

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

Mounting style	
Foot	H
V flange	V
Flange	F

Type of Input	
Gearmotor	M
With adaptor	JM

Special Specifications	
Standard specification	blank
Special specification	S

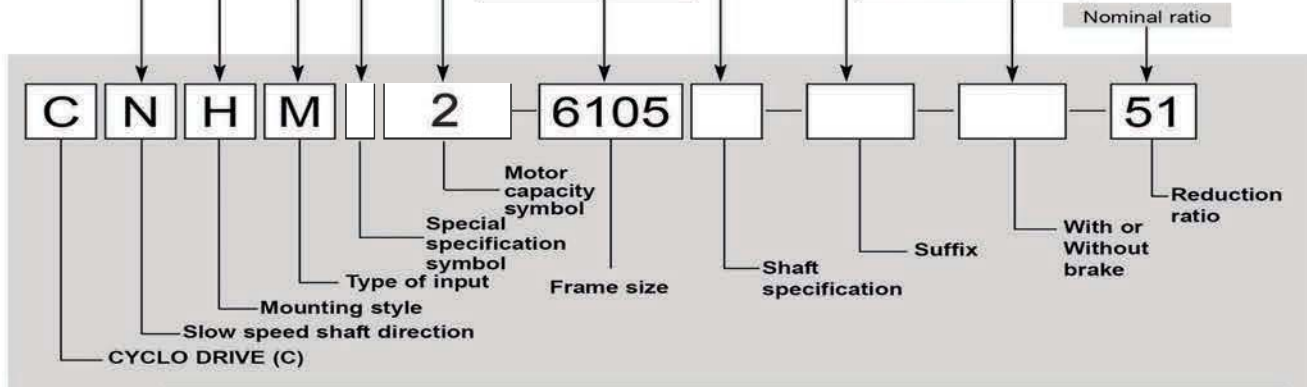
		Motor Capacity Symbol						
4P	Capacity symbol	01	02	03	05	08	1	
	kW (HP)	0.1 (1/8)	0.2 (1/4)	0.25 (1/3)	0.4 (1/2)	0.55 (3/4)	0.75 (1)	
	Capacity symbol	1H	2	3	4	5	8	
	kW (HP)	1.1 (1.5)	1.5 (2)	2.2 (3)	3.0 (4)	3.7 (5)	5.5 (7.5)	
6P	Capacity symbol	10	15	20	25	30	40	
	kW (HP)	7.5 (10)	11 (15)	15 (20)	18.5 (25)	22 (30)	30 (40)	
	Capacity symbol	50	60	75	100			
	kW (HP)	37 (50)	45 (60)	55 (75)	75 (100)			
	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
Light Heavy Radial	R1	With AF (inverter) motor
High Cap. Brg. Ductile Casing	R2	Servo Motor
Baseplate	BP	DC Motor
HH Type Ceiling	H1	High Efficiency Motor
Modification Left Wall	H2	Torque Limiter
Modification Right Wall	H3	

With or Without Brake	
Without brake	-
With brake	B

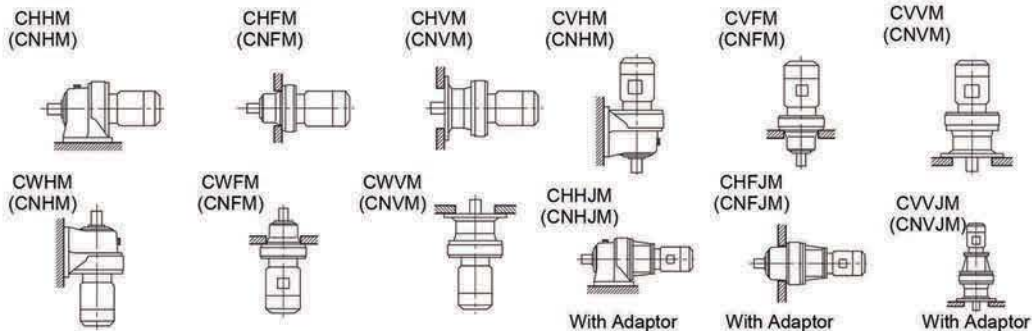
Frame size  
(Refer to Selection Tables starting from page B-13.)



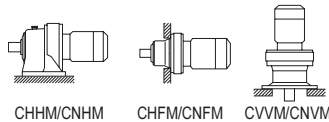
Product and Nomenclature Symbol Examples (Gearmotor)

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

CYCLO® GEARMOTORS



## Selection Tables Gearmotors #CNHM2, #CHHM2, #CNVM2, #CVVM2



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

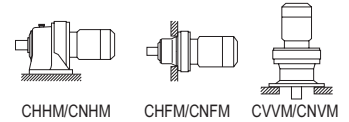
n<sub>1</sub>: Motor Speed

50Hz					60Hz					Nomenclature			Page of Dimension Sheet													
Output Speed n <sub>2</sub> r/min	Output Torque Tout N·m    kgf·m		Allowable Radial Load Pro N    kgf		SF	Output Speed n <sub>2</sub> r/min	Output Torque Tout N·m    kgf·m		Allowable Radial Load Pro N    kgf		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM	CHHM	CHFM	CVVM						
580	23.5	2.39	1130	115	1.10	700	19.4	1.98	1090	111	1.10	2 - 6080SK	- 2.5 *3	B-98	-	B-133										
			1130	115	1.37				1090	111	1.37											2 - 6085SK	- 2.5 *3	B-98	-	B-133
			2140	218	1.60				2050	209	1.60											2 - 6090SK	- 2.5 *3	B-98	-	B-133
			2140	218	1.81				2050	209	1.81											2 - 6095SK	- 2.5 *3	B-98	-	B-133
			2140	218	2.12				2050	209	2.12											2 - 6100SK	- 2.5 *3	B-99	-	B-134
			2140	218	2.50				2050	209	2.50											2 - 6105SK	- 2.5 *3	B-99	-	B-134
			2860	292	3.43				2710	276	3.43											2 - 6110SK	- 2.5 *3	B-99	-	B-134
483	28.2	2.87	1170	119	1.10	583	23.3	2.38	1130	115	1.10	2 - 6080SK	- 3 *3	B-98	-	B-133										
			1170	119	1.37				1130	115	1.37											2 - 6085SK	- 3 *3	B-98	-	B-133
			2230	227	1.56				2120	216	1.56											2 - 6090SK	- 3 *3	B-98	-	B-133
			2230	227	1.75				2120	216	1.75											2 - 6095SK	- 3 *3	B-98	-	B-133
			2230	227	2.20				2120	216	2.20											2 - 6100SK	- 3 *3	B-99	-	B-134
			2230	227	2.59				2120	216	2.59											2 - 6105SK	- 3 *3	B-99	-	B-134
363	37.5	3.83	1250	127	1.10	438	31.1	3.17	1210	123	1.10	2 - 6080SK	- 4 *3	B-98	-	B-133										
			1250	127	1.37				1210	123	1.37											2 - 6085SK	- 4 *3	B-98	-	B-133
			2470	252	1.56				2370	242	1.56											2 - 6090SK	- 4 *3	B-98	-	B-133
			2470	252	1.75				2370	242	1.75											2 - 6095SK	- 4 *3	B-98	-	B-133
			2470	252	2.15				2370	242	2.15											2 - 6100SK	- 4 *3	B-99	-	B-134
290	46.9	4.78	2470	252	2.53	350	38.9	3.96	2370	242	2.53	2 - 6105SK	- 4 *3	B-99	-	B-134										
			3280	334	3.57				3100	316	3.57											2 - 6110SK	- 4 *3	B-99	-	B-134
			1290	132	1.21				1270	129	1.21											2 - 6085SK	- 5 *3	B-98	-	B-133
			2590	264	1.49				2490	254	1.49											2 - 6090SK	- 5 *3	B-98	-	B-133
			2590	264	1.75				2490	254	1.75											2 - 6095SK	- 5 *3	B-98	-	B-133
			2590	264	2.10				2490	254	2.10											2 - 6100SK	- 5 *3	B-99	-	B-134
242	56.3	5.74	2590	264	2.47	292	46.7	4.76	2490	254	2.47	2 - 6105SK	- 5 *3	B-99	-	B-134										
			3460	353	3.07				3290	335	3.07											2 - 6110SK	- 5 *3	B-99	-	B-134
			1290	132	1.08				1290	131	1.08											2 - 6085SK	- 6 *3	B-98	-	B-133
			2660	271	1.27				2530	258	1.27											2 - 6090SK	- 6 *3	B-98	-	B-133
			2660	271	1.51				2530	258	1.51											2 - 6095SK	- 6 *3	B-98	-	B-133
			2660	271	1.78				2530	258	1.78											2 - 6100SK	- 6 *3	B-99	-	B-134
			2660	271	2.09				2530	258	2.09											2 - 6105SK	- 6 *3	B-99	-	B-134
			3700	377	2.82				3510	358	2.82											2 - 6110SK	- 6 *3	B-99	-	B-134
			2790	284	1.01				2630	268	1.01											2 - 6095	- 6	B-100	B-116	B-135
			4130	421	1.57				3880	396	1.57											2 - 6100	- 6	B-101	B-117	B-136
			4130	421	2.12				3880	396	2.12											2 - 6105	- 6	B-101	B-117	B-136
181	75.1	7.65	4670	476	2.37	219	62.2	6.34	4390	447	2.37	2 - 6110	- 6	B-101	B-117	B-136										
			4670	476	2.61				4390	447	2.61											2 - 6115	- 6	B-101	B-117	B-136
			1290	132	0.91				1290	132	0.91											2 - 6085SK	- 8 *3	B-98	-	B-133
			2870	293	1.00				2780	283	1.00											2 - 6090SK	- 8 *3	B-98	-	B-133
			2870	293	1.18				2780	283	1.18											2 - 6095SK	- 8 *3	B-98	-	B-133
			2870	293	1.41				2780	283	1.41											2 - 6100SK	- 8 *3	B-99	-	B-134
			2870	293	1.66				2780	283	1.66											2 - 6105SK	- 8 *3	B-99	-	B-134
			3950	403	2.47				3770	384	2.47											2 - 6110SK	- 8 *3	B-99	-	B-134
			3950	403	3.09				3770	384	3.09											2 - 6115SK	- 8 *3	B-99	-	B-134
			3090	315	1.01				2920	297	1.01											2 - 6095	- 8	B-100	B-116	B-135
			4600	469	1.57				4330	441	1.57											2 - 6100	- 8	B-101	B-117	B-136
			4600	469	2.12				4330	441	2.12											2 - 6105	- 8	B-101	B-117	B-136
			145	93.9	9.57				5210	531	2.37											175	77.8	7.93	4900	499
5210	531	2.61				4900	499	2.61	2 - 6115	- 8	B-101	B-117	B-136													
2990	305	1.32				2900	296	1.32	2 - 6095SK	- 10 *3	B-98	-	B-133													
2990	305	1.47				2900	296	1.47	2 - 6100SK	- 10 *3	B-99	-	B-134													
4250	433	2.04				2900	296	1.47	2 - 6105SK	- 10 *3	B-99	-	B-134													
4250	433	2.55	4050	413	2.04	2 - 6110SK	- 10 *3	B-99	-	B-134																
			4050	413	2.55	2 - 6115SK	- 10 *3	B-99	-	B-134																

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

# Selection Tables Gearmotors #CNHM2, #CHHM2, #CNVM2, #CVVM2

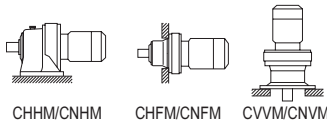
1.5 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n <sub>1</sub>	r/min	1450	980	1750	1165



50Hz					60Hz					Nomenclature			Page of Dimension Sheet			
Output Speed n <sub>2</sub> r/min	Output Torque Tout N·m	kgf·m	Allowable Radial Load Pro N	SF	Output Speed n <sub>2</sub> r/min	Output Torque Tout N·m	kgf·m	Allowable Radial Load Pro N	SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM CHHM	CNFM CHFM	CNVM CVVM	
132	103	10.5	<b>3340</b>	<b>340</b>	<b>1.01</b>	159	85.5	8.72	<b>3300</b>	<b>336</b>	<b>1.01</b>	2 - 6095	- 11	<b>B-100</b>	<b>B-116</b>	<b>B-135</b>
			5220	532	1.57				4920	501	1.57	2 - 6100	- 11	B-101	B-117	B-136
			5220	532	2.12				4920	501	2.12	2 - 6105	- 11	B-101	B-117	B-136
			5950	606	2.37				5600	571	2.37	2 - 6110	- 11	B-101	B-117	B-136
			5950	606	2.61				5600	571	2.61	2 - 6115	- 11	B-101	B-117	B-136
112	122	12.4	<b>3340</b>	<b>340</b>	<b>1.01</b>	135	101	10.3	<b>3300</b>	<b>336</b>	<b>1.01</b>	2 - 6095	- 13	<b>B-100</b>	<b>B-116</b>	<b>B-135</b>
			5400	550	1.57				5110	521	1.57	2 - 6100	- 13	B-101	B-117	B-136
			5400	550	2.12				5110	521	2.12	2 - 6105	- 13	B-101	B-117	B-136
			6150	627	2.37				5790	591	2.37	2 - 6110	- 13	B-101	B-117	B-136
			6150	627	2.60				5790	591	2.60	2 - 6115	- 13	B-101	B-117	B-136
96.7	141	14.4	<b>3340</b>	<b>340</b>	<b>1.01</b>	117	117	11.9	<b>3280</b>	<b>335</b>	<b>1.01</b>	2 - 6095	- 15	<b>B-100</b>	<b>B-116</b>	<b>B-135</b>
			5400	550	1.57				5400	550	1.57	2 - 6100	- 15	B-101	B-117	B-136
			5400	550	2.12				5400	550	2.12	2 - 6105	- 15	B-101	B-117	B-136
			6560	669	2.37				6180	630	2.37	2 - 6110	- 15	B-101	B-117	B-136
			6560	669	2.60				6180	630	2.60	2 - 6115	- 15	B-101	B-117	B-136
85.3	160	16.3	<b>3340</b>	<b>340</b>	<b>1.01</b>	103	132	13.5	<b>3290</b>	<b>336</b>	<b>1.01</b>	2 - 6095	- 17	<b>B-100</b>	<b>B-116</b>	<b>B-135</b>
			5400	550	1.33				5400	550	1.33	2 - 6100	- 17	B-101	B-117	B-136
			5400	550	1.64				5400	550	1.64	2 - 6105	- 17	B-101	B-117	B-136
			6620	675	2.12				6240	636	2.12	2 - 6110	- 17	B-101	B-117	B-136
			6620	675	2.60				6240	636	2.60	2 - 6115	- 17	B-101	B-117	B-136
69.0	197	20.1	<b>3340</b>	<b>340</b>	<b>1.01</b>	83.3	163	16.6	<b>3260</b>	<b>332</b>	<b>1.01</b>	2 - 6095	- 21	<b>B-100</b>	<b>B-116</b>	<b>B-135</b>
			5400	550	1.27				5400	550	1.29	2 - 6100	- 21	B-101	B-117	B-136
			5400	550	1.52				5400	550	1.56	2 - 6105	- 21	B-101	B-117	B-136
			7020	716	1.81				6620	675	1.81	2 - 6110	- 21	B-101	B-117	B-136
			7020	716	2.07				6620	675	2.07	2 - 6115	- 21	B-101	B-117	B-136
58.0	235	23.9	<b>5400</b>	<b>550</b>	<b>1.11</b>	70.0	194	19.8	<b>5400</b>	<b>550</b>	<b>1.11</b>	2 - 6105	- 25	<b>B-101</b>	<b>B-117</b>	<b>B-136</b>
			7120	726	1.27				6720	685	1.27	2 - 6110	- 25	B-101	B-117	B-136
			7120	726	1.48				6720	685	1.48	2 - 6115	- 25	B-101	B-117	B-136
			8650	882	2.06				8150	831	2.06	2 - 6120	- 25	B-101	B-117	B-136
			8650	882	2.64				8150	831	2.64	2 - 6125	- 25	B-101	B-117	B-136
50.0	272	27.7	<b>5400</b>	<b>550</b>	<b>1.06</b>	60.3	226	23.0	<b>5400</b>	<b>550</b>	<b>1.06</b>	2 - 6105	- 29	<b>B-101</b>	<b>B-117</b>	<b>B-136</b>
			7290	743	1.27				6900	703	1.27	2 - 6110	- 29	B-101	B-117	B-136
			7290	743	1.48				6900	703	1.48	2 - 6115	- 29	B-101	B-117	B-136
			8990	916	1.91				8470	863	1.99	2 - 6120	- 29	B-101	B-117	B-136
			8990	916	2.31				8470	863	2.51	2 - 6125	- 29	B-101	B-117	B-136
41.4	328	33.5	<b>7310</b>	<b>745</b>	<b>1.00</b>	50.0	272	27.7	<b>7360</b>	<b>751</b>	<b>1.00</b>	2 - 6110	- 35	<b>B-101</b>	<b>B-117</b>	<b>B-136</b>
			7310	745	1.21				7360	751	1.21	2 - 6115	- 35	B-101	B-117	B-136
			9490	967	1.58				8940	912	1.66	2 - 6120	- 35	B-101	B-117	B-136
			9490	967	1.92				8940	912	2.12	2 - 6125	- 35	B-101	B-117	B-136
			11100	1130	2.37				10400	1060	2.47	2 - 6130	- 35	B-102	B-118	B-137
33.7	404	41.1	<b>7540</b>	<b>769</b>	<b>1.01</b>	40.7	334	34.1	<b>7610</b>	<b>776</b>	<b>1.01</b>	2 - 6115	- 43	<b>B-101</b>	<b>B-117</b>	<b>B-136</b>
			9810	1000	1.27				9510	969	1.27	2 - 6120	- 43	B-101	B-117	B-136
			9810	1000	1.56				9510	969	1.59	2 - 6125	- 43	B-101	B-117	B-136
			11900	1210	1.93				11200	1140	1.99	2 - 6130	- 43	B-102	B-118	B-137
			11900	1210	2.23				11200	1140	2.51	2 - 6135	- 43	B-102	B-118	B-137
28.4	479	48.8	<b>9810</b>	<b>1000</b>	<b>1.09</b>	34.3	397	40.4	<b>9810</b>	<b>1000</b>	<b>1.15</b>	2 - 6120	- 51	<b>B-101</b>	<b>B-117</b>	<b>B-136</b>
			12400	1260	1.63				9810	1000	1.52	2 - 6125	- 51	B-101	B-117	B-136
			12400	1260	1.70				11700	1190	1.69	2 - 6130	- 51	B-102	B-118	B-137
			16000	1630	2.29				11700	1190	1.95	2 - 6135	- 51	B-102	B-118	B-137
			16000	1630	2.47				16000	1630	2.29	2 - 6140	- 51	B-102	B-118	B-137

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<sub>1</sub> and n<sub>2</sub>. Refer to technical data for details.
3. CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
4. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
5. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

## Selection Tables Gearmotors #CNHM2, #CHHM2, #CNVM2, #CVVM2



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

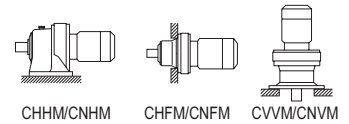
n<sub>1</sub>: Motor Speed

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

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

# Selection Tables Gearmotors #CNHM2, #CHHM2, #CNVM2, #CVVM2

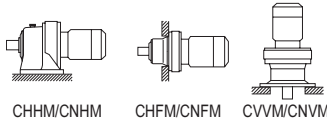
1.5 kW	Hz		50Hz		60Hz	
	P		4	6	4	6
	n <sub>1</sub>	r/min	1450	980	1750	1165



50Hz						60Hz					Nomenclature			Page of Dimension Sheet				
Output Speed n <sub>2</sub>	Output Torque Tout		Allowable Radial Load Pro		SF	Output Speed n <sub>2</sub>	Output Torque Tout		Allowable Radial Load Pro		SF	Input Capacity Symbol	Frame Size	Reduction Ratio	CNHM	CNFM	CNVM	
r/min	N·m	kgf·m	N	kgf		r/min	N·m	kgf·m	N	kgf					CHHM	CHFM	CVVM	
8.79	940	95.8	14700	1500	*1	10.6	940	95.8	14700	1500	*1	2 -	6135DB	- 165	B-109	B-125	B-144	
			15500	1580	0.93				16000	1630	1.07	2 -	6145DB	- 165	B-109	B-125	B-144	
	1470	150	15500	1580	0.93		16000	1630	1.12	2 -	6145DC	- 165	2 -	6160DA	- 165	<b>B-110</b>	<b>B-126</b>	<b>B-145</b>
			<b>22100</b>	<b>2250</b>	<b>1.07</b>		<b>22100</b>	<b>2250</b>	<b>1.07</b>	2 -	6160DB	- 165	B-110	B-126	B-145			
			22100	2250	1.20		22100	2250	1.44	2 -	6165DB	- 165	B-110	B-126	B-145			
			22100	2250	1.43		22100	2250	1.73	2 -	6170DB	- 165	B-110	B-126	B-145			
			29500	3010	1.72		29500	3010	2.08	2 -	6175DB	- 165	B-110	B-126	B-145			
			29500	3010	2.15		29500	3010	2.24	2 -	6180DA	- 165	B-110	B-126	B-145			
			41700	4250	2.24		41700	4250	2.24	2 -	6180DB	- 165	B-111	B-127	B-146			
			41700	4250	2.77		41700	4250	3.34	2 -	6180DB	- 165	B-111	B-127	B-146			
7.44	1230	125	16000	1630	*1	8.97	1230	125	16000	1630	*1	2 -	6140DB	- 195	B-109	B-125	B-144	
			1360	138	16000				1630	*1	2 -	6145DB	- 195	B-109	B-125	B-144		
	1730	177	<b>22100</b>	<b>2250</b>	<b>1.01</b>		<b>22100</b>	<b>2250</b>	<b>1.07</b>	2 -	6160DA	- 195	<b>B-110</b>	<b>B-126</b>	<b>B-145</b>			
			22100	2250	1.01		22100	2250	1.22	2 -	6160DB	- 195	B-110	B-126	B-145			
			22100	2250	1.07		22100	2250	1.07	2 -	6165DA	- 195	B-110	B-126	B-145			
			22100	2250	1.21		22100	2250	1.46	2 -	6165DB	- 195	B-110	B-126	B-145			
			29500	3010	1.46		29500	3010	1.76	2 -	6170DB	- 195	B-110	B-126	B-145			
			29500	3010	1.82		29500	3010	2.19	2 -	6175DB	- 195	B-110	B-126	B-145			
			41700	4250	2.24		41700	4250	2.24	2 -	6180DA	- 195	B-110	B-126	B-145			
			41700	4250	2.34		41700	4250	2.83	2 -	6180DB	- 195	B-111	B-127	B-146			
41700	4250	2.84	41700	4250	3.43	2 -	6185DB	- 195	B-111	B-127	B-146							
6.28	1340	136	16000	1630	*1	7.58	1340	136	16000	1630	*1	2 -	6145DB	- 231	B-109	B-125	B-144	
			<b>22100</b>	<b>2250</b>	<b>1.02</b>				<b>22100</b>	<b>2250</b>	<b>1.07</b>	2 -	6165DA	- 231	<b>B-110</b>	<b>B-126</b>	<b>B-145</b>	
	2050	209	22100	2250	1.02		22100	2250	1.23	2 -	6165DB	- 231	B-110	B-126	B-145			
			29500	3010	1.07		29500	3010	1.07	2 -	6170DA	- 231	B-110	B-126	B-145			
			29500	3010	1.23		29500	3010	1.49	2 -	6170DB	- 231	B-110	B-126	B-145			
			29500	3010	1.53		29500	3010	1.85	2 -	6175DB	- 231	B-110	B-126	B-145			
			41700	4250	1.97		41700	4250	2.24	2 -	6180DA	- 231	B-110	B-126	B-145			
			41700	4250	1.97		41700	4250	2.38	2 -	6180DB	- 231	B-111	B-127	B-146			
			41700	4250	2.24		41700	4250	2.24	2 -	6185DA	- 231	B-110	B-126	B-145			
			41700	4250	2.43		41700	4250	2.94	2 -	6185DB	- 231	B-111	B-127	B-146			
5.31	1760	179	22100	2250	*1	6.41	1760	179	22100	2250	*1	2 -	6160DA	- 273	B-110	B-126	B-145	
			22100	2250	0.87				22100	2250	1.04	2 -	6165DA	- 273	B-110	B-126	B-145	
	2430	247	<b>29500</b>	<b>3010</b>	<b>1.04</b>		<b>29500</b>	<b>3010</b>	<b>1.07</b>	2 -	6170DA	- 273	<b>B-110</b>	<b>B-126</b>	<b>B-145</b>			
			29500	3010	1.04		29500	3010	1.26	2 -	6170DB	- 273	B-110	B-126	B-145			
			29500	3010	1.07		29500	3010	1.07	2 -	6175DA	- 273	B-110	B-126	B-145			
			29500	3010	1.30		29500	3010	1.57	2 -	6175DB	- 273	B-110	B-126	B-145			
			41700	4250	1.67		41700	4250	2.01	2 -	6180DA	- 273	B-110	B-126	B-145			
			41700	4250	2.06		41700	4250	2.24	2 -	6185DA	- 273	B-110	B-126	B-145			
			41700	4250	2.06		41700	4250	2.49	2 -	6185DB	- 273	B-111	B-127	B-146			
			59000	6010	2.63		59000	6010	3.17	2 -	6190DA	- 273	B-111	B-128	B-147			
4.55	1760	179	22100	2250	*1	5.49	1760	179	22100	2250	*1	2 -	6160DA	- 319	B-110	B-126	B-145	
			2100	214	22100				2250	*1	2 -	6165DA	- 319	B-110	B-126	B-145		
	2840	289	<b>29500</b>	<b>3010</b>	<b>1.07</b>		<b>29500</b>	<b>3010</b>	<b>1.07</b>	2 -	6175DA	- 319	<b>B-110</b>	<b>B-126</b>	<b>B-145</b>			
			29500	3010	1.11		29500	3010	1.34	2 -	6175DB	- 319	B-110	B-126	B-145			
			41700	4250	1.43		41700	4250	1.72	2 -	6180DA	- 319	B-110	B-126	B-145			
			41700	4250	1.76		41700	4250	2.13	2 -	6185DA	- 319	B-110	B-126	B-145			
59000	6010	2.25	59000	6010	2.71	2 -	6190DA	- 319	B-111	B-128	B-147							
59000	6010	2.81	59000	6010	3.39	2 -	6195DA	- 319	B-111	B-128	B-147							

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<sub>1</sub> and n<sub>2</sub>. Refer to technical data for details.
3. CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
4. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
5. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

## Selection Tables Gearmotors #CNHM2, #CHHM2, #CNVM2, #CVVM2

n<sub>1</sub>: Motor Speed

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

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

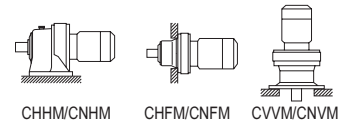
- "\*2" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.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

# Selection Tables Gearmotors #CNHM2, #CHHM2, #CNVM2, #CVVM2

GEARMOTORS

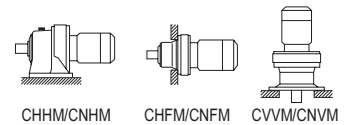
Selection Tables  
1.5 kW, 2.2 kW

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



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

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



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

1. Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
2. Motor slippage may affect n<sub>1</sub> and n<sub>2</sub>. 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.