

CYCLO DRIVE WARRANTY 2 YEARS

Sumitomo Drive Technologies
» Building Tomorrow Together

CYCLO DRIVE GEAR MOTOR

CNHM CHHM CNVM CVVM

Sumitomo Drive Technologies
CYCLO 6000

Sumitomo Drive Technologies
100 years of the Cyclo® gear

Victorysystem@gmail.com
LINE OA: @hipower89

www.victorysystem.co.th
LET'S SUMITOMO GEAR MOTOR

Sumitomo Drive Technologies
» Building Tomorrow Together

CYCLO DRIVE GEAR MOTOR

CNHM CHHM

Sumitomo Drive Technologies
CYCLO 6000

Sumitomo Drive Technologies
100 years of the Cyclo® gear

Victorysystem@gmail.com
LINE OA: @hipower89

www.victorysystem.co.th
LET'S SUMITOMO GEAR MOTOR

Sumitomo Drive Technologies
» Building Tomorrow Together

CYCLO DRIVE GEAR MOTOR

CNVM CVVM

Sumitomo Drive Technologies
CYCLO 6000

Sumitomo Drive Technologies
100 years of the Cyclo® gear

Victorysystem@gmail.com
LINE OA: @hipower89

www.victorysystem.co.th
LET'S SUMITOMO GEAR MOTOR

Table of Contents

A. Common

Features & Benefits
Product Line-up
Product Range of
CYCLO DRIVE
Product Range of Motor

Page

B. Gearmotors

1. How to Select
2. Selection Tables
3. Dimension Tables

B-1~154

B-2

B-13

B-97

C. Speed Reducers

1. How to Select
2. Selection Tables
3. Dimension Tables

C-1~88

C-2

C-11

C-69

D. Gearmotor for Inverters with AF Motor for Inverters

1. How to Select
2. Selection Tables
3. Dimension Tables

D-1~40

D-2

D-11

D-27

E. Gearmotors with High Efficiency Motor

E-1~6

F. Technical Data

1. Reducer
2. Motor
3. Common

F-1~68

F-2

F-31

F-63

Warranty Standard
Warning

G-1

G-2



Product Range of CYCLO® DRIVE

CYCLO® Frame Size

Table A-1 CYCLO Frame Size

COMMON	6000SK Series		6000 Series					
	Frame Size		Single Reduction		Double Reduction			
			Frame Size		(Output side + Input side)		Frame Size	
	6070SK	6140	6060	6140	6060DA (6060+6060)	6140DC (6140+6105)	6190DA (6190+6125)	
	6075SK	6145	6065	6145	6065DA (6065+6060)	6145DA (6145+6075)	6190DB (6190+6135)	
	6080SK	614H	6070	614H	6070DA (6070+6065)	6145DB (6145+6095)	6195DA (6195+6125)	
	6085SK	6160	6075	6160	6075DA (6075+6065)	6145DC (6145+6105)	6195DB (6195+6135)	
	6090SK	6165	6080	6165	6090DA (6090+6075)	6160DA (6160+6095)	6205DA (6205+6125)	
	6095SK	616H	6085	616H	6095DA (6095+6075)	6160DB (6160+6105)	6205DB (6205+6135)	
	6100SK	6170	6090	6170	6100DA (6100+6075)	6160DC (6160+6125)	6215DA (6215+6135)	
	6105SK	6175	6095	6175	6105DA (6105+6075)	6165DA (6165+6095)	6215DB (6215+6165)	
	6110SK	6180	6100	6180	6120DA (6120+6075)	6165DB (6165+6105)	6225DA (6225+6135)	
	6115SK	6185	6105	6185	6120DB (6120+6095)	6165DC (6165+6125)	6225DB (6225+6175)	
		6190	610H	6190	6125DA (6125+6075)	6170DA (6170+6095)	6235DA (6235+6165)	
		6195	6110	6195	6125DB (6125+6095)	6170DB (6170+6105)	6235DB (6235+6185)	
		6205	6115	6205	6130DA (6130+6075)	6170DC (6170+6125)	6245DA (6245+6165)	
		6215	6120	6215	6130DB (6130+6095)	6175DA (6175+6095)	6245DB (6245+6185)	
		6225	6125	6225	6130DC (6130+6105)	6175DB (6175+6105)	6255DA (6255+6175)	
		6235	612H	6235	6135DA (6135+6075)	6175DC (6175+6125)	6255DB (6255+6195)	
		6245	6130	6245	6135DB (6135+6095)	6180DA (6180+6105)	6265DA (6265+6195)	
		6255	6135	6255	6135DC (6135+6105)	6180DB (6180+6135)	6275DA (6275+6195)	
		6265		6265	6140DA (6140+6075)	6185DA (6185+6105)		
		6275		6275	6140DB (6140+6095)	6185DB (6185+6135)		

Reduction Ratio

Table A-2 6000 Series

Single Reduction								
6	8	11	13	15	17	21	25	29
35	43	51	59	71	87	119		

Double Reduction indicated in catalog (Upper row: reduction ratio, lower row: output side reduction ratio x input side reduction ratio)										
104	121	143	165	195	231	273	319	377	473	559
(13 × 8)	(11 × 11)	(13 × 11)	(15 × 11)	(15 × 13)	(21 × 11)	(21 × 13)	(29 × 11)	(29 × 13)	(43 × 11)	(43 × 13)
649	731	841	1003	1247	1479	1849	2065	2537	3045	3481
(59 × 11)	(43 × 17)	(29 × 29)	(59 × 17)	(43 × 29)	(87 × 17)	(43 × 43)	(59 × 35)	(59 × 43)	(87 × 35)	(59 × 59)
4437	5133 ^{Note1}	6177	7569							
(87 × 51)	(87 × 59)	(87 × 71)	(87 × 87)							

Note 1: Frame size 6205# ~ 6265# are (59 × 87)

Other Reduction Ratios (Under certain conditions, the following reduction ratios may also be available, please consult us.)

Reduction Ratio	88	90	102	120	126	136	150	168	169	174	187	200	210	221	225	232	255	258	275
	(11 × 8)	(15 × 6)	(17 × 6)	(15 × 8)	(21 × 6)	(17 × 8)	(25 × 6)	(21 × 8)	(13 × 13)	(29 × 6)	(17 × 11)	(25 × 8)	(35 × 6)	(17 × 13)	(15 × 15)	(29 × 8)	(17 × 15)	(43 × 6)	(25 × 11)
Output speed 50Hz	16.5	16.1	14.2	12.1	11.5	10.7	9.67	8.63	8.58	8.33	7.75	7.25	6.90	6.56	6.44	6.25	5.69	5.62	5.27
r/min 60Hz	19.9	19.4	17.2	14.6	13.9	12.9	11.7	10.4	10.4	10.1	9.36	8.75	8.33	7.92	7.78	7.54	6.86	6.87	6.36
Reduction Ratio	280	289	306	315	325	344	354	357	375	385	408	425	426	435	441	455	472	493	522
	(35 × 8)	(17 × 17)	(51 × 6)	(21 × 15)	(25 × 13)	(43 × 8)	(59 × 6)	(21 × 17)	(25 × 15)	(35 × 11)	(51 × 8)	(25 × 17)	(71 × 6)	(29 × 15)	(21 × 21)	(35 × 13)	(59 × 8)	(29 × 17)	(87 × 6)
Output speed 50Hz	5.18	5.02	4.74	4.60	4.46	4.22	4.10	4.06	3.87	3.77	3.55	3.41	3.40	3.33	3.29	3.19	3.07	2.94	2.78
r/min 60Hz	6.25	6.06	5.72	5.56	5.38	5.09	4.94	4.90	4.67	4.55	4.29	4.12	4.11	4.02	3.97	3.85	3.71	3.55	3.35
Reduction Ratio	525	561	568	595	609	625	645	663	696	725	735	765	767	781	867	875	885	903	923
	(35 × 15)	(51 × 11)	(71 × 8)	(35 × 17)	(29 × 21)	(25 × 25)	(43 × 15)	(51 × 13)	(87 × 8)	(29 × 25)	(35 × 21)	(51 × 15)	(59 × 13)	(71 × 11)	(51 × 17)	(35 × 25)	(59 × 15)	(43 × 21)	(71 × 13)
Output speed 50Hz	2.76	2.58	2.55	2.44	2.38	2.32	2.25	2.19	2.08	2.00	1.97	1.90	1.89	1.86	1.67	1.66	1.64	1.61	1.57
r/min 60Hz	3.33	3.12	3.08	2.94	2.87	2.80	2.71	2.64	2.51	2.41	2.38	2.29	2.28	2.24	2.02	2.00	1.98	1.94	1.90
Reduction Ratio	957	1015	1065	1071	1075	1131	1207	1225	1239	1275	1305	1475	1491	1505	1711	1775	1785	1827	2059
	(87 × 11)	(35 × 29)	(71 × 15)	(51 × 21)	(43 × 25)	(87 × 13)	(71 × 17)	(35 × 35)	(59 × 21)	(51 × 25)	(87 × 15)	(59 × 25)	(71 × 21)	(43 × 35)	(59 × 29)	(71 × 25)	(51 × 35)	(87 × 21)	(71 × 29)
Output speed 50Hz	1.52	1.43	1.36	1.35	1.35	1.28	1.20	1.18	1.17	1.14	1.11	0.98	0.97	0.96	0.85	0.82	0.81	0.79	0.70
r/min 60Hz	1.83	1.72	1.64	1.63	1.63	1.55	1.45	1.43	1.41	1.37	1.34	1.19	1.17	1.16	1.02	0.99	0.98	0.96	0.85
Reduction Ratio	2175	2193	2485	2523	2601	3009	3053	3621	3741	4189	5041	Calculation of output speed is based on the following input speed. 50Hz: 1450r/min 60Hz: 1750r/min							
	(87 × 25)	(51 × 43)	(71 × 35)	(87 × 29)	(51 × 51)	(59 × 51)	(71 × 43)	(71 × 43)	(87 × 43)	(71 × 59)	(71 × 71)								
Output speed 50Hz	0.67	0.66	0.58	0.57	0.56	0.48	0.47	0.40	0.39	0.45	0.29								
r/min 60Hz	0.80	0.80	0.70	0.69	0.67	0.58	0.57	0.48	0.47	0.42	0.35								

Table A-3 6000SK Series (Actual Reduction Ratio)

Frame Size	Nominal Reduction Ratio						
	2.5	3	4	5	6	8	10
6070SK, 6075SK	2.514	2.911	3.985	5.109	5.915	8.097	9.848
6080SK, 6085SK	2.475	2.931	3.878	5.114	6.164	7.660	9.474
6090SK, 6095SK	2.492	2.878	4.100	5.017	5.623	8.169	9.996
6100SK, 6105SK	2.492	2.878	4.100	5.017	5.623	8.169	9.996
6110SK, 6115SK	2.483	3.063	3.859	4.707	5.980	7.738	10.07

*Note that reduction ratio differs for each frame size for 6000SK Series.

Product Range of CYCLO® DRIVE

Table A-6 6000 Series Double Reduction

Reduction Ratio	104	121	143	165	195	231	273	319	377	473	559	649	731	841	1003	1247	1479	1849	2065
Output Speed 50Hz	13.9	12.0	10.1	8.79	7.44	6.28	5.31	4.55	3.85	3.07	2.59	2.23	1.98	1.72	1.45	1.16	0.980	0.784	0.702
r/min 60Hz	16.8	14.5	12.2	10.6	8.97	7.58	6.41	5.49	4.64	3.70	3.13	2.70	2.39	2.08	1.74	1.40	1.18	0.946	0.847
0.1 × 4P kW	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
0.2 × 4P kW	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
0.25 × 4P kW	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
0.4 × 4P kW	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
0.55 × 4P kW	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
0.75 × 4P kW	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
1.1 × 4P kW	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
1.5 × 4P kW	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
2.2 × 4P kW	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
3.0 × 4P kW	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
3.7 × 4P kW	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
5.5 × 4P kW	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
7.5 × 4P kW	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
11 × 4P kW	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
15 × 4P kW	●	●		●	●	●	●	●	●	●	●	●	●	●	●				
18.5 × 4P kW		●		●	●	●	●	●	●	●	●	●	●	●					
22 × 4P kW		●		●	●	●	●	●	●	●	●	●							
30 × 4P kW		●		●	●	●	●	●	●	●									
37 × 4P kW		●		●	●	●		●	●										
45 × 4P kW		●		●	●			●											

Reduction Ratio	2537	3045	3481	4437	5133	6177	7569
Output Speed 50Hz	0.572	0.476	0.417	0.327	0.282	0.235	0.192
r/min 60Hz	0.690	0.575	0.503	0.394	0.341	0.283	0.231
0.1 × 4P kW	●	●	●	●	●	●	●
0.2 × 4P kW	●	●	●	●	●	●	●
0.25 × 4P kW	●	●					
0.4 × 4P kW	●	●	●	●	●	●	●
0.75 × 4P kW	●	●	●	●	●	●	●
1.5 × 4P kW	●	●	●	●	●	●	●
2.2 × 4P kW	●	●	●	●	●	●	●
3.7 × 4P kW	●	●	●	●	●	●	●
5.5 × 4P kW	●	●	●	●	●	●	●

Note: 1. Calculation of output speed is based on the following input speed.

- 4P Motor
 - 50Hz: 1450 r/min
 - 60Hz: 1750 r/min
- 6P Motor
 - 50Hz: 980 r/min
 - 60Hz: 1165 r/min

2. Combination in the table is based on service factor 1.0. Refer to Gearmotor Selection Table for combinations with other service factors.
3. Reduction ratios in 6000SK Series table are nominal ratios. Output speeds are based on these ratios. Refer to "Reduction Ratio" tables in the previous page for actual reduction ratio.
4. The rated current of 6P motor is different from the one of 4P motor even if the power is same.

B

GEARMOTORS

CYCLO® GEARMOTORS

	Page
1. How to Select	
Standard Specifications	B-3
Model Selection	B-4
Selection of Load Factor	B-7
Nomenclature	B-9
2. Selection Tables	B-13
3. Dimension Tables	B-97

Standard Specifications of Gearmotor

Mortor

Items	Standard Specification			Standard Specification with Built-in Brake		
Capacity Range	0.1 - 55kW × 4P 15 - 55kW × 6P			0.1 - 11kW × 4P FB Brake (Non-Asbestors) 15kW × 4P CMB Brake 18.5 -37kW × 4P ESB Brake *For 6P motor with brake, consult us.		
Enclosure	Totally enclosed fan cooled type (0.1kW × 4P totally enclosed non-ventilated)			Totally enclosed fan cooled type (0.1kW × 4P totally enclosed non-ventilated)		
Power Source	0.1 - 3.7kW:	220 - 240V 220V 380 - 420V 5.5 - 55kW: 380 - 420V 440V	50Hz 60Hz 50Hz 50Hz 60Hz	0.1 - 3.7kW:	220 - 240V 220V 380 - 420V 5.5 - 37kW: 380 - 420V 440V	50Hz 60Hz 50Hz 50Hz 60Hz
Thermal Class	F			F		
Time Rating	Continuous rating			Continuous rating		
Terminal Box Position & Lead Wire Direction	On the left side viewed from the load side. Regarding the draw out hole direction, refer to Table below.			On the left side viewed from the load side. Regarding the draw out hole direction, refer to Table below.		
Lead Wiring	6 Wires	4P	6P	8 Wires	4P	
		0.1~3.7kW (Direct starting)	-		0.1~3.7kW (Direct starting)	
		Note: 2 5.5~55kW (λ - Δ starting available)	Note: 2 15~55kW (λ - Δ starting available)		Note: 2 5.5~37kW (λ - Δ starting available)	
Standards	According to IEC					

GEARMOTORS

How to
Select

Reducer

Items	Specifications	
Model	CYCLO 6000 Series	CYCLO 6000SK Series
Lubrication Method	Grease lubricated and oil lubricated models available	
Speed Reduction Method	Internal planetary gear mechanism with trochoidal curved tooth profile	
Direction of Output Shaft Rotation	Single reduction	Clockwise rotation
	Double reduction	Counter-clockwise rotation
	*Note that it is different from CYCLO 6000 series single reduction type	
	As observed from the load side when connected to R-U, S-V, T-W motors.	

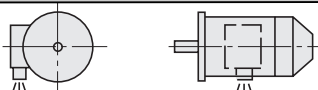
Common to Motor and Reducer

Items	Specifications
Installation location	Indoor or outdoor (Minimal dust and humidity)
Ambient Temperature	-10°C ~ 40°C
Ambient Humidity	Under 85%
Elevation	Under 1,000 meters
Atmosphere	Well ventilated location, free of corrosive gases, explosive gases, vapors and dust.
Method of Mounting Note: 3	CHHM Type : slow speed shaft in horizontal direction and with foot CHFM Type : slow speed shaft in horizontal direction and with flange (not for 6000SK Series) CVVM Type : slow speed shaft down in vertical direction and with V-flange *Models with "N" for the second nomenclature symbol (such as CNHM Type) may be mounted in any direction.
Method of Coupling with Driven Machine	Coupling, gears, chain sprocket or belt.
Painting	Type : Acrylic modified phtalic Colour : Equivalent to Munsell 6.5PB 3.6/8.2.

- Note: 1. Refer to the technical section (Page F-31~57) for motor specification other than standard one.
 2. Consult us when λ - Δ start is necessary for non-standard voltage.
 3. Models for universal mounting (types with N for the second digit of nomenclature) can be manufactured for following frame sizes only. Other frame sizes require indication for mounting direction.

[Frame sizes for universal mounting direction] *□ of the frame size indicates 0, 5, or H.
 606□, 607□, 608□, 609□, 610□, 611□, 612□,
 606□DA, 607□DA, 608□DA, 609□DA, 610□DA, 612□DA, 612□DB

Direction of Withdrawing Lead Wire

Main frame mounting direction	Standard
Horizontal Type (Slow speed shaft in horizontal direction)	
Vertical Type (Slow speed shaft in vertical direction)	

Note: Whenever not specified, the above direction shall be used. When the direction of withdrawal from the terminal box is other than specified above, refer to Page F-34.

Selection of Load Factor

The Load Factor is rated for the characteristics of the driven machine.

The tabulated ratings are based on a running time of 10 hours per day with uniform load.

For your reference, please see method (1) and (2) shown below.

(1) Recommended Load Factor by the Driven Application.

[Load Factor] U: Uniform load M: Moderate shock H: Heavy shock

Table B-1 Reducer Load Factor

Daily duty	~3 hours/day			~10 hours/day			~24 hours/day		
	U	M	H	U	M	H	U	M	H
Load Factor	0.80	1.00	1.35	1.00	1.20	1.50	1.50	1.35	1.60

Table B-2 Recommended Load Classifications

Type of APPLICATION	Type of LOAD	Type of APPLICATION	Type of LOAD	Type of APPLICATION	Type of LOAD	Type of APPLICATION	Type of LOAD
*Aerator		Elevators		slab conveyor	H	suction roll	U
Agitators.		bucket - uniform load	U	small waste-conveyor-belt	U	washers & thickeners	M
pure liquids	U	bucket - heavy load	M	small waste-conveyor-chain	M	winders	U
liquids & solids	M	bucket - cont.	U	sorting table	M		
liquids-variable density	M	centrifugal discharge	U	tipple hoist conveyor	M	*Printing Presses	
Blowers		escalators	U	tipple hoist drive	M	Pullers	
centrifugal	U	freight	M	transfer conveyors	M	barge haul	H
lobe	M	gravity discharge	U	transfer rolls	M	Pumps	
vane	U	*man lifts	M	tray drive	M	centrifugal	U
Brewing & Distilling		*passenger	M	trimmer feed	M	proportioning	M
bottling machinery	U	**Extruders(Plastics)		waste conveyor	M	reciprocating single acting, 3 or more cylinders	M
brew kettles, cont. duty	U	blow molders	M			double acting, 2 or more cylinders	M
cookers-cont. duty	U	coating	U	Machine Tools		*single acting, 1 or 2 cylinders	M
mash tubs-cont. duty	U	film	U	punch press-gear driven	H	*double acting, single cylinder	U
scale hopper, frequent starts	M	pipe	U	*notching press-belt driven	M	rotary-gear type	U
Can Filling Machines	U	pre-plasticizers	M	plate planers	H	rotary-lobe, vane	U
*Cane Knives	M	rods	U	tapping machine	H	Rubber & Plastics Industries	
Car Dumpers	H	sheet	U	other machine tools		*crackers	H
Car Pullers	M	tubing	U	main drives	M	laboratory equipment	M
Clarifiers	U	Fans		auxiliary drives	U	**mixing mills	H
Classifiers	M	centrifugal	U	Metal Mills		**refiners	M
Clay Working Machinery		*cooling towers	U	draw bench carriage & main drive	M	**rubber calendars	M
brick press	H	induced draft	U	forming machines	H	**rubber mill(2 on line)	M
briquette machine	H	*forced draft	M	*pinch, dryer & scrubber rolls, reversing		**rubber mill(3 on line)	U
clay working machinery	M	induced draft	M	slitters	M	**sheeter	M
pug mill	M	large(mine, etc.)	M	table conveyors-non-reversing group drives	M	*tire building machines	U
Compressors		large(industrial)	M	individual drives	H	*tire & tube press openers	M
centrifugal	U	light(small diameter)	U	*table conveyors-reversing	M	*tubers & strainers	M
lobe	M	Feeders		wire drawing & flattening machine	M	**warming mills	M
reciprocating, multi-cylinder	M	apron	M	wire winding machine	M	Sand Muller	M
reciprocating, single-cylinder	H	belt	M	Mills, Rotary Type		Screens	
Conveyors-Uniformly Loaded or Fed		disc	U	**ball	M	air washing	U
apron	U	reciprocating	H	*cement kilns	M	rotary-stone or gravel	M
assembly	U	screw	M	**dryers & coolers	M	traveling water intake	U
belt	U	Food industry		kilns	M	Sewage Disposal Equipment	
bucket	U	beet slicer	M	**pebble	M	bar screens	U
chain	U	cereal cooker	U	**rod, plain & wedge bar	M	chemical feeders	U
flight	U	dough mixer	M	tumbling barrels	H	collectors, circuline or straightline	U
oven	U	meat grinders	M	Mixers		dewatering screws	M
screw	U	Generators(not welding)	U	concrete mixers, cont.	M	grit collectors	U
Conveyors-Heavy Duty Not Uniformly Fed		Hammer mills	H	concrete mixers, intermittent	M	scum breakers	M
apron	M	Hoists		constant density	U	slow or rapid mixers	M
assembly	M	heavy duty	H	variable density	M	sludge collectors	U
belt	M	medium duty	M	Oil Industry		thickeners	M
bucket	M	skip hoist	M	chillers	M	vacuum filters	M
chain	M	Laundry Washers		*oil well pumping	M	Slab Pushers	M
flight	M	reversing	M	paraffin filter press	M	*Steering Gear	
*live roll	U	driving processing equipment	M	rotary kilns	M	Stokers	U
oven	M	Line Shaft		Paper Mills		Sugar Industry	
reciprocating	H	light	U	agitators(mixers)	M	*cane knives	M
screw	M	other line shafts	U	barker-auxiliaries-hydraulic	M	**crushers	M
shaker	H	Lumber Industry		barker-mechanical	M	**mills	H
Cranes(Except for Dry Dock Cranes)		barkers-hydraulic	H	barking drum	H	Textile Industry	
main hoists	U	mechanical	H	beater & pulper	U	batchers	M
*bridge travel	U	burner conveyor	M	bleacher	M	calendars	M
*trolley travel	U	chain saw & drag saw	H	calendars	M	cards	M
Crusher		chain transfer	H	calendars-super	H	dry cans	M
ore	H	craneway transfer	H	converting machine, except cutters, platers	M	dryers	M
stone	H	de-barking drum	H	conveyors	U	dyeing machinery	M
**sugar	M	edger feed	M	couch	M	*knitting machines	M
Dredges		gang feed	H	cutters-platers	H	looms	M
cable reels	M	green chain	M	cylinders	M	mangles	M
conveyors	M	live rolls	H	dryers	M	nappers	M
cutter head drives	H	log haul-locline	H	Paper Mills		pads	M
jig drives	H	log haul-well type	H	felt stretcher	M	*range drives	M
maneuvering winches	M	log turning device	H	felt whipper	H	slashers	M
pumps	M	main log conveyor	H	jordan	H	soapers	M
screen drive	H	off bearing rolls	M	log haul	H	spinners	M
stackers	M	planer feed chains	M	presses	U	tenter frames	M
utility winches	M	planer floor chains	M	pulp machine reel	M	washers	M
*Dry Dock Cranes		planer tilting hoist	M	stock chests	M	winders	M
		re-saw merry-go-round conveyor	M			*Windlass	
		roll cases	H				

Remarks: * Refer to factory. ** To be selected on basis of 24hr. service only.

Note: Table above contains reference value. Names and mechanical characteristics of the actual machine may differ from the table above.

Selection of Load Factor

(2) Recommended Load Factor Modifications for Frequent Start-Stop Operation

Please see table B-3 and B-4.

Table B-3 Number of Starts-Stops and Load Factor

Number of starts-stops (times/hour)	~3 hours/day			~10 hours/day			~24 hours/day		
	I	II	III	I	II	III	I	II	III
~10	0.80	1.00	1.20	1.00	1.10	1.35	1.20	1.25	1.50
~200	0.85	1.10	1.30	1.10	1.30	1.50	1.25	1.50	1.65
~500	0.90	1.20	1.40	1.15	1.45	1.60	1.30	1.60	1.75

The ratio of Moment of Inertia (The ratio of GD^2) = $\frac{\text{Total Moment of Inertia (GD}^2\text{) as seen from the motor shaft}}{\text{Moment of Inertia (GD}^2\text{) of motor}}$

- Load Factor
- 1: Allowable ratio of Moment of Inertia (GD^2) ≤ 0.3
 - 2: Allowable ratio of Moment of Inertia (GD^2) ≤ 3
 - 3: Allowable ratio of Moment of Inertia (GD^2) ≤ 10

Note: 1. The number of starts-stops includes brake or clutch operation times.
 2. Consult us when starting under loaded conditions.
 3. Consult us when start-stop frequency exceeds 500 times/hour. Brake for high frequency use may be necessary.

Table B-4 MOTOR THERMAL RATING (C × Z)

Motor Power kW	Allowable C × Z				Motor moment of inertia kg·m ²		Motor GD ² kgf·m ²	
	(35%ED)	(35%ED~50%ED)	(50%ED~80%ED)	(80%ED~100%ED)	Standard	With brake	Standard	With brake
0.1	3200	3000	2000	1200	0.00033	0.00035	0.0013	0.0014
0.2	2200	2800	2800	2500	0.00050	0.00055	0.002	0.0022
0.25	2200	2800	2800	2500	0.00050	0.00055	0.002	0.0022
0.4	1800	2200	1500	1500	0.00065	0.00068	0.0026	0.0027
0.55	1800	2200	1500	1500	0.00101	0.00111	0.00405	0.00445
0.75	1400	1400	800	500	0.00120	0.00130	0.0048	0.0052
1.1	1400	1400	800	500	0.00185	0.00208	0.0074	0.0083
1.5	1200	1200	500	400	0.00213	0.00235	0.0085	0.0094
2.2	1000	900	400	200	0.00333	0.00373	0.0133	0.0149
3.0	1000	900	400	200	0.00700	0.00810	0.0281	0.0325
3.7	800	800	800	700	0.00848	0.00958	0.0339	0.0383
5.5	300	300	200	150	0.01143	0.01253	0.0457	0.0501
7.5	400	350	300	300	0.02675	0.03025	0.1070	0.121
11	200	200	150	150	0.03750	0.04100	0.1500	0.164

C × Z calculated by below steps (1) ~ (3) must be less than allowable C × Z listed in Table B-4.

(1) Calculate C from formula below.

[SI units] $C = \frac{J_M + J_L}{J_M}$

J_M ; Moment of inertia of motor (kg·m²)

J_L ; Total moment of inertia (excluding motor) at motor shaft (kg·m²)

[Gravitational units] $C = \frac{GD_M^2 + GD_L^2}{GD_M^2}$

GD_M^2 ; GD^2 of motor (kgf·m²)

GD_L^2 ; Total GD^2 (excluding motor) at motor shaft (kgf·m²)

Continues to the next page.

Nomenclature

CYCLO DRIVE WARRANTY 2 YEARS

Slow Speed Shaft Direction	
Horizontal, slow speed shaft level	H
Vertical, slow speed shaft down	V
Vertically, slow speed shaft up	W
Universal mounting	N

Mounting style	
Foot	H
V flange	V
Flange	F

Type of Input	
Gearmotor	M
With adaptor	JM

Special Specifications	
Standard specification	blank
Special specification	S

Motor Capacity Symbol		01	02	03	05	08	1
4P	Capacity symbol	01	02	03	05	08	1
	kW (HP)	0.1 (1/8)	0.2 (1/4)	0.25 (1/3)	0.4 (1/2)	0.55 (3/4)	0.75 (1)
	Capacity symbol	1H	2	3	4	5	8
	kW (HP)	1.1 (1.5)	1.5 (2)	2.2 (3)	3.0 (4)	3.7 (5)	5.5 (7.5)
	Capacity symbol	10	15	20	25	30	40
	kW (HP)	7.5 (10)	11 (15)	15 (20)	18.5 (25)	22 (30)	30 (40)
6P	Capacity symbol	50	60	75	100		
	kW (HP)	37 (50)	45 (60)	55 (75)	75 (100)		
	Capacity symbol	016	026	036	056	086	16
	kW (HP)	0.1 (1/8)	0.2 (1/4)	0.25 (1/3)	0.4 (1/2)	0.55 (3/4)	0.75 (1)
	Capacity symbol	1H6	26	36	46	56	86
	kW (HP)	1.1 (1.5)	1.5 (2)	2.2 (3)	3.0 (4)	3.7 (5)	5.5 (7.5)
	Capacity symbol	106	156	206	256	306	406
	kW (HP)	7.5 (10)	11 (15)	15 (20)	18.5 (25)	22 (30)	30 (40)
	Capacity symbol	506	606	756	1006	1256	1506
	kW (HP)	37 (50)	45 (60)	55 (75)	75 (100)	90 (125)	110 (150)
	Capacity symbol	1756					
	kW (HP)	132 (175)					

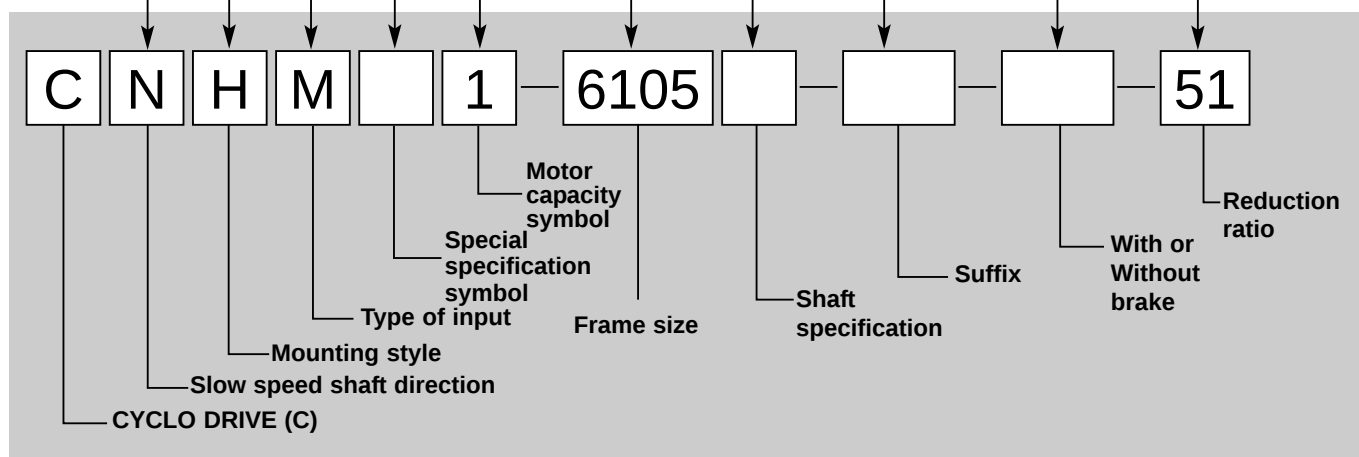
Shaft specification	
Metric JIS (Standard)	-
Inch size	Y
Metric DIN	G

Suffix		
Standard	-	Low Backlash LB
Light Heavy Radial R1		With AF (inverter) motor AV
High Cap. Brg. Ductile Casing R2		Servo Motor SV
Baseplate BP		DC Motor DV
HH Type Ceiling H1		High Efficiency Motor ES
Modification Left Wall H2		Torque Limiter TL
Modification Right Wall H3		

With or Without Brake	
Without brake	-
With brake	B

Frame size
(Refer to Selection
Tables starting from
page B-13.)

Nominal ratio



CNHM Foot mount 0.1kW to 3.7 kW
CHHM Foot mount upper => 3.7 kW

CNVM Flange mount 0.1kW to 3.7 kW
CVVM Flange mount upper => 3.7 kW

Nomenclature and Product Examples

Nomenclature Examples (Gearmotor)

CYCLO DRIVE WARRANTY 2 YEARS

Example 1. CNHM2 - 6115 - 29

C:	Model	- CYCLO® DRIVE
N:	Slow speed shaft direction	- Universal direction
H:	Mounting style	- Foot
M:	Type of input	- Gearmotor type
2:	Motor capacity	- 1.5kW
6115:	Frame size	- 6115
29:	Reduction ratio	- 29

Example 2. CVVM5 - 6195DA - B - 377

C:	Model	- CYCLO® DRIVE
V:	Slow speed shaft direction	- Vertical mounting
V:	Mounting style	- V flange
M:	Type of input	- Gearmotor type
5:	Motor capacity	- 3.7kW
6195DA:	Frame size	- 6115
B:	Brake	- With brake
377:	Reduction ratio	- 377

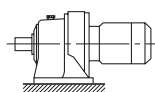
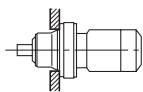
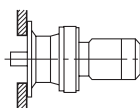
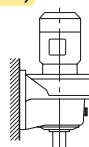
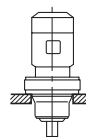
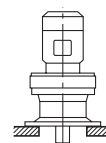
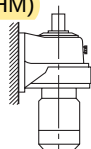
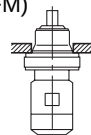
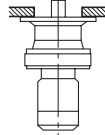
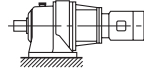
GEARMOTORS

How to
Select

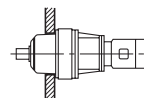
Product and Nomenclature Symbol Examples (Gearmotor)

Standard and various application products of CYCLO® GEARMOTOR are classified by their nomenclature symbol as below. Refer to specific catalogs or consult us for details on our application products.

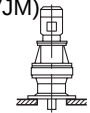
CYCLO® GEARMOTORS

CHHM
(CNHM)CHFM
(CNFM)CHVM
(CNVM)CVHM
(CNHM)CVFM
(CNFM)CVVM
(CNVM)CWHM
(CNHM)CWFM
(CNFM)CWVM
(CNVM)CHHJM
(CNHJM)

With Adaptor

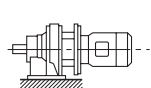
CHFJM
(CNFJM)

With Adaptor

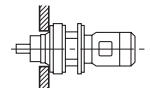
CVVJM
(CNVJM)

With Adaptor

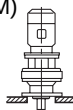
CYCLO® GEARMOTOR Application Products

CHHXM
(CNHXM)

Input Side Hollow Shaft

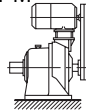
CHFXM
(CNFXM)

Input Side Hollow Shaft

CVVXM
(CNVXM)

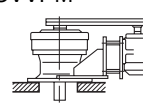
Input Side Hollow Shaft

CHHPM



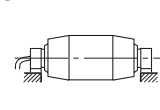
Top Mount Type

CVVPM



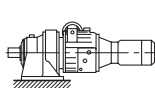
Side Mount Type

CPM



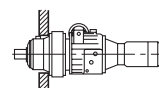
Cyclo Motor Pulley

CHHBM



Beier Cyclo Variator

CHFBM



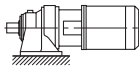
Beier Cyclo Variator

CVVBM



Beier Cyclo Variator

CHHCM

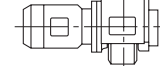
Cyclo Pack
with Clutch Brake

C11WM



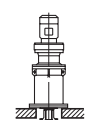
Cyclo Capstan

C10CM

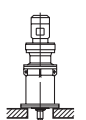


Cyclo Wheel

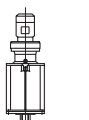
C14VM

Vertical Special
Base Mount

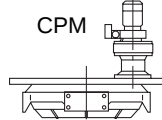
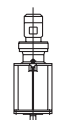
C15VM



C17VM

Vertical Special
Base Mount

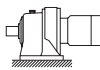
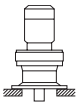
C18VM

CPM
Center Post Type

B CYCLO® GEAR MOTORS

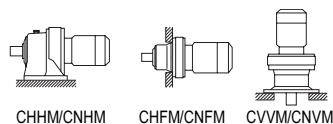
2. Selection Tables

Selection Tables Gearmotors

0.1 kW		n ₁ : Motor Speed															
		Hz		50Hz		60Hz											
		P		4	6	4	6										
		n ₁ r/min		1450	980	1750	1165										
50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout		Allowable Radial Load Pro		SF	Output Speed n ₂	Output Torque Tout		Allowable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
242	3.75	0.383	804	82.0	2.00	292	3.11	0.317	756	77.1	2.00	01 -	6060	- 6	B-100	B-116	B-135
			804	82.0	2.86				756	77.1	2.86	01 -	6065	- 6	B-100	B-116	B-135
181	5.01	0.510	921	94	2.00	219	4.15	0.423	866	88	2.00	01 -	6060	- 8	B-100	B-116	B-135
			921	94	2.86				866	88	2.86	01 -	6065	- 8	B-100	B-116	B-135
132	6.88	0.702	1180	120	2.00	159	5.70	0.581	1180	120	2.00	01 -	6060	- 11	B-100	B-116	B-135
			1180	120	2.86				1180	120	2.86	01 -	6065	- 11	B-100	B-116	B-135
112	8.1	0.83	1180	120	2.00	135	6.7	0.69	1180	120	2.00	01 -	6060	- 13	B-100	B-116	B-135
			1180	120	2.86				1180	120	2.86	01 -	6065	- 13	B-100	B-116	B-135
96.7	9.4	0.96	1180	120	2.00	117	7.8	0.79	1180	120	2.00	01 -	6060	- 15	B-100	B-116	B-135
			1180	120	2.86				1180	120	2.86	01 -	6065	- 15	B-100	B-116	B-135
85.3	10.6	1.08	1180	120	2.00	103	8.8	0.90	1180	120	2.00	01 -	6060	- 17	B-100	B-116	B-135
			1180	120	2.82				1180	120	2.86	01 -	6065	- 17	B-100	B-116	B-135
69.0	13.1	1.34	1180	120	1.83	83.3	10.9	1.11	1180	120	2.00	01 -	6060	- 21	B-100	B-116	B-135
			1180	120	2.28				1180	120	2.34	01 -	6065	- 21	B-100	B-116	B-135
58.0	15.6	1.59	1180	120	1.10	70.0	13.0	1.32	1180	120	1.10	01 -	6060	- 25	B-100	B-116	B-135
			1180	120	1.66				01 -	6065	- 25	B-100	B-116	B-135			
			1770	180	2.30				01 -	6070	- 25	B-100	B-116	B-135			
			1770	180	2.94				01 -	6075	- 25	B-100	B-116	B-135			
50.0	18.1	1.85	1180	120	1.10	60.3	15.0	1.53	1180	120	1.10	01 -	6060	- 29	B-100	B-116	B-135
			1180	120	1.66				01 -	6065	- 29	B-100	B-116	B-135			
			1770	180	2.26				01 -	6070	- 29	B-100	B-116	B-135			
			1770	180	2.86				01 -	6075	- 29	B-100	B-116	B-135			
41.4	21.9	2.23	1180	120	1.10	50.0	18.1	1.85	1180	120	1.10	01 -	6060	- 35	B-100	B-116	B-135
			1180	120	1.43				01 -	6065	- 35	B-100	B-116	B-135			
			1770	180	2.11				01 -	6070	- 35	B-100	B-116	B-135			
			1770	180	2.79				01 -	6075	- 35	B-100	B-116	B-135			
			2560	261	2.90				2560	261	3.29	01 -	6080	- 35	B-100	B-116	B-135
33.7	26.9	2.74	1180	120	1.12	40.7	22.3	2.27	1180	120	1.13	01 -	6065	- 43	B-100	B-116	B-135
			1770	180	1.67				01 -	6070	- 43	B-100	B-116	B-135			
			1770	180	2.23				01 -	6075	- 43	B-100	B-116	B-135			
			2560	261	2.50				01 -	6080	- 43	B-100	B-116	B-135			
			2560	261	2.94				2560	261	2.94	01 -	6085	- 43	B-100	B-116	B-135
28.4	31.9	3.25	1770	180	1.00	34.3	26.4	2.70	1770	180	1.00	01 -	6070	- 51	B-100	B-116	B-135
			1770	180	1.43				01 -	6075	- 51	B-100	B-116	B-135			
			2560	261	1.92				01 -	6080	- 51	B-100	B-116	B-135			
			2560	261	2.41				01 -	6085	- 51	B-100	B-116	B-135			
24.6	36.9	3.76	1770	180	1.00	30.0	30.6	3.12	1770	180	1.00	01 -	6070	- 59	B-100	B-116	B-135
			1770	180	1.36				01 -	6075	- 59	B-100	B-116	B-135			
			2560	261	1.85				01 -	6080	- 59	B-100	B-116	B-135			
			2560	261	2.34				01 -	6085	- 59	B-100	B-116	B-135			
20.4	44.4	4.53	2560	261	1.20	24.6	36.8	3.75	2560	261	1.20	01 -	6080	- 71	B-100	B-116	B-135
			2560	261	1.87				01 -	6085	- 71	B-100	B-116	B-135			
			3340	340	2.52				01 -	6090	- 71	B-100	B-116	B-135			
			3340	340	2.78				01 -	6095	- 71	B-100	B-116	B-135			
16.7	54.4	5.55	2560	261	1.21	20.0	45.10	4.600	2560	261	1.21	01 -	6085	- 87	B-100	B-116	B-135
			3340	340	2.11				01 -	6090	- 87	B-100	B-116	B-135			
			3340	340	2.63				3340	340	3.01	01 -	6095	- 87	B-100	B-116	B-135
13.9	24.0	2.45	1180	120	*1	16.8	24.0	2.45	1180	120	*1	01 -	6060DA	- 104	B-108	B-124	B-143
	30.0	3.06	1180	120	*1		30.0	3.06	1180	120	*1	01 -	6065DA	- 104	B-108	B-124	B-143
	45.0	4.59	1770	180	*1		45.0	4.59	1770	180	*1	01 -	6070DA	- 104	B-108	B-124	B-143
			1770	180	0.97				1770	180	1.17	01 -	6075DA	- 104	B-108	B-124	B-143
	61.6	6.28	3340	340	2.43		51.1	5.21	3340	340	2.94	01 -	6090DA	- 104	B-108	B-124	B-143
			3340	340	2.93				3340	340	3.54	01 -	6095DA	- 104	B-108	B-124	B-143

- Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
- Motor slippage may affect n₁ and n₂. Refer to technical data for details.
- CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
- Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
- "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

Selection Tables Gearmotors



0.1 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

n₁: Motor Speed

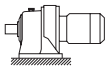
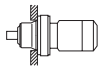
50Hz						60Hz					Nomenclature			Page of Dimension Sheet			
Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF		Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
12.2	74.5	7.59	3340	340	1.25	14.7	61.7	6.29	3340	340	1.25	01 - 6090	- 119		B-100	B-116	B-135
			3340	340	1.45				3340	340	1.51	01 - 6095	- 119		B-100	B-116	B-135
12.0	24.0	2.45	1180	120	*1	14.5	24.0	2.45	1180	120	*1	01 - 6060DA	- 121		B-108	B-124	B-143
	30.0	3.06	1140	116	*1		30.0	3.06	1140	116	*1	01 - 6065DA	- 121		B-108	B-124	B-143
	45.0	4.59	1770	180	*1		45.0	4.59	1770	180	*1	01 - 6070DA	- 121		B-108	B-124	B-143
	50.8	5.18	1770	180	*1		50.8	5.18	1770	180	*1	01 - 6075DA	- 121		B-108	B-124	B-143
	71.7	7.31	3340	340	2.09		59.4	6.06	3340	340	2.52	01 - 6090DA	- 121		B-108	B-124	B-143
			3340	340	2.24				3340	340	2.70	01 - 6095DA	- 121		B-108	B-124	B-143
10.1	24.0	2.45	1180	120	*1	12.2	24.0	2.45	1180	120	*1	01 - 6060DA	- 143		B-108	B-124	B-143
	30.0	3.06	1180	120	*1		30.0	3.06	1180	120	*1	01 - 6065DA	- 143		B-108	B-124	B-143
	45.0	4.59	1770	180	*1		45.0	4.59	1770	180	*1	01 - 6070DA	- 143		B-108	B-124	B-143
	60.0	6.12	1770	180	*1		60.0	6.12	1770	180	*1	01 - 6075DA	- 143		B-108	B-124	B-143
			3340	340	1.77				3340	340	2.14	01 - 6090DA	- 143		B-108	B-124	B-143
	84.8	8.64	3340	340	2.16		70.2	7.16	3340	340	2.61	01 - 6095DA	- 143		B-108	B-124	B-143
			5400	550	2.95				5400	550	3.56	01 - 6100DA	- 143		B-108	B-124	B-143
8.79	24.0	2.45	1180	120	*1	10.6	24.0	2.45	1180	120	*1	01 - 6060DA	- 165		B-108	B-124	B-143
	30.0	3.06	1180	120	*1		30.0	3.06	1180	120	*1	01 - 6065DA	- 165		B-108	B-124	B-143
	45.0	4.59	1770	180	*1		45.0	4.59	1770	180	*1	01 - 6070DA	- 165		B-108	B-124	B-143
	60.0	6.12	1770	180	*1		60.0	6.12	1770	180	*1	01 - 6075DA	- 165		B-108	B-124	B-143
			3340	340	1.53				3340	340	1.85	01 - 6090DA	- 165		B-108	B-124	B-143
	97.8	9.97	3340	340	2.04		81.0	8.26	3340	340	2.47	01 - 6095DA	- 165		B-108	B-124	B-143
			5400	550	2.56				5400	550	3.08	01 - 6100DA	- 165		B-108	B-124	B-143
7.44	24.0	2.45	1180	120	*1	8.97	24.0	2.45	1180	120	*1	01 - 6060DA	- 195		B-108	B-124	B-143
	30.0	3.06	1180	120	*1		30.0	3.06	1180	120	*1	01 - 6065DA	- 195		B-108	B-124	B-143
	45.0	4.59	1770	180	*1		45.0	4.59	1770	180	*1	01 - 6070DA	- 195		B-108	B-124	B-143
	60.0	6.12	1770	180	*1		60.0	6.12	1770	180	*1	01 - 6075DA	- 195		B-108	B-124	B-143
			3340	340	1.30				3340	340	1.57	01 - 6090DA	- 195		B-108	B-124	B-143
			3340	340	1.73				3340	340	2.09	01 - 6095DA	- 195		B-108	B-124	B-143
	116	11.8	5400	550	2.16		95.8	9.76	5400	550	2.61	01 - 6100DA	- 195		B-108	B-124	B-143
			5400	550	2.60				5400	550	3.13	01 - 6105DA	- 195		B-108	B-124	B-143
6.28	24.0	2.45	1180	120	*1	7.58	24.0	2.45	1180	120	*1	01 - 6060DA	- 231		B-108	B-124	B-143
	30.0	3.06	1180	120	*1		30.0	3.06	1180	120	*1	01 - 6065DA	- 231		B-108	B-124	B-143
	45.0	4.59	1770	180	*1		45.0	4.59	1770	180	*1	01 - 6070DA	- 231		B-108	B-124	B-143
	60.0	6.12	1770	180	*1		60.0	6.12	1770	180	*1	01 - 6075DA	- 231		B-108	B-124	B-143
			3340	340	1.10				3340	340	1.32	01 - 6090DA	- 231		B-108	B-124	B-143
			3340	340	1.46				3340	340	1.76	01 - 6095DA	- 231		B-108	B-124	B-143
	137	14.0	5400	550	1.83		113	11.6	5400	550	2.20	01 - 6100DA	- 231		B-108	B-124	B-143
			5400	550	2.19				5400	550	2.64	01 - 6105DA	- 231		B-108	B-124	B-143
5.31	24.0	2.45	1180	120	*1	6.41	24.0	2.45	1180	120	*1	01 - 6060DA	- 273		B-108	B-124	B-143
	30.0	3.06	1180	120	*1		30.0	3.06	1180	120	*1	01 - 6065DA	- 273		B-108	B-124	B-143
	45.0	4.59	1770	180	*1		45.0	4.59	1770	180	*1	01 - 6070DA	- 273		B-108	B-124	B-143
	60.0	6.12	1770	180	*1		60.0	6.12	1770	180	*1	01 - 6075DA	- 273		B-108	B-124	B-143
			3340	340	1.24				3340	340	1.49	01 - 6095DA	- 273		B-108	B-124	B-143
	162	16.5	5400	550	1.54		134	13.7	5400	550	1.86	01 - 6100DA	- 273		B-108	B-124	B-143
			5400	550	1.85				5400	550	2.24	01 - 6105DA	- 273		B-108	B-124	B-143

GEARMOTORS

Selection Tables
0.1 kW

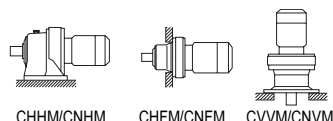
- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

Selection Tables Gearmotors

0.1 kW		n ₁ : Motor Speed														
		Hz		50Hz												
		P		4		6										
		n ₁ r/min		1450		980		1750		1165						
		50Hz				60Hz				Nomenclature						
Output Speed n ₂	Output Torque T _{out}		Allowable Radial Load Pro		SF	Output Speed n ₂	Output Torque T _{out}		Allowable Radial Load Pro		Input Capacity Symbol	Frame Size	Reduction Ratio	Page of Dimension Sheet		
	r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf			CHHM	CNFM	CNVM
4.55	24.0	2.45	1180	120	*1	5.49	24.0	2.45	1180	120	*1	01 - 6060DA	- 319	B-108	B-124	B-143
	30.0	3.06	1180	120	*1		30.0	3.06	1180	120	*1	01 - 6065DA	- 319	B-108	B-124	B-143
	45.0	4.59	1770	180	*1		45.0	4.59	1770	180	*1	01 - 6070DA	- 319	B-108	B-124	B-143
	60.0	6.12	1770	180	*1		60.0	6.12	1770	180	*1	01 - 6075DA	- 319	B-108	B-124	B-143
	150	15.3	3290	336	*1		150	15.3	3290	336	*1	01 - 6090DA	- 319	B-108	B-124	B-143
			3220	328	1.06				3280	334	1.28	01 - 6095DA	- 319	B-108	B-124	B-143
			5400	550	1.32				5400	550	1.60	01 - 6100DA	- 319	B-108	B-124	B-143
			5400	550	1.59				5400	550	1.91	01 - 6105DA	- 319	B-108	B-124	B-143
			9810	1000	2.75				9810	1000	3.32	01 - 6120DA	- 319	B-108	B-124	B-143
	189	19.3					157	16.0								
3.85	24.0	2.45	1180	120	*1	4.64	24.0	2.45	1180	120	*1	01 - 6060DA	- 377	B-108	B-124	B-143
	30.0	3.06	1180	120	*1		30.0	3.06	1180	120	*1	01 - 6065DA	- 377	B-108	B-124	B-143
	45.0	4.59	1770	180	*1		45.0	4.59	1770	180	*1	01 - 6070DA	- 377	B-108	B-124	B-143
	60.0	6.12	1770	180	*1		60.0	6.12	1770	180	*1	01 - 6075DA	- 377	B-108	B-124	B-143
	150	15.3	3290	336	*1		150	15.3	3290	336	*1	01 - 6090DA	- 377	B-108	B-124	B-143
			3150	321	0.89				3230	329	1.08	01 - 6095DA	- 377	B-108	B-124	B-143
			5400	550	1.12				5400	550	1.35	01 - 6100DA	- 377	B-108	B-124	B-143
			5400	550	1.34				5400	550	1.62	01 - 6105DA	- 377	B-108	B-124	B-143
			9810	1000	2.33				9810	1000	2.81	01 - 6120DA	- 377	B-108	B-124	B-143
			9810	1000	2.33				9810	1000	2.81	01 - 6120DB	- 377	B-108	B-124	B-143
3.07	24.0	2.45	1180	120	*1	3.70	24.0	2.45	1180	120	*1	01 - 6060DA	- 473	B-108	B-124	B-143
	30.0	3.06	1180	120	*1		30.0	3.06	1180	120	*1	01 - 6065DA	- 473	B-108	B-124	B-143
	45.0	4.59	1770	180	*1		45.0	4.59	1770	180	*1	01 - 6070DA	- 473	B-108	B-124	B-143
	60.0	6.12	1660	169	*1		60.0	6.12	1660	169	*1	01 - 6075DA	- 473	B-108	B-124	B-143
	150	15.3	3310	338	*1		150	15.3	3310	338	*1	01 - 6090DA	- 473	B-108	B-124	B-143
	200	20.4	3220	328	*1		200	20.4	3220	328	*1	01 - 6095DA	- 473	B-108	B-124	B-143
			5400	550	1.07				5400	550	1.29	01 - 6105DA	- 473	B-108	B-124	B-143
			9810	1000	1.87				9810	1000	2.26	01 - 6120DA	- 473	B-108	B-124	B-143
			9810	1000	2.25				9810	1000	2.71	01 - 6125DA	- 473	B-108	B-124	B-143
	280	28.6					232	23.7								
2.59	24.0	2.45	1180	120	*1	3.13	24.0	2.45	1180	120	*1	01 - 6060DA	- 559	B-108	B-124	B-143
	30.0	3.06	1180	120	*1		30.0	3.06	1180	120	*1	01 - 6065DA	- 559	B-108	B-124	B-143
	45.0	4.59	1770	180	*1		45.0	4.59	1770	180	*1	01 - 6070DA	- 559	B-108	B-124	B-143
	60.0	6.12	1660	169	*1		60.0	6.12	1660	169	*1	01 - 6075DA	- 559	B-108	B-124	B-143
	150	15.3	3310	338	*1		150	15.3	3310	338	*1	01 - 6090DA	- 559	B-108	B-124	B-143
	200	20.4	3220	328	*1		200	20.4	3220	328	*1	01 - 6095DA	- 559	B-108	B-124	B-143
	250	25.5	5400	550	*1		250	25.5	5400	550	*1	01 - 6100DA	- 559	B-108	B-124	B-143
			4380	446	0.91				5400	550	1.09	01 - 6105DA	- 559	B-108	B-124	B-143
			9810	1000	1.58				9810	1000	1.91	01 - 6120DA	- 559	B-108	B-124	B-143
			9810	1000	1.90				9810	1000	2.29	01 - 6125DA	- 559	B-108	B-124	B-143
2.23	45.0	4.59	1770	180	*1	2.70	45.0	4.59	1770	180	*1	01 - 6070DA	- 649	B-108	B-124	B-143
	57.4	5.85	1580	161	*1		57.4	5.85	1580	161	*1	01 - 6075DA	- 649	B-108	B-124	B-143
	146	14.9	3300	336	*1		146	14.9	3300	336	*1	01 - 6090DA	- 649	B-108	B-124	B-143
	250	25.5	5400	550	*1		250	25.5	5400	550	*1	01 - 6100DA	- 649	B-108	B-124	B-143
	296	30.2	5090	519	*1		296	30.2	5090	519	*1	01 - 6105DA	- 649	B-108	B-124	B-143
			9810	1000	1.36				9810	1000	1.65	01 - 6120DA	- 649	B-108	B-124	B-143
			9810	1000	1.64				9810	1000	1.98	01 - 6125DA	- 649	B-108	B-124	B-143
	385	39.2					319	32.5								
1.98	24.0	2.45	1180	120	*1	2.39	24.0	2.45	1180	120	*1	01 - 6060DA	- 731	B-108	B-124	B-143
	30.0	3.06	1180	120	*1		30.0	3.06	1180	120	*1	01 - 6065DA	- 731	B-108	B-124	B-143
	45.0	4.59	1770	180	*1		45.0	4.59	1770	180	*1	01 - 6070DA	- 731	B-108	B-124	B-143
	60.0	6.12	1660	169	*1		60.0	6.12	1660	169	*1	01 - 6075DA	- 731	B-108	B-124	B-143
	150	15.3	3310	338	*1		150	15.3	3310	338	*1	01 - 6090DA	- 731	B-108	B-124	B-143
	200	20.4	3220	328	*1		200	20.4	3220	328	*1	01 - 6095DA	- 731	B-108	B-124	B-143
			5400	550	*1				5400	550	*1	01 - 6100DA	- 731	B-108	B-124	B-143
			5400	550	*1				5400	550	*1	01 - 6105DA	- 731	B-108	B-124	B-143
			9810	1000	1.21				9810	1000	1.46	01 - 6120DA	- 731	B-108	B-124	B-143
			9810	1000	1.45				9810	1000	1.75	01 - 6125DA	- 731	B-108	B-124	B-143

- Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
- Motor slippage may affect n₁ and n₂. Refer to technical data for details.
- CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
- Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
- "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

Selection Tables Gearmotors



0.1 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

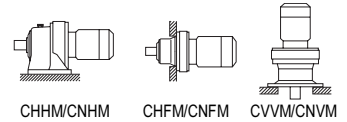
n₁: Motor Speed

50Hz						60Hz					Nomenclature			Page of Dimension Sheet			
Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF		Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
1.72	24.0	2.45	1180	120	*1	2.08	24.0	2.45	1180	120	*1	01 - 6060DA	- 841		B-108	B-124	B-143
	30.0	3.06	1180	120	*1		30.0	3.06	1180	120	*1	01 - 6065DA	- 841		B-108	B-124	B-143
	45.0	4.59	1770	180	*1		45.0	4.59	1770	180	*1	01 - 6070DA	- 841		B-108	B-124	B-143
	60.0	6.12	1770	180	*1		60.0	6.12	1770	180	*1	01 - 6075DA	- 841		B-108	B-124	B-143
	150	15.3	3290	336	*1		150	15.3	3290	336	*1	01 - 6090DA	- 841		B-108	B-124	B-143
	200	20.4	3200	326	*1		200	20.4	3200	326	*1	01 - 6095DA	- 841		B-108	B-124	B-143
	250	25.5	5400	550	*1		250	25.5	5400	550	*1	01 - 6100DA	- 841		B-108	B-124	B-143
	300	30.6	5400	550	*1		300	30.6	5400	550	*1	01 - 6105DA	- 841		B-108	B-124	B-143
	499	50.8	9810	1000	1.04		413	42.1	9810	1000	1.26	01 - 6120DA	- 841		B-108	B-124	B-143
			9810	1000	1.26				9810	1000	1.53	01 - 6125DA	- 841		B-108	B-124	B-143
1.45	45.0	4.59	1770	180	*1	1.74	45.0	4.59	1770	180	*1	01 - 6070DA	- 1003		B-108	B-124	B-143
	57.4	5.85	1580	161	*1		57.4	5.85	1580	161	*1	01 - 6075DA	- 1003		B-108	B-124	B-143
	146	14.9	3300	336	*1		146	14.9	3300	336	*1	01 - 6090DA	- 1003		B-108	B-124	B-143
	250	25.5	5400	550	*1		250	25.5	5400	550	*1	01 - 6100DA	- 1003		B-108	B-124	B-143
	296	30.2	5090	519	*1		296	30.2	5090	519	*1	01 - 6105DA	- 1003		B-108	B-124	B-143
	595	60.6	9810	1000	1.06		493	50.2	9810	1000	1.28	01 - 6125DA	- 1003		B-108	B-124	B-143
1.16	24.0	2.45	1180	120	*1	1.40	24.0	2.45	1180	120	*1	01 - 6060DA	- 1247		B-108	B-124	B-143
	30.0	3.06	1180	120	*1		30.0	3.06	1180	120	*1	01 - 6065DA	- 1247		B-108	B-124	B-143
	45.0	4.59	1770	180	*1		45.0	4.59	1770	180	*1	01 - 6070DA	- 1247		B-108	B-124	B-143
	60.0	6.12	1660	169	*1		60.0	6.12	1660	169	*1	01 - 6075DA	- 1247		B-108	B-124	B-143
	150	15.3	3310	338	*1		150	15.3	3310	338	*1	01 - 6090DA	- 1247		B-108	B-124	B-143
	200	20.4	3220	328	*1		200	20.4	3220	328	*1	01 - 6095DA	- 1247		B-108	B-124	B-143
	250	25.5	5400	550	*1		250	25.5	5400	550	*1	01 - 6100DA	- 1247		B-108	B-124	B-143
	300	30.6	5400	550	*1		300	30.6	5400	550	*1	01 - 6105DA	- 1247		B-108	B-124	B-143
	525	53.5	9810	1000	*1		525	53.5	9810	1000	*1	01 - 6120DA	- 1247		B-108	B-124	B-143
	739	75.3	9810	1000	0.85		612	62.4	9810	1000	1.03	01 - 6125DA	- 1247		B-108	B-124	B-143
0.980	150	15.3	3310	338	*1	1.18	150	15.3	3310	338	*1	01 - 6090DA	- 1479		B-108	B-124	B-143
	193	19.6	3240	330	*1		193	19.6	3240	330	*1	01 - 6095DA	- 1479		B-108	B-124	B-143
	250	25.5	5400	550	*1		250	25.5	5400	550	*1	01 - 6100DA	- 1479		B-108	B-124	B-143
	300	30.6	4780	488	*1		300	30.6	4780	488	*1	01 - 6105DA	- 1479		B-108	B-124	B-143
	525	53.5	9780	997	*1		525	53.5	9780	997	*1	01 - 6120DA	- 1479		B-108	B-124	B-143
	630	64.2	9560	974	*1		630	64.2	9560	974	*1	01 - 6125DA	- 1479		B-108	B-124	B-143
0.784	24.0	2.45	1180	120	*1	0.946	24.0	2.45	1180	120	*1	01 - 6060DA	- 1849		B-108	B-124	B-143
	30.0	3.06	1180	120	*1		30.0	3.06	1180	120	*1	01 - 6065DA	- 1849		B-108	B-124	B-143
	45.0	4.59	1770	180	*1		45.0	4.59	1770	180	*1	01 - 6070DA	- 1849		B-108	B-124	B-143
	60.0	6.12	1660	169	*1		60.0	6.12	1660	169	*1	01 - 6075DA	- 1849		B-108	B-124	B-143
	150	15.3	3310	338	*1		150	15.3	3310	338	*1	01 - 6090DA	- 1849		B-108	B-124	B-143
	200	20.4	3220	328	*1		200	20.4	3220	328	*1	01 - 6095DA	- 1849		B-108	B-124	B-143
	250	25.5	5400	550	*1		250	25.5	5400	550	*1	01 - 6100DA	- 1849		B-108	B-124	B-143
	300	30.6	5400	550	*1		300	30.6	5400	550	*1	01 - 6105DA	- 1849		B-108	B-124	B-143
	525	53.5	9810	1000	*1		525	53.5	9810	1000	*1	01 - 6120DA	- 1849		B-108	B-124	B-143
	630	64.2	9810	1000	*1		630	64.2	9810	1000	*1	01 - 6125DA	- 1849		B-108	B-124	B-143
0.702	45.0	4.59	1770	180	*1	0.847	45.0	4.59	1770	180	*1	01 - 6070DA	- 2065		B-108	B-124	B-143
	57.4	5.85	1580	161	*1		57.4	5.85	1580	161	*1	01 - 6075DA	- 2065		B-108	B-124	B-143
	146	14.9	3300	336	*1		146	14.9	3300	336	*1	01 - 6090DA	- 2065		B-108	B-124	B-143
	250	25.5	5400	550	*1		250	25.5	5400	550	*1	01 - 6100DA	- 2065		B-108	B-124	B-143
	296	30.2	5090	519	*1		296	30.2	5090	519	*1	01 - 6105DA	- 2065		B-108	B-124	B-143
	525	53.5	9810	1000	*1		525	53.5	9810	1000	*1	01 - 6120DA	- 2065		B-108	B-124	B-143
0.572	45.0	4.59	1770	180	*1	0.690	45.0	4.59	1770	180	*1	01 - 6070DA	- 2537		B-108	B-124	B-143
	57.4	5.85	1580	161	*1		57.4	5.85	1580	161	*1	01 - 6075DA	- 2537		B-108	B-124	B-143
	146	14.9	3300	336	*1		146	14.9	3300	336	*1	01 - 6090DA	- 2537		B-108	B-124	B-143
	250	25.5	5400	550	*1		250	25.5	5400	550	*1	01 - 6100DA	- 2537		B-108	B-124	B-143
	296	30.2	5090	519	*1		296	30.2	5090	519	*1	01 - 6105DA	- 2537		B-108	B-124	B-143
	525	53.5	9810	1000	*1		525	53.5	9810	1000	*1	01 - 6120DA	- 2537		B-108	B-124	B-143
	630	64.2	9810	1000	*1		630	64.2	9810	1000	*1	01 - 6125DA	- 2537		B-108	B-124	B-143

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*1" in the SF column. They cannot be operated with 100% motor rating.

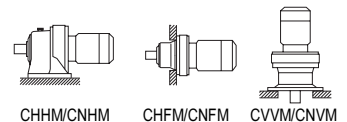
Selection Tables Gearmotors

0.1 kW	n ₁ : Motor Speed				
	Hz		50Hz		60Hz
	P		4	6	4 6
	n ₁	r/min	1450	980	1750 1165



50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF		Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM CHHM	CNFM CHFM	CNVN CVVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf							
0.476	150	15.3	3310	338	*1	0.575	150	15.3	3310	338	*1	01 -	6090DA	- 3045	B-108	B-124	B-143
	192	19.6	3240	330	*1		192	19.6	3240	330	*1	01 -	6095DA	- 3045	B-108	B-124	B-143
	250	25.5	5400	550	*1		250	25.5	5400	550	*1	01 -	6100DA	- 3045	B-108	B-124	B-143
	300	30.6	4780	488	*1		300	30.6	4780	488	*1	01 -	6105DA	- 3045	B-108	B-124	B-143
	525	53.5	9780	997	*1		525	53.5	9780	997	*1	01 -	6120DA	- 3045	B-108	B-124	B-143
	630	64.2	9560	974	*1		630	64.2	9560	974	*1	01 -	6125DA	- 3045	B-108	B-124	B-143
0.417	146	14.9	3300	336	*1	0.503	146	14.9	3300	336	*1	01 -	6090DA	- 3481	B-108	B-124	B-143
	250	25.5	5400	550	*1		250	25.5	5400	550	*1	01 -	6100DA	- 3481	B-108	B-124	B-143
	296	30.2	5090	519	*1		296	30.2	5090	519	*1	01 -	6105DA	- 3481	B-108	B-124	B-143
	525	53.5	9810	1000	*1		525	53.5	9810	1000	*1	01 -	6120DA	- 3481	B-108	B-124	B-143
	630	64.2	9810	1000	*1		630	64.2	9810	1000	*1	01 -	6125DA	- 3481	B-108	B-124	B-143
	150	15.3	3310	338	*1		150	15.3	3310	338	*1	01 -	6090DA	- 4437	B-108	B-124	B-143
0.327	192	19.6	3240	330	*1	0.394	192	19.6	3240	330	*1	01 -	6095DA	- 4437	B-108	B-124	B-143
	250	25.5	5400	550	*1		250	25.5	5400	550	*1	01 -	6100DA	- 4437	B-108	B-124	B-143
	300	30.6	4780	488	*1		300	30.6	4780	488	*1	01 -	6105DA	- 4437	B-108	B-124	B-143
	525	53.5	9780	997	*1		525	53.5	9780	997	*1	01 -	6120DA	- 4437	B-108	B-124	B-143
	630	64.2	9560	974	*1		630	64.2	9560	974	*1	01 -	6125DA	- 4437	B-108	B-124	B-143
	150	15.3	3310	338	*1		150	15.3	3310	338	*1	01 -	6090DA	- 5133	B-108	B-124	B-143
0.282	192	19.6	3240	330	*1	0.341	192	19.6	3240	330	*1	01 -	6095DA	- 5133	B-108	B-124	B-143
	250	25.5	5400	550	*1		250	25.5	5400	550	*1	01 -	6100DA	- 5133	B-108	B-124	B-143
	300	30.6	4780	488	*1		300	30.6	4780	488	*1	01 -	6105DA	- 5133	B-108	B-124	B-143
	525	53.5	9780	997	*1		525	53.5	9780	997	*1	01 -	6120DA	- 5133	B-108	B-124	B-143
	630	64.2	9560	974	*1		630	64.2	9560	974	*1	01 -	6125DA	- 5133	B-108	B-124	B-143
	525	53.5	9780	997	*1		525	53.5	9780	997	*1	01 -	6120DB	- 6177	B-108	B-124	B-143
0.235	630	64.2	9560	974	*1	0.283	630	64.2	9560	974	*1	01 -	6125DB	- 6177	B-108	B-124	B-143
0.192	525	53.5	9780	997	*1	0.231	525	53.5	9780	997	*1	01 -	6120DB	- 7569	B-108	B-124	B-143
	630	64.2	9560	974	*1		630	64.2	9560	974	*1	01 -	6125DB	- 7569	B-108	B-124	B-143

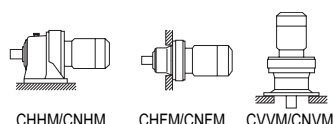
0.2 kW	n ₁ : Motor Speed				
	Hz		50Hz		60Hz
	P		4	6	4 6
	n ₁	r/min	1450	980	1750 1165



50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Alloeable Radial Load Pro		SF		Output Speed n ₂	Output Torque Tout	Alloeable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVN
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
242	7.51	0.765	798	81.4	1.00	292	6.22	0.634	751	76.6	1.00	02 -	6060	- 6	B-100	B-116	B-135
			798	81.4	1.43				751	76.6	1.43	02 -	6065	- 6	B-100	B-116	B-135
			1390	142	1.74				1310	134	1.74	02 -	6070	- 6	B-100	B-116	B-135
			1390	142	2.04				1310	134	2.04	02 -	6075	- 6	B-100	B-116	B-135
			1930	197	2.96				1820	185	2.96	02 -	6080	- 6	B-100	B-116	B-135
181	10.0	1.02	912	93.0	1.00	219	8.29	0.846	859	87.5	1.00	02 -	6060	- 8	B-100	B-116	B-135
			912	93	1.43				859	88	1.43	02 -	6065	- 8	B-100	B-116	B-135
			1540	157	1.74				1450	148	1.74	02 -	6070	- 8	B-100	B-116	B-135
			1540	157	2.04				1450	148	2.04	02 -	6075	- 8	B-100	B-116	B-135
			2100	214	2.96				1970	201	2.96	02 -	6080	- 8	B-100	B-116	B-135

- Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
- Motor slippage may affect n₁ and n₂. Refer to technical data for details.
- CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
- Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
- "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

Selection Tables Gearmotors



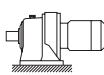
0.2 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

n₁: Motor Speed

50Hz					60Hz					Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro	SF		Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro	SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf	r/min	N·m	kgf·m	N	kgf				CHHM	CHFM	CVVM
132	13.8	1.40	1180	120	159	11.4	1.16	1170	119	02 -	6060	- 11	B-100	B-116	B-135
			1180	120				1170	119				B-100	B-116	B-135
			1730	176				1630	166				B-100	B-116	B-135
			1730	176				1630	166				B-100	B-116	B-135
			2320	236				2180	222				B-100	B-116	B-135
112	16.3	1.66	1180	120	135	13.5	1.37	1180	120	02 -	6060	- 13	B-100	B-116	B-135
			1180	120				1180	120				B-100	B-116	B-135
			1770	180				1720	175				B-100	B-116	B-135
			1770	180				1720	175				B-100	B-116	B-135
			2500	254				2350	239				B-100	B-116	B-135
96.7	18.8	1.91	1180	120	117	15.6	1.59	1180	120	02 -	6060	- 15	B-100	B-116	B-135
			1180	120				1180	120				B-100	B-116	B-135
			1770	180				1730	176				B-100	B-116	B-135
			1770	180				1730	176				B-100	B-116	B-135
			2560	261				2420	247				B-100	B-116	B-135
85.3	21.3	2.17	1180	120	103	17.6	1.80	1180	120	02 -	6060	- 17	B-100	B-116	B-135
			1180	120				1180	120				B-100	B-116	B-135
			1770	180				1770	180				B-100	B-116	B-135
			1770	180				1770	180				B-100	B-116	B-135
			2560	261				2540	259				B-100	B-116	B-135
69.0	26.3	2.68	1180	120	83.3	21.8	2.22	1180	120	02 -	6065	- 21	B-100	B-116	B-135
			1180	120				1180	120				B-100	B-116	B-135
			1770	180				1770	180				B-100	B-116	B-135
			1770	180				1770	180				B-100	B-116	B-135
			2560	261				2480	253				B-100	B-116	B-135
58.0	31.3	3.19	1180	120	70.0	25.9	2.64	1180	120	02 -	6065	- 25	B-100	B-116	B-135
			1180	120				1180	120				B-100	B-116	B-135
			1770	180				1770	180				B-100	B-116	B-135
			1770	180				1770	180				B-100	B-116	B-135
			2560	261				2550	260				B-100	B-116	B-135
50.0	36.3	3.70	1180	120	60.3	30.1	3.07	1180	120	02 -	6065	- 29	B-100	B-116	B-135
			1180	120				1180	120				B-100	B-116	B-135
			1770	180				1770	180				B-100	B-116	B-135
			1770	180				1770	180				B-100	B-116	B-135
			2560	261				2560	261				B-100	B-116	B-135
41.4	43.8	4.46	1180	120	50.0	36.3	3.70	1180	120	02 -	6070	- 35	B-100	B-116	B-135
			1180	120				1180	120				B-100	B-116	B-135
			1770	180				1770	180				B-100	B-116	B-135
			1770	180				1770	180				B-100	B-116	B-135
			2560	261				2560	261				B-100	B-116	B-135
33.7	53.8	5.49	1180	120	40.7	44.6	4.54	1180	120	02 -	6070	- 43	B-100	B-116	B-135
			1180	120				1180	120				B-100	B-116	B-135
			1770	180				1770	180				B-100	B-116	B-135
			1770	180				1770	180				B-100	B-116	B-135
			2560	261				2560	261				B-100	B-116	B-135
28.4	63.8	6.51	1180	120	34.3	52.9	5.39	1180	120	02 -	6085	- 51	B-100	B-116	B-135
			1180	120				1180	120				B-100	B-116	B-135
			1770	180				1770	180				B-100	B-116	B-135
			1770	180				1770	180				B-100	B-116	B-135
			2560	261				2560	261				B-100	B-116	B-135
24.6	73.8	7.53	1180	120	29.7	61.2	6.24	1180	120	02 -	6090	- 59	B-100	B-116	B-135
			1180	120				1180	120				B-100	B-116	B-135
			1770	180				1770	180				B-100	B-116	B-135
			1770	180				1770	180				B-100	B-116	B-135
			2560	261				2560	261				B-100	B-116	B-135
20.4	88.8	9.06	1180	120	24.6	73.6	7.50	1180	120	02 -	6100	- 71	B-100	B-116	B-135
			1180	120				1180	120				B-100	B-116	B-135
			1770	180				1770	180				B-100	B-116	B-135
			1770	180				1770	180				B-100	B-116	B-135
			2560	261				2560	261				B-100	B-116	B-135

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

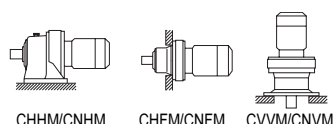
Selection Tables Gearmotors

0.2 kW		n ₁ : Motor Speed									
		Hz		50Hz							
		P		4	6	4	6				
n ₁ r/min		1450	980	1750	1165						

50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout		Allowable Radial Load Pro		SF	Output Speed n ₂	Output Torque Tout		Allowable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
16.7	109	11.1	3340	340	1.06	20.1	90.2	9.20	3340	340	1.06	02 - 6090	- 87		B-100	B-116	B-135
			3340	340	1.32				3340	340	1.51	02 - 6095	- 87	B-100	B-116	B-135	
			5400	550	2.17				5400	550	2.17	02 - 6100	- 87	B-101	B-117	B-136	
			5400	550	2.52				5400	550	2.83	02 - 6105	- 87	B-101	B-117	B-136	
13.9	123	12.6	60.0	6.12	*1	16.8	102	10.4	60.0	6.12	*1	02 - 6075DA	- 104	B-108	B-124	B-143	
			3340	340	1.22				3340	340	1.47	02 - 6090DA	- 104	B-108	B-124	B-143	
			3340	340	1.47				3340	340	1.77	02 - 6095DA	- 104	B-108	B-124	B-143	
			5400	550	2.03				5400	550	2.15	02 - 6100DA	- 104	B-108	B-124	B-143	
12.2	149.0	15.2	5400	550	1.05	14.7	123	12.6	5400	550	1.05	02 - 6100	- 119	B-101	B-117	B-136	
			5400	550	1.43				5400	550	1.43	02 - 6105	- 119	B-101	B-117	B-136	
			3340	340	1.05				3340	340	1.26	02 - 6090DA	- 121	B-108	B-124	B-143	
			3340	340	1.12				3340	340	1.35	02 - 6095DA	- 121	B-108	B-124	B-143	
12.0	143	14.6	5400	550	1.74	14.5	119	12.1	5400	550	2.10	02 - 6100DA	- 121	B-108	B-124	B-143	
			5400	550	2.14				5400	550	2.15	02 - 6105DA	- 121	B-108	B-124	B-143	
			9810	1000	2.15				9810	1000	2.15	02 - 6120DA	- 121	B-108	B-124	B-143	
			3340	340	1.08				3340	340	1.30	02 - 6095DA	- 143	B-108	B-124	B-143	
10.1	170	17.3	5400	550	1.47	12.2	140	14.3	5400	550	1.78	02 - 6100DA	- 143	B-108	B-124	B-143	
			5400	550	1.77				5400	550	2.14	02 - 6105DA	- 143	B-108	B-124	B-143	
			9810	1000	2.15				9810	1000	2.15	02 - 6120DA	- 143	B-108	B-124	B-143	
			3340	340	*1				3340	340	*1	02 - 6090DA	- 165	B-108	B-124	B-143	
8.79	196	19.9	3340	340	1.02	10.6	162	16.5	3340	340	1.23	02 - 6095DA	- 165	B-108	B-124	B-143	
			5400	550	1.28				5400	550	1.54	02 - 6100DA	- 165	B-108	B-124	B-143	
			5400	550	1.53				5400	550	1.85	02 - 6105DA	- 165	B-108	B-124	B-143	
			9810	1000	2.15				9810	1000	2.15	02 - 6120DA	- 165	B-108	B-124	B-143	
7.44	231	23.6	9810	1000	2.68	8.97	192	19.5	9810	1000	3.24	02 - 6120DB	- 165	B-108	B-124	B-143	
			9810	1000	2.15				9810	1000	2.15	02 - 6120DA	- 195	B-108	B-124	B-143	
			9810	1000	2.27				9810	1000	2.74	02 - 6120DB	- 195	B-108	B-124	B-143	
			9810	1000	2.73				9810	1000	3.29	02 - 6125DB	- 195	B-108	B-124	B-143	
6.28	274	27.9	150	15.3	*1	7.58	227	23.1	150	15.3	*1	02 - 6090DA	- 231	B-108	B-124	B-143	
			200	20.4	*1				200	20.4	*1	02 - 6095DA	- 231	B-108	B-124	B-143	
			5400	550	1.10				5400	550	1.32	02 - 6105DA	- 231	B-108	B-124	B-143	
			9810	1000	1.91				9810	1000	2.15	02 - 6120DA	- 231	B-108	B-124	B-143	
5.31	324	33.0	9810	1000	1.91	6.41	268	27.3	9810	1000	2.30	02 - 6120DB	- 231	B-108	B-124	B-143	
			9810	1000	2.15				9810	1000	2.15	02 - 6125DA	- 231	B-108	B-124	B-143	
			9810	1000	2.30				9810	1000	2.78	02 - 6125DB	- 231	B-108	B-124	B-143	
			14700	1500	2.85				14700	1500	3.44	02 - 6130DB	- 231	B-109	B-125	B-144	
5.31	324	33.0	14700	1500	2.85	6.41	268	27.3	14700	1500	3.44	02 - 6130DB	- 231	B-109	B-125	B-144	
			14700	1500	2.85				14700	1500	3.44	02 - 6130DB	- 231	B-109	B-125	B-144	
			14700	1500	2.85				14700	1500	3.44	02 - 6130DB	- 231	B-109	B-125	B-144	
			14700	1500	2.85				14700	1500	3.44	02 - 6130DB	- 231	B-109	B-125	B-144	

- Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
- Motor slippage may affect n₁ and n₂. Refer to technical data for details.
- CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
- Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
- "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

Selection Tables Gearmotors



0.2 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

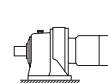
n₁: Motor Speed

50Hz						60Hz					Nomenclature			Page of Dimension Sheet					
Output Speed n ₂	Output Torque Tout		Allowable Radial Load Pro		SF	Output Speed n ₂	Output Torque Tout		Allowable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM		
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM		
4.55	200	20.4	3200	326	*1	5.49	200	20.4	3200	326	*1	02 - 6095DA	- 319		B-108	B-124	B-143		
	250	25.5	5400	550	*1		250	25.5	5400	550	*1	02 - 6100DA	- 319		B-108	B-124	B-143		
	300	30.6	5400	550	*1		300	30.6	5400	550	*1	02 - 6105DA	- 319		B-108	B-124	B-143		
	378	38.6	9810	1000	1.38		313	31.9	9810	1000	1.66	02 - 6120DA	- 319		B-108	B-124	B-143		
			9810	1000	1.67				9810	1000	2.01	02 - 6125DA	- 319		B-108	B-124	B-143		
			14700	1500	2.06				14700	1500	2.15	02 - 6130DA	- 319		B-109	B-125	B-144		
			14700	1500	2.06				14700	1500	2.49	02 - 6130DB	- 319		B-109	B-125	B-143		
			14700	1500	2.15				14700	1500	2.15	02 - 6135DA	- 319		B-109	B-125	B-144		
			14700	1500	2.49				14700	1500	3.00	02 - 6135DB	- 319		B-109	B-125	B-144		
	3.85	200	20.4	3200	326		*1	4.64	200	20.4	3200	326	*1	02 - 6095DA	- 377		B-108	B-124	B-143
250		25.5	5400	550	*1	250	25.5		5400	550	*1	02 - 6100DA	- 377		B-108	B-124	B-143		
300		30.6	5400	550	*1	300	30.6		5400	550	*1	02 - 6105DA	- 377		B-108	B-124	B-143		
447		45.6	9810	1000	1.16	370	37.7		9810	1000	1.40	02 - 6120DA	- 377		B-108	B-124	B-143		
			9810	1000	1.41				9810	1000	1.70	02 - 6125DA	- 377		B-108	B-124	B-143		
			14700	1500	1.75				14700	1500	2.11	02 - 6130DA	- 377		B-109	B-125	B-144		
			14700	1500	2.10				14700	1500	2.15	02 - 6135DA	- 377		B-109	B-125	B-144		
			14700	1500	2.10				14700	1500	2.54	02 - 6135DB	- 377		B-109	B-125	B-144		
			16000	1630	2.15				16000	1630	2.15	02 - 6140DA	- 377		B-109	B-125	B-144		
16000		1630	2.74	16000	1630	3.31	02 - 6140DB		- 377		B-109	B-125	B-144						
3.07	250	25.5	5400	550	*1	3.70	250	25.5	5400	550	*1	02 - 6100DA	- 473		B-108	B-124	B-143		
	300	30.6	5400	550	*1		300	30.6	5400	550	*1	02 - 6105DA	- 473		B-108	B-124	B-143		
	561	57.2	9810	1000	1.12		465	47.4	9810	1000	1.36	02 - 6125DA	- 473		B-108	B-124	B-143		
			14700	1500	1.39				14700	1500	1.68	02 - 6130DA	- 473		B-109	B-125	B-144		
			14700	1500	1.68				14700	1500	2.02	02 - 6135DA	- 473		B-109	B-125	B-144		
			16000	1630	2.15				16000	1630	2.15	02 - 6140DA	- 473		B-109	B-125	B-144		
			16000	1630	2.18				16000	1630	2.64	02 - 6140DB	- 473		B-109	B-125	B-144		
			16000	1630	2.44				16000	1630	2.95	02 - 6145DB	- 473		B-109	B-125	B-144		
	2.59	300	30.6	5400	550		*1	3.13	300	30.6	5400	550	*1	02 - 6105DA	- 559		B-108	B-124	B-143
		525	53.5	9810	1000		*1		525	53.5	9810	1000	*1	02 - 6120DA	- 559		B-108	B-124	B-143
663		67.6	9810	1000	0.95	549	56.0		9810	1000	1.15	02 - 6125DA	- 559		B-108	B-124	B-143		
			14700	1500	1.18				14700	1500	1.42	02 - 6130DA	- 559		B-109	B-125	B-144		
			14700	1500	1.42				14700	1500	1.71	02 - 6135DA	- 559		B-109	B-125	B-144		
			16000	1630	1.85				16000	1630	2.15	02 - 6140DA	- 559		B-109	B-125	B-144		
			16000	1630	1.85				16000	1630	2.23	02 - 6140DB	- 559		B-109	B-125	B-144		
			16000	1630	2.07				16000	1630	2.15	02 - 6145DA	- 559		B-109	B-125	B-144		
16000		1630	2.07	16000	1630	2.50	02 - 6145DB		- 559		B-109	B-125	B-144						
2.23		525	53.5	9810	1000	*1	2.70		525	53.5	9810	1000	*1	02 - 6120DA	- 649		B-108	B-124	B-143
	630	64.2	9810	1000	*1	630		64.2	9810	1000	*1	02 - 6125DA	- 649		B-108	B-124	B-143		
	769	78.4	9810	1000	0.82	638		65.0	9810	1000	0.98	02 - 6125DA	- 649		B-108	B-124	B-143		
			14700	1500	1.19				14700	1500	1.43	02 - 6130DA	- 649		B-109	B-125	B-144		
			14700	1500	1.36				14700	1500	1.65	02 - 6135DA	- 649		B-109	B-125	B-144		
			16000	1630	1.59				16000	1630	1.92	02 - 6140DA	- 649		B-109	B-125	B-144		
			16000	1630	1.78				16000	1630	2.15	02 - 6145DA	- 649		B-109	B-125	B-144		
1.98	525	53.5	9810	1000	*1	2.39	525	53.5	9810	1000	*1	02 - 6120DA	- 731		B-108	B-124	B-143		
	630	64.2	9810	1000	*1		630	64.2	9810	1000	*1	02 - 6125DA	- 731		B-108	B-124	B-143		
	867	88.3	14700	1500	1.08		718	73.2	14700	1500	1.31	02 - 6135DA	- 731		B-109	B-125	B-144		
			16000	1630	1.41				16000	1630	1.71	02 - 6140DA	- 731		B-109	B-125	B-144		
16000	1630	1.58	16000	1630	1.91	02 - 6145DA	- 731		B-109	B-125	B-144								
1.72	520	53.0	9810	1000	*1	2.08	520	53.0	9810	1000	*1	02 - 6120DA	- 841		B-108	B-124	B-143		
	630	64.2	9810	1000	*1		630	64.2	9810	1000	*1	02 - 6125DA	- 841		B-108	B-124	B-143		
	780	79.5	14700	1500	*1		780	79.5	14700	1500	*1	02 - 6130DA	- 841		B-109	B-125	B-144		
	997	102	14700	1500	0.94		826	84.2	14700	1500	1.14	02 - 6135DA	- 841		B-109	B-125	B-144		
			16000	1630	1.23				16000	1630	1.48	02 - 6140DA	- 841		B-109	B-125	B-144		
			16000	1630	1.37				16000	1630	1.51	02 - 6145DA	- 841		B-109	B-125	B-144		

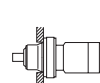
- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*1" in the SF column. They cannot be operated with 100% motor rating.

Selection Tables Gearmotors

0.2 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165



CHHM/CNHM



CHFM/CNFM

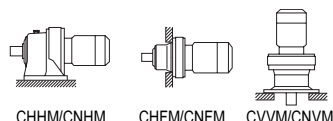


CVVM/CNVVM

50Hz						60Hz					Nomenclature			Page of Dimension Sheet			
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVMM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
1.45	525	53.5	9810	1000	*1	1.74	525	53.5	9810	1000	*1	02 -	6120DA	- 1003	B-108	B-124	B-143
	630	64.2	9810	1000	*1		630	64.2	9810	1000	*1	02 -	6125DA	- 1003	B-108	B-124	B-143
	912	93.0	14700	1500	*1		912	93.0	14700	1500	*1	02 -	6130DA	- 1003	B-109	B-125	B-144
			14700	1500	0.88				14700	1500	1.07	02 -	6135DA	- 1003	B-109	B-125	B-144
	1190	121	16000	1630	1.03		985	100	16000	1630	1.24	02 - 6140DA	- 1003	B-109	B-125	B-144	
			16000	1630	1.15				16000	1630	1.39	02 -	6145DA	- 1003	B-109	B-125	B-144
1.16	630	64.2	9810	1000	*1	1.40	630	64.2	9810	1000	*1	02 -	6125DA	- 1247	B-108	B-124	B-143
	780	79.5	14700	1500	*1		780	79.5	14700	1500	*1	02 -	6130DA	- 1247	B-109	B-125	B-144
	940	95.8	14700	1500	*1		940	95.8	14700	1500	*1	02 -	6135DA	- 1247	B-109	B-125	B-144
	1230	125	16000	1630	*1		1230	125	16000	1630	*1	02 -	6140DA	- 1247	B-109	B-125	B-144
	1480	151	15200	1540	0.93		1220	125	16000	1630	1.12	02 -	6145DA	- 1247	B-109	B-125	B-144
0.980	848	86.5	14700	1500	*1	1.18	848	86.5	14700	1500	*1	02 -	6130DA	- 1479	B-109	B-125	B-144
	979	99.8	14700	1500	*1		979	99.8	14700	1500	*1	02 -	6135DA	- 1479	B-109	B-125	B-144
	1230	125	16000	1630	*1		1230	125	16000	1630	*1	02 -	6140DA	- 1479	B-109	B-125	B-144
	1250	127	16000	1630	*1		1250	127	16000	1630	*1	02 -	6145DA	- 1479	B-109	B-125	B-144
0.784	780	79.5	14700	1500	*1	0.946	780	79.5	14700	1500	*1	02 -	6130DA	- 1849	B-109	B-125	B-144
	940	95.8	14700	1500	*1		940	95.8	14700	1500	*1	02 -	6135DA	- 1849	B-109	B-125	B-144
	1230	125	16000	1630	*1		1230	125	16000	1630	*1	02 -	6140DA	- 1849	B-109	B-125	B-144
	1370	140	15700	1600	*1		1370	140	15700	1600	*1	02 -	6145DA	- 1849	B-109	B-125	B-144
	1740	177	22100	2250	*1		1740	177	22100	2250	*1	02 -	6160DA	- 1849	B-110	B-126	B-145
0.702	912	93.0	14700	1500	*1	0.847	912	93.0	14700	1500	*1	02 -	6130DA	- 2065	B-109	B-125	B-144
	1050	107	14700	1500	*1		1050	107	14700	1500	*1	02 -	6135DA	- 2065	B-109	B-125	B-144
	1230	125	16000	1630	*1		1230	125	16000	1630	*1	02 -	6140DA	- 2065	B-109	B-125	B-144
	1370	140	16000	1630	*1		1370	140	16000	1630	*1	02 -	6145DA	- 2065	B-109	B-125	B-144
	1760	179	22100	2250	*1		1760	179	22100	2250	*1	02 -	6160DA	- 2065	B-110	B-126	B-145
	2450	250	22100	2250	0.86		2030	207	22100	2250	1.04	02 -	6165DA	- 2065	B-110	B-126	B-145
0.572	912	93.0	14700	1500	*1	0.690	912	93.0	14700	1500	*1	02 -	6130DA	- 2537	B-109	B-125	B-144
	1050	107	14700	1500	*1		1050	107	14700	1500	*1	02 -	6135DA	- 2537	B-109	B-125	B-144
	1230	125	16000	1630	*1		1230	125	16000	1630	*1	02 -	6140DA	- 2537	B-109	B-125	B-144
	1370	140	16000	1630	*1		1370	140	16000	1630	*1	02 -	6145DA	- 2537	B-109	B-125	B-144
	1760	179	22100	2250	*1		1760	179	22100	2250	*1	02 -	6160DA	- 2537	B-110	B-126	B-145
	2100	214	22100	2250	*1		2100	214	22100	2250	*1	02 -	6165DA	- 2537	B-110	B-126	B-145
0.476	848	86.5	14700	1500	*1	0.575	848	86.5	14700	1500	*1	02 -	6130DA	- 3045	B-109	B-125	B-144
	979	99.8	14700	1500	*1		979	99.8	14700	1500	*1	02 -	6135DA	- 3045	B-109	B-125	B-144
	1230	125	16000	1630	*1		1230	125	16000	1630	*1	02 -	6140DA	- 3045	B-109	B-125	B-144
	1250	127	16000	1630	*1		1250	127	16000	1630	*1	02 -	6145DA	- 3045	B-109	B-125	B-144
	1760	179	22100	2250	*1		1760	179	22100	2250	*1	02 -	6160DA	- 3045	B-110	B-126	B-145
	2050	209	21800	2220	*1		2050	209	21800	2220	*1	02 -	6165DA	- 3045	B-110	B-126	B-145
	2530	258	29500	3010	*1		2530	258	29500	3010	*1	02 -	6170DA	- 3045	B-110	B-126	B-145
	3610	368	29500	3010	0.87		2990	305	29500	3010	1.05	02 -	6175DA	- 3045	B-110	B-126	B-145
0.417	912	93.0	14700	1500	*1	0.503	912	93.0	14700	1500	*1	02 -	6130DA	- 3481	B-109	B-125	B-144
	1050	107	14700	1500	*1		1050	107	14700	1500	*1	02 -	6135DA	- 3481	B-109	B-125	B-144
	1230	125	16000	1630	*1		1230	125	16000	1630	*1	02 -	6140DA	- 3481	B-109	B-125	B-144
	1370	140	16000	1630	*1		1370	140	16000	1630	*1	02 -	6145DA	- 3481	B-109	B-125	B-144
	1760	179	22100	2250	*1		1760	179	22100	2250	*1	02 -	6160DA	- 3481	B-110	B-126	B-145
	2100	214	22100	2250	*1		2100	214	22100	2250	*1	02 -	6165DA	- 3481	B-110	B-126	B-145
	2530	258	29500	3010	*1		2530	258	29500	3010	*1	02 -	6170DA	- 3481	B-110	B-126	B-145
	3150	321	29500	3010	*1		3150	321	29500	3010	*1	02 -	6175DA	- 3481	B-110	B-126	B-145

1. Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
2. Motor slippage may affect n₁ and n₂. Refer to technical data for details.
3. CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
4. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
5. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

Selection Tables Gearmotors



0.2 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

n₁: Motor Speed

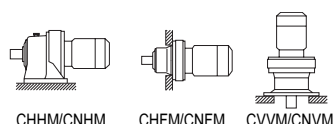
50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM CHHM	CNFM CHF	CNVM CVVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf							
0.327	848	86.5	14700	1500	*1	0.394	848	86.5	14700	1500	*1	02 -	6130DA	- 4437	B-109	B-125	B-144
	979	99.8	14700	1500	*1		979	99.8	14700	1500	*1	02 -	6135DA	- 4437	B-109	B-125	B-144
	1230	125	16000	1630	*1		1230	125	16000	1630	*1	02 -	6140DA	- 4437	B-109	B-125	B-144
	1250	127	16000	1630	*1		1250	127	16000	1630	*1	02 -	6145DA	- 4437	B-109	B-125	B-144
	1760	179	22100	2250	*1		1760	179	22100	2250	*1	02 -	6160DA	- 4437	B-110	B-126	B-145
	2050	209	21800	2220	*1		2050	209	21800	2220	*1	02 -	6165DA	- 4437	B-110	B-126	B-145
	2530	258	29500	3010	*1		2530	258	29500	3010	*1	02 -	6170DA	- 4437	B-110	B-126	B-145
	3150	321	29500	3010	*1		3150	321	29500	3010	*1	02 -	6175DA	- 4437	B-110	B-126	B-145
0.282	848	86.5	14700	1500	*1	0.341	848	86.5	14700	1500	*1	02 -	6130DA	- 5133	B-109	B-125	B-144
	979	99.8	14700	1500	*1		979	99.8	14700	1500	*1	02 -	6135DA	- 5133	B-109	B-125	B-144
	1230	125	16000	1630	*1		1230	125	16000	1630	*1	02 -	6140DA	- 5133	B-109	B-125	B-144
	1250	127	16000	1630	*1		1250	127	16000	1630	*1	02 -	6145DA	- 5133	B-109	B-125	B-144
	1760	179	22100	2250	*1		1760	179	22100	2250	*1	02 -	6160DA	- 5133	B-110	B-126	B-145
	2050	209	21800	2220	*1		2050	209	21800	2220	*1	02 -	6165DA	- 5133	B-110	B-126	B-145
	2530	258	29500	3010	*1		2530	258	29500	3010	*1	02 -	6170DA	- 5133	B-110	B-126	B-145
	3150	321	29500	3010	*1		3150	321	29500	3010	*1	02 -	6175DA	- 5133	B-110	B-126	B-145
0.235	848	86.5	14700	1500	*1	0.283	848	86.5	14700	1500	*1	02 -	6130DB	- 6177	B-109	B-125	B-143
	979	99.8	14700	1500	*1		979	99.8	14700	1500	*1	02 -	6135DB	- 6177	B-109	B-125	B-144
	1230	125	16000	1630	*1		1230	125	16000	1630	*1	02 -	6140DB	- 6177	B-109	B-125	B-144
	1250	127	16000	1630	*1		1250	127	16000	1630	*1	02 -	6145DB	- 6177	B-109	B-125	B-144
	1760	179	22100	2250	*1		1760	179	22100	2250	*1	02 -	6160DA	- 6177	B-110	B-126	B-145
	2050	209	21800	2220	*1		2050	209	21800	2220	*1	02 -	6165DA	- 6177	B-110	B-126	B-145
	2530	258	29500	3010	*1		2530	258	29500	3010	*1	02 -	6170DA	- 6177	B-110	B-126	B-145
	3150	321	29500	3010	*1		3150	321	29500	3010	*1	02 -	6175DA	- 6177	B-110	B-126	B-145
0.192	848	86.5	14700	1500	*1	0.231	848	86.5	14700	1500	*1	02 -	6130DB	- 7569	B-109	B-125	B-143
	979	99.8	14700	1500	*1		979	99.8	14700	1500	*1	02 -	6135DB	- 7569	B-109	B-125	B-144
	1230	125	16000	1630	*1		1230	125	16000	1630	*1	02 -	6140DB	- 7569	B-109	B-125	B-144
	1250	127	16000	1630	*1		1250	127	16000	1630	*1	02 -	6145DB	- 7569	B-109	B-125	B-144
	1760	179	22100	2250	*1		1760	179	22100	2250	*1	02 -	6160DA	- 7569	B-110	B-126	B-145
	2050	209	21800	2220	*1		2050	209	21800	2220	*1	02 -	6165DA	- 7569	B-110	B-126	B-145
	2530	258	29500	3010	*1		2530	258	29500	3010	*1	02 -	6170DA	- 7569	B-110	B-126	B-145
	3150	321	29500	3010	*1		3150	321	29500	3010	*1	02 -	6175DA	- 7569	B-110	B-126	B-145

GEARMOTORS

Selection Tables
0.2 kW

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

Selection Tables Gearmotors



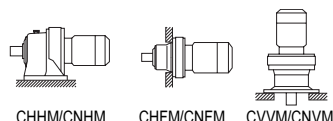
0.25 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

n₁: Motor Speed

50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout		Allowable Radial Load Pro		SF	Output Speed n ₂	Output Torque Tout		Allowable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
20.4	111	11.3	3340	340	1.01	24.6	92	9.4	3340	340	1.01	03 - 6090	- 71		B-100	B-116	B-135
			3340	340	1.11				03 - 6095	- 71		B-100	B-116	B-135			
			5400	550	1.74				03 - 6100	- 71		B-101	B-117	B-136			
			5400	550	2.02				03 - 6105	- 71		B-101	B-117	B-136			
16.7	136	13.9	3340	340	1.05	20.1	113	11.5	3340	340	1.20	03 - 6095	- 87		B-100	B-116	B-135
			5400	550	1.73				03 - 6100	- 87		B-101	B-117	B-136			
			5400	550	2.01				03 - 6105	- 87		B-101	B-117	B-136			
13.9	154	15.7	3340	340	1.17	16.8	128	13.0	3340	340	1.42	03 - 6095DA	- 104		B-108	B-124	B-143
			5400	550	1.62				03 - 6100DA	- 104		B-108	B-124	B-143			
			5400	550	1.72				03 - 6105DA	- 104		B-108	B-124	B-143			
12.2	186	19.0	5400	550	1.14	14.7	154	15.7	5400	550	1.14	03 - 6105	- 119		B-101	B-117	B-136
12.0	179	18.3	3340	340	0.89	14.5	149	15.1	3340	340	1.08	03 - 6095DA	- 121		B-108	B-124	B-143
			5400	550	1.39				03 - 6100DA	- 121		B-108	B-124	B-143			
			5400	550	1.72				03 - 6105DA	- 121		B-108	B-124	B-143			
			9810	1000	2.93				03 - 6120DB	- 121		B-108	B-124	B-143			
10.1	150	15.3	3340	340	*1	12.2	176	17.9	3340	340	*1	03 - 6090DA	- 143		B-108	B-124	B-143
			3340	340	0.87				3340	340	1.04	03 - 6095DA	- 143		B-108	B-124	B-143
	5400	550	1.18	5400	550		1.42	03 - 6100DA	- 143		B-108	B-124	B-143				
	5400	550	1.42	5400	550		1.71	03 - 6105DA	- 143		B-108	B-124	B-143				
	9810	1000	1.72	9810	1000		1.72	03 - 6120DA	- 143		B-108	B-124	B-143				
	9810	1000	2.48	9810	1000		2.99	03 - 6120DB	- 143		B-108	B-124	B-143				
9810	1000	2.97	9810	1000	3.59	03 - 6125DB	- 143		B-108	B-124	B-143						
8.79	200	20.4	3340	340	*1	10.6	203	20.7	3340	340	*1	03 - 6095DA	- 165		B-108	B-124	B-143
			3340	340	0.82				3340	340	0.98	03 - 6095DA	- 165		B-108	B-124	B-143
	5400	550	1.02	5400	550		1.23	03 - 6100DA	- 165		B-108	B-124	B-143				
	5400	550	1.23	5400	550		1.48	03 - 6105DA	- 165		B-108	B-124	B-143				
	9810	1000	1.72	9810	1000		1.72	03 - 6120DA	- 165		B-108	B-124	B-143				
	9810	1000	2.15	9810	1000		2.59	03 - 6120DB	- 165		B-108	B-124	B-143				
9810	1000	2.58	9810	1000	3.11	03 - 6125DB	- 165		B-108	B-124	B-143						
7.44	200	20.4	3340	340	*1	8.97	239	24.4	3340	340	*1	03 - 6095DA	- 195		B-108	B-124	B-143
			5400	550	1.04				5400	550	1.25	03 - 6105DA	- 195		B-108	B-124	B-143
	9810	1000	1.72	9810	1000		1.72	03 - 6120DA	- 195		B-108	B-124	B-143				
	9810	1000	1.82	9810	1000		2.19	03 - 6120DB	- 195		B-108	B-124	B-143				
	9810	1000	2.18	9810	1000		2.63	03 - 6125DB	- 195		B-108	B-124	B-143				
	14700	1500	2.70	14700	1500		3.26	03 - 6130DB	- 195		B-109	B-125	B-144				
6.28	250	25.5	5400	550	*1	7.58	284	28.9	5400	550	*1	03 - 6100DA	- 231		B-108	B-124	B-143
			4940	504	0.88				5400	550	1.06	03 - 6105DA	- 231		B-108	B-124	B-143
	9810	1000	1.52	9810	1000		1.72	03 - 6120DA	- 231		B-108	B-124	B-143				
	9810	1000	1.52	9810	1000		1.84	03 - 6120DB	- 231		B-108	B-124	B-143				
	9810	1000	1.72	9810	1000		1.72	03 - 6125DA	- 231		B-108	B-124	B-143				
	9810	1000	1.84	9810	1000		2.22	03 - 6125DB	- 231		B-108	B-124	B-143				
	14700	1500	2.28	14700	1500		2.75	03 - 6130DB	- 231		B-109	B-125	B-144				
	14700	1500	2.75	14700	1500		3.31	03 - 6135DB	- 231		B-109	B-125	B-144				
5.31	300	30.6	5400	550	*1	6.41	335	34.2	5400	550	*1	03 - 6105DA	- 273		B-108	B-124	B-143
			9810	1000	1.29				9810	1000	1.56	03 - 6120DA	- 273		B-108	B-124	B-143
	9810	1000	1.56	9810	1000		1.72	03 - 6125DA	- 273		B-108	B-124	B-143				
	9810	1000	1.56	9810	1000		1.88	03 - 6125DB	- 273		B-108	B-124	B-143				
	14700	1500	1.72	14700	1500		1.72	03 - 6130DA	- 273		B-109	B-125	B-144				
	14700	1500	1.93	14700	1500		2.33	03 - 6130DB	- 273		B-109	B-125	B-144				
	14700	1500	2.32	14700	1500		2.80	03 - 6135DB	- 273		B-109	B-125	B-144				

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

Selection Tables Gearmotors



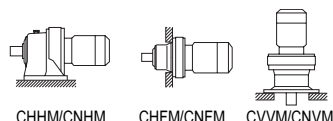
0.4 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

n₁: Motor Speed

50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque T _{out}		Allowable Radial Load Pro		SF	Output Speed n ₂	Output Torque T _{out}		Allowable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
580	6.26	0.638	1180	120	2.78	700	5.18	0.528	1120	114	2.78	05 - 6070SK	- 2.5 *3		B-98	-	B-133
			1180	120	3.47				1120	114	3.47	05 - 6075SK	- 2.5 *3		B-98	-	B-133
			1310	134	4.12				1250	127	4.12	05 - 6080SK	- 2.5 *3		B-98	-	B-133
483	7.51	0.765	1240	126	2.65	583	6.22	0.634	1180	120	2.65	05 - 6070SK	- 3 *3		B-98	-	B-133
			1240	126	3.31				1180	120	3.31	05 - 6075SK	- 3 *3		B-98	-	B-133
			1380	141	4.12				1300	133	4.12	05 - 6080SK	- 3 *3		B-98	-	B-133
363	10.0	1.02	1340	137	2.34	438	8.29	0.846	1290	131	2.34	05 - 6070SK	- 4 *3		B-98	-	B-133
			1340	137	2.92				1290	131	2.92	05 - 6075SK	- 4 *3		B-98	-	B-133
			1500	153	4.12				1420	145	4.12	05 - 6080SK	- 4 *3		B-98	-	B-133
290	12.5	1.28	1370	140	2.22	350	10.4	1.06	1290	132	2.22	05 - 6070SK	- 5 *3		B-98	-	B-133
			1370	140	2.78				1290	132	2.78	05 - 6075SK	- 5 *3		B-98	-	B-133
			1640	167	3.88				1550	158	3.88	05 - 6080SK	- 5 *3		B-98	-	B-133
242	15.0	1.53	1370	140	1.96	292	12.4	1.27	1290	132	1.96	05 - 6070SK	- 6 *3		B-98	-	B-133
			1370	140	2.45				1290	132	2.45	05 - 6075SK	- 6 *3		B-98	-	B-133
			1720	175	3.24				1630	166	3.24	05 - 6080SK	- 6 *3		B-98	-	B-133
			1720	175	4.05				1630	166	4.05	05 - 6085SK	- 6 *3		B-98	-	B-133
			1370	140	1.02				1290	132	1.02	05 - 6075	- 6	B-100	B-116	B-135	
			1920	196	1.48				1810	184	1.48	05 - 6080	- 6		B-100	B-116	B-135
			1920	196	1.95				1810	184	1.95	05 - 6085	- 6		B-100	B-116	B-135
2860	292	2.88	2690	275	2.88	05 - 6090	- 6		B-100	B-116	B-135						
181	20.0	2.04	1510	154	1.47	219	16.6	1.69	1430	145	1.47	05 - 6070SK	- 8 *3		B-98	-	B-133
			1510	154	1.84				1430	145	1.84	05 - 6075SK	- 8 *3		B-98	-	B-133
			1820	186	2.74				1730	176	2.74	05 - 6080SK	- 8 *3		B-98	-	B-133
			1820	186	3.43				1730	176	3.43	05 - 6085SK	- 8 *3		B-98	-	B-133
			3280	334	3.76				3110	317	3.76	05 - 6090SK	- 8 *3		B-98	-	B-133
			3280	334	4.43				3110	317	4.43	05 - 6095SK	- 8 *3		B-98	-	B-133
			1510	154	1.02				1430	145	1.02	05 - 6075	- 8	B-100	B-116	B-135	
			2080	212	1.48				1960	200	1.48	05 - 6080	- 8		B-100	B-116	B-135
			2080	212	1.95				1960	200	1.95	05 - 6085	- 8		B-100	B-116	B-135
3190	326	2.88	3000	306	2.88	05 - 6090	- 8		B-100	B-116	B-135						
145	25.0	2.55	1680	171	1.13	175	20.7	2.11	1590	162	1.13	05 - 6070SK	- 10 *3		B-98	-	B-133
			1680	171	1.42				1590	162	1.42	05 - 6075SK	- 10 *3		B-98	-	B-133
			1930	197	2.20				1840	188	2.20	05 - 6080SK	- 10 *3		B-98	-	B-133
			1930	197	2.75				1840	188	2.75	05 - 6085SK	- 10 *3		B-98	-	B-133
			3590	366	3.50				3390	346	3.50	05 - 6090SK	- 10 *3		B-98	-	B-133
			3590	366	4.43				3390	346	4.43	05 - 6095SK	- 10 *3		B-98	-	B-133
132	27.5	2.81	1680	171	1.02	159	22.8	2.33	1590	162	1.02	05 - 6075	- 11	B-100	B-116	B-135	
			2300	234	1.48				2160	220	1.48	05 - 6080	- 11		B-100	B-116	B-135
			2300	234	1.95				2160	220	1.95	05 - 6085	- 11		B-100	B-116	B-135
			3340	340	2.88				3340	340	2.88	05 - 6090	- 11		B-100	B-116	B-135
112	32.5	3.32	1770	180	1.02	135	27.0	2.75	1680	171	1.02	05 - 6075	- 13	B-100	B-116	B-135	
			2470	251	1.48				2320	237	1.48	05 - 6080	- 13		B-100	B-116	B-135
			2470	251	1.95				2320	237	1.95	05 - 6085	- 13		B-100	B-116	B-135
			3340	340	2.88				3340	340	2.88	05 - 6090	- 13		B-100	B-116	B-135
96.7	37.5	3.83	1770	180	1.02	117	31.1	3.17	1680	171	1.02	05 - 6075	- 15	B-100	B-116	B-135	
			2550	260	1.48				2400	245	1.48	05 - 6080	- 15		B-100	B-116	B-135
			2550	260	1.95				2400	245	1.95	05 - 6085	- 15		B-100	B-116	B-135
			3340	340	2.88				3340	340	2.88	05 - 6090	- 15		B-100	B-116	B-135
85.3	42.5	4.34	1770	180	1.02	103	35.3	3.59	1770	180	1.02	05 - 6075	- 17	B-100	B-116	B-135	
			2560	261	1.48				2510	256	1.48	05 - 6080	- 17		B-100	B-116	B-135
			2560	261	1.95				2510	256	1.95	05 - 6085	- 17		B-100	B-116	B-135
			3340	340	2.88				3340	340	2.88	05 - 6090	- 17		B-100	B-116	B-135
69.0	52.6	5.36	1770	180	1.02	83.3	43.5	4.44	1770	180	1.02	05 - 6075	- 21	B-100	B-116	B-135	
			2560	261	1.20				2450	250	1.20	05 - 6080	- 21		B-100	B-116	B-135
			2560	261	1.38				2450	250	1.38	05 - 6085	- 21		B-100	B-116	B-135
			3340	340	1.90				3340	340	1.90	05 - 6090	- 21		B-100	B-116	B-133

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

Selection Tables Gearmotors

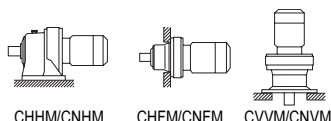


0.4 kW	n ₁ : Motor Speed			
	Hz		50Hz	
	P	r/min	4	6
	n ₁	r/min	1450	980
			1750	1165

50Hz						60Hz					Nomenclature			Page of Dimension Sheet			
Output Speed n ₂	Output Torque Tout		Allowable Radial Load Pro		SF	Output Speed n ₂	Output Torque Tout		Allowable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
10.1	183	18.7	3340	340	*1	12.2	183	18.7	3340	340	*1	05 - 6095DA	- 143		B-108	B-124	B-143
	250	25.5	5400	550	*1		250	25.5	5400	550	*1	05 - 6100DA	- 143		B-108	B-124	B-143
			5400	550	0.88				5400	550	1.07	05 - 6105DA	- 143		B-108	B-124	B-143
			9810	1000	1.07				9810	1000	1.07	05 - 6120DA	- 143		B-108	B-124	B-143
			9810	1000	1.55				9810	1000	1.87	05 - 6120DB	- 143		B-108	B-124	B-143
	339	34.6	9810	1000	1.86		281	28.6	9810	1000	2.24	05 - 6125DB	- 143		B-108	B-124	B-143
			14700	1500	2.30				14700	1500	2.78	05 - 6130DB	- 143		B-109	B-125	B-144
			14700	1500	2.77				14700	1500	3.35	05 - 6135DB	- 143		B-109	B-125	B-144
8.79	250	25.5	5400	550	*1	10.6	250	25.5	5400	550	*1	05 - 6100DA	- 165		B-108	B-124	B-143
	300	30.6	5400	550	*1		300	30.6	5400	550	*1	05 - 6105DA	- 165		B-108	B-124	B-143
			9810	1000	1.07				9810	1000	1.07	05 - 6120DA	- 165		B-108	B-124	B-143
			9810	1000	1.34				9810	1000	1.62	05 - 6120DB	- 165		B-108	B-124	B-143
	391	39.9	9810	1000	1.61		324	33.0	9810	1000	1.94	05 - 6125DB	- 165		B-108	B-124	B-143
			14700	1500	1.99				14700	1500	2.41	05 - 6130DB	- 165		B-109	B-125	B-144
			14700	1500	2.40				14700	1500	2.90	05 - 6135DB	- 165		B-109	B-125	B-144
7.44	250	25.5	5400	550	*1	8.97	250	25.5	5400	550	*1	05 - 6100DA	- 195		B-108	B-124	B-143
	300	30.6	5400	550	*1		300	30.6	5400	550	*1	05 - 6105DA	- 195		B-108	B-124	B-143
			9810	1000	1.07				9810	1000	1.07	05 - 6120DA	- 195		B-108	B-124	B-143
			9810	1000	1.14				9810	1000	1.37	05 - 6120DB	- 195		B-108	B-124	B-143
			9810	1000	1.36				9810	1000	1.64	05 - 6125DB	- 195		B-108	B-124	B-143
	462	47.1	14700	1500	1.69		383	39.1	14700	1500	2.04	05 - 6130DB	- 195		B-109	B-125	B-144
			14700	1500	2.03				14700	1500	2.45	05 - 6135DB	- 195		B-109	B-125	B-144
			16000	1630	2.65				16000	1630	3.20	05 - 6140DB	- 195		B-109	B-125	B-144
6.28	300	30.6	5400	550	*1	7.58	300	30.6	5400	550	*1	05 - 6105DA	- 231		B-108	B-124	B-143
			9810	1000	1.07				9810	1000	1.07	05 - 6125DA	- 231		B-108	B-124	B-143
			9810	1000	1.15				9810	1000	1.39	05 - 6125DB	- 231		B-108	B-124	B-143
			14700	1500	1.42				14700	1500	1.72	05 - 6130DB	- 231		B-109	B-125	B-144
	548	55.8	14700	1500	1.72		454	46.3	14700	1500	2.07	05 - 6135DB	- 231		B-109	B-125	B-144
			16000	1630	2.24				16000	1630	2.70	05 - 6140DB	- 231		B-109	B-125	B-144
			16000	1630	2.44				16000	1630	2.95	05 - 6145DB	- 231		B-109	B-125	B-144
5.31	522	53.2	9810	1000	*1	6.41	522	53.2	9810	1000	*1	05 - 6120DA	- 273		B-108	B-124	B-143
			9810	1000	0.97				9810	1000	1.07	05 - 6125DA	- 273		B-108	B-124	B-143
			9810	1000	0.97				9810	1000	1.17	05 - 6125DB	- 273		B-108	B-124	B-143
			14700	1500	1.07				14700	1500	1.07	05 - 6130DA	- 273		B-109	B-125	B-144
			14700	1500	1.21				14700	1500	1.45	05 - 6130DB	- 273		B-109	B-125	B-144
	647	66.0	14700	1500	1.45		536	54.7	14700	1500	1.75	05 - 6135DB	- 273		B-109	B-125	B-144
			16000	1630	1.89				16000	1630	2.28	05 - 6140DB	- 273		B-109	B-125	B-144
			16000	1630	2.07				16000	1630	2.49	05 - 6145DB	- 273		B-109	B-125	B-144
4.55	520	53.0	9810	1000	*1	5.49	520	53.0	9810	1000	*1	05 - 6120DA	- 319		B-108	B-124	B-143
			9810	1000	0.83				9810	1000	1.01	05 - 6125DA	- 319		B-108	B-124	B-143
			14700	1500	1.03				14700	1500	1.07	05 - 6130DA	- 319		B-109	B-125	B-144
			14700	1500	1.03				14700	1500	1.24	05 - 6130DB	- 319		B-109	B-125	B-144
			14700	1500	1.07				14700	1500	1.07	05 - 6135DA	- 319		B-109	B-125	B-144
	756	77.1	14700	1500	1.24		627	63.9	14700	1500	1.50	05 - 6135DB	- 319		B-109	B-125	B-144
			16000	1630	1.62				16000	1630	1.95	05 - 6140DB	- 319		B-109	B-125	B-144
			16000	1630	1.81				16000	1630	2.19	05 - 6145DB	- 319		B-109	B-125	B-144
		22100	2250	2.32			22100	2250	2.80	05 - 6160DA	- 319		B-110	B-126	B-145		
		22100	2250	2.78			22100	2250	3.35	05 - 6165DA	- 319		B-110	B-126	B-145		

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*1" in the SF column. They cannot be operated with 100% motor rating.

Selection Tables Gearmotors



0.4 kW		n ₁ : Motor Speed			
		Hz	50Hz		60Hz
		P	4	6	4 6
		n ₁ r/min	1450	980	1750 1165

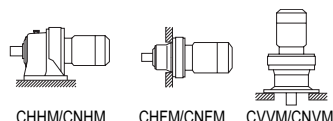
50Hz						60Hz					Nomenclature			Page of Dimension Sheet			
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Input Capacity - Symbol	Frame Size	Reduction Ratio	CNHM CHHM	CNFM CHFM	CNVM CVVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf							
0.980	1760	179	22100	2250	*1	1.18	1760	179	22100	2250	*1	05 -	6160DA	- 1479	B-110	B-126	B-145
	2050	209	21800	2220	*1		2050	209	21800	2220	*1	05 -	6165DA	- 1479	B-110	B-126	B-145
	2530	258	29500	3010	*1		2530	258	29500	3010	*1	05 -	6170DA	- 1479	B-110	B-126	B-145
	3510	357	29500	3010	0.90		2910	296	29500	3010	1.08	05 -	6175DA	- 1479	B-110	B-126	B-145
0.784	2100	214	22100	2250	*1	0.946	2100	214	22100	2250	*1	05 -	6165DA	- 1849	B-110	B-126	B-145
	2530	258	29500	3010	*1		2530	258	29500	3010	*1	05 -	6170DA	- 1849	B-110	B-126	B-145
	3150	321	29500	3010	*1		3150	321	29500	3010	*1	05 -	6175DA	- 1849	B-110	B-126	B-145
	4380	447	41700	4250	0.93		3630	370	41700	4250	1.12	05 -	6180DA	- 1849	B-110	B-126	B-145
0.702	2530	258	29500	3010	*1	0.847	2530	258	29500	3010	*1	05 -	6170DA	- 2065	B-110	B-126	B-145
	3150	321	29500	3010	*1		3150	321	29500	3010	*1	05 -	6175DA	- 2065	B-110	B-126	B-145
	4050	413	41700	4250	*1		4050	413	41700	4250	*1	05 -	6180DA	- 2065	B-110	B-126	B-145
	3150	321	29500	3010	*1		3150	321	29500	3010	*1	05 -	6175DA	- 2537	B-110	B-126	B-145
0.572	4050	413	41700	4250	*1	0.690	4050	413	41700	4250	*1	05 -	6180DA	- 2537	B-110	B-126	B-145
	5000	510	41600	4240	*1		5000	510	41600	4240	*1	05 -	6185DA	- 2537	B-110	B-126	B-145
	6020	613	41200	4200	0.83		4980	508	41600	4240	1.00	05 -	6185DA	- 2537	B-110	B-126	B-145
	4060	414	41700	4250	*1		4060	414	41700	4250	*1	05 -	6180DA	- 3045	B-110	B-126	B-145
0.476	5000	510	41700	4250	*1	0.575	5000	510	41700	4250	*1	05 -	6185DA	- 3045	B-110	B-126	B-145
	4050	413	41700	4250	*1		4050	413	41700	4250	*1	05 -	6180DA	- 3481	B-110	B-126	B-145
0.417	5000	510	41600	4240	*1	0.503	5000	510	41600	4240	*1	05 -	6185DA	- 3481	B-110	B-126	B-145
	4060	414	41700	4250	*1		4060	414	41700	4250	*1	05 -	6180DA	- 4437	B-110	B-126	B-145
0.327	5000	510	41700	4250	*1	0.394	5000	510	41700	4250	*1	05 -	6185DA	- 4437	B-110	B-126	B-145
	4060	414	41700	4250	*1		4060	414	41700	4250	*1	05 -	6180DA	- 5133	B-110	B-126	B-145
0.282	5000	510	41700	4250	*1	0.341	5000	510	41700	4250	*1	05 -	6185DA	- 5133	B-110	B-126	B-145
	4060	414	41700	4250	*1		4060	414	41700	4250	*1	05 -	6180DA	- 6177	B-110	B-126	B-145
0.235	5000	510	41700	4250	*1	0.283	5000	510	41700	4250	*1	05 -	6185DA	- 6177	B-110	B-126	B-145
	4060	414	41700	4250	*1		4060	414	41700	4250	*1	05 -	6180DA	- 7569	B-110	B-126	B-145
0.192	5000	510	41700	4250	*1	0.231	5000	510	41700	4250	*1	05 -	6185DA	- 7569	B-110	B-126	B-145

GEARMOTORS

Selection Tables
0.4 kW

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

Selection Tables Gearmotors



0.55 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

n₁: Motor Speed

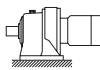
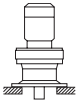
50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout		Allowable Radial Load Pro		SF	Output Speed n ₂	Output Torque Tout		Allowable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
96.7	51.6	5.26	2520	257	1.08	117	42.8	4.36	2380	242	1.08	08 -	6080	- 15	B-100	B-116	B-135
			2520	257	1.41				2380	242	1.41	08 -	6085	- 15	B-100	B-116	B-135
			3340	340	2.09				3340	340	2.09	08 -	6090	- 15	B-100	B-116	B-135
			3340	340	2.76				3340	340	2.76	08 -	6095	- 15	B-100	B-116	B-135
85.3	58.5	5.96	2560	261	1.08	103	48.5	4.94	2490	254	1.08	08 -	6080	- 17	B-100	B-116	B-135
			2560	261	1.41				2490	254	1.41	08 -	6085	- 17	B-100	B-116	B-135
			3340	340	2.09				3340	340	2.09	08 -	6090	- 17	B-100	B-116	B-135
			3340	340	2.76				3340	340	2.76	08 -	6095	- 17	B-100	B-116	B-135
69.0	72.3	7.37	2560	261	1.00	83.3	59.9	6.10	2430	247	1.00	08 -	6085	- 21	B-100	B-116	B-135
			3340	340	1.38				3340	340	1.38	08 -	6090	- 21	B-100	B-116	B-135
			3340	340	2.75				3340	340	2.76	08 -	6095	- 21	B-100	B-116	B-135
58.0	86.0	8.77	2510	256	0.86	70.0	71.3	7.27	2490	254	0.86	08 -	6085	- 25	B-100	B-116	B-135
			3340	340	1.22				3340	340	1.22	08 -	6090	- 25	B-100	B-116	B-135
			3340	340	1.57				3340	340	1.57	08 -	6095	- 25	B-100	B-116	B-135
			5400	550	2.31				5400	550	2.31	08 -	6100	- 25	B-101	B-117	B-136
50.0	99.8	10.2	2300	235	0.85	60.3	82.7	8.43	2480	253	0.85	08 -	6085	- 29	B-100	B-116	B-135
			3340	340	1.14				3340	340	1.14	08 -	6090	- 29	B-100	B-116	B-135
			3340	340	1.43				3340	340	1.43	08 -	6095	- 29	B-100	B-116	B-135
			5400	550	2.20				5400	550	2.20	08 -	6100	- 29	B-101	B-117	B-136
			5400	550	2.89				5400	550	2.89	08 -	6105	- 29	B-101	B-117	B-136
41.4	120	12.3	3340	340	1.11	50.0	99.8	10.2	3340	340	1.11	08 -	6090	- 35	B-100	B-116	B-135
			3340	340	1.38				3340	340	1.38	08 -	6095	- 35	B-100	B-116	B-135
			5400	550	1.77				5400	550	1.77	08 -	6100	- 35	B-101	B-117	B-136
			5400	550	2.18				5400	550	2.18	08 -	6105	- 35	B-101	B-117	B-136
			7510	765	2.73				7530	767	2.73	08 -	6110	- 35	B-101	B-117	B-136
33.7	148	15.1	3320	338	1.10	40.7	123	12.5	3340	340	1.10	08 -	6095	- 43	B-100	B-116	B-135
			5400	550	1.42				5400	550	1.42	08 -	6100	- 43	B-101	B-117	B-136
			5400	550	1.96				5400	550	1.96	08 -	6105	- 43	B-101	B-117	B-136
			7610	776	2.36				7610	776	2.36	08 -	6110	- 43	B-101	B-117	B-136
			7610	776	2.76				7610	776	2.76	08 -	6115	- 43	B-101	B-117	B-136
28.4	176	17.9	5400	550	1.02	34.3	145	14.8	5400	550	1.02	08 -	6100	- 51	B-101	B-117	B-136
			5400	550	1.41				5400	550	1.41	08 -	6105	- 51	B-101	B-117	B-136
			7610	776	1.72				7610	776	1.72	08 -	6110	- 51	B-101	B-117	B-136
			7610	776	2.02				7610	776	2.02	08 -	6115	- 51	B-101	B-117	B-136
			9810	1000	2.96				9810	1000	3.13	08 -	6120	- 51	B-101	B-117	B-136
24.6	203	20.7	5400	550	1.24	29.7	168	17.1	5400	550	1.29	08 -	6105	- 59	B-101	B-117	B-136
			7610	776	1.56				7610	776	1.56	08 -	6110	- 59	B-101	B-117	B-136
			7610	776	1.84				7610	776	1.84	08 -	6115	- 59	B-101	B-117	B-136
			9810	1000	2.36				9810	1000	2.36	08 -	6120	- 59	B-101	B-117	B-136
			9810	1000	2.95				9810	1000	2.95	08 -	6125	- 59	B-101	B-117	B-136
20.4	244	24.9	5380	549	0.92	24.6	202	20.6	5400	550	1.02	08 -	6105	- 71	B-101	B-117	B-136
			7610	776	1.22				7610	776	1.22	08 -	6110	- 71	B-101	B-117	B-136
			7610	776	1.38				7610	776	1.38	08 -	6115	- 71	B-101	B-117	B-136
			9810	1000	1.74				9810	1000	1.74	08 -	6120	- 71	B-101	B-117	B-136
			9810	1000	2.07				9810	1000	2.18	08 -	6125	- 71	B-101	B-117	B-136
16.7	299	30.5	4800	489	0.91	20.1	248	25.3	5400	550	1.03	08 -	6105	- 87	B-101	B-117	B-136
			7610	776	1.20				7610	776	1.20	08 -	6110	- 87	B-101	B-117	B-136
			7610	776	1.38				7610	776	1.38	08 -	6115	- 87	B-101	B-117	B-136
			9810	1000	1.72				9810	1000	1.72	08 -	6120	- 87	B-101	B-117	B-136
			9810	1000	1.87				9810	1000	2.05	08 -	6125	- 87	B-101	B-117	B-136
			14700	1500	2.58				14200	1450	2.58	08 -	6130	- 87	B-102	B-118	B-137
			14700	1500	3.00				14200	1450	3.47	08 -	6135	- 87	B-102	B-118	B-137

GEARMOTORS

Selection Tables
0.55 kW

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

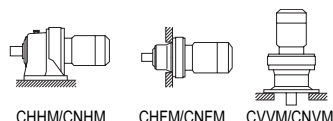
Selection Tables Gearmotors

0.55 kW		n ₁ : Motor Speed													
		Hz		50Hz		60Hz									
		P		4	6	4	6								
n ₁ r/min				1450	980	1750	1165								

50Hz						60Hz						Nomenclature			Page of Dimension Sheet			
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF	Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVVM			
r/min	N·m	kgf·m	N	kgf	r/min	N·m	kgf·m	N	kgf				CHHM	CHFM	CVVM			
13.9	339	34.6	9810	1000	1.55	16.8	281	28.6	9810	1000	1.87	08 - 6120DB	- 104	B-108	B-124	B-143		
			9810	1000	1.86				9810	1000	2.24	08 - 6125DB	- 104	B-108	B-124	B-143		
			14700	1500	2.30				14700	1500	2.78	08 - 6130DB	- 104	B-109	B-125	B-144		
			14700	1500	2.77				14700	1500	2.91	08 - 6135DB	- 104	B-109	B-125	B-144		
			14700	1500	2.77				14700	1500	3.35	08 - 6135DC	- 104	B-109	B-125	B-144		
			16000	1630	2.91				16000	1630	2.91	08 - 6140DB	- 104	B-109	B-125	B-144		
12.0	394	40.2	9810	1000	1.33	14.5	327	33.3	9810	1000	1.61	08 - 6120DB	- 121	B-108	B-124	B-143		
			9810	1000	1.58				9810	1000	1.90	08 - 6125DB	- 121	B-108	B-124	B-143		
			14700	1500	1.98				14700	1500	2.39	08 - 6130DB	- 121	B-109	B-125	B-144		
			14700	1500	2.38				14700	1500	2.88	08 - 6135DB	- 121	B-109	B-125	B-144		
			16000	1630	2.91				16000	1630	2.91	08 - 6140DB	- 121	B-109	B-125	B-144		
			9810	1000	1.13				9810	1000	1.36	08 - 6120DB	- 143	B-108	B-124	B-143		
10.1	466	47.5	9810	1000	1.35	12.2	386	39.4	9810	1000	1.63	08 - 6125DB	- 143	B-108	B-124	B-143		
			14700	1500	1.67				14700	1500	2.02	08 - 6130DB	- 143	B-109	B-125	B-144		
			14700	1500	2.02				14700	1500	2.43	08 - 6135DB	- 143	B-109	B-125	B-144		
			16000	1630	2.63				16000	1630	2.91	08 - 6140DB	- 143	B-109	B-125	B-144		
			16000	1630	2.63				16000	1630	3.17	08 - 6140DC	- 143	B-109	B-125	B-144		
			16000	1630	2.91				16000	1630	2.91	08 - 6145DB	- 143	B-109	B-125	B-144		
8.79	538	54.8	16000	1630	2.94	16000	1630	3.55	08 - 6145DC	- 143	B-109	B-125	B-144					
7.44	636	64.8	9810	1000	1.17	10.6	446	45.4	9810	1000	1.41	08 - 6125DB	- 165	B-108	B-124	B-143		
			14700	1500	1.45				14700	1500	1.75	08 - 6130DB	- 165	B-109	B-125	B-144		
			14700	1500	1.75				14700	1500	2.11	08 - 6135DB	- 165	B-109	B-125	B-144		
			16000	1630	2.28				16000	1630	2.75	08 - 6140DB	- 165	B-109	B-125	B-144		
			16000	1630	2.52				16000	1630	2.91	08 - 6145DB	- 165	B-109	B-125	B-144		
			16000	1630	2.52				16000	1630	3.05	08 - 6145DC	- 165	B-109	B-125	B-144		
525	53.5	9810	1000	*1	8.97	527	53.7	22100	2250	2.91	08 - 6160DA	- 165	B-110	B-126	B-145			
9810	1000	0.98	9810	1000				1.20	08 - 6120DB	- 195	B-108	B-124	B-143					
14700	1500	1.23	14700	1500				1.48	08 - 6125DB	- 195	B-108	B-124	B-143					
14700	1500	1.48	14700	1500				1.78	08 - 6130DB	- 195	B-109	B-125	B-144					
16000	1630	1.93	16000	1630				2.33	08 - 6135DB	- 195	B-109	B-125	B-144					
16000	1630	2.14	16000	1630				2.58	08 - 6140DB	- 195	B-109	B-125	B-144					
22100	2250	2.76	22100	2250	2.91	08 - 6145DB	- 195	B-109	B-125	B-144								
22100	2250	2.76	22100	2250	3.33	08 - 6160DA	- 195	B-110	B-126	B-145								
22100	2250	2.91	22100	2250	2.91	08 - 6160DB	- 195	B-110	B-126	B-145								
6.28	753	76.8	522	53.2	9810	1000	*1	7.58	624	63.6	9810	1000	*1	08 - 6120DB	- 231	B-108	B-124	B-143
			9810	1000	0.84	9810	1000				1.01	08 - 6125DB	- 231	B-108	B-124	B-143		
			14700	1500	1.04	14700	1500				1.25	08 - 6130DB	- 231	B-109	B-125	B-144		
			14700	1500	1.25	14700	1500				1.51	08 - 6135DB	- 231	B-109	B-125	B-144		
			16000	1630	1.63	16000	1630				1.96	08 - 6140DB	- 231	B-109	B-125	B-144		
			16000	1630	1.78	16000	1630				2.14	08 - 6145DB	- 231	B-109	B-125	B-144		
22100	2250	2.33	22100	2250	2.81	08 - 6160DA	- 231	B-110	B-126	B-145								
22100	2250	2.79	22100	2250	2.91	08 - 6165DA	- 231	B-110	B-126	B-145								
22100	2250	2.79	22100	2250	3.37	08 - 6165DB	- 231	B-110	B-126	B-145								
29500	3010	2.91	29500	3010	2.91	08 - 6170DA	- 231	B-110	B-126	B-145								

- Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
- Motor slippage may affect n₁ and n₂. Refer to technical data for details.
- CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
- Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
- "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

Selection Tables Gearmotors



0.55 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

n₁: Motor Speed

50Hz					60Hz					Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF	Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf	r/min	N·m	kgf·m	N	kgf				CHHM	CHFM	CVVM
5.31	890	90.7	14700	1500	6.41	737	75.2	14700	1500	08 - 6135DB	- 273		B-109	B-125	B-144
			16000	1630				16000	1630	08 - 6140DB	- 273		B-109	B-125	B-144
			16000	1630				16000	1630	08 - 6145DB	- 273		B-109	B-125	B-144
			22100	2250				22100	2250	08 - 6160DA	- 273		B-110	B-126	B-145
			22100	2250				22100	2250	08 - 6165DA	- 273		B-110	B-126	B-145
			29500	3010				29500	3010	08 - 6170DA	- 273		B-110	B-126	B-145
			29500	3010				29500	3010	08 - 6170DB	- 273		B-110	B-126	B-145
4.55	1040	106	29500	3010	5.49	862	87.8	29500	3010	08 - 6175DA	- 273		B-110	B-126	B-145
			29500	3010				29500	3010	08 - 6175DB	- 319		B-108	B-124	B-143
			9810	1000				9810	1000	08 - 6130DB	- 319		B-109	B-125	B-144
			14700	1500				14700	1500	08 - 6135DB	- 319		B-109	B-125	B-144
			14700	1500				14700	1500	08 - 6140DB	- 319		B-109	B-125	B-144
			16000	1630				16000	1630	08 - 6145DB	- 319		B-109	B-125	B-144
			16000	1630				16000	1630	08 - 6160DA	- 319		B-110	B-126	B-145
3.85	1230	125	22100	2250	4.64	1020	104	22100	2250	08 - 6165DA	- 319		B-110	B-126	B-145
			22100	2250				22100	2250	08 - 6165DA	- 319		B-110	B-126	B-145
			29500	3010				29500	3010	08 - 6170DA	- 319		B-110	B-126	B-145
			29500	3010				29500	3010	08 - 6170DB	- 319		B-110	B-126	B-145
			29500	3010				29500	3010	08 - 6175DA	- 319		B-110	B-126	B-145
			29500	3010				29500	3010	08 - 6175DB	- 377		B-109	B-125	B-144
			14700	1500				14700	1500	08 - 6135DB	- 377		B-109	B-125	B-144
3.07	1540	157	14700	1500	3.70	1280	130	14700	1500	08 - 6140DB	- 377		B-109	B-125	B-144
			16000	1630				16000	1630	08 - 6145DB	- 377		B-109	B-125	B-144
			16000	1630				16000	1630	08 - 6160DA	- 377		B-110	B-126	B-145
			22100	2250				22100	2250	08 - 6165DA	- 377		B-110	B-126	B-145
			22100	2250				22100	2250	08 - 6165DA	- 377		B-110	B-126	B-145
			29500	3010				29500	3010	08 - 6170DA	- 377		B-110	B-126	B-145
			29500	3010				29500	3010	08 - 6175DA	- 377		B-110	B-126	B-145
2.59	1820	186	29500	3010	3.13	1510	154	29500	3010	08 - 6135DB	- 473		B-109	B-125	B-144
			29500	3010				29500	3010	08 - 6140DB	- 473		B-109	B-125	B-144
			16000	1630				16000	1630	08 - 6145DB	- 473		B-109	B-125	B-144
			16000	1630				16000	1630	08 - 6160DA	- 473		B-110	B-126	B-145
			22100	2250				22100	2250	08 - 6165DA	- 473		B-110	B-126	B-145
			22100	2250				22100	2250	08 - 6165DA	- 473		B-110	B-126	B-145
			29500	3010				29500	3010	08 - 6170DA	- 473		B-110	B-126	B-145
2.23	2120	216	29500	3010	2.70	1760	179	29500	3010	08 - 6175DA	- 473		B-110	B-126	B-145
			29500	3010				29500	3010	08 - 6145DB	- 559		B-109	B-125	B-144
			16000	1630				16000	1630	08 - 6145DB	- 559		B-109	B-125	B-144
			16000	1630				16000	1630	08 - 6160DA	- 559		B-110	B-126	B-145
			22100	2250				22100	2250	08 - 6165DA	- 559		B-110	B-126	B-145
			22100	2250				22100	2250	08 - 6165DA	- 559		B-110	B-126	B-145
			29500	3010				29500	3010	08 - 6170DA	- 559		B-110	B-126	B-145
1.98	2380	243	29500	3010	2.39	1970	201	29500	3010	08 - 6175DA	- 559		B-110	B-126	B-145
			29500	3010				29500	3010	08 - 6145DB	- 649		B-109	B-125	B-144
			22100	2250				22100	2250	08 - 6160DA	- 649		B-110	B-126	B-145
			22100	2250				22100	2250	08 - 6165DA	- 649		B-110	B-126	B-145
			29500	3010				29500	3010	08 - 6170DA	- 649		B-110	B-126	B-145
			29500	3010				29500	3010	08 - 6175DA	- 649		B-110	B-126	B-145
			22100	2250				22100	2250	08 - 6160DA	- 731		B-110	B-126	B-145
1.98	2380	243	22100	2250	2.39	1970	201	22100	2250	08 - 6165DA	- 731		B-110	B-126	B-145
			22100	2250				22100	2250	08 - 6165DA	- 731		B-110	B-126	B-145
			29500	3010				29500	3010	08 - 6170DA	- 731		B-110	B-126	B-145

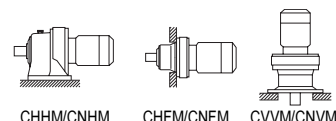
GEARMOTORS

Selection Tables
0.55 kW

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

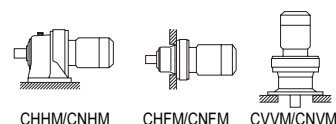
Selection Tables Gearmotors

0.55 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165



50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVN
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
1.72	1760	179	22100	2250	*1	2.08	1760	179	22100	2250	*1	08 -	6160DA	- 841	B-110	B-126	B-145
	2100	214	22100	2250	*1		2100	214	22100	2250	*1	08 -	6165DA	- 841	B-110	B-126	B-145
	2740	279	29500	3010	1.15		2270	232	29500	3010	1.39	08 -	6175DA	- 841	B-110	B-126	B-145
1.45	2100	214	22100	2250	*1	1.74	2100	214	22100	2250	*1	08 -	6165DA	- 1003	B-110	B-126	B-145
	2530	258	29500	3010	*1		2530	258	29500	3010	*1	08 -	6170DA	- 1003	B-110	B-126	B-145
	3270	333	29500	3010	0.96		2710	276	29500	3010	1.16	08 -	6175DA	- 1003	B-110	B-126	B-145
1.16	2530	258	29500	3010	*1	1.40	2530	258	29500	3010	*1	08 -	6170DA	- 1247	B-110	B-126	B-145
	3150	321	29500	3010	*1		3150	321	29500	3010	*1	08 -	6175DA	- 1247	B-110	B-126	B-145
0.980	3150	321	29500	3010	*1	1.18	3150	321	29500	3010	*1	08 -	6175DA	- 1479	B-110	B-126	B-145
0.784	4060	414	41700	4250	*1	0.946	4060	414	41700	4250	*1	08 -	6180DA	- 1849	B-110	B-126	B-145

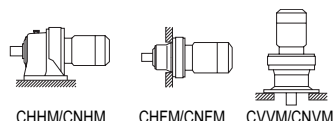
0.75 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165



50Hz						60Hz					Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Alloable Radial Load Pro		SF	Output Speed n ₂	Output Torque Tout	Alloable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVN	
r/min	N·m	kgf·m	N	kgf	r/min	N·m	kgf·m	N	kgf				CHHM	CHFM	CVVM	
580	11.7	1.20	1130	115	1.48	700	9.72	0.991	1080	110	1.48	1 - 6070SK	- 2.5 *3	B-98	-	B-133
			1130	115	1.85				1080	110	1.85	1 - 6075SK	- 2.5 *3	B-98	-	B-133
			1260	128	2.20				1190	121	2.20	1 - 6080SK	- 2.5 *3	B-98	-	B-133
			1260	128	2.75				1190	121	2.75	1 - 6085SK	- 2.5 *3	B-98	-	B-133
			2250	229	3.20				2130	217	3.20	1 - 6090SK	- 2.5 *3	B-98	-	B-133
			2250	229	3.61				2130	217	3.61	1 - 6095SK	- 2.5 *3	B-98	-	B-133
483	14.1	1.44	1180	120	1.41	583	11.7	1.19	1120	114	1.41	1 - 6070SK	- 3 *3	B-98	-	B-133
			1180	120	1.77				1120	114	1.77	1 - 6075SK	- 3 *3	B-98	-	B-133
			1310	134	2.20				1250	127	2.20	1 - 6080SK	- 3 *3	B-98	-	B-133
			1310	134	2.75				1250	127	2.75	1 - 6085SK	- 3 *3	B-98	-	B-133
			2340	239	3.12				2220	226	3.12	1 - 6090SK	- 3 *3	B-98	-	B-133
			2340	239	3.51				2220	226	3.51	1 - 6095SK	- 3 *3	B-98	-	B-133
363	18.8	1.91	1270	129	1.25	438	15.6	1.59	1220	124	1.25	1 - 6070SK	- 4 *3	B-98	-	B-133
			1270	129	1.56				1220	124	1.56	1 - 6075SK	- 4 *3	B-98	-	B-133
			1420	145	2.20				1350	138	2.20	1 - 6080SK	- 4 *3	B-98	-	B-133
			1420	145	2.75				1350	138	2.75	1 - 6085SK	- 4 *3	B-98	-	B-133
			2660	271	3.12				2520	257	3.12	1 - 6090SK	- 4 *3	B-98	-	B-133
			2660	271	3.51				2520	257	3.51	1 - 6095SK	- 4 *3	B-98	-	B-133
290	23.5	2.39	1370	140	1.18	350	19.4	1.98	1290	132	1.18	1 - 6070SK	- 5 *3	B-98	-	B-133
			1370	140	1.48				1290	132	1.48	1 - 6075SK	- 5 *3	B-98	-	B-133
			1530	156	2.07				1460	149	2.07	1 - 6080SK	- 5 *3	B-98	-	B-133
			1530	156	2.47				1460	149	2.43	1 - 6085SK	- 5 *3	B-98	-	B-133
			2820	287	2.98				2680	273	2.98	1 - 6090SK	- 5 *3	B-98	-	B-133
			2820	287	3.51				2680	273	3.51	1 - 6095SK	- 5 *3	B-98	-	B-133

- Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
- Motor slippage may affect n₁ and n₂. Refer to technical data for details.
- CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
- Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
- "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

Selection Tables Gearmotors



0.75 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

n₁: Motor Speed

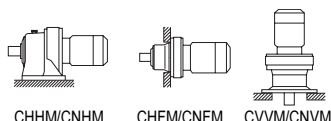
50Hz					60Hz					Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro	SF		Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro	SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf	r/min	N·m	kgf·m	N	kgf				CHHM	CHFM	CVVM
242	28.2	2.87	1370	140	292	23.3	2.38	1290	132	1 - 6070SK	- 6	*3	B-98	-	B-133
			1370	140				1290	132	1 - 6075SK	- 6	*3	B-98	-	B-133
			1580	161				1520	155	1 - 6080SK	- 6	*3	B-98	-	B-133
			1580	161				1520	155	1 - 6085SK	- 6	*3	B-98	-	B-133
			2880	294				2750	280	1 - 6090SK	- 6	*3	B-98	-	B-133
			2880	294				2750	280	1 - 6095SK	- 6	*3	B-98	-	B-133
			2880	294				2750	280	1 - 6100SK	- 6	*3	B-99	-	B-134
			1900	193				1790	182	1 - 6085	- 6		B-100	B-116	B-135
			2840	290				2670	273	1 - 6090	- 6		B-100	B-116	B-135
			2840	290				2670	273	1 - 6095	- 6		B-100	B-116	B-135
181	37.5	3.83	1510	154	219	31.1	3.17	1420	145	1 - 6075SK	- 8	*3	B-98	-	B-133
			1660	169				1590	162	1 - 6080SK	- 8	*3	B-98	-	B-133
			1660	169				1590	162	1 - 6085SK	- 8	*3	B-98	-	B-133
			3210	327				3060	312	1 - 6090SK	- 8	*3	B-98	-	B-133
			3210	327				3060	312	1 - 6095SK	- 8	*3	B-98	-	B-133
			3210	327				3060	312	1 - 6100SK	- 8	*3	B-99	-	B-134
			3210	327				3060	312	1 - 6105SK	- 8	*3	B-99	-	B-134
			2050	209				1930	197	1 - 6085	- 8		B-100	B-116	B-135
			3160	322				2980	304	1 - 6090	- 8		B-100	B-116	B-135
			3160	322				2980	304	1 - 6095	- 8		B-100	B-116	B-135
145	46.9	4.78	1740	177	175	38.9	3.96	1680	171	1 - 6080SK	- 10	*3	B-98	-	B-133
			1740	177				1680	171	1 - 6085SK	- 10	*3	B-98	-	B-133
			3380	345				3240	330	1 - 6090SK	- 10	*3	B-98	-	B-133
			3380	345				3240	330	1 - 6095SK	- 10	*3	B-98	-	B-133
			3380	345				3240	330	1 - 6100SK	- 10	*3	B-99	-	B-134
			3380	345				3240	330	1 - 6105SK	- 10	*3	B-99	-	B-134
132	51.6	5.26	2250	230	159	42.8	4.36	2130	217	1 - 6085	- 11		B-100	B-116	B-135
			3340	340				3340	340	1 - 6090	- 11		B-100	B-116	B-135
			3340	340				3340	340	1 - 6095	- 11		B-100	B-116	B-135
112	61.0	6.22	2410	246	135	50.5	5.15	2280	233	1 - 6085	- 13		B-100	B-116	B-135
			3340	340				3340	340	1 - 6090	- 13		B-100	B-116	B-135
			3340	340				3340	340	1 - 6095	- 13		B-100	B-116	B-135
96.7	70.4	7.18	2490	253	117	58.3	5.95	2350	240	1 - 6085	- 15		B-100	B-116	B-135
			3340	340				3340	340	1 - 6090	- 15		B-100	B-116	B-135
			3340	340				3340	340	1 - 6095	- 15		B-100	B-116	B-135
85.3	79.8	8.13	2560	261	103	66.1	6.74	2460	251	1 - 6085	- 17		B-100	B-116	B-135
			3340	340				3340	340	1 - 6090	- 17		B-100	B-116	B-135
			3340	340				3340	340	1 - 6095	- 17		B-100	B-116	B-135
			5400	550				5400	550	1 - 6100	- 17		B-101	B-117	B-136
69.0	98.5	10.0	3340	340	83.3	81.7	8.32	3340	340	1 - 6090	- 21		B-100	B-116	B-135
			3340	340				3340	340	1 - 6095	- 21		B-100	B-116	B-135
			5400	550				5400	550	1 - 6100	- 21		B-101	B-117	B-136
58.0	117	12.0	3340	340	70.0	97.2	9.91	3340	340	1 - 6095	- 25		B-100	B-116	B-135
			5400	550				5400	550	1 - 6100	- 25		B-101	B-117	B-136
			5400	550				5400	550	1 - 6105	- 25		B-101	B-117	B-136
			7240	738				6810	694	1 - 6110	- 25		B-101	B-117	B-136
			7240	738				6810	694	1 - 6115	- 25		B-101	B-117	B-136
50.0	136	13.9	3320	338	60.3	113	11.5	3340	340	1 - 6095	- 29		B-100	B-116	B-135
			5400	550				5400	550	1 - 6100	- 29		B-101	B-117	B-136
			5400	550				5400	550	1 - 6105	- 29		B-101	B-117	B-136
			7410	756				7000	714	1 - 6110	- 29		B-101	B-117	B-136
			7410	756				7000	714	1 - 6115	- 29		B-101	B-117	B-136

GEARMOTORS

Selection Tables
0.55 kW, 0.75 kW

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

Selection Tables Gearmotors



0.75 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

n₁: Motor Speed

50Hz						60Hz					Nomenclature			Page of Dimension Sheet				
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM	
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM	
10.1	636	64.8	525	53.5	9810	1000	*1	12.2	527	53.7	525	53.5	9810	1000	*1	1 - 6120DB	- 143	B-108 B-124 B-143
					9810	1000	0.98						9810	1000	1.20	1 - 6125DB	- 143	B-108 B-124 B-143
					14700	1500	1.23						14700	1500	1.48	1 - 6130DB	- 143	B-109 B-125 B-144
					14700	1500	1.48						14700	1500	1.78	1 - 6135DB	- 143	B-109 B-125 B-144
					16000	1630	1.93						16000	1630	2.13	1 - 6140DB	- 143	B-109 B-125 B-144
					16000	1630	1.93						16000	1630	2.33	1 - 6140DC	- 143	B-109 B-125 B-144
					16000	1630	2.13						16000	1630	2.13	1 - 6145DB	- 143	B-109 B-125 B-144
					16000	1630	2.15						16000	1630	2.60	1 - 6145DC	- 143	B-109 B-125 B-144
					22100	2250	2.76						22100	2250	3.33	1 - 6160DB	- 143	B-110 B-126 B-145
					22100	2250	2.76						22100	2250	3.33	1 - 6160DB	- 143	B-110 B-126 B-145
8.79	734	74.8	525	53.5	9810	1000	*1	10.6	608	62.0	525	53.5	9810	1000	*1	1 - 6120DB	- 165	B-108 B-124 B-143
					9810	1000	0.86						9810	1000	1.04	1 - 6125DB	- 165	B-108 B-124 B-143
					14700	1500	1.06						14700	1500	1.28	1 - 6130DB	- 165	B-109 B-125 B-144
					14700	1500	1.28						14700	1500	1.55	1 - 6135DB	- 165	B-109 B-125 B-144
					16000	1630	1.67						16000	1630	2.02	1 - 6140DB	- 165	B-109 B-125 B-144
					16000	1630	1.85						16000	1630	2.13	1 - 6145DB	- 165	B-109 B-125 B-144
					16000	1630	1.85						16000	1630	2.23	1 - 6145DC	- 165	B-109 B-125 B-144
					22100	2250	2.13						22100	2250	2.13	1 - 6160DA	- 165	B-110 B-126 B-145
					22100	2250	2.39						22100	2250	2.89	1 - 6160DB	- 165	B-110 B-126 B-145
					22100	2250	2.86						22100	2250	3.46	1 - 6165DB	- 165	B-110 B-126 B-145
		22100	2250	2.86			22100	2250	3.46	1 - 6165DB	- 165	B-110 B-126 B-145						
7.44	867	88.4	630	64.2	9810	1000	*1	8.97	718	73.2	630	64.2	9810	1000	*1	1 - 6125DB	- 195	B-108 B-124 B-143
					14700	1500	1.08						14700	1500	1.31	1 - 6135DB	- 195	B-109 B-125 B-144
					16000	1630	1.41						16000	1630	1.71	1 - 6140DB	- 195	B-109 B-125 B-144
					16000	1630	1.57						16000	1630	1.89	1 - 6145DB	- 195	B-109 B-125 B-144
					22100	2250	2.02						22100	2250	2.13	1 - 6160DA	- 195	B-110 B-126 B-145
					22100	2250	2.02						22100	2250	2.44	1 - 6160DB	- 195	B-110 B-126 B-145
					22100	2250	2.13						22100	2250	2.13	1 - 6165DA	- 195	B-110 B-126 B-145
					22100	2250	2.42						22100	2250	2.92	1 - 6165DB	- 195	B-110 B-126 B-145
					29500	3010	2.92						29500	3010	3.52	1 - 6170DB	- 195	B-110 B-126 B-145
					29500	3010	2.92						29500	3010	3.52	1 - 6170DB	- 195	B-110 B-126 B-145
6.28	1030	105	630	64.2	9810	1000	*1	7.58	851	86.7	630	64.2	9810	1000	*1	1 - 6125DB	- 231	B-108 B-124 B-143
			780	79.5	14700	1500	*1				780	79.5	14700	1500	*1	1 - 6130DB	- 231	B-109 B-125 B-144
					14700	1500	0.92						14700	1500	1.10	1 - 6135DB	- 231	B-109 B-125 B-144
					16000	1630	1.19						16000	1630	1.44	1 - 6140DB	- 231	B-109 B-125 B-144
					16000	1630	1.30						16000	1630	1.57	1 - 6145DB	- 231	B-109 B-125 B-144
					22100	2250	1.71						22100	2250	2.06	1 - 6160DA	- 231	B-110 B-126 B-145
					22100	2250	2.04						22100	2250	2.13	1 - 6165DA	- 231	B-110 B-126 B-145
					22100	2250	2.04						22100	2250	2.47	1 - 6165DB	- 231	B-110 B-126 B-145
					29500	3010	2.13						29500	3010	2.13	1 - 6170DA	- 231	B-110 B-126 B-145
					29500	3010	2.46						29500	3010	2.97	1 - 6170DB	- 231	B-110 B-126 B-145
		29500	3010	2.46			29500	3010	2.97	1 - 6170DB	- 231	B-110 B-126 B-145						
5.31	1210	124	780	79.5	14700	1500	*1	6.41	1010	103	780	79.5	14700	1500	*1	1 - 6130DB	- 273	B-109 B-125 B-144
			940	95.8	14700	1500	*1				940	95.8	14700	1500	*1	1 - 6135DB	- 273	B-109 B-125 B-144
					16000	1630	1.01						16000	1630	1.22	1 - 6140DB	- 273	B-109 B-125 B-144
					16000	1630	1.10						16000	1630	1.33	1 - 6145DB	- 273	B-109 B-125 B-144
					22100	2250	1.45						22100	2250	1.75	1 - 6160DA	- 273	B-110 B-126 B-145
					22100	2250	1.73						22100	2250	2.09	1 - 6165DA	- 273	B-110 B-126 B-145
					29500	3010	2.08						29500	3010	2.13	1 - 6170DA	- 273	B-110 B-126 B-145
					29500	3010	2.08						29500	3010	2.52	1 - 6170DB	- 273	B-110 B-126 B-145
					29500	3010	2.13						29500	3010	2.13	1 - 6175DA	- 273	B-110 B-126 B-145
					29500	3010	2.60						29500	3010	3.13	1 - 6175DB	- 273	B-110 B-126 B-145

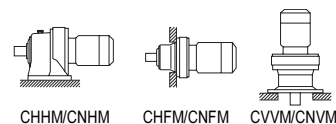
GEARMOTORS

Selection Tables
0.75 kW

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

Selection Tables Gearmotors

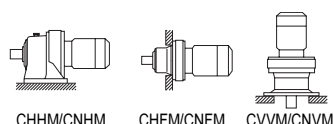
0.75 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁ r/min		1450	980	1750	1165



50Hz						60Hz					Nomenclature			Page of Dimension Sheet			
Output Speed n ₂	Output Torque T _{out}		Allowable Radial Load Pro		SF	Output Speed n ₂	Output Torque T _{out}		Allowable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVN
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
4.55	940	95.8	14700	1500	*1	5.49	940	95.8	14700	1500	*1	1 -	6135DB	- 319	B-109	B-125	B-144
	1420	145	15500	1580	0.97		16000	1630	1.17	1 -	6145DB	- 319	B-109	B-125	B-144		
			22100	2250	1.24		22100	2250	1.49	1 -	6160DA	- 319	B-110	B-126	B-145		
			22100	2250	1.48		22100	2250	1.79	1 -	6165DA	- 319	B-110	B-126	B-145		
			29500	3010	1.78		29500	3010	2.13	1 -	6170DA	- 319	B-110	B-126	B-145		
			29500	3010	1.78		29500	3010	2.15	1 -	6170DB	- 319	B-110	B-126	B-145		
			29500	3010	2.13		29500	3010	2.13	1 -	6175DA	- 319	B-110	B-126	B-145		
			29500	3010	2.22		29500	3010	2.68	1 -	6175DB	- 319	B-110	B-126	B-145		
			41700	4250	2.86		41700	4250	3.45	1 -	6180DA	- 319	B-110	B-126	B-145		
3.85	1230	125	16000	1630	*1	4.64	1230	125	16000	1630	*1	1 -	6140DB	- 377	B-109	B-125	B-144
	1370	140	15800	1610	*1		1370	140	15800	1610	*1	1 -	6145DB	- 377	B-109	B-125	B-144
	1680	171	14100	1440	0.82		15700	1600	0.98	1 -	6145DB	- 377	B-109	B-125	B-144		
			22100	2250	1.05		22100	2250	1.26	1 -	6160DA	- 377	B-110	B-126	B-145		
			22100	2250	1.25		22100	2250	1.51	1 -	6165DA	- 377	B-110	B-126	B-145		
			29500	3010	1.51		29500	3010	1.82	1 -	6170DA	- 377	B-110	B-126	B-145		
			29500	3010	1.88		29500	3010	2.13	1 -	6175DA	- 377	B-110	B-126	B-145		
			29500	3010	1.88		29500	3010	2.13	1 -	6175DA	- 377	B-110	B-126	B-145		
			41700	4250	2.42		41700	4250	2.92	1 -	6175DB	- 377	B-110	B-126	B-145		
41700			4250	2.98	41700	4250	2.92	1 -	6180DA	- 377	B-110	B-126	B-145				
3.07	1370	140	15700	1600	*1	3.70	1370	140	15700	1600	*1	1 -	6145DB	- 473	B-109	B-125	B-144
	1740	177	22100	2250	*1		1740	177	22100	2250	*1	1 -	6160DA	- 473	B-110	B-126	B-145
	2100	214	22100	2250	1.00		22100	2250	1.21	1 -	6165DA	- 473	B-110	B-126	B-145		
			29500	3010	1.20		29500	3010	1.45	1 -	6170DA	- 473	B-110	B-126	B-145		
			29500	3010	1.50		29500	3010	1.81	1 -	6175DA	- 473	B-110	B-126	B-145		
			41700	4250	1.93		41700	4250	2.33	1 -	6180DA	- 473	B-110	B-126	B-145		
			41700	4250	2.38		41700	4250	2.87	1 -	6185DA	- 473	B-110	B-126	B-145		
			2530	258	29500		3010	0.97	29500	3010	1.17	1 -	6175DA	- 731	B-110	B-126	B-145
					41700		4250	1.25	41700	4250	1.51	1 -	6180DA	- 731	B-110	B-126	B-145
3250	331	41700	4250	1.54	41700	4250	1.86	1 -	6185DA	- 731	B-110	B-126	B-145				
1.98	3250	331	59000	6010	1.96	59000	6010	2.37	1 -	6190DA	- 731	B-111	B-128	B-147			
			59000	6010	2.45	59000	6010	2.96	1 -	6195DA	- 731	B-111	B-128	B-147			
			3740	381	2530	258	29500	3010	*1	1 -	6170DA	- 841	B-110	B-126	B-145		
					29500	3010	0.84	29500	3010	1.02	1 -	6175DA	- 841	B-110	B-126	B-145	
					41700	4250	1.08	41700	4250	1.31	1 -	6180DA	- 841	B-110	B-126	B-145	
41700	4250	1.34			41700	4250	1.61	1 -	6185DA	- 841	B-110	B-126	B-145				
1.72	3740	381	59000	6010	1.71	59000	6010	2.06	1 -	6190DA	- 841	B-111	B-128	B-147			
			59000	6010	2.13	59000	6010	2.57	1 -	6195DA	- 841	B-111	B-128	B-147			
			3150	321	29500	3010	*1	1 -	6175DA	- 1003	B-110	B-126	B-145				
					41700	4250	1.12	41700	4250	1.35	1 -	6185DA	- 1003	B-110	B-126	B-145	
					59000	6010	1.43	59000	6010	1.73	1 -	6190DA	- 1003	B-111	B-128	B-147	
59000	6010	1.79			59000	6010	2.15	1 -	6195DA	- 1003	B-111	B-128	B-147				

1. Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
2. Motor slippage may affect n₁ and n₂. Refer to technical data for details.
3. CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
4. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
5. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

Selection Tables Gearmotors



0.75 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

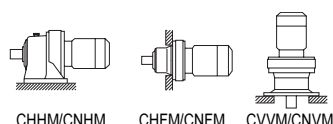
50Hz						60Hz					Nomenclature			Page of Dimension Sheet			
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
1.16	4060	414	41700	4250	*1	1.40	4060	414	41700	4250	*1	1 -	6180DA	-1247	B-110	B-126	B-145
			41700	4250	0.90				41700	4250	1.09	1 -	6185DA	-1247	B-110	B-126	B-145
	5540	565	59000	6010	1.15		4590	468	59000	6010	1.39	1 -	6190DA	-1247	B-111	B-128	B-147
			59000	6010	1.44				59000	6010	1.73	1 -	6195DA	-1247	B-111	B-128	B-147
0.980	4060	414	41700	4250	*1	1.18	4060	414	41700	4250	*1	1 -	6180DA	-1479	B-110	B-126	B-145
	5000	510	41700	4250	*1		5000	510	41700	4250	*1	1 -	6185DA	-1479	B-110	B-126	B-145
	6580	670	58800	5990	1.21		5450	555	59000	6010	1.46	1 -	6195DA	-1479	B-111	B-128	B-147
0.784	5000	510	41700	4250	*1	0.946	5000	510	41700	4250	*1	1 -	6185DA	-1849	B-110	B-126	B-145
	6380	650	59000	6010	*1		6380	650	59000	6010	*1	1 -	6190DA	-1849	B-111	B-128	B-147
							6810	694	59000	6010	1.17	1 -	6195DA	-1849	B-111	B-128	B-147
	8220	838	58900	6000	0.97												
0.702	5000	510	41600	4240	*1	0.847	5000	510	41600	4240	*1	1 -	6185DA	-2065	B-110	B-126	B-145
	6380	650	58600	5970	*1		6380	650	58600	5970	*1	1 -	6190DA	-2065	B-111	B-128	B-147
	9180	936	57800	5890	0.87		7610	775	58200	5940	1.05	1 -	6195DA	-2065	B-111	B-128	B-147
0.572	6380	650	58600	5970	*1	0.690	6380	650	58600	5970	*1	1 -	6190DA	-2537	B-111	B-128	B-147
	7960	811	58100	5930	*1		7960	811	58100	5930	*1	1 -	6195DA	-2537	B-111	B-128	B-147
	9300	948	84100	8570	*1		9300	948	84100	8570	*1	1 -	6205DA	-2537	B-112	B-129	B-148
	11300	1150	84100	8570	0.82		9350	953	84100	8570	1.00	1 -	6205DA	-2537	B-112	B-129	B-148
0.476	6380	650	58900	6000	*1	0.575	6380	650	58900	6000	*1	1 -	6190DA	-3045	B-111	B-128	B-147
	7960	811	58400	5950	*1		7960	811	58400	5950	*1	1 -	6195DA	-3045	B-111	B-128	B-147
	8760	893	84100	8570	*1		8760	893	84100	8570	*1	1 -	6205DA	-3045	B-112	B-129	B-148
0.417	6380	650	58600	5970	*1	0.503	6380	650	58600	5970	*1	1 -	6190DA	-3481	B-111	B-128	B-147
	7960	811	58100	5930	*1		7960	811	58100	5930	*1	1 -	6195DA	-3481	B-111	B-128	B-147
	9300	948	84100	8570	*1		9300	948	84100	8570	*1	1 -	6205DA	-3481	B-112	B-129	B-148
0.327	6380	650	58900	6000	*1	0.394	6380	650	58900	6000	*1	1 -	6190DA	-4437	B-111	B-128	B-147
	7960	811	58400	5950	*1		7960	811	58400	5950	*1	1 -	6195DA	-4437	B-111	B-128	B-147
	8760	893	84100	8570	*1		8760	893	84100	8570	*1	1 -	6205DA	-4437	B-112	B-129	B-148
0.282	6380	650	58900	6000	*1	0.341	6380	650	58900	6000	*1	1 -	6190DA	-5133	B-111	B-128	B-147
	7960	811	58400	5950	*1		7960	811	58400	5950	*1	1 -	6195DA	-5133	B-111	B-128	B-147
	9300	948	84100	8570	*1		9300	948	84100	8570	*1	1 -	6205DA	-5133	B-112	B-129	B-148
0.235	6380	650	58900	6000	*1	0.283	6380	650	58900	6000	*1	1 -	6190DA	-6177	B-111	B-128	B-147
	7960	811	58400	5950	*1		7960	811	58400	5950	*1	1 -	6195DA	-6177	B-111	B-128	B-147
	8760	893	84100	8570	*1		8760	893	84100	8570	*1	1 -	6205DA	-6177	B-112	B-129	B-148
0.192	6380	650	58900	6000	*1	0.231	6380	650	58900	6000	*1	1 -	6190DA	-7569	B-111	B-128	B-147
	7960	811	58400	5950	*1		7960	811	58400	5950	*1	1 -	6195DA	-7569	B-111	B-128	B-147
	8760	893	84100	8570	*1		8760	893	84100	8570	*1	1 -	6205DA	-7569	B-112	B-129	B-148

GEARMOTORS

Selection Tables
0.75 kW

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

Selection Tables Gearmotors

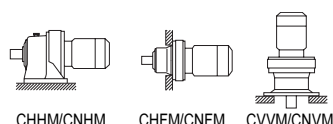


1.1 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂ r/min	Output Torque Tout N·m	kgf·m	Allowable Radial Load Pro N	kgf	SF	Output Speed n ₂ r/min	Output Torque Tout N·m	kgf·m	Allowable Radial Load Pro N	kgf	SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
															CHHM	CHFM	CVVM
112	89.5	9.12	3340	340	1.05	135	74.1	7.56	3340	340	1.05	1H -	6090	- 13	B-100	B-116	B-135
			3340	340	1.38				3340	340	1.38	1H -	6095	- 13	B-100	B-116	B-135
			5400	550	2.14				5140	524	2.14	1H -	6100	- 13	B-101	B-117	B-136
			5400	550	2.89				5140	524	2.89	1H -	6105	- 13	B-101	B-117	B-136
96.7	103	10.5	3340	340	1.05	117	85.5	8.72	3340	340	1.05	1H -	6090	- 15	B-100	B-116	B-135
			3340	340	1.38				3340	340	1.38	1H -	6095	- 15	B-100	B-116	B-135
			5400	550	2.14				5400	550	2.14	1H -	6100	- 15	B-101	B-117	B-136
			5400	550	2.89				5400	550	2.89	1H -	6105	- 15	B-101	B-117	B-136
85.3	117	11.9	3340	340	1.05	103	96.9	9.88	3340	340	1.05	1H -	6090	- 17	B-100	B-116	B-135
			3340	340	1.38				3340	340	1.38	1H -	6095	- 17	B-100	B-116	B-135
			5400	550	1.81				5400	550	1.81	1H -	6100	- 17	B-101	B-117	B-136
			5400	550	2.24				5400	550	2.24	1H -	6105	- 17	B-101	B-117	B-136
69.0	145	14.7	6660	679	2.89	83.3	120	12.2	6270	639	2.89	1H -	6110	- 17	B-101	B-117	B-136
			3340	340	1.37				3340	340	1.38	1H -	6095	- 21	B-100	B-116	B-135
			5400	550	1.73				5400	550	1.75	1H -	6100	- 21	B-101	B-117	B-136
			5400	550	2.07				5400	550	2.13	1H -	6105	- 21	B-101	B-117	B-136
58.0	172	17.5	7080	722	2.47	70.0	143	14.5	6670	679	2.47	1H -	6110	- 21	B-101	B-117	B-136
			7080	722	2.83				6670	679	2.83	1H -	6115	- 21	B-101	B-117	B-136
			5400	550	1.15				5400	550	1.15	1H -	6100	- 25	B-101	B-117	B-136
			5400	550	1.52				5400	550	1.52	1H -	6105	- 25	B-101	B-117	B-136
50.0	200	20.3	7180	732	1.74	60.3	165	16.9	6770	690	1.74	1H -	6110	- 25	B-101	B-117	B-136
			7180	732	2.02				6770	690	2.02	1H -	6115	- 25	B-101	B-117	B-136
			8700	887	2.81				8190	835	2.81	1H -	6120	- 25	B-101	B-117	B-136
			5400	550	1.10				5400	550	1.10	1H -	6100	- 29	B-101	B-117	B-136
41.4	241	24.6	5400	550	1.45	50.0	200	20.3	5400	550	1.45	1H -	6105	- 29	B-101	B-117	B-136
			7350	750	1.73				6960	709	1.73	1H -	6110	- 29	B-101	B-117	B-136
			7350	750	2.02				6960	709	2.02	1H -	6115	- 29	B-101	B-117	B-136
			9050	922	2.61				8510	868	2.72	1H -	6120	- 29	B-101	B-117	B-136
33.7	296	30.2	5400	550	1.09	40.7	245	25.0	5400	550	1.09	1H -	6105	- 35	B-101	B-117	B-136
			7400	754	1.36				7430	758	1.36	1H -	6110	- 35	B-101	B-117	B-136
			7400	754	1.65				7430	758	1.65	1H -	6115	- 35	B-101	B-117	B-136
			9560	975	2.15				9000	918	2.26	1H -	6120	- 35	B-101	B-117	B-136
28.4	351	35.8	9560	975	2.62	34.3	291	29.6	9000	918	2.89	1H -	6125	- 35	B-101	B-117	B-136
			5400	550	0.98				5380	548	0.98	1H -	6105	- 43	B-101	B-117	B-136
			7610	776	1.18				7610	776	1.18	1H -	6110	- 43	B-101	B-117	B-136
			7610	776	1.38				7610	776	1.38	1H -	6115	- 43	B-101	B-117	B-136
24.6	406	41.4	9810	1000	1.74	29.7	336	34.3	9580	976	1.74	1H -	6120	- 43	B-101	B-117	B-136
			9810	1000	2.13				9580	976	2.16	1H -	6125	- 43	B-101	B-117	B-136
			12000	1220	2.64				11300	1150	2.72	1H -	6130	- 43	B-102	B-118	B-137
			7600	775	1.01				7610	776	1.01	1H -	6115	- 51	B-101	B-117	B-136
20.4	489	49.8	9810	1000	1.47	24.6	405	41.3	9810	1000	1.56	1H -	6120	- 51	B-101	B-117	B-136
			9810	1000	1.79				9810	1000	2.07	1H -	6125	- 51	B-101	B-117	B-136
			12500	1270	2.22				11800	1200	2.31	1H -	6130	- 51	B-102	B-118	B-137
			12500	1270	2.32				11800	1200	2.66	1H -	6135	- 51	B-102	B-118	B-137
20.4	489	49.8	7570	772	0.92	24.6	405	41.3	7610	776	0.92	1H -	6115	- 59	B-101	B-117	B-136
			9810	1000	1.18				9810	1000	1.18	1H -	6120	- 59	B-101	B-117	B-136
			9810	1000	1.47				9810	1000	1.47	1H -	6125	- 59	B-101	B-117	B-136
			13100	1340	1.92				12300	1260	1.99	1H -	6130	- 59	B-102	B-118	B-137
20.4	489	49.8	13100	1340	2.22	24.6	405	41.3	12300	1260	2.29	1H -	6135	- 59	B-102	B-118	B-137
			16000	1630	2.69				16000	1630	2.69	1H -	6140	- 59	B-102	B-118	B-137
			16000	1630	2.89				16000	1630	3.32	1H -	6145	- 59	B-102	B-118	B-137
			9810	1000	1.04				9810	1000	1.09	1H -	6125	- 71	B-101	B-117	B-136
20.4	489	49.8	13900	1410	1.60	24.6	405	41.3	13100	1330	1.66	1H -	6130	- 71	B-102	B-118	B-137
			13900	1410	1.85				13100	1330	1.97	1H -	6135	- 71	B-102	B-118	B-137
			16000	1630	2.21				16000	1630	2.21	1H -	6140	- 71	B-102	B-118	B-137
			16000	1630	2.38				16000	1630	2.75	1H -	6145	- 71	B-102	B-118	B-137

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

Selection Tables Gearmotors

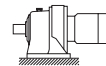


1.1 kW	n ₁ : Motor Speed			
	Hz		50Hz	
	P	r/min	4	6
	n ₁	r/min	1450	980
			1750	1165

50Hz						60Hz					Nomenclature			Page of Dimension Sheet			
Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF		Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
7.44	780	79.5	14700	1500	*1	8.97	780	79.5	14700	1500	*1	1H -	6130DB	- 195	B-109	B-125	B-144
	940	95.8	14700	1500	*1		940	95.8	14700	1500	*1	1H -	6135DB	- 195	B-109	B-125	B-144
			16000	1630	1.07				16000	1630	1.29	1H -	6145DB	- 195	B-109	B-125	B-144
			22100	2250	1.38				22100	2250	1.45	1H -	6160DA	- 195	B-110	B-126	B-145
			22100	2250	1.38				22100	2250	1.67	1H -	6160DB	- 195	B-110	B-126	B-145
	1270	130	22100	2250	1.45		1050	107	22100	2250	1.45	1H -	6165DA	- 195	B-110	B-126	B-145
			22100	2250	1.65				22100	2250	1.99	1H -	6165DB	- 195	B-110	B-126	B-145
			29500	3010	1.99				29500	3010	2.40	1H -	6170DB	- 195	B-110	B-126	B-145
			29500	3010	2.48				29500	3010	2.99	1H -	6175DB	- 195	B-110	B-126	B-145
6.28	940	95.8	14700	1500	*1	7.58	940	95.8	14700	1500	*1	1H -	6135DB	- 231	B-109	B-125	B-144
	1230	125	16000	1630	*1		1230	125	16000	1630	*1	1H -	6140DB	- 231	B-109	B-125	B-144
			15500	1580	0.89				16000	1630	1.07	1H -	6145DB	- 231	B-109	B-125	B-144
			22100	2250	1.17				22100	2250	1.41	1H -	6160DA	- 231	B-110	B-126	B-145
			22100	2250	1.39				22100	2250	1.45	1H -	6165DA	- 231	B-110	B-126	B-145
			22100	2250	1.39				22100	2250	1.68	1H -	6165DB	- 231	B-110	B-126	B-145
	1510	154	29500	3010	1.45		1250	127	29500	3010	1.45	1H -	6170DA	- 231	B-110	B-126	B-145
			29500	3010	1.68				29500	3010	2.03	1H -	6170DB	- 231	B-110	B-126	B-145
			29500	3010	2.09				29500	3010	2.52	1H -	6175DB	- 231	B-110	B-126	B-145
			41700	4250	2.69				41700	4250	3.05	1H -	6180DA	- 231	B-110	B-126	B-145
		41700	4250	2.69			41700	4250	3.25	1H -	6180DB	- 231	B-111	B-127	B-146		
5.31	1230	125	16000	1630	*1	6.41	1230	125	16000	1630	*1	1H -	6140DB	- 273	B-109	B-125	B-144
	1340	136	16000	1630	*1		1340	136	16000	1630	*1	1H -	6145DB	- 273	B-109	B-125	B-144
			22100	2250	1.18				22100	2250	1.42	1H -	6165DA	- 273	B-110	B-126	B-145
			29500	3010	1.42				29500	3010	1.45	1H -	6170DA	- 273	B-110	B-126	B-145
			29500	3010	1.42				29500	3010	1.72	1H -	6170DB	- 273	B-110	B-126	B-145
			29500	3010	1.45				29500	3010	1.45	1H -	6175DA	- 273	B-110	B-126	B-145
	1780	181	29500	3010	1.77		1470	150	29500	3010	2.14	1H -	6175DB	- 273	B-110	B-126	B-145
			41700	4250	2.28				41700	4250	2.75	1H -	6180DA	- 273	B-110	B-126	B-145
			41700	4250	2.81				41700	4250	3.05	1H -	6185DA	- 273	B-110	B-126	B-145
			41700	4250	2.81				41700	4250	3.39	1H -	6185DB	- 273	B-111	B-127	B-146
4.55	1230	125	16000	1630	*1	5.49	1230	125	16000	1630	*1	1H -	6140DB	- 319	B-109	B-125	B-144
	1370	140	15800	1610	*1		1370	140	15800	1610	*1	1H -	6145DB	- 319	B-109	B-125	B-144
			22100	2250	1.01				22100	2250	1.22	1H -	6165DA	- 319	B-110	B-126	B-145
			29500	3010	1.22				29500	3010	1.45	1H -	6170DA	- 319	B-110	B-126	B-145
			29500	3010	1.22				29500	3010	1.47	1H -	6170DB	- 319	B-110	B-126	B-145
			29500	3010	1.45				29500	3010	1.45	1H -	6175DA	- 319	B-110	B-126	B-145
	2080	212	29500	3010	1.51		1720	176	29500	3010	1.83	1H -	6175DB	- 319	B-110	B-126	B-145
			41700	4250	1.95				41700	4250	2.35	1H -	6180DA	- 319	B-110	B-126	B-145
		41700	4250	2.40			41700	4250	2.90	1H -	6185DA	- 319	B-110	B-126	B-145		
3.85	1760	179	22100	2250	*1	4.64	1760	179	22100	2250	*1	1H -	6160DA	- 377	B-110	B-126	B-145
			22100	2250	0.85				22100	2250	1.03	1H -	6165DA	- 377	B-110	B-126	B-145
			29500	3010	1.03				29500	3010	1.24	1H -	6170DA	- 377	B-110	B-126	B-145
			29500	3010	1.28				29500	3010	1.45	1H -	6175DA	- 377	B-110	B-126	B-145
			29500	3010	1.28				29500	3010	1.55	1H -	6175DB	- 377	B-110	B-126	B-145
	2460	251	29500	3010	1.28		2040	208	29500	3010	1.55	1H -	6175DB	- 377	B-110	B-126	B-145
			41700	4250	1.65				41700	4250	1.99	1H -	6180DA	- 377	B-110	B-126	B-145
			41700	4250	2.03				41700	4250	2.45	1H -	6185DA	- 377	B-110	B-126	B-145
			59000	6010	2.60				59000	6010	3.13	1H -	6190DA	- 377	B-111	B-128	B-147

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

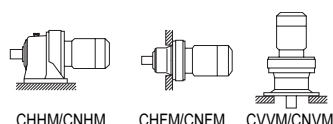
Selection Tables Gearmotors

1.1 kW		n ₁ : Motor Speed				  				
		Hz		50Hz		60Hz				
		P		4	6	4	6			
		n ₁ r/min		1450	980	1750	1165			

50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF		Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N			kgf	r/min	N·m	kgf·m			N	kgf				
3.07	2100	214	22100	2250	*1	3.70	2100	214	22100	2250	*1	1H -	6165DA	- 473	B-110	B-126	B-145
	2530	258	29500	3010	*1		2530	258	29500	3010	*1	1H -	6170DA	- 473	B-110	B-126	B-145
			29500	3010	1.02				29500	3010	1.23	1H -	6175DA	- 473	B-110	B-126	B-145
			41700	4250	1.32				41700	4250	1.59	1H -	6180DA	- 473	B-110	B-126	B-145
	3080	314	41700	4250	1.62		2560	260	41700	4250	1.96	1H -	6185DA	- 473	B-110	B-126	B-145
			59000	6010	2.07				59000	6010	2.50	1H -	6190DA	- 473	B-111	B-128	B-147
			59000	6010	2.58			59000	6010	3.11	1H -	6195DA	- 473	B-111	B-128	B-147	
2.59	2100	214	22100	2250	*1	3.13	2100	214	22100	2250	*1	1H -	6165DA	- 559	B-110	B-126	B-145
	2530	258	29500	3010	*1		2530	258	29500	3010	*1	1H -	6170DA	- 559	B-110	B-126	B-145
			29500	3010	0.86				29500	3010	1.04	1H -	6175DA	- 559	B-110	B-126	B-145
			41700	4250	1.11				41700	4250	1.34	1H -	6180DA	- 559	B-110	B-126	B-145
	3640	372	41700	4250	1.37		3020	308	41700	4250	1.66	1H -	6185DA	- 559	B-110	B-126	B-145
			59000	6010	1.75				59000	6010	2.11	1H -	6190DA	- 559	B-111	B-128	B-147
			59000	6010	2.18			59000	6010	2.64	1H -	6195DA	- 559	B-111	B-128	B-147	
2.23	2530	258	29500	3010	*1	2.70	2530	258	29500	3010	*1	1H -	6170DA	- 649	B-110	B-126	B-145
	3150	321	29500	3010	*1		3150	321	29500	3010	*1	1H -	6175DA	- 649	B-110	B-126	B-145
			41700	4250	1.18				41700	4250	1.43	1H -	6185DA	- 649	B-110	B-126	B-145
	4230	431	59000	6010	1.51		3510	357	59000	6010	1.82	1H -	6190DA	- 649	B-111	B-128	B-147
			59000	6010	1.88			59000	6010	2.27	1H -	6195DA	- 649	B-111	B-128	B-147	
1.98	3150	321	29500	3010	*1	2.39	3150	321	29500	3010	*1	1H -	6175DA	- 731	B-110	B-126	B-145
			41700	4250	1.05				41700	4250	1.27	1H -	6185DA	- 731	B-110	B-126	B-145
	4770	486	59000	6010	1.34		3950	403	59000	6010	1.62	1H -	6190DA	- 731	B-111	B-128	B-147
			59000	6010	1.67			59000	6010	2.02	1H -	6195DA	- 731	B-111	B-128	B-147	
1.72	3150	321	29500	3010	*1	2.08	3150	321	29500	3010	*1	1H -	6175DA	- 841	B-110	B-126	B-145
	4050	413	41700	4250	*1		4050	413	41700	4250	*1	1H -	6180DA	- 841	B-110	B-126	B-145
			41700	4250	0.91				41700	4250	1.10	1H -	6185DA	- 841	B-110	B-126	B-145
	5480	559	59000	6010	1.16		4540	463	59000	6010	1.40	1H -	6190DA	- 841	B-111	B-128	B-147
			59000	6010	1.45				59000	6010	1.75	1H -	6195DA	- 841	B-111	B-128	B-147
1.45	4050	413	41700	4250	*1	1.74	4050	413	41700	4250	*1	1H -	6180DA	- 1003	B-110	B-126	B-145
	5000	510	41600	4240	*1		5000	510	41600	4240	*1	1H -	6185DA	- 1003	B-110	B-126	B-145
	6540	667	58500	5970	1.22		5420	552	58800	6000	1.47	1H -	6195DA	- 1003	B-111	B-128	B-147
1.16	5000	510	41700	4250	*1	1.40	5000	510	41700	4250	*1	1H -	6185DA	- 1247	B-110	B-126	B-145
	6380	650	59000	6010	*1		6380	650	59000	6010	*1	1H -	6190DA	- 1247	B-111	B-128	B-147
	8130	829	58900	6010	0.98		6740	687	59000	6010	1.18	1H -	6195DA	- 1247	B-111	B-128	B-147
0.980	6380	650	58900	6000	*1	1.18	6380	650	58900	6000	*1	1H -	6190DA	- 1479	B-111	B-128	B-147
	7960	811	58400	5950	*1		7960	811	58400	5950	*1	1H -	6195DA	- 1479	B-111	B-128	B-147
	9640	983	57800	5900	0.83		7990	815	58400	5950	1.00	1H -	6195DA	- 1479	B-111	B-128	B-147
0.784	7960	811	59000	6010	*1	0.946	7960	811	59000	6010	*1	1H -	6195DA	- 1849	B-111	B-128	B-147
0.702	7960	811	58100	5930	*1	0.847	7960	811	58100	5930	*1	1H -	6195DA	- 2065	B-111	B-128	B-147

- Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
- Motor slippage may affect n₁ and n₂. Refer to technical data for details.
- CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
- Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
- "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

Selection Tables Gearmotors



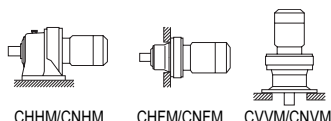
1.5 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

n₁: Motor Speed

50Hz					60Hz					Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF	Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf	r/min	N·m	kgf·m	N	kgf				CHHM	CHFM	CVVM
580	23.5	2.39	1130	115	700	19.4	1.98	1090	111	2 - 6080SK	- 2.5 *3	B-98	-	B-133	
			1130	115				1090	111						
			2140	218				2050	209						
			2140	218				2050	209						
			2140	218				2050	209						
			2140	218				2050	209						
			2860	292				2710	276						
483	28.2	2.87	1170	119	583	23.3	2.38	1130	115	2 - 6080SK	- 3 *3	B-98	-	B-133	
			1170	119				1130	115						
			2230	227				2120	216						
			2230	227				2120	216						
			2230	227				2120	216						
			2230	227				2120	216						
			3060	312				2890	295						
363	37.5	3.83	1250	127	438	31.1	3.17	1210	123	2 - 6080SK	- 4 *3	B-98	-	B-133	
			1250	127				1210	123						
			2470	252				2370	242						
			2470	252				2370	242						
			2470	252				2370	242						
			2470	252				2370	242						
			3280	334				3100	316						
290	46.9	4.78	1290	132	350	38.9	3.96	1270	129	2 - 6085SK	- 5 *3	B-98	-	B-133	
			2590	264				2490	254						
			2590	264				2490	254						
			2590	264				2490	254						
			2590	264				2490	254						
			3460	353				3290	335						
242	56.3	5.74	1290	132	292	46.7	4.76	1290	131	2 - 6085SK	- 6 *3	B-98	-	B-133	
			2660	271				2530	258						
			2660	271				2530	258						
			2660	271				2530	258						
			2660	271				2530	258						
			3700	377				3510	358						
			2790	284				2630	268						
			4130	421				3880	396						
			4130	421				3880	396						
			4670	476				4390	447						
			4670	476				4390	447						
181	75.1	7.65	1290	132	219	62.2	6.34	1290	132	2 - 6085SK	- 8 *3	B-98	-	B-133	
			2870	293				2780	283						
			2870	293				2780	283						
			2870	293				2780	283						
			3950	403				3770	384						
			3950	403				3770	384						
			3090	315				2920	297						
			4600	469				4330	441						
			4600	469				4330	441						
			5210	531				4900	499						
			5210	531				4900	499						
145	93.9	9.57	2990	305	175	77.8	7.93	2900	296	2 - 6095SK	- 10 *3	B-98	-	B-133	
			2990	305				2900	296						
			2990	305				2900	296						
			4250	433				4050	413						
			4250	433				4050	413						

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

Selection Tables Gearmotors



1.5 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

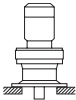
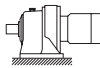
n₁: Motor Speed

50Hz						60Hz						Nomenclature			Page of Dimension Sheet						
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF	Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM CHHM	CNFM CHFM	CNVM CVVM						
r/min	N·m	kgf·m	N	kgf	r/min	N·m	kgf·m	N	kgf												
24.6	554	56.4	9810	1000	1.08	29.7	459	46.8	9810	1000	1.08	2 -	6125	- 59	B-101	B-117	B-136				
			13000	1320	1.41				12200	1250	1.46	2 -	6130	- 59	B-102	B-118	B-137				
			13000	1320	1.63				12200	1250	1.68	2 -	6135	- 59	B-102	B-118	B-137				
			16000	1630	1.97				16000	1630	1.97	2 -	6140	- 59	B-102	B-118	B-137				
			16000	1630	2.12				16000	1630	2.43	2 -	6145	- 59	B-102	B-118	B-137				
			22100	2250	2.95				22100	2250	2.95	2 -	6160	- 59	B-103	B-119	B-138				
20.4	666	67.9	13700	1400	1.17	24.6	552	56.3	12900	1320	1.22	2 -	6130	- 71	B-102	B-118	B-137				
			13700	1400	1.35				12900	1320	1.45	2 -	6135	- 71	B-102	B-118	B-137				
			16000	1630	1.62				16000	1630	1.62	2 -	6140	- 71	B-102	B-118	B-137				
			16000	1630	1.75				16000	1630	2.02	2 -	6145	- 71	B-102	B-118	B-137				
			22100	2250	2.31				22100	2250	2.31	2 -	6160	- 71	B-103	B-119	B-138				
16.7	817	83.2	14700	1500	1.10	20.1	677	69.0	13900	1420	1.27	2 -	6135	- 87	B-102	B-118	B-137				
			16000	1630	1.32				16000	1630	1.32	2 -	6140	- 87	B-102	B-118	B-137				
			16000	1630	1.44				16000	1630	1.65	2 -	6145	- 87	B-102	B-118	B-137				
			22100	2250	2.15				22100	2250	2.31	2 -	6160	- 87	B-103	B-119	B-138				
			22100	2250	2.51				22100	2250	2.60	2 -	6165	- 87	B-103	B-119	B-138				
13.9	925	94.3	630	64.2	9810	1000	*1	16.8	766	78.1	630	64.2	9810	1000	*1	2 -	6125DB	- 104	B-108	B-124	B-143
			14700	1500	1.02	14700	1500				1.07	2 -	6135DB	- 104	B-109	B-125	B-144				
			14700	1500	1.02	14700	1500				1.23	2 -	6135DC	- 104	B-109	B-125	B-144				
			16000	1630	1.07	16000	1630				1.07	2 -	6140DB	- 104	B-109	B-125	B-144				
			16000	1630	1.32	16000	1630				1.60	2 -	6140DC	- 104	B-109	B-125	B-144				
			16000	1630	1.48	16000	1630				1.79	2 -	6145DC	- 104	B-109	B-125	B-144				
			22100	2250	1.90	22100	2250				2.24	2 -	6160DB	- 104	B-110	B-126	B-145				
			22100	2250	1.90	22100	2250				2.29	2 -	6160DC	- 104	B-111	B-127	B-146				
			22100	2250	2.24	22100	2250				2.24	2 -	6165DB	- 104	B-110	B-126	B-145				
			22100	2250	2.27	22100	2250				2.74	2 -	6165DC	- 104	B-111	B-127	B-146				
			29500	3010	2.73	29500	3010				3.30	2 -	6170DC	- 104	B-111	B-127	B-146				
12.0	1080	110	780	79.5	14700	1500	*1	14.5	891	90.9	780	79.5	14700	1500	*1	2 -	6130DB	- 121	B-109	B-125	B-144
			14700	1500	0.87	14700	1500				1.05	2 -	6135DB	- 121	B-109	B-125	B-144				
			16000	1630	1.07	16000	1630				1.07	2 -	6140DB	- 121	B-109	B-125	B-144				
			16000	1630	1.14	16000	1630				1.37	2 -	6140DC	- 121	B-109	B-125	B-144				
			16000	1630	1.20	16000	1630				1.45	2 -	6145DC	- 121	B-109	B-125	B-144				
			22100	2250	1.63	22100	2250				1.97	2 -	6160DB	- 121	B-110	B-126	B-145				
			22100	2250	1.95	22100	2250				2.24	2 -	6165DB	- 121	B-110	B-126	B-145				
			22100	2250	1.95	22100	2250				2.36	2 -	6165DC	- 121	B-111	B-127	B-146				
			29500	3010	2.24	29500	3010				2.24	2 -	6170DB	- 121	B-110	B-126	B-145				
			29500	3010	2.35	29500	3010				2.84	2 -	6170DC	- 121	B-111	B-127	B-146				
29500	3010	2.93	29500	3010	3.53	2 -	6175DC	- 121	B-111	B-127	B-146										
10.1	1270	130	780	79.5	14700	1500	*1	12.2	1050	107	780	79.5	14700	1500	*1	2 -	6130DB	- 143	B-109	B-125	B-144
			940	95.8	14700	1500	*1				940	95.8	14700	1500	*1	2 -	6135DB	- 143	B-109	B-125	B-144
			16000	1630	1.07	16000	1630				1.07	2 -	6145DB	- 143	B-109	B-125	B-144				
			16000	1630	1.08	16000	1630				1.30	2 -	6145DC	- 143	B-109	B-125	B-144				
			22100	2250	1.38	22100	2250				1.67	2 -	6160DB	- 143	B-110	B-126	B-145				
			22100	2250	1.65	22100	2250				1.99	2 -	6165DB	- 143	B-110	B-126	B-145				
			29500	3010	1.99	29500	3010				2.24	2 -	6170DB	- 143	B-110	B-126	B-145				
			29500	3010	1.99	29500	3010				2.40	2 -	6170DC	- 143	B-111	B-127	B-146				
			29500	3010	2.24	29500	3010				2.24	2 -	6175DB	- 143	B-110	B-126	B-145				
			29500	3010	2.48	29500	3010				2.99	2 -	6175DC	- 143	B-111	B-127	B-146				

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

Selection Tables Gearmotors

1.5 kW		n ₁ : Motor Speed															
		Hz		50Hz		60Hz											
		P		4	6	4	6										
		n ₁ r/min		1450		980		1750		1165							

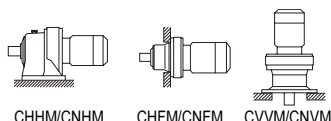


CHHM/CNHMCHFM/CNFM CVVM/CNVM

50Hz						60Hz						Nomenclature			Page of Dimension Sheet			
Output Speed n ₂	Output Torque Tout		Allowable Radial Load Pro		SF	Output Speed n ₂	Output Torque Tout		Allowable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM	
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM	
8.79	940	95.8	14700	1500	*1	10.6	940	95.8	14700	1500	*1	2 -	6135DB	- 165	B-109	B-125	B-144	
			15500	1580	0.93				16000	1630	1.07	2 -	6145DB	- 165	B-109	B-125	B-144	
			15500	1580	0.93				16000	1630	1.12	2 -	6145DC	- 165	B-109	B-125	B-144	
			22100	2250	1.07				22100	2250	1.07	2 -	6160DA	- 165	B-110	B-126	B-145	
			22100	2250	1.20				22100	2250	1.44	2 -	6160DB	- 165	B-110	B-126	B-145	
			22100	2250	1.43				22100	2250	1.73	2 -	6165DB	- 165	B-110	B-126	B-145	
			29500	3010	1.72				29500	3010	2.08	2 -	6170DB	- 165	B-110	B-126	B-145	
			29500	3010	2.15				29500	3010	2.24	2 -	6175DB	- 165	B-110	B-126	B-145	
			41700	4250	2.24				41700	4250	2.24	2 -	6180DA	- 165	B-110	B-126	B-145	
			41700	4250	2.77				41700	4250	3.34	2 -	6180DB	- 165	B-111	B-127	B-146	
7.44	1230	125	16000	1630	*1	8.97	1230	125	16000	1630	*1	2 -	6140DB	- 195	B-109	B-125	B-144	
	1360	138	16000	1630	*1			1360	138	16000	1630	*1	2 -	6145DB	- 195	B-109	B-125	B-144
			22100	2250	1.01				22100	2250	1.07	2 -	6160DA	- 195	B-110	B-126	B-145	
			22100	2250	1.01				22100	2250	1.22	2 -	6160DB	- 195	B-110	B-126	B-145	
			22100	2250	1.07				22100	2250	1.07	2 -	6165DA	- 195	B-110	B-126	B-145	
			22100	2250	1.21				22100	2250	1.46	2 -	6165DB	- 195	B-110	B-126	B-145	
			29500	3010	1.46				29500	3010	1.76	2 -	6170DB	- 195	B-110	B-126	B-145	
			29500	3010	1.82				29500	3010	2.19	2 -	6175DB	- 195	B-110	B-126	B-145	
			41700	4250	2.24				41700	4250	2.24	2 -	6180DA	- 195	B-110	B-126	B-145	
			41700	4250	2.34				41700	4250	2.83	2 -	6180DB	- 195	B-111	B-127	B-146	
		41700	4250	2.84			41700	4250	3.43	2 -	6185DB	- 195	B-111	B-127	B-146			
6.28	1340	136	16000	1630	*1	7.58	1340	136	16000	1630	*1	2 -	6145DB	- 231	B-109	B-125	B-144	
			22100	2250	1.02				22100	2250	1.07	2 -	6165DA	- 231	B-110	B-126	B-145	
			22100	2250	1.02				22100	2250	1.23	2 -	6165DB	- 231	B-110	B-126	B-145	
			29500	3010	1.07				29500	3010	1.07	2 -	6170DA	- 231	B-110	B-126	B-145	
			29500	3010	1.23				29500	3010	1.49	2 -	6170DB	- 231	B-110	B-126	B-145	
			29500	3010	1.53				29500	3010	1.85	2 -	6175DB	- 231	B-110	B-126	B-145	
			41700	4250	1.97				41700	4250	2.24	2 -	6180DA	- 231	B-110	B-126	B-145	
			41700	4250	1.97				41700	4250	2.38	2 -	6180DB	- 231	B-111	B-127	B-146	
			41700	4250	2.24				41700	4250	2.24	2 -	6185DA	- 231	B-110	B-126	B-145	
			41700	4250	2.43				41700	4250	2.94	2 -	6185DB	- 231	B-111	B-127	B-146	
5.31	1760	179	22100	2250	*1	6.41	1760	179	22100	2250	*1	2 -	6160DA	- 273	B-110	B-126	B-145	
			22100	2250	0.87				22100	2250	1.04	2 -	6165DA	- 273	B-110	B-126	B-145	
			29500	3010	1.04				29500	3010	1.07	2 -	6170DA	- 273	B-110	B-126	B-145	
			29500	3010	1.04				29500	3010	1.26	2 -	6170DB	- 273	B-110	B-126	B-145	
			29500	3010	1.07				29500	3010	1.07	2 -	6175DA	- 273	B-110	B-126	B-145	
			29500	3010	1.30				29500	3010	1.57	2 -	6175DB	- 273	B-110	B-126	B-145	
			41700	4250	1.67				41700	4250	2.01	2 -	6180DA	- 273	B-110	B-126	B-145	
			41700	4250	2.06				41700	4250	2.24	2 -	6185DA	- 273	B-110	B-126	B-145	
			41700	4250	2.06				41700	4250	2.49	2 -	6185DB	- 273	B-111	B-127	B-146	
			59000	6010	2.63				59000	6010	3.17	2 -	6190DA	- 273	B-111	B-128	B-147	
4.55	1760	179	22100	2250	*1	5.49	1760	179	22100	2250	*1	2 -	6160DA	- 319	B-110	B-126	B-145	
	2100	214	22100	2250	*1			2100	214	22100	2250	*1	2 -	6165DA	- 319	B-110	B-126	B-145
			29500	3010	1.07				29500	3010	1.07	2 -	6175DA	- 319	B-110	B-126	B-145	
			29500	3010	1.11				29500	3010	1.34	2 -	6175DB	- 319	B-110	B-126	B-145	
			41700	4250	1.43				41700	4250	1.72	2 -	6180DA	- 319	B-110	B-126	B-145	
			41700	4250	1.76				41700	4250	2.13	2 -	6185DA	- 319	B-110	B-126	B-145	
			59000	6010	2.25				59000	6010	2.71	2 -	6190DA	- 319	B-111	B-128	B-147	
			59000	6010	2.81				59000	6010	3.39	2 -	6195DA	- 319	B-111	B-128	B-147	

- Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
- Motor slippage may affect n₁ and n₂. Refer to technical data for details.
- CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
- Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
- "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

Selection Tables Gearmotors



1.5 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

n₁: Motor Speed

50Hz						60Hz					Nomenclature			Page of Dimension Sheet			
Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF		Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
3.85	2100	214	22100	2250	*1	4.64	2100	214	22100	2250	*1	2 -	6165DA	- 377	B-110	B-126	B-145
	2530	258	29500	3010	*1		2530	258	29500	3010	*1	2 -	6170DA	- 377	B-110	B-126	B-145
			29500	3010	0.94				29500	3010	1.07	2 -	6175DA	- 377	B-110	B-126	B-145
			29500	3010	0.94				29500	3010	1.13	2 -	6175DB	- 377	B-110	B-126	B-145
			41700	4250	1.21				41700	4250	1.46	2 -	6180DA	- 377	B-110	B-126	B-145
	3350	342	41700	4250	1.49		2780	283	41700	4250	1.80	2 -	6185DA	- 377	B-110	B-126	B-145
			59000	6010	1.90				59000	6010	2.30	2 -	6190DA	- 377	B-111	B-128	B-147
			59000	6010	2.37				59000	6010	2.87	2 -	6195DA	- 377	B-111	B-128	B-147
3.07	3150	321	29500	3010	*1	3.70	3150	321	29500	3010	*1	2 -	6175DA	- 473	B-110	B-126	B-145
			41700	4250	1.19				41700	4250	1.43	2 -	6185DA	- 473	B-110	B-126	B-145
	4210	429	59000	6010	1.52		3480	355	59000	6010	1.83	2 -	6190DA	- 473	B-111	B-128	B-147
			59000	6010	1.89				59000	6010	2.28	2 -	6195DA	- 473	B-111	B-128	B-147
2.59	3150	321	29500	3010	*1	3.13	3150	321	29500	3010	*1	2 -	6175DA	- 559	B-110	B-126	B-145
	4060	414	41700	4250	*1		4060	414	41700	4250	*1	2 -	6180DA	- 559	B-110	B-126	B-145
			41700	4250	1.01				41700	4250	1.21	2 -	6185DA	- 559	B-110	B-126	B-145
	4970	507	59000	6010	1.28		4120	420	59000	6010	1.55	2 -	6190DA	- 559	B-111	B-128	B-147
		59000	6010	1.60			59000	6010	1.93	2 -	6195DA	- 559	B-111	B-128	B-147		
2.23	4050	413	41700	4250	*1	2.70	4050	413	41700	4250	*1	2 -	6180DA	- 649	B-110	B-126	B-145
			41300	4210	0.87				41700	4250	1.05	2 -	6185DA	- 649	B-110	B-126	B-145
	5770	588	58700	5990	1.11		4780	487	59000	6010	1.33	2 -	6190DA	- 649	B-111	B-128	B-147
			58700	5990	1.38				59000	6010	1.66	2 -	6195DA	- 649	B-111	B-128	B-147
1.98	4060	414	41700	4250	*1	2.39	4060	414	41700	4250	*1	2 -	6180DA	- 731	B-110	B-126	B-145
	5000	510	41700	4250	*1		5000	510	41700	4250	*1	2 -	6185DA	- 731	B-110	B-126	B-145
	6500	663	59000	6010	1.22		5390	549	59000	6010	1.48	2 -	6195DA	- 731	B-111	B-128	B-147
1.72	5000	510	41700	4250	*1	2.08	5000	510	41700	4250	*1	2 -	6185DA	- 841	B-110	B-126	B-145
	7480	762	59000	6010	1.06		6200	632	59000	6010	1.28	2 -	6195DA	- 841	B-111	B-128	B-147
			59000	6010	1.06				59000	6010	1.28	2 -	6195DB	- 841	B-112	B-128	B-147
1.45	6380	650	58600	5970	*1	1.74	6380	650	58600	5970	*1	2 -	6190DA	- 1003	B-111	B-128	B-147
	8920	909	57900	5900	0.89		7390	753	58300	5940	1.08	2 -	6195DA	- 1003	B-111	B-128	B-147
1.16	7960	811	59000	6010	*1	1.40	7960	811	59000	6010	*1	2 -	6195DA	- 1247	B-111	B-128	B-147
0.980	8760	893	84100	8570	*1	1.18	8360	853	84100	8570	*1	2 -	6205DA	- 1479	B-112	B-129	B-148
	13200	1340	104000	10600	0.86		10900	1110	104000	10600	1.03	2 -	6215DA	- 1479	B-112	B-129	B-148
0.784	9300	948	84100	8570	*1	0.946	9300	948	84100	8570	*1	2 -	6205DA	- 1849	B-112	B-129	B-148
	12700	1290	104000	10600	*1		12700	1290	104000	10600	*1	2 -	6215DA	- 1849	B-112	B-129	B-148
	16400	1680	145000	14800	0.97		13600	1390	145000	14800	1.17	2 -	6225DA	- 1849	B-113	B-130	B-149
0.702	9300	948	84100	8570	*1	0.847	9300	948	84100	8570	*1	2 -	6205DA	- 2065	B-112	B-129	B-148
	12700	1290	104000	10600	*1		12700	1290	104000	10600	*1	2 -	6215DA	- 2065	B-112	B-129	B-148
	18400	1870	145000	14800	0.86		15200	1550	145000	14800	1.04	2 -	6225DA	- 2065	B-113	B-130	B-149
0.572	12700	1290	104000	10600	*1	0.690	12700	1290	104000	10600	*1	2 -	6215DA	- 2537	B-112	B-129	B-148
	15900	1620	145000	14800	*1		15900	1620	145000	14800	*1	2 -	6225DA	- 2537	B-113	B-130	B-149
0.476	11300	1150	104000	10600	*1	0.575	11300	1150	104000	10600	*1	2 -	6215DA	- 3045	B-112	B-129	B-148
	15100	1540	145000	14800	*1		15100	1540	145000	14800	*1	2 -	6225DA	- 3045	B-113	B-130	B-149
0.417	12700	1290	104000	10600	*1	0.503	12700	1290	104000	10600	*1	2 -	6215DA	- 3481	B-112	B-129	B-148
	15900	1620	145000	14800	*1		15900	1620	145000	14800	*1	2 -	6225DA	- 3481	B-113	B-130	B-149
0.327	11300	1150	104000	10600	*1	0.394	11300	1150	104000	10600	*1	2 -	6215DA	- 4437	B-112	B-129	B-148
	15100	1540	145000	14800	*1		15100	1540	145000	14800	*1	2 -	6225DA	- 4437	B-113	B-130	B-149
0.282	12700	1290	104000	10600	*1	0.341	12700	1290	104000	10600	*1	2 -	6215DA	- 5133	B-112	B-129	B-148
	15900	1620	145000	14800	*1		15900	1620	145000	14800	*1	2 -	6225DA	- 5133	B-113	B-130	B-149

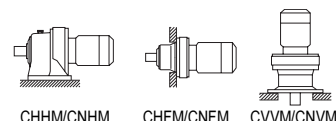
GEARMOTORS

Selection Tables
1.5 kW

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*1" in the SF column. They cannot be operated with 100% motor rating.

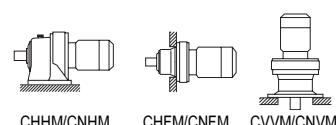
Selection Tables Gearmotors

1.5 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165



50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVN
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
0.235	11300	1150	104000	10600	*1	0.283	11300	1150	104000	10600	*1	2 -	6215DA	- 6177	B-112	B-129	B-148
	15100	1540	145000	14800	*1		15100	1540	145000	14800	*1	2 -	6225DA	- 6177	B-113	B-130	B-149
0.192	11300	1150	104000	10600	*1	0.231	11300	1150	104000	10600	*1	2 -	6215DA	- 7569	B-112	B-129	B-148
	15100	1540	145000	14800	*1		15100	1540	145000	14800	*1	2 -	6225DA	- 7569	B-113	B-130	B-149

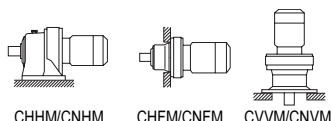
2.2 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165



50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Alloeable Radial Load Pro		SF		Output Speed n ₂	Output Torque Tout	Alloeable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVN
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
580	34.4	3.51	2050	209	1.09	700	28.5	2.91	1970	201	1.09	3 -	6090SK	- 2.5 *3	B-98	-	B-133
			2050	209	1.23				1970	201	1.23	3 -	6095SK	- 2.5 *3	B-98	-	B-133
			2050	209	1.45				1970	201	1.45	3 -	6100SK	- 2.5 *3	B-99	-	B-134
			2050	209	1.70				1970	201	1.70	3 -	6105SK	- 2.5 *3	B-99	-	B-134
			2790	284	2.34				2650	270	2.34	3 -	6110SK	- 2.5 *3	B-99	-	B-134
			2790	284	2.93				2650	270	2.93	3 -	6115SK	- 2.5 *3	B-99	-	B-134
483	41.3	4.21	2120	216	1.06	583	34.2	3.49	2040	208	1.06	3 -	6090SK	- 3 *3	B-98	-	B-133
			2120	216	1.20				2040	208	1.20	3 -	6095SK	- 3 *3	B-98	-	B-133
			2120	216	1.50				2040	208	1.50	3 -	6100SK	- 3 *3	B-99	-	B-134
			2120	216	1.76				2040	208	1.76	3 -	6105SK	- 3 *3	B-99	-	B-134
			2960	302	2.40				2820	287	2.40	3 -	6110SK	- 3 *3	B-99	-	B-134
			2960	302	3.00				2820	287	3.00	3 -	6115SK	- 3 *3	B-99	-	B-134
363	55.1	5.61	2300	234	1.06	438	45.6	4.65	2240	228	1.06	3 -	6090SK	- 4 *3	B-98	-	B-133
			2300	234	1.20				2240	228	1.20	3 -	6095SK	- 4 *3	B-98	-	B-133
			2300	234	1.46				2240	228	1.46	3 -	6100SK	- 4 *3	B-99	-	B-134
			2300	234	1.72				2240	228	1.72	3 -	6105SK	- 4 *3	B-99	-	B-134
			3170	323	2.43				3010	307	2.43	3 -	6110SK	- 4 *3	B-99	-	B-134
			3170	323	3.04				3010	307	3.04	3 -	6115SK	- 4 *3	B-99	-	B-134
290	68.8	7.02	2420	247	1.02	350	57.0	5.81	2330	238	1.02	3 -	6090SK	- 5 *3	B-98	-	B-133
			2420	247	1.20				2330	238	1.20	3 -	6095SK	- 5 *3	B-98	-	B-133
			2420	247	1.43				2330	238	1.43	3 -	6100SK	- 5 *3	B-99	-	B-134
			2420	247	1.68				2330	238	1.68	3 -	6105SK	- 5 *3	B-99	-	B-134
			3330	339	2.09				3180	324	2.09	3 -	6110SK	- 5 *3	B-99	-	B-134
			3330	339	2.62				3180	324	2.62	3 -	6115SK	- 5 *3	B-99	-	B-134
242	82.6	8.42	2410	246	1.03	292	68.4	6.98	2370	242	1.03	3 -	6095SK	- 6 *3	B-98	-	B-133
			2410	246	1.21				2370	242	1.21	3 -	6100SK	- 6 *3	B-99	-	B-134
			2410	246	1.43				2370	242	1.43	3 -	6105SK	- 6 *3	B-99	-	B-134
			3520	359	1.92				3370	344	1.92	3 -	6110SK	- 6 *3	B-99	-	B-134
			3520	359	2.40				3370	344	2.40	3 -	6115SK	- 6 *3	B-99	-	B-134
			4090	417	1.07				3860	393	1.07	3 -	6100	- 6	B-101	B-117	B-136
			4090	417	1.45				3860	393	1.45	3 -	6105	- 6	B-101	B-117	B-136
			4640	473	1.61				4370	445	1.61	3 -	6110	- 6	B-101	B-117	B-136
			4640	473	1.78				4370	445	1.78	3 -	6115	- 6	B-101	B-117	B-136
			5260	536	2.30				4950	505	2.30	3 -	6120	- 6	B-101	B-117	B-136

1. Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
2. Motor slippage may affect n₁ and n₂. Refer to technical data for details.
3. CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
4. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
5. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

Selection Tables Gearmotors



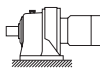
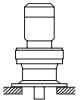
2.2 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

n₁: Motor Speed

50Hz					60Hz					Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro	SF		Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro	SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf	r/min	N·m	kgf·m	N	kgf				CHHM	CHFM	CVVM
181	110	11.2	2540	259	219	91.2	9.30	2500	255	3 - 6095SK	- 8	*3	B-98	-	B-133
			2540	259				2500	255	3 - 6105SK	- 8	*3	B-99	-	B-134
			3730	380				3580	365	3 - 6110SK	- 8	*3	B-99	-	B-134
			3730	380				3580	365	3 - 6115SK	- 8	*3	B-99	-	B-134
			4560	465				4300	438	3 - 6100	- 8		B-101	B-117	B-136
			4560	465				4300	438	3 - 6105	- 8		B-101	B-117	B-136
			5170	527				4870	496	3 - 6110	- 8		B-101	B-117	B-136
			5170	527				4870	496	3 - 6115	- 8		B-101	B-117	B-136
145	138	14.0	5870	598	175	114	11.6	5520	563	3 - 6120	- 8		B-101	B-117	B-136
			2610	266				2580	263	3 - 6095SK	- 10	*3	B-98	-	B-133
			2610	266				2580	263	3 - 6105SK	- 10	*3	B-99	-	B-134
			3960	404				3820	389	3 - 6110SK	- 10	*3	B-99	-	B-134
132	151	15.4	3960	404	159	125	12.8	3820	389	3 - 6115SK	- 10	*3	B-99	-	B-134
			5170	527				4870	497	3 - 6100	- 11		B-101	B-117	B-136
			5170	527				4870	497	3 - 6105	- 11		B-101	B-117	B-136
			5900	601				5560	567	3 - 6110	- 11		B-101	B-117	B-136
			5900	601				5560	567	3 - 6115	- 11		B-101	B-117	B-136
			6670	680				6280	640	3 - 6120	- 11		B-101	B-117	B-136
112	179	18.2	6670	680	135	148	15.1	6280	640	3 - 6125	- 11		B-101	B-117	B-136
			5360	547				5060	516	3 - 6100	- 13		B-101	B-117	B-136
			5360	547				5060	516	3 - 6105	- 13		B-101	B-117	B-136
			6090	621				5740	586	3 - 6110	- 13		B-101	B-117	B-136
			6090	621				5740	586	3 - 6115	- 13		B-101	B-117	B-136
			6890	702				6490	662	3 - 6120	- 13		B-101	B-117	B-136
96.7	206	21.0	6890	702	117	171	17.4	6490	662	3 - 6125	- 13		B-101	B-117	B-136
			5400	550				5340	544	3 - 6100	- 15		B-101	B-117	B-136
			5400	550				5340	544	3 - 6105	- 15		B-101	B-117	B-136
			6490	662				6120	624	3 - 6110	- 15		B-101	B-117	B-136
			6490	662				6120	624	3 - 6115	- 15		B-101	B-117	B-136
			7390	753				6960	710	3 - 6120	- 15		B-101	B-117	B-136
85.3	234	23.9	7390	753	103	194	19.8	6960	710	3 - 6125	- 15		B-101	B-117	B-136
			5400	550				5400	550	3 - 6105	- 17		B-101	B-117	B-136
			6550	668				6180	630	3 - 6110	- 17		B-101	B-117	B-136
			6550	668				6180	630	3 - 6115	- 17		B-101	B-117	B-136
			7460	760				7030	716	3 - 6120	- 17		B-101	B-117	B-136
			7460	760				7030	716	3 - 6125	- 17		B-101	B-117	B-136
69.0	289	29.5	5400	550	83.3	240	24.4	5400	550	3 - 6105	- 21		B-101	B-117	B-136
			6920	706				6540	667	3 - 6110	- 21		B-101	B-117	B-136
			6920	706				6540	667	3 - 6115	- 21		B-101	B-117	B-136
			8180	834				7710	786	3 - 6120	- 21		B-101	B-117	B-136
			8180	834				7710	786	3 - 6125	- 21		B-101	B-117	B-136
			9580	976				9020	919	3 - 6130	- 21		B-102	B-118	B-137
58.0	344	35.1	7010	715	70.0	285	29.1	6620	675	3 - 6115	- 25		B-101	B-117	B-136
			8560	873				8070	823	3 - 6120	- 25		B-101	B-117	B-136
			8560	873				8070	823	3 - 6125	- 25		B-101	B-117	B-136
			9950	1010				9370	955	3 - 6130	- 25		B-102	B-118	B-137
			9950	1010				9370	955	3 - 6135	- 25		B-102	B-118	B-137
			7160	730	60.3	331	33.7	6800	693	3 - 6115	- 29		B-101	B-117	B-136
50.0	399	40.7	8880	905				8380	854	3 - 6120	- 29		B-101	B-117	B-136
			8880	905				8380	854	3 - 6125	- 29		B-101	B-117	B-136
			10500	1070				9850	1000	3 - 6130	- 29		B-102	B-118	B-137
			10500	1070				9850	1000	3 - 6135	- 29		B-102	B-118	B-137
			15000	1530				14200	1450	3 - 6140	- 29		B-102	B-118	B-137

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

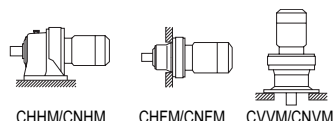
Selection Tables Gearmotors

2.2 kW		n ₁ : Motor Speed																		
		Hz		50Hz		60Hz														
		P		4	6	4	6													
n ₁		r/min		1450	980	1750	1165													

50Hz					60Hz					Nomenclature			Page of Dimension Sheet			
Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF	Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM	
r/min	N·m	kgf·m	N	kgf	r/min	N·m	kgf·m	N	kgf				CHHM	CHFM	CVVM	
41.4	482	49.1	4960	506	0.82	50.0	399	40.7	7230	737	0.82	3 - 6115	- 35	B-101	B-117	B-136
			9350	954	1.08				8830	900	1.13	3 - 6120	- 35	B-101	B-117	B-136
			9350	954	1.31				8830	900	1.45	3 - 6125	- 35	B-101	B-117	B-136
			11000	1120	1.62				10300	1050	1.69	3 - 6130	- 35	B-102	B-118	B-137
			11000	1120	1.87				10300	1050	1.93	3 - 6135	- 35	B-102	B-118	B-137
			16000	1630	2.37				15200	1550	2.37	3 - 6140	- 35	B-102	B-118	B-137
33.7	592	60.3	16000	1630	2.85	40.7	490	50.0	15200	1550	3.42	3 - 6145	- 35	B-102	B-118	B-137
			9810	1000	1.06				9380	956	1.08	3 - 6125	- 43	B-101	B-117	B-136
			11800	1200	1.32				11100	1130	1.36	3 - 6130	- 43	B-102	B-118	B-137
			11800	1200	1.52				11100	1130	1.71	3 - 6135	- 43	B-102	B-118	B-137
			16000	1630	1.79				15900	1620	1.79	3 - 6140	- 43	B-102	B-118	B-137
			16000	1630	2.12				15900	1620	2.45	3 - 6145	- 43	B-102	B-118	B-137
28.4	702	71.6	20600	2100	2.93	34.3	582	59.3	19300	1970	3.39	3 - 6160	- 43	B-103	B-119	B-138
			9810	1000	0.90				9760	995	1.04	3 - 6125	- 51	B-101	B-117	B-136
			12200	1250	1.16				11500	1180	1.15	3 - 6130	- 51	B-102	B-118	B-137
			16000	1630	1.56				11500	1180	1.33	3 - 6135	- 51	B-102	B-118	B-137
			16000	1630	1.68				16000	1630	1.56	3 - 6140	- 51	B-102	B-118	B-137
			21300	2180	2.50				16000	1630	1.92	3 - 6145	- 51	B-102	B-118	B-137
24.6	812	82.8	21300	2180	2.99	29.7	673	68.6	20100	2050	2.61	3 - 6160	- 51	B-103	B-119	B-138
			12800	1300	1.11				20100	2050	3.42	3 - 6165	- 51	B-103	B-119	B-138
			16000	1630	1.35				16000	1630	1.35	3 - 6140	- 59	B-102	B-118	B-137
			16000	1630	1.45				16000	1630	1.66	3 - 6145	- 59	B-102	B-118	B-137
			22100	2250	2.01				22100	2250	2.01	3 - 6160	- 59	B-103	B-119	B-138
			22100	2250	2.59				22100	2250	2.61	3 - 6165	- 59	B-103	B-119	B-138
20.4	977	99.6	13500	1380	0.92	24.6	810	82.5	12800	1300	0.98	3 - 6135	- 71	B-102	B-118	B-137
			16000	1630	1.10				16000	1630	1.10	3 - 6140	- 71	B-102	B-118	B-137
			16000	1630	1.19				16000	1630	1.38	3 - 6145	- 71	B-102	B-118	B-137
			22100	2250	1.58				22100	2250	1.58	3 - 6160	- 71	B-103	B-119	B-138
			22100	2250	2.15				22100	2250	2.57	3 - 6165	- 71	B-103	B-119	B-138
			16.7	1200	122				16000	1630	0.98	20.1	992	101	16000	1630
22100	2250	1.46				22100	2250	1.58	3 - 6160	- 87	B-103				B-119	B-138
22100	2250	1.71				22100	2250	1.77	3 - 6165	- 87	B-103				B-119	B-138
780	79.5	14700				1500	*1	3 - 6130DC	- 104	B-109	B-125				B-144	
940	95.8	14700				1500	*1	3 - 6135DC	- 104	B-109	B-125				B-144	
16000	1630	1.01				16000	1630	1.22	3 - 6145DC	- 104	B-109				B-125	B-144
13.9	1360	138	22100	2250	1.29	16.8	1120	115	22100	2250	1.53	3 - 6160DB	- 104	B-110	B-126	B-145
			22100	2250	1.29				22100	2250	1.56	3 - 6160DC	- 104	B-111	B-127	B-146
			22100	2250	1.53				22100	2250	1.53	3 - 6165DB	- 104	B-110	B-126	B-145
			22100	2250	1.55				22100	2250	1.87	3 - 6165DC	- 104	B-111	B-127	B-146
			29500	3010	1.86				29400	3000	2.25	3 - 6170DC	- 104	B-111	B-127	B-146
			29500	3010	2.32				29400	3000	2.80	3 - 6175DC	- 104	B-111	B-127	B-146
41300	4210	2.99	38800	3960	3.61	3 - 6180DB	- 104	B-111	B-127	B-146						

1. Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
2. Motor slippage may affect n₁ and n₂. Refer to technical data for details.
3. CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
4. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
5. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

Selection Tables Gearmotors



2.2 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

n₁: Motor Speed

50Hz						60Hz					Nomenclature			Page of Dimension Sheet				
Output Speed n ₂	Output Torque Tout		Allowable Radial Load Pro		SF	Output Speed n ₂	Output Torque Tout		Allowable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM	
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHF	CVVM	
12.0	940	95.8	14700	1500	*1	14.5	940	95.8	14700	1500	*1	3 -	6135DC	- 121	B-109	B-125	B-144	
	1230	125	16000	1630	*1		1230	125	16000	1630	*1	3 -	6140DC	- 121	B-109	B-125	B-144	
	1290	132	16000	1630	*1		1290	132	16000	1630	*1	3 -	6145DC	- 121	B-109	B-125	B-144	
			15300	1560	0.82					16000	1630	0.98	3 -	6145DC	- 121	B-109	B-125	B-144
			22100	2250	1.11					22100	2250	1.34	3 -	6160DB	- 121	B-110	B-126	B-145
			22100	2250	1.11					22100	2250	1.34	3 -	6160DC	- 121	B-111	B-127	B-146
			22100	2250	1.33					22100	2250	1.53	3 -	6165DB	- 121	B-110	B-126	B-145
	1580	161	22100	2250	1.33		1310	133	22100	2250	1.61	3 -	6165DC	- 121	B-111	B-127	B-146	
			29500	3010	1.53					29500	3010	1.53	3 -	6170DB	- 121	B-110	B-126	B-145
			29500	3010	1.60					29500	3010	1.94	3 -	6170DC	- 121	B-111	B-127	B-146
			29500	3010	2.00					29500	3010	2.41	3 -	6175DC	- 121	B-111	B-127	B-146
			41700	4250	2.57					41300	4210	3.11	3 -	6180DB	- 121	B-111	B-127	B-146
10.1	1230	125	16000	1630	*1	12.2	1230	125	16000	1630	*1	3 -	6140DC	- 143	B-109	B-125	B-144	
	1370	140	15900	1620	*1		1370	140	15900	1620	*1	3 -	6145DC	- 143	B-109	B-125	B-144	
			22100	2250	1.13					22100	2250	1.36	3 -	6165DB	- 143	B-110	B-126	B-145
			29500	3010	1.35					29500	3010	1.53	3 -	6170DB	- 143	B-110	B-126	B-145
			29500	3010	1.35					29500	3010	1.64	3 -	6170DC	- 143	B-111	B-127	B-146
	1860	190	29500	3010	1.53		1550	158	29500	3010	1.53	3 -	6175DB	- 143	B-110	B-126	B-145	
			29500	3010	1.69					29500	3010	2.04	3 -	6175DC	- 143	B-111	B-127	B-146
			41700	4250	2.18					41700	4250	2.63	3 -	6180DB	- 143	B-111	B-127	B-146
			41700	4250	2.63					41700	4250	3.17	3 -	6185DB	- 143	B-111	B-127	B-146
			59000	6010	2.84					59000	6010	2.84	3 -	6190DA	- 143	B-111	B-128	B-147
8.79	1230	125	16000	1630	*1	10.6	1230	125	16000	1630	*1	3 -	6140DC	- 165	B-109	B-125	B-144	
	1360	138	16000	1630	*1		1360	138	16000	1630	*1	3 -	6145DC	- 165	B-109	B-125	B-144	
	1760	179	22100	2250	*1		1760	179	22100	2250	*1	3 -	6160DB	- 165	B-110	B-126	B-145	
			22100	2250	0.98					22100	2250	1.18	3 -	6165DB	- 165	B-110	B-126	B-145
			29500	3010	1.18					29500	3010	1.42	3 -	6170DB	- 165	B-110	B-126	B-145
			29500	3010	1.46					29500	3010	1.53	3 -	6175DB	- 165	B-110	B-126	B-145
	2150	219	29500	3010	1.46		1780	182	29500	3010	1.77	3 -	6175DC	- 165	B-111	B-127	B-146	
			41700	4250	1.53					41700	4250	1.53	3 -	6180DA	- 165	B-110	B-126	B-145
			41700	4250	1.89					41700	4250	2.28	3 -	6180DB	- 165	B-111	B-127	B-146
			41700	4250	2.29					41700	4250	2.76	3 -	6185DB	- 165	B-111	B-127	B-146
7.44	1760	179	22100	2250	*1	8.97	1760	179	22100	2250	*1	3 -	6160DB	- 195	B-110	B-126	B-145	
	2100	214	22100	2250	*1		2100	214	22100	2250	*1	3 -	6165DB	- 195	B-110	B-126	B-145	
			22100	2250	0.83					22100	2250	1.00	3 -	6165DB	- 195	B-110	B-126	B-145
			29500	3010	0.98					29500	3010	1.20	3 -	6170DB	- 195	B-110	B-126	B-145
			29500	3010	1.24					29500	3010	1.50	3 -	6175DB	- 195	B-110	B-126	B-145
	2540	259	41700	4250	1.53		2110	215	41700	4250	1.53	3 -	6180DA	- 195	B-110	B-126	B-145	
			41700	4250	1.60					41700	4250	1.93	3 -	6180DB	- 195	B-111	B-127	B-146
			41700	4250	1.94					41700	4250	2.34	3 -	6185DB	- 195	B-111	B-127	B-146
			59000	6010	2.51					59000	6010	2.84	3 -	6190DA	- 195	B-111	B-128	B-147
			59000	6010	2.51					59000	6010	3.03	3 -	6190DB	- 195	B-112	B-128	B-147
			59000	6010	2.56					59000	6010	2.84	3 -	6195DA	- 195	B-111	B-128	B-147
			84100	8570	2.84					84100	8570	2.84	3 -	6205DA	- 195	B-112	B-129	B-148

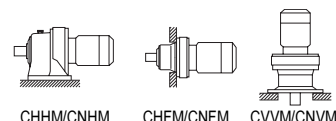
GEARMOTORS

Selection Tables
2.2 kW

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

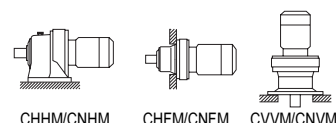
Selection Tables Gearmotors

2.2 kW	n ₁ : Motor Speed					
	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165



50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVN
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
0.192	17200	1750	179000	18200	*1	0.231	17200	1750	179000	18200	*1	3 -	6235DA	- 7569	B-114	B-131	B-150
	22600	2310	208000	21200	*1		22600	2310	208000	21200	*1	3 -	6245DA	- 7569	B-114	B-131	B-150

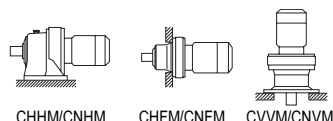
3.0 kW	n ₁ : Motor Speed					
	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165



50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Alloable Radial Load Pro		SF		Output Speed n ₂	Output Torque Tout	Alloable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVN
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
580	46.9	4.78	1930	197	1.06	700	38.9	3.96	1870	191	1.06	4 -	6100SK	- 2.5 *3	B-99	-	B-134
			1930	197	1.25				1870	191	1.25	4 -	6105SK	- 2.5 *3	B-99	-	B-134
			2700	275	1.72				2570	262	1.72	4 -	6110SK	- 2.5 *3	B-99	-	B-134
			2700	275	2.15				2570	262	2.15	4 -	6115SK	- 2.5 *3	B-99	-	B-134
483	56.3	5.74	1980	202	1.10	583	46.7	4.76	1920	196	1.10	4 -	6100SK	- 3 *3	B-99	-	B-134
			1980	202	1.29				1920	196	1.29	4 -	6105SK	- 3 *3	B-99	-	B-134
			2850	291	1.76				2730	278	1.76	4 -	6110SK	- 3 *3	B-99	-	B-134
			2850	291	2.20				2730	278	2.20	4 -	6115SK	- 3 *3	B-99	-	B-134
363	75.1	7.65	2130	217	1.07	583	62.2	6.34	2080	212	1.07	4 -	6100SK	- 4 *3	B-99	-	B-134
			2130	217	1.26				2080	212	1.26	4 -	6105SK	- 4 *3	B-99	-	B-134
			3040	310	1.78				2900	296	1.78	4 -	6110SK	- 4 *3	B-99	-	B-134
			3040	310	2.23				2900	296	2.23	4 -	6115SK	- 4 *3	B-99	-	B-134
290	93.9	9.57	2210	225	1.23	350	77.8	7.93	2160	220	1.23	4 -	6105SK	- 5 *3	B-99	-	B-134
			3180	324	1.54				3040	310	1.26	4 -	6110SK	- 5 *3	B-99	-	B-134
			3180	324	1.92				3040	310	1.78	4 -	6115SK	- 5 *3	B-99	-	B-134
242	113	11.5	2190	223	1.05	292	93.3	9.51	2160	220	1.05	4 -	6105SK	- 6 *3	B-99	-	B-134
			3330	339	1.41				3210	327	1.41	4 -	6110SK	- 6 *3	B-99	-	B-134
			3330	339	1.76				3210	327	1.76	4 -	6115SK	- 6 *3	B-99	-	B-134
			4610	470	1.18				4340	443	1.18	4 -	6110	- 6	B-101	B-117	B-136
			4610	470	1.31				4340	443	1.31	4 -	6115	- 6	B-101	B-117	B-136
			5230	534	1.69				4930	502	1.69	4 -	6120	- 6	B-101	B-117	B-136
181	150	15.3	5230	534	2.32				4930	502	1.94	4 -	6125	- 6	B-101	B-117	B-136
			2170	221	0.83	219	124	12.7	2190	223	0.83	4 -	6105SK	- 8 *3	B-99	-	B-134
			3470	354	1.23				3370	344	1.23	4 -	6110SK	- 8 *3	B-99	-	B-134
			3470	354	1.54				3370	344	1.54	4 -	6115SK	- 8 *3	B-99	-	B-134
			5130	523	1.18				4830	493	1.18	4 -	6110	- 8	B-101	B-117	B-136
			5130	523	1.31				4830	493	1.31	4 -	6115	- 8	B-101	B-117	B-136
145	188	19.1	5830	595	1.69				5490	560	1.69	4 -	6120	- 8	B-101	B-117	B-136
			5830	595	2.32				5490	560	2.32	4 -	6125	- 8	B-101	B-117	B-136
			3650	372	1.02	175	156	15.9	3550	362	1.02	4 -	6110SK	- 10 *3	B-99	-	B-134
			3650	372	1.27				3550	362	1.27	4 -	6115SK	- 10 *3	B-99	-	B-134
			5840	595	1.18				5510	561	1.18	4 -	6110	- 11	B-101	B-117	B-136
			5840	595	1.31				5510	561	1.31	4 -	6115	- 11	B-101	B-117	B-136
132	206	21.0	6620	675	1.69		159	17.4	6240	636	1.69	4 -	6120	- 11	B-101	B-117	B-136
			6620	675	1.97				6240	636	1.97	4 -	6125	- 11	B-101	B-117	B-136

1. Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
2. Motor slippage may affect n₁ and n₂. Refer to technical data for details.
3. CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
4. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
5. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

Selection Tables Gearmotors



3.0 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

n₁: Motor Speed

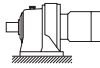
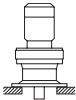
50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro	SF			Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro	SF			Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM CNFM CNVM		
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
112	244	24.9	6020	614	1.18	135	202	20.6	5690	580	1.18	4 -	6110	- 13	B-101	B-117	B-136
			6020	614	1.30				5690	580	1.30	4 -	6115	- 13	B-101	B-117	B-136
			6830	696	1.69				6440	657	1.69	4 -	6120	- 13	B-101	B-117	B-136
			6830	696	1.97				6440	657	1.97	4 -	6125	- 13	B-101	B-117	B-136
96.7	282	28.7	6410	653	1.18	117	233	23.8	6050	617	1.18	4 -	6110	- 15	B-101	B-117	B-136
			6410	653	1.30				6050	617	1.30	4 -	6115	- 15	B-101	B-117	B-136
			7320	747	1.69				6910	704	1.69	4 -	6120	- 15	B-101	B-117	B-136
			7320	747	1.97				6910	704	1.97	4 -	6125	- 15	B-101	B-117	B-136
			8290	845	2.59				7810	796	2.59	4 -	6130	- 15	B-102	B-118	B-137
85.3	319	32.5	8290	845	2.99				7810	796	2.99	4 -	6135	- 15	B-102	B-118	B-137
			6460	659	1.06	103	264	27.0	6110	622	1.06	4 -	6110	- 17	B-101	B-117	B-136
			6460	659	1.30				6110	622	1.30	4 -	6115	- 17	B-101	B-117	B-136
			7390	753	1.63				6970	710	1.69	4 -	6120	- 17	B-101	B-117	B-136
			7390	753	1.89				6970	710	1.89	4 -	6125	- 17	B-101	B-117	B-136
			8900	907	2.42				8380	854	2.42	4 -	6130	- 17	B-102	B-118	B-137
69.0	394	40.2	8900	907	2.76				8380	854	2.76	4 -	6135	- 17	B-102	B-118	B-137
			6800	693	1.04	83.3	327	33.3	6440	657	1.04	4 -	6115	- 21	B-101	B-117	B-136
			8090	825	1.32				7640	779	1.32	4 -	6120	- 21	B-101	B-117	B-136
			8090	825	1.60				7640	779	1.63	4 -	6125	- 21	B-101	B-117	B-136
			9500	969	1.98				8960	913	2.05	4 -	6130	- 21	B-102	B-118	B-137
			9500	969	2.24				8960	913	2.51	4 -	6135	- 21	B-102	B-118	B-137
58.0	469	47.8	14000	1430	2.89				13200	1350	2.89	4 -	6140	- 21	B-102	B-118	B-137
			8450	861	1.03	70.0	389	39.6	7980	814	1.03	4 -	6120	- 25	B-101	B-117	B-136
			8450	861	1.32				7980	814	1.32	4 -	6125	- 25	B-101	B-117	B-136
			9860	1010	1.66				9300	948	1.72	4 -	6130	- 25	B-102	B-118	B-137
			9860	1010	1.92				9300	948	1.98	4 -	6135	- 25	B-102	B-118	B-137
			14700	1490	2.30				13900	1410	2.30	4 -	6140	- 25	B-102	B-118	B-137
50.0	544	55.5	14700	1490	2.64				13900	1410	2.64	4 -	6145	- 25	B-102	B-118	B-137
			8750	892	1.16	60.3	451	46.0	8280	844	1.26	4 -	6125	- 29	B-101	B-117	B-136
			10400	1060	1.43				9770	996	1.49	4 -	6130	- 29	B-102	B-118	B-137
			10400	1060	1.63				9770	996	1.88	4 -	6135	- 29	B-102	B-118	B-137
			15000	1530	1.98				14200	1450	1.98	4 -	6140	- 29	B-102	B-118	B-137
			15000	1530	2.51				14200	1450	2.51	4 -	6145	- 29	B-102	B-118	B-137
41.4	657	67.0	9190	937	0.96	50.0	544	55.5	8700	887	1.06	4 -	6125	- 35	B-101	B-117	B-136
			10900	1110	1.19				10300	1050	1.24	4 -	6130	- 35	B-102	B-118	B-137
			10900	1110	1.37				10300	1050	1.42	4 -	6135	- 35	B-102	B-118	B-137
			16000	1630	1.74				15200	1550	1.74	4 -	6140	- 35	B-102	B-118	B-137
			16000	1630	2.09				15200	1550	2.51	4 -	6145	- 35	B-102	B-118	B-137
33.7	807	82.3	19100	1950	2.67				18000	1840	3.22	4 -	6160	- 35	B-103	B-119	B-138
			11600	1180	1.12	40.7	669	68.2	11000	1120	1.26	4 -	6135	- 43	B-102	B-118	B-137
			16000	1630	1.31				15800	1610	1.31	4 -	6140	- 43	B-102	B-118	B-137
			16000	1630	1.56				15800	1610	1.80	4 -	6145	- 43	B-102	B-118	B-137
			20400	2080	2.15				19200	1960	2.48	4 -	6160	- 43	B-103	B-119	B-138
			20400	2080	2.60				19200	1960	2.64	4 -	6165	- 43	B-103	B-119	B-138
28.4	957	97.6	12000	1220	0.85	34.3	793	80.9	11400	1160	0.98	4 -	6135	- 51	B-102	B-118	B-137
			16000	1630	1.14				16000	1630	1.14	4 -	6140	- 51	B-102	B-118	B-137
			16000	1630	1.23				16000	1630	1.41	4 -	6145	- 51	B-102	B-118	B-137
			21200	2160	1.83				20000	2040	1.92	4 -	6160	- 51	B-103	B-119	B-138
			21200	2160	2.19				20000	2040	2.51	4 -	6165	- 51	B-103	B-119	B-138
28.4	957	97.6	24100	2450	2.55				22700	2310	2.80	4 -	6170	- 51	B-103	B-119	B-138

GEARMOTORS

Selection Tables
3.0 kW

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

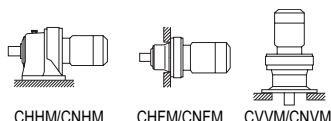
Selection Tables Gearmotors

3.0 kW		n ₁ : Motor Speed											
		Hz		50Hz		60Hz							
		P		4	6	4	6						
n ₁ r/min		1450	980	1750	1165								

50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF	Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVN		
r/min	N·m	kgf·m	N	kgf	r/min	N·m	kgf·m	N	kgf				CHHM	CHFM	CVVM		
24.6	1110	113	12600	1280	0.81	29.7	918	93.5	11900	1210	0.84	4 -	6135	- 59	B-102	B-118	B-137
			16000	1630	0.98				16000	1630	0.98	4 -	6140	- 59	B-102	B-118	B-137
			16000	1630	1.06				16000	1630	1.22	4 -	6145	- 59	B-102	B-118	B-137
			22100	2250	1.47				22100	2250	1.47	4 -	6160	- 59	B-103	B-119	B-138
			22100	2250	1.90				22100	2250	1.92	4 -	6165	- 59	B-103	B-119	B-138
			25200	2570	2.21				23800	2420	2.38	4 -	6170	- 59	B-103	B-119	B-138
20.4	1330	136	25200	2570	2.76	24.6	1100	113	23800	2420	2.76	4 -	6175	- 59	B-103	B-119	B-138
			16000	1630	0.87				16000	1630	1.01	4 -	6145	- 71	B-102	B-118	B-137
			22100	2250	1.16				22100	2250	1.16	4 -	6160	- 71	B-103	B-119	B-138
			22100	2250	1.58				22100	2250	1.88	4 -	6165	- 71	B-103	B-119	B-138
			26700	2720	1.83				25100	2560	1.97	4 -	6170	- 71	B-103	B-119	B-138
			26700	2720	2.33				25100	2560	2.38	4 -	6175	- 71	B-103	B-119	B-138
16.7	1630	166	35900	3650	2.93	20.1	1350	138	33700	3440	2.93	4 -	6180	- 71	B-104	B-120	B-139
			22100	2250	1.07				21900	2230	1.16	4 -	6160	- 87	B-103	B-119	B-138
			22100	2250	1.26				21900	2230	1.30	4 -	6165	- 87	B-103	B-119	B-138
			28600	2910	1.52				26900	2750	1.60	4 -	6170	- 87	B-103	B-119	B-138
			28600	2910	1.87				26900	2750	1.87	4 -	6175	- 87	B-103	B-119	B-138
			38600	3930	2.38				36300	3700	2.38	4 -	6180	- 87	B-104	B-120	B-139
13.9	1850	189	38600	3930	2.86	16.8	1530	156	36300	3700	2.86	4 -	6185	- 87	B-104	B-120	B-139
			22100	2250	1.14				22100	2250	1.37	4 -	6165DC	- 104	B-111	B-127	B-146
			29500	3010	1.37				29200	2970	1.65	4 -	6170DC	- 104	B-111	B-127	B-146
			29500	3010	1.70				29200	2970	2.06	4 -	6175DC	- 104	B-111	B-127	B-146
			41100	4190	2.20				38700	3940	2.65	4 -	6180DB	- 104	B-111	B-127	B-146
			41100	4190	2.65				38700	3940	3.20	4 -	6185DB	- 104	B-111	B-127	B-146
12.0	1760	179	57400	5850	2.44	14.5	1780	182	53900	5500	2.44	4 -	6190DA	- 104	B-111	B-128	B-147
			57400	5850	2.44				53900	5500	2.44	4 -	6195DA	- 104	B-111	B-128	B-147
			22100	2250	*1				22100	2250	*1	4 -	6160DC	- 121	B-111	B-127	B-146
			22100	2250	0.98				22100	2250	1.18	4 -	6165DC	- 121	B-111	B-127	B-146
			29500	3010	1.18				29500	3010	1.42	4 -	6170DC	- 121	B-111	B-127	B-146
			29500	3010	1.46				29500	3010	1.77	4 -	6175DC	- 121	B-111	B-127	B-146
10.1	2150	219	41700	4250	1.89	12.2	2110	215	41200	4200	2.28	4 -	6180DB	- 121	B-111	B-127	B-146
			41700	4250	2.23				41200	4200	2.70	4 -	6185DB	- 121	B-111	B-127	B-146
			59000	6010	2.97				57500	5860	3.58	4 -	6190DB	- 121	B-112	B-128	B-147
			22100	2250	*1				22100	2250	*1	4 -	6160DC	- 143	B-111	B-127	B-146
			22100	2250	*1				22100	2250	*1	4 -	6165DC	- 143	B-111	B-127	B-146
			22100	2250	0.83				22100	2250	1.00	4 -	6165DC	- 143	B-111	B-127	B-146
10.1	2540	259	29500	3010	0.98	12.2	2110	215	29500	3010	1.20	4 -	6170DC	- 143	B-111	B-127	B-146
			29500	3010	1.24				29500	3010	1.50	4 -	6175DC	- 143	B-111	B-127	B-146
			41700	4250	1.60				41700	4250	1.93	4 -	6180DB	- 143	B-111	B-127	B-146
			41700	4250	1.93				41700	4250	2.33	4 -	6185DB	- 143	B-111	B-127	B-146
			59000	6010	2.08				59000	6010	2.08	4 -	6190DA	- 143	B-111	B-128	B-147
			59000	6010	2.51				59000	6010	3.03	4 -	6190DB	- 143	B-112	B-128	B-147
10.1	2540	259	59000	6010	3.00	59000	6010	3.62	4 -	6195DB	- 143	B-112	B-128	B-147			

- Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
- Motor slippage may affect n₁ and n₂. Refer to technical data for details.
- CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
- Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
- "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

Selection Tables Gearmotors



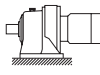
3.0 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

n₁: Motor Speed

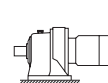
50Hz						60Hz					Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro	SF	Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro	SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM	CHHM	CHFM	CVVM
r/min	N·m	kgf·m	N	kgf	r/min	N·m	kgf·m	N	kgf							
8.79	2100	214	22100	2250	10.6	2100	214	22100	2250	*1	4 - 6165DC	- 165	B-111	B-127	B-146	
			29500	3010				29500	3010	1.30	4 - 6175DC	- 165	B-111	B-127	B-146	
			41700	4250				41700	4250	1.67	4 - 6180DB	- 165	B-111	B-127	B-146	
			41700	4250				41700	4250	2.02	4 - 6185DB	- 165	B-111	B-127	B-146	
			59000	6010				59000	6010	2.08	4 - 6190DA	- 165	B-111	B-128	B-147	
			59000	6010				59000	6010	2.62	4 - 6190DB	- 165	B-112	B-128	B-147	
			59000	6010				59000	6010	3.25	4 - 6195DB	- 165	B-112	B-128	B-147	
7.44	2530	258	29500	3010	8.97	2530	258	29500	3010	*1	4 - 6170DC	- 195	B-111	B-127	B-146	
			29500	3010				29500	3010	1.10	4 - 6175DC	- 195	B-111	B-127	B-146	
			41700	4250				41700	4250	1.41	4 - 6180DB	- 195	B-111	B-127	B-146	
			41700	4250				41700	4250	1.71	4 - 6185DB	- 195	B-111	B-127	B-146	
			59000	6010				59000	6010	2.08	4 - 6190DA	- 195	B-111	B-128	B-147	
			59000	6010				59000	6010	2.22	4 - 6190DB	- 195	B-112	B-128	B-147	
			59000	6010				59000	6010	2.08	4 - 6195DA	- 195	B-111	B-128	B-147	
6.28	2530	258	29500	3010	7.58	2530	258	29500	3010	*1	4 - 6170DC	- 231	B-111	B-127	B-146	
			29500	3010				29500	3010	*1	4 - 6175DC	- 231	B-111	B-127	B-146	
			41700	4250				41700	4250	1.47	4 - 6185DB	- 231	B-111	B-127	B-146	
			59000	6010				59000	6010	1.87	4 - 6190DA	- 231	B-111	B-128	B-147	
			59000	6010				59000	6010	2.08	4 - 6195DA	- 231	B-111	B-128	B-147	
			59000	6010				59000	6010	2.34	4 - 6195DB	- 231	B-112	B-128	B-147	
			84100	8570				84100	8570	2.72	4 - 6205DB	- 231	B-112	B-129	B-148	
5.31	3150	321	29500	3010	6.41	3150	321	29500	3010	*1	4 - 6175DC	- 273	B-111	B-127	B-146	
			41700	4250				41700	4250	1.24	4 - 6185DB	- 273	B-111	B-127	B-146	
			59000	6010				59000	6010	1.59	4 - 6190DA	- 273	B-111	B-128	B-147	
			59000	6010				59000	6010	1.98	4 - 6195DA	- 273	B-111	B-128	B-147	
			84100	8570				84100	8570	1.95	4 - 6205DA	- 273	B-112	B-129	B-148	
			84100	8570				84100	8570	2.31	4 - 6205DB	- 273	B-112	B-129	B-148	
			104000	10600				104000	10600	3.11	4 - 6215DA	- 273	B-112	B-129	B-148	
4.55	4050	413	41700	4250	5.49	4050	413	41700	4250	*1	4 - 6180DB	- 319	B-111	B-127	B-146	
			41700	4250				41700	4250	1.06	4 - 6185DB	- 319	B-111	B-127	B-146	
			59000	6010				59000	6010	1.36	4 - 6190DA	- 319	B-111	B-128	B-147	
			59000	6010				59000	6010	1.69	4 - 6195DA	- 319	B-111	B-128	B-147	
			84100	8570				84100	8570	1.61	4 - 6205DA	- 319	B-112	B-129	B-148	
			84100	8570				84100	8570	1.96	4 - 6205DB	- 319	B-112	B-129	B-148	
			104000	10600				104000	10600	2.69	4 - 6215DA	- 319	B-112	B-129	B-148	
3.85	5000	510	41700	4250	4.64	5000	510	41700	4250	*1	4 - 6185DB	- 377	B-111	B-127	B-146	
			59000	6010				59000	6010	1.43	4 - 6195DA	- 377	B-111	B-128	B-147	
			84100	8570				84100	8570	1.45	4 - 6205DA	- 377	B-112	B-129	B-148	
			84100	8570				84100	8570	1.66	4 - 6205DB	- 377	B-112	B-129	B-148	
			104000	10600				104000	10600	2.28	4 - 6215DA	- 377	B-112	B-129	B-148	
			145000	14800				145000	14800	2.71	4 - 6225DA	- 377	B-113	B-130	B-149	
			179000	18200				179000	18200	3.40	4 - 6235DA	- 377	B-114	B-131	B-150	
3.07	6380	650	59000	6010	3.70	6380	650	59000	6010	*1	4 - 6190DA	- 473	B-111	B-128	B-147	
			58800	6000				59000	6010	1.14	4 - 6195DA	- 473	B-111	B-128	B-147	
			84100	8570				84100	8570	1.12	4 - 6205DA	- 473	B-112	B-129	B-148	
			84100	8570				84100	8570	1.33	4 - 6205DB	- 473	B-112	B-129	B-148	
			104000	10600				104000	10600	1.82	4 - 6215DA	- 473	B-112	B-129	B-148	
			145000	14800				145000	14800	2.30	4 - 6225DA	- 473	B-113	B-130	B-149	
			179000	18200				179000	18200	2.94	4 - 6235DA	- 473	B-114	B-131	B-150	

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*1" in the SF column. They cannot be operated with 100% motor rating.

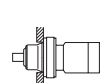
Selection Tables Gearmotors

3.0 kW		n ₁ : Motor Speed				  				
		Hz		50Hz		60Hz		CHHM/CNHM	CHFM/CNFM	CNVM/CNVM
		P		4	6	4	6			
		n ₁ r/min		1450	980	1750	1165			

50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque T _{out}		Allowable Radial Load Pro		SF	Output Speed n ₂	Output Torque T _{out}		Allowable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
2.59	6380	650	59000	6010	*1	3.13	6380	650	59000	6010	*1	4 - 6190DA	- 559		B-111	B-128	B-147
	7960	811	59000	6010	*1		7960	811	59000	6010	*1	4 - 6195DA	- 559		B-111	B-128	B-147
	8760	893	84100	8570	*1		8230	839	84100	8570	*1	4 - 6205DA	- 559		B-112	B-129	B-148
			58400	5950	0.80				58900	6000	0.97	4 - 6195DA	- 559		B-111	B-128	B-147
			84100	8570	0.88				84100	8570	1.00	4 - 6205DA	- 559		B-112	B-129	B-148
			84100	8570	0.94				84100	8570	1.13	4 - 6205DB	- 559		B-112	B-129	B-148
	9940	1010	104000	10600	1.27		8240	840	104000	10600	1.54	4 - 6215DA	- 559		B-112	B-129	B-148
			145000	14800	1.61				145000	14800	1.94	4 - 6225DA	- 559		B-113	B-130	B-149
			179000	18200	2.06				179000	18200	2.49	4 - 6235DA	- 559		B-114	B-131	B-150
			208000	21200	2.60				208000	21200	3.13	4 - 6245DA	- 559		B-114	B-131	B-150
2.23	7960	811	58100	5930	*1	2.70	7960	811	58100	5930	*1	4 - 6195DA	- 649		B-111	B-128	B-147
	8300	846	84100	8570	*1		7790	794	84100	8570	*1	4 - 6205DA	- 649		B-112	B-129	B-148
			84100	8570	0.81				84100	8570	0.97	4 - 6205DB	- 649		B-112	B-129	B-148
			104000	10600	1.10				104000	10600	1.32	4 - 6215DA	- 649		B-112	B-129	B-148
	11500	1180	145000	14800	1.38		9560	975	145000	14800	1.66	4 - 6225DA	- 649		B-113	B-130	B-149
			179000	18200	1.78				179000	18200	2.14	4 - 6235DA	- 649		B-114	B-131	B-150
1.98	7960	811	59000	6010	*1	2.39	7960	811	59000	6010	*1	4 - 6195DA	- 731		B-111	B-128	B-147
	9300	948	84100	8570	*1		9060	923	84100	8570	*1	4 - 6205DA	- 731		B-112	B-129	B-148
			104000	10600	0.97				104000	10600	1.17	4 - 6215DA	- 731		B-112	B-129	B-148
			145000	14800	1.23				145000	14800	1.49	4 - 6225DA	- 731		B-113	B-130	B-149
	13000	1330	179000	18200	1.58		10800	1100	179000	18200	1.90	4 - 6235DA	- 731		B-114	B-131	B-150
			208000	21200	1.98				208000	21200	2.40	4 - 6245DA	- 731		B-114	B-131	B-150
1.72	9230	941	84100	8570	*1	2.08	9230	941	84100	8570	*1	4 - 6205DA	- 841		B-112	B-129	B-148
			104000	10600	0.85				104000	10600	1.02	4 - 6215DA	- 841		B-112	B-129	B-148
			145000	14800	1.01				145000	14800	1.21	4 - 6225DA	- 841		B-113	B-130	B-149
	15000	1520	179000	18200	1.26		12400	1260	179000	18200	1.53	4 - 6235DA	- 841		B-114	B-131	B-150
1.45			208000	21200	1.73			208000	21200	2.08	4 - 6245DA	- 841		B-114	B-131	B-150	
	12700	1290	104000	10600	*1	1.74	12700	1290	104000	10600	*1	4 - 6215DA	- 1003		B-112	B-129	B-148
			145000	14800	0.89				145000	14800	1.07	4 - 6225DA	- 1003		B-113	B-130	B-149
	17800	1820	179000	18200	1.15		14800	1510	179000	18200	1.39	4 - 6235DA	- 1003		B-114	B-131	B-150
			208000	21200	1.45				208000	21200	1.75	4 - 6245DA	- 1003		B-114	B-131	B-150
1.16	16000	1630	145000	14800	*1	1.40	16000	1630	145000	14800	*1	4 - 6225DA	- 1247		B-113	B-130	B-149
	22200	2260	179000	18200	0.92		18400	1870	179000	18200	1.12	4 - 6235DA	- 1247		B-114	B-131	B-150
0.980			208000	21200	1.16			208000	21200	1.40	4 - 6245DA	- 1247		B-114	B-131	B-150	
	17200	1750	179000	18200	*1	1.18	17200	1750	179000	18200	*1	4 - 6235DA	- 1479		B-114	B-131	B-150
	26300	2680	208000	21200	0.86		21800	2220	208000	21200	1.04	4 - 6245DA	- 1479		B-114	B-131	B-150
0.784	20500	2090	179000	18200	*1	0.946	20500	2090	179000	18200	*1	4 - 6235DA	- 1849		B-114	B-131	B-150
	25800	2630	208000	21200	*1		25800	2630	208000	21200	*1	4 - 6245DA	- 1849		B-114	B-131	B-150
0.702	25800	2630	208000	21200	*1	0.847	25800	2630	208000	21200	*1	4 - 6245DA	- 2065		B-114	B-131	B-150



CHHM/CNHM



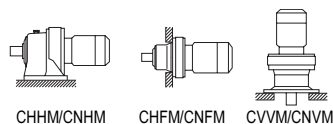
CHFM/CNFM



CVVM/CNVVM

1. Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
2. Motor slippage may affect n₁ and n₂. Refer to technical data for details.
3. CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
4. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
5. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

Selection Tables Gearmotors

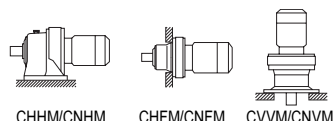


3.7 kW	n ₁ : Motor Speed			
	Hz		50Hz	
	P	r/min	4	6
			1450	980
			1750	1165

50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVN
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
12.0	2100	214	22100	2250	*1	14.5	2100	214	22100	2250	*1	5 -	6165DC	- 121	B-111	B-127	B-146
			29500	3010	1.19				29500	3010	1.43	5 -	6175DC	- 121	B-111	B-127	B-146
	2650	271	41700	4250	1.53		2200	224	41000	4180	1.85	5 -	6180DB	- 121	B-111	B-127	B-146
			41700	4250	1.81				41000	4180	2.19	5 -	6185DB	- 121	B-111	B-127	B-146
			59000	6010	2.40				57300	5840	2.90	5 -	6190DB	- 121	B-112	B-128	B-147
			59000	6010	2.86				57300	5840	3.22	5 -	6195DB	- 121	B-112	B-128	B-147
10.1	2530	258	29500	3010	*1	12.2	2530	258	29500	3010	*1	5 -	6170DC	- 143	B-111	B-127	B-146
			29500	3010	1.00				29500	3010	1.21	5 -	6175DC	- 143	B-111	B-127	B-146
	3140	320	41700	4250	1.29		2600	265	41700	4250	1.56	5 -	6180DB	- 143	B-111	B-127	B-146
			41700	4250	1.56				41700	4250	1.89	5 -	6185DB	- 143	B-111	B-127	B-146
			59000	6010	1.69				59000	6010	1.69	5 -	6190DA	- 143	B-111	B-128	B-147
			59000	6010	2.03				59000	6010	2.46	5 -	6190DB	- 143	B-112	B-128	B-147
59000	6010	2.43	59000	6010	2.94	5 -	6195DB	- 143	B-112	B-128	B-147						
8.79	2530	258	29500	3010	*1	10.6	2530	258	29500	3010	*1	5 -	6170DC	- 165	B-111	B-127	B-146
			29500	3010	0.87				29500	3010	1.05	5 -	6175DC	- 165	B-111	B-127	B-146
	3620	369	41700	4250	1.12		3000	306	41700	4250	1.35	5 -	6180DB	- 165	B-111	B-127	B-146
			41700	4250	1.36				41700	4250	1.64	5 -	6185DB	- 165	B-111	B-127	B-146
			59000	6010	1.69				59000	6010	1.69	5 -	6190DA	- 165	B-111	B-128	B-147
			59000	6010	1.76				59000	6010	2.13	5 -	6190DB	- 165	B-112	B-128	B-147
59000	6010	2.19	59000	6010	2.64	5 -	6195DB	- 165	B-112	B-128	B-147						
84100	8570	2.56	84100	8570	3.09	5 -	6205DB	- 165	B-112	B-129	B-148						
7.44	3150	321	29500	3010	*1	8.97	3150	321	29500	3010	*1	5 -	6175DC	- 195	B-111	B-127	B-146
			41700	4250	1.15				41700	4250	1.39	5 -	6185DB	- 195	B-111	B-127	B-146
	4280	436	59000	6010	1.49		59000	6010	1.69	5 -	6190DA	- 195	B-111	B-128	B-147		
			59000	6010	1.49		59000	6010	1.80	5 -	6190DB	- 195	B-112	B-128	B-147		
			59000	6010	1.52		59000	6010	1.69	5 -	6195DA	- 195	B-111	B-128	B-147		
			59000	6010	1.85		59000	6010	2.23	5 -	6195DB	- 195	B-112	B-128	B-147		
			84100	8570	2.17		84100	8570	2.62	5 -	6205DB	- 195	B-112	B-129	B-148		
			104000	10600	2.85		104000	10600	3.22	5 -	6215DA	- 195	B-112	B-129	B-148		
			104000	10600	2.85		104000	10600	3.43	5 -	6215DB	- 195	B-113	B-130	B-149		
131000	13400	2.92	124000	12600	3.22	5 -	6225DA	- 195	B-113	B-130	B-149						
6.28	4050	413	41700	4250	*1	7.58	4050	413	41700	4250	*1	5 -	6180DB	- 231	B-111	B-127	B-146
			41700	4250	0.98				41700	4250	1.19	5 -	6185DB	- 231	B-111	B-127	B-146
	5070	516	59000	6010	1.26		59000	6010	1.52	5 -	6190DA	- 231	B-111	B-128	B-147		
			59000	6010	1.57		59000	6010	1.69	5 -	6195DA	- 231	B-111	B-128	B-147		
			59000	6010	1.57		59000	6010	1.90	5 -	6195DB	- 231	B-112	B-128	B-147		
			84100	8570	1.83		84100	8570	2.21	5 -	6205DB	- 231	B-112	B-129	B-148		
			104000	10600	2.47		104000	10600	2.98	5 -	6215DA	- 231	B-112	B-129	B-148		
			140000	14200	2.92		132000	13500	3.22	5 -	6225DA	- 231	B-113	B-130	B-149		
			140000	14200	2.92		132000	13500	3.53	5 -	6225DB	- 231	B-113	B-130	B-149		

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

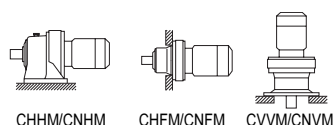
Selection Tables Gearmotors



3.7 kW	n ₁ : Motor Speed					
	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Input Capacity - Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
1.16	20500	2090	179000	18200	*1	1.40	20500	2090	179000	18200	*1	5 -	6235DA	- 1247	B-114	B-131	B-150
	27300	2790	208000	21200	0.94		22700	2310	208000	21200	1.14	5 -	6245DA	- 1247	B-114	B-131	B-150
0.980	22600	2310	208000	21200	*1	1.18	22600	2310	208000	21200	*1	5 -	6245DA	- 1479	B-114	B-131	B-150
	32400	3310	258000	26300	0.96		26900	2740	258000	26300	1.15	5 -	6255DA	- 1479	B-115	B-132	B-151
0.784	40600	4130	258000	26300	0.85	0.946	33600	3430	258000	26300	1.03	5 -	6255DA	- 1849	B-115	B-132	B-151
0.702	34500	3520	258000	26300	*1	0.847	34500	3520	258000	26300	*1	5 -	6255DA	- 2065	B-115	B-132	B-151
0.572	34500	3520	258000	26300	*1	0.690	34500	3520	258000	26300	*1	5 -	6255DA	- 2537	B-115	B-132	B-151
0.476	31000	3160	258000	26300	*1	0.575	31000	3160	258000	26300	*1	5 -	6255DA	- 3045	B-115	B-132	B-151
0.417	34500	3520	258000	26300	*1	0.503	34500	3520	258000	26300	*1	5 -	6255DA	- 3481	B-115	B-132	B-151
0.327	31000	3160	258000	26300	*1	0.394	31000	3160	258000	26300	*1	5 -	6255DA	- 4437	B-115	B-132	B-151
0.282	34500	3520	258000	26300	*1	0.341	34500	3520	258000	26300	*1	5 -	6255DA	- 5133	B-115	B-132	B-151
0.235	31000	3160	258000	26300	*1	0.283	31000	3160	258000	26300	*1	5 -	6255DA	- 6177	B-115	B-132	B-151
0.192	31000	3160	258000	26300	*1	0.231	31000	3160	258000	26300	*1	5 -	6255DA	- 7569	B-115	B-132	B-151

GEARMOTORS

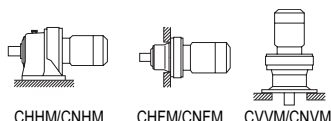
Selection Tables
3.7 kW, 5.5 kW

5.5 kW	n ₁ : Motor Speed				
	Hz	50Hz		60Hz	
	P	4	6	4	6
	n ₁ r/min	1450	980	1750	1165

50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Alloable Radial Load Pro		SF		Output Speed n ₂	Output Torque Tout	Alloable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
580	86.0	8.77	2410	246	1.17	700	71.3	7.27	2330	238	1.17	8 -	6115SK	- 2.5 *3	B-99	-	B-134
483	103	10.5	2530	258	1.20	583	85.5	8.72	2450	250	1.20	8 -	6115SK	- 3 *3	B-99	-	B-134
363	138	14.0	2640	269	1.22	11.6	2580	263	2580	263	1.22	8 -	6115SK	- 4 *3	B-99	-	B-134
290	172	17.5	2690	274	1.05	350	143	14.5	2640	269	1.05	8 -	6115SK	- 5 *3	B-99	-	B-134
242	206	21.0	2710	276	0.96	292	171	17.4	2700	275	0.96	8 -	6115SK	- 6 *3	B-99	-	B-134
			5140	524	1.27				4850	494	1.06	8 -	6125	- 6	B-101	B-117	B-136
			6060	617	1.71				5710	582	1.71	8 -	6130	- 6	B-102	B-118	B-137
			6060	617	2.05				5710	582	2.05	8 -	6135	- 6	B-102	B-118	B-137
			9370	955	2.36				8860	903	2.36	8 -	6140	- 6	B-102	B-118	B-137
			9370	955	2.75				8860	903	2.75	8 -	6145	- 6	B-102	B-118	B-137
181	275	28.1	2680	273	0.84	219	228	23.3	2710	276	0.84	8 -	6115SK	- 8 *3	B-99	-	B-134
			5710	582	1.26				5400	550	1.26	8 -	6125	- 8	B-101	B-117	B-136
			6740	687	1.71				6360	648	1.71	8 -	6130	- 8	B-102	B-118	B-137
			6740	687	2.05				6360	648	2.05	8 -	6135	- 8	B-102	B-118	B-137
			10400	1060	2.36				9820	1000	2.36	8 -	6140	- 8	B-102	B-118	B-137
			10400	1060	2.75				9820	1000	2.75	8 -	6145	- 8	B-102	B-118	B-137
132	379	38.6	6450	658	1.08	159	314	32.0	6100	622	1.08	8 -	6125	- 11	B-101	B-117	B-136
			7680	783	1.71				7240	739	1.71	8 -	6130	- 11	B-102	B-118	B-137
			7680	783	2.05				7240	739	2.05	8 -	6135	- 11	B-102	B-118	B-137
			11600	1190	2.36				11000	1120	2.36	8 -	6140	- 11	B-102	B-118	B-137
			11600	1190	2.75				11000	1120	2.75	8 -	6145	- 11	B-102	B-118	B-137

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*1" in the SF column. They cannot be operated with 100% motor rating.

Selection Tables Gearmotors

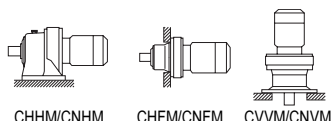


5.5 kW	n ₁ : Motor Speed			
	Hz		50Hz	
	P	n ₁	4	6
	r/min	r/min	1450	980
			1750	1165

50Hz					60Hz					Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro	SF		Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro	SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf	r/min	N·m	kgf·m	N	kgf				CHHM	CHFM	CVVM
24.6	2030	207	22100	2250	29.7	1680	171	21700	2220	8 -	6165	- 59	B-103	B-119	B-138
			24800	2530				23400	2390	8 -	6170	- 59	B-103	B-119	B-138
			24800	2530				23400	2390	8 -	6175	- 59	B-103	B-119	B-138
			33400	3400				31400	3200	8 -	6180	- 59	B-104	B-120	B-139
			33400	3400				31400	3200	8 -	6185	- 59	B-104	B-120	B-139
			47000	4790				44200	4500	8 -	6190	- 59	B-104	B-120	B-139
20.4	2440	249	22100	2250	24.6	2020	206	21600	2200	8 -	6165	- 71	B-103	B-119	B-138
			26200	2670				24700	2520	8 -	6170	- 71	B-103	B-119	B-138
			26200	2670				24700	2520	8 -	6175	- 71	B-103	B-119	B-138
			35500	3620				33400	3410	8 -	6180	- 71	B-104	B-120	B-139
			35500	3620				33400	3410	8 -	6185	- 71	B-104	B-120	B-139
			49800	5080				46900	4780	8 -	6190	- 71	B-104	B-120	B-139
16.7	2990	305	22100	2250	20.1	2480	253	21600	2200	8 -	6165	- 87	B-103	B-119	B-138
			26200	2670				24700	2520	8 -	6170	- 87	B-103	B-119	B-138
			26200	2670				24700	2520	8 -	6175	- 87	B-103	B-119	B-138
			35500	3620				33400	3410	8 -	6180	- 87	B-104	B-120	B-139
			35500	3620				33400	3410	8 -	6185	- 87	B-104	B-120	B-139
			49800	5080				46900	4780	8 -	6190	- 87	B-104	B-120	B-139
13.9	2100	214	22100	2250	16.8	2530	258	21600	2200	8 -	6165DC	- 104	B-111	B-127	B-146
			29500	3010				28600	2920	8 -	6170DC	- 104	B-111	B-127	B-146
			29500	3010				28600	2920	8 -	6175DC	- 104	B-111	B-127	B-146
			40500	4130				38200	3890	8 -	6180DB	- 104	B-111	B-127	B-146
			40500	4130				38200	3890	8 -	6185DB	- 104	B-111	B-127	B-146
			56800	5790				53500	5460	8 -	6190DB	- 104	B-112	B-128	B-147
12.0	2530	258	22100	2250	14.5	3150	321	21600	2200	8 -	6165DC	- 121	B-111	B-127	B-146
			29500	3010				28600	2920	8 -	6170DC	- 121	B-111	B-127	B-146
			29500	3010				28600	2920	8 -	6175DC	- 121	B-111	B-127	B-146
			40500	4130				38200	3890	8 -	6180DB	- 121	B-111	B-127	B-146
			40500	4130				38200	3890	8 -	6185DB	- 121	B-111	B-127	B-146
			56800	5790				53500	5460	8 -	6190DB	- 121	B-112	B-128	B-147
10.1	3150	321	22100	2250	12.2	3860	394	21600	2200	8 -	6165DC	- 143	B-111	B-127	B-146
			29500	3010				28600	2920	8 -	6170DC	- 143	B-111	B-127	B-146
			29500	3010				28600	2920	8 -	6175DC	- 143	B-111	B-127	B-146
			40500	4130				38200	3890	8 -	6180DB	- 143	B-111	B-127	B-146
			40500	4130				38200	3890	8 -	6185DB	- 143	B-111	B-127	B-146
			56800	5790				53500	5460	8 -	6190DB	- 143	B-112	B-128	B-147
8.79	4060	414	22100	2250	10.6	4460	454	21600	2200	8 -	6165DC	- 165	B-111	B-127	B-146
			29500	3010				28600	2920	8 -	6170DC	- 165	B-111	B-127	B-146
			29500	3010				28600	2920	8 -	6175DC	- 165	B-111	B-127	B-146
			40500	4130				38200	3890	8 -	6180DB	- 165	B-111	B-127	B-146
			40500	4130				38200	3890	8 -	6185DB	- 165	B-111	B-127	B-146
			56800	5790				53500	5460	8 -	6190DB	- 165	B-112	B-128	B-147

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

Selection Tables Gearmotors

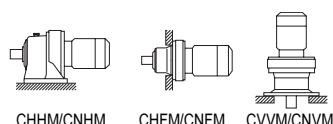


5.5 kW	n ₁ : Motor Speed			
	Hz		50Hz	
	P	r/min	4	6
			1450	980
			1750	1165

50Hz						60Hz					Nomenclature			Page of Dimension Sheet			
Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF		Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
3.07	12700	1290	104000	10600	*1	3.70	12700	1290	104000	10600	*1	8 -	6215DA	- 473	B-112	B-129	B-148
			104000	10600	0.82				104000	10600	0.98	8 -	6215DA	- 473	B-112	B-129	B-148
			145000	14800	1.04				145000	14800	1.25	8 -	6225DA	- 473	B-113	B-130	B-149
	15400	1570	179000	18200	1.33		12800	1300	179000	18200	1.60	8 -	6235DA	- 473	B-114	B-131	B-150
			208000	21200	1.67				208000	21200	2.02	8 -	6245DA	- 473	B-114	B-131	B-150
			258000	26300	2.24				258000	26300	2.70	8 -	6255DA	- 473	B-115	B-132	B-151
		276000	28100	2.98				276000	28100	3.60	8 -	6265DA	- 473	B-115	B-132	B-151	
2.59	12700	1290	104000	10600	*1	3.13	12700	1290	104000	10600	*1	8 -	6215DA	- 559	B-112	B-129	B-148
			145000	14800	0.88				145000	14800	1.06	8 -	6225DA	- 559	B-113	B-130	B-149
			179000	18200	1.12				179000	18200	1.36	8 -	6235DA	- 559	B-114	B-131	B-150
	18200	1860	208000	21200	1.42		15100	1540	208000	21200	1.71	8 -	6245DA	- 559	B-114	B-131	B-150
			258000	26300	1.89				258000	26300	2.28	8 -	6255DA	- 559	B-115	B-132	B-151
			276000	28100	2.52				276000	28100	3.05	8 -	6265DA	- 559	B-115	B-132	B-151
2.23	12700	1290	104000	10600	*1	2.70	12700	1290	104000	10600	*1	8 -	6215DA	- 649	B-112	B-129	B-148
	15900	1620	145000	14800	*1		15900	1620	145000	14800	*1	8 -	6225DA	- 649	B-113	B-130	B-149
			179000	18200	0.97				179000	18200	1.17	8 -	6235DA	- 649	B-114	B-131	B-150
			208000	21200	1.22				208000	21200	1.47	8 -	6245DA	- 649	B-114	B-131	B-150
	21200	2160	258000	26300	1.63		17500	1790	258000	26300	1.97	8 -	6255DA	- 649	B-115	B-132	B-151
			276000	28100	2.17				276000	28100	2.62	8 -	6265DA	- 649	B-115	B-132	B-151
1.98	16000	1630	145000	14800	*1	2.39	16000	1630	145000	14800	*1	8 -	6225DA	- 731	B-113	B-130	B-149
			179000	18200	0.86				179000	18200	1.04	8 -	6235DA	- 731	B-114	B-131	B-150
			208000	21200	1.08				208000	21200	1.31	8 -	6245DA	- 731	B-114	B-131	B-150
	23800	2430	258000	26300	1.45		19700	2010	258000	26300	1.75	8 -	6255DA	- 731	B-115	B-132	B-151
			276000	28100	1.93				276000	28100	2.33	8 -	6265DA	- 731	B-115	B-132	B-151
1.72	18900	1930	179000	18200	*1	2.08	18900	1930	179000	18200	*1	8 -	6235DA	- 841	B-114	B-131	B-150
			208000	21200	0.94				208000	21200	1.14	8 -	6245DA	- 841	B-114	B-131	B-150
	27400	2790	258000	26300	1.18		22700	2320	258000	26300	1.43	8 -	6255DA	- 841	B-115	B-132	B-151
			276000	28100	1.68				276000	28100	2.02	8 -	6265DA	- 841	B-115	B-132	B-151
1.45	20500	2090	179000	18200	*1	1.74	20500	2090	179000	18200	*1	8 -	6235DA	- 1003	B-114	B-131	B-150
	25800	2630	208000	21200	*1		25800	2630	208000	21200	*1	8 -	6245DA	- 1003	B-114	B-131	B-150
			258000	26300	1.06				258000	26300	1.27	8 -	6255DA	- 1003	B-115	B-132	B-151
	32700	3330	276000	28100	1.41		27100	2760	276000	28100	1.70	8 -	6265DA	- 1003	B-115	B-132	B-151
1.16	25800	2630	208000	21200	*1	1.40	25800	2630	208000	21200	*1	8 -	6245DA	- 1247	B-114	B-131	B-150
			258000	26300	0.85				258000	26300	1.02	8 -	6255DA	- 1247	B-115	B-132	B-151
	40700	4140	276000	28100	1.13		33700	3430	276000	28100	1.37	8 -	6265DA	- 1247	B-115	B-132	B-151
0.980	31000	3160	258000	26300	*1	1.18	31000	3160	258000	26300	*1	8 -	6255DA	- 1479	B-115	B-132	B-151
	48200	4920	276000	28100	0.91		40000	4070	276000	28100	1.10	8 -	6265DA	- 1479	B-115	B-132	B-151
0.784	34500	3520	258000	26300	*1	0.946	34500	3520	258000	26300	*1	8 -	6255DA	- 1849	B-115	B-132	B-151
	46000	4690	276000	28100	*1		46000	4690	276000	28100	*1	8 -	6265DA	- 1849	B-115	B-132	B-151
0.702	46000	4690	276000	28100	*1	0.847	46000	4690	276000	28100	*1	8 -	6265DA	- 2065	B-115	B-132	B-151
0.572	46000	4690	276000	28100	*1	0.690	46000	4690	276000	28100	*1	8 -	6265DA	- 2537	B-115	B-132	B-151
0.476	44000	4490	276000	28100	*1	0.575	44000	4490	276000	28100	*1	8 -	6265DA	- 3045	B-115	B-132	B-151
0.417	46000	4690	276000	28100	*1	0.503	46000	4690	276000	28100	*1	8 -	6265DA	- 3481	B-115	B-132	B-151
0.327	44000	4490	276000	28100	*1	0.394	44000	4490	276000	28100	*1	8 -	6265DA	- 4437	B-115	B-132	B-151
0.282	46000	4690	276000	28100	*1	0.341	46000	4690	276000	28100	*1	8 -	6265DA	- 5133	B-115	B-132	B-151
0.235	44000	4490	276000	28100	*1	0.283	44000	4490	276000	28100	*1	8 -	6265DA	- 6177	B-115	B-132	B-151
0.192	44000	4490	276000	28100	*1	0.231	44000	4490	276000	28100	*1	8 -	6265DA	- 7569	B-115	B-132	B-151

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

Selection Tables Gearmotors



7.5 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

n₁: Motor Speed

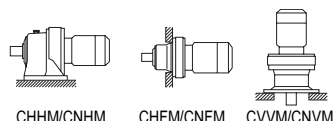
50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF		Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM CNFM CNVM CHHM CHFM CVVM		
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf							
33.7	2020	206	19700	2010	1.04	40.7	1670	170	18600	1900	1.05	10 -	6165	- 43	B-103	B-119	B-138
			22500	2300	1.21				21300	2170	1.30	10 -	6170	- 43	B-103	B-119	B-138
			22500	2300	1.51				21300	2170	1.51	10 -	6175	- 43	B-103	B-119	B-138
			30700	3130	2.01				28900	2950	2.01	10 -	6180	- 43	B-104	B-120	B-139
			30700	3130	2.48				28900	2950	2.51	10 -	6185	- 43	B-104	B-120	B-139
			42800	4370	2.79				40300	4110	2.79	10 -	6190	- 43	B-104	B-120	B-139
28.4	2390	244	20400	2080	0.88	34.3	1980	202	19300	1970	1.00	10 -	6165	- 51	B-103	B-119	B-138
			23400	2390	1.02				22100	2250	1.12	10 -	6170	- 51	B-103	B-119	B-138
			23400	2390	1.32				22100	2250	1.51	10 -	6175	- 51	B-103	B-119	B-138
			31700	3230	1.60				29900	3050	1.60	10 -	6180	- 51	B-104	B-120	B-139
			31700	3230	2.01				29900	3050	2.01	10 -	6185	- 51	B-104	B-120	B-139
			44800	4560	2.43				42100	4290	2.43	10 -	6190	- 51	B-104	B-120	B-139
24.6	2770	282	24400	2490	1.11	29.7	2290	234	23100	2360	1.11	10 -	6175	- 59	B-103	B-119	B-138
			33100	3380	1.30				31200	3180	1.30	10 -	6180	- 59	B-104	B-120	B-139
			33100	3380	1.60				31200	3180	1.60	10 -	6185	- 59	B-104	B-120	B-139
			46800	4770	2.04				44000	4490	2.04	10 -	6190	- 59	B-104	B-120	B-139
			46800	4770	2.51				44000	4490	2.51	10 -	6195	- 59	B-104	B-120	B-139
			25700	2620	0.93	24.6	2760	281	24300	2480	0.95	10 -	6175	- 71	B-103	B-119	B-138
20.4	3330	340	35100	3580	1.17				33100	3380	1.17	10 -	6180	- 71	B-104	B-120	B-139
			35100	3580	1.31				33100	3380	1.31	10 -	6185	- 71	B-104	B-120	B-139
			49600	5050	1.80				46700	4760	1.80	10 -	6190	- 71	B-104	B-120	B-139
			49600	5050	2.08				46700	4760	2.08	10 -	6195	- 71	B-104	B-120	B-139
			37700	3840	1.15	20.1	3380	345	35600	3620	1.15	10 -	6185	- 87	B-104	B-120	B-139
16.7	4080	416	53300	5430	1.56				50200	5120	1.57	10 -	6190	- 87	B-104	B-120	B-139
			53300	5430	1.81				50200	5120	1.81	10 -	6195	- 87	B-104	B-120	B-139
			40000	4080	1.06	16.8	3830	391	37800	3850	1.28	10 -	6185DB	- 104	B-111	B-127	B-146
			56400	5750	1.38				53200	5420	1.59	10 -	6190DB	- 104	B-112	B-128	B-147
			56400	5750	1.59				53200	5420	1.59	10 -	6195DB	- 104	B-112	B-128	B-147
12.0	4060	414	41700	4250	*1	14.5	4060	414	40300	4100	*1	10 -	6180DB	- 121	B-111	B-127	B-146
			41700	4250	0.89				40100	4090	1.08	10 -	6185DB	- 121	B-111	B-127	B-146
			59000	6010	1.19				56600	5770	1.43	10 -	6190DB	- 121	B-112	B-128	B-147
			59000	6010	1.41				56600	5770	1.59	10 -	6195DB	- 121	B-112	B-128	B-147
			84100	8570	1.59				84100	8570	1.59	10 -	6205DB	- 121	B-112	B-129	B-148
			104000	10600	2.12				102000	10400	2.55	10 -	6215DB	- 121	B-113	B-130	B-149
10.1	4060	414	41700	4250	*1	12.2	4900	500	41700	4250	*1	10 -	6180DB	- 143	B-111	B-127	B-146
			41700	4250	*1				41700	4250	*1	10 -	6185DB	- 143	B-111	B-127	B-146
			58700	5980	1.00				58800	5990	1.21	10 -	6190DB	- 143	B-112	B-128	B-147
			58700	5980	1.20				58800	5990	1.45	10 -	6195DB	- 143	B-112	B-128	B-147
			4920	502	*1	8.79	7340	748	41700	4250	*1	10 -	6185DB	- 165	B-111	B-127	B-146
			58500	5960	1.08				59000	6010	1.30	10 -	6195DB	- 165	B-112	B-128	B-147
8.79	7340	748	84100	8570	1.26				84100	8570	1.53	10 -	6205DB	- 165	B-112	B-129	B-148
			104000	10600	1.59				104000	10600	1.59	10 -	6215DA	- 165	B-112	B-129	B-148
			104000	10600	1.66				104000	10600	2.00	10 -	6215DB	- 165	B-113	B-130	B-149
			124000	12600	1.97				117000	12000	2.38	10 -	6225DB	- 165	B-113	B-130	B-149
			154000	15700	2.67				146000	14800	3.23	10 -	6235DA	- 165	B-114	B-131	B-150

GEARMOTORS

Selection Tables
7.5 kW

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

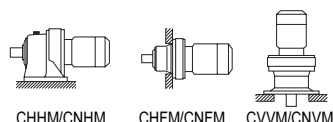
Selection Tables Gearmotors



7.5 kW	n ₁ : Motor Speed			
	Hz		50Hz	
	P		4	6
	n ₁	r/min	1450	980
			1750	1165

50Hz						60Hz					Nomenclature			Page of Dimension Sheet			
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
1.72	25800	2630	208000	21200	*1	2.08	25800	2630	208000	21200	*1	10 -	6245DA	- 841	B-114	B-131	B-150
			258000	26300	0.87				258000	26300	1.05	10 -	6255DA	- 841	B-115	B-132	B-151
	37400	3810	276000	28100	1.23		31000	3160	276000	28100	1.48	10 -	6265DA	- 841	B-115	B-132	B-151
			248000	25300	1.82				248000	25300	2.20	10 -	6275DA	- 841	B-115	-	B-151
1.45	34500	3520	258000	26300	*1	1.74	34500	3520	258000	26300	*1	10 -	6255DA	- 1003	B-115	B-132	B-151
			276000	28100	1.03				276000	28100	1.25	10 -	6265DA	- 1003	B-115	B-132	B-151
	44600	4550	248000	25300	1.53		36900	3770	248000	25300	1.85	10 -	6275DA	- 1003	B-115	-	B-151
1.16	34500	3520	258000	26300	*1	1.40	34500	3520	258000	26300	*1	10 -	6255DA	- 1247	B-115	B-132	B-151
	46000	4690	276000	28100	*1		46000	4690	276000	28100	*1	10 -	6265DA	- 1247	B-115	B-132	B-151
			276000	28100	0.83				276000	28100	1.00	10 -	6265DA	- 1247	B-115	B-132	B-151
	55400	5650	248000	25300	1.23		45900	4680	248000	25300	1.48	10 -	6275DA	- 1247	B-115	-	B-151
0.980	44000	4490	276000	28100	*1	1.18	44000	4490	276000	28100	*1	10 -	6265DA	- 1479	B-115	B-132	B-151
	65800	6700	247000	25200	1.04		54500	5550	248000	25300	1.25	10 -	6275DA	- 1479	B-115	-	B-151
0.784	82200	8380	248000	25300	0.83	0.946	68100	6940	248000	25300	1.00	10 -	6275DA	- 1849	B-115	-	B-151
0.702	68200	6950	248000	25300	*1	0.847	68200	6950	248000	25300	*1	10 -	6275DA	- 2065	B-115	-	B-151
0.572	68200	6950	248000	25300	*1	0.690	68200	6950	248000	25300	*1	10 -	6275DA	- 2537	B-115	-	B-151
0.476	68200	6950	245000	25000	*1	0.575	68200	6950	245000	25000	*1	10 -	6275DA	- 3045	B-115	-	B-151
0.417	68200	6950	248000	25300	*1	0.503	68200	6950	248000	25300	*1	10 -	6275DA	- 3481	B-115	-	B-151
0.327	68200	6950	245000	25000	*1	0.394	68200	6950	245000	25000	*1	10 -	6275DA	- 4437	B-115	-	B-151
0.282	68200	6950	245000	25000	*1	0.341	68200	6950	245000	25000	*1	10 -	6275DA	- 5133	B-115	-	B-151
0.235	68200	6950	245000	25000	*1	0.283	68200	6950	245000	25000	*1	10 -	6275DA	- 6177	B-115	-	B-151
0.192	68200	6950	245000	25000	*1	0.231	68200	6950	245000	25000	*1	10 -	6275DA	- 7569	B-115	-	B-151

GEARMOTORS

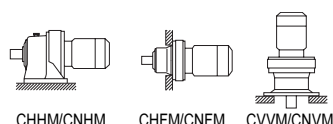
Selection Tables
7.5 kW, 11 kW

11 kW	n ₁ : Motor Speed			
	Hz		50Hz	
	P		4	6
	n ₁	r/min	1450	980
			1750	1165

50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout		Alloeable Radial Load Pro		SF	Output Speed n ₂	Output Torque Tout		Alloeable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
242	413	42.1	5840	595	1.03	292	342	34.9	5540	564	1.03	15 -	6135	- 6	B-102	B-118	B-137
			9270	945	1.18				8780	895	1.18	15 -	6140	- 6	B-102	B-118	B-137
			9270	945	1.37				8780	895	1.37	15 -	6145	- 6	B-102	B-118	B-137
			10400	1060	1.85				9760	995	1.85	15 -	6160	- 6	B-103	B-119	B-138
			10400	1060	2.19				9760	995	2.19	15 -	6165	- 6	B-103	B-119	B-138
			11700	1190	2.51				11000	1120	2.51	15 -	6170	- 6	B-103	B-119	B-138
			11700	1190	2.74				11000	1120	2.74	15 -	6175	- 6	B-103	B-119	B-138
181	551	56.1	6480	661	1.03	219	456	46.5	6150	627	1.03	15 -	6135	- 8	B-102	B-118	B-137
			10300	1050	1.18				9730	992	1.18	15 -	6140	- 8	B-102	B-118	B-137
			10300	1050	1.37				9730	992	1.37	15 -	6145	- 8	B-102	B-118	B-137
			11600	1180	1.79				10900	1110	1.79	15 -	6160	- 8	B-103	B-119	B-138
			11600	1180	2.19				10900	1110	2.19	15 -	6165	- 8	B-103	B-119	B-138
			12900	1320	2.51				12200	1240	2.51	15 -	6170	- 8	B-103	B-119	B-138
			12900	1320	2.74				12200	1240	2.74	15 -	6175	- 8	B-103	B-119	B-138

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

Selection Tables Gearmotors



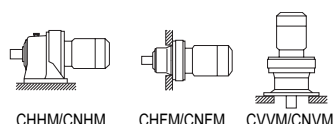
15 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

n₁: Motor Speed

50Hz					60Hz					Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro	SF		Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro	SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf	r/min	N·m	kgf·m	N	kgf				CHHM	CHFM	CVVM
242	563	57.4	9200	938	292	467	47.6	8730	889	20 -	6145	- 6	B-102	B-118	B-137
			10200	1040				9670	986	20 -	6160	- 6	B-103	B-119	B-138
			10200	1040				9670	986	20 -	6165	- 6	B-103	B-119	B-138
			11600	1180				10900	1110	20 -	6170	- 6	B-103	B-119	B-138
			11600	1180				10900	1110	20 -	6175	- 6	B-103	B-119	B-138
181	751	76.5	10200	1040	219	622	63.4	9660	984	20 -	6145	- 8	B-102	B-118	B-137
			11400	1170				10800	1100	20 -	6160	- 8	B-103	B-119	B-138
			11400	1170				10800	1100	20 -	6165	- 8	B-103	B-119	B-138
			12800	1310				12100	1230	20 -	6170	- 8	B-103	B-119	B-138
			12800	1310				12100	1230	20 -	6175	- 8	B-103	B-119	B-138
132	1030	105	11400	1160	159	855	87.2	10800	1100	20 -	6145	- 11	B-102	B-118	B-137
			12900	1320				12200	1240	20 -	6160	- 11	B-103	B-119	B-138
			12900	1320				12200	1240	20 -	6165	- 11	B-103	B-119	B-138
			14700	1500				13900	1420	20 -	6170	- 11	B-103	B-119	B-138
			14700	1500				13900	1420	20 -	6175	- 11	B-103	B-119	B-138
			19600	2000				18500	1880	20 -	6180	- 11	B-104	B-120	B-139
			19600	2000				18500	1880	20 -	6185	- 11	B-104	B-120	B-139
			27500	2800				25800	2630	20 -	6190	- 11	B-104	B-120	B-139
112	1220	124	11600	1190	135	1010	103	11000	1130	20 -	6145	- 13	B-102	B-118	B-137
			13500	1370				12700	1300	20 -	6160	- 13	B-103	B-119	B-138
			13500	1370				12700	1300	20 -	6165	- 13	B-103	B-119	B-138
			15300	1560				14500	1470	20 -	6170	- 13	B-103	B-119	B-138
			15300	1560				14500	1470	20 -	6175	- 13	B-103	B-119	B-138
			20400	2080				19200	1960	20 -	6180	- 13	B-104	B-120	B-139
			20400	2080				19200	1960	20 -	6185	- 13	B-104	B-120	B-139
96.7	1410	144	28600	2910	117	1170	119	26900	2740	20 -	6190	- 13	B-104	B-120	B-139
			12100	1240				11500	1170	20 -	6145	- 15	B-102	B-118	B-137
			14200	1450				13500	1370	20 -	6160	- 15	B-103	B-119	B-138
			14200	1450				13500	1370	20 -	6165	- 15	B-103	B-119	B-138
			16100	1640				15200	1550	20 -	6170	- 15	B-103	B-119	B-138
			16100	1640				15200	1550	20 -	6175	- 15	B-103	B-119	B-138
			21600	2200				20300	2070	20 -	6180	- 15	B-104	B-120	B-139
85.3	1600	163	21600	2200	103	1320	135	20300	2070	20 -	6185	- 15	B-104	B-120	B-139
			30000	3060				28200	2880	20 -	6190	- 15	B-104	B-120	B-139
			12600	1290				12000	1220	20 -	6145	- 17	B-102	B-118	B-137
			14600	1490				13900	1410	20 -	6165	- 17	B-103	B-119	B-138
			16700	1700				15800	1610	20 -	6170	- 17	B-103	B-119	B-138
			16700	1700				15800	1610	20 -	6175	- 17	B-103	B-119	B-138
			22700	2320				21400	2180	20 -	6180	- 17	B-104	B-120	B-139
69.0	1970	201	22700	2320	83.3	1630	166	21400	2180	20 -	6185	- 17	B-104	B-120	B-139
			31600	3220				29800	3030	20 -	6190	- 17	B-104	B-120	B-139
			15600	1590				14800	1510	20 -	6165	- 21	B-103	B-119	B-138
			17900	1830				17000	1730	20 -	6170	- 21	B-103	B-119	B-138
			17900	1830				17000	1730	20 -	6175	- 21	B-103	B-119	B-138
			24300	2480				22900	2340	20 -	6180	- 21	B-104	B-120	B-139
			24300	2480				22900	2340	20 -	6185	- 21	B-104	B-120	B-139
58.0	2350	239	34000	3470				32000	3260	20 -	6190	- 21	B-104	B-120	B-139
			16200	1650	70.0	1940	198	15400	1570	20 -	6165	- 25	B-103	B-119	B-138
			18500	1890				17500	1780	20 -	6170	- 25	B-103	B-119	B-138
			18500	1890				17500	1780	20 -	6175	- 25	B-103	B-119	B-138
			25300	2580				23800	2430	20 -	6180	- 25	B-104	B-120	B-139
			25300	2580				23800	2430	20 -	6185	- 25	B-104	B-120	B-139
			35600	3620				33500	3410	20 -	6190	- 25	B-104	B-120	B-139
			35600	3620				33500	3410	20 -	6195	- 25	B-104	B-120	B-139

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

Selection Tables Gearmotors

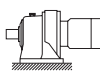
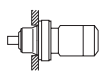
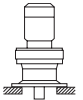


15 kW	n: Motor Speed			
	Hz		50Hz	
	P	r/min	4	6
	n ₁	r/min	1450	980
			1750	1165

50Hz						60Hz					Nomenclature			Page of Dimension Sheet			
Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF		Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
8.79	9270	945	84100	8570	*1	10.6	9270	945	84100	8570	*1	20 -	6205DB	- 165	B-112	B-129	B-148
	11700	1190	104000	10600	*1		9670	985	104000	10600	*1	20 -	6215DA	- 165	B-112	B-129	B-148
			104000	10600	0.80				104000	10600	0.80	20 -	6215DA	- 165	B-112	B-129	B-148
			104000	10600	0.83				104000	10600	1.00	20 -	6215DB	- 165	B-113	B-129	B-149
			122000	12500	0.98				116000	11800	1.19	20 -	6225DB	- 165	B-113	B-130	B-149
			152000	15500	1.34				144000	14700	1.61	20 -	6235DA	- 165	B-114	B-114	B-150
	14700	1500	170000	17400	1.69		12200	1240	161000	16400	1.69	20 -	6245DA	- 165	B-114	B-114	B-150
			170000	17400	1.79				161000	16400	2.16	20 -	6245DB	- 165	B-114	B-114	B-150
			209000	21300	2.12				197000	20100	2.12	20 -	6255DA	- 165	B-115	B-132	B-151
			209000	21300	2.12				197000	20100	2.56	20 -	6255DB	- 165	B-115	B-132	B-151
		254000	25900	2.98			241000	24500	3.38	20 -	6265DA	- 165	B-115	B-132	B-151		
7.44	12200	1240	104000	10600	*1	8.97	11400	1160	104000	10600	*1	20 -	6215DA	- 195	B-112	B-129	B-148
	12500	1270	129000	13200	*1		11400	1160	122000	12500	*1	20 -	6225DA	- 195	B-113	B-113	B-149
			128000	13100	0.84				122000	12400	1.01	20 -	6225DB	- 195	B-113	B-130	B-149
			160000	16300	1.13				151000	15400	1.37	20 -	6235DA	- 195	B-114	B-114	B-150
			179000	18200	1.51				169000	17200	1.59	20 -	6245DA	- 195	B-114	B-114	B-150
	17300	1770	179000	18200	1.51		14400	1460	169000	17200	1.83	20 -	6245DB	- 195	B-114	B-114	B-150
			219000	22300	1.80				207000	21100	2.12	20 -	6255DA	- 195	B-115	B-132	B-151
			219000	22300	1.80				207000	21100	2.17	20 -	6255DB	- 195	B-115	B-132	B-151
6.28	14800	1510	137000	14000	*1	7.58	13500	1380	130000	13200	*1	20 -	6225DA	- 231	B-113	B-113	B-149
			171000	17400	0.92				162000	16500	1.11	20 -	6235DA	- 231	B-114	B-114	B-150
			190000	19400	1.26				180000	18400	1.52	20 -	6245DA	- 231	B-114	B-114	B-150
	20500	2090	232000	23700	1.51		17000	1730	220000	22400	1.82	20 -	6255DA	- 231	B-115	B-132	B-151
			276000	28100	2.24				269000	27400	2.70	20 -	6265DA	- 231	B-115	B-132	B-151
5.31	18900	1930	179000	18200	*1	6.41	18900	1930	170000	17300	*1	20 -	6235DA	- 273	B-114	B-114	B-150
			200000	20300	1.06				189000	19300	1.28	20 -	6245DA	- 273	B-114	B-114	B-150
	24300	2470	244000	24900	1.28		20100	2050	231000	23500	1.54	20 -	6255DA	- 273	B-115	B-132	B-151
			276000	28100	1.90				276000	28100	2.29	20 -	6265DA	- 273	B-115	B-132	B-151
4.55	18900	1930	179000	18200	*1	5.49	18900	1930	177000	18100	*1	20 -	6235DA	- 319	B-114	B-114	B-150
			208000	21200	0.91				197000	20100	1.10	20 -	6245DA	- 319	B-114	B-114	B-150
			256000	26100	1.14				243000	24800	1.38	20 -	6255DA	- 319	B-115	B-132	B-151
	28400	2890	276000	28100	1.62		23500	2400	276000	28100	1.96	20 -	6265DA	- 319	B-115	B-132	B-151
			248000	25300	2.40				248000	25300	2.90	20 -	6275DA	- 319	B-115	-	B-151
3.85	25800	2630	208000	21200	*1	4.64	25800	2630	207000	21100	*1	20 -	6245DA	- 377	B-114	B-114	B-150
			258000	26300	0.97				255000	26000	1.17	20 -	6255DA	- 377	B-115	B-132	B-151
	33500	3420	276000	28100	1.37		27800	2830	276000	28100	1.66	20 -	6265DA	- 377	B-115	B-132	B-151
		248000	25300	2.03			248000	25300	2.46	20 -	6275DA	- 377	B-115	-	B-151		
3.07	25800	2630	208000	21200	*1	3.70	25800	2630	208000	21200	*1	20 -	6245DA	- 473	B-114	B-114	B-150
	34500	3520	258000	26300	*1		34500	3520	258000	26300	*1	20 -	6255DA	- 473	B-115	B-132	B-151
			258000	26300	0.82				258000	26300	0.98	20 -	6255DA	- 473	B-115	B-132	B-151
			258000	26300	0.82				258000	26300	0.98	20 -	6255DB	- 473	B-115	B-132	B-151
	42100	4290	276000	28100	1.09		34800	3550	276000	28100	1.32	20 -	6265DA	- 473	B-115	B-132	B-151
			248000	25300	1.62				248000	25300	1.96	20 -	6275DA	- 473	B-115	-	B-151
2.59	34500	3520	258000	26300	*1	3.13	34500	3520	258000	26300	*1	20 -	6255DA	- 559	B-115	B-132	B-151
			276000	28100	0.93				276000	28100	1.12	20 -	6265DA	- 559	B-115	B-132	B-151
	49700	5070	248000	25300	1.37		41200	4200	248000	25300	1.66	20 -	6275DA	- 559	B-115	-	B-151
2.23	46000	4690	276000	28100	*1	2.70	46000	4690	276000	28100	*1	20 -	6265DA	- 649	B-115	B-132	B-151
			276000	28100	0.80				276000	28100	0.96	20 -	6265DA	- 649	B-115	B-132	B-151
	57700	5880	248000	25300	1.18		47800	4870	248000	25300	1.43	20 -	6275DA	- 649	B-115	-	B-151
1.98	46000	4690	276000	28100	*1	2.39	46000	4690	276000	28100	*1	20 -	6265DA	- 731	B-115	B-132	B-151
	65000	6630	248000	25300	1.05		53900	5490	248000	25300	1.27	20 -	6275DA	- 731	B-115	-	B-151
1.72	46000	4690	276000	28100	*1	2.08	46000	4690	276000	28100	*1	20 -	6265DA	- 841	B-115	B-132	B-151
	74800	7620	248000	25300	0.91		62000	6320	248000	25300	1.10	20 -	6275DA	- 841	B-115	-	B-151
1.45	68200	6950	248000	25300	*1	1.74	68200	6950	248000	25300	*1	20 -	6275DA	- 1003	B-115	-	B-151
1.16	68200	6950	248000	25300	*1	1.40	68200	6950	248000	25300	*1	20 -	6275DA	- 1247	B-115	-	B-151

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*1" in the SF column. They cannot be operated with 100% motor rating.

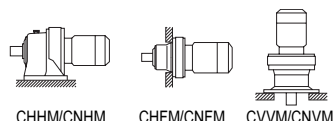
Selection Tables Gearmotors

18.5 kW		n ₁ : Motor Speed															
		Hz		50Hz		60Hz											
		P		4	6	4	6										
n ₁		r/min		1450	980	1750	1165										

50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout		Allowable Radial Load Pro		SF	Output Speed n ₂	Output Torque Tout		Allowable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
242	695	70.8	10200	1030	1.10	292	575	58.7	9590	978	1.10	25 -	6160	- 6	B-103	B-119	B-138
			10200	1030	1.30				9590	978	1.30	25 -	6165	- 6	B-103	B-119	B-138
			11500	1180	1.49				10900	1110	1.49	25 -	6170	- 6	B-103	B-119	B-138
			11500	1180	1.63				10900	1110	1.63	25 -	6175	- 6	B-103	B-119	B-138
181	926	94.4	11300	1150	1.06	219	767	78.2	10700	1090	1.06	25 -	6160	- 8	B-103	B-119	B-138
			11300	1150	1.30				10700	1090	1.30	25 -	6165	- 8	B-103	B-119	B-138
			12700	1300	1.49				12000	1220	1.49	25 -	6170	- 8	B-103	B-119	B-138
			12700	1300	1.63				12000	1220	1.63	25 -	6175	- 8	B-103	B-119	B-138
132	1270	130	12700	1300	1.06	159	1060	108	12100	1230	1.06	25 -	6160	- 11	B-103	B-119	B-138
			12700	1300	1.30				12100	1230	1.30	25 -	6165	- 11	B-103	B-119	B-138
			14600	1490	1.49				13800	1410	1.49	25 -	6170	- 11	B-103	B-119	B-138
			14600	1490	1.63				13800	1410	1.63	25 -	6175	- 11	B-103	B-119	B-138
			19500	1990	1.90				18400	1880	1.90	25 -	6180	- 11	B-104	B-120	B-139
			19500	1990	2.11				18400	1880	2.11	25 -	6185	- 11	B-104	B-120	B-139
			27400	2790	2.22				25800	2630	2.22	25 -	6190	- 11	B-104	B-120	B-139
			27400	2790	2.60				25800	2630	2.60	25 -	6195	- 11	B-104	B-120	B-139
112	1500	153	13300	1350	1.06	135	1250	127	12600	1280	1.06	25 -	6160	- 13	B-103	B-119	B-138
			13300	1350	1.22				12600	1280	1.22	25 -	6165	- 13	B-103	B-119	B-138
			15200	1550	1.48				14300	1460	1.48	25 -	6170	- 13	B-103	B-119	B-138
			15200	1550	1.63				14300	1460	1.63	25 -	6175	- 13	B-103	B-119	B-138
			20300	2070	1.90				19100	1950	1.90	25 -	6180	- 13	B-104	B-120	B-139
			20300	2070	2.11				19100	1950	2.11	25 -	6185	- 13	B-104	B-120	B-139
			28500	2900	2.22				26800	2730	2.22	25 -	6190	- 13	B-104	B-120	B-139
			28500	2900	2.60				26800	2730	2.60	25 -	6195	- 13	B-104	B-120	B-139
96.7	1740	177	14000	1430	1.01	117	1440	147	13300	1350	1.01	25 -	6160	- 15	B-103	B-119	B-138
			14000	1430	1.21				13300	1350	1.22	25 -	6165	- 15	B-103	B-119	B-138
			15800	1620	1.38				15000	1530	1.38	25 -	6170	- 15	B-103	B-119	B-138
			15800	1620	1.63				15000	1530	1.63	25 -	6175	- 15	B-103	B-119	B-138
			21400	2180	1.75				20200	2060	1.75	25 -	6180	- 15	B-104	B-120	B-139
			21400	2180	2.11				20200	2060	2.11	25 -	6185	- 15	B-104	B-120	B-139
			29900	3050	2.22				28100	2870	2.22	25 -	6190	- 15	B-104	B-120	B-139
			29900	3050	2.60				28100	2870	2.60	25 -	6195	- 15	B-104	B-120	B-139
85.3	1970	201	14400	1460	1.02	103	1630	166	13600	1390	1.02	25 -	6165	- 17	B-103	B-119	B-138
			16500	1680	1.06				15600	1590	1.06	25 -	6170	- 17	B-103	B-119	B-138
			16500	1680	1.30				15600	1590	1.30	25 -	6175	- 17	B-103	B-119	B-138
			22600	2300	1.65				21300	2170	1.65	25 -	6180	- 17	B-104	B-120	B-139
			22600	2300	2.06				21300	2170	2.11	25 -	6185	- 17	B-104	B-120	B-139
			31500	3210	2.22				29700	3020	2.22	25 -	6190	- 17	B-104	B-120	B-139
			31500	3210	2.60				29700	3020	2.60	25 -	6195	- 17	B-104	B-120	B-139
			69.0	2430	248				15300	1550	0.86	83.3	2010	205	14500	1480	0.87
17700	1800	1.01				16800	1710	1.05	25 -	6170	- 21				B-103	B-119	B-138
17700	1800	1.28				16800	1710	1.30	25 -	6175	- 21				B-103	B-119	B-138
24200	2470	1.62				22800	2330	1.62	25 -	6180	- 21				B-104	B-120	B-139
24200	2470	2.06				22800	2330	2.11	25 -	6185	- 21				B-104	B-120	B-139
33900	3450	2.22				31900	3250	2.22	25 -	6190	- 21				B-104	B-120	B-139
33900	3450	2.60				31900	3250	2.60	25 -	6195	- 21				B-104	B-120	B-139
58.0	2890	295				18200	1860	1.05	70.0	2400	244				17300	1760	1.05
			25100	2560	1.30	23700	2410	1.30				25 -	6180	- 25	B-104	B-120	B-139
			25100	2560	1.63	23700	2410	1.63				25 -	6185	- 25	B-104	B-120	B-139
			35400	3610	1.90	33300	3400	1.90				25 -	6190	- 25	B-104	B-120	B-139
			35400	3610	2.19	33300	3400	2.19				25 -	6195	- 25	B-104	B-120	B-139

- Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
- Motor slippage may affect n₁ and n₂. Refer to technical data for details.
- CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
- Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
- "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

Selection Tables Gearmotors

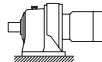


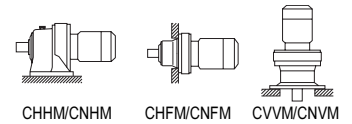
18.5 kW	n ₁ : Motor Speed			
	Hz		50Hz	
	P	r/min	4	6
			1450	980
			1750	1165

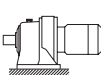
50Hz					60Hz					Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro	SF		Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro	SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf	r/min	N·m	kgf·m	N	kgf				CHHM	CHFM	CVVM
50.0	3360	342	19000	1940	60.3	2780	284	18100	1840	25 -	6175	- 29	B-103	B-119	B-138
			26100	2660				24700	2520	25 -	6180	- 29	B-104	B-120	B-139
			26100	2660				24700	2520	25 -	6185	- 29	B-104	B-120	B-139
			37200	3790				35000	3570	25 -	6190	- 29	B-104	B-120	B-139
			37200	3790				35000	3570	25 -	6195	- 29	B-104	B-120	B-139
			68700	7000				65000	6630	25 -	6205	- 29	B-105	B-121	B-140
41.4	4050	413	27800	2830	50.0	3360	342	26300	2680	25 -	6180	- 35	B-104	B-120	B-139
			27800	2830				26300	2680	25 -	6185	- 35	B-104	B-120	B-139
			39200	3990				36900	3760	25 -	6190	- 35	B-104	B-120	B-139
			39200	3990				36900	3760	25 -	6195	- 35	B-104	B-120	B-139
33.7	4980	507	29500	3010	40.7	4120	420	28000	2850	25 -	6185	- 43	B-104	B-120	B-139
			42000	4290				39600	4040	25 -	6190	- 43	B-104	B-120	B-139
			42000	4290				39600	4040	25 -	6195	- 43	B-104	B-120	B-139
			77300	7880				73200	7460	25 -	6205	- 43	B-105	B-121	B-140
			78900	8050				74700	7620	25 -	6215	- 43	B-105	B-121	B-140
28.4	5900	602	30400	3100	34.3	4890	499	28900	2940	25 -	6185	- 51	B-104	B-120	B-139
			43700	4460				41300	4210	25 -	6190	- 51	B-104	B-120	B-139
			43700	4460				41300	4210	25 -	6195	- 51	B-104	B-120	B-139
24.6	6830	696	45700	4660	29.7	5660	577	43100	4400	25 -	6195	- 59	B-104	B-120	B-139
			83900	8550				79400	8100	25 -	6205	- 59	B-105	B-121	B-140
			85600	8730				81100	8270	25 -	6215	- 59	B-105	B-121	B-140
			90800	9250				86000	8760	25 -	6225	- 59	B-106	B-122	B-141
22.8	7360	751	47400	4830	27.1	6190	631	45000	4580	256 -	6195	- 43	B-104	B-120	B-139
			88400	9010				84100	8570	256 -	6215	- 43	B-105	B-121	B-140
			93700	9550				89100	9090	256 -	6225	- 43	B-106	B-122	B-141
20.4	8220	838	48100	4910	24.6	6810	694	45500	4640	25 -	6195	- 71	B-104	B-120	B-139
16.7	10100	1030	95600	9740	20.1	8340	851	90600	9240	25 -	6215	- 87	B-105	B-121	B-140
			101000	10300				96100	9790	25 -	6225	- 87	B-106	B-122	B-141
16.6	10100	1030	95700	9760	19.7	8500	866	91100	9290	256 -	6215	- 59	B-105	B-121	B-140
			102000	10300				96700	9850	256 -	6225	- 59	B-106	B-122	B-141
			127000	12900				120000	12300	256 -	6235	- 59	B-106	B-122	B-142
			104000	10600				101000	10300	25 -	6215DB	- 121	B-113	B-130	B-149
12.0	13300	1350	113000	11500	14.5	11000	1120	107000	10900	25 -	6225DB	- 121	B-113	B-130	B-149
			142000	14500				134000	13700	25 -	6235DA	- 121	B-114	B-131	B-150
			142000	14500				134000	13700	25 -	6235DB	- 121	B-114	B-131	B-150
			158000	16100				150000	15300	25 -	6245DB	- 121	B-114	B-131	B-150
			194000	19800				184000	18700	25 -	6255DA	- 121	B-115	B-132	B-151
			194000	19800				184000	18700	25 -	6255DB	- 121	B-115	B-132	B-151
			237000	24200				224000	22900	25 -	6265DA	- 121	B-115	B-132	B-151
			113000	11500				108000	11000	256 -	6225	- 87	B-106	B-122	B-141
11.3	14900	1520	142000	14400	13.4	12500	1280	135000	13700	256 -	6235	- 87	B-106	B-122	B-142
			159000	16200				151000	15400	256 -	6245	- 87	B-107	B-123	B-142
			195000	19900				186000	18900	256 -	6255	- 87	B-107	B-123	B-142
8.79	18100	1840	14500	1480	10.6	15000	1530	115000	11800	25 -	6225DB	- 165	B-113	B-130	B-149
			121000	12400				115000	11800	25 -	6225DB	- 165	B-113	B-130	B-149
			151000	15400				144000	14600	25 -	6235DA	- 165	B-114	B-131	B-150
			170000	17300				161000	16400	25 -	6245DA	- 165	B-114	B-131	B-150
			170000	17300				161000	16400	25 -	6245DB	- 165	B-114	B-131	B-150
			208000	21200				197000	20100	25 -	6255DA	- 165	B-115	B-132	B-151
			208000	21200				197000	20100	25 -	6255DB	- 165	B-115	B-132	B-151
			254000	25900				240000	24500	25 -	6265DA	- 165	B-115	B-132	B-151

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

Selection Tables Gearmotors

18.5 kW		n ₁ : Motor Speed															
		Hz		50Hz		60Hz											
		P		4	6	4	6										
		n ₁	r/min	1450	980	1750	1165										
50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF	Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM		
r/min	N·m	kgf·m	N	kgf	r/min	N·m	kgf·m	N	kgf				CHHM	CHFM	CVVM		
7.44	21400	2180	159000	16200	0.92	8.97	17700	1810	151000	15400	1.11	25 - 6235DA - 195	B-114	B-131	B-150		
			178000	18100	1.23				169000	17200	1.29	25 - 6245DA - 195	B-114	B-131	B-150		
			178000	18100	1.23				169000	17200	1.48	25 - 6245DB - 195	B-114	B-131	B-150		
			218000	22200	1.46				207000	21100	1.72	25 - 6255DA - 195	B-115	B-132	B-151		
			218000	22200	1.46				207000	21100	1.76	25 - 6255DB - 195	B-115	B-132	B-151		
6.28	25300	2580	267000	27200	2.05	7.58	21000	2140	252000	25700	2.47	25 - 6265DA - 195	B-115	B-132	B-151		
			189000	19300	1.02				189000	19300	1.23	25 - 6235DA - 231	B-114	B-131	B-150		
			232000	23600	1.22				219000	22400	1.48	25 - 6255DA - 231	B-115	B-132	B-151		
			276000	28100	1.82				269000	27400	2.19	25 - 6265DA - 231	B-115	B-132	B-151		
			198000	20200	0.86				188000	19200	1.04	25 - 6245DA - 273	B-114	B-131	B-150		
5.31	29900	3050	243000	24800	1.04	6.41	24800	2530	230000	23500	1.25	25 - 6255DA - 273	B-115	B-132	B-151		
			276000	28100	1.54				276000	28100	1.85	25 - 6265DA - 273	B-115	B-132	B-151		
			258000	26300	1.02				258000	26300	1.12	25 - 6245DA - 319	B-114	B-131	B-150		
			255000	26000	0.93				242000	24600	1.12	25 - 6255DA - 319	B-115	B-132	B-151		
			276000	28100	1.31				276000	28100	1.59	25 - 6265DA - 319	B-115	B-132	B-151		
4.55	35000	3570	248000	25300	1.95	5.49	29000	2950	248000	25300	2.35	25 - 6275DA - 319	B-115	-	B-151		
			325000	33100	1.04				325000	33100	1.04	25 - 6255DA - 377	B-115	B-132	B-151		
			276000	28100	1.11				276000	28100	1.34	25 - 6265DA - 377	B-115	B-132	B-151		
			248000	25300	1.65				248000	25300	1.99	25 - 6275DA - 377	B-115	-	B-151		
			276000	28100	0.89				276000	28100	1.07	25 - 6265DA - 473	B-115	B-132	B-151		
3.85	41300	4210	248000	25300	1.31	4.64	34300	3490	248000	25300	1.59	25 - 6275DA - 473	B-115	-	B-151		
			46000	4690	1.04				46000	4690	1.04	25 - 6265DA - 559	B-115	B-132	B-151		
			61300	6250	1.11				50800	5180	1.34	25 - 6275DA - 559	B-115	-	B-151		
			71200	7250	0.96				59000	6010	1.16	25 - 6275DA - 649	B-115	-	B-151		
			80200	8170	0.85				66400	6770	1.03	25 - 6275DA - 731	B-115	-	B-151		
3.07	51900	5290	248000	25300	1.04	3.70	43000	4380	248000	25300	1.37	25 - 6275DA - 841	B-115	-	B-151		
			46000	4690	1.04				46000	4690	1.04	25 - 6265DA - 559	B-115	B-132	B-151		
			61300	6250	1.11				50800	5180	1.34	25 - 6275DA - 559	B-115	-	B-151		
			71200	7250	0.96				59000	6010	1.16	25 - 6275DA - 649	B-115	-	B-151		
			80200	8170	0.85				66400	6770	1.03	25 - 6275DA - 731	B-115	-	B-151		
2.59	61300	6250	248000	25300	1.37	3.13	50800	5180	248000	25300	1.37	25 - 6275DA - 841	B-115	-	B-151		
			248000	25300	1.37				248000	25300	1.37	25 - 6275DA - 841	B-115	-	B-151		
			12600	1290	1.25				11900	1220	1.25	30 - 6170	-	8			
			12600	1290	1.37				11900	1220	1.37	30 - 6175	-	8			
			10100	1020	1.10				9510	969	1.10	30 - 6165	-	6			
2.23	71200	7250	248000	25300	0.96	2.70	59000	6010	248000	25300	1.16	25 - 6275DA - 649	B-115	-	B-151		
			80200	8170	0.85				66400	6770	1.03	25 - 6275DA - 731	B-115	-	B-151		
			248000	25300	1.04				248000	25300	1.04	25 - 6275DA - 841	B-115	-	B-151		
			248000	25300	1.37				248000	25300	1.37	25 - 6275DA - 841	B-115	-	B-151		
			12600	1290	1.25				11900	1220	1.25	30 - 6170	-	8			
1.98	80200	8170	248000	25300	0.85	2.39	66400	6770	248000	25300	1.03	25 - 6275DA - 731	B-115	-	B-151		
			248000	25300	1.04				248000	25300	1.04	25 - 6275DA - 841	B-115	-	B-151		
			248000	25300	1.37				248000	25300	1.37	25 - 6275DA - 841	B-115	-	B-151		
			12600	1290	1.25				11900	1220	1.25	30 - 6170	-	8			
			12600	1290	1.37				11900	1220	1.37	30 - 6175	-	8			
1.72	68200	6950	248000	25300	1.04	2.08	68200	6950	248000	25300	1.04	25 - 6275DA - 841	B-115	-	B-151		
			248000	25300	1.37				248000	25300	1.37	25 - 6275DA - 841	B-115	-	B-151		
			12600	1290	1.25				11900	1220	1.25	30 - 6170	-	8			
			12600	1290	1.37				11900	1220	1.37	30 - 6175	-	8			
			10100	1020	1.10				9510	969	1.10	30 - 6165	-	6			



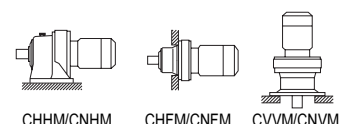
22 kW	n ₁ : Motor Speed								
	Hz		50Hz		60Hz				
	P		4	6	4	6			
	n ₁	r/min	1450	980	1750	1165			

CHHM/CNHM

CHFM/CNFM

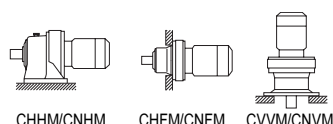
CVVM/CNVM

50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed	Output Torque	Alloable Radial Load		SF		Output Speed	Output Torque	Alloable Radial Load		SF		Input Capacity	Frame	Reduction	CNHM CNFM CNVM		
n ₂	Tout	Pro				n ₂	Tout	Pro				Symbol	Size	Ratio	CHHM	CHFM	CVVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf							
242	826	84.2	10100	1020	1.10	292	684	69.8	9510	969	1.10	30 -	6165	- 6	B-103	B-119	B-138
			11500	1170	1.25				10800	1100	1.25	30 -	6170	- 6	B-103	B-119	B-138
			11500	1170	1.37				10800	1100	1.37	30 -	6175	- 6	B-103	B-119	B-138
181	1100	112	11200	1140	1.10	219	912	93.0	10600	1080	1.10	30 -	6165	- 8	B-103	B-119	B-138
			12600	1290	1.25				11900	1220	1.25	30 -	6170	- 8	B-103	B-119	B-138
			12600	1290	1.37				11900	1220	1.37	30 -	6175	- 8	B-103	B-119	B-138



- Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
- Motor slippage may affect n₁ and n₂. Refer to technical data for details.
- CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
- Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
- "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

Selection Tables Gearmotors



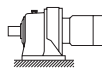
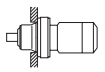
22 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

n₁: Motor Speed

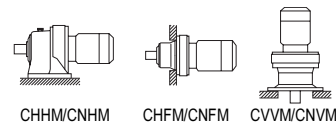
50Hz					60Hz					Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro	SF		Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro	SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf	r/min	N·m	kgf·m	N	kgf				CHHM	CHFM	CVVM
132	1510	154	12600	1280	159	1250	128	11900	1220	30 -	6165	- 11	B-103	B-119	B-138
			14500	1470				13700	1390	30 -	6170	- 11	B-103	B-119	B-138
			14500	1470				13700	1390	30 -	6175	- 11	B-103	B-119	B-138
			19500	1980				18300	1870	30 -	6180	- 11	B-104	B-120	B-139
			19500	1980				18300	1870	30 -	6185	- 11	B-104	B-120	B-139
			27300	2780				25700	2620	30 -	6190	- 11	B-104	B-120	B-139
			27300	2780				25700	2620	30 -	6195	- 11	B-104	B-120	B-139
112	1790	182	52300	5330	135	1480	151	49500	5040	30 -	6205	- 11	B-105	B-121	B-140
			13100	1330				12400	1270	30 -	6165	- 13	B-103	B-119	B-138
			15000	1530				14200	1450	30 -	6170	- 13	B-103	B-119	B-138
			15000	1530				14200	1450	30 -	6175	- 13	B-103	B-119	B-138
			20200	2060				19100	1940	30 -	6180	- 13	B-104	B-120	B-139
			20200	2060				19100	1940	30 -	6185	- 13	B-104	B-120	B-139
			28400	2890				26700	2730	30 -	6190	- 13	B-104	B-120	B-139
96.7	2060	210	28400	2890	117	1710	174	26700	2730	30 -	6195	- 13	B-104	B-120	B-139
			13800	1400				13100	1340	30 -	6165	- 15	B-103	B-119	B-138
			15600	1590				14800	1510	30 -	6170	- 15	B-103	B-119	B-138
			15600	1590				14800	1510	30 -	6175	- 15	B-104	B-120	B-139
			21300	2170				20100	2050	30 -	6180	- 15	B-104	B-120	B-139
			21300	2170				20100	2050	30 -	6185	- 15	B-104	B-120	B-139
			29800	3040				28100	2860	30 -	6190	- 15	B-104	B-120	B-139
85.3	2340	239	29800	3040	103	1940	198	28100	2860	30 -	6195	- 15	B-104	B-120	B-139
			56200	5730				53200	5420	30 -	6205	- 15	B-105	B-121	B-140
			14100	1440				13400	1370	30 -	6165	- 17	B-103	B-119	B-138
			16200	1650				15400	1570	30 -	6175	- 17	B-103	B-119	B-138
			22400	2280				21200	2160	30 -	6180	- 17	B-104	B-120	B-139
			22400	2280				21200	2160	30 -	6185	- 17	B-104	B-120	B-139
			31400	3200				29600	3010	30 -	6190	- 17	B-104	B-120	B-139
69.0	2890	295	31400	3200	83.3	2400	244	29600	3010	30 -	6195	- 17	B-104	B-120	B-139
			17500	1780				16600	1690	30 -	6175	- 21	B-103	B-119	B-138
			24000	2450				22700	2310	30 -	6180	- 21	B-104	B-120	B-139
			24000	2450				22700	2310	30 -	6185	- 21	B-104	B-120	B-139
			33700	3440				31800	3240	30 -	6190	- 21	B-104	B-120	B-139
			33700	3440				31800	3240	30 -	6195	- 21	B-104	B-120	B-139
			62900	6410				59500	6070	30 -	6205	- 21	B-105	B-121	B-140
58.0	3440	351	17900	1830	70.0	2850	291	17000	1740	30 -	6175	- 25	B-103	B-119	B-138
			24900	2530				23500	2400	30 -	6180	- 25	B-104	B-120	B-139
			24900	2530				23500	2400	30 -	6185	- 25	B-104	B-120	B-139
			35300	3590				33200	3390	30 -	6190	- 25	B-104	B-120	B-139
			35300	3590				33200	3390	30 -	6195	- 25	B-104	B-120	B-139
			25900	2640	60.3	3310	337	24500	2500	30 -	6185	- 29	B-104	B-120	B-139
			37000	3770				34900	3560	30 -	6190	- 29	B-104	B-120	B-139
41.4	4820	491	37000	3770				34900	3560	30 -	6195	- 29	B-104	B-120	B-139
			68500	6990				64900	6610	30 -	6205	- 29	B-105	B-121	B-140
			70000	7130				66200	6750	30 -	6215	- 29	B-105	B-121	B-140
			27500	2810	50.0	3990	407	26000	2650	30 -	6185	- 35	B-104	B-120	B-139
			39000	3970				36700	3750	30 -	6190	- 35	B-104	B-120	B-139
			39000	3970				36700	3750	30 -	6195	- 35	B-104	B-120	B-139
			29100	2970	40.7	4900	500	27600	2820	30 -	6185	- 43	B-104	B-120	B-139
33.7	5920	603	41800	4260				39400	4020	30 -	6190	- 43	B-104	B-120	B-139
			41800	4260				39400	4020	30 -	6195	- 43	B-104	B-120	B-139
			77100	7860				73000	7440	30 -	6205	- 43	B-105	B-121	B-140
			78700	8020				74600	7600	30 -	6215	- 43	B-105	B-121	B-140
			83400	8510				79000	8050	30 -	6225	- 43	B-106	B-122	B-141
			28.4	7020	34.3	5820	593	41000	4180	30 -	6195	- 51	B-104	B-120	B-139
			716	43400				4420	0.95						

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

Selection Tables Gearmotors

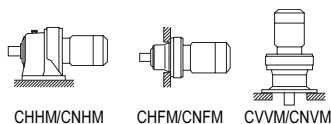
30 kW		n ₁ : Motor Speed															
		Hz		50Hz		60Hz											
		P		4	6	4	6										
n ₁		r/min		1450	980	1750	1165										

50Hz						60Hz						Nomenclature			Page of Dimension Sheet					
Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF		Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM			
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM			
16.6	16400	1670	129000	13200	2.16	19.7	13800	1410	123000	12500	2.51	406 -	6245	- 43	B-107	B-123	B-142			
			125000	12800	1.15				119000	12200	1.26	406 -	6235	- 59	B-106	B-122	B-141			
			140000	14300	1.57				134000	13600	1.87	406 -	6245	- 59	B-107	B-123	B-142			
			173000	17600	1.89				164000	16800	2.16	406 -	6255	- 59	B-107	B-123	B-142			
12.0	21500	2190	13500	1370	113000	11500	*1	14.5	13500	1370	106000	10800	*1	40 -	6225DB	- 121	B-113	B-130	B-149	
			140000	14300	0.87				133000	13500	1.05	40 -	6235DB	- 121	B-114	B-131	B-150			
			156000	15900	0.95				148000	15100	1.15	40 -	6245DB	- 121	B-114	B-131	B-150			
			192000	19600	1.06				182000	18600	1.06	40 -	6255DA	- 121	B-115	B-132	B-151			
			192000	19600	1.28				182000	18600	1.54	40 -	6255DB	- 121	B-115	B-132	B-151			
			236000	24000	1.46				223000	22700	1.69	40 -	6265DA	- 121	B-115	B-132	B-151			
11.3	24200	2460	193000	19700	1.28	13.4	20300	2070	184000	18800	1.43	406 -	6255	- 87	B-107	B-123	B-142			
			236000	24100	1.78				225000	22900	1.78	406 -	6265	- 87	B-107	B-123	B-142			
8.79	29300	2990	19600	2000	151000	15400	*1	10.6	19600	2000	143000	14500	*1	40 -	6235DB	- 165	B-114	B-131	B-150	
			167000	17000	0.89				159000	16200	1.08	40 -	6245DB	- 165	B-114	B-131	B-150			
			206000	21000	1.06				195000	19900	1.06	40 -	6255DA	- 165	B-115	B-132	B-151			
			206000	21000	1.06				195000	19900	1.28	40 -	6255DB	- 165	B-115	B-132	B-151			
			252000	25700	1.49				239000	24300	1.69	40 -	6265DA	- 165	B-115	B-132	B-151			
7.44	34700	3530	26200	2680	177000	18000	*1	8.97	26200	2680	167000	17000	*1	40 -	6245DB	- 195	B-114	B-131	B-150	
			216000	22000	0.90				205000	20900	1.06	40 -	6255DA	- 195	B-115	B-132	B-151			
			216000	22000	0.90				205000	20900	1.08	40 -	6255DB	- 195	B-115	B-132	B-151			
			265000	27000	1.26				251000	25600	1.52	40 -	6265DA	- 195	B-115	B-132	B-151			
6.28	31000	3160	25800	2630	189000	19300	*1	7.58	25800	2630	179000	18200	*1	40 -	6245DB	- 231	B-114	B-131	B-150	
			31000	3160	231000	23500	*1		31000	3160	218000	22200	*1	40 -	6255DA	- 231	B-115	B-132	B-151	
			41100	4190	276000	28100	1.12		34000	3470	267000	27200	1.35	40 -	6265DA	- 231	B-115	B-132	B-151	
5.31	31000	3160	243000	24700	*1	6.41	31000	3160	229000	23400	*1	40 -	6255DA	- 273	B-115	B-132	B-151			
			48500	4950	276000	28100	0.95		40200	4100	276000	28100	1.14	40 -	6265DA	- 273	B-115	B-132	B-151	
			46000	4690	276000	28100	*1		46000	4690	276000	28100	*1	40 -	6265DA	- 319	B-115	B-132	B-151	
4.55	56700	5780	276000	28100	0.81	5.49	47000	4790	276000	28100	0.98	40 -	6265DA	- 319	B-115	B-132	B-151			
			248000	25300	1.20				248000	25300	1.45	40 -	6275DA	- 319	B-115	-	B-151			
3.85	46000	4690	276000	28100	*1	4.64	46000	4690	276000	28100	*1	40 -	6265DA	- 377	B-115	B-132	B-151			
			67000	6830	248000	25300	1.02		55500	5660	248000	25300	1.23	40 -	6275DA	- 377	B-115	-	B-151	
3.07	68200	6950	248000	25300	*1	3.70	68200	6950	248000	25300	*1	40 -	6275DA	- 473	B-115	-	B-151			
			84100	8570	248000	25300	0.81		69700	7100	248000	25300	0.98	40 -	6275DA	- 473	B-115	-	B-151	
2.59	68200	6950	248000	25300	*1	3.13	68200	6950	248000	25300	*1	40 -	6275DA	- 559	B-115	-	B-151			



- Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
- Motor slippage may affect n₁ and n₂. Refer to technical data for details.
- CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
- Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
- "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

Selection Tables Gearmotors



37 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

n₁: Motor Speed

50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro	SF			Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro	SF			Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM CNFM CNVM		
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
132	2550	260	19000	1940	1.05	159	2110	215	18000	1830	1.05	50 -	6185	- 11	B-104	B-120	B-139
			27000	2750	1.11				25400	2590	1.11	50 -	6190	- 11	B-104	B-120	B-139
			27000	2750	1.30				25400	2590	1.30	50 -	6195	- 11	B-104	B-120	B-139
			52000	5310	1.61				49300	5020	1.61	50 -	6205	- 11	B-105	B-121	B-140
			52700	5380	2.04				49900	5090	2.04	50 -	6215	- 11	B-105	B-121	B-140
			56000	5700	2.69				53000	5400	2.69	50 -	6225	- 11	B-106	B-122	B-141
112	3010	307	19700	2010	1.05	135	2490	254	18600	1900	1.05	50 -	6185	- 13	B-104	B-120	B-139
			28000	2850	1.11				26400	2690	1.11	50 -	6190	- 13	B-104	B-120	B-139
			28000	2850	1.30				26400	2690	1.30	50 -	6195	- 13	B-104	B-120	B-139
96.7	3470	354	20600	2100	1.05	117	2880	293	19500	1990	1.05	50 -	6185	- 15	B-104	B-120	B-139
			29300	2990	1.11				27700	2820	1.11	50 -	6190	- 15	B-104	B-120	B-139
			29300	2990	1.30				27700	2820	1.30	50 -	6195	- 15	B-104	B-120	B-139
			55900	5700	1.61				52900	5390	1.61	50 -	6205	- 15	B-105	B-121	B-140
			56600	5770	2.04				53600	5470	2.04	50 -	6215	- 15	B-105	B-121	B-140
			60400	6160	2.69				57200	5830	2.69	50 -	6225	- 15	B-106	B-122	B-141
85.3	3940	401	21600	2210	1.03	103	3260	332	20500	2090	1.05	50 -	6185	- 17	B-104	B-120	B-139
			30900	3150	1.11				29100	2970	1.11	50 -	6190	- 17	B-104	B-120	B-139
			30900	3150	1.30				29100	2970	1.30	50 -	6195	- 17	B-104	B-120	B-139
69.0	4860	496	23300	2370	1.03	83.3	4030	411	22100	2250	1.05	50 -	6185	- 21	B-104	B-120	B-139
			33200	3380	1.11				31300	3190	1.11	50 -	6190	- 21	B-104	B-120	B-139
			33200	3380	1.30				31300	3190	1.30	50 -	6195	- 21	B-104	B-120	B-139
			62500	6370	1.60				59200	6030	1.60	50 -	6205	- 21	B-105	B-121	B-140
			63800	6510	2.04				60500	6170	2.04	50 -	6215	- 21	B-105	B-121	B-140
			67500	6880	2.55				63900	6510	2.55	50 -	6225	- 21	B-106	B-122	B-141
65.3	5140	524	32900	3360	1.11	77.7	4320	441	31300	3190	1.11	506 -	6190	- 15	B-104	B-120	B-139
			32900	3360	1.30				31300	3190	1.30	506 -	6195	- 15	B-104	B-120	B-139
			62600	6380	1.61				59500	6070	1.61	506 -	6205	- 15	B-105	B-121	B-140
			63400	6460	2.04				60300	6150	2.04	506 -	6215	- 15	B-105	B-121	B-140
58.0	5790	590	23900	2440	0.81	70.0	4800	489	22700	2320	0.81	50 -	6185	- 25	B-104	B-120	B-139
			34600	3530	0.95				32700	3330	0.95	50 -	6190	- 25	B-104	B-120	B-139
			34600	3530	1.09				32700	3330	1.09	50 -	6195	- 25	B-104	B-120	B-139
50.0	6710	684	36200	3690	1.02	60.3	5560	567	34200	3490	1.02	50 -	6195	- 29	B-104	B-120	B-139
			67900	6920	1.24				64400	6560	1.24	50 -	6205	- 29	B-105	B-121	B-140
			69300	7060	1.58				65700	6700	1.58	50 -	6215	- 29	B-105	B-121	B-140
			73400	7490	2.04				69600	7090	2.04	50 -	6225	- 29	B-106	B-122	B-141
46.7	7190	733	37300	3800	1.11	55.5	6050	617	35500	3610	1.30	506 -	6195	- 21	B-104	B-120	B-139
			71400	7280	1.74				68000	6930	2.04	506 -	6215	- 21	B-105	B-121	B-140
			75500	7690	2.06				71800	7320	2.45	506 -	6225	- 21	B-106	B-122	B-141
41.4	8100	826	38000	3870	0.81	50.0	6710	684	35900	3660	0.81	50 -	6195	- 35	B-104	B-120	B-139
33.8	9930	1010	77300	7880	1.27	40.2	8360	852	73700	7510	1.51	506 -	6215	- 29	B-105	B-121	B-140
			82000	8360	1.51				78100	7970	1.80	506 -	6225	- 29	B-106	B-122	B-141
			103000	10500	1.90				97900	9980	2.04	506 -	6235	- 29	B-106	B-122	B-141
33.7	9950	1010	77700	7920	1.22	40.7	8250	841	73800	7520	1.22	50 -	6215	- 43	B-105	B-121	B-140
			82500	8410	1.53				78300	7980	1.53	50 -	6225	- 43	B-106	B-122	B-141
24.6	13700	1390	89200	9090	1.06	29.7	11300	1150	84700	8630	1.22	50 -	6225	- 59	B-106	B-122	B-141
22.8	14700	1500	129000	13100	1.75	27.1	12400	1260	122000	12500	2.04	506 -	6245	- 43	B-107	B-123	B-142
16.6	20200	2060	140000	14200	1.28	19.7	17000	1730	133000	13500	1.52	506 -	6245	- 59	B-107	B-123	B-142
			172000	17600	1.54				164000	16700	1.75	506 -	6255	- 59	B-107	B-123	B-142
			211000	21500	2.28				201000	20500	2.55	506 -	6265	- 59	B-107	B-123	B-142

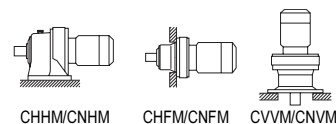
GEARMOTORS

Selection Tables
37 kW

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

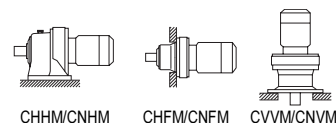
Selection Tables Gearmotors

37 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165



50Hz						60Hz					Nomenclature			Page of Dimension Sheet			
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVN
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
12.0	18700	1910	141000	14300	*1	14.5	18700	1910	133000	13500	*1	50 -	6235DB	- 121	B-114	B-131	B-150
	20500	2090	156000	15900	*1		20500	2090	148000	15000	*1	50 -	6245DB	- 121	B-114	B-131	B-150
	26500	2710	191000	19500	1.04		22000	2240	181000	18500	1.25	50 - 6255DB	- 121	B-115	B-132	B-151	
11.3	29800	3040	235000	23900	1.18	13.4	25100	2560	222000	22700	1.37	50 -	6265DA	- 121	B-115	B-132	B-151
			192000	19600	1.04				183000	18700	1.16	506 - 6255	- 87	B-107	B-123	B-142	
			236000	24000	1.44				224000	22900	1.44	506 -	6265	- 87	B-107	B-123	B-142
8.79	26200	2680	168000	17100	*1	10.6	26200	2680	158000	16100	*1	50 -	6245DB	- 165	B-114	B-131	B-150
	36200	3690	205000	20900	0.86		30000	3060	194000	19800	1.04	50 -	6255DB	- 165	B-115	B-132	B-151
			251000	25600	1.21				238000	24300	1.37	50 -	6265DA	- 165	B-115	B-132	B-151
7.44	31200	3180	216000	22100	*1	8.97	31200	3180	204000	20800	*1	50 -	6255DB	- 195	B-115	B-132	B-151
	42800	4360	263000	26800	1.02		35400	3610	250000	25400	1.23	50 - 6265DA	- 195	B-115	B-132	B-151	
6.28	50700	5160	276000	28100	0.91	7.58	42000	4280	266000	27100	1.10	50 -	6265DA	- 231	B-115	B-132	B-151
5.31	46000	4690	276000	28100	*1	6.41	46000	4690	276000	28100	*1	50 -	6265DA	- 273	B-115	B-132	B-151
4.55	70000	7130	248000	25300	0.97	5.49	58000	5910	248000	25300	1.18	50 -	6275DA	- 319	B-115	-	B-151
3.85	68200	6950	248000	25300	*1	4.64	68200	6950	248000	25300	*1	50 -	6275DA	- 377	B-115	-	B-151
	82700	8430	248000	25300	0.82		68500	6980	248000	25300	1.00	50 -	6275DA	- 377	B-115	-	B-151

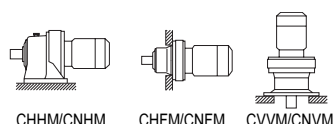
45 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165



50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Alloable Radial Load Pro		SF		Output Speed n ₂	Output Torque Tout	Alloable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVN
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
132	3100	316	26800	2730	1.07	159	2570	262	25300	2570	1.07	60 -	6195	- 11	B-104	B-120	B-139
			51900	5290	1.33				49200	5010	1.33	60 -	6205	- 11	B-105	B-121	B-140
			52600	5360	1.67				49800	5080	1.67	60 -	6215	- 11	B-105	B-121	B-140
			55800	5690	2.21				52800	5390	2.21	60 -	6225	- 11	B-106	B-122	B-141
112	3660	373	27700	2830	1.07	135	3030	309	26200	2670	1.07	60 -	6195	- 13	B-104	B-120	B-139
96.7	4220	431	29000	2960	1.07	117	3500	357	27400	2800	1.07	60 -	6195	- 15	B-104	B-120	B-139
			55700	5680	1.33				52800	5380	1.33	60 -	6205	- 15	B-105	B-121	B-140
			56500	5750	1.67				53500	5450	1.67	60 -	6215	- 15	B-105	B-121	B-140
			60200	6140	2.21				57000	5820	2.21	60 -	6225	- 15	B-106	B-122	B-141
85.3	4790	488	21200	2160	0.85	103	3970	404	20200	2060	0.87	60 -	6185	- 17	B-104	B-120	B-139
			30600	3120	1.07				28900	2950	1.07	60 -	6195	- 17	B-104	B-120	B-139
69.0	5910	603	22800	2330	0.85	83.3	4900	499	21700	2210	0.87	60 -	6185	- 21	B-104	B-120	B-139
			32900	3350	0.91				31100	3170	0.91	60 -	6190	- 21	B-104	B-120	B-139
			32900	3350	1.07				31100	3170	1.07	60 -	6195	- 21	B-104	B-120	B-139
			62200	6340	1.32				59000	6010	1.32	60 -	6205	- 21	B-105	B-121	B-140
			63600	6480	1.67				60300	6140	1.67	60 -	6215	- 21	B-105	B-121	B-140
			67200	6850	2.09				63700	6490	2.09	60 -	6225	- 21	B-106	B-122	B-141
65.3	6250	637	62300	6350	1.33	77.7	5260	536	59300	6050	1.33	606 -	6205	- 15	B-105	B-121	B-140
			63100	6430	1.67				60100	6130	1.67	606 -	6215	- 15	B-105	B-121	B-140
			67400	6870	2.21				64200	6540	2.21	606 -	6225	- 15	B-106	B-122	B-141
58.0	7040	718	34200	3490	0.90	70.0	5830	595	32400	3300	0.90	60 -	6195	- 25	B-104	B-120	B-139
50.0	8170	832	35700	3640	0.84	60.3	6770	690	33900	3450	0.84	60 -	6195	- 29	B-104	B-120	B-139
			67600	6890	1.02				64100	6530	1.02	60 -	6205	- 29	B-105	B-121	B-140
			68900	7030	1.30				65400	6660	1.30	60 -	6215	- 29	B-105	B-121	B-140
			73100	7450	1.67				69300	7070	1.67	60 -	6225	- 29	B-106	B-122	B-141

1. Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
2. Motor slippage may affect n₁ and n₂. Refer to technical data for details.
3. CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
4. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
5. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

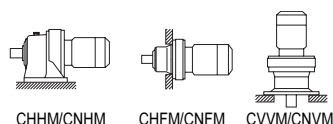
Selection Tables Gearmotors



45 kW		n ₁ : Motor Speed			
		Hz	50Hz		60Hz
		P	4	6	4 6
n ₁	r/min		1450	980	1750 1165

50Hz						60Hz					Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF	Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM	
r/min	N·m	kgf·m	N	kgf	r/min	N·m	kgf·m	N	kgf				CHHM	CHFM	CVVM	
46.7	8750	892	69500	7080	55.5	7360	750	66200	6750	1.22	606 -	6205	- 21	B-105	B-121	B-140
			71000	7240				1.67	606 -	6215	- 21	B-105	B-121	B-140		
			75100	7660				2.01	606 -	6225	- 21	B-106	B-122	B-141		
			94100	9590				2.17	606 -	6235	- 21	B-106	B-122	B-141		
33.8	12100	1230	76800	7830	40.2	10200	1040	73200	7460	1.24	606 -	6215	- 29	B-105	B-121	B-140
			102000	10400				1.67	606 -	6235	- 29	B-106	B-122	B-141		
			114000	11700				2.09	606 -	6245	- 29	B-107	B-123	B-142		
33.7	12100	1230	77200	7870	40.7	10000	1020	73300	7470	1.00	60 -	6215	- 43	B-105	B-121	B-140
			82000	8360				1.26	60 -	6225	- 43	B-106	B-122	B-141		
22.8	17900	1830	114000	11600	27.1	15100	1540	108000	11100	1.21	606 -	6235	- 43	B-106	B-122	B-141
			128000	13100				1.67	606 -	6245	- 43	B-107	B-123	B-142		
			157000	16000				1.98	606 -	6255	- 43	B-107	B-123	B-142		
			193000	19700				2.51	606 -	6265	- 43	B-107	B-123	B-142		
16.6	24600	2510	139000	14100	19.7	20700	2110	132000	13500	1.25	606 -	6245	- 59	B-107	B-123	B-142
			210000	21400				2.09	606 -	6265	- 59	B-107	B-123	B-142		
12.0	32300	3290	190000	19400	14.5	26700	2730	180000	18400	1.03	60 -	6255DB	- 121	B-115	B-132	B-151
			234000	23800				1.13	60 -	6265DA	- 121	B-115	B-132	B-151		
11.3	36200	3690	235000	23900	13.4	30500	3110	223000	22800	1.19	606 -	6265	- 87	B-107	B-123	B-142
8.79	44000	4490	250000	25500	10.6	36500	3720	237000	24200	1.13	60 -	6265DA	- 165	B-115	B-132	B-151
7.44	52000	5300	262000	26700	8.97	43100	4390	248000	25300	1.01	60 -	6265DA	- 195	B-115	B-132	B-151
6.28	46000	4690	276000	28100	7.58	46000	4690	265000	27000	*1	60 -	6265DA	- 231	B-115	B-132	B-151
4.55	85100	8670	68200	6950	5.49	70500	7190	248000	25300	*1	60 -	6275DA	- 319	B-115	-	B-151
			248000	25300				0.97	60 -	6275DA	- 319	B-115	-	B-151		

GEARMOTORS

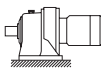
Selection Tables
45 kW, 55 kW

55 kW		n ₁ : Motor Speed			
		Hz	50Hz		60Hz
		P	4	6	4 6
n ₁	r/min		1450	980	1750 1165

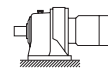
50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout		Alloeable Radial Load Pro		SF	Output Speed n ₂	Output Torque Tout		Alloeable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
132	3790	386	51700	5270	1.09	159	3140	320	49000	5000	1.09	75 -	6205	- 11	B-105	B-121	B-140
			52400	5340	1.37				49700	5060	1.37	75 -	6215	- 11	B-105	B-121	B-140
			55600	5670	1.81				52700	5370	1.81	75 -	6225	- 11	B-106	B-122	B-141
96.7	5160	526	55500	5660	1.09	117	4280	436	52600	5360	1.09	75 -	6205	- 15	B-105	B-121	B-140
			56200	5730	1.37				53300	5430	1.37	75 -	6215	- 15	B-105	B-121	B-140
			60000	6120	1.81				56900	5800	1.81	75 -	6225	- 15	B-106	B-122	B-141
89.1	5600	571	57800	5900	1.09	106	4710	480	55100	5610	1.09	756 -	6205	- 11 *2	-	-	-
			58600	5970	1.37				55800	5690	1.37	756 -	6215	- 11 *2	-	-	-
			62200	6340	1.81				59300	6040	1.81	756 -	6225	- 11 *2	-	-	-
69.0	7230	737	61900	6310	1.08	83.3	5990	610	58700	5980	1.08	75 -	6205	- 21	B-105	B-121	B-140
			63300	6450	1.37				60000	6120	1.37	75 -	6215	- 21	B-105	B-121	B-140
			66900	6820	1.71				63400	6470	1.71	75 -	6225	- 21	B-106	B-122	B-141
65.3	7640	779	62000	6320	1.09	77.7	6420	655	59000	6020	1.09	756 -	6205	- 15 *2	-	-	-
			62800	6400	1.37				59800	6100	1.37	756 -	6215	- 15 *2	-	-	-
			67100	6840	1.81				63900	6510	1.81	756 -	6225	- 15 *2	-	-	-

- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*1" in the SF column. They cannot be operated with 100% motor rating.

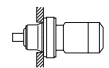
Selection Tables Gearmotors

55 kW		n ₁ : Motor Speed														
		Hz		50Hz		60Hz										
		P		4	6	4	6									
		n ₁ r/min		1450	980	1750	1165									

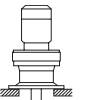
50Hz						60Hz						Nomenclature			Page of Dimension Sheet							
Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF	Output Speed n ₂	Output Torque T _{out}	Allowable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM							
r/min	N·m	kgf·m	N	kgf	r/min	N·m	kgf·m	N	kgf				CHHM	CHFM	CVVM							
50.0	9980	1020	68500	6980	1.06	60.3	8270	843	65000	6630	1.06	75 -	6215	- 29	B-105	B-121	B-140					
			72700	7410					1.37	69000		7030	1.37	75 -	6225	- 29	B-106	B-122	B-141			
			70500	7190					1.17	67200		6860	1.37	756 -	6215	- 21 *2	-	-	-			
46.7	10700	1090	74700	7610	1.38	55.5	8990	917	71200	7250	1.65	756 -	6225	- 21 *2	-	-	-					
			93700	9550					1.77	89200		9090	1.77	756 -	6235	- 21	B-106	B-122	B-141			
			80900	8240					1.02	77200		7870	1.21	756 -	6225	- 29 *2	-	-	-			
114000	11600	1.71	40.2	12400	1270	108000	11100	1.71		756 -	6245	- 29		B-107	B-123	B-142						
141000	14300	2.15	134000	13600	2.15	756 -	6255	- 29		B-107	B-123	B-142										
33.8	14800	1510	81400	8290	1.03	40.7	12300	1250	77300	7880	1.03	75 -	6225	- 43	B-106	B-122	B-141					
22.8	21900	2230	127000	13000					1.18	27.1		18400	1880	121000	12400	1.37	756 -	6245	- 43	B-107	B-123	B-142
			157000	16000					1.42					149000	15200	1.62	756 -	6255	- 43	B-107	B-123	B-142
			192000	19600	2.05	183000	18700	2.05	756 -		6265			- 43	B-107	B-123	B-142					
16.6	30000	3060	170000	17400	1.03	19.7	25300	2580	162000	16500	1.18	756 -	6255	- 59	B-107	B-123	B-142					
			209000	21400					1.53	199000		20300	1.71	756 -	6265	- 59	B-107	B-123	B-142			
			248000	25300					2.27	248000		25300	2.40	756 -	6275	- 59 *2	-	-	-			



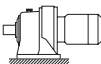
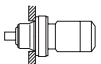
CHHM/CNHM



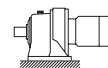
CHFM/CNFM



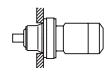
CVVM/CNVVM

75 kW		n ₁ : Motor Speed														
		Hz		50Hz		60Hz										
		P		4	6	4	6									
		n ₁ r/min		1450	980	1750	1165									

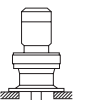
50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque T _{out}	Alloable Radial Load Pro		SF	Output Speed n ₂	Output Torque T _{out}	Alloable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNFM	CNFM	CNVM		
r/min	N·m	kgf·m	N		kgf	r/min	N·m	kgf·m		N	kgf				CHHM	CHFM	CVVM
132	5160	526	55300	5640	1.33	159	4280	436	52400	5340	1.33	100 -	6225	- 11 *2	-	-	-
96.7	7040	718	59600	6070	1.33	117	5830	595	56500	5760	1.33	100 -	6225	- 15 *2	-	-	-
89.1	7640	779	77600	7910	1.51	106	6420	655	73900	7530	1.51	1006 -	6235	- 11 *2	-	-	-
			86500	8810	1.76				82300	8390	1.76	1006 -	6245	- 11 *2	-	-	-
69.0	9850	1000	66300	6760	1.26	83.3	8170	832	62900	6420	1.26	100 -	6225	- 21 *2	-	-	-
65.3	10400	1060	82900	8450	1.51	77.7	8760	893	78900	8050	1.51	1006 -	6235	- 15 *2	-	-	-
			92800	9460	1.76				88300	9000	1.76	1006 -	6245	- 15 *2	-	-	-
50.0	13600	1390	71800	7320	1.00	60.3	11300	1150	68200	6960	1.00	100 -	6225	- 29 *2	-	-	-
46.7	14600	1490	92800	9460	1.30	55.5	12300	1250	88500	9020	1.30	1006 -	6235	- 21 *2	-	-	-
			104000	10600	1.60				98700	10100	1.60	1006 -	6245	- 21 *2	-	-	-
			127000	12900	2.01				121000	12300	2.01	1006 -	6255	- 21 *2	-	-	-
33.8	20100	2050	113000	11500	1.26	40.2	16900	1730	108000	11000	1.26	1006 -	6245	- 29 *2	-	-	-
			139000	14200	1.57				133000	13500	1.57	1006 -	6255	- 29 *2	-	-	-
			172000	17500	2.12				163000	16600	2.12	1006 -	6265	- 29 *2	-	-	-
22.8	29900	3040	155000	15800	1.04	27.1	25100	2560	148000	15100	1.19	1006 -	6255	- 43 *2	-	-	-
			191000	19500	1.51				182000	18600	1.51	1006 -	6265	- 43 *2	-	-	-
			248000	25300	2.01				248000	25300	2.01	1006 -	6275	- 43 *2	-	-	-
16.6	41000	4180	208000	21200	1.12	19.7	34500	3510	198000	20200	1.26	1006 -	6265	- 59 *2	-	-	-
			248000	25300	1.67				248000	25300	1.76	1006 -	6275	- 59 *2	-	-	-



CHHM/CNHM



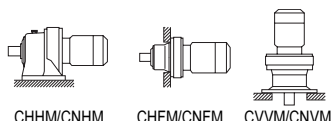
CHFM/CNFM



CVVM/CNVVM

1. Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
2. Motor slippage may affect n₁ and n₂. Refer to technical data for details.
3. CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
4. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
5. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

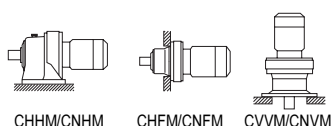
Selection Tables Gearmotors



90 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHH	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf							
89.1	9170	934	77300	7880	1.26	106	7710	786	73600	7500	1.26	1256-	6235	- 11 *2	-	-	-
			86100	8780	1.47				82000	8360	1.47	1256-	6245	- 11 *2	-	-	-
			106000	10800	1.68				101000	10300	1.68	1256-	6255	- 11 *2	-	-	-
			130000	13200	1.94				123000	12600	1.94	1256-	6265	- 11 *2	-	-	-
65.3	12500	1270	82400	8400	1.26	77.7	10500	1070	78500	8010	1.26	1256-	6235	- 15 *2	-	-	-
			92300	9410	1.47				87900	8960	1.47	1256-	6245	- 15 *2	-	-	-
			113000	11600	1.68				108000	11000	1.68	1256-	6255	- 15 *2	-	-	-
			139000	14100	1.94				132000	13400	1.94	1256-	6265	- 15 *2	-	-	-
46.7	17500	1780	92200	9400	1.08	55.5	14700	1500	88000	8970	1.08	1256-	6235	- 21 *2	-	-	-
			103000	10500	1.33				98200	10000	1.33	1256-	6245	- 21 *2	-	-	-
			126000	12900	1.68				120000	12300	1.68	1256-	6255	- 21 *2	-	-	-
			155000	15800	1.91				147000	15000	1.91	1256-	6265	- 21 *2	-	-	-
33.8	24200	2460	112000	11400	1.05	40.2	20300	2070	107000	10900	1.05	1256-	6245	- 29 *2	-	-	-
			139000	14100	1.31				132000	13500	1.31	1256-	6255	- 29 *2	-	-	-
			171000	17400	1.77				163000	16600	1.77	1256-	6265	- 29 *2	-	-	-
22.8	35800	3650	190000	19400	1.26	27.1	30100	3070	181000	18500	1.26	1256-	6265	- 43 *2	-	-	-
			248000	25300	1.68				248000	25300	1.68	1256-	6275	- 43 *2	-	-	-
16.6	49200	5010	248000	25300	1.39	19.7	41400	4220	248000	25300	1.47	1256-	6275	- 59 *2	-	-	-

GEARMOTORS

Selection Tables
90 kW, 110 kW

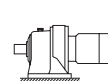
110 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n ₁	r/min	1450	980	1750	1165

50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Alloeable Radial Load Pro		SF		Output Speed n ₂	Output Torque Tout	Alloeable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHH	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf							
89.1	11200	1140	85700	8730	1.20	106	9420	961	81600	8320	1.20	1506-	6245	- 11 *2	-	-	-
			105000	10700	1.37				100000	10200	1.37	1506-	6255	- 11 *2	-	-	-
65.3	15300	1560	91700	9350	1.20	77.7	12800	1310	87500	8910	1.20	1506-	6245	- 15 *2	-	-	-
			113000	11500	1.37				108000	11000	1.37	1506-	6255	- 15 *2	-	-	-
46.7	21400	2180	102000	10400	1.09	55.5	18000	1830	97500	9940	1.09	1506-	6245	- 21 *2	-	-	-
			126000	12800	1.37				120000	12200	1.37	1506-	6255	- 21 *2	-	-	-
33.8	29500	3010	138000	14000	1.07	40.2	24800	2530	131000	13400	1.07	1506-	6255	- 29 *2	-	-	-
			170000	17300	1.45				162000	16500	1.45	1506-	6265	- 29 *2	-	-	-
22.8	43800	4460	189000	19300	1.03	27.1	36800	3750	180000	18400	1.03	1506-	6265	- 43 *2	-	-	-

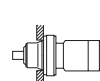
- "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "*" in the SF column. They cannot be operated with 100% motor rating.

Selection Tables Gearmotors

132 kW	n ₁ : Motor Speed				
	Hz		50Hz		60Hz
	P		4	6	4 6
	n ₁	r/min	1450	980	1750 1165



CHHM/CNHM



CHFV/CNFM



CVVM/CNVM

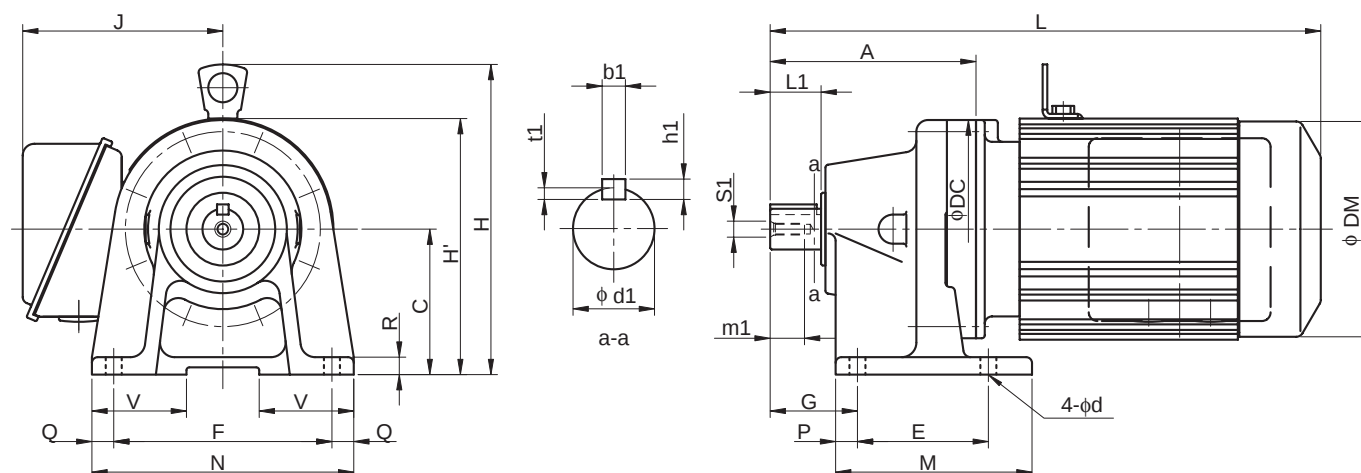
50Hz						60Hz						Nomenclature			Page of Dimension Sheet		
Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Output Speed n ₂	Output Torque Tout	Allowable Radial Load Pro		SF		Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM
89.1	13400	1370	105000	10700	1.14	106	11300	1150	99900	10200	1.14	1756-	6255	- 11 *2	-	-	-
			129000	13100	1.33				123000	12500	1.33	1756-	6265	- 11 *2	-	-	-
65.3	18300	1870	112000	11500	1.14	77.7	15400	1570	107000	10900	1.14	1756-	6255	- 15 *2	-	-	-
			138000	14000	1.33				131000	13400	1.33	1756-	6265	- 15 *2	-	-	-
46.7	25700	2620	125000	12700	1.14	55.5	21600	2200	119000	12100	1.14	1756-	6255	- 21 *2	-	-	-
			154000	15700	1.30				146000	14900	1.30	1756-	6265	- 21 *2	-	-	-
33.8	35400	3610	169000	17200	1.20	40.2	29800	3040	161000	16400	1.20	1756-	6265	- 29 *2	-	-	-

1. Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
2. Motor slippage may affect n₁ and n₂. Refer to technical data for details.
3. CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
4. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
5. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.
6. "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
7. Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
8. "*3" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
9. Maintain torque load during operation within "Output torque" in the table for models with "**1" in the SF column. They cannot be operated with 100% motor rating.

B CYCLO® GEARMOTORS

3. Dimension Tables

Dimension Tables Gearmotors (Universal Direction, Foot-Mount)

CNHM^{Note 1} - 606□ to 609□

Frame size Note 4	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 6						
														d1	L1	b1	h1	t1	S1	m1
606□	92	80	110	60	120	41	84	144	12	12	10	35	9	14	25	5	5	3	M5	16
607□	98	80	110	60	120	47	84	144	12	12	10	35	9	18	30	6	6	3.5	M6	16
608□	129	90	134	75	120	52	99	144	12	12	13	37	9	22	35	6	6	3.5	M6	16
609□	142	100	150	90	150	60	135	180	15	15	12	40	11	28	35	8	7	4	M8	20

Model Note 4, 5	Motor		Standard							With Brake						
	kW	P	L	H	H'	J	DM	W(kg)		L	H	H'	J	DM	W(kg)	
CNHM01 - 606□ - (B) - Ratio	0.1	4	254	-	140	130	119	7		261	-	138	130	124	8	
CNHM02 - 606□ - (B) - Ratio	0.2	4	272	-	138	130	124	8		300	-	138	130	124	9	
CNHM03 - 606□ - (B) - Ratio	0.25	4	272	-	138	130	124	8		300	-	138	130	124	9	
CNHM01 - 607□ - (B) - Ratio	0.1	4	260	-	140	130	119	7		267	-	138	130	124	8	
CNHM02 - 607□ - (B) - Ratio	0.2	4	278	-	138	130	124	8		306	-	138	130	124	9	
CNHM03 - 607□ - (B) - Ratio	0.25	4	278	-	138	130	124	8		306	-	138	130	124	9	
CNHM05 - 607□ - (B) - Ratio	0.4	4	294	-	138	130	124	9		326	-	138	130	124	10	
CNHM01 - 608□ - (B) - Ratio	0.1	4	286	-	157	130	119	10		293	-	157	130	124	11	
CNHM02 - 608□ - (B) - Ratio	0.2	4	304	-	157	130	124	11		332	-	157	130	124	12	
CNHM03 - 608□ - (B) - Ratio	0.25	4	304	-	157	130	124	11		332	-	157	130	124	12	
CNHM05 - 608□ - (B) - Ratio	0.4	4	320	-	157	130	124	13		352	-	157	130	124	14	
CNHM08 - 608□ - (B) - Ratio	0.55	4	361	203	-	140	148	17		404	203	-	140	148	18	
CNHM1 - 608□ - (B) - Ratio	0.75	4	361	203	-	140	148	17		404	203	-	140	148	18	
CNHM01 - 609□ - (B) - Ratio	0.1	4	304	-	175	130	119	12		311	-	175	130	124	14	
CNHM02 - 609□ - (B) - Ratio	0.2	4	322	-	175	130	124	13		350	-	175	130	124	15	
CNHM03 - 609□ - (B) - Ratio	0.25	4	322	-	175	130	124	13		350	-	175	130	124	15	
CNHM05 - 609□ - (B) - Ratio	0.4	4	338	-	175	130	124	14		370	-	175	130	124	16	
CNHM08 - 609□ - (B) - Ratio	0.55	4	379	213	-	140	148	18		422	213	-	140	148	21	
CNHM1 - 609□ - (B) - Ratio	0.75	4	379	213	-	140	148	18		422	213	-	140	148	21	
CNHM1H - 609□ - (B) - Ratio	1.1	4	412	220	-	145	160	21		474	220	-	145	160	26	
CNHM2 - 609□ - (B) - Ratio	1.5	4	412	220	-	145	160	21		474	220	-	145	160	26	

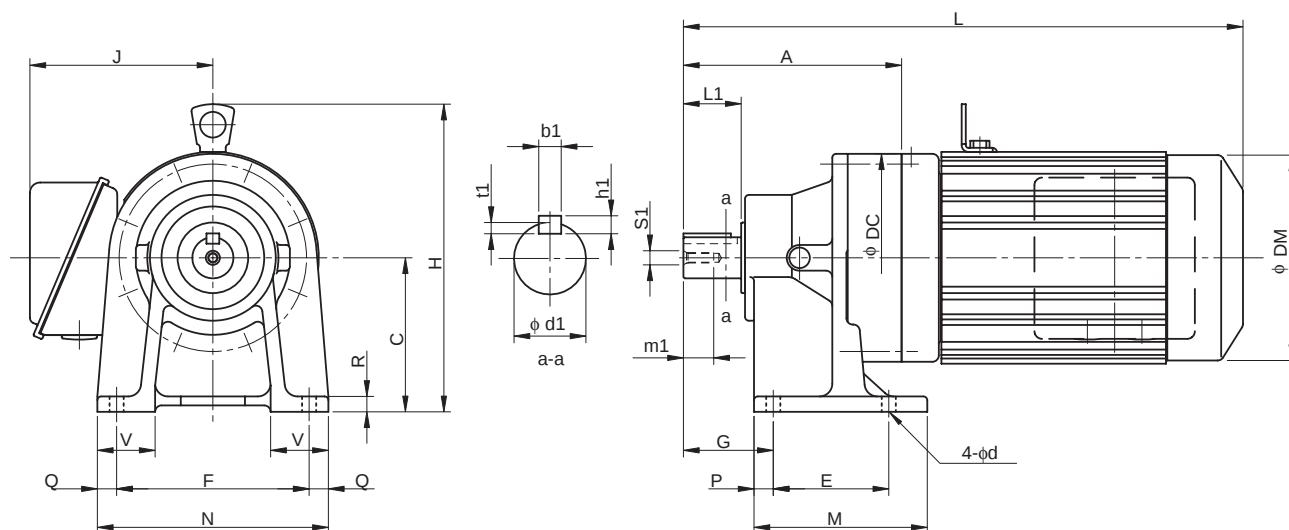
Note: 1. □ indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

Dimension Tables Gearmotors (Universal Direction, Foot-Mount)

CNHM^{Note 1} - 610□ to 612□



GEARMOTORS

Dimension Tables
CNHM

Frame size Note 4	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 6						
														d1	L1	b1	h1	t1	S1	m1
610□	156	100	150	90	150	60	135	180	15	15	12	40	11	28	35	8	7	4	M8	20
611□	170	120	162	90	150	70	135	180	15	15	12	45	11	32	45	10	8	5	M8	20
612□	186	120	204	115	190	82	155	230	20	20	15	55	14	38	55	10	8	5	M8	20

Model Note 4, 5	Motor		Standard						With Brake					
	kW	P	L	H	J	DM	W(kg)		L	H	J	DM	W(kg)	
CNHM02 - 610□ - (B) - Ratio	0.2	4	336	207	130	124	18		364	207	130	124	20	
CNHM03 - 610□ - (B) - Ratio	0.25	4	336	207	130	124	18		364	207	130	124	20	
CNHM05 - 610□ - (B) - Ratio	0.4	4	352	207	130	124	19		384	207	130	124	21	
CNHM08 - 610□ - (B) - Ratio	0.55	4	393	213	140	148	23		436	213	140	148	26	
CNHM1 - 610□ - (B) - Ratio	0.75	4	393	213	140	148	23		436	213	140	148	26	
CNHM1H - 610□ - (B) - Ratio	1.1	4	426	220	145	160	27		488	220	145	160	32	
CNHM2 - 610□ - (B) - Ratio	1.5	4	426	220	145	160	27		488	220	145	160	32	
CNHM3 - 610□ - (B) - Ratio	2.2	4	446	226	152	173	31		509	226	152	173	37	
CNHM05 - 611□ - (B) - Ratio	0.4	4	363	236	130	124	20		394	236	130	124	21	
CNHM08 - 611□ - (B) - Ratio	0.55	4	403	236	140	148	23		452	236	140	148	26	
CNHM1 - 611□ - (B) - Ratio	0.75	4	403	236	140	148	23		452	236	140	148	26	
CNHM1H - 611□ - (B) - Ratio	1.1	4	436	240	145	160	26		493	240	145	160	31	
CNHM2 - 611□ - (B) - Ratio	1.5	4	436	240	145	160	26		493	240	145	160	31	
CNHM3 - 611□ - (B) - Ratio	2.2	4	456	246	152	173	30		519	246	152	173	36	
CNHM4 - 611□ - (B) - Ratio	3.0	4	491	266	168	212	40		563	266	168	212	50	
CNHM5 - 611□ - (B) - Ratio	3.7	4	491	266	168	212	40		563	266	168	212	50	
CNHM05 - 612□ - (B) - Ratio	0.4	4	387	257	130	124	30		419	257	130	124	32	
CNHM08 - 612□ - (B) - Ratio	0.55	4	423	233	140	148	32		466	233	140	148	35	
CNHM1 - 612□ - (B) - Ratio	0.75	4	423	233	140	148	32		466	233	140	148	35	
CNHM1H - 612□ - (B) - Ratio	1.1	4	456	240	145	160	36		518	240	145	160	41	
CNHM2 - 612□ - (B) - Ratio	1.5	4	456	240	145	160	36		518	240	145	160	41	
CNHM3 - 612□ - (B) - Ratio	2.2	4	476	246	152	173	40		539	246	152	173	47	
CNHM4 - 612□ - (B) - Ratio	3.0	4	499	266	168	212	50		571	266	168	212	60	
CNHM5 - 612□ - (B) - Ratio	3.7	4	499	266	168	212	50		571	266	168	212	60	
CNHM8 - 612□ - (B) - Ratio	5.5	4	543	266	168	212	57		615	266	168	212	67	

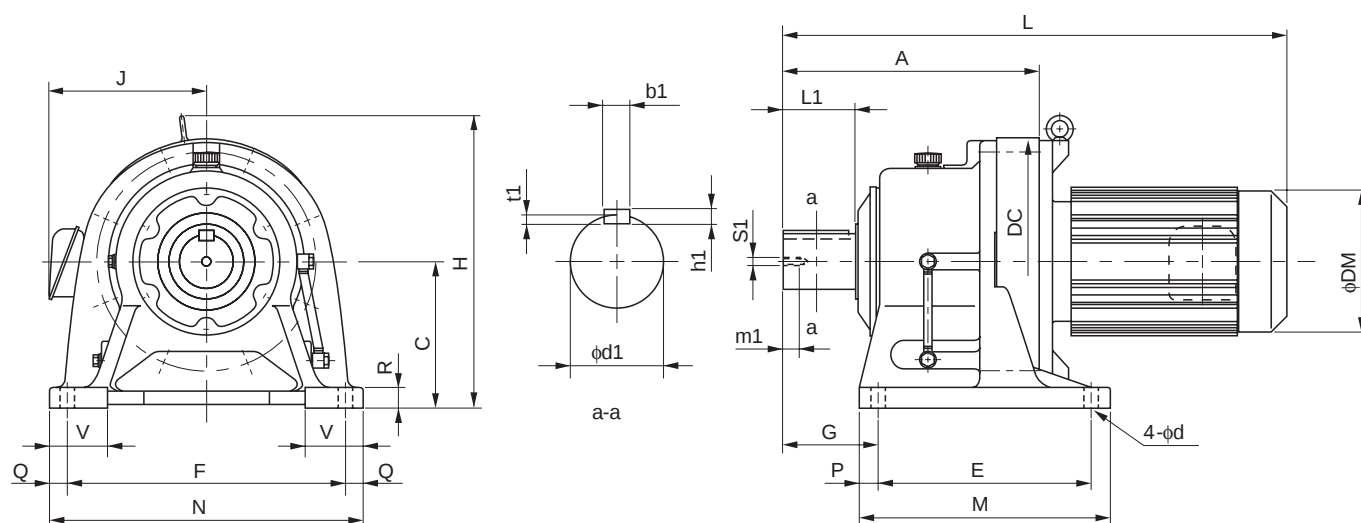
Note: 4. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

5. "B" after the frame size indicates models equipped with brake.

6. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

7. Dimensions in above drawings are subject to change without notice.

Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM^{Note 1} - 613□ to 614□

Frame size Note 4	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 6						
														d1	L1	b1	h1	t1	S1	m1
613□	240	150	230	145	290	100	195	330	25	20	22	65	18	50	70	14	9	5.5	M10	18
614□	260	150	230	145	290	120	195	330	25	20	22	65	18	50	90	14	9	5.5	M10	18

Model Note 4, 5	Motor		Standard						With Brake				
	kW	P	L	H	J	DM	W(kg)		L	H	J	DM	W(kg)
CHHM08 - 613□ - (B) - Ratio	0.55	4	477	265	140	148	51		520	265	140	148	54
CHHM1 - 613□ - (B) - Ratio	0.75	4	477	265	140	148	51		520	265	140	148	54
CHHM1H - 613□ - (B) - Ratio	1.1	4	510	268	145	160	55		572	268	145	160	60
CHHM2 - 613□ - (B) - Ratio	1.5	4	510	268	145	160	55		572	268	145	160	60
CHHM3 - 613□ - (B) - Ratio	2.2	4	530	274	152	173	58		593	274	152	173	65
CHHM4 - 613□ - (B) - Ratio	3.0	4	553	296	168	212	68		625	296	168	212	78
CHHM5 - 613□ - (B) - Ratio	3.7	4	553	296	168	212	68		625	296	168	212	78
CHHM8 - 613□ - (B) - Ratio	5.5	4	597	296	168	212	75		669	296	168	212	85
CHHM10 - 613□ - (B) - Ratio	7.5	4	620	323	213	251	90		715	323	213	251	108
CHHM15 - 613□ - (B) - Ratio	11	4	680	323	213	251	104		775	323	213	251	121
CHHM1 - 614□ - (B) - Ratio	0.75	4	497	268	140	148	52		540	268	140	148	55
CHHM1H - 614□ - (B) - Ratio	1.1	4	530	268	145	160	56		592	268	145	160	61
CHHM2 - 614□ - (B) - Ratio	1.5	4	530	268	145	160	56		592	268	145	160	61
CHHM3 - 614□ - (B) - Ratio	2.2	4	550	274	152	173	59		613	274	152	173	66
CHHM4 - 614□ - (B) - Ratio	3.0	4	573	296	168	212	69		645	296	168	212	79
CHHM5 - 614□ - (B) - Ratio	3.7	4	573	296	168	212	69		645	296	168	212	79
CHHM8 - 614□ - (B) - Ratio	5.5	4	617	296	168	212	76		689	296	168	212	86
CHHM10 - 614□ - (B) - Ratio	7.5	4	640	323	213	251	91		735	323	213	251	109
CHHM15 - 614□ - (B) - Ratio	11	4	700	323	213	251	104		795	323	213	251	122
CHHM20 - 614□ - (B) - Ratio	15	4	790	358	261	324	156		880	321	261	324	190

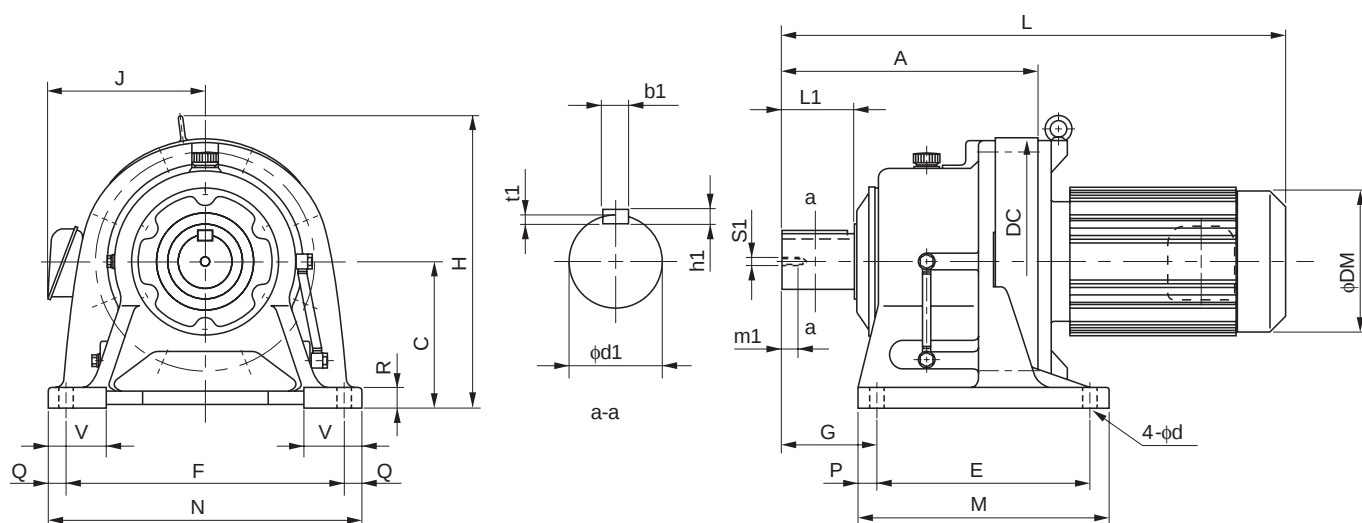
Note: 1. □ indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM^{Note 1} - 616□ to 617□



GEARMOTORS

Dimension Tables
CHHM

Frame size Note 4	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 6						
														d1	L1	b1	h1	t1	S1	m1
616□	308	160	300	150	370	139	238	410	44	20	25	75	18	60	90	18	11	7	M10	18
617□	352	200	340	275	380	125	335	430	30	25	30	80	22	70	90	20	12	7.5	M12	24

Model Note 4, 5	Motor		Standard						With Brake				
	kW	P	L	H	J	DM	W(kg)		L	H	J	DM	W(kg)
CHHM1H - 616□ - (B) - Ratio	1.1	4	583	310	145	160	93		645	310	145	160	99
CHHM2 - 616□ - (B) - Ratio	1.5	4	583	310	145	160	93		645	310	145	160	99
CHHM3 - 616□ - (B) - Ratio	2.2	4	598	310	152	173	96		661	310	152	173	103
CHHM4 - 616□ - (B) - Ratio	3.0	4	621	310	168	212	105		693	310	168	212	116
CHHM5 - 616□ - (B) - Ratio	3.7	4	621	310	168	212	105		693	310	168	212	116
CHHM8 - 616□ - (B) - Ratio	5.5	4	665	310	168	212	112		737	310	168	212	123
CHHM10 - 616□ - (B) - Ratio	7.5	4	693	333	213	251	128		788	333	213	251	146
CHHM15 - 616□ - (B) - Ratio	11	4	753	333	213	251	142		848	333	213	251	160
*CHHM20 - 616□ - (B) - Ratio	15	4	838	368	261	324	195		928	368	261	324	230
*CHHM25 - 616□ - (B) - Ratio	18.5	4	933	368	328	394	267		1098	368	328	394	323
*CHHM30 - 616□ - (B) - Ratio	22	4	933	368	328	394	267		1098	368	328	394	323
CHHM4 - 617□ - (B) - Ratio	3.0	4	680	403	168	212	146		752	403	168	212	157
CHHM5 - 617□ - (B) - Ratio	3.7	4	680	403	168	212	146		752	403	168	212	157
CHHM8 - 617□ - (B) - Ratio	5.5	4	724	403	168	212	153		796	403	168	212	164
CHHM10 - 617□ - (B) - Ratio	7.5	4	742	403	213	251	168		837	403	213	251	187
CHHM15 - 617□ - (B) - Ratio	11	4	802	403	213	251	182		897	403	213	251	201
CHHM20 - 617□ - (B) - Ratio	15	4	882	413	259	324	236		987	413	259	324	271
CHHM25 - 617□ - (B) - Ratio	18.5	4	977	428	328	394	304		1142	428	328	394	360
CHHM30 - 617□ - (B) - Ratio	22	4	977	428	328	394	304		1142	428	328	394	360
CHHM40 - 617□ - (B) - Ratio	30	4	977	428	328	394	321		1142	428	328	394	369

"*" indicates models with bottom level of the motor lower than the reducer base.

Refer to pages B-152 and B-153 for center height options.

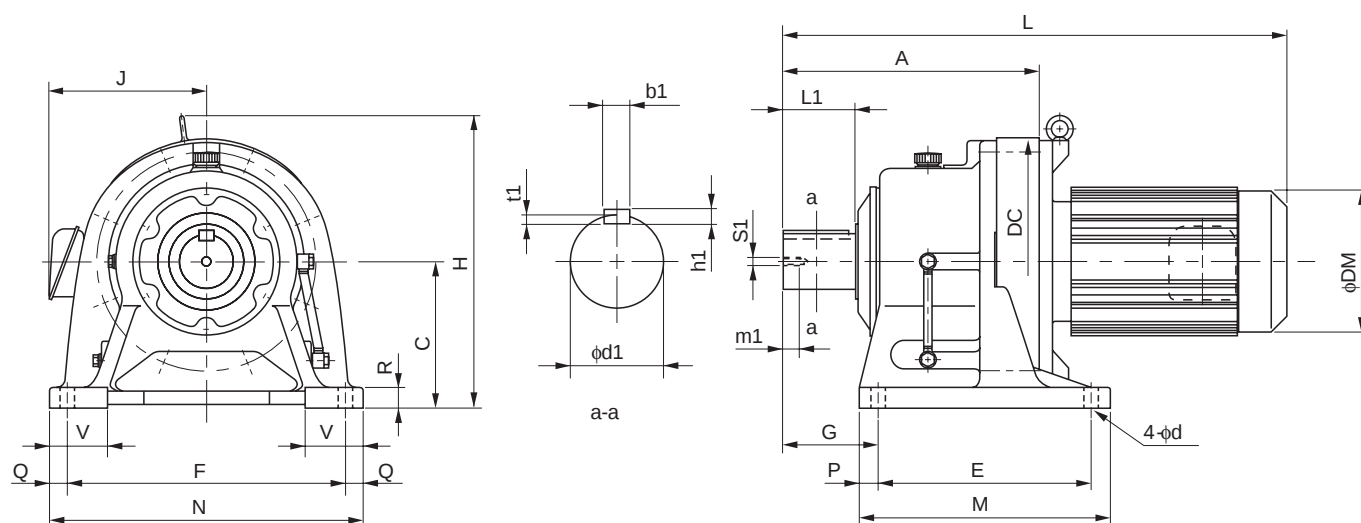
Note: 4. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

5. "B" after the frame size indicates models equipped with brake.

6. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

7. Dimensions in above drawings are subject to change without notice.

Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM^{Note 1} - 618□ to 619□

Frame size Note 4	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 6						
														d1	L1	b1	h1	t1	S1	m1
618□	389	220	370	320	420	145	380	470	30	25	30	85	22	80	110	22	14	9	M12	24
619□	465	250	430	380	480	170	440	530	30	25	35	90	26	95	135	25	14	9	M20	34

Model Note 4, 5	Motor		Standard					With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)
CHHM4 - 618□ - (B) - Ratio	3.0	4	717	438	168	212	184	789	438	168	212	194
CHHM5 - 618□ - (B) - Ratio	3.7	4	717	438	168	212	184	789	438	168	212	194
CHHM8 - 618□ - (B) - Ratio	5.5	4	761	438	168	212	192	833	438	168	212	202
CHHM10 - 618□ - (B) - Ratio	7.5	4	779	438	213	251	207	874	438	213	251	225
CHHM15 - 618□ - (B) - Ratio	11	4	839	438	213	251	221	934	438	213	251	239
CHHM20 - 618□ - (B) - Ratio	15	4	919	438	261	324	281	1024	438	261	324	310
CHHM25 - 618□ - (B) - Ratio	18.5	4	1014	448	328	394	347	1179	448	328	394	398
CHHM30 - 618□ - (B) - Ratio	22	4	1014	448	328	394	347	1179	448	328	394	398
CHHM40 - 618□ - (B) - Ratio	30	4	1014	448	328	394	364	1179	448	328	394	407
CHHM50 - 618□ - (B) - Ratio	37	4	1129	481	328	394	412	1344	481	328	394	509
CHHM60 - 618□ - (B) - Ratio	45	4	1129	481	328	394	412	1344	481	328	394	509
CHHM8 - 619□ - (B) - Ratio	5.5	4	857	511	168	212	266	929	511	168	212	276
CHHM10 - 619□ - (B) - Ratio	7.5	4	870	511	213	251	279	965	511	213	251	297
CHHM15 - 619□ - (B) - Ratio	11	4	930	511	213	251	293	1025	511	213	251	311
CHHM20 - 619□ - (B) - Ratio	15	4	995	467	261	324	346	1100	467	261	324	381
CHHM25 - 619□ - (B) - Ratio	18.5	4	1090	511	328	394	422	1255	511	328	394	467
CHHM256 - 619□ - (B) - Ratio	18.5	6	1090	511	328	394	437	1255	511	328	394	480
CHHM30 - 619□ - (B) - Ratio	22	4	1090	511	328	394	422	1255	511	328	394	467
CHHM40 - 619□ - (B) - Ratio	30	4	1090	511	328	394	437	1255	511	328	394	480
CHHM406 - 619□ - (B) - Ratio	30	6	1205	511	328	394	475	1420	511	328	394	572
CHHM50 - 619□ - (B) - Ratio	37	4	1205	511	328	394	475	1420	511	328	394	572
CHHM506 - 619□ - (B) - Ratio	37	6	1205	511	328	394	475	1420	511	328	394	572
CHHM60 - 619□ - (B) - Ratio	45	4	1205	511	328	394	475	1420	511	328	394	572

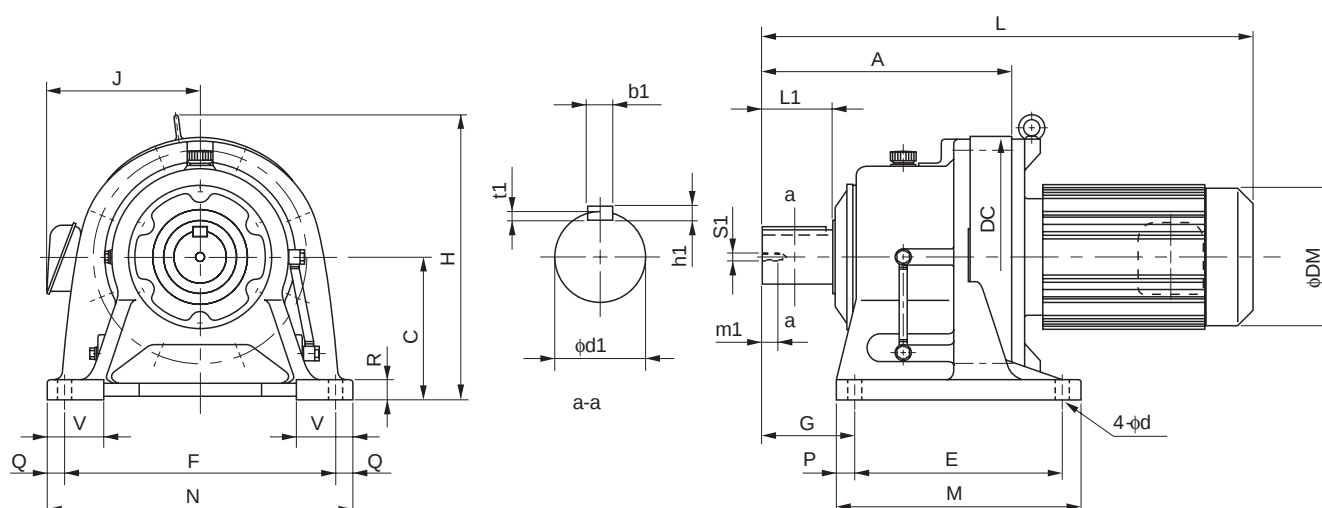
Note: 1. □ indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM^{Note 1} - 6205 to 6215



GEARMOTORS

Dimension Tables
CHHM

Frame size	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 6						
														d1	L1	b1	h1	t1	S1	m1
6205	502	250	448	360	440	215	440	530	40	45	35	100	26	100	165	28	16	10	M20	34
6215	526	265	485	395	480	210	475	580	40	50	40	110	26	110	165	28	16	10	M20	34

Model Note 5	Motor		Standard							With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)	L	H
CHHM15 - 6205 - (B) - Ratio	11	4	972	530	213	251	313	1067	530	213	251	332	1067	530
CHHM20 - 6205 - (B) - Ratio	15	4	1042	530	261	324	367	1147	530	261	324	404	1147	530
CHHM206 - 6205 - (B) - Ratio	15	6	1127	530	328	394	438	1292	530	328	394	484	1292	530
CHHM25 - 6205 - (B) - Ratio	18.5	4	1127	530	328	394	438	1292	530	328	394	488	1292	530
CHHM30 - 6205 - (B) - Ratio	22	4	1127	530	328	394	438	1292	530	328	394	488	1292	530
CHHM306 - 6205 - (B) - Ratio	22	6	1127	530	328	394	451	1292	530	328	394	501	1292	530
CHHM40 - 6205 - (B) - Ratio	30	4	1127	530	328	394	451	1292	530	328	394	501	1292	530
CHHM406 - 6205 - (B) - Ratio	30	6	1242	530	328	394	489	1457	530	328	394	588	1457	530
CHHM50 - 6205 - (B) - Ratio	37	4	1242	530	328	394	489	1457	530	328	394	588	1457	530
CHHM506 - 6205 - (B) - Ratio	37	6	1242	530	328	394	489	1457	530	328	394	588	1457	530
CHHM60 - 6205 - (B) - Ratio	45	4	1242	530	328	394	489	1457	530	328	394	588	1457	530
CHHM606 - 6205 - (B) - Ratio	45	6	1297	575	378	484	582	-	-	-	-	-	-	-
CHHM75 - 6205 - (B) - Ratio	55	4	1297	575	378	484	582	-	-	-	-	-	-	-
CHHM15 - 6215 - (B) - Ratio	11	4	996	575	213	251	395	1091	575	213	251	414	1091	575
CHHM20 - 6215 - (B) - Ratio	15	4	1066	575	261	324	450	1171	575	261	324	486	1171	575
CHHM206 - 6215 - (B) - Ratio	15	6	1151	575	328	394	515	1316	575	328	394	565	1316	575
CHHM25 - 6215 - (B) - Ratio	18.5	4	1151	575	328	394	515	1316	575	328	394	565	1316	575
CHHM256 - 6215 - (B) - Ratio	18.5	6	1151	575	328	394	528	1316	575	328	394	578	1316	575
CHHM30 - 6215 - (B) - Ratio	22	4	1151	575	328	394	515	1316	575	328	394	565	1316	575
CHHM306 - 6215 - (B) - Ratio	22	6	1151	575	328	394	528	1316	575	328	394	578	1316	575
CHHM40 - 6215 - (B) - Ratio	30	4	1151	575	328	394	528	1316	575	328	394	578	1316	575
CHHM406 - 6215 - (B) - Ratio	30	6	1266	575	328	394	566	1481	575	328	394	666	1481	575
CHHM50 - 6215 - (B) - Ratio	37	4	1266	575	328	394	566	1481	575	328	394	666	1481	575
CHHM506 - 6215 - (B) - Ratio	37	6	1266	575	328	394	566	1481	575	328	394	666	1481	575
CHHM60 - 6215 - (B) - Ratio	45	4	1266	575	328	394	566	1481	575	328	394	666	1481	575
CHHM606 - 6215 - (B) - Ratio	45	6	1321	575	378	484	676	-	-	-	-	-	-	-
CHHM75 - 6215 - (B) - Ratio	55	4	1321	575	378	484	676	-	-	-	-	-	-	-

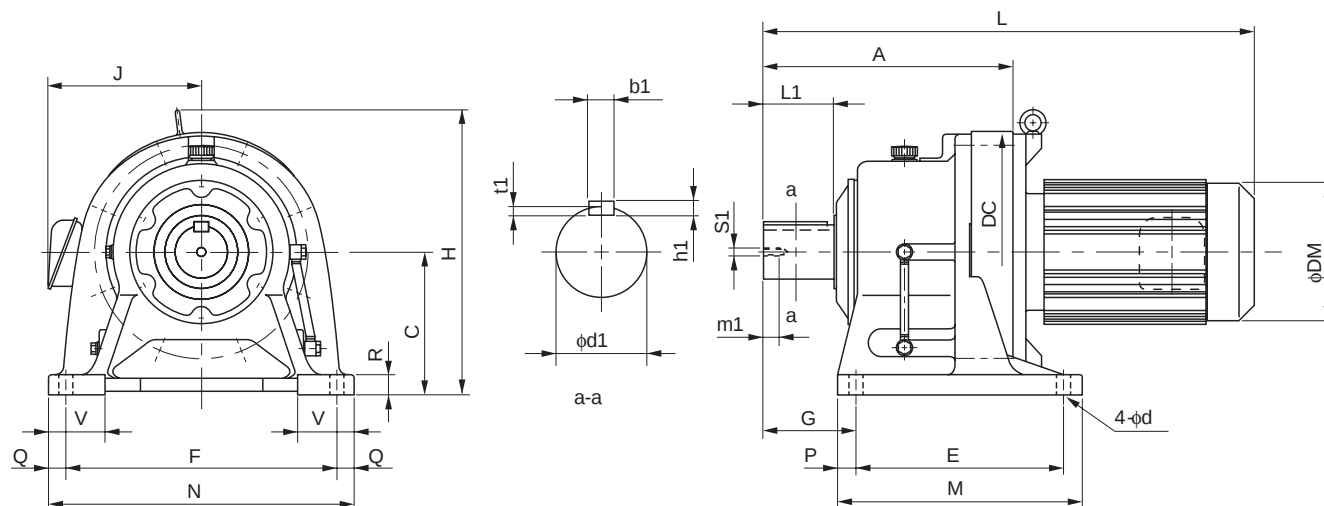
Note: 4. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

5. "B" after the frame size indicates models equipped with brake.

6. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

7. Dimensions in above drawings are subject to change without notice.

Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM^{Note 1} - 6225 to 6235

Frame size	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 5						
														d1	L1	b1	h1	t1	S1	m1
6225	566	280	526	420	540	230	520	620	50	40	40	115	33	120	165	32	18	11	M20	34
6235	628	300	562	460	580	260	560	670	50	45	45	120	33	130	200	32	18	11	M24	41

Model	Note 4	Motor		Standard					With Brake				
		kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)
CHHM206 - 6225	- (B) - Ratio	15	6	1191	610	328	394	600	1356	610	328	394	650
CHHM25 - 6225	- (B) - Ratio	18.5	4	1191	610	328	394	600	1356	610	328	394	650
CHHM256 - 6225	- (B) - Ratio	18.5	6	1191	610	328	394	613	1356	610	328	394	663
CHHM30 - 6225	- (B) - Ratio	22	4	1191	610	328	394	600	1356	610	328	394	650
CHHM306 - 6225	- (B) - Ratio	22	6	1191	610	328	394	613	1356	610	328	394	663
CHHM40 - 6225	- (B) - Ratio	30	4	1191	610	328	394	613	1356	610	328	394	663
CHHM406 - 6225	- (B) - Ratio	30	6	1306	610	328	394	651	1521	610	328	394	751
CHHM50 - 6225	- (B) - Ratio	37	4	1306	610	328	394	651	1521	610	328	394	751
CHHM506 - 6225	- (B) - Ratio	37	6	1306	610	328	394	651	1521	610	328	394	751
CHHM60 - 6225	- (B) - Ratio	45	4	1306	610	328	394	651	1521	610	328	394	751
CHHM606 - 6225	- (B) - Ratio	45	6	1361	610	378	484	750	-	-	-	-	-
CHHM75 - 6225	- (B) - Ratio	55	4	1361	610	378	484	750	-	-	-	-	-
CHHM206 - 6235	- (B) - Ratio	15	6	1253	667	328	394	698	1448	667	328	394	734
CHHM256 - 6235	- (B) - Ratio	18.5	6	1253	667	328	394	698	1448	667	328	394	748
CHHM306 - 6235	- (B) - Ratio	22	6	1253	667	328	394	698	1448	667	328	394	748
CHHM406 - 6235	- (B) - Ratio	30	6	1368	667	328	394	744	1583	667	328	394	837
CHHM506 - 6235	- (B) - Ratio	37	6	1368	667	328	394	744	1583	667	328	394	837
CHHM606 - 6235	- (B) - Ratio	45	6	1423	667	378	484	833	-	-	-	-	-
CHHM756 - 6235	- (B) - Ratio	55	6	1503	667	378	485	887	-	-	-	-	-

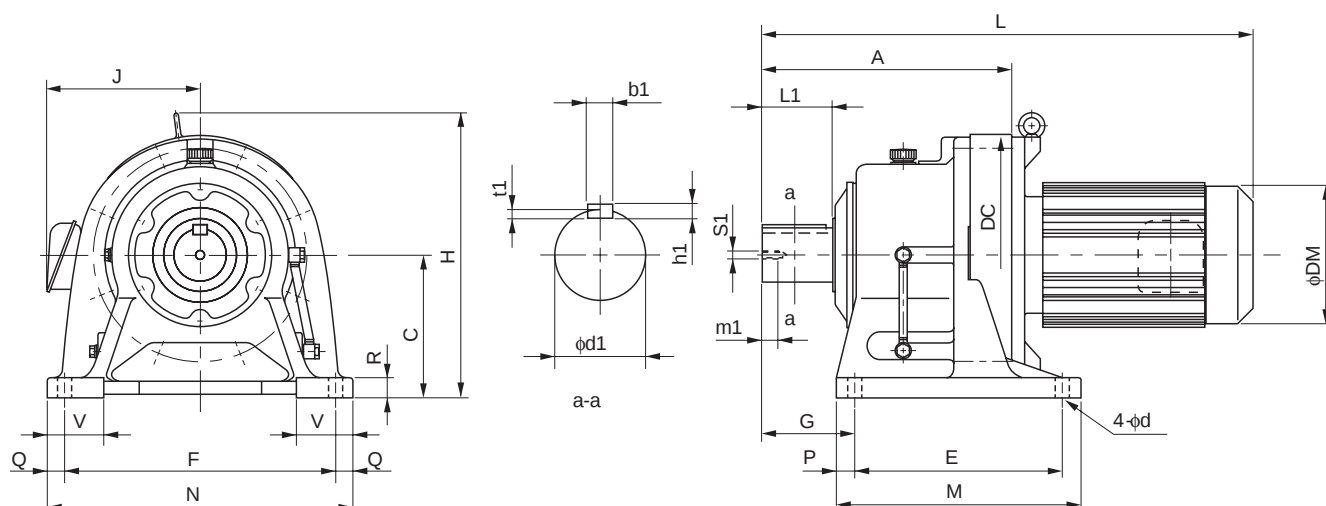
Note: 1. $\square$ indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM^{Note 1} - 6245 to 6265



GEARMOTORS

Dimension Tables
CHHM

Frame size	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 5						
														d1	L1	b1	h1	t1	S1	m1
6245	657	335	614	480	630	263	580	720	50	45	45	128	39	140	200	36	20	12	M24	41
6255	775	375	670	520	670	320	630	780	55	55	50	140	39	160	240	40	22	13	M30	49
6265	892	400	736	590	770	390	700	880	55	55	55	160	45	170	300	40	22	13	M30	49

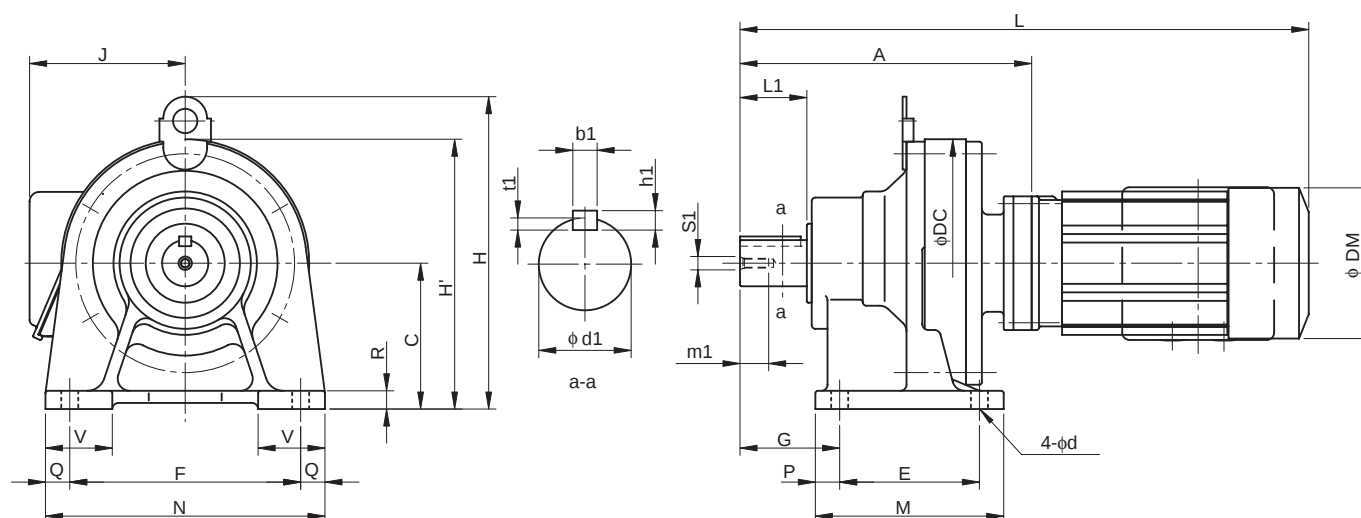
Model Note 4	Motor		Standard						With Brake					
	kW	P	L	H	J	DM	W(kg)		L	H	J	DM	W(kg)	
CHHM206 - 6245 - (B) - Ratio	15	6	1282	729	328	394	824		1447	729	328	394	857	
CHHM256 - 6245 - (B) - Ratio	18.5	6	1282	729	328	394	824		1447	729	328	394	871	
CHHM306 - 6245 - (B) - Ratio	22	6	1282	729	328	394	824		1447	729	328	394	871	
CHHM406 - 6245 - (B) - Ratio	30	6	1397	729	328	394	870		1612	729	328	394	958	
CHHM506 - 6245 - (B) - Ratio	37	6	1397	729	328	394	870		1612	729	328	394	958	
CHHM606 - 6245 - (B) - Ratio	45	6	1452	729	378	484	961		-	-	-	-	-	
CHHM756 - 6245 - (B) - Ratio	55	6	1532	729	378	485	1010		-	-	-	-	-	
CHHM206 - 6255 - (B) - Ratio	15	6	1400	815	328	394	1155		1565	815	328	394	1188	
CHHM256 - 6255 - (B) - Ratio	18.5	6	1400	815	328	394	1155		1610	815	328	394	1202	
CHHM306 - 6255 - (B) - Ratio	22	6	1400	815	328	394	1155		1610	815	328	394	1202	
CHHM406 - 6255 - (B) - Ratio	30	6	1515	815	328	394	1200		1730	815	328	394	1288	
CHHM506 - 6255 - (B) - Ratio	37	6	1515	815	328	394	1200		1730	815	328	394	1288	
CHHM606 - 6255 - (B) - Ratio	45	6	1570	815	378	484	1280		-	-	-	-	-	
CHHM756 - 6255 - (B) - Ratio	55	6	1650	815	378	485	1335		-	-	-	-	-	
CHHM306 - 6265 - (B) - Ratio	22	6	1517	874	328	394	1400		1727	874	328	394	1447	
CHHM406 - 6265 - (B) - Ratio	30	6	1632	874	328	394	1445		1847	874	328	394	1533	
CHHM506 - 6265 - (B) - Ratio	37	6	1632	874	328	394	1445		1847	874	328	394	1533	
CHHM606 - 6265 - (B) - Ratio	45	6	1687	874	378	484	1540		-	-	-	-	-	

Note: 4. "B" after the frame size indicates models equipped with brake.

5. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

6. Dimensions in above drawings are subject to change without notice.

Dimension Tables Gearmotors (Universal Direction, Foot-Mount)

CNHM^{Note 1} - 606□DA to 612□DB

Frame size Note 4	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 6						
														d1	L1	b1	h1	t1	S1	m1
606□DA	125	80	110	60	120	41	84	144	12	12	10	35	9	14	25	5	5	3	M5	16
607□DA	131	80	110	60	120	47	84	144	12	12	10	35	9	18	30	6	6	3.5	M6	16
609□DA	190	100	150	90	150	60	135	180	15	15	12	40	11	28	35	8	7	4	M8	20
610□DA	204	100	150	90	150	60	135	180	15	15	12	40	11	28	35	8	7	4	M8	20
612□DA	240	120	204	115	190	82	155	230	20	20	15	55	14	38	55	10	8	5	M8	20
612□DB	252	120	204	115	190	82	155	230	20	20	15	55	14	38	55	10	8	5	M8	20

Model Note 4, 5	Motor		Standard							With Brake						
	kW	P	L	H	H'	J	DM	W(kg)		L	H	H'	J	DM	W(kg)	
CNHM01 - 606□DA - (B) - Ratio	0.1	4	287	-	140	130	119	9		294	-	138	130	124	10	
CNHM01 - 607□DA - (B) - Ratio	0.1	4	293	-	140	130	119	9		300	-	138	130	124	10	
CNHM02 - 607□DA - (B) - Ratio	0.2	4	311	-	140	130	124	10		339	-	138	130	124	11	
CNHM01 - 609□DA - (B) - Ratio	0.1	4	352	207	-	130	119	17		359	207	-	130	124	18	
CNHM02 - 609□DA - (B) - Ratio	0.2	4	370	207	-	130	124	18		398	207	-	130	124	19	
CNHM03 - 609□DA - (B) - Ratio	0.25	4	370	207	-	130	124	18		398	207	-	130	124	19	
CNHM05 - 609□DA - (B) - Ratio	0.4	4	386	207	-	130	124	19		418	207	-	130	124	20	
CNHM01 - 610□DA - (B) - Ratio	0.1	4	366	207	-	130	119	19		373	207	-	130	124	20	
CNHM02 - 610□DA - (B) - Ratio	0.2	4	384	207	-	130	124	20		412	207	-	130	124	21	
CNHM03 - 610□DA - (B) - Ratio	0.25	4	384	207	-	130	124	20		412	207	-	130	124	21	
CNHM05 - 610□DA - (B) - Ratio	0.4	4	400	207	-	130	124	21		432	207	-	130	124	22	
CNHM01 - 612□DA - (B) - Ratio	0.1	4	402	257	-	130	119	30		409	257	-	130	124	31	
CNHM02 - 612□DA - (B) - Ratio	0.2	4	420	257	-	130	124	31		448	257	-	130	124	32	
CNHM03 - 612□DA - (B) - Ratio	0.25	4	420	257	-	130	124	31		448	257	-	130	124	32	
CNHM05 - 612□DA - (B) - Ratio	0.4	4	436	257	-	130	124	32		468	257	-	130	124	33	
CNHM01 - 612□DB - (B) - Ratio	0.1	4	414	257	-	130	119	33		421	257	-	130	124	35	
CNHM02 - 612□DB - (B) - Ratio	0.2	4	432	257	-	130	124	34		473	257	-	130	124	36	
CNHM03 - 612□DB - (B) - Ratio	0.25	4	432	257	-	130	124	34		473	257	-	130	124	36	
CNHM05 - 612□DB - (B) - Ratio	0.4	4	448	257	-	130	124	35		473	257	-	130	124	37	
CNHM08 - 612□DB - (B) - Ratio	0.55	4	489	257	-	140	148	39		532	257	-	140	148	42	
CNHM1 - 612□DB - (B) - Ratio	0.75	4	489	257	-	140	148	39		532	257	-	140	148	42	
CNHM1H - 612□DB - (B) - Ratio	1.1	4	516	257	-	145	160	42		578	257	-	145	160	47	
CNHM2 - 612□DB - (B) - Ratio	1.5	4	516	257	-	145	160	42		578	257	-	145	160	47	

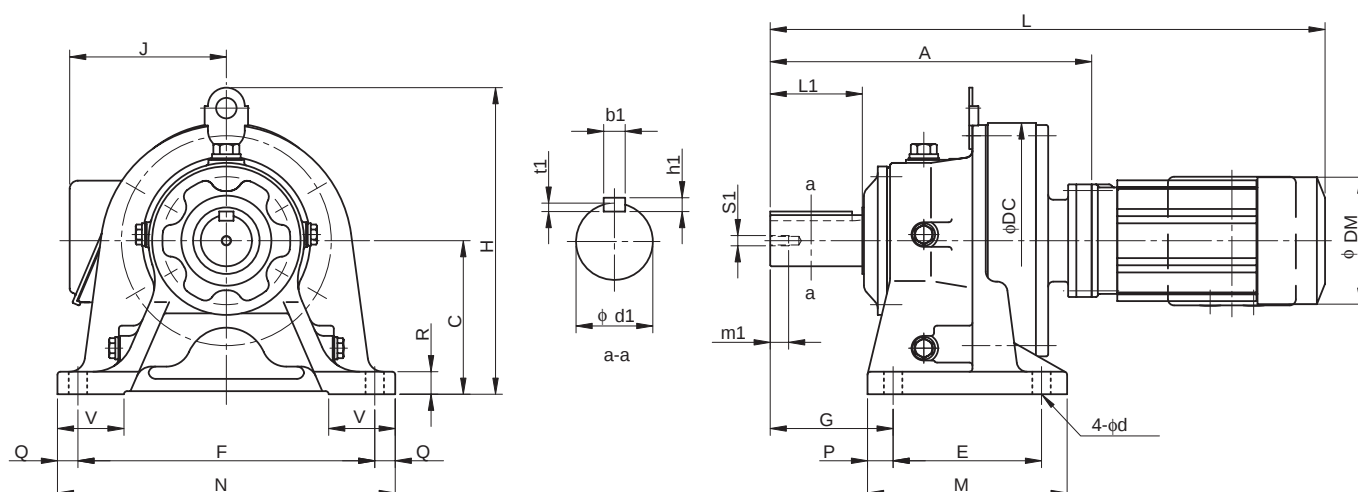
Note: 1. □ indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM^{Note 1} - 613□DA to 614□DC



GEARMOTORS

Dimension Tables
CHHM

Frame size Note 4	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 6						
														d1	L1	b1	h1	t1	S1	m1
613□DA	294	150	230	145	290	100	195	330	25	20	22	65	18	50	70	14	9	5.5	M10	18
613□DB	303	150	230	145	290	100	195	330	25	20	22	65	18	50	70	14	9	5.5	M10	18
613□DC	317	150	230	145	290	100	195	330	25	20	22	65	18	50	70	14	9	5.5	M10	18
614□DA	314	150	230	145	290	120	195	330	25	20	22	65	18	50	90	14	9	5.5	M10	18
614□DB	323	150	230	145	290	120	195	330	25	20	22	65	18	50	90	14	9	5.5	M10	18
614□DC	337	150	230	145	290	120	195	330	25	20	22	65	18	50	90	14	9	5.5	M10	18

Model Note 4, 5	Motor		Standard						With Brake				
	kW	P	L	H	J	DM	W(kg)		L	H	J	DM	W(kg)
CHHM02 - 613□DA - (B) - Ratio	0.2	4	474	300	130	124	47		502	300	130	124	47
CHHM03 - 613□DA - (B) - Ratio	0.25	4	474	300	130	124	48		522	300	130	124	49
CHHM05 - 613□DA - (B) - Ratio	0.4	4	490	300	130	124	48		522	300	130	124	49
CHHM02 - 613□DB - (B) - Ratio	0.2	4	483	300	130	124	49		511	300	130	124	51
CHHM03 - 613□DB - (B) - Ratio	0.25	4	483	300	130	124	49		511	300	130	124	51
CHHM05 - 613□DB - (B) - Ratio	0.4	4	499	300	130	124	50		531	300	130	124	52
CHHM08 - 613□DB - (B) - Ratio	0.55	4	540	263	140	148	54		583	263	140	148	57
CHHM1 - 613□DB - (B) - Ratio	0.75	4	540	263	140	148	54		583	263	140	148	57
CHHM1H - 613□DB - (B) - Ratio	1.1	4	573	270	145	160	57		635	270	145	160	62
CHHM2 - 613□DB - (B) - Ratio	1.5	4	573	270	145	160	57		635	270	145	160	62
CHHM08 - 613□DC - (B) - Ratio	0.55	4	554	265	140	148	56		597	265	140	148	59
CHHM1 - 613□DC - (B) - Ratio	0.75	4	554	265	140	148	56		597	265	140	148	59
CHHM2 - 613□DC - (B) - Ratio	1.5	4	587	272	145	160	59		649	272	145	160	64
CHHM3 - 613□DC - (B) - Ratio	2.2	4	607	276	152	173	64		670	276	152	173	70
CHHM02 - 614□DA - (B) - Ratio	0.2	4	494	300	130	124	47		522	300	130	124	48
CHHM03 - 614□DA - (B) - Ratio	0.25	4	494	300	130	124	47		522	300	130	124	48
CHHM05 - 614□DA - (B) - Ratio	0.4	4	510	300	130	124	48		542	300	130	124	49
CHHM02 - 614□DB - (B) - Ratio	0.2	4	503	300	130	124	49		531	300	130	124	51
CHHM03 - 614□DB - (B) - Ratio	0.25	4	503	300	130	124	49		531	300	130	124	51
CHHM05 - 614□DB - (B) - Ratio	0.4	4	519	300	130	124	50		551	300	130	124	52
CHHM08 - 614□DB - (B) - Ratio	0.55	4	560	263	140	148	54		603	263	140	148	57
CHHM1 - 614□DB - (B) - Ratio	0.75	4	560	263	140	148	54		603	263	140	148	57
CHHM1H - 614□DB - (B) - Ratio	1.1	4	593	270	145	160	57		655	270	145	160	62
CHHM2 - 614□DB - (B) - Ratio	1.5	4	593	270	145	160	57		655	270	145	160	62
CHHM08 - 614□DC - (B) - Ratio	0.55	4	574	265	140	148	56		617	265	140	148	59
CHHM1 - 614□DC - (B) - Ratio	0.75	4	574	265	140	148	56		617	265	140	148	59
CHHM1H - 614□DC - (B) - Ratio	1.1	4	607	270	145	160	60		669	270	145	160	65
CHHM2 - 614□DC - (B) - Ratio	1.5	4	607	270	145	160	60		669	270	145	160	65
CHHM3 - 614□DC - (B) - Ratio	2.2	4	627	276	152	173	64		690	276	152	173	70

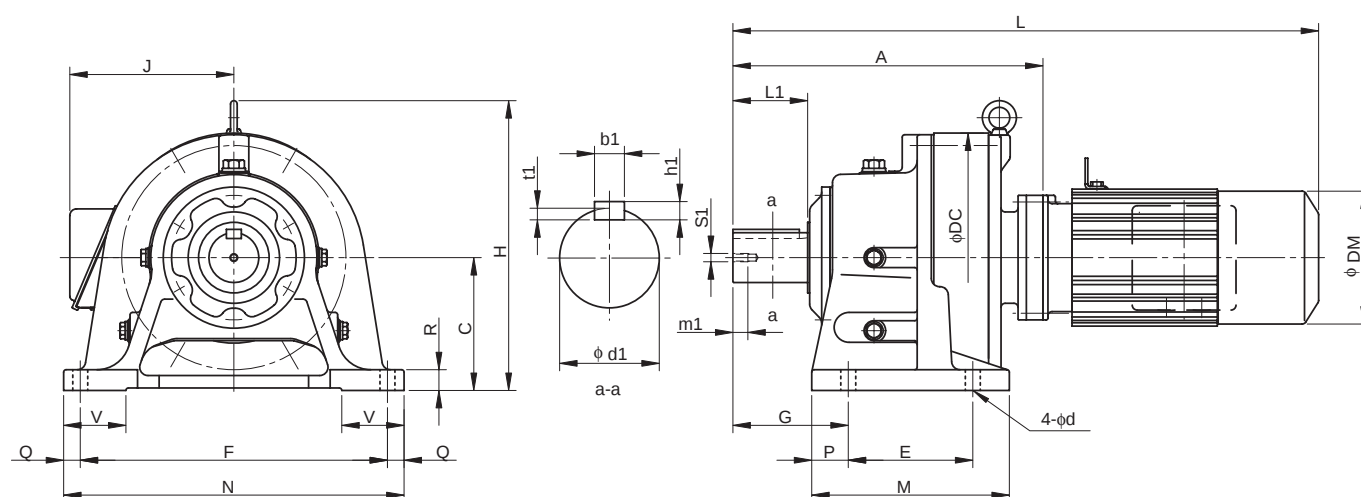
Note: 4. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

5. "B" after the frame size indicates models equipped with brake.

6. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

7. Dimensions in above drawings are subject to change without notice.

Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM^{Note 1} - 616□DA to 618□DA

Frame size Note 4	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 6						
														d1	L1	b1	h1	t1	S1	m1
616□DA	373	160	300	150	370	139	238	410	44	20	25	75	18	60	90	18	11	7	M10	18
616□DB	387	160	300	150	370	139	238	410	44	20	25	75	18	60	90	18	11	7	M10	18
617□DA	418	200	340	275	380	125	335	430	30	25	30	80	22	70	90	20	12	7.5	M12	24
617□DB	432	200	340	275	380	125	335	430	30	25	30	80	22	70	90	20	12	7.5	M12	24
618□DA	474	220	370	320	420	145	380	470	30	25	30	85	22	80	110	22	14	9	M12	24

Model Note 4, 5	Motor		Standard						With Brake				
	kW	P	L	H	J	DM	W(kg)		L	H	J	DM	W(kg)
CHHM02 - 616□DA - (B) - Ratio	0.2	4	553	349	130	124	90		581	349	130	124	92
CHHM03 - 616□DA - (B) - Ratio	0.25	4	553	349	130	124	90		581	349	130	124	92
CHHM05 - 616□DA - (B) - Ratio	0.4	4	569	349	130	124	91		601	349	130	124	93
CHHM08 - 616□DA - (B) - Ratio	0.55	4	610	349	140	148	95		653	349	140	148	98
CHHM1 - 616□DA - (B) - Ratio	0.75	4	610	349	140	148	95		653	349	140	148	98
CHHM1H - 616□DA - (B) - Ratio	1.1	4	643	349	145	160	99		705	349	145	160	104
CHHM2 - 616□DA - (B) - Ratio	1.5	4	643	349	145	160	99		705	349	145	160	104
CHHM08 - 616□DB - (B) - Ratio	0.55	4	624	349	140	148	97		667	349	140	148	100
CHHM1 - 616□DB - (B) - Ratio	0.75	4	624	349	140	148	97		667	349	140	148	100
CHHM1H - 616□DB - (B) - Ratio	1.1	4	657	349	145	160	101		719	349	145	160	106
CHHM2 - 616□DB - (B) - Ratio	1.5	4	657	349	145	160	101		719	349	145	160	106
CHHM3 - 616□DB - (B) - Ratio	2.2	4	677	349	152	173	105		740	349	152	173	111
CHHM02 - 617□DA - (B) - Ratio	0.2	4	598	416	130	124	120		626	416	130	124	127
CHHM03 - 617□DA - (B) - Ratio	0.25	4	598	416	130	124	120		626	416	130	124	127
CHHM05 - 617□DA - (B) - Ratio	0.4	4	614	416	130	124	126		646	416	130	124	128
CHHM08 - 617□DA - (B) - Ratio	0.55	4	655	416	140	148	130		698	416	140	148	133
CHHM1 - 617□DA - (B) - Ratio	0.75	4	655	416	140	148	130		698	416	140	148	133
CHHM1H - 617□DA - (B) - Ratio	1.1	4	688	416	145	160	133		750	416	145	160	138
CHHM2 - 617□DA - (B) - Ratio	1.5	4	688	416	145	160	133		750	416	145	160	138
CHHM08 - 617□DB - (B) - Ratio	0.55	4	669	416	140	148	127		712	416	140	148	134
CHHM1 - 617□DB - (B) - Ratio	0.75	4	669	416	140	148	127		712	416	140	148	134
CHHM1H - 617□DB - (B) - Ratio	1.1	4	702	416	145	160	136		764	416	145	160	141
CHHM2 - 617□DB - (B) - Ratio	1.5	4	702	416	145	160	136		764	416	145	160	141
CHHM3 - 617□DB - (B) - Ratio	2.2	4	722	416	152	173	140		785	416	152	173	146
CHHM05 - 618□DA - (B) - Ratio	0.4	4	670	451	130	124	171		702	451	130	124	173
CHHM08 - 618□DA - (B) - Ratio	0.55	4	711	451	140	148	175		754	451	140	148	178
CHHM1 - 618□DA - (B) - Ratio	0.75	4	711	451	140	148	175		754	451	140	148	178
CHHM1H - 618□DA - (B) - Ratio	1.1	4	744	451	145	160	179		806	451	145	160	184
CHHM2 - 618□DA - (B) - Ratio	1.5	4	744	451	145	160	179		806	451	145	160	184
CHHM3 - 618□DA - (B) - Ratio	2.2	4	764	451	152	173	183		827	451	152	173	189

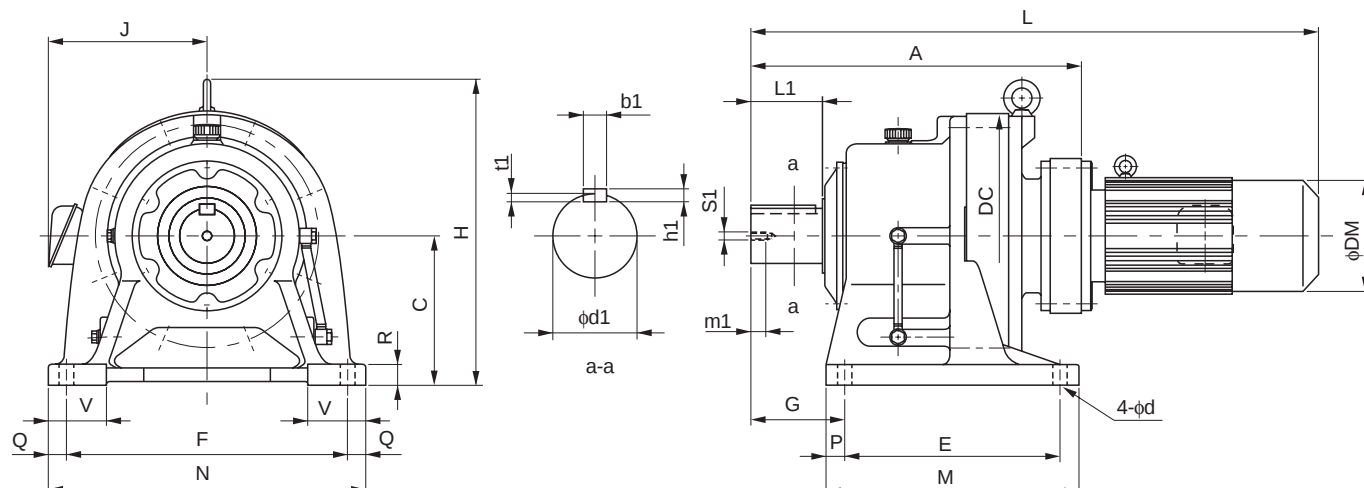
Note: 1. □ indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM^{Note 1} - 616□DC to 619□DA



GEARMOTORS

Dimension Tables
CHHM

Frame size Note 4	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 6						
														d1	L1	b1	h1	t1	S1	m1
616□DC	389	160	300	150	370	139	238	410	44	20	25	75	18	60	90	18	11	7	M10	18
617□DC	436	200	340	275	380	125	335	430	30	25	30	80	22	70	90	20	12	7.5	M12	24
618□DB	496	220	370	320	420	145	380	470	30	25	30	85	22	80	110	22	14	9	M12	24
619□DA	556	250	430	380	480	170	440	530	30	25	35	90	26	95	135	25	14	9	M20	34

Model Note 4, 5	Motor		Standard						With Brake				
	kW	P	L	H	J	DM	W(kg)		L	H	J	DM	W(kg)
CHHM1H - 616□DC - (B) - Ratio	1.1	4	659	349	145	160	107		721	349	145	160	112
CHHM2 - 616□DC - (B) - Ratio	1.5	4	659	349	145	160	107		721	349	145	160	112
CHHM3 - 616□DC - (B) - Ratio	2.2	4	679	349	152	173	111		742	349	152	173	118
CHHM4 - 616□DC - (B) - Ratio	3.0	4	702	349	168	212	121		774	349	168	212	131
CHHM5 - 616□DC - (B) - Ratio	3.7	4	702	349	168	212	121		774	349	168	212	131
CHHM8 - 616□DC - (B) - Ratio	5.5	4	746	349	168	212	128		818	349	168	212	138
CHHM1H - 617□DC - (B) - Ratio	1.1	4	706	416	145	160	141		768	416	145	160	146
CHHM2 - 617□DC - (B) - Ratio	1.5	4	706	416	145	160	141		768	416	145	160	146
CHHM3 - 617□DC - (B) - Ratio	2.2	4	726	416	152	173	145		789	416	152	173	152
CHHM4 - 617□DC - (B) - Ratio	3.0	4	749	416	168	212	155		821	416	168	212	165
CHHM5 - 617□DC - (B) - Ratio	3.7	4	749	416	168	212	155		821	416	168	212	165
CHHM8 - 617□DC - (B) - Ratio	5.5	4	793	416	168	212	162		865	416	168	212	172
CHHM1H - 618□DB - (B) - Ratio	1.1	4	766	451	145	160	194		828	451	145	160	199
CHHM2 - 618□DB - (B) - Ratio	1.5	4	766	451	145	160	194		828	451	145	160	199
CHHM3 - 618□DB - (B) - Ratio	2.2	4	786	451	152	173	197		849	451	152	173	204
CHHM4 - 618□DB - (B) - Ratio	3.0	4	809	451	168	212	207		881	451	168	212	217
CHHM5 - 618□DB - (B) - Ratio	3.7	4	809	451	168	212	207		881	451	168	212	217
CHHM8 - 618□DB - (B) - Ratio	5.5	4	853	451	168	212	214		925	451	168	212	224
CHHM10 - 618□DB - (B) - Ratio	7.5	4	876	451	213	251	229		971	451	213	251	247
CHHM15 - 618□DB - (B) - Ratio	11	4	936	451	213	251	243		1031	451	213	251	261
CHHM1 - 619□DA - (B) - Ratio	0.75	4	793	531	140	148	250		836	531	140	148	253
CHHM1H - 619□DA - (B) - Ratio	1.1	4	826	531	145	160	254		888	531	145	160	259
CHHM2 - 619□DA - (B) - Ratio	1.5	4	826	531	145	160	254		888	531	145	160	259
CHHM3 - 619□DA - (B) - Ratio	2.2	4	846	531	152	173	258		909	531	152	173	265
CHHM4 - 619□DA - (B) - Ratio	3.0	4	869	531	168	212	268		941	531	168	212	278
CHHM5 - 619□DA - (B) - Ratio	3.7	4	869	531	168	212	268		941	531	168	212	278
CHHM8 - 619□DA - (B) - Ratio	5.5	4	913	531	168	212	275		985	531	168	212	285

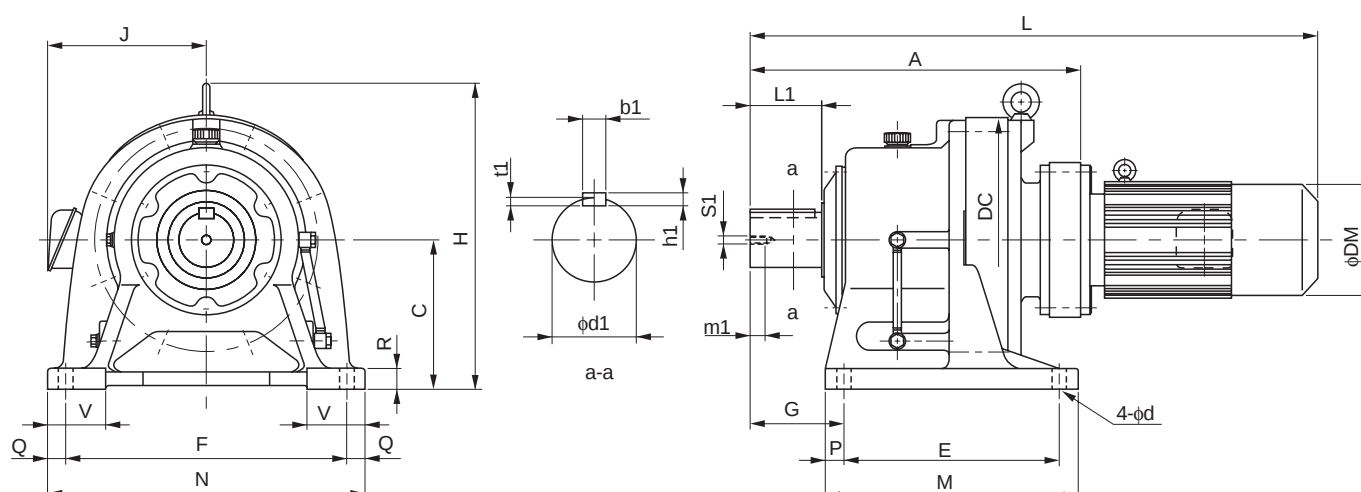
Note: 4. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

5. "B" after the frame size indicates models equipped with brake.

6. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

7. Dimensions in above drawings are subject to change without notice.

Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM^{Note 1} - 619□DB to 6215DA

Frame size Note 4	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 6						
														d1	L1	b1	h1	t1	S1	m1
619□DB	572	250	430	380	480	170	440	530	30	25	35	90	26	95	135	25	14	9	M20	34
6205DA	597	250	448	360	440	215	440	530	40	45	35	100	26	100	165	28	16	10	M20	34
6205DB	624	250	448	360	440	215	440	530	40	45	35	100	26	100	165	28	16	10	M20	34
6215DA	650	265	485	395	480	210	475	580	40	50	40	110	26	110	165	28	16	10	M20	34

Model Note 4, 5	Motor		Standard						With Brake					
	kW	P	L	H	J	DM	W(kg)		L	H	J	DM	W(kg)	
CHHM2 - 619□DB - (B) - Ratio	1.5	4	842	531	145	160	261		904	531	145	160	266	
CHHM3 - 619□DB - (B) - Ratio	2.2	4	862	531	152	173	265		925	531	152	173	272	
CHHM4 - 619□DB - (B) - Ratio	3.0	4	885	531	168	212	275		957	531	168	212	285	
CHHM5 - 619□DB - (B) - Ratio	3.7	4	885	531	168	212	275		957	531	168	212	285	
CHHM8 - 619□DB - (B) - Ratio	5.5	4	929	531	168	212	282		1001	531	168	212	292	
CHHM10 - 619□DB - (B) - Ratio	7.5	4	952	531	213	251	297		1047	531	213	251	315	
CHHM15 - 619□DB - (B) - Ratio	11	4	1012	531	213	251	311		1107	531	213	251	329	
CHHM20 - 619□DB - (B) - Ratio	15	4	1102	531	261	324	363		1207	531	261	324	397	
CHHM1 - 6205DA - (B) - Ratio	0.75	4	834	530	140	148	269		877	530	140	148	272	
CHHM2 - 6205DA - (B) - Ratio	1.5	4	867	530	145	160	273		929	530	145	160	278	
CHHM3 - 6205DA - (B) - Ratio	2.2	4	887	530	152	173	277		949	530	152	173	284	
CHHM4 - 6205DA - (B) - Ratio	3.0	4	910	530	168	212	287		982	530	168	212	297	
CHHM5 - 6205DA - (B) - Ratio	3.7	4	910	530	168	212	287		982	530	168	212	297	
CHHM8 - 6205DA - (B) - Ratio	5.5	4	954	530	168	212	294		1026	530	168	212	304	
CHHM3 - 6205DB - (B) - Ratio	2.2	4	914	530	152	173	289		977	530	152	173	296	
CHHM4 - 6205DB - (B) - Ratio	3.0	4	937	530	168	212	299		1009	530	168	212	309	
CHHM5 - 6205DB - (B) - Ratio	3.7	4	937	530	168	212	299		1009	530	168	212	309	
CHHM8 - 6205DB - (B) - Ratio	5.5	4	981	530	168	212	306		1053	530	168	212	316	
CHHM10 - 6205DB - (B) - Ratio	7.5	4	1004	530	213	251	321		1099	530	213	251	339	
CHHM15 - 6205DB - (B) - Ratio	11	4	1064	530	213	251	334		1159	530	213	251	352	
CHHM20 - 6205DB - (B) - Ratio	15	4	1154	530	261	324	386		1249	530	261	324	419	
CHHM2 - 6215DA - (B) - Ratio	1.5	4	920	575	145	160	367		982	575	145	160	372	
CHHM3 - 6215DA - (B) - Ratio	2.2	4	940	575	152	173	370		1003	575	152	173	377	
CHHM4 - 6215DA - (B) - Ratio	3.0	4	963	575	168	212	380		1035	575	168	212	390	
CHHM5 - 6215DA - (B) - Ratio	3.7	4	963	575	168	212	380		1035	575	168	212	390	
CHHM8 - 6215DA - (B) - Ratio	5.5	4	1007	575	168	212	387		1079	575	168	212	397	
CHHM10 - 6215DA - (B) - Ratio	7.5	4	1030	575	213	251	402		1125	575	213	251	420	
CHHM15 - 6215DA - (B) - Ratio	11	4	1090	575	213	251	415		1185	575	213	251	433	
CHHM20 - 6215DA - (B) - Ratio	15	4	1180	575	261	324	467		1285	575	261	324	501	

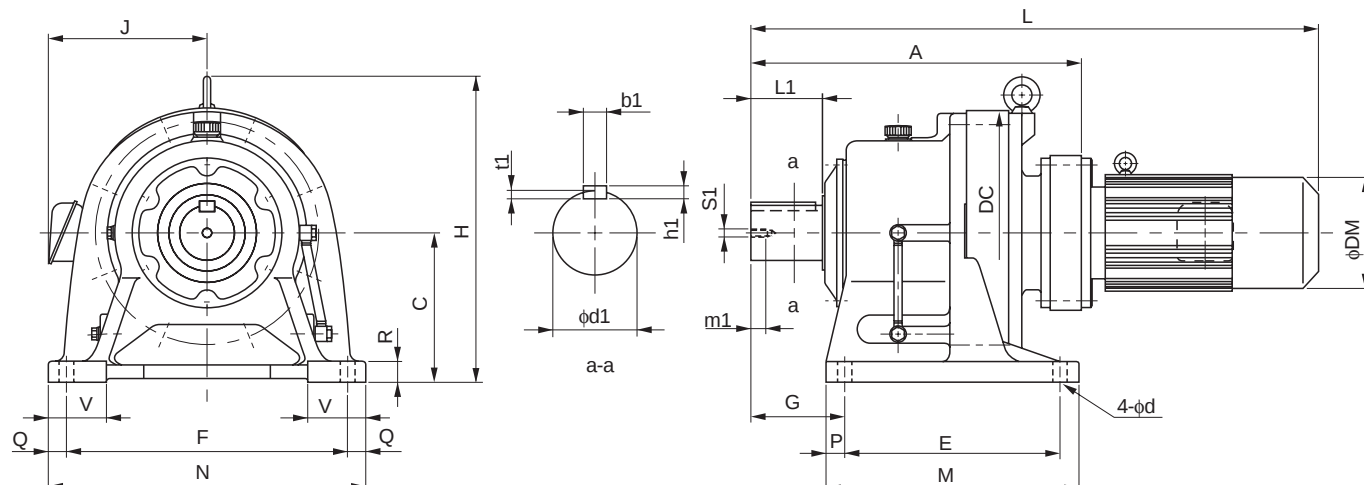
Note: 1. □ indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM - 6215DB to 6225DB



GEARMOTORS

Dimension Tables
CHHM

Frame size	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 6						
														d1	L1	b1	h1	t1	S1	m1
6215DB	675	265	485	395	480	210	475	580	40	50	40	110	26	110	165	28	16	10	M20	34
6225DA	692	280	526	420	540	230	520	620	50	40	40	115	33	120	165	32	18	11	M20	34
6225DB	735	280	526	420	540	230	520	620	50	40	40	115	33	120	165	32	18	11	M20	34

Model Note 5	Motor		Standard						With Brake				
	kW	P	L	H	J	DM	W(kg)		L	H	J	DM	W(kg)
CHHM5 - 6215DB - (B) - Ratio	3.7	4	993	575	168	212	399		1065	575	168	212	409
CHHM8 - 6215DB - (B) - Ratio	5.5	4	1037	575	168	212	406		1109	575	168	212	416
CHHM10 - 6215DB - (B) - Ratio	7.5	4	1060	575	213	251	422		1155	575	213	251	439
CHHM15 - 6215DB - (B) - Ratio	11	4	1120	575	213	251	436		1215	575	213	251	453
CHHM20 - 6215DB - (B) - Ratio	15	4	1205	575	261	324	489		1310	575	261	324	523
CHHM25 - 6215DB - (B) - Ratio	18.5	4	1300	575	328	394	564		1465	575	328	394	615
CHHM30 - 6215DB - (B) - Ratio	22	4	1300	575	328	394	564		1465	575	328	394	615
CHHM2 - 6225DA - (B) - Ratio	1.5	4	962	610	145	160	441		1024	610	145	160	446
CHHM3 - 6225DA - (B) - Ratio	2.2	4	982	610	152	173	444		1045	610	152	173	451
CHHM4 - 6225DA - (B) - Ratio	3.0	4	1005	610	168	212	454		1077	610	168	212	464
CHHM5 - 6225DA - (B) - Ratio	3.7	4	1005	610	168	212	454		1077	610	168	212	464
CHHM8 - 6225DA - (B) - Ratio	5.5	4	1049	610	168	212	461		1121	610	168	212	471
CHHM10 - 6225DA - (B) - Ratio	7.5	4	1072	610	213	251	476		1167	610	213	251	494
CHHM15 - 6225DA - (B) - Ratio	11	4	1132	610	213	251	490		1227	610	213	251	508
CHHM20 - 6225DA - (B) - Ratio	15	4	1222	610	261	324	542		1327	610	261	324	576
CHHM5 - 6225DB - (B) - Ratio	3.7	4	1058	610	168	212	499		1130	610	168	212	510
CHHM8 - 6225DB - (B) - Ratio	5.5	4	1102	610	168	212	506		1174	610	168	212	517
CHHM10 - 6225DB - (B) - Ratio	7.5	4	1125	610	213	251	521		1220	610	213	251	539
CHHM15 - 6225DB - (B) - Ratio	11	4	1185	610	213	251	535		1280	610	213	251	553
CHHM20 - 6225DB - (B) - Ratio	15	4	1265	610	261	324	589		1370	610	261	324	623
CHHM25 - 6225DB - (B) - Ratio	18.5	4	1360	610	328	394	661		1525	610	328	394	712
CHHM30 - 6225DB - (B) - Ratio	22	4	1360	610	328	394	661		1525	610	328	394	712
CHHM40 - 6225DB - (B) - Ratio	30	4	1360	610	328	394	678		1525	610	328	394	729

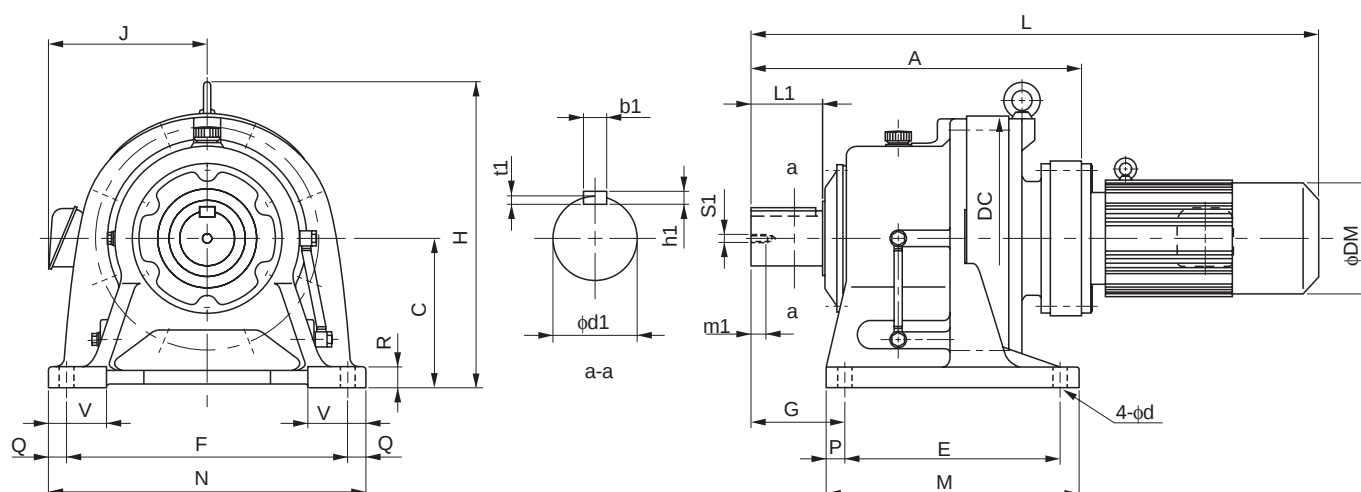
Note: 4. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

5. "B" after the frame size indicates models equipped with brake.

6. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

7. Dimensions in above drawings are subject to change without notice.

Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM^{Note 1} - 6235DA to 6245DB

Frame size	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft ^{Note 2, 3, 5}						
														d1	L1	b1	h1	t1	S1	m1
6235DA	778	300	562	460	580	260	560	670	50	45	45	120	33	130	200	32	18	11	M24	41
6235DB	800	300	562	460	580	260	560	670	50	45	45	120	33	130	200	32	18	11	M24	41
6245DA	816	335	614	480	630	263	580	720	50	45	45	128	39	140	200	36	20	12	M24	41
6245DB	837	335	614	480	630	263	580	720	50	45	45	128	39	140	200	36	20	12	M24	41

Model	Note 4	Motor		Standard					With Brake				
		kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)
CHHM3 - 6235DA - (B) - Ratio		2.2	4	1068	667	152	173	561	1131	667	152	173	567
CHHM4 - 6235DA - (B) - Ratio		3.0	4	1091	667	168	212	570	1163	667	168	212	580
CHHM5 - 6235DA - (B) - Ratio		3.7	4	1091	667	168	212	570	1163	667	168	212	580
CHHM8 - 6235DA - (B) - Ratio		5.5	4	1135	667	168	212	577	1207	667	168	212	587
CHHM10 - 6235DA - (B) - Ratio		7.5	4	1163	667	213	251	593	1258	667	213	251	610
CHHM15 - 6235DA - (B) - Ratio		11	4	1223	667	213	251	607	1318	667	213	251	624
CHHM20 - 6235DA - (B) - Ratio		15	4	1308	667	261	324	660	1413	667	261	324	624
CHHM25 - 6235DA - (B) - Ratio		18.5	4	1403	667	328	394	737	1568	667	328	394	788
CHHM30 - 6235DA - (B) - Ratio		22	4	1403	667	328	394	737	1568	667	328	394	788
CHHM15 - 6235DB - (B) - Ratio		11	4	1245	667	213	251	639	1340	667	213	251	657
CHHM20 - 6235DB - (B) - Ratio		15	4	1330	667	261	324	701	1435	667	261	324	735
CHHM25 - 6235DB - (B) - Ratio		18.5	4	1425	667	328	394	768	1590	667	328	394	819
CHHM30 - 6235DB - (B) - Ratio		22	4	1425	667	328	394	768	1590	667	328	394	819
CHHM40 - 6235DB - (B) - Ratio		30	4	1425	667	328	394	782	1590	667	328	394	825
CHHM50 - 6235DB - (B) - Ratio		37	4	1540	667	328	394	820	1755	667	328	394	917
CHHM3 - 6245DA - (B) - Ratio		2.2	4	1106	729	152	173	670	1169	729	152	173	676
CHHM4 - 6245DA - (B) - Ratio		3.0	4	1129	729	168	212	679	1201	729	168	212	689
CHHM5 - 6245DA - (B) - Ratio		3.7	4	1129	729	168	212	679	1201	729	168	212	689
CHHM8 - 6245DA - (B) - Ratio		5.5	4	1173	729	168	212	686	1245	729	168	212	696
CHHM10 - 6245DA - (B) - Ratio		7.5	4	1201	729	213	251	702	1296	729	213	251	719
CHHM15 - 6245DA - (B) - Ratio		11	4	1261	729	213	251	716	1356	729	213	251	733
CHHM20 - 6245DA - (B) - Ratio		15	4	1346	729	261	324	769	1451	729	261	324	803
CHHM25 - 6245DA - (B) - Ratio		18.5	4	1441	729	328	394	840	1606	729	328	394	891
CHHM30 - 6245DA - (B) - Ratio		22	4	1441	729	328	394	840	1606	729	328	394	891
CHHM15 - 6245DB - (B) - Ratio		11	4	1282	729	213	251	740	1377	729	213	251	758
CHHM20 - 6245DB - (B) - Ratio		15	4	1367	729	261	324	800	1472	729	261	324	834
CHHM25 - 6245DB - (B) - Ratio		18.5	4	1462	729	328	394	866	1627	729	328	394	917
CHHM30 - 6245DB - (B) - Ratio		22	4	1462	729	328	394	866	1627	729	328	394	917
CHHM40 - 6245DB - (B) - Ratio		30	4	1462	729	328	394	883	1627	729	328	394	926
CHHM50 - 6245DB - (B) - Ratio		37	4	1577	729	328	394	935	1792	729	328	394	1032

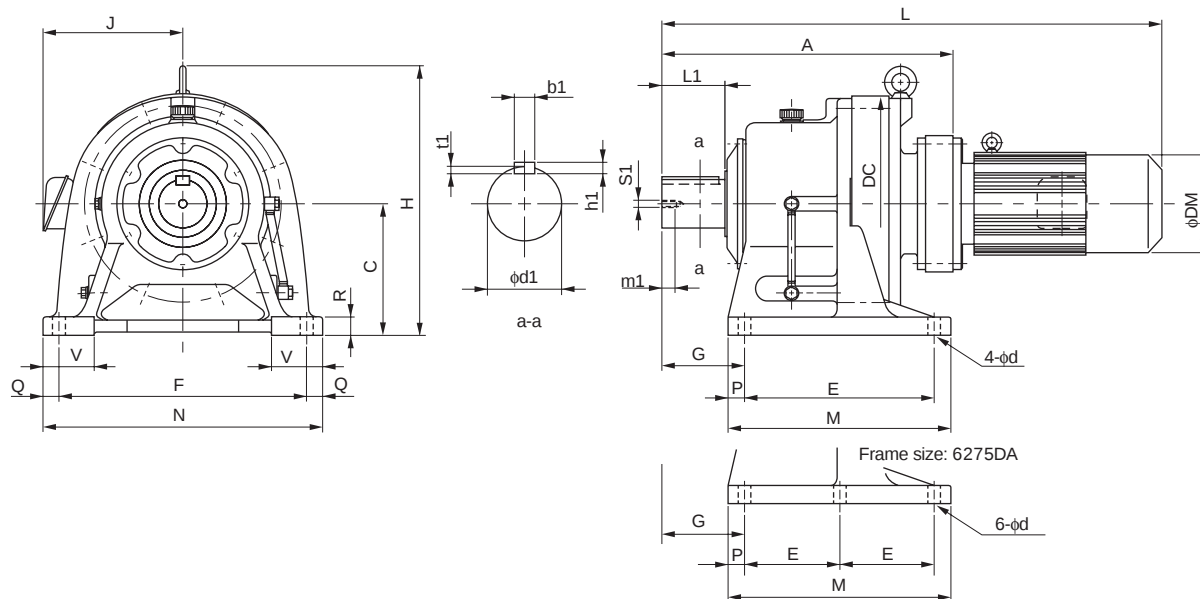
Note: 1. □ indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM^{Note 1} - 6255DA to 6275DA



Frame size	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft ^{Note 2, 3, 5}						
														d1	L1	b1	h1	t1	S1	m1
6255DA	956	375	670	520	670	320	630	780	55	55	50	140	39	160	240	40	22	13	M30	49
6255DB	978	375	670	520	670	320	630	780	55	55	50	140	39	160	240	40	22	13	M30	49
6265DA	1088	400	736	590	770	390	700	880	55	55	55	160	45	170	300	40	22	13	M30	49
6275DA	1349	540	950	420	1050	485	1040	1160	100	55	60	200	45	180	330	45	25	15	M30	52

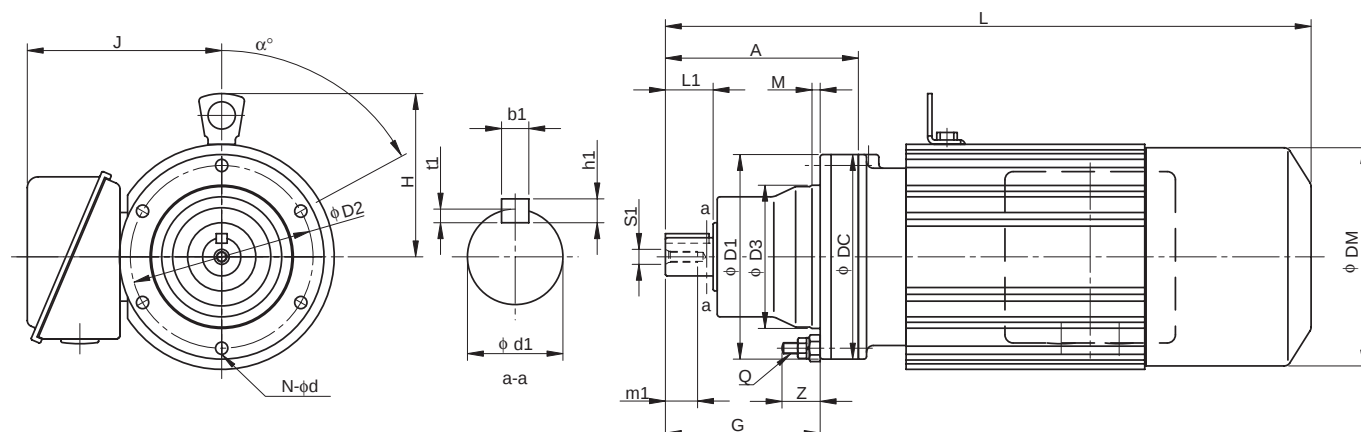
Model ^{Note 4}	Motor		Standard							With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)	L	H
CHHM5 - 6255DA - (B) - Ratio	3.7	4	1284	815	168	212	1031	1356	815	168	212	1041	1356	815
CHHM8 - 6255DA - (B) - Ratio	5.5	4	1328	815	168	212	1041	1400	815	168	212	1051	1400	815
CHHM10 - 6255DA - (B) - Ratio	7.5	4	1346	815	213	251	1056	1441	815	213	251	1071	1441	815
CHHM15 - 6255DA - (B) - Ratio	11	4	1406	815	213	251	1071	1501	815	213	251	1086	1501	815
CHHM20 - 6255DA - (B) - Ratio	15	4	1486	815	261	324	1121	1591	815	261	324	1157	1591	815
CHHM25 - 6255DA - (B) - Ratio	18.5	4	1581	815	328	394	1195	1746	815	328	394	1246	1746	815
CHHM30 - 6255DA - (B) - Ratio	22	4	1581	815	328	394	1195	1746	815	328	394	1246	1746	815
CHHM40 - 6255DA - (B) - Ratio	30	4	1581	815	328	394	1215	1746	815	328	394	1258	1746	815
CHHM15 - 6255DB - (B) - Ratio	11	4	1443	815	213	251	1144	1538	815	213	251	1159	1538	815
CHHM20 - 6255DB - (B) - Ratio	15	4	1508	815	261	324	1194	1613	815	261	324	1228	1613	815
CHHM25 - 6255DB - (B) - Ratio	18.5	4	1603	815	328	394	1270	1768	815	328	394	1321	1768	815
CHHM30 - 6255DB - (B) - Ratio	22	4	1603	815	328	394	1270	1768	815	328	394	1321	1768	815
CHHM40 - 6255DB - (B) - Ratio	30	4	1603	815	328	394	1285	1768	815	328	394	1328	1768	815
CHHM50 - 6255DB - (B) - Ratio	37	4	1718	815	328	394	1323	1928	815	328	394	1420	1928	815
CHHM60 - 6255DB - (B) - Ratio	45	4	1718	815	328	394	1323	1928	815	328	394	1420	1928	815
CHHM8 - 6265DA - (B) - Ratio	5.5	4	1480	874	168	212	1366	1552	874	168	212	1376	1552	874
CHHM10 - 6265DA - (B) - Ratio	7.5	4	1493	874	213	251	1381	1588	874	213	251	1401	1588	874
CHHM15 - 6265DA - (B) - Ratio	11	4	1553	874	213	251	1396	1648	874	213	251	1411	1648	874
CHHM20 - 6265DA - (B) - Ratio	15	4	1618	874	261	324	1446	1723	874	261	324	1482	1723	874
CHHM25 - 6265DA - (B) - Ratio	18.5	4	1713	874	328	394	1525	1878	874	328	394	1570	1878	874
CHHM30 - 6265DA - (B) - Ratio	22	4	1713	874	328	394	1525	1878	874	328	394	1570	1878	874
CHHM40 - 6265DA - (B) - Ratio	30	4	1713	874	328	394	1540	1878	874	328	394	1583	1878	874
CHHM50 - 6265DA - (B) - Ratio	37	4	1828	874	328	394	1575	2043	874	328	394	1672	2043	874
CHHM60 - 6265DA - (B) - Ratio	45	4	1828	874	328	394	1575	2043	874	328	394	1672	2043	874
CHHM10 - 6275DA - (B) - Ratio	7.5	4	1754	1161	213	251	2516	1849	1161	213	251	2536	1849	1161
CHHM15 - 6275DA - (B) - Ratio	11	4	1814	1161	213	251	2531	1909	1161	213	251	2546	1909	1161
CHHM20 - 6275DA - (B) - Ratio	15	4	1879	1161	261	324	2581	1984	1161	261	324	2617	1984	1161
CHHM25 - 6275DA - (B) - Ratio	18.5	4	1974	1161	328	394	2660	2139	1161	328	394	2705	2139	1161
CHHM30 - 6275DA - (B) - Ratio	22	4	1974	1161	328	394	2660	2139	1161	328	394	2705	2139	1161
CHHM40 - 6275DA - (B) - Ratio	30	4	1974	1161	328	394	2670	2139	1161	328	394	2718	2139	1161
CHHM50 - 6275DA - (B) - Ratio	37	4	2089	1161	328	394	2715	2304	1161	328	394	2810	2304	1161
CHHM60 - 6275DA - (B) - Ratio	45	4	2089	1161	328	394	2715	2304	1161	328	394	2810	2304	1161

Note: 4. "B" after the frame size indicates models equipped with brake.

5. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

6. Dimensions in above drawings are subject to change without notice.

Dimension Tables Gearmotors (Universal Direction, Flange Mount)

CNFM^{Note 1} - 606[□] to 609[□]

Frame size Note 5	A	G	D1	D2	D3	DC	Q	Z	M	N	d	α°	Output Shaft Note 2, 3, 7						
													d1	L1	b1	h1	t1	S1	m1
606□	92	68	110	98	80	110	M6	21	4	6	6.6	60	14	25	5	5	3	M5	16
607□	98	74	110	98	80	110	M6	21	4	6	6.6	60	18	30	6	6	3.5	M6	16
608□	129	91	134	118	95	134	M8	27	5	8	9	22.5	22	35	6	6	3.5	M6	16
609□	142	114	150	134	105	150	M8	28	6	8	9	22.5	28	35	8	7	4	M8	20

Model Note 5, 6	Motor		Standard						With Brake				
	kW	P	L	H	J	DM	W(kg)		L	H	J	DM	W(kg)
CNFM01 - 606 [□] - (B) - Ratio	0.1	4	254	-	130	119	6.5		261	-	130	124	8
CNFM02 - 606 [□] - (B) - Ratio	0.2	4	272	-	130	124	7.5		300	-	130	124	9
CNFM03 - 606 [□] - (B) - Ratio	0.25	4	272	-	130	124	7.5		300	-	130	124	9
CNFM01 - 607 [□] - (B) - Ratio	0.1	4	260	-	130	119	7.5		267	-	130	124	8.5
CNFM02 - 607 [□] - (B) - Ratio	0.2	4	278	-	130	124	8.5		306	-	130	124	9.5
CNFM03 - 607 [□] - (B) - Ratio	0.25	4	278	-	130	124	8.5		306	-	130	124	9.5
CNFM05 - 607 [□] - (B) - Ratio	0.4	4	294	-	130	124	9.5		326	-	130	124	10.5
CNFM01 - 608 [□] - (B) - Ratio	0.1	4	286	-	130	119	10		293	-	130	124	11
CNFM02 - 608 [□] - (B) - Ratio	0.2	4	304	-	130	124	11		332	-	130	124	12
CNFM03 - 608 [□] - (B) - Ratio	0.25	4	304	-	130	124	11		332	-	130	124	12
CNFM05 - 608 [□] - (B) - Ratio	0.4	4	320	-	130	124	13		352	-	130	124	14
CNFM08 - 608 [□] - (B) - Ratio	0.55	4	361	113	140	148	17		404	113	140	148	18
CNFM1 - 608 [□] - (B) - Ratio	0.75	4	361	113	140	148	17		404	113	140	148	18
CNFM01 - 609 [□] - (B) - Ratio	0.1	4	304	-	130	119	11		311	-	130	124	13
CNFM02 - 609 [□] - (B) - Ratio	0.2	4	322	-	130	124	12		350	-	130	124	14
CNFM03 - 609 [□] - (B) - Ratio	0.25	4	322	-	130	124	12		350	-	130	124	14
CNFM05 - 609 [□] - (B) - Ratio	0.4	4	338	-	130	124	13		370	-	130	124	15
CNFM08 - 609 [□] - (B) - Ratio	0.55	4	379	113	140	148	17		422	113	140	148	19
CNFM1 - 609 [□] - (B) - Ratio	0.75	4	379	113	140	148	17		422	113	140	148	19
CNFM1H - 609 [□] - (B) - Ratio	1.1	4	412	120	145	160	21		474	120	145	160	25
CNFM2 - 609 [□] - (B) - Ratio	1.5	4	412	120	145	160	21		474	120	145	160	25

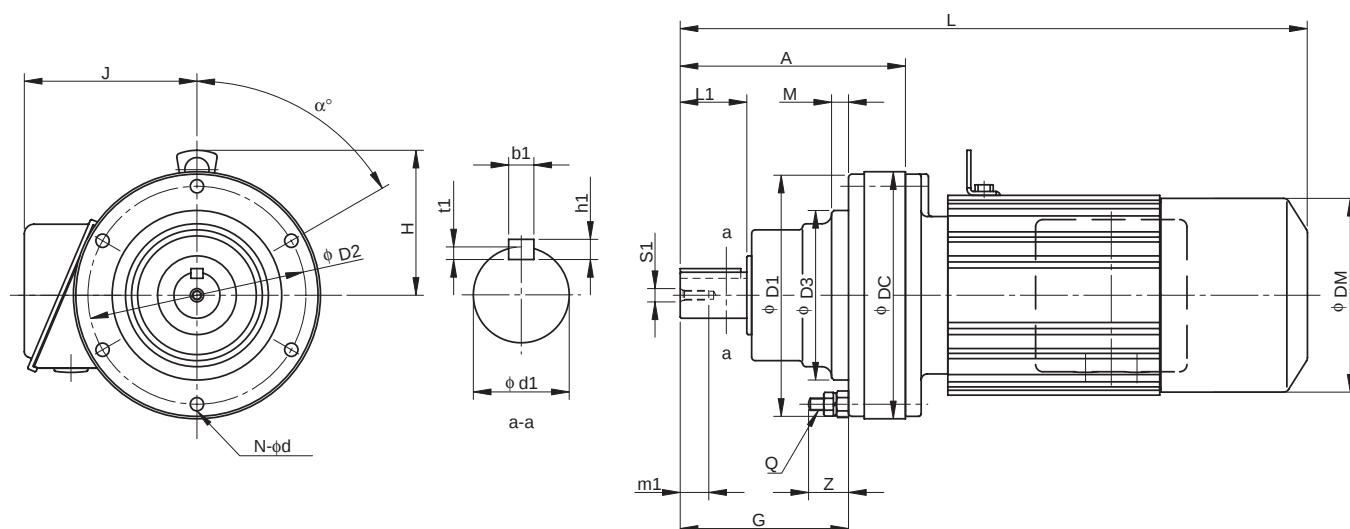
Note: 1. [□] indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter ($\phi D3$): Dimension tolerance conforms to JIS B 0401-1976 "g6."

Dimension Tables Gearmotors (Universal Direction, Flange Mount)

CNFM^{Note 1} - 610^{Note 5} to 612^{Note 5}

GEARMOTORS

Dimension Tables
CNFM

Frame size Note 5	A	G	D1	D2	D3	DC	Q	Z	M	N	d	α°	Output Shaft Note 2, 3, 7						
													d1	L1	b1	h1	t1	S1	m1
610 ^{Note 5}	156	114	150	134	105	150	M8	28	6	8	9	22.5	28	35	8	7	4	M8	20
611 ^{Note 5}	170	118	162	146	115	162	M8	28	6	8	9	22.5	32	45	10	8	5	M8	20
612 ^{Note 5}	186	139	200	180	140	204	M10	33	14	6	11	60	38	55	10	8	5	M8	20

Model Note 5, 6	Motor		Standard						With Brake					
	kW	P	L	H	J	DM	W(kg)		L	H	J	DM	W(kg)	
CNFM02 - 610 ^{Note 5}	0.2	4	336	-	130	124	14		364	-	130	124	16	
CNFM03 - 610 ^{Note 5}	0.25	4	336	-	130	124	14		364	-	130	124	16	
CNFM05 - 610 ^{Note 5}	0.4	4	352	-	130	124	15		384	-	130	124	17	
CNFM08 - 610 ^{Note 5}	0.55	4	393	113	140	148	19		436	113	140	148	22	
CNFM1 - 610 ^{Note 5}	0.75	4	393	113	140	148	19		436	113	140	148	22	
CNFM1H - 610 ^{Note 5}	1.1	4	426	120	145	160	23		488	120	145	160	28	
CNFM2 - 610 ^{Note 5}	1.5	4	426	120	145	160	23		488	120	145	160	28	
CNFM3 - 610 ^{Note 5}	2.2	4	446	126	152	173	27		509	126	152	173	33	
CNFM05 - 611 ^{Note 5}	0.4	4	363	-	130	124	17		394	-	130	124	18	
CNFM08 - 611 ^{Note 5}	0.55	4	403	113	140	148	20		452	113	140	148	23	
CNFM1 - 611 ^{Note 5}	0.75	4	403	113	140	148	20		452	113	140	148	23	
CNFM1H - 611 ^{Note 5}	1.1	4	436	120	145	160	23		493	120	145	160	28	
CNFM2 - 611 ^{Note 5}	1.5	4	436	120	145	160	23		493	120	145	160	28	
CNFM3 - 611 ^{Note 5}	2.2	4	456	126	152	173	27		519	126	152	173	33	
CNFM4 - 611 ^{Note 5}	3.0	4	491	146	168	212	37		563	146	168	212	47	
CNFM5 - 611 ^{Note 5}	3.7	4	491	146	168	212	37		563	146	168	212	47	
CNFM05 - 612 ^{Note 5}	0.4	4	387	113	130	124	26		419	113	130	124	28	
CNFM08 - 612 ^{Note 5}	0.55	4	423	113	140	148	28		466	113	140	148	31	
CNFM1 - 612 ^{Note 5}	0.75	4	423	113	140	148	28		466	113	140	148	31	
CNFM1H - 612 ^{Note 5}	1.1	4	456	120	145	160	32		518	120	145	160	37	
CNFM2 - 612 ^{Note 5}	1.5	4	456	120	145	160	32		518	120	145	160	37	
CNFM3 - 612 ^{Note 5}	2.2	4	476	126	152	173	36		539	126	152	173	43	
CNFM4 - 612 ^{Note 5}	3.0	4	499	146	168	212	46		571	146	168	212	56	
CNFM5 - 612 ^{Note 5}	3.7	4	499	146	168	212	46		571	146	168	212	56	
CNFM8 - 612 ^{Note 5}	5.5	4	543	146	168	212	53		615	146	168	212	63	

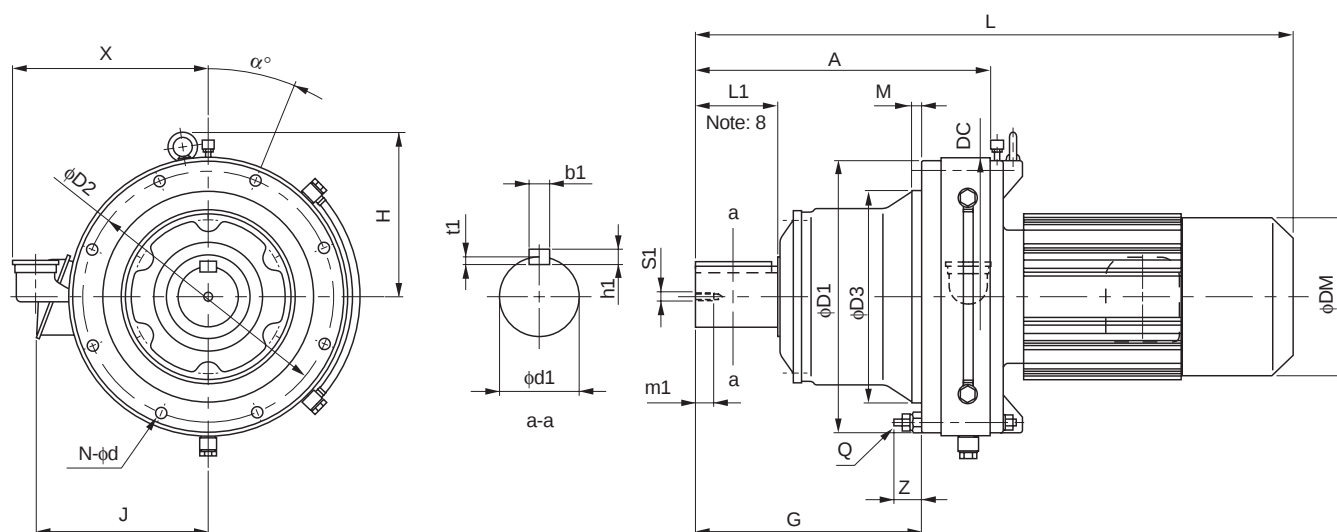
Note: 5. ^{Note 5} indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

6. "B" after the frame size indicates models equipped with brake.

7. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

8. Dimensions in above drawings are subject to change without notice.

Dimension Tables Gearmotors (Horizontal Direction, Flange Mount)

CHFM^{Note 1} - 613[□] to 614[□]

Frame size Note 5	A	G	D1	D2	D3	DC	Q	Z	M	N	d	α°	X	Output Shaft Note 2, 3, 7						
														d1	L1	b1	h1	t1	S1	m1
613 [□]	240	178	226	205	165	230	M10	31	16	6	11	60	208	50	70	14	9	5.5	M10	18
614 [□]	260	198	226	205	165	230	M10	31	16	6	11	60	208	50	90	14	9	5.5	M10	18

Model Note 5, 6	Motor		Standard						With Brake					
	kW	P	L	H	J	DM	W(kg)		L	H	J	DM	W(kg)	
CHFM08 - 613 [□]	0.55	4	477	111	140	148	44		520	111	140	148	46	
CHFM1 - 613 [□]	0.75	4	477	111	140	148	44		520	111	140	148	47	
CHFM1H - 613 [□]	1.1	4	510	118	145	160	48		572	118	145	160	53	
CHFM2 - 613 [□]	1.5	4	510	118	145	160	48		572	118	145	160	53	
CHFM3 - 613 [□]	2.2	4	530	124	152	173	51		593	124	152	173	58	
CHFM4 - 613 [□]	3.0	4	553	146	168	212	61		625	146	168	212	71	
CHFM5 - 613 [□]	3.7	4	553	146	168	212	61		625	146	168	212	71	
CHFM8 - 613 [□]	5.5	4	597	146	168	212	68		669	146	168	212	78	
CHFM10 - 613 [□]	7.5	4	620	173	213	251	83		715	173	213	251	101	
CHFM15 - 613 [□]	11	4	680	173	213	251	97		775	173	213	251	115	
CHFM1 - 614 [□]	0.75	4	497	118	140	148	45		540	118	140	148	48	
CHFM1H - 614 [□]	1.1	4	530	118	145	160	49		592	118	145	160	54	
CHFM2 - 614 [□]	1.5	4	530	118	145	160	49		592	118	145	160	54	
CHFM3 - 614 [□]	2.2	4	550	124	152	173	52		613	124	152	173	59	
CHFM4 - 614 [□]	3.0	4	573	146	168	212	62		645	146	168	212	72	
CHFM5 - 614 [□]	3.7	4	573	146	168	212	62		645	146	168	212	72	
CHFM8 - 614 [□]	5.5	4	617	146	168	212	69		689	146	168	212	79	
CHFM10 - 614 [□]	7.5	4	640	173	213	251	84		735	173	213	251	102	
CHFM15 - 614 [□]	11	4	700	173	213	251	98		795	173	213	251	116	
CHFM20 - 614 [□]	15	4	790	208	261	324	150		895	208	261	324	184	

Note: 1. [□] indicates motor capacity.

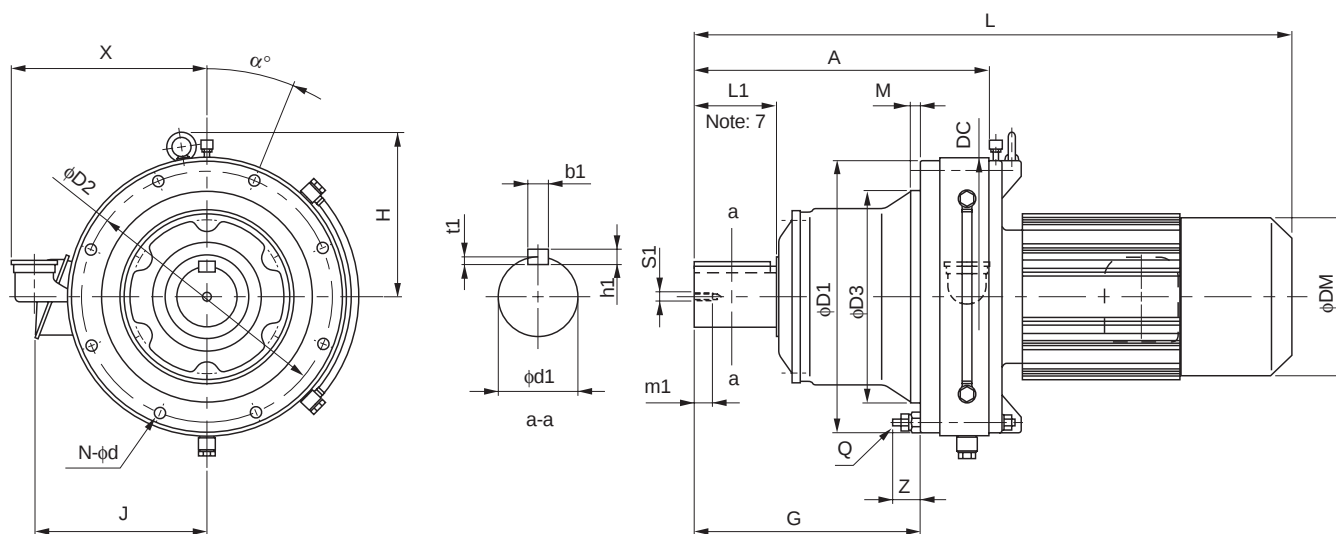
2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter (ϕD_3): Dimension tolerance conforms to JIS B 0401-1976 "g6."

Dimension Tables Gearmotors (Horizontal Direction, Flange Mount)

CHFM^{Note 1} - 616□ to 617□



GEARMOTORS

Dimension Tables
CHFM

Frame size Note 5	A	G	D1	D2	D3	DC	Q	Z	M	N	d	α°	X	Output Shaft Note 2, 3, 7						
														d1	L1	b1	h1	t1	S1	m1
616□	308	222	296	270	200	300	M12	35	10	6	14	30	228	60	90	18	11	7	M10	18
617□	352	262	330	300	250	340	M12	41	12	8	14	22.5	243	70	90	20	12	7.5	M12	24

Model Note 5, 6	Motor		Standard					With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)
CHFM1H - 616□ - (B) - Ratio	1.1	4	583	118	145	160	76	645	118	145	160	81
CHFM2 - 616□ - (B) - Ratio	1.5	4	583	118	145	160	76	645	118	145	160	81
CHFM3 - 616□ - (B) - Ratio	2.2	4	598	124	152	173	79	661	124	152	173	85
CHFM4 - 616□ - (B) - Ratio	3.0	4	621	146	168	212	88	693	146	168	212	98
CHFM5 - 616□ - (B) - Ratio	3.7	4	621	146	168	212	88	693	146	168	212	98
CHFM8 - 616□ - (B) - Ratio	5.5	4	665	146	168	212	95	737	146	168	212	105
CHFM10 - 616□ - (B) - Ratio	7.5	4	693	173	213	251	111	788	173	213	251	128
CHFM15 - 616□ - (B) - Ratio	11	4	753	173	213	251	125	848	173	213	251	142
CHFM20 - 616□ - (B) - Ratio	15	4	838	208	261	324	178	943	208	261	324	212
CHFM25 - 616□ - (B) - Ratio	18.5	4	933	208	328	394	254	1098	208	328	394	305
CHFM30 - 616□ - (B) - Ratio	22	4	933	208	328	394	254	1098	208	328	394	305
CHFM4 - 617□ - (B) - Ratio	3.0	4	680	203	168	212	119	752	203	168	212	129
CHFM5 - 617□ - (B) - Ratio	3.7	4	680	203	168	212	119	752	203	168	212	129
CHFM8 - 617□ - (B) - Ratio	5.5	4	724	203	168	212	126	796	203	168	212	136
CHFM10 - 617□ - (B) - Ratio	7.5	4	742	203	213	251	141	837	203	213	251	159
CHFM15 - 617□ - (B) - Ratio	11	4	802	203	213	251	155	897	203	213	251	173
CHFM20 - 617□ - (B) - Ratio	15	4	882	213	261	324	209	987	213	261	324	243
CHFM25 - 617□ - (B) - Ratio	18.5	4	977	227	328	394	281	1142	227	328	394	332
CHFM30 - 617□ - (B) - Ratio	22	4	977	227	328	394	281	1142	227	328	394	332
CHFM40 - 617□ - (B) - Ratio	30	4	977	228	328	394	298	1142	228	328	394	341

Note: 5. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

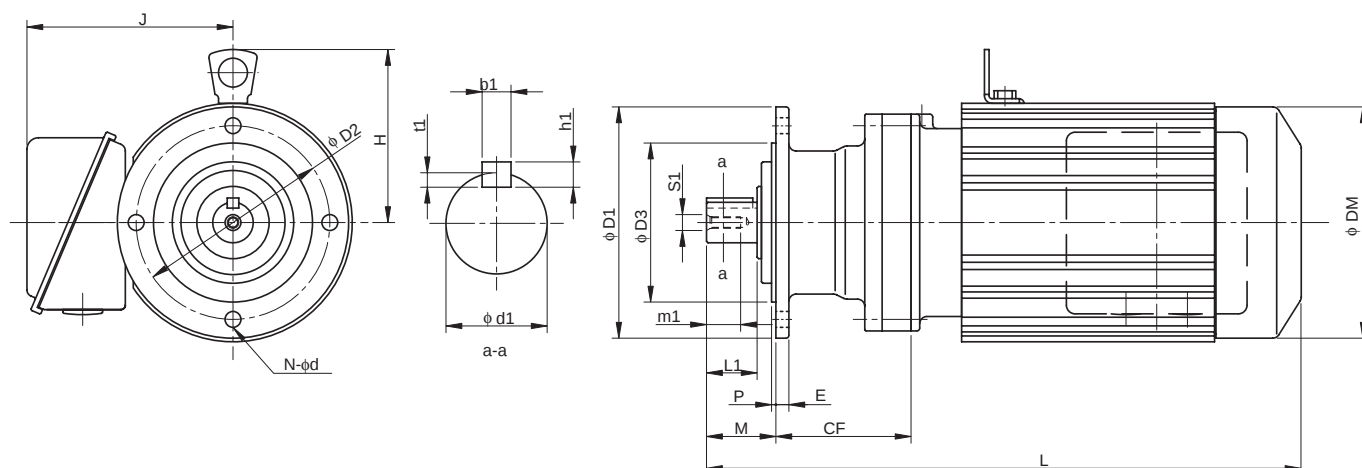
6. "B" after the frame size indicates models equipped with brake.

7. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

8. Dimensions in above drawings are subject to change without notice.

Dimension Tables Gearmotors (Universal Direction, V-Flange Mount)

CNVM^{Note 1} - 606□ to 609□



GEARMOTORS

Dimension Tables
CNVM

Frame size Note 5	CF	D1	D2	D3	M	E	P	N	d	H	Output Shaft Note 2, 3, 7						
											d1	L1	b1	h1	t1	S1	m1
606□	58	120	102	80	34	8	3	6	9	-	14	25	5	5	3	M5	16
607□	56	160	134	110	42	9	3	4	11	-	18	30	6	6	3.5	M6	16
608□	81	160	134	110	48	9	3	4	11	-	22	35	6	6	3.5	M6	16
609□	94	160	134	110	48	9	3	4	11	107	28	35	8	7	4	M8	20

Model Note 5, 6	Motor		Standard				With Brake			
	kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)
CNVM01 - 606□ - (B) - Ratio	0.1	4	254	130	119	7	261	130	124	9
CNVM02 - 606□ - (B) - Ratio	0.2	4	272	130	124	8	300	130	124	10
CNVM03 - 606□ - (B) - Ratio	0.25	4	272	130	124	9	300	130	124	10
CNVM01 - 607□ - (B) - Ratio	0.1	4	260	130	119	9	267	130	124	10
CNVM02 - 607□ - (B) - Ratio	0.2	4	278	130	124	10	306	130	124	11
CNVM03 - 607□ - (B) - Ratio	0.25	4	278	130	124	10	306	130	124	11
CNVM05 - 607□ - (B) - Ratio	0.4	4	294	130	124	11	326	130	124	12
CNVM01 - 608□ - (B) - Ratio	0.1	4	286	130	119	12	293	130	124	13
CNVM02 - 608□ - (B) - Ratio	0.2	4	304	130	124	13	332	130	124	14
CNVM03 - 608□ - (B) - Ratio	0.25	4	304	130	124	13	332	130	124	14
CNVM05 - 608□ - (B) - Ratio	0.4	4	320	130	124	15	352	130	124	16
CNVM08 - 608□ - (B) - Ratio	0.55	4	361	140	148	19	404	140	148	20
CNVM1 - 608□ - (B) - Ratio	0.75	4	361	140	148	19	404	140	148	20
CNVM01 - 609□ - (B) - Ratio	0.1	4	304	130	119	13	311	130	124	15
CNVM02 - 609□ - (B) - Ratio	0.2	4	322	130	124	14	350	130	124	16
CNVM03 - 609□ - (B) - Ratio	0.25	4	322	130	124	14	350	130	124	16
CNVM05 - 609□ - (B) - Ratio	0.4	4	338	130	124	15	370	130	124	17
CNVM08 - 609□ - (B) - Ratio	0.55	4	379	140	148	19	422	140	148	22
CNVM1 - 609□ - (B) - Ratio	0.75	4	379	140	148	19	422	140	148	22
CNVM1H - 609□ - (B) - Ratio	1.1	4	412	145	160	22	474	145	160	27
CNVM2 - 609□ - (B) - Ratio	1.5	4	412	145	160	22	474	145	160	27

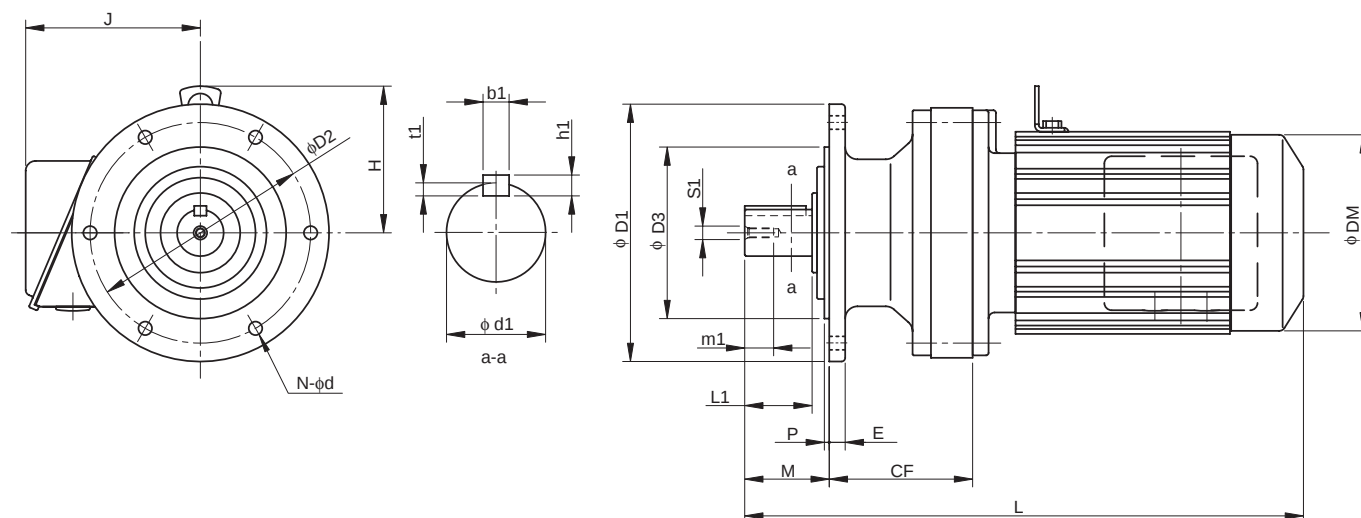
Note: 5. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

6. "B" after the frame size indicates models equipped with brake.

7. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

8. Dimensions in above drawings are subject to change without notice.

Dimension Tables Gearmotors (Universal Direction, V-Flange Mount)

CNVM^{Note 1} - 610□ to 612□

Frame size Note 5	CF	D1	D2	D3	M	E	P	N	d	H	Output Shaft Note 2, 3, 7						
											d1	L1	b1	h1	t1	S1	m1
610□	108	160	134	110	48	9	3	4	11	107	28	35	8	7	4	M8	20
611□	112	210	180	140	58	11	4	6	11	116	32	45	10	8	5	M8	20
612□	117	210	180	140	69	13	4	6	11	137	38	55	10	8	5	M8	20

Model Note 5, 6	Motor		Standard					With Brake			
	kW	P	L	J	DM	W(kg)		L	J	DM	W(kg)
CNVM02 - 610□ - (B) - Ratio	0.2	4	336	130	124	16		364	130	124	18
CNVM03 - 610□ - (B) - Ratio	0.25	4	336	130	124	16		364	130	124	18
CNVM05 - 610□ - (B) - Ratio	0.4	4	352	130	124	17		384	130	124	19
CNVM08 - 610□ - (B) - Ratio	0.55	4	393	140	148	21		436	140	148	24
CNVM1 - 610□ - (B) - Ratio	0.75	4	393	140	148	21		436	140	148	24
CNVM1H - 610□ - (B) - Ratio	1.1	4	426	145	160	25		488	145	160	30
CNVM2 - 610□ - (B) - Ratio	1.5	4	426	145	160	25		488	145	160	30
CNVM3 - 610□ - (B) - Ratio	2.2	4	446	152	173	29		509	152	173	35
CNVM05 - 611□ - (B) - Ratio	0.4	4	363	130	124	19		394	130	124	21
CNVM08 - 611□ - (B) - Ratio	0.55	4	403	140	148	22		452	140	148	25
CNVM1 - 611□ - (B) - Ratio	0.75	4	403	140	148	22		452	140	148	25
CNVM1H - 611□ - (B) - Ratio	1.1	4	436	145	160	25		493	145	160	30
CNVM2 - 611□ - (B) - Ratio	1.5	4	436	145	160	25		493	145	160	30
CNVM3 - 611□ - (B) - Ratio	2.2	4	456	152	173	29		519	152	173	35
CNVM4 - 611□ - (B) - Ratio	3.0	4	491	168	212	39		563	168	212	49
CNVM5 - 611□ - (B) - Ratio	3.7	4	491	168	212	39		563	168	212	49
CNVM05 - 612□ - (B) - Ratio	0.4	4	387	130	124	30		419	130	124	31
CNVM08 - 612□ - (B) - Ratio	0.55	4	423	140	148	31		466	140	148	34
CNVM1 - 612□ - (B) - Ratio	0.75	4	423	140	148	31		466	140	148	34
CNVM1H - 612□ - (B) - Ratio	1.1	4	456	145	160	35		518	145	160	40
CNVM2 - 612□ - (B) - Ratio	1.5	4	456	145	160	35		518	145	160	40
CNVM3 - 612□ - (B) - Ratio	2.2	4	476	152	173	39		539	152	173	46
CNVM4 - 612□ - (B) - Ratio	3.0	4	499	168	212	49		571	168	212	59
CNVM5 - 612□ - (B) - Ratio	3.7	4	499	168	212	49		571	168	212	59
CNVM8 - 612□ - (B) - Ratio	5.5	4	543	168	212	56		615	168	212	66

Note: 1. □ indicates motor capacity.

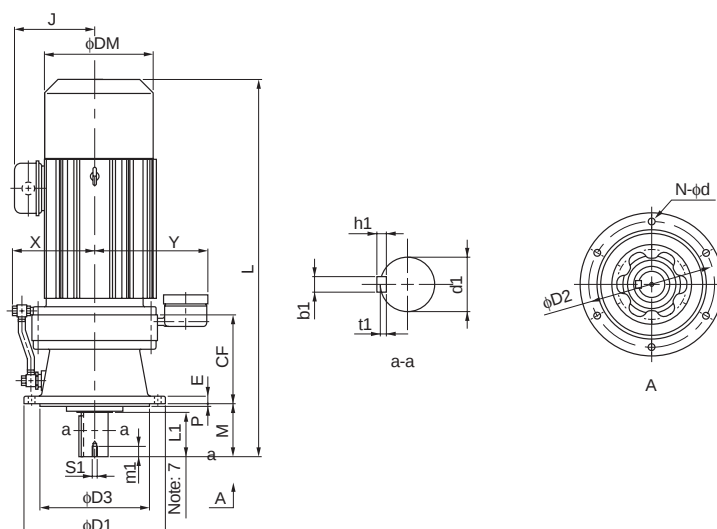
2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter ($\phi D3$): Dimension tolerance conforms to JIS B 0401-1976 "f8."

Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM^{Note 1} - 613□ to 614□



GEARMOTORS

 Dimension Tables
CVVM

Frame size Note 5	CF	D1	D2	D3	M	E	P	N	d	X	Y	Output Shaft Note 2, 3, 7						
												d1	L1	b1	h1	t1	S1	m1
613□	164	260	230	200	76	15	4	6	11	152	233	50	61	14	9	5.5	M10	18
614□	164	260	230	200	96	15	4	6	11	152	233	50	81	14	9	5.5	M10	18

Model Note 5, 6	Motor		Standard					With Brake			
	kW	P	L	J	DM	W(kg)		L	J	DM	W(kg)
CVVM08 - 613□ - (B) - Ratio	0.55	4	477	140	148	51		520	140	148	54
CVVM1 - 613□ - (B) - Ratio	0.75	4	477	140	148	51		520	140	148	54
CVVM1H - 613□ - (B) - Ratio	1.1	4	510	145	160	55		572	145	160	60
CVVM2 - 613□ - (B) - Ratio	1.5	4	510	145	160	55		572	145	160	60
CVVM3 - 613□ - (B) - Ratio	2.2	4	530	152	173	58		593	152	173	65
CVVM4 - 613□ - (B) - Ratio	3.0	4	553	168	212	68		625	168	212	78
CVVM5 - 613□ - (B) - Ratio	3.7	4	553	168	212	68		625	168	212	78
CVVM8 - 613□ - (B) - Ratio	5.5	4	597	168	212	75		669	168	212	85
CVVM10 - 613□ - (B) - Ratio	7.5	4	620	213	251	90		715	213	251	108
CVVM15 - 613□ - (B) - Ratio	11	4	680	213	251	104		775	213	251	121
CVVM1 - 614□ - (B) - Ratio	0.75	4	497	140	148	52		540	140	148	55
CVVM1H - 614□ - (B) - Ratio	1.1	4	530	145	160	56		592	145	160	61
CVVM2 - 614□ - (B) - Ratio	1.5	4	530	145	160	56		592	145	160	61
CVVM3 - 614□ - (B) - Ratio	2.2	4	550	152	173	59		613	152	173	66
CVVM4 - 614□ - (B) - Ratio	3.0	4	573	168	212	69		645	168	212	79
CVVM5 - 614□ - (B) - Ratio	3.7	4	573	168	212	69		645	168	212	79
CVVM8 - 614□ - (B) - Ratio	5.5	4	617	168	212	76		689	168	212	86
CVVM10 - 614□ - (B) - Ratio	7.5	4	640	213	251	91		735	213	251	109
CVVM15 - 614□ - (B) - Ratio	11	4	700	213	251	104		795	213	251	122
CVVM20 - 614□ - (B) - Ratio	15	4	790	261	324	156		895	261	324	190

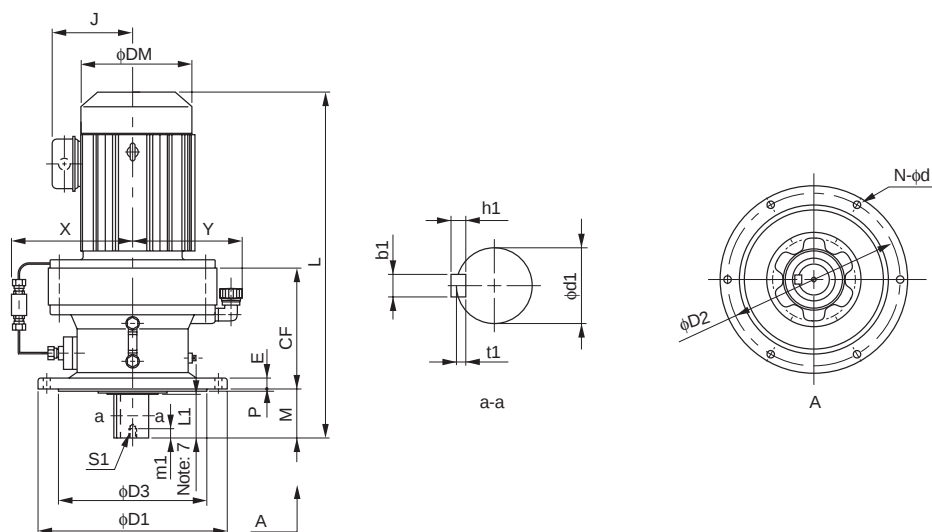
Note: 5. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

6. "B" after the frame size indicates models equipped with brake.

7. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

8. Dimensions in above drawings are subject to change without notice.

Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM^{Note 1} - 616□ to 617□

Frame size Note 5	CF	D1	D2	D3	M	E	P	N	d	X	Y	Output Shaft Note 2, 3, 7						
												d1	L1	b1	h1	t1	S1	m1
616□	219	340	310	270	89	20	4	6	11	217	200	60	80	18	11	7	M10	18
617□	258	400	360	316	94	22	5	8	14	222	225	70	84	20	12	7.5	M12	24

Model Note 5, 6	Motor		Standard				With Brake			
	kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)
CVVM1H - 616□ - (B) - Ratio	1.1	4	583	145	160	89	645	145	160	94
CVVM2 - 616□ - (B) - Ratio	1.5	4	583	145	160	89	645	145	160	94
CVVM3 - 616□ - (B) - Ratio	2.2	4	598	152	173	92	661	152	173	98
CVVM4 - 616□ - (B) - Ratio	3.0	4	621	168	212	101	693	168	212	111
CVVM5 - 616□ - (B) - Ratio	3.7	4	621	168	212	101	693	168	212	111
CVVM8 - 616□ - (B) - Ratio	5.5	4	665	168	212	108	737	168	212	118
CVVM10 - 616□ - (B) - Ratio	7.5	4	693	213	251	124	788	213	251	141
CVVM15 - 616□ - (B) - Ratio	11	4	753	213	251	138	848	213	251	155
CVVM20 - 616□ - (B) - Ratio	15	4	838	261	324	191	943	261	324	225
CVVM25 - 616□ - (B) - Ratio	18.5	4	933	328	394	267	1098	328	394	318
CVVM30 - 616□ - (B) - Ratio	22	4	933	328	394	267	1098	328	394	318
CVVM4 - 617□ - (B) - Ratio	3.0	4	680	168	212	144	752	168	212	154
CVVM5 - 617□ - (B) - Ratio	3.7	4	680	168	212	144	752	168	212	154
CVVM8 - 617□ - (B) - Ratio	5.5	4	724	168	212	151	796	168	212	161
CVVM10 - 617□ - (B) - Ratio	7.5	4	742	213	251	166	837	213	251	184
CVVM15 - 617□ - (B) - Ratio	11	4	802	213	251	180	897	213	251	198
CVVM20 - 617□ - (B) - Ratio	15	4	882	261	324	234	987	261	324	268
CVVM25 - 617□ - (B) - Ratio	18.5	4	977	328	394	306	1142	328	324	357
CVVM30 - 617□ - (B) - Ratio	22	4	977	328	394	306	1142	328	324	357
CVVM40 - 617□ - (B) - Ratio	30	4	977	328	394	323	1142	328	324	366

Note: 1. □ indicates motor capacity.

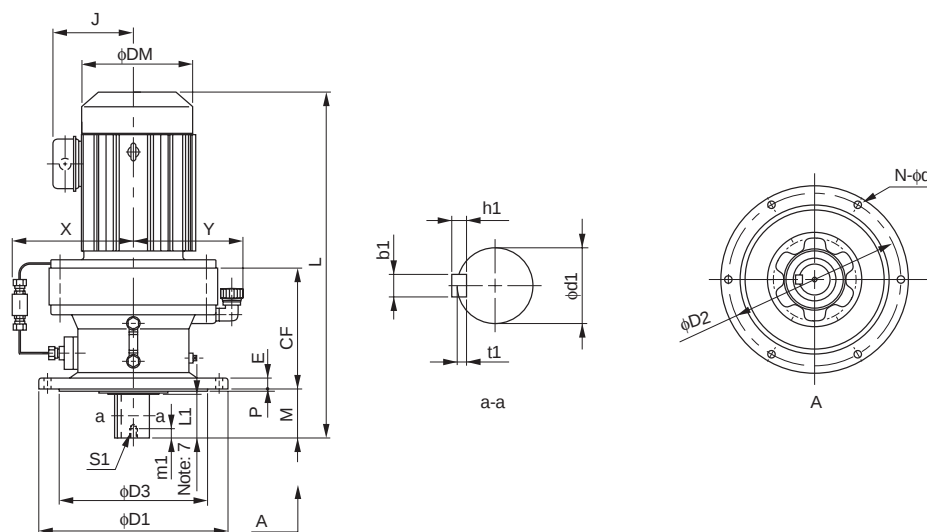
2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter (φD3): Dimension tolerance conforms to JIS B 0401-1976 "f8."

Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM^{Note 1} - 618□ to 619□



GEARMOTORS

 Dimension Tables
CVVM

Frame size Note 5	CF	D1	D2	D3	M	E	P	N	d	X	Y	Output Shaft Note 2, 3, 7						
												d1	L1	b1	h1	t1	S1	m1
618□	279	430	390	345	110	22	5	8	18	237	240	80	100	22	14	9	M12	24
619□	320	490	450	400	145	30	6	12	18	265	270	95	125	25	14	9	M20	34

Model				Motor		Standard				With Brake			
				kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)
CVVM4	- 618□	- (B)	- Ratio	3.0	4	717	168	212	170	789	168	212	180
CVVM5	- 618□	- (B)	- Ratio	3.7	4	717	168	212	170	789	168	212	180
CVVM8	- 618□	- (B)	- Ratio	5.5	4	761	168	212	178	833	168	212	188
CVVM10	- 618□	- (B)	- Ratio	7.5	4	779	213	251	193	874	213	251	211
CVVM15	- 618□	- (B)	- Ratio	11	4	839	213	251	207	934	213	251	225
CVVM20	- 618□	- (B)	- Ratio	15	4	919	261	324	267	1024	261	324	296
CVVM25	- 618□	- (B)	- Ratio	18.5	4	1014	328	394	333	1179	328	394	384
CVVM30	- 618□	- (B)	- Ratio	22	4	1014	328	394	333	1179	328	394	384
CVVM40	- 618□	- (B)	- Ratio	30	4	1014	328	394	350	1179	328	394	393
CVVM50	- 618□	- (B)	- Ratio	37	4	1129	328	394	398	1344	328	394	495
CVVM60	- 618□	- (B)	- Ratio	45	4	1129	328	394	398	1344	328	394	495
CVVM8	- 619□	- (B)	- Ratio	5.5	4	857	168	212	250	929	168	212	260
CVVM10	- 619□	- (B)	- Ratio	7.5	4	870	213	251	263	965	213	251	281
CVVM15	- 619□	- (B)	- Ratio	11	4	930	213	251	277	1025	213	251	295
CVVM20	- 619□	- (B)	- Ratio	15	4	995	261	324	330	1100	261	324	365
CVVM25	- 619□	- (B)	- Ratio	18.5	4	1090	328	394	408	1255	328	394	453
CVVM256	- 619□	- (B)	- Ratio	18.5	6	1090	328	394	421	1255	328	394	466
CVVM30	- 619□	- (B)	- Ratio	22	4	1090	328	394	408	1255	328	394	453
CVVM40	- 619□	- (B)	- Ratio	30	4	1090	328	394	421	1255	328	394	466
CVVM406	- 619□	- (B)	- Ratio	30	6	1205	328	394	459	1420	328	394	556
CVVM50	- 619□	- (B)	- Ratio	37	4	1205	328	394	459	1420	328	394	556
CVVM506	- 619□	- (B)	- Ratio	37	6	1205	328	394	459	1420	328	394	556
CVVM60	- 619□	- (B)	- Ratio	45	4	1205	328	394	459	1420	328	394	556

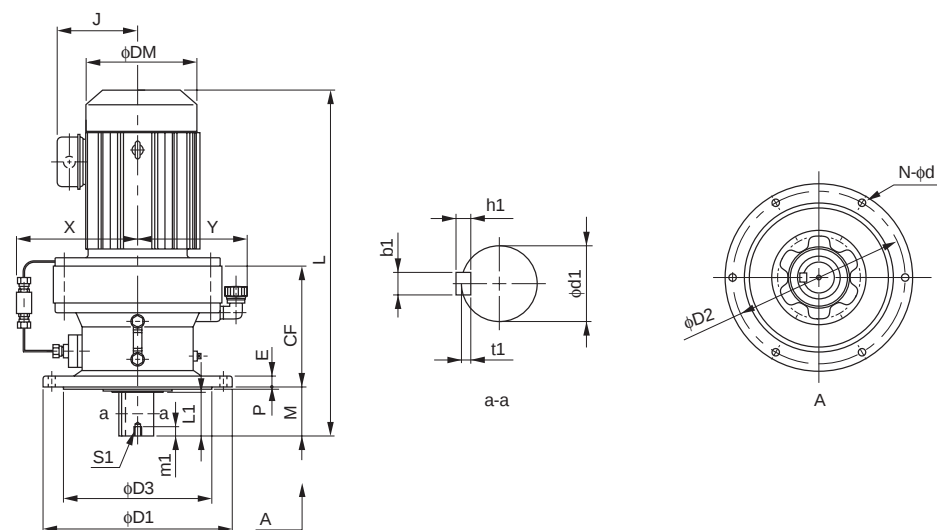
Note: 5. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

6. "B" after the frame size indicates models equipped with brake.

7. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

8. Dimensions in above drawings are subject to change without notice.

Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM^{Note 1} - 6205 to 6215

Frame size	CF	D1	D2	D3	M	E	P	N	d	X	Y	Output Shaft Note 2, 3, 6						
												d1	L1	b1	h1	t1	S1	m1
6205	298	455	405	355	204	30	5	8	22	341	287	100	165	28	16	10	M20	34
6215	323	490	440	390	203	35	7	8	24	348	306	110	165	28	16	10	M20	34

Model	Note 5	Motor		Standard				With Brake			
		kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)
CVVM15 - 6205	- (B) - Ratio	11	4	972	213	251	299	1067	213	251	317
CVVM20 - 6205	- (B) - Ratio	15	4	1042	261	324	353	1147	261	324	389
CVVM206 - 6205	- (B) - Ratio	15	6	1127	328	394	428	1292	328	394	473
CVVM25 - 6205	- (B) - Ratio	18.5	4	1127	328	394	428	1292	328	394	473
CVVM30 - 6205	- (B) - Ratio	22	4	1127	328	394	428	1292	328	394	473
CVVM306 - 6205	- (B) - Ratio	22	6	1127	328	394	441	1292	328	394	486
CVVM40 - 6205	- (B) - Ratio	30	4	1127	328	394	441	1292	328	394	486
CVVM406 - 6205	- (B) - Ratio	30	6	1242	328	394	479	1457	328	394	573
CVVM50 - 6205	- (B) - Ratio	37	4	1242	328	394	479	1457	328	394	573
CVVM506 - 6205	- (B) - Ratio	37	6	1242	328	394	479	1457	328	394	573
CVVM60 - 6205	- (B) - Ratio	45	4	1242	328	394	479	1457	328	394	573
CVVM606 - 6205	- (B) - Ratio	45	6	1297	378	484	572	-	-	-	-
CVVM75 - 6205	- (B) - Ratio	55	4	1297	378	484	572	-	-	-	-
CVVM15 - 6215	- (B) - Ratio	11	4	996	213	251	377	1091	213	251	395
CVVM20 - 6215	- (B) - Ratio	15	4	1066	261	324	432	1171	261	324	467
CVVM206 - 6215	- (B) - Ratio	15	6	1151	328	394	501	1316	328	394	546
CVVM25 - 6215	- (B) - Ratio	18.5	4	1151	328	394	501	1316	328	394	546
CVVM256 - 6215	- (B) - Ratio	18.5	6	1151	328	394	514	1316	328	394	559
CVVM30 - 6215	- (B) - Ratio	22	4	1151	328	394	501	1316	328	394	546
CVVM306 - 6215	- (B) - Ratio	22	6	1151	328	394	514	1316	328	394	559
CVVM40 - 6215	- (B) - Ratio	30	4	1151	328	394	514	1316	328	394	559
CVVM406 - 6215	- (B) - Ratio	30	6	1266	328	394	569	1481	328	394	664
CVVM50 - 6215	- (B) - Ratio	37	4	1266	328	394	569	1481	328	394	664
CVVM506 - 6215	- (B) - Ratio	37	6	1266	328	394	569	1481	328	394	664
CVVM60 - 6215	- (B) - Ratio	45	4	1266	328	394	569	1481	328	394	664
CVVM606 - 6215	- (B) - Ratio	45	6	1321	378	484	662	-	-	-	-
CVVM75 - 6215	- (B) - Ratio	55	4	1321	378	484	662	-	-	-	-

Note: 1. $\square$ indicates motor capacity.

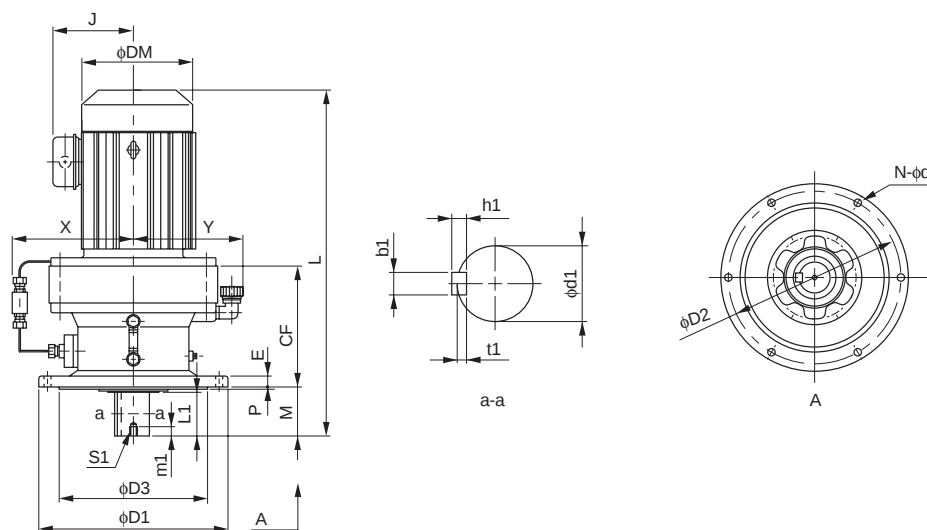
2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter ($\phi D3$): Dimension tolerance conforms to JIS B 0401-1976 "f8."

Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM^{Note 1} - 6225 to 6235



GEARMOTORS

 Dimension Tables
CVVM

Frame size	CF	D1	D2	D3	M	E	P	N	d	X	Y	Output Shaft Note 2, 3, 6						
												d1	L1	b1	h1	t1	S1	m1
6225	356	535	475	415	210	35	10	8	27	352	326	120	165	32	18	11	M20	34
6235	378	570	510	450	250	40	10	8	27	359	344	130	200	32	18	11	M24	41

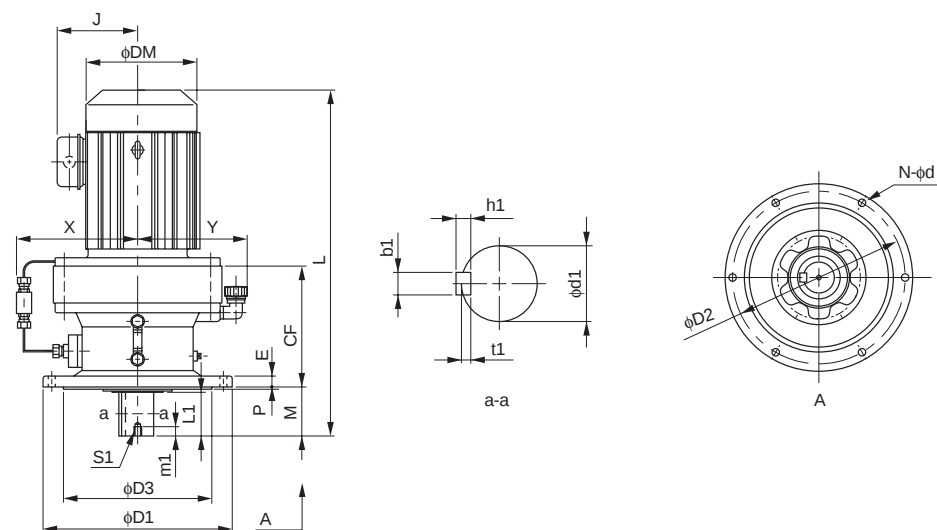
Model Note 5	Motor		Standard				With Brake			
	kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)
CVVM206 - 6225 - (B) - Ratio	15	6	1191	328	394	593	1356	328	394	638
CVVM25 - 6225 - (B) - Ratio	18.5	4	1191	328	394	593	1356	328	394	638
CVVM256 - 6225 - (B) - Ratio	18.5	6	1191	328	394	606	1356	328	394	651
CVVM30 - 6225 - (B) - Ratio	22	4	1191	328	394	593	1356	328	394	638
CVVM306 - 6225 - (B) - Ratio	22	6	1191	328	394	606	1356	328	394	651
CVVM40 - 6225 - (B) - Ratio	30	4	1191	328	394	606	1356	328	394	651
CVVM406 - 6225 - (B) - Ratio	30	6	1306	328	394	660	1521	328	394	755
CVVM50 - 6225 - (B) - Ratio	37	4	1306	328	394	660	1521	328	394	755
CVVM506 - 6225 - (B) - Ratio	37	6	1306	328	394	660	1521	328	394	755
CVVM60 - 6225 - (B) - Ratio	45	4	1306	328	394	660	1521	328	394	755
CVVM606 - 6225 - (B) - Ratio	45	6	1361	378	484	743	-	-	-	-
CVVM75 - 6225 - (B) - Ratio	55	4	1361	378	484	743	-	-	-	-
CVVM206 - 6235 - (B) - Ratio	15	6	1253	328	394	653	1418	328	394	684
CVVM256 - 6235 - (B) - Ratio	18.5	6	1253	328	394	653	1418	328	394	698
CVVM306 - 6235 - (B) - Ratio	22	6	1253	328	394	653	1418	328	394	698
CVVM406 - 6235 - (B) - Ratio	30	6	1368	328	394	699	1583	328	394	787
CVVM506 - 6235 - (B) - Ratio	37	6	1368	328	394	699	1583	328	394	787
CVVM606 - 6235 - (B) - Ratio	45	6	1423	378	484	788	-	-	-	-
CVVM756 - 6235 - (B) - Ratio	55	6	1503	378	485	842	-	-	-	-

Note: 5. "B" after the frame size indicates models equipped with brake.

6. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

7. Dimensions in above drawings are subject to change without notice.

Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM - 6245 to 6265

Frame size	CF	D1	D2	D3	M	E	P	N	d	X	Y	Output Shaft Note 2, 3, 7						
												d1	L1	b1	h1	t1	S1	m1
6245	407	635	560	485	250	40	10	8	33	370	371	140	200	36	20	12	M24	41
6255	480	685	610	535	295	45	10	8	33	426	399	160	240	40	22	13	M30	49
6265	532	750	660	570	360	50	10	8	39	460	431	170	300	40	22	13	M30	49

Model	Note 6	Motor		Standard				With Brake			
		kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)
CVVM206 - 6245	- (B) - Ratio	15	6	1282	328	394	759	1447	328	394	792
CVVM256 - 6245	- (B) - Ratio	18.5	6	1282	328	394	759	1447	328	394	806
CVVM306 - 6245	- (B) - Ratio	22	6	1282	328	394	759	1447	328	394	806
CVVM406 - 6245	- (B) - Ratio	30	6	1397	328	394	805	1612	328	394	893
CVVM506 - 6245	- (B) - Ratio	37	6	1397	328	394	805	1612	328	394	893
CVVM606 - 6245	- (B) - Ratio	45	6	1452	378	484	896	-	-	-	-
CVVM756 - 6245	- (B) - Ratio	55	6	1532	378	485	945	-	-	-	-
CVVM206 - 6255	- (B) - Ratio	15	6	1400	328	394	1045	1565	328	394	1123
CVVM256 - 6255	- (B) - Ratio	18.5	6	1400	328	394	1045	1565	328	394	1137
CVVM306 - 6255	- (B) - Ratio	22	6	1400	328	394	1045	1565	328	394	1137
CVVM406 - 6255	- (B) - Ratio	30	6	1515	328	394	1090	1730	328	394	1178
CVVM506 - 6255	- (B) - Ratio	37	6	1515	328	394	1090	1730	328	394	1178
CVVM606 - 6255	- (B) - Ratio	45	6	1570	378	484	1170	-	-	-	-
CVVM756 - 6255	- (B) - Ratio	55	6	1650	378	485	1225	-	-	-	-
CVVM406 - 6265	- (B) - Ratio	22	6	1517	328	394	1350	1727	328	394	1397
CVVM406 - 6265	- (B) - Ratio	30	6	1632	328	394	1395	1847	328	394	1483
CVVM506 - 6265	- (B) - Ratio	37	6	1632	328	394	1395	1847	328	394	1483
CVVM606 - 6265	- (B) - Ratio	45	6	1687	378	484	1490	-	-	-	-

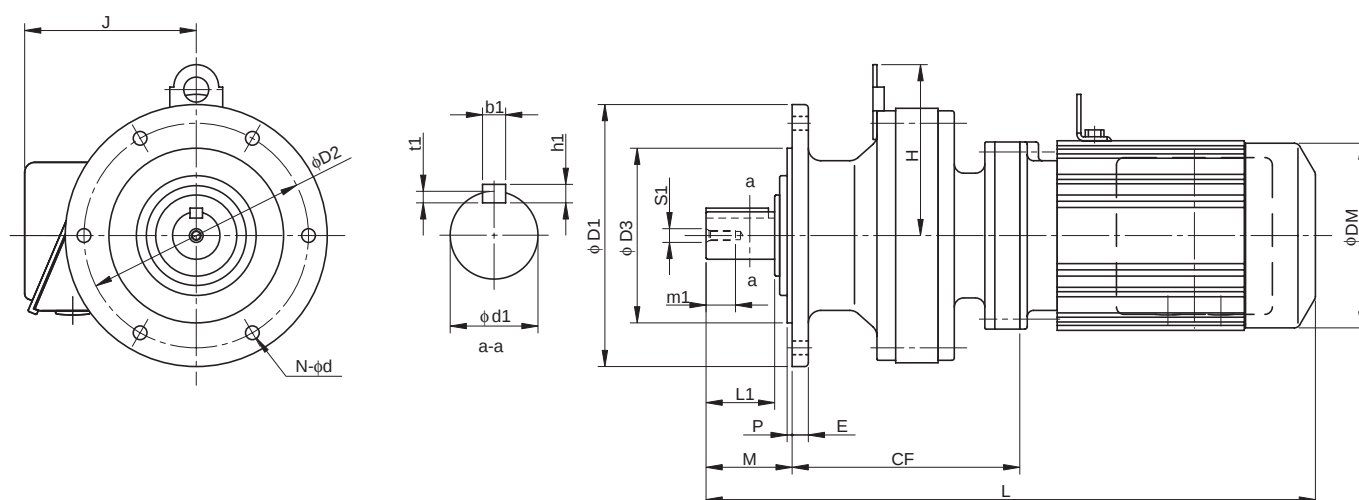
Note: 1.  indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter (φD3): Dimension tolerance conforms to JIS B 0401-1976 "f8."

Dimension Tables Gearmotors (Universal Direction, V-Flange Mount)

CNVM^{Note 1} - 606□DA to 612□DB

Frame size Note 5	CF	D1	D2	D3	M	E	P	N	d	H	Output Shaft Note 2, 3, 7						
											d1	L1	b1	h1	t1	S1	m1
606□DA	91	120	102	80	34	8	3	6	9	-	14	25	5	5	3	M5	16
607□DA	89	160	134	110	42	9	3	4	11	-	18	30	6	6	3.5	M6	16
609□DA	142	160	134	110	48	9	3	4	11	107	28	35	8	7	4	M8	20
610□DA	156	160	134	110	48	9	3	4	11	107	28	35	8	7	4	M8	20
612□DA	171	210	180	140	69	13	4	6	11	137	38	55	10	8	5	M8	20
612□DB	183	210	180	140	69	13	4	6	11	-	38	55	10	8	5	M8	20

Model Note 5, 6	Motor		Standard					With Brake			
	kW	P	L	J	DM	W(kg)		L	J	DM	W(kg)
CNVM01 - 606□DA - (B) - Ratio	0.1	4	287	130	119	9		294	130	124	12
CNVM01 - 607□DA - (B) - Ratio	0.1	4	293	130	119	9		300	130	124	12
CNVM02 - 607□DA - (B) - Ratio	0.2	4	311	130	124	10		339	130	124	13
CNVM01 - 609□DA - (B) - Ratio	0.1	4	352	130	119	16		359	130	124	17
CNVM02 - 609□DA - (B) - Ratio	0.2	4	370	130	124	17		398	130	124	18
CNVM03 - 609□DA - (B) - Ratio	0.25	4	370	130	124	17		398	130	124	18
CNVM05 - 609□DA - (B) - Ratio	0.4	4	386	130	124	18		418	130	124	19
CNVM01 - 610□DA - (B) - Ratio	0.1	4	366	130	119	17		373	130	124	18
CNVM02 - 610□DA - (B) - Ratio	0.2	4	384	130	124	18		412	130	124	19
CNVM03 - 610□DA - (B) - Ratio	0.25	4	384	130	124	18		412	130	124	19
CNVM05 - 610□DA - (B) - Ratio	0.4	4	400	130	124	19		432	130	124	20
CNVM01 - 612□DA - (B) - Ratio	0.1	4	402	130	119	29		409	130	124	30
CNVM02 - 612□DA - (B) - Ratio	0.2	4	420	130	124	30		448	130	124	31
CNVM03 - 612□DA - (B) - Ratio	0.25	4	420	130	124	30		448	130	124	31
CNVM05 - 612□DA - (B) - Ratio	0.4	4	436	130	124	31		468	130	124	32
CNVM01 - 612□DB - (B) - Ratio	0.1	4	414	130	119	32		421	130	124	34
CNVM02 - 612□DB - (B) - Ratio	0.2	4	432	130	124	33		473	130	124	35
CNVM03 - 612□DB - (B) - Ratio	0.25	4	432	130	124	33		473	130	124	35
CNVM05 - 612□DB - (B) - Ratio	0.4	4	448	130	124	34		473	130	124	36
CNVM08 - 612□DB - (B) - Ratio	0.55	4	489	140	148	38		532	140	148	41
CNVM1 - 612□DB - (B) - Ratio	0.75	4	489	140	148	38		532	140	148	41
CNVM1H - 612□DB - (B) - Ratio	1.1	4	516	145	160	42		578	145	160	47
CNVM2 - 612□DB - (B) - Ratio	1.5	4	516	145	160	42		578	145	160	47

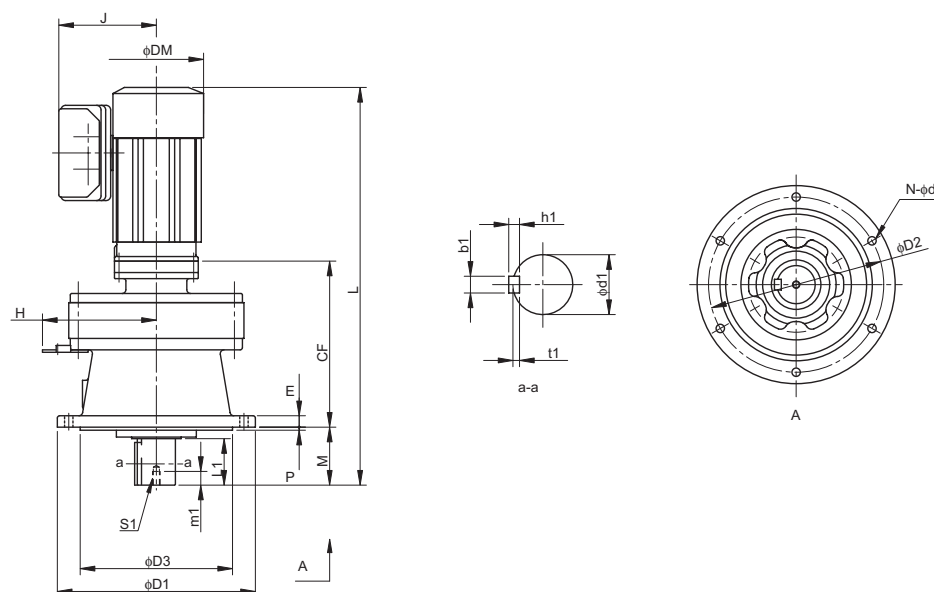
Note: 5. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

6. "B" after the frame size indicates models equipped with brake.

7. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

8. Dimensions in above drawings are subject to change without notice.

Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM^{Note 1} - 613□DA to 614□DC

Frame size Note 5	CF	D1	D2	D3	M	E	P	N	d	H	Output Shaft Note 2, 3, 7						
											d1	L1	b1	h1	t1	S1	m1
613□DA	218	260	230	200	76	15	4	6	11	150	50	61	14	9	5.5	M10	18
613□DB	227	260	230	200	76	15	4	6	11	150	50	61	14	9	5.5	M10	18
613□DC	241	260	230	200	76	15	4	6	11	-	50	61	14	9	5.5	M10	18
614□DA	218	260	230	200	96	15	4	6	11	150	50	81	14	9	5.5	M10	18
614□DB	227	260	230	200	96	15	4	6	11	150	50	81	14	9	5.5	M10	18
614□DC	241	260	230	200	96	15	4	6	11	-	50	81	14	9	5.5	M10	18

Model Note 5, 6	Motor		Standard					With Brake			
	kW	P	L	J	DM	W(kg)		L	J	DM	W(kg)
CVVM02 - 613□DA - (B) - Ratio	0.2	4	474	130	124	45		502	130	124	45
CVVM03 - 613□DA - (B) - Ratio	0.25	4	494	130	124	45		522	130	124	45
CVVM05 - 613□DA - (B) - Ratio	0.4	4	490	130	124	48		522	130	124	49
CVVM02 - 613□DB - (B) - Ratio	0.2	4	483	130	124	48		511	130	124	50
CVVM03 - 613□DB - (B) - Ratio	0.25	4	483	130	124	48		511	130	124	50
CVVM05 - 613□DB - (B) - Ratio	0.4	4	499	130	124	49		531	130	124	51
CVVM08 - 613□DB - (B) - Ratio	0.55	4	540	140	148	53		583	140	148	56
CVVM1 - 613□DB - (B) - Ratio	0.75	4	540	140	148	53		583	140	148	56
CVVM1H - 613□DB - (B) - Ratio	1.1	4	573	145	160	57		635	145	160	62
CVVM2 - 613□DB - (B) - Ratio	1.5	4	573	145	160	57		635	145	160	62
CVVM08 - 613□DC - (B) - Ratio	0.55	4	554	140	148	56		597	140	148	59
CVVM1 - 613□DC - (B) - Ratio	0.75	4	554	140	148	56		597	140	148	59
CVVM2 - 613□DC - (B) - Ratio	1.5	4	587	145	160	60		649	145	160	65
CVVM3 - 613□DC - (B) - Ratio	2.2	4	607	152	173	64		670	152	173	70
CVVM02 - 614□DA - (B) - Ratio	0.2	4	494	123	124	45		522	123	124	46
CVVM03 - 614□DA - (B) - Ratio	0.25	4	494	123	124	45		522	123	124	46
CVVM05 - 614□DA - (B) - Ratio	0.4	4	510	123	124	48		542	123	124	49
CVVM02 - 614□DB - (B) - Ratio	0.2	4	503	123	124	48		531	123	124	50
CVVM03 - 614□DB - (B) - Ratio	0.25	4	503	123	124	48		531	123	124	50
CVVM05 - 614□DB - (B) - Ratio	0.4	4	519	123	124	49		551	123	124	51
CVVM08 - 614□DB - (B) - Ratio	0.55	4	560	140	148	53		603	140	148	56
CVVM1 - 614□DB - (B) - Ratio	0.75	4	560	140	148	53		603	140	148	56
CVVM1H - 614□DB - (B) - Ratio	1.1	4	593	145	160	57		655	145	160	62
CVVM2 - 614□DB - (B) - Ratio	1.5	4	593	145	160	57		655	145	160	62
CVVM08 - 614□DC - (B) - Ratio	0.55	4	574	140	148	54		617	140	148	57
CVVM1 - 614□DC - (B) - Ratio	0.75	4	574	140	148	54		617	140	148	57
CVVM1H - 614□DC - (B) - Ratio	1.1	4	607	145	160	58		669	145	160	63
CVVM2 - 614□DC - (B) - Ratio	1.5	4	607	145	160	58		669	145	160	63
CVVM3 - 614□DC - (B) - Ratio	2.2	4	627	152	173	62		690	152	173	68

Note: 1. □ indicates motor capacity.

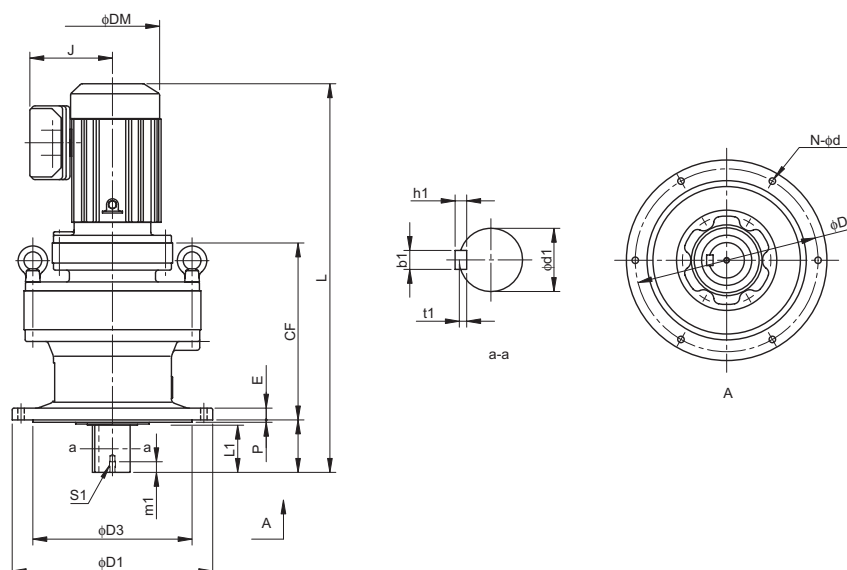
2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter (φD3): Dimension tolerance conforms to JIS B 0401-1976 "f8."

Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM^{Note 1} - 616□DA to 618□DA



Frame size Note 5	CF	D1	D2	D3	M	E	P	N	d	H	Output Shaft Note 2, 3, 7						
											d1	L1	b1	h1	t1	S1	m1
616□DA	285	340	310	270	89	20	4	6	11	-	60	80	18	11	7	M10	18
616□DB	299	340	310	270	89	20	4	6	11	-	60	80	18	11	7	M10	18
617□DA	324	400	360	316	94	22	5	8	14	-	70	84	20	12	7.5	M12	24
617□DB	338	400	360	316	94	22	5	8	14	-	70	84	20	12	7.5	M12	24
618□DA	364	430	390	345	110	22	5	8	18	-	80	100	22	14	9	M12	24

Model Note 5, 6	Motor		Standard				With Brake			
	kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)
CVVM02 - 616□DA - (B) - Ratio	0.2	4	554	130	124	84	581	130	124	86
CVVM03 - 616□DA - (B) - Ratio	0.25	4	554	130	124	84	581	130	124	86
CVVM05 - 616□DA - (B) - Ratio	0.4	4	570	130	124	85	601	130	124	87
CVVM08 - 616□DA - (B) - Ratio	0.55	4	611	140	148	89	653	140	148	92
CVVM1 - 616□DA - (B) - Ratio	0.75	4	611	140	148	89	653	140	148	92
CVVM1H - 616□DA - (B) - Ratio	1.1	4	643	145	160	93	705	145	160	98
CVVM2 - 616□DA - (B) - Ratio	1.5	4	643	145	160	93	705	145	160	98
CVVM08 - 616□DB - (B) - Ratio	0.55	4	625	140	148	91	667	140	148	94
CVVM1 - 616□DB - (B) - Ratio	0.75	4	625	140	148	91	667	140	148	94
CVVM1H - 616□DB - (B) - Ratio	1.1	4	658	145	160	95	719	145	160	100
CVVM2 - 616□DB - (B) - Ratio	1.5	4	658	145	160	95	719	145	160	100
CVVM3 - 616□DB - (B) - Ratio	2.2	4	678	152	173	99	740	152	173	105
CVVM02 - 617□DA - (B) - Ratio	0.2	4	598	130	124	120	626	130	124	122
CVVM03 - 617□DA - (B) - Ratio	0.25	4	598	130	124	120	626	130	124	122
CVVM05 - 617□DA - (B) - Ratio	0.4	4	614	130	124	121	646	130	124	123
CVVM08 - 617□DA - (B) - Ratio	0.55	4	655	140	148	125	698	140	148	128
CVVM1 - 617□DA - (B) - Ratio	0.75	4	655	140	148	125	698	140	148	128
CVVM1H - 617□DA - (B) - Ratio	1.1	4	688	145	160	129	750	145	160	134
CVVM2 - 617□DA - (B) - Ratio	1.5	4	688	145	160	129	750	145	160	134
CVVM08 - 617□DB - (B) - Ratio	0.55	4	669	140	148	122	712	140	148	129
CVVM1 - 617□DB - (B) - Ratio	0.75	4	669	140	148	122	712	140	148	129
CVVM1H - 617□DB - (B) - Ratio	1.1	4	702	145	160	131	764	145	160	136
CVVM2 - 617□DB - (B) - Ratio	1.5	4	702	145	160	131	764	145	160	136
CVVM3 - 617□DB - (B) - Ratio	2.2	4	722	152	173	135	785	152	173	141
CVVM05 - 618□DA - (B) - Ratio	0.4	4	670	130	124	154	702	130	124	156
CVVM08 - 618□DA - (B) - Ratio	0.55	4	711	140	148	158	754	140	148	161
CVVM1 - 618□DA - (B) - Ratio	0.75	4	711	140	148	158	754	140	148	161
CVVM1H - 618□DA - (B) - Ratio	1.1	4	744	145	160	162	806	145	160	167
CVVM2 - 618□DA - (B) - Ratio	1.5	4	744	145	160	162	806	145	160	167
CVVM3 - 618□DA - (B) - Ratio	2.2	4	764	152	173	166	827	152	173	172

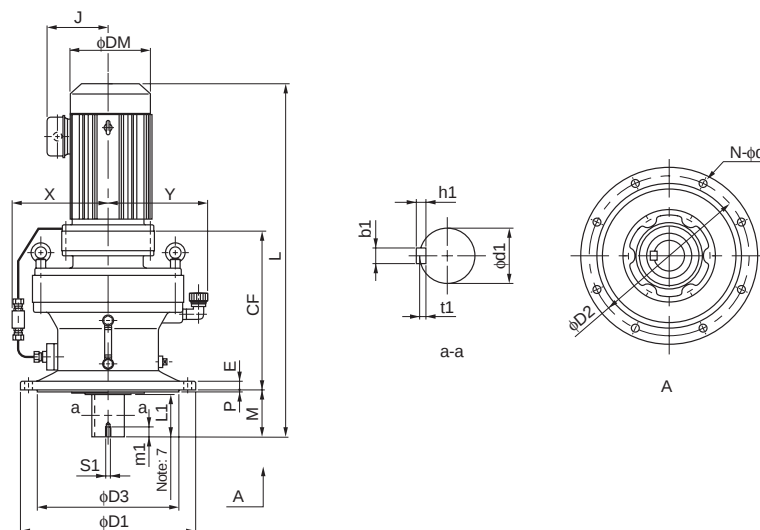
Note: 5. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

6. "B" after the frame size indicates models equipped with brake.

7. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

8. Dimensions in above drawings are subject to change without notice.

Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM^{Note 1} - 616□DC to 618□DB

Frame size Note 5	CF	D1	D2	D3	M	E	P	N	d	X	Y	Output Shaft Note 2, 3, 7						
												d1	L1	b1	h1	t1	S1	m1
616□DC	300	340	310	270	89	20	4	6	11	196	200	60	80	18	11	7	M10	18
617□DC	342	400	360	316	94	22	5	8	14	218	225	70	84	20	12	7.5	M12	24
618□DB	386	430	390	345	110	22	5	8	18	233	240	80	100	22	14	9	M12	24

Model Note 5, 6	Motor		Standard				With Brake			
	kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)
CVVM1H - 616□DC - (B) - Ratio	1.1	4	659	145	160	103	721	145	160	108
CVVM2 - 616□DC - (B) - Ratio	1.5	4	659	145	160	103	721	145	160	108
CVVM3 - 616□DC - (B) - Ratio	2.2	4	679	152	173	107	742	152	173	114
CVVM4 - 616□DC - (B) - Ratio	3.0	4	702	168	212	117	774	168	212	127
CVVM5 - 616□DC - (B) - Ratio	3.7	4	702	168	212	117	774	168	212	127
CVVM8 - 616□DC - (B) - Ratio	5.5	4	746	168	212	127	818	168	212	131
CVVM1H - 617□DC - (B) - Ratio	1.1	4	706	145	160	138	768	145	160	143
CVVM2 - 617□DC - (B) - Ratio	1.5	4	706	145	160	138	768	145	160	143
CVVM3 - 617□DC - (B) - Ratio	2.2	4	726	152	173	142	789	152	173	152
CVVM4 - 617□DC - (B) - Ratio	3.0	4	749	168	212	152	821	168	212	165
CVVM5 - 617□DC - (B) - Ratio	3.7	4	749	168	212	152	821	168	212	165
CVVM8 - 617□DC - (B) - Ratio	5.5	4	793	168	212	162	865	168	212	172
CVVM1H - 618□DB - (B) - Ratio	1.1	4	766	145	160	179	828	145	160	184
CVVM2 - 618□DB - (B) - Ratio	1.5	4	766	145	160	179	828	145	160	184
CVVM3 - 618□DB - (B) - Ratio	2.2	4	786	152	173	183	849	152	173	190
CVVM4 - 618□DB - (B) - Ratio	3.0	4	809	168	212	193	881	168	212	203
CVVM5 - 618□DB - (B) - Ratio	3.7	4	809	168	212	193	881	168	212	203
CVVM8 - 618□DB - (B) - Ratio	5.5	4	853	168	212	200	925	168	212	210
CVVM10 - 618□DB - (B) - Ratio	7.5	4	876	213	251	215	971	213	251	231
CVVM15 - 618□DB - (B) - Ratio	11	4	936	213	251	229	1031	213	251	247

Note: 1. □ indicates motor capacity.

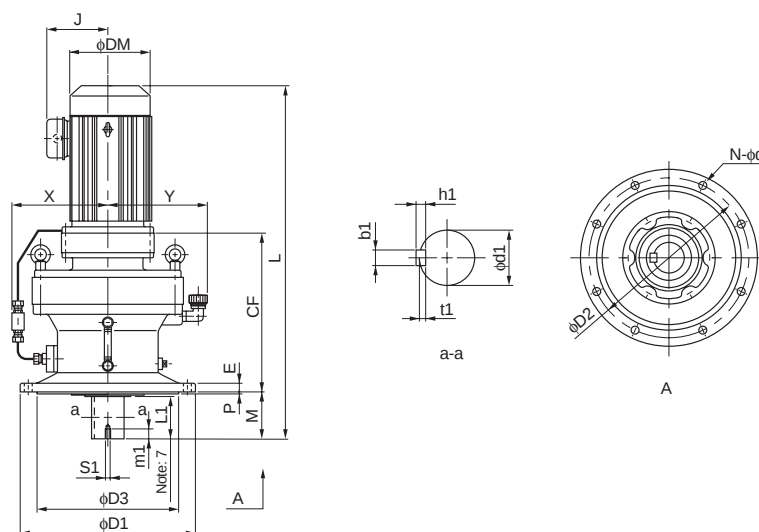
2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter ($\phi D3$): Dimension tolerance conforms to JIS B 0401-1976 "f8."

Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM^{Note 1} - 619□DA to 619□DB



GEARMOTORS

Dimension Tables
CVVM

Frame size Note 5	CF	D1	D2	D3	M	E	P	N	d	X	Y	Output Shaft Note 2, 3, 7						
												d1	L1	b1	h1	t1	S1	m1
619□DA	411	490	450	400	145	30	6	12	18	255	270	95	125	25	14	9	M20	34
619□DB	427	490	450	400	145	30	6	12	18	255	270	95	125	25	14	9	M20	34

Model Note 5, 6	Motor		Standard				With Brake			
	kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)
CVVM1 - 619□DA - (B) - Ratio	0.75	4	793	140	148	238	836	140	148	241
CVVM1H - 619□DA - (B) - Ratio	1.1	4	826	145	160	242	888	145	160	247
CVVM2 - 619□DA - (B) - Ratio	1.5	4	826	145	160	242	888	145	160	247
CVVM3 - 619□DA - (B) - Ratio	2.2	4	846	152	173	246	909	152	173	253
CVVM4 - 619□DA - (B) - Ratio	3.0	4	869	168	212	256	941	168	212	266
CVVM5 - 619□DA - (B) - Ratio	3.7	4	869	168	212	256	941	168	212	266
CVVM8 - 619□DA - (B) - Ratio	5.5	4	913	168	212	263	985	168	212	273
CVVM2 - 619□DB - (B) - Ratio	1.5	4	842	145	160	249	904	145	160	254
CVVM3 - 619□DB - (B) - Ratio	2.2	4	862	152	173	253	925	152	173	260
CVVM4 - 619□DB - (B) - Ratio	3.0	4	885	168	212	263	957	168	212	273
CVVM5 - 619□DB - (B) - Ratio	3.7	4	885	168	212	263	957	168	212	273
CVVM8 - 619□DB - (B) - Ratio	5.5	4	929	168	212	270	1001	168	212	280
CVVM10 - 619□DB - (B) - Ratio	7.5	4	952	213	251	285	1047	213	251	303
CVVM15 - 619□DB - (B) - Ratio	11	4	1012	213	251	299	1107	213	251	317
CVVM20 - 619□DB - (B) - Ratio	15	4	1102	261	324	351	1207	261	324	385

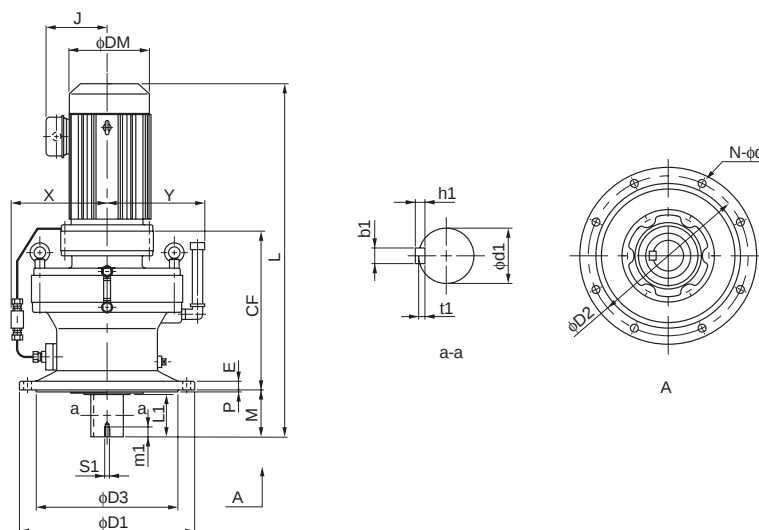
Note: 5. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

6. "B" after the frame size indicates models equipped with brake.

7. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

8. Dimensions in above drawings are subject to change without notice.

Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM^{Note 1} - 6205DA to 6215DA

Frame size	CF	D1	D2	D3	M	E	P	N	d	X	Y	Output Shaft Note 2, 3, 6						
												d1	L1	b1	h1	t1	S1	m1
6205DA	393	455	405	355	204	30	5	8	22	341	287	100	165	28	16	10	M20	34
6205DB	420	455	405	355	204	30	5	8	22	341	287	100	165	28	16	10	M20	34
6215DA	447	490	440	390	203	35	7	8	24	348	306	110	165	28	16	10	M20	34

Model	Note 5	Motor		Standard				With Brake			
		kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)
CVVM1 - 6205DA - (B) - Ratio		0.75	4	834	140	148	254	877	140	148	257
CVVM2 - 6205DA - (B) - Ratio		1.5	4	867	145	160	257	929	145	160	263
CVVM3 - 6205DA - (B) - Ratio		2.2	4	887	152	173	262	949	152	173	269
CVVM4 - 6205DA - (B) - Ratio		3.0	4	910	168	212	272	982	168	212	282
CVVM5 - 6205DA - (B) - Ratio		3.7	4	910	168	212	272	982	168	212	282
CVVM8 - 6205DA - (B) - Ratio		5.5	4	954	168	212	279	1026	168	212	289
CVVM3 - 6205DB - (B) - Ratio		2.2	4	914	152	173	274	977	152	173	281
CVVM4 - 6205DB - (B) - Ratio		3.0	4	937	168	212	284	1009	168	212	294
CVVM5 - 6205DB - (B) - Ratio		3.7	4	937	168	212	284	1009	168	212	301
CVVM8 - 6205DB - (B) - Ratio		5.5	4	981	168	212	291	1053	168	212	324
CVVM10 - 6205DB - (B) - Ratio		7.5	4	1004	213	251	306	1099	213	251	347
CVVM15 - 6205DB - (B) - Ratio		11	4	1064	213	251	320	1159	213	251	361
CVVM20 - 6205DB - (B) - Ratio		15	4	1154	259	324	372	1249	259	324	429
CVVM2 - 6215DA - (B) - Ratio		1.5	4	920	145	160	331	982	145	160	336
CVVM3 - 6215DA - (B) - Ratio		2.2	4	940	152	173	334	1003	152	173	341
CVVM4 - 6215DA - (B) - Ratio		3.0	4	963	168	212	344	1035	168	212	354
CVVM5 - 6215DA - (B) - Ratio		3.7	4	963	168	212	344	1035	168	212	354
CVVM8 - 6215DA - (B) - Ratio		5.5	4	1007	168	212	351	1079	168	212	361
CVVM10 - 6215DA - (B) - Ratio		7.5	4	1030	213	251	366	1125	213	251	384
CVVM15 - 6215DA - (B) - Ratio		11	4	1090	213	251	380	1185	213	251	398
CVVM20 - 6215DA - (B) - Ratio		15	4	1180	161	324	432	1285	161	324	466

Note: 1. $\square$ indicates motor capacity.

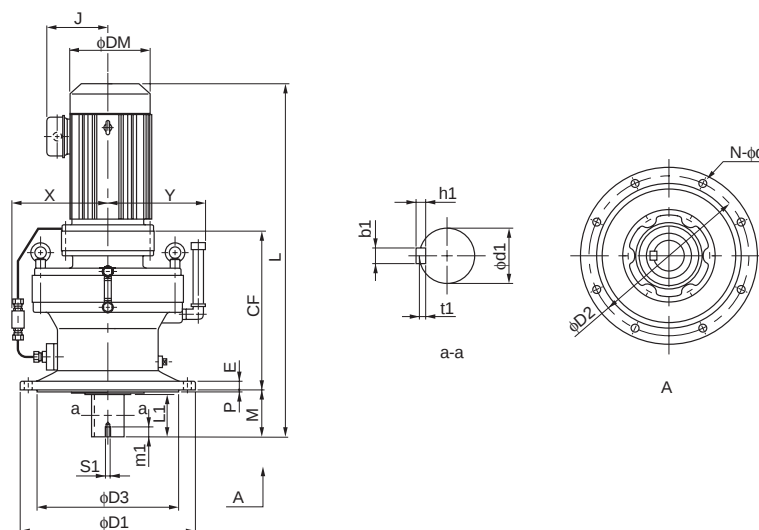
2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter ($\phi D3$): Dimension tolerance conforms to JIS B 0401-1976 "f8."

Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM^{Note 1} - 6215DB to 6225DB



GEARMOTORS

Dimension Tables
CVVM

Frame size	CF	D1	D2	D3	M	E	P	N	d	X	Y	Output Shaft ^{Note 2, 3, 6}						
												d1	L1	b1	h1	t1	S1	m1
6215DB	472	490	440	390	203	35	7	8	24	348	306	110	165	28	16	10	M20	34
6225DA	482	535	475	415	210	35	10	8	27	352	326	120	165	32	18	11	M20	34
6225DB	525	535	475	415	210	35	10	8	27	352	326	120	165	32	18	11	M20	34

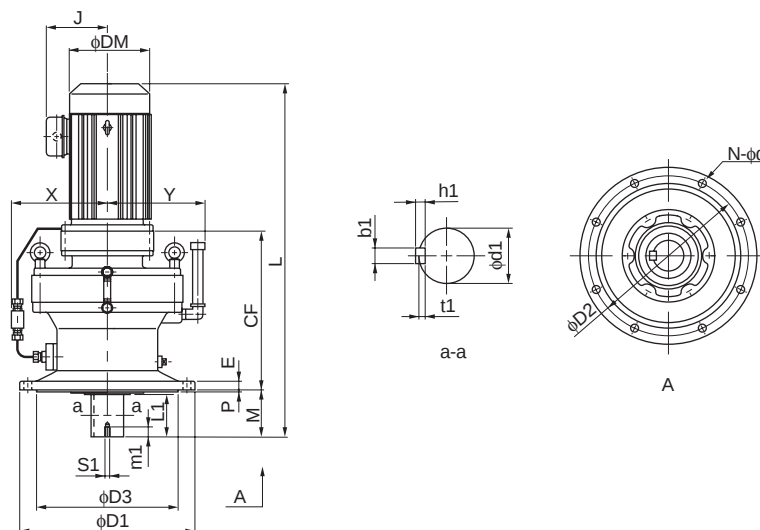
Model	Note 5	Motor		Standard				With Brake			
		kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)
CVVM5 - 6215DB - (B) - Ratio		3.7	4	993	168	212	377	1065	168	212	387
CVVM8 - 6215DB - (B) - Ratio		5.5	4	1037	168	212	384	1109	168	212	400
CVVM10 - 6215DB - (B) - Ratio		7.5	4	1060	213	251	400	1155	213	251	417
CVVM15 - 6215DB - (B) - Ratio		11	4	1120	213	251	414	1215	213	251	431
CVVM20 - 6215DB - (B) - Ratio		15	4	1205	261	324	467	1310	261	324	500
CVVM25 - 6215DB - (B) - Ratio		18.5	4	1300	328	394	543	1465	328	394	587
CVVM30 - 6215DB - (B) - Ratio		22	4	1300	328	394	543	1465	328	394	587
CVVM2 - 6225DA - (B) - Ratio		1.5	4	962	145	160	420	1024	145	160	425
CVVM3 - 6225DA - (B) - Ratio		2.2	4	982	152	173	423	1045	152	173	430
CVVM4 - 6225DA - (B) - Ratio		3.0	4	1005	168	212	433	1077	168	212	443
CVVM5 - 6225DA - (B) - Ratio		3.7	4	1005	168	212	433	1077	168	212	443
CVVM8 - 6225DA - (B) - Ratio		5.5	4	1049	168	212	440	1121	168	212	450
CVVM10 - 6225DA - (B) - Ratio		7.5	4	1072	213	251	455	1167	213	251	473
CVVM15 - 6225DA - (B) - Ratio		11	4	1132	213	251	469	1227	213	251	486
CVVM20 - 6225DA - (B) - Ratio		15	4	1222	261	324	521	1327	261	324	554
CVVM5 - 6225DB - (B) - Ratio		3.7	4	1058	168	212	479	1130	168	212	490
CVVM8 - 6225DB - (B) - Ratio		5.5	4	1102	168	212	486	1174	168	212	497
CVVM10 - 6225DB - (B) - Ratio		7.5	4	1125	213	251	501	1220	213	251	519
CVVM15 - 6225DB - (B) - Ratio		11	4	1185	213	251	515	1280	213	251	533
CVVM20 - 6225DB - (B) - Ratio		15	4	1265	261	324	569	1370	261	324	603
CVVM25 - 6225DB - (B) - Ratio		18.5	4	1360	328	394	661	1525	328	394	685
CVVM30 - 6225DB - (B) - Ratio		22	4	1360	328	394	661	1525	328	394	685
CVVM40 - 6225DB - (B) - Ratio		30	4	1360	328	394	678	1525	328	394	721

Note: 5. "B" after the frame size indicates models equipped with brake.

6. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

7. Dimensions in above drawings are subject to change without notice.

Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM^{Note 1} - 6235DA to 6245DB

Frame size	CF	D1	D2	D3	M	E	P	N	d	X	Y	Output Shaft Note 2, 3, 6						
												d1	L1	b1	h1	t1	S1	m1
6235DA	529	570	510	450	250	40	10	8	27	359	344	130	200	32	18	11	M24	41
6235DB	551	570	510	450	250	40	10	8	27	359	344	130	200	32	18	11	M24	41
6245DA	566	635	560	485	250	40	10	8	33	370	371	140	200	36	20	12	M24	41
6245DB	587	635	560	485	250	40	10	8	33	370	371	140	200	36	20	12	M24	41

Model	Note 5	Motor		Standard				With Brake			
		kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)
CVVM3 - 6235DA - (B) - Ratio		2.2	4	1069	152	173	523	1131	152	173	529
CVVM4 - 6235DA - (B) - Ratio		3.0	4	1091	168	212	532	1163	168	212	542
CVVM5 - 6235DA - (B) - Ratio		3.7	4	1091	168	212	532	1163	168	212	542
CVVM8 - 6235DA - (B) - Ratio		5.5	4	1135	168	212	539	1207	168	212	549
CVVM10 - 6235DA - (B) - Ratio		7.5	4	1163	213	251	555	1258	213	251	572
CVVM15 - 6235DA - (B) - Ratio		11	4	1223	213	251	569	1318	213	251	586
CVVM20 - 6235DA - (B) - Ratio		15	4	1309	261	324	622	1413	261	324	656
CVVM25 - 6235DA - (B) - Ratio		18.5	4	1403	328	394	698	1568	328	394	742
CVVM30 - 6235DA - (B) - Ratio		22	4	1403	328	394	698	1568	328	394	742
CVVM15 - 6235DB - (B) - Ratio		11	4	1245	213	251	601	1340	213	251	619
CVVM20 - 6235DB - (B) - Ratio		15	4	1330	261	324	663	1435	261	324	697
CVVM25 - 6235DB - (B) - Ratio		18.5	4	1425	328	394	730	1590	328	394	781
CVVM30 - 6235DB - (B) - Ratio		22	4	1425	328	394	730	1590	328	394	781
CVVM40 - 6235DB - (B) - Ratio		30	4	1425	328	394	744	1590	328	394	787
CVVM50 - 6235DB - (B) - Ratio		37	4	1540	328	394	792	1755	328	394	889
CVVM3 - 6245DA - (B) - Ratio		2.2	4	1106	152	173	617	1169	152	173	623
CVVM4 - 6245DA - (B) - Ratio		3.0	4	1129	168	212	626	1201	168	212	636
CVVM5 - 6245DA - (B) - Ratio		3.7	4	1129	168	212	626	1201	168	212	636
CVVM8 - 6245DA - (B) - Ratio		5.5	4	1173	168	212	633	1245	168	212	643
CVVM10 - 6245DA - (B) - Ratio		7.5	4	1201	213	251	649	1296	213	251	666
CVVM15 - 6245DA - (B) - Ratio		11	4	1261	213	251	663	1356	213	251	680
CVVM20 - 6245DA - (B) - Ratio		15	4	1346	261	324	716	1451	261	324	750
CVVM25 - 6245DA - (B) - Ratio		18.5	4	1441	328	394	792	1606	328	394	845
CVVM30 - 6245DA - (B) - Ratio		22	4	1441	328	394	792	1606	328	394	845
CVVM15 - 6245DB - (B) - Ratio		11	4	1282	213	251	690	1377	213	251	708
CVVM20 - 6245DB - (B) - Ratio		15	4	1367	261	324	750	1472	261	324	779
CVVM25 - 6245DB - (B) - Ratio		18.5	4	1462	328	394	816	1627	328	394	867
CVVM30 - 6245DB - (B) - Ratio		22	4	1462	328	394	816	1627	328	394	867
CVVM40 - 6245DB - (B) - Ratio		30	4	1462	328	394	833	1627	328	394	876
CVVM50 - 6245DB - (B) - Ratio		37	4	1577	328	394	881	1792	328	394	978

Note: 1. $\square$ indicates motor capacity.

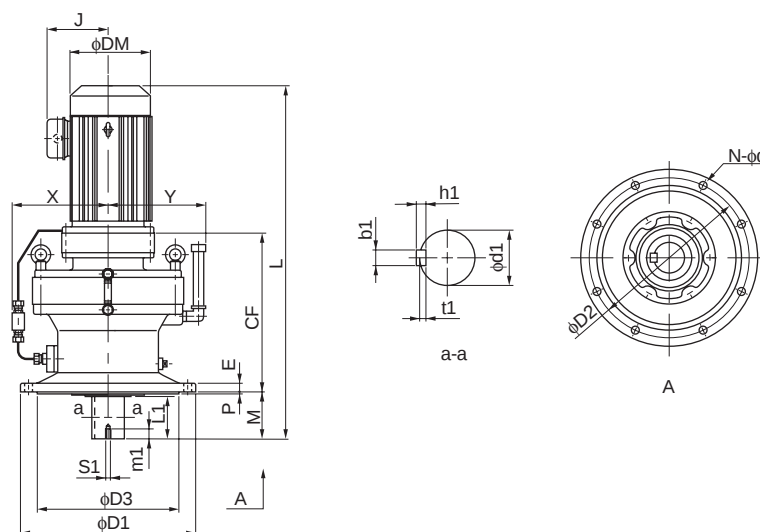
2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter ($\phi D3$): Dimension tolerance conforms to JIS B 0401-1976 "f8."

Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM^{Note 1} - 6255DA to 6275DA



Frame size	CF	D1	D2	D3	M	E	P	N	d	X	Y	Output Shaft Note 2, 3, 6						
												d1	L1	b1	h1	t1	S1	m1
6255DA	661	685	610	535	295	45	10	8	33	395	399	160	240	40	22	13	M30	49
6255DB	684	685	610	535	295	45	10	8	33	395	399	160	240	40	22	13	M30	49
6265DA	728	750	660	570	360	50	10	8	39	427	431	170	300	40	22	13	M30	49
6275DA	994	1160	1020	900	355	60	10	8	39	610	613	180	320	45	25	15	M30	52

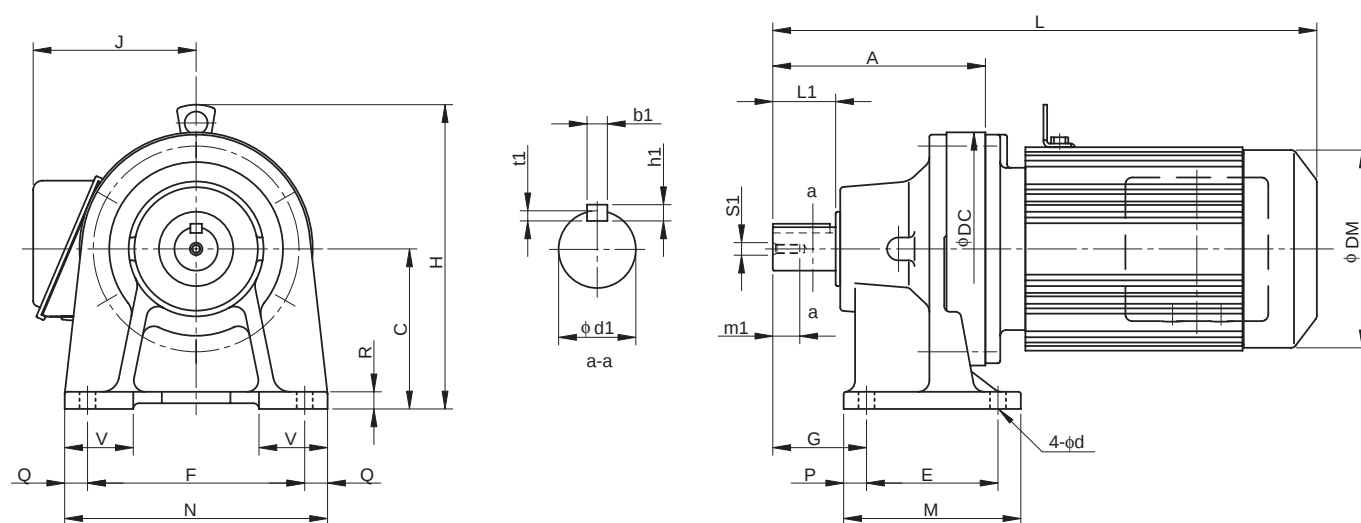
Model	Note 5	Motor		Standard				With Brake			
		kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)
CVVM5 - 6255DA - (B) - Ratio		3.7	4	1284	168	212	947	1356	168	212	957
CVVM8 - 6255DA - (B) - Ratio		5.5	4	1328	168	212	954	1400	168	212	964
CVVM10 - 6255DA - (B) - Ratio		7.5	4	1346	213	251	969	1441	213	251	984
CVVM15 - 6255DA - (B) - Ratio		11	4	1406	213	251	983	1501	213	251	998
CVVM20 - 6255DA - (B) - Ratio		15	4	1486	261	324	1041	1591	261	324	1077
CVVM25 - 6255DA - (B) - Ratio		18.5	4	1581	328	394	1110	1746	328	394	1161
CVVM30 - 6255DA - (B) - Ratio		22	4	1581	328	394	1110	1746	328	394	1161
CVVM40 - 6255DA - (B) - Ratio		30	4	1581	328	394	1129	1746	328	394	1172
CVVM15 - 6255DB - (B) - Ratio		11	4	1443	213	251	1059	1538	213	251	1074
CVVM20 - 6255DB - (B) - Ratio		15	4	1508	261	324	1109	1613	261	324	1143
CVVM25 - 6255DB - (B) - Ratio		18.5	4	1603	328	394	1185	1768	328	394	1236
CVVM30 - 6255DB - (B) - Ratio		22	4	1603	328	394	1185	1768	328	394	1236
CVVM40 - 6255DB - (B) - Ratio		30	4	1603	328	394	1200	1768	328	394	1243
CVVM50 - 6255DB - (B) - Ratio		37	4	1718	328	394	1238	1928	328	394	1335
CVVM60 - 6255DB - (B) - Ratio		45	4	1718	328	394	1238	1928	328	394	1335
CVVM8 - 6265DA - (B) - Ratio		5.5	4	1480	168	212	1296	1552	168	212	1306
CVVM10 - 6265DA - (B) - Ratio		7.5	4	1493	213	251	1309	1588	213	251	1329
CVVM15 - 6265DA - (B) - Ratio		11	4	1553	213	251	1326	1648	213	251	1341
CVVM20 - 6265DA - (B) - Ratio		15	4	1618	261	324	1376	1723	261	324	1412
CVVM25 - 6265DA - (B) - Ratio		18.5	4	1713	328	394	1455	1878	328	394	1500
CVVM30 - 6265DA - (B) - Ratio		22	4	1713	328	394	1455	1878	328	394	1500
CVVM40 - 6265DA - (B) - Ratio		30	4	1713	328	394	1470	1878	328	394	1513
CVVM50 - 6265DA - (B) - Ratio		37	4	1828	328	394	1505	2043	328	394	1598
CVVM60 - 6265DA - (B) - Ratio		45	4	1828	328	394	1505	2043	328	394	1598
CVVM10 - 6275DA - (B) - Ratio		7.5	4	1754	213	251	2694	1849	213	251	2714
CVVM15 - 6275DA - (B) - Ratio		11	4	1814	213	251	2708	1909	213	251	2723
CVVM20 - 6275DA - (B) - Ratio		15	4	1879	261	324	2761	1984	261	324	2797
CVVM25 - 6275DA - (B) - Ratio		18.5	4	1974	328	394	2840	2139	328	394	2885
CVVM30 - 6275DA - (B) - Ratio		22	4	1974	328	394	2840	2139	328	394	2885
CVVM40 - 6275DA - (B) - Ratio		30	4	1974	328	394	2855	2139	328	394	2898
CVVM50 - 6275DA - (B) - Ratio		37	4	2089	328	394	2890	2304	328	394	2983
CVVM60 - 6275DA - (B) - Ratio		45	4	2089	328	394	2890	2304	328	394	2983

Note: 5. "B" after the frame size indicates models equipped with brake.

6. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

7. Dimensions in above drawings are subject to change without notice.

Dimension Tables Gearmotors (Universal Direction, Foot-Mount)

CNHM^{Note 1} - 610H, 612H (Center Height Option)

Frame size	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 5						
														d1	L1	b1	h1	t1	S1	m1
610H	156	120	150	90	150	60	135	180	15	15	12	40	11	28	35	8	7	4	M8	20
612H	186	140	204	115	190	82	155	230	20	20	15	60	14	38	55	10	8	5	M8	20

Model	Note 4	Motor		Standard					With Brake				
		kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)
CNHM02 - 610H	- (B) - Ratio	0.2	4	336	207	130	124	19	364	207	130	124	21
CNHM03 - 610H	- (B) - Ratio	0.25	4	336	207	130	124	19	364	207	130	124	21
CNHM05 - 610H	- (B) - Ratio	0.4	4	352	207	130	124	20	384	207	130	124	22
CNHM08 - 610H	- (B) - Ratio	0.55	4	393	213	140	148	24	436	213	140	148	27
CNHM1 - 610H	- (B) - Ratio	0.75	4	393	213	140	148	24	436	213	140	148	27
CNHM1H - 610H	- (B) - Ratio	1.1	4	426	220	145	160	28	488	220	145	160	33
CNHM2 - 610H	- (B) - Ratio	1.5	4	426	220	145	160	28	488	220	145	160	33
CNHM3 - 610H	- (B) - Ratio	2.2	4	446	226	152	173	32	509	226	152	173	38
CNHM05 - 612H	- (B) - Ratio	0.4	4	387	257	130	124	31	419	257	130	124	33
CNHM08 - 612H	- (B) - Ratio	0.55	4	423	233	140	148	33	466	233	140	148	36
CNHM1 - 612H	- (B) - Ratio	0.75	4	423	233	140	148	33	466	233	140	148	36
CNHM1H - 612H	- (B) - Ratio	1.1	4	456	240	145	160	37	518	240	145	160	42
CNHM2 - 612H	- (B) - Ratio	1.5	4	456	240	145	160	37	518	240	145	160	42
CNHM3 - 612H	- (B) - Ratio	2.2	4	476	246	152	173	51	539	246	152	173	48
CNHM4 - 612H	- (B) - Ratio	3.0	4	499	266	168	212	51	571	266	168	212	61
CNHM5 - 612H	- (B) - Ratio	3.7	4	499	266	168	212	51	571	266	168	212	61
CNHM8 - 612H	- (B) - Ratio	5.5	4	543	266	168	212	58	615	266	168	212	68

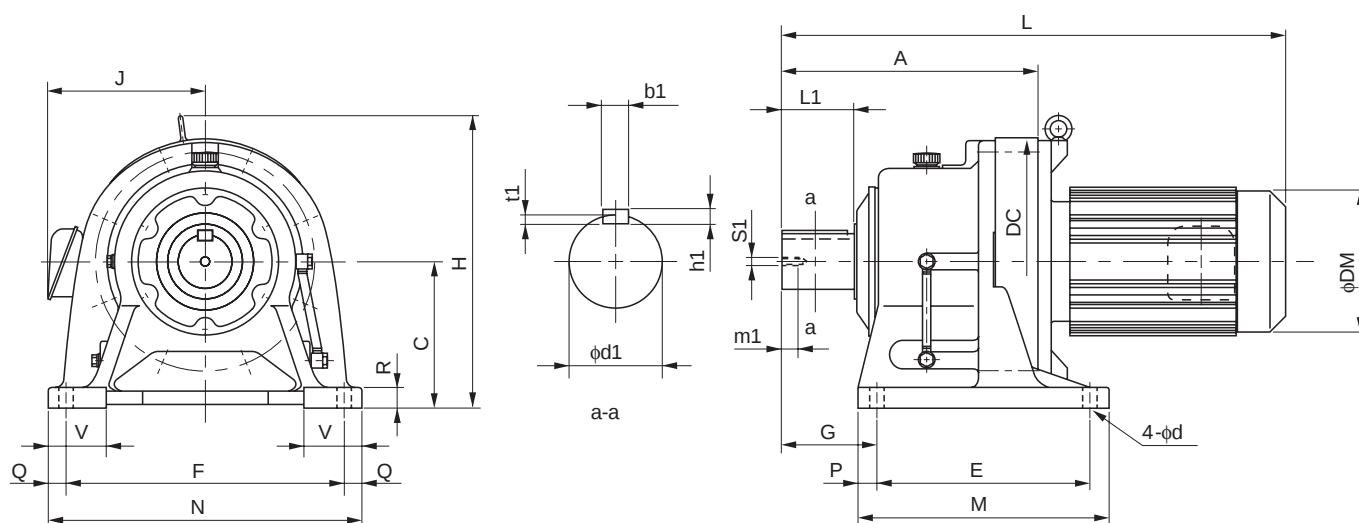
Note: 1. $\square$ indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM^{Note 1} - 614H, 616H (Center Height Option)



GEARMOTORS

Dimension Tables
Center Height Option

Frame size	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 5						
														d1	L1	b1	h1	t1	S1	m1
614H	260	160	230	145	290	120	195	330	25	20	22	65	18	50	90	14	9	5.5	M10	18
616H	308	200	300	150	370	139	238	410	44	20	25	75	18	60	90	18	11	7	M10	18

Model Note 4	Motor		Standard							With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)	L	H
CHHM1 - 614H - (B) - Ratio	0.75	4	497	268	140	148	52	540	268	140	148	57	540	268
CHHM1H - 614H - (B) - Ratio	1.1	4	530	268	145	160	58	592	268	145	160	63	592	268
CHHM2 - 614H - (B) - Ratio	1.5	4	530	268	145	160	58	592	268	145	160	63	592	268
CHHM3 - 614H - (B) - Ratio	2.2	4	550	274	152	173	61	613	274	152	173	68	613	274
CHHM4 - 614H - (B) - Ratio	3.0	4	573	296	168	212	71	645	296	168	212	81	645	296
CHHM5 - 614H - (B) - Ratio	3.7	4	573	296	168	212	71	645	296	168	212	81	645	296
CHHM8 - 614H - (B) - Ratio	5.5	4	617	296	168	212	78	689	296	168	212	88	689	296
CHHM10 - 614H - (B) - Ratio	7.5	4	640	323	213	251	93	735	323	213	251	111	735	323
CHHM15 - 614H - (B) - Ratio	11	4	700	323	213	251	107	795	323	213	251	125	795	323
*CHHM20 - 614H - (B) - Ratio	15	4	790	358	261	324	159	880	321	261	324	193	880	321
CHHM1H - 616H - (B) - Ratio	1.1	4	583	310	145	160	99	645	310	145	160	104	645	310
CHHM2 - 616H - (B) - Ratio	1.5	4	583	310	145	160	99	645	310	145	160	104	645	310
CHHM3 - 616H - (B) - Ratio	2.2	4	598	310	152	173	102	661	310	152	173	108	661	310
CHHM4 - 616H - (B) - Ratio	3.0	4	621	310	168	212	111	693	310	168	212	121	693	310
CHHM5 - 616H - (B) - Ratio	3.7	4	621	310	168	212	111	693	310	168	212	121	693	310
CHHM8 - 616H - (B) - Ratio	5.5	4	665	310	168	212	118	737	310	168	212	128	737	310
CHHM10 - 616H - (B) - Ratio	7.5	4	693	333	213	251	134	788	333	213	251	151	788	333
CHHM15 - 616H - (B) - Ratio	11	4	753	333	213	251	148	848	333	213	251	165	848	333
CHHM20 - 616H - (B) - Ratio	15	4	838	368	261	324	201	928	368	261	324	235	928	368
CHHM25 - 616H - (B) - Ratio	18.5	4	933	368	328	394	277	1098	368	328	394	328	1098	368
CHHM30 - 616H - (B) - Ratio	22	4	933	368	328	394	277	1098	368	328	394	328	1098	368

"*" indicates models with bottom level of the motor lower than the reducer base.

Note: 4. "B" after the frame size indicates models equipped with brake.

5. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

6. Dimensions in above drawings are subject to change without notice.

C

REDUCERS

CYCLO® SPEED REDUCERS

	Page
1. How to Select	
Standard Specifications	C-3
Model Selection	C-4
Selection of Load Factor	C-7
Nomenclature	C-9
2. Selection Tables	C-11
3. Dimension Tables	C-69

C CYCLO® SPEED REDUCER

1. How to Select

Sumitomo Drive Technologies
» Building Tomorrow Together

CYCLO DRIVE GEAR REDUCER
CNH / CHH / CNV / CVV CYCLO 6000
CYCLO SPEED REDUCER GEAR PORTION

Sumitomo Drive Technologies
CYCLO 6000

GEAR HEAD ONLY

Sumitomo Drive Technologies

victorysystem@gmail.com
LINE OA : @hipower89

www.victorysystem.co.th
LET'S SUMITOMO GEAR MOTOR

Standard Specifications of Reducer

		CYCLO® DRIVE 6000 Series	CYCLO® DRIVE 6000SK Series (With "SK" at the end of frame size)
Lubrication		Grease or oil lubricated models	Grease lubricated models
Speed reduction		Internal planetary gear mechanism with trochoidal curved tooth profile	
Output rotation direction		Single reduction type	Reverse rotation direction
		Duble reduction type	Same rotation direction
		(*Note the difference with single reduction type of CYCLO® DRIVE 6000 Series.)	
		*In contrast to input rotation direction.	
Ambient Conditions	Installation location	Indoors (Minimal)	
	Ambient Temperature	-10°~40°C	
	Ambient Humidity	Under 85%	
	Elevation	Under 1,000 meters	
	Atmosphere	Well ventilated location, free of corrosive gases, explosive gases, vapors and dust.	
Method of Mounting Note 1		CHH Type : slow speed shaft in horizontal direction and with foot CHF Type : slow speed shaft in horizontal direction and with flange (not for 6000SK Series) CVV Type : slow speed shaft down in vertical direction and with V-flange *Models with "N" for the second nomenclature symbol (such as CNH Type) may be mounted in any direction.	
Method of coupling with driven machine		Coupling, gears, chain sprocket or belt.	
Painting		Type : Acrylic modified phthalic Colour : Equivalent to Mancel 6.5PB 3.6/8.2.	

Note: 1. Models for universal mounting (types with N for the second digit of nomenclature) can be manufactured for following frame sizes only. Other frame sizes require indication for mounting direction.

[Frame sizes for universal mounting direction] *□ of the frame size indicates 0, 5, or H.

606□, 607□, 608□, 609□, 610□, 611□, 612□,

606□DA, 607□DA, 608□DA, 609□DA, 610□DA, 612□DA, 612□DB

Model Selection

Description of Our Selection Table

This is a brief description of our tables on page C-11 and after.

Upper row: Output speed (r/min)
 Lower row: Reduction ratio
 * Note that "reduction ratio = nominal ratio" for models with "SK" at the end of frame size (6000 SK Series).
 (Indicated reduction ratio is the same as actual reduction ratios for other models.)

Input speed (r/min)

Selection Tables 6000 Series Reducer

Single Reduction Ratio 6 ~ 119 Frame Size: 6060 ~ 6120

Frame Size	n ₂ [r/min] Ratio[Z]	n ₁ : Input Speed [r/min] n ₂ : Output Speed [r/min] P ₁ : Allowable input power [kW]												T _{out} : Allowable output torque [N·m, kgf·m] P _{out} : Allowable output shaft radial load [N, kgf·m] * Consult us Pro for CNF-CHF type.		
		242	181	132	112	96.7	85.3	69.0	58.0	50.0	41.4	33.7	28.4	24.6	2	
6060	P ₁ [kW]	0.200	0.200	0.200	0.200	0.200	0.200	0.183	0.110	0.110	0.110	0.089	-	-	-	
	T _{out} [N·m]	7.51	10.0	13.8	16.3	18.8	21.3	24.0	17.2	20.0	24.0	24.0	-	-	-	
	T _{out} [kgf·m]	0.766	1.02	1.41	1.66	1.92	2.17	2.45	1.75	2.04	2.45	2.45	-	-	-	
	Pro[N]	798	912	1180	1180	1180	1180	1180	1180	1180	1180	1180	-	-	-	
	Pro[kgf]	81.3	93	120	120	120	120	120	120	120	120	120	-	-	-	
6065	P ₁ [kW]	0.286	0.286	0.286	0.286	0.286	0.282	0.228	0.166	0.165	0.137	0.112	-	-	-	
	T _{out} [N·m]	10.7	14.3	19.7	23.3	26.9	30.0	30.0	25.9	30.0	30.0	30.0	-	-	-	
	T _{out} [kgf·m]	1.09	1.46	2.01	2.38	2.74	3.06	3.06	2.64	3.06	3.06	3.06	-	-	-	
	Pro[N]	793	904	1180	1180	1180	1180	1180	1180	1180	1180	1180	-	-	-	
	Pro[kgf]	80.8	92.2	120	120	120	120	120	120	120	120	120	-	-	-	
6070	P ₁ [kW]	0.347	0.347	0.347	0.347	0.347	0.347	0.310	0.230	0.226	0.205	0.167	0.100	0.100	-	
	T _{out} [N·m]	13.0	17.3	23.9	28.2	32.5	36.9	42.1	35.9	41.0	45.0	45.0	31.9	36.9	-	
	T _{out} [kgf·m]	1.33	1.76	2.44	2.87	3.31	3.76	4.29	3.66	4.18	4.59	4.59	3.25	3.76	-	
	Pro[N]	1380	1520	1690	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	-	
	Pro[kgf]	141	155	172	180	180	180	180	180	180	180	180	180	180	-	
6075	P ₁ [kW]	0.407	0.407	0.407	0.407	0.407	0.407	0.407	0.294	0.286	0.272	0.223	0.143	0.136	-	
	T _{out} [N·m]	15.3	20.4	28.0	33.1	38.2	43.3	53.5	46.0	52.0	59.6	60.0	45.7	50.1	-	
	T _{out} [kgf·m]	1.56	2.08	2.85	3.37	3.89	4.41	5.45	4.69	5.30	6.08	6.12	4.66	5.11	-	
	Pro[N]	1370	1510	1680	1770	1770	1770	1770	1770	1770	1770	1660	1750	1700	-	
	Pro[kgf]	140	154	171	180	180	180	180	180	180	180	169	178	173	-	
	P ₁ [kW]	0.592	0.592	0.592	0.592	0.592	0.592	0.478	0.340	0.340	0.340	0.250	0.192	0.185	0.	

Frame size

First row: Allowable input capacity (kW)
 Second row: Allowable output torque (N·m)
 Third row: Allowable output torque (kgf·m)
 Fourth row: Allowable radial load at slow speed shaft (N)
 Fifth row: Allowable radial load at slow speed shaft (kgf)

REDUCERS

How to
Select

Selection of Load Factor

CYCLO® SPEED REDUCER is designed for operation under uniform load for 10 hours/day.

Load factors below must be considered for operations exceeding 10 hours/day or load condition of your application. Select load factor by method (1) or (2) according to the load characteristics.

(1) Load Factor Selection by Load Classifications

[Load Factor] U: Uniform load M: Moderate shock H: Heavy shock

Table C-1 Reducer Load Factor

Daily Duty	~3 hours/day			~10 hours/day			~24 hours/day		
	U	M	H	U	M	H	U	M	H
Load Factor	0.80	1.00	1.35	1.00	1.20	1.50	1.50	1.35	1.60

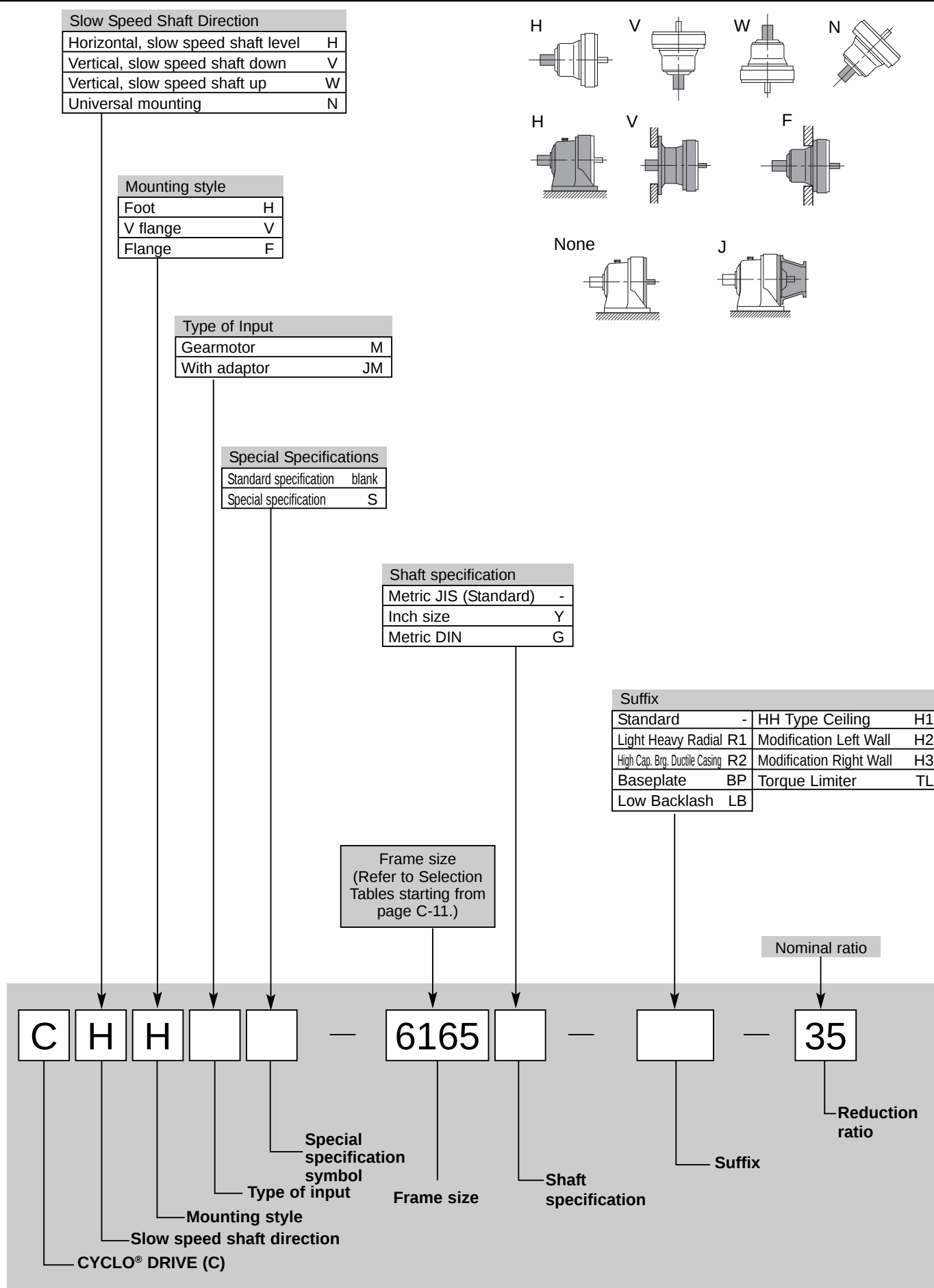
Table C-2 Recommended Load Classifications

Type of APPLICATION	Type of LOAD	Type of APPLICATION	Type of LOAD	Type of APPLICATION	Type of LOAD	Type of APPLICATION	Type of LOAD
*Aerator		Elevators		slab conveyor	H	suction roll	U
Agitators.		bucket - uniform load	U	small waste-conveyor-belt	U	washers & thickeners	M
pure liquids	U	bucket - heavy load	M	small waste-conveyor-chain	M	winders	U
liquids & solids	M	bucket - cont.	U	sorting table	M	*Printing Presses	
liquids-variable density	M	centrifugal discharge	U	tipple hoist conveyor	M	Pullers	
Blowers		escalators	U	tipple hoist drive	M	barge haul	H
centrifugal	U	freight	M	transfer conveyors	M	Pumps	
lobe	M	gravity discharge	U	transfer rolls	M	centrifugal	U
vane	U	*man lifts	M	tray drive	M	proportioning	M
Brewing & Distilling		*passenger	M	trimmer feed	M	reciprocating single acting, 3 or more cylinders	M
bottling machinery	U	**Extruders(Plastics)		waste conveyor	M	double acting, 2 or more cylinders	M
brew kettles, cont. duty	U	blow molders	M	Machine Tools		*single acting, 1 or 2 cylinders	M
cookers-cont. duty	U	coating	U	bending roll	M	*double acting, single cylinder	U
mash tubs-cont. duty	U	film	U	punch press-gear driven	H	rotary-gear type	U
scale hopper, frequent starts	M	pipe	U	*notching press-belt driven	M	rotary-lobe, vane	U
Can Filling Machines	U	pre-plasticizers	M	plate planers	H	Rubber & Plastics Industries	
*Cane Knives	M	rods	U	tapping machine	H	*crackers	H
Car Dumpers	H	sheet	U	other machine tools		laboratory equipment	M
Car Pullers	M	tubing	U	main drives	M	*mixing mills	H
Clarifiers	U	Fans		auxiliary drives	U	*refiners	M
Classifiers	M	centrifugal	U	Metal Mills		*rubber calendars	M
Clay Working Machinery		*cooling towers	U	draw bench carriage &	M	*rubber mill(2 on line)	M
brick press	H	induced draft	U	main drive	M	*rubber mill(3 on line)	U
briquette machine	H	*forced draft	M	forming machines	H	*sheeter	M
clay working machinery	M	induced draft	M	*pinch, dryer & scrubber rolls,		*tire building machines	M
pug mill	M	large(mine, etc.)	M	reversing	M	*tire & tube press openers	M
Compressors		large(industrial)	M	slitters	M	*tubers & strainers	M
centrifugal	U	light(small diameter)	U	table conveyors-non-reversing group	M	*warming mills	M
lobe	M	Feeders		drives	M	Sand Muller	M
reciprocating, multi-cylinder	M	apron	M	individual drives	H	Screens	
reciprocating, single-cylinder	H	belt	M	*table conveyors-reversing	M	air washing	U
Conveyors-Uniformly		disc	U	wire drawing & flattening machine	M	rotary-stone or gravel	M
Loaded or Fed		reciprocating	H	wire winding machine	M	traveling water intake	U
apron	U	screw	M	Mills, Rotary Type		Sewage Disposal Equipment	
assembly	U	Food industry		*ball	M	bar screens	U
belt	U	beet slicer	M	*cement kilns	M	chemical feeders	U
bucket	U	cereal cooker	U	*dryers & coolers	M	collectors, circuline or	
chain	U	dough mixer	M	kilns	M	straightline	U
oven	U	meat grinders	M	*pebble	M	dewatering screws	M
flight	U	Generators(not welding)	U	*rod, plain & wedge bar	M	grit collectors	U
oven	U	Hammer mills	H	tumbling barrels	H	scum breakers	M
screw	U	Hoists		Mixers		slow or rapid mixers	M
Conveyors-Heavy Duty		heavy duty	H	concrete mixers, cont.	M	sludge collectors	U
Not Uniformly Fed		medium duty	M	concrete mixers, intermittent	M	thickeners	M
apron	M	skip hoist	M	constant density	U	vacuum filters	M
assembly	M	Laundry Washers		variable density	M	Slab Pushers	M
belt	M	reversing	M	Oil Industry		*Steering Gear	
bucket	M	Laundry Tumblers	M	chillers	M	Stokers	U
chain	M	Line Shaft		*oil well pumping	M	Sugar Industry	
flight	M	driving processing equipment	M	paraffin filter press	M	*cane knives	M
live roll	U	light	U	rotary kilns	M	*crushers	M
oven	M	other line shafts	U	Paper Mills		*mills	H
reciprocating	H	Lumber Industry		agitators(mixers)	M	Textile Industry	
screw	M	barkers-hydraulic	H	barker-auxiliaries-hydraulic	M	batchers	M
shaker	H	mechanical	H	barker-mechanical	M	calendars	M
Cranes(Except for Dry Dock Cranes)		burner conveyor	M	barking drum	H	cards	M
main hoists	U	chain saw & drag saw	H	beater & pulper	U	dry cans	M
*bridge travel	U	chain transfer	H	bleacher	M	dryers	M
*trolley travel	U	craneway transfer	H	calendars	M	dyeing machinery	M
Crusher		de-barking drum	H	calendars-super	H	*knitting machines	M
ore	H	edger feed	M	converting machine, except cutters,	M	looms	M
stone	H	gang feed	H	platers	M	mangles	M
*sugar	M	green chain	M	conveyors	U	nappers	M
Dredges		live rolls	H	couch	M	pads	M
cable reels	M	log haul-locline	H	cutters-platers	H	*range drives	M
conveyors	M	log haul-well type	H	cylinders	M	slashers	M
cutter head drives	H	log turning device	H	dryers	M	soapers	M
jig drives	H	main log conveyor	H	Paper Mills		spinners	M
maneuvering winches	M	off bearing rolls	M	felt stretcher	M	tenter frames	M
pumps	M	planer feed chains	M	felt whipper	H	washers	M
screen drive	H	planer floor chains	M	jardans	H	winders	M
stackers	M	planer tilting hoist	M	log haul	H	*Windlass	
utility winches	M	re-saw merry-go-round conveyor	M	presses	U		
*Dry Dock Cranes		roll cases	H	pulp machine reel	M		
				stock chests	M		

Remarks: * Refer to factory. ** To be selected on basis of 24hr. service only.

Note: Table above contains reference value. Names and mechanical characteristics of the actual machine may differ from the table above.

Nomenclature



Nomenclature and Product Examples

Nomenclature Examples(Speed Reducer)

Example 1.

CNH - 6115 - 29

C:	Model	- CYCLO® DRIVE
N:	Slow speed shaft direction	- Universal direction
H:	Mounting style	- Foot
6115:	Frame size	- 6115
29:	Reduction ratio	- 29

Example 2.

CVV - 6195DA - 377

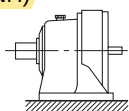
C:	Model	- CYCLO® DRIVE
V:	Slow speed shaft direction	- Vertical mounting
V:	Mounting style	- V flange
6195DA:	Frame size	- 6195DA
377:	Reduction ratio	- 377

Product and Nomenclature Symbol Examples (Speed Reducer)

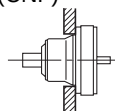
Standard and various application products of CYCLO SPEED REDUCER are classified by their nomenclature symbol as below. Refer to specific catalogs or consult us for details on our application products.

CYCLO® SPEED REDUCERS

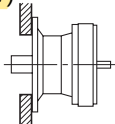
CHH
(CNH)



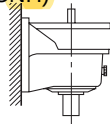
CHF
(CNF)



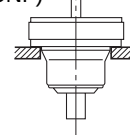
CHV
(CNV)



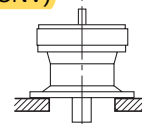
CVH
(CNH)



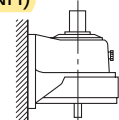
CVF
(CNF)



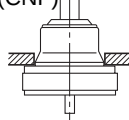
CVV
(CNV)



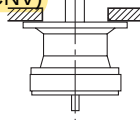
CWH
(CNH)



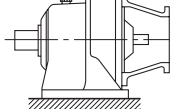
CWF
(CNF)



CWV
(CNV)

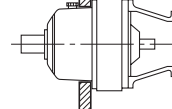


CHHJ



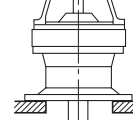
With Adaptor

CHFJ



With Adaptor

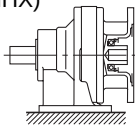
CVVJ



With Adaptor

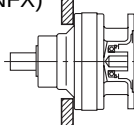
CYCLO® SPEED REDUCERS Application Products

CHHX
(CNHX)



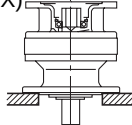
Input Side Hollow Shaft

CHFX
(CNFX)



Input Side Hollow Shaft

CVVX
(CNVX)



Input Side Hollow Shaft

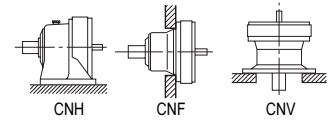
C CYCLO® SPEED REDUCERS

2. Selection Tables

Selection Tables 6000 Series Reducer

Single Reduction Ratio 6 ~ 119 Frame Size: 6060 ~ 6120

Input Speed	$n_1 = 50$ r/min	n_1 : Input Speed [r/min]										T_{out} : Allowable output torque [N·m, kgf·m]									
		n_2 : Output Speed [r/min]										Pro: Allowable output shaft radial load [N, kgf]									
		P : Allowable input power [kW]										*Consult us for Pro of CNF and CHF type.									

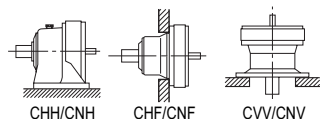


Frame Size	n_2 [r/min]	8.33	6.25	4.55	3.85	3.33	2.94	2.38	2.00	1.72	1.43	1.16	0.980	0.847	0.704	0.575	0.420	Dim. Page
	Ratio[Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	
6060	P_i [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CNH C-71
	T_{out} [N·m]	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	-	-	-	-	-	CNF C-76
	T_{out} [kgf·m]	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	-	-	-	-	-	CNV C-82
	Pro [N]	969	1010	1180	1180	1180	1180	1180	1180	1180	1180	1180	-	-	-	-	-	
	Pro [kgf]	98.8	103	120	120	120	120	120	120	120	120	120	-	-	-	-	-	
6065	P_i [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CNH C-71
	T_{out} [N·m]	25.0	27.1	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	-	-	-	-	-	CNF C-76
	T_{out} [kgf·m]	2.55	2.76	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	-	-	-	-	-	CNV C-82
	Pro [N]	958	974	1140	1180	1180	1180	1180	1180	1180	1180	1180	-	-	-	-	-	
	Pro [kgf]	97.7	99	116	120	120	120	120	120	120	120	120	-	-	-	-	-	
6070	P_i [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CNH C-71
	T_{out} [N·m]	29.7	43.7	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45	45	-	-	-	CNF C-76
	T_{out} [kgf·m]	3.03	4.45	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	5	5	-	-	-	CNV C-82
	Pro [N]	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1750	1770	-	-	-	
	Pro [kgf]	180.0	180	180	180	180	180	180	180	180	180	180	178	180	-	-	-	
6075	P_i [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CNH C-71
	T_{out} [N·m]	29.7	43.7	50.8	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	57	57	-	-	-	CNF C-76
	T_{out} [kgf·m]	3.03	4.45	5.18	6.12	6.12	6.12	6.12	6.12	6.12	6.12	6.12	6	6	-	-	-	CNV C-82
	Pro [N]	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1660	1580	1580	-	-	-	
	Pro [kgf]	180.0	180	180	180	180	180	180	180	180	180	169	161	161	-	-	-	
6080	P_i [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CNH C-71
	T_{out} [N·m]	78.5	80.0	80.0	80.0	80.0	80.0	77.2	80.0	80.0	80.0	80.0	80	80	80	80	-	CNF C-76
	T_{out} [kgf·m]	8.00	8.15	8.15	8.15	8.15	8.15	7.87	8.15	8.15	8.15	8.15	8	8	8	8	-	CNV C-82
	Pro [N]	2560	2560	2560	2560	2560	2560	2560	2560	2500	2560	2540	2480	2510	2460	2450	-	
	Pro [kgf]	261.0	261	261	261	261	261	261	261	255	261	259	253	256	251	250	-	
6085	P_i [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CNH C-71
	T_{out} [N·m]	78.5	99.2	100.0	100.0	100.0	100.0	77.2	100.0	100.0	100.0	100.0	100	100	100	100	-	CNF C-76
	T_{out} [kgf·m]	8.00	10.10	10.20	10.20	10.20	10.20	7.87	10.20	10.20	10.20	10.20	10	10	10	10	-	CNV C-82
	Pro [N]	2560	2560	2560	2560	2560	2560	2560	2360	2300	2420	2340	2290	2310	2260	2260	-	
	Pro [kgf]	261.0	261	261	261	261	261	261	241	234	247	239	233	235	230	230	-	
6090	P_i [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CNH C-71
	T_{out} [N·m]	142.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	149	146	132	150	108	CNF C-76
	T_{out} [kgf·m]	14.50	15.30	15.30	15.30	15.30	15.30	15.30	15.30	15.30	15.30	15.30	15	15	14	15	11	CNV C-82
	Pro [N]	3340	3340	3340	3340	3340	3340	3340	3280	3290	3300	3310	3280	3300	3310	3310	3310	
	Pro [kgf]	340.0	340	340	340	340	340	340	334	335	336	337	334	336	337	337	337	
6095	P_i [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CNH C-71
	T_{out} [N·m]	170.0	168.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	153	146	132	195	108	CNF C-76
	T_{out} [kgf·m]	17.30	17.10	20.40	20.40	20.40	20.40	20.40	20.40	20.40	20.40	20.40	16	15	14	20	11	CNV C-82
	Pro [N]	3340	3340	3340	3340	3340	3340	3340	3180	3200	3200	3220	3280	3300	3310	3230	3310	
	Pro [kgf]	340.0	340	340	340	340	340	340	324	326	326	328	334	336	337	329	337	
6100	P_i [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CNH C-71
	T_{out} [N·m]	171.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250	250	250	250	250	CNF C-76
	T_{out} [kgf·m]	17.40	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	25.50	26	26	26	26	26	CNV C-82
	Pro [N]	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5380	5400	5360	
	Pro [kgf]	550.0	550	550	550	550	550	550	550	550	550	550	550	550	548	550	546	
6105	P_i [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CNH C-71
	T_{out} [N·m]	171.0	276.0	308.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	297	296	264	300	258	CNF C-76
	T_{out} [kgf·m]	17.40	28.10	31.40	30.60	30.60	30.60	30.60	30.60	30.60	30.60	30.60	30	30	27	31	26	CNV C-82
	Pro [N]	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5310	5090	5370	4780	5350	
	Pro [kgf]	550.0	550	550	550	550	550	550	550	550	550	550	541	519	547	487	545	
6110	P_i [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CNH C-71
	T_{out} [N·m]	193.0	360.0	360.0	360.0	360.0	360.0	360.0	360.0	360.0	360.0	360.0	360	360	360	360	-	CNF C-76
	T_{out} [kgf·m]	19.70	36.70	36.70	36.70	36.70	36.70	36.70	36.70	36.70	36.70	36.70	37	37	37	37	-	CNV C-82
	Pro [N]	7610	7610	7610	7610	7610	7610	7610	7340	7200	7280	7590	7590	7610	7580	7600	-	
	Pro [kgf]	776.0	776	776	776	776	776	776	748	734	742	774	774	776	773	775	-	
6115	P_i [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CNH C-71
	T_{out} [N·m]	193.0	406.0	420.0	420.0	420.0	420.0	420.0	420.0	420.0	420.0	420.0	420	420	420	420	-	CNF C-76
	T_{out} [kgf·m]	19.70	41.40	42.80	42.80	42.80	42.80	42.80	42.80	42.80	42.80	42.80	43	43	43	43	-	CNV C-82
	Pro [N]	7610	7610	7610	7600	7610	7500	7460	7150	7010	7090	7370	7410	7430	7390	7410	-	
	Pro [kgf]	776.0	776	776	775	776	765	760	729	715	723	751	755	757	753	755	-	
6120	P_i [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CNH C-71
	T_{out} [N·m]	366	525	525	525	525	520	522	525	520	525	525	525	525	525	525	-	CNF C-76
	T_{out} [kgf·m]	37.3	53.5	53.5	53.5	53.5	53.0	53.2	53.5	53.0	53.5	53.5	53.5	53.5	53.5	53.5	-	CNV C-82
	Pro [N]	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9780	-	
	Pro [kgf]	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	997	-	
Frame Size	Ratio[Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	Dim. Page
	n_2 [r/min]	8.33	6.25	4.55	3.85	3.33	2.94	2.38	2.00	1.72	1.43	1.16	0.980	0.847	0.704	0.575	0.420	

Note: 1. Allowable radial load Pro is the value at the midpoint of the output shaft. Refer to pages F-11~12 when radial

Selection Tables 6000 Series Reducer

Single Reduction Ratio 6 ~ 119 Frame Size: 6125 ~ 6195



n_1 : Input Speed [r/min] T_{out} : Allowable output torque [N·m, kgf·m]
 n_2 : Output Speed [r/min] Pro: Allowable output shaft radial load [N, kgf]
 P : Allowable input power [kW] *Consult us for Pro of CNF and CHF type.

Input Speed $n_1 = 50$ r/min

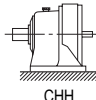
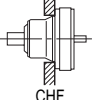
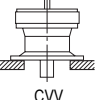
Frame Size	n_2 [r/min] Ratio[Z]	8.33	6.25	4.55	3.85	3.33	2.94	2.38	2.00	1.72	1.43	1.16	0.980	0.847	0.704	0.575	0.420	Dim. Page
		6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	
6125	P [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CNH C-71
	T_{out} [N·m]	366	574	622	630	630	630	630	630	630	630	630	630	630	592	630	-	CNF C-76
	T_{out} [kgf·m]	37.3	58.5	63.4	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	60.3	64.2	-	CNV C-82
	Pro[N]	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9560	-	
6130	P [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHH C-72
	T_{out} [N·m]	555	744	780	780	780	780	780	780	780	780	780	928	912	902	848	-	CHF C-77
	T_{out} [kgf·m]	56.6	75.8	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	94.6	93.0	91.9	86.4	-	CVV C-83
	Pro[N]	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	-	
6135	P [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHH C-72
	T_{out} [N·m]	607	764	940	940	940	940	940	900	940	940	940	967	1050	1040	979	-	CHF C-77
	T_{out} [kgf·m]	61.9	77.9	95.8	95.8	95.8	95.8	95.8	91.7	95.8	95.8	95.8	98.6	107	106	99.8	-	CVV C-83
	Pro[N]	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	-	
6140	P [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHH C-72
	T_{out} [N·m]	717	1150	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	-	CHF C-77
	T_{out} [kgf·m]	73.1	117	125	125	125	125	125	125	125	125	125	125	125	125	125	-	CVV C-83
	Pro[N]	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000	-	
6145	P [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHH C-72
	T_{out} [N·m]	717	1150	1290	1370	1360	1370	1340	1370	1370	1370	1370	1370	1370	1320	1250	-	CHF C-77
	T_{out} [kgf·m]	73.1	117	131	140	139	140	137	140	140	140	140	140	140	135	127	-	CVV C-83
	Pro[N]	16000	16000	16000	15900	16000	16000	16000	16000	15800	16000	15700	15700	16000	16000	16000	-	
6160	P [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHH C-72
	T_{out} [N·m]	1320	1760	1760	1760	1760	1760	1760	1760	1760	1760	1740	1760	1760	1760	1760	-	CHF C-77
	T_{out} [kgf·m]	135	179	179	179	179	179	179	179	179	179	177	179	179	179	179	-	CVV C-84
	Pro[N]	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	-	
6165	P [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHH C-72
	T_{out} [N·m]	1320	1870	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2050	-	CHF C-77
	T_{out} [kgf·m]	135	191	214	214	214	214	214	214	214	214	214	214	214	214	209	-	CVV C-84
	Pro[N]	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	21800	-	
6170	P [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHH C-72
	T_{out} [N·m]	1860	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	-	CHF C-77
	T_{out} [kgf·m]	190	258	258	258	258	258	258	258	258	258	258	258	258	258	258	-	CVV C-84
	Pro[N]	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	-	
6175	P [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHH C-72
	T_{out} [N·m]	1860	2600	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	-	CHF C-77
	T_{out} [kgf·m]	190	265	321	321	321	321	321	321	321	321	321	321	321	321	321	-	CVV C-84
	Pro[N]	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	-	
6180	P [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHH C-72
	T_{out} [N·m]	-	-	4060	4060	4060	4060	4050	4050	4050	4050	4060	4050	4050	4050	4060	-	CHF C-77
	T_{out} [kgf·m]	-	-	414	414	414	414	413	413	413	413	414	413	413	413	414	-	CVV C-84
	Pro[N]	-	-	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	-	
6185	P [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHH C-72
	T_{out} [N·m]	-	-	4810	4900	4920	5000	5000	5000	5000	5000	5000	5000	5000	4510	5000	-	CHF C-77
	T_{out} [kgf·m]	-	-	490	499	502	510	510	510	510	510	510	510	510	460	510	-	CVV C-84
	Pro[N]	-	-	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41600	41700	41700	-	
6190	P [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHH C-72
	T_{out} [N·m]	-	-	6380	6380	6380	6380	6380	6380	6380	6380	6380	6380	6380	6380	6380	-	CHF C-77
	T_{out} [kgf·m]	-	-	650	650	650	650	650	650	650	650	650	650	650	650	650	-	CVV C-84
	Pro[N]	-	-	59000	58700	58900	59000	59000	59000	59000	59000	59000	58700	58600	58400	58900	-	
6195	P [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHH C-72
	T_{out} [N·m]	-	-	7580	7630	7910	7960	7960	7960	7960	7960	7960	7960	7960	7960	7960	-	CHF C-77
	T_{out} [kgf·m]	-	-	773	778	806	811	811	811	811	811	811	811	811	811	811	-	CVV C-84
	Pro[N]	-	-	59000	58200	58300	59000	59000	59000	59000	58600	59000	58200	58100	58000	58400	-	
Frame Size	Ratio[Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	Dim. Page
	n_2 [r/min]	8.33	6.25	4.55	3.85	3.33	2.94	2.38	2.00	1.72	1.43	1.16	0.980	0.847	0.704	0.575	0.420	

Note: 1. Allowable radial load Pro is the value at the midpoint of the output shaft. Refer to pages F-11~12 when radial load is off the midpoint of output shaft and for checking thrust load.

2. Refer to pages F-15~16 for allowable radial load for input shaft.

Selection Tables 6000 Series Reducer

Single Reduction Ratio 6 ~ 119 Frame Size: 6205 ~ 6275

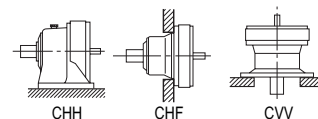
Input Speed		$n_1 = 50$ r/min		n_2 : Input Speed [r/min] n_2 : Output Speed [r/min] P_i : Allowable input power [kW]										T_{out} : Allowable output torque [N·m, kgf·m] Pro: Allowable output shaft radial load [N, kgf] *Consult us for Pro of CNF and CHF type.												
Frame Size	n_2 [r/min] Ratio[Z]	8.33 6	6.25 8	4.55 11	3.85 13	3.33 15	2.94 17	2.38 21	2.00 25	1.72 29	1.43 35	1.16 43	0.980 51	0.847 59	0.704 71	0.575 87	0.420 119	Dim. Page								
6205	P_i [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHH C-72								
	T_{out} [N·m]	-	-	8620	-	9270	-	9270	-	9230	-	9300	-	9300	-	8760	-	CHF C-77								
	T_{out} [kgf·m]	-	-	879	-	945	-	945	-	941	-	948	-	948	-	893	-	CVW C-84								
	Pro[N]	-	-	84100	-	84100	-	84100	-	84100	-	84100	-	84100	-	84100	-									
6215	P_i [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHH C-72								
	T_{out} [N·m]	-	-	11400	-	12200	-	12500	-	12700	-	12700	-	12700	-	11300	-	CHF C-77								
	T_{out} [kgf·m]	-	-	1160	-	1240	-	1270	-	1290	-	1290	-	1290	-	1150	-	CVW C-84								
	Pro[N]	-	-	104000	-	104000	-	104000	-	104000	-	104000	-	104000	-	104000	-									
6225	P_i [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHH C-72								
	T_{out} [N·m]	-	-	13500	-	14500	-	14800	-	15000	-	16000	-	15900	-	15100	-	CHF C-77								
	T_{out} [kgf·m]	-	-	1380	-	1480	-	1510	-	1530	-	1630	-	1620	-	1540	-	CVW C-84								
	Pro[N]	-	-	145000	-	145000	-	145000	-	145000	-	145000	-	145000	-	145000	-									
6235	P_i [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHH C-72								
	T_{out} [N·m]	-	-	18700	-	19600	-	18900	-	18900	-	20500	-	20500	-	17200	-	CHF C-77								
	T_{out} [kgf·m]	-	-	1910	-	2000	-	1930	-	1930	-	2090	-	2090	-	1750	-	CVW C-84								
	Pro[N]	-	-	179000	-	179000	-	179000	-	179000	-	179000	-	179000	-	179000	-									
6245	P_i [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHH C-72								
	T_{out} [N·m]	-	-	20500	-	26200	-	25800	-	25800	-	25800	-	25800	-	22600	-	CHF C-77								
	T_{out} [kgf·m]	-	-	2090	-	2670	-	2630	-	2630	-	2630	-	2630	-	2300	-	CVW C-84								
	Pro[N]	-	-	208000	-	208000	-	208000	-	208000	-	208000	-	208000	-	208000	-									
6255	P_i [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHH C-72								
	T_{out} [N·m]	-	-	27500	-	31200	-	31000	-	32500	-	34500	-	34500	-	31000	-	CHF C-77								
	T_{out} [kgf·m]	-	-	2800	-	3180	-	3160	-	3310	-	3520	-	3520	-	3160	-	CVW C-84								
	Pro[N]	-	-	257000	-	258000	-	258000	-	258000	-	258000	-	258000	-	258000	-									
6265	P_i [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHH C-72								
	T_{out} [N·m]	-	-	31300	-	43700	-	46000	-	46000	-	46000	-	46000	-	44000	-	CHF C-77								
	T_{out} [kgf·m]	-	-	3190	-	4450	-	4690	-	4690	-	4690	-	4690	-	4490	-	CVW C-84								
	Pro[N]	-	-	276000	-	276000	-	276000	-	276000	-	276000	-	276000	-	276000	-									
6275	P_i [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHH C-72								
	T_{out} [N·m]	-	-	-	-	-	-	-	-	68200	-	68200	-	68200	-	68200	-	CHF C-77								
	T_{out} [kgf·m]	-	-	-	-	-	-	-	-	6950	-	6950	-	6950	-	6950	-	CVW C-84								
	Pro[N]	-	-	-	-	-	-	-	-	248000	-	248000	-	248000	-	245000	-									
Frame Size	Ratio[Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	Dim. Page								
	n_2 [r/min]	8.33	6.25	4.55	3.85	3.33	2.94	2.38	2.00	1.72	1.43	1.16	0.980	0.847	0.704	0.575	0.420									

Note: 1. Allowable radial load Pro is the value at the midpoint of the output shaft. Refer to pages F-11~12 when radial load is off the midpoint of output shaft and for checking thrust load.
 2. Refer to pages F-15~16 for allowable radial load for input shaft.

Selection Tables 6000 Series Reducer

Single Reduction Ratio 6 ~ 119 Frame Size: 6205 ~ 6275

Input Speed	$n_1 = 580$ r/min	n_1 : Input Speed [r/min]	T_{out} : Allowable output torque [N·m, kgf·m]
		n_2 : Output Speed [r/min]	Pro: Allowable output shaft radial load [N, kgf]
		P : Allowable input power [kW]	*Consult us for Pro of CNF and CHF type.



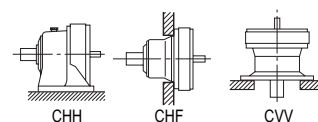
Frame Size	n_2 [r/min]	96.7	72.5	52.7	44.6	38.7	34.1	27.6	23.2	20.0	16.6	13.5	11.4	9.83	8.17	6.67	4.87	Dim. Page
	Ratio[Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	
6205	P_1 [kW]	-	-	46.8	-	39.5	-	28.2	-	20.3	-	13.8	-	10.1	-	6.43	-	CHH C-72
	T_{out} [N·m]	-	-	8050	-	9270	-	9270	-	9230	-	9300	-	9300	-	8760	-	CHF C-77
	T_{out} [kgf·m]	-	-	821	-	945	-	945	-	941	-	948	-	948	-	893	-	CVV C-84
	Pro[N]	-	-	67300	-	72500	-	81600	-	84100	-	84100	-	84100	-	84100	-	
	Pro[kgf]	-	-	6860	-	7390	-	8320	-	8570	-	8570	-	8570	-	8570	-	
6215	P_1 [kW]	-	-	64.0	-	51.9	-	38.1	-	27.9	-	18.8	-	13.7	-	8.28	-	CHH C-72
	T_{out} [N·m]	-	-	11000	-	12200	-	12500	-	12700	-	12700	-	12700	-	11300	-	CHF C-77
	T_{out} [kgf·m]	-	-	1120	-	1240	-	1270	-	1290	-	1290	-	1290	-	1150	-	CVV C-84
	Pro[N]	-	-	67300	-	72600	-	82500	-	90200	-	102000	-	104000	-	104000	-	
	Pro[kgf]	-	-	6860	-	7400	-	8410	-	9190	-	10400	-	10600	-	10600	-	
6225	P_1 [kW]	-	-	74.7	-	61.7	-	45.1	-	33.2	-	23.8	-	17.2	-	11.1	-	CHH C-72
	T_{out} [N·m]	-	-	12900	-	14500	-	14800	-	15000	-	16000	-	15900	-	15100	-	CHF C-77
	T_{out} [kgf·m]	-	-	1310	-	1480	-	1510	-	1530	-	1630	-	1620	-	1540	-	CVV C-84
	Pro[N]	-	-	71100	-	77100	-	86900	-	95200	-	108000	-	118000	-	133000	-	
	Pro[kgf]	-	-	7250	-	7860	-	8860	-	9700	-	11000	-	12000	-	13600	-	
6235	P_1 [kW]	-	-	99.9	-	83.6	-	57.5	-	41.7	-	30.5	-	22.2	-	12.6	-	CHH C-72
	T_{out} [N·m]	-	-	17200	-	19600	-	18900	-	18900	-	20500	-	20500	-	17200	-	CHF C-77
	T_{out} [kgf·m]	-	-	1750	-	2000	-	1930	-	1930	-	2090	-	2090	-	1750	-	CVV C-84
	Pro[N]	-	-	88800	-	95300	-	108000	-	119000	-	133000	-	146000	-	166000	-	
	Pro[kgf]	-	-	9050	-	9710	-	11000	-	12100	-	13600	-	14900	-	16900	-	
6245	P_1 [kW]	-	-	117	-	112	-	78.5	-	56.9	-	38.4	-	28.0	-	16.6	-	CHH C-72
	T_{out} [N·m]	-	-	20200	-	26200	-	25800	-	25800	-	25800	-	25800	-	22600	-	CHF C-77
	T_{out} [kgf·m]	-	-	2060	-	2670	-	2630	-	2630	-	2630	-	2630	-	2300	-	CVV C-84
	Pro[N]	-	-	98600	-	106000	-	119000	-	131000	-	149000	-	163000	-	185000	-	
	Pro[kgf]	-	-	10100	-	10800	-	12100	-	13400	-	15200	-	16600	-	18900	-	
6255	P_1 [kW]	-	-	151	-	133	-	94.4	-	71.6	-	51.3	-	37.4	-	22.8	-	CHH C-72
	T_{out} [N·m]	-	-	25900	-	31200	-	31000	-	32500	-	34500	-	34500	-	31000	-	CHF C-77
	T_{out} [kgf·m]	-	-	2640	-	3180	-	3160	-	3310	-	3520	-	3520	-	3160	-	CVV C-84
	Pro[N]	-	-	121000	-	130000	-	146000	-	161000	-	182000	-	200000	-	226000	-	
	Pro[kgf]	-	-	12300	-	13300	-	14900	-	16400	-	18600	-	20400	-	23000	-	
6265	P_1 [kW]	-	-	175	-	175	-	140	-	101	-	68.4	-	49.8	-	32.3	-	CHH C-72
	T_{out} [N·m]	-	-	30100	-	41000	-	46000	-	46000	-	46000	-	46000	-	44000	-	CHF C-77
	T_{out} [kgf·m]	-	-	3070	-	4180	-	4690	-	4690	-	4690	-	4690	-	4490	-	CVV C-84
	Pro[N]	-	-	148000	-	158000	-	177000	-	197000	-	222000	-	243000	-	274000	-	
	Pro[kgf]	-	-	15100	-	16100	-	18000	-	20100	-	22600	-	24800	-	27900	-	
6275	P_1 [kW]	-	-	-	-	-	-	-	-	150	-	101	-	73.9	-	50.1	-	CHH C-72
	T_{out} [N·m]	-	-	-	-	-	-	-	-	68200	-	68200	-	68200	-	68200	-	CHF C-77
	T_{out} [kgf·m]	-	-	-	-	-	-	-	-	6950	-	6950	-	6950	-	6950	-	CVV C-84
	Pro[N]	-	-	-	-	-	-	-	-	228000	-	248000	-	248000	-	245000	-	
	Pro[kgf]	-	-	-	-	-	-	-	-	23200	-	25300	-	25300	-	25000	-	
Frame Size	Ratio[Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	Dim. Page
	n_2 [r/min]	96.7	72.5	52.7	44.6	38.7	34.1	27.6	23.2	20.0	16.6	13.5	11.4	9.83	8.17	6.67	4.87	

Note: 1. Allowable radial load Pro is the value at the midpoint of the output shaft. Refer to pages F-11~12 when radial load is off the midpoint of output shaft and for checking thrust load.
 2. Refer to pages F-15~16 for allowable radial load for input shaft.

Selection Tables 6000 Series Reducer

Single Reduction Ratio 6 ~ 119 Frame Size: 6205 ~ 6275

Input Speed	$n_1 = 720$ r/min	n_1 : Input Speed [r/min]										T_{out} : Allowable output torque [N·m, kgf·m]									
		n_2 : Output Speed [r/min]										Pro: Allowable output shaft radial load [N, kgf]									
		P : Allowable input power [kW]										*Consult us for Pro of CNF and CHF type.									



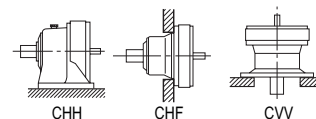
Frame Size	n_2 [r/min]	120	90.0	65.5	55.4	48.0	42.4	34.3	28.8	24.8	20.6	16.7	14.1	12.2	10.1	8.28	6.05	Dim. Page
	Ratio[Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	
6205	P_i [kW]	-	-	55.2	-	49.0	-	35.0	-	25.3	-	17.2	-	12.5	-	7.99	-	CHH C-72 CHF C-77 CVV C-84
	T_{out} [N·m]	-	-	7650	-	9270	-	9270	-	9230	-	9300	-	9300	-	8760	-	
	T_{out} [kgf·m]	-	-	780	-	945	-	945	-	941	-	948	-	948	-	893	-	
	Pro [N]	-	-	63000	-	67800	-	76300	-	83600	-	84100	-	84100	-	84100	-	
6215	P_i [kW]	-	-	75.3	-	64.4	-	47.2	-	34.6	-	23.3	-	17.0	-	10.3	-	CHH C-72 CHF C-77 CVV C-84
	T_{out} [N·m]	-	-	10400	-	12200	-	12500	-	12700	-	12700	-	12700	-	11300	-	
	T_{out} [kgf·m]	-	-	1060	-	1240	-	1270	-	1290	-	1290	-	1290	-	1150	-	
	Pro [N]	-	-	63000	-	67900	-	77200	-	84400	-	95800	-	104000	-	104000	-	
6225	P_i [kW]	-	-	88.1	-	76.6	-	55.9	-	41.2	-	29.5	-	21.4	-	13.7	-	CHH C-72 CHF C-77 CVV C-84
	T_{out} [N·m]	-	-	12200	-	14500	-	14800	-	15000	-	16000	-	15900	-	15100	-	
	T_{out} [kgf·m]	-	-	1240	-	1480	-	1510	-	1530	-	1630	-	1620	-	1540	-	
	Pro [N]	-	-	66600	-	72100	-	81200	-	89000	-	101000	-	110000	-	124000	-	
6235	P_i [kW]	-	-	113	-	104	-	71.4	-	51.7	-	37.6	-	27.3	-	15.7	-	CHH C-72 CHF C-77 CVV C-84
	T_{out} [N·m]	-	-	15700	-	19600	-	18900	-	18900	-	20400	-	20300	-	17200	-	
	T_{out} [kgf·m]	-	-	1600	-	2000	-	1930	-	1930	-	2080	-	2070	-	1750	-	
	Pro [N]	-	-	83400	-	89000	-	101000	-	111000	-	125000	-	137000	-	155000	-	
6245	P_i [kW]	-	-	132	-	132	-	97.5	-	70.6	-	47.6	-	34.7	-	20.7	-	CHH C-72 CHF C-77 CVV C-84
	T_{out} [N·m]	-	-	18300	-	24900	-	25800	-	25800	-	25800	-	25800	-	22600	-	
	T_{out} [kgf·m]	-	-	1870	-	2540	-	2630	-	2630	-	2630	-	2630	-	2300	-	
	Pro [N]	-	-	92600	-	98800	-	112000	-	123000	-	139000	-	152000	-	173000	-	
6255	P_i [kW]	-	-	151	-	151	-	117	-	88.9	-	61.5	-	44.9	-	28.3	-	CHH C-72 CHF C-77 CVV C-84
	T_{out} [N·m]	-	-	20900	-	28500	-	31000	-	32500	-	33300	-	33400	-	31000	-	
	T_{out} [kgf·m]	-	-	2130	-	2910	-	3160	-	3310	-	3390	-	3400	-	3160	-	
	Pro [N]	-	-	114000	-	122000	-	136000	-	151000	-	170000	-	187000	-	211000	-	
6265	P_i [kW]	-	-	175	-	175	-	172	-	126	-	84.9	-	61.9	-	40.2	-	CHH C-72 CHF C-77 CVV C-84
	T_{out} [N·m]	-	-	24200	-	33000	-	45400	-	46000	-	46000	-	46000	-	44000	-	
	T_{out} [kgf·m]	-	-	2470	-	3360	-	4630	-	4690	-	4690	-	4690	-	4490	-	
	Pro [N]	-	-	140000	-	149000	-	166000	-	184000	-	208000	-	228000	-	257000	-	
6275	P_i [kW]	-	-	-	-	-	-	-	-	159	-	126	-	91.7	-	53.4	-	CHH C-72 CHF C-77 CVV C-84
	T_{out} [N·m]	-	-	-	-	-	-	-	-	58100	-	68200	-	68200	-	58600	-	
	T_{out} [kgf·m]	-	-	-	-	-	-	-	-	5920	-	6950	-	6950	-	5970	-	
	Pro [N]	-	-	-	-	-	-	-	-	214000	-	248000	-	248000	-	240000	-	
Frame Size	n_2 [r/min]	120	90.0	65.5	55.4	48.0	42.4	34.3	28.8	24.8	20.6	16.7	14.1	12.2	10.1	8.28	6.05	Dim. Page
	Ratio[Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	

Note: 1. Allowable radial load Pro is the value at the midpoint of the output shaft. Refer to pages F-11~12 when radial load is off the midpoint of output shaft and for checking thrust load.
2. Refer to pages F-15~16 for allowable radial load for input shaft.

Selection Tables 6000 Series Reducer

Single Reduction Ratio 6 ~ 119 Frame Size: 6205 ~ 6275

Input Speed	$n_1 = 870$ r/min	n_1 : Input Speed [r/min]																T_{out} : Allowable output torque [N·m, kgf·m]		P_{in} : Allowable input power [kW]	
		n_2 : Output Speed [r/min]																P_{out} : Allowable output shaft radial load [N, kgf]			
																				*Consult us for Pro of CNF and CHF type.	

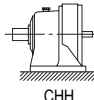
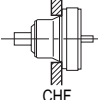
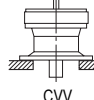


Frame Size	n_2 [r/min]	145	109	79.1	66.9	58.0	51.2	41.4	34.8	30.0	24.9	20.2	17.1	14.7	12.3	10.0	7.31	Dim. Page
	Ratio[Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	
6205	P_1 [kW]	-	-	59.7	-	58.3	-	42.4	-	30.5	-	20.7	-	15.1	-	9.65	-	CHH C-72 CHF C-77 CVV C-84
	T_{out} [N·m]	-	-	6850	-	9130	-	9270	-	9230	-	9300	-	9300	-	8760	-	
	T_{out} [kgf·m]	-	-	698	-	931	-	945	-	941	-	948	-	948	-	893	-	
	Pro [N]	-	-	59700	-	63900	-	72000	-	78800	-	84100	-	84100	-	84100	-	
6215	P_1 [kW]	-	-	75.3	-	75.3	-	57.1	-	41.8	-	28.2	-	20.6	-	12.4	-	CHH C-72 CHF C-77 CVV C-84
	T_{out} [N·m]	-	-	8640	-	11800	-	12500	-	12700	-	12700	-	12700	-	11300	-	
	T_{out} [kgf·m]	-	-	881	-	1200	-	1270	-	1290	-	1290	-	1290	-	1150	-	
	Pro [N]	-	-	59900	-	64000	-	72700	-	79500	-	90300	-	98700	-	104000	-	
6225	P_1 [kW]	-	-	99.5	-	92.6	-	67.6	-	49.7	-	35.7	-	25.8	-	16.6	-	CHH C-72 CHF C-77 CVV C-84
	T_{out} [N·m]	-	-	11400	-	14500	-	14800	-	15000	-	16000	-	15900	-	15100	-	
	T_{out} [kgf·m]	-	-	1160	-	1480	-	1510	-	1530	-	1630	-	1620	-	1540	-	
	Pro [N]	-	-	63000	-	67900	-	76500	-	83900	-	95100	-	104000	-	117000	-	
6235	P_1 [kW]	-	-	113	-	113	-	86.3	-	62.5	-	43.4	-	31.6	-	18.9	-	CHH C-72 CHF C-77 CVV C-84
	T_{out} [N·m]	-	-	13000	-	17700	-	18900	-	18900	-	19500	-	19400	-	17200	-	
	T_{out} [kgf·m]	-	-	1330	-	1800	-	1930	-	1930	-	1990	-	1980	-	1750	-	
	Pro [N]	-	-	79200	-	84300	-	95400	-	105000	-	118000	-	129000	-	146000	-	
6245	P_1 [kW]	-	-	132	-	132	-	118	-	85.3	-	57.5	-	41.9	-	25.0	-	CHH C-72 CHF C-77 CVV C-84
	T_{out} [N·m]	-	-	15100	-	20600	-	25800	-	25800	-	25800	-	25800	-	22600	-	
	T_{out} [kgf·m]	-	-	1540	-	2100	-	2630	-	2630	-	2630	-	2630	-	2300	-	
	Pro [N]	-	-	88000	-	94000	-	105000	-	116000	-	131000	-	144000	-	163000	-	
6255	P_1 [kW]	-	-	151	-	151	-	142	-	107	-	71.1	-	51.9	-	34.2	-	CHH C-72 CHF C-77 CVV C-84
	T_{out} [N·m]	-	-	17300	-	23600	-	31000	-	32500	-	31900	-	31900	-	31000	-	
	T_{out} [kgf·m]	-	-	1760	-	2410	-	3160	-	3310	-	3250	-	3250	-	3160	-	
	Pro [N]	-	-	108000	-	116000	-	128000	-	142000	-	161000	-	176000	-	199000	-	
6265	P_1 [kW]	-	-	175	-	175	-	172	-	152	-	103	-	74.8	-	48.5	-	CHH C-72 CHF C-77 CVV C-84
	T_{out} [N·m]	-	-	20100	-	27300	-	37600	-	46000	-	46000	-	46000	-	44000	-	
	T_{out} [kgf·m]	-	-	2050	-	2780	-	3830	-	4690	-	4690	-	4690	-	4490	-	
	Pro [N]	-	-	132000	-	141000	-	158000	-	174000	-	196000	-	215000	-	242000	-	
6275	P_1 [kW]	-	-	-	-	-	-	-	-	159	-	151	-	111	-	53.4	-	CHH C-72 CHF C-77 CVV C-84
	T_{out} [N·m]	-	-	-	-	-	-	-	-	48100	-	67600	-	68200	-	48500	-	
	T_{out} [kgf·m]	-	-	-	-	-	-	-	-	4900	-	6890	-	6950	-	4940	-	
	Pro [N]	-	-	-	-	-	-	-	-	203000	-	248000	-	248000	-	227000	-	
Frame Size	n_2 [r/min]	145	109	79.1	66.9	58.0	51.2	41.4	34.8	30.0	24.9	20.2	17.1	14.7	12.3	10.0	7.31	Dim. Page
	Ratio[Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	

Note: 1. Allowable radial load Pro is the value at the midpoint of the output shaft. Refer to pages F-11~12 when radial load is off the midpoint of output shaft and for checking thrust load.
2. Refer to pages F-15~16 for allowable radial load for input shaft.

Selection Tables 6000 Series Reducer

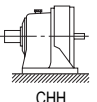
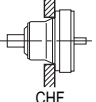
Single Reduction Ratio 6 ~ 119 Frame Size: 6205 ~ 6275

Input Speed		$n_1 = 980$ r/min		n_1 : Input Speed [r/min] n_2 : Output Speed [r/min] P_i : Allowable input power [kW]										T_{out} : Allowable output torque [N·m, kgf·m] Pro: Allowable output shaft radial load [N, kgf] *Consult us for Pro of CNF and CHF type.					 CHH			 CHF			 CVV		
Frame Size	n_2 [r/min] Ratio[Z]	163	123	89.1	75.4	65.3	57.6	46.7	39.2	33.8	28.0	22.8	19.2	16.6	13.8	11.3	8.24	Dim. Page									
6205	P_i [kW]	-	-	59.7	-	59.7	-	47.7	-	34.4	-	23.4	-	17.0	-	10.9	-	CHH C-72									
	T_{out} [N·m]	-	-	6080	-	8290	-	9270	-	9230	-	9300	-	9300	-	8760	-	CHF C-77									
	T_{out} [kgf·m]	-	-	620	-	845	-	945	-	941	-	948	-	948	-	893	-	CVW C-84									
	Pro[N]	-	-	57700	-	61800	-	69400	-	76000	-	84100	-	84100	-	84100	-										
	Pro[kgf]	-	-	5880	-	6300	-	7070	-	7750	-	8570	-	8570	-	8570	-										
6215	P_i [kW]	-	-	75.3	-	75.3	-	64.3	-	47.1	-	31.8	-	23.2	-	14.0	-	CHH C-72									
	T_{out} [N·m]	-	-	7670	-	10500	-	12500	-	12700	-	12700	-	12700	-	11300	-	CHF C-77									
	T_{out} [kgf·m]	-	-	782	-	1070	-	1270	-	1290	-	1290	-	1290	-	1150	-	CVW C-84									
	Pro[N]	-	-	58000	-	62000	-	70100	-	76600	-	87100	-	95100	-	104000	-										
	Pro[kgf]	-	-	5910	-	6320	-	7150	-	7810	-	8880	-	9690	-	10600	-										
6225	P_i [kW]	-	-	99.5	-	99.5	-	76.1	-	56.0	-	40.2	-	29.1	-	18.7	-	CHH C-72									
	T_{out} [N·m]	-	-	10100	-	13800	-	14800	-	15000	-	16000	-	15900	-	15100	-	CHF C-77									
	T_{out} [kgf·m]	-	-	1030	-	1410	-	1510	-	1530	-	1630	-	1620	-	1540	-	CVW C-84									
	Pro[N]	-	-	61000	-	65500	-	73700	-	80800	-	91700	-	100000	-	113000	-										
	Pro[kgf]	-	-	6220	-	6680	-	7510	-	8240	-	9350	-	10200	-	11500	-										
6235	P_i [kW]	-	-	113	-	113	-	97.2	-	70.4	-	47.6	-	34.6	-	21.3	-	CHH C-72									
	T_{out} [N·m]	-	-	11500	-	15700	-	18900	-	18900	-	18900	-	18900	-	17200	-	CHF C-77									
	T_{out} [kgf·m]	-	-	1170	-	1600	-	1930	-	1930	-	1930	-	1930	-	1750	-	CVW C-84									
	Pro[N]	-	-	76700	-	81700	-	91900	-	101000	-	114000	-	125000	-	141000	-										
	Pro[kgf]	-	-	7820	-	8330	-	9370	-	10300	-	11600	-	12700	-	14400	-										
6245	P_i [kW]	-	-	132	-	132	-	120	-	94.2	-	64.8	-	47.2	-	28.1	-	CHH C-72									
	T_{out} [N·m]	-	-	13400	-	18300	-	23300	-	25300	-	25800	-	25800	-	22600	-	CHF C-77									
	T_{out} [kgf·m]	-	-	1370	-	1870	-	2380	-	2580	-	2630	-	2630	-	2300	-	CVW C-84									
	Pro[N]	-	-	85200	-	91100	-	102000	-	112000	-	126000	-	138000	-	157000	-										
	Pro[kgf]	-	-	8690	-	9290	-	10400	-	11400	-	12800	-	14100	-	16000	-										
6255	P_i [kW]	-	-	151	-	151	-	151	-	118	-	77.9	-	56.8	-	38.5	-	CHH C-72									
	T_{out} [N·m]	-	-	15300	-	20900	-	29300	-	31800	-	31000	-	31000	-	31000	-	CHF C-77									
	T_{out} [kgf·m]	-	-	1560	-	2130	-	2990	-	3240	-	3160	-	3160	-	3160	-	CVW C-84									
	Pro[N]	-	-	104000	-	112000	-	124000	-	137000	-	155000	-	170000	-	192000	-										
	Pro[kgf]	-	-	10600	-	11400	-	12600	-	14000	-	15800	-	17300	-	19600	-										
6265	P_i [kW]	-	-	175	-	175	-	172	-	159	-	113	-	84.2	-	53.4	-	CHH C-72									
	T_{out} [N·m]	-	-	17800	-	24300	-	33400	-	42700	-	45000	-	46000	-	43000	-	CHF C-77									
	T_{out} [kgf·m]	-	-	1810	-	2480	-	3400	-	4350	-	4590	-	4690	-	4380	-	CVW C-84									
	Pro[N]	-	-	128000	-	137000	-	152000	-	168000	-	189000	-	207000	-	234000	-										
	Pro[kgf]	-	-	13000	-	14000	-	15500	-	17100	-	19300	-	21100	-	23900	-										
6275	P_i [kW]	-	-	-	-	-	-	-	-	159	-	151	-	125	-	53.4	-	CHH C-72									
	T_{out} [N·m]	-	-	-	-	-	-	-	-	42700	-	60000	-	68200	-	43000	-										
	T_{out} [kgf·m]	-	-	-	-	-	-	-	-	4350	-	6120	-	6950	-	4380	-	CVW C-84									
	Pro[N]	-	-	-	-	-	-	-	-	196000	-	248000	-	248000	-	219000	-										
	Pro[kgf]	-	-	-	-	-	-	-	-	20000	-	25300	-	25300	-	22300	-										
Frame Size	Ratio[Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	Dim. Page									
	n_2 [r/min]	163	123	89.1	75.4	65.3	57.6	46.7	39.2	33.8	28.0	22.8	19.2	16.6	13.8	11.3	8.24										

Note: 1. Allowable radial load Pro is the value at the midpoint of the output shaft. Refer to pages F-11~12 when radial load is off the midpoint of output shaft and for checking thrust load.
2. Refer to pages F-15~16 for allowable radial load for input shaft.

Selection Tables 6000 Series Reducer

Single Reduction Ratio 6 ~ 119 Frame Size: 6205 ~ 6275

Input Speed		$n_1 = 1165$ r/min		n_1 : Input Speed [r/min] n_2 : Output Speed [r/min] P_i : Allowable input power [kW]										T_{out} : Allowable output torque [N·m, kgf·m] Pro: Allowable output shaft radial load [N, kgf] *Consult us for Pro of CNF and CHF type.										 CHH  CHF  CVV		
Frame Size	n_2 [r/min] Ratio[Z]	194	146	106	89.6	77.7	68.5	55.5	46.6	40.2	33.3	27.1	22.8	19.7	16.4	13.4	9.79	Dim. Page								
6205	P_i [kW]	-	-	59.7	-	59.7	-	54.7	-	39.6	-	27.8	-	19.5	-	12.9	-	CHH C-72								
	T_{out} [N·m]	-	-	5110	-	6970	-	8950	-	8950	-	9300	-	8950	-	8760	-	CHF C-77								
	T_{out} [kgf·m]	-	-	521	-	710	-	912	-	912	-	948	-	912	-	893	-	CVV C-84								
	Pro [N]	-	-	55000	-	58900	-	65800	-	72100	-	81600	-	84100	-	84100	-									
	Pro [kgf]	-	-	5610	-	6000	-	6710	-	7350	-	8320	-	8570	-	8570	-									
6215	P_i [kW]	-	-	75.3	-	75.3	-	75.3	-	56.0	-	37.8	-	27.5	-	16.6	-	CHH C-72								
	T_{out} [N·m]	-	-	6450	-	8800	-	12300	-	12700	-	12700	-	12700	-	11300	-	CHF C-77								
	T_{out} [kgf·m]	-	-	657	-	897	-	1250	-	1290	-	1290	-	1290	-	1150	-	CVV C-84								
	Pro [N]	-	-	55300	-	59200	-	66400	-	72600	-	82500	-	90100	-	102000	-									
	Pro [kgf]	-	-	5640	-	6030	-	6770	-	7400	-	8410	-	9180	-	10400	-									
6225	P_i [kW]	-	-	99.5	-	99.5	-	90.5	-	66.6	-	47.8	-	33.3	-	22.2	-	CHH C-72								
	T_{out} [N·m]	-	-	8520	-	11600	-	14800	-	15000	-	16000	-	15300	-	15100	-	CHF C-77								
	T_{out} [kgf·m]	-	-	869	-	1180	-	1510	-	1530	-	1630	-	1560	-	1540	-	CVV C-84								
	Pro [N]	-	-	58200	-	62600	-	69800	-	76500	-	86800	-	95000	-	107000	-									
	Pro [kgf]	-	-	5930	-	6380	-	7120	-	7800	-	8850	-	9680	-	10900	-									
6235	P_i [kW]	-	-	113	-	113	-	97.5	-	75.3	-	54.3	-	37.7	-	24.0	-	CHH C-72								
	T_{out} [N·m]	-	-	9680	-	13200	-	15900	-	17000	-	18200	-	17300	-	16200	-	CHF C-77								
	T_{out} [kgf·m]	-	-	987	-	1350	-	1620	-	1730	-	1860	-	1760	-	1650	-	CVV C-84								
	Pro [N]	-	-	73100	-	77900	-	87700	-	96000	-	108000	-	119000	-	134000	-									
	Pro [kgf]	-	-	7450	-	7940	-	8940	-	9790	-	11000	-	12100	-	13700	-									
6245	P_i [kW]	-	-	132	-	132	-	120	-	94.2	-	75.3	-	56.2	-	32.1	-	CHH C-72								
	T_{out} [N·m]	-	-	11300	-	15400	-	19600	-	21300	-	25200	-	25800	-	21700	-	CHF C-77								
	T_{out} [kgf·m]	-	-	1150	-	1570	-	2000	-	2170	-	2570	-	2630	-	2210	-	CVV C-84								
	Pro [N]	-	-	81200	-	86900	-	97100	-	107000	-	120000	-	131000	-	149000	-									
	Pro [kgf]	-	-	8280	-	8860	-	9900	-	10900	-	12200	-	13400	-	15200	-									
6255	P_i [kW]	-	-	151	-	151	-	151	-	118	-	88.9	-	64.8	-	42.9	-	CHH C-72								
	T_{out} [N·m]	-	-	12900	-	17600	-	24600	-	26700	-	29800	-	29800	-	29000	-	CHF C-77								
	T_{out} [kgf·m]	-	-	1310	-	1790	-	2510	-	2720	-	3040	-	3040	-	2960	-	CVV C-84								
	Pro [N]	-	-	99600	-	107000	-	118000	-	131000	-	147000	-	161000	-	182000	-									
	Pro [kgf]	-	-	10200	-	10900	-	12000	-	13400	-	15000	-	16400	-	18600	-									
6265	P_i [kW]	-	-	175	-	175	-	172	-	159	-	113	-	94.2	-	53.4	-	CHH C-72								
	T_{out} [N·m]	-	-	15000	-	20400	-	28100	-	35900	-	37800	-	43300	-	36200	-	CHF C-77								
	T_{out} [kgf·m]	-	-	1530	-	2080	-	2860	-	3660	-	3850	-	4410	-	3690	-	CVV C-84								
	Pro [N]	-	-	122000	-	130000	-	145000	-	160000	-	180000	-	197000	-	222000	-									
	Pro [kgf]	-	-	12400	-	13300	-	14800	-	16300	-	18300	-	20100	-	22600	-									
6275	P_i [kW]	-	-	-	-	-	-	-	-	159	-	151	-	132	-	53.4	-	CHH C-72								
	T_{out} [N·m]	-	-	-	-	-	-	-	-	35900	-	50500	-	60600	-	36200	-	CHF C-77								
	T_{out} [kgf·m]	-	-	-	-	-	-	-	-	3660	-	5150	-	6180	-	3690	-	CVV C-84								
	Pro [N]	-	-	-	-	-	-	-	-	186000	-	248000	-	247000	-	208000	-									
	Pro [kgf]	-	-	-	-	-	-	-	-	19000	-	25300	-	25200	-	21200	-									
Frame Size	Ratio[Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	Dim. Page								
	n_2 [r/min]	194	146	106	89.6	77.7	68.5	55.5	46.6	40.2	33.3	27.1	22.8	19.7	16.4	13.4	9.79									

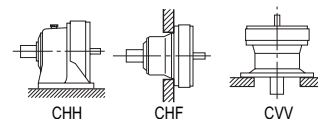
Note: 1. Allowable radial load Pro is the value at the midpoint of the output shaft. Refer to pages F-11~12 when radial load is off the midpoint of output shaft and for checking thrust load.

2. Refer to pages F-15~16 for allowable radial load for input shaft.

Selection Tables 6000 Series Reducer

Single Reduction Ratio 6 ~ 119 Frame Size: 6205 ~ 6275

Input Speed	$n_1 = 1450$ r/min	n_1 : Input Speed [r/min]	T_{out} : Allowable output torque [N·m, kgf·m]
		n_2 : Output Speed [r/min]	Pro: Allowable output shaft radial load [N, kgf]
		P : Allowable input power [kW]	*Consult us for Pro of CNF and CHF type.



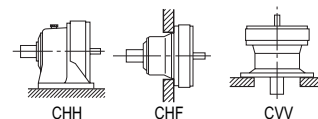
Frame Size	n_2 [r/min]	242	181	132	112	96.7	85.3	69.0	58.0	50.0	41.4	33.7	28.4	24.6	20.4	16.7	12.2	Dim. Page
	Ratio[Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	
6205	P_1 [kW]	-	-	59.7	-	59.7	-	59.2	-	45.7	-	31.8	-	22.6	-	15.9	-	CHH C-72
	T_{out} [N·m]	-	-	4110	-	5600	-	7780	-	8280	-	8550	-	8340	-	8650	-	CHF C-77
	T_{out} [kgf·m]	-	-	419	-	571	-	793	-	844	-	872	-	850	-	882	-	CVV C-84
	Pro [N]	-	-	51700	-	55400	-	61800	-	67500	-	76500	-	83500	-	84100	-	
6215	P_1 [kW]	-	-	75.3	-	75.3	-	75.3	-	58.5	-	45.2	-	33.9	-	19.7	-	CHH C-72
	T_{out} [N·m]	-	-	5190	-	7070	-	9900	-	10600	-	12200	-	12500	-	10700	-	CHF C-77
	T_{out} [kgf·m]	-	-	529	-	721	-	1010	-	1080	-	1240	-	1270	-	1090	-	CVV C-84
	Pro [N]	-	-	52000	-	55700	-	62600	-	68300	-	77200	-	84200	-	95400	-	
6225	P_1 [kW]	-	-	99.5	-	99.5	-	94.2	-	75.3	-	56.5	-	39.3	-	26.7	-	CHH C-72
	T_{out} [N·m]	-	-	6850	-	9330	-	12400	-	13700	-	15200	-	14500	-	14600	-	CHF C-77
	T_{out} [kgf·m]	-	-	698	-	951	-	1260	-	1400	-	1550	-	1480	-	1490	-	CVV C-84
	Pro [N]	-	-	54800	-	59000	-	65700	-	71800	-	81300	-	89000	-	100000	-	
6235	P_1 [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHH C-72
	T_{out} [N·m]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHF C-77
	T_{out} [kgf·m]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CVV C-84
	Pro [N]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6245	P_1 [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHH C-72
	T_{out} [N·m]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHF C-77
	T_{out} [kgf·m]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CVV C-84
	Pro [N]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6255	P_1 [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHH C-72
	T_{out} [N·m]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHF C-77
	T_{out} [kgf·m]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CVV C-84
	Pro [N]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6265	P_1 [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHH C-72
	T_{out} [N·m]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHF C-77
	T_{out} [kgf·m]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CVV C-84
	Pro [N]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6275	P_1 [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHH C-72
	T_{out} [N·m]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CHF C-77
	T_{out} [kgf·m]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CVV C-84
	Pro [N]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Frame Size	Ratio[Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	Dim. Page
	n_2 [r/min]	242	181	132	112	96.7	85.3	69.0	58.0	50.0	41.4	33.7	28.4	24.6	20.4	16.7	12.2	

Note: 1. Allowable radial load Pro is the value at the midpoint of the output shaft. Refer to pages F-11~12 when radial load is off the midpoint of output shaft and for checking thrust load.
 2. Refer to pages F-15~16 for allowable radial load for input shaft.

Selection Tables 6000 Series Reducer

Single Reduction Ratio 6 ~ 119 Frame Size: 6205 ~ 6275

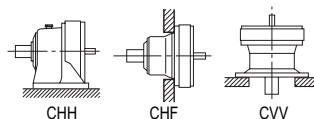
Input Speed	$n_1 = 1750$ r/min	n_1 : Input Speed [r/min]	T_{out} : Allowable output torque [N·m, kgf·m]
		n_2 : Output Speed [r/min]	Pro: Allowable output shaft radial load [N, kgf]
		P : Allowable input power [kW]	*Consult us for Pro of CNF and CHF type.



Frame Size	n_2 [r/min]	292	219	159	135	117	103	83.3	70.0	60.3	50.0	40.7	34.3	29.7	24.6	20.1	14.7	Dim. Page
	Ratio[Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	
6205	P_1 [kW]	-	-	59.7	-	59.7	-	59.2	-	45.7	-	31.8	-	22.6	-	15.9	-	CHH C-72
	T_{out} [N·m]	-	-	3400	-	4640	-	6450	-	6860	-	7090	-	6910	-	7170	-	CHF C-77
	T_{out} [kgf·m]	-	-	347	-	473	-	657	-	699	-	723	-	704	-	731	-	CVV C-84
	Pro [N]	-	-	48900	-	52500	-	58600	-	64100	-	72500	-	79200	-	84100	-	
	Pro [kgf]	-	-	4980	-	5350	-	5970	-	6530	-	7390	-	8070	-	8570	-	
6215	P_1 [kW]	-	-	75.3	-	75.3	-	75.3	-	58.5	-	45.2	-	37.7	-	21.4	-	CHH C-72
	T_{out} [N·m]	-	-	4300	-	5860	-	8200	-	8790	-	10100	-	11500	-	9650	-	CHF C-77
	T_{out} [kgf·m]	-	-	438	-	597	-	836	-	896	-	1030	-	1170	-	984	-	CVV C-84
	Pro [N]	-	-	49300	-	52900	-	59500	-	64900	-	73300	-	79700	-	90300	-	
	Pro [kgf]	-	-	5030	-	5390	-	6070	-	6620	-	7470	-	8120	-	9200	-	
6225	P_1 [kW]	-	-	99.5	-	99.5	-	94.2	-	75.3	-	56.5	-	45.2	-	26.7	-	CHH C-72
	T_{out} [N·m]	-	-	5670	-	7730	-	10300	-	11300	-	12600	-	13800	-	12100	-	CHF C-77
	T_{out} [kgf·m]	-	-	578	-	788	-	1050	-	1150	-	1280	-	1410	-	1230	-	CVV C-84
	Pro [N]	-	-	52100	-	56100	-	62500	-	68200	-	77200	-	84100	-	95200	-	
	Pro [kgf]	-	-	5310	-	5720	-	6370	-	6950	-	7870	-	8570	-	9700	-	
6235	P_1 [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	T_{out} [N·m]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	T_{out} [kgf·m]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Pro [N]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Pro [kgf]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6245	P_1 [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	T_{out} [N·m]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	T_{out} [kgf·m]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Pro [N]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Pro [kgf]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6255	P_1 [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	T_{out} [N·m]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	T_{out} [kgf·m]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Pro [N]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Pro [kgf]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6265	P_1 [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	T_{out} [N·m]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	T_{out} [kgf·m]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Pro [N]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Pro [kgf]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6275	P_1 [kW]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	T_{out} [N·m]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	T_{out} [kgf·m]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Pro [N]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Pro [kgf]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Frame Size	Ratio[Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	Dim. Page
	n_2 [r/min]	292	219	159	135	117	103	83.3	70.0	60.3	50.0	40.7	34.3	29.7	24.6	20.1	14.7	

Note: 1. Allowable radial load Pro is the value at the midpoint of the output shaft. Refer to pages F-11~12 when radial load is off the midpoint of output shaft and for checking thrust load.
 2. Refer to pages F-15~16 for allowable radial load for input shaft.

Selection Tables 6000 Series Reducer



Input Speed

 $n_1 = 1450 \text{ r/min}$

1.45	1.16	0.980	0.784	0.702	0.572	0.476	0.417	0.327	0.282	0.235	0.192	n_2 [r/min]	Dim. Page	Frame Size
1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569	Ratio[Z]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-75	6160DC
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-80	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-87	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
0.400	0.400	0.400	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	P_i [kW]	CHH C-74	6165DA
2100	2100	2050	2100	2100	2100	2050	2100	2050	2050	2050	2050	T_{OUT} [N·m]	CHF C-79	
214	214	209	214	214	214	209	214	209	209	209	209	T_{OUT} [kgf·m]	CVV C-86	
22100	22100	21800	22100	22100	22100	21800	22100	21800	21800	21800	21800	Pro[N]		
2250	2250	2220	2250	2250	2250	2220	2250	2220	2220	2220	2220	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-74	6165DB
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-79	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-86	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-75	6165DC
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-80	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-87	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
0.426	0.400	0.400	0.400	0.207	0.200	0.200	0.200	0.200	0.200	0.200	0.200	P_i [kW]	CHH C-74	6170DA
2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	T_{OUT} [N·m]	CHF C-79	
258	258	258	258	258	258	258	258	258	258	258	258	T_{OUT} [kgf·m]	CVV C-86	
29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	Pro[N]		
3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-74	6170DB
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-79	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-86	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-75	6170DC
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-80	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-87	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
0.530	0.426	0.400	0.400	0.400	0.209	0.200	0.200	0.200	0.200	0.200	0.200	P_i [kW]	CHH C-74	6175DA
3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	T_{OUT} [N·m]	CHF C-79	
321	321	321	321	321	321	321	321	321	321	321	321	T_{OUT} [kgf·m]	CVV C-86	
29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	Pro[N]		
3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-74	6175DB
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-79	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-86	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-75	6175DC
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-80	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-87	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
0.750	0.750	0.463	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	P_i [kW]	CHH C-74	6180DA
4050	4060	4060	4060	4050	4050	4060	4050	4060	4060	4060	4060	T_{OUT} [N·m]	CHF C-79	
413	414	414	414	413	413	414	413	414	414	414	414	T_{OUT} [kgf·m]	CVV C-86	
41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	Pro[N]		
4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-75	6180DB
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-80	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-87	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
0.841	0.750	0.750	0.750	0.408	0.400	0.400	0.400	0.400	0.400	0.400	0.400	P_i [kW]	CHH C-74	6185DA
5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	T_{OUT} [N·m]	CHF C-79	
510	510	510	510	510	510	510	510	510	510	510	510	T_{OUT} [kgf·m]	CVV C-86	
41600	41700	41700	41700	41600	41600	41700	41600	41700	41700	41700	41700	Pro[N]		
4240	4250	4250	4250	4240	4240	4250	4240	4250	4250	4250	4250	Pro[kgf]		
1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569	Ratio[Z]	Dim. Page	Frame Size
1.45	1.16	0.980	0.784	0.702	0.572	0.476	0.417	0.327	0.282	0.235	0.192	n_2 [r/min]		

Note: 3. Necessary input power for starting is printed in bold face. Do not exceed allowable output torque after startup.

Selection Tables 6000 Series Reducer

Double Reduction Ratio 104,121 ~ 7569 Frame Size: 6245DA ~ 6275DA

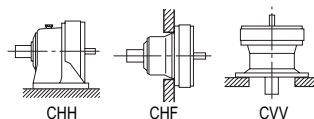
Input Speed	$n_1 = 1450$ r/min	n_1 : Input Speed [r/min]	T_{out} : Allowable output torque [N·m, kgf·m]
		n_2 : Output Speed [r/min]	Pro: Allowable output shaft radial load [N, kgf]
		P_i : Allowable input power [kW]	*Consult us for Pro of CNF and CHF type.

Frame Size	n_2 [r/min]	13.9	12.0	10.1	8.79	7.44	6.28	5.31	4.55	3.85	3.07	2.59	2.23	1.98	1.72
	Ratio[Z]	104	121	143	165	195	231	273	319	377	473	559	649	731	841
6245DA	P_i [kW]	-	-	-	25.4	22.7	18.8	15.9	13.6	11.5	9.20	7.79	6.71	5.95	5.18
	T_{out} [N·m]	-	-	-	24800	26200	25800	25800	25800	25800	25800	25800	25800	25800	25800
	T_{out} [kgf·m]	-	-	-	2530	2680	2630	2630	2630	2630	2630	2630	2630	2630	2630
	Pro[N]	-	-	-	168000	177000	189000	199000	208000	208000	208000	208000	208000	208000	208000
	Pro[kgf]	-	-	-	17100	18000	19300	20300	21200	21200	21200	21200	21200	21200	21200
6245DB	P_i [kW]	-	28.6	-	26.8	22.7	18.8	-	-	-	-	-	-	-	-
	T_{out} [N·m]	-	20500	-	26200	26200	25800	-	-	-	-	-	-	-	-
	T_{out} [kgf·m]	-	2090	-	2680	2680	2630	-	-	-	-	-	-	-	-
	Pro[N]	-	156000	-	168000	177000	189000	-	-	-	-	-	-	-	-
	Pro[kgf]	-	15900	-	17100	18000	19300	-	-	-	-	-	-	-	-
6255DA	P_i [kW]	-	31.8	-	31.8	27.0	22.6	19.2	17.2	14.5	12.3	10.4	8.97	7.96	6.51
	T_{out} [N·m]	-	22800	-	31100	31200	31000	31000	32500	32500	34500	34500	34500	34500	32500
	T_{out} [kgf·m]	-	2330	-	3170	3180	3160	3160	3310	3310	3520	3520	3520	3520	3310
	Pro[N]	-	192000	-	206000	216000	231000	243000	255000	258000	258000	258000	258000	258000	258000
	Pro[kgf]	-	19600	-	21000	22100	23500	24700	26000	26300	26300	26300	26300	26300	26300
6255DB	P_i [kW]	-	38.3	-	31.9	27.0	-	-	-	-	-	-	-	-	-
	T_{out} [N·m]	-	27500	-	31200	31200	-	-	-	-	-	-	-	-	-
	T_{out} [kgf·m]	-	2800	-	3180	3180	-	-	-	-	-	-	-	-	-
	Pro[N]	-	191000	-	206000	216000	-	-	-	-	-	-	-	-	-
	Pro[kgf]	-	19500	-	21000	22100	-	-	-	-	-	-	-	-	-
6265DA	P_i [kW]	-	43.7	-	44.7	37.8	33.6	28.4	24.3	20.6	16.4	13.9	12.0	10.6	9.23
	T_{out} [N·m]	-	31300	-	43700	43700	46000	46000	46000	46000	46000	46000	46000	46000	46000
	T_{out} [kgf·m]	-	3190	-	4460	4460	4690	4690	4690	4690	4690	4690	4690	4690	4690
	Pro[N]	-	234000	-	250000	263000	276000	276000	276000	276000	276000	276000	276000	276000	276000
	Pro[kgf]	-	23800	-	25500	26800	28100	28100	28100	28100	28100	28100	28100	28100	28100
6275DA	P_i [kW]	-	-	-	-	-	-	36.1	30.5	24.3	20.6	17.7	15.7	13.7	-
	T_{out} [N·m]	-	-	-	-	-	-	68200	68200	68200	68200	68200	68200	68200	68200
	T_{out} [kgf·m]	-	-	-	-	-	-	6950	6950	6950	6950	6950	6950	6950	6950
	Pro[N]	-	-	-	-	-	-	248000	248000	248000	248000	248000	248000	248000	248000
	Pro[kgf]	-	-	-	-	-	-	25300	25300	25300	25300	25300	25300	25300	25300
Frame Size	Ratio[Z]	104	121	143	165	195	231	273	319	377	473	559	649	731	841
	n_2 [r/min]	13.9	12.0	10.1	8.79	7.44	6.28	5.31	4.55	3.85	3.07	2.59	2.23	1.98	1.72

Note: 1. Allowable radial load Pro is the value at the midpoint of the output shaft. Refer to pages F-11~12 when radial load is off the midpoint of output shaft and for checking thrust load.

2. Refer to pages F-15~16 for allowable radial load for input shaft.

Selection Tables 6000 Series Reducer



Input Speed

 $n_1 = 1450 \text{ r/min}$

1.45	1.16	0.980	0.784	0.702	0.572	0.476	0.417	0.327	0.282	0.235	0.192	n_2 [r/min]	Dim. Page	Frame Size
1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569	Ratio[Z]		
4.34	3.49	2.58	2.35	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	P_i [kW]	CHH C-75	6245DA
25800	25800	22600	25800	25800	25800	22600	25800	22600	25800	22600	22600	T_{OUT} [N·m]	CHF C-80	
2630	2630	2310	2630	2630	2630	2310	2630	2310	2630	2310	2310	T_{OUT} [kgf·m]	CVV C-87	
208000	208000	208000	208000	208000	208000	208000	208000	208000	208000	208000	208000	Pro[N]		
21200	21200	21200	21200	21200	21200	21200	21200	21200	21200	21200	21200	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-75	6245DB
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-80	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-87	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
5.80	4.67	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	P_i [kW]	CHH C-75	6255DA
34500	34500	31000	34500	34500	34500	31000	34500	31000	34500	31000	31000	T_{OUT} [N·m]	CHF C-80	
3520	3520	3160	3520	3520	3520	3160	3520	3160	3520	3160	3160	T_{OUT} [kgf·m]	CVV C-87	
258000	258000	258000	258000	258000	258000	258000	258000	258000	258000	258000	258000	Pro[N]		
26300	26300	26300	26300	26300	26300	26300	26300	26300	26300	26300	26300	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-75	6255DB
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-80	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-87	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
7.74	6.22	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	P_i [kW]	CHH C-75	6265DA
46000	46000	44000	46000	46000	46000	44000	46000	44000	46000	44000	44000	T_{OUT} [N·m]	CHF C-80	
4690	4690	4490	4690	4690	4690	4490	4690	4490	4690	4490	4490	T_{OUT} [kgf·m]	CVV C-87	
276000	276000	276000	276000	276000	276000	276000	276000	276000	276000	276000	276000	Pro[N]		
28100	28100	28100	28100	28100	28100	28100	28100	28100	28100	28100	28100	Pro[kgf]		
11.5	9.23	7.78	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	P_i [kW]	CHH C-75	6275DA
68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	T_{OUT} [N·m]	CHF C-80	
6950	6950	6950	6950	6950	6950	6950	6950	6950	6950	6950	6950	T_{OUT} [kgf·m]	CVV C-87	
248000	248000	245000	248000	248000	248000	245000	248000	245000	245000	245000	245000	Pro[N]		
25300	25300	25000	25300	25300	25300	25000	25300	25000	25000	25000	25000	Pro[kgf]		
1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569	Ratio[Z]	Dim. Page	Frame Size
1.45	1.16	0.980	0.784	0.702	0.572	0.476	0.417	0.327	0.282	0.235	0.192	n_2 [r/min]		

REDUCERS

Selection Tables
Ratio 104, 121 - 7569

Note: 3. Necessary input power for starting is printed in bold face. Do not exceed allowable output torque after startup.

Selection Tables 6000 Series Reducer

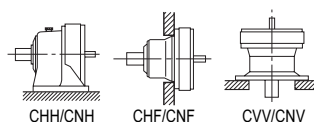
Double Reduction Ratio 104,121 ~ 7569 Frame Size: 6060DA ~ 6130DA

Input Speed		$n_1 = 1750$ r/min		n_1 : Input Speed [r/min]		T_{out} : Allowable output torque [N·m, kgf·m]		n_2 : Output Speed [r/min]		Pro: Allowable output shaft radial load [N, kgf]		P : Allowable input power [kW]		*Consult us for Pro of CNF and CHF type.	
Frame Size	n_2 [r/min]	16.8	14.5	12.2	10.6	8.97	7.58	6.41	5.49	4.64	3.70	3.13	2.70	2.39	2.08
	Ratio[Z]	104	121	143	165	195	231	273	319	377	473	559	649	731	841
6060DA	P_i [kW]	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	-	0.100	0.100
	T_{out} [N·m]	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	-	24.0	24.0
	T_{out} [kgf·m]	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	-	2.45	2.45
	Pro[N]	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180	-	1180	1180
	Pro[kgf]	120	120	120	120	120	120	120	120	120	120	120	-	120	120
6065DA	P_i [kW]	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	-	0.100	0.100
	T_{out} [N·m]	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	-	30.0	30.0
	T_{out} [kgf·m]	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	-	3.06	3.06
	Pro[N]	1180	1140	1180	1180	1180	1180	1180	1180	1180	1180	1180	-	1180	1180
	Pro[kgf]	120	116	120	120	120	120	120	120	120	120	120	-	120	120
6070DA	P_i [kW]	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100
	T_{out} [N·m]	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
	T_{out} [kgf·m]	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59
	Pro[N]	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770
	Pro[kgf]	180	180	180	180	180	180	180	180	180	180	180	180	180	180
6075DA	P_i [kW]	0.117	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100
	T_{out} [N·m]	60.0	50.8	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	57.4	60.0	60.0
	T_{out} [kgf·m]	6.12	5.18	6.12	6.12	6.12	6.12	6.12	6.12	6.12	6.12	6.12	5.85	6.12	6.12
	Pro[N]	1770	1770	1770	1770	1770	1770	1770	1770	1770	1660	1660	1580	1660	1770
	Pro[kgf]	180	180	180	180	180	180	180	180	180	169	169	161	169	180
6090DA	P_i [kW]	0.294	0.252	0.214	0.185	0.157	0.132	0.112	0.100	0.100	0.100	0.100	0.100	0.100	0.100
	T_{out} [N·m]	150	150	150	150	150	150	150	150	150	150	150	146	150	150
	T_{out} [kgf·m]	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	14.9	15.3	15.3
	Pro[N]	3340	3340	3340	3340	3340	3340	3340	3290	3290	3310	3310	3300	3310	3290
	Pro[kgf]	340	340	340	340	340	340	340	336	336	338	338	336	338	336
6095DA	P_i [kW]	0.354	0.270	0.261	0.247	0.209	0.176	0.149	0.128	0.108	0.100	0.100	-	0.100	0.100
	T_{out} [N·m]	181	160	183	200	200	200	200	200	200	200	200	-	200	200
	T_{out} [kgf·m]	18.4	16.4	18.7	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	-	20.4	20.4
	Pro[N]	3340	3340	3340	3340	3340	3340	3340	3200	3200	3220	3220	-	3220	3200
	Pro[kgf]	340	340	340	340	340	340	340	326	326	328	328	-	328	326
6100DA	P_i [kW]	0.429	0.421	0.356	0.308	0.261	0.220	0.186	0.160	0.135	0.108	0.100	0.100	0.100	0.100
	T_{out} [N·m]	219	250	250	250	250	250	250	250	250	250	250	250	250	250
	T_{out} [kgf·m]	22.4	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
	Pro[N]	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400
	Pro[kgf]	550	550	550	550	550	550	550	550	550	550	550	550	550	550
6105DA	P_i [kW]	0.429	0.429	0.427	0.370	0.313	0.264	0.224	0.191	0.162	0.129	0.109	0.100	0.100	0.100
	T_{out} [N·m]	219	255	300	300	300	300	300	300	300	300	300	296	300	300
	T_{out} [kgf·m]	22.4	26.0	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.2	30.6	30.6
	Pro[N]	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5090	5400	5400
	Pro[kgf]	550	550	550	550	550	550	550	550	550	550	550	519	550	550
6120DA	P_i [kW]	-	-	0.429	0.429	0.429	0.429	0.389	0.332	0.281	0.226	0.191	0.165	0.146	0.126
	T_{out} [N·m]	-	-	302	348	411	487	522	520	520	525	525	525	525	520
	T_{out} [kgf·m]	-	-	30.7	35.5	41.9	49.7	53.2	53.0	53.0	53.5	53.5	53.5	53.5	53.0
	Pro[N]	-	-	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810
	Pro[kgf]	-	-	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
6120DB	P_i [kW]	1.03	0.883	0.748	0.648	0.548	0.460	-	-	-	-	-	-	-	-
	T_{out} [N·m]	525	525	525	525	525	522	-	-	-	-	-	-	-	-
	T_{out} [kgf·m]	53.5	53.5	53.5	53.5	53.5	53.2	-	-	-	-	-	-	-	-
	Pro[N]	9810	9810	9810	9810	9810	9810	-	-	-	-	-	-	-	-
	Pro[kgf]	1000	1000	1000	1000	1000	1000	-	-	-	-	-	-	-	-
6125DA	P_i [kW]	-	-	-	-	-	0.429	0.429	0.402	0.340	0.271	0.229	0.198	0.175	0.153
	T_{out} [N·m]	-	-	-	-	-	487	576	630	630	630	630	630	630	630
	T_{out} [kgf·m]	-	-	-	-	-	49.7	58.7	64.2	64.2	64.2	64.2	64.2	64.2	64.2
	Pro[N]	-	-	-	-	-	9810	9810	9810	9810	9810	9810	9810	9810	9810
	Pro[kgf]	-	-	-	-	-	1000	1000	1000	1000	1000	1000	1000	1000	1000
6125DB	P_i [kW]	1.23	1.05	0.897	0.777	0.658	0.555	0.470	0.402	-	-	-	-	-	-
	T_{out} [N·m]	630	622	630	630	630	630	630	630	-	-	-	-	-	-
	T_{out} [kgf·m]	64.2	63.4	64.2	64.2	64.2	64.2	64.2	64.2	-	-	-	-	-	-
	Pro[N]	9810	9810	9810	9810	9810	9810	9810	9810	-	-	-	-	-	-
	Pro[kgf]	1000	1000	1000	1000	1000	1000	1000	1000	-	-	-	-	-	-
6130DA	P_i [kW]	-	-	-	-	-	0.429	0.429	0.421	0.336	0.284	0.286	0.217	0.200	-
	T_{out} [N·m]	-	-	-	-	-	576	673	780	780	780	912	780	780	-
	T_{out} [kgf·m]	-	-	-	-	-	58.7	68.6	79.5	79.5	79.5	93.0	79.5	79.5	-
	Pro[N]	-	-	-	-	-	14700	14700	14700	14700	14700	14700	14700	14700	-
	Pro[kgf]	-	-	-	-	-	1500	1500	1500	1500	1500	1500	1500	1500	-
Frame Size	Ratio[Z]	104	121	143	165	195	231	273	319	377	473	559	649	731	841
	n_2 [r/min]	16.8	14.5	12.2	10.6	8.97	7.58	6.41	5.49	4.64	3.70	3.13	2.70	2.39	2.08

Note: 1. Allowable radial load Pro is the value at the midpoint of the output shaft. Refer to pages F-11~12 when radial load is off the midpoint of output shaft and for checking thrust load.

2. Refer to pages F-15~16 for allowable radial load for input shaft.

Selection Tables 6000 Series Reducer



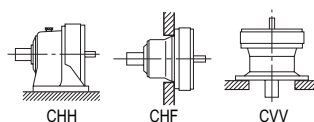
Input Speed

 $n_1 = 1750 \text{ r/min}$

1.74	1.40	1.18	0.946	0.847	0.690	0.575	0.503	0.394	0.341	0.283	0.231	n_2 [r/min]	Dim. Page	Frame Size
1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569	Ratio[Z]		
-	0.100	-	0.100	-	-	-	-	-	-	-	-	P ₁ [kW]	CNH C-73	6060DA
-	24.0	-	24.0	-	-	-	-	-	-	-	-	T _{OUT} [N·m]	CNF C-78	
-	2.45	-	2.45	-	-	-	-	-	-	-	-	T _{OUT} [kgf·m]	CNV C-85	
-	1180	-	1180	-	-	-	-	-	-	-	-	Pro[N]		
-	120	-	120	-	-	-	-	-	-	-	-	Pro[kgf]		
-	0.100	-	0.100	-	-	-	-	-	-	-	-	P ₁ [kW]	CNH C-73	6065DA
-	30.0	-	30.0	-	-	-	-	-	-	-	-	T _{OUT} [N·m]	CNF C-78	
-	3.06	-	3.06	-	-	-	-	-	-	-	-	T _{OUT} [kgf·m]	CNV C-85	
-	1180	-	1180	-	-	-	-	-	-	-	-	Pro[N]		
-	120	-	120	-	-	-	-	-	-	-	-	Pro[kgf]		
0.100	0.100	-	0.100	0.100	0.100	-	-	-	-	-	-	P ₁ [kW]	CNH C-73	6070DA
45.0	45.0	-	45.0	45.0	45.0	-	-	-	-	-	-	T _{OUT} [N·m]	CNF C-78	
4.59	4.59	-	4.59	4.59	4.59	-	-	-	-	-	-	T _{OUT} [kgf·m]	CNV C-85	
1770	1770	-	1770	1770	1770	-	-	-	-	-	-	Pro[N]		
180	180	-	180	180	180	-	-	-	-	-	-	Pro[kgf]		
0.100	0.100	-	0.100	0.100	0.100	-	-	-	-	-	-	P ₁ [kW]	CNH C-73	6075DA
57.4	60.0	-	60.0	57.4	57.4	-	-	-	-	-	-	T _{OUT} [N·m]	CNF C-78	
5.85	6.12	-	6.12	5.85	5.85	-	-	-	-	-	-	T _{OUT} [kgf·m]	CNV C-85	
1580	1660	-	1660	1580	1580	-	-	-	-	-	-	Pro[N]		
161	169	-	169	161	161	-	-	-	-	-	-	Pro[kgf]		
0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	-	-	P ₁ [kW]	CNH C-73	6090DA
146	150	150	150	146	146	150	146	150	150	-	-	T _{OUT} [N·m]	CNF C-78	
14.9	15.3	15.3	15.3	14.9	14.9	15.3	14.9	15.3	15.3	-	-	T _{OUT} [kgf·m]	CNV C-85	
3300	3310	3310	3310	3300	3300	3310	3300	3310	3310	-	-	Pro[N]		
336	338	338	338	336	336	338	336	338	338	-	-	Pro[kgf]		
-	0.100	0.100	0.100	-	-	0.100	-	0.100	0.100	-	-	P ₁ [kW]	CNH C-73	6095DA
-	200	193	200	-	-	192	-	192	192	-	-	T _{OUT} [N·m]	CNF C-78	
-	20.4	19.6	20.4	-	-	19.6	-	19.6	19.6	-	-	T _{OUT} [kgf·m]	CNV C-85	
-	3220	3240	3220	-	-	3240	-	3240	3240	-	-	Pro[N]		
-	328	330	328	-	-	330	-	330	330	-	-	Pro[kgf]		
0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	-	-	P ₁ [kW]	CNH C-73	6100DA
250	250	250	250	250	250	250	250	250	250	-	-	T _{OUT} [N·m]	CNF C-78	
25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	-	-	T _{OUT} [kgf·m]	CNV C-85	
5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	-	-	Pro[N]		
550	550	550	550	550	550	550	550	550	550	-	-	Pro[kgf]		
0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	-	-	P ₁ [kW]	CNH C-73	6105DA
296	300	300	300	296	296	300	296	300	300	-	-	T _{OUT} [N·m]	CNF C-78	
30.2	30.6	30.6	30.6	30.2	30.2	30.6	30.2	30.6	30.6	-	-	T _{OUT} [kgf·m]	CNV C-85	
5090	5400	4780	5400	5090	5090	4780	5090	4780	4780	-	-	Pro[N]		
519	550	488	550	519	519	488	519	488	488	-	-	Pro[kgf]		
0.107	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	-	-	P ₁ [kW]	CNH C-73	6120DA
525	525	525	525	525	525	525	525	525	525	-	-	T _{OUT} [N·m]	CNF C-78	
53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	-	-	T _{OUT} [kgf·m]	CNV C-85	
9810	9810	9780	9810	9810	9810	9780	9810	9780	9780	-	-	Pro[N]		
1000	1000	997	1000	1000	1000	997	1000	997	997	-	-	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	0.100	0.100	P ₁ [kW]	CNH C-73	6120DB
-	-	-	-	-	-	-	-	-	-	525	525	T _{OUT} [N·m]	CNF C-78	
-	-	-	-	-	-	-	-	-	-	53.5	53.5	T _{OUT} [kgf·m]	CNV C-85	
-	-	-	-	-	-	-	-	-	-	9780	9780	Pro[N]		
-	-	-	-	-	-	-	-	-	-	997	997	Pro[kgf]		
0.128	0.103	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	-	-	P ₁ [kW]	CNH C-73	6125DA
630	630	630	630	630	630	630	630	630	630	-	-	T _{OUT} [N·m]	CNF C-78	
64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	-	-	T _{OUT} [kgf·m]	CNV C-85	
9810	9810	9560	9810	9810	9810	9560	9810	9560	9560	-	-	Pro[N]		
1000	1000	974	1000	1000	1000	974	1000	974	974	-	-	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	0.100	0.100	P ₁ [kW]	CNH C-73	6125DB
-	-	-	-	-	-	-	-	-	-	630	630	T _{OUT} [N·m]	CNF C-78	
-	-	-	-	-	-	-	-	-	-	64.2	64.2	T _{OUT} [kgf·m]	CNV C-85	
-	-	-	-	-	-	-	-	-	-	9560	9560	Pro[N]		
-	-	-	-	-	-	-	-	-	-	974	974	Pro[kgf]		
0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	-	-	P ₁ [kW]	CHH C-74	6130DA
912	780	848	780	912	912	848	912	848	848	-	-	T _{OUT} [N·m]	CHF C-79	
93.0	79.5	86.5	79.5	93.0	93.0	86.5	93.0	86.5	86.5	-	-	T _{OUT} [kgf·m]	CVV C-86	
14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	-	-	Pro[N]		
1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	-	-	Pro[kgf]		
1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569	Ratio[Z]	Dim. Page	Frame Size
1.74	1.40	1.18	0.946	0.847	0.690	0.575	0.503	0.394	0.341	0.283	0.231	n_2 [r/min]		

Note: 3. Necessary input power for starting is printed in bold face. Do not exceed allowable output torque after startup.

Selection Tables 6000 Series Reducer



Input Speed

 $n_1 = 1750 \text{ r/min}$

1.74	1.40	1.18	0.946	0.847	0.690	0.575	0.503	0.394	0.341	0.283	0.231	n_2 [r/min]	Dim. Page	Frame Size
1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569	Ratio[Z]		
-	-	-	-	-	-	-	-	-	-	0.200	0.200	P ₁ [kW]	CHH C-74	6130DB
-	-	-	-	-	-	-	-	-	-	848	848	T _{OUT} [N·m]	CHF C-79	
-	-	-	-	-	-	-	-	-	-	86.5	86.5	T _{OUT} [kgf·m]	CVV C-86	
-	-	-	-	-	-	-	-	-	-	14700	14700	Pro[N]		
-	-	-	-	-	-	-	-	-	-	1500	1500	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P ₁ [kW]	CHH C-74	6130DC
-	-	-	-	-	-	-	-	-	-	-	-	T _{OUT} [N·m]	CHF C-79	
-	-	-	-	-	-	-	-	-	-	-	-	T _{OUT} [kgf·m]	CVV C-86	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
0.213	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	-	-	P ₁ [kW]	CHH C-74	6135DA
1050	940	979	940	1050	1050	979	1050	979	979	-	-	T _{OUT} [N·m]	CHF C-79	
107	95.8	99.8	95.8	107	107	99.8	107	99.8	99.8	-	-	T _{OUT} [kgf·m]	CVV C-86	
14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	-	-	Pro[N]		
1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	-	-	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	0.200	0.200	P ₁ [kW]	CHH C-74	6135DB
-	-	-	-	-	-	-	-	-	-	979	979	T _{OUT} [N·m]	CHF C-79	
-	-	-	-	-	-	-	-	-	-	99.8	99.8	T _{OUT} [kgf·m]	CVV C-86	
-	-	-	-	-	-	-	-	-	-	14700	14700	Pro[N]		
-	-	-	-	-	-	-	-	-	-	1500	1500	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P ₁ [kW]	CHH C-74	6135DC
-	-	-	-	-	-	-	-	-	-	-	-	T _{OUT} [N·m]	CHF C-79	
-	-	-	-	-	-	-	-	-	-	-	-	T _{OUT} [kgf·m]	CVV C-86	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
0.249	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	-	-	P ₁ [kW]	CHH C-74	6140DA
1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	-	-	T _{OUT} [N·m]	CHF C-79	
125	125	125	125	125	125	125	125	125	125	-	-	T _{OUT} [kgf·m]	CVV C-86	
16000	16000	16000	16000	16000	16000	16000	16000	16000	16000	-	-	Pro[N]		
1630	1630	1630	1630	1630	1630	1630	1630	1630	1630	-	-	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	0.200	0.200	P ₁ [kW]	CHH C-74	6140DB
-	-	-	-	-	-	-	-	-	-	1230	1230	T _{OUT} [N·m]	CHF C-79	
-	-	-	-	-	-	-	-	-	-	125	125	T _{OUT} [kgf·m]	CVV C-86	
-	-	-	-	-	-	-	-	-	-	16000	16000	Pro[N]		
-	-	-	-	-	-	-	-	-	-	1630	1630	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P ₁ [kW]	CHH C-74	6140DC
-	-	-	-	-	-	-	-	-	-	-	-	T _{OUT} [N·m]	CHF C-79	
-	-	-	-	-	-	-	-	-	-	-	-	T _{OUT} [kgf·m]	CVV C-86	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
0.278	0.224	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	-	-	P ₁ [kW]	CHH C-74	6145DA
1370	1370	1250	1370	1370	1370	1250	1370	1250	1250	-	-	T _{OUT} [N·m]	CHF C-79	
140	140	127	140	140	140	127	140	127	127	-	-	T _{OUT} [kgf·m]	CVV C-86	
16000	15700	16000	15700	16000	16000	16000	16000	16000	16000	-	-	Pro[N]		
1630	1600	1630	1600	1630	1630	1630	1630	1630	1630	-	-	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	0.200	0.200	P ₁ [kW]	CHH C-74	6145DB
-	-	-	-	-	-	-	-	-	-	1250	1250	T _{OUT} [N·m]	CHF C-79	
-	-	-	-	-	-	-	-	-	-	127	127	T _{OUT} [kgf·m]	CVV C-86	
-	-	-	-	-	-	-	-	-	-	16000	16000	Pro[N]		
-	-	-	-	-	-	-	-	-	-	1630	1630	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P ₁ [kW]	CHH C-74	6145DC
-	-	-	-	-	-	-	-	-	-	-	-	T _{OUT} [N·m]	CHF C-79	
-	-	-	-	-	-	-	-	-	-	-	-	T _{OUT} [kgf·m]	CVV C-86	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
0.400	0.400	0.400	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	P ₁ [kW]	CHH C-74	6160DA
1760	1740	1760	1740	1760	1760	1760	1760	1760	1760	1760	1760	T _{OUT} [N·m]	CHF C-79	
179	177	179	177	179	179	179	179	179	179	179	179	T _{OUT} [kgf·m]	CVV C-86	
22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	Pro[N]		
2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P ₁ [kW]	CHH C-74	6160DB
-	-	-	-	-	-	-	-	-	-	-	-	T _{OUT} [N·m]	CHF C-79	
-	-	-	-	-	-	-	-	-	-	-	-	T _{OUT} [kgf·m]	CVV C-86	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569	Ratio[Z]	Dim. Page	Frame Size
1.74	1.40	1.18	0.946	0.847	0.690	0.575	0.503	0.394	0.341	0.283	0.231	n_2 [r/min]		

Note: 3. Necessary input power for starting is printed in bold face. Do not exceed allowable output torque after startup.

Selection Tables 6000 Series Reducer

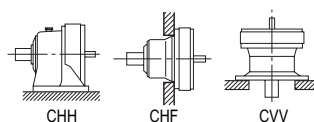
Double Reduction Ratio 104,121 ~ 7569 Frame Size: 6160DC ~ 6185DA

Input Speed		$n_1 = 1750$ r/min		n_1 : Input Speed [r/min]		T_{out} : Allowable output torque [N·m, kgf·m]		n_2 : Output Speed [r/min]		Pro: Allowable output shaft radial load [N, kgf]		P : Allowable input power [kW]		*Consult us for Pro of CNF and CHF type.	
Frame Size	n_2 [r/min]	16.8	14.5	12.2	10.6	8.97	7.58	6.41	5.49	4.64	3.70	3.13	2.70	2.39	2.08
	Ratio[Z]	104	121	143	165	195	231	273	319	377	473	559	649	731	841
6160DC	P_i [kW]	3.44	2.95	2.50	-	-	-	-	-	-	-	-	-	-	-
	T_{out} [N·m]	1760	1760	1760	-	-	-	-	-	-	-	-	-	-	-
	T_{out} [kgf·m]	179	179	179	-	-	-	-	-	-	-	-	-	-	-
	Pro[N]	22100	22100	22100	-	-	-	-	-	-	-	-	-	-	-
	Pro[kgf]	2250	2250	2250	-	-	-	-	-	-	-	-	-	-	-
6165DA	P_i [kW]	-	-	-	-	1.60	1.60	1.57	1.34	1.13	0.904	0.765	0.659	0.585	0.508
	T_{out} [N·m]	-	-	-	-	1530	1810	2100	2100	2100	2100	2100	2100	2100	2100
	T_{out} [kgf·m]	-	-	-	-	156	185	214	214	214	214	214	214	214	214
	Pro[N]	-	-	-	-	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100
	Pro[kgf]	-	-	-	-	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250
6165DB	P_i [kW]	3.36	3.36	2.99	2.59	2.19	1.85	1.57	-	-	-	-	-	-	-
	T_{out} [N·m]	1710	1990	2100	2100	2100	2100	2100	-	-	-	-	-	-	-
	T_{out} [kgf·m]	175	203	214	214	214	214	214	-	-	-	-	-	-	-
	Pro[N]	22100	22100	22100	22100	22100	22100	22100	-	-	-	-	-	-	-
	Pro[kgf]	2250	2250	2250	2250	2250	2250	2250	-	-	-	-	-	-	-
6165DC	P_i [kW]	4.11	3.53	2.99	2.59	-	-	-	-	-	-	-	-	-	-
	T_{out} [N·m]	2100	2100	2100	2100	-	-	-	-	-	-	-	-	-	-
	T_{out} [kgf·m]	214	214	214	214	-	-	-	-	-	-	-	-	-	-
	Pro[N]	22100	22100	22100	22100	-	-	-	-	-	-	-	-	-	-
	Pro[kgf]	2250	2250	2250	2250	-	-	-	-	-	-	-	-	-	-
6170DA	P_i [kW]	-	-	-	-	-	1.60	1.60	1.60	1.37	1.09	0.922	0.794	0.705	0.613
	T_{out} [N·m]	-	-	-	-	-	1810	2140	2510	2530	2530	2530	2530	2530	2530
	T_{out} [kgf·m]	-	-	-	-	-	185	219	255	258	258	258	258	258	258
	Pro[N]	-	-	-	-	-	29500	29500	29500	29500	29500	29500	29500	29500	29500
	Pro[kgf]	-	-	-	-	-	3010	3010	3010	3010	3010	3010	3010	3010	3010
6170DB	P_i [kW]	-	3.36	3.36	3.12	2.64	2.23	1.89	1.61	-	-	-	-	-	-
	T_{out} [N·m]	-	1990	2360	2530	2530	2530	2530	2530	-	-	-	-	-	-
	T_{out} [kgf·m]	-	203	240	258	258	258	258	258	-	-	-	-	-	-
	Pro[N]	-	29500	29500	29500	29500	29500	29500	29500	-	-	-	-	-	-
	Pro[kgf]	-	3010	3010	3010	3010	3010	3010	3010	-	-	-	-	-	-
6170DC	P_i [kW]	4.95	4.26	3.60	3.12	2.64	2.23	-	-	-	-	-	-	-	-
	T_{out} [N·m]	2530	2530	2530	2530	2530	2530	-	-	-	-	-	-	-	-
	T_{out} [kgf·m]	258	258	258	258	258	258	-	-	-	-	-	-	-	-
	Pro[N]	28600	29500	29500	29500	29500	29500	-	-	-	-	-	-	-	-
	Pro[kgf]	2920	3010	3010	3010	3010	3010	-	-	-	-	-	-	-	-
6175DA	P_i [kW]	-	-	-	-	-	-	1.60	1.60	1.60	1.36	1.15	0.988	0.877	0.763
	T_{out} [N·m]	-	-	-	-	-	-	2140	2510	2960	3150	3150	3150	3150	3150
	T_{out} [kgf·m]	-	-	-	-	-	-	219	255	302	321	321	321	321	321
	Pro[N]	-	-	-	-	-	-	29500	29500	29500	29500	29500	29500	29500	29500
	Pro[kgf]	-	-	-	-	-	-	3010	3010	3010	3010	3010	3010	3010	3010
6175DB	P_i [kW]	-	-	3.36	3.36	3.29	2.78	2.35	2.01	1.70	-	-	-	-	-
	T_{out} [N·m]	-	-	2360	2720	3150	3150	3150	3150	3150	-	-	-	-	-
	T_{out} [kgf·m]	-	-	240	277	321	321	321	321	321	-	-	-	-	-
	Pro[N]	-	-	29500	29500	29500	29500	29500	29500	29500	-	-	-	-	-
	Pro[kgf]	-	-	3010	3010	3010	3010	3010	3010	3010	-	-	-	-	-
6175DC	P_i [kW]	6.17	5.30	4.49	3.89	3.29	2.78	2.35	-	-	-	-	-	-	-
	T_{out} [N·m]	3150	3150	3150	3150	3150	3150	3150	-	-	-	-	-	-	-
	T_{out} [kgf·m]	321	321	321	321	321	321	321	-	-	-	-	-	-	-
	Pro[N]	28300	29500	29500	29500	29500	29500	29500	-	-	-	-	-	-	-
	Pro[kgf]	2880	3010	3010	3010	3010	3010	3010	-	-	-	-	-	-	-
6180DA	P_i [kW]	-	-	-	3.36	3.36	3.36	3.02	2.59	2.19	1.75	1.48	1.27	1.13	0.981
	T_{out} [N·m]	-	-	-	2720	3210	3810	4050	4050	4050	4060	4060	4050	4060	4050
	T_{out} [kgf·m]	-	-	-	277	328	388	413	413	413	414	414	413	414	413
	Pro[N]	-	-	-	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700
	Pro[kgf]	-	-	-	4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	4250
6180DB	P_i [kW]	7.95	6.83	5.78	5.01	4.24	3.57	3.02	2.59	-	-	-	-	-	-
	T_{out} [N·m]	4060	4060	4060	4060	4060	4050	4050	4050	-	-	-	-	-	-
	T_{out} [kgf·m]	414	414	414	414	414	413	413	413	-	-	-	-	-	-
	Pro[N]	37700	40300	41700	41700	41700	41700	41700	41700	-	-	-	-	-	-
	Pro[kgf]	3840	4100	4250	4250	4250	4250	4250	4250	-	-	-	-	-	-
6185DA	P_i [kW]	-	-	-	-	-	3.36	3.36	3.19	2.70	2.15	1.82	1.57	1.39	1.21
	T_{out} [N·m]	-	-	-	-	-	3810	4500	5000	5000	5000	5000	5000	5000	5000
	T_{out} [kgf·m]	-	-	-	-	-	388	459	510	510	510	510	510	510	510
	Pro[N]	-	-	-	-	-	41700	41700	41700	41700	41700	41700	41600	41700	41700
	Pro[kgf]	-	-	-	-	-	4250	4250	4250	4250	4250	4250	4240	4250	4250
Frame Size	Ratio[Z]	104	121	143	165	195	231	273	319	377	473	559	649	731	841
	n_2 [r/min]	16.8	14.5	12.2	10.6	8.97	7.58	6.41	5.49	4.64	3.70	3.13	2.70	2.39	2.08

Note: 1. Allowable radial load Pro is the value at the midpoint of the output shaft. Refer to pages F-11~12 when radial load is off the midpoint of output shaft and for checking thrust load.

2. Refer to pages F-15~16 for allowable radial load for input shaft.

Selection Tables 6000 Series Reducer



Input Speed

 $n_1 = 1750 \text{ r/min}$

1.74	1.40	1.18	0.946	0.847	0.690	0.575	0.503	0.394	0.341	0.283	0.231	n_2 [r/min]	Dim. Page	Frame Size
1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569	Ratio[Z]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-75	6160DC
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-80	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-87	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
0.426	0.400	0.400	0.400	0.207	0.200	0.200	0.200	0.200	0.200	0.200	0.200	P_i [kW]	CHH C-74	6165DA
2100	2100	2050	2100	2100	2100	2050	2100	2050	2050	2050	2050	T_{OUT} [N·m]	CHF C-79	
214	214	209	214	214	214	209	214	209	209	209	209	T_{OUT} [kgf·m]	CVV C-86	
22100	22100	21800	22100	22100	22100	21800	22100	21800	21800	21800	21800	Pro[N]		
2250	2250	2220	2250	2250	2250	2220	2250	2220	2220	2220	2220	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-74	6165DB
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-79	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-86	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-75	6165DC
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-80	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-87	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
0.514	0.413	0.400	0.400	0.400	0.203	0.200	0.200	0.200	0.200	0.200	0.200	P_i [kW]	CHH C-74	6170DA
2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	T_{OUT} [N·m]	CHF C-79	
258	258	258	258	258	258	258	258	258	258	258	258	T_{OUT} [kgf·m]	CVV C-86	
29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	Pro[N]		
3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-74	6170DB
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-79	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-86	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-75	6170DC
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-80	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-87	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
0.639	0.514	0.434	0.400	0.400	0.400	0.211	0.200	0.200	0.200	0.200	0.200	P_i [kW]	CHH C-74	6175DA
3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	T_{OUT} [N·m]	CHF C-79	
321	321	321	321	321	321	321	321	321	321	321	321	T_{OUT} [kgf·m]	CVV C-86	
29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	Pro[N]		
3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-74	6175DB
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-79	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-86	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-75	6175DC
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-80	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-87	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
0.822	0.750	0.750	0.447	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	P_i [kW]	CHH C-74	6180DA
4050	4060	4060	4060	4050	4050	4060	4050	4060	4060	4060	4060	T_{OUT} [N·m]	CHF C-79	
413	414	414	414	413	413	414	413	414	414	414	414	T_{OUT} [kgf·m]	CVV C-86	
41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	Pro[N]		
4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-75	6180DB
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-80	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-87	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
1.01	0.816	0.750	0.750	0.750	0.401	0.400	0.400	0.400	0.400	0.400	0.400	P_i [kW]	CHH C-74	6185DA
5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	T_{OUT} [N·m]	CHF C-79	
510	510	510	510	510	510	510	510	510	510	510	510	T_{OUT} [kgf·m]	CVV C-86	
41600	41700	41700	41700	41600	41600	41700	41600	41700	41700	41700	41700	Pro[N]		
4240	4250	4250	4250	4240	4240	4250	4240	4250	4250	4250	4250	Pro[kgf]		
1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569	Ratio[Z]	Dim. Page	Frame Size
1.74	1.40	1.18	0.946	0.847	0.690	0.575	0.503	0.394	0.341	0.283	0.231	n_2 [r/min]		

Note: 3. Necessary input power for starting is printed in bold face. Do not exceed allowable output torque after startup.

Selection Tables 6000 Series Reducer

Double Reduction Ratio 104,121 ~ 7569 Frame Size: 6185DB ~ 6235DB

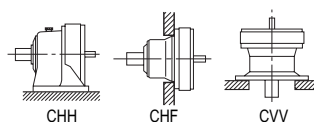
Input Speed	$n_1 = 1750$ r/min	n_1 : Input Speed [r/min]	T_{out} : Allowable output torque [N·m, kgf·m]
		n_2 : Output Speed [r/min]	Pro: Allowable output shaft radial load [N, kgf]
		P : Allowable input power [kW]	*Consult us for Pro of CNF and CHF type.

Frame Size	n_2 [r/min]	16.8	14.5	12.2	10.6	8.97	7.58	6.41	5.49	4.64	3.70	3.13	2.70	2.39	2.08
	Ratio[Z]	104	121	143	165	195	231	273	319	377	473	559	649	731	841
6185DB	P_i [kW]	9.60	8.09	6.98	6.07	5.14	4.41	3.73	3.19	2.70	-	-	-	-	-
	T_{out} [N·m]	4900	4810	4900	4920	4920	5000	5000	5000	5000	-	-	-	-	-
	T_{out} [kgf·m]	500	490	500	502	502	510	510	510	510	-	-	-	-	-
	Pro[N]	37300	40000	41700	41700	41700	41700	41700	41700	41700	-	-	-	-	-
	Pro[kgf]	3800	4070	4250	4250	4250	4250	4250	4250	4250	-	-	-	-	-
6190DA	P_i [kW]	-	-	6.25	6.25	6.25	5.62	4.76	4.07	3.45	2.75	2.32	2.00	1.78	1.54
	T_{out} [N·m]	-	-	4390	5060	5980	6380	6380	6380	6380	6380	6380	6380	6380	6380
	T_{out} [kgf·m]	-	-	447	516	610	650	650	650	650	650	650	650	650	650
	Pro[N]	-	-	59000	59000	59000	59000	59000	59000	59000	59000	59000	58600	59000	59000
	Pro[kgf]	-	-	6010	6010	6010	6010	6010	6010	6010	6010	6010	5970	6010	6010
6190DB	P_i [kW]	11.9	10.7	9.08	7.87	6.66	5.62	-	-	-	-	-	-	-	-
	T_{out} [N·m]	6090	6380	6380	6380	6380	6380	-	-	-	-	-	-	-	-
	T_{out} [kgf·m]	621	650	650	650	650	650	-	-	-	-	-	-	-	-
	Pro[N]	52400	55900	58400	58900	58900	59000	-	-	-	-	-	-	-	-
	Pro[kgf]	5340	5700	5950	6000	6000	6010	-	-	-	-	-	-	-	-
6195DA	P_i [kW]	-	-	-	-	6.25	6.25	5.94	5.08	4.30	3.43	2.90	2.50	2.22	1.93
	T_{out} [N·m]	-	-	-	-	5980	7090	7960	7960	7960	7960	7960	7960	7960	7960
	T_{out} [kgf·m]	-	-	-	-	610	723	811	811	811	811	811	811	811	811
	Pro[N]	-	-	-	-	59000	59000	59000	59000	59000	59000	59000	58100	59000	59000
	Pro[kgf]	-	-	-	-	6010	6010	6010	6010	6010	6010	6010	5930	6010	6010
6195DB	P_i [kW]	11.9	11.9	10.9	9.76	8.26	7.02	5.94	-	-	-	-	-	-	-
	T_{out} [N·m]	6090	7090	7630	7910	7910	7960	7960	-	-	-	-	-	-	-
	T_{out} [kgf·m]	621	723	778	806	806	811	811	-	-	-	-	-	-	-
	Pro[N]	52400	55700	57900	58300	58300	59000	59000	-	-	-	-	-	-	-
	Pro[kgf]	5340	5680	5900	5940	5940	6010	6010	-	-	-	-	-	-	-
6205DA	P_i [kW]	-	-	-	-	-	-	5.86	4.84	4.34	3.35	3.00	2.44	2.52	2.23
	T_{out} [N·m]	-	-	-	-	-	-	7860	7590	8030	7780	8230	7790	9060	9230
	T_{out} [kgf·m]	-	-	-	-	-	-	801	773	819	793	839	794	923	941
	Pro[N]	-	-	-	-	-	-	84100	84100	84100	84100	84100	84100	84100	84100
	Pro[kgf]	-	-	-	-	-	-	8570	8570	8570	8570	8570	8570	8570	8570
6205DB	P_i [kW]	-	11.9	-	11.4	9.68	8.17	6.92	5.89	4.99	4.00	3.39	2.92	2.59	-
	T_{out} [N·m]	-	7090	-	9270	9270	9270	9270	9230	9230	9300	9300	9300	9300	-
	T_{out} [kgf·m]	-	723	-	945	945	945	945	941	941	948	948	948	948	-
	Pro[N]	-	84100	-	84100	84100	84100	84100	84100	84100	84100	84100	84100	84100	-
	Pro[kgf]	-	8570	-	8570	8570	8570	8570	8570	8570	8570	8570	8570	8570	-
6215DA	P_i [kW]	-	-	-	11.9	11.9	11.0	9.32	8.07	6.83	5.45	4.61	3.97	3.52	3.06
	T_{out} [N·m]	-	-	-	9670	11400	12500	12500	12700	12700	12700	12700	12700	12700	12700
	T_{out} [kgf·m]	-	-	-	985	1160	1270	1270	1290	1290	1290	1290	1290	1290	1290
	Pro[N]	-	-	-	104000	104000	104000	104000	104000	104000	104000	104000	104000	104000	104000
	Pro[kgf]	-	-	-	10600	10600	10600	10600	10600	10600	10600	10600	10600	10600	10600
6215DB	P_i [kW]	-	19.1	-	15.0	12.7	-	-	-	-	-	-	-	-	-
	T_{out} [N·m]	-	11400	-	12200	12200	-	-	-	-	-	-	-	-	-
	T_{out} [kgf·m]	-	1160	-	1240	1240	-	-	-	-	-	-	-	-	-
	Pro[N]	-	101000	-	104000	104000	-	-	-	-	-	-	-	-	-
	Pro[kgf]	-	10300	-	10600	10600	-	-	-	-	-	-	-	-	-
6225DA	P_i [kW]	-	-	-	-	11.9	11.9	11.0	9.60	8.12	6.89	5.83	4.98	4.46	3.64
	T_{out} [N·m]	-	-	-	-	11400	13500	14800	15000	15000	16000	16000	15900	16000	15000
	T_{out} [kgf·m]	-	-	-	-	1160	1380	1510	1530	1530	1630	1630	1620	1630	1530
	Pro[N]	-	-	-	-	122000	130000	137000	142000	145000	145000	145000	145000	145000	145000
	Pro[kgf]	-	-	-	-	12500	13200	13900	14500	14800	14800	14800	14800	14800	14800
6225DB	P_i [kW]	-	22.6	-	17.9	15.1	13.0	-	-	-	-	-	-	-	-
	T_{out} [N·m]	-	13500	-	14500	14500	14800	-	-	-	-	-	-	-	-
	T_{out} [kgf·m]	-	1370	-	1480	1480	1510	-	-	-	-	-	-	-	-
	Pro[N]	-	106000	-	115000	122000	130000	-	-	-	-	-	-	-	-
	Pro[kgf]	-	10800	-	11800	12400	13200	-	-	-	-	-	-	-	-
6235DA	P_i [kW]	-	25.4	-	24.2	20.5	16.7	14.1	12.1	10.2	8.82	7.47	6.43	5.71	4.58
	T_{out} [N·m]	-	15100	-	19600	19600	18900	18900	18900	18900	20500	20500	20500	20500	18900
	T_{out} [kgf·m]	-	1540	-	2000	2000	1930	1930	1930	1930	2090	2090	2090	2090	1930
	Pro[N]	-	133000	-	143000	150000	162000	170000	177000	179000	179000	179000	179000	179000	179000
	Pro[kgf]	-	13600	-	14500	15300	16500	17300	18100	18200	18200	18200	18200	18200	18200
6235DB	P_i [kW]	-	31.5	-	24.2	-	-	-	-	-	-	-	-	-	-
	T_{out} [N·m]	-	18700	-	19600	-	-	-	-	-	-	-	-	-	-
	T_{out} [kgf·m]	-	1910	-	2000	-	-	-	-	-	-	-	-	-	-
	Pro[N]	-	133000	-	143000	-	-	-	-	-	-	-	-	-	-
	Pro[kgf]	-	13500	-	14500	-	-	-	-	-	-	-	-	-	-
Frame Size	Ratio[Z]	104	121	143	165	195	231	273	319	377	473	559	649	731	841
	n_2 [r/min]	16.8	14.5	12.2	10.6	8.97	7.58	6.41	5.49	4.64	3.70	3.13	2.70	2.39	2.08

Note: 1. Allowable radial load Pro is the value at the midpoint of the output shaft. Refer to pages F-11~12 when radial load is off the midpoint of output shaft and for checking thrust load.

2. Refer to pages F-15~16 for allowable radial load for input shaft.

Selection Tables 6000 Series Reducer



Input Speed

 $n_1 = 1750 \text{ r/min}$

1.74	1.40	1.18	0.946	0.847	0.690	0.575	0.503	0.394	0.341	0.283	0.231	n_2 [r/min]	Dim. Page	Frame Size
1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569	Ratio[Z]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-75	6185DB
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-80	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-87	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
1.30	1.04	0.878	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	P_i [kW]	CHH C-75	6190DA
6380	6380	6380	6380	6380	6380	6380	6380	6380	6380	6380	6380	T_{OUT} [N·m]	CHF C-80	
650	650	650	650	650	650	650	650	650	650	650	650	T_{OUT} [kgf·m]	CVV C-87	
58600	59000	58900	59000	58600	58600	58900	58600	58900	58900	58900	58900	Pro[N]		
5970	6010	6000	6010	5970	5970	6000	5970	6000	6000	6000	6000	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-75	6190DB
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-80	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-87	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
1.62	1.30	1.10	0.877	0.785	0.750	0.750	0.750	0.750	0.750	0.750	0.750	P_i [kW]	CHH C-75	6195DA
7960	7960	7960	7960	7960	7960	7960	7960	7960	7960	7960	7960	T_{OUT} [N·m]	CHF C-80	
811	811	811	811	811	811	811	811	811	811	811	811	T_{OUT} [kgf·m]	CVV C-87	
58100	59000	58400	59000	58100	58100	58400	58100	58400	58400	58400	58400	Pro[N]		
5930	6010	5950	6010	5930	5930	5950	5930	5950	5950	5950	5950	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-75	6195DB
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-80	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-87	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
2.20	2.20	1.50	1.50	1.50	0.750	0.750	0.750	0.750	0.750	0.750	0.750	P_i [kW]	CHH C-75	6205DA
9060	9300	8360	9300	9300	9300	8760	9300	8760	9300	8760	8760	T_{OUT} [N·m]	CHF C-80	
923	948	853	948	948	948	893	948	893	948	893	893	T_{OUT} [kgf·m]	CVV C-87	
84100	84100	84100	84100	84100	84100	84100	84100	84100	84100	84100	84100	Pro[N]		
8570	8570	8570	8570	8570	8570	8570	8570	8570	8570	8570	8570	Pro[kgf]		
2.20	-	1.50	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-75	6205DB
9300	-	8760	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-80	
948	-	893	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-87	
84100	-	84100	-	-	-	-	-	-	-	-	-	Pro[N]		
8570	-	8570	-	-	-	-	-	-	-	-	-	Pro[kgf]		
2.57	2.20	1.55	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	P_i [kW]	CHH C-75	6215DA
12700	12700	11300	12700	12700	12700	11300	12700	11300	12700	11300	11300	T_{OUT} [N·m]	CHF C-80	
1290	1290	1150	1290	1290	1290	1150	1290	1150	1290	1150	1150	T_{OUT} [kgf·m]	CVV C-87	
104000	104000	104000	104000	104000	104000	104000	104000	104000	104000	104000	104000	Pro[N]		
10600	10600	10600	10600	10600	10600	10600	10600	10600	10600	10600	10600	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-75	6215DB
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-80	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-87	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
3.22	2.61	2.20	1.76	1.57	1.50	1.50	1.50	1.50	1.50	1.50	1.50	P_i [kW]	CHH C-75	6225DA
15900	16000	15100	16000	15900	15900	15100	15900	15100	15900	15100	15100	T_{OUT} [N·m]	CHF C-80	
1620	1630	1540	1630	1620	1620	1540	1620	1540	1620	1540	1540	T_{OUT} [kgf·m]	CVV C-87	
145000	145000	145000	145000	145000	145000	145000	145000	145000	145000	145000	145000	Pro[N]		
14800	14800	14800	14800	14800	14800	14800	14800	14800	14800	14800	14800	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-75	6225DB
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-80	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-87	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
4.16	3.35	2.36	2.26	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	P_i [kW]	CHH C-75	6235DA
20500	20500	17200	20500	20500	20500	17200	20500	17200	20500	17200	17200	T_{OUT} [N·m]	CHF C-80	
2090	2090	1750	2090	2090	2090	1750	2090	1750	2090	1750	1750	T_{OUT} [kgf·m]	CVV C-87	
179000	179000	179000	179000	179000	179000	179000	179000	179000	179000	179000	179000	Pro[N]		
18200	18200	18200	18200	18200	18200	18200	18200	18200	18200	18200	18200	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-75	6235DB
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-80	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-87	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569	Ratio[Z]	Dim. Page	Frame Size
1.74	1.40	1.18	0.946	0.847	0.690	0.575	0.503	0.394	0.341	0.283	0.231	n_2 [r/min]		

Note: 3. Necessary input power for starting is printed in bold face. Do not exceed allowable output torque after startup.

Selection Tables 6000 Series Reducer

Double Reduction Ratio 104,121 ~ 7569 Frame Size: 6245DA ~ 6275DA

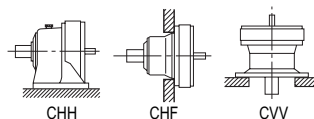
Input Speed	$n_1 = 1750$ r/min	n_1 : Input Speed [r/min]	T_{out} : Allowable output torque [N·m, kgf·m]
		n_2 : Output Speed [r/min]	Pro: Allowable output shaft radial load [N, kgf]
		P_i : Allowable input power [kW]	*Consult us for Pro of CNF and CHF type.

Frame Size	n_2 [r/min]	16.8	14.5	12.2	10.6	8.97	7.58	6.41	5.49	4.64	3.70	3.13	2.70	2.39	2.08
	Ratio[Z]	104	121	143	165	195	231	273	319	377	473	559	649	731	841
6245DA	P_i [kW]	-	-	-	25.4	23.9	22.7	19.2	16.5	13.9	11.1	9.40	8.09	7.19	6.25
	T_{out} [N·m]	-	-	-	20600	22900	25800	25800	25800	25800	25800	25800	25800	25800	25800
	T_{out} [kgf·m]	-	-	-	2100	2330	2630	2630	2630	2630	2630	2630	2630	2630	2630
	Pro[N]	-	-	-	160000	167000	179000	188000	196000	207000	208000	208000	208000	208000	208000
	Pro[kgf]	-	-	-	16300	17100	18200	19200	20000	21100	21200	21200	21200	21200	21200
6245DB	P_i [kW]	-	34.6	-	32.4	27.4	22.7	-	-	-	-	-	-	-	-
	T_{out} [N·m]	-	20500	-	26200	26200	25800	-	-	-	-	-	-	-	-
	T_{out} [kgf·m]	-	2090	-	2680	2680	2630	-	-	-	-	-	-	-	-
	Pro[N]	-	148000	-	158000	167000	179000	-	-	-	-	-	-	-	-
	Pro[kgf]	-	15000	-	16100	17000	18200	-	-	-	-	-	-	-	-
6255DA	P_i [kW]	-	31.8	-	31.8	31.8	27.3	23.1	20.7	17.5	14.9	12.6	10.8	9.61	7.86
	T_{out} [N·m]	-	18900	-	25800	30500	31000	31000	32500	32500	34500	34500	34500	34500	32500
	T_{out} [kgf·m]	-	1930	-	2630	3110	3160	3160	3310	3310	3520	3520	3520	3520	3310
	Pro[N]	-	182000	-	195000	204000	218000	229000	241000	254000	258000	258000	258000	258000	258000
	Pro[kgf]	-	18500	-	19900	20800	22200	23400	24600	25900	26300	26300	26300	26300	26300
6255DB	P_i [kW]	-	46.3	-	38.4	32.5	-	-	-	-	-	-	-	-	-
	T_{out} [N·m]	-	27500	-	31200	31200	-	-	-	-	-	-	-	-	-
	T_{out} [kgf·m]	-	2800	-	3180	3180	-	-	-	-	-	-	-	-	-
	Pro[N]	-	180000	-	194000	204000	-	-	-	-	-	-	-	-	-
	Pro[kgf]	-	18400	-	19800	20800	-	-	-	-	-	-	-	-	-
6265DA	P_i [kW]	-	50.8	-	50.8	45.7	40.5	34.3	29.4	24.8	19.8	16.8	14.4	12.8	11.1
	T_{out} [N·m]	-	30200	-	41100	43700	46000	46000	46000	46000	46000	46000	46000	46000	46000
	T_{out} [kgf·m]	-	3080	-	4190	4460	4690	4690	4690	4690	4690	4690	4690	4690	4690
	Pro[N]	-	221000	-	236000	248000	265000	276000	276000	276000	276000	276000	276000	276000	276000
	Pro[kgf]	-	22500	-	24100	25300	27000	28100	28100	28100	28100	28100	28100	28100	28100
6275DA	P_i [kW]	-	-	-	-	-	-	-	43.5	36.8	29.4	24.8	21.4	19.0	16.5
	T_{out} [N·m]	-	-	-	-	-	-	-	68200	68200	68200	68200	68200	68200	68200
	T_{out} [kgf·m]	-	-	-	-	-	-	-	6950	6950	6950	6950	6950	6950	6950
	Pro[N]	-	-	-	-	-	-	-	248000	248000	248000	248000	248000	248000	248000
	Pro[kgf]	-	-	-	-	-	-	-	25300	25300	25300	25300	25300	25300	25300
Frame Size	Ratio[Z]	104	121	143	165	195	231	273	319	377	473	559	649	731	841
	n_2 [r/min]	16.8	14.5	12.2	10.6	8.97	7.58	6.41	5.49	4.64	3.70	3.13	2.70	2.39	2.08

Note: 1. Allowable radial load Pro is the value at the midpoint of the output shaft. Refer to pages F-11~12 when radial load is off the midpoint of output shaft and for checking thrust load.

2. Refer to pages F-15~16 for allowable radial load for input shaft.

Selection Tables 6000 Series Reducer



Input Speed

 $n_1 = 1750 \text{ r/min}$

1.74	1.40	1.18	0.946	0.847	0.690	0.575	0.503	0.394	0.341	0.283	0.231	n_2 [r/min]	Dim. Page	Frame Size
1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569	Ratio[Z]		
5.24	4.21	3.12	2.84	2.54	2.20	2.20	2.20	2.20	2.20	2.20	2.20	P_i [kW]	CHH C-75	6245DA
25800	25800	22600	25800	25800	25800	22600	25800	22600	25800	22600	22600	T_{OUT} [N·m]	CHF C-80	
2630	2630	2310	2630	2630	2630	2310	2630	2310	2630	2310	2310	T_{OUT} [kgf·m]	CVV C-87	
208000	208000	208000	208000	208000	208000	208000	208000	208000	208000	208000	208000	Pro[N]		
21200	21200	21200	21200	21200	21200	21200	21200	21200	21200	21200	21200	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-75	6245DB
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-80	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-87	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
7.00	5.63	4.27	3.80	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	P_i [kW]	CHH C-75	6255DA
34500	34500	31000	34500	34500	34500	31000	34500	31000	34500	31000	31000	T_{OUT} [N·m]	CHF C-80	
3520	3520	3160	3520	3520	3520	3160	3520	3160	3520	3160	3160	T_{OUT} [kgf·m]	CVV C-87	
258000	258000	258000	258000	258000	258000	258000	258000	258000	258000	258000	258000	Pro[N]		
26300	26300	26300	26300	26300	26300	26300	26300	26300	26300	26300	26300	Pro[kgf]		
-	-	-	-	-	-	-	-	-	-	-	-	P_i [kW]	CHH C-75	6255DB
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [N·m]	CHF C-80	
-	-	-	-	-	-	-	-	-	-	-	-	T_{OUT} [kgf·m]	CVV C-87	
-	-	-	-	-	-	-	-	-	-	-	-	Pro[N]		
-	-	-	-	-	-	-	-	-	-	-	-	Pro[kgf]		
9.34	7.51	6.06	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	P_i [kW]	CHH C-75	6265DA
46000	46000	44000	46000	46000	46000	44000	46000	44000	46000	44000	44000	T_{OUT} [N·m]	CHF C-80	
4690	4690	4490	4690	4690	4690	4490	4690	4490	4690	4490	4490	T_{OUT} [kgf·m]	CVV C-87	
276000	276000	276000	276000	276000	276000	276000	276000	276000	276000	276000	276000	Pro[N]		
28100	28100	28100	28100	28100	28100	28100	28100	28100	28100	28100	28100	Pro[kgf]		
13.8	11.1	9.39	7.51	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	P_i [kW]	CHH C-75	6275DA
68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	T_{OUT} [N·m]	CHF C-80	
6950	6950	6950	6950	6950	6950	6950	6950	6950	6950	6950	6950	T_{OUT} [kgf·m]	CVV C-87	
248000	248000	245000	248000	248000	248000	245000	248000	245000	245000	245000	245000	Pro[N]		
25300	25300	25000	25300	25300	25300	25000	25300	25000	25000	25000	25000	Pro[kgf]		
1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569	Ratio[Z]	Dim. Page	Frame Size
1.74	1.40	1.18	0.946	0.847	0.690	0.575	0.503	0.394	0.341	0.283	0.231	n_2 [r/min]		

REDUCERS

Selection Tables
Ratio 104, 121 - 7569

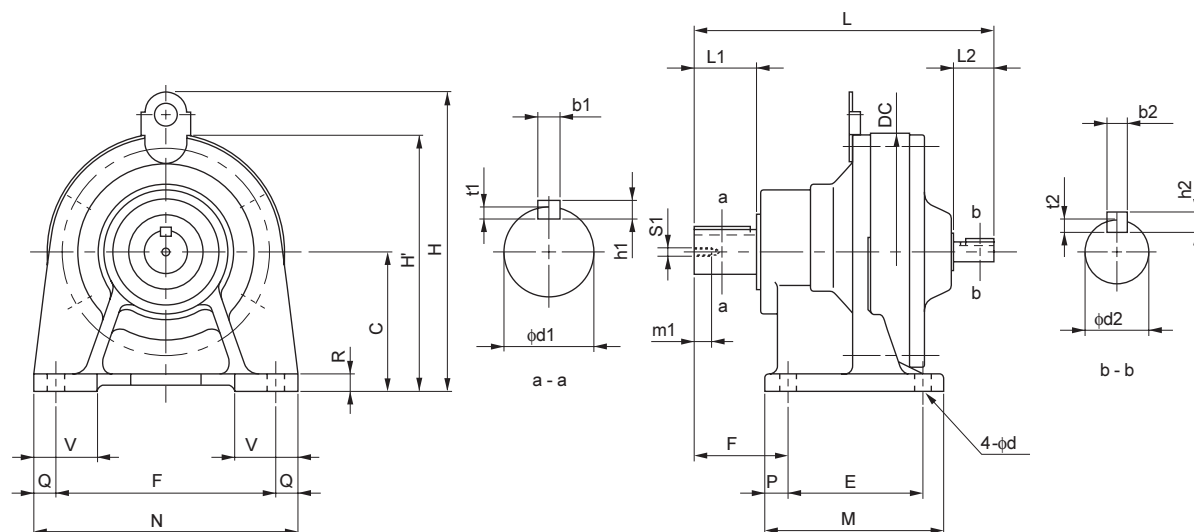
Note: 3. Necessary input power for starting is printed in bold face. Do not exceed allowable output torque after startup.

C CYCLO® SPEED REDUCERS

3. Dimension Tables

Dimension Tables Speed Reducer (Universal Direction, Foot Mount)

CNH - 606□ to 612□



Frame Size Note 1	L	C	DC	E	F	G	H	H'	M	N	P	Q	R	V	d	W(kg)
606□	145	80	110	60	120	41	-	135	84	144	12	12	10	35	9	2.5
607□	151	80	110	60	120	47	-	135	84	144	12	12	10	35	9	2.5
608□	179	90	134	75	120	52	-	157	99	144	12	12	13	37	9	8
609□	202	100	150	90	150	60	-	175	135	180	15	15	12	40	11	11
Note 5 610□	208	100	150	90	150	60	207	-	135	180	15	15	12	40	11	13
611□	218	120	162	90	150	70	236	-	135	180	15	15	12	45	11	15
Note 5 612□	259	120	204	115	190	82	257	-	155	230	20	20	15	55	14	24

Model Note 1	Output Shaft Note 2, 3, 4								Input Shaft Note 2, 3, 4					
	d1	L1	b1	h1	t1	S1	m1		d2	L2	b2	h2	t2	
CNH - 606□ - Ratio	14	25	5	5	3	M5	16		12	25	4	4	2.5	
CNH - 607□ - Ratio	18	30	6	6	3.5	M6	16		12	25	4	4	2.5	
CNH - 608□ - Ratio	22	35	6	6	3.5	M6	16		12	25	4	4	2.5	
CNH - 609□ - Ratio	28	35	8	7	4	M8	20		15	25	5	5	3	
Note 5 CNH - 610□ - Ratio	28	35	8	7	4	M8	20		15	25	5	5	3	
CNH - 611□ - Ratio	32	45	10	8	5	M8	20		15	25	5	5	3	
Note 5 CNH - 612□ - Ratio	38	55	10	8	5	M8	20		18	35	6	6	3.5	

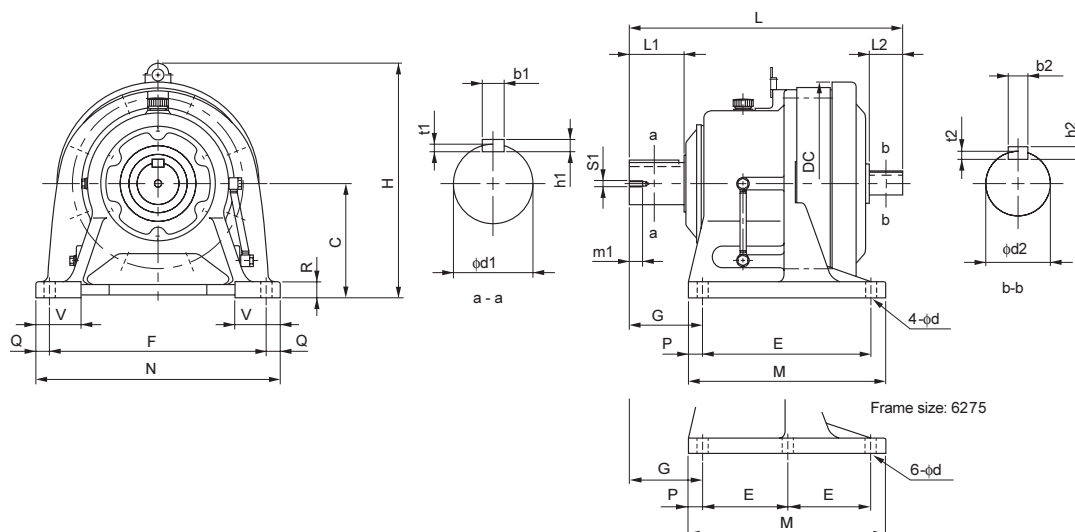
Note: 4. Refer to pages F-28~30 for details on input and output shaft end dimensions.

5. Refer to page C-88 for center height options available.

6. Dimensions in above drawings are subject to change without notice.

Dimension Tables Speed Reducer (Horizontal Direction, Foot Mount)

CHH - 613□ to 6275



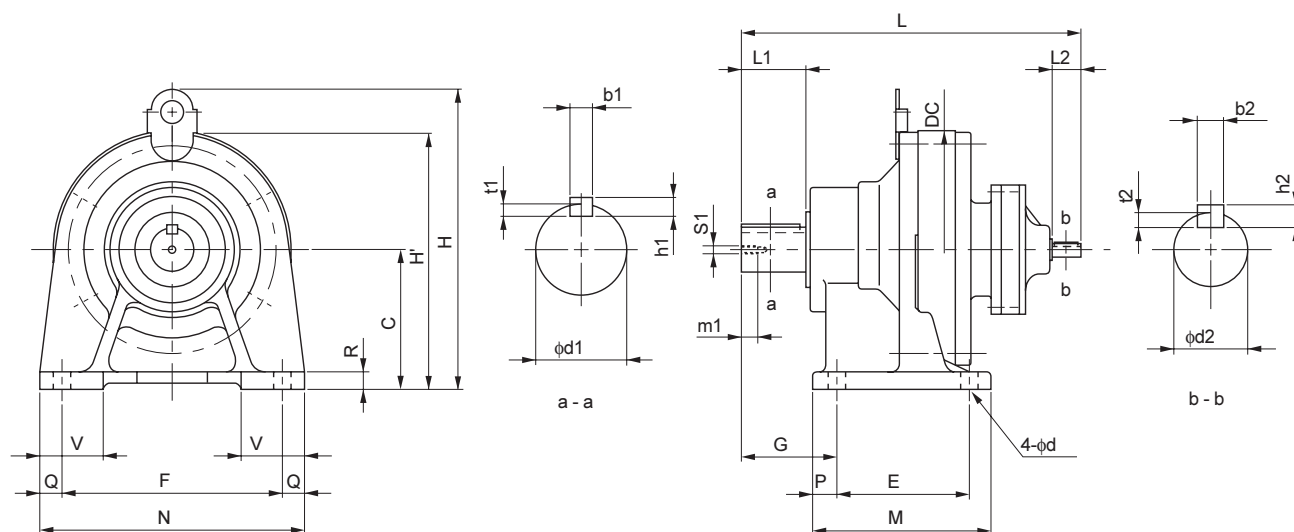
Frame Size	L	C	DC	E	F	G	H	M	N	P	Q	R	V	d	W(kg)
Note 1 613□	321	150	230	145	290	100	300	195	330	25	20	22	65	18	43
Note 5 614□	341	150	230	145	290	120	300	195	330	25	20	22	65	18	44
Note 5 616□	413	160	318	150	370	139	367	238	410	44	20	25	75	18	84
617□	477	200	362	275	380	125	429	335	430	30	25	30	80	22	125
618□	527	220	390	320	420	145	467	380	470	30	25	30	85	22	163
619□	620	250	451	380	480	170	539	440	530	30	25	35	90	26	240
6205	678	250	471	360	440	215	530	440	530	40	45	35	100	26	255
6215	708	265	507	395	480	210	575	475	580	40	50	40	110	26	336
6225	752	280	549	420	540	230	610	520	620	50	40	40	115	33	409
6235	839	300	591	460	580	260	667	560	670	50	45	45	120	33	503
6245	877	335	637	480	630	263	729	580	720	50	45	45	128	39	614
6255	1040	375	703	520	670	320	815	630	780	55	55	50	140	39	957
6265	1150	400	772	590	770	390	874	700	880	55	55	55	160	45	1190
6275	1462	540	986	420	1050	485	1161	1040	1160	100	55	60	200	45	2460

Model						Output Shaft						Input Shaft					
						Note 2, 3, 4						Note 2, 3, 4					
Note 1						d1	L1	b1	h1	t1	S1	m1	d2	L2	b2	h2	t2
	CHH	-	613	□	- Ratio	50	70	14	9	5.5	M10	18	22	40	6	6	3.5
Note 5	CHH	-	614	□	- Ratio	50	90	14	9	5.5	M10	18	22	40	6	6	3.5
Note 5	CHH	-	616	□	- Ratio	60	90	18	11	7	M10	18	30	45	8	7	4
	CHH	-	617	□	- Ratio	70	90	20	12	7.5	M12	24	35	55	10	8	5
	CHH	-	618	□	- Ratio	80	110	22	14	9	M12	24	40	65	12	8	5
	CHH	-	619	□	- Ratio	95	135	25	14	9	M20	34	45	70	14	9	5.5
	CHH	-	6205	-	- Ratio	100	165	28	16	10	M20	34	45	82	14	9	5.5
	CHH	-	6215	-	- Ratio	110	165	28	16	10	M20	34	50	82	14	9	5.5
	CHH	-	6225	-	- Ratio	120	165	32	18	11	M20	34	55	82	16	10	6
	CHH	-	6235	-	- Ratio	130	200	32	18	11	M24	41	60	105	18	11	7
	CHH	-	6245	-	- Ratio	140	200	36	20	12	M24	41	65	105	18	11	7
	CHH	-	6255	-	- Ratio	160	240	40	22	13	M30	49	80	130	22	14	9
	CHH	-	6265	-	- Ratio	170	300	40	22	13	M30	49	80	130	22	14	9
	CHH	-	6275	-	- Ratio	180	330	45	25	15	M30	52	90	150	25	14	9

Note: 1. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.
 2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."
 3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

Dimension Tables Speed Reducer (Universal Direction, Foot Mount)

CNH - 606□DA to 612□DB



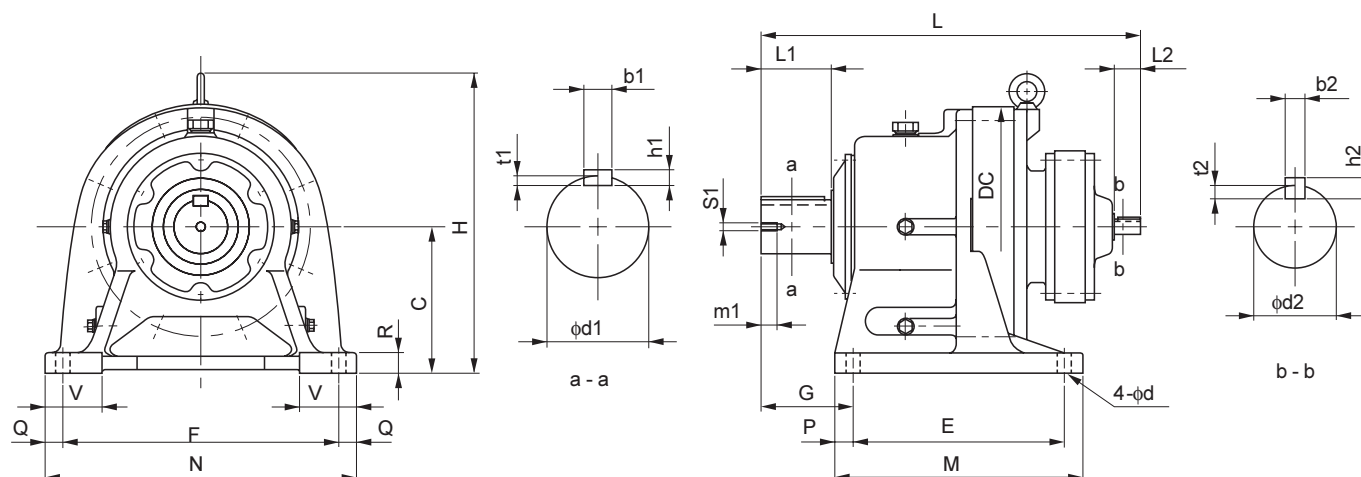
Frame Size Note 1	L	C	DC	E	F	G	H	H'	M	N	P	Q	R	V	d	W(kg)
606□DA	178	80	110	60	120	41	-	135	84	144	12	12	10	35	9	4.0
607□DA	184	80	110	60	120	47	-	135	84	144	12	12	10	35	9	4.5
609□DA	243	100	150	90	150	60	-	175	135	180	15	15	12	40	11	12
610□DA	257	100	150	90	150	60	207	-	135	180	15	15	12	40	11	15
612□DA	293	120	204	115	190	82	257	-	155	230	20	20	15	55	14	26
612□DB	312	120	204	115	190	82	257	-	155	230	20	20	15	55	14	29

Model Note 1	Output Shaft Note 2, 3, 4								Input Shaft Note 2, 3, 4					
	d1	L1	b1	h1	t1	S1	m1		d2	L2	b2	h2	t2	
CNH - 606□DA - Ratio	14	25	5	5	3	M5	16		12	25	4	4	2.5	
CNH - 607□DA - Ratio	18	30	6	6	3.5	M6	16		12	25	4	4	2.5	
CNH - 609□DA - Ratio	28	35	8	7	4	M8	20		12	25	4	4	2.5	
CNH - 610□DA - Ratio	28	35	8	7	4	M8	20		12	25	4	4	2.5	
CNH - 612□DA - Ratio	38	55	10	8	5	M8	20		12	25	4	4	2.5	
CNH - 612□DB - Ratio	38	55	10	8	5	M8	20		15	25	5	5	3	

Note: 4. Refer to pages F-28~30 for details on input and output shaft end dimensions.

5. Refer to page C-88 for center height options available.

6. Dimensions in above drawings are subject to change without notice.



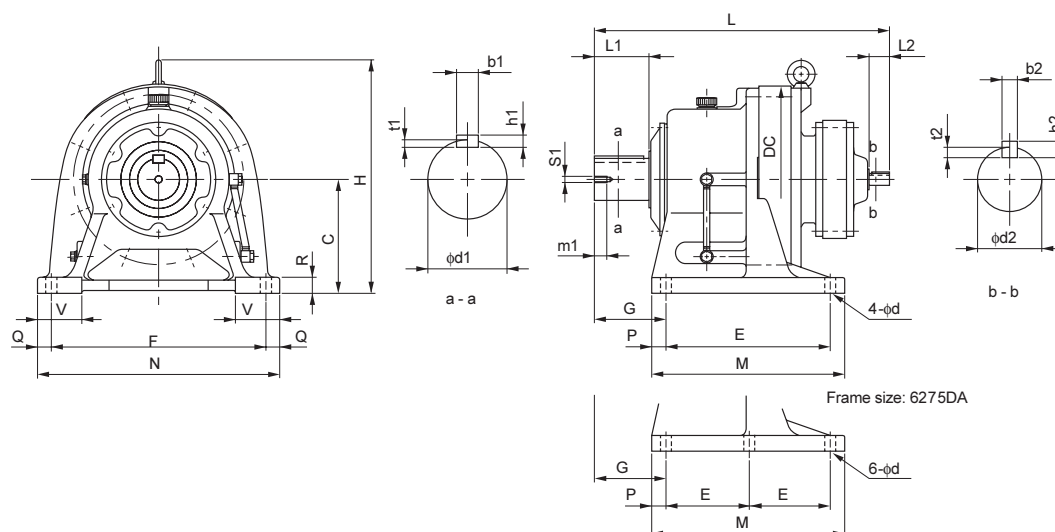
Frame Size Note 1	L	C	DC	E	F	G	H	M	N	P	Q	R	V	d	W(kg)
613□DA	347	150	230	145	290	100	300	195	330	25	20	22	65	18	41
613□DB	363	150	230	145	290	100	300	195	330	25	20	22	65	18	45
613□DC	369	150	230	145	290	100	300	195	330	25	20	22	65	18	46
614□DA	367	150	230	145	290	120	300	195	330	25	20	22	65	18	41
614□DB	383	150	230	145	290	120	300	195	330	25	20	22	65	18	45
614□DC	389	150	230	145	290	120	300	195	330	25	20	22	65	18	46
616□DA	433	160	300	150	370	139	349	238	410	44	20	25	75	18	85
616□DB	439	160	300	150	370	139	349	238	410	44	20	25	75	18	87
617□DA	478	200	340	275	380	125	416	335	430	30	25	30	80	22	121
617□DB	484	200	340	275	380	125	416	335	430	30	25	30	80	22	123
618□DA	526	220	370	320	420	145	451	380	470	30	25	30	85	22	165

Model Note 1	Output Shaft Note 2, 3, 4							Input Shaft Note 2, 3, 4				
	d1	L1	b1	h1	t1	S1	m1	d2	L2	b2	h2	t2
CHH - 613□DA - Ratio	50	70	14	9	5.5	M10	18	12	25	4	4	2.5
CHH - 613□DB - Ratio	50	70	14	9	5.5	M10	18	15	25	5	5	3
CHH - 613□DC - Ratio	50	70	14	9	5.5	M10	18	15	25	5	5	3
CHH - 614□DA - Ratio	50	90	14	9	5.5	M10	18	12	25	4	4	2.5
CHH - 614□DB - Ratio	50	90	14	9	5.5	M10	18	15	25	5	5	3
CHH - 614□DC - Ratio	50	90	14	9	5.5	M10	18	15	25	5	5	3
CHH - 616□DA - Ratio	60	90	18	11	7	M10	18	15	25	5	5	3
CHH - 616□DB - Ratio	60	90	18	11	7	M10	18	15	25	5	5	3
CHH - 617□DA - Ratio	70	90	20	12	7.5	M12	24	15	25	5	5	3
CHH - 617□DB - Ratio	70	90	20	12	7.5	M12	24	15	25	5	5	3
CHH - 618□DA - Ratio	80	110	22	14	9	M12	24	15	25	5	5	3

Note: 1. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.
2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."
3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

Dimension Tables Speed Reducer (Horizontal Direction, Foot Mount)

CHH - 616□DC to 6275DA



Frame Size Note 1	L	C	DC	E	F	G	H	M	N	P	Q	R	V	d	W(kg)
616□DC	462	160	300	150	370	139	349	238	410	44	20	25	75	18	94
617□DC	509	200	340	275	380	125	416	335	430	30	25	30	80	22	128
618□DB	577	220	370	320	420	145	451	380	470	30	25	30	85	22	183
619□DA	629	250	430	380	480	170	531	440	530	30	25	35	90	26	241
619□DB	653	250	430	380	480	170	531	440	530	30	25	35	90	26	250
6205DA	670	250	448	360	440	215	530	440	530	40	45	35	100	26	260
6205DB	705	250	448	360	440	215	530	440	530	40	45	35	100	26	273
6215DA	731	265	485	395	480	210	575	475	580	40	50	40	110	26	354
6215DB	780	265	485	395	480	210	575	475	580	40	50	40	110	26	376
6225DA	773	280	526	420	540	230	610	520	620	50	40	40	115	33	429
6225DB	860	280	526	420	540	230	610	520	620	50	40	40	115	33	476
6235DA	883	300	562	460	580	260	667	560	670	50	45	45	120	33	548
6235DB	938	300	562	460	580	260	667	560	670	50	45	45	120	33	582
6245DA	921	335	614	480	630	263	729	580	720	50	45	45	128	39	656
6245DB	975	335	614	480	630	263	729	580	720	50	45	45	128	39	686
6255DA	1081	375	670	520	670	320	815	630	780	55	55	50	140	39	1010
6255DB	1133	375	670	520	670	320	815	630	780	55	55	50	140	39	1085
6265DA	1243	400	736	590	770	390	874	700	880	55	55	55	160	45	1340
6275DA	1504	540	950	420	1050	485	1161	1040	1160	100	55	60	200	45	2480

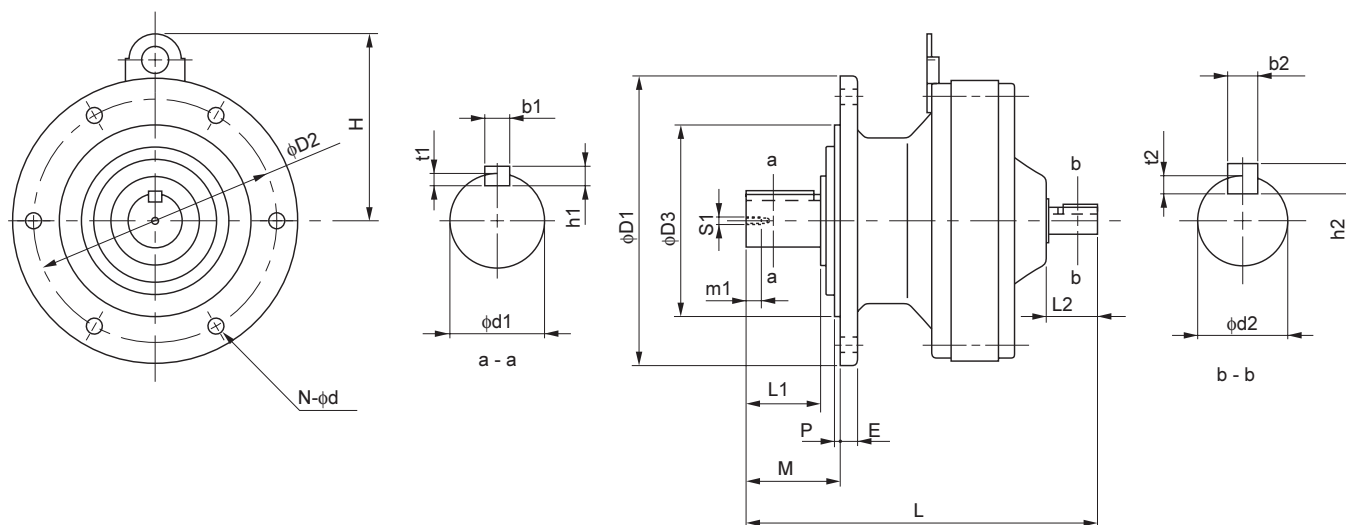
Model Note 1	Output Shaft Note 2, 3, 4								Input Shaft Note 2, 3, 4					
	d1	L1	b1	h1	t1	S1	m1		d2	L2	b2	h2	t2	
CHH - 616□DC - Ratio	60	90	18	11	7	M10	18		18	35	6	6	3.5	
CHH - 617□DC - Ratio	70	90	20	12	7.5	M12	24		18	35	6	6	3.5	
CHH - 618□DB - Ratio	80	110	22	14	9	M12	24		22	40	6	6	3.5	
CHH - 619□DA - Ratio	95	135	25	14	9	M20	34		18	35	6	6	3.5	
CHH - 619□DB - Ratio	95	135	25	14	9	M20	34		22	40	6	6	3.5	
CHH - 6205DA - Ratio	100	165	28	16	10	M20	34		18	35	6	6	3.5	
CHH - 6205DB - Ratio	100	165	28	16	10	M20	34		22	40	6	6	3.5	
CHH - 6215DA - Ratio	110	165	28	16	10	M20	34		22	40	6	6	3.5	
CHH - 6215DB - Ratio	110	165	28	16	10	M20	34		30	45	8	7	4	
CHH - 6225DA - Ratio	120	165	32	18	11	M20	34		22	40	6	6	3.5	
CHH - 6225DB - Ratio	120	165	32	18	11	M20	34		35	55	10	8	5	
CHH - 6235DA - Ratio	130	200	32	18	11	M24	41		30	45	8	7	4	
CHH - 6235DB - Ratio	130	200	32	18	11	M24	41		40	65	12	8	5	
CHH - 6245DA - Ratio	140	200	36	20	12	M24	41		30	45	8	7	4	
CHH - 6245DB - Ratio	140	200	36	20	12	M24	41		40	65	12	8	5	
CHH - 6255DA - Ratio	160	240	40	22	13	M30	49		35	55	10	8	5	
CHH - 6255DB - Ratio	160	240	40	22	13	M30	49		45	70	14	9	5.5	
CHH - 6265DA - Ratio	170	300	40	22	13	M30	49		45	70	14	9	5.5	
CHH - 6275DA - Ratio	180	330	45	25	15	M30	52		45	70	14	9	5.5	

Note: 4. Refer to pages F-28~30 for details on input and output shaft end dimensions.

5. Dimensions in above drawings are subject to change without notice.

Dimension Tables Speed Reducer (Universal Direction, V-Flange Mount)

CNV - 606□ to 612□



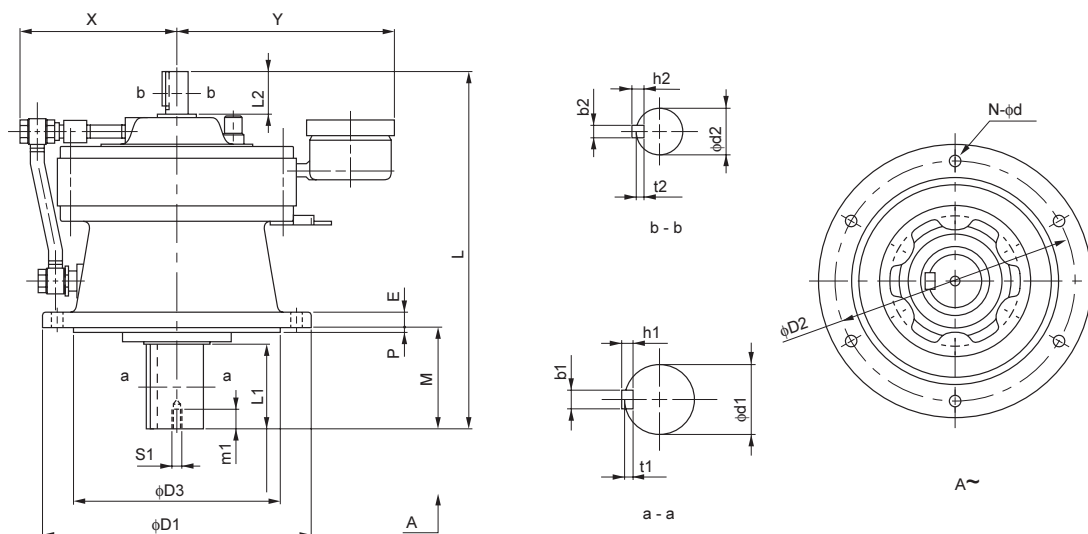
Frame Size Note 1	L	D1	D2	D3 Note 4	H	M	E	P	N	d	W(kg)
606□	145	120	102	80	-	34	8	3	6	9	3.5
607□	151	160	134	110	-	42	9	3	4	11	4.5
608□	179	160	134	110	-	48	9	3	4	11	8
609□	202	160	134	110	107	48	9	3	4	11	9
610□	208	160	134	110	107	48	9	3	4	11	11
611□	218	210	180	140	116	58	11	4	6	11	13
612□	259	210	180	140	137	69	13	4	6	11	23

Model Note 1	Output Shaft Note 2, 3								Input Shaft Note 2, 3				
	d1	L1	b1	h1	t1	S1	m1		d2	L2	b2	h2	t2
CNV - 606□ - Ratio	14	25	5	5	3	M5	16		12	25	4	4	2.5
CNV - 607□ - Ratio	18	30	6	6	3.5	M6	16		12	25	4	4	2.5
CNV - 608□ - Ratio	22	35	6	6	3.5	M6	16		12	25	4	4	2.5
CNV - 609□ - Ratio	28	35	8	7	4	M8	20		15	25	5	5	3
CNV - 610□ - Ratio	28	35	8	7	4	M8	20		15	25	5	5	3
CNV - 611□ - Ratio	32	45	10	8	5	M8	20		15	25	5	5	3
CNV - 612□ - Ratio	38	55	10	8	5	M8	20		18	35	6	6	3.5

Note: 1. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.
 2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."
 3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

Dimension Tables Speed Reducer (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVV - 613□ to 614□



Frame Size Note 1	L	D1	D2	D3	M	E	P	N	d	X	Y	W(kg)
613□	321	260	230	200	76	15	4	6	11	152	233	42
614□	341	260	230	200	96	15	4	6	11	152	233	43

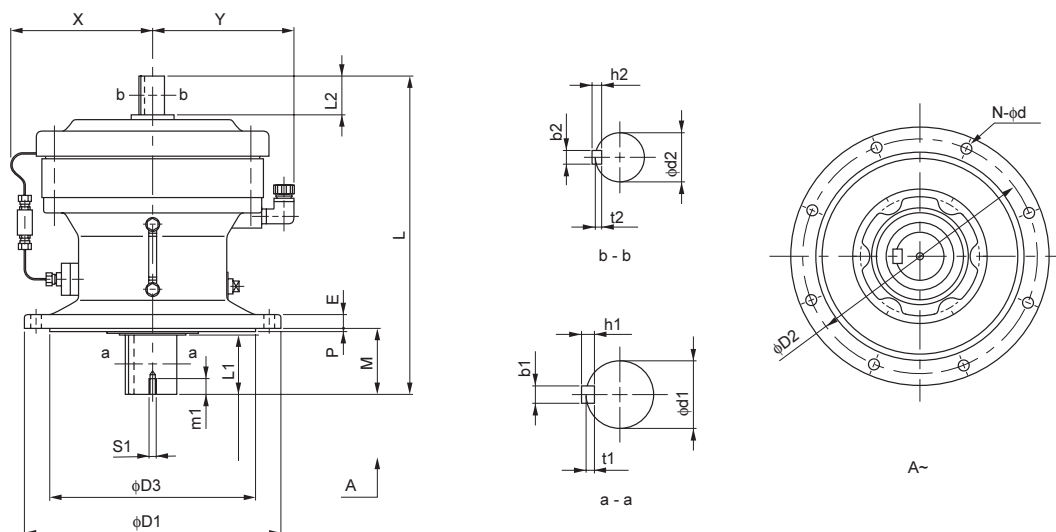
Model Note 1	Output Shaft Note 2, 3							Input Shaft Note 2, 3				
	d1	L1	b1	h1	t1	S1	m1	d2	L2	b2	h2	t2
CVV - 613□ - Ratio	50	61	14	9	5.5	M10	18	22	40	6	6	3.5
CVV - 614□ - Ratio	50	81	14	9	5.5	M10	18	22	40	6	6	3.5

Note: 4. Pilot diameter ($\phi D3$): Dimension tolerance conforms to JIS B 0401-1976 "f8."

5. Dimensions in above drawings are subject to change without notice.

Dimension Tables Speed Reducer (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVV - 616□ to 6275



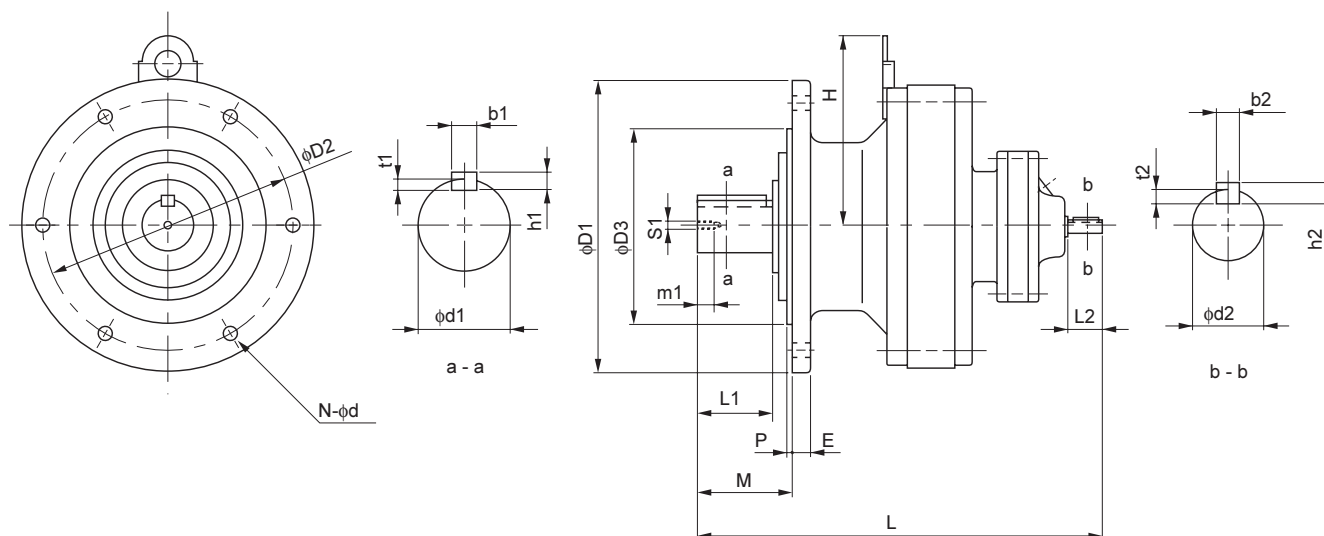
Frame Size Note 1	L	D1	D2	D3 Note 4	M	E	P	N	d	X	Y	W(kg)
616□	413	340	310	270	89	20	4	6	11	217	200	79
617□	477	400	360	316	94	22	5	8	14	222	225	125
618□	527	430	390	345	110	22	5	8	18	237	240	150
619□	620	490	450	400	145	30	6	12	18	265	270	225
6205	678	455	405	355	204	30	5	8	22	341	287	243
6215	708	490	440	390	203	35	7	8	24	348	306	314
6225	752	535	475	415	210	35	10	8	27	352	326	396
6235	839	570	510	450	250	40	10	8	27	359	344	474
6245	877	635	560	485	250	40	10	8	33	370	371	568
6255	1040	685	610	535	295	45	10	8	33	426	399	865
6265	1150	750	660	570	360	50	10	8	39	460	431	1125
6275	1462	1160	1020	900	355	60	10	8	39	610	613	2610

Model	Output Shaft							Input Shaft				
	d1	L1	b1	h1	t1	S1	m1	d2	L2	b2	h2	t2
CVV - 616□ - Ratio	60	80	18	11	7	M10	18	30	45	8	7	4
CVV - 617□ - Ratio	70	84	20	12	7.5	M12	24	35	55	10	8	5
CVV - 618□ - Ratio	80	100	22	14	9	M12	24	40	65	12	8	5
CVV - 619□ - Ratio	95	125	25	14	9	M20	34	45	70	14	9	5.5
CVV - 6205 - Ratio	100	165	28	16	10	M20	34	45	82	14	9	5.5
CVV - 6215 - Ratio	110	165	28	16	10	M20	34	50	82	14	9	5.5
CVV - 6225 - Ratio	120	165	32	18	11	M20	34	55	82	16	10	6
CVV - 6235 - Ratio	130	200	32	18	11	M24	41	60	105	18	11	7
CVV - 6245 - Ratio	140	200	36	20	12	M24	41	65	105	18	11	7
CVV - 6255 - Ratio	160	240	40	22	13	M30	49	80	130	22	14	9
CVV - 6265 - Ratio	170	300	40	22	13	M30	49	80	130	22	14	9
CVV - 6275 - Ratio	180	320	45	25	15	M30	52	90	150	25	14	9

Note: 1. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.
 2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."
 3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

Dimension Tables Speed Reducer (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CNV - 606□DA to 612□DB



REDUCERS

Dimension Tables
CNV

Frame Size Note 1	L	D1	D2	D3 Note 4	H	M	E	P	N	d	W(kg)
606□DA	178	120	102	80	-	34	8	3	6	9	5.0
607□DA	184	160	134	110	-	42	9	3	4	11	6.7
609□DA	243	160	134	110	107	48	9	3	4	11	11
610□DA	257	160	134	110	107	48	9	3	4	11	13
612□DA	293	210	180	140	137	69	13	4	6	11	25
612□DB	312	210	180	140	137	69	13	4	6	11	29

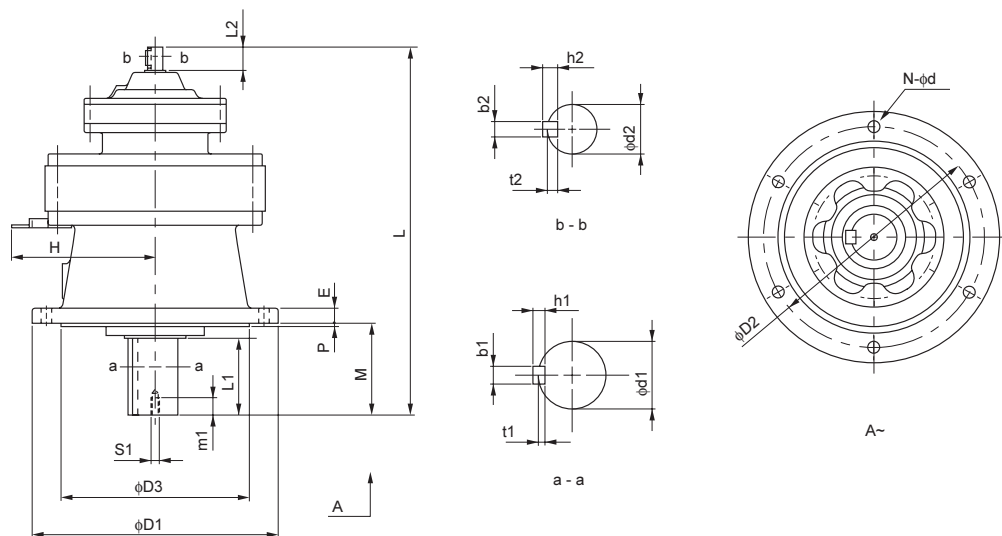
Model Note 1	Output Shaft Note 2, 3								Input Shaft Note 2, 3				
	d1	L1	b1	h1	t1	S1	m1		d2	L2	b2	h2	t2
CNV - 606□DA - Ratio	14	25	5	5	3	M5	16		12	25	4	4	2.5
CNV - 607□DA - Ratio	18	30	6	6	3.5	M6	16		12	25	4	4	2.5
CNV - 609□DA - Ratio	28	35	8	7	4	M8	20		12	25	4	4	2.5
CNV - 610□DA - Ratio	28	35	8	7	4	M8	20		12	25	4	4	2.5
CNV - 612□DA - Ratio	38	55	10	8	5	M8	20		12	25	4	4	2.5
CNV - 612□DB - Ratio	38	55	10	8	5	M8	20		15	25	5	5	3

Note: 4. Pilot diameter ($\phi D3$): Dimension tolerance conforms to JIS B 0401-1976 "f8."

5. Dimensions in above drawings are subject to change without notice.

Dimension Tables Speed Reducer (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVV - 613□DA to 618□DA



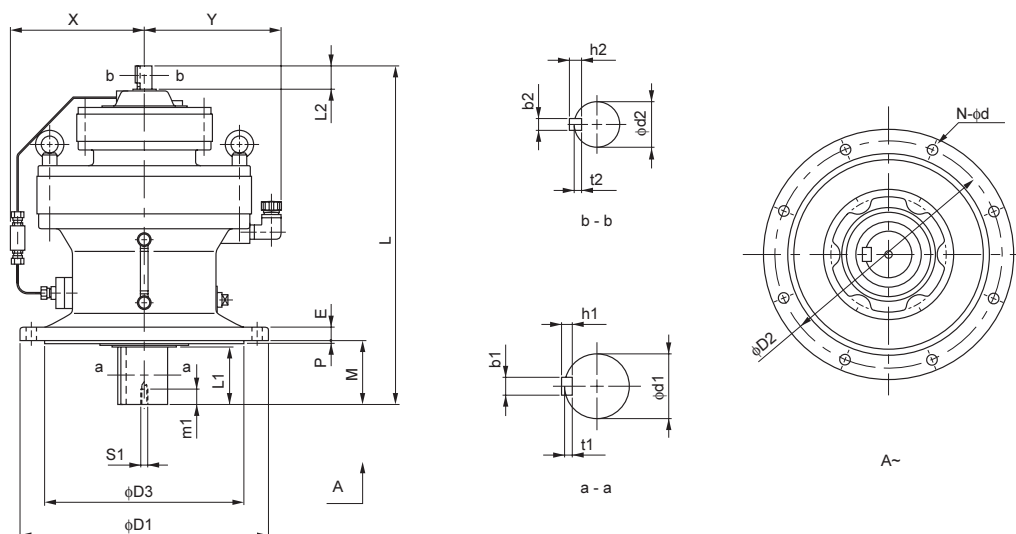
Frame Size	L	D1	D2	D3	M	E	P	N	d	H	W(kg)
Note 1				Note 4							
613□DA	347	260	230	200	76	15	4	6	11	150	40
613□DB	363	260	230	200	76	15	4	6	11	150	43
613□DC	369	260	230	200	76	15	4	6	11	-	44
614□DA	367	260	230	200	96	15	4	6	11	150	40
614□DB	383	260	230	200	96	15	4	6	11	150	43
614□DC	389	260	230	200	96	15	4	6	11	-	44
616□DA	433	340	310	270	89	20	4	6	11	-	80
616□DB	439	340	310	270	89	20	4	6	11	-	82
617□DA	478	400	360	316	94	22	5	8	14	-	115
617□DB	484	400	360	316	94	22	5	8	14	-	117
618□DA	526	430	390	345	110	22	5	8	18	-	149

Model	Note 1	Output Shaft							Input Shaft				
		d1	L1	b1	h1	t1	S1	m1	d2	L2	b2	h2	t2
CVV - 613□DA - Ratio		50	61	14	9	5.5	M10	18	12	25	4	4	2.5
CVV - 613□DB - Ratio		50	61	14	9	5.5	M10	18	15	25	5	5	3
CVV - 613□DC - Ratio		50	61	14	9	5.5	M10	18	15	25	5	5	3
CVV - 614□DA - Ratio		50	81	14	9	5.5	M10	18	12	25	4	4	2.5
CVV - 614□DB - Ratio		50	81	14	9	5.5	M10	18	15	25	5	5	3
CVV - 614□DC - Ratio		50	81	14	9	5.5	M10	18	15	25	5	5	3
CVV - 616□DA - Ratio		60	80	18	11	7	M10	18	15	25	5	5	3
CVV - 616□DB - Ratio		60	80	18	11	7	M10	18	15	25	5	5	3
CVV - 617□DA - Ratio		70	84	20	12	7.5	M12	24	15	25	5	5	3
CVV - 617□DB - Ratio		70	84	20	12	7.5	M12	24	15	25	5	5	3
CVV - 618□DA - Ratio		80	100	22	14	9	M12	24	15	25	5	5	3

Note: 1. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.
 2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."
 3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

Dimension Tables Speed Reducer (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVV - 616□DC to 6275DA



Frame Size Note 1	L	D1	D2	D3 Note 4	M	E	P	N	d	X	Y	W(kg)
616□DC	462	340	310	270	89	20	4	6	11	196	200	90
617□DC	509	400	360	316	94	22	5	8	14	218	225	125
618□DB	577	430	390	345	110	22	5	8	18	233	240	171
619□DA	629	490	450	400	145	30	6	12	18	255	270	229
619□DB	653	490	450	400	145	30	6	12	18	255	270	240
6205DA	670	455	405	355	204	30	5	8	22	341	287	246
6205DB	705	455	405	355	204	30	5	8	22	341	287	258
6215DA	731	490	440	390	203	35	7	8	24	348	306	333
6215DB	780	490	440	390	203	35	7	8	24	348	306	355
6225DA	773	535	475	415	210	35	10	8	27	352	326	408
6225DB	860	535	475	415	210	35	10	8	27	352	326	455
6235DA	883	570	510	450	250	40	10	8	27	359	344	510
6235DB	938	570	510	450	250	40	10	8	27	359	344	544
6245DA	921	635	560	485	250	40	10	8	33	370	371	604
6245DB	975	635	560	485	250	40	10	8	33	370	371	633
6255DA	1081	685	610	535	295	45	10	8	33	395	399	925
6255DB	1133	685	610	535	295	45	10	8	33	395	399	993
6265DA	1243	750	660	570	360	50	10	8	39	427	431	1265
6275DA	1504	1160	1020	900	355	60	10	8	39	610	613	2660

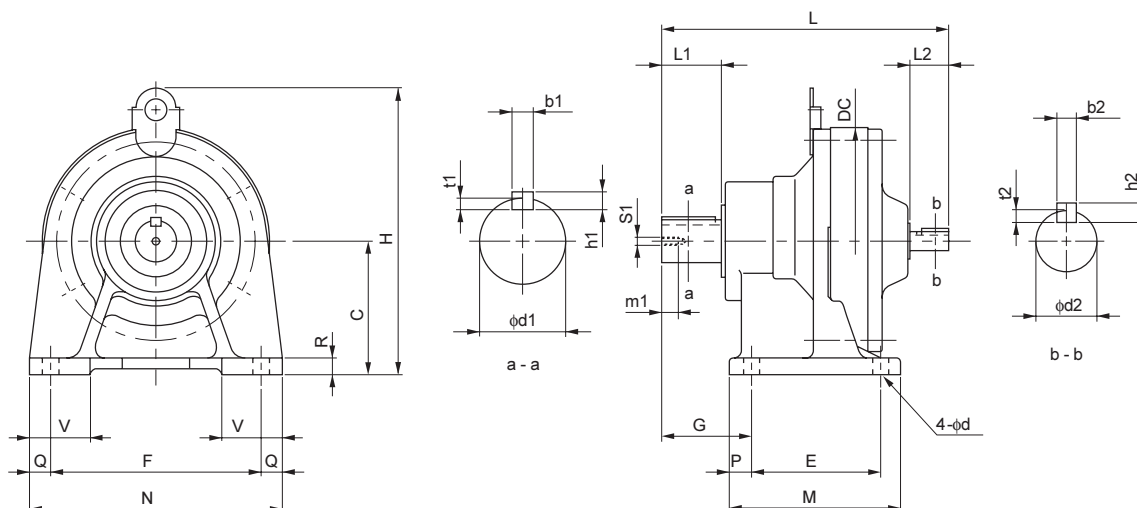
Model Note 1	Output Shaft Note 2, 3								Input Shaft Note 2, 3				
	d1	L1	b1	h1	t1	S1	m1		d2	L2	b2	h2	t2
CVV - 616□DC - Ratio	60	80	18	11	7	M10	18		18	35	6	6	3.5
CVV - 617□DC - Ratio	70	84	20	12	7.5	M12	24		18	35	6	6	3.5
CVV - 618□DB - Ratio	80	100	22	14	9	M12	24		22	40	6	6	3.5
CVV - 619□DA - Ratio	95	125	25	14	9	M20	34		18	35	6	6	3.5
CVV - 619□DB - Ratio	95	125	25	14	9	M20	34		22	40	6	6	3.5
CVV - 6205DA - Ratio	100	165	28	16	10	M20	34		18	35	6	6	3.5
CVV - 6205DB - Ratio	100	165	28	16	10	M20	34		22	40	6	6	3.5
CVV - 6215DA - Ratio	110	165	28	16	10	M20	34		22	40	6	6	3.5
CVV - 6215DB - Ratio	110	165	28	16	10	M20	34		30	45	8	7	4
CVV - 6225DA - Ratio	120	165	32	18	11	M20	34		22	40	6	6	3.5
CVV - 6225DB - Ratio	120	165	32	18	11	M20	34		35	55	10	8	5
CVV - 6235DA - Ratio	130	200	32	18	11	M24	41		30	45	8	7	4
CVV - 6235DB - Ratio	130	200	32	18	11	M24	41		40	65	12	8	5
CVV - 6245DA - Ratio	140	200	36	20	12	M24	41		30	45	8	7	4
CVV - 6245DB - Ratio	140	200	36	20	12	M24	41		40	65	12	8	5
CVV - 6255DA - Ratio	160	240	40	22	13	M30	49		35	55	10	8	5
CVV - 6255DB - Ratio	160	240	40	22	13	M30	49		45	70	14	9	5.5
CVV - 6265DA - Ratio	170	300	40	22	13	M30	49		45	70	14	9	5.5
CVV - 6275DA - Ratio	180	320	45	25	15	M30	52		45	70	14	9	5.5

Note: 4. Pilot diameter (φD3): Dimension tolerance conforms to JIS B 0401-1976 "f8."

5. Dimensions in above drawings are subject to change without notice.

Dimension Tables Speed Reducer (Foot Mount, Center Height Option)

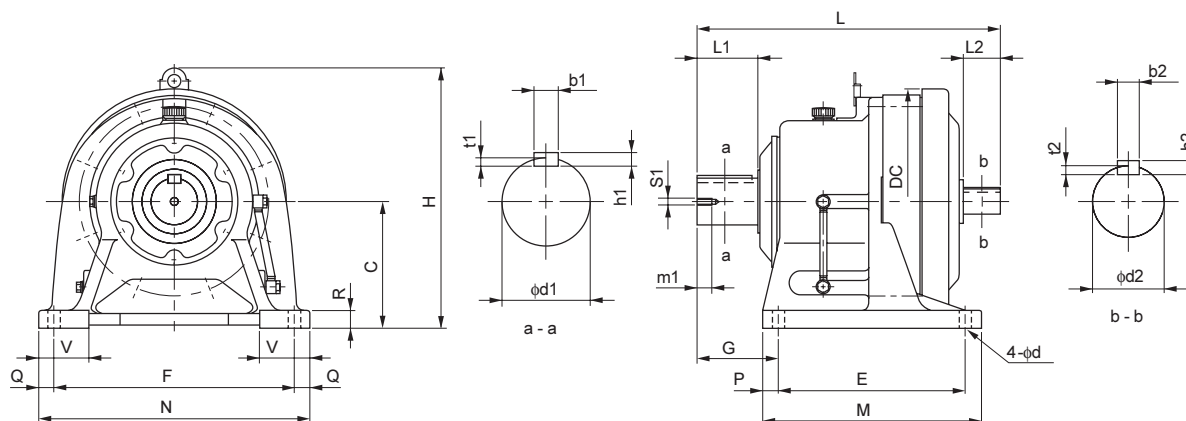
CNH - 610H, 612H



Frame Size	L	C	DC	E	F	G	H	M	N	P	Q	R	V	d	W(kg)
610H	208	120	150	90	150	60	227	135	180	15	15	12	45	11	14
612H	259	140	204	115	190	82	277	155	230	20	20	15	60	14	25

Model	Output Shaft								Input Shaft					
	d1	L1	b1	h1	t1	S1	m1		d2	L2	b2	h2	t2	
CHH - 610H - Ratio	28	35	8	7	4	M8	20		15	25	5	5	3	
CHH - 612H - Ratio	38	55	10	8	5	M8	20		18	35	6	6	3.5	

CNH - 614H, 616H



Frame size	L	C	DC	E	F	G	H	M	N	P	Q	R	V	d	W(kg)
614H	341	160	230	145	290	120	310	195	330	25	20	22	70	18	46
616H	413	200	318	150	370	139	407	238	410	44	20	25	80	18	89

Model	Output Shaft								Input Shaft					
	d1	L1	b1	h1	t1	S1	m1		d2	L2	b2	h2	t2	
CHH - 614H - Ratio	50	90	14	9	5.5	M10	18		22	40	6	6	3.5	
CHH - 616H - Ratio	60	90	18	11	7	M10	18		30	45	8	7	4	

Note: 1. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

2. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

3. Refer to pages F-28~30 for details on input and output shaft end dimensions.

4. Dimensions in above drawings are subject to change without notice.

D

GEARMOTOR
FOR INVERTERS

CYCLO® GEARMOTORS with AF Motor for Inverters

	Page
1. How to Select	
Standard Specifications	D-3
Model Selection	D-4
Reminders for Selection	D-6
Nomenclature	D-7
Precautions for Inverter Driving	D-9
2. Selection Tables	D-11
3. Dimension Tables	D-23

D CYCLO® GEARMOTORS with AF Motor for Inverters

1. How to Select

Standard Specifications of Gearmotor for Inverters

Motor

Items	Standard Specification ^{Note 1}		Standard Specification with Built-in Brake	
Capacity Range	0.1 ~ 55kW × 4P		0.1 ~ 7.5kW × 4P FB Brake (Non-Asbestors) 11kW × 4P CMB Brake 15 ~ 22kW × 4P ESB Brake	
Enclosure	Totally enclosed fan cooled type (30kW and over: Totally enclosed air over)		Totally enclosed fan cooled type	
Power Source	380V 60Hz, 400V 60Hz, 415V 60Hz		380V 60Hz, 400V 60Hz, 415V 60Hz	
Insulation	F		F	
Time Rating	Continuous rating (6 ~ 60Hz Torque constant)		Continuous rating (6 ~ 60Hz Torque constant)	
Terminal Box Position & Lead Wire Direction	On the left side viewed from the load side. Regarding the draw out hole direction, refer to table below.		On the left side viewed from the load side. Regarding the draw out hole direction, refer to table below.	
Lead wiring (Lug type)		4P		6P
	6 Wires	0.1~5.5kW	8 Wires	0.1~5.5kW
	6 Wires	7.5~22kW ^{Note: 2}	8 Wires	7.5~22kW ^{Note: 2}
	6 for motor 2 for thermostat 3 for axial fan	30~55kW ^{Note: 2}	-	-
Standards	According to IEC			

Reducer

Items	Specifications	
Model	CYCLO 6000 Series	CYCLO 6000SK Series
Lubrication Method	Grease lubricated and oil lubricated models available	
Speed Reduction Method	Internal planetary gear mechanism with trochoidal curved tooth profile	
Direction of output shaft rotation	Single reduction	Clockwise rotation
	Double reduction	Counter-clockwise rotation
	*Note that it is different from CYCLO 6000 series single reduction type	
	As observed from the load side when connected to R-U, S-V, T-W motors.	

Common to Motor and Reducer

Items	Specifications
Installation location	Indoor or outdoor (Minimal dust and humidity)
Ambient temperature	-10°C ~ 40°C
Ambient humidity	Under 85%
Elevation	Under 1,000 meters
Atmosphere	Well ventilated location, free of corrosive gases, explosive gases, vapors and dust.
Method of Mounting ^{Note: 3}	CHHM type-with slow speed shaft in horizontal direction and with legs. CVVM type-with slow speed shaft down in vertical direction and with mount. (No restrictions in mounting position of maintenance-free grease lubricated models, and the 2nd digit of type symbol provides "N")
Method of coupling with driven machine	Coupling, gears, chain sprocket or belt.
Painting	Type : Acrylic modified phtalic Colour : Equivalent to Muncell 6.5PB 3.6/8.2.

- Note: 1. Refer to the technical section (Page F-31~57) for motor specification other than standard one.
 2. Δ - Δ start is also available. Please consult us.
 3. Models for universal mounting (types with N for the second digit of nomenclature) can be manufactured for following frame sizes only. Other frame sizes require indication for mounting direction.

[Frame sizes for universal mounting direction] *□ of the frame size indicates 0, 5, or H.
 606□, 607□, 608□, 609□, 610□, 611□, 612□,
 606□DA, 607□DA, 608□DA, 609□DA, 610□DA, 612□DA, 612□DB

Direction of Withdrawing Lead Wire

Main frame mounting direction	Standard
Horizontal Type (Slow speed shaft in horizontal direction)	
Vertical Type (Slow speed shaft in vertical direction)	

Note: Whenever not specified, the above direction shall be used. When the direction of withdrawal from the terminal box is other than specified above, refer to Page F-34.

Model Selection

Description of Our Selection Table

This is a brief description of our tables on page D-11 and after.

Motor capacity (kW)

Input speed (r/min) (Indicated for each number of poles at 60Hz.)

Selection Tables Gearmotors (AF Motor for Inverters)

5.5 kW

AF Motor for Inverter

P	4
Motor Speed n ₁	r/min
	1750(60Hz)

Output Speed n ₂ r/min		Allowable MAX Speed (Horizontal)	Output Torque (60Hz) Tout		Allowable Radial Load (60Hz) Pro		Model			
6Hz	60Hz		N·m	kgf·m	N	kgf	Input Capacity Symbol	Frame Size	Suffix	Reduction Ratio
29.2	292	584 (120Hz)	171	17.4	5710	582	8	-	6130	- AV - 6
21.9	219	438 (120Hz)	228	23.3	6360	648	8	-	6130	- AV - 8
15.9	159	318 (120Hz)	314	32.0	7240	739	8	-	6130	- AV - 11
13.5	135	270 (120Hz)	371	37.8	7530	768	8	-	6130	- AV - 13
11.7	117	234 (120Hz)	428	43.6	7680	783	8	-	6130	- AV - 15
10.3	103	206 (120Hz)	485	49.4	8230	839	8	-	6135	- AV - 17
8.33	83.3	167 (120Hz)	599	61.0	8760	893	8	-	6135	- AV - 21
7.00	70.0	140 (120Hz)	713	72.7	9070	925	8	-	6135	- AV - 25
6.03	60.3	121 (120Hz)	827	84.3	14100	1430	8	-	6140	- AV - 29
5.00	50.0	100 (120Hz)	998	102	15000	1530	8	-	6145	- AV - 35
4.07	40.7	56.3 (83Hz)	1230	125	18900	1930	8	-	6160	- AV - 43
3.43	34.3	47.4 (83Hz)	1450	148	19600	2000	8	-	6165	- AV - 51
2.97	29.7	41.1 (83Hz)	1680	171	21700	2220	8	-	6165	- AV - 59
2.46	24.6	34.0 (83Hz)	2020	206	24700	2520	8	-	6175	- AV - 71
2.01	20.1	27.8 (83Hz)	2480	253	26400	2690	8	-	6175	- AV - 87
1.68	16.8	33.7 (120Hz)	2810	286	37700	3840	8	-	6180DB	- AV - 104
1.45	14.5	28.9 (120Hz)	3270	333	40000	4070	8	-	6185DB	- AV - 121

Output speed (r/min)

Allowable maximum output speed (r/min) and motor frequency (Hz) at that time

[Input capacity symbol] - [Frame size] - [Suffix (AV)] - [Reduction ratio]

GEARMOTOR
FOR INVERTERS

How to
Select

* Note that "reduction ratio = normal ratio" for models with "SK" at the end of frame size (6000 SK Series with "**1" on the side of reduction ratio).
(Indicated reduction ratio is the same as actual reduction ratios for other models.)

Nomenclature

Slow Speed Shaft Direction	
Horizontal, slow speed shaft level	H
Vertical, slow speed shaft down	V
Vertical, slow speed shaft up	W
Universal mounting	N

Mounting style	
Foot	H
Vflange	V
Flange	F

Type of Input	
Gearmotor	M
With adaptor	JM

Special Specifications	
Standard specification	-
Special specification	S

		Motor Capacity Symbol			
4P	Capacity symbol	01	02	05	1
	kW (HP)	0.1 (1/8)	0.2 (1/4)	0.4 (1/2)	0.75 (1)
	Capacity symbol	2	3	5	8
	kW (HP)	1.5 (2)	2.2 (3)	3.7 (5)	5.5 (7.5)
6P	Capacity symbol	10	15	20	25
	kW (HP)	7.5 (10)	11 (15)	15 (20)	18.5 (25)
	Capacity symbol	30	40	50	100
	kW (HP)	22 (30)	30 (40)	37 (50)	75 (100)
6P	Capacity symbol	406	506		
	kW (HP)	30 (40)	37 (50)		

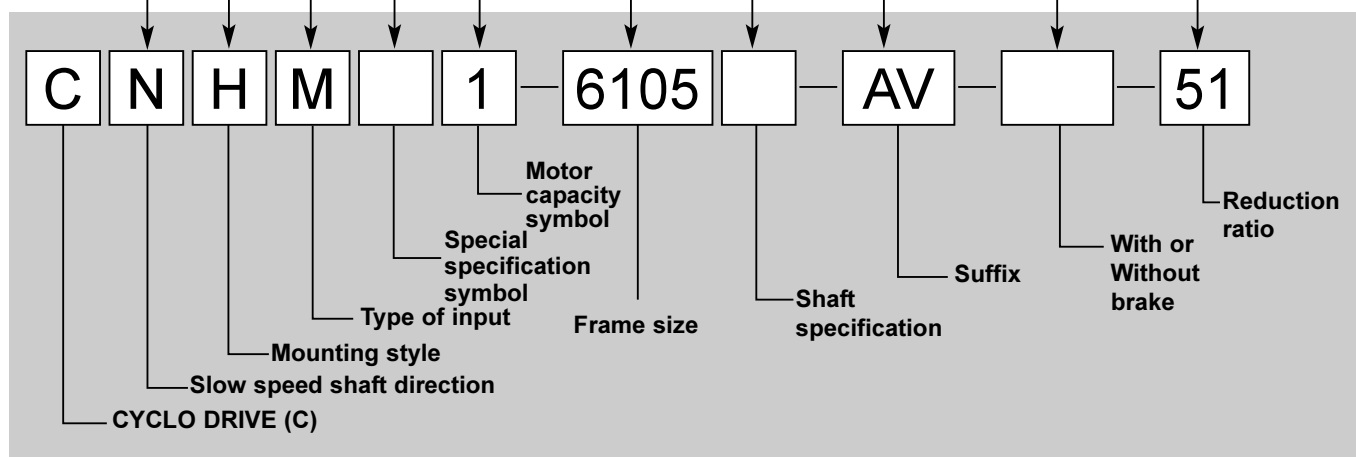
Shaft specification	
Metric JIS (Standard)	-
Inch size	Y
AGMA I	YA
AGMA II	YB
AGMA III	YC
Metric DIN	G

Frame size
(Refer to Selection
Tables starting from
page D-11.)

Suffix	
With AF (inverter) motor	AV

With or Without Brake	
Without brake	-
With brake	B

Nominal ratio



GEARMOTOR
FOR INVERTERS

How to
Select

Nomenclature and Product Examples

Nomenclature Examples (Gearmotor)

Example 1.

CNHM2 - 6105 - AV - 29

C:	Model	- CYCLO® DRIVE
N:	Slow speed shaft direction	- Universal direction
H:	Mounting style	- Foot
M:	Type of input	- Gearmotor type
2:	Motor capacity	- 1.5kW
6115:	Frame size	- 6105
AV:	With motor for inverter	- AV
29:	Reduction ratio	- 29

Example 2.

CHHM5 - 6175DC - AV - B - 143

C:	Model	- CYCLO® DRIVE
H:	Slow speed shaft direction	- Horizontal, level
H:	Mounting style	- Foot mount
M:	Type of input	- Gearmotor type
5:	Motor capacity	- 3.7kW
6175DC:	Frame size	- 6175DC
AV:	With motor for inverter	
B:	Brake	- With brake
143:	Reduction ratio	- 143

GEARMOTOR
FOR INVERTERSHow to
Select

Application Products

Consult us for application products for CYCLO® GEARMOTORS with inverter motors. Application products are available, which are comparable to gearmotors with general motors.

Constant Torque Operation of General-Purpose Motors

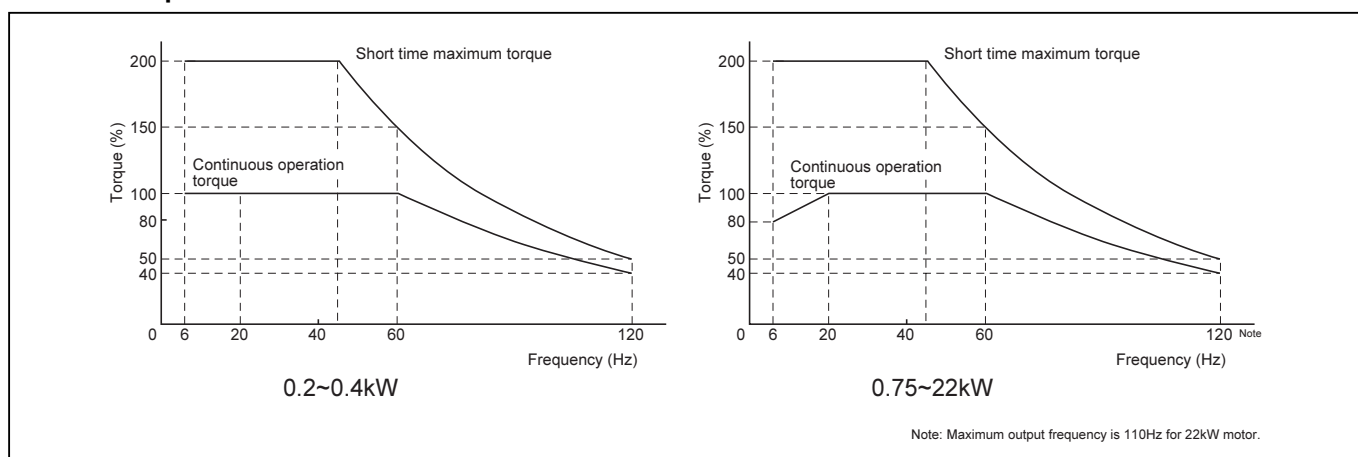
Operation with the following characteristics is possible when our inverters HF-320 α and HF-430 series are used for sensorless control in combination with our general-purpose motors (22 kW or less).

A combination with a motor of standard frame size can be used for constant torque operation where an AF motor with a reducer of a larger frame size has conventionally been used.

- Note:
1. To select the combination with CYCLO, examine the lubrication method and torque during slow speed operation and rated output operation. Specify that inverter operation is desired when placing an order (Refer to page C-6).
 2. Contact us for 400V class model because insulation selection is necessary for inverter operation.
 3. When a motor with brakes is to be operated for a long time at slow speed, the cooling effect of the fan will decrease and the brake temperature will rise substantially. Contact us for details.
 4. Contact us for details when a general-purpose motor is to be operated under V/F control. (Contact us also when SF-320 α series is to be used.)

kW	Motor frame size	Thermal class	Applicable frequency range	Constant torque range	Constant output range	Applicable inverter
0.1	F63S	E	6~120Hz	6~60Hz (1:10)	60~120Hz	HF-320 α Sensorless control
0.2	F63M					
0.4	F71M					
0.75	F80M					
1.5	F90L	B		20~60Hz (1:3)	60~120Hz	HF-430 Sensorless control
2.2	F100L					
3.7	F112M					
5.5	F132S					
7.5	F132M					
11	F160M					
15	G160L					
22	F180MG	6~110Hz	60~110Hz			

HF-320 α and HF-430 Output Torque Characteristics During Sensorless Mode Operation



Output torque 100% is the motor rating at 60Hz.

Continuous operation torque: Allowable torque value enabling continuous operation with motor temperature rise, fulfilling standards.

Short-time operation torque: Maximum torque emitted by motor when driven with inverter.
Motor can be operated for 1 minute at this torque value.

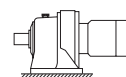
Use AF motor when constant torque is required for capacity 30kW and above.

D CYCLO® GEARMOTORS With AF Motor for Inverters

2. Selection Tables

GEARMOTOR
FOR INVERTERSSelection
Tables

Selection Tables Gearmotors (AF Motor for Inverters)



CNHM

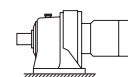
0.1 kW	AF Motor for Inverters	
	P	4
	Motor Speed n ₁ r/min	1750(60Hz)

Output Speed n ₂ r/min			Output Torque (60Hz) Tout		Allowable Radial Load (60Hz) Pro		Model				Dim. Page
6Hz	60Hz	Allowable MAX Speed (Horizontal)	N·m	kgf·m	N	kgf	Input Capacity Symbol	Frame Size	Suffix	Reduction Ratio	CNHM
29.2	292	584 (120Hz)	3.11	0.317	756	77.1	01 -	6060	- AV	- 6	D-29
21.9	219	438 (120Hz)	4.15	0.423	866	88.3	01 -	6060	- AV	- 8	D-29
15.9	159	318 (120Hz)	5.70	0.581	1180	120	01 -	6060	- AV	- 11	D-29
13.5	135	270 (120Hz)	6.74	0.687	1180	120	01 -	6060	- AV	- 13	D-29
11.7	117	234 (120Hz)	7.78	0.793	1180	120	01 -	6060	- AV	- 15	D-29
10.3	103	206 (120Hz)	8.81	0.898	1180	120	01 -	6060	- AV	- 17	D-29
8.33	83.3	167 (120Hz)	10.9	1.11	1180	120	01 -	6060	- AV	- 21	D-29
7.00	70.0	140 (120Hz)	13.0	1.32	1180	120	01 -	6060	- AV	- 25	D-29
6.03	60.3	121 (120Hz)	15.0	1.53	1180	120	01 -	6060	- AV	- 29	D-29
5.00	50.0	100 (120Hz)	18.1	1.85	1180	120	01 -	6060	- AV	- 35	D-29
4.07	40.7	81.4 (120Hz)	22.3	2.27	1180	120	01 -	6065	- AV	- 43	D-29
3.43	34.3	68.6 (120Hz)	26.4	2.70	1770	180	01 -	6070	- AV	- 51	D-29
2.97	29.7	59.4 (120Hz)	30.6	3.12	1770	180	01 -	6070	- AV	- 59	D-29
2.46	24.6	49.2 (120Hz)	36.8	3.75	2560	261	01 -	6080	- AV	- 71	D-29
2.01	20.1	40.2 (120Hz)	45.1	4.60	2560	261	01 -	6085	- AV	- 87	D-29
1.68	16.8	33.7 (120Hz)	51.1	5.21	1770	180	01 -	6075DA	- AV	- 104	D-33
1.45	14.5	28.9 (120Hz)	59.4	6.06	3340	340	01 -	6090DA	- AV	- 121	D-33
1.22	12.2	24.5 (120Hz)	70.2	7.16	3340	340	01 -	6090DA	- AV	- 143	D-33
1.06	10.6	21.2 (120Hz)	81.0	8.26	3340	340	01 -	6090DA	- AV	- 165	D-33
0.897	8.97	17.9 (120Hz)	95.8	9.76	3340	340	01 -	6090DA	- AV	- 195	D-33
0.758	7.58	15.2 (120Hz)	113	11.6	3340	340	01 -	6090DA	- AV	- 231	D-33
0.641	6.41	12.8 (120Hz)	134	13.7	3340	340	01 -	6095DA	- AV	- 273	D-33
0.549	5.49	11.0 (120Hz)	157	16.0	3280	334	01 -	6095DA	- AV	- 319	D-33
0.464	4.64	9.3 (120Hz)	185	18.9	3230	329	01 -	6095DA	- AV	- 377	D-33
0.370	3.70	7.4 (120Hz)	232	23.7	5400	550	01 -	6105DA	- AV	- 473	D-33
0.313	3.13	6.3 (120Hz)	275	28.0	5400	550	01 -	6105DA	- AV	- 559	D-33
0.270	2.70	5.4 (120Hz)	319	32.5	9810	1000	01 -	6120DA	- AV	- 649	D-33
0.239	2.39	4.8 (120Hz)	359	36.6	9810	1000	01 -	6120DA	- AV	- 731	D-33
0.208	2.08	4.2 (120Hz)	413	42.1	9810	1000	01 -	6125DA	- AV	- 841	D-33
0.174	1.74	3.5 (120Hz)	493	50.2	9810	1000	01 -	6125DA	- AV	- 1003	D-33
0.140	1.40	2.8 (120Hz)	612	62.4	9810	1000	01 -	6125DA	- AV	- 1247	D-33

- Note: 1. Allowable radial load Pro is the value at the midpoint of the output shaft.
 2. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
 3. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.
 4. Refer to page D-9 "Precautions for Inverter Driving" when operating beyond 6~60 Hz.

Selection Tables 600SK Series•Reducer

0.2 kW	AF Motor for Inverters	
	P	4
	Motor Speed n ₁ r/min	1750(60Hz)

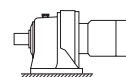


CHHM/CNHM

Output Speed n ₂ r/min			Output Torque (60Hz) Tout		Allowable Radial Load (60Hz) Pro		Model				Dim. Page
6Hz	60Hz	Allowable MAX Speed (Horizontal)	N·m	kgf·m	N	kgf	Input Capacity Symbol	Frame Size	Suffix	Reduction Ratio	CNHM
29.2	292	584 (120Hz)	6.22	0.634	751	76.6	02 -	6060	- AV	- 6	D-29
21.9	219	438 (120Hz)	8.29	0.846	859	87.5	02 -	6060	- AV	- 8	D-29
15.9	159	318 (120Hz)	11.4	1.16	1170	119	02 -	6060	- AV	- 11	D-29
13.5	135	270 (120Hz)	13.5	1.37	1180	120	02 -	6060	- AV	- 13	D-29
11.7	117	234 (120Hz)	15.6	1.59	1180	120	02 -	6060	- AV	- 15	D-29
10.3	103	206 (120Hz)	17.6	1.80	1180	120	02 -	6060	- AV	- 17	D-29
8.33	83.3	167 (120Hz)	21.8	2.22	1180	120	02 -	6065	- AV	- 21	D-29
7.00	70.0	140 (120Hz)	25.9	2.64	1770	180	02 -	6070	- AV	- 25	D-29
6.03	60.3	121 (120Hz)	30.1	3.07	1770	180	02 -	6070	- AV	- 29	D-29
5.00	50.0	100 (120Hz)	36.3	3.70	1770	180	02 -	6070	- AV	- 35	D-29
4.07	40.7	81.4 (120Hz)	44.6	4.54	1770	180	02 -	6075	- AV	- 43	D-29
3.43	34.3	68.6 (120Hz)	52.9	5.39	2560	261	02 -	6085	- AV	- 51	D-29
2.97	29.7	59.4 (120Hz)	61.2	6.24	2560	261	02 -	6085	- AV	- 59	D-29
2.46	24.6	49.2 (120Hz)	73.6	7.50	3290	335	02 -	6090	- AV	- 71	D-29
2.01	20.1	40.2 (120Hz)	90.2	9.20	3340	340	02 -	6090	- AV	- 87	D-29
1.68	16.8	33.7 (120Hz)	102	10.4	3340	340	02 -	6090DA	- AV	- 104	D-33
1.47	14.7	29.4 (120Hz)	123	12.6	5400	550	02 -	6100	- AV	- 119	D-29
1.45	14.5	28.9 (120Hz)	119	12.1	3340	340	02 -	6095DA	- AV	- 121	D-33
1.22	12.2	24.5 (120Hz)	140	14.3	3340	340	02 -	6095DA	- AV	- 143	D-33
1.06	10.6	21.2 (120Hz)	162	16.5	3340	340	02 -	6095DA	- AV	- 165	D-33
0.897	8.97	17.9 (120Hz)	192	19.5	3340	340	02 -	6095DA	- AV	- 195	D-33
0.758	7.58	15.2 (120Hz)	227	23.1	5400	550	02 -	6105DA	- AV	- 231	D-33
0.641	6.41	12.8 (120Hz)	268	27.3	5400	550	02 -	6105DA	- AV	- 273	D-33
0.549	5.49	11.0 (120Hz)	313	31.9	9810	1000	02 -	6120DA	- AV	- 319	D-33
0.464	4.64	9.3 (120Hz)	370	37.7	9810	1000	02 -	6120DA	- AV	- 377	D-33
0.370	3.70	7.4 (120Hz)	465	47.4	9810	1000	02 -	6125DA	- AV	- 473	D-33
0.313	3.13	6.3 (120Hz)	549	56.0	9810	1000	02 -	6125DA	- AV	- 559	D-33
0.270	2.70	5.4 (120Hz)	638	65.0	14700	1500	02 -	6130DA	- AV	- 649	D-34
0.239	2.39	4.8 (120Hz)	718	73.2	14700	1500	02 -	6135DA	- AV	- 731	D-34
0.208	2.08	4.2 (120Hz)	826	84.2	14700	1500	02 -	6135DA	- AV	- 841	D-34
0.174	1.74	3.5 (120Hz)	985	100	14700	1500	02 -	6135DA	- AV	- 1003	D-34
0.140	1.40	2.8 (120Hz)	1220	125	16000	1630	02 -	6145DA	- AV	- 1247	D-34
0.085	0.85	1.7 (120Hz)	2030	207	22100	2250	02 -	6165DA	- AV	- 2065	D-34
0.058	0.58	1.2 (120Hz)	2990	305	29500	3010	02 -	6175DA	- AV	- 3045	D-34

- "*1" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000 SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- "*2" indicate models requiring increased capacity for inverters, for certain operation conditions (ambient temperature, load condition, etc.).
- Consult us for vertical types. Lubrication oil and system requires contemplation.

Selection Tables Gearmotors (AF Motor for Inverters)



CHHM/CNHM

0.4 kW	AF Motor for Inverters	
	P	4
	Motor Speed n ₁ r/min	1750(60Hz)

Output Speed n ₂ r/min			Output Torque (60Hz) Tout		Allowable Radial Load (60Hz) Pro		Model				Dim. Page
6Hz	60Hz	Allowable MAX Speed (Horizontal)	N·m	kgf·m	N	kgf	Input Capacity Symbol	Frame Size	Suffix	Reduction Ratio	CNHM CHHM
70.0	700	1400 (120Hz)	5.18	0.528	1120	114	05 -	6070SK	- AV	2.5 *1	D-28
58.3	583	1167 (120Hz)	6.22	0.634	1180	120	05 -	6070SK	- AV	3 *1	D-28
43.8	438	875 (120Hz)	8.29	0.846	1290	131	05 -	6070SK	- AV	4 *1	D-28
35.0	350	700 (120Hz)	10.4	1.06	1290	132	05 -	6070SK	- AV	5 *1	D-28
29.2	292	584 (120Hz)	12.4	1.27	1290	132	05 -	6070SK	- AV	6 *1	D-28
29.2	292	584 (120Hz)	12.4	1.27	1810	184	05 -	6080	- AV	6	D-29
21.9	219	438 (120Hz)	16.6	1.69	1430	145	05 -	6070SK	- AV	8 *1	D-28
21.9	219	438 (120Hz)	16.6	1.69	1960	200	05 -	6080	- AV	8	D-29
17.5	175	350 (120Hz)	20.7	2.11	1590	162	05 -	6070SK	- AV	10 *1	D-28
15.9	159	318 (120Hz)	22.8	2.33	2160	220	05 -	6080	- AV	11	D-29
13.5	135	270 (120Hz)	27.0	2.75	2320	237	05 -	6080	- AV	13	D-29
11.7	117	234 (120Hz)	31.1	3.17	2400	245	05 -	6080	- AV	15	D-29
10.3	103	206 (120Hz)	35.3	3.59	2510	256	05 -	6080	- AV	17	D-29
8.33	83.3	167 (120Hz)	43.5	4.44	2450	250	05 -	6085	- AV	21	D-29
7.00	70.0	140 (120Hz)	51.8	5.28	2520	256	05 -	6085	- AV	25	D-29
6.03	60.3	121 (120Hz)	60.1	6.13	2560	261	05 -	6085	- AV	29	D-29
5.00	50.0	100 (120Hz)	72.6	7.40	3340	340	05 -	6090	- AV	35	D-29
4.07	40.7	81.4 (120Hz)	89.2	9.09	3340	340	05 -	6090	- AV	43	D-29
3.43	34.3	68.6 (120Hz)	106	10.8	3340	340	05 -	6095	- AV	51	D-29
2.97	29.7	59.4 (120Hz)	122	12.5	5400	550	05 -	6100	- AV	59	D-29
2.46	24.6	49.2 (120Hz)	147	15.0	5400	550	05 -	6105	- AV	71	D-29
2.01	20.1	40.2 (120Hz)	180	18.4	5400	550	05 -	6105	- AV	87	D-29
1.68	16.8	33.7 (120Hz)	204	20.8	9810	1000	05 -	6120DB	- AV	104	D-33
1.45	14.5	28.9 (120Hz)	238	24.2	9810	1000	05 -	6120DB	- AV	121	D-33
1.22	12.2	24.5 (120Hz)	281	28.6	9810	1000	05 -	6120DB	- AV	143	D-33
1.06	10.6	21.2 (120Hz)	324	33.0	9810	1000	05 -	6120DB	- AV	165	D-33
0.897	8.97	17.9 (120Hz)	383	39.1	9810	1000	05 -	6120DB	- AV	195	D-33
0.758	7.58	15.2 (120Hz)	454	46.3	9810	1000	05 -	6125DB	- AV	231	D-33
0.641	6.41	12.8 (120Hz)	536	54.7	9810	1000	05 -	6125DB	- AV	273	D-33
0.549	5.49	11.0 (120Hz)	627	63.9	9810	1000	05 -	6125DB	- AV	319	D-33
0.464	4.64	9.3 (120Hz)	741	75.5	14700	1500	05 -	6135DB	- AV	377	D-34
0.370	3.70	7.4 (120Hz)	929	94.7	14700	1500	05 -	6135DB	- AV	473	D-34
0.313	3.13	6.3 (120Hz)	1100	112	16000	1630	05 -	6145DB	- AV	559	D-34
0.270	2.70	5.4 (120Hz)	1280	130	16000	1630	05 -	6145DB	- AV	649	D-34
0.239	2.39	4.8 (120Hz)	1440	146	22100	2250	05 -	6165DA	- AV	731	D-34
0.208	2.08	4.2 (120Hz)	1650	168	22100	2250	05 -	6165DA	- AV	841	D-34
0.174	1.74	3.5 (120Hz)	1970	201	22100	2250	05 -	6165DA	- AV	1003	D-34
0.140	1.40	2.8 (120Hz)	2450	250	29500	3010	05 -	6175DA	- AV	1247	D-34
0.118	1.18	2.4 (120Hz)	2910	296	29500	3010	05 -	6175DA	- AV	1479	D-34
0.069	0.69	1.4 (120Hz)	4980	508	41600	4240	05 -	6185DA	- AV	2537	D-34

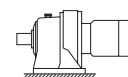
Notes: 1. Allowable radial load Pro is the value at the midpoint of the output shaft.

2. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.

3. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

4. Refer to page D-9 "Precautions for Inverter Driving" when operating beyond 6~60 Hz.

Selection Tables Gearmotors (AF Motor for Inverters)



CHHM/CNHM

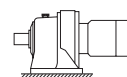
0.75 kW	AF Motor for Inverters	
	P	4
	Motor Speed n ₁ r/min	1750(60Hz)

Output Speed n ₂ r/min			Output Torque (60Hz) Tout		Allowable Radial Load (60Hz) Pro		Model				Dim. Page
6Hz	60Hz	Allowable MAX Speed (Horizontal)	N·m	kgf·m	N	kgf	Input Capacity Symbol	Frame Size	Suffix	Reduction Ratio	CNHM CHHM
70.0	700	1400 (120Hz)	9.72	0.991	1190	121	1 -	6080SK	- AV	- 2.5 *1	D-28
58.3	583	1167 (120Hz)	11.7	1.19	1250	127	1 -	6080SK	- AV	- 3 *1	D-28
43.8	438	875 (120Hz)	15.6	1.59	1350	138	1 -	6080SK	- AV	- 4 *1	D-28
35.0	350	700 (120Hz)	19.4	1.98	1460	149	1 -	6080SK	- AV	- 5 *1	D-28
29.2	292	584 (120Hz)	23.3	2.38	1520	155	1 -	6080SK	- AV	- 6 *1	D-28
29.2	292	584 (120Hz)	23.3	2.38	2670	273	1 -	6090	- AV	- 6	D-29
21.9	219	438 (120Hz)	31.1	3.17	1590	162	1 -	6080SK	- AV	- 8 *1	D-28
21.9	219	438 (120Hz)	31.1	3.17	2980	304	1 -	6090	- AV	- 8	D-29
17.5	175	350 (120Hz)	38.9	3.96	1680	171	1 -	6080SK	- AV	- 10 *1	D-28
15.9	159	318 (120Hz)	42.8	4.36	3340	340	1 -	6090	- AV	- 11	D-29
13.5	135	270 (120Hz)	50.5	5.15	3340	340	1 -	6090	- AV	- 13	D-29
11.7	117	234 (120Hz)	58.3	5.95	3340	340	1 -	6090	- AV	- 15	D-29
10.3	103	206 (120Hz)	66.1	6.74	3340	340	1 -	6090	- AV	- 17	D-29
8.33	83.3	167 (120Hz)	81.7	8.32	3340	340	1 -	6090	- AV	- 21	D-29
7.00	70.0	140 (120Hz)	97.2	9.91	3340	340	1 -	6095	- AV	- 25	D-29
6.03	60.3	121 (120Hz)	113	11.5	3340	340	1 -	6095	- AV	- 29	D-29
5.00	50.0	100 (120Hz)	136	13.9	3330	339	1 -	6095	- AV	- 35	D-29
4.07	40.7	81.4 (120Hz)	167	17.0	5400	550	1 -	6100	- AV	- 43	D-29
3.43	34.3	68.6 (120Hz)	198	20.2	5390	549	1 -	6105	- AV	- 51	D-29
2.97	29.7	59.4 (120Hz)	229	23.4	7610	776	1 -	6110	- AV	- 59	D-29
2.46	24.6	49.2 (120Hz)	276	28.1	7610	776	1 -	6115	- AV	- 71	D-29
2.01	20.1	40.2 (120Hz)	338	34.5	7610	776	1 -	6115	- AV	- 87	D-29
1.68	16.8	33.7 (120Hz)	383	39.1	9810	1000	1 -	6120DB	- AV	- 104	D-33
1.45	14.5	28.9 (120Hz)	446	45.4	9810	1000	1 -	6125DB	- AV	- 121	D-33
1.22	12.2	24.5 (120Hz)	527	53.7	9810	1000	1 -	6125DB	- AV	- 143	D-33
1.06	10.6	21.2 (120Hz)	608	62.0	9810	1000	1 -	6125DB	- AV	- 165	D-33
0.897	8.97	17.9 (120Hz)	718	73.2	14700	1500	1 -	6135DB	- AV	- 195	D-34
0.758	7.58	15.2 (120Hz)	851	86.7	14700	1500	1 -	6135DB	- AV	- 231	D-34
0.641	6.41	12.8 (120Hz)	1010	103	16000	1630	1 -	6145DB	- AV	- 273	D-34
0.549	5.49	11.0 (120Hz)	1180	120	16000	1630	1 -	6145DB	- AV	- 319	D-34
0.464	4.64	9.3 (120Hz)	1390	142	22100	2250	1 -	6165DA	- AV	- 377	D-34
0.370	3.70	7.4 (120Hz)	1740	178	22100	2250	1 -	6165DA	- AV	- 473	D-34
0.313	3.13	6.3 (120Hz)	2060	210	22100	2250	1 -	6165DA	- AV	- 559	D-34
0.270	2.70	5.4 (120Hz)	2390	244	29500	3010	1 -	6175DA	- AV	- 649	D-34
0.239	2.39	4.8 (120Hz)	2690	274	29500	3010	1 -	6175DA	- AV	- 731	D-34
0.208	2.08	4.2 (120Hz)	3100	316	29500	3010	1 -	6175DA	- AV	- 841	D-34
0.174	1.74	3.5 (120Hz)	3690	377	41700	4250	1 -	6185DA	- AV	- 1003	D-34
0.140	1.40	2.8 (120Hz)	4590	468	41700	4250	1 -	6185DA	- AV	- 1247	D-34
0.118	1.18	2.4 (120Hz)	5450	555	59000	6010	1 -	6195DA	- AV	- 1479	D-35
0.095	0.95	1.9 (120Hz)	6810	694	59000	6010	1 -	6195DA	- AV	- 1849	D-35
0.085	0.85	1.7 (120Hz)	7610	775	58200	5940	1 -	6195DA	- AV	- 2065	D-35
0.069	0.69	1.4 (120Hz)	9350	953	84100	8570	1 -	6205DA	- AV	- 2537 *2	D-36

GEARMOTOR
FOR INVERTERSSelection Tables
0.75 kW

- "*1" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000 SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- "*2" indicate models requiring increased capacity for inverters, for certain operation conditions (ambient temperature, load condition, etc.).
- Consult us for vertical types. Lubrication oil and system requires contemplation.

Selection Tables Gearmotors (AF Motor for Inverters)



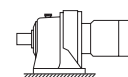
CHHM/CNHM

1.5 kW	AF Motor for Inverters	
	P	4
	Motor Speed n ₁ r/min	1750(60Hz)

Output Speed n ₂ r/min			Output Torque (60Hz) Tout		Allowable Radial Load (60Hz) Pro		Model				Dim. Page
6Hz	60Hz	Allowable MAX Speed (Horizontal)	N·m	kgf·m	N	kgf	Input Capacity Symbol	Frame Size	Suffix	Reduction Ratio	CNHM CHHM
70.0	700	1400 (120Hz)	19.4	1.98	2050	209	2 -	6090SK	- AV	- 2.5 *1	D-28
58.3	583	1167 (120Hz)	23.3	2.38	2120	216	2 -	6090SK	- AV	- 3 *1	D-28
43.8	438	875 (120Hz)	31.1	3.17	2370	242	2 -	6090SK	- AV	- 4 *1	D-28
35.0	350	700 (120Hz)	38.9	3.96	2490	254	2 -	6090SK	- AV	- 5 *1	D-28
29.2	292	584 (120Hz)	46.7	4.76	2530	258	2 -	6090SK	- AV	- 6 *1	D-28
29.2	292	584 (120Hz)	46.7	4.76	3880	396	2 -	6100	- AV	- 6	D-29
21.9	219	438 (120Hz)	62.2	6.34	2780	283	2 -	6090SK	- AV	- 8 *1	D-28
21.9	219	438 (120Hz)	62.2	6.34	4330	441	2 -	6100	- AV	- 8	D-29
17.5	175	350 (120Hz)	77.8	7.93	2900	296	2 -	6095SK	- AV	- 10 *1	D-28
15.9	159	318 (120Hz)	85.5	8.72	4920	501	2 -	6100	- AV	- 11	D-29
13.5	135	270 (120Hz)	101	10.3	5110	521	2 -	6100	- AV	- 13	D-29
11.7	117	234 (120Hz)	117	11.9	5400	550	2 -	6100	- AV	- 15	D-29
10.3	103	206 (120Hz)	132	13.5	5400	550	2 -	6100	- AV	- 17	D-29
8.33	83.3	167 (120Hz)	163	16.6	5400	550	2 -	6105	- AV	- 21	D-29
7.00	70.0	140 (120Hz)	194	19.8	5400	550	2 -	6105	- AV	- 25	D-29
6.03	60.3	121 (120Hz)	226	23.0	5400	550	2 -	6105	- AV	- 29	D-29
5.00	50.0	100 (120Hz)	272	27.7	7360	751	2 -	6115	- AV	- 35	D-29
4.07	40.7	81.4 (120Hz)	334	34.1	7610	776	2 -	6115	- AV	- 43	D-29
3.43	34.3	68.6 (120Hz)	397	40.4	9810	1000	2 -	6120	- AV	- 51	D-29
2.97	29.7	59.4 (120Hz)	459	46.8	9810	1000	2 -	6125	- AV	- 59	D-29
2.46	24.6	49.2 (120Hz)	552	56.3	12900	1320	2 -	6130	- AV	- 71	D-30
2.01	20.1	40.2 (120Hz)	677	69.0	13900	1420	2 -	6135	- AV	- 87	D-30
1.68	16.8	33.7 (120Hz)	766	78.1	14700	1500	2 -	6135DC	- AV	- 104	D-34
1.45	14.5	28.9 (120Hz)	891	90.9	14700	1500	2 -	6135DC	- AV	- 121	D-34
1.22	12.2	24.5 (120Hz)	1050	107	15900	1620	2 -	6145DC	- AV	- 143	D-34
1.06	10.6	21.2 (120Hz)	1220	124	16000	1630	2 -	6145DC	- AV	- 165	D-34
0.897	8.97	17.9 (120Hz)	1440	146	22100	2250	2 -	6165DB	- AV	- 195	D-34
0.758	7.58	15.2 (120Hz)	1700	173	22100	2250	2 -	6165DB	- AV	- 231	D-34
0.641	6.41	12.8 (120Hz)	2010	205	22100	2250	2 -	6165DB	- AV	- 273	D-34
0.549	5.49	11.0 (120Hz)	2350	240	29500	3010	2 -	6175DB	- AV	- 319	D-34
0.464	4.64	9.3 (120Hz)	2780	283	29500	3010	2 -	6175DB	- AV	- 377	D-34
0.370	3.70	7.4 (120Hz)	3480	355	41700	4250	2 -	6185DA	- AV	- 473	D-34
0.313	3.13	6.3 (120Hz)	4120	420	41700	4250	2 -	6185DA	- AV	- 559	D-34
0.270	2.70	5.4 (120Hz)	4780	487	41700	4250	2 -	6185DA	- AV	- 649	D-34
0.239	2.39	4.8 (120Hz)	5390	549	59000	6010	2 -	6195DA	- AV	- 731	D-35
0.208	2.08	4.2 (120Hz)	6200	632	59000	6010	2 -	6195DA	- AV	- 841	D-35
0.174	1.74	3.5 (120Hz)	7390	753	58300	5940	2 -	6195DA	- AV	- 1003	D-35
0.118	1.18	2.4 (120Hz)	10900	1110	104000	10600	2 -	6215DA	- AV	- 1479	D-36
0.095	0.95	1.9 (120Hz)	13600	1390	145000	14800	2 -	6225DA	- AV	- 1849	D-36
0.085	0.85	1.7 (120Hz)	15200	1550	145000	14800	2 -	6225DA	- AV	- 2065	D-36

- Note: 1. Allowable radial load Pro is the value at the midpoint of the output shaft.
 2. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
 3. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.
 4. Refer to page D-9 "Precautions for Inverter Driving" when operating beyond 6~60 Hz.

Selection Tables Gearmotors (AF Motor for Inverters)



CHHM/CNHM

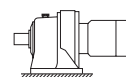
2.2 kW	AF Motor for Inverters	
	P	4
	Motor Speed n ₁ r/min	1750(60Hz)

Output Speed n ₂ r/min			Output Torque (60Hz) Tout		Allowable Radial Load (60Hz) Pro		Model				Dim. Page
6Hz	60Hz	Allowable MAX Speed (Horizontal)	N·m	kgf·m	N	kgf	Input Capacity Symbol	Frame Size	Suffix	Reduction Ratio	CNHM CHHM
70.0	700	1400 (120Hz)	28.5	2.91	1970	201	3 -	6100SK	- AV	- 2.5 *1	D-28
58.3	583	1167 (120Hz)	34.2	3.49	2040	208	3 -	6100SK	- AV	- 3 *1	D-28
43.8	438	875 (120Hz)	45.6	4.65	2240	228	3 -	6100SK	- AV	- 4 *1	D-28
35.0	350	700 (120Hz)	57.0	5.81	2330	238	3 -	6100SK	- AV	- 5 *1	D-28
29.2	292	584 (120Hz)	68.4	6.98	2370	242	3 -	6100SK	- AV	- 6 *1	D-28
29.2	292	584 (120Hz)	68.4	6.98	4370	445	3 -	6110	- AV	- 6	D-29
21.9	219	438 (120Hz)	91.2	9.30	2500	255	3 -	6105SK	- AV	- 8 *1	D-28
21.9	219	438 (120Hz)	91.2	9.30	4870	496	3 -	6110	- AV	- 8	D-29
17.5	175	350 (120Hz)	114	11.6	2500	263	3 -	6105SK	- AV	- 10 *1	D-28
15.9	159	318 (120Hz)	125	12.8	5560	567	3 -	6110	- AV	- 11	D-29
13.5	135	270 (120Hz)	148	15.1	5740	586	3 -	6110	- AV	- 13	D-29
11.7	117	234 (120Hz)	171	17.4	6120	624	3 -	6110	- AV	- 15	D-29
10.3	103	206 (120Hz)	194	19.8	6180	630	3 -	6110	- AV	- 17	D-29
8.33	83.3	167 (120Hz)	240	24.4	6540	667	3 -	6115	- AV	- 21	D-29
7.00	70.0	140 (120Hz)	285	29.1	6620	675	3 -	6115	- AV	- 25	D-29
6.03	60.3	121 (120Hz)	331	33.7	6800	693	3 -	6115	- AV	- 29	D-29
5.00	50.0	100 (120Hz)	399	40.7	8830	900	3 -	6120	- AV	- 35	D-29
4.07	40.7	81.4 (120Hz)	490	50.0	9380	956	3 -	6125	- AV	- 43	D-29
3.43	34.3	68.6 (120Hz)	582	59.3	11500	1180	3 -	6135	- AV	- 51	D-30
2.97	29.7	59.4 (120Hz)	673	68.6	12100	1230	3 -	6135	- AV	- 59	D-30
2.46	24.6	49.2 (120Hz)	810	82.5	16000	1630	3 -	6145	- AV	- 71	D-30
2.01	20.1	40.2 (120Hz)	992	101	22100	2250	3 -	6160	- AV	- 87	D-30
1.68	16.8	33.7 (120Hz)	1120	115	22100	2250	3 -	6160DC	- AV	- 104	D-35
1.45	14.5	28.9 (120Hz)	1310	133	22100	2250	3 -	6160DC	- AV	- 121	D-35
1.22	12.2	24.5 (120Hz)	1550	158	22100	2250	3 -	6165DC	- AV	- 143	D-35
1.06	10.6	21.2 (120Hz)	1780	182	22100	2250	3 -	6165DC	- AV	- 165	D-35
0.897	8.97	17.9 (120Hz)	2100	214	22100	2250	3 -	6165DC	- AV	- 195	D-35
0.758	7.58	15.2 (120Hz)	2500	254	29500	3010	3 -	6175DC	- AV	- 231	D-35
0.641	6.41	12.8 (120Hz)	2950	301	29500	3010	3 -	6175DC	- AV	- 273	D-35
0.549	5.49	11.0 (120Hz)	3450	351	41700	4250	3 -	6185DB	- AV	- 319	D-35
0.464	4.64	9.3 (120Hz)	4070	415	41700	4250	3 -	6185DB	- AV	- 377	D-35
0.370	3.70	7.4 (120Hz)	5110	521	59000	6010	3 -	6195DA	- AV	- 473	D-35
0.313	3.13	6.3 (120Hz)	6040	616	59000	6010	3 -	6195DA	- AV	- 559	D-35
0.270	2.70	5.4 (120Hz)	7010	715	58400	5950	3 -	6195DA	- AV	- 649	D-35
0.239	2.39	4.8 (120Hz)	7900	805	59000	6010	3 -	6195DA	- AV	- 731	D-35
0.208	2.08	4.2 (120Hz)	9090	926	84100	8570	3 -	6205DA	- AV	- 841	D-36
0.174	1.74	3.5 (120Hz)	10800	1100	104000	10600	3 -	6215DA	- AV	- 1003	D-36
0.140	1.40	2.8 (120Hz)	13500	1370	145000	14800	3 -	6225DA	- AV	- 1247	D-36
0.118	1.18	2.4 (120Hz)	16000	1630	179000	18200	3 -	6235DA	- AV	- 1479	D-37
0.095	0.95	1.9 (120Hz)	20000	2040	179000	18200	3 -	6235DA	- AV	- 1849	D-37
0.085	0.85	1.7 (120Hz)	22300	2270	208000	21200	3 -	6245DA	- AV	- 2065	D-37

GEARMOTOR
FOR INVERTERSSelection Tables
2.2 kW

- "*1" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000 SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- "*2" indicate models requiring increased capacity for inverters, for certain operation conditions (ambient temperature, load condition, etc.).
- Consult us for vertical types. Lubrication oil and system requires contemplation.

Selection Tables Gearmotors (AF Motor for Inverters)



CHHM/CNHM

3.7 kW	AF Motor for Inverters	
	P	4
	Motor Speed n ₁ r/min	1750(60Hz)

Output Speed n ₂ r/min			Output Torque (60Hz) Tout		Allowable Radial Load (60Hz) Pro		Model				Dim. Page
6Hz	60Hz	Allowable MAX Speed (Horizontal)	N·m	kgf·m	N	kgf	Input Capacity Symbol	Frame Size	Suffix	Reduction Ratio	CNHM CHHM
70.0	700	1400 (120Hz)	48.0	4.89	2500	255	5 -	6110SK	- AV	2.5 *1	D-28
58.3	583	1167 (120Hz)	57.5	5.87	2650	275	5 -	6110SK	- AV	3 *1	D-28
43.8	438	875 (120Hz)	76.7	7.82	2820	287	5 -	6110SK	- AV	4 *1	D-28
35.0	350	700 (120Hz)	95.9	9.78	2930	299	5 -	6110SK	- AV	5 *1	D-28
29.2	292	584 (120Hz)	115	11.7	3060	312	5 -	6110SK	- AV	6 *1	D-28
29.2	292	389 (80Hz)	115	11.7	4910	500	5 -	6120	- AV	6	D-29
21.9	219	438 (120Hz)	153	15.6	3190	325	5 -	6110SK	- AV	8 *1	D-28
21.9	219	438 (120Hz)	153	15.6	5470	557	5 -	6120	- AV	8	D-29
17.5	175	350 (120Hz)	192	19.6	3330	339	5 -	6115SK	- AV	10 *1	D-28
15.9	159	318 (120Hz)	211	21.5	6200	632	5 -	6120	- AV	11	D-29
13.5	135	270 (120Hz)	249	25.4	6400	652	5 -	6120	- AV	13	D-29
11.7	117	234 (120Hz)	288	29.3	6860	699	5 -	6120	- AV	15	D-29
10.3	103	206 (120Hz)	326	33.2	6920	705	5 -	6125	- AV	17	D-29
8.33	83.3	167 (120Hz)	403	41.1	7570	772	5 -	6125	- AV	21	D-29
7.00	70.0	140 (120Hz)	480	48.9	7900	806	5 -	6125	- AV	25	D-29
6.03	60.3	121 (120Hz)	556	56.7	9700	989	5 -	6130	- AV	29	D-30
5.00	50.0	100 (120Hz)	671	68.4	10200	1040	5 -	6135	- AV	35	D-30
4.07	40.7	81.4 (120Hz)	825	84.1	15800	1610	5 -	6145	- AV	43	D-30
3.43	34.3	68.6 (120Hz)	978	99.7	16000	1630	5 -	6145	- AV	51	D-30
2.97	29.7	59.4 (120Hz)	1130	115	22100	2250	5 -	6160	- AV	59	D-30
2.46	24.6	34.0 (83Hz)	1360	139	21900	2240	5 -	6165	- AV	71	D-30
2.01	20.1	27.8 (83Hz)	1670	170	21800	2220	5 -	6165	- AV	87	D-30
1.68	16.8	33.7 (120Hz)	1890	193	22100	2250	5 -	6165DC	- AV	104	D-35
1.45	14.5	28.9 (120Hz)	2200	224	29500	3010	5 -	6175DC	- AV	121	D-35
1.22	12.2	24.5 (120Hz)	2600	265	29500	3010	5 -	6175DC	- AV	143	D-35
1.06	10.6	21.2 (120Hz)	3000	306	29500	3010	5 -	6175DC	- AV	165	D-35
0.897	8.97	17.9 (120Hz)	3540	361	41700	4250	5 -	6185DB	- AV	195	D-35
0.758	7.58	15.2 (120Hz)	4200	428	41700	4250	5 -	6185DB	- AV	231	D-35
0.641	6.41	12.8 (120Hz)	4960	506	41700	4250	5 -	6185DB	- AV	273	D-35
0.549	5.49	11.0 (120Hz)	5800	591	59000	6010	5 -	6195DA	- AV	319	D-35
0.464	4.64	9.3 (120Hz)	6850	698	59000	6010	5 -	6195DA	- AV	377	D-35
0.370	3.70	7.4 (120Hz)	8600	876	104000	10600	5 -	6215DA	- AV	473	D-36
0.313	3.13	6.3 (120Hz)	10200	1040	104000	10600	5 -	6215DA	- AV	559	D-36
0.270	2.70	5.4 (120Hz)	11800	1200	104000	10600	5 -	6215DA	- AV	649	D-36
0.239	2.39	4.8 (120Hz)	13300	1350	145000	14800	5 -	6225DA	- AV	731	D-36
0.208	2.08	4.2 (120Hz)	15300	1560	179000	18200	5 -	6235DA	- AV	841	D-37
0.174	1.74	3.5 (120Hz)	18200	1860	179000	18200	5 -	6235DA	- AV	1003	D-37
0.140	1.40	2.8 (120Hz)	22700	2310	208000	21200	5 -	6245DA	- AV	1247	D-37
0.118	1.18	1.6 (83Hz)	26900	2740	258000	26300	5 -	6255DA	- AV	1479 *2	D-37
0.095	0.95	1.3 (83Hz)	33600	3430	258000	26300	5 -	6255DA	- AV	1849 *2	D-37

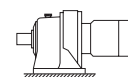
Note: 1. Allowable radial load Pro is the value at the midpoint of the output shaft.

2. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.

3. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

4. Refer to page D-9 "Precautions for Inverter Driving" when operating beyond 6~60 Hz.

Selection Tables Gearmotors (AF Motor for Inverters)



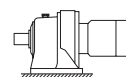
CHHM

5.5 kW	AF Motor for Inverters	
	P	4
	Motor Speed n ₁	r/min 1750(60Hz)

Output Speed n ₂ r/min			Output Torque (60Hz) Tout		Allowable Radial Load (60Hz) Pro		Model				Dim. Page
6Hz	60Hz	Allowable MAX Speed (Horizontal)	N·m	kgf·m	N	kgf	Input Capacity Symbol	Frame Size	Suffix	Reduction Ratio	CHHM
29.2	292	584 (120Hz)	171	17.4	5710	582	8 -	6130	- AV	- 6	D-30
21.9	219	438 (120Hz)	228	23.3	6360	648	8 -	6130	- AV	- 8	D-30
15.9	159	318 (120Hz)	314	32.0	7240	739	8 -	6130	- AV	- 11	D-30
13.5	135	270 (120Hz)	371	37.8	7530	768	8 -	6130	- AV	- 13	D-30
11.7	117	234 (120Hz)	428	43.6	7680	783	8 -	6130	- AV	- 15	D-30
10.3	103	206 (120Hz)	485	49.4	8230	839	8 -	6135	- AV	- 17	D-30
8.33	83.3	167 (120Hz)	599	61.0	8760	893	8 -	6135	- AV	- 21	D-30
7.00	70.0	140 (120Hz)	713	72.7	9070	925	8 -	6135	- AV	- 25	D-30
6.03	60.3	121 (120Hz)	827	84.3	14100	1430	8 -	6140	- AV	- 29	D-30
5.00	50.0	100 (120Hz)	998	102	15000	1530	8 -	6145	- AV	- 35	D-30
4.07	40.7	56.3 (83Hz)	1230	125	18900	1930	8 -	6160	- AV	- 43	D-30
3.43	34.3	47.4 (83Hz)	1450	148	19600	2000	8 -	6165	- AV	- 51	D-30
2.97	29.7	41.1 (83Hz)	1680	171	21700	2220	8 -	6165	- AV	- 59	D-30
2.46	24.6	34.0 (83Hz)	2020	206	24700	2520	8 -	6175	- AV	- 71	D-31
2.01	20.1	27.8 (83Hz)	2480	253	26400	2690	8 -	6175	- AV	- 87	D-31
1.68	16.8	33.7 (120Hz)	2810	286	37700	3840	8 -	6180DB	- AV	- 104	D-35
1.45	14.5	28.9 (120Hz)	3270	333	40000	4070	8 -	6185DB	- AV	- 121	D-35
1.22	12.2	24.5 (120Hz)	3860	394	41700	4250	8 -	6185DB	- AV	- 143	D-35
1.06	10.6	21.2 (120Hz)	4460	454	41700	4250	8 -	6185DB	- AV	- 165	D-35
0.897	8.97	17.9 (120Hz)	5270	537	58300	5940	8 -	6195DB	- AV	- 195	D-35
0.758	7.58	15.2 (120Hz)	6240	636	59000	6010	8 -	6195DB	- AV	- 231	D-35
0.641	6.41	12.8 (120Hz)	7370	752	59000	6010	8 -	6195DB	- AV	- 273	D-35
0.549	5.49	11.0 (120Hz)	8620	878	84100	8570	8 -	6205DB	- AV	- 319	D-36
0.464	4.64	9.3 (120Hz)	10200	1040	104000	10600	8 -	6215DA	- AV	- 377	D-36
0.370	3.70	7.4 (120Hz)	12800	1300	145000	14800	8 -	6225DA	- AV	- 473	D-36
0.313	3.13	6.3 (120Hz)	15100	1540	145000	14800	8 -	6225DA	- AV	- 559	D-36
0.270	2.70	5.4 (120Hz)	17500	1790	179000	18200	8 -	6235DA	- AV	- 649	D-37
0.239	2.39	4.8 (120Hz)	19700	2010	179000	18200	8 -	6235DA	- AV	- 731	D-37
0.208	2.08	4.2 (120Hz)	22700	2320	208000	21200	8 -	6245DA	- AV	- 841	D-37
0.174	1.74	2.4 (83Hz)	27100	2760	258000	26300	8 -	6255DA	- AV	- 1003 *2	D-37
0.140	1.40	1.9 (83Hz)	33700	3430	258000	26300	8 -	6255DA	- AV	- 1247	D-37
0.118	1.18	1.4 (73Hz)	40000	4070	276000	28100	8 -	6265DA	- AV	- 1479 *2	D-37

- "*1" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000 SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- "*2" indicate models requiring increased capacity for inverters, for certain operation conditions (ambient temperature, load condition, etc.).
- Consult us for vertical types. Lubrication oil and system requires contemplation.

Selection Tables Gearmotors (AF Motor for Inverters)



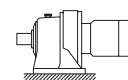
CHHM

7.5 kW	AF Motor for Inverters	
	P	4
	Motor Speed n ₁ r/min	1750(60Hz)

Output Speed n ₂ r/min			Output Torque (60Hz) Tout		Allowable Radial Load (60Hz) Pro		Model				Dim. Page
6Hz	60Hz	Allowable MAX Speed (Horizontal)					Input Capacity Symbol	Frame Size	Suffix	Reduction Ratio	CHHM
29.2	292	584 (120Hz)	233	23.8	5650	576	10 -	6130	- AV	6	D-30
21.9	219	438 (120Hz)	311	31.7	6290	641	10 -	6130	- AV	8	D-30
15.9	159	318 (120Hz)	428	43.6	7150	729	10 -	6130	- AV	11	D-30
13.5	135	270 (120Hz)	505	51.5	7430	758	10 -	6130	- AV	13	D-30
11.7	117	234 (120Hz)	583	59.5	7570	771	10 -	6135	- AV	15	D-30
10.3	103	206 (120Hz)	661	67.4	8100	826	10 -	6135	- AV	17	D-30
8.33	83.3	167 (120Hz)	817	83.2	13100	1330	10 -	6145	- AV	21	D-30
7.00	70.0	140 (120Hz)	972	99.1	13700	1390	10 -	6145	- AV	25	D-30
6.03	60.3	121 (120Hz)	1130	115	14000	1420	10 -	6145	- AV	29	D-30
5.00	50.0	100 (120Hz)	1360	139	17500	1790	10 -	6165	- AV	35	D-30
4.07	40.7	56.3 (83Hz)	1670	170	18600	1900	10 -	6165	- AV	43	D-30
3.43	34.3	47.4 (83Hz)	1980	202	22100	2250	10 -	6170	- AV	51	D-31
2.97	29.7	41.1 (83Hz)	2290	234	23100	2360	10 -	6175	- AV	59	D-31
2.46	24.6	34.0 (83Hz)	2760	281	33100	3380	10 -	6180	- AV	71	D-31
2.01	20.1	27.8 (83Hz)	3380	345	35600	3620	10 -	6185	- AV	87	D-31
1.68	16.8	33.7 (120Hz)	3830	391	37300	3800	10 -	6185DB	- AV	104	D-35
1.45	14.5	28.9 (120Hz)	4460	454	40000	4070	10 -	6185DB	- AV	121	D-35
1.22	12.2	24.5 (120Hz)	5270	537	57900	5900	10 -	6195DB	- AV	143	D-35
1.06	10.6	21.2 (120Hz)	6080	620	58300	5940	10 -	6195DB	- AV	165	D-35
0.897	8.97	17.9 (120Hz)	7180	732	58300	5940	10 -	6195DB	- AV	195	D-35
0.758	7.58	15.2 (120Hz)	8510	867	84100	8570	10 -	6205DB	- AV	231	D-36
0.641	6.41	12.8 (120Hz)	10100	1030	104000	10600	10 -	6215DA	- AV	273	D-36
0.549	5.49	11.0 (120Hz)	11800	1200	104000	10600	10 -	6215DA	- AV	319	D-36
0.464	4.64	9.3 (120Hz)	13900	1420	145000	14800	10 -	6225DA	- AV	377	D-36
0.370	3.70	7.4 (120Hz)	17400	1780	179000	18200	10 -	6235DA	- AV	473	D-37
0.313	3.13	6.3 (120Hz)	20600	2100	179000	18200	10 -	6235DA	- AV	559	D-37
0.270	2.70	5.4 (120Hz)	23900	2440	208000	21200	10 -	6245DA	- AV	649	D-37
0.239	2.39	3.3 (83Hz)	26900	2740	258000	26300	10 -	6255DA	- AV	731 *2	D-37
0.208	2.08	2.9 (83Hz)	31000	3160	258000	26300	10 -	6255DA	- AV	841	D-37
0.174	1.74	2.1 (73Hz)	36900	3770	276000	28100	10 -	6265DA	- AV	1003	D-37
0.140	1.40	1.7 (73Hz)	45900	4680	276000	28100	10 -	6265DA	- AV	1247 *2	D-37
0.118	1.18	1.4 (73Hz)	54500	5550	248000	25300	10 -	6275DA	- AV	1479	D-37
0.095	0.95	1.2 (73Hz)	68100	6940	248000	25300	10 -	6275DA	- AV	1849	D-37

- Note: 1. Allowable radial load Pro is the value at the midpoint of the output shaft.
 2. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
 3. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.
 4. Refer to page D-9 "Precautions for Inverter Driving" when operating beyond 6~60 Hz.

Selection Tables Gearmotors (AF Motor for Inverters)



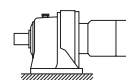
CHHM

11 kW	AF Motor for Inverters	
	P	4
	Motor Speed n ₁ r/min	1750(60Hz)

Output Speed n ₂ r/min			Output Torque (60Hz) Tout		Allowable Radial Load (60Hz) Pro		Model				Dim. Page
6Hz	60Hz	Allowable MAX Speed (Horizontal)	N·m	kgf·m	N	kgf	Input Capacity Symbol	Frame Size	Suffix	Reduction Ratio	CNHM
29.2	292	584 (120Hz)	342	34.9	5540	564	15 -	6135	- AV	- 6	D-30
21.9	219	438 (120Hz)	456	46.5	6150	627	15 -	6135	- AV	- 8	D-30
15.9	159	318 (120Hz)	627	63.9	6980	712	15 -	6135	- AV	- 11	D-30
13.5	135	270 (120Hz)	741	75.6	11100	1140	15 -	6140	- AV	- 13	D-30
11.7	117	234 (120Hz)	855	87.2	11600	1190	15 -	6140	- AV	- 15	D-30
10.3	103	206 (120Hz)	969	98.8	12100	1240	15 -	6145	- AV	- 17	D-30
8.33	83.3	115 (83Hz)	1200	122	15000	1530	15 -	6160	- AV	- 21	D-30
7.00	70.0	96.8 (83Hz)	1430	145	15700	1600	15 -	6165	- AV	- 25	D-30
6.03	60.3	83.4 (83Hz)	1650	169	16300	1660	15 -	6165	- AV	- 29	D-30
5.00	50.0	69.2 (83Hz)	2000	203	19700	2010	15 -	6170	- AV	- 35	D-31
4.07	40.7	56.3 (83Hz)	2450	250	20900	2130	15 -	6175	- AV	- 43	D-31
3.43	34.3	47.4 (83Hz)	2910	296	29600	3010	15 -	6180	- AV	- 51	D-31
2.97	29.7	41.1 (83Hz)	3360	343	30900	3150	15 -	6185	- AV	- 59	D-31
2.46	24.6	29.9 (73Hz)	4050	413	46300	4720	15 -	6190	- AV	- 71	D-31
2.01	20.1	24.5 (73Hz)	4960	506	49700	5070	15 -	6195	- AV	- 87	D-31
1.68	16.8	33.7 (120Hz)	5620	573	51800	5280	15 -	6195DB	- AV	- 104	D-35
1.45	14.5	28.9 (120Hz)	6540	666	55500	5660	15 -	6195DB	- AV	- 121	D-35
1.06	10.6	21.2 (120Hz)	8910	909	84100	8570	15 -	6205DB	- AV	- 165	D-36
0.897	8.97	17.9 (120Hz)	10500	1070	104000	10600	15 -	6215DA	- AV	- 195	D-36
0.758	7.58	15.2 (120Hz)	12500	1270	104000	10600	15 -	6215DA	- AV	- 231	D-36
0.641	6.41	12.8 (120Hz)	14800	1510	137000	13900	15 -	6225DA	- AV	- 273	D-36
0.549	5.49	11.0 (120Hz)	17200	1760	177000	18100	15 -	6235DA	- AV	- 319	D-37
0.464	4.64	9.3 (120Hz)	20400	2080	208000	21200	15 -	6245DA	- AV	- 377 *2	D-37
0.370	3.70	7.4 (120Hz)	25600	2600	208000	21200	15 -	6245DA	- AV	- 473	D-37
0.313	3.13	3.8 (73Hz)	30200	3080	258000	26300	15 -	6255DA	- AV	- 559 *2	D-37
0.270	2.70	3.3 (73Hz)	35100	3570	276000	28100	15 -	6265DA	- AV	- 649 *2	D-37
0.239	2.39	2.9 (73Hz)	39500	4030	276000	28100	15 -	6265DA	- AV	- 731 *2	D-37
0.208	2.08	2.5 (73Hz)	45400	4630	276000	28100	15 -	6265DA	- AV	- 841 *2	D-37
0.174	1.74	2.1 (73Hz)	54200	5520	248000	25300	15 -	6275DA	- AV	- 1003 *2	D-37
0.140	1.40	1.7 (73Hz)	67400	6870	248000	25300	15 -	6275DA	- AV	- 1247 *2	D-37

- "*1" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000 SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- "*2" indicate models requiring increased capacity for inverters, for certain operation conditions (ambient temperature, load condition, etc.).
- Consult us for vertical types. Lubrication oil and system requires contemplation.

Selection Tables Gearmotors (AF Motor for Inverters)



CHHM

15 kW	AF Motor for Inverters	
	P	4
	Motor Speed n ₁ r/min	1750(60Hz)

Output Speed n ₂ /min			Output Torque (60Hz) Tout		Allowable Radial Load (60Hz) Pro		Model				Dim. Page
6Hz	60Hz	Allowable MAX Speed (Horizontal)	N·m	kgf·m	N	kgf	Input Capacity Symbol	Frame Size	Suffix	Reduction Ratio	CNHM
29.2	292	355 (73Hz)	467	47.6	9670	986	20 -	6160	- AV	- 6	D-30
21.9	219	518 (120Hz)	622	63.4	10800	1100	20 -	6160	- AV	- 8	D-30
15.9	159	318 (120Hz)	855	87.2	12200	1240	20 -	6160	- AV	- 11	D-30
13.5	135	270 (120Hz)	1010	103	12700	1300	20 -	6165	- AV	- 13	D-30
11.7	117	142 (73Hz)	1170	119	13500	1370	20 -	6165	- AV	- 15	D-30
10.3	103	142 (83Hz)	1320	135	13900	1410	20 -	6165	- AV	- 17	D-30
8.33	83.3	115 (83Hz)	1630	166	14800	1510	20 -	6165	- AV	- 21	D-30
7.00	70.0	85.2 (73Hz)	1940	198	17500	1780	20 -	6170	- AV	- 25	D-31
6.03	60.3	73.4 (73Hz)	2260	230	18400	1870	20 -	6175	- AV	- 29	D-31
5.00	50.0	69.2 (83Hz)	2720	277	26500	2700	20 -	6180	- AV	- 35	D-31
4.07	40.7	56.3 (83Hz)	3340	341	28300	2880	20 -	6185	- AV	- 43	D-31
3.43	34.3	41.7 (73Hz)	3970	404	29200	2980	20 -	6185	- AV	- 51	D-31
2.97	29.7	36.1 (73Hz)	4590	468	43400	4430	20 -	6195	- AV	- 59	D-31
2.46	24.6	29.9 (73Hz)	5520	563	45900	4680	20 -	6195	- AV	- 71	D-31
2.01	20.1	24.5 (73Hz)	6770	690	84100	8570	20 -	6205	- AV	- 87 *2	D-32
1.45	14.5	28.9 (120Hz)	8910	909	101000	10300	20 -	6215DB	- AV	- 121	D-36
1.06	10.6	21.2 (120Hz)	12200	1240	104000	10600	20 -	6215DB	- AV	- 165	D-36
0.897	8.97	17.9 (120Hz)	14400	1460	122000	12400	20 -	6225DB	- AV	- 195	D-36
0.758	7.58	15.2 (120Hz)	17000	1730	162000	16500	20 -	6235DA	- AV	- 231	D-37
0.641	6.41	12.8 (120Hz)	20100	2050	188000	19200	20 -	6245DA	- AV	- 273	D-37
0.549	5.49	10.1 (110Hz)	23500	2400	197000	20100	20 -	6245DA	- AV	- 319	D-37
0.464	4.64	5.7 (73Hz)	27800	2830	255000	26000	20 -	6255DA	- AV	- 377	D-37
0.370	3.70	4.5 (73Hz)	34800	3550	276000	28100	20 -	6265DA	- AV	- 473 *2	D-37
0.313	3.13	3.8 (73Hz)	41200	4200	276000	28100	20 -	6265DA	- AV	- 559 *2	D-37
0.270	2.70	3.3 (73Hz)	47800	4870	248000	25300	20 -	6275DA	- AV	- 649 *2	D-37
0.239	2.39	2.9 (73Hz)	53900	5490	248000	25300	20 -	6275DA	- AV	- 731 *2	D-37
0.208	2.08	2.5 (73Hz)	62000	6320	248000	25300	20 -	6275DA	- AV	- 841	D-37

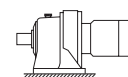
Notes: 1. Allowable radial load Pro is the value at the midpoint of the output shaft.

2. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.

3. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

4. Refer to page D-9 "Precautions for Inverter Driving" when operating beyond 6~60 Hz.

Selection Tables 600SK Series•Reducer



CHHM

18.5 kW	AF Motor for Inverters	
	P	4
	Motor Speed n ₁	r/min 1750(60Hz)

Output Speed n ₂ r/min			Output Torque (60Hz) Tout		Allowable Radial Load (60Hz) Pro		Model				Dim. Page
6Hz	60Hz	Allowable MAX Speed (Horizontal)	N·m	kgf·m	N	kgf	Input Capacity Symbol	Frame Size	Suffix	Reduction Ratio	CNHM
29.2	292	292 (60Hz)	575	58.7	10900	1110	25 -	6175	- AV	- 6	D-31
21.9	219	219 (60Hz)	767	78.2	12000	1220	25 -	6175	- AV	- 8	D-31
15.9	159	193 (73Hz)	1060	108	13800	1410	25 -	6175	- AV	- 11	D-31
13.5	135	164 (73Hz)	1250	127	14300	1460	25 -	6175	- AV	- 13	D-31
11.7	117	142 (73Hz)	1440	147	15000	1530	25 -	6175	- AV	- 15	D-31
10.3	103	125 (73Hz)	1630	166	15600	1590	25 -	6175	- AV	- 17	D-31
8.33	83.3	101 (73Hz)	2010	205	16800	1710	25 -	6175	- AV	- 21	D-31
7.00	70.0	85.1 (73Hz)	2400	244	17300	1760	25 -	6175	- AV	- 25	D-31
6.03	60.3	73.4 (73Hz)	2780	284	24700	2520	25 -	6180	- AV	- 29	D-31
5.00	50.0	60.8 (73Hz)	3360	342	26300	2680	25 -	6185	- AV	- 35	D-31
4.07	40.7	40.7 (60Hz)	4120	420	28000	2850	25 -	6185	- AV	- 43	D-31
3.43	34.3	41.7 (73Hz)	4890	499	41300	4210	25 -	6195	- AV	- 51	D-31
2.97	29.7	36.1 (73Hz)	5660	577	43100	4400	25 -	6195	- AV	- 59	D-31
2.01	20.1	20.1 (60Hz)	8340	851	90600	9240	25 -	6215	- AV	- 87 *2	D-32
1.45	14.5	17.6 (73Hz)	11000	1120	106000	10800	25 -	6225DB	- AV	- 121	D-36
1.06	10.6	12.9 (73Hz)	15000	1530	143000	14500	25 -	6235DB	- AV	- 165 *2	D-37
0.897	8.97	10.9 (73Hz)	17700	1810	150000	15300	25 -	6235DB	- AV	- 195 *2	D-37
0.758	7.58	9.22 (73Hz)	21000	2140	179000	18200	25 -	6245DB	- AV	- 231 *2	D-37
0.641	6.41	7.80 (73Hz)	24800	2530	188000	19200	25 -	6245DB	- AV	- 273	D-37
0.549	5.49	6.7 (73Hz)	29000	2950	242000	24600	25 -	6255DA	- AV	- 319	D-37
0.464	4.64	5.7 (73Hz)	34300	3490	276000	28100	25 -	6265DA	- AV	- 377 *2	D-37
0.370	3.70	4.5 (73Hz)	43000	4380	276000	28100	25 -	6265DA	- AV	- 473 *2	D-37
0.313	3.13	3.8 (73Hz)	50800	5180	248000	25300	25 -	6275DA	- AV	- 559 *2	D-37
0.270	2.70	3.3 (73Hz)	59000	6010	248000	25300	25 -	6275DA	- AV	- 649 *2	D-37
0.239	2.39	2.9 (73Hz)	66400	6770	248000	25300	25 -	6275DA	- AV	- 731 *2	D-37

GEARMOTOR
FOR INVERTERS

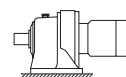
Selection Tables
18.5 kW

5. "*"1" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000 SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.

6. "*"2" indicate models requiring increased capacity for inverters, for certain operation conditions (ambient temperature, load condition, etc.).

7. Consult us for vertical types. Lubrication oil and system requires contemplation.

Selection Tables Gearmotors (AF Motor for Inverters)



CHHM

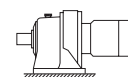
22 kW	AF Motor for Inverters	
	P	4
	Motor Speed n ₁	r/min 1750(60Hz)

Output Speed n ₂ r/min			Output Torque (60Hz) Tout		Allowable Radial Load (60Hz) Pro		Model				Dim. Page
6Hz	60Hz	Allowable MAX Speed (Horizontal)	N·m	kgf·m	N	kgf	Input Capacity Symbol	Frame Size	Suffix	Reduction Ratio	CNHM
29.2	292	292 (60Hz)	684	69.8	10800	1100	30 -	6175	- AV	- 6	D-31
21.9	219	219 (60Hz)	912	93.0	11900	1220	30 -	6175	- AV	- 8	D-31
15.9	159	193 (73Hz)	1250	128	13700	1390	30 -	6175	- AV	- 11	D-31
13.5	135	164 (73Hz)	1480	151	14200	1450	30 -	6175	- AV	- 13	D-31
11.7	117	142 (73Hz)	1710	174	14800	1510	30 -	6175	- AV	- 15	D-31
10.3	103	125 (73Hz)	1940	198	15400	1570	30 -	6175	- AV	- 17	D-31
8.33	83.3	101 (73Hz)	2400	244	16600	1690	30 -	6175	- AV	- 21	D-31
7.00	70.0	85.2 (73Hz)	2850	291	23500	2400	30 -	6180	- AV	- 25	D-31
6.03	60.3	73.4 (73Hz)	3310	337	24500	2500	30 -	6185	- AV	- 29	D-31
5.00	50.0	60.8 (73Hz)	3990	407	26000	2650	30 -	6185	- AV	- 35	D-31
4.07	40.7	40.7 (60Hz)	4900	500	39400	4020	30 -	6195	- AV	- 43	D-31
2.97	29.7	29.7 (60Hz)	6730	686	79200	8070	30 -	6205	- AV	- 59 *2	D-32
2.01	20.1	20.1 (60Hz)	9920	1010	95700	9760	30 -	6225	- AV	- 87 *2	D-32
1.45	14.5	17.6 (73Hz)	13100	1330	106000	10800	30 -	6225DB	- AV	- 121	D-36
1.06	10.6	12.9 (73Hz)	17800	1820	143000	14500	30 -	6235DB	- AV	- 165 *2	D-37
0.897	8.97	10.9 (73Hz)	21100	2150	167000	17000	30 -	6245DB	- AV	- 195 *2	D-37
0.758	7.58	9.22 (73Hz)	25000	2540	179000	18200	30 -	6245DB	- AV	- 231 *2	D-37
0.641	6.41	7.80 (73Hz)	29500	3010	229000	23400	30 -	6255DA	- AV	- 273	D-37
0.549	5.49	6.7 (73Hz)	34500	3510	276000	28100	30 -	6265DA	- AV	- 319 *2	D-37
0.464	4.64	5.7 (73Hz)	40700	4150	276000	28100	30 -	6265DA	- AV	- 377 *2	D-37
0.370	3.70	4.5 (73Hz)	51100	5210	248000	25300	30 -	6275DA	- AV	- 473 *2	D-37
0.313	3.13	3.8 (73Hz)	60400	6160	248000	25300	30 -	6275DA	- AV	- 559 *2	D-37

- Note: 1. Allowable radial load Pro is the value at the midpoint of the output shaft.
 2. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
 3. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.
 4. Refer to page D-9 "Precautions for Inverter Driving" when operating beyond 6~60 Hz.

Selection Tables Gearmotors (AF Motor for Inverters)

30 kW	AF Motor for Inverters		
	P	4	6
	Motor Speed n ₁ r/min	1750(60Hz)	1165(60Hz)

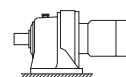


CHHM

Output Speed n ₂ r/min			Output Torque (60Hz) Tout		Allowable Radial Load (60Hz) Pro		Model				Dim. Page
6Hz	60Hz	Allowable MAX Speed (Horizontal)					Input Capacity Symbol	Frame Size	Suffix	Reduction Ratio	CHHM
15.9	159	193 (73Hz)	1710	174	18200	1850	40	-	6185	- AV - 11	D-31
13.5	135	164 (73Hz)	2020	206	18800	1920	40	-	6185	- AV - 13	D-31
11.7	117	142 (73Hz)	2330	238	19800	2020	40	-	6185	- AV - 15	D-31
10.3	103	125 (73Hz)	2640	270	20800	2120	40	-	6185	- AV - 17	D-31
8.33	83.3	83.3 (60Hz)	3270	333	22400	2280	40	-	6185	- AV - 21	D-31
7.00	70.0	70.0 (60Hz)	3890	396	23100	2360	40	-	6185	- AV - 25	D-31
6.03	60.3	60.3 (60Hz)	4510	460	34500	3520	40	-	6195	- AV - 29	D-31
5.55	55.5	55.5 (60Hz)	4910	500	35800	3650	406	-	6190	- AV - 21	D-31
5.00	50.0	50.0 (60Hz)	5440	555	36300	3700	40	-	6195	- AV - 35	D-31
4.07	40.7	40.7 (60Hz)	6690	682	72600	7400	40	-	6205	- AV - 43 *2	D-32
2.97	29.7	29.7 (60Hz)	9180	935	80300	8180	40	-	6215	- AV - 59 *2	D-32
2.71	27.1	27.1 (60Hz)	10000	1020	83100	8480	406	-	6215	- AV - 43 *2	D-32
1.97	19.7	19.7 (60Hz)	13800	1410	119000	12200	406	-	6235	- AV - 59 *2	D-32
1.45	14.5	17.6 (73Hz)	17800	1820	133000	13500	40	-	6235DB	- AV - 121	D-37
1.06	10.6	12.9 (73Hz)	24300	2480	158000	16100	40	-	6245DB	- AV - 165	D-37
0.897	8.97	10.9 (73Hz)	28700	2930	204000	20800	40	-	6255DB	- AV - 195 *2	D-37
0.758	7.58	9.22 (73Hz)	34000	3470	265000	27000	40	-	6265DA	- AV - 231	D-37
0.641	6.41	7.80 (73Hz)	40200	4100	276000	28100	40	-	6265DA	- AV - 273	D-37
0.549	5.49	6.7 (73Hz)	47000	4790	248000	25300	40	-	6275DA	- AV - 319	D-37
0.464	4.64	5.7 (73Hz)	55500	5660	248000	25300	40	-	6275DA	- AV - 377 *2	D-37

- "*1" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000 SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- "*2" indicate models requiring increased capacity for inverters, for certain operation conditions (ambient temperature, load condition, etc.).
- Consult us for vertical types. Lubrication oil and system requires contemplation.

Selection Tables Gearmotors (AF Motor for Inverters)



CHHM

37 kW	AF Motor for Inverters		
	P	4	6
	Motor Speed n ₁ r/min	1750(60Hz)	1165(60Hz)

Output Speed n ₂ r/min			Output Torque (60Hz) Tout		Allowable Radial Load (60Hz) Pro		Model				Dim. Page
6Hz	60Hz	Allowable MAX Speed (Horizontal)					Input Capacity Symbol	Frame Size	Suffix	Reduction Ratio	CHHM
15.9	159	193 (73Hz)	2110	215	25400	2590	50	-	6195	- AV - 11	D-31
13.5	135	164 (73Hz)	2490	254	26400	2690	50	-	6195	- AV - 13	D-31
11.7	117	142 (73Hz)	2880	293	27700	2820	50	-	6195	- AV - 15	D-31
10.3	103	125 (73Hz)	3260	332	29100	2970	50	-	6195	- AV - 17	D-31
8.33	83.3	83.3 (60Hz)	4030	411	31300	3190	50	-	6195	- AV - 21	D-31
7.77	77.7	77.7 (60Hz)	4320	441	31300	3190	506	-	6190	- AV - 15	D-31
7.00	70.0	70.0 (60Hz)	4800	489	32700	3330	50	-	6195	- AV - 25	D-31
6.03	60.3	60.3 (60Hz)	5560	567	34200	3490	50	-	6195	- AV - 29	D-31
5.55	55.5	55.5 (60Hz)	6050	617	35500	3610	506	-	6195	- AV - 21	D-31
4.07	40.7	40.7 (60Hz)	8250	841	73800	7520	50	-	6215	- AV - 43	D-32
2.97	29.7	29.7 (60Hz)	11300	1150	84700	8630	50	-	6225	- AV - 59	D-32
2.71	27.1	27.1 (60Hz)	12400	1260	87700	8940	506	-	6225	- AV - 43 *2	D-32
1.97	19.7	19.7 (60Hz)	17000	1730	133000	13500	506	-	6245	- AV - 59 *2	D-32
1.45	14.5	17.6 (73Hz)	22000	2240	180000	18400	50	-	6255DB	- AV - 121	D-37
1.06	10.6	12.9 (73Hz)	30000	3060	194000	19800	50	-	6255DB	- AV - 165	D-37
0.897	8.97	10.9 (73Hz)	35400	3610	248000	25300	50	-	6265DA	- AV - 195	D-37
0.758	7.58	9.22 (73Hz)	42000	4280	265000	27000	50	-	6265DA	- AV - 231	D-37
0.549	5.49	6.7 (73Hz)	58000	5910	248000	25300	50	-	6275DA	- AV - 319	D-37
0.464	4.64	5.7 (73Hz)	68500	6980	248000	25300	50	-	6275DA	- AV - 377 *2	D-37

Notes: 1. Allowable radial load Pro is the value at the midpoint of the output shaft.

2. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.

3. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

4. Refer to page D-9 "Precautions for Inverter Driving" when operating beyond 6~60 Hz.

5. "**1" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000 SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.

6. "**2" indicate models requiring increased capacity for inverters, for certain operation conditions (ambient temperature, load condition, etc.).

7. Consult us for vertical types. Lubrication oil and system requires contemplation.

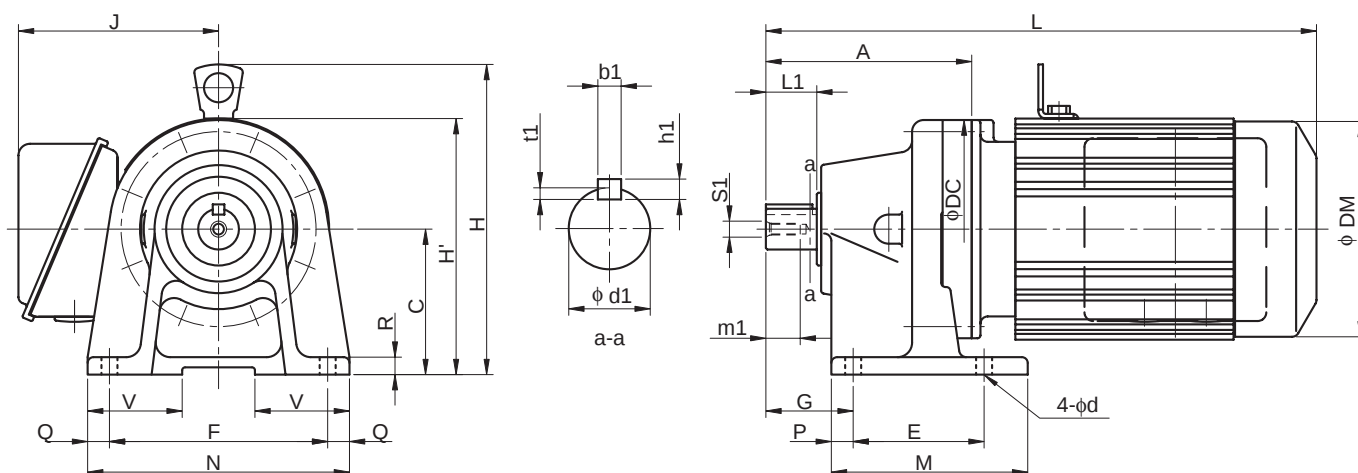
D CYCLO® GEARMOTORS With AF Motor for Inverters

GEARMOTOR
FOR INVERTERS

Dimension
Tables

3. Dimension Tables

Dimension Tables (Universal Direction, Foot Mount)

CNHM^{Note 1} - 606□ to 612□ - AV

Frame size Note 3	A	C	DC	E	F	G	M	N	O	P	R	V	d	Output Shaft Note 2, 3, 6						
														d1	L1	b1	h1	t1	S1	m1
606□	92	80	110	60	120	41	84	144	12	12	10	35	9	14	25	5	5	3	M5	16
607□	98	80	110	60	120	47	84	144	12	12	10	35	9	18	30	6	6	3.5	M6	16
608□	129	90	134	75	120	52	99	144	12	12	13	37	9	22	35	6	6	3.5	M6	16
609□	142	100	150	90	150	60	135	180	15	15	12	40	11	28	35	8	7	4	M8	20
610□	156	100	150	90	150	60	135	180	15	15	12	40	11	28	35	8	7	4	M8	20
611□	170	120	162	90	150	70	135	180	15	15	12	45	11	32	45	10	8	5	M8	20
612□	186	120	204	115	190	82	155	230	20	20	15	55	14	38	55	10	8	5	M8	20

Model Note 4, 5	Motor		Standard							With Brake						
	kW	P	L	H	H'	J	DM	W(kg)		L	H	H'	J	DM	W(kg)	
CNHM01 - 606□ - AV - (B) - Ratio	0.1	4	272	-	138	130	124	8		300	-	138	130	124	9	
CNHM02 - 606□ - AV - (B) - Ratio	0.2	4	288	-	138	130	124	9		320	-	138	130	124	10	
CNHM01 - 607□ - AV - (B) - Ratio	0.1	4	278	-	138	130	124	8		306	-	138	130	124	9	
CNHM02 - 607□ - AV - (B) - Ratio	0.2	4	294	-	138	130	124	9		326	-	138	130	124	10	
CNHM01 - 608□ - AV - (B) - Ratio	0.1	4	304	-	157	130	124	11		332	-	157	130	124	12	
CNHM02 - 608□ - AV - (B) - Ratio	0.2	4	320	-	157	130	124	13		352	-	157	130	124	14	
CNHM05 - 608□ - AV - (B) - Ratio	0.4	4	361	203	-	140	148	17		404	203	-	140	148	18	
CNHM02 - 609□ - AV - (B) - Ratio	0.2	4	338	-	175	130	124	14		370	-	175	130	124	16	
CNHM05 - 609□ - AV - (B) - Ratio	0.4	4	379	213	-	140	148	18		422	213	-	140	148	21	
CNHM1 - 609□ - AV - (B) - Ratio	0.75	4	412	220	-	145	160	21		474	220	-	145	160	26	
CNHM02 - 610□ - AV - (B) - Ratio	0.2	4	352	207	-	130	124	19		384	207	-	130	124	21	
CNHM05 - 610□ - AV - (B) - Ratio	0.4	4	393	213	-	140	148	23		436	213	-	140	148	26	
CNHM1 - 610□ - AV - (B) - Ratio	0.75	4	426	220	-	145	160	27		488	220	-	145	160	32	
CNHM2 - 610□ - AV - (B) - Ratio	1.5	4	446	226	-	152	173	31		509	226	-	152	173	37	
CNHM1 - 611□ - AV - (B) - Ratio	0.75	4	436	240	-	145	160	26		493	240	-	145	160	31	
CNHM2 - 611□ - AV - (B) - Ratio	1.5	4	456	246	-	152	173	30		519	246	-	152	173	36	
CNHM3 - 611□ - AV - (B) - Ratio	2.2	4	491	266	-	168	212	40		563	266	-	168	212	50	
CNHM2 - 612□ - AV - (B) - Ratio	1.5	4	476	246	-	152	173	40		539	246	-	152	173	47	
CNHM3 - 612□ - AV - (B) - Ratio	2.2	4	499	266	-	168	212	50		571	266	-	168	212	60	
CNHM5 - 612□ - AV - (B) - Ratio	3.7	4	543	266	-	168	212	57		615	266	-	168	212	67	

Note: 4. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

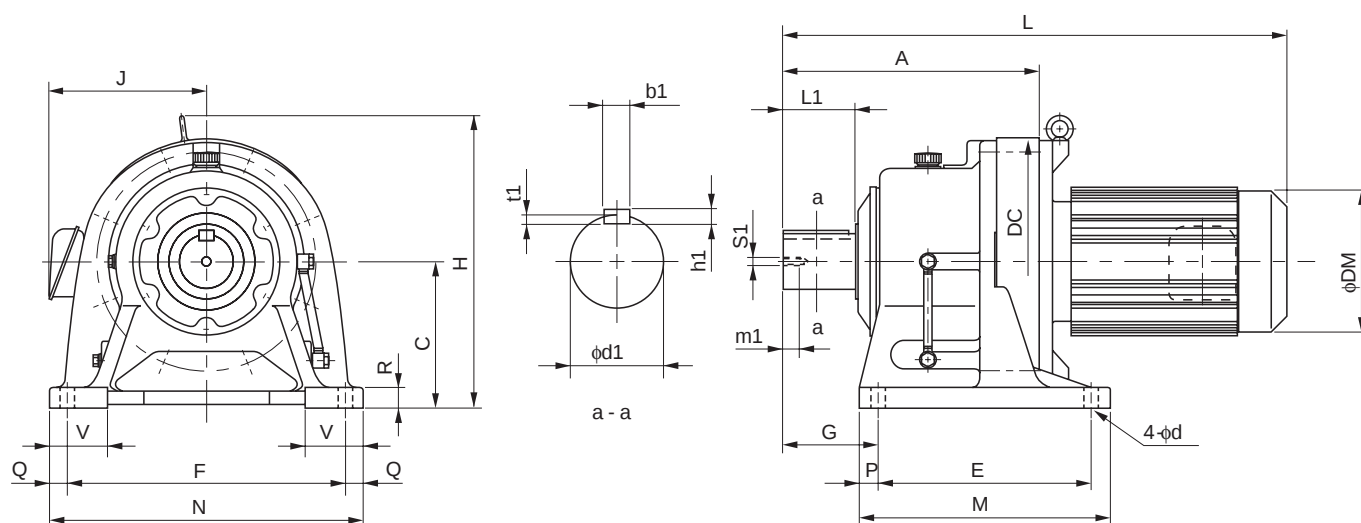
5. "B" after the suffix "AV" indicates models equipped with brake.

6. Dimensions of shaft end: Refer to pages F-28 to F-29 for details.

7. 30kW or over motors are air over type.

8. Dimensions in above drawings are subject to change without notice.

Dimension Tables (Horizontal Direction, Foot Mount)

CHHM^{Note 1} - 613□ to 616□ - AV

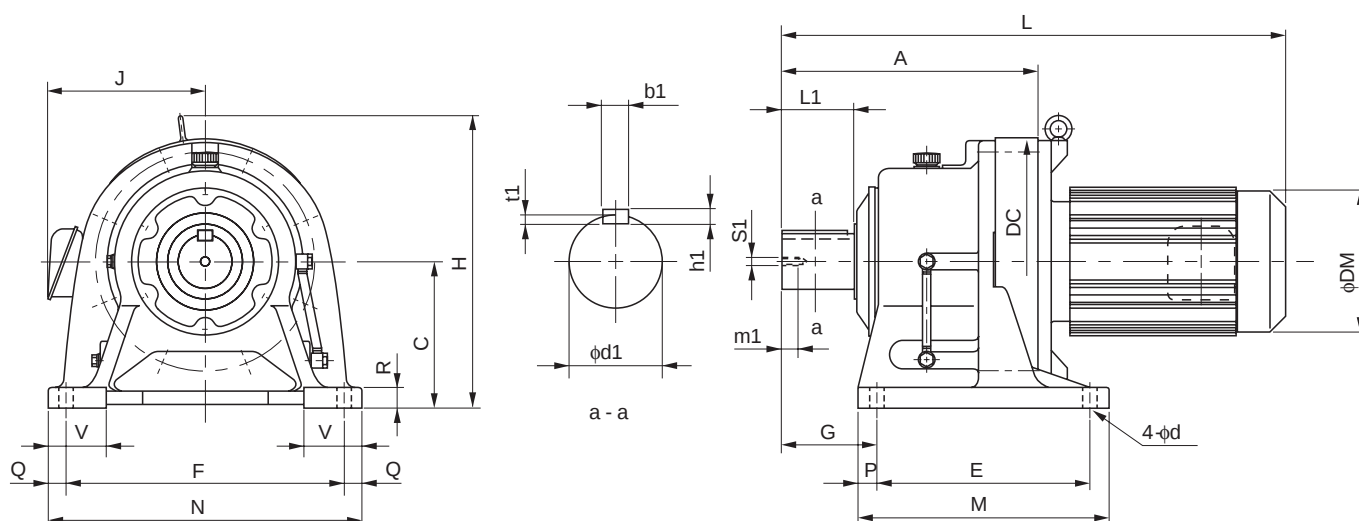
Frame size Note 4	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 6						
														d1	L1	b1	h1	t1	S1	m1
613□	240	150	230	145	290	100	195	330	25	20	22	65	18	50	70	14	9	5.5	M10	18
Note 8 614□	260	150	230	145	290	120	195	330	25	20	22	65	18	50	90	14	9	5.5	M10	18
Note 8 616□	308	160	300	150	370	139	238	410	44	20	25	75	18	60	90	18	11	7	M10	18

Model Note 4, 5	Motor		Standard					With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)
CHHM2 - 613□ - AV - (B) - Ratio	1.5	4	530	274	152	173	58	593	274	152	173	65
CHHM3 - 613□ - AV - (B) - Ratio	2.2	4	553	296	168	212	68	625	296	168	212	78
CHHM5 - 613□ - AV - (B) - Ratio	3.7	4	597	296	168	212	75	669	296	168	212	85
CHHM8 - 613□ - AV - (B) - Ratio	5.5	4	620	323	213	251	90	715	323	213	251	108
CHHM10 - 613□ - AV - (B) - Ratio	7.5	4	680	323	213	251	103	775	323	213	251	121
*CHHM15 - 613□ - AV - (B) - Ratio	11	4	770	358	261	324	155	875	321	261	324	189
CHHM3 - 614□ - AV - (B) - Ratio	2.2	4	573	296	168	212	69	645	296	168	212	79
CHHM5 - 614□ - AV - (B) - Ratio	3.7	4	617	296	168	212	76	689	296	168	212	86
CHHM8 - 614□ - AV - (B) - Ratio	5.5	4	640	323	213	251	91	735	323	213	251	109
CHHM10 - 614□ - AV - (B) - Ratio	7.5	4	700	323	213	251	104	795	323	213	251	122
*CHHM15 - 614□ - AV - (B) - Ratio	11	4	790	358	261	324	156	895	321	261	324	190
CHHM3 - 616□ - AV - (B) - Ratio	2.2	4	621	310	168	212	106	693	310	168	212	116
CHHM5 - 616□ - AV - (B) - Ratio	3.7	4	665	310	168	212	113	737	310	168	212	123
CHHM8 - 616□ - AV - (B) - Ratio	5.5	4	693	333	213	251	129	788	333	213	251	146
CHHM10 - 616□ - AV - (B) - Ratio	7.5	4	753	333	213	251	143	848	333	213	251	160
*CHHM15 - 616□ - AV - (B) - Ratio	11	4	838	368	261	324	196	943	368	261	324	230
*CHHM20 - 616□ - AV - (B) - Ratio	15	4	933	368	328	394	272	1098	368	328	394	323

"*" indicates models with bottom level of the motor lower than the reducer base.
Refer to pages D-33 and D-34 for center height options.

Note: 1. □ indicates motor capacity.
2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."
3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

Dimension Tables (Horizontal Direction, Foot-Mount)

CHHM^{Note 1} - 617□ to 619□ - AV

Frame size Note 4	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 6						
														d1	L1	b1	h1	t1	S1	m1
617□	352	200	340	275	380	125	335	430	30	25	30	80	22	70	90	20	12	7.5	M12	24
618□	389	220	370	320	420	145	380	470	30	25	30	85	22	80	110	22	14	9	M12	24
619□	465	250	430	380	480	170	440	530	30	25	35	90	26	95	135	25	14	9	M20	34

Model Note 4, 5	Motor		Standard					With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)
CHHM8 - 617□ - AV - (B) - Ratio	5.5	4	742	403	213	251	169	837	403	213	251	187
CHHM10 - 617□ - AV - (B) - Ratio	7.5	4	802	403	213	251	183	897	403	213	251	201
CHHM15 - 617□ - AV - (B) - Ratio	11	4	882	413	261	324	237	987	413	261	324	271
CHHM20 - 617□ - AV - (B) - Ratio	15	4	977	428	328	394	309	1142	428	328	394	360
CHHM25 - 617□ - AV - (B) - Ratio	18.5	4	977	428	328	394	309	1142	428	328	394	360
CHHM30 - 617□ - AV - (B) - Ratio	22	4	977	428	328	394	326	1142	428	328	394	369
CHHM10 - 618□ - AV - (B) - Ratio	7.5	4	839	438	213	251	221	934	438	213	251	239
CHHM15 - 618□ - AV - (B) - Ratio	11	4	919	438	261	324	281	1024	438	261	324	310
CHHM20 - 618□ - AV - (B) - Ratio	15	4	1014	448	328	394	347	1179	448	328	394	398
CHHM25 - 618□ - AV - (B) - Ratio	18.5	4	1014	448	328	394	347	1179	448	328	394	398
CHHM30 - 618□ - AV - (B) - Ratio	22	4	1014	448	328	394	364	1179	448	328	394	407
CHHM40 - 618□ - AV - (B) - Ratio	30 Note 7	4	1159	481	328	394	314	1411	481	328	394	510
CHHM15 - 619□ - AV - (B) - Ratio	11	4	995	467	261	324	346	1100	467	261	324	381
CHHM20 - 619□ - AV - (B) - Ratio	15	4	1090	511	328	394	422	1255	511	328	394	467
CHHM25 - 619□ - AV - (B) - Ratio	18.5	4	1090	511	328	394	422	1255	511	328	394	467
CHHM30 - 619□ - AV - (B) - Ratio	22	4	1090	511	328	394	437	1255	511	328	394	480
CHHM40 - 619□ - AV - (B) - Ratio	30 Note 7	4	1235	511	328	394	477	1487	511	328	394	573
CHHM406 - 619□ - AV - (B) - Ratio	30 Note 7	6	1235	511	328	394	477	1487	511	328	394	573
CHHM50 - 619□ - AV - (B) - Ratio	37 Note 7	4	1235	511	328	394	478	1487	511	328	394	573
CHHM506 - 619□ - AV - (B) - Ratio	37 Note 7	6	1290	511	378	484	569	-	-	-	-	-

Note: 4. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

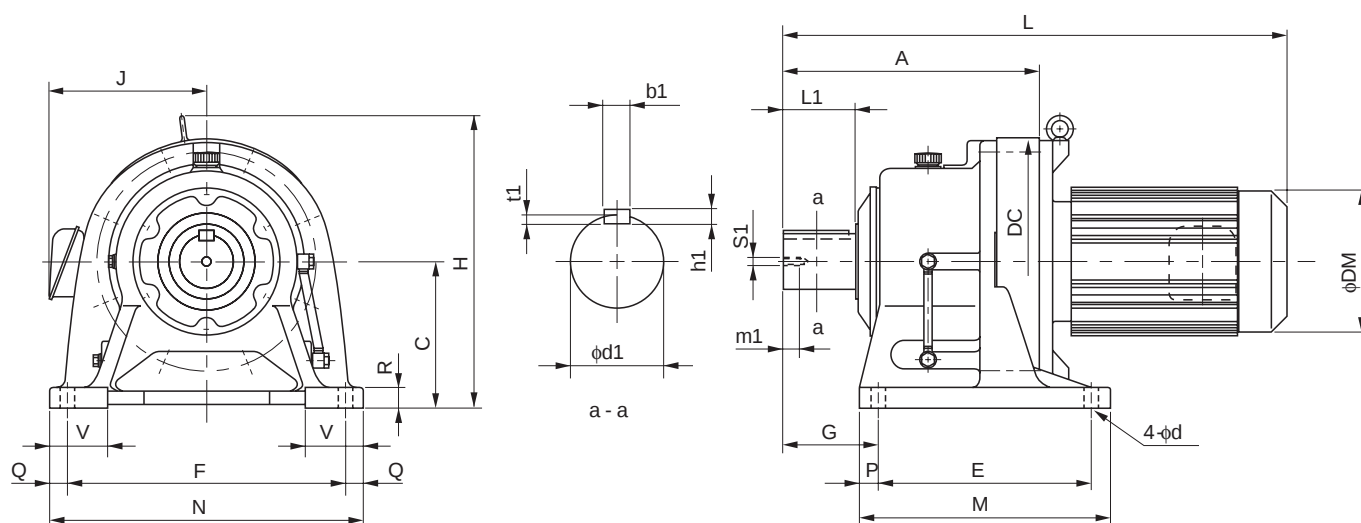
5. "B" after the suffix "AV" indicates models equipped with brake.

6. Dimensions of shaft end: Refer to pages F-28 to F-29 for details.

7. 30kW or over motors are air over type.

8. Dimensions in above drawings are subject to change without notice.

Dimension Tables (Horizontal Direction, Foot Mount)

CHHM^{Note 1} - 6205 to 6255 - AV

Frame size	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 6						
														d1	L1	b1	h1	t1	S1	m1
6205	502	250	448	360	440	215	440	530	40	45	35	100	26	100	165	28	16	10	M20	34
6215	526	265	485	395	480	210	475	580	40	50	40	110	26	110	165	28	16	10	M20	34
6225	566	280	526	420	540	230	520	620	50	40	40	115	33	120	165	32	18	11	M20	34
6235	628	300	562	460	580	260	560	670	50	45	45	120	33	130	200	32	18	11	M24	41
6245	657	335	614	480	630	263	580	720	50	45	45	128	39	140	200	36	20	12	M24	41
6255	775	375	670	520	670	320	630	780	55	55	50	140	39	160	240	40	22	13	M30	49

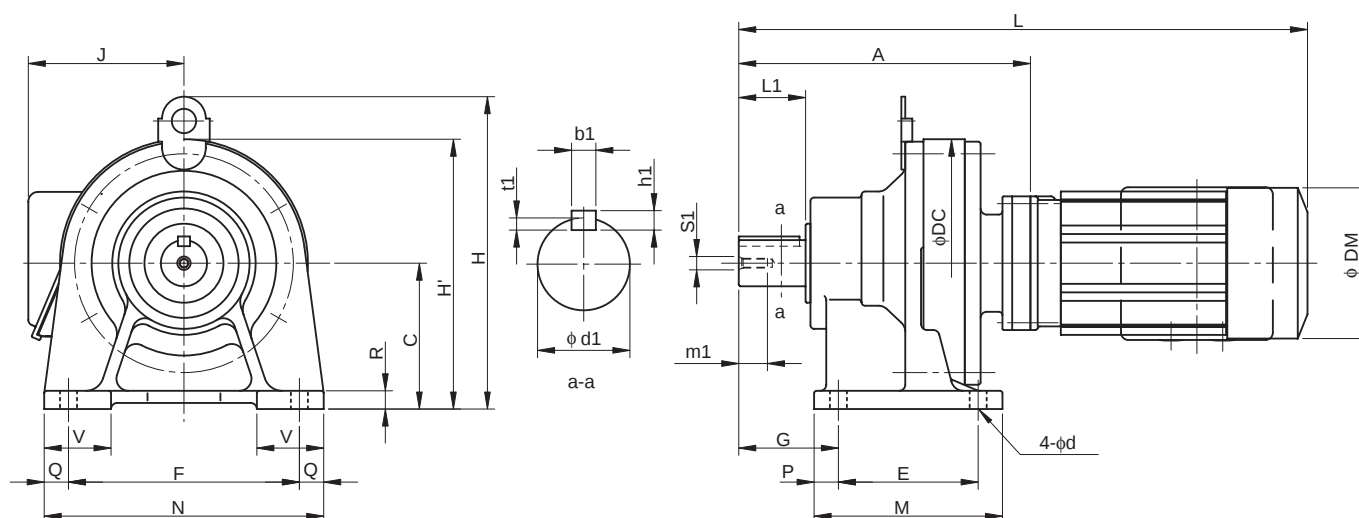
Model	Motor		Standard					With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)
CHHM20 - 6205 - AV - (B) - Ratio	15	4	1127	530	328	394	443	1292	530	328	394	488
CHHM30 - 6205 - AV - (B) - Ratio	22	4	1127	530	328	394	456	1292	530	328	394	501
CHHM40 - 6205 - AV - (B) - Ratio	30 Note 7	4	1272	530	328	394	496	1524	530	328	394	589
CHHM25 - 6215 - AV - (B) - Ratio	18.5	4	1151	575	328	394	520	1316	575	328	394	565
CHHM40 - 6215 - AV - (B) - Ratio	30 Note 7	4	1296	575	328	394	573	1548	575	328	394	667
CHHM406 - 6215 - AV - (B) - Ratio	30 Note 7	6	1296	575	328	394	573	1548	575	328	394	667
CHHM50 - 6215 - AV - (B) - Ratio	37 Note 7	4	1296	575	328	394	573	1548	575	328	394	667
CHHM30 - 6225 - AV - (B) - Ratio	22	4	1191	610	328	394	618	1401	610	328	394	663
CHHM50 - 6225 - AV - (B) - Ratio	37 Note 7	4	1336	610	328	394	658	1588	610	328	394	752
CHHM406 - 6235 - AV - (B) - Ratio	30 Note 7	6	1398	667	328	394	751	1650	667	297	394	838
CHHM506 - 6245 - AV - (B) - Ratio	37 Note 7	6	1482	729	378	484	967	-	-	-	-	-
CHHM506 - 6255 - AV - (B) - Ratio	37 Note 7	6	1600	815	378	484	1286	-	-	-	-	-

Note: 1. □ indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

Dimension Tables (Universal Direction, Foot Mount)

CNHM^{Note 1} - 607□DA to 612□DB - AV

Frame size Note 4	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 6						
														d1	L1	b1	h1	t1	S1	m1
607□DA	131	80	110	60	120	47	84	144	12	12	10	35	9	18	30	6	6	3.5	M6	16
609□DA	190	100	150	90	150	60	135	180	15	15	12	40	11	28	35	8	7	4	M8	20
610□DA	204	100	150	90	150	60	135	180	15	15	12	40	11	28	35	8	7	4	M8	20
612□DA	240	120	204	115	190	82	155	230	20	20	15	55	14	38	55	10	8	5	M8	20
612□DB	252	120	204	115	190	82	155	230	20	20	15	55	14	38	55	10	8	5	M8	20

Model Note 4, 5	Motor		Standard							With Brake					
	kW	P	L	H	H'	J	DM	W(kg)		L	H	H'	J	DM	W(kg)
CNHM01 - 607□DA - AV - (B) - Ratio	0.1	4	311	-	140	130	124	10		339	-	138	130	124	11
CNHM01 - 609□DA - AV - (B) - Ratio	0.1	4	370	207	-	130	124	18		398	207	-	130	124	19
CNHM02 - 609□DA - AV - (B) - Ratio	0.2	4	386	207	-	130	124	19		418	207	-	130	124	20
CNHM01 - 610□DA - AV - (B) - Ratio	0.1	4	384	207	-	130	124	20		412	207	-	130	124	21
CNHM02 - 610□DA - AV - (B) - Ratio	0.2	4	400	207	-	130	124	21		432	207	-	130	124	22
CNHM01 - 612□DA - AV - (B) - Ratio	0.1	4	420	257	-	130	124	31		448	257	-	130	124	32
CNHM02 - 612□DA - AV - (B) - Ratio	0.2	4	436	257	-	130	124	32		468	257	-	130	124	33
CNHM05 - 612□DB - AV - (B) - Ratio	0.4	4	489	257	-	140	148	39		532	257	-	140	148	42
CNHM1 - 612□DB - AV - (B) - Ratio	0.75	4	516	257	-	145	160	42		578	257	-	145	160	47

Note: 4. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

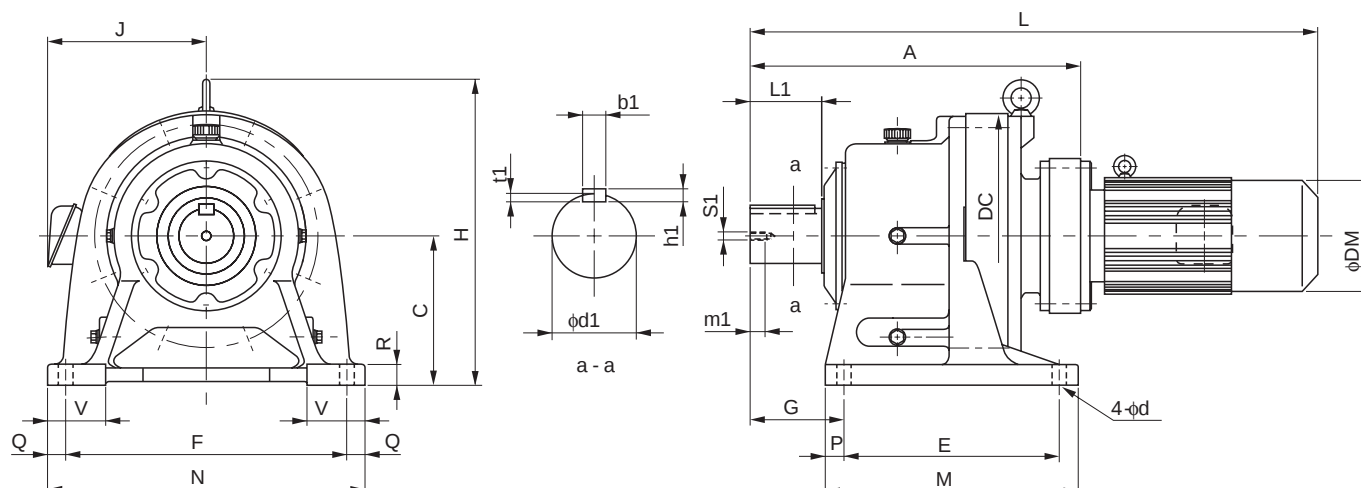
5. "B" after the suffix "AV" indicates models equipped with brake.

6. Dimensions of shaft end: Refer to pages F-28 to F-29 for details.

7. 30kW or over motors are air over type.

8. Dimensions in above drawings are subject to change without notice.

Dimension Tables (Horizontal Direction, Foot Mount)

CHHM^{Note 1} - 613□DA to 618□DA - AV

Frame size Note 4	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 6						
														d1	L1	b1	h1	t1	S1	m1
613□DA	294	150	230	145	290	100	195	330	25	20	22	65	18	50	70	14	9	5.5	M10	18
613□DB	303	150	230	145	290	100	195	330	25	20	22	65	18	50	70	14	9	5.5	M10	18
613□DC	317	150	230	145	290	100	195	330	25	20	22	65	18	50	70	14	9	5.5	M10	18
614□DA	314	150	230	145	290	120	195	330	25	20	22	65	18	50	90	14	9	5.5	M10	18
614□DB	323	150	230	145	290	120	195	330	25	20	22	65	18	50	90	14	9	5.5	M10	18
614□DC	337	150	230	145	290	120	195	330	25	20	22	65	18	50	90	14	9	5.5	M10	18
616□DA	373	160	300	150	370	139	238	410	44	20	25	75	18	60	90	18	11	7	M10	18
616□DB	387	160	300	150	370	139	238	410	44	20	25	75	18	60	90	18	11	7	M10	18
617□DA	418	200	340	275	380	125	335	430	30	25	30	80	22	70	90	20	12	7.5	M12	24
617□DB	432	200	340	275	380	125	335	430	30	25	30	80	22	70	90	20	12	7.5	M12	24
618□DA	474	220	370	320	420	145	380	470	30	25	30	85	22	80	110	22	14	9	M12	24

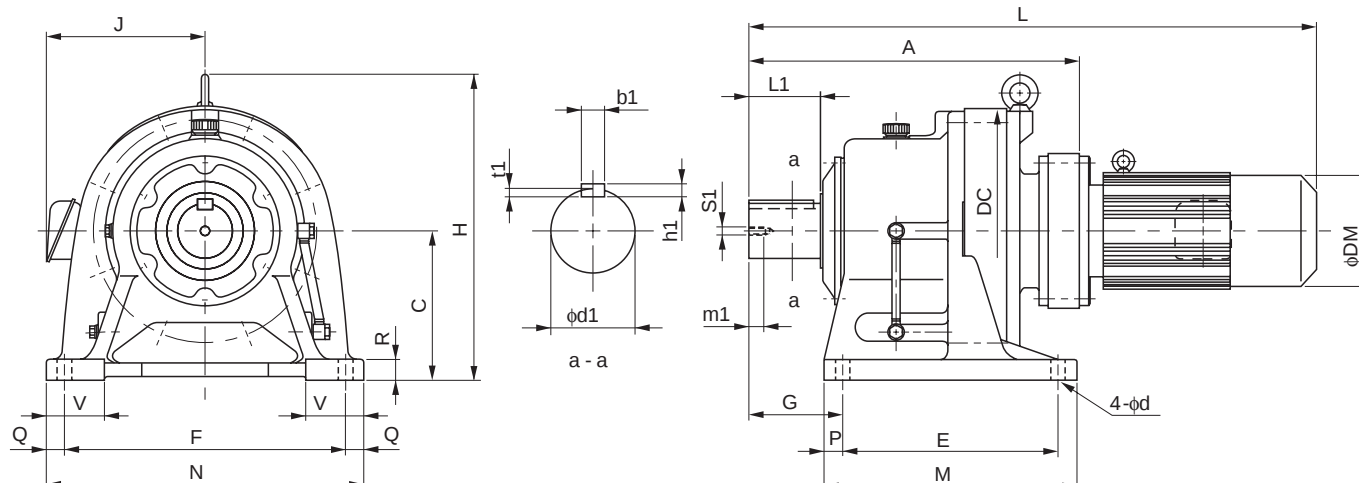
Model Note 4, 5	Motor		Standard					With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)
CHHM02 - 613□DA - AV - (B) - Ratio	0.2	4	490	300	130	124	47	522	300	130	124	48
CHHM05 - 613□DB - AV - (B) - Ratio	0.4	4	540	265	140	148	54	583	265	140	148	57
CHHM1 - 613□DB - AV - (B) - Ratio	0.75	4	573	270	145	160	57	635	270	145	160	62
CHHM2 - 613□DC - AV - (B) - Ratio	1.5	4	607	276	152	173	64	670	276	152	173	70
CHHM02 - 614□DA - AV - (B) - Ratio	0.2	4	510	300	130	124	48	542	300	130	124	49
CHHM05 - 614□DB - AV - (B) - Ratio	0.4	4	560	265	140	148	54	603	265	140	148	57
CHHM1 - 614□DB - AV - (B) - Ratio	0.75	4	593	270	145	160	57	655	270	145	160	62
CHHM2 - 614□DC - AV - (B) - Ratio	1.5	4	627	276	152	173	61	690	276	152	173	70
CHHM02 - 616□DA - AV - (B) - Ratio	0.2	4	569	349	130	124	91	601	349	130	124	93
CHHM05 - 616□DA - AV - (B) - Ratio	0.4	4	610	349	140	148	95	653	349	140	148	98
CHHM1 - 616□DA - AV - (B) - Ratio	0.75	4	643	349	145	160	99	705	349	145	160	104
CHHM2 - 616□DB - AV - (B) - Ratio	1.5	4	677	349	152	173	105	740	349	152	173	111
CHHM02 - 617□DA - AV - (B) - Ratio	0.2	4	614	416	130	124	126	646	416	130	124	128
CHHM05 - 617□DA - AV - (B) - Ratio	0.4	4	655	416	140	148	130	698	416	140	148	133
CHHM1 - 617□DA - AV - (B) - Ratio	0.75	4	688	416	145	160	134	750	416	145	160	139
CHHM2 - 617□DB - AV - (B) - Ratio	1.5	4	722	416	152	173	140	785	416	152	173	146
CHHM05 - 618□DA - AV - (B) - Ratio	0.4	4	711	451	140	148	176	754	451	140	148	178
CHHM1 - 618□DA - AV - (B) - Ratio	0.75	4	744	451	145	160	179	806	451	145	160	184
CHHM2 - 618□DA - AV - (B) - Ratio	1.5	4	764	451	152	173	183	827	451	152	173	189

Note: 1. □ indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

Dimension Tables (Horizontal Direction, Foot-Mount)

CHHM^{Note 1} - 616□DC to 619□DB - AV

Frame size Note 4	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 6						
														d1	L1	b1	h1	t1	S1	m1
616□DC	389	160	300	150	370	139	238	410	44	20	25	75	18	60	90	18	11	7	M10	18
617□DC	436	200	340	275	380	125	335	430	30	25	30	80	22	70	90	20	12	7.5	M12	24
618□DB	496	220	370	320	420	145	380	470	30	25	30	85	22	80	110	22	14	9	M12	24
619□DA	556	250	430	380	480	170	440	530	30	25	35	90	26	95	135	25	14	9	M20	34
619□DB	572	250	430	380	480	170	440	530	30	25	35	90	26	95	135	25	14	9	M20	34

Model Note 4, 5	Motor		Standard						With Brake					
	kW	P	L	H	J	DM	W(kg)		L	H	J	DM	W(kg)	
CHHM3 - 616□DC - AV - (B) - Ratio	2.2	4	702	349	168	212	121		774	349	147	212	131	
CHHM5 - 616□DC - AV - (B) - Ratio	3.7	4	746	349	168	212	128		818	349	147	212	138	
CHHM3 - 617□DC - AV - (B) - Ratio	2.2	4	749	416	168	212	155		821	416	147	212	165	
CHHM5 - 617□DC - AV - (B) - Ratio	3.7	4	793	416	168	212	162		865	416	147	212	172	
CHHM3 - 618□DB - AV - (B) - Ratio	2.2	4	809	451	168	212	207		881	451	147	212	217	
CHHM5 - 618□DB - AV - (B) - Ratio	3.7	4	853	451	168	212	214		925	451	147	212	224	
CHHM8 - 618□DB - AV - (B) - Ratio	5.5	4	876	451	213	251	229		971	451	188	251	247	
CHHM10 - 618□DB - AV - (B) - Ratio	7.5	4	936	451	213	251	243		1031	451	188	251	261	
CHHM1 - 619□DA - AV - (B) - Ratio	0.75	4	826	531	145	160	254		888	531	119	160	259	
CHHM2 - 619□DA - AV - (B) - Ratio	1.5	4	846	531	152	173	258		909	531	126	173	265	
CHHM3 - 619□DA - AV - (B) - Ratio	2.2	4	869	531	168	212	268		941	531	147	212	278	
CHHM5 - 619□DA - AV - (B) - Ratio	3.7	4	913	531	168	212	275		985	531	147	212	285	
CHHM8 - 619□DB - AV - (B) - Ratio	5.5	4	952	531	213	251	297		1047	531	188	251	315	
CHHM10 - 619□DB - AV - (B) - Ratio	7.5	4	1012	531	213	251	311		1107	531	188	251	329	
CHHM15 - 619□DB - AV - (B) - Ratio	11	4	1102	531	232	324	363		1207	531	259	324	397	

Note: 4. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

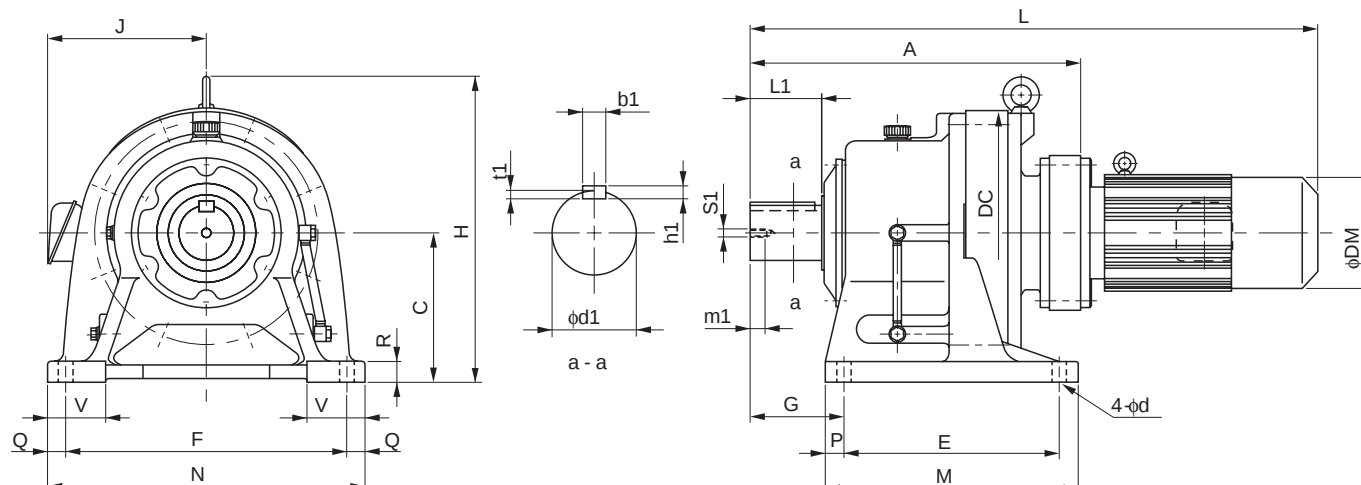
5. "B" after the suffix "AV" indicates models equipped with brake.

6. Dimensions of shaft end: Refer to pages F-28 to F-29 for details.

7. 30kW or over motors are air over type.

8. Dimensions in above drawings are subject to change without notice.

Dimension Tables (Horizontal Direction, Foot Mount)

CHHM^{Note 1} - 6205DA to 6225DB - AV

Frame size Note 4	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 6						
														d1	L1	b1	h1	t1	S1	m1
6205DA	597	250	448	360	440	215	440	530	40	45	35	100	26	100	165	28	16	10	M20	34
6205DB	624	250	448	360	440	215	440	530	40	45	35	100	26	100	165	28	16	10	M20	34
6215DA	650	265	485	395	480	210	475	580	40	50	40	110	26	110	165	28	16	10	M20	34
6215DB	675	265	485	395	480	210	475	580	40	50	40	110	26	110	165	28	16	10	M20	34
6225DA	692	280	526	420	540	230	520	620	50	40	40	115	33	120	165	32	18	11	M20	34
6225DB	735	280	526	420	540	230	520	620	50	40	40	115	33	120	165	32	18	11	M20	34

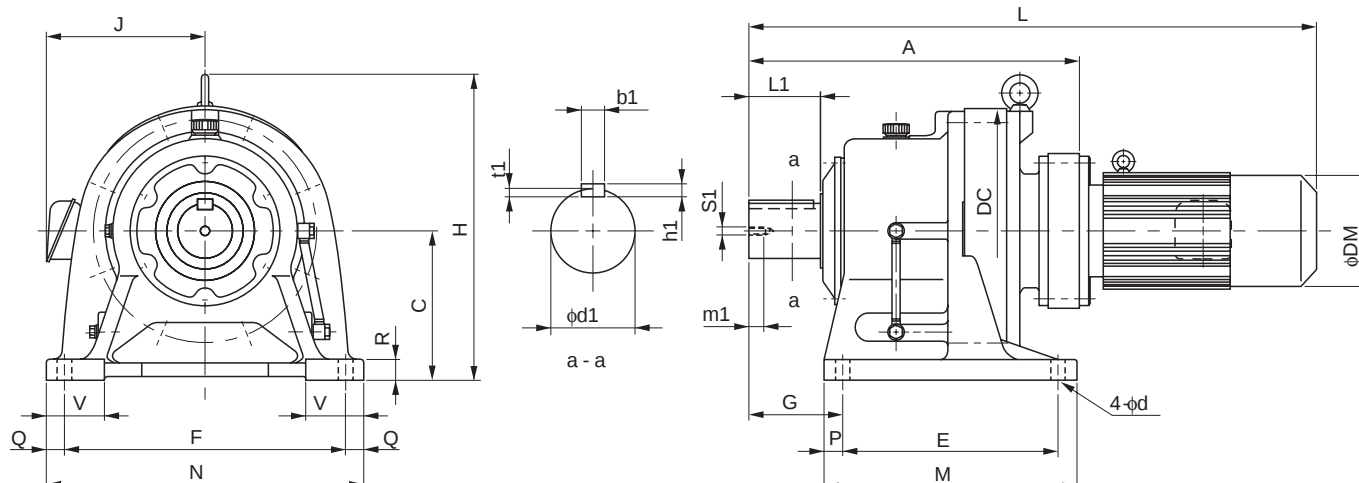
Model Note 4, 5	Motor		Standard						With Brake					
	kW	P	L	H	J	DM	W(kg)		L	H	J	DM	W(kg)	
CHHM1 - 6205DA - AV - (B) - Ratio	0.75	4	867	530	145	160	273		929	530	145	160	278	
CHHM3 - 6205DA - AV - (B) - Ratio	2.2	4	910	530	168	212	287		982	530	168	212	297	
CHHM8 - 6205DB - AV - (B) - Ratio	5.5	4	1004	530	213	251	321		1099	530	213	251	339	
CHHM10 - 6205DB - AV - (B) - Ratio	7.5	4	1064	530	188	251	334		1159	530	188	251	352	
CHHM15 - 6205DB - AV - (B) - Ratio	11	4	1154	530	232	324	386		1249	530	259	324	419	
CHHM2 - 6215DA - AV - (B) - Ratio	1.5	4	940	575	152	173	370		1003	575	152	173	377	
CHHM3 - 6215DA - AV - (B) - Ratio	2.2	4	963	575	168	212	380		1035	575	168	212	390	
CHHM5 - 6215DA - AV - (B) - Ratio	3.7	4	1007	575	168	212	387		1079	575	168	212	397	
CHHM8 - 6215DA - AV - (B) - Ratio	5.5	4	1030	575	213	251	402		1125	575	213	251	420	
CHHM10 - 6215DA - AV - (B) - Ratio	7.5	4	1090	575	188	251	415		1185	575	188	251	433	
CHHM15 - 6215DA - AV - (B) - Ratio	11	4	1180	575	232	324	467		1285	575	259	324	501	
CHHM20 - 6215DB - AV - (B) - Ratio	15	4	1300	575	297	394	564		1465	575	297	394	615	
CHHM2 - 6225DA - AV - (B) - Ratio	1.5	4	982	610	152	173	444		1045	640	152	173	451	
CHHM3 - 6225DA - AV - (B) - Ratio	2.2	4	1005	610	168	212	454		1077	610	168	212	464	
CHHM5 - 6225DA - AV - (B) - Ratio	3.7	4	1049	610	168	212	461		1121	610	168	212	471	
CHHM8 - 6225DA - AV - (B) - Ratio	5.5	4	1072	610	213	251	476		1167	610	213	251	494	
CHHM10 - 6225DA - AV - (B) - Ratio	7.5	4	1132	610	213	251	490		1227	610	213	251	508	
CHHM15 - 6225DA - AV - (B) - Ratio	11	4	1222	610	232	324	542		1327	610	259	324	576	
CHHM20 - 6225DB - AV - (B) - Ratio	15	4	1360	610	297	394	661		1525	610	297	394	712	
CHHM25 - 6225DB - AV - (B) - Ratio	18.5	4	1360	610	297	394	661		1525	610	297	394	712	
CHHM30 - 6225DB - AV - (B) - Ratio	22	4	1360	610	297	394	678		1525	610	297	394	729	

Note: 1. □ indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

Dimension Tables (Horizontal Direction, Foot Mount)

CHHM^{Note 1} - 6235DA to 6255DB - AV

Frame size	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft ^{Note 2, 3, 6}						
														d1	L1	b1	h1	t1	S1	m1
6235DA	778	300	562	460	580	260	560	670	50	45	45	120	33	130	200	32	18	11	M24	41
6235DB	800	300	562	460	580	260	560	670	50	45	45	120	33	130	200	32	18	11	M24	41
6245DA	816	335	614	480	630	263	580	720	50	45	45	128	39	140	200	36	20	12	M24	41
6245DB	837	335	614	480	630	263	580	720	50	45	45	128	39	140	200	36	20	12	M24	41
6255DA	956	375	670	520	670	320	630	780	55	55	50	140	39	160	240	40	22	13	M30	49
6255DB	978	375	670	520	670	320	630	780	55	55	50	140	39	160	240	40	22	13	M30	49

Model	^{Note 5}	Motor		Standard					With Brake				
		kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)
CHHM3 - 6235DA - AV - (B) - Ratio		2.2	4	1091	667	168	212	570	1163	667	168	212	580
CHHM5 - 6235DA - AV - (B) - Ratio		3.7	4	1135	667	168	212	577	1207	667	168	212	587
CHHM8 - 6235DA - AV - (B) - Ratio		5.5	4	1163	667	213	251	593	1258	667	213	251	610
CHHM10 - 6235DA - AV - (B) - Ratio		7.5	4	1223	667	213	251	607	1318	667	213	251	624
CHHM15 - 6235DA - AV - (B) - Ratio		11	4	1308	667	261	324	660	1413	667	261	324	694
CHHM20 - 6235DA - AV - (B) - Ratio		15	4	1403	667	297	394	737	1568	667	297	394	788
CHHM25 - 6235DB - AV - (B) - Ratio		18.5	4	1425	667	297	394	782	1590	667	297	394	825
CHHM30 - 6235DB - AV - (B) - Ratio		22	4	1425	667	297	394	782	1590	667	297	394	825
CHHM40 - 6235DB - AV - (B) - Ratio		30 ^{Note 7}	4	1570	667	297	394	822	1822	667	297	394	918
CHHM3 - 6245DA - AV - (B) - Ratio		2.2	4	1129	729	168	212	679	1201	729	168	212	689
CHHM5 - 6245DA - AV - (B) - Ratio		3.7	4	1173	729	168	212	686	1245	729	168	212	696
CHHM8 - 6245DA - AV - (B) - Ratio		5.5	4	1201	729	213	251	702	1296	729	213	251	719
CHHM10 - 6245DA - AV - (B) - Ratio		7.5	4	1261	729	213	251	716	1356	729	213	251	733
CHHM15 - 6245DA - AV - (B) - Ratio		11	4	1346	729	261	324	769	1451	729	261	324	803
CHHM20 - 6245DA - AV - (B) - Ratio		15	4	1441	729	328	394	840	1606	729	328	394	891
CHHM25 - 6245DB - AV - (B) - Ratio		18.5	4	1462	729	297	394	866	1627	729	297	394	917
CHHM30 - 6245DB - AV - (B) - Ratio		22	4	1462	729	297	394	883	1627	729	297	394	926
CHHM40 - 6245DB - AV - (B) - Ratio		30 ^{Note 7}	4	1607	729	297	394	937	1859	729	297	394	1033
CHHM5 - 6255DA - AV - (B) - Ratio		3.7	4	1328	815	168	212	1041	1400	815	168	212	1049
CHHM8 - 6255DA - AV - (B) - Ratio		5.5	4	1346	815	213	251	1056	1441	815	213	251	1071
CHHM10 - 6255DA - AV - (B) - Ratio		7.5	4	1406	815	213	251	1071	1501	815	213	251	1086
CHHM15 - 6255DA - AV - (B) - Ratio		11	4	1486	815	261	324	1103	1591	815	261	324	1157
CHHM20 - 6255DA - AV - (B) - Ratio		15	4	1581	815	328	394	1195	1746	815	328	394	1246
CHHM25 - 6255DA - AV - (B) - Ratio		18.5	4	1581	815	328	394	1195	1746	815	328	394	1246
CHHM30 - 6255DA - AV - (B) - Ratio		22	4	1581	815	297	394	1215	1746	815	297	394	1258
CHHM40 - 6255DB - AV - (B) - Ratio		30 ^{Note 7}	4	1748	815	297	394	1325	2000	815	297	394	1421
CHHM50 - 6255DB - AV - (B) - Ratio		37 ^{Note 7}	4	1748	815	297	394	1325	2000	815	297	394	1421

Note: 4. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

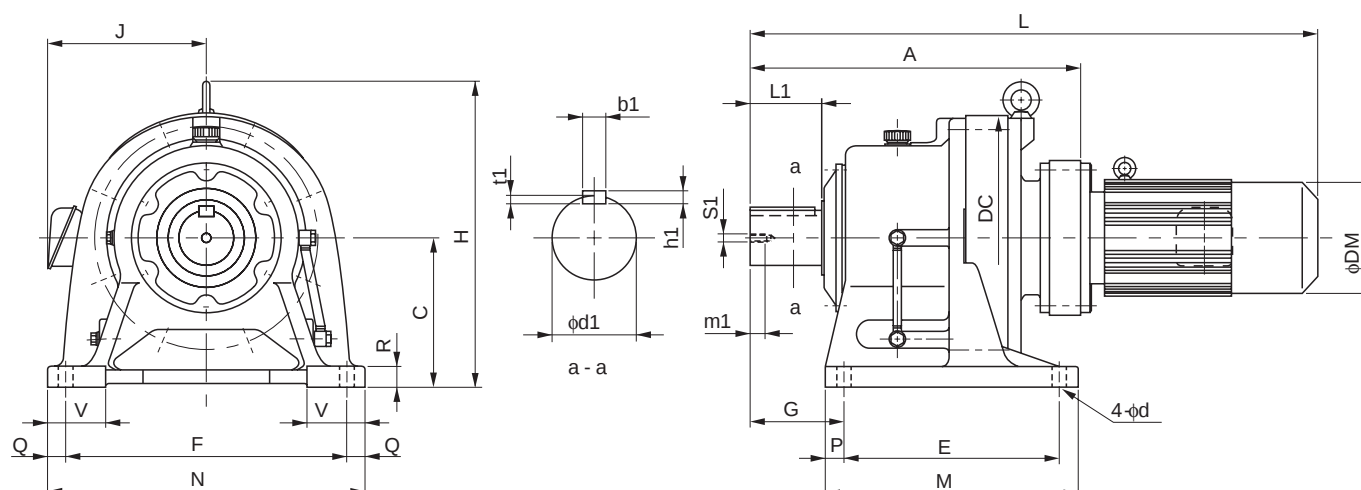
5. "B" after the suffix "AV" indicates models equipped with brake.

6. Dimensions of shaft end: Refer to pages F-28 to F-29 for details.

7. 30kW or over motors are air over type.

8. Dimensions in above drawings are subject to change without notice.

Dimension Tables (Horizontal Direction, Foot Mount)

CHHM^{Note 1} - 6265DA to 6275DA - AV

Frame size	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 6						
														d1	L1	b1	h1	t1	S1	m1
6265DA	1088	400	736	590	770	390	700	880	55	55	55	160	45	170	300	40	22	13	M30	49
6275DA	1349	540	950	420	1050	485	1040	1160	100	55	60	200	45	180	330	45	25	15	M30	52

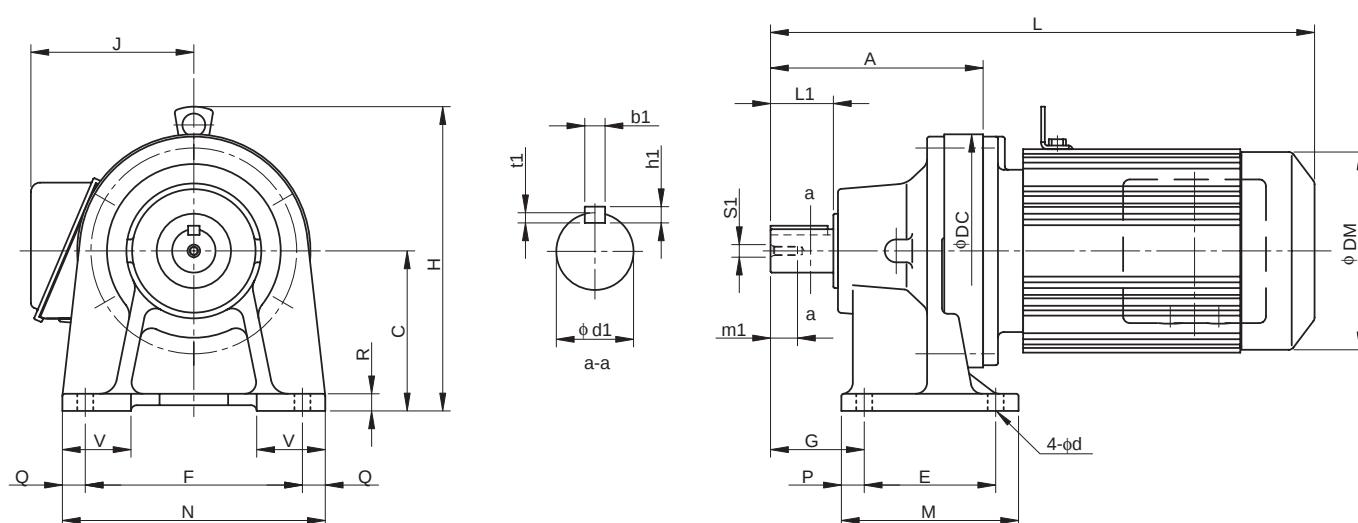
Model Note 5	Motor		Standard					With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)
CHHM8 - 6265DA - AV - (B) - Ratio	5.5	4	1493	874	213	251	1381	1588	874	213	251	1401
CHHM10 - 6265DA - AV - (B) - Ratio	7.5	4	1553	874	213	251	1396	1648	874	213	251	1411
CHHM15 - 6265DA - AV - (B) - Ratio	11	4	1618	874	261	324	1446	1723	874	261	324	1482
CHHM20 - 6265DA - AV - (B) - Ratio	15	4	1713	874	328	394	1525	1878	874	328	394	1570
CHHM25 - 6265DA - AV - (B) - Ratio	18.5	4	1713	874	328	394	1525	1878	874	328	394	1570
CHHM30 - 6265DA - AV - (B) - Ratio	22	4	1713	874	328	394	1540	1878	874	328	394	1583
CHHM40 - 6265DA - AV - (B) - Ratio	30 Note 7	4	1858	874	328	394	1577	2110	874	328	394	1673
CHHM50 - 6265DA - AV - (B) - Ratio	37 Note 7	4	1858	874	328	394	1577	2110	874	328	394	1673
CHHM10 - 6275DA - AV - (B) - Ratio	7.5	4	1814	1161	213	251	2531	1909	1161	213	251	2546
CHHM15 - 6275DA - AV - (B) - Ratio	11	4	1879	1161	261	324	2581	1984	1161	261	324	2617
CHHM20 - 6275DA - AV - (B) - Ratio	15	4	1974	1161	328	394	2660	2139	1161	328	394	2705
CHHM25 - 6275DA - AV - (B) - Ratio	18.5	4	1974	1161	328	394	2660	2139	1161	328	394	2705
CHHM30 - 6275DA - AV - (B) - Ratio	22	4	1974	1161	328	394	2675	2139	1161	328	394	2718
CHHM40 - 6275DA - AV - (B) - Ratio	30 Note 7	4	2089	1161	328	394	2713	2304	1161	328	394	2810
CHHM50 - 6275DA - AV - (B) - Ratio	37 Note 7	4	2089	1161	328	394	2713	2304	1161	328	394	2810

Notes: 1 □ indicates motor capacity.

2 Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3 Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key".

Dimension Tables (Universal Direction, Foot Mount)

CNHM^{Note 2} - 610H, 612H - AV (Center Height Option)

Frame size	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 6						
														d1	L1	b1	h1	t1	S1	m1
610H	156	120	150	90	150	60	135	180	15	15	12	40	11	28	35	8	7	4	M8	20
612H	186	140	204	115	190	82	155	230	20	20	15	60	14	38	55	10	8	5	M8	20

Model Note 4	Motor		Standard							With Brake					
	kW	P	L	H	H'	J	DM	W(kg)		L	H	H'	J	DM	W(kg)
CNHM02 - 610H - AV - (B) - Ratio	0.2	4	352	227	-	130	124	20		384	227	-	130	124	22
CNHM05 - 610H - AV - (B) - Ratio	0.4	4	393	233	-	140	148	24		436	233	-	140	148	27
CNHM1 - 610H - AV - (B) - Ratio	0.75	4	426	240	-	145	160	28		488	240	-	145	160	33
CNHM2 - 610H - AV - (B) - Ratio	1.5	4	446	246	-	152	173	32		509	246	-	152	173	38
CNHM2 - 612H - AV - (B) - Ratio	1.5	4	476	266	-	152	173	41		539	266	-	152	173	48
CNHM3 - 612H - AV - (B) - Ratio	2.2	4	499	286	-	168	212	51		571	286	-	168	212	61
CNHM5 - 612H - AV - (B) - Ratio	3.7	4	543	286	-	168	212	58		615	286	-	168	212	68

Note: 4. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

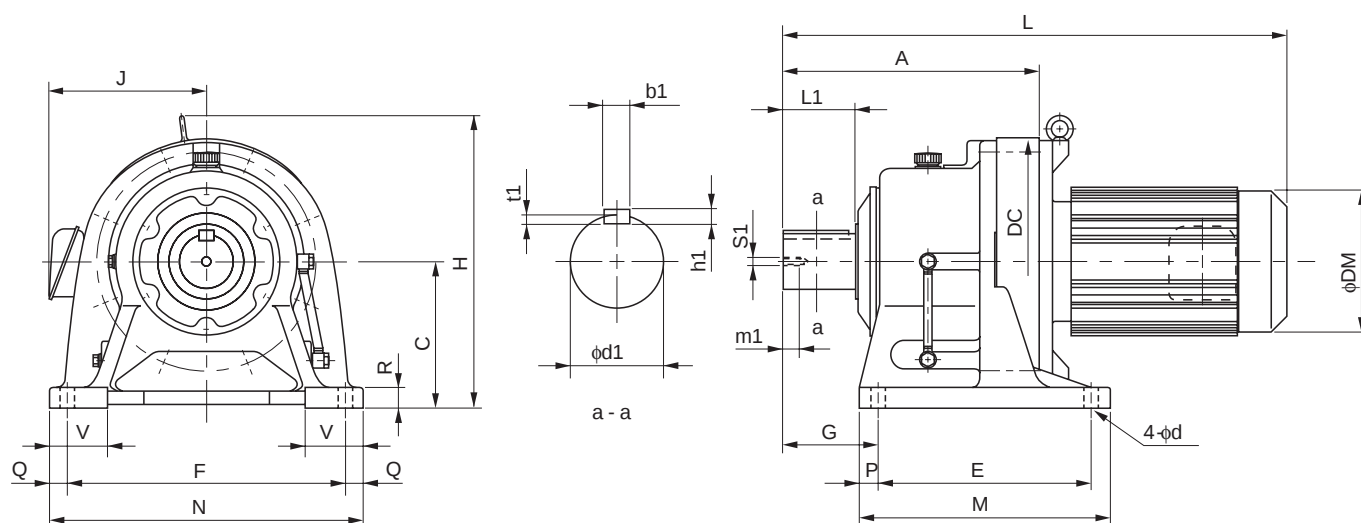
5. "B" after the suffix "AV" indicates models equipped with brake.

6. Dimensions of shaft end: Refer to pages F-28 to F-29 for details.

7. 30kW or over motors are air over type.

8. Dimensions in above drawings are subject to change without notice.

Dimension Tables (Horizontal Direction, Foot-Mount)

CHHM^{Note 2} - 614H, 616H - AV (Center Height Option)

Frame size	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Note 2, 3, 6						
														d1	L1	b1	h1	t1	S1	m1
614H	260	160	230	145	290	120	195	330	25	20	22	70	18	50	90	14	9	5.5	M10	18
616H	308	200	300	150	370	139	238	410	44	20	25	80	18	60	90	18	11	7	M10	18

Model Note 4	Motor		Standard					With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)
CHHM3 - 614H - AV - (B) - Ratio	2.2	4	573	306	168	212	71	645	306	168	212	81
CHHM5 - 614H - AV - (B) - Ratio	3.7	4	617	306	168	212	78	689	306	168	212	88
CHHM8 - 614H - AV - (B) - Ratio	5.5	4	640	333	213	251	93	735	333	213	251	111
CHHM10 - 614H - AV - (B) - Ratio	7.5	4	700	333	213	251	107	795	333	213	251	125
*CHHM15 - 614H - AV - (B) - Ratio	11	4	790	368	261	324	159	895	368	261	324	193
CHHM3 - 616H - AV - (B) - Ratio	2.2	4	621	350	168	212	111	693	350	168	212	121
CHHM5 - 616H - AV - (B) - Ratio	3.7	4	665	350	168	212	118	737	350	168	212	128
CHHM8 - 616H - AV - (B) - Ratio	5.5	4	693	373	213	251	134	788	373	213	251	151
CHHM10 - 616H - AV - (B) - Ratio	7.5	4	753	373	213	251	148	848	373	213	251	165
CHHM15 - 616H - AV - (B) - Ratio	11	4	838	408	261	324	201	943	408	261	324	235
CHHM20 - 616H - AV - (B) - Ratio	15	4	933	408	328	394	273	1098	408	328	394	324

"*" indicates models with bottom level of the motor lower than the reducer base.

- Note: 1. $\square$ indicates motor capacity.
 2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."
 3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."
 4. "B" after the suffix "AV" indicates models equipped with brake.
 5. Dimensions of shaft end: Refer to pages F-28 to F-29 for details.
 6. Dimensions in above drawings are subject to change without notice.

E

CYCLO® GEARMOTORS with High Efficiency Motor

GEARMOTORS WITH HIGH
EFFICIENCY MOTORS

	Page
Product Introduction	E-2
High Efficiency Regulation and Standard	E-4
Basic Gearmotor with High Efficiency	
Motor Specification	E-5

* This section contains a brief description on
CYCLO® GEARMOTORS with high efficiency
motor.

CYCLO® GEARMOTORS with High Efficiency Motor

High-Efficiency Regulations and Standards

1. High Efficiency Regulations

- US:** According to the Energy Policy Act of 1992 (EPA), motors and other products with built-in motors sold in the US later than October 24, 1997 are subject to this energy-efficiency regulation. Motors which fail to conform to the standards are penalized. (Subject capacity: 1-200HP; voltage: 230 & 460V; for commercial power supply). Although gearmotors are not included at this point, they may also become subject, observing the movement in Canada,
- Canada:** Natural Resources Canada (NRCAN) enacted the Energy Efficiency Act (EEA) in 1992 and the Energy Efficiency Regulation (EER) in 1995. These regulations are applied to standard motors imported to Canada starting February 3, 1995. Additional regulations were applied to gearmotors and explosion-proof motors imported after November 27, 1999. Motors and gearmotors which do not conform to the efficiency standard are prohibited for import. This requires all gearmotors to be high efficiency. (Subject capacity: 1-200HP; frame: IEC 90 or larger; voltage: 600V or less; for constant-speed motors).
- Japan:** Law concerning the Rational Use of Energy (comprehensive law promoting efficient energy use and energy waste elimination) was enacted in 1997 and "Reduction of annual energy consumption at factories by 1% on average" was announced. Furthermore, "Promotion on systematic energy-saving investment" and "Expansion of object factories and offices" were revised in April 1999. Use of high efficiency motor is recommended for the factory owners.

2. Standards

- UL Standards: (US)** Safety standards required primarily in the US. In the US, this standard is most generally applied to motored machines and is frequently quoted during negotiations for import. UL standards assure safety of equipment, appliances, and materials in order to protect human life and assets from fire and other accidents. UL conformity products are recommended also for observing the Product Liability (PL) Law.
- CSA Standards: (Canada)** Safety standards required in Canada. This is an arbitrary standards developed voluntarily by the members of association. However, most of the standards have been adopted officially as Canadian national standards and are quoted in laws and ordinances by the federal and state government and other local authorities. The CSA standards adopted as the Canadian national standards prefix with "CAN," followed with the number, for differentiation (Ex. CAN/CSA C22.1).
- JIS: (Japan)** Technical reference organized by Japan Electrical Manufacturers' Association (JEMA) has been applied previously. In July 2000, standard for high efficiency motors, "Low-voltage three-phase squirrel-cage high efficiency induction motors, JIS C 4212" was added in Japanese Industrial Standards (JIS).

Table of Models

Combinations with 4P Motor **Reduction Ratio 6~273**

Reduction Ratio		6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	104 (13 × 8)	121 (11 × 11)	143 (13 × 11)	165 (15 × 11)	195 (15 × 13)	231 (21 × 11)	273 (21 × 13)
Output Speed r/min	50Hz	242	181	132	112	96.7	85.3	69.0	58.0	50.0	41.4	33.7	28.4	24.6	20.4	16.7	12.2	13.9	12.0	10.1	8.79	7.44	6.28	5.31
	60Hz	292	219	159	135	117	103	83.3	70.0	60.3	50.0	40.7	34.3	29.7	24.6	20.1	14.7	16.8	14.5	12.2	10.6	8.97	7.58	6.41
Motor (kW × P)	0.2 × 4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	0.4 × 4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	0.75 × 4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	1.5 × 4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	2.2 × 4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	3.7 × 4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	5.5 × 4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	7.5 × 4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	11 × 4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	15 × 4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	18.5 × 4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	22 × 4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	30 × 4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

*Consult us for 6000SK Series (Reduction Ratio 2.5~10).

CYCLO® GEARMOTORS with High Efficiency Motor

High Efficiency Motor

Table E-1 3-Phase Induction Motor without Built-in Brakes

◎: Standard Type ○: Produced on order

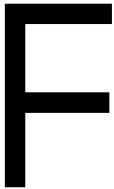
Specification		Indoor type (IP44)	Outdoor type (IP44)	Insulation class		
Output (kW)	Poles			E	B	F
		4	4	4	4	4
0.2		◎	○	◎	○	○
0.4		◎	○	◎	○	○
0.75		◎	○		◎	○
1.5		◎	○		◎	○
2.2		◎	○		◎	○
3.7		◎	○		◎	○
5.5		◎	○		◎	○
7.5		◎	○		◎	○
11		◎	○		◎	○
15		◎	○		◎	○
18.5		◎	○		◎	○
22		◎	○		◎	○
30		◎	○		◎	○
Remarks		Continuous rating, power source specification 200V 50/60Hz, 220V 60Hz (400V 50/60Hz, 440V 60Hz)				

Table E-2 3-Phase Induction Motor with Built-in Brakes

◎: Standard Type ○: Produced on order

Specification		Indoor type (IP44)	Outdoor type (IP44)	Insulation class		
Output (kW)	Poles			E	B	F
		4	4	4	4	4
0.2		◎	○	◎	○	○
0.4		◎	○	◎	○	○
0.75		◎	○		◎	○
1.5		◎	○		◎	○
2.2		◎	○		◎	○
3.7		◎	○		◎	○
5.5		◎	○		◎	○
7.5		◎	○		◎	○
11		◎	○		◎	○
15		◎	○		◎	○
18.5		◎	○		◎	○
22		◎	○		◎	○
30		◎	○		◎	○
Remarks		Continuous rating, power source specification 200V 50/60Hz, 220V 60Hz (400V 50/60Hz, 440V 60Hz)				

- Note:
1. Consult us for specifications not indicated in above tables. They may be produced on order. Characteristics, dimension, and CYCLO® DRIVE combinations may be changed depending on the specification. Example: 6P, special voltage, dust-proof type, humidity-proof, tropical treatment, high-temperature use, double shaft extension (round or square shaft), EPAct conformity, NRCan conformity, etc.
 2. Consult us with information on operation condition (ambient temperature, input speed, mounting style, load condition, etc.) when driving our high-efficiency motor with inverter. CYCLO® DRIVE combination selection requires contemplation on startup, lubrication, thermal rating, etc.
 3. Consult us when driving our high-efficiency motor with high carrier frequency type (IGBT, etc.) at high input voltage (400V and above) or with long wiring distance. Motor insulation may be necessary.
 4. Protection nomenclature for outdoor type is IP44. Consult us for operation in locations with exposure to elements or with frequent water splash.



TECHNICAL DATA

	Page
1. Reducer	
Mechanism	F-3
Lubrication	F-4
Nameplate	F-8
Allowable Radial and Axial Load	F-10
Moment of Inertia (GD ²)	F-17
Construction Drawing	F-25
Detailed Dimension of Slow Speed Shaft	F-28
2. Motor	
Terminal Box Specifications	F-32
Table of Motor Characteristics	F-36
Specifications and Constructions of Built-in Brake	F-40
Structure of Brake Terminal Box	F-49
Protection and Cooling	F-51
International Standards and Compliance of Sumitomo Products	F-52
EC Directives and CE Marking	F-55
Power Source Voltage and Conditions Worldwide	F-57
3. Common	
Paint and Rustproof Coating	F-59
Drive System Formulas	F-61

TECHNICAL DATA

F TECHNICAL DATA

1. Reducer

TECHNICAL
DATA

Reducer

1. □ indicates 0, 5, or H (for certain frame size)

(1) Standard Type

Table F-1 Horizontal

a) 6000SK Series Horizontal

Nominal Reduction Ratio Frame Size	2.5	3	4	5	6	8	10
607□SK, 608□SK 609□SK, 610□SK 611□SK	Maintenance-Free Type Grease (MF) *Indication necessary for mounting direction.						

b) 6000 Series Single Reduction Horizontal

[illegible]

c) 6000 Series Double Reduction Horizontal

Ratio	104	121	143	165	195	231	273	319	377	473	599	649	731	841	1003	1015	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569				
Frame Size																															
606□DA																															
607□DA																				2537											
609□DA, 610□DA												Maintenance-Free Type Grease (MF)																5133			
612□DA, 612□DB																															
613□DA, 613□DB																															
613□DC																															
614□DA, 614□DB												Grease (G)																			
614□DC																															
616□DA, 616□DB																															
617□DA, 617□DB																															
618□DA																															
616□DC																															
617□DC																															
618□DB																															
619□DA, 619□DB																															
6205DA, 6205DB												Oil Bath (PB)																			
6215DA, 6215DB	121																														
6225DA, 6225DB																															
6235DA, 6235DB																															
6245DA, 6245DB																															
6255DA, 6255DB																															
6265DA																															
6275DA												377																			

Note: 1. This table shows the standard lubrication method when the CYCLO® DRIVE is driven at the standard input speed.
2. Grease lubrication is possible for some models with oil lubrication as standards. Consult us in those cases, for performance may vary.
3. □ indicates 0 or 5, expressing the combination with reduction ratio.

Table F-2 Vertical

a) 6000SK Series Vertical

Nominal Reduction Ratio Frame Size	2.5	3	4	5	6	8	10
607 □ SK, 608 □ SK	Maintenance-Free Type Grease (MF) *Indication necessary for mounting direction.						
609 □ SK, 610 □ SK							
611 □ SK							

b) 6000 Series Single Reduction Vertical

Ratio Frame Size	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119
606□	43															
607□	Maintenance-Free Type Grease (MF)													59		
608□															87	
609□, 610□																
611□, 612□																
613□, 614□	Oil Bath (PB)															
616□, 617□	Forced Oil Lubrication (P)															
618□, 619□																
6205, 6215																
6225, 6235																
6245, 6255																
6265																
6275									TP		TP		TP		TP	

TP: Positive Displacement Pump Lubrication (See Table F-3)

c) 6000 Series Double Reduction Vertical

Ratio	104	121	143	165	195	231	273	319	377	473	599	649	731	841	1003	1015	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569				
Frame Size																															
606 □ DA																															
607 □ DA																															
609 □ DA, 610 □ DA											Maintenance-Free Type Grease (MF)																				
612 □ DA, 612 □ DB																					5133										
613 □ DA, 613 □ DB																															
613 □ DC																															
614 □ DA, 614 □ DB																															
614 □ DC																															
616 □ DA, 616 □ DB																															
617 □ DA, 617 □ DB																															
618 □ DA																															
616 □ DC											473																				
617 □ DC																					841										
618 □ DB																					1015										
619 □ DA, 619 □ DB																					2065										
6205DA, 6205DB																					1849										
6215DA, 6215DB	121																					2537									
6225DA, 6225DB																															
6235DA, 6235DB																															
6245DA, 6245DB																															
6255DA, 6255DB																															
6265DA																															
6275DA										377	Positive Displacement Pump Lubrication (TP) (See Table F-3)																				

TECHNICAL DATA

Reducer

Note:

1. This table shows the standard lubrication method when the CYCLO® DRIVE is driven at the standard input speed.
2. Grease lubrication is possible for some models with oil lubrication as standards. Consult us in those cases, for performance may vary.
3. □ indicates 0 or 5, expressing the combination with reduction ratio.

Lubrication

(2) Electric Pump (Electric Pump Type Forced Oil Lubrication Specification)

Table F-3 Electric Pump Specification

Trochoid pump type	TOP216HA-VB3 with release valve (3-phase induction motor: 0.75kW × 4P Type E)	TOP204HB-VB3 with release valve (3-phase induction motor: 0.4kW × 4P Type E)
Frame size/ reduction ratio	6275/29, 43, 59, 87	6275DA

Note: Although the CYCLO® SPEED REDUCER is capable for most uses with lubrication method in Table F-1 and 2, consult us when using in severe conditions, such as with harsh ambient temperature, input speed, or load condition.

2. Lubricant

(1) Grease Lubrication Models

Grease lubrication models in Table F-4 are packed with grease prior to shipment. They may be used without replenishment.

(i) Maintenance-Free Series

· 6000SK Series

Models in Table F-1 a) and F-2 a) are sealed with long-life grease (ALVANIA GREASE EPR000). Although replenishment is hardly necessary, replacement every 20,000 hours or 4~5 years will provide longer lifetime.

*Only designated mounting direction possible.

· 6000 Series

Models in section (MF) in Table F-1 b & c and F-2 b & c are sealed with long-life grease (ALVANIA GREASE RA). Although replenishment is hardly necessary, replacement every 20,000 hours or 4~5 years will provide longer lifetime.

*Any mounting direction possible.

(ii) Grease Lubrication Models Other than Indicated in Section (i)

Replenish or replace grease following the Instruction Manual.

Table F-4 Standard Grease

Model	Ambient Temperature °C	Model/Part		Company	Brand
CYCLO® 6000SK Series	-10 ~ 40	(i) Maintenance-Free Type Grease Lubrication		Shell Oil	SHELL ALVANIA GREASE EPR000
CYCLO® 6000 Series	-10 ~ 50	(i) Maintenance-Free Type Grease Lubrication		Shell Oil	SHELL ALVANIA GREASE RA
		(ii) Models other than (i)		Shell Oil	SHELL ALVANIA GREASE 2
				Cosmo Oil	COSMO GREASE DYNAMAX SH No.2
Sumitomo Motor	-10 ~ 50	Sealed Bearings		Kyodo Yushi	MULTEMP SRL
		Open Bearings	Thermal Class: E, B	Shell Oil	SHELL ALVANIA GREASE 2
			Thermal Class: F	Shell Oil	DARINA GREASE 2

(iii) Consult us when the unit is stored for more than three years. Grease replacement may be necessary.

Note: 1. Do not use grease other than the ones indicated above.
2. Models (ii) in the Table F-4 are packed with COSMO GREASE DYNAMAX SH No.2 prior to shipment.
3. Grease for models (ii) in Table F-4 may be combined with no problem.
4. Consult us when the unit will be operated in temperatures exceeding 0~40°C.

(2) Oil Lubrication Models

Oil lubrication models are shipped without oil. Always fill with lubrication oil to the top red line on the oil gauge before operation.

Table F-5 Recommended Lubrication Oil (SP Type Industrial Extreme-Pressure Gear Oil)
[Equivalent to Type 2 Industrial Oil in JIS K2219.]

Ambient temperature °C	Gulf Oil	Esso Oil	Mobil Oil	Shell Oil	Caltex Oil	BP Oil
-10~5	EP Lubricant HD 68	Spartan EP 68	Mobil gear 626 (ISO VG 68)	Omala Oil 68		Energol GR-XP 68
0 ~ 35	EP Lubricant HD 100 HD 150	Spartan EP 100 EP 150	Mobil gear 627, 629 (ISO VG 100, 150)	Omala Oil 100, 150	Meropa 100, 150	Energol GR-XP 100 GR-XP 150
30 ~ 50	EP Lubricant HD 220 HD 320 HD 460	Spartan EP 220 EP 320 EP 460	Mobil gear 630, 632 633, 634 (ISO VG 220~460)	Omala Oil 220, 320 460	Meropa 220, 320 460	Energol GR-XP 220 GR-XP 320 GR-XP 460

Note: 1. Use oil with lower viscosity for operation in winter or relatively low ambient temperature, specified in the parenthesis.
2. Consult us for operation in ambient temperatures exceeding 0~40°C.

2. Volume of Oil

Table F-6 Volume of Lubrication Oil, Litres ℓ (Approximate)

[Single Reduction]

Frame Size	613□	614□	616□	617□	618□	619□	6205	6215	6225	6235	6245	6255	6265	6275
Horizontal	0.7	0.7	1.4	1.9	2.5	4.0	5.5	8.5	10	15	16	21	29	56
Vertical	1.1	1.1	1	1.9	2	2.7	5.7	7.5	10	12	15	42	51	(60)

[Double Reduction]

Frame Size	616□ DC	617□ DC	618□ DB	619□ DA	619□ DB	6205 DA	6205 DB	6215 DA	6215 DB	6225 DA	6225 DB	6235 DA	6235 DB	6245 DA	6245 DB	6255 DA	6255 DB	6265 DA	6275 DA
Horizontal	1.5	2.4	3.5	5.8	6.0	6.0	6	10	10	11	11	17	17	18	18	23	23	32	60
Vertical	1.0	1.9	2.0	2.7	2.7	11	11	14	14	18	18	23	23	29	29	42	42	51	(60)

Note: 1. □ indicates 0, 5, or H (for certain frame size).
2. () with trochoid pump.

3. Cautions on Oil Seals

Oil seal has limited lifetime. Sealing effect may lower by natural degradation or abrasion by prolonged use. Seal life may vary depending on operation condition and ambient condition of the reducer. Oil seal change every 1~3 years is recommended for normal operation (uniform load, 10 hours/day, at normal temperature).

Nameplate

There are two types of nameplates, Type I and Type II. Refer to the relevant example of the typical plates shown below.

1. For Gearmotors

(1) Nameplate Type I: Gearmotor

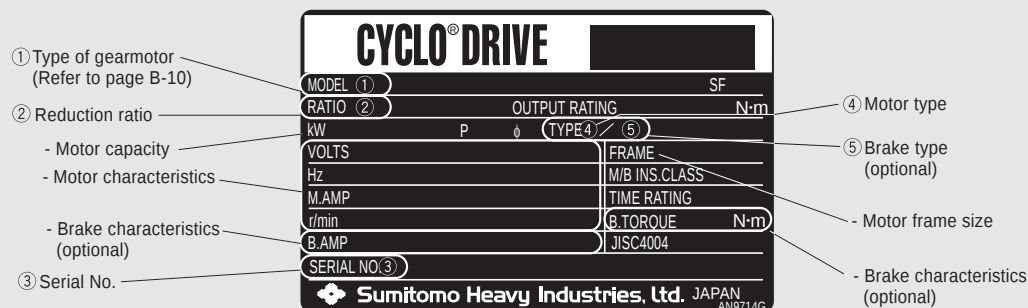


Fig. F-5 Nameplate of Gearmotor (Type I)

(2) Nameplate Type II: Reducer with Motor

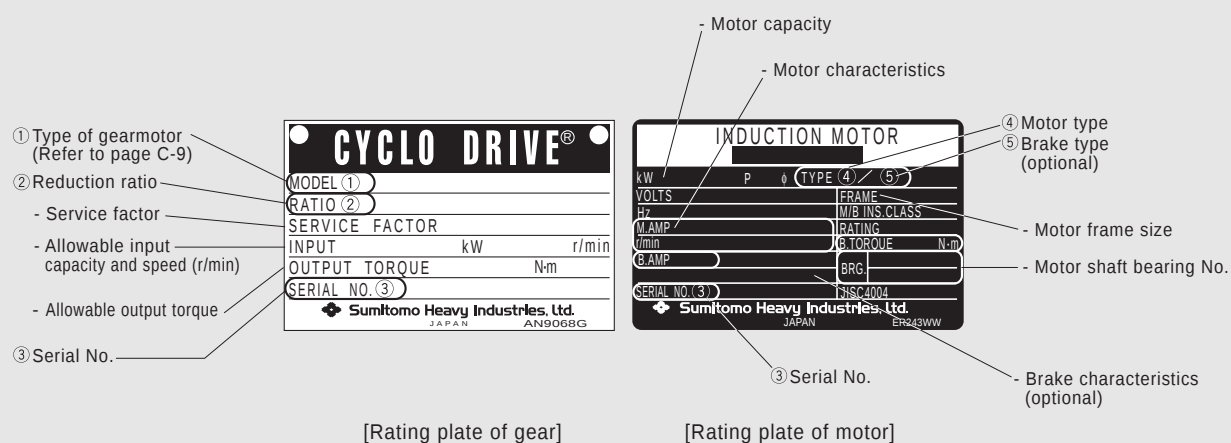


Fig. F-6 Namplates of Reducer with Motor (Type II)

2. For Reducers

(1) Nameplate Type I

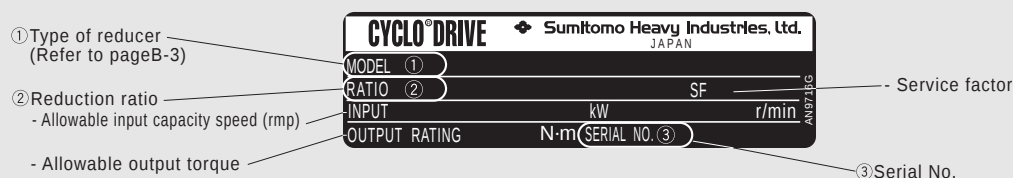


Fig. F-7 Nameplate of Reducer (Type I)

(2) Nameplate Type II

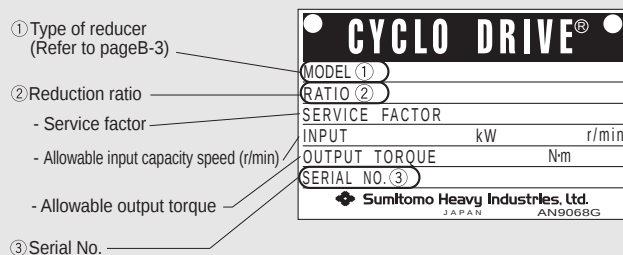
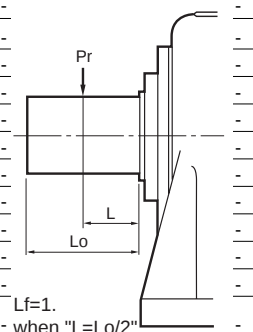


Fig. F-8 Nameplate of Reducer (Type II)

Allowable Radial and Axial Load

Table F-9 Load Location Factor (Slow Speed Shaft) Lf

Frame Size		Load Location L mm																											
Single Reduction	Double Reduction	~5	10	15	20	25	30	35	40	45	50	60	70	80	90	100	120	140	160	180	200	225	250	275	300				
607□SK	-	0.83	0.92	1.00	1.08	1.17	1.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
608□SK	-	0.83	0.90	0.97	1.03	1.10	1.17	1.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
609□SK	-	0.87	0.92	0.97	1.03	1.08	1.13	1.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
610□SK	-	0.87	0.92	0.97	1.03	1.08	1.13	1.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
611□SK	-	0.83	0.88	0.93	0.98	1.02	1.07	1.12	1.17	1.22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
606□	606□DA	0.83	0.94	1.19	1.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
607□	607□DA	0.82	0.91	1.00	1.29	1.59	1.88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
608□	-	0.81	0.87	0.94	1.03	1.28	1.54	1.80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
609□	609□DA	0.86	0.92	0.97	1.13	1.38	1.64	1.90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
610□	610□DA	0.86	0.92	0.97	1.13	1.38	1.64	1.90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
611□	-	0.78	0.84	0.90	0.96	1.02	1.08	1.19	1.36	1.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
612□	612□DA 612□DB	-	0.82	0.87	0.92	0.97	1.08	1.25	1.42	1.59	1.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
613□	613□DA 613□DB 613□DC	-	-	0.83	0.87	0.92	0.96	1.00	1.13	1.25	1.38	1.63	1.88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
614□	614□DA 614□DB 614□DC	-	-	-	0.66	0.73	0.80	0.87	0.93	1.00	1.10	1.30	1.50	1.70	1.90	-	-	-	-	-	-	-	-	-	-	-	-	-	
616□	616□DA 616□DB 616□DC	-	-	-	0.83	0.87	0.90	0.93	0.97	1.00	1.11	1.32	1.53	1.75	1.96	-	-	-	-	-	-	-	-	-	-	-	-	-	
617□	617□DA 617□DB 617□DC	-	-	-	0.86	0.89	0.92	0.94	0.97	1.00	1.11	1.32	1.53	1.75	1.96	-	-	-	-	-	-	-	-	-	-	-	-	-	
618□	618□DA 618□DB	-	-	-	-	0.85	0.87	0.90	0.93	0.95	0.98	1.09	1.26	1.43	1.60	1.78	-	-	-	-	-	-	-	-	-	-	-	-	
619□	619□DA 619□DB	-	-	-	-	-	0.85	0.87	0.89	0.91	0.93	0.97	1.04	1.18	1.32	1.46	1.75	-	-	-	-	-	-	-	-	-	-	-	
6205	6205DA 6205DB	-	-	-	-	-	-	-	0.70	0.74	0.77	0.84	0.91	0.98	1.05	1.12	1.26	1.40	1.54	-	-	-	-	-	-	-	-	-	
6215	6215DA 6215DB	-	-	-	-	-	-	-	0.70	0.73	0.77	0.84	0.91	0.98	1.05	1.13	1.27	1.41	1.56	-	-	-	-	-	-	-	-	-	
6225	6225DA 6225DB	-	-	-	-	-	-	-	0.86	0.88	0.90	0.93	0.96	0.99	1.02	1.06	1.12	1.19	1.25	-	-	-	-	-	-	-	-	-	
6235	6235DA 6235DB	-	-	-	-	-	-	-	0.82	0.84	0.85	0.88	0.91	0.94	0.97	1.00	1.06	1.12	1.18	1.24	1.30	-	-	-	-	-	-	-	
6245	6245DA 6245DB	-	-	-	-	-	-	-	0.83	0.84	0.86	0.89	0.92	0.94	0.97	1.00	1.06	1.11	1.17	1.23	1.29	-	-	-	-	-	-	-	
6255	6255DA 6255DB	-	-	-	-	-	-	-	-	-	0.83	0.85	0.88	0.90	0.93	0.95	1.00	1.05	1.10	1.22	1.36	1.52	1.69	-	-	-	-	-	
6265	6265DA	-	-	-	-	-	-	-	-	-	-	-	0.83	0.85	0.88	0.90	0.94	0.98	1.04	1.17	1.29	1.45	1.61	1.77	1.93	-	-	-	
6275	6275DA	-	-	-	-	-	-	-	-	-	-	-	-	0.67	0.71	0.75	0.82	0.90	0.98	1.09	1.21	1.35	1.50	1.65	1.79	-	-	-	
Single Reduction	Double Reduction	~5	10	15	20	25	30	35	40	45	50	60	70	80	90	100	120	140	160	180	200	225	250	275	300				
Frame Size		Load Location L mm																											



Note: □ indicates 0 or 5, expressing combination with reduction ratio.

Allowable Radial and Axial Load

Table F-10 Axial Load Capacity (Slow Speed Shaft) Pao (Upper Row: N, Lower Row: kgf)

(When Cf, Lf, Fs=1)

Frame Size		Output Speed r/min																
Single Reduction	Double Reduction	~10	15	20	25	30	35	40	50	60	80	100	125	150	200	250	300	~700
607□SK	-	785 80	785 80	785 80	785 80	785 80	785 80	785 80	785 80	785 80	785 80	785 80	785 80	785 80	785 80	785 80	785 80	785 80
608□SK	-	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100
609□SK	-	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100
610□SK	-	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150
611□SK	-	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150
606□	606□DA	294 30	294 30	294 30	294 30	294 30	294 30	294 30	294 30	294 30	294 30	294 30	294 30	294 30	294 30	-	-	-
607□	607□DA	785 80	785 80	785 80	785 80	785 80	785 80	785 80	785 80	785 80	785 80	785 80	785 80	785 80	785 80	785 80	785 80	785 80
608□	-	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100
609□	609□DA	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100	981 100
610□	610□DA	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150
611□	-	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150	1470 150
612□	612□DA 612□DB	2940 300	2940 300	2940 300	2940 300	2940 300	2940 300	2940 300	2940 300	2940 300	2940 300	2940 300	2940 300	2940 300	2940 300	2770 282	2500 255	2390 244
613□	613□DA 613□DB 613□DC	3920 400	3920 400	3920 400	3920 400	3920 400	3920 400	3920 400	3920 400	3920 400	3920 400	3920 400	3920 400	3920 400	3920 400	3920 400	3920 400	3920 400
614□	614□DA 614□DB 614□DC	5400 550	5400 550	5400 550	5400 550	5400 550	5400 550	5400 550	5400 550	5400 550	5230 533	4860 495	4560 465	4370 445	3850 392	3670 374	3450 352	-
616□	616□DA 616□DB 616□DC	6870 700	6870 700	6870 700	6870 700	6870 700	6870 700	6870 700	6870 700	6870 700	6870 700	6870 700	6870 700	6870 700	6300 642	5700 581	-	-
617□	617□DA 617□DB 617□DC	9810 1000	9810 1000	9810 1000	9810 1000	9810 1000	9810 1000	9810 1000	9810 1000	9810 1000	9810 1000	9810 1000	9680 987	9020 919	8090 825	7330 747	6880 701	-
618□	618□DA 618□DB	13700 1400	13700 1400	13700 1400	13700 1400	13700 1400	13700 1400	13700 1400	13700 1400	13700 1400	13700 1400	13700 1400	13100 1340	12500 1270	11000 1120	-	-	-
619□	619□DA 619□DB	19600 2000	19600 2000	19600 2000	19600 2000	19600 2000	19600 2000	19600 2000	19600 2000	19600 2000	19600 2000	19600 2000	18500 1890	17500 1780	15400 1570	-	-	-
6205	6205DA 6205DB	26500 2700	23500 2400	21100 2150	19600 2000	18600 1900	18100 1850	17700 1800	16700 1700	15700 1600	14200 1450	13200 1350	12800 1300	12300 1250	11300 1150	-	-	-
6215	6215DA 6215DB	27500 2800	24500 2500	22100 2250	20600 2100	19600 2000	18600 1900	18100 1850	17200 1750	16200 1650	14700 1500	13700 1400	13200 1350	12800 1300	11800 1200	-	-	-
6225	6225DA 6225DB	29400 3000	25600 2610	23200 2360	21700 2210	20600 2100	19600 2000	18700 1910	17600 1790	16700 1700	15300 1560	14400 1470	13600 1390	13100 1340	12100 1230	-	-	-
6235	6235DA 6235DB	35300 3600	31400 3200	28400 2900	26500 2700	25000 2550	23500 2400	22600 2300	21100 2150	20100 2050	18600 1900	17700 1800	16700 1700	-	-	-	-	-
6245	6245DA 6245DB	37300 3800	33800 3450	30900 3150	28800 2940	27300 2780	26100 2660	25100 2560	23500 2400	22300 2270	21000 2140	19900 2030	19100 1950	-	-	-	-	-
6255	6255DA 6255DB	48100 4900	43100 4390	39400 4020	36900 3760	35100 3580	33600 3430	32300 3290	30400 3100	28500 2910	26800 2730	25500 2600	24200 2470	-	-	-	-	-
6265	6265DA	52000 5300	52000 5300	51000 5200	47500 4840	44800 4570	42800 4360	41600 4240	38900 3970	37300 3800	34800 3550	33000 3360	31100 3170	-	-	-	-	-
6275	6275DA	58900 6000	58900 6000	58900 6000	58900 6000	58900 6000	58900 6000	58900 6000	58900 6000	-	-	-	-	-	-	-	-	-
Single Reduction	Double Reduction	~10	15	20	25	30	35	40	50	60	80	100	125	150	200	250	300	
Frame Size		Output Speed r/min																

Note: □ indicates 0 or 5, expressing combination with reduction ratio.

Allowable Radial and Axial Load

2. Heavy Radial Load Type, Light Heavy Radial Load Type (Optional Items)

When the radial load of the slow speed shaft exceeds the allowable value of the standard CYCLO® reducer, a larger frame size may be selected, but depending upon the degree of the load, this may be avoided by using the heavy radial load type. Refer to Table F-9~10 for allowable radial load on the slow speed shaft of the heavy radial load type.

Precautions for Selection and Use

1. Heavy radial load type is indicated with the suffix "R1" or "R2" after the frame size.
Example: CHHM5-6135-R2-B-29
2. □ indicates 0, 5, or H.
3. Consult us for the following conditions, which require special considerations:
 - When the shaft direction is vertical (Vertical type).
 - When thrust load is simultaneously exerted on the slow speed shaft.
4. Use JIS B1051 erection bolts, with strength in exceeding 8.8.

Table F-11 Allowable Radial Load Pro (Upper: N, Lower: kgf, Max) on the Slow Speed Shaft of the Light Heavy Radial Load Type.

(When Cf, Lf, Fs=1)

Frame Size		Output Speed r/min											
Single Reduction	Double Reduction	~1	2	3	4	5	6	8	10	15	20	25	30
613□	613□DA	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700
	613□DB	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
	613□DC												
616□	616□DA	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100
	616□DB	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250
	616□DC												
617□	617□DA	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500
	617□DB	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010
	617□DC												
618□	618□DA	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700
	618□DB	4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	4250
619□	619□DA	59000	59000	59000	59000	59000	59000	59000	59000	59000	59000	59000	59000
	619□DB	6010	6010	6010	6010	6010	6010	6010	6010	6010	6010	6010	6010

Frame Size		Output Speed r/min											
Single Reduction	Double Reduction	35	40	50	60	80	100	125	150	200	250	300	
613□	613□DA	14700	14700	14700	14700	14100	13500	12600	11900	10900	10200	9660	
	613□DB	1500	1500	1500	1500	1440	1380	1280	1210	1110	1040	985	
	613□DC												
616□	616□DA	22100	22100	22100	22100	22100	21600	20100	19000	17500	16300	15400	
	616□DB	2250	2250	2250	2250	2250	2200	2050	1940	1780	1660	1570	
	616□DC												
617□	617□DA	29500	29500	29500	29500	29500	29300	27400	25900	23800	22200	21100	
	617□DB	3010	3010	3010	3010	3010	2990	2790	2640	2430	2260	2150	
	617□DC												
618□	618□DA	41700	41700	41700	41700	41300	38600	36200	34200	31400	-	-	
	618□DB	4250	4250	4250	4250	4210	3930	3690	3490	3200	-	-	
619□	619□DA	59000	59000	55200	53000	47200	44000	41000	38300	34700	-	-	
	619□DB	6010	6010	5630	5400	4810	4490	4180	3900	3540	-	-	

Note: □ indicates 0 or 5, expressing combination with reduction ratio.

TECHNICAL
DATA

Reducer

Allowable Radial and Axial Load

Table F-12 Allowable Radial Load Pro (Upper: N, Lower: kgf, Max) on the Slow Speed Shaft of the Heavy Radial Load Type.

(Cf, Lf, Fs=1)

Frame Size		Output Speed r/min											
Single Reduction	Double Reduction	~1	2	3	4	5	6	8	10	15	20	25	30
613□	613□DA	24000	24000	24000	24000	24000	24000	24000	24000	23800	21800	20400	19300
	613□DB	2450	2450	2450	2450	2450	2450	2450	2450	2430	2220	2080	1970
	613□DC												
616□	616□DA	33600	33600	33600	33600	33600	33600	33600	33600	33600	33600	33300	31500
	616□DB	3430	3430	3430	3430	3430	3430	3430	3430	3430	3430	3390	3210
	616□DC												
617□	617□DA	45900	45900	45900	45900	45900	45900	45900	45900	45900	45900	45300	42900
	617□DB	4680	4680	4680	4680	4680	4680	4680	4680	4680	4680	4620	4370
	617□DC												
618□	618□DA	55700	55700	55700	55700	55700	55700	55700	55700	55700	55700	55700	55700
	618□DB	5680	5680	5680	5680	5680	5680	5680	5680	5680	5680	5680	5680
	618□DC												
619□	619□DA	71800	71800	71800	71800	71800	71800	71800	71800	71800	71800	71800	69300
	619□DB	7320	7320	7320	7320	7320	7320	7320	7320	7320	7320	7320	7060
	619□DC												
6205	6205DA	97800	97800	97800	97800	97800	97800	97800	97800	89100	81800	76500	72400
	6205DB	9970	9970	9970	9970	9970	9970	9970	9970	9080	8340	7800	7380
	6205DC												
6215	6215DA	132000	132000	132000	132000	126000	119000	109000	102000	90500	83000	77600	73500
	6215DB	13500	13500	13500	13500	12800	12100	11100	10400	9230	8460	7910	7490
	6215DC												
6225	6225DA	161000	161000	161000	161000	156000	148000	135000	126000	112000	103000	96300	91100
	6225DB	16400	16400	16400	16400	15900	15100	13800	12800	11400	10500	9820	9290
	6225DC												
6235	6235DA	183000	183000	183000	183000	183000	183000	170000	159000	141000	129000	121000	114000
	6235DB	18700	18700	18700	18700	18700	18700	17300	16200	14400	13100	12300	11600
	6235DC												
6245	6245DA	223000	223000	223000	223000	209000	198000	181000	169000	150000	138000	129000	122000
	6245DB	22700	22700	22700	22700	21300	20200	18500	17200	15300	14100	13100	12400
	6245DC												
6255	6255DA	274000	274000	274000	274000	258000	244000	224000	210000	185000	170000	159000	151000
	6255DB	27900	27900	27900	27900	26300	24900	22800	21400	18900	17300	16200	15400
	6255DC												
6265	6265DA	283000	283000	283000	283000	283000	283000	270000	253000	224000	205000	191000	181000
	6265DB	28800	28800	28800	28800	28800	28800	27500	25800	22800	20900	19500	18500
	6265DC												
6275	6275DA	272000	272000	272000	272000	272000	272000	272000	272000	272000	272000	272000	272000
	6275DB	27700	27700	27700	27700	27700	27700	27700	27700	27700	27700	27700	27700
	6275DC												

Frame Size		Output Speed r/min											
Single Reduction	Double Reduction	35	40	50	60	80	100	125	150	200	250	300	
613□	613□DA	18400	17800	16500	15600	14400	13500	12600	11900	10900	10200	9660	
	613□DB	1880	1810	1680	1590	1470	1380	1280	1210	1110	1040	985	
	613□DC												
616□	616□DA	30100	28900	27000	25600	23500	22000	20500	19400	17900	16600	15400	
	616□DB	3070	2950	2750	2610	2400	2240	2090	1980	1820	1690	1570	
	616□DC												
617□	617□DA	40900	39300	36800	34800	31900	29900	27900	26400	24300	22200	21100	
	617□DB	4170	4010	3750	3550	3250	3050	2840	2690	2480	2260	2150	
	617□DC												
618□	618□DA	54000	51900	48500	45900	42100	39400	36900	34900	32000	-	-	
	618□DB	5500	5290	4940	4680	4290	4020	3760	3560	3260	-	-	
	618□DC												
619□	619□DA	66100	63500	59400	56300	51600	48300	45100	42800	39300	-	-	
	619□DB	6740	6470	6060	5740	5260	4920	4600	4360	4010	-	-	
	619□DC												
6205	6205DA	69100	66400	62100	58800	54000	50500	47100	44600	41000	-	-	
	6205DB	7040	6770	6330	5990	5500	5150	4800	4550	4180	-	-	
	6205DC												
6215	6215DA	70100	67400	63000	59600	54800	51300	47900	45400	41600	-	-	
	6215DB	7150	6870	6420	6080	5590	5230	4880	4630	4240	-	-	
	6215DC												
6225	6225DA	87000	83500	78100	74000	67900	63500	59400	56300	51500	-	-	
	6225DB	8870	8510	7960	7540	6920	6470	6060	5740	5250	-	-	
	6225DC												
6235	6235DA	109000	105000	98100	92900	85300	79800	74500	-	-	-	-	
	6235DB	11100	10700	10000	9470	8700	8130	7590	-	-	-	-	
	6235DC												
6245	6245DA	116000	112000	105000	98900	90800	84900	79400	-	-	-	-	
	6245DB	11800	11400	10700	10100	9260	8650	8090	-	-	-	-	
	6245DC												
6255	6255DA	144000	139000	129000	123000	112000	105000	98300	-	-	-	-	
	6255DB	14700	14200	13100	12500	11400	10700	10000	-	-	-	-	
	6255DC												
6265	6265DA	174000	166000	156000	148000	135000	126000	118000	-	-	-	-	
	6265DB	17700	16900	15900	15100	13800	12800	12000	-	-	-	-	
	6265DC												
6275	6275DA	-	-	-	-	-	-	-	-	-	-	-	
	6275DB	-	-	-	-	-	-	-	-	-	-	-	
	6275DC												

Note: □ indicates 0 or 5, expressing combination with reduction ratio.

Allowable Radial and Axial Load

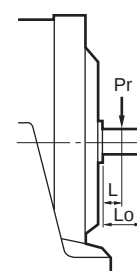
Confirm the radial load on the high speed shaft, following the formula below:

$$Pr \leq \frac{Pro}{Lf \cdot Cf \cdot Fs} [N, \text{kgf}]$$

Pr: Actual radial load [N, kgf]
 Pro: Allowable radial load [N, kgf]
 Lf: Load location factor (Table F-11)
 Cf: Coupling factor (Table F-5)
 Fs: Shock factor (Table F-6)

Table F-13 Radial Load Location Factor (High Speed Shaft) Lf

Frame Size		Load Location L mm																			
Single Reduction	Double Reduction	5	10	15	20	25	30	35	40	45	50	60	70	80	90	100	120	140	160	180	200
607□SK	-	0.72	0.91	1.09	1.28	1.46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
608□SK	-	0.90	0.97	1.03	1.10	1.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
609□SK	-	0.90	0.97	1.03	1.10	1.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
610□SK	-	0.75	0.92	1.08	1.25	1.42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
611□SK	-	0.87	0.92	0.97	1.03	1.08	1.13	1.18	-	-	-	-	-	-	-	-	-	-	-	-	-
606□	606□DA, 607□DA	0.73	0.91	1.20	1.60	2.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
607□	609□DA, 610□DA, 612□DA 613□DA, 614□DA	0.73	0.91	1.20	1.60	2.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
608□	-	0.73	0.91	1.20	1.60	2.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
609□	612□DB, 613□DB, 614□DB 616□DA, 617□DA	0.88	0.96	1.20	1.59	2.00	2.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-
610□	613□DC, 614□DC, 616□DB 617□DB, 618□DA	0.91	0.97	1.20	1.59	2.00	2.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-
611□	-	0.91	0.97	1.20	1.59	2.00	2.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-
612□	616□DC, 617□DC 619□DA, 6205DA	-	0.81	0.93	1.14	1.41	1.67	1.96	2.22	-	-	-	-	-	-	-	-	-	-	-	-
613□	618□DB, 619□DB, 6205DB 6215DA, 6225DA	-	0.78	0.89	1.00	1.23	1.45	1.69	1.92	2.13	-	-	-	-	-	-	-	-	-	-	-
614□	-	-	0.78	0.89	1.00	1.23	1.45	1.69	1.92	2.13	-	-	-	-	-	-	-	-	-	-	-
616□	6215DB, 6235DA, 6245DA	-	0.92	0.95	0.98	1.05	1.18	1.28	1.41	1.52	1.64	1.85	-	-	-	-	-	-	-	-	-
617□	6225DA, 6255DB	-	-	0.93	0.96	0.99	1.05	1.16	1.28	1.39	1.49	1.72	1.92	2.17	-	-	-	-	-	-	-
618□	6235DB, 6245DB	-	-	-	0.93	0.96	0.99	1.05	1.15	1.25	1.35	1.56	1.75	1.96	2.17	-	-	-	-	-	-
619□	6255DB, 6265DA, 6275DA	-	-	-	0.93	0.95	0.98	1.00	1.09	1.16	1.25	1.41	1.59	1.75	1.92	2.08	-	-	-	-	-
6205	-	-	-	-	-	0.93	0.95	0.97	1.00	1.04	1.10	1.22	1.33	1.45	1.56	1.68	1.91	-	-	-	-
6215	-	-	-	-	-	0.93	0.95	0.98	1.00	1.03	1.08	1.19	1.29	1.40	1.51	1.61	1.82	-	-	-	-
6225	-	-	-	-	-	0.94	0.96	0.98	1.00	1.02	1.04	1.08	1.14	1.24	1.33	1.42	1.60	-	-	-	-
6235	-	-	-	-	-	0.84	0.86	0.87	0.89	0.93	0.98	1.07	1.16	1.25	1.34	1.44	1.62	-	-	-	-
6245	-	-	-	-	-	0.91	0.92	0.94	0.96	0.98	0.99	1.07	1.15	1.24	1.33	1.42	1.59	-	-	-	-
6255	-	-	-	-	-	-	-	0.92	0.93	0.94	0.96	0.99	1.03	1.09	1.16	1.22	1.34	1.47	1.60	1.72	-
6265	-	-	-	-	-	-	-	0.92	0.93	0.94	0.96	0.99	1.03	1.09	1.16	1.22	1.34	1.47	1.60	1.72	-
6275	-	-	-	-	-	-	-	-	-	0.93	0.94	0.97	0.99	1.04	1.14	1.22	1.39	1.56	1.72	1.92	2.08
Single Reduction	Double Reduction	5	10	15	20	25	30	35	40	45	50	60	70	80	90	100	120	140	160	180	200
Frame Size		Load Location L mm																			



Lf=1
when "L=Lo/2"

Note: □ indicates 0 or 5, expressing combination with reduction ratio.

TECHNICAL
DATA

Reducer

Allowable Radial and Axial Load

Table F-14 Radial Load Capacity (High Speed Shaft) Pro (Upper row: N, Lower row: kgf)

(When Cf, Lf, Fs=1)

Frame Size		Reduction Ratio (Double Reduction: Input side)	Input Speed r/min						
Single Reduction	Double Reduction		1750	1450	1165	980	870	720	580
607□SK	-	2.5 - 10	196 20	147 15	147 15	196 20	196 20	196 20	196 20
608□SK	-	2.5 - 10	196 20	147 15	147 15	196 20	196 20	196 20	196 20
609□SK	-	2.5 - 10	294 30	294 30	294 30	294 30	294 30	294 30	294 30
610□SK	-	2.5 - 10	441 45	441 45	491 50	540 55	589 60	589 60	589 60
611□SK	-	2.5 - 10	441 45	343 35	441 45	491 50	491 50	540 55	589 60
606□	606□DA, 607□DA	6 - 17, 25 - 35	196 20	147 15	147 15	196 20	196 20	196 20	196 20
		21, 43	196 8	147 3	147 5	196 5	196 5	196 5	196 5
607□	609□DA, 610□DA, 612□DA 613□DA, 614□DA	6 - 17, 25 - 35, 51, 59	196 20	147 15	147 15	196 20	196 20	196 20	196 20
		21, 43	49.1 5	49.1 5	49.1 5	49.1 5	49.1 5	147 15	196 20
608□	-	6 - 15, 21 - 29, 43 - 59, 87	196 20	147 15	147 15	196 20	196 20	196 20	196 20
		17, 35, 71	49.1 5	49.1 5	49.1 5	49.1 5	49.1 5	147 15	196 20
609□	612□DB, 613□DB, 614□DB 616□DA, 617□DA	6 - 17, 25 - 71, 119	294 30	294 30	294 30	294 30	294 30	294 30	294 30
		21, 87	196 20	196 20	196 20	196 20	245 25	245 25	294 30
610□	613□DC, 614□DC, 616□DB 617□DB, 618VDA	6 - 11, 17 - 119	441 45	441 45	491 50	540 55	589 60	589 60	589 60
		13, 15	441 45	343 35	441 45	491 50	491 50	540 55	589 60
611□	-	6, 8, 21 - 87	441 45	343 35	441 45	491 50	491 50	540 55	589 60
		11 - 17	196 20	196 20	196 20	196 20	245 25	245 25	294 30
612□	616□DC, 617□DC 619□DA, 6205DA	6 - 17	590 60	690 70	740 75	780 80	880 90	880 90	880 90
		21 - 87	540 55	440 45	490 50	540 55	590 60	880 90	880 90
613□	618□DB, 619□DB, 6205DB 6215DA, 6225DA	6 - 17, 21	1370 140	1370 140	1370 140	1520 155	1620 165	1720 175	1860 190
		25 - 87	1280 130	1280 130	1280 130	1370 140	1470 150	1570 160	1770 180
614□	-	6, 8	1370 140	1370 140	1370 140	1520 155	1620 165	1720 175	1860 190
		11 - 21	1230 125	980 100	1080 110	1180 120	1230 125	1320 135	1470 150
		25	1080 110	1130 115	1180 120	1280 130	1320 135	1370 140	1470 150
		29 - 87	540 55	590 60	590 60	690 70	690 70	690 70	1080 110
616□	6215DB, 6235DA, 6245DA	8 - 25, 51, 59	1770 180	1770 180	1960 200	2060 210	2160 220	2160 220	2160 220
		29 - 43, 71, 87	1080 110	1180 120	1280 130	1370 140	1370 140	1570 160	1770 180
617□	6225DA, 6255DB	11 - 87	2060 210	2060 210	2260 230	2260 230	2350 240	2450 250	2650 270
618□	6235DB, 6245DB	11 - 87	2750 280	2550 260	2750 280	2940 300	3040 310	3340 340	3430 350
619□	6255DB, 6265DA, 6275DA	11 - 25	3040 310	3040 310	3240 330	3530 360	3630 370	3920 400	3920 400
		29 - 87	2650 270	2550 260	2840 290	2940 300	3140 320	3340 340	3630 370
6205	-	11 - 87	5400 550	4910 501	5400 550	5890 600	6080 620	6230 635	6180 630
6215	-	11 - 87	5740 585	5100 520	5440 555	6130 625	6330 645	6820 695	7260 740
6225	-	11 - 87	6620 675	5790 590	5980 610	6130 625	6620 675	6970 710	7500 765
6235	-	11 - 87	-	-	10000 1020	9520 970	9170 935	8980 915	8730 890
6245	-	11 - 87	-	-	11100 1130	10100 1030	10100 1030	10600 1080	11200 1140
6255	-	11 - 87	-	-	11800 1200	10800 1100	11300 1150	12300 1250	13100 1340
6265	-	11 - 87	-	-	11800 1200	10800 1100	11300 1150	12300 1250	13100 1340
6275	-	29 - 87	-	-	14700 1500	14700 1500	14700 1500	14700 1500	14700 1500
Single Reduction	Double Reduction	Reduction Ratio (Double Reduction: Input side)	1750	1450	1165	980	870	720	580
Frame Size			Input Speed r/min						

Note: □ indicates 0 or 5, expressing combination with reduction ratio.

Introduction to Moment of Inertia · GD²

2. Calculation of Moment of Inertia

(1) Moment of Inertia of Rotating Motion

Rotating motion on the center of gravity		Rotating motion off the center of gravity	
	$J = \frac{1}{8} MD^2 \text{ [kg} \cdot \text{m}^2 \text{]}$		$J = \frac{M}{4} \left(\frac{1}{2} D^2 + 4R^2 \right) \text{ [kg} \cdot \text{m}^2 \text{]}$
	$J = \frac{1}{8} M (D^2 + d^2) \text{ [kg} \cdot \text{m}^2 \text{]}$		$J = \frac{M}{4} \left(\frac{a^2 + b^2}{3} + 4R^2 \right) \text{ [kg} \cdot \text{m}^2 \text{]}$
	$J = \frac{1}{12} M (a^2 + b^2) \text{ [kg} \cdot \text{m}^2 \text{]}$		$J = \frac{1}{12} M (4L^2 + C^2) \text{ [kg} \cdot \text{m}^2 \text{]}$

(2) Moment of Inertia of Rectilinear Motion (Loaded Shaft Side)

General application		$J = \frac{M}{4} \left(\frac{V}{\pi N_s} \right)^2 = \frac{M}{4} D^2 \text{ [kg} \cdot \text{m}^2 \text{]}$
Horizontal motion by conveyor		$J = \frac{1}{4} \left(\frac{M_1 + M_2}{2} + M_3 + M_4 \right) \times D^2 \text{ [kg} \cdot \text{m}^2 \text{]}$
Horizontal motion by lead screw		$J = \frac{M}{4} \left(\frac{V}{\pi N_s} \right)^2 = \frac{M}{4} \left(\frac{P}{\pi} \right)^2 \text{ [kg} \cdot \text{m}^2 \text{]}$
Vertical motion by hoist		$J = \frac{M_1 D^2}{4} + \frac{1}{8} M_2 D^2 \text{ [kg} \cdot \text{m}^2 \text{]}$

(3) Calculation of Moment of Inertia at Different Rotating Speeds

	$J_L = \left(\frac{N_{s2}}{N_{s1}} \right)^2 J_R = \left(\frac{1}{Z} \right)^2 J_R$
	Z: Total ratio

Introduction to Moment of Inertia · GD^2 3. Calculation of GD^2 (1) GD^2 of Rotating Motion

Rotating motion on the center of gravity		Rotating motion off the center of gravity	
	$GD^2 = \frac{1}{2} WD^2 \text{ [kgf} \cdot \text{m}^2\text{]}$		$GD^2 = W \left(\frac{1}{2} D^2 + 4R^2 \right) \text{ [kgf} \cdot \text{m}^2\text{]}$
	$GD^2 = \frac{1}{2} W (D^2 + d^2) \text{ [kgf} \cdot \text{m}^2\text{]}$		$GD^2 = W \left(\frac{a^2 + b^2}{3} + 4R^2 \right) \text{ [kgf} \cdot \text{m}^2\text{]}$
	$GD^2 = \frac{1}{3} W (a^2 + b^2) \text{ [kgf} \cdot \text{m}^2\text{]}$		$GD^2 = \frac{1}{3} W (4L^2 + C^2) \text{ [kgf} \cdot \text{m}^2\text{]}$

(2) GD^2 of Rectilinear Motion (Loaded Shaft Side GD^2)

General application		$GD^2 = W \left(\frac{V}{\pi \cdot N} \right)^2 = WD^2 \text{ [kgf} \cdot \text{m}^2\text{]}$
Horizontal motion by conveyor		$GD^2 = \left(\frac{W_1 + W_2}{2} + W_3 + W_4 \right) \times D^2 \text{ [kgf} \cdot \text{m}^2\text{]}$
Horizontal motion by lead screw		$GD^2 = W \left(\frac{V}{\pi \cdot N} \right)^2 = W \left(\frac{P}{\pi} \right)^2 \text{ [kgf} \cdot \text{m}^2\text{]}$
Vertical motion by hoist		$GD^2 = W_1 D^2 + \frac{1}{2} W_2 D^2 \text{ [kgf} \cdot \text{m}^2\text{]}$

(3) Calculation of Moment of Inertia at Different Rotating Speeds

	$GD_L^2 = \left(\frac{N_2}{N_1} \right)^2 GD^2 = \left(\frac{1}{Z} \right)^2 GD^2$
	Z: Total ratio

TECHNICAL
DATA

Reducer

Introduction to Moment of Inertia · GD²Moment of Inertia · GD²Table F-15 Moment of Inertia·GD²on Motor Shaft of CYCLO® Gearmotor (Single Stage Reduction, CYCLO Part Only)Unit: $\frac{\text{GD}^2}{(\times 10^{-4}\text{kgf}\cdot\text{m}^2)}$ $\frac{\text{J}_c \text{ (Moment of inertia)}}{(\times 10^{-4}\text{kg}\cdot\text{m}^2)}$

Frame Size	Reduction Ratio															
	6		8		11		13		15		17		21		25	
	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c
6060 6065	0.666	0.167	0.532	0.133	0.449	0.112	0.423	0.106	0.407	0.102	0.396	0.099	0.378	0.095	0.366	0.092
6070 6075	0.682	0.171	0.541	0.135	0.454	0.114	0.426	0.107	0.409	0.102	0.398	0.100	0.379	0.095	0.367	0.092
6080 6085	1.61	0.403	1.32	0.330	1.12	0.280	1.07	0.268	1.02	0.255	0.997	0.249	0.688	0.172	0.665	0.166
6090 6095	3.82	0.955	2.96	0.740	2.37	0.593	2.49	0.623	2.42	0.605	2.12	0.530	1.61	0.403	1.56	0.390
6100 6105	3.07	0.768	2.22	0.555	1.36	0.340	1.40	0.350	1.28	0.320	0.897	0.224	1.03	0.258	0.942	0.236
6110 6115	5.99	1.50	4.44	1.11	3.38	0.845	3.07	0.768	2.88	0.720	2.75	0.688	2.44	0.610	2.38	0.595
6120 6125	12.4	3.10	10.1	2.53	6.24	1.56	6.82	1.71	6.46	1.62	4.82	1.21	5.56	1.39	5.17	1.29
6130 6135	34.3	8.58	23.5	5.88	17.3	4.33	14.7	3.68	13.2	3.30	12.1	3.03	10.0	2.51	9.39	2.35
6140 6145	37.7	9.43	25.6	6.40	18.2	4.55	14.7	3.68	13.3	3.33	11.8	2.95	10.1	2.52	9.41	2.35
6160 6165	98.7	24.7	68.9	17.2	45.4	12.4	41.5	11.0	37.7	9.90	32.2	8.35	29.9	7.65	28.2	71.5
6170 6175	264	66.0	197	49.3	153	37.5	140	35.3	124	31.3	119	30.0	111	28.0	107	27.0
6180 6185	-	-	-	-	231	58.5	209	52.8	186	46.8	177	44.5	167	42.3	156	39.3
6190 6195	-	-	-	-	545	136	503	126	478	120	460	115	428	107	415	104
6205	-	-	-	-	646	162	-	-	565	141	-	-	517	129	-	-
6215	-	-	-	-	990	248	-	-	864	216	-	-	789	197	-	-
6225	-	-	-	-	1220	305	-	-	1030	258	-	-	927	232	-	-
6235	-	-	-	-	1990	498	-	-	1710	428	-	-	1530	383	-	-
6245	-	-	-	-	3610	903	-	-	3170	793	-	-	2890	723	-	-
6255	-	-	-	-	5870	1470	-	-	5120	1280	-	-	4630	1160	-	-
6265	-	-	-	-	8590	2150	-	-	7460	1870	-	-	6800	1700	-	-
6275	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Frame Size	Reduction Ratio															
	29		35		43		51		59		71		87		119	
	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c
6060 6065	0.361	0.090	0.356	0.089	0.351	0.088	-	-	-	-	-	-	-	-	-	-
6070 6075	0.362	0.091	0.356	0.089	0.351	0.088	0.348	0.087	0.346	0.087	-	-	-	-	-	-
6080 6085	0.650	0.163	0.633	0.158	0.380	0.095	0.373	0.093	0.370	0.093	0.365	0.091	0.363	0.091	-	-
6090 6095	1.30	0.325	1.01	0.253	0.993	0.248	0.968	0.242	0.723	0.181	0.954	0.239	0.712	0.178	0.944	0.236
6100 6105	0.651	0.163	0.607	0.152	0.573	0.143	0.790	0.198	0.528	0.132	0.767	0.192	0.511	0.128	0.750	0.188
6110 6115	2.32	0.580	2.23	0.558	2.19	0.548	2.13	0.533	2.12	0.530	2.10	0.525	2.09	0.523	-	-
6120 6125	3.63	0.908	3.46	0.865	3.30	0.825	4.58	1.15	3.15	0.788	4.48	1.12	3.04	0.760	-	-
6130 6135	8.63	2.16	8.33	2.08	7.84	1.96	7.71	1.93	7.64	1.91	7.45	1.86	7.40	1.85	-	-
6140 6145	8.63	2.16	8.34	2.09	7.84	1.96	7.65	1.91	7.64	1.91	7.45	1.86	7.40	1.85	-	-
6160 6165	25.2	6.35	24.3	6.10	23.3	5.85	23.0	5.75	23.1	5.78	22.1	5.53	21.8	5.45	-	-
6170 6175	102	25.5	100	25.3	97.7	24.5	96.7	24.2	95.6	23.9	95.2	23.8	94.7	23.7	-	-
6180 6185	149	37.5	147	37.0	144	36.0	140	35.0	139	34.8	138	34.5	137	34.3	-	-
6190 6195	402	101	393	98.3	387	96.8	383	95.8	380	95.0	378	94.5	376	94.0	-	-
6205	482	121	-	-	460	115	-	-	451	113	-	-	446	117	-	-
6215	735	184	-	-	700	175	-	-	686	172	-	-	678	170	-	-
6225	840	210	-	-	788	197	-	-	766	192	-	-	753	188	-	-
6235	1410	353	-	-	1340	335	-	-	1300	325	-	-	1290	323	-	-
6245	2720	680	-	-	2600	650	-	-	2550	638	-	-	2530	633	-	-
6255	4320	1080	-	-	4140	1040	-	-	4060	1020	-	-	4010	1000	-	-
6265	6330	1580	-	-	6030	1510	-	-	5900	1480	-	-	5820	1460	-	-
6275	19600	4900	-	-	18900	4730	-	-	18600	4650	-	-	18400	4600	-	-

Note: 1. Table F-15 does not include GD² of motor.Obtain the GD² of the single stage reduction gearmotor by adding the GD² of the motor Tables F-19, 20.2. Calculate the GD² of the 2-Stage reduction model from the following formula:

$$\text{GD}^2 \text{ of the 2-stage reduction model} = \text{GD}^2 \text{ of 1st stage} + \frac{\text{GD}^2 \text{ (2nd stage)}}{(\text{Reduction ratio of 1st stage})^2}$$

Calculate the GD² of the 1st stage (input side) in the same manner as calculating the GD² of single stage reduction model.For the GD² of the 2nd stage (output side), the values shown in Table F-15 may be used.

*The values in Table F-15 are subject to change without notice.

Introduction to Moment of Inertia · GD²Table F-16 Moment of Inertia · GD² on High Speed Shaft of CYCLO® Reducer
(Single Stage Reducer)Unit: $\frac{GD^2}{(\times 10^{-4} \text{kgf} \cdot \text{m}^2)}$ $\frac{J_c}{(\times 10^{-4} \text{kg} \cdot \text{m}^2)}$ (Moment of inertia)

Frame Size	Reduction Ratio															
	6		8		11		13		15		17		21		25	
	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c
6060 6065	0.764	0.191	0.630	0.158	0.547	0.137	0.521	0.130	0.505	0.126	0.494	0.124	0.476	0.119	0.464	0.116
6070 6075	0.780	0.195	0.639	0.160	0.552	0.138	0.524	0.131	0.507	0.127	0.496	0.124	0.477	0.119	0.465	0.116
6080 6085	1.70	0.425	1.41	0.353	1.22	0.305	1.16	0.290	1.11	0.278	1.09	0.273	0.782	0.196	0.759	0.190
6090 6095	4.06	1.015	2.73	0.683	2.60	0.650	2.25	0.563	2.18	0.545	2.36	0.590	1.380	0.345	1.330	0.333
6100 6105	3.32	0.830	1.98	0.495	1.60	0.400	1.15	0.288	1.03	0.259	1.18	0.295	0.783	0.196	0.695	0.174
6110 6115	6.23	1.56	4.68	1.17	3.62	0.905	3.31	0.828	3.12	0.780	2.99	0.748	2.68	0.670	2.62	0.655
6120 6125	13.8	3.45	8.68	2.17	7.64	1.91	5.42	1.36	5.06	1.27	6.22	1.56	4.17	1.04	3.77	0.943
6130 6135	36.8	9.20	26.0	6.50	19.8	4.95	17.2	4.30	15.8	3.95	14.6	3.65	12.6	3.15	18.9	4.73
6140 6145	41.7	10.4	28.9	7.23	21.2	5.30	17.3	4.33	15.8	3.95	14.5	3.63	12.6	3.15	12.0	3.00
6160 6165	146	36.5	116	29.0	92.6	23.2	88.7	22.2	84.9	21.2	79.4	19.9	77.1	19.3	75.4	18.9
6170 6175	315	78.8	248	62.0	204	51.0	191	47.8	175	43.8	170	42.5	161	40.3	158	39.5
6180 6185	-	-	-	-	292	73.0	271	67.8	247	61.8	239	59.8	228	57.0	217	54.3
6190 6195	-	-	-	-	678	169	636	159	611	152	594	148	561	140	548	137
6205	-	-	-	-	946	237	-	-	864	216	-	-	817	204	-	-
6215	-	-	-	-	1490	373	-	-	1360	340	-	-	1290	323	-	-
6225	-	-	-	-	1930	483	-	-	1750	438	-	-	1640	410	-	-
6235	-	-	-	-	3240	810	-	-	2960	740	-	-	2780	695	-	-
6245	-	-	-	-	4940	1240	-	-	4500	1130	-	-	4220	1060	-	-
6255	-	-	-	-	8910	2230	-	-	8160	2040	-	-	7670	1920	-	-
6265	-	-	-	-	11700	2930	-	-	10600	2650	-	-	9960	2490	-	-
6275	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Frame Size	Reduction Ratio																GD ² of fan Moment of Inertia	
	29		35		43		51		59		71		87		119			
	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c
6060 6065	0.460	0.115	0.454	0.114	0.449	0.112	-	-	-	-	-	-	-	-	-	-	-	-
6070 6075	0.460	0.115	0.454	0.114	0.450	0.113	0.446	0.112	0.445	0.111	-	-	-	-	-	-	-	-
6080 6085	0.744	0.186	0.727	0.182	0.474	0.119	0.467	0.117	0.463	0.116	0.459	0.115	0.456	0.114	-	-		
6090 6095	1.54	0.385	1.25	0.313	1.23	0.308	0.731	0.183	0.960	0.240	0.717	0.179	0.949	0.237	0.707	0.177	-	-
6100 6105	0.899	0.225	0.854	0.214	0.820	0.205	0.543	0.136	0.776	0.194	0.520	0.130	0.758	0.190	0.503	0.126	-	-
6110 6115	2.56	0.64	2.47	0.618	2.43	0.608	2.37	0.593	2.36	0.590	2.34	0.585	2.33	0.583	-	-	-	-
6120 6125	5.03	1.26	4.86	1.22	4.70	1.18	3.19	0.798	4.55	1.14	3.08	0.770	4.44	1.11	-	-	-	-
6130 6135	11.2	2.80	10.9	2.73	10.3	2.58	10.2	2.55	10.2	2.55	9.97	2.49	9.93	2.48	-	-	-	-
6140 6145	11.2	2.80	10.9	2.73	10.3	2.58	10.2	2.55	10.2	2.55	9.99	2.50	9.93	2.48	-	-	-	-
6160 6165	72.4	18.1	71.5	17.9	70.5	17.6	70.2	17.6	70.3	17.6	69.3	17.3	69.0	17.3	-	-	35.4	8.85
6170 6175	153	38.3	151	37.8	148	37.0	147	36.8	146	36.5	146	36.5	145	36.3	-	-	33.3	8.33
6180 6185	211	52.8	209	52.3	206	51.5	202	50.5	200	50.0	199	49.8	198	49.5	-	-	32.7	8.18
6190 6195	535	133	527	131	520	130	516	129	513	128	511	127	509	127	-	-	83.6	20.9
6205	782	196	-	-	760	190	-	-	750	188	-	-	745	186	-	-	248	62.0
6215	1240	310	-	-	1200	300	-	-	1190	298	-	-	1180	295	-	-	419	105
6225	1550	388	-	-	1500	375	-	-	1480	370	-	-	1470	368	-	-	599	150
6235	2660	665	-	-	2580	645	-	-	2550	638	-	-	2530	633	-	-	1040	260
6245	4040	1010	-	-	3930	983	-	-	3880	970	-	-	3850	963	-	-	1040	260
6255	7360	1840	-	-	7180	1800	-	-	7100	1780	-	-	7060	1770	-	-	2370	593
6265	9480	2370	-	-	9180	2300	-	-	9050	2260	-	-	8980	2250	-	-	2370	593
6275	-	-	-	-	29900	7480	-	-	29600	7400	-	-	29400	7350	-	-	9540	2390

Note: 1. The value of the fan has been to the GD² of the Frame sizes of 6160-6275.
 2. The GD² of the 2-stage reduction model is calculated by the following formula:

$$\text{GD}^2 \text{ of the 2-stage reduction model} = \text{GD}^2 \text{ of 1st stage} + \frac{\text{GD}^2 \text{ (2nd stage)}}{(\text{Reduction ratio of 1st stage})^2}$$

 Use value in Table F-16 for GD² of 1st stage.
 For the GD² of the 2nd stage, deduct the GD² of the fan from the value in Table F-16.

*The values in Table F-16 are subject to change without notice.

TECHNICAL
DATA

Reducer

Moment of Inertia·GD²Table F-19 Moment of Inertia · GD² of Three Phase Motor

[4P Motor]

Unit: GD_M² (kgf·m²) J_M (Moment of inertia) (kg·m²)

kW × P	0.1kW × 4P		0.2kW × 4P		0.25kW × 4P		0.4kW × 4P		0.55kW × 4P		0.75kW × 4P	
	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M
Standard	0.0013	0.000325	0.0020	0.000500	0.0020	0.000500	0.0026	0.000650	0.0041	0.00101	0.0048	0.00120
With Brake	0.0014	0.000350	0.0022	0.000550	0.0022	0.000550	0.0027	0.000675	0.0045	0.00111	0.0052	0.00130
kW × P	1.1kW × 4P		1.5kW × 4P		2.2kW × 4P		3.0kW × 4P		3.7kW × 4P		5.5kW × 4P	
	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M
Standard	0.0074	0.00185	0.0085	0.00213	0.0133	0.00333	0.0281	0.00700	0.0339	0.00848	0.0457	0.0114
With Brake	0.0083	0.00208	0.0094	0.00235	0.0149	0.00373	0.0325	0.00810	0.0383	0.00958	0.0501	0.0125
kW × P	7.5kW × 4P		11kW × 4P		15kW × 4P		18.5kW × 4P		22kW × 4P		30W × 4P	
	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M
Standard	0.107	0.0268	0.150	0.0375	0.359	0.0898	0.900	0.225	0.900	0.225	1.00	0.250
With Brake	0.121	0.0303	0.164	0.0410	0.428	0.107	0.972	0.243	0.972	0.243	1.05	0.262
kW × P	37kW × 4P		45kW × 4P		55kW × 4P							
	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M						
Standard	1.23	0.308	1.37	0.343	2.70	0.675						
With Brake	1.28	0.321	-	-	-	-						

[6P Motor]

kW × P	0.1kW × 6P		0.2kW × 6P		0.25kW × 6P		0.4kW × 6P		0.55kW × 6P		0.75kW × 6P	
	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M
Standard	0.0023	0.000575	0.0031	0.000775	0.0031	0.000775	0.0067	0.00168	0.0077	0.00193	0.0120	0.00300
With Brake	0.0025	0.000625	0.0032	0.000800	0.0032	0.000800	0.0071	0.00178	0.0081	0.00203	0.0129	0.00323
kW × P	1.1kW × 6P		1.5kW × 6P		2.2kW × 6P		3.0kW × 6P		3.7kW × 6P		5.5kW × 6P	
	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M
Standard	0.0145	0.00363	0.0212	0.00530	0.0527	0.0132	0.0657	0.0164	0.0740	0.0185	0.140	0.0350
With Brake	0.0154	0.00385	0.0228	0.00570	0.0571	0.0143	0.0701	0.0175	0.0784	0.0196	0.154	0.0385
kW × P	7.5kW × 6P		11kW × 6P		15kW × 6P		18.5kW × 6P		22kW × 6P		30W × 6P	
	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M
Standard	0.286	0.0715	0.359	0.0898	1.27	0.318	1.45	0.363	1.45	0.363	1.90	0.475
With Brake	0.355	0.0888	0.428	0.1070	-	-	-	-	-	-	-	-
kW × P	37kW × 6P		45kW × 6P		55kW × 6P							
	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M						
Standard	2.40	0.600	4.00	1.00	4.70	1.18						
With Brake	-	-	-	-	-	-						

TECHNICAL
DATA

Reducer

Table F-20 Moment of Inertia · GD² of Motor for InverterUnit: GD_M² (kgf·m²) J_M (Moment of inertia) (kg·m²)

kW × P	0.1kW × 4P		0.2kW × 4P		0.4kW × 4P		0.75kW × 4P		1.5kW × 4P		2.2kW × 4P	
	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M
Standard	0.0020	0.000500	0.0026	0.000650	0.0048	0.00120	0.0085	0.00213	0.0133	0.00333	0.0339	0.00848
With Brake	0.0022	0.000550	0.0027	0.000675	0.0052	0.00130	0.0094	0.00235	0.0149	0.00373	0.0383	0.00958
kW × P	3.7kW × 4P		5.5kW × 4P		7.5kW × 4P		11kW × 4P		15kW × 4P		18.5W × 4P	
	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M
Standard	0.0457	0.0114	0.107	0.0268	0.150	0.0375	0.359	0.0898	0.900	0.225	1.00	0.250
With Brake	0.0501	0.0125	0.121	0.0303	0.164	0.0410	0.428	0.1070	0.972	0.243	1.05	0.262
kW × P	22kW × 4P		30kW × 4P		37kW × 4P							
	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M						
Standard	1.00	0.250	1.23	0.308	1.37	0.343						
With Brake	1.05	0.262	1.28	0.321	-	-						

Construction Drawing

1. Construction of 6000 Series

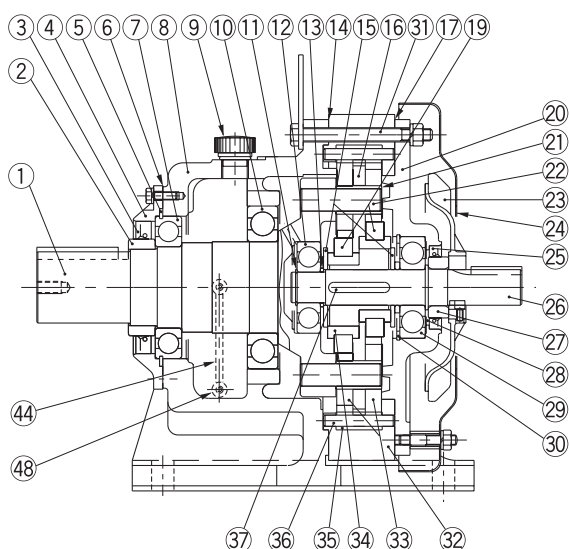


Fig F-10 Type CHH (Horizontal, Reducer) Single reduction
(Example: Frame size 6175)

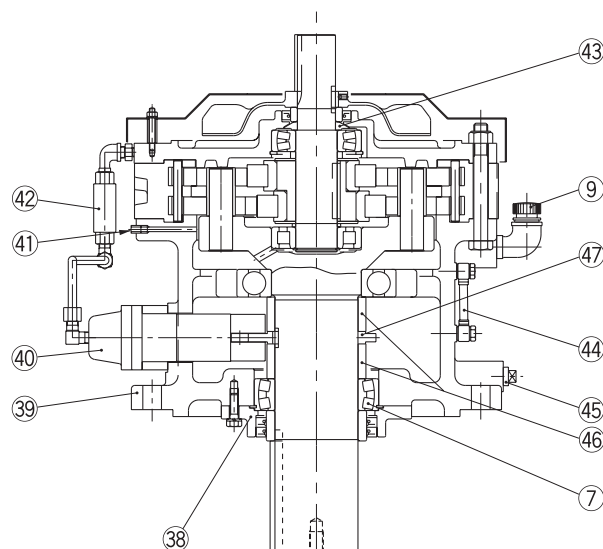


Fig F-11 Type CVV (Vertical, Reducer) Single reduction
(Example: Frame size 6225)

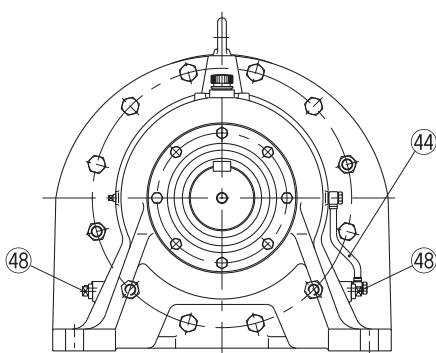


Fig F-12 Type CHHM (Horizontal, Gearmotor) Single reduction
(Example: Frame size 6225)

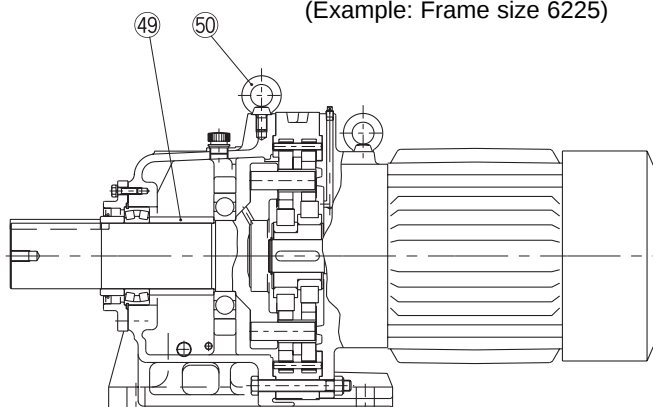


Fig F-13 Type CNHM (Horizontal, Gearmotor) Single reduction
(Example: Frame size 6095)

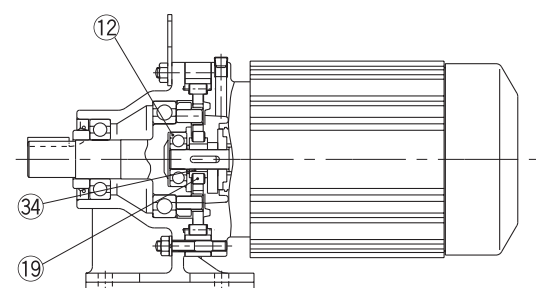
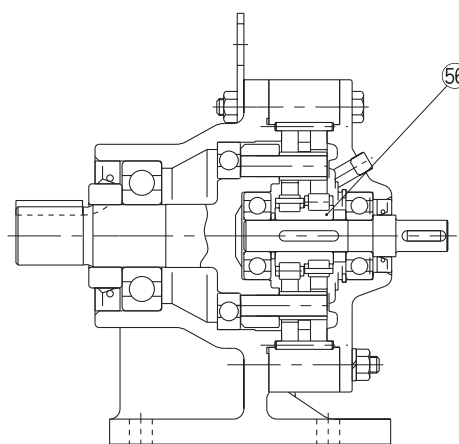


Fig F-14 Type CNH (Horizontal, Reducer) Single reduction
(Example: Frame size 6105)



TECHNICAL
DATA

Reducer

Construction Drawing

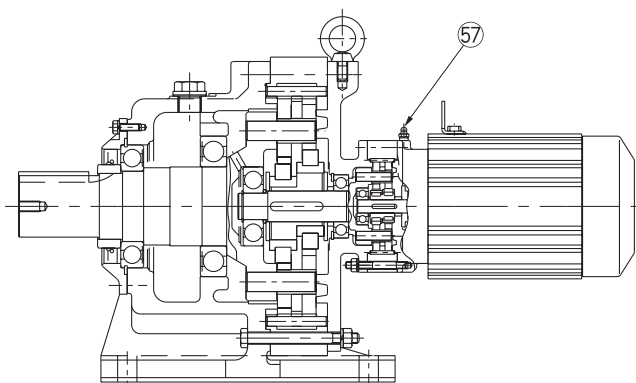


Fig F-15 Type CHHM (Horizontal, Gearmotor)
Double reduction
(Example: Frame size grease lubricated 6185DB)

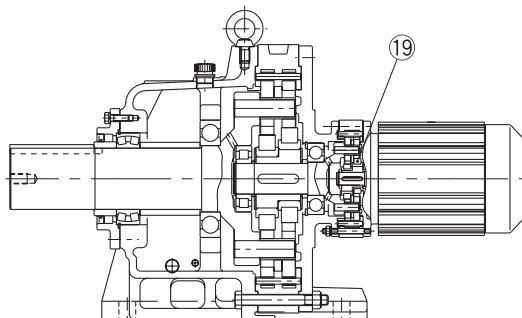


Fig F-17 Type CHHM (Horizontal, Gearmotor)
Double reduction
(Example: Frame size 6225DB)

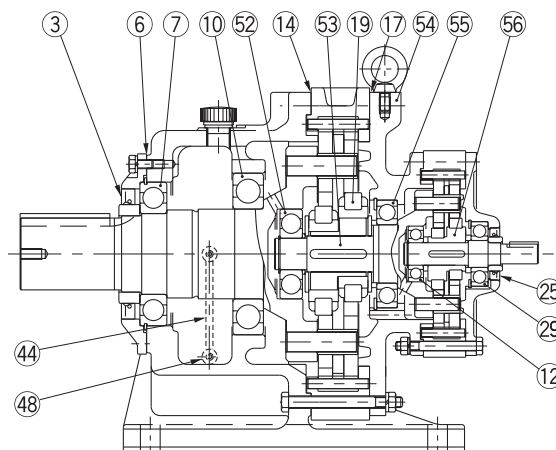


Fig F-16 Type CHH (Horizontal, Reducer)
Double reduction
(Example: Frame size 6185DB)

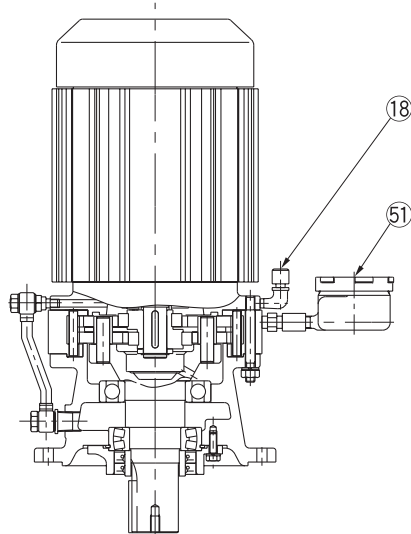


Fig F-18 Type CVVM
(Vertical, Gearmotor)
Single reduction
(Example: Frame size 6145)

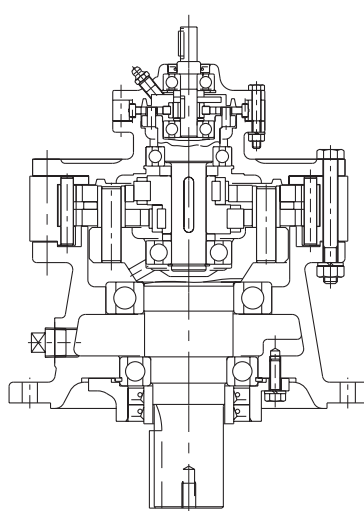


Fig F-19 Type CVV
(Vertical, Reducer)
Double reduction
(Example: Frame size 6135DA)

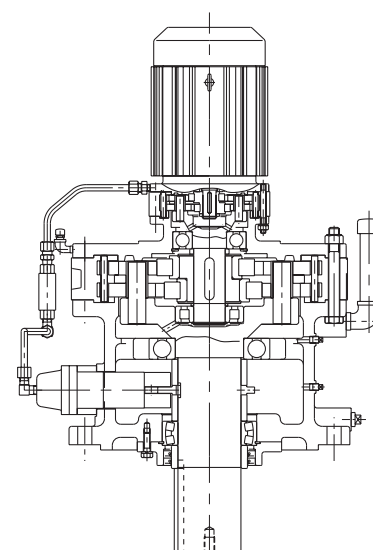


Fig F-20 Type CVVM
(Vertical, Gearmotor)
Double reduction
(Example: Frame size 6225DA)

Principal parts

No.	Part Name	No.	Part Name	No.	Part Name	No.	Part Name	No.	Part Name
1	Slow speed shaft	13	Spacer	25	Oil seal	37	Key	49	Spacer
2	Collar (Slow speed shaft)	14	Gasket B	26	High speed shaft	38	Gland	50	Eye bolt
3	Oil seal	15	End plate	27	Collar (High Speed Shaft)	39	Flanged casing	51	Oil filler
4	Slow speed end cap	16	Spacer ring	28	Spacer	40	Plunger pump	52	Intermediate shaft, bearing A
5	Retaining ring	17	Gasket C	29	High speed shaft, bearing B	41	Air vent plug	53	Intermediate shaft
6	Gasket A	18	Air vent plug	30	Retaining ring	42	Oil signal	54	Intermediate cover
7	Slow speed shaft, bearing A	19	Bearing for eccentric (High speed shaft section)	31	Bolt for ring gear housing	43	Oil slinger	55	Intermediate shaft, bearing B
8	Horizontal casing	20	High speed end shield	32	Ring gear housing	44	Oil level gauge	56	Eccentric bearing (Double)
9	Oil filler plug	21	Slow speed shaft roller	33	Cycloid disc	45	Plug (Oil drain)	57	Grease nipple
10	Slow speed shaft, bearing B	22	Slow speed shaft pin	34	Eccentric	46	Spacer		
11	Retaining ring	23	Cooling fan	35	Ring gear roller	47	Cam		
12	High speed shaft, bearing A	24	Fan cover	36	Ring gear pin	48	Plug (Oil drain)		

Construction Drawing

2. Construction of 6000SK Series

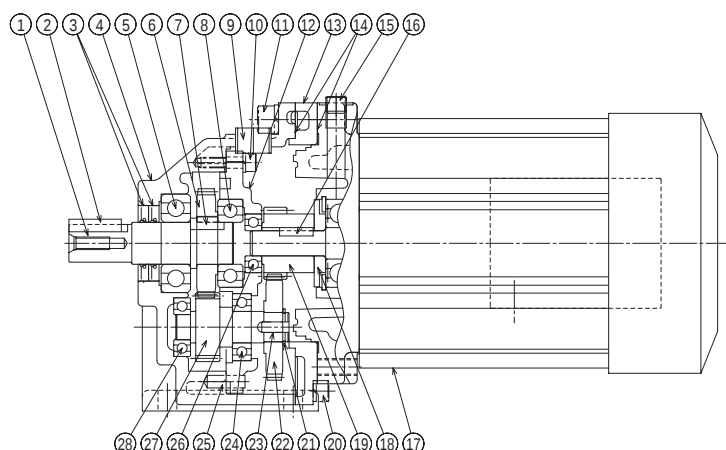


Fig F-21 Type CHHM
(6000SK Series Horizontal, Gearmotor)
(Example: Frame size 6075SK)

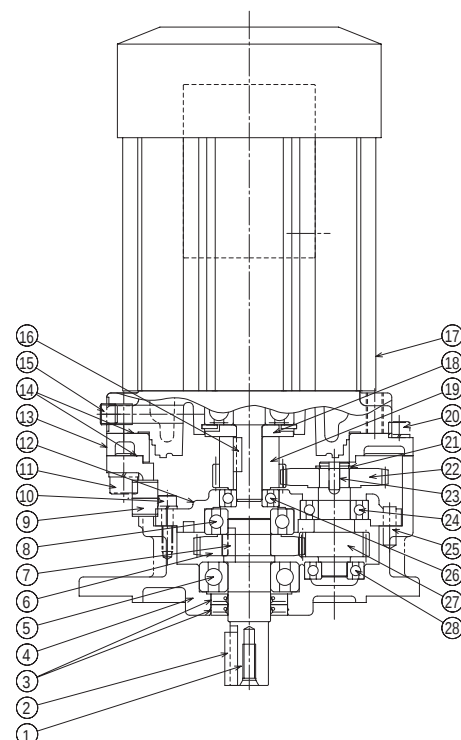


Fig F-22 Type CVVM
(6000SK Series Vertical, Gearmotor)
(Example: Frame size 6075SK)

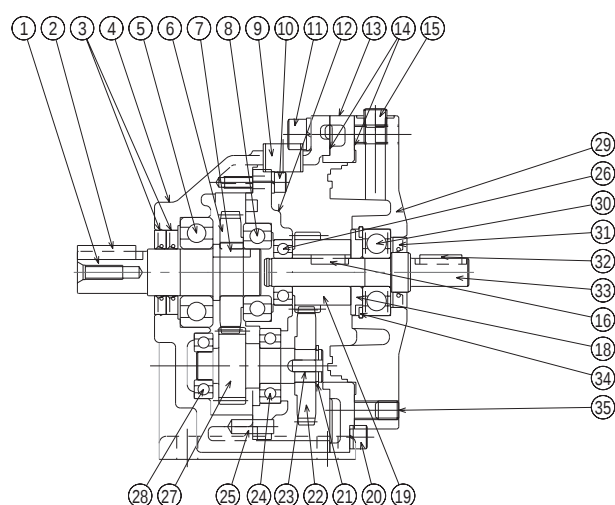
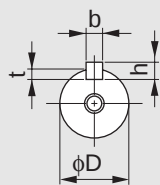


Fig F-23 Type CHH
(6000SK Series Horizontal, Reducer)
(Example: Frame size 6075SK)

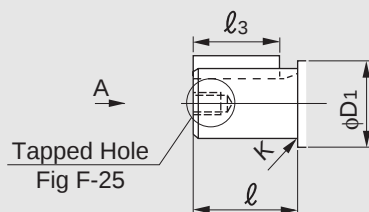
Principal parts

No.	Part Name	No.	Part Name	No.	Part Name	No.	Part Name
1	Slow speed shaft (Output shaft)	11	Hexagon socket head cap screw	21	Snap ring	31	Oil seal
2	Key	12	Bearing plate	22	First gear	32	Key
3	Oil seal	13	Adapter plate	23	Key	33	High speed shaft
4	Horizontal casing	14	Liquid gasket	24	Bearing (B) for mid speed shaft	34	Snap ring
5	Bearing (A) for slow speed shaft	15	Plug	25	Pin	35	Hexagon socket head cap screw
6	Second gear	16	Key	26	Bearing (A) for high speed shaft		
7	Key	17	Motor	27	Second pinion (middle speed shaft)		
8	Bearing (B) for slow speed shaft	18	Oil slinger	28	Bearing (A) for middle speed shaft		
9	Plug	19	First pinion	29	High speed end shield		
10	Hexagon socket head cap screw	20	Hexagon socket head cap screw	30	Bearing (B) for high speed shaft		

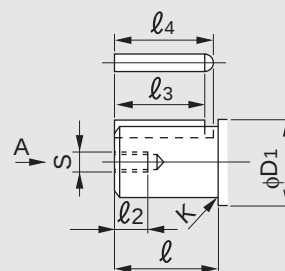
Detailed Dimension of Slow Speed Shaft



View from A



[Fig F-24a]



[Fig F-24b]

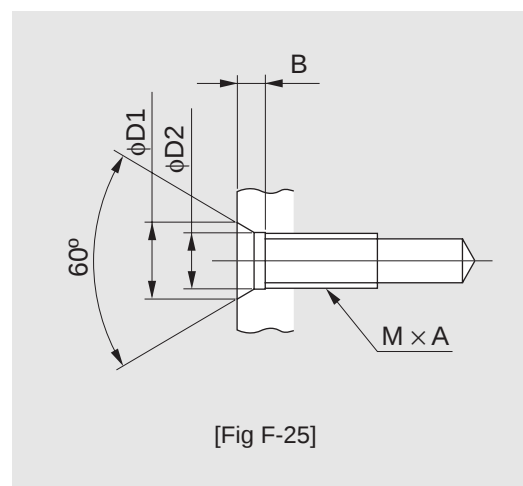
- Dimension of slow speed shaft end; Dimension tolerance in accordance with JIS B 0401-1976 "h6".
- Dimension of shaft end key; Parallel key in accordance with JIS B 1301-1996.

Table F-23 Dimension of Slow Speed Shaft

Frame Size			Slow Speed Shaft													
6000SK Series	6000Series		Fig	D (h6)	Tolerance	D1	ℓ	K (Roundness)	t	Tolerance	b(key (h9)	Tolerance	h(key)	Tolerance	ℓ3 (key)	ℓ4
	Single	Double														
-	6060	6060DA	F-24b	14	0 -0.011	30	25	-	3	+0.1 0	5	0 -0.030	5	0 -0.030	20	22.5
-	6065	6065DA	F-24b	18		30	-	-	3.5		6		6		25	-
-	6070	6070DA				30	0.6	3.5			6		6		28	-
6075SK	-	-	F-24b	22	0 -0.013	20	-	-	-	+0.2 0	6	0 -0.036	6	0 -0.090	30	33
-	6080	-				35	0.6	3.5	6		6		33		-	
6085SK	-	-				25	-	-	-		8		7		32	-
-	6090	6090DA	F-24a	28	0 -0.013	45	-	-	4	8	7	0 -0.090	32	-		
-	6095	6095DA	F-24b			30	0.5	4					27	32		
6095SK	-	-	F-24a	28	0 -0.016	50	-	-	4	+0.2 0	8	0 -0.036	7	0 -0.090	32	-
-	6100	6100DA				30	0.5	4			8		7		27	32
-	6105	6105DA				35	0.5	4			8		7		27	32
6105SK	-	-	F-24b	32	0 -0.016	30	-	-	5	10	8	0 -0.036	7	0 -0.090	37	42
-	6110	-	F-24b			45	1	-			10		8		37	42
6115SK	-	-	F-24b			35	-	-			10		8		37	40
6115SK	-	-	F-24a	38	0 -0.016	65	55	-	5	10	8	0 -0.036	8	0 -0.090	50	-
-	6120	6120DA 6120DB				65	-	-	5		8		-		-	
-	6125	6125DA 6125DB				65	-	-	5		8		-		-	
-	612H	-														

Table F-24 Dimension of Tapped Hole

Frame Size			Tap	Depth	Center hole		
6000SK Series	6000 Series				M	A	φD1
	Single	Double					
-	6060	6060DA	M5	16	7	5.2	2.6
-	6065	6065DA	M5	16	7	5.2	2.6
6070SK	6070	6070DA	M6	16	9	6.2	3.4
6075SK	6075	6075DA	M6	16	9	6.2	3.4
6080SK	6080	-	M6	16	9	6.2	3.4
6085SK	6085	-	M6	16	9	6.2	3.4
6090SK	6090	6090DA	M8	20	11	8.2	3.6
6095SK	6095	6095DA	M8	20	11	8.2	3.6
6100SK	6100	6100DA	M8	20	11	8.2	3.6
6105SK	6105	6105DA	M8	20	11	8.2	3.6
-	610H	-	M8	20	11	8.2	3.6
6110SK	6110	-	M8	20	11	8.2	3.6
6115SK	6115	-	M8	20	11	8.2	3.6
-	6120	6120DA 6120DB	M8	20	11	8.2	3.6
-	6125	6125DA 6125DB	M8	20	11	8.2	3.6
-	612H	-	M8	20	11	8.2	3.6



[Fig F-25]

Detailed Dimension of Slow Speed Shaft

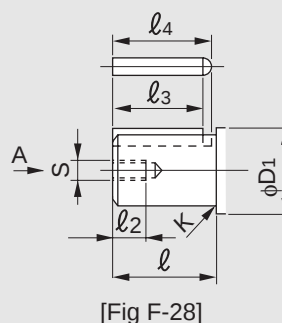
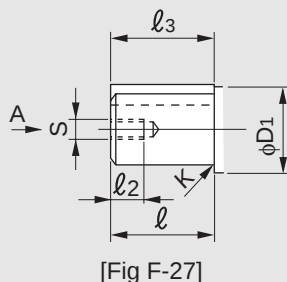
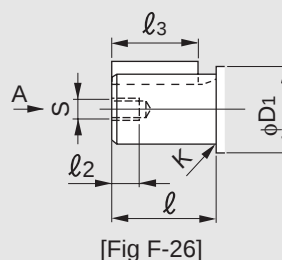
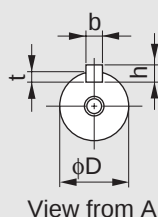


Table F-25 Dimension of Slow Speed Shaft

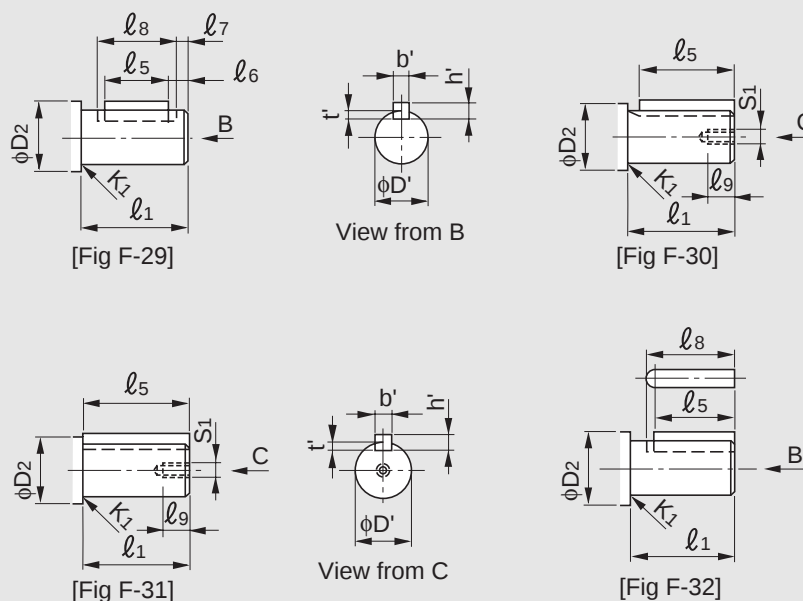
Frame Size				Slow Speed Shaft																
				Fig	D (h6)	Tolerance	D ₁	ℓ	K (Roundness)	s	ℓ ₂	t	Tolerance	b (key) (h9)		h (key)		ℓ ₃ (key)	ℓ ₄	
Single	Double													Tolerance	Tolerance	Tolerance	Tolerance			
6130	6130DA	6130DB	6130DC	F-26	50	0 -0.016	65	70 (61)	-	M10	18	5.5	+0.2 0	14	0 -0.043	9	0	56	-	
6135	6135DA	6135DB	6135DC	F-26			65	90 (81)	-	M10	18	5.5		14		9	-0.090	80		
6140	6140DA	6140DB	6140DC	F-26			65	90 (81)	-	M10	18	5.5		14		9	-0.090	80		
6145	6145DA	6145DB	6145DC	F-26			65	90 (81)	-	M10	18	5.5		14		9	-0.090	80		
614H	-			F-26	60	0 -0.019	85	90 (80)	-	M10	18	7	+0.2 0	18	0 -0.052	11	0	80	-	
6160	6160DA	6160DB	6160DC	F-26			85	90 (80)	-	M10	18	7		18		11	0	80		
6165	6165DA	6165DB	6165DC	F-26			85	90 (80)	-	M10	18	7		18		11	0	80		
616H	-			F-26			85	90 (80)	-	M10	18	7		18		11	0	80		
6170	6170DA	6170DB	6170DC	F-26	70	0 -0.019	95	90 (84)	-	M12	24	7.5	+0.2 0	20	0 -0.052	12	0	80	-	
6175	6175DA	6175DB	6175DC	F-26			95	90 (84)	-	M12	24	7.5		20		12	0	80		
6180	6180DA	6180DB	F-26	80			110	110 (100)	-	M12	24	9		22		14	0	100		-
6185	6185DA	6185DB	F-26				110	110 (100)	-	M12	24	9		22		14	0	100		-
6190	6190DA	6190DB	F-28	95	0 -0.022	120	135 (125)	-	M20	34	9	+0.3 0	25	0 -0.063	14	0 -0.110	125	137.5		
6195	6195DA	6195DB	F-28			120	135 (125)	-	M20	34	9		25		14		125	137.5		
6205	6205DA	6205DB	F-27			100	120	165	-	M20	34		10		28		16	165	-	
6215	6215DA	6215DB	F-27			110	130	165	-	M20	34		10		28		16	165	-	
6225	6225DA	6225DB	F-27	120	0 -0.025	145	165	-	M20	34	11	+0.3 0	32	0 -0.063	18	0 -0.130	165	-		
6235	6235DA	6235DB	F-27	130		160	200	-	M24	41	11		32		18		200	-		
6245	6245DA	6245DB	F-27	140		170	200	-	M24	41	12		36		20		200	-		
6255	6255DA	6255DB	F-27	160		190	240	-	M30	49	13		40		22		240	-		
6265	6265DA			F-27	170	200	300	-	M30	49	13	+0.3 0	40	0 -0.063	22	0 -0.130	300	-		
6275	6275DA			F-27	180	230	330 (320)	-	M30	52	15		45		25		330 (320)	-		

Note: Dimensions in parentheses for ℓ and ℓ₃ are models with vertical output shaft.

TECHNICAL
DATA

Reducer

Detailed Dimension of High Speed Shaft



- Dimension of high speed shaft end; Dimension tolerance in accordance with JIS B 0401-1976 "h6".
- Dimension of shaft end key; Parallel key in accordance with JIS B 1301-1996.
- *S1 & 9 Dimension Tap Hole is only for vertical (Type CVV, CVF) Single stage only

Table F-26 Dimension of High Speed Shaft

Frame Size				Figh Speed Shaft																
6000SK Series	6000 Series		Fig	D' (h6)	Tolerance	D ₂	ℓ ₁	K ₁ (Roundness)	t'	Tolerance	b' (key)		h' (key)		ℓ ₅ (key)	ℓ ₆	ℓ ₇	ℓ ₈	*S ₁	*ℓ ₉
	Single	Double									(h9)	Tolerance	(h9)	Tolerance						
-	6060	6060DA 6070DA	F-29	12		17	25	0.5	2.5		4		4		18		3	22	-	-
-	6065	6065DA 6075DA	F-29																	
-	6070	6090DA 6100DA 6120DA 6130DA 6140DA	F-29																	
-	6075	6095DA 6105DA 6125DA 6135DA 6145DA	F-29	12		17	25	0.5	2.5		4		4		18				-	-
6070SK	6080	-	F-29	12		17	25	0.5	2.5		4		4		18		1		-	-
6075SK	6085	-	F-29																	
6080SK	6090	6120DB 6130DB 6140DB 6160DA 6170DA	F-29																	
6085SK	6095	6125DB 6135DB 6145DB 6165DA 6175DA	F-29	15	0 -0.011	20	25	1	3		5		5		16		3.5		-	-
6090SK	6100	6130DC 6140DC 6160DB 6170DB 6180DA	F-29																	
6095SK	6105	6135DC 6145DC 6165DB 6175DB 6185DA	F-29																	
-	610H	-	F-29	15		20	25	1	3		5	0 -0.030	5	0 -0.030	16				-	-
6100SK	6110	-	F-29																	
6105SK	6115	-	F-29																	
6110SK	6120	6160DC 6170DC 6190DA	F-32	18		32	35	-	3.5		6		6		25	-	-	28	-	-
6115SK	6125	6165DC 6175DC 6195DA 6205DA	F-32																	
-	612H	-	F-32																	
-	6130	6180DC 6190DB	F-32	22		38	40	-	3.5		6		6		32				-	-
-	6135	6185DB 6195DB 6205DB 6215DA 6255DA	F-32																	
-	6140	-	F-32																	
-	6145	-	F-32	22	0 -0.013	38	40	-	3.5		6		6		32			35	-	-
-	614H	-	F-32																	
-	6160	6215DB	F-31																	
-	6165	6215DB 6235DA 6245DA	F-31	30		70	45	-	4		8	0 -0.036	7		45	-	-	-	M10	20
-	616H	-	F-31																	
-	6170	-	F-32																	
-	6175	6255DB 6255DA	F-32	35		70	55	-	5		10		8	0 -0.090	50	-	-	-	M12	25
-	6180	-	F-32																	
-	6185	6235DB 6245DB	F-32																	
-	6190	-	F-31	40	0 -0.016	70	65	-	5		12		8		63	-	-	-	M16	30
-	6195	6255DB 6265DA 6275DA	F-31																	
-	6205	-	F-31																	
-	6215	-	F-31	50		82	82	-	5.5		14	-0.043	9		82	-	-	-	-	-
-	6225	-	F-31																	
-	6235	-	F-31																	
-	6245	-	F-31	60	0 -0.019	110	105	-	7		18		11	0 -0.110	105	-	-	-	-	-
-	6255	-	F-31																	
-	6265	-	F-31																	
-	6275	-	F-32	90	0 -0.022	140	150	-	9		25		14		140	-	-	152.5	-	-

F TECHNICAL DATA

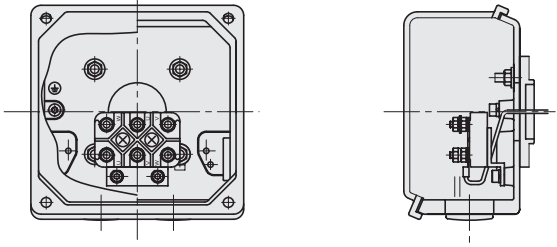
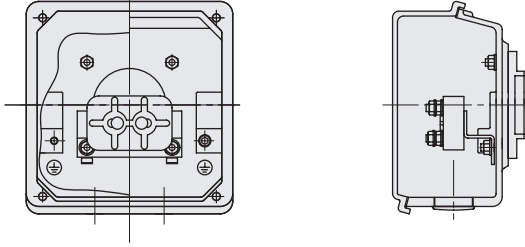
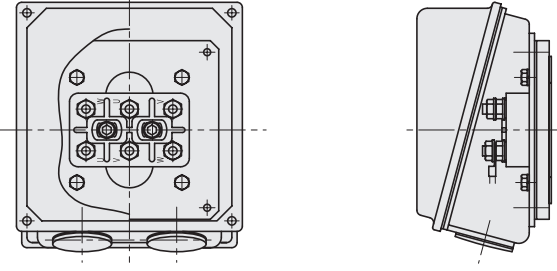
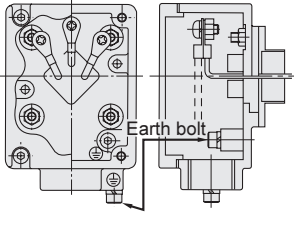
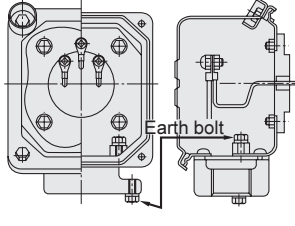
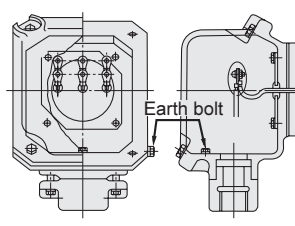
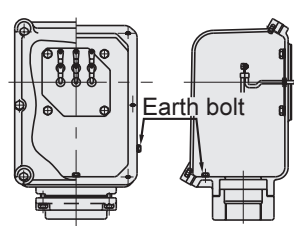
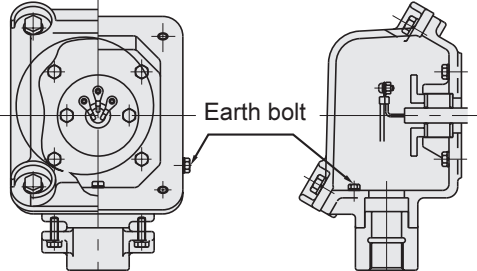
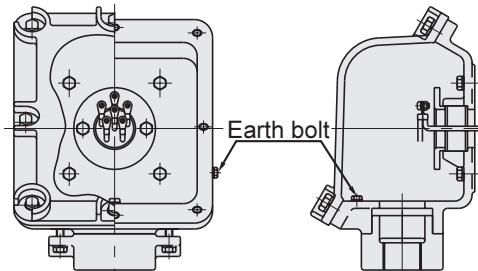
2. Motor

TECHNICAL
DATA

Motor

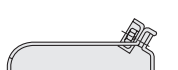
Terminal Box Specifications

1. Construction of Terminal Box

TECHNICAL DATA	Motor	Standard Motors	3-Phase Motor AF Motor		3-Phase Motor AF Motor	
			0.1 ~ 5.5kW × 4P 0.1 ~ 3.7kW × 4P		7.5 ~ 15kW × 4P 5.5 ~ 11kW × 4P	
						
			3-Phase Motor AF Motor			
		Increased Safety Motors	18.5 ~ 55kW × 4P 15 ~ 55kW × 4P			
						
			0.1 ~ 0.4kW × 4P	0.75 ~ 15kW × 4P	18.5 ~ 37kW × 4P 15 ~ 37kW × 6P	45 ~ 55kW × 4P 45 ~ 55kW × 6P
						
		Flame Proof Motors	0.1 ~ 3.7kW × 4P		5.5 ~ 37kW × 4P 15 ~ 37kW × 6P	
						

Terminal Box Specifications

2. Methods for Drawing Lead Wire Outside of Terminal Box.

Standard model	Conduit tube type (Option)	Packing type with threaded conduit joint (Option)	Cable gland for marine use (Option)
			 Cable gland for marine use

Motor		P	Standard Model	Option								
				Conduit Tube Type		Packing Type with Thread Conduit Joint				Cable Gland for Marine Use		
Capacity (kW)				Standard Size KD	Available Size KD	Standard Size		Available Size		Standard Size		
3-Phase Motor	AF Motor	Thread KD	Cable Dia. ϕD	Thread KD	Cable Dia. ϕD	Thread KD	Cable Dia. ϕD	Thread KD	Cable Dia. ϕD			
0.1	-	4	M25	16 (PF1/2)	16 (PF1/2) 22 (PF3/4) 28 (PF1) 36 (PF1 1/4) Note:1	22 (PF3/4)	12.5	22 (PF3/4)	10.0~16.5	20c	15a~c	
0.2	0.1	4	M25									
0.25	-	4	M25									
0.4	0.2	4	M25									
0.55	-	4	M25	22 (PF3/4)		28 (PF1)	12.0~19.5	28 (PF1)	12.0~19.5	20c	20a~c	
0.75	0.4	4	M25									
1.1	-	4	M25									
1.5	0.75	4	M25									
2.2	1.5	4	M25									
3.0	-	4	M25									
3.7	2.2	4	M25	28 (PF1)	14.5	36 (PF1 1/4)	15.5~23.5	25c	25a~c			
5.5	3.7	4	M32									
7.5	5.5	4	M32	28 (PF1)	22 (PF3/4) 28 (PF1) 36 (PF1 1/4) 42 (PF1 1/2)	28 (PF1)	12.0~16.5	28 (PF1)	12.0~18.7	25c	20a~c 25a~c 30a~c	
11	7.5	4	M32									
15	11	4	M32	36 (PF1 1/4)	42 (PF1 1/2)	24	28 (PF1) 36 (PF1 1/4) 42 (PF1 1/2) 54 (PF2) Note:2	13.5~19.0 16.0~23.0 19.5~28.0 23.0~35.7 29.0~45.0	30a	35a	25a~c 30a~c 35a~c	
15	-	6	M40									
18.5	-	4	M40									
18.5	-	6	M40									
22	15	4	M40									
22	15	6	M40									
30	22	4	M40	54 (PF2)	54 (PF2)	29	70 (PF2 1/2) Note:2	70 (PF2 1/2)	44	36 (PF1 1/4) 42 (PF1 1/2) 54 (PF2) 70 (PF2 1/2) 82 (PF3) 92 (PF3 1/2)	55a	35a~c 45a~c 55a~c
30	22	6	M50									
37	30	4	M50									
37	30	6	M50									
45	37	4	M50	70 (PF2 1/2)	70 (PF2 1/2)	44	36 (PF1 1/4) 42 (PF1 1/2) 54 (PF2) 70 (PF2 1/2) 82 (PF3) 92 (PF3 1/2)	70 (PF2 1/2)	44	36 (PF1 1/4) 42 (PF1 1/2) 54 (PF2) 70 (PF2 1/2) 82 (PF3) 92 (PF3 1/2)	55a	35a~c 45a~c 55a~c
45	37	6	M50									
55	45	4	M50									
55	-	6	M63									

The size of the external lead wire opening of the standard Sumitomo motor has been listed.

Notes: 1. In case of 0.4kW × 4Pole below(0.2kW × 4Pole below when AF motor for Inverter), Except for STD KD(PF1/2), dimensions of a terminal box become special.

2. For the increased safety explosion-proof 45kw4pole motor, the KD dimensions become PF11/4 (36) - PF31/2(92).

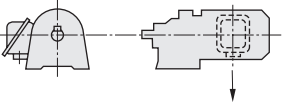
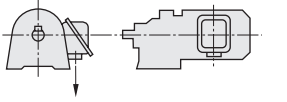
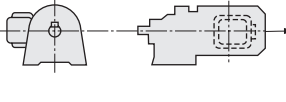
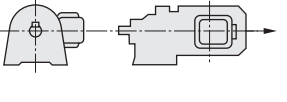
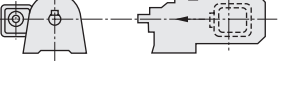
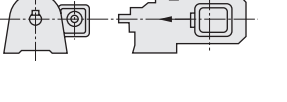
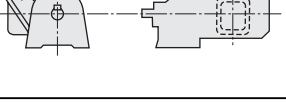
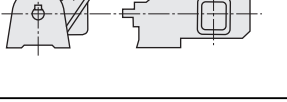
3. Unless otherwise specifically requested, the outdoor type, increased safety explosion-proof motor and for maritime use will be manufactured to the standard dimensions specified above.

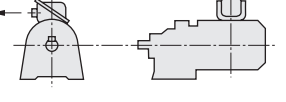
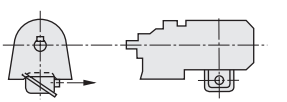
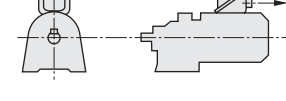
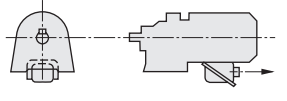
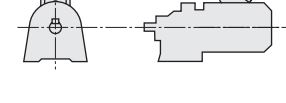
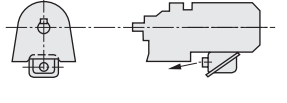
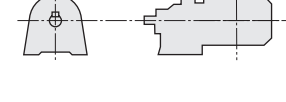
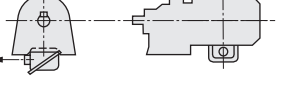
4. Terminal Box below 0.4kW x 4P is plastic. Steel is also available. Please consult us.

Terminal Box Specifications

3. Mounting Direction of Terminal Box

- The terminal box mounting direction can be changed in units of 90°, but specify the direction according to the following table when placing an order.

Cable port direction	Terminal box mounting position (As viewed from output shaft with motor being horizontal)	
	Left side (N33)	Right side (N34)
Type A (N3A)		
Type B (N3B)		
Type C (N3C)		
Type D (N3D)		

Cable port direction	Terminal box mounting position (As viewed from output shaft with motor being horizontal)	
	Top (N35)	Down (N36)
Type A (N3A)		
Type B (N3B)		
Type C (N3C)		
Type D (N3D)		

Note: Arrow indicates direction of lead wires out of terminal box.

4. Standard Position of Terminal Box and Direction of Lead Wires.

	Horizontal type(Horizontal Slow Speed Shaft)				Vertical type(Vertical Slow Speed Shaft Down)	
	Standard Motor		Brake Motor		Standard Motor	Brake Motor
	3-Phase	AF Motor	3-Phase	AF Motor	3-Phase	AF Motor
Terminal Box Mounting Position	Left side	Left side	Left side	Left side	Left side	Left side
Cable port direction	A	A	A	A	A	A

Terminal Box Specifications

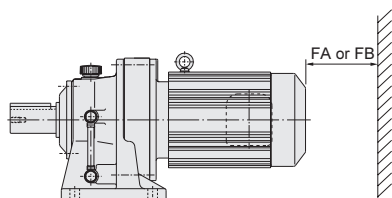
5. Details of Motor Fan Cover Mounting

Refer to the dimensions FA or FB shown below when designing a gearmotor mounting space.

(1) Dimensions FA:.....Dimensions necessary to remove the fan cover or brake cover without removing the motor from the equipment.

(2) Dimensions FB:.....Minimum space required for adequate ventilation

Note : 1. It is necessary to remove the gearmotor from the equipment when removing the fan or brake cover.
2. The minimum space when the wall at the back of the motor fan is closed tightly.
3. AF(Inverter) of 30kw or above are a differently ventilated type.

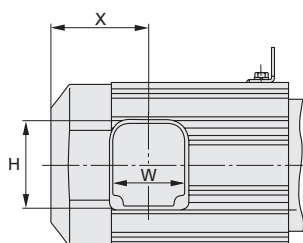


Dimension of FA and FB

Unit: mm

Specification	Without Brake				With Brake			
	3-Phase Motor		AF Motor		3-Phase Motor		AF Motor	
	FA	FB	FA	FB	FA	FB	FA	FB
Capacity								
0.1kW × 4P	-	-	48	20	49	-	61	20
0.2kW × 4P	48	20	48	20	61	20	61	20
0.25kW × 4P	48	20	-	-	61	20	-	-
0.4kW × 4P	48	20	49	20	61	20	93	20
0.55kW × 4P	49	20	-	-	93	20	-	-
0.75kW × 4P	49	20	52	20	93	20	115	20
1.1kW × 4P	52	20	-	-	115	20	-	-
1.5kW × 4P	52	20	56	20	115	20	121	20
2.2kW × 4P	56	20	60	20	121	20	132	20
3.0kW × 4P	60	20	-	-	132	20	-	-
3.7kW × 4P	60	20	60	20	132	20	132	20
5.5kW × 4P	60	20	75	25	132	20	170	25
7.5kW × 4P	75	25	75	25	170	25	170	25
11kW × 4P	75	25	130	30	170	25	220	30
15kW × 4P	130	30	155	30	220	30	367	30
18.5kW × 4P	155	30	170	30	367	30	370	30
22kW × 4P	155	30	170	30	367	30	370	30
30kW × 4P	170	30	140	30	370	30	295	30
37kW × 4P	230	30	140	30	445	30	295	30

6. Dimensions of Terminal Box Mounting Centers



Unit: mm

Specification	Without Brake						With Brake					
	3-Phase Motor			AF Motor			3-Phase Motor			AF Motor		
	X	W	H	X	W	H	X	W	H	X	W	H
Capacity												
0.1kW×4P	35	125	126	59	125	126	70	125	126	91	125	126
0.2kW×4P	59	125	126	59	125	126	91	125	126	91	125	126
0.25kW×4P	59	125	126	-	-	-	91	125	126	-	-	-
0.4kW×4P	59	125	126	97	125	126	91	125	126	140	125	126
0.55kW×4P	97	125	126	-	-	-	140	125	126	-	-	-
0.75kW×4P	97	125	126	100	125	126	140	125	126	162	125	126
1.1kW×4P	100	125	126	-	-	-	162	125	126	-	-	-
1.5kW×4P	100	125	126	105	125	126	162	125	126	168	125	126
2.2kW×4P	105	125	126	127	125	126	168	125	126	199	125	126
3.0kW×4P	127	125	126	-	-	-	199	125	126	-	-	-
3.7kW×4P	127	125	126	127	125	126	199	125	126	199	125	126
5.5kW×4P	127	125	126	143	170	175	199	125	126	238	170	175
7.5kW×4P	143	170	175	143	170	175	238	170	175	238	170	175
11kW×4P	143	170	175	295	170	175	238	170	175	385	170	175
15kW×4P	295	170	175	340	215	233	385	170	175	550	215	233
18.5kW×4P	340	215	233	340	215	233	550	215	233	550	215	233
22kW×4P	340	215	233	340	215	233	550	215	233	550	215	233
30kW×4P	340	215	233	460	215	233	550	215	233	712	215	233
37kW×4P	430	215	233	460	215	233	645	215	233	712	215	233
45kW×4P	430	215	233	-	-	-	-	-	-	-	-	-
55kW×4P	465	215	233	-	-	-	-	-	-	-	-	-

Characteristics for Global Motor

Table F-27 Characteristics of Non-Explosion Proof Motors

(1) 200V Class

Motor Frame Size	Pole	4P														
	Power	220V-50Hz					230V-50Hz					220V-60Hz				
	Output power (kW)	Rated Current	Torque max.(%)	Starting Torque (%)	Starting Current (A)	Speed (r/min)	Rated Current	Torque max.(%)	Starting Torque (%)	Starting Current (A)	Speed (r/min)	Rated Current	Torque max.(%)	Starting Torque (%)	Starting Current (A)	Speed (r/min)
F-63S	0.10	0.60	235	230	2.3	1420	0.62	261	261	2.3	1430	0.53	220	202	2.1	1700
F-63M	0.20	1.0	210	206	3.8	1410	1.0	231	236	4.0	1420	0.95	186	191	3.5	1690
F-63M	0.25	1.2	182	195	4.2	1380	1.2	202	222	4.4	1400	1.2	153	161	3.7	1640
F-71M	0.40	2.0	200	201	7.3	1410	2.1	221	229	7.8	1400	1.8	188	185	6.6	1680
F-80S	0.55	2.4	182	206	9.2	1410	2.4	200	225	9.6	1420	2.3	164	166	8.6	1680
F-80M	0.75	3.3	211	193	13.1	1420	3.3	217	212	13.8	1430	3.1	189	180	12.3	1720
F-90S	1.1	4.7	215	200	21.7	1420	4.6	236	223	22.8	1420	4.4	189	170	19.9	1690
F-90L	1.5	6.1	204	192	27.9	1420	6.0	226	212	28.9	1430	5.7	196	175	25.5	1700
F-100L	2.2	8.7	203	213	42.1	1420	8.3	231	255	45.0	1430	8.1	207	185	38.0	1690
F-112S	3.0	11.2	205	213	61	1420	11.1	224	237	64	1420	10.8	175	155	54	1720
F-112M	3.7	13.4	219	218	80	1410	17.8	308	340	114	1440	12.9	207	178	70	1700

(2) 400V Class

Motor Frame Size	Pole	4P														
	Power	380V-50Hz					400V-50Hz					415V-50Hz				
	Output (kW)	Rated Current	Torque max.(%)	Starting Torque (%)	Starting Current (A)	Speed (r/min)	Rated Current	Torque max.(%)	Starting Torque (%)	Starting Current (A)	Speed (r/min)	Rated Current	Torque max.(%)	Starting Torque (%)	Starting Current (A)	Speed (r/min)
F-63S	0.10	0.34	235	230	1.3	1420	0.36	261	261	1.3	1430	0.37	281	286	1.4	1430
F-63M	0.20	0.61	210	206	2.2	1410	0.62	233	236	2.3	1420	0.63	251	260	2.4	1420
F-63M	0.25	0.70	182	195	2.4	1380	0.70	202	222	2.5	1380	0.70	220	242	2.3	1400
F-71M	0.40	1.2	200	201	4.2	1410	1.2	221	229	4.5	1420	1.3	236	250	4.7	1420
F-80S	0.55	1.4	182	206	5.3	1410	1.4	200	225	5.5	1420	1.4	218	248	5.8	1420
F-80M	0.75	1.9	211	193	7.6	1420	1.9	219	215	8.0	1430	2.0	237	232	8.4	1440
F-90S	1.1	2.7	215	200	12.5	1420	2.7	236	223	13.2	1420	2.7	256	243	14.3	1430
F-90L	1.5	3.5	204	192	16.1	1420	3.5	228	224	17.1	1430	3.6	242	236	17.8	1430
F-100L	2.2	5.0	203	213	24.3	1420	4.8	231	255	26.0	1430	5.0	240	263	26.8	1430
F-112S	3.0	6.5	205	213	35.1	1420	6.4	224	237	37.0	1420	6.2	241	255	35.7	1420
F-112M	3.7	7.8	219	218	45.9	1410	7.5	231	236	46.9	1420	7.7	259	269	51	1430
F-132S	5.5	11.3	215	227	69	1410	11.1	237	256	73	1420	11.0	256	281	76	1430
F-132M	7.5	15.0	228	232	93	1450	14.8	252	261	99	1450	14.8	270	284	103	1450
F-160M	11.0	21.5	231	250	139	1450	21.0	256	282	147	1450	20.8	274	308	154	1450
G-160L	15.0	27.7	241	235	170	1460	26.6	271	265	180	1470	26.0	294	289	188	1470
F-180MG	18.5	34.5	262	277	245	1450	33.1	293	312	261	1450	32.3	319	340	272	1460
F-180MG	22.0	40.8	252	269	280	1450	39.3	281	302	297	1450	38.9	304	328	310	1450
F-180L	30.0	56	218	236	325	1450	54	244	265	345	1450	54	264	286	361	1450
F-200L	37.0	70	256	285	479	1450	66	256	287	446	1460	65	277	311	467	1460
F-200L	45.0	84	251	286	564	1440	81	252	288	538	1450	80	271	310	559	1450

Motor Frame Size	Pole	4P				
	Power	440V-60Hz				
	Output (kW)	Rated Current	Torque max.(%)	Starting Torque (%)	Starting Current (A)	Speed (r/min)
F-63S	0.10	0.32	300	289	1.4	1730
F-63M	0.20	0.54	268	266	2.4	1720
F-63M	0.25	0.60	232	251	2.6	1700
F-71M	0.40	1.0	256	262	4.6	1730
F-80S	0.55	1.2	224	240	5.9	1720
F-80M	0.75	1.7	247	242	8.4	1740
F-90S	1.1	2.3	257	260	13.6	1720
F-90L	1.5	3.0	250	243	17.5	1740
F-100L	2.2	4.2	248	260	26.2	1720
F-112S	3.0	5.5	238	225	37.0	1720
F-112M	3.7	6.6	246	238	46.4	1720
F-132S	5.5	9.6	254	263	73	1720
F-132M	7.5	12.8	267	271	98	1750
F-160M	11.0	18.4	270	296	145	1750
G-160L	15.0	23.8	275	280	175	1770
F-180MG	18.5	29.6	295	324	252	1750
F-180MG	22.0	38.8	199	216	225	1720
F-180L	30.0	47.8	249	280	334	1740
F-200L	37.0	59	259	306	429	1730
F-200L	45.0	72	255	311	516	1730

Notes: 1. The characteristics of the 4-pole motor with built-in brake is the same as shown in Table F-27 (1) and (2).

2. For the electrical current of the brakes, refer to Table F-31 on Page F-40.

3. Because the values in the above table are subject to change without notice, please consult us if confirmed values are necessary.

Characteristics for Global Motor

Table F-28 Characteristics of AF Motor for Inverters

Motor Frame Size	Pole	4P							
	Power	220V-60Hz				380V-60Hz			
	Output (kW)	Frequency (Hz)	Voltage (V)	Rated Current	Speed (r/min)	Frequency (Hz)	Voltage (V)	Rated Current	Speed (r/min)
FA-63S	0.10	60	220	0.85	1765	60	380	0.38	1755
		6.0	34.0	0.75	120	6.0	68	0.37	125
FA-63M	0.20	60	220	1.6	1760	60	380	0.69	1750
		6.0	34.0	1.5	130	6.0	68	0.75	130
FA-71M	0.40	60	220	2.4	1745	60	380	1.1	1725
		6.0	35.0	2.2	115	6.0	70	1.1	115
FA-80M	0.75	60	220	4.0	1755	60	380	1.9	1735
		6.0	31.0	3.9	120	6.0	62	1.9	120
FA-90L	1.5	60	220	6.4	1735	60	380	3.3	1705
		6.0	33.0	6.5	105	6.0	66	3.2	110
FA-100L	2.2	60	220	9.1	1755	60	380	4.7	1740
		6.0	31.0	9.3	140	6.0	62	4.6	135
FA-112M	3.7	60	220	14.0	1750	60	380	7.7	1730
		6.0	30.0	14.8	125	6.0	60	7.4	120
FA-132S	5.5	60	220	20.2	1760	60	380	11.2	1745
		6.0	30.0	21.3	135	6.0	60	10.7	130
FA-132M	7.5	60	220	27.4	1765	60	380	15.2	1750
		6.0	30.0	28.2	145	6.0	60	14.1	145
G-160L	11.0	60	220	38.5	1770	60	380	21.7	1755
		6.0	32.0	39.6	155	6.0	64	19.7	155
F-180MG	15.0	60	220	53	1780	60	380	30.3	1770
		6.0	32.0	53	165	6.0	64	26.3	165
F-180L	22.0	60	220	77	1775	60	380	44.5	1765
		6.0	32.0	79	160	6.0	64	39.4	160
BF-200L	30.0	60	220	100	1780	60	380	58	1770
		6.0	32.0	101	165	6.0	64	51	165
BF-200L	37.0	60	220	123	1775	60	380	72	1765
		6.0	30.0	123	165	6.0	64	62	165

Motor Frame Size	Pole	4P			
	Power	415V-60Hz			
	Output (kW)	Frequency (Hz)	Voltage (V)	Rated Current	Speed (r/min)
FA-63S	0.10	60	415	0.40	1760
		6.0	68	0.37	125
FA-63M	0.20	60	415	0.75	1760
		6.0	68	0.75	130
FA-71M	0.40	60	415	1.1	1740
		6.0	70	1.1	115
FA-80M	0.75	60	415	1.9	1745
		6.0	62	1.9	120
FA-90L	1.5	60	415	3.1	1725
		6.0	66	3.2	110
FA-100L	2.2	60	415	4.4	1750
		6.0	62	4.6	135
FA-112M	3.7	60	415	7.2	1745
		6.0	60	7.4	120
FA-132S	5.5	60	415	10.5	1755
		6.0	60	10.7	130
FA-132M	7.5	60	415	14.2	1760
		6.0	60	14.1	145
G-160L	11.0	60	415	20.1	1765
		6.0	64	19.7	155
F-180MG	15.0	60	415	27.8	1775
		6.0	64	26.3	165
F-180L	22.0	60	415	40.7	1770
		6.0	64	39.4	160
BF-200L	30.0	60	415	53	1775
		6.0	64	51	165
BF-200L	37.0	60	415	65	1775
		6.0	64	62	165

Notes: Because the values in the above table are subject to change without notice, please consult us if confirmed values are necessary.

TECHNICAL
DATA

Motor

Characteristics for Japan Standard Motor

Table F-29 Characteristics of 6P Motors

(1) 200V Class

Motor Frame Size	Pole	6P														
	Power	200V-50Hz					200V-60Hz					220V-60Hz				
	Output power (kW)	Rated Current	Torque max.(%)	Starting Torque (%)	Starting Current (A)	Speed (r/min)	Rated Current	Torque max.(%)	Starting Torque (%)	Starting Current (A)	Speed (r/min)	Rated Current	Torque max.(%)	Starting Torque (%)	Starting Current (A)	Speed (r/min)
F-63M	0.1	0.72	213	200	2.4	940	0.64	194	172	2.2	1120	0.65	240	221	2.4	1140
F-71M	0.2	1.6	296	289	5.8	940	1.3	260	243	5.3	1140	1.4	325	312	6.0	1150
F-71M	0.25	1.7	232	226	5.8	920	1.4	205	190	5.3	1120	1.5	257	247	6.0	1130
F-80M	0.40	2.6	240	235	9.3	930	2.3	215	199	8.7	1100	2.3	265	256	9.7	1130
F-80ML	0.55	3.4	245	257	12.0	920	3.0	220	218	11.1	1100	3.0	274	282	12.4	1120
F-90L	0.75	4.5	240	228	17.8	930	4.0	212	196	16.3	1110	4.0	265	254	18.4	1130
F-90LL	1.1	6.0	260	265	25.3	930	5.3	222	216	23.1	1110	5.2	278	280	26.0	1130
F-100L	1.5	7.7	247	244	36.2	940	7.0	202	191	32.5	1120	6.8	261	247	36.6	1140
F-112M	2.2	(11.1)	(248)	(222)	(62.3)	(950)	(9.9)	(205)	(175)	(54.5)	(1140)	(9.5)	(263)	(226)	(61.5)	(1150)
F-132SS	3.0	(14.9)	(242)	(217)	(82.7)	(950)	(13.4)	(200)	(173)	(72.4)	(1140)	(12.8)	(257)	(223)	(81.7)	(1150)
F-132S	3.7	(17.7)	(235)	(220)	(98.1)	(950)	(16.3)	(190)	(170)	(85.1)	(1140)	(15.3)	(239)	(221)	(96.2)	(1150)
F-132M	5.5	(25.8)	(239)	(232)	(149)	(960)	(23.7)	(190)	(175)	(126)	(1150)	(22.2)	(246)	(228)	(143)	(1160)
F-160M	7.5	30.3	246	254	174	980	28.7	197	213	150	1180	26.8	251	272	165	1180
F-160L	11.0	43.4	245	263	250	970	41.3	194	219	216	1170	38.4	247	280	244	1170
F-180MG	15.0	55	271	232	358	980	55	222	195	308	1180	49.9	276	246	344	1180
F-180L	18.5	71	311	274	500	990	66	258	234	430	1180	62	321	293	480	1190
F-180L	22.0	83	261	230	500	990	79	216	196	430	1180	73	269	246	480	1180
F-200L	30.0	111	269	267	694	960	106	221	228	598	1180	98	275	287	668	1180
F-200L	37.0	137	289	293	912	980	130	237	251	784	1170	120	296	314	878	1170
F-225S	45.0	163	238	244	962	980	158	195	209	818	1170	144	242	262	914	1180
F-250S	55	198	231	242	1146	980	194	188	208	970	1170	176	234	260	1084	1180
F-250M	75	269	271	296	1830	980	261	221	255	1536	1170	239	274	320	1718	1180

(2) 400V Class

Motor Frame Size	Pole	6P														
	Power	400V-50Hz					400V-60Hz					440V-60Hz				
	Output (kW)	Rated Current	Torque max.(%)	Starting Torque (%)	Starting Current (A)	Speed (r/min)	Rated Current	Torque max.(%)	Starting Torque (%)	Starting Current (A)	Speed (r/min)	Rated Current	Torque max.(%)	Starting Torque (%)	Starting Current (A)	Speed (r/min)
F-63M	0.10	0.36	213	200	1.2	940	0.32	194	172	1.1	1120	0.33	240	221	1.2	1140
F-71M	0.20	0.81	296	289	2.9	940	0.64	260	243	2.7	1140	0.69	325	312	3.0	1150
F-71M	0.25	0.87	232	226	2.9	920	0.72	205	190	2.7	1120	0.75	257	247	3.0	1130
F-80M	0.40	1.3	240	235	4.7	930	1.2	215	199	4.4	1100	1.2	265	256	4.9	1130
F-80ML	0.55	1.7	245	257	6.0	920	1.5	220	218	5.6	1100	1.5	274	282	6.2	1120
F-90L	0.75	2.3	240	228	8.9	930	2.0	212	196	8.2	1110	2.0	265	254	9.2	1130
F-90LL	1.10	3.0	260	265	12.7	930	2.7	222	216	11.6	1110	2.6	278	280	13.0	1130
F-100L	1.5	3.9	247	244	18.1	940	3.5	202	191	16.3	1120	3.4	261	247	18.3	1140
F-112M	2.2	(5.6)	(248)	(222)	(31.2)	(950)	(5.0)	(205)	(175)	(27.3)	(1140)	(4.8)	(263)	(226)	(30.75)	(1150)
F-132SS	3.0	(7.5)	(242)	(217)	(41.4)	(950)	(6.7)	(200)	(173)	(36.2)	(1140)	(6.4)	(257)	(223)	(40.85)	(1150)
F-132S	3.7	(8.9)	(235)	(220)	(49.1)	(950)	(8.2)	(190)	(170)	(42.6)	(1140)	(7.7)	(239)	(221)	(48.1)	(1150)
F-132M	5.5	(12.9)	(239)	(232)	(74)	(960)	(11.9)	(190)	(175)	(63.3)	(1150)	(11.1)	(246)	(228)	(71.7)	(1160)
F-160M	7.5	15.2	246	254	87	980	14.4	197	213	75	1180	13.4	251	272	83	1180
F-160L	11.0	21.7	245	263	125	970	20.6	194	219	108	1170	19.2	247	280	122	1170
F-180MG	15.0	27.7	271	232	179	980	27.3	222	195	154	1180	25.0	276	246	172	1180
F-180L	18.5	35.6	311	274	250	990	33.2	258	234	215	1180	31.1	321	293	240	1190
F-180L	22.0	41.4	261	230	250	990	39.5	216	196	215	1180	36.3	269	246	240	1180
F-200L	30.0	56	269	267	347	960	53	221	228	299	1180	48.8	275	287	334	1180
F-200L	37.0	68	289	293	456	980	65	237	251	392	1170	60	296	314	439	1170
F-225S	45.0	82	238	244	481	980	79	195	209	409	1170	72	242	262	457	1180
F-250S	55	99	231	242	573	980	97	188	208	485	1170	88	234	260	542	1180
F-250M	75	135	271	296	915	980	131	221	255	768	1170	119	274	266	859	1180

Notes: 1. Values in parenthesis in the above table is designed value. Consult us for detailed values.

2. Because the values in the above table are subject to change without notice, please consult us if confirmed values are necessary.

Characteristics for Japan Standard Motor

Table F-30 Characteristics of Increased Safety Motors

(1) 200V Class

Motor Frame Size	Pole	4P														
	Power	200V-50Hz					200V-60Hz					220V-60Hz				
	Output (kW)	Rated Current	Torque max.(%)	Starting Torque (%)	Starting Current (A)	Speed (r/min)	Rated Current	Torque max.(%)	Starting Torque (%)	Starting Current (A)	Speed (r/min)	Rated Current	Torque max.(%)	Starting Torque (%)	Starting Current (A)	Speed (r/min)
F-63S	0.10	0.69	265	281	2.7	1420	0.60	236	245	2.5	1690	0.62	285	297	2.8	1720
F-63M	0.20	1.2	232	233	4.6	1410	1.1	210	207	4.2	1690	1.1	254	250	4.8	1710
F-71M	0.40	2.3	237	237	9.1	1380	2.0	210	210	8.3	1650	2.0	257	257	9.4	1680
F-80M	0.75	3.9	234	215	16.0	1420	3.4	211	190	15.1	1720	3.3	253	242	16.8	1740
F-90L	1.5	7.0	242	224	34.1	1430	6.3	205	192	31.2	1710	6.0	250	243	34.9	1730
F-100L	2.2	9.6	268	255	52	1430	8.8	229	204	46.9	1700	8.3	282	260	52	1720
F-112M	3.7	15.1	262	236	94	1430	14.2	216	188	83	1710	13.1	264	238	93	1730
F-132S	5.5	22.9	313	286	158	1420	21.1	264	229	139	1700	19.7	325	291	156	1720
F-132M	7.5	29.5	274	261	198	1450	27.4	240	224	175	1750	25.6	292	271	195	1760
F-160M	11.0	41.9	305	297	302	1450	39.5	263	247	265	1740	36.7	322	309	296	1750
G-160L	15.0	53	271	265	360	1460	52	220	222	313	1750	48	275	280	349	1760
F-180LG	18.5	66	293	312	522	1480	65	236	257	450	1780	59	295	324	504	1780
F-180LG	22.0	79	246	262	522	1480	78	199	216	450	1770	70	248	272	504	1780
F-200LG	30.0	105	245	281	706	1470	105	195	231	610	1760	94	245	292	684	1770
F-200L	37.0	128	245	289	857	1470	128	195	241	742	1750	115	245	305	832	1760
F-225S	45.0	154	243	228	985	1470	154	198	193	844	1770	139	246	241	943	1770
F-225S	55	186	267	261	1328	1470	186	217	225	1130	1770	168	269	280	1261	1770

Motor Frame Size	Pole	6P														
	Power	200V-50Hz					200V-60Hz					220V-60Hz				
	Output (kW)	Rated Current	Torque max.(%)	Starting Torque (%)	Starting Current (A)	Speed (r/min)	Rated Current	Torque max.(%)	Starting Torque (%)	Starting Current (A)	Speed (r/min)	Rated Current	Torque max.(%)	Starting Torque (%)	Starting Current (A)	Speed (r/min)
F-180LG	15.0	56	271	232	358	980	55	222	195	308	1180	50	276	246	344	1180
F-180L	18.5	72	311	274	500	990	67	258	234	430	1180	63	321	293	480	1190
F-180L	22.0	84	261	230	500	990	79	216	196	430	1180	73	269	246	480	1180
F-200L	30.0	107	252	253	652	980	107	204	212	558	1170	97	256	287	668	1170
F-225S	37.0	136	239	241	793	980	132	196	206	678	1170	121	243	314	878	1180
F-225S	45.0	163	235	245	946	970	163	190	208	809	1170	146	237	262	914	1170
F-250S	55	199	242	257	1184	970	198	196	219	1011	1170	178	244	260	1084	1180

(2) 400V Class

Motor Frame Size	Pole	4P														
	Power	400V-50Hz					400V-60Hz					440V-60Hz				
	Output (kW)	Rated Current	Torque max.(%)	Starting Torque (%)	Starting Current (A)	Speed (r/min)	Rated Current	Torque max.(%)	Starting Torque (%)	Starting Current (A)	Speed (r/min)	Rated Current	Torque max.(%)	Starting Torque (%)	Starting Current (A)	Speed (r/min)
F-63S	0.10	0.36	255	261	1.3	1420	0.31	233	224	1.2	1700	0.32	277	289	1.4	1720
F-63M	0.20	0.62	233	236	2.3	1410	0.54	212	202	2.1	1690	0.54	257	266	2.4	1710
F-71M	0.40	1.2	229	229	4.5	1390	1.0	205	201	4.1	1650	1.0	249	262	4.6	1680
F-80M	0.75	1.9	234	215	8.0	1420	1.7	211	190	7.6	1720	1.7	253	242	8.4	1740
F-90L	1.5	3.5	242	224	17.1	1430	3.1	205	192	15.6	1710	3.0	250	243	17.5	1730
F-100L	2.2	4.8	268	255	26.0	1430	4.4	229	204	23.5	1700	4.2	282	260	26.2	1720
F-112M	3.7	7.5	262	236	46.9	1430	7.1	216	188	41.4	1710	6.6	264	238	46.4	1730
F-132S	5.5	11.4	313	286	79	1420	10.5	264	229	70	1700	9.9	325	291	78	1720
F-132M	7.5	14.8	274	261	99	1450	13.7	240	224	88	1750	12.8	292	271	98	1760
F-160M	11.0	21.0	305	297	151	1450	19.7	263	247	133	1740	18.3	322	309	148	1750
G-160L	15.0	26.8	271	265	180	1460	26.1	220	222	157	1750	23.8	275	280	175	1760
F-180LG	18.5	33.1	293	312	261	1480	32.3	236	257	225	1780	29.6	295	324	252	1780
F-180LG	22.0	39.3	246	262	261	1480	38.8	199	216	225	1770	35.1	248	272	252	1780
F-200LG	30.0	52	245	281	353	1470	53	195	231	305	1760	47.2	245	292	342	1770
F-200L	37.0	64	245	289	429	1470	64	195	241	371	1750	58	245	305	416	1760
F-225S	45.0	77	243	222	492	1470	77	198	193	422	1770	70	246	241	471	1770
F-225S	55	93	267	261	664	1470	93	217	225	565	1770	84	269	280	630	1770

Motor Frame Size	Pole	6P														
	Power	400V-50Hz					400V-60Hz					440V-60Hz				
	Output (kW)	Rated Current	Torque max.(%)	Starting Torque (%)	Starting Current (A)	Speed (r/min)	Rated Current	Torque max.(%)	Starting Torque (%)	Starting Current (A)	Speed (r/min)	Rated Current	Torque max.(%)	Starting Torque (%)	Starting Current (A)	Speed (r/min)
F-180LG	15.0	27.9	271	232	179	980	27.3	222	195	154	1180	25.0	276	246	172	1180
F-180L	18.5	36.0	311	274	250	990	33.4	258	234	215	1180	31.3	321	293	240	1190
F-180L	22.0	41.9	261	230	250	990	39.7	216	196	215	1180	36.5	269	246	240	1180
F-200L	30.0	54	252	253	326	980	53	204	212	279	1170	48.4	256	269	313	1170
F-225S	37.0	68	239	241	396	980	66	196	206	339	1170	60	243	258	379	1180
F-225S	45.0	81	235	245	473	970	81	190	208	404	1170	73	237	261	453	1170
F-250S	55	99	242	257	592	970	99	196	219	506	1170	89	244	275	566	1180

*Because the values in the above table are subject to change without notice, please consult us if confirmed values are necessary.

Specification and Constructions of Built-in Brake

Table F-31 Standard Brake Motor Specification

Output Power (kW × 4P)		Brake Type	Standard Torque (N · m)	Moment of Inertia (× 10 ⁻⁴ kg · m ²)	Total Braking Energy (× 10 ³ J)	Motion Delay Time (sec)		Brake Current (A)					
General-Purpose Motors	AF Motor					Standard Braking Action	Fast Braking Action	220V	230V	380V	400V	415V	440V
0.10	0.10	FB-01A	1.0	3.5	12	0.15~0.20	0.015~0.02	0.08	0.10	-	-	-	-
0.20/0.25		FB-02A	2.0	5.5	12			0.10	0.10	-	-	-	-
0.40	0.20	FB-05A	4.0	6.75	12	0.10~0.150	0.01~0.015	0.10	0.10	-	-	-	-
0.55/0.75	0.40	FB-1B	7.5	11.1/13	33	0.20~0.30	0.01~0.02	0.10	0.10	-	-	-	-
1.1/1.5	0.75	FB-2B	15	20.8/23.5	38			0.30	0.30	-	-	-	-
2.2	1.5	FB-3B	22	37.3	45	0.30~0.40	0.01~0.02	0.30	0.30	-	-	-	-
3.0/3.7	2.2	FB-5B	37	81/95.8	235	0.40~0.50		0.60	0.60	-	-	-	-
5.5	3.7	FB-8B	55	125	235	0.30~0.40	0.03~0.04	-	-	0.30	0.30	0.30	0.30
7.5	5.5	FB-10B	75	303	343	0.70~0.80		-	-	0.30	0.40	0.40	0.40
11	7.5	FB-15B	110	410	343	0.50~0.60	0.10~0.15	-	-	0.40	0.40	0.40	0.40
15	11	CMB-20	100	1350	304	0.40~0.50		-	-	1.6	1.6	1.7	1.8
22	15	*1 ESB-220	150	2370	201	-	0.08	0.95	*2				
30	22	*1 ESB-220	200	2572	201	-		0.95					
37	30	*1 ESB-250	250	3205	262	-	0.07	1.15					

*1. Continuous rating applies to both motor and brake of the FB, CMB and ESB brakes, but continuous operation is impossible with vertical and inverted 4P input of the ESB type brake.

*2. ESB type brake comes in a 200V class only. When the power supply is 400V, use a transformer. The capacity of the transformer is 250-300 VA and the secondary voltage is 200-220V.

- The rectifier of the ESB type brake is to be placed separately.
Use a special DC power unit (HD-110M3) for the ESB brake. (See p.F-43 of the rectifier.) The DC power unit is made as an indoor type. Install it in a place where it will not be splashed by water.
- Nonasbestos lining is used for the FB brake.
- When greater stopping accuracy is desired or brake is used for lifter, use the fast braking action.
- Low-noise type brakes are also available as an option.
- FB, CMB, and ESB brakes need DC power supply, and the spring braking system (non-electromagnetic braking system) is adopted.

Output Voltage of Rectifier (FB Brake)

Input Voltage	Output Voltage
AC220V	DC99V
AC230V	DC104V
AC380V	DC171V
AC400V	DC180V
AC415V	DC187V
AC440V	DC198V

* Refer to p.F-43 for the output voltage of ESB brake.

Why fast braking circuit shortens braking time.

See Fig.F-33 and Fig.F-34 for differences between standard braking circuit and fast braking circuit.
See Fig.F-35 and Fig.F-36 for current curves of standard braking and fast braking.

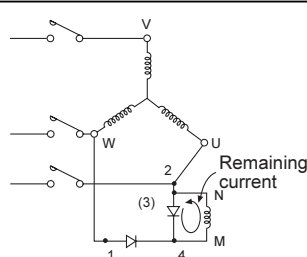


Fig. F-33 standard circuit

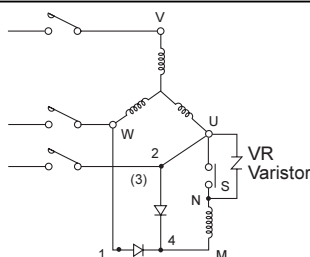


Fig. F-34 quick braking circuit

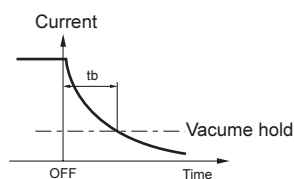


Fig. F-35 current curve of standard braking

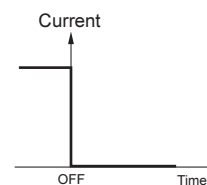


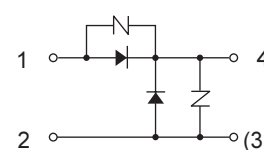
Fig. F-36 current curve of quick braking

In the standard circuit Shown in Fig.F-33, some current remains after the power is turned off due to the saved energy in the inductance L of brake coil. The current curve is shown in the Fig.F-35. When it is connected to fast braking circuit as Show in Fig.F-34 and S is released at the same time, no current remains as there

is no closed circuit with the brake coil. (See the Fig.F-36)

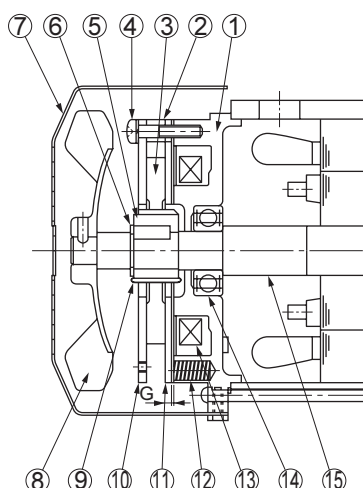
Therefore, it shortens the braking time by t_b in the Fig.F-35. Fast braking circuit is to release all current by ON/OFF of brake coil at the same time with power ON/OFF. (VR varistor must be used to protect the rectifier and connection S.)

Circuit in the rectifier



Specification and Constructions of Built-in Brake

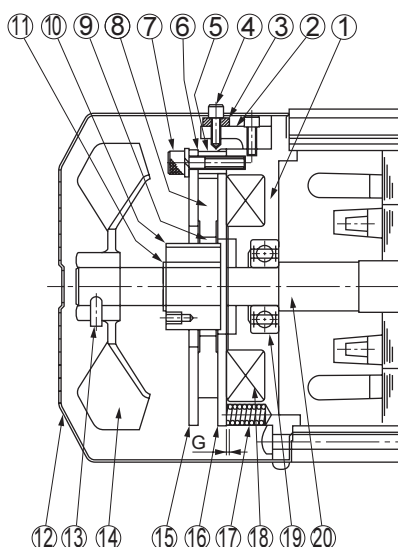
Fig. F-37 FB-01A, 02A, 05A
(FB-01A without Fan)



No.	Pats Name
1	Stationary core
2	Spacer
3	Brake lining
4	Assembling bolt
5	Boss
6	Shaft retaining C-ring
7	Cove
8	Fan (except for 0.1kW x 4 Poles)
9	Leaf spring
10	Fixed plate
11	Armature plate
12	Spring
13	Electromagnetic coil
14	Ball bearing
15	Motor shaft

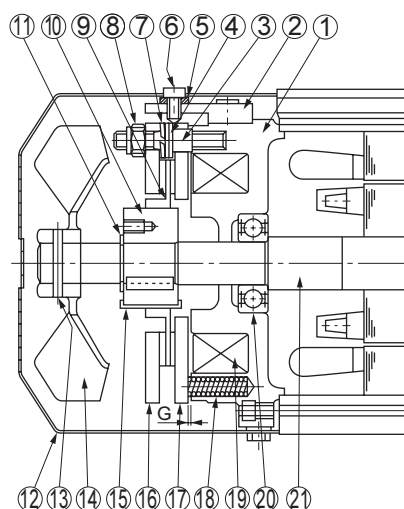
*Brake release unit is available by option.

Fig. F-38 FB-1B, 2B, 3B



No.	Pats Name
1	Stationary core
2	Release fitting
3	Manual release protection spacer
4	Brake release bolt
5	Spacer
6	Gap adjusting shim
7	Assembling bolt
8	Brake lining
9	Leaf spring
10	Boss
11	Shaft retaining C-ring
12	Cover
13	Fan set bolt
14	Fan
15	Fixed plate
16	Armature plate
17	Spring
18	Electromagnetic coil
19	Ball bearing
20	Motor shaft

Fig. F-39 FB-5B, 8B



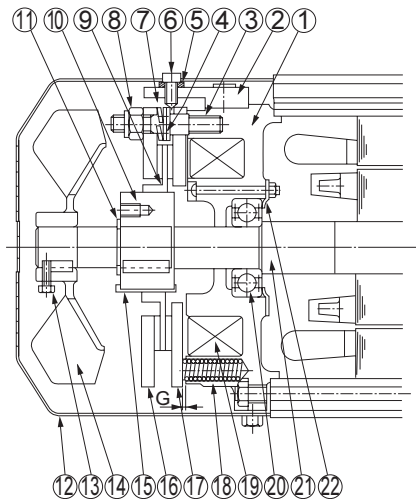
No.	Pats Name
1	Stationary core
2	Release fitting
3	Stud bolt
4	Adjusting washer
5	Manual release protection spacer
6	Brake release bolt
7	Spring washer
8	Gap adjusting nut
9	Brake lining
10	Boss
11	Shaft retaining C-ring
12	Cover
13	Spring pin
14	Fan
15	Leaf spring
16	Fixed plate
17	Armature plate
18	Spring
19	Electromagnetic coil
20	Ball bearing
21	Motor shaft

TECHNICAL
DATA

Motor

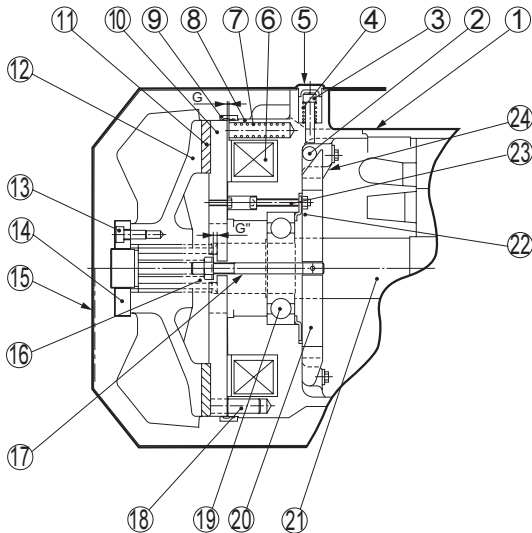
Specification and Constructions of Built-in Brake

Fig. F-40 FB-10B, 15B



No.	Pats Name
1	Stationary core
2	Release fitting
3	Stud bolt
4	Adjusting washer
5	Manual release protection spacer
6	Brake release bolt
7	Spring washer
8	Gap adjusting nut
9	Brake lining
10	Boss
11	Shaft retaining C-ring
12	Cover
13	Fan set bolt
14	Fan
15	Leaf spring
16	Fixed plate
17	Armature plate
18	Spring
19	Electromagnetic coil
20	Ball bearing
21	Motor shaft
22	Bearing cover

Fig. F-41 CMB-20



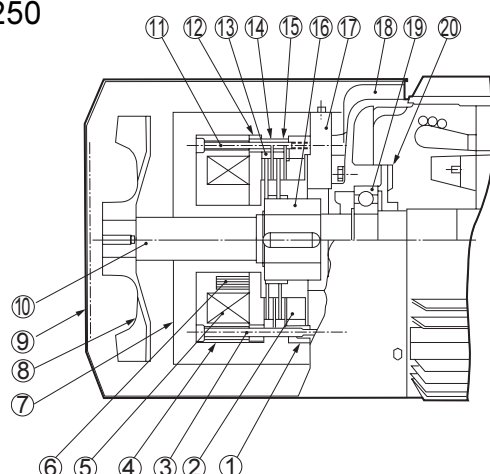
No.	Pats Name
1	Motor
2	Roller
3	Brake release bolt
4	Auxiliary spring
5	Plug
6	Electromagnetic coil
7	Spring
8	Stationary core
9	Dust seal
10	Armature plate
11	Brake lining
12	Brake wheel
13	Bolt
14	Retaining nut
15	Cover
16	U nut
17	Stud bolt
18	Retaining pin
19	Ball bearing
20	Release lever
21	Motor shaft
22	Bearing cover
23	Bearing cover bolt
24	Release lever stopper

TECHNICAL
DATA

Motor

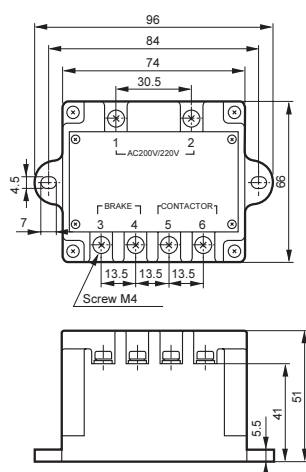
Specification and Constructions of Built-in Brake

Fig. F-42. ESB220, 250

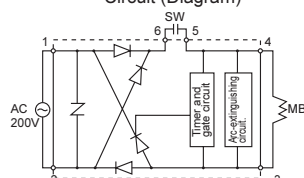


No.	Pats Name
1	Center ring
2	Gap adjusting screw
3	Assembling bolt
4	Field
5	Brake coil
6	Actuating spring
7	Brake cover (not provided for indoor type)
8	Fan
9	Fan cover
10	Shaft
11	Lock bolt
12	Armature
13	Inner disc
14	Outer disc
15	Spacer bushing
16	Hub
17	Brake adapter plate
18	Opposite drive end bracket
19	Opposite drive end bearing
20	Opposite drive end bearing cover

Power Module Model HD-110M3



Circuit (Diagram)



Rated input voltage: AC200/220V 50/60Hz

Maximum input voltage: AC240V 50/60Hz

Minimum input voltage: AC170V 50/60Hz

Standard output voltage

Instantaneous voltage: DC180V with AC200V input

Steady voltage: DC90V

Maximum output current: DC1.8A (Steady output)

Overexcitation time: 0.4 to 1.2 sec

Insulation resistance: At 100MΩ or above
(When measured with 1000V megohmmeter)

Insulation with stand voltage: Application of AC2000V for over 1 time

Maximum frequency

Inching(On-time 1.2 sec or less), 8 cycle/min

Constant(On-time over 1.2sec), 30 cycle/min

Ambient temperature: -20°C ~ +60°C

Note: 1. Take care to avoid dust and water.

2. Transformer is necessary for operation with 400V class power source.

The transformer should have 250 ~ 300VA rating and 200 ~ 220V secondary voltage.

TECHNICAL
DATA

Motor

Connection

3-Phase Induction Motor

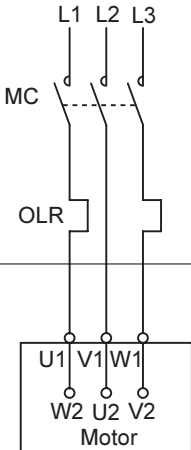
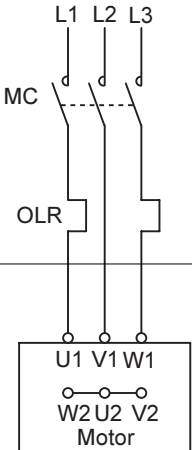
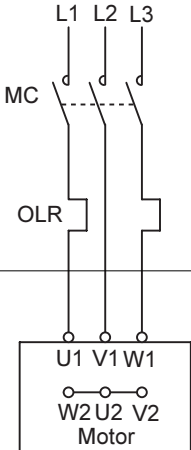
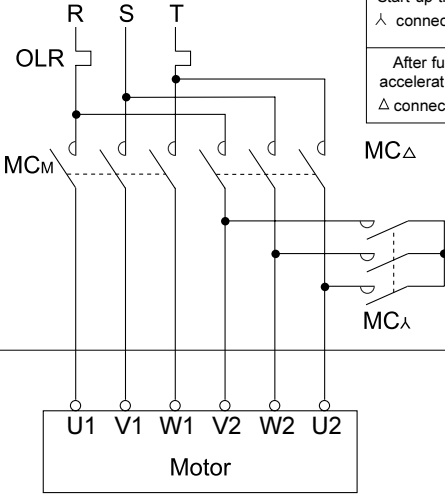
	Wiring	Connection & Terminal code	Remarks
Direct Start-up			Standard motor under 0.1 - 3.7kW 200V Class 220 - 240V 50Hz 220V 60Hz
			Standard motor 0.1 - 3.7kW 400V Class 380 - 420V 50Hz 440V 60Hz
Start-up		Start-up time ^ Connection	Standard Motor (1) Capacity: more than 5.5kW and more (2) Power Source 400V Class 380 - 420V 50Hz 400V 60Hz
		After full acceleration Δ Connection	Note: If other than the above-mentioned voltages, please consult us.

TECHNICAL DATA

Motor

Example of Connection

a. 3-Phase Motor

0.1-3.7kW x 4P 200V Class Direct Starting		0.1-3.7kW x 4P 400V Class Direct Starting																			
	Control panel Terminal box		Control panel Terminal box																		
5.5-45kW x 4P 400V Class Direct Starting		5.5-45kW x 4P 400V Class λ - Δ Starting																			
	Control panel Terminal box	 <table><tr><td>Start-up time</td><td>MCM</td><td>ON</td></tr><tr><td>λ connection</td><td>MC Δ</td><td>OFF</td></tr><tr><td></td><td>MC λ</td><td>ON</td></tr><tr><td>After full acceleration</td><td>MCM</td><td>ON</td></tr><tr><td>Δ connection</td><td>MC Δ</td><td>OFF</td></tr><tr><td></td><td>MC λ</td><td>ON</td></tr></table>	Start-up time	MCM	ON	λ connection	MC Δ	OFF		MC λ	ON	After full acceleration	MCM	ON	Δ connection	MC Δ	OFF		MC λ	ON	Control panel Terminal box
Start-up time	MCM	ON																			
λ connection	MC Δ	OFF																			
	MC λ	ON																			
After full acceleration	MCM	ON																			
Δ connection	MC Δ	OFF																			
	MC λ	ON																			

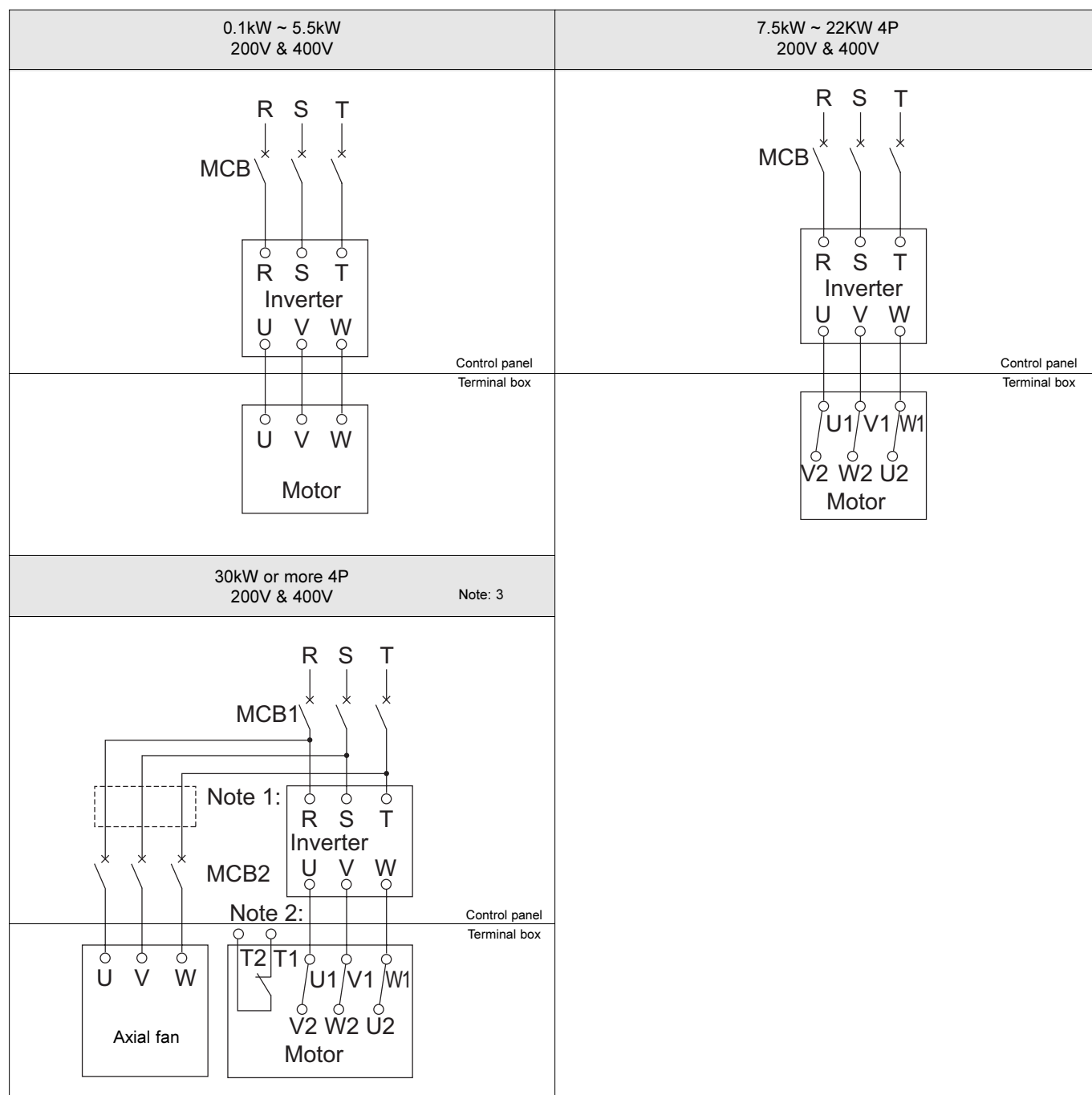
MC : Electromagnetic contactor and
OLR : Overload relay or thermal relay are not supplied by sumitomo.

TECHNICAL DATA
Motor

Example of Connection

b. 3-phase motor

Example of connection for inverter-driving



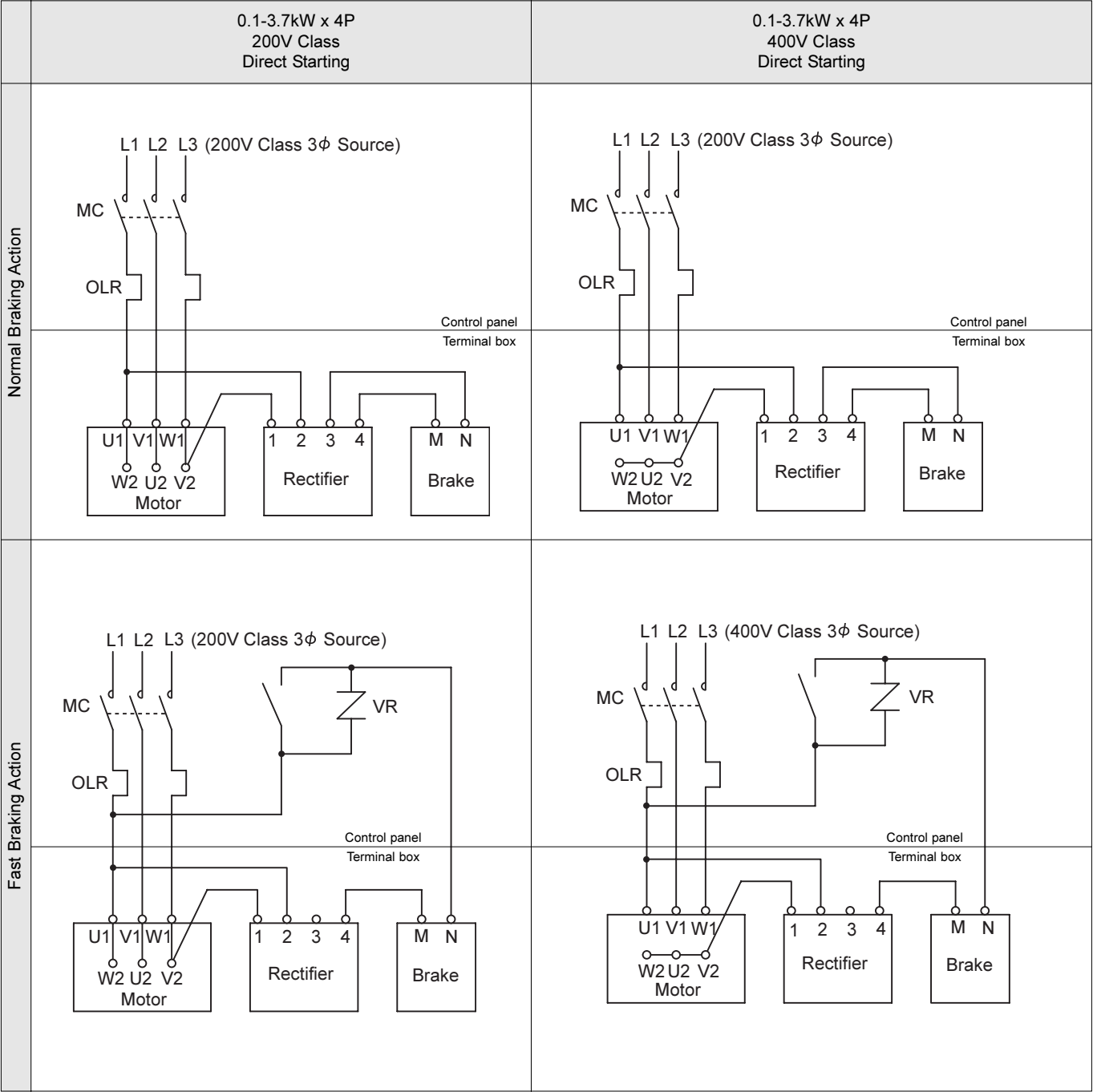
The AF motor is designed for inverter-driving. When the capacity is small, the λ connection is adopted, and when it is intermediate or larger, the Δ connection is adopted.

- λ - Δ change-over operation by commercial power will also be possible.

- Note:
1. The standard voltage of the axial fan is 3 ,200V. Provide a 400/200V transformer for the 400V power supply. Contact us for inquiries about a 400V fan.
 2. Thermostat specifications (For totally enclosed separate ventilation type)
Terminal code: T1 and T2 or P1 and P2
Operating temperature: 135°C (Type F insulation)
Operation: Normally closed (b contact point)
Max. current: 24VDC; 18A; 230VAC ; 13A

Example of Connection

c. 3-Phase Motor with FB Brake for One Way Rotation (0.1-3.7kW)

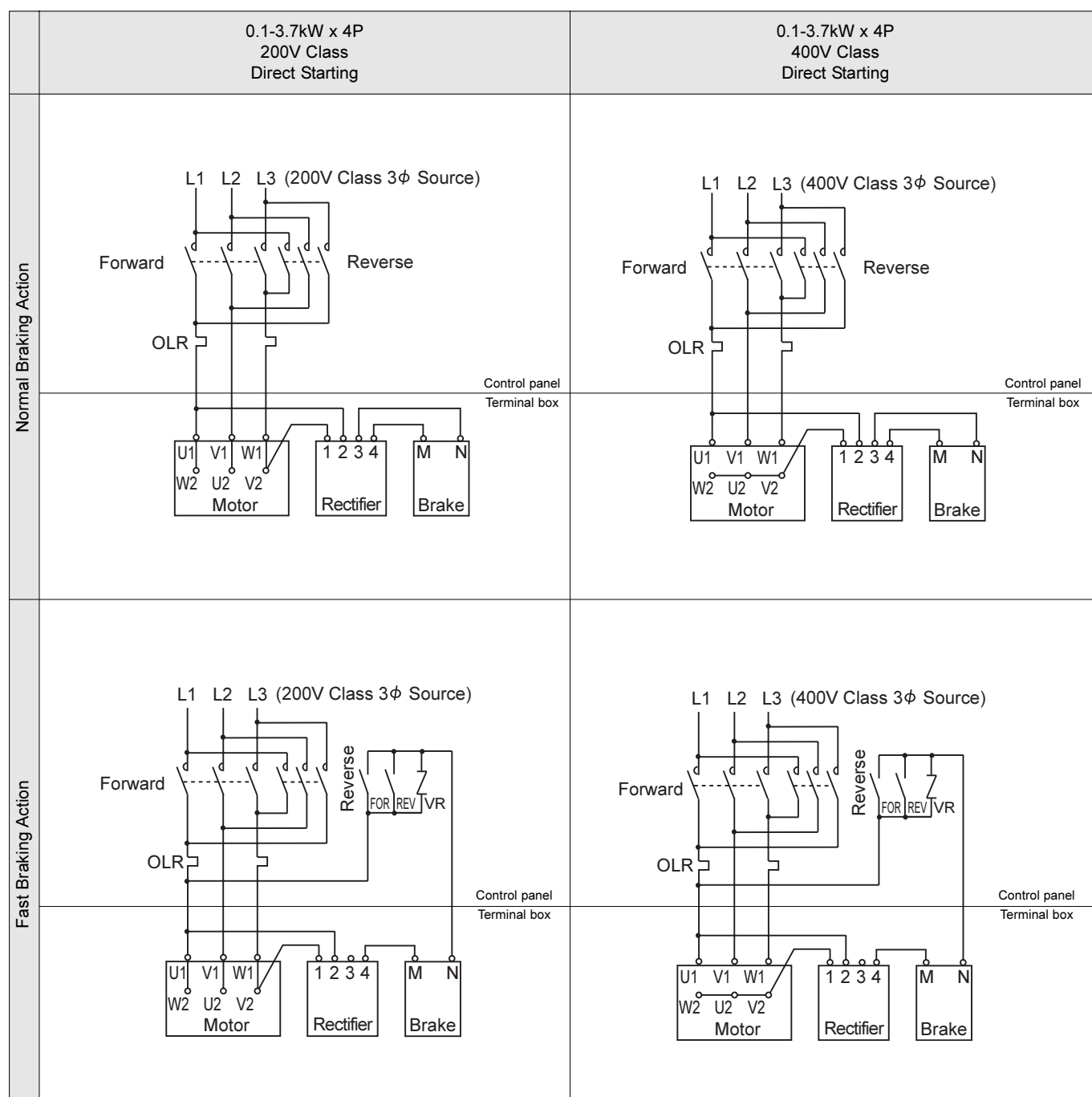


TECHNICAL
DATA

Motor

Example of Connection

d. 3-Phase Motor with FB Brake for Operating in Both Directions (0.1-3.7kW)



Electromagnetic contactor and OLR: Overload relay are not supplied by Sumitomo.

VR: Varistor is optionally available at Sumitomo.

Brake input power		AC200V ~ 230V	AC380V ~ 460V
Rated voltage of varistor		430V ~ 470V	820V
Rated capacity of varistor	FB-01A,02A,05A	0.2Watt and above	0.4Watt and above
	FB-1B	0.4Watt and above	0.6Watt and above
	FB-2B,3B,5B	0.6Watt and above	1.5Watt and above

Connection capacity of quick braking circuit is recommended to have more than five times of braking capacity (direct current coil load) of the brake current shown in the page on page F-40.

Example of Connection

e. 3-Phase Motor with FB Brake for One Way Rotation (5.5-11kW)

	5.5-11kW x 4P 400V Class Direct Starting	5.5-11kW x 4P 400V Class Δ - Δ Starting																	
Normal Braking Action																			
		<table><tr><td>Start-up time Δ connection</td><td>MCM</td><td>ON</td></tr><tr><td></td><td>MC Δ</td><td>OFF</td></tr><tr><td></td><td>MC Δ</td><td>ON</td></tr><tr><td>After full acceleration Δ connection</td><td>MCM</td><td>ON</td></tr><tr><td></td><td>MC Δ</td><td>OFF</td></tr><tr><td></td><td>MC Δ</td><td>ON</td></tr></table>	Start-up time Δ connection	MCM	ON		MC Δ	OFF		MC Δ	ON	After full acceleration Δ connection	MCM	ON		MC Δ	OFF		MC Δ
Start-up time Δ connection	MCM	ON																	
	MC Δ	OFF																	
	MC Δ	ON																	
After full acceleration Δ connection	MCM	ON																	
	MC Δ	OFF																	
	MC Δ	ON																	
Fast Braking Action																			
		<table><tr><td>Start-up time Δ connection</td><td>MCM</td><td>ON</td></tr><tr><td></td><td>MC Δ</td><td>OFF</td></tr><tr><td></td><td>MC Δ</td><td>ON</td></tr><tr><td>After full acceleration Δ connection</td><td>MCM</td><td>ON</td></tr><tr><td></td><td>MC Δ</td><td>OFF</td></tr><tr><td></td><td>MC Δ</td><td>ON</td></tr></table>	Start-up time Δ connection	MCM	ON		MC Δ	OFF		MC Δ	ON	After full acceleration Δ connection	MCM	ON		MC Δ	OFF		MC Δ
Start-up time Δ connection	MCM	ON																	
	MC Δ	OFF																	
	MC Δ	ON																	
After full acceleration Δ connection	MCM	ON																	
	MC Δ	OFF																	
	MC Δ	ON																	

TECHNICAL
DATA

Motor

Example of Connection

f. 3-Phase Motor with FB Brake for Operating in Both Directions (5.5-11kW)

		5.5-11kW x 4P 400V Class Direct Starting	5.5-11kW x 4P 400V Class λ - Δ Starting				
Normal Braking Action			<table><tr><td>Start-up time λ connection</td><td>MCM ON MC Δ OFF MC λ ON</td></tr><tr><td>After full acceleration Δ connection</td><td>MCM ON MC Δ OFF MC λ ON</td></tr></table>	Start-up time λ connection	MCM ON MC Δ OFF MC λ ON	After full acceleration Δ connection	MCM ON MC Δ OFF MC λ ON
	Start-up time λ connection	MCM ON MC Δ OFF MC λ ON					
After full acceleration Δ connection	MCM ON MC Δ OFF MC λ ON						
Fast Braking Action			<table><tr><td>Start-up time λ connection</td><td>MCM ON MC Δ OFF MC λ ON</td></tr><tr><td>After full acceleration Δ connection</td><td>MCM ON MC Δ OFF MC λ ON</td></tr></table>	Start-up time λ connection	MCM ON MC Δ OFF MC λ ON	After full acceleration Δ connection	MCM ON MC Δ OFF MC λ ON
	Start-up time λ connection	MCM ON MC Δ OFF MC λ ON					
After full acceleration Δ connection	MCM ON MC Δ OFF MC λ ON						

Electromagnetic contactor and OLR: Overload relay are not supplied by Sumitomo.

VR: Varistor is optionally available at Sumitomo.

Brake input power		AC200V ~ 230V	AC380V ~ 460V
Rated voltage of varistor		430V ~ 470V	820V
Rated capacity of varistor	FB-8B	0.6Watt and above	1.5Watt and above
	FB-10B, 15B	1Watt and above	1.5Watt and above

Connection capacity of quick braking circuit is recommended to have more than five times of braking capacity (direct current coil load) of the brake current shown in the page on page F-40.

Example of Connection

g. 3-Phase Motor with CMB Brake for One Way Rotation

	15kW x 4P 400V Class Direct Starting	15kW x 4P 400V Class λ - Δ Starting									
Normal Braking Action		<table><tr><td>Start-up time</td><td>MCM</td><td>ON</td></tr><tr><td>λ connection</td><td>MC Δ</td><td>OFF</td></tr><tr><td></td><td>MC λ</td><td>ON</td></tr></table>	Start-up time	MCM	ON	λ connection	MC Δ	OFF		MC λ	ON
	Start-up time	MCM	ON								
λ connection	MC Δ	OFF									
	MC λ	ON									
Fast Braking Action		<table><tr><td>Start-up time</td><td>MCM</td><td>ON</td></tr><tr><td>λ connection</td><td>MC Δ</td><td>OFF</td></tr><tr><td></td><td>MC λ</td><td>ON</td></tr></table>	Start-up time	MCM	ON	λ connection	MC Δ	OFF		MC λ	ON
	Start-up time	MCM	ON								
λ connection	MC Δ	OFF									
	MC λ	ON									

TECHNICAL
DATA

Motor

Example of Connection

h. 3-Phase Motor with CMB Brake for Operating in Both Directions

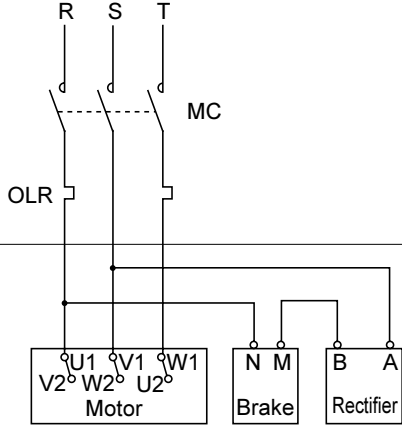
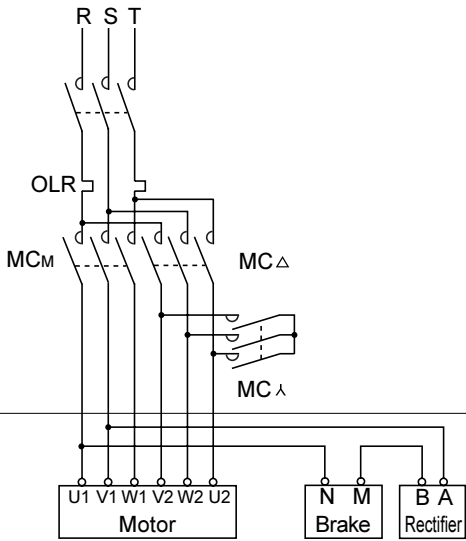
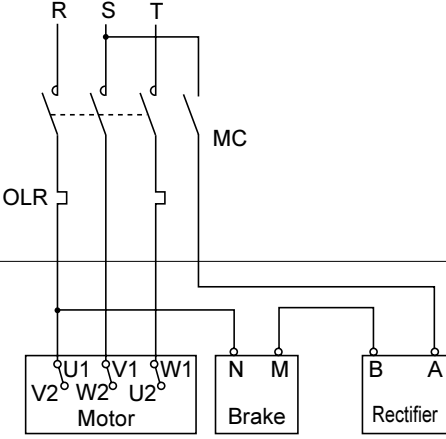
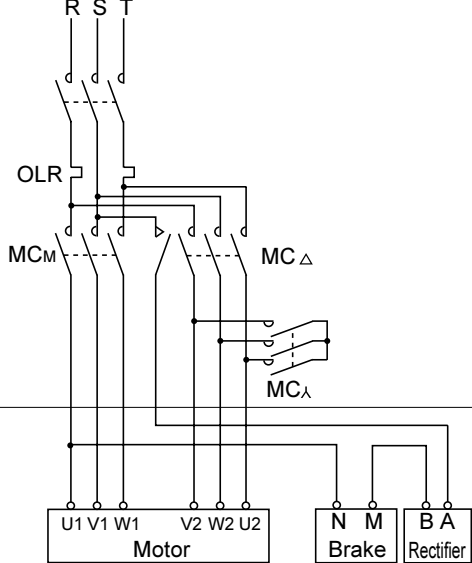
	15kW x 4P 400V Class Direct Starting	15kW x 4P 400V Class λ - Δ Starting
Normal Braking Action		
Fast Braking Action		

TECHNICAL
DATA

Motor

Example of Connection

i. 3-Phase Motor with CMB Brake for One Way Rotation

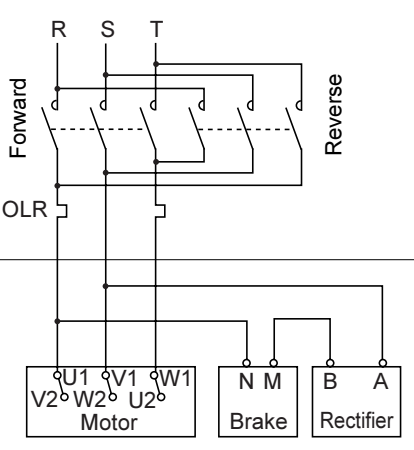
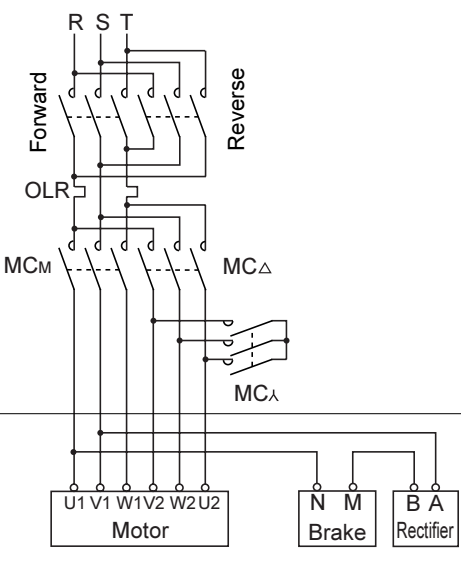
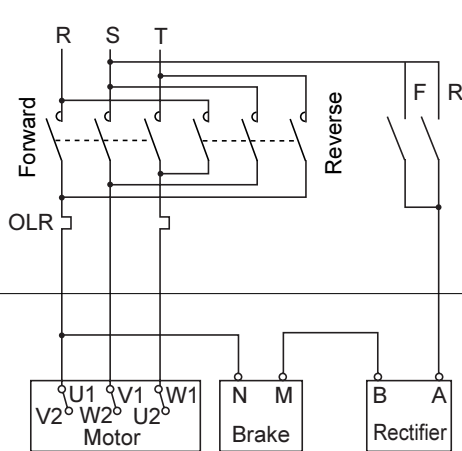
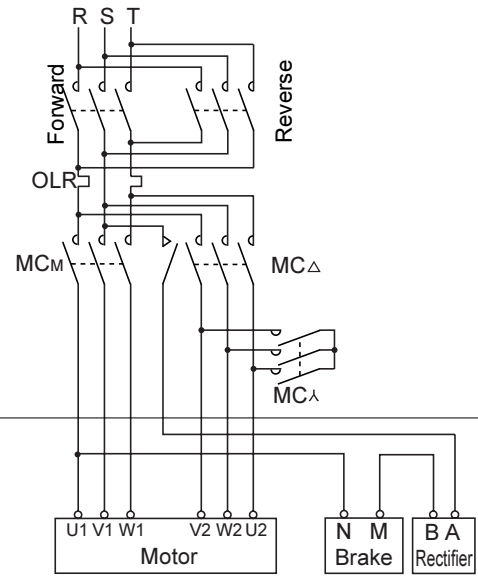
	15kW x 4P 400V Class Direct Starting	15kW x 4P 400V Class Δ - Δ Starting
Normal Braking Action		
Fast Braking Action		

TECHNICAL DATA

Motor

Example of Connection

j. 3-Phase Motor with CMB Brake for Operating in Both Directions

	15kW x 4P 400V Class Direct Starting	15kW x 4P 400V Class λ - Δ Starting
Normal Braking Action		
Fast Braking Action		

TECHNICAL
DATA

Motor

Protection and Cooling

No.1 Symbol : type of protection of humans and solid foreign substances
 No.2 Symbol : type of protection against water permeation } Classified according to combination (IEC34-1)

Protection Method of Motors

No.1 Symbol No.1 type	No.2 Symbol No.2 type	0 Non-protected type	2 Drip-proof type	3 Spray-proof type	4 Splash-proof type	5 Water-jet-proof type	6 Sea-wave-proof type	7 Immersion-proof type	8 Submersible type
0 (Non-protected type)		IP00			×	×	×	×	
1 (Semi-protected type)		IP10	IP12S			×	×	×	
2 (Protected type)		IP20	IP22S	IP23S	IP24	×	×	×	
4 (Totally enclosed type)		×			IP44	IP45			
5 (Dust-proof type)		×			IP54	IP55	IP56		

Notes: 1. × denotes difficulty in forming the combination.

2. Outlined columns denote the manufacturing range of Sumitomo standard.

3. Please consult us if operating conditions include splashed water, or rain.

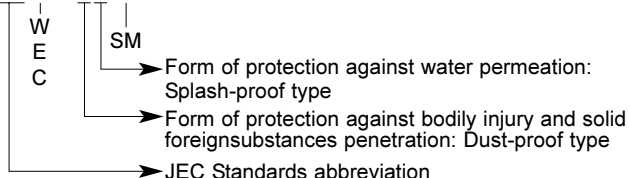
Class of No.1 Symbol

Type	Symbol	Description
Non-protected	0	Constructed without special protection against human contact and penetration of solid foreign substances.
Semi-protected	1	Constructed to prevent inadvertent contact with rotating and conductive parts inside the machine, by hand or other critical parts of human body. Constructed to prevent penetration of solid foreign substances over 50 mm in diameter.
Protected	2	Constructed to prevent contact with rotating and conductive parts inside the machine, by hand or other critical parts of the human body. Constructed to prevent penetration by solid substances over 12mm in diameter.
Totally enclosed	3	Constructed to prevent contact with the rotating and conductive parts inside the machine, by tools, electric wires, etc., with minimum width and thickness over 1mm. Constructed to prevent penetration of solid foreign substances over 1mm diameter. However, water drainage outlet and exhaust outlet may be of Symbol 2 construction.
Dust-proof type	4	Constructed to prevent contact with rotating and conductive parts inside the machine by any foreign object. Constructed for maximum protection against dust particles penetration, but such penetration will not interfere with normal operation.

Class of No.2 Symbol

Type	Symbol	Description
Non-protected	0	Constructed without special protection against water permeation.
Drip-proof	2	Constructed to prevent harmful effect from dripping water falling from within 15° direction from vertical.
Spray-proof	3	Constructed to prevent harmful effect from dripping water falling from within 60° direction from vertical.
Splash-proof	4	Constructed to prevent harmful effect from dripping water falling from any direction.
Water-jet-proof	5	Constructed to prevent harmful effect from spray from any direction.
Sea-wave-proof	6	Constructed to prevent harmful effect from strong spray from any direction.
Immersion-proof	7	Constructed for submersion into water of prescribed depth and time, but not having any harmful effect in spite of water permeation.
Submersible	8	Constructed to assure normal operations under water.

Example: IP ☐ - 54 ☐



- S: Test of form of protection against water permeation conducted when motor is stopped.
 M: Test of form of protection against water permeation, conducted while motor is operating.
 When no S or M stipulated:
 Test conducted when motor stopped and when operating
 W: Outdoor type (Only Non - protected)
 E: Explosion-proof type
 C: Form of protection against other harmful atmosphere.

Cooling

Enclosure Construction	IEC Standards
Totally enclosed, non-ventilated (TENV)	IC410
Totally enclosed, fan-cooled (TEFC)	IC411
Totally enclosed, Air over (TEAO)	IC416

International Standards and Compliance of Sumitomo Products

UL Standards (Underwriters Laboratories)

UL Standards are established by Underwriters Laboratories Inc. (UL), an independent, not-for-profit product-safety testing and certification organization in the USA. It conducts series of scientific study, research, and testing to prevent harmful effect to human life, fire, and disaster. Although there is no regulation by the Federal Government for manufacturers' compliance, some state and cities mandate them. Using Sumitomo product with UL Standard Certification will represent your reliability, which is highly appreciated in the USA.

Motor	Non-explosion proof single-phase induction motor *1	Non-explosion proof 3-phase induction motor	3-phase induction motor with brake
Power	1/8~1HP × 4P	1/8~60HP × P	1/8~8HP × 4P
Voltage	115V, 230V	208V, 230V, 460V, 575V	
Frequency	60Hz	60Hz	
Thermal class	Class A	*3 Class A (Class B, Class F)	Class F
Ambient conditions	Indoor type *2		

*1 Contact us for manufacturing single-phase motor or motor with brake.

*2 Outdoor types are unavailable.

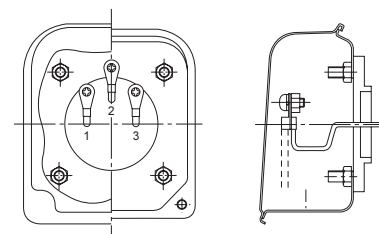
*3 Contact us for manufacturing insulation Type B and F.

Differences from Sumitomo standard models

- Terminal symbol: 1, 2, 3
- Name plate with UL mark and measurement expressed by units HP
- Opposite rotating direction from the Japanese domestic products
- Copper terminal box
- UL standard motor coil and brake coil

Remarks

- Motors must be manufactured, modified, and repaired at certified factories.
- Certified motor for inverter (AF Motor) may be manufactured for range 1/8~11HP.



3-Phase indoor terminal box



SM-CYCLO® 3 PHASE INDUCTION MOTOR		
HP	P	TYPE
VOLTS		FRAME
Hz		INS. CLASS
AMP		TIME RATING
RPM		SERVICE FACTOR
CODE		MAX AMB °C
SER. NO.		
SUMITOMO MACHINERY CORP. OF AMERICA CHESAPEAKE, VIRGINIA		

UL Nameplate

CSA Standards (Canadian Standards Association)

CSA Standards are established by the semiprivate Canadian Standards Association, a not-for-profit membership-based association. Most of the Canadian states requires this CSA certification for its domestically sold electric related products. Some American states evaluate CSA Standards comparable to UL Standards.

Motor	1-phase induction motor *1	3-phase induction motor	3-phase induction motor with brake	High efficiency 3-phase induction motor *1	High efficiency 3-phase induction motor with brake *1
Power	1/8~1HP × 4P	1/8~60HP × 4P	1/8~30HP × 4P	1.5~50HP × 4P	1.5~30HP × 4P
Voltage	115V, 230V	208V, 230V, 460V, 575V		230V, 460V, 575V	
Frequency	60Hz				
Thermal class	Class B (and Class F)				
Ambient conditions	Indoor type *2				

*1 Contact us for manufacturing of single-phase or high-efficiency motor with brake.

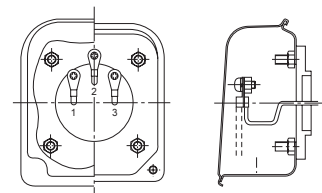
*2 Outdoor types are not available.

Differences from Sumitomo standard models

- Terminal symbol: 1, 2, 3 (with Brake type, T1, T2, T3)
- The frame size of a high-efficiency motors are different from standard types.
- Name plate with CSA mark and measurement in HP
- Opposite rotating direction
- Copper terminal box
- CSA standard motor coil

Remarks

- CSA certified motor is necessary for export to Canada. In addition, high-efficiency motor is necessary for 1 HP and above.
 - Motors must be manufactured, modified, and repaired at certified factories.
 - Because CSA does not certify motors for inverters, our AF Motors is not CSA certified and does not come with the CSA
 - Mark although it complies with the CSA standard.
- NRCan established the energy efficiency act (EEACT) in 1992 and the energy efficiency regulations (EER) in 1995. Additional regulations were applied to gearmotors imported on November 27, 1999 and later. Gearmotor import which do not meet the efficiency standards are now banned under this law. (Subject capacity: 1~200HP, Subject frame: IEC frame size 90 and above, Subject voltage: 600V and below, constant speed motor)



3-Phase indoor terminal box



SM-CYCLO™ 3 PHASE INDUCTION MOTOR		
HP	P	TYPE
VOLTS		FRAME
Hz		M/B INS. CLASS /
M.AMP		TIME RATING
RPM		SERVICE FACTOR
B.AMP		MAX AMB °C
B.TORQUE	FT-LB	ENCLOSURE
MANUF. No.		TE
SM CYCLO OF CANADA, LTD TORONTO, MONTREAL, VANCOUVER		

CSA Nameplate

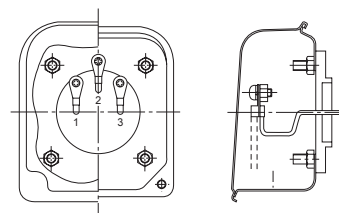
International Standards and Compliance of Sumitomo Products

NEMA Standards (National Electrical Manufacturers Association)

NEMA Standards include numerous standards for electric products established by the National Electrical Manufacturers Association (NEMA) to eliminate misunderstandings between manufacturer and purchaser.

Differences from Sumitomo standard models

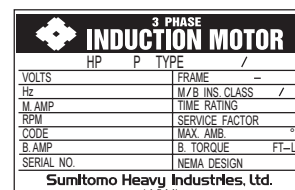
- Terminal symbol: 1, 2, 3
- Name plate marked with NEMA DESIGN and measurement in HP
- Opposite rotating direction from the Japanese domestic products
- Copper terminal box
- NEMA standard motor coil



3-Phase indoor terminal box

Remarks

- No approval is required to state NEMA compliance
- NEMA is also applicable for inverter motor (AF motor), but limited to terminal symbols, measurement in HP, rotating direction and terminal box.



NEMA Nameplate

Other Standards

○: Sumitomo standards
△: Manufactured specially on customer's request

Application of International Standards (Example)

Country/Standards	Japan · JIS JEM JEC	International-IEC	UK · BS
Standard output	○	○	△ : 4kW and below ○ : 5.5kW and above
Applicable output frame size	○	-	△
Motor mounting dimension of each frame size	○ Note	○ Note	○ Note
Shaft end dimension	○ Note	○ Note	△ Note
Dimension tolerance of shaft end key and keyway	○ Note	○ Note	△ Note
Thermal class	○	○	○
Lead wire code	○	○	○
Standard rotation direction	○	△	△
Description on nameplate	○	△	△
Characteristic testing method	○	○	△
Standard voltage	200V·220V 400V·440V	△	415V
Standard frequency	50Hz, 60Hz	50Hz, 60Hz	50Hz

IEC- International Electrotechnical Commission.
BS- British Standards.

Note: CYCLO flange dimension is the standard. Consult us for flange dimension for your required compliance standards.

Major Japanese Standards

- (1) General rotating electrical machines
 - JIS C 4004 (1992): General rules for rotating electrical machines
 - JEC-200 (1993): Rotating machinery in general
 - JEM 1188 (1969): Rated output values of electric motors
- (2) General 3-phase induction motors
 - JIS C 4210 (1983): Low-voltage 3-phase squirrel cage induction motors for general purpose
 - JIS C 4212 (2000): High efficiency low-voltage 3-phase squirrel cage induction motors.
 - JEC-37 (1979): Induction machines
- (3) Methods of testing and calculating characteristics
 - JEC-37 (1979): Induction machines
 - JIS C 4207 (1995): Calculating method of 3-phase induction motors characteristics
- (4) Dimensions
 - JEM 1400 (1991): Dimension of low-voltage 3-phase squirrel cage induction motors for general purpose
 - JEM 1401 (1991): Dimensions of flange-mounted low-voltage 3-phase squirrel cage induction motors for general purposes
- (5) Explosion-proof construction
 - JIS C 0903 (1983): Electrical apparatus for explosive atmospheres in general industries

JIS C 0904 (1983): Test methods on electrical apparatus for explosive gas atmospheres in general industries

JIS C 0905 (1983): Supplementary requirements for construction of electrical apparatus for explosive atmosphere in general industries

Recommended practices for explosion-protected electrical installations in general industries (1979)

Rules for authorization of explosion-proof construction of electrical machine tools (1981)

(6) Others

JIS C 4003 (1977): Classification of materials for insulation of electrical machinery and apparatus

JEC-147 (1960): Classification of materials for insulation of electrical machinery and apparatus

JEM 1313 (1983): Noise levels for low-voltage 3-phase squirrel-cage induction motors for general purpose

Abbreviations: JEC Japanese Electrotechnical Committee Standards
JIS Japanese Industrial Standard
JEM Japan Electrical Manufacturers' Association

EC Directives and CE Marking

EC Directives are established to for free distribution of products across the borders within the European Union (EU). CE Mark applied on the product indicates their compliance to EC Directives..

Relevant EC Directives and Implementation Timing

The following three directives apply to ordinary machine products.

Details	Subjects	Directive details
EC directives		
Machinery Directive	Aggregates of parts, which are movable (Industrial machines, primarily)	Essential matters related to safety of machines are stipulated. Machines that are electrically dangerous shall fulfill the requirements for low voltage.
Low Voltage Directive	Products driven by power of 50-1,000 VAC or 75-15,000 VDC	Products not conforming to standards cannot be put on the market.
Electromagnetic Compatibility Directive	All types of products that may cause jamming (electromagnetic radiation) or have their functions impeded by nearby radio waves	EMI: Not to cause external electromagnetic interference EMS: To withstand external electromagnetic interference

Transition and Time Limits of CE Marking Implementation for Major Directives

EC Directive	Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Machinery Directive															
89/392/EEC Original				1/1			1/1								
91/368/EEC Revision I				Transition		Enforcement									
93/44/EEC Revision II															
EMC Directives				1/1				1/1							
89/336/EEC Original				Transition			Enforcement								
92/31/EEC Revision I															
Low Voltage Directive							1/1		1/1						
73/23/EEC Original							Transition		Enforcement						
93/68/EEC Revision I															

Conformity to EC Directive and CE Mark of Our Products

Our induction motor conforms to the Machinery Directive (issued January 1995) and Low Voltage Directive (issued January 1996) of the EC Directives.

EMC Directive (issued January 1996) does not contain statements for induction motors.

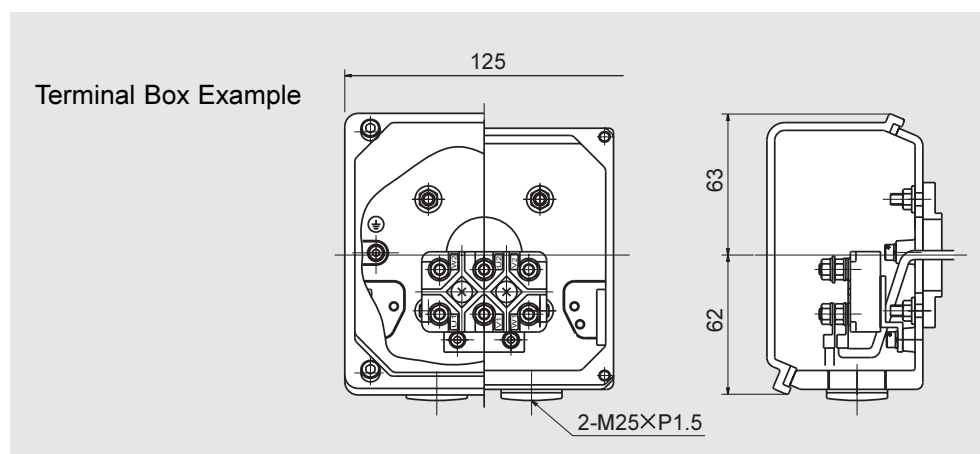
CE marking logo shown on nameplates



EC Directives and CE Marking

Standard Specifications of CE Marking Motors

Input power:	0.1kW~4kW : 230/400V 50Hz Dual voltage direct starting 5.5kW or more : 400V 50Hz Δ - Δ Start
Thermal class:	0.1kW~0.4kW : Class E 0.75kW or more : Class B
Rated time:	Continuous
Characteristics:	IEC34-1
Protection:	IP54 (without brake), IP44 (with brake)
Terminal box:	(Material) 5.5kw or less: Aluminum (M25 bolts (P1.5) $\times$ 2pcs) 7.5kw or more: Cast iron (M32 bolts (P1.5) $\times$ 2pcs) (Specification) Terminal plate (six terminals European style) With grounding terminal Conduit tube of M thread
Shaft rotating direction:	Rotating direction is reverse to Japanese standard direction.
Insulation:	Distances between insulated surfaces and spaces conforms to IEC Standards.
External dimensions:	Same as standard except for the terminal box
TÜV Test Report:	Representative model 0.75kW $\times$ 4p, 230V/400V is TÜV certified (Oct 1996) Our CE marking motors are manufactured conforming to TÜV.
Declaration of Conformity:	"Declaration of Conformity" document is necessary for CE marking is available.



TECHNICAL
DATA

Motor

Manufacturing range of CE Marking Motors

3-phase induction motor

	230/400V dual voltage															400V		
Input power symbol	01	012	018	02	03	04	05	08	1	1H	2	3	4	5	6	8	10	15
KW × 4P	(0.1)	0.12	0.18	(0.2)	0.25	0.37	(0.4)	0.55	0.75	1.1	1.5	2.2	3	(3.7)	4	5.5	7.5	11
Frame size	F63S		F63M			F71M		F80S	F80M	F90S	F90L	F100L	F112S	F112M		F132S	F132M	F160M

- kW without brackets in the above table indicate standard capacity for Europe. kW within the brackets indicate capacity in Japan and some other countries.
- Standard European kW motors are recommended. Motors of kW within brackets are also available.
3-phase 200V/50Hz, 200V/60Hz, 220V/60Hz
3-phase 400V/50Hz, 400V/60Hz, 440V/60Hz
3-phase 380V/50Hz, 415V/50Hz
Contact us for motors with kW and voltage not shown in the above table.
- Consult us for M bolt (Metric bolt) for conduit tube.

F TECHNICAL DATA

3. Common

TECHNICAL
DATA

Motor

Paint and Rustproof Coating

1. Coating Specifications

Treatment	Kind of painting		Additional leadtime (days)	Painting specifications			Applied paint	Weather resistance	Submersible	Oil-proof	Acid resistance	Alkal resistance	Heat resistance (°C)	Application
	Classification	Paint of finish coat		Type	Layers (μm)	Quality	Brand							
Cast Iron: Near White blast cleaning	Standard	-	0	Under coating	1	Modified alkyd resin	UNIGRAOUND PTC PRIMER						100	Standard under coat
		Acrylic modified phthalic	0	Finish coating	1 (15~30)	Acrylic modified alkyd resin	NEORON #2000	○	×	△	△	△	100	Standard under coat
	Standard export painting	Acrylic modified phthalic	2	Under coating	2 (30~60)	Modified alkyd resin	UNIGRAOUND PTC PRIMER	○	×	△	△	×	100	Models for export
				Finish coating	1 (15~30)	Acrylic modified alkyd resin	NEORON #2000							
	Special painting (including rust-proof and heat resisting painting) one layer of Uniground PTC Primer as the first primer	Modified epoxy	3	Under coating	1 (20~40)	Vinyl modified alkyd resin	NEO-GOSE #500 Red lead primer	○	△	○	△	△	100	Moderate corrosive atmosphere, sea side, outdoor humid atmosphere, chemical plant area, etc.
				Finish coating	2 (30~60)	Acrylic modified alkyd resin	Acron #300							
		Long oil phthalic (synthetic resin type)	7	Under coating	2 (40~70)	Lead rust preventive paint	SD MARINE PRIMER (rust)	○	×	×	△	×	100	Ocean-going vessel & boat, bridge, sea side, outdoor humid atmosphere, etc.
				Finish coating	2 (30~60)	Synthetics resin paint	PENFORTE #600							
		Chloride rubber	10	Under coating	2 (40~70)	Lead rust preventive paint	SD MARINE PRIMER (rust)	○	△	△	○	○	80	Ocean-going vessel & boat, bridge, sea side, outdoor humid atmosphere, etc.
				Second coating	2 (30~60)	Phenol M.I.O paint	SHINTO MIO							
				Finish coating	2 (40~70)	Chloride rubber paint	RUBBER #100							
		Phenol	7	Under coating	2 (40~70)	Lead rust preventive paint	SD MARINE PRIMER (rust)	○	×	△	○	△	100	In-and-out door of acid treating plant or chemical plant, etc.
				Finish coating	2 (30~60)	Phenol resin enamel	NEW AKNON							
		Heat-proof silver	7	Under coating	1 (20~40)	Lead rust preventive paint	SD MARINE PRIMER (rust)	○	×	×	×	×	120	Heating furnace (120°C), etc.
				Finish coating	1 (15~30)	Aluminum paint	SILVER TOP (heat resisting)							
	Extra rust-proof painting	Epoxy	10	Under coating	1 (50~60)	Special permeability epoxy aluminum paint	CARBOMASTIC #15	◎	○	○	○	○	150	Chemical contact area, chemical plant, anticorrosion plant, etc.
				Finish coating	3 (30~90)	Polyamide epoxy	NEO-GOSE #200							
		Epoxy	10	Under coating	1 (50~60)	Special permeability epoxy aluminum paint	CARBOMASTIC #15	◎	○	○	○	○	150	Nuclear power plant, etc.
				Finish coating	3 (30~90)	Polyamide epoxy	NEO-GOSE #2300CW							
		Polyurethane	10	Under coating	1 (50~60)	Special permeability epoxy aluminum paint	CARBOMASTIC #15	◎	○	○	○	○	150	Nuclear power plant, etc.
				Finish coating	3 (45~90)	Polyisocyanate urethane resin paint	NY POLIN K finish coat							
	Extra rustpreventive painting (sand blast undercoating)	Thick film epoxy	12		5 (250~350)	Thick film type modified epoxy resin paint	NEO-GOSE #2300 NTHB	◎	◎	○	○	○	100	Submersible equipment, marine structure, etc.

- Note: 1. "Additional leadtime" refers to the number of days required for special coating in addition to standard painting.
 2. Standard coating is 6.5PB 3.6/8.2. Coating specification may differ for special coating color.
 3. Paint specified above is subject to replacement by comparable product.
 4. "*" indicates coating which may fade with sunlight.
 5. Consult us when ambient temperature exceeds heat resistance temperature indicated above.
 (Heat resistance temperature above is only for the paint, not for the CYCLO® DRIVE.)
 6. Consult us when ambient temperature fluctuates between low and room temperature in short time period.
 7. Thick film epoxy coating has limited color selections. Consult us for coating other than N1.0 or 10GY6/2.
 (Our standard coating 6.5PB3.6/8.2 may not be applied.)

○ ○ ○ ○ △: Appropriate
 △: Caution necessary for selection
 ×: Inappropriate

Paint and Rustproof Coating

2. Surface Conditioning

Treatment	Surface condition after treatment	Methods	Standards	
			SSPC	SIS
Class 1 Near white blast cleaning	Surface completely free of mill scales, rust, corrosives, dirt, and other foreign substances. Embedded residues (mill scales, rust, slight smears, or discoloration of oxide substances) are acceptable. However, minimum 95% of the surface area should be visibly clean of any residues. Remaining surface may contain slight discolorations, such as stains.	☐ Near White ☐ Blast cleaning ☐ Shot blast ☐ Sand blast, etc.	SP-10	Sa-2 1/2
Class 2 Power tool cleaning	Surface free of loose mill scales, rust, corrosives, dirt, and other foreign substances. Embedded residues (mill scales, rust, slight smears or discoloration of oxide substances) are acceptable. However, minimum 2/3 of the surface area should be visibly clean of any residues. Remaining surface may contain slight discolorations, such as stains, and residual rust, and coating peelings in pores, for surface with porous corrosion.	☐ Commercial Blast cleaning ☐ Power Tool Cleaning ☐ Disk sander ☐ Wire wheel ☐ Grinder, etc.	SP-6 (SP-3)	Sa-2 (St-3)
Class 3 Hand tool cleaning	Surface free of loose scales, rust, coating, oil & grease, dirt, and other foreign substances, with slight metallic luster. The surface should be cleaned with wire brush, scraper, etc.	☐ Hard Tool Cleaning ☐ Wire brush ☐ Scraper, etc.	SP-2	St-2

(U.S.A. Steel Structural Painting Councils) (SWEEDEN, SVENSK Standard, S.I.S. 055900)

Rustproof Treatment Standards

Our complete products are shipped with following rust proofing treatment.

1. Standard Rustproof Specification

(1) External Rustproof

Our assembled products are shipped with rust proofing oil applied. Check rustproof condition six months after shipment. Reapply rustproof treatment if necessary.

(2) Internal Rustproof

Lubrication	Grease lubricated models	Oil lubrication models
Rustproof period	1 year	6 months
Storage condition	Storage inside general shop or warehouse, with relatively low humidity, dust, extreme temperature fluctuation, corrosive gas, or such.	

2. Rustproof Specification for Export

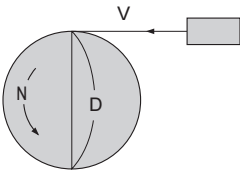
Consult us for when the item is exported or if more treatment is necessary than standard rustproof treatment. Export rustproof treatment is available.1.

TECHNICAL
DATA

Common

Drive System Formulas (Reference Materials)

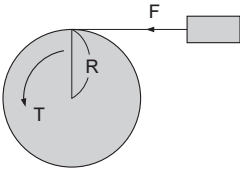
1. Speed N (r/min) and Velocity (m/s)



$$V = \pi \cdot D \cdot \frac{N}{60} \text{ (m/s)}$$

π : Circular constant (≈ 3.14)
D: Wheel diameter

2. Torque T (N·m, kgf·m)



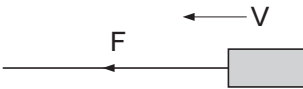
[SI Units]
 $T = F \cdot R \text{ (N·m)}$

F: Load (N)
R: Wheel radius (m)

[Gravitational Units]
 $T = F \cdot R \text{ (kgf·m)}$

F: Load (kgf)
R: Wheel radius (m)

3. Power P (kW)



[SI Units]

$$P = \frac{F \cdot V}{1000}$$

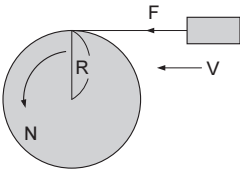
F: Load (N)
V: Velocity (m/s)

[Gravitational Units]

$$T = \frac{F \cdot V}{102}$$

F: Load (kgf)
V: Velocity (m/s)

4. Power P (kW), Torque T (N·m, kgf·m), Speed N (r/min)



[SI Units]

$$P = \frac{N \cdot T}{9550} \text{ (kW)}$$

$$T = \frac{9550 \cdot P}{N} \text{ (N·m)}$$

$$P = \frac{F \cdot V}{1000} \text{ (kW)}$$

$$V = \pi \cdot 2 \cdot R \cdot \frac{N}{60} \text{ (m/s)}$$

F: Load (N)

$$\therefore P = \frac{F \cdot \pi \cdot 2 \cdot R \cdot \frac{N}{60}}{1000} = \frac{2 \cdot \pi}{1000 \times 60} \cdot N \cdot F \cdot R \text{ (kW)}$$

$T = F \cdot R$

$$\therefore P = \frac{2 \cdot \pi}{1000 \times 60} \cdot N \cdot T = \frac{N \cdot T}{9550} \text{ (kW)}$$

[Gravitational Units]

$$P = \frac{N \cdot T}{975} \text{ (kW)}$$

$$T = \frac{975 \cdot P}{N} \text{ (kgf·m)}$$

$$P = \frac{F \cdot V}{102} \text{ (kW)}$$

$$V = \pi \cdot 2 \cdot R \cdot \frac{N}{60} \text{ (m/s)}$$

F: Load (kgf)

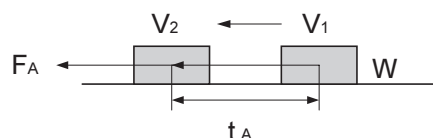
$$\therefore P = \frac{F \cdot \pi \cdot 2 \cdot R \cdot \frac{N}{60}}{102} = \frac{2 \cdot \pi}{102 \times 60} \cdot N \cdot F \cdot R \text{ (kW)}$$

$T = F \cdot R$

$$\therefore P = \frac{2 \cdot \pi}{102 \times 60} \cdot N \cdot T = \frac{N \cdot T}{975} \text{ (kW)}$$

Drive System Formulas Reference Materials

5. Acceleration Force F_A (N, kgf)



[SI Units]

$$F_A = m \cdot \alpha = m \cdot \frac{V_2 - V_1 \text{ (N)}}{t_A}$$

$$\alpha = \frac{V_2 - V_1}{t_A}$$

m: Mass (kg)

 α : Acceleration (m/s²) t_A : Acceleration Time (s)

[Gravitational Units]

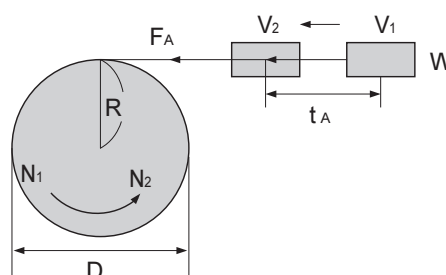
$$F_A = m \cdot \alpha = \frac{W}{g} \cdot \frac{V_2 - V_1 \text{ (N)}}{t_A}$$

$$\alpha = \frac{V_2 - V_1}{t_A}$$

W: Weight (kgf)

g: Acceleration of gravity ≈ 9.8 (m/s²)m: Mass (kgf·s²/m) α : Acceleration (m/s²) t_A : Acceleration Time (s)

6. Acceration Torque T_A (N·m, kgf·m)



[SI Units]

$$T_A = F_A \cdot R \quad F_A = m \cdot \frac{V_2 - V_1}{t_A}$$

$$V_2 = \pi \cdot D \cdot \frac{N_2}{60} \quad V_1 = \pi \cdot D \cdot \frac{N_1}{60}$$

$$D = 2 \cdot R$$

$$\therefore T_A = m \cdot \frac{\frac{\pi \cdot 2 \cdot R}{60} \cdot (N_2 - N_1)}{t_A} \cdot R$$

$$= \frac{2 \cdot \pi \cdot m \cdot R}{60} \cdot \frac{N_2 - N_1}{t_A} \cdot R$$

$$= \frac{m \cdot R^2}{9.55} \cdot \frac{N_2 - N_1}{t_A} \text{ (N·m)}$$

$$m \cdot R^2 = J \text{ (moment of inertia (kgm}^2\text{))}$$

$$\therefore T_A = \frac{J}{9.55} \cdot \frac{N_2 - N_1}{t_A} \text{ (N·m)}$$

[Gravitational Units]

$$T_A = F_A \cdot R \quad F_A = \frac{W}{g} \cdot \frac{V_2 - V_1}{t_A}$$

$$V_2 = \pi \cdot D \cdot \frac{N_2}{60} \quad V_1 = \pi \cdot D \cdot \frac{N_1}{60} \cdot R = \frac{D}{2}$$

$$\therefore T_A = \frac{W}{g} \cdot \frac{\frac{\pi \cdot D}{60} \cdot (N_2 - N_1)}{t_A} \cdot \frac{D}{2}$$

$$= \frac{\pi \cdot W \cdot D}{60 \cdot g} \cdot \frac{N_2 - N_1}{t_A} \cdot \frac{D}{2}$$

$$= \frac{W \cdot D^2}{375} \cdot \frac{N_2 - N_1}{t_A} \text{ (kgf·m)}$$

$$W \cdot D^2 = GD^2 \text{ (Flywheel effect (kgm}^2\text{))}$$

$$\therefore T_A = \frac{GD^2}{375} \cdot \frac{N_2 - N_1}{t_A} \text{ (kgf·m)}$$

7. Synchronized Speed of AC Motor N_0 (r/min)

$$N_0 = \frac{120 \cdot f}{P} \text{ (r/min)}$$

f: Power supply frequency (Hz)

P: Number of motor poles

8. Rated Speed of AC Motor N (r/min)

$$N = N_0 (1 - s) \text{ (r/min)}$$

 N_0 : Synchronized speed (r/min)

s: Slippage

TECHNICAL
DATA

Common

Warranty Standard

Warranty Standard

Warranty period	Warranty for the CYCLOR DRIVE shall be 24 months from the shipment date, limited to new units.
Warranty Condition	In the event that any problem or damage to the Product arises during the "Warranty Period" from defects in the Product whenever the Product is properly installed and combined with the Buyer's equipment or machines, maintained as specified in the maintenance manual, and properly operated under the conditions described in the catalog or as otherwise agree upon in writing between the Seller and the Buyer or its customers; the Seller will provide, at its sole discretion, appropriate repair or replacement of the Product without charge at a designated facility, except as stipulated in the "Warranty Exclusions" as described below. However, if the Product is installed or integrated into the Buyer's equipment or machines, the Seller shall not reimburse the cost of: removal or re-installation of the Product or other incidental costs related thereto, any lost opportunity, any profit loss or other incidental or consequential losses or damages incurred by the Buyer or its customers.
Warranty Exclusions	Notwithstanding the above warranty, the warranty as set forth herein shall not apply to any problem or damage to the Product that is caused by: 1. installation, connection, combination or integration of the Product in or to the other equipment or machine that is rendered by any person or entity other than the Seller; 2. insufficient maintenance or improper operation by the Buyer or its customers, such that the Product is not maintained in accordance with the maintenance manual provided or designated by the Seller; 3. improper use or operation of the Product by the Buyer or its customers that is not informed to the Seller, including, without limitation, the Buyer's or its customers, operation of the Product not in conformity with the specifications, or use of lubricating oil in the Product that is not recommended by the Seller; 4. any problem or damage on any equipment or machine to which the Product is installed, connected or combined or on any specifications particular to the Buyer or its customers; 5. any changes, modifications, improvements or alterations to the Product or those functions that are rendered on the Product by any person or entity other than the Seller; 6. any parts in the Product that are supplied or designated by the Buyer or its customers; 7. earthquake, fire, flood, sea-breeze, gas, thunder, acts of God or any other reasons beyond the control of the Seller; 8. normal wear and tear, or deterioration of the Product's parts, such as bearings, oil-seals; 9. any other troubles, problems or damage to the Product that are not attributable to the Seller.