Table of Contents

CYCLO® 6000Series

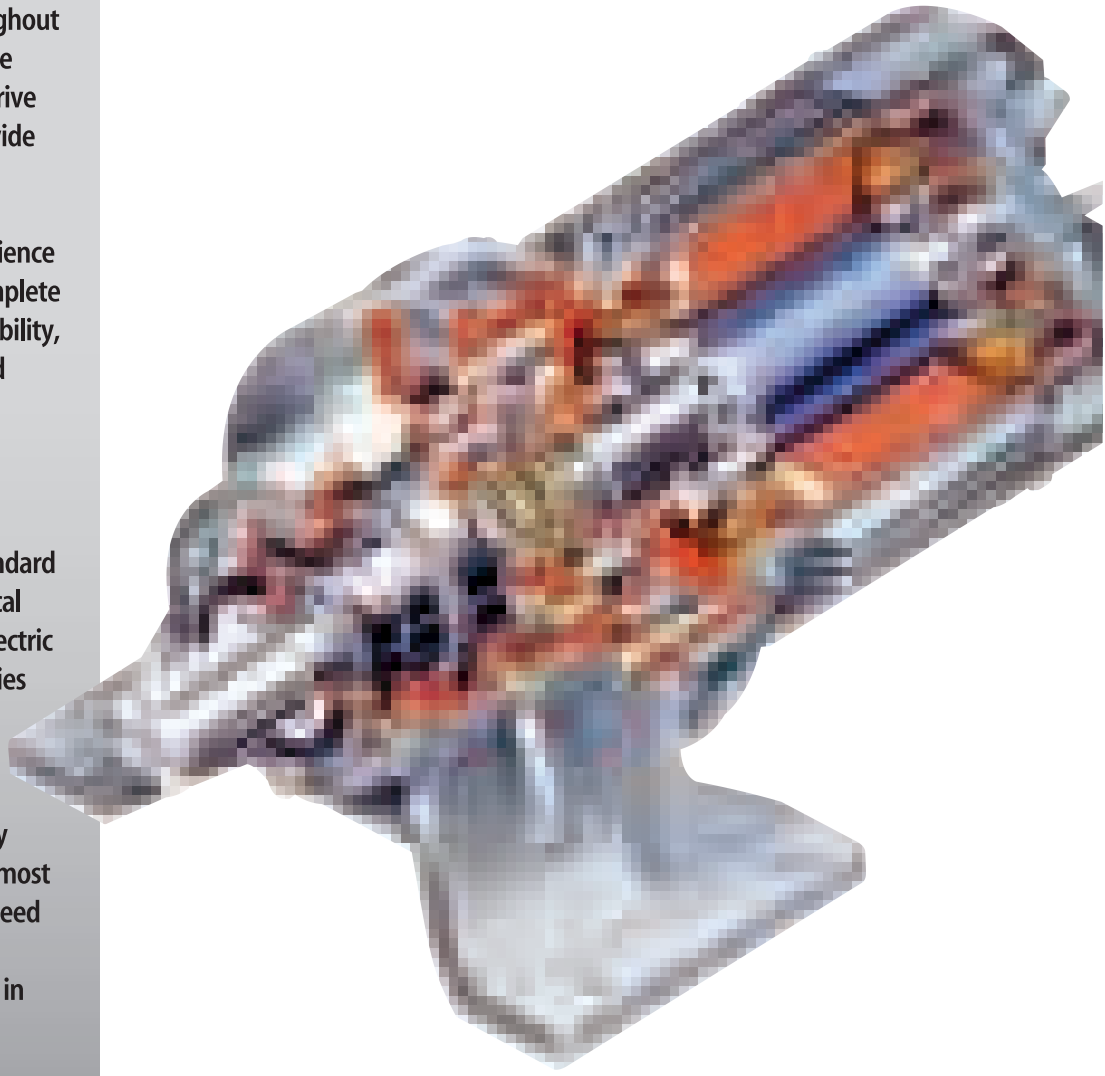
Over 10 Million in the Making

Sumitomo Drive Technologies is a world-class leader in power transmission and control devices. Our top lined product, the Cyclo® Drive is actively serving industries throughout the world through its popular and unique epitrochoidal mechanism. The Cyclo® Drive has served over ten million units worldwide in a wide range of model offerings.

With the technical know-how and experience cultivated over 70 years, we provide complete satisfaction with unrivalled product reliability, durability and economy. This is achieved through our continual product R&D and state-of-the-art production facilities. Sumitomo Drive Technologies is Quality System Certified to ISO 9001, EN29001, BS5750 Part 1: 1987, JIS Z9901:1991 standard for design and manufacture of mechanical speed reducers, mechanical variators, electric motors and gearmotors in over 30 facilities located around the world.

The Sumitomo Drive Technologies' brand guarantees innovative, top quality products and services developed by the most advanced technologies. We strive to exceed the expectations of our customers, and continue to be your dependable partner in business.

High Shock Load, High Reliability Cycloidal Speed Reducers and Gearmotors



Exceptional Performance, Unmatched Reliability

The Sumitomo Cyclo® Drive is unsurpassed by any other inline drive available in the market today. Cyclo®'s unique cycloid design has advantages superior to speed reducers using common involute tooth gears. Unlike gear teeth with limited contact points, the Cyclo® has two-thirds of its reduction components in contact at all times. Cyclo® speed reducers and gearmotors are designed to withstand shock loads exceeding ratings of 500%, provide exceptional performance, reliability and long life in the most severe applications.

Features & Benefits

Outstanding Reliability -2 Year Warranty

Cyclo® Drive speed reducers and gearmotors provide customers with a typical operating life of 20 years. We back this assurance with a two year warranty on all Cyclo® products.

Durable, Robust Construction

On top of the unique mechanism and design, Cyclo® housings are made of cast iron with the exception of our three smallest size models. All rotating elements are made from Chromium Molybdenum bearing steel, which have been hardened and ground .

Smooth Operation and Low Noise

In comparison to the sliding tooth contact of the conventional gearing, the rolling contact of the Cyclo® system provides a reduced noise level.

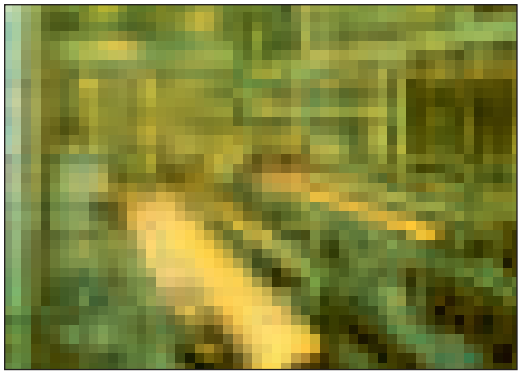
Selection and Variety

Reduction Ratios from 1/3 to 1/119 are available for the single stage; for triple stages we offer ratios up to 1,000,000:1.

Applications

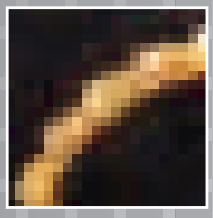
Applications Include: Conveyors, Automotive Plants, Recycling Machines, Waterwaste Treatment, Steel Mills, Construction Equipment, Paper Mills, Food Machinery, Poultry Plants, Sawmills and Wood Mills, Processing Plants,



Clockwise from Top-Left: Chemical and Food Industry (agitator, mixer), Logistics and Handling Machines (sorting machines, conveyors), Iron and Steel Manufacturing (conveyors) and Water Treatment Machines (agitators).

Superior Design, Powerful Performance



CYCLO® SPEED REDUCER

All torque transmitting parts roll, not grind. The gear tooth profile of the Cyclo® reducer enables the sharing of the load by a number of teeth, thus not susceptible to tooth breakage.

CONVENTIONAL HELICAL REDUCER

Involute gears allow for small tooth engagement rate.
Torque transmitting parts grind, wear, and can break off with the sliding contact.

Product Line-up

6w — Commercial → Industrial

In-Line

ASTERO®

Practical and Convenient

Modular system of motors and gearheads. Maximum flexibility and interchangability.
Power: 6W~90W Ratio: 1/3~1/2000

CYCLO®

Unmatched Reliability, Exceptional Performance Cycloidal Drives

Unique Cycloidal gear teeth and mechanism is unsurpassed by any other inline drive. Simple and compact design.
Power:0.1kW~132kW Ratio:1/6~1/1,000,00

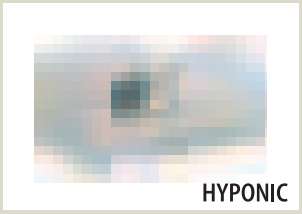
Offset-Parallel

Integrated parallel shaft mount design, single stage, helical gearbox for durability.
Power:0.1kW~132kW Ratio:1/6~1/1,000,00

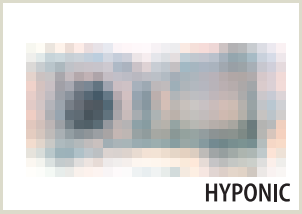
Right-Angle

HYPONIC DRIVE®

Quiet, Compact & Maintenance Free



Highly efficient, grease lubricated, compact design hypoid gearing.
Power:15W~90W Ratio:1/5~1/1440



Patented all-steel hypoid gear technology is extremely high-performance and more efficient than worm gearing.
Power:90W~5.5kW Ratio:1/5~1/1440

Incorporates the strength and flexibility of the Cyclo® reducer with adaptability of a shaft-mounted design in a right angle spiral bevel gearbox for exceptional reliability.
Power:0.1kW~30kW Ratio:1/11~1/10658

Motion Control Drives (MCD)

High Precision, Very Low Backlash

F Series CYCLO®
Rolling contact of cycloid discs, optimum load distribution, and low vibration yields highest efficiencies.

Torque:111N•m ~5140N•m Ratio:1/29~1/119
Backlash:No Backlash Lost Motion:0.5~1.0arc min

IB Series P Type
Precision planetary gearheads for Servomotor applications in the most compact design.

Torque:8.3N•m ~127N•m Ratio:1/5~1/45
Backlash:3~10min

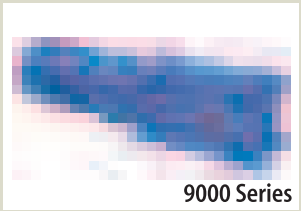
Engineering 552kN•m

PARAMAX®

High Quality & Maximum Efficiency, Computer-Aided Design

9000 Series

The offset-parallel 9000 Series allow direct motor mounting and has universal housing for unique mounting positions.
Power:2.6~552kN•m Ratio:1/6.3~1/500



9000 Series

The new 9000 Series design combines helical gears and bevel gears in a right-angle gearbox for compact drive assembly.
Power:2.6~552kN•m Ratio:1/6.3~1/500

LB Series CYCLO®
The reputation of the Cyclo® Drive's strength to the Servomotor gives us a direct coupling gearhead possibility for a maintenance free operation.

Torque:30N•m~630Nm Ratio:1/11~1/29
Backlash:6min

Sumitomo Drives

Speed Variators

BEIER Variator
BEIER CYCLO® Variator

Constant power torque converters with extremely accurate speed/ratio holding and repeatability to control speeds on industrial machinery.
Capacity 0.2kW~150kW

Inverters
SF320α • HF320α •HF430

Multiple functions, easy to use highly efficient Inverter.
Output Power: 0.1kW~55kW

Shaft-Mounted Speed Reducer

HSM

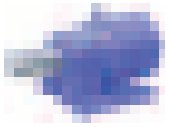
Maximum loading and the highest efficiency torque output in the most compact design.
Power: 0.2kW~224kW

Worm Gears

HEDCON®

Unique double contact theory, high efficiency, and high strength work reduction mechanism.
Power: 589~82,400N•m
Ratio:1/5~1/100

Planetary Gears



COMPOWER®

Unique load sharing mechanism, high precision carburized ground gears.
Power:1.47~736kN•m
Ratio:1/5~1/1768

Product Line-up

Product Range of CYCLO® DRIVE

CYCLO® Frame Size

Table A-1 CYCLO Frame Size

6000SK Series Frame Size
6070SK
6075SK
6080SK
6085SK
6090SK
6095SK
6100SK
6105SK
6110SK
6115SK

6000 Series							
Single Reduction		Double Reduction					
Frame Size		Frame Size	(Output side + Input side)	Frame Size	(Output side + Input side)	Frame Size	(Output side + Input side)
6060	6140	6060DA	(6060+6060)	6140DC	(6140+6105)	6190DA	(6190+6125)
6065	6145	6065DA	(6065+6060)	6145DA	(6145+6075)	6190DB	(6190+6135)
6070	614H	6070DA	(6070+6065)	6145DB	(6145+6095)	6195DA	(6195+6125)
6075	6160	6075DA	(6075+6065)	6145DC	(6145+6105)	6195DB	(6195+6135)
6080	6165	6090DA	(6090+6075)	6160DA	(6160+6095)	6205DA	(6205+6125)
6085	616H	6095DA	(6095+6075)	6160DB	(6160+6105)	6205DB	(6205+6135)
6090	6170	6100DA	(6100+6075)	6160DC	(6160+6125)	6215DA	(6215+6135)
6095	6175	6105DA	(6105+6075)	6165DA	(6165+6095)	6215DB	(6215+6165)
6100	6180	6120DA	(6120+6075)	6165DB	(6165+6105)	6225DA	(6225+6135)
6105	6185	6120DB	(6120+6095)	6165DC	(6165+6125)	6225DB	(6225+6175)
610H	6190	6125DA	(6125+6075)	6170DA	(6170+6095)	6235DA	(6235+6165)
6110	6195	6125DB	(6125+6095)	6170DB	(6170+6105)	6235DB	(6235+6185)
6115	6205	6130DA	(6130+6075)	6170DC	(6170+6125)	6245DA	(6245+6165)
6120	6215	6130DB	(6130+6095)	6175DA	(6175+6095)	6245DB	(6245+6185)
6125	6225	6130DC	(6130+6105)	6175DB	(6175+6105)	6255DA	(6255+6175)
612H	6235	6135DA	(6135+6075)	6175DC	(6175+6125)	6255DB	(6255+6195)
6130	6245	6135DB	(6135+6095)	6180DA	(6180+6105)	6265DA	(6265+6195)
6135	6255	6135DC	(6135+6105)	6180DB	(6180+6135)	6275DA	(6275+6195)
	6265	6140DA	(6140+6075)	6185DA	(6185+6105)		
	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	5133Note1	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								
		(87 × 25)	(51 × 43)	(71 × 35)	(87 × 29)	(51 × 51)	(59 × 51)	(71 × 43)	(71 × 51)	(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								

Calculation of output speed is based on the following input speed.
50Hz: 1450r/min
60Hz: 1750r/min

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.

Available Combination

Table A-4 6000SK Series

Nominal Reduction Ratio		2.5	3	4	5	6	8	10
Output Speed	50Hz	580	483	363	290	242	181	145
r/min	60Hz	700	583	438	350	292	219	175
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	●	●	●	●	●	●	

Table A-5 6000 Series Single Reduction

Reduction Ratio		6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119
Output Speed	50Hz	242	181	132	112	96.7	85.3	69	58	50	41.4	33.7	28.4	24.6	20.4	16.7	12.2
r/min	60Hz	292	219	159	135	117	103	83.3	70	60.3	50	40.7	34.3	29.7	24.6	20.1	14.7
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			●	●	●	●	●	●	●		●					
55 × 4P	kW			●		●		●		●		●					
75 × 4P	kW			●		●		●		●							

Reduction Ratio		11	15	21	29	43	59	87
Output Speed	50Hz	89.1	65.3	46.7	33.8	22.8	16.6	11.3
r/min	60Hz	106	77.7	55.5	40.2	27.1	19.7	13.4
15 × 6P	kW						●	●
18.5 × 6P	kW					●	●	●
22 × 6P	kW					●	●	●
30 × 6P	kW			●	●	●	●	●
37 × 6P	kW		●	●	●	●	●	●
45 × 6P	kW		●	●	●	●	●	●
55 × 6P	kW	●	●	●	●	●	●	
75 × 6P	kW	●	●	●	●	●	●	
90 × 6P	kW	●	●	●	●	●		
110 × 6P	kW	●	●	●	●	●		
132 × 6P	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.

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.

Table A-7 3-Phase Induction Motors ◎: Standard Thermal Class ○: Manufactured Models

Specification / Capacity (kW)	P	Indoor or Outdoor (IP55)				Corrosion Proof Class 2		Thermal Class							Inverter Motors (Constant Torque)			
								E	B		F		H		Indoor Type		Outdoor Type	
		4	6	4	6	4	6	4	4	6	4	6	4	6	4	6	4	6
0.1		○	○	○	○	○	○	○	○	◎	◎	○	○	○	○		○	
0.2		○	○	○	○	○	○	○	○	◎	◎	○	○	○	○		○	
0.25		○	○	○	○	○	○	○	○	◎	◎	○	○	○				
0.4		○	○	○	○	○	○	○	○	◎	◎	○	○	○	○		○	
0.55		○	○	○	○	○	○		○	◎	◎	○	○	○				
0.75		○	○	○	○	○	○		○	◎	◎	○	○	○	○		○	
1.1		○	○	○	○	○	○		○	◎	◎	○	○	○				
1.5		○	○	○	○	○	○		○	◎	◎	○	○	○	○		○	
2.2		○	○	○	○	○	○		○	◎	◎	○	○	○	○		○	
3.0		○	○	○	○	○	○		○	◎	◎	○	○	○				
3.7		○	○	○	○	○	○		○	◎	◎	○	○	○	○		○	
5.5		○	○	○	○	○	○		○	◎	◎	○	○	○	○	○	○	○
7.5		○	○	○	○	○	○		○	◎	◎	○	○	○	○	○	○	○
11		○	○	○	○	○	○		○	◎	◎	○	○	○	○	○	○	○
15		○	○	○	○	○	○		○	◎	◎	○	○	○	○	○	○	○
18.5		○	○	○	○	○	○		○		◎	◎	○	○	○	○	○	○
22		○	○	○	○	○	○		○		◎	◎	○	○	○	○	○	○
30		○	○	○	○	○	○				◎	◎	○	○	○	○	○	○
37		○	○	○	○	○	○				◎	◎	○	○	○	○	○	○
45		○	○	○	○	○	○				◎	◎	○	○	○	○	○	○
55		○	○	○	○	○	○				◎	◎	○	○	○	○	○	○
Remarks		Continuous Rating Applicable Voltage: 4P: 3.7kW and below 220 - 240V 50Hz 220V 60Hz 380 - 420V 50Hz 5.5kW and above 380 - 420V 50Hz 440 - 480V 60Hz 6P: 200V 50/60Hz 220V 60Hz 400V 50/60Hz 440V 60Hz Provided that the base frequency for driving an inverter is 60Hz.																

Table A-8 3-Phase Induction Motors with Built-in Brakes ◎: Standard Thermal Class ○: Manufactured Models

Specification / Capacity (kW)	P	Indoor or Outdoor (IP55)		Corrosion Proof Class 2		Insulation Class							Inverter Motors (Constant Torque)			
						E	B		F		H		Indoor Type		Outdoor Type	
		4	6	4	6	4	4	6	4	6	4	6	4	6	4	6
0.1		○	○	○	○	◎	○	◎	○		○		○		○	
0.2		○	○	○	○	◎	○	◎	○		○		○		○	
0.25		○	○	○	○	◎	○	◎	○		○					
0.4		○	○	○	○	◎	○	◎	○	○	○	○	○		○	
0.55		○	○	○	○		◎	◎	○		○					
0.75		○	○	○	○		◎	◎	○	○	○	○	○		○	
1.1		○	○	○	○		◎	◎	○		○					
1.5		○	○	○	○		◎	◎	○	○	○	○	○		○	
2.2		○	○	○	○		◎	◎	○	○	○	○	○		○	
3.0		○	○	○	○		◎	◎	○		○					
3.7		○	○	○	○		◎	◎	○	○	○	○	○		○	
5.5		○	○	○	○		◎	◎	○	○	○	○	○	○	○	○
7.5		○	○	○	○		◎	◎	○	○	○	○	○	○	○	○
11		○	○	○	○		◎	◎	○	○	○	○	○	○	○	○
15		○	○	○	○		◎	◎	○	○	○	○	○	○	○	○
18.5		○	○	○	○		◎		○	◎	○	○	○	○	○	○
22		○	○	○	○		◎		○	◎	○	○	○	○	○	○
30		○	○	○	○				◎	◎	○	○	○	○	○	○
37		○	○	○	○				◎	◎	○	○	○	○	○	○
Remarks		Continuous Rating Applicable Voltage: 4P: 3.7kW and below 220 - 240V 50Hz 220V 60Hz 380 - 420V 50Hz 5.5kW and above 380 - 420V 50Hz 400V 60Hz Brake Thermal Class: F 6P: 200V 50/60Hz 220V 60Hz 400V 50/60Hz 440V 60Hz Provided that the base frequency for driving an inverter is 60Hz.														

Note: 1. Motors with capacities and specifications other than as listed in Tables A-7 ~ A-10 are also manufactured .Consult factory.
Examples : Special voltage, dust-proof, humidity proof, tropical treatment, high temperature, ship use, dual shaft (round & square shaft), CSA Standard , NEMA Standard, etc. For other corresponding Standards, refer to Comparison of Sumitomo Standards with International Standards on Page F52 ~ 56 of Technical Information.
2. Indicate outdoor type when placing 6P motor outdoor. Structure differs for indoor and outdoor type although protection type is IP44.
3. For inverter drive use, consult us with ambient temperature, input speed, mounting method, load characteristics, and other operation conditions. Startup properties, lubrication, thermal rating, and such must be reviewed for selection of proper CYCLO DRIVE frame size for combination.
4. For standard electric motor use with inverter, consult us if input voltage is high (400V or more), carrier frequency is high (typical in IGBT), or wiring distance is large. Review of withstand voltage of the motor may be necessary.

Product Range of Motor

Table A-9 Increased Safety (eG3) 3-Phase Induction Motor

◎: Standard Insulation ○: Manufactured Models

Specification / Capacity (kW)	P	Indoor Type (IP44)		Outdoor Type (IP44)		Corrosion Proof Class 2		Thermal Class B		Thermal Class F	
		4	6	4	6	4	6	4	6	4	6
0.1		○		○		○		◎		○	
0.2		○		○		○		◎		○	
0.4		○		○		○		◎		○	
0.75		○		○		○		◎		○	
1.5		○		○		○		◎		○	
2.2		○		○		○		◎		○	
3.7		○		○		○		◎		○	
5.5		○		○		○		◎		○	
7.5		○	○	○	○	○	○	◎	◎	○	
11		○	○	○	○	○	○	◎	◎	○	
15		○	○	○	○	○	○	◎	◎		
18.5		○	○	○	○	○	○	◎			◎
22		○	○	○	○	○	○	◎			◎
30		○	○	○	○	○	○	◎		○	◎
37		○	○	○	○	○	○			◎	◎
45		○	○	○	○	○	○			◎	◎
55		○	○	○	○	○	○			◎	◎
Remarks		Continuous Rating Applicable Voltage : 200V, 220V, 350V, 380V, 400V, 440V, 50/60Hz									

Table A-10 Flame-Proof (d2G4) 3-Phase Motor

◎: Standard Insulation ○: Manufactured Models

Specification / Capacity (kW)	P	Indoor Type (IP44)		Outdoor Type (IP44)		Corrosion Proof Class 1, 2		Thermal Class B		Thermal Class F		Inverter Motors (Constant Torque) Indoor Type	Inverter Motors (Constant Torque) Outdoor Type
		4	6	4	6	4	6	4	6	4	6	4	6
0.1		○		○		○		◎		○			
0.2		○		○		○		◎		○		○	
0.4		○		○		○		◎		○		○	
0.75		○		○		○		◎		○		○	
1.5		○		○		○		◎		○		○	
2.2		○		○		○		◎		○		○	
3.7		○		○		○		◎		○		○	
5.5		○		○		○		◎		○		○	
7.5		○		○		○		◎		○		○	
11		○		○		○		◎		○		○	
15		○	○	○	○	○	○	◎	○	○		○	○
18.5		○	○	○	○	○	○	◎	◎	○	○	○	○
22		○	○	○	○	○	○	◎	◎	○	○	○	○
30		○	○	○	○	○	○	◎	◎	○	○	○	○
37		○	○	○	○	○	○		◎	◎	○	○	○
Remarks		Continuous Rating Applicable Voltage : 200V, 220V, 350V, 380V, 400V, 440V, 50/60Hz (For inverter drive) 200V 60Hz 220V 60Hz 400V 60Hz 440V 60Hz Applicable inverter : Applicable only to Sumitomo inverters. (Refer to Inverter catalogue.)											

⚠ Safety Precautions

1. Authorized combination in Japan for motor and inverter is 1:1 when explosion protection motor is driven with inverter. Always operate with the specific indicated inverter. Always locate inverter unit in the area without explosive gas; it does not have explosion protection structure.
2. Consult us when the unit is exposed to the elements or to frequent water splashing.

MEMO

MEMO

B

CYCLO® GEARMOTORS

B CYCLO® GEARMOTORS

1. How to Select

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	50Hz	0.1 - 3.7kW:	220 - 240V	50Hz
		220V	60Hz		220V	60Hz
		380 - 420V	50Hz		380 - 420V	50Hz
	5.5 - 55kW:	380 - 420V	50Hz	5.5 - 37kW:	380 - 420V	50Hz
		440V	60Hz		440V	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 (人-△ starting available)	Note: 2 15~55kW (人-△ starting available)		Note: 2 5.5~37kW (人-△ starting available)	
Standards	According to IEC					

Reducer

Items	Specifications		
Model	CYCLO 6000 Series		CYCLO 6000SK Series
Lubrication Method	Grease lubricated and oil lubricated models available		Grease lubricated models available
Speed Reduction Method	Internal planetary gear mechanism with trochoidal curved tooth profile		Involute gear type
Direction of Output Shaft Rotation	Single reduction	Clockwise rotation	Counter-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.		

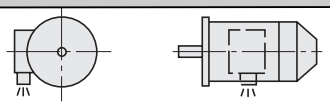
Common to Motor and Reducer

Items		Specifications
Ambient Conditions	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 by 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 人-△ 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.

Model Selection

Select models referring to the following flowchart. Consult us if there is any question.

Step 1: Determination of Operating Condition

Determine the following condition before starting selection.

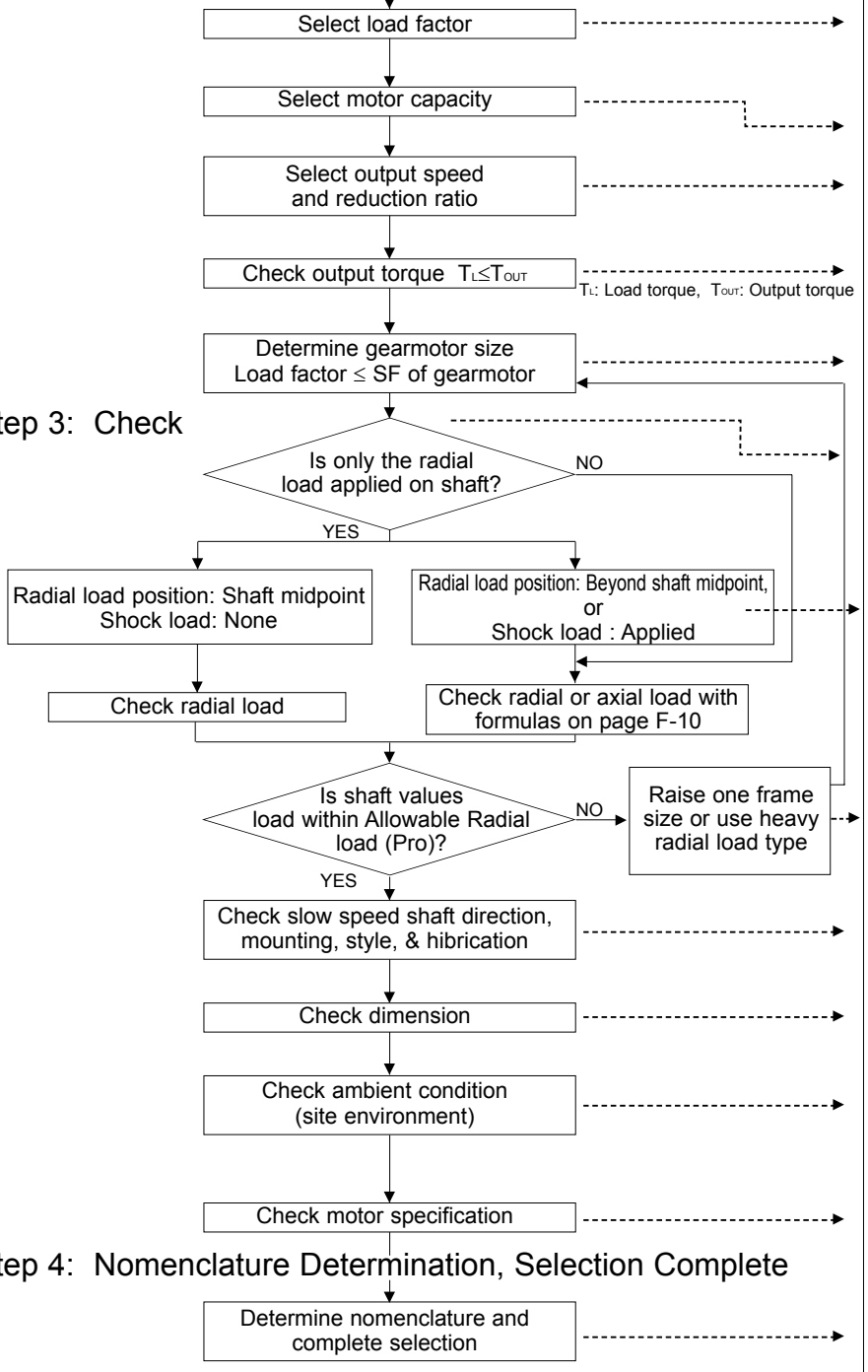
- Application
- Continuous operation, or operation with frequent startup and stop
- Motor capacity (kW) and output speed or reduction ratio
- Radial load and axial load
- Operation hours per day
- Level of shock load
- Mounting direction (slow speed shaft direction), mounting shape
- Motor specification (power source frequency, voltage, with or without brake, etc.)
- Other ambient conditions (temperature, humidity, indoor or outdoor, and other environments)

* Refer to section "D. CYCLO® GEARMOTORS (WITH AF MOTOR FOR INVERTERS)" for gearmotors with inverter motors.

Step 2: Model Selection

Step 3: Check

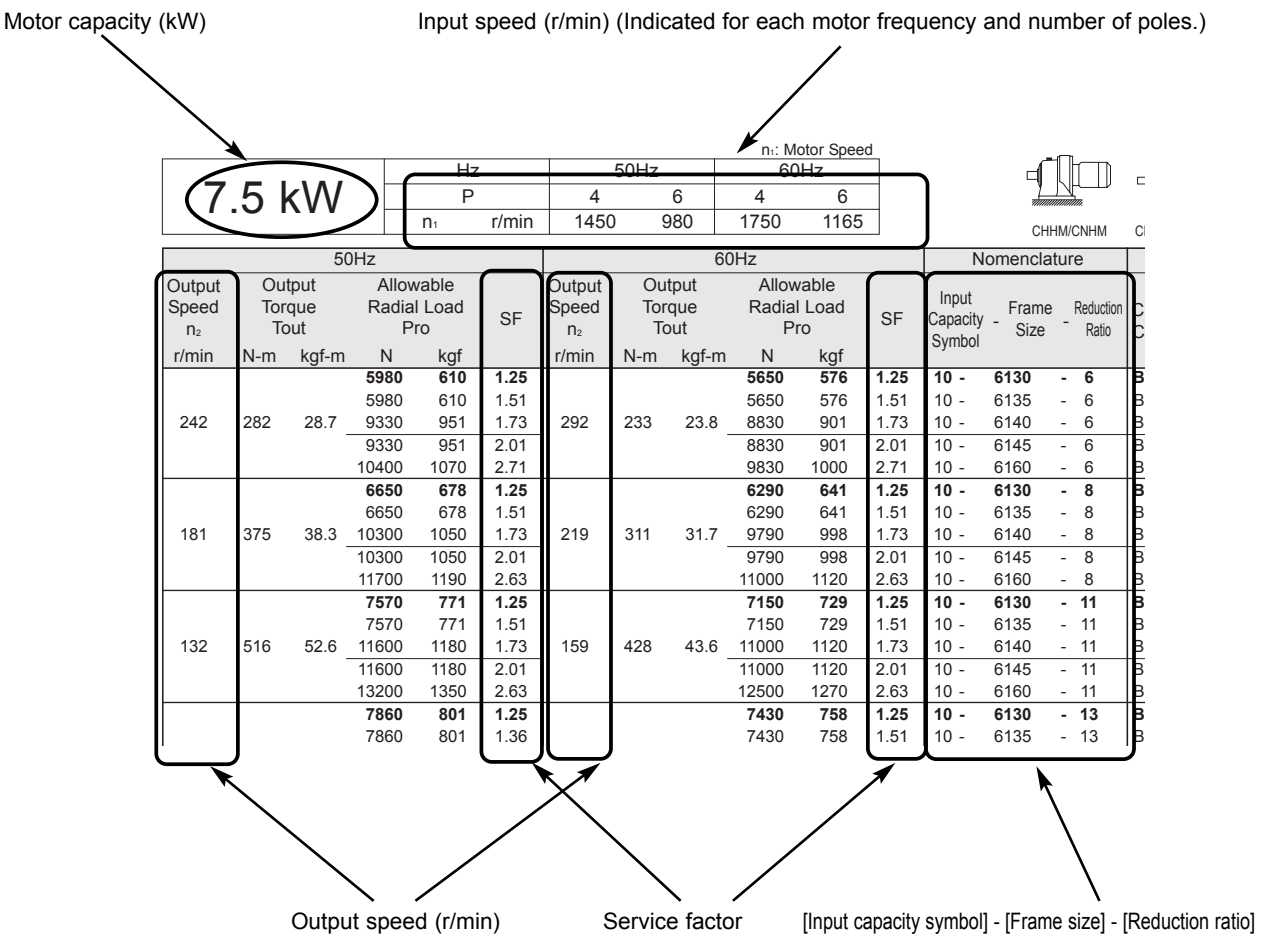
Step 4: Nomenclature Determination, Selection Complete



Procedure
- Select appropriate load factor from page B-7~8. Check allowable thermal capacity for motor in page B-9 if startup and stop is repeated during operation.
- Open the page with selection table for your motor capacity, starting from page B-13.
- Select the cell containing close value to your output speed or reduction ratio in the selection table.
- Check whether the output torque is sufficient for your usage. Raise motor capacity by one frame size if the output torque is not sufficient.
- Select combination with service factor (SF), which is larger than the load factor, from the selection table.
- Check whether only the radial load is applied on slow speed shaft. Refer to Technical Data starting at page F-10 and calculate if axial load is also applied.
- Refer to Technical Data starting at page F-10 depending on where the radial load is applied, or if any shock load is applied or not. - *1 Allowable radial load for slow speed shaft in the selection table is when the load position is at the midpoint of the shaft. *2 Calculate radial load including initial tension if they are applied using chain, V-belt, synchronous belt, etc. - Check whether the calculated radial load does not exceed allowable radial load of the slow speed shaft.
- Check whether the selected combination is sufficient for your slow speed shaft direction, mounting style, and lubrication method.
- Check whether the dimension is adequate. Consult us if it does not match your operation condition.
- Check whether the selected combination is sufficient for your operation condition, such as surrounding environment. Refer to "Standard Specifications of Gearmotor" in page B-3 or section "F. Technical Data" for checking. - Check whether the selected motor is sufficient for your operation condition (power source, environment, thermal class, etc.).
- Determine nomenclature for selected model referring to "Nomenclature" in page B-10. Now, the selection process is complete.

Description of Our Selection Table

This is a brief desciption of our tables on page B-13 and after.



50Hz Output Speed n2 r/min	50Hz Output Torque Tout N-m	50Hz Output Torque Tout kgf-m	50Hz Allowable Radial Load Pro N	50Hz Allowable Radial Load Pro kgf	50Hz SF	60Hz Output Speed n2 r/min	60Hz Output Torque Tout N-m	60Hz Output Torque Tout kgf-m	60Hz Allowable Radial Load Pro N	60Hz Allowable Radial Load Pro kgf	60Hz SF	Nomenclature: Input Capacity Symbol - Frame Size - Reduction Ratio
			5980	**610**	**1.25**				**5650**	**576**	**1.25**	**10 - 6130 - 6**
			5980	610	1.51				5650	576	1.51	10 - 6135 - 6
242	282	28.7	9330	951	1.73	292	233	23.8	8830	901	1.73	10 - 6140 - 6
			9330	951	2.01				8830	901	2.01	10 - 6145 - 6
			10400	1070	2.71				9830	1000	2.71	10 - 6160 - 6
			6650	**678**	**1.25**				**6290**	**641**	**1.25**	**10 - 6130 - 8**
			6650	678	1.51				6290	641	1.51	10 - 6135 - 8
181	375	38.3	10300	1050	1.73	219	311	31.7	9790	998	1.73	10 - 6140 - 8
			10300	1050	2.01				9790	998	2.01	10 - 6145 - 8
			11700	1190	2.63				11000	1120	2.63	10 - 6160 - 8
			7570	**771**	**1.25**				**7150**	**729**	**1.25**	**10 - 6130 - 11**
			7570	771	1.51				7150	729	1.51	10 - 6135 - 11
132	516	52.6	11600	1180	1.73	159	428	43.6	11000	1120	1.73	10 - 6140 - 11
			11600	1180	2.01				11000	1120	2.01	10 - 6145 - 11
			13200	1350	2.63				12500	1270	2.63	10 - 6160 - 11
			7860	**801**	**1.25**				**7430**	**758**	**1.25**	**10 - 6130 - 13**
			7860	801	1.36				7430	758	1.51	10 - 6135 - 13

*Note that “reduction ratio = normal ratio” for models with “SK” at the end of frame size (6000 SK Series with “*3” on the side of reduction ratio).
(Indicated reduction ratio is the same as actual reduction ratios for other models.)

Selection Example

Below is an example selection process following the model selection procedure in page B-4.

•Operation condition

- Application: Chain conveyor
- Operation hours per day: 24 hours/day
- Operation pattern: Continuous operation
- Load capacity: 0.7kW
- Output speed: 33.7r/min
- Connection with application:
  Chain sprocket
  Initial tension = 0
  Sprocket pitch circle radius: R=61mm
  Load position: Midpoint of shaft
- Level of shock load: None
- Mounting direction (slow speed shaft direction), and mounting style:
  horizontal, foot mount
- Motor specification
  Electric frequency: 50Hz
  Voltage: 200V
  Brake: None
  Others: Indoor type
- Surrounding condition
  Ambient temperature 20°C for indoor use

⇩ The model is selected based on above operation conditions in this example.

Operation condition, selection, and calculation results	Reference pages
• **Select load factor** Load condition for chain conveyor application → Uniform load (U) Load factor = 1.2 (U, 24 hours/day operation)	Page B-7~9 Table B-2: Reducer Load Classification Table B-1: Reducer Load Factor
• **Select motor capacity** Load capacity=0.7kW → Motor capacity=0.75kW	Page A-7: Product Range of Motor
• **Select output speed** Power source frequency 50Hz, output speed 33.7r/min → 1450/33.7 = Reduction ratio 43	Page B-38: CYCLO® GEARMOTORS Selection Tables
• **Check output torque** $T_L=\frac{9550 \times 0.7(kw)}{1450} \times 43 = 199\ N{\cdot}m \leq 202N{\cdot}m \rightarrow OK$ T_L=Load torque	Page B-38: CYCLO® GEARMOTORS Selection Tables
• **Determine reducer frame size** Load factor = 1.2 ≤ 1.44 Reducer frame size & reduction ratio: 1-6105-43	Page B-38: CYCLO® GEARMOTORS Selection Tables
• **Check radial load** Pr = TL/R ≤ Pro/Cf Pr = 199(N·m)/0.061(m) = 3262(N) ≤ 5400(N)/1 = 5400(N) → OK	Page F-10: Allowable Radial and Axial Load
• **Check slow speed shaft direction, mounting style, lubrication method** Slow speed shaft direction: Horizontal, Mounting style: Foot mount → Nomenclature: CNHM (Grease lubrication method)	Page B-38: CYCLO® GEARMOTORS Selection Tables
• **Check dimension** Check dimension using Dimension Tables.	Page B-10: Nomenclature
• **Check surrounding condition** Ambient temperature: 20°C → OK	Page B-101: Dimension Tables
• **Check motor specification** 200V, 50Hz, for indoor use → OK with standard specificationn	Page B-3: Standard Specifications of Gearmotor
■**Determine nomenclature** Determine nomenclature: CNHM1-6105-43	Page A-7: Product Range of Motor Page B-10: Nomenclature
The selection is complete.	

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

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

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

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·m²		Motor GD²	kgf·m²
	(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) Caluculate 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.

(2) Caluculate Z (number of startup times/hour).

(a) Assume that one operating period consists of"on time"ta (sec),"off time"tb(sec) and the motor is started nr (times/cycle)

$$Z_r = \frac{3600 n_r}{t_a + t_b} \quad \text{(times/hr)}$$

(b) When inching, ni(times/cycle)is included in 1 cycle (t_a+t_b), the number of inching times per hour Zi, and then included in the number of starts.

$$Z_i = \frac{3600 n_r}{t_a + t_b} \quad \text{(times/hr)}$$

(c) Calculate Z (times/hr) by (a) and (b).

$$Z = Z_r + \frac{1}{2} \quad Z_r = \frac{3600 n_r}{t_a + t_b} \cdot \left(n_r + \frac{1}{2} n_i\right) \quad \text{(times/hr)}$$

(3) Calculate C multiplied by Z.

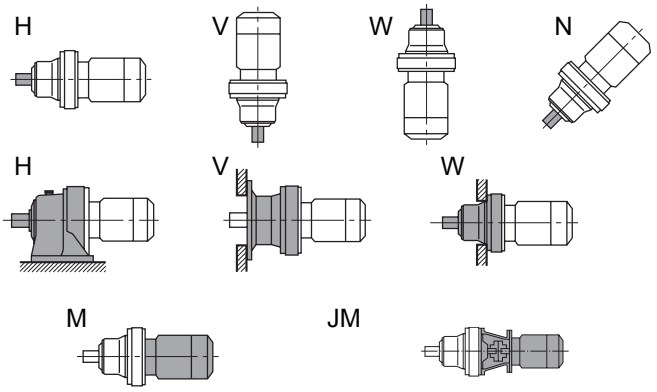
Use the C obtained in step (1) and Z in step (2).

(4) Obtain the duty cycle %ED and check with table above.

$$\%ED = \frac{t_a}{t_a + t_b} \times 100$$

Nomenclatue

Slow Speed Shaft Direction	
Horizontal, slow speed shaft level	H
Vertical, slow speed shaft down	V
Verticaly, 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

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)
	Capacity symbol	50	60	75	100		
	kW (HP)	37 (50)	45 (60)	55 (75)	75 (100)		
6P	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 Efficency Motor	ES
Modification Left Wall	H2	Torque Limiter	TL
Modification Right Wall	H3		

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

With or Without Brake	
Without brake	-
With brake	B

Nominal ratio

C	N	H	M		1	6105				51

- CYCLO DRIVE (C)
- Slow speed shaft direction
- Mounting style
- Type of input
- Special specification symbol
- Motor capacity symbol
- Frame size
- Shaft specification
- Suffix
- With or Without brake
- Reduction ratio

Nomenclature Examples (Gearmotor)

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

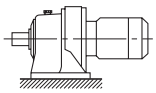
C:	Model	- CYCLO® DRIVE
V:	Slow speed shaft direction	- Vertical mounting
V:	Mounting style	- V flange
M:	Type of input	- Gearmotor type
5:	Motor capacity	- 3.7kW
6195DA:	Frame size	- 6115
B:	Brake	- With brake
377:	Reduction ratio	- 377

Product and Nomenclature Symbol Examples (Gearmotor)

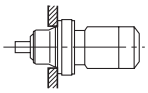
Standard and various application products of CYCLOR GEARMOTOR are classified by their nomenclature symbol as below.
Refer to specific catalogs or consult us for details on our application products.

CYCLO® GEARMOTORS

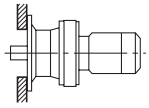
CHHM (CNHM)



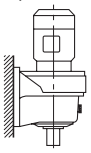
CHFM (CNFM)



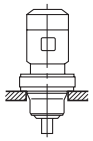
CHVM (CNVM)



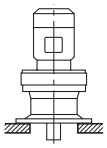
CVHM (CNHM)



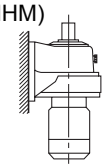
CVFM (CNFM)



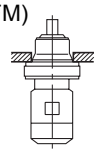
CVVM (CNVM)



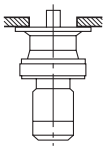
CWHM (CNHM)



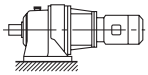
CWFM (CNFM)



CWVM (CNVM)

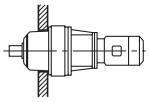


CHHJM (CNHJM)



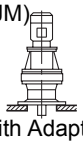
With Adaptor

CHFJM (CNFJM)



With Adaptor

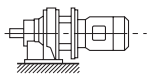
CVVJM (CNVJM)



With Adaptor

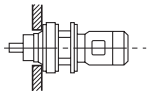
CYCLO® GEARMOTOR Application Products

CHHXM (CNHXM)



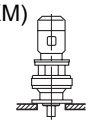
Input Side Hollow Shaft

CHFXM (CNFXM)



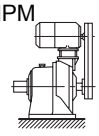
Input Side Hollow Shaft

CVVXM (CNVXM)



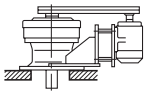
Input Side Hollow Shaft

CHHPM



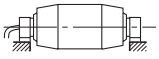
Top Mount Type

CVVPM



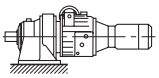
Side Mount Type

CPM



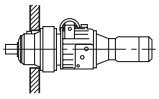
Cyclo Motor Pulley

CHHBM



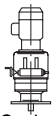
Beier Cyclo Variator

CHFBM



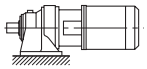
Beier Cyclo Variator

CVVBM



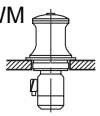
Beier Cyclo Variator

CHHCM



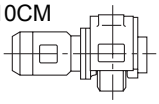
Cyclo Pack with Clutch Brake

C11WM



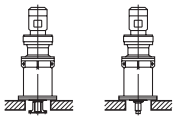
Cyclo Capstan

C10CM



Cyclo Wheel

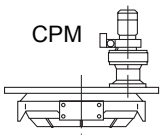
C14VM C15VM C17VM C18VM



Vertical Special Base Mount

Vertical Special Base Mount

CPM



Center Post Type

M E M O

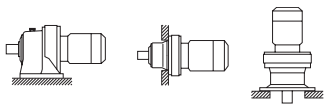
B CYCLO® GEAR MOTORS

2. Selection Tables

Selection Tables Gearmotors

n_1: Motor Speed

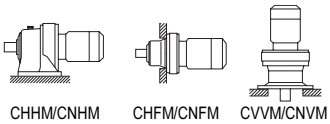
0.1 kW	Hz	50Hz		60Hz	
	P	4	6	4	6
	n_1 r/min	1450	980	1750	1165



CHHM/CNHM CHFM/CNFM CVVM/CNVM

50Hz						60Hz						Nomenclature				Page of Dimension Sheet		
Output Speed 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								
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
			1180	**120**	**1.10**				**1180**	**120**	**1.10**	**01 -**	**6060**	**- 25**		**B-100**	**B-116**	**B-135**
			1180	120	1.66				1180	120	1.66	01 -	6065	- 25		B-100	B-116	B-135
58.0	15.6	1.59	1770	180	2.30	70.0	13.0	1.32	1770	180	2.30	01 -	6070	- 25		B-100	B-116	B-135
			1770	180	2.94				1770	180	2.94	01 -	6075	- 25		B-100	B-116	B-135
			1180	**120**	**1.10**				**1180**	**120**	**1.10**	**01 -**	**6060**	**- 29**		**B-100**	**B-116**	**B-135**
			1180	120	1.65				1180	120	1.66	01 -	6065	- 29		B-100	B-116	B-135
50.0	18.1	1.85	1770	180	2.26	60.3	15.0	1.53	1770	180	2.26	01 -	6070	- 29		B-100	B-116	B-135
			1770	180	2.86				1770	180	2.86	01 -	6075	- 29		B-100	B-116	B-135
			1180	**120**	**1.10**				**1180**	**120**	**1.10**	**01 -**	**6060**	**- 35**		**B-100**	**B-116**	**B-135**
			1180	120	1.37				1180	120	1.43	01 -	6065	- 35		B-100	B-116	B-135
41.4	21.9	2.23	1770	180	2.05	50.0	18.1	1.85	1770	180	2.11	01 -	6070	- 35		B-100	B-116	B-135
			1770	180	2.72				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
			1180	**120**	**1.12**				**1180**	**120**	**1.13**	**01 -**	**6065**	**- 43**		**B-100**	**B-116**	**B-135**
			1770	180	1.67				1770	180	1.70	01 -	6070	- 43		B-100	B-116	B-135
33.7	26.9	2.74	1770	180	2.23	40.7	22.3	2.27	1770	180	2.26	01 -	6075	- 43		B-100	B-116	B-135
			2560	261	2.50				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
			1770	**180**	**1.00**				**1770**	**180**	**1.00**	**01 -**	**6070**	**- 51**		**B-100**	**B-116**	**B-135**
			1770	180	1.43				1770	180	1.43	01 -	6075	- 51		B-100	B-116	B-135
28.4	31.9	3.25	2560	261	1.92	34.3	26.4	2.70	2560	261	1.92	01 -	6080	- 51		B-100	B-116	B-135
			2560	261	2.41				2560	261	2.41	01 -	6085	- 51		B-100	B-116	B-135
			1770	**180**	**1.00**				**1770**	**180**	**1.00**	**01 -**	**6070**	**- 59**		**B-100**	**B-116**	**B-135**
			1770	180	1.36				1770	180	1.36	01 -	6075	- 59		B-100	B-116	B-135
24.6	36.9	3.76	2560	261	1.85	30.0	30.6	3.12	2560	261	1.85	01 -	6080	- 59		B-100	B-116	B-135
			2560	261	2.34				2560	261	2.34	01 -	6085	- 59		B-100	B-116	B-135
			2560	**261**	**1.20**				**2560**	**261**	**1.20**	**01 -**	**6080**	**- 71**		**B-100**	**B-116**	**B-135**
			2560	261	1.65				2560	261	1.87	01 -	6085	- 71		B-100	B-116	B-135
20.4	44.4	4.53	3340	340	2.52	24.6	36.8	3.75	3340	340	2.52	01 -	6090	- 71		B-100	B-116	B-135
			3340	340	2.78				3340	340	3.01	01 -	6095	- 71		B-100	B-116	B-135
			2560	**261**	**1.21**				**2560**	**261**	**1.21**	**01 -**	**6085**	**- 87**		**B-100**	**B-116**	**B-135**
16.7	54.4	5.55	3340	340	2.11	20.0	45.10	4.600	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
	24.0	2.45	1180	120	*1		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
13.9			1770	180	0.97	16.8			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

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 n_1 and n_2. 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.



CHHM/CNHM CHFM/CNFM CVVM/CNVM

0.1 kW

n_1: Motor Speed

Hz	50Hz		60Hz	
P	4	6	4	6
n_1 r/min	1450	980	1750	1165

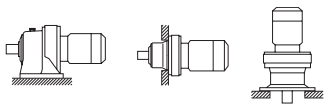
50Hz						60Hz						Nomenclature				Page of Dimension Sheet		
Output Speed n_2	Output Torque Tout		Allowable Radial Load Pro		SF	Output Speed n_2	Output Torque Tout		Allowable Radial Load Pro		SF	Input Capacity Symbol	- Frame Size	- Reduction Ratio		CNHM CHHM	CNFM CHFM	CNVM CVVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf								
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
	84.8	8.64	3340	340	1.77		70.2	7.16	3340	340	2.14	01 -	6090DA	- 143		B-108	B-124	B-143
			3340	340	2.16				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
	97.8	9.97	3340	340	1.53		81.0	8.26	3340	340	1.85	01 -	6090DA	- 165		B-108	B-124	B-143
			3340	340	2.04				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
	116	11.8	3340	340	1.30		95.8	9.76	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
			5400	550	2.16				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
	137	14.0	3340	340	1.10		113	11.6	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
			5400	550	1.83				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
	162	16.5	3340	340	1.24		134	13.7	3340	340	1.49	01 -	6095DA	- 273		B-108	B-124	B-143
			5400	550	1.54				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

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.

Selection Tables Gearmotors

n_1: Motor Speed

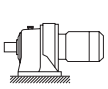
0.1 kW	Hz	50Hz		60Hz	
	P	4	6	4	6
	n_1 r/min	1450	980	1750	1165

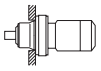


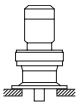
CHHM/CNHM CHFM/CNFM CVVM/CNVM

50Hz						60Hz						Nomenclature	Page of Dimension Sheet		
Output Speed 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					
	24.0	2.45	1180	120	*1		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
4.55	150	15.3	3290	336	*1	5.49	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
	189	19.3	5400	550	1.59		157	16.0	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
	24.0	2.45	1180	120	*1		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
3.85			3150	321	0.89	4.64			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
	223	22.8	5400	550	1.34		185	18.9	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
			9810	1000	2.82				9810	1000	3.40	01 - 6125DA - 377	B-108	B-124	B-143
	24.0	2.45	1180	120	*1		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
3.07	150	15.3	3310	338	*1	3.70	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**
	280	28.6	9810	1000	1.87		232	23.7	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
	24.0	2.45	1180	120	*1		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
2.59	150	15.3	3310	338	*1	3.13	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
	331	33.8	9810	1000	1.58		275	28.0	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
	45.0	4.59	1770	180	*1		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
2.23	250	25.5	5400	550	*1	2.70	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
	385	39.2	9810	1000	1.64		319	32.5	9810	1000	1.98	01 - 6125DA - 649	B-108	B-124	B-143
	24.0	2.45	1180	120	*1		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
1.98	200	20.4	3220	328	*1	2.39	200	20.4	3220	328	*1	01 - 6095DA - 731	B-108	B-124	B-143
	250	25.5	5400	550	*1		250	25.5	5400	550	*1	01 - 6100DA - 731	B-108	B-124	B-143
	300	30.6	5400	550	*1		300	30.6	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
	433	44.2	9810	1000	1.45		359	36.6	9810	1000	1.75	01 - 6125DA - 731	B-108	B-124	B-143

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 n_1 and n_2. 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.


CHHM/CNHM


CHFM/CNFM


CVVM/CNVM

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 CHHM	CNFM CHFM	CNVM CVVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					
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
	630	64.2	9810	1000	*1		630	64.2	9810	1000	*1	01 - 6125DA - 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

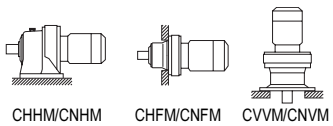
6. "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
7. Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
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.

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

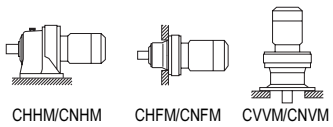


50Hz						60Hz						Nomenclature	Page of Dimension Sheet		
Output Speed n_2	Output Torque Tout		Allowable Radial Load Pro		SF	Output Speed n_2	Output Torque Tout		Allowable Radial Load Pro		SF	Input Capacity Symbol - Frame Size - Reduction Ratio	CNHM CHHM	CNFM CHFM	CNVM CVVM
r/min	N·m	kgf·m	N	kgf		r/min	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
0.327	150	15.3	3310	338	*1	0.394	150	15.3	3310	338	*1	01 - 6090DA - 4437	B-108	B-124	B-143
	192	19.6	3240	330	*1		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
0.282	150	15.3	3310	338	*1	0.341	150	15.3	3310	338	*1	01 - 6090DA - 5133	B-108	B-124	B-143
	192	19.6	3240	330	*1		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
0.235	525	53.5	9780	997	*1	0.283	525	53.5	9780	997	*1	01 - 6120DB - 6177	B-108	B-124	B-143
	630	64.2	9560	974	*1		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

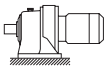
n_1: Motor Speed

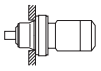
Hz	50Hz		60Hz	
P	4	6	4	6
n1 r/min	1450	980	1750	1165

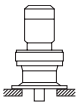


50Hz						60Hz						Nomenclature	Page of Dimension Sheet		
Output Speed n_2	Output Torque Tout		Alloeable Radial Load Pro		SF	Output Speed n_2	Output Torque Tout		Alloeable Radial Load Pro		SF	Input Capacity Symbol - Frame Size - Reduction Ratio	CNHM CHHM	CNFM CHFM	CNVM CVVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					
			798	**81.4**	**1.00**				**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
242	7.51	0.765	1390	142	1.74	292	6.22	0.634	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
			912	**93.0**	**1.00**				**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
181	10.0	1.02	1540	157	1.74	219	8.29	0.846	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

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 n_1 and n_2. 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.


CHHM/CNHM


CHFM/CNFM


CVVM/CNVM

0.2 kW

n_1: Motor Speed

Hz	50Hz		60Hz	
P	4	6	4	6
n_1 r/min	1450	980	1750	1165

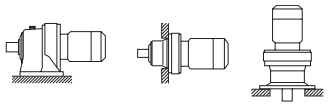
50Hz						60Hz						Nomenclature				Page of Dimension Sheet		
Output Speed n_2	Output Torque Tout		Allowable Radial Load Pro		SF	Output Speed n_2	Output Torque Tout		Allowable Radial Load Pro		SF	Input Capacity Symbol	- Frame Size	- Reduction Ratio		CNHM CHHM	CNFM CHFM	CNVM CVVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf								
			1180	**120**	**1.00**				**1170**	**119**	**1.00**	**02 -**	**6060**	**- 11**		**B-100**	**B-116**	**B-135**
			1180	120	1.43				1170	119	1.43	02 -	6065	- 11		B-100	B-116	B-135
132	13.8	1.40	1730	176	1.74	159	11.4	1.16	1630	166	1.74	02 -	6070	- 11		B-100	B-116	B-135
			1730	176	2.04				1630	166	2.04	02 -	6075	- 11		B-100	B-116	B-135
			2320	236	2.96				2180	222	2.96	02 -	6080	- 11		B-100	B-116	B-135
			1180	**120**	**1.00**				**1180**	**120**	**1.00**	**02 -**	**6060**	**- 13**		**B-100**	**B-116**	**B-135**
			1180	120	1.43				1180	120	1.43	02 -	6065	- 13		B-100	B-116	B-135
112	16.3	1.66	1770	180	1.74	135	13.5	1.37	1720	175	1.74	02 -	6070	- 13		B-100	B-116	B-135
			1770	180	2.04				1720	175	2.04	02 -	6075	- 13		B-100	B-116	B-135
			2500	254	2.96				2350	239	2.96	02 -	6080	- 13		B-100	B-116	B-135
			1180	**120**	**1.00**				**1180**	**120**	**1.00**	**02 -**	**6060**	**- 15**		**B-100**	**B-116**	**B-135**
			1180	120	1.43				1180	120	1.43	02 -	6065	- 15		B-100	B-116	B-135
96.7	18.8	1.91	1770	180	1.74	117	15.6	1.59	1730	176	1.74	02 -	6070	- 15		B-100	B-116	B-135
			1770	180	2.04				1730	176	2.04	02 -	6075	- 15		B-100	B-116	B-135
			2560	261	2.96				2420	247	2.96	02 -	6080	- 15		B-100	B-116	B-135
			1180	**120**	**1.00**				**1180**	**120**	**1.00**	**02 -**	**6060**	**- 17**		**B-100**	**B-116**	**B-135**
			1180	120	1.41				1180	120	1.43	02 -	6065	- 17		B-100	B-116	B-135
85.3	21.3	2.17	1770	180	1.74	103	17.6	1.80	1770	180	1.74	02 -	6070	- 17		B-100	B-116	B-135
			1770	180	2.04				1770	180	2.04	02 -	6075	- 17		B-100	B-116	B-135
			2560	261	2.96				2540	259	2.96	02 -	6080	- 17		B-100	B-116	B-135
			1180	**120**	**1.14**				**1180**	**120**	**1.17**	**02 -**	**6065**	**- 21**		**B-100**	**B-116**	**B-135**
			1770	180	1.60				1770	180	1.60	02 -	6070	- 21		B-100	B-116	B-135
69.0	26.3	2.68	1770	180	2.04	83.3	21.8	2.22	1770	180	2.04	02 -	6075	- 21		B-100	B-116	B-135
			2560	261	2.39				2480	253	2.39	02 -	6080	- 21		B-100	B-116	B-135
			2560	261	2.75				2480	253	2.75	02 -	6085	- 21		B-100	B-116	B-135
			1180	120	0.83				1180	120	0.83	02 -	6065	- 25		B-100	B-116	B-135
			1770	**180**	**1.15**				**1770**	**180**	**1.15**	**02 -**	**6070**	**- 25**		**B-100**	**B-116**	**B-135**
58.0	31.3	3.19	1770	180	1.47	70.0	25.9	2.64	1770	180	1.47	02 -	6075	- 25		B-100	B-116	B-135
			2560	261	1.70				2550	260	1.70	02 -	6080	- 25		B-100	B-116	B-135
			2560	261	2.38				2550	260	2.38	02 -	6085	- 25		B-100	B-116	B-135
			1180	120	0.83				1180	120	0.83	02 -	6065	- 29		B-100	B-116	B-135
			1770	**180**	**1.13**				**1770**	**180**	**1.13**	**02 -**	**6070**	**- 29**		**B-100**	**B-116**	**B-135**
50.0	36.3	3.70	1770	180	1.43	60.3	30.1	3.07	1770	180	1.43	02 -	6075	- 29		B-100	B-116	B-135
			2560	261	1.70				2560	261	1.70	02 -	6080	- 29		B-100	B-116	B-135
			2560	261	2.34				2560	261	2.34	02 -	6085	- 29		B-100	B-116	B-135
			1770	**180**	**1.03**				**1770**	**180**	**1.06**	**02 -**	**6070**	**- 35**		**B-100**	**B-116**	**B-135**
			1770	180	1.36				1770	180	1.40	02 -	6075	- 35		B-100	B-116	B-135
41.4	43.8	4.46	2560	261	1.45	50.0	36.3	3.70	2560	261	1.65	02 -	6080	- 35		B-100	B-116	B-135
			2560	261	1.64				2560	261	1.86	02 -	6085	- 35		B-100	B-116	B-135
			3340	340	3.06				3340	340	3.06	02 -	6090	- 35		B-100	B-116	B-135
			1770	**180**	**1.12**				**1770**	**180**	**1.13**	**02 -**	**6075**	**- 43**		**B-100**	**B-116**	**B-135**
33.7	53.8	5.49	2560	261	1.25	40.7	44.6	4.54	2560	261	1.25	02 -	6080	- 43		B-100	B-116	B-135
			2560	261	1.47				2560	261	1.47	02 -	6085	- 43		B-100	B-116	B-135
			3340	340	2.18				3340	340	2.18	02 -	6090	- 43		B-100	B-116	B-135
			2560	**261**	**1.21**				**2560**	**261**	**1.21**	**02 -**	**6085**	**- 51**		**B-100**	**B-116**	**B-135**
28.4	63.8	6.51	3340	340	1.66	34.3	52.9	5.39	3340	340	1.66	02 -	6090	- 51		B-100	B-116	B-135
			3340	340	2.04				3340	340	2.11	02 -	6095	- 51		B-100	B-116	B-135
			5400	550	2.80				5400	550	2.80	02 -	6100	- 51		B-101	B-117	B-136
			2560	**261**	**1.17**				**2560**	**261**	**1.17**	**02 -**	**6085**	**- 59**		**B-100**	**B-116**	**B-135**
24.6	73.8	7.53	3340	340	1.55	29.7	61.2	6.24	3340	340	1.55	02 -	6090	- 59		B-100	B-116	B-135
			3340	340	1.68				3340	340	1.87	02 -	6095	- 59		B-100	B-116	B-135
			5400	550	2.58				5400	550	2.58	02 -	6100	- 59		B-101	B-117	B-136
			2380	243	0.83				2510	256	0.94	02 -	6085	- 71		B-100	B-116	B-135
			3340	**340**	**1.26**				**3340**	**340**	**1.26**	**02 -**	**6090**	**- 71**		**B-100**	**B-116**	**B-135**
20.4	88.8	9.06	3340	340	1.39	24.6	73.6	7.50	3340	340	1.51	02 -	6095	- 71		B-100	B-116	B-135
			5400	550	2.18				5400	550	2.18	02 -	6100	- 71		B-101	B-117	B-136
			5400	550	2.53				5400	550	2.81	02 -	6105	- 71		B-101	B-117	B-136

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.

Selection Tables Gearmotors

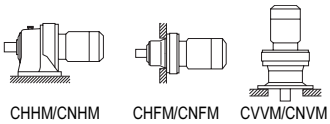
n_1: Motor Speed

0.2 kW	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 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								
			3340	**340**	**1.06**				**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
16.7	109	11.1	5400	550	2.17	20.1	90.2	9.20	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
	60.0	6.12	1770	180	*1		60.0	6.12	1770	180	*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
13.9	123	12.6	3340	340	1.47	16.8	102	10.4	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
			5400	550	2.15				5400	550	2.15	02 -	6105DA	- 104		B-108	B-124	B-143
			5400	**550**	**1.05**				**5400**	**550**	**1.05**	**02 -**	**6100**	**- 119**		**B-101**	**B-117**	**B-136**
12.2	149.0	15.2	5400	550	1.43	14.7	123	12.6	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**
			5400	550	1.47				5400	550	1.78	02 -	6100DA	- 143		B-108	B-124	B-143
10.1	170	17.3	5400	550	1.77	12.2	140	14.3	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
	150	15.3	3340	340	*1		150	15.3	3340	340	*1	02 -	6090DA	- 165		B-108	B-124	B-143
			3340	**340**	**1.02**				**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
8.79	196	19.9	5400	550	1.53	10.6	162	16.5	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
			9810	1000	2.68				9810	1000	3.24	02 -	6120DB	- 165		B-108	B-124	B-143
	150	15.3	3340	340	*1		150	15.3	3340	340	*1	02 -	6090DA	- 195		B-108	B-124	B-143
			3340	340	0.87				3340	340	1.04	02 -	6095DA	- 195		B-108	B-124	B-143
			5400	550	1.08				5400	550	1.31	02 -	6100DA	- 195		B-108	B-124	B-143
7.44	231	23.6	5400	550	1.30	8.97	192	19.5	5400	550	1.57	02 -	6105DA	- 195		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
	150	15.3	3340	340	*1		150	15.3	3340	340	*1	02 -	6090DA	- 231		B-108	B-124	B-143
	200	20.4	3340	340	*1		200	20.4	3340	340	*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
6.28			9810	1000	1.91	7.58			9810	1000	2.30	02 -	6120DB	- 231		B-108	B-124	B-143
	274	27.9	9810	1000	2.15		227	23.1	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-143
	150	15.3	3340	340	*1		150	15.3	3340	340	*1	02 -	6090DA	- 273		B-108	B-124	B-143
	200	20.4	3340	340	*1		200	20.4	3340	340	*1	02 -	6095DA	- 273		B-108	B-124	B-143
	250	25.5	5400	550	*1		250	25.5	5400	550	*1	02 -	6100DA	- 273		B-108	B-124	B-143
			5400	550	0.93				5400	550	1.12	02 -	6105DA	- 273		B-108	B-124	B-143
			9810	1000	1.61				9810	1000	1.95	02 -	6120DA	- 273		B-108	B-124	B-143
5.31			9810	1000	1.95	6.41			9810	1000	2.15	02 -	6125DA	- 273		B-108	B-124	B-143
	324	33.0	9810	1000	1.95		268	27.3	9810	1000	2.35	02 -	6125DB	- 273		B-108	B-124	B-143
			14700	1500	2.15				14700	1500	2.15	02 -	6130DA	- 273		B-109	B-125	B-144
			14700	1500	2.41				14700	1500	2.91	02 -	6130DB	- 273		B-109	B-125	B-143
			14700	1500	2.90				14700	1500	3.51	02 -	6135DB	- 273		B-109	B-125	B-144

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 n_1 and n_2. 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.



CHHM/CNHM CHFM/CNFM CVVM/CNVM

n_1: Motor Speed

0.2 kW	Hz	50Hz		60Hz	
	P	4	6	4	6
	n_1 r/min	1450	980	1750	1165

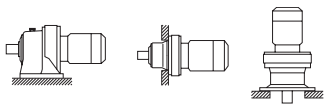
50Hz						60Hz						Nomenclature	Page of Dimension Sheet		
Output Speed n_2	Output Torque Tout		Allowable Radial Load Pro		SF	Output Speed n_2	Output Torque Tout		Allowable Radial Load Pro		SF	Input Capacity Symbol - Frame Size - Reduction Ratio	CNHM CHHM	CNFM CHFM	CNVM CVVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					
	200	20.4	3200	326	*1		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
			9810	1000	1.38				9810	1000	1.66	02 - 6120DA - 319	B-108	B-124	B-143
4.55			9810	1000	1.67	5.49			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
	378	38.6	14700	1500	2.06		313	31.9	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
	200	20.4	3200	326	*1		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
			9810	1000	1.16				9810	1000	1.40	02 - 6120DA - 377	B-108	B-124	B-143
3.85			9810	1000	1.41	4.64			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
	447	45.6	14700	1500	2.10		370	37.7	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
	250	25.5	5400	550	*1		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
			9810	1000	1.12				9810	1000	1.36	02 - 6125DA - 473	B-108	B-124	B-143
3.07			14700	1500	1.39	3.70			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
	561	57.2	16000	1630	2.15		465	47.4	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
	300	30.6	5400	550	*1		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
			9810	1000	0.95				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
2.59			14700	1500	1.42	3.13			14700	1500	1.71	02 - 6135DA - 559	B-109	B-125	B-144
	663	67.6	16000	1630	1.85		549	56.0	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
	525	53.5	9810	1000	*1		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
			9810	1000	0.82				9810	1000	0.98	02 - 6125DA - 649	B-108	B-124	B-143
2.23			14700	1500	1.19	2.70			14700	1500	1.43	02 - 6130DA - 649	B-109	B-125	B-144
	769	78.4	14700	1500	1.36		638	65.0	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
	525	53.5	9810	1000	*1		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
1.98			14700	1500	1.08	2.39			14700	1500	1.31	02 - 6135DA - 731	B-109	B-125	B-144
	867	88.3	16000	1630	1.41		718	73.2	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
	520	53.0	9810	1000	*1		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
1.72			14700	1500	0.94	2.08			14700	1500	1.14	02 - 6135DA - 841	B-109	B-125	B-144
	997	102	16000	1630	1.23		826	84.2	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

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.

Selection Tables Gearmotors

n_1: Motor Speed

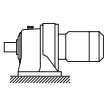
0.2 kW	Hz	50Hz		60Hz	
	P	4	6	4	6
	n_1 r/min	1450	980	1750	1165



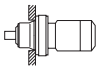
CHHM/CNHM CHFM/CNFM CVVM/CNVM

50Hz						60Hz						Nomenclature	Page of Dimension Sheet		
Output Speed 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					
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

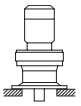
1. Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
2. Motor slippage may affect n_1 and n_2. Refer to technical data for details.
3. CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer 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.



CHHM/CNHM



CHFM/CNFM



CVVM/CNVM

n_1: Motor Speed

0.2 kW	Hz	50Hz		60Hz	
	P	4	6	4	6
	n_1 r/min	1450	980	1750	1165

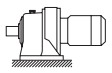
50Hz						60Hz						Nomenclature	Page of Dimension Sheet		
Output Speed n_2	Output Torque Tout		Allowable Radial Load Pro		SF	Output Speed n_2	Output Torque Tout		Allowable Radial Load Pro		SF	Input Capacity Symbol - Frame Size - Reduction Ratio	CNHM CHHM	CNFM CHFM	CNVM CVVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					
0.327	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

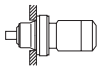
6. "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
7. Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
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.

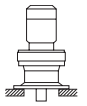
Selection Tables Gearmotors

n_1: Motor Speed

0.25 kW	Hz	50Hz		60Hz	
	P	4	6	4	6
	n_1 r/min	1450	980	1750	1165

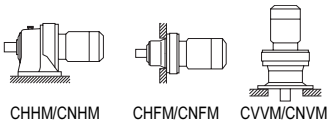

CHHM/CNHM


CHFM/CNFM


CVVM/CNVM

50Hz						60Hz						Nomenclature				Page of Dimension Sheet		
Output Speed 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								
			795	**81.1**	**1.14**				**749**	**76.3**	**1.14**	**03 -**	**6065**	**- 6**		**B-100**	**B-116**	**B-135**
242	9.39	0.957	1390	141	1.39	292	7.78	0.793	1310	133	1.39	03 -	6070	- 6		B-100	B-116	B-135
			1390	141	1.63				1310	133	1.63	03 -	6075	- 6		B-100	B-116	B-135
			1930	197	2.37				1810	185	2.37	03 -	6080	- 6		B-100	B-116	B-135
			908	**92.5**	**1.14**				**855**	**87.2**	**1.14**	**03 -**	**6065**	**- 8**		**B-100**	**B-116**	**B-135**
181	12.5	1.28	1530	156	1.39	219	10.4	1.06	1450	147	1.39	03 -	6070	- 8		B-100	B-116	B-135
			1530	156	1.63				1450	147	1.63	03 -	6075	- 8		B-100	B-116	B-135
			2090	213	2.37				1970	201	2.37	03 -	6080	- 8		B-100	B-116	B-135
			1180	**120**	**1.14**				**1160**	**118**	**1.14**	**03 -**	**6065**	**- 11**		**B-100**	**B-116**	**B-135**
132	17.2	1.75	1720	175	1.39	159	14.3	1.45	1620	165	1.39	03 -	6070	- 11		B-100	B-116	B-135
			1720	175	1.63				1620	165	1.63	03 -	6075	- 11		B-100	B-116	B-135
			2310	236	2.37				2180	222	2.37	03 -	6080	- 11		B-100	B-116	B-135
			1180	**120**	**1.14**				**1180**	**120**	**1.14**	**03 -**	**6065**	**- 13**		**B-100**	**B-116**	**B-135**
112	20.3	2.07	1770	180	1.39	135	16.8	1.72	1710	174	1.39	03 -	6070	- 13		B-100	B-116	B-135
			1770	180	1.63				1710	174	1.63	03 -	6075	- 13		B-100	B-116	B-135
			2490	254	2.37				2340	239	2.37	03 -	6080	- 13		B-100	B-116	B-135
			1180	**120**	**1.14**				**1180**	**120**	**1.14**	**03 -**	**6065**	**- 15**		**B-100**	**B-116**	**B-135**
96.7	23.5	2.39	1770	180	1.39	117	19.4	1.98	1720	175	1.39	03 -	6070	- 15		B-100	B-116	B-135
			1770	180	1.63				1720	175	1.63	03 -	6075	- 15		B-100	B-116	B-135
			2560	261	2.37				2420	247	2.37	03 -	6080	- 15		B-100	B-116	B-135
			1180	**120**	**1.13**				**1180**	**120**	**1.14**	**03 -**	**6065**	**- 17**		**B-100**	**B-116**	**B-135**
85.3	26.6	2.71	1770	180	1.39	103	22.0	2.25	1770	180	1.39	03 -	6070	- 17		B-100	B-116	B-135
			1770	180	1.63				1770	180	1.63	03 -	6075	- 17		B-100	B-116	B-135
			2560	261	2.37				2540	258	2.37	03 -	6080	- 17		B-100	B-116	B-135
			1180	120	0.91				1180	120	0.94	03 -	6065	- 21		B-100	B-116	B-135
			1770	**180**	**1.28**				**1770**	**180**	**1.28**	**03 -**	**6070**	**- 21**		**B-100**	**B-116**	**B-135**
69.0	32.8	3.35	1770	180	1.63	83.3	27.2	2.77	1770	180	1.63	03 -	6075	- 21		B-100	B-116	B-135
			2560	261	1.91				2470	252	1.91	03 -	6080	- 21		B-100	B-116	B-135
			2560	261	2.20				2470	252	2.20	03 -	6085	- 21		B-100	B-116	B-135
			1770	**180**	**1.18**				**1770**	**180**	**1.18**	**03 -**	**6075**	**- 25**		**B-100**	**B-116**	**B-135**
58.0	39.1	3.99	2560	261	1.36	70.0	32.4	3.30	2540	259	1.36	03 -	6080	- 25		B-100	B-116	B-135
			2560	261	1.90				2540	259	1.90	03 -	6085	- 25		B-100	B-116	B-135
			3340	340	2.68				3340	340	2.68	03 -	6090	- 25		B-100	B-116	B-135
			1770	**180**	**1.14**				**1770**	**180**	**1.14**	**03 -**	**6075**	**- 29**		**B-100**	**B-116**	**B-135**
50.0	45.4	4.62	2560	261	1.36	60.3	37.6	3.83	2560	261	1.36	03 -	6080	- 29		B-100	B-116	B-135
			2560	261	1.87				2560	261	1.87	03 -	6085	- 29		B-100	B-116	B-135
			3340	340	2.50				3340	340	2.50	03 -	6090	- 29		B-100	B-116	B-135
			1770	**180**	**1.09**				**1770**	**180**	**1.12**	**03 -**	**6075**	**- 35**		**B-100**	**B-116**	**B-135**
41.4	54.7	5.58	2560	261	1.16	50.0	45.4	4.62	2560	261	1.32	03 -	6080	- 35		B-100	B-116	B-135
			2560	261	1.31				2560	261	1.48	03 -	6085	- 35		B-100	B-116	B-135
			3340	340	2.45				3340	340	2.45	03 -	6090	- 35		B-100	B-116	B-135
			1500	152	0.89				1740	178	0.90	03 -	6075	- 43		B-100	B-116	B-135
			2560	**261**	**1.00**				**2560**	**261**	**1.00**	**03 -**	**6080**	**- 43**		**B-100**	**B-116**	**B-135**
33.7	67.3	6.86	2560	261	1.18	40.7	55.7	5.68	2560	261	1.18	03 -	6085	- 43		B-100	B-116	B-135
			3340	340	1.74				3340	340	1.74	03 -	6090	- 43		B-100	B-116	B-135
			3340	340	2.41				3340	340	2.41	03 -	6095	- 43		B-100	B-116	B-135
			2490	253	0.96				2560	261	0.96	03 -	6085	- 51		B-100	B-116	B-135
28.4	79.8	8.13	3340	340	1.33	34.3	66.1	6.74	3340	340	1.33	03 -	6090	- 51		B-100	B-116	B-135
			3340	340	1.63				3340	340	1.69	03 -	6095	- 51		B-100	B-116	B-135
			5400	550	2.24				5400	550	2.24	03 -	6100	- 51		B-101	B-117	B-136
			2390	244	0.94				2540	259	0.94	03 -	6085	- 59		B-100	B-116	B-135
			3340	**340**	**1.24**				**3340**	**340**	**1.24**	**03 -**	**6090**	**- 59**		**B-100**	**B-116**	**B-135**
24.6	92.3	9.41	3340	340	1.34	29.7	76.5	7.79	3340	340	1.49	03 -	6095	- 59		B-100	B-116	B-135
			5400	550	2.06				5400	550	2.06	03 -	6100	- 59		B-101	B-117	B-136
			5400	550	2.72				5400	550	2.83	03 -	6105	- 59		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 n_1 and n_2. 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.



CHHM/CNHM CHFM/CNFM CVVM/CNVM

n_1: Motor Speed

0.25 kW	Hz	50Hz		60Hz	
	P	4	6	4	6
	n_1 r/min	1450	980	1750	1165

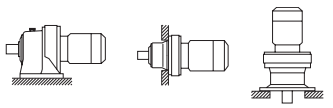
50Hz						60Hz						Nomenclature					Page of Dimension Sheet		
Output Speed n_2	Output Torque Tout		Allowable Radial Load Pro		SF	Output Speed n_2	Output Torque Tout		Allowable Radial Load Pro		SF	Input Capacity Symbol	-	Frame Size	-	Reduction Ratio	CNHM CHHM	CNFM CHFM	CNVM CVVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf									
			3340	**340**	**1.01**				**3340**	**340**	**1.01**	**03 -**		**6090**	**-**	**71**	**B-100**	**B-116**	**B-135**
			3340	340	1.11				3340	340	1.20	03 -		6095	-	71	B-100	B-116	B-135
20.4	111	11.3	5400	550	1.74	24.6	92	9.4	5400	550	1.74	03 -		6100	-	71	B-101	B-117	B-136
			5400	550	2.02				5400	550	2.24	03 -		6105	-	71	B-101	B-117	B-136
			3340	**340**	**1.05**				**3340**	**340**	**1.20**	**03 -**		**6095**	**-**	**87**	**B-100**	**B-116**	**B-135**
16.7	136	13.9	5400	550	1.73	20.1	113	11.5	5400	550	1.73	03 -		6100	-	87	B-101	B-117	B-136
			5400	550	2.01				5400	550	2.26	03 -		6105	-	87	B-101	B-117	B-136
			3340	340	1.17				3340	340	1.42	03 -		6095DA	-	104	B-108	B-124	B-143
13.9	154	15.7	5400	550	1.62	16.8	128	13.0	5400	550	1.72	03 -		6100DA	-	104	B-108	B-124	B-143
			5400	550	1.72				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
			3340	340	0.89				3340	340	1.08	03 -		6095DA	-	121	B-108	B-124	B-143
12.0	179	18.3	5400	550	1.39	14.5	149	15.1	5400	550	1.68	03 -		6100DA	-	121	B-108	B-124	B-143
			5400	550	1.72				5400	550	1.72	03 -		6105DA	-	121	B-108	B-124	B-143
			9810	1000	2.93				9810	1000	3.53	03 -		6120DB	-	121	B-108	B-124	B-143
	150	15.3	3340	340	*1		150	15.3	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
10.1	212	21.6	5400	550	1.42	12.2	176	17.9	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
	200	20.4	3340	340	*1		200	20.4	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**
8.79	245	24.9	5400	550	1.23	10.6	203	20.7	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
	200	20.4	3340	340	*1		200	20.4	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
7.44	289	29.5	9810	1000	1.82	8.97	239	24.4	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
	250	25.5	5400	550	*1		250	25.5	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
6.28	342	34.9	9810	1000	1.72	7.58	284	28.9	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
	300	30.6	5400	550	*1		300	30.6	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
5.31	405	41.2	9810	1000	1.56	6.41	335	34.2	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

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.

Selection Tables Gearmotors

n_1: Motor Speed

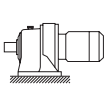
0.25 kW	Hz	50Hz		60Hz	
	P	4	6	4	6
	n_1 r/min	1450	980	1750	1165



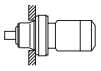
CHHM/CNHM CHFM/CNFM CVVM/CNVM

50Hz						60Hz						Nomenclature	Page of Dimension Sheet		
Output Speed 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					
			9810	1000	1.10				9810	1000	1.33	03 - 6120DA - 319	B-108	B-124	B-143
			9810	1000	1.33				9810	1000	1.61	03 - 6125DA - 319	B-108	B-124	B-143
			14700	1500	1.65				14700	1500	1.72	03 - 6130DA - 319	B-109	B-125	B-144
4.55	473	48.2	14700	1500	1.65	5.49	392	39.9	14700	1500	1.99	03 - 6130DB - 319	B-109	B-125	B-144
			14700	1500	1.72				14700	1500	1.72	03 - 6135DA - 319	B-109	B-125	B-144
			14700	1500	1.99				14700	1500	2.40	03 - 6135DB - 319	B-109	B-125	B-144
			16000	1630	2.59				16000	1630	3.13	03 - 6140DB - 319	B-109	B-125	B-144
			16000	1630	2.90				16000	1630	3.50	03 - 6145DB - 319	B-109	B-125	B-144
			9810	1000	1.13				9810	1000	1.36	03 - 6125DA - 377	B-108	B-124	B-143
			14700	1500	1.40				14700	1500	1.69	03 - 6130DA - 377	B-109	B-125	B-144
			14700	1500	1.68				14700	1500	1.72	03 - 6135DA - 377	B-109	B-125	B-144
3.85	559	56.9	14700	1500	1.68	4.64	463	47.2	14700	1500	2.03	03 - 6135DB - 377	B-109	B-125	B-144
			16000	1630	1.72				16000	1630	1.72	03 - 6140DA - 377	B-109	B-125	B-144
			16000	1630	2.19				16000	1630	2.65	03 - 6140DB - 377	B-109	B-125	B-144
			16000	1630	2.45				16000	1630	2.96	03 - 6145DB - 377	B-109	B-125	B-144
	525	53.5	9810	1000	*1		525	53.5	9810	1000	*1	03 - 6120DA - 473	B-108	B-124	B-143
			9810	1000	0.90				9810	1000	1.08	03 - 6125DA - 473	B-108	B-124	B-143
			14700	1500	1.11				14700	1500	1.34	03 - 6130DA - 473	B-109	B-125	B-144
3.07	701	71.5	14700	1500	1.34	3.70	581	59.2	14700	1500	1.62	03 - 6135DA - 473	B-109	B-125	B-144
			16000	1630	1.72				16000	1630	1.72	03 - 6140DA - 473	B-109	B-125	B-144
			16000	1630	1.75				16000	1630	2.11	03 - 6140DB - 473	B-109	B-125	B-144
			16000	1630	1.95				16000	1630	2.36	03 - 6145DB - 473	B-109	B-125	B-144
	630	64.2	9810	1000	*1		630	64.2	9810	1000	*1	03 - 6125DA - 559	B-108	B-124	B-143
			14700	1500	1.13				14700	1500	1.37	03 - 6135DA - 559	B-109	B-125	B-144
			16000	1630	1.48				16000	1630	1.72	03 - 6140DA - 559	B-109	B-125	B-144
2.59	828	84.4	16000	1630	1.48	3.13	686	70.0	16000	1630	1.78	03 - 6140DB - 559	B-109	B-125	B-144
			16000	1630	1.65				16000	1630	1.72	03 - 6145DA - 559	B-109	B-125	B-144
			16000	1630	1.65				16000	1630	2.00	03 - 6145DB - 559	B-109	B-125	B-144
			14700	1500	1.09				14700	1500	1.32	03 - 6135DA - 649	B-109	B-125	B-144
2.23	962	98.0	16000	1630	1.27	2.70	797	81.2	16000	1630	1.54	03 - 6140DA - 649	B-109	B-125	B-144
			16000	1630	1.42				16000	1630	1.72	03 - 6145DA - 649	B-109	B-125	B-144
	780	79.5	14700	1500	*1		780	79.5	14700	1500	*1	03 - 6130DA - 731	B-109	B-125	B-144
			14700	1500	0.87				14700	1500	1.05	03 - 6135DA - 731	B-109	B-125	B-144
1.98	1080	110	16000	1630	1.13	2.39	898	91.5	16000	1630	1.36	03 - 6140DA - 731	B-109	B-125	B-144
			16000	1630	1.26				16000	1630	1.53	03 - 6145DA - 731	B-109	B-125	B-144
	940	95.8	14700	1500	*1		940	95.8	14700	1500	*1	03 - 6135DA - 841	B-109	B-125	B-144
1.72	1250	127	**16000**	**1630**	**1.10**	2.08	1030	105	**16000**	**1630**	**1.21**	**03 - 6145DA - 841**	**B-109**	**B-125**	**B-144**
			16000	1630	1.10				16000	1630	1.33	03 - 6145DB - 841	B-109	B-125	B-144
	1050	107	14700	1500	*1		1050	107	14700	1500	*1	03 - 6135DA - 1003	B-109	B-125	B-144
1.45	1230	125	16000	1630	*1	1.74	1230	125	16000	1630	*1	03 - 6140DA - 1003	B-109	B-125	B-144
	1490	152	16000	1630	0.92		1230	126	16000	1630	1.11	03 - 6145DA - 1003	B-109	B-125	B-144
1.16	1370	140	15700	1600	*1	1.40	1370	140	15700	1600	*1	03 - 6145DA - 1247	B-109	B-125	B-144
0.702	2100	214	22100	2250	*1	0.847	2100	214	22100	2250	*1	03 - 6165DA - 2065	B-110	B-126	B-145
0.572	2530	258	29500	3010	*1	0.690	2530	258	29500	3010	*1	03 - 6170DA - 2537	B-110	B-126	B-145
0.476	3150	321	29500	3010	*1	0.575	3150	321	29500	3010	*1	03 - 6175DA - 3045	B-110	B-126	B-145

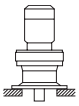
1. Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
2. Motor slippage may affect n_1 and n_2. Refer to technical data for details.
3. CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer 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.



CHHM/CNHM



CHFM/CNFM



CVVM/CNVM

0.4 kW

n_1: Motor Speed

Hz	50Hz		60Hz	
P	4	6	4	6
n_1 r/min	1450	980	1750	1165

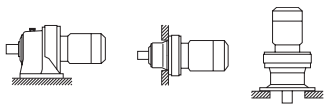
50Hz						60Hz						Nomenclature	Page of Dimension Sheet		
Output Speed n_2	Output Torque Tout		Allowable Radial Load Pro		SF	Output Speed n_2	Output Torque Tout		Allowable Radial Load Pro		SF	Input Capacity Symbol - Frame Size - Reduction Ratio	CNHM CHHM	CNFM CHFM	CNVM CVVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					
			1180	120	2.78				1120	114	2.78	05 - 6070SK - 2.5 *3	B-98	-	B-133
580	6.26	0.638	1180	120	3.47	700	5.18	0.528	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
			1240	126	2.65				1180	120	2.65	05 - 6070SK - 3 *3	B-98	-	B-133
483	7.51	0.765	1240	126	3.31	583	6.22	0.634	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
			1340	137	2.34				1290	131	2.34	05 - 6070SK - 4 *3	B-98	-	B-133
363	10.0	1.02	1340	137	2.92	438	8.29	0.846	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
			1370	140	2.22				1290	132	2.22	05 - 6070SK - 5 *3	B-98	-	B-133
290	12.5	1.28	1370	140	2.78	350	10.4	1.06	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
			1370	140	1.96				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
242	15.0	1.53	**1370**	**140**	**1.02**	292	12.4	1.27	**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
			1510	154	1.47				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
181	20.0	2.04	3280	334	4.43	219	16.6	1.69	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
			1680	**171**	**1.13**				**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
145	25.0	2.55	1930	197	2.75	175	20.7	2.11	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
			1680	**171**	**1.02**				**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
132	27.5	2.81	2300	234	1.95	159	22.8	2.33	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
			1770	**180**	**1.02**				**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
112	32.5	3.32	2470	251	1.95	135	27.0	2.75	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
			1770	**180**	**1.02**				**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
96.7	37.5	3.83	2550	260	1.95	117	31.1	3.17	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
			1770	**180**	**1.02**				**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
85.3	42.5	4.34	2560	261	1.95	103	35.3	3.59	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
			1770	**180**	**1.02**				**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
69.0	52.6	5.36	2560	261	1.38	83.3	43.5	4.44	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-135

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.

Selection Tables Gearmotors

n_1: Motor Speed

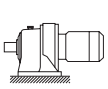
0.4 kW	Hz	50Hz		60Hz	
	P	4	6	4	6
	n_1 r/min	1450	980	1750	1165



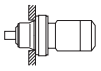
CHHM/CNHM CHFM/CNFM CVVM/CNVM

50Hz						60Hz						Nomenclature				Page of Dimension Sheet		
Output Speed 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								
			2560	**261**	**1.19**				**2520**	**256**	**1.19**	**05 -**	**6085**	**- 25**		**B-100**	**B-116**	**B-135**
58.0	62.6	6.38	3340	340	1.68	70.0	51.8	5.28	3340	340	1.68	05 -	6090	- 25		B-100	B-116	B-135
			3340	340	2.17				3340	340	2.17	05 -	6095	- 25		B-100	B-116	B-135
			2560	**261**	**1.17**				**2560**	**261**	**1.17**	**05 -**	**6085**	**- 29**		**B-100**	**B-116**	**B-135**
50.0	72.6	7.40	3340	340	1.56	60.3	60.1	6.13	3340	340	1.56	05 -	6090	- 29		B-100	B-116	B-135
			3340	340	1.96				3340	340	1.96	05 -	6095	- 29		B-100	B-116	B-135
			2560	261	0.82				2560	261	0.93	05 -	6085	- 35		B-100	B-116	B-135
			3340	340	1.53				3340	340	1.53	05 -	6090	- 35		B-100	B-116	B-135
41.4	87.6	8.93	3340	340	1.90	50.0	72.6	7.40	3340	340	1.90	05 -	6095	- 35		B-100	B-116	B-135
			5400	550	2.44				5400	550	2.44	05 -	6100	- 35		B-101	B-117	B-136
			5400	550	3.00				5400	550	3.00	05 -	6105	- 35		B-101	B-117	B-136
			3340	**340**	**1.09**				**3340**	**340**	**1.09**	**05 -**	**6090**	**- 43**		**B-100**	**B-116**	**B-135**
			3340	340	1.51				3340	340	1.51	05 -	6095	- 43		B-100	B-116	B-135
33.7	108	11.0	5400	550	1.95	40.7	89.2	9.09	5400	550	1.95	05 -	6100	- 43		B-101	B-117	B-136
			5400	550	2.70				5400	550	2.70	05 -	6105	- 43		B-101	B-117	B-136
			3320	**339**	**1.02**				**3340**	**340**	**1.06**	**05 -**	**6095**	**- 51**		**B-100**	**B-116**	**B-135**
			5400	550	1.40				5400	550	1.40	05 -	6100	- 51		B-101	B-117	B-136
28.4	128	13.0	5400	550	1.94	34.3	106	10.8	5400	550	1.94	05 -	6105	- 51		B-101	B-117	B-136
			7610	776	2.36				7610	776	2.36	05 -	6110	- 51		B-101	B-117	B-136
			7610	776	2.78				7610	776	2.78	05 -	6115	- 51		B-101	B-117	B-136
			3300	336	0.84				3340	340	0.93	05 -	6095	- 59		B-100	B-116	B-135
			5400	**550**	**1.29**				**5400**	**550**	**1.29**	**05 -**	**6100**	**- 59**		**B-101**	**B-117**	**B-136**
24.6	148	15.1	5400	550	1.70	29.7	122	12.5	5400	550	1.77	05 -	6105	- 59		B-101	B-117	B-136
			7610	776	2.15				7610	776	2.15	05 -	6110	- 59		B-101	B-117	B-136
			7610	776	2.53				7610	776	2.53	05 -	6115	- 59		B-101	B-117	B-136
			5400	**550**	**1.09**				**5400**	**550**	**1.09**	**05 -**	**6100**	**- 71**		**B-101**	**B-117**	**B-136**
			5400	550	1.27				5400	550	1.40	05 -	6105	- 71		B-101	B-117	B-136
			7610	776	1.67				7610	776	1.67	05 -	6110	- 71		B-101	B-117	B-136
20.4	178	18.1	7610	776	1.90	24.6	147	15.0	7610	776	1.90	05 -	6115	- 71		B-101	B-117	B-136
			9810	1000	2.39				9810	1000	2.39	05 -	6120	- 71		B-101	B-117	B-136
			9810	1000	2.85				9810	1000	3.00	05 -	6125	- 71		B-101	B-117	B-136
			5400	**550**	**1.08**				**5400**	**550**	**1.08**	**05 -**	**6100**	**- 87**		**B-101**	**B-117**	**B-136**
			5400	550	1.26				5400	550	1.41	05 -	6105	- 87		B-101	B-117	B-136
			7610	776	1.65				7610	776	1.65	05 -	6110	- 87		B-101	B-117	B-136
16.7	218	22.2	7610	776	1.90	20.1	180	18.4	7610	776	1.90	05 -	6115	- 87		B-101	B-117	B-136
			9810	1000	2.36				9810	1000	2.36	05 -	6120	- 87		B-101	B-117	B-136
			9810	1000	2.58				9810	1000	2.83	05 -	6125	- 87		B-101	B-117	B-136
	150	15.3	3340	340	*1		150	15.3	3340	340	*1	05 -	6090DA	- 104		B-108	B-124	B-143
	181	18.4	3340	340	*1		181	18.4	3340	340	*1	05 -	6095DA	- 104		B-108	B-124	B-143
13.9			**5400**	**550**	**1.01**	16.8			**5400**	**550**	**1.07**	**05 -**	**6100DA**	**- 104**		B-108	B-124	B-143
	247	25.1	5400	550	1.07		204	20.8	5400	550	1.07	05 -	6105DA	- 104		B-108	B-124	B-143
			9810	1000	2.13				9810	1000	2.57	05 -	6120DB	- 104		B-108	B-124	B-143
			9810	1000	2.55				9810	1000	3.08	05 -	6125DB	- 104		B-108	B-124	B-143
	150	15.3	3340	340	*1		150	15.3	3340	340	*1	05 -	6090DA	- 121		B-108	B-124	B-143
	160	16.4	3340	340	*1		160	16.4	3340	340	*1	05 -	6095DA	- 121		B-108	B-124	B-143
12.0			**5400**	**550**	**1.07**	14.5			**5400**	**550**	**1.07**	**05 -**	**6105DA**	**- 121**		B-108	B-124	B-143
	287	29.2	9810	1000	1.83		238	24.2	9810	1000	2.21	05 -	6120DB	- 121		B-108	B-124	B-143
			9810	1000	2.17				9810	1000	2.62	05 -	6125DB	- 121		B-108	B-124	B-143
			14700	1500	2.72				14700	1500	3.28	05 -	6130DB	- 121		B-109	B-125	B-144

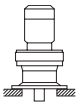
1. Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
2. Motor slippage may affect n_1 and n_2. Refer to technical data for details.
3. CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer 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.



CHHM/CNHM



CHFM/CNFM



CVVM/CNVM

0.4 kW

n_1: Motor Speed

Hz	50Hz		60Hz	
P	4	6	4	6
n_1 r/min	1450	980	1750	1165

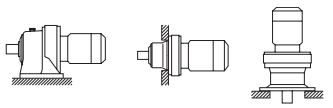
50Hz						60Hz						Nomenclature	Page of Dimension Sheet		
Output Speed n_2	Output Torque Tout		Allowable Radial Load Pro		SF	Output Speed n_2	Output Torque Tout		Allowable Radial Load Pro		SF	Input Capacity Symbol - Frame Size - Reduction Ratio	CNHM CHHM	CNFM CHFM	CNVM CVVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					
	183	18.7	3340	340	*1		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
10.1			9810	1000	1.55	12.2			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
	250	25.5	5400	550	*1		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**
8.79			9810	1000	1.34	10.6			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
	250	25.5	5400	550	*1		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
7.44			9810	1000	1.36	8.97			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
			16000	1630	2.94				16000	1630	3.54	05 - 6145DB - 195	B-109	B-125	B-144
	300	30.6	5400	550	*1		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
6.28			14700	1500	1.42	7.58			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
	522	53.2	9810	1000	*1		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**
5.31			14700	1500	1.21	6.41			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
			22100	2250	2.71				22100	2250	3.27	05 - 6160DA - 273	B-110	B-126	B-145
	520	53.0	9810	1000	*1		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
4.55	756	77.1	14700	1500	1.24	5.49	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

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.

Selection Tables Gearmotors

n_1: Motor Speed

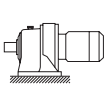
0.4 kW	Hz	50Hz		60Hz	
	P	4	6	4	6
	n_1 r/min	1450	980	1750	1165



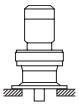
CHHM/CNHM CHFM/CNFM CVVM/CNVM

50Hz						60Hz						Nomenclature	Page of Dimension Sheet		
Output Speed 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					
3.85	520	53.0	9810	1000	*1	4.64	520	53.0	9810	1000	*1	05 - 6120DA - 377	B-108	B-124	B-143
	630	64.2	9810	1000	*1		630	64.2	9810	1000	*1	05 - 6125DA - 377	B-108	B-124	B-143
	894	91.1	**14700**	**1500**	**1.05**		741	75.5	**14700**	**1500**	**1.07**	**05 - 6135DA - 377**	**B-109**	**B-125**	**B-144**
			14700	1500	1.05				14700	1500	1.27	05 - 6135DB - 377	B-109	B-125	B-144
			16000	1630	1.07				16000	1630	1.07	05 - 6140DA - 377	B-109	B-125	B-144
			16000	1630	1.37				16000	1630	1.65	05 - 6140DB - 377	B-109	B-125	B-144
			16000	1630	1.53				16000	1630	1.85	05 - 6145DB - 377	B-109	B-125	B-144
			22100	2250	1.96				22100	2250	2.37	05 - 6160DA - 377	B-110	B-126	B-145
			22100	2250	2.35				22100	2250	2.84	05 - 6165DA - 377	B-110	B-126	B-145
			29500	3010	2.83				29500	3010	3.42	05 - 6170DA - 377	B-110	B-126	B-145
3.07	630	64.2	9810	1000	*1	3.70	630	64.2	9810	1000	*1	05 - 6125DA - 473	B-108	B-124	B-143
	780	79.5	14700	1500	*1		780	79.5	14700	1500	*1	05 - 6130DA - 473	B-109	B-125	B-144
	1120	114	14700	1500	0.84		929	94.7	14700	1500	1.01	05 - 6135DA - 473	B-109	B-125	B-144
			16000	**1630**	**1.07**				**16000**	**1630**	**1.07**	**05 - 6140DA - 473**	**B-109**	**B-125**	**B-144**
			16000	1630	1.09				16000	1630	1.32	05 - 6140DB - 473	B-109	B-125	B-144
			16000	1630	1.22				16000	1630	1.47	05 - 6145DB - 473	B-109	B-125	B-144
			22100	2250	1.55				22100	2250	1.87	05 - 6160DA - 473	B-110	B-126	B-145
			22100	2250	1.87				22100	2250	2.26	05 - 6165DA - 473	B-110	B-126	B-145
			29500	3010	2.26				29500	3010	2.72	05 - 6170DA - 473	B-110	B-126	B-145
			29500	3010	2.81				29500	3010	3.39	05 - 6175DA - 473	B-110	B-126	B-145
2.59	780	79.5	14700	1500	*1	3.13	780	79.5	14700	1500	*1	05 - 6130DA - 559	B-109	B-125	B-144
	940	95.8	14700	1500	*1		940	95.8	14700	1500	*1	05 - 6135DA - 559	B-109	B-125	B-144
	1330	135	**15900**	**1620**	**1.03**		1100	112	**16000**	**1630**	**1.07**	**05 - 6145DA - 559**	**B-109**	**B-125**	**B-144**
			15900	1620	1.03				16000	1630	1.25	05 - 6145DB - 559	B-109	B-125	B-144
			22100	2250	1.31				22100	2250	1.58	05 - 6160DA - 559	B-110	B-126	B-145
			22100	2250	1.58				22100	2250	1.91	05 - 6165DA - 559	B-110	B-126	B-145
			29500	3010	1.91				29500	3010	2.30	05 - 6170DA - 559	B-110	B-126	B-145
			29500	3010	2.38				29500	3010	2.87	05 - 6175DA - 559	B-110	B-126	B-145
2.23	912	93.0	14700	1500	*1	2.70	912	93.0	14700	1500	*1	05 - 6130DA - 649	B-109	B-125	B-144
	1050	107	14700	1500	*1		1050	107	14700	1500	*1	05 - 6135DA - 649	B-109	B-125	B-144
	1230	125	16000	1630	*1		1230	125	16000	1630	*1	05 - 6140DA - 649	B-109	B-125	B-144
	1540	157	16000	1630	0.89		1280	130	16000	1630	1.07	05 - 6145DA - 649	B-109	B-125	B-144
			22100	2250	1.14				22100	2250	1.38	05 - 6160DA - 649	B-110	B-126	B-145
			22100	2250	1.36				22100	2250	1.65	05 - 6165DA - 649	B-110	B-126	B-145
			29500	3010	1.64				29500	3010	1.98	05 - 6170DA - 649	B-110	B-126	B-145
			29500	3010	2.05				29500	3010	2.47	05 - 6175DA - 649	B-110	B-126	B-145
1.98	940	95.8	14700	1500	*1	2.39	940	95.8	14700	1500	*1	05 - 6135DA - 731	B-109	B-125	B-144
	1230	125	16000	1630	*1		1230	125	16000	1630	*1	05 - 6140DA - 731	B-109	B-125	B-144
	1370	140	15700	1600	*1		1370	140	15700	1600	*1	05 - 6145DA - 731	B-109	B-125	B-144
	1730	177	**22100**	**2250**	**1.00**		1440	146	**22100**	**2250**	**1.21**	**05 - 6160DA - 731**	**B-110**	**B-126**	**B-145**
			22100	2250	1.21				22100	2250	1.46	05 - 6165DA - 731	B-110	B-126	B-145
			29500	3010	1.46				29500	3010	1.76	05 - 6170DA - 731	B-110	B-126	B-145
			29500	3010	1.82				29500	3010	2.19	05 - 6175DA - 731	B-110	B-126	B-145
1.72	1230	125	16000	1630	*1	2.08	1230	125	16000	1630	*1	05 - 6140DA - 841	B-109	B-125	B-144
	1370	140	15800	1610	*1		1250	127	16000	1630	*1	05 - 6145DA - 841	B-109	B-125	B-144
	1990	203	**22100**	**2250**	**1.05**		1650	168	**22100**	**2250**	**1.27**	**05 - 6165DA - 841**	B-110	B-126	B-145
			29500	3010	1.27				29500	3010	1.53	05 - 6170DA - 841	B-110	B-126	B-145
			29500	3010	1.58				29500	3010	1.91	05 - 6175DA - 841	B-110	B-126	B-145
1.45	1370	140	16000	1630	*1	1.74	1370	140	16000	1630	*1	05 - 6145DA - 1003	B-109	B-125	B-144
	1760	179	22100	2250	*1		1760	179	22100	2250	*1	05 - 6160DA - 1003	B-110	B-126	B-145
	2380	242	22100	2250	0.88		1970	201	22100	2250	1.07	05 - 6165DA - 1003	B-110	B-126	B-145
			29500	**3010**	**1.06**				**29500**	**3010**	**1.28**	**05 - 6170DA - 1003**	B-110	B-126	B-145
			29500	3010	1.32				29500	3010	1.60	05 - 6175DA - 1003	B-110	B-126	B-145
1.16	1740	177	22100	2250	*1	1.40	1740	177	22100	2250	*1	05 - 6160DA - 1247	B-110	B-126	B-145
	2100	214	22100	2250	*1		2100	214	22100	2250	*1	05 - 6165DA - 1247	B-110	B-126	B-145
	2960	301	**29500**	**3010**	**1.07**		2450	250	**29500**	**3010**	**1.29**	**05 - 6175DA - 1247**	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 n_1 and n_2. 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.


CHHM/CNHM


CHFM/CNFM


CVVM/CNVM

0.4 kW

n_1: Motor Speed

Hz	50Hz		60Hz	
P	4	6	4	6
n_1 r/min	1450	980	1750	1165

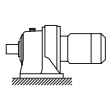
50Hz						60Hz						Nomenclature	Page of Dimension Sheet		
Output Speed n_2	Output Torque Tout		Allowable Radial Load Pro		SF	Output Speed n_2	Output Torque Tout		Allowable Radial Load Pro		SF	Input Capacity Symbol - Frame Size - Reduction Ratio	CNHM CHHM	CNFM CHFM	CNVM CVVM
r/min	N·m	kgf·m	N	kgf		r/min	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
0.572	3150	321	29500	3010	*1	0.690	3150	321	29500	3010	*1	05 - 6175DA - 2537	B-110	B-126	B-145
	4050	413	41700	4250	*1		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
0.476	4060	414	41700	4250	*1	0.575	4060	414	41700	4250	*1	05 - 6180DA - 3045	B-110	B-126	B-145
	5000	510	41700	4250	*1		5000	510	41700	4250	*1	05 - 6185DA - 3045	B-110	B-126	B-145
0.417	4050	413	41700	4250	*1	0.503	4050	413	41700	4250	*1	05 - 6180DA - 3481	B-110	B-126	B-145
	5000	510	41600	4240	*1		5000	510	41600	4240	*1	05 - 6185DA - 3481	B-110	B-126	B-145
0.327	4060	414	41700	4250	*1	0.394	4060	414	41700	4250	*1	05 - 6180DA - 4437	B-110	B-126	B-145
	5000	510	41700	4250	*1		5000	510	41700	4250	*1	05 - 6185DA - 4437	B-110	B-126	B-145
0.282	4060	414	41700	4250	*1	0.341	4060	414	41700	4250	*1	05 - 6180DA - 5133	B-110	B-126	B-145
	5000	510	41700	4250	*1		5000	510	41700	4250	*1	05 - 6185DA - 5133	B-110	B-126	B-145
0.235	4060	414	41700	4250	*1	0.283	4060	414	41700	4250	*1	05 - 6180DA - 6177	B-110	B-126	B-145
	5000	510	41700	4250	*1		5000	510	41700	4250	*1	05 - 6185DA - 6177	B-110	B-126	B-145
0.192	4060	414	41700	4250	*1	0.231	4060	414	41700	4250	*1	05 - 6180DA - 7569	B-110	B-126	B-145
	5000	510	41700	4250	*1		5000	510	41700	4250	*1	05 - 6185DA - 7569	B-110	B-126	B-145

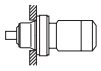
6. "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
7. Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
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.

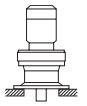
Selection Tables Gearmotors

n_1: Motor Speed

0.55 kW	Hz	50Hz		60Hz	
	P	4	6	4	6
	n_1 r/min	1450	980	1750	1165

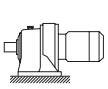

CHHM/CNHM

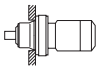

CHFM/CNFM

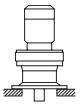

CVVM/CNVM

50Hz						60Hz						Nomenclature						Page of Dimension Sheet		
Output Speed 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										
			1170	119	2.02				1100	112	2.02	08	-	6070SK	-	2.5	*3	B-98	-	B-133
			1170	119	2.53				1100	112	2.53	08	-	6075SK	-	2.5	*3	B-98	-	B-133
580	8.60	0.877	1290	131	3.00	700	7.13	0.727	1220	124	3.00	08	-	6080SK	-	2.5	*3	B-98	-	B-133
			1290	131	3.75				1220	124	3.75	08	-	6085SK	-	2.5	*3	B-98	-	B-133
			2280	232	4.36				2150	219	4.36	08	-	6090SK	-	2.5	*3	B-98	-	B-133
			1220	124	1.93				1150	117	1.93	08	-	6070SK	-	3	*3	B-98	-	B-133
			1220	124	2.41				1150	117	2.41	08	-	6075SK	-	3	*3	B-98	-	B-133
483	10.3	1.05	1350	138	3.00	583	8.55	0.872	1290	131	3.00	08	-	6080SK	-	3	*3	B-98	-	B-133
			1350	138	3.75				1290	131	3.75	08	-	6085SK	-	3	*3	B-98	-	B-133
			2380	243	4.25				2250	229	4.25	08	-	6090SK	-	3	*3	B-98	-	B-133
			1320	135	1.70				1260	128	1.70	08	-	6070SK	-	4	*3	B-98	-	B-133
			1320	135	2.12				1260	128	2.12	08	-	6075SK	-	4	*3	B-98	-	B-133
363	13.8	1.40	1470	150	3.00	438	11.4	1.16	1390	142	3.00	08	-	6080SK	-	4	*3	B-98	-	B-133
			1470	150	3.75				1390	142	3.75	08	-	6085SK	-	4	*3	B-98	-	B-133
			2670	272	4.25				2560	261	4.25	08	-	6090SK	-	4	*3	B-98	-	B-133
			1370	140	1.61				1290	132	1.61	08	-	6070SK	-	5	*3	B-98	-	B-133
			1370	140	2.02				1290	132	2.02	08	-	6075SK	-	5	*3	B-98	-	B-133
290	17.2	1.75	1590	162	2.82	350	14.3	1.45	1510	154	2.82	08	-	6080SK	-	5	*3	B-98	-	B-133
			1590	162	3.31				1510	154	3.31	08	-	6085SK	-	5	*3	B-98	-	B-133
			2880	294	4.06				2730	278	4.06	08	-	6090SK	-	5	*3	B-98	-	B-133
			1370	140	1.42				1290	132	1.42	08	-	6070SK	-	6	*3	B-98	-	B-133
			1370	140	1.78				1290	132	1.78	08	-	6075SK	-	6	*3	B-98	-	B-133
			1660	169	2.36				1580	161	2.36	08	-	6080SK	-	6	*3	B-98	-	B-133
			1660	169	2.95				1580	161	2.95	08	-	6085SK	-	6	*3	B-98	-	B-133
242	20.6	2.10	2950	301	3.47	292	17.1	1.74	2810	286	3.47	08	-	6090SK	-	6	*3	B-98	-	B-133
			2950	301	4.13				2810	286	4.13	08	-	6095SK	-	6	*3	B-98	-	B-133
			1910	**195**	**1.08**				**1800**	**183**	**1.08**	**08**	**-**	**6080**	**-**	**6**		**B-100**	**B-116**	**B-135**
			1910	195	1.41				1800	183	1.41	08	-	6085	-	6		B-100	B-116	B-135
			2850	291	2.09				2690	274	2.09	08	-	6090	-	6		B-100	B-116	B-135
			2850	291	2.76				2690	274	2.76	08	-	6095	-	6		B-100	B-116	B-135
			1510	154	1.07				1420	145	1.07	08	-	6070SK	-	8	*3	B-98	-	B-133
			1510	154	1.34				1420	145	1.34	08	-	6075SK	-	8	*3	B-98	-	B-133
			1750	178	1.99				1670	170	1.99	08	-	6080SK	-	8	*3	B-98	-	B-133
			1750	178	2.49				1670	170	2.49	08	-	6085SK	-	8	*3	B-98	-	B-133
			3300	336	2.74				3140	320	2.74	08	-	6090SK	-	8	*3	B-98	-	B-133
181	27.5	2.81	3300	336	3.22	219	22.8	2.33	3140	320	3.22	08	-	6095SK	-	8	*3	B-98	-	B-133
			3300	336	3.85				3140	320	3.85	08	-	6100SK	-	8	*3	B-99	-	B-134
			2070	**211**	**1.08**				**1950**	**198**	**1.08**	**08**	**-**	**6080**	**-**	**8**		**B-100**	**B-116**	**B-135**
			2070	211	1.41				1950	198	1.41	08	-	6085	-	8		B-100	B-116	B-135
			3180	324	2.09				2990	305	2.09	08	-	6090	-	8		B-100	B-116	B-135
			3180	324	2.76				2990	305	2.76	08	-	6095	-	8		B-100	B-116	B-135
			1680	**171**	**1.03**				**1590**	**162**	**1.03**	**08**	**-**	**6075SK**	**-**	**10**	*3	**B-98**	**-**	**B-133**
			1840	188	1.60				1770	180	1.60	08	-	6080SK	-	10	*3	B-98	-	B-133
			1840	188	2.00				1770	180	2.00	08	-	6085SK	-	10	*3	B-98	-	B-133
145	34.4	3.51	3490	356	2.55	175	28.5	2.91	3330	339	2.55	08	-	6090SK	-	10	*3	B-98	-	B-133
			3490	356	3.22				3330	339	3.22	08	-	6095SK	-	10	*3	B-98	-	B-133
			3490	356	3.60				3330	339	3.60	08	-	6100SK	-	10	*3	B-99	-	B-134
			3490	356	4.00				3330	339	4.00	08	-	6105SK	-	10	*3	B-99	-	B-134
			2280	**232**	**1.08**				**2150**	**219**	**1.08**	**08**	**-**	**6080**	**-**	**11**		**B-100**	**B-116**	**B-135**
			2280	232	1.41				2150	219	1.41	08	-	6085	-	11		B-100	B-116	B-135
132	37.9	3.86	3340	340	2.09	159	31.4	3.20	3340	340	2.09	08	-	6090	-	11		B-100	B-116	B-135
			3340	340	2.76				3340	340	2.76	08	-	6095	-	11		B-100	B-116	B-135
			2450	**249**	**1.08**				**2310**	**235**	**1.08**	**08**	**-**	**6080**	**-**	**13**		**B-100**	**B-116**	**B-135**
			2450	249	1.41				2310	235	1.41	08	-	6085	-	13		B-100	B-116	B-135
112	44.7	4.56	3340	340	2.09	135	37.1	3.78	3340	340	2.09	08	-	6090	-	13		B-100	B-116	B-135
			3340	340	2.76				3340	340	2.76	08	-	6095	-	13		B-100	B-116	B-135

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 n_1 and n_2. 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.


CHHM/CNHM


CHFM/CNFM


CVVM/CNVM

0.55 kW

n_1: Motor Speed

Hz	50Hz		60Hz	
P	4	6	4	6
n_1 r/min	1450	980	1750	1165

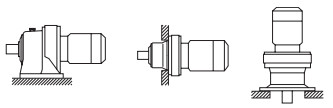
50Hz						60Hz						Nomenclature				Page of Dimension Sheet		
Output Speed n_2	Output Torque Tout		Allowable Radial Load Pro		SF	Output Speed n_2	Output Torque Tout		Allowable Radial Load Pro		SF	Input Capacity Symbol	- Frame Size	- Reduction Ratio		CNHM CHHM	CNFM CHFM	CNVM CVVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf								
			2520	**257**	**1.08**				**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
96.7	51.6	5.26	3340	340	2.09	117	42.8	4.36	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
			2560	**261**	**1.08**				**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
85.3	58.5	5.96	3340	340	2.09	103	48.5	4.94	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
			2560	**261**	**1.00**				**2430**	**247**	**1.00**	**08 -**	**6085**	**- 21**		**B-100**	**B-116**	**B-135**
69.0	72.3	7.37	3340	340	1.38	83.3	59.9	6.10	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
			2510	256	0.86				2490	254	0.86	08 -	6085	- 25		B-100	B-116	B-135
58.0	86.0	8.77	**3340**	**340**	**1.22**	70.0	71.3	7.27	**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
			2300	235	0.85				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**
50.0	99.8	10.2	3340	340	1.43	60.3	82.7	8.43	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
			3340	**340**	**1.11**				**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
41.4	120	12.3	5400	550	1.77	50.0	99.8	10.2	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
			3320	**338**	**1.10**				**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
33.7	148	15.1	5400	550	1.96	40.7	123	12.5	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
			5400	**550**	**1.02**				**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
28.4	176	17.9	7610	776	1.72	34.3	145	14.8	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
			5400	**550**	**1.24**				**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
24.6	203	20.7	7610	776	1.84	29.7	168	17.1	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
			5380	549	0.92				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**
20.4	244	24.9	7610	776	1.38	24.6	202	20.6	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
			4800	489	0.91				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
16.7	299	30.5	9810	1000	1.72	20.1	248	25.3	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

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.

Selection Tables Gearmotors

n_1: Motor Speed

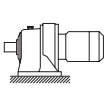
0.55 kW	Hz	50Hz		60Hz	
	P	4	6	4	6
	n_1 r/min	1450	980	1750	1165

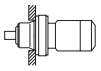


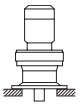
CHHM/CNHM CHFM/CNFM CVVM/CNVM

50Hz						60Hz						Nomenclature	Page of Dimension Sheet		
Output Speed 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					
			9810	1000	1.55				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
13.9	339	34.6	14700	1500	2.77	16.8	281	28.6	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
			9810	1000	1.33				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
12.0	394	40.2	14700	1500	1.98	14.5	327	33.3	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
			9810	1000	1.35				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
10.1	466	47.5	16000	1630	2.63	12.2	386	39.4	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
			16000	1630	2.94				16000	1630	3.55	08 - 6145DC - 143	B-109	B-125	B-144
			9810	1000	1.17				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
8.79	538	54.8	16000	1630	2.28	10.6	446	45.4	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
			22100	2250	2.91				22100	2250	2.91	08 - 6160DA - 165	B-110	B-126	B-145
	525	53.5	9810	1000	*1		525	53.5	9810	1000	*1	08 - 6120DB - 195	B-108	B-124	B-143
			9810	1000	0.98				9810	1000	1.20	08 - 6125DB - 195	B-108	B-124	B-143
			14700	1500	1.23				14700	1500	1.48	08 - 6130DB - 195	B-109	B-125	B-144
			14700	1500	1.48				14700	1500	1.78	08 - 6135DB - 195	B-109	B-125	B-144
7.44	636	64.8	16000	1630	1.93	8.97	527	53.7	16000	1630	2.33	08 - 6140DB - 195	B-109	B-125	B-144
			16000	1630	2.14				16000	1630	2.58	08 - 6145DB - 195	B-109	B-125	B-144
			22100	2250	2.76				22100	2250	2.91	08 - 6160DA - 195	B-110	B-126	B-145
			22100	2250	2.76				22100	2250	3.33	08 - 6160DB - 195	B-110	B-126	B-145
			22100	2250	2.91				22100	2250	2.91	08 - 6165DA - 195	B-110	B-126	B-145
	522	53.2	9810	1000	*1		522	53.2	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
6.28	753	76.8	16000	1630	1.78	7.58	624	63.6	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

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 n_1 and n_2. 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.


CHHM/CNHM


CHFM/CNFM


CVVM/CNVM

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 CHHM	CNFM CHFM	CNVM CVVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					
			14700	**1500**	**1.06**				**14700**	**1500**	**1.27**	**08 - 6135DB - 273**	**B-109**	**B-125**	**B-144**
			16000	1630	1.38				16000	1630	1.66	08 - 6140DB - 273	B-109	B-125	B-144
			16000	1630	1.50				16000	1630	1.81	08 - 6145DB - 273	B-109	B-125	B-144
5.31	890	90.7	22100	2250	1.97	6.41	737	75.2	22100	2250	2.38	08 - 6160DA - 273	B-110	B-126	B-145
			22100	2250	2.36				22100	2250	2.85	08 - 6165DA - 273	B-110	B-126	B-145
			29500	3010	2.84				29500	3010	2.91	08 - 6170DA - 273	B-110	B-126	B-145
			29500	3010	2.84				29500	3010	3.43	08 - 6170DB - 273	B-110	B-126	B-145
			29500	3010	2.91				29500	3010	2.91	08 - 6175DA - 273	B-110	B-126	B-145
	630	64.2	9810	1000	*1		630	64.2	9810	1000	*1	08 - 6125DB - 319	B-108	B-124	B-143
	780	79.5	14700	1500	*1		780	79.5	14700	1500	*1	08 - 6130DB - 319	B-109	B-125	B-144
			14700	1500	0.90				14700	1500	1.09	08 - 6135DB - 319	B-109	B-125	B-144
			16000	1630	1.18				16000	1630	1.42	08 - 6140DB - 319	B-109	B-125	B-144
			16000	1630	1.32				16000	1630	1.59	08 - 6145DB - 319	B-109	B-125	B-144
4.55			22100	2250	1.69	5.49			22100	2250	2.04	08 - 6160DA - 319	B-110	B-126	B-145
	1040	106	22100	2250	2.02		862	87.8	22100	2250	2.44	08 - 6165DA - 319	B-110	B-126	B-145
			29500	3010	2.43				29500	3010	2.91	08 - 6170DA - 319	B-110	B-126	B-145
			29500	3010	2.43				29500	3010	2.94	08 - 6170DB - 319	B-110	B-126	B-145
			29500	3010	2.91				29500	3010	2.91	08 - 6175DA - 319	B-110	B-126	B-145
	780	79.5	14700	1500	*1		780	79.5	14700	1500	*1	08 - 6130DB - 377	B-109	B-125	B-144
	940	95.8	14700	1500	*1		940	95.8	14700	1500	*1	08 - 6135DB - 377	B-109	B-125	B-144
			16000	**1630**	**1.00**				**16000**	**1630**	**1.20**	**08 - 6140DB - 377**	**B-109**	**B-125**	**B-144**
			16000	1630	1.11				16000	1630	1.35	08 - 6145DB - 377	B-109	B-125	B-144
3.85			22100	2250	1.43	4.64			22100	2250	1.72	08 - 6160DA - 377	B-110	B-126	B-145
	1230	125	22100	2250	1.71		1020	104	22100	2250	2.06	08 - 6165DA - 377	B-110	B-126	B-145
			29500	3010	2.06				29500	3010	2.48	08 - 6170DA - 377	B-110	B-126	B-145
			29500	3010	2.56				29500	3010	2.91	08 - 6175DA - 377	B-110	B-126	B-145
			29500	3010	2.56				29500	3010	3.09	08 - 6175DB - 377	B-110	B-126	B-145
	940	95.8	14700	1500	*1		940	95.8	14700	1500	*1	08 - 6135DB - 473	B-109	B-125	B-144
	1230	125	16000	1630	*1		1230	125	16000	1630	*1	08 - 6140DB - 473	B-109	B-125	B-144
			14800	1510	0.89				16000	1630	1.07	08 - 6145DB - 473	B-109	B-125	B-144
3.07			22100	2250	1.13	3.70			22100	2250	1.36	08 - 6160DA - 473	B-110	B-126	B-145
	1540	157	22100	2250	1.36		1280	130	22100	2250	1.64	08 - 6165DA - 473	B-110	B-126	B-145
			29500	3010	1.64				29500	3010	1.98	08 - 6170DA - 473	B-110	B-126	B-145
			29500	3010	2.04				29500	3010	2.47	08 - 6175DA - 473	B-110	B-126	B-145
	1230	125	16000	1630	*1		1230	125	16000	1630	*1	08 - 6140DB - 559	B-109	B-125	B-144
	1370	140	15700	1600	*1		1370	140	15700	1600	*1	08 - 6145DB - 559	B-109	B-125	B-144
2.59			22100	2250	1.15	3.13			22100	2250	1.39	08 - 6165DA - 559	B-110	B-126	B-145
	1820	186	29500	3010	1.39		1510	154	29500	3010	1.68	08 - 6170DA - 559	B-110	B-126	B-145
			29500	3010	1.73				29500	3010	2.09	08 - 6175DA - 559	B-110	B-126	B-145
	1370	140	16000	1630	*1		1370	140	16000	1630	*1	08 - 6145DB - 649	B-109	B-125	B-144
	1760	179	22100	2250	*1		1760	179	22100	2250	*1	08 - 6160DA - 649	B-110	B-126	B-145
2.23			22100	2250	0.98	2.70			22100	2250	1.20	08 - 6165DA - 649	B-110	B-126	B-145
	2120	216	29500	3010	1.20		1750	179	29500	3010	1.44	08 - 6170DA - 649	B-110	B-126	B-145
			29500	3010	1.49				29500	3010	1.80	08 - 6175DA - 649	B-110	B-126	B-145
	1740	177	22100	2250	*1		1740	177	22100	2250	*1	08 - 6160DA - 731	B-110	B-126	B-145
1.98			22100	2250	0.88	2.39			22100	2250	1.06	08 - 6165DA - 731	B-110	B-126	B-145
	2380	243	**29500**	**3010**	**1.06**		1970	201	**29500**	**3010**	**1.28**	**08 - 6170DA - 731**	**B-110**	**B-126**	**B-145**
			29500	3010	1.32				29500	3010	1.60	08 - 6175DA - 731	B-110	B-126	B-145

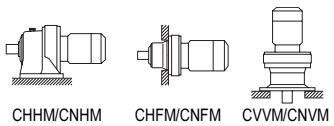
6. "*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
7. Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
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.

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

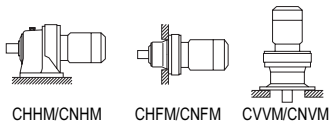

CHHM/CNHM CHFM/CNFM CVVM/CNVM

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 CHHM	CNFM CHFM	CNVM CVVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					
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

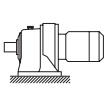
n_1: Motor Speed

Hz	50Hz		60Hz	
P	4	6	4	6
n_1 r/min	1450	980	1750	1165

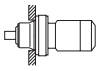

CHHM/CNHM CHFM/CNFM CVVM/CNVM

50Hz						60Hz						Nomenclature	Page of Dimension Sheet		
Output Speed 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 CHHM	CNFM CHFM	CNVM CVVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					
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

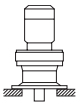
1. Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
2. Motor slippage may affect n_1 and n_2. Refer to technical data for details.
3. CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer 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.



CHHM/CNHM



CHFM/CNFM



CVVM/CNVM

0.75 kW

n_1: Motor Speed

Hz	50Hz		60Hz	
P	4	6	4	6
n_1 r/min	1450	980	1750	1165

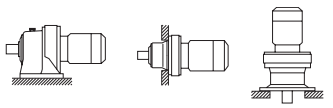
50Hz						60Hz						Nomenclature				Page of Dimension Sheet		
Output Speed n_2	Output Torque Tout		Allowable Radial Load Pro		SF	Output Speed n_2	Output Torque Tout		Allowable Radial Load Pro		SF	Input Capacity Symbol	- Frame Size	- Reduction Ratio		CNHM CHHM	CNFM CHFM	CNVM CVVM
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf								
			1370	**140**	**1.04**				**1290**	**132**	**1.04**	**1**	**- 6070SK**	**- 6**	***3**	**B-98**	**-**	**B-133**
			1370	140	1.30				1290	132	1.30	1	- 6075SK	- 6	*3	B-98	-	B-133
			1580	161	1.73				1520	155	1.73	1	- 6080SK	- 6	*3	B-98	-	B-133
			1580	161	2.16				1520	155	2.16	1	- 6085SK	- 6	*3	B-98	-	B-133
			2880	294	2.55				2750	280	2.55	1	- 6090SK	- 6	*3	B-98	-	B-133
242	28.2	2.87	2880	294	3.03	292	23.3	2.38	2750	280	3.03	1	- 6095SK	- 6	*3	B-98	-	B-133
			2880	294	3.56				2750	280	3.56	1	- 6100SK	- 6	*3	B-99	-	B-134
			1900	**193**	**1.04**				**1790**	**182**	**1.04**	**1**	**- 6085**	**- 6**		**B-100**	**B-116**	**B-135**
			2840	290	1.53				2670	273	1.53	1	- 6090	- 6		B-100	B-116	B-135
			2840	290	2.03				2670	273	2.03	1	- 6095	- 6		B-100	B-116	B-135
			1510	154	0.98				1420	145	0.98	1	- 6075SK	- 8	*3	B-98	-	B-133
			1660	169	1.46				1590	162	1.46	1	- 6080SK	- 8	*3	B-98	-	B-133
			1660	169	1.83				1590	162	1.83	1	- 6085SK	- 8	*3	B-98	-	B-133
			3210	327	2.01				3060	312	2.01	1	- 6090SK	- 8	*3	B-98	-	B-133
181	37.5	3.83	3210	327	2.36	219	31.1	3.17	3060	312	2.36	1	- 6095SK	- 8	*3	B-98	-	B-133
			3210	327	2.82				3060	312	2.82	1	- 6100SK	- 8	*3	B-99	-	B-134
			3210	327	3.32				3060	312	3.32	1	- 6105SK	- 8	*3	B-99	-	B-134
			2050	**209**	**1.04**				**1930**	**197**	**1.04**	**1**	**- 6085**	**- 8**		**B-100**	**B-116**	**B-135**
			3160	322	1.53				2980	304	1.53	1	- 6090	- 8		B-100	B-116	B-135
			3160	322	2.03				2980	304	2.03	1	- 6095	- 8		B-100	B-116	B-135
			1740	**177**	**1.17**				**1680**	**171**	**1.17**	**1**	**- 6080SK**	**- 10**	***3**	**B-98**	**-**	**B-133**
			1740	177	1.47				1680	171	1.47	1	- 6085SK	- 10	*3	B-98	-	B-133
			3380	345	1.87				3240	330	1.87	1	- 6090SK	- 10	*3	B-98	-	B-133
145	46.9	4.78	3380	345	2.36	175	38.9	3.96	3240	330	2.36	1	- 6095SK	- 10	*3	B-98	-	B-133
			3380	345	2.64				3240	330	2.64	1	- 6100SK	- 10	*3	B-99	-	B-134
			3380	345	2.93				3240	330	2.93	1	- 6105SK	- 10	*3	B-99	-	B-134
			2250	**230**	**1.04**				**2130**	**217**	**1.04**	**1**	**- 6085**	**- 11**		**B-100**	**B-116**	**B-135**
132	51.6	5.26	3340	340	1.53	159	42.8	4.36	3340	340	1.53	1	- 6090	- 11		B-100	B-116	B-135
			3340	340	2.03				3340	340	2.03	1	- 6095	- 11		B-100	B-116	B-135
			2410	**246**	**1.04**				**2280**	**233**	**1.04**	**1**	**- 6085**	**- 13**		**B-100**	**B-116**	**B-135**
112	61.0	6.22	3340	340	1.53	135	50.5	5.15	3340	340	1.53	1	- 6090	- 13		B-100	B-116	B-135
			3340	340	2.03				3340	340	2.03	1	- 6095	- 13		B-100	B-116	B-135
			2490	**253**	**1.04**				**2350**	**240**	**1.04**	**1**	**- 6085**	**- 15**		**B-100**	**B-116**	**B-135**
96.7	70.4	7.18	3340	340	1.53	117	58.3	5.95	3340	340	1.53	1	- 6090	- 15		B-100	B-116	B-135
			3340	340	2.03				3340	340	2.03	1	- 6095	- 15		B-100	B-116	B-135
			2560	**261**	**1.04**				**2460**	**251**	**1.04**	**1**	**- 6085**	**- 17**		**B-100**	**B-116**	**B-135**
			3340	340	1.53				3340	340	1.53	1	- 6090	- 17		B-100	B-116	B-135
85.3	79.8	8.13	3340	340	2.03	103	66.1	6.74	3340	340	2.03	1	- 6095	- 17		B-100	B-116	B-135
			5400	550	2.65				5400	550	2.65	1	- 6100	- 17		B-101	B-117	B-136
			3340	**340**	**1.01**				**3340**	**340**	**1.01**	**1**	**- 6090**	**- 21**		**B-100**	**B-116**	**B-135**
69.0	98.5	10.0	3340	340	2.01	83.3	81.7	8.32	3340	340	2.03	1	- 6095	- 21		B-100	B-116	B-135
			5400	550	2.53				5400	550	2.57	1	- 6100	- 21		B-101	B-117	B-136
			3340	**340**	**1.15**				**3340**	**340**	**1.15**	**1**	**- 6095**	**- 25**		**B-100**	**B-116**	**B-135**
			5400	550	1.69				5400	550	1.69	1	- 6100	- 25		B-101	B-117	B-136
58.0	117	12.0	5400	550	2.23	70.0	97.2	9.91	5400	550	2.23	1	- 6105	- 25		B-101	B-117	B-136
			7240	738	2.55				6810	694	2.55	1	- 6110	- 25		B-101	B-117	B-136
			7240	738	2.96				6810	694	2.96	1	- 6115	- 25		B-101	B-117	B-136
			3320	**338**	**1.05**				**3340**	**340**	**1.05**	**1**	**- 6095**	**- 29**		**B-100**	**B-116**	**B-135**
			5400	550	1.61				5400	550	1.61	1	- 6100	- 29		B-101	B-117	B-136
50.0	136	13.9	5400	550	2.12	60.3	113	11.5	5400	550	2.12	1	- 6105	- 29		B-101	B-117	B-136
			7410	756	2.53				7000	714	2.53	1	- 6110	- 29		B-101	B-117	B-136
			7410	756	2.96				7000	714	2.96	1	- 6115	- 29		B-101	B-117	B-136

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.

Selection Tables Gearmotors

n_1: Motor Speed

0.75 kW	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 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								
			3270	**334**	**1.01**				**3330**	**339**	**1.01**	**1 -**	**6095**	**- 35**		**B-100**	**B-116**	**B-135**
			5400	550	1.30				5400	550	1.30	1 -	6100	- 35		B-101	B-117	B-136
41.4	164	16.7	5400	550	1.60	50.0	136	13.9	5400	550	1.60	1 -	6105	- 35		B-101	B-117	B-136
			7470	761	2.00				7490	764	2.00	1 -	6110	- 35		B-101	B-117	B-136
			7470	761	2.41				7490	764	2.41	1 -	6115	- 35		B-101	B-117	B-136
			3210	328	0.80				3280	334	0.80	1 -	6095	- 43		B-100	B-116	B-135
			5400	**550**	**1.04**				**5400**	**550**	**1.04**	**1 -**	**6100**	**- 43**		**B-101**	**B-117**	**B-136**
			5400	550	1.44				5400	550	1.44	1 -	6105	- 43		B-101	B-117	B-136
33.7	202	20.6	7610	776	1.73	40.7	167	17.0	7610	776	1.73	1 -	6110	- 43		B-101	B-117	B-136
			7610	776	2.03				7610	776	2.03	1 -	6115	- 43		B-101	B-117	B-136
			9810	1000	2.55				9640	983	2.55	1 -	6120	- 43		B-101	B-117	B-136
			5400	**550**	**1.03**				**5390**	**549**	**1.03**	**1 -**	**6105**	**- 51**		**B-101**	**B-117**	**B-136**
			7610	776	1.26				7610	776	1.26	1 -	6110	- 51		B-101	B-117	B-136
28.4	239	24.4	7610	776	1.48	34.3	198	20.2	7610	776	1.48	1 -	6115	- 51		B-101	B-117	B-136
			9810	1000	2.17				9810	1000	2.29	1 -	6120	- 51		B-101	B-117	B-136
			9810	1000	2.63				9810	1000	3.04	1 -	6125	- 51		B-101	B-117	B-136
			5400	550	0.91				5370	548	0.94	1 -	6105	- 59		B-101	B-117	B-136
			7610	**776**	**1.15**				**7610**	**776**	**1.15**	**1 -**	**6110**	**- 59**		**B-101**	**B-117**	**B-136**
			7610	776	1.35				7610	776	1.35	1 -	6115	- 59		B-101	B-117	B-136
24.6	277	28.2	9810	1000	1.73	29.7	229	23.4	9810	1000	1.73	1 -	6120	- 59		B-101	B-117	B-136
			9810	1000	2.16				9810	1000	2.16	1 -	6125	- 59		B-101	B-117	B-136
			13200	1340	2.81				12400	1270	2.92	1 -	6130	- 59		B-102	B-118	B-137
			7610	775	1.01				7610	776	1.01	1 -	6115	- 71		B-101	B-117	B-136
			9810	**1000**	**1.28**				**9810**	**1000**	**1.28**	**1 -**	**6120**	**- 71**		**B-101**	**B-117**	**B-136**
20.4	333	34.0	9810	1000	1.52	24.6	276	28.1	9810	1000	1.60	1 -	6125	- 71		B-101	B-117	B-136
			14000	1420	2.35				13100	1340	2.44	1 -	6130	- 71		B-102	B-118	B-137
			14000	1420	2.71				13100	1340	2.89	1 -	6135	- 71		B-102	B-118	B-137
			7550	770	1.01				7610	776	1.01	1 -	6115	- 87		B-101	B-117	B-136
			9810	**1000**	**1.26**				**9810**	**1000**	**1.26**	**1 -**	**6120**	**- 87**		**B-101**	**B-117**	**B-136**
			9810	1000	1.37				9810	1000	1.51	1 -	6125	- 87		B-101	B-117	B-136
16.7	408	41.6	14700	1500	1.89	20.1	338	34.5	14200	1440	1.89	1 -	6130	- 87		B-102	B-118	B-137
			14700	1500	2.20				14200	1440	2.55	1 -	6135	- 87		B-102	B-118	B-137
			16000	1630	2.64				16000	1630	2.64	1 -	6140	- 87		B-102	B-118	B-137
			16000	1630	2.88				16000	1630	3.31	1 -	6145	- 87		B-102	B-118	B-137
			9810	1000	1.14				9810	1000	1.37	1 -	6120DB	- 104		B-108	B-124	B-143
			9810	1000	1.36				9810	1000	1.64	1 -	6125DB	- 104		B-108	B-124	B-143
			14700	1500	1.69				14700	1500	2.04	1 -	6130DB	- 104		B-109	B-125	B-144
			14700	1500	2.03				14700	1500	2.13	1 -	6135DB	- 104		B-109	B-125	B-144
13.9	462	47.1	14700	1500	2.03	16.8	383	39.1	14700	1500	2.45	1 -	6135DC	- 104		B-109	B-125	B-144
			16000	1630	2.13				16000	1630	2.13	1 -	6140DB	- 104		B-109	B-125	B-144
			16000	1630	2.65				16000	1630	3.20	1 -	6140DC	- 104		B-109	B-125	B-144
			16000	1630	2.96				16000	1630	3.58	1 -	6145DC	- 104		B-109	B-125	B-144
			9810	1000	1.16				9810	1000	1.40	1 -	6125DB	- 121		B-108	B-124	B-143
			14700	1500	1.45				14700	1500	1.75	1 -	6130DB	- 121		B-109	B-125	B-144
			14700	1500	1.75				14700	1500	2.11	1 -	6135DB	- 121		B-109	B-125	B-144
12.0	538	54.8	16000	1630	2.13	14.5	446	45.4	16000	1630	2.13	1 -	6140DB	- 121		B-109	B-125	B-144
			16000	1630	2.28				16000	1630	2.75	1 -	6140DC	- 121		B-109	B-125	B-144
			16000	1630	2.40				16000	1630	2.90	1 -	6145DC	- 121		B-109	B-125	B-144

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 n_1 and n_2. 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.