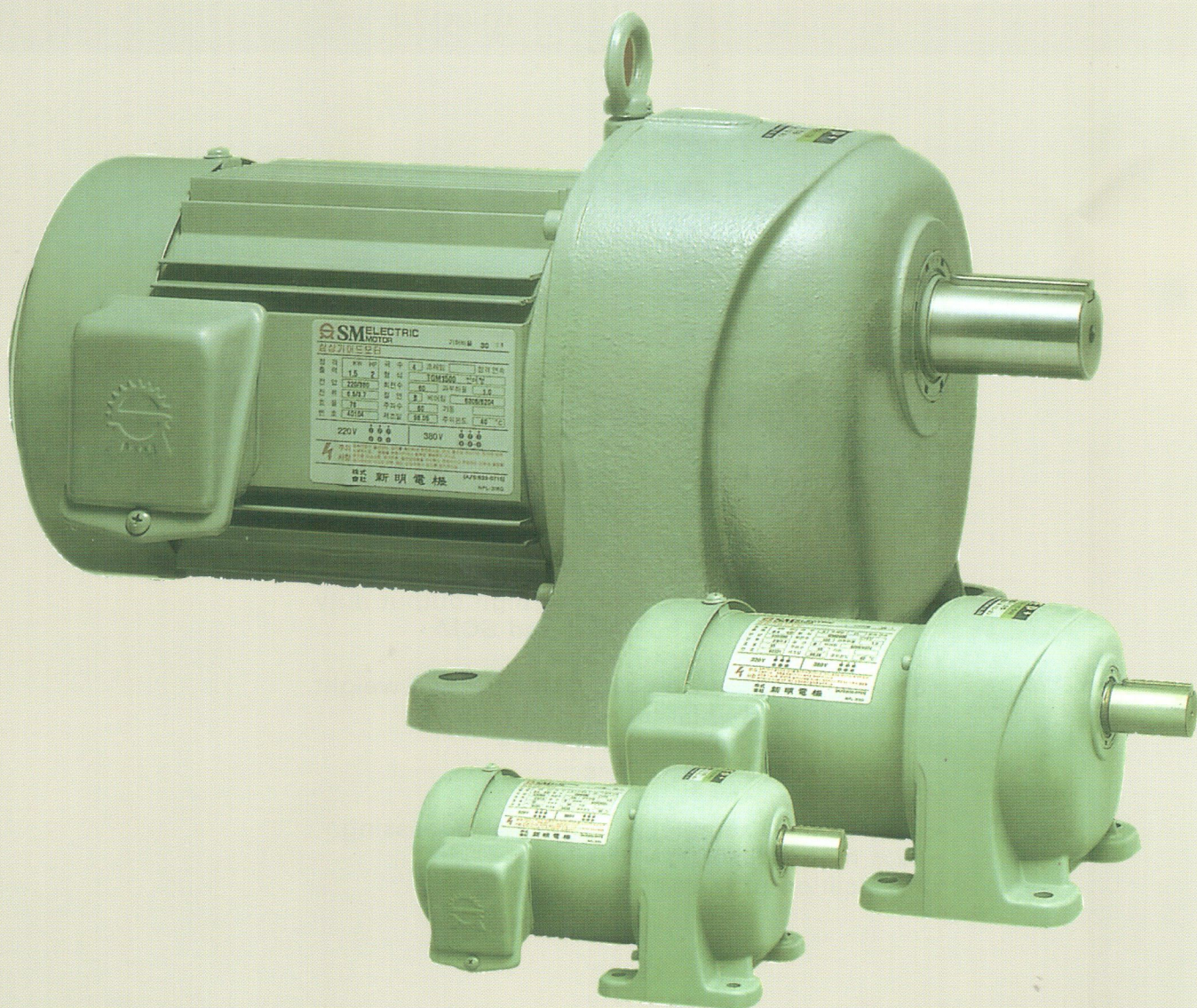
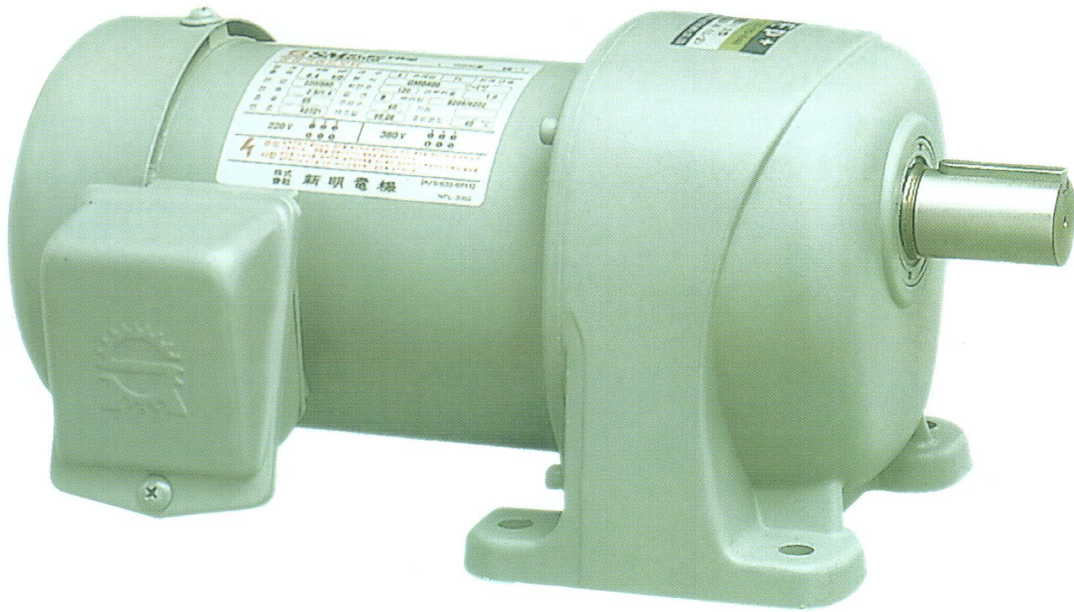


EP+





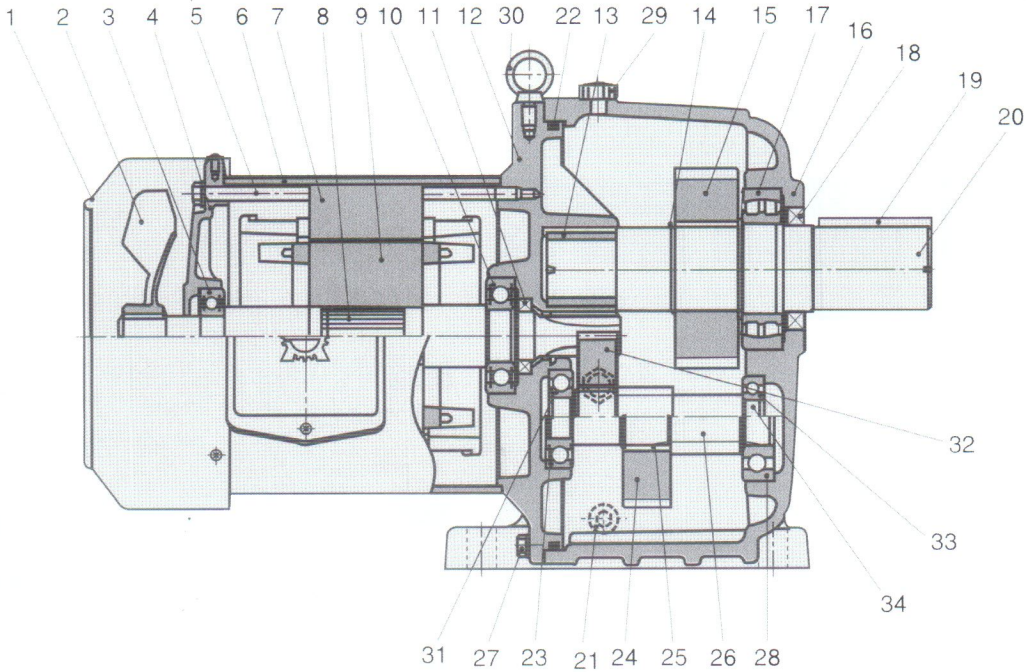
■ EP+의 특징 및 장점

- 모든 기어는 특수강을 사용하여 특수 열처리하고 내마모성을 극대화 하였으며
- 고 토크 고력형에 적합함 .
- 소형,경량화 시켰으며 외관이 미려함
- 반영구적 윤활제 사용 윤활제 교환 불필요.
- 저진동, 저소음, 장수명 보장
- 다양한 기종과 속비선택
- 63계열 베어링 채택
- 정밀 가공하여 분해조립이 용이하고 분해조립시 기밀유지
- 92%의 고효율
- 저진동 고효율 모터 채용

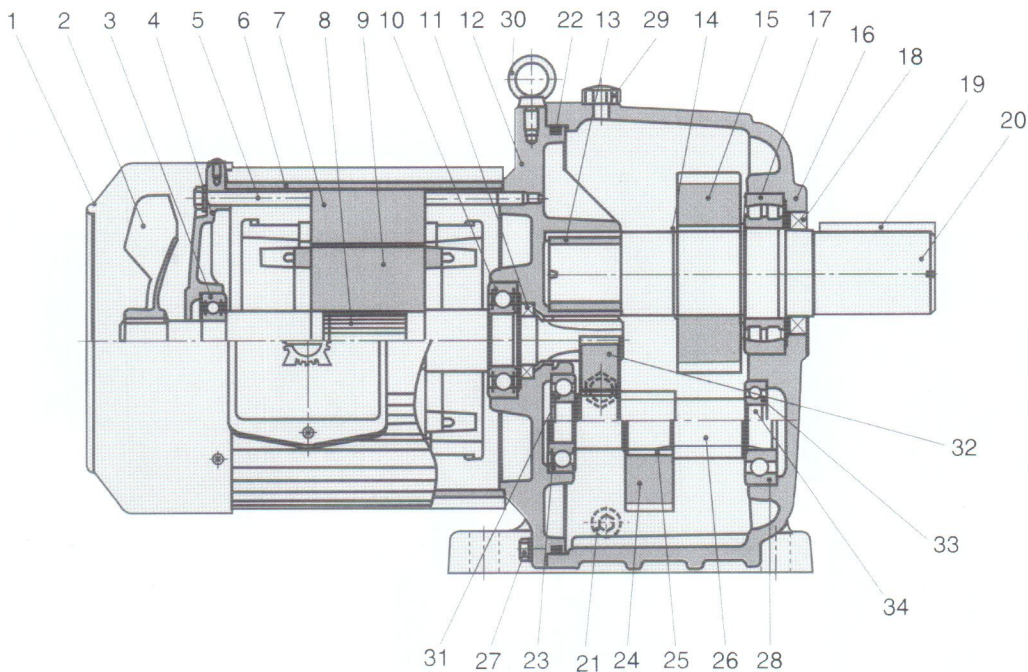
- Designed for high torque and high output duty by plazma models heattreat and SCM
- series material gears.
- Excellent apperances with less size and weight.
- Needless to change lubricanting oll.
- Low vibration, noise and models.
- Various ratios and models.
- High quality of 63 series bearings
- Easy to disassemble by precision processing.
- 92% high efficiency.
- Application of high efficient motor.

내부 구조도(Inside Structure)

PART NAME



1. FAN COVER
2. FAN
3. BEARING
4. REAR BRACKET
5. MOTOR BOLT
6. MOTOR FRAME
7. STATOR
8. MOTOR SHAFT
9. ROTOR
10. BEARING
11. OIL SEAL
12. FRONT BRACKET
13. OILLESS BEARING
14. RETAINING RING
15. 3RD GEAR
16. GEAR CASE
17. BEARING
18. OIL SEAL
19. KEY
20. OUTPUT SHAFT
21. DRAIN PLUG
22. O-RING
23. BEARING
24. 2ND GEAR
25. KEY
26. 3RD PINION GEAR
27. SOCKET BOLT
28. BEARING
29. AIR VENT
30. EYE-BOLT
31. BEARING
32. 1ST GEAR
33. BEARING
34. 2ND PINION GEAR



GEARED MOTOR 기종 형식기호(CODING SYSTEM)

용량 호칭표(CAPACITY)

용량 kW	0.2kW	0.4kW	0.75kW	1.5kW	2.2kW	3.7kW	5.5kW	7.5kW	11kW	15kW
상수 Phase	200W	400W	750W	1500W	2200W	3700W	5500W	7500W	11000W	1500W
삼 상 Three Phase	T020	T040	T075	T150	T220	T370	T550	T750	T1100	T1500
단 상 Single Phase	S200	S400	S750	S1500	S2200	-	-	-	-	-

형 식(TYPE)	형 번(SHAFT)	속 비(RATIO)	용 량(KW)
H	28	50	T040
F	32	100	T075 W

표준전압(STANDARD Voltage)
 - 삼상(Three Phase) 220V/380V 60Hz
 - 단상(Single Phase) 220V 60Hz

W
 고전압(High Voltage)
 삼상(Three Phase) 380V, 440V, 60Hz

용량 (kW)
 T010:삼상(Three Phase)0.1kW S200:삼상(Three Phase)0.1kW
 T020:삼상(Three Phase)0.2kW S400:삼상(Three Phase)0.2kW
 T040:삼상(Three Phase)0.4kW S750:삼상(Three Phase)0.4kW

감속비 (RATIO)
 05 : 1/5
 100 : 1/100

출력축경(Dia of output shaft)

취부구분 (Mounting type)
 H : FOOT MOUNTING
 F : FLANGE MOUNTING

전동기 출력과 형번대조표(TABLE OF MOTOR OUTPUT PER TYPE MODEL)

HP RATIO	1/4HP	1/2HP	1HP	2HP	3HP	5HP	7.5HP	10HP	15HP	20HP
5 : 1	22	22 28	32	38	45 50	45 50 55	50 55 65 70	50 55 65 70	55 65 70 65 70	65 70 80 100
10 : 1	22	22 28	32	38	45 50	45 50 55	50 55 65 70	50 55 65 70	55 65 70 65 70	65 70 80 100
15 : 1	22	22 28	32	38	45 50	45 50 55	50 55 65 70	50 55 65 70	55 65 70 65 70	65 70 80 100
20 : 1	22	22 28	32	38	45 50	45 50 55	50 55 65 70	50 55 65 70	55 65 70 65 70	65 70 80 100
30 : 1	22	22 28	32	38	45 50	45 50 55	50 55 65 70	50 55 65 70	55 65 70 65 70	65 70 80 100
40 : 1	22	22 28	32 38	38 45	45 50	45 50 55	50 55 65 70	50 55 65 70	55 65 70 65 70	65 70 80 100
50 : 1	22	22 28	32 38	38 45	45 50	45 50 55	50 55 65 70	50 55 65 70	55 65 70 65 70	65 70 80 100
60 : 1	22	22 28	32 38	38 45	45 50	45 50 55	50 55 65 70	50 55 65 70	55 65 70 65 70	65 70 80 100
75 : 1	22	22 28	32 38	38 45	45 50	45 50 55	50 55 65 70	50 55 65 70	55 65 70 65 70	65 70 80 100
80 : 1	22	22 28	32 38	38 45	45 50	45 50 55	50 55 65 70	50 55 65 70	55 65 70 65 70	65 70 80 100
90 : 1	22	22 28	32 38	38 45	45 50	45 50 55	50 55 65 70	50 55 65 70	55 65 70 65 70	65 70 80 100
100 : 1	22	22 28	32 38	38 45	45 50	45 50 55	50 55 65 70	50 55 65 70	55 65 70 65 70	65 70 80 100

표준품(Standard Size)

전동기 출력의 선정(SELECTION OF MOTOR SPECIFICATION)

- 부하의 소요토크를 산출합니다.
부하에 변동이 있는 경우에는 등가 토크로 합니다만 부하의 변동 사이클이 분명치 않을 경우에는 최대토크를 사용합니다.
- 감속기 부분의 효율을 고려하여 전동기 소요 토크를 구합니다.

$$\text{전동기 소요토크} = \frac{\text{부하소요토크}}{\text{감속기 부분의 효율}}$$

- 전동기소요토크와 출력축 회전수에서 표1의 토크 - KW환산표로부터 전동기 출력을 구합니다.

4. 선정(예)

출력축 회전수 : 75RPM 부하소요토크 : 40kg - m

토크 - KW환산표로부터 전동기 출력은 3.2KW가 되고 표준 출력 3.7KW를 선정합니다.

- 토크와 출력 회전수의 관계는 다음과 같습니다.

$$T = 974 \times \frac{P}{N}$$

T : 토크 kg - m P : 출력 KW
N : 회전수 RPM

- Calculation of field torque by load.

(Put equivalent torque in case of certain load cycle or max touque in case of uncertain cycle)

- Calculation of motor field torque by geared part efficiency.

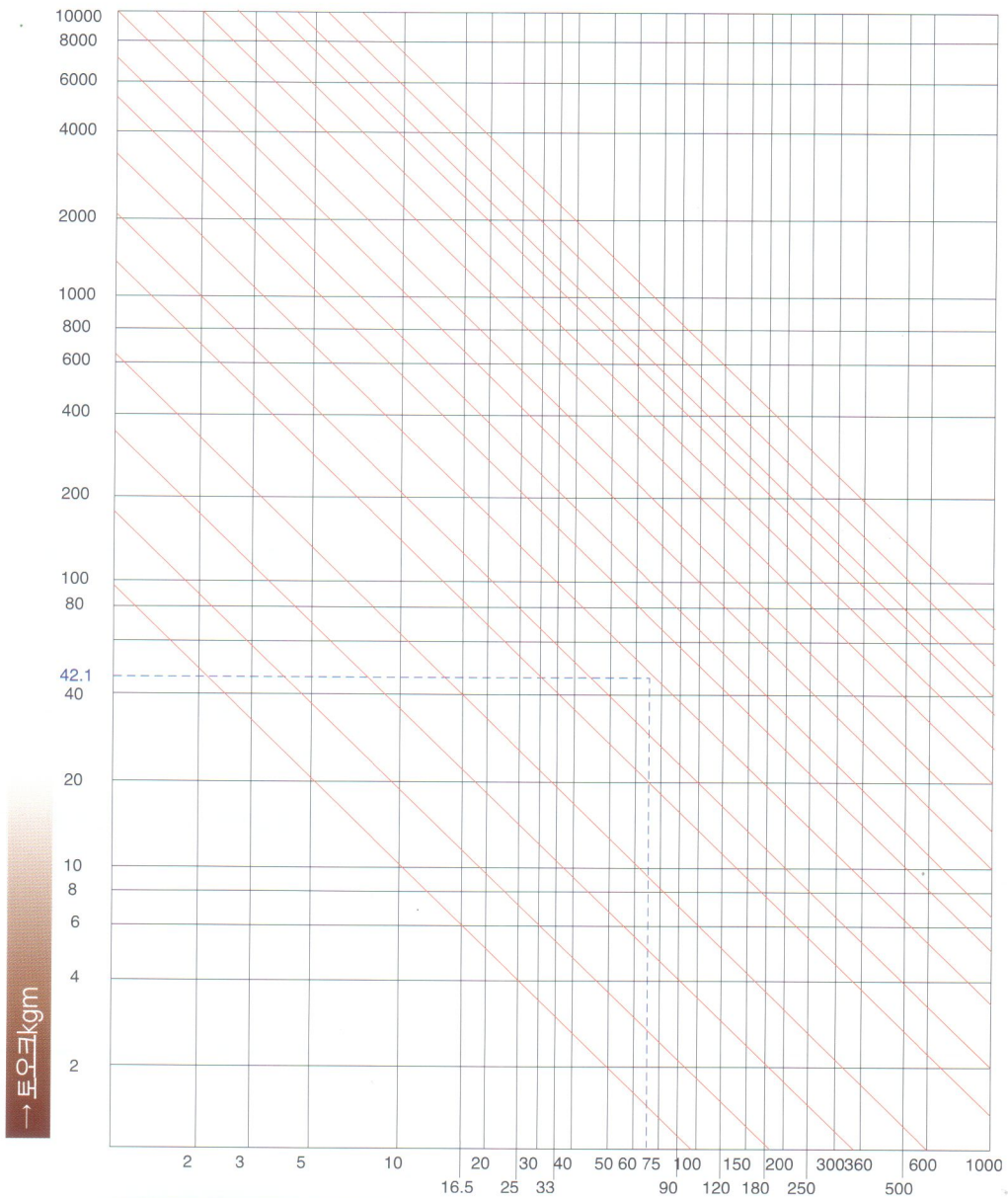
$$\text{motor field torque} = \frac{\text{field torque by load}}{\text{geared parts efficiency}}$$

- Calculation of EXCHANGE TABLE OF TORQUE - kW

$$4. T = 974 \times \frac{P}{N}$$

T:torque(kg-m) P:capacity(kW)
N:revolutions per mimute(RPM)

토크 kW환산표



→ 회전수rpm

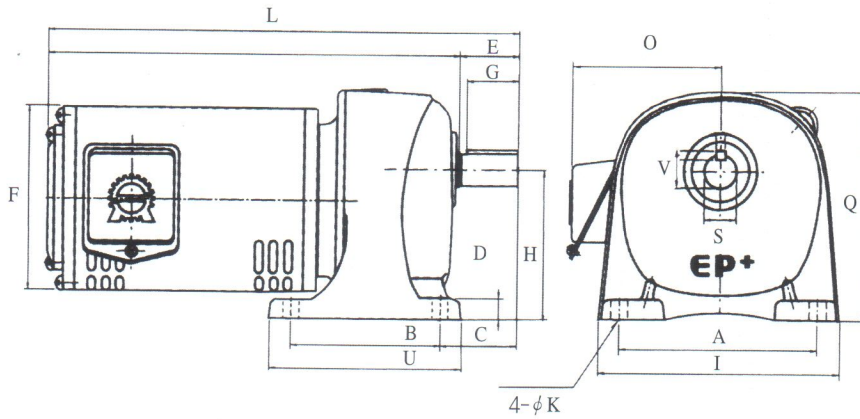
신제품의 특징점(FEATURES OF EP+ GEARED MOTOR)

- ◆ 모든 기어는 특수강을 사용하여 특수 열처리하고 내마모성을 극대화 하였으며 고 토크 고 출력형에 적합함
- ◆ 소형, 경량화 시켰으며 외관이 미려함
- ◆ 반영구적 윤활제 사용 윤활제 교환 불필요
- ◆ 저진동, 저소음, 장수명 보장
- ◆ 다양한 기종과 속비선택
- ◆ 63계열 베어링 채택
- ◆ 정밀 가공하여 분해조립이 용이하고 분해조립시 기밀유지
- ◆ 92%의 고효율
- ◆ 저진동 고효율 모터 채용

- ◆ Designed for high torque and high output duty by plazma heattreat and SCM series material gears.
- ◆ Excellent apperances with less size and weight.
- ◆ Needless to change lubricanting oil.
- ◆ Low vibration, noise and long life span.
- ◆ Various ratios and models.
- ◆ High quality of 63 series bearings.
- ◆ Easy to disassemble by precision processing.
- ◆ 92% high efficiency.
- ◆ Application of high efficient motor.

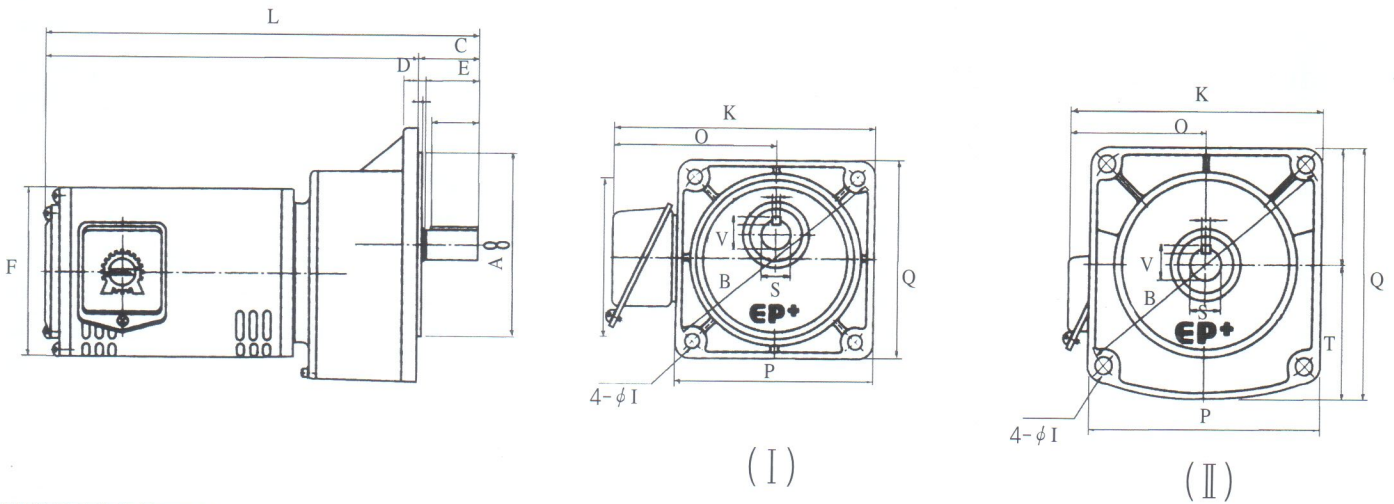
1. IP54와 CE규격이 필요할 경우 상담하여 주시기 바랍니다.
2. 0.2kW~0.75kW까지 AL GEAR CASE가 준비되어 있으므로 용도에 따라 주문하여 주시기 바랍니다.
3. 0.2kW~7.5kW 범위내에 AL MOTOR FRAME0이 준비되어 있습니다.
4. 0.2kW~7.5kW까지 철판 MOTOR FRAME0이 준비되어 있습니다.
5. 5.5kW~15kW까지 주철 MOTOR FRAME0이 준비되어 있으므로 용도에 따라 주문하여 주시기 바랍니다.
6. 기재된 비율외 비율은 주문사양입니다.
7. 기어, 축, 케이스, 오일씰을 교체할 때는 본사로 문의하시기 바라며 비품교체는 감속기 전체를 손상시킬 수 있으므로 주의하시기 바랍니다.
8. 제품의 품질향상을 위하여 예고없이 치수가 변경될 수 있습니다.

EP+(Efficiency & Power Plus) Geared Motor



SINGLE PHASE HORIZONTAL

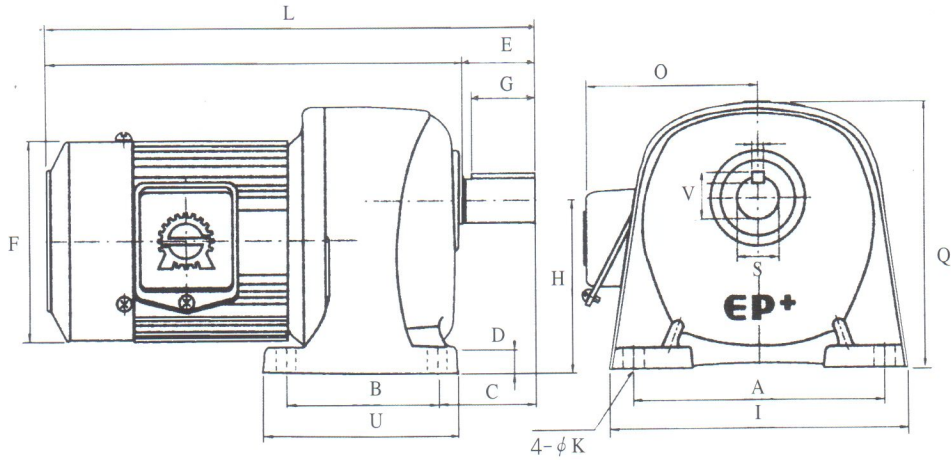
KW(HP)	TYPE	RATIO	L	F	O	A	B	C	D	E	H	I	K	Q	S	U	V	KEY
0.20(1/4)	22	1/ 5-1/100	323	134	123	130	78	55	12	40	88	154	12	137	22	103	24.5	6*6*35
0.40(1/2)	28	1/ 5-1/100	359	144	132	135	90	65	14	45	105	175	12	162	28	125	31.0	8*7*40
0.75(1)	32	1/ 5-1/100	433	165	135	180	135	73	18	55	135	218	15	206	32	173	35.0	10*8*50



SINGLE PHASE VERTICAL

KW(HP)	TYPE	RATIO	L	F	O	A	B	C	D	E	I	K	P	Q	S	U	V	KEY
0.20(1/4)	22(I)	1/ 5-1/100	323	134	123	120	175	46	12	40	11	198	150	150	22		24.5	6*6*35
0.40(1/2)	28(I)	1/ 5-1/100	359	144	132	150	198	50	15	45	11	215	166	166	28		31.0	8*7*40
0.75(1)	32(II)	1/ 5-1/100	434	165	135	180	280	63	15	55	13	250	230	248	32	133	35.0	10*8*50

EP+(Efficiency & Power Plus) Geared Motor

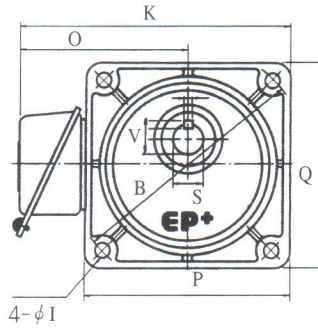
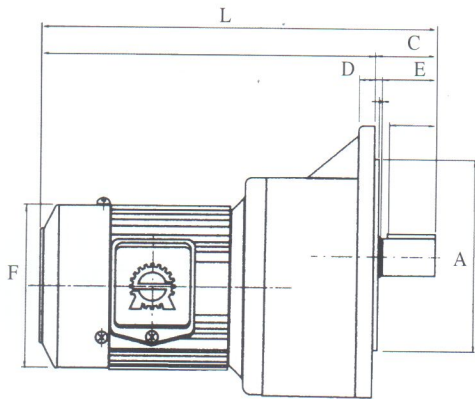


THREE PHASE HORIZONTAL

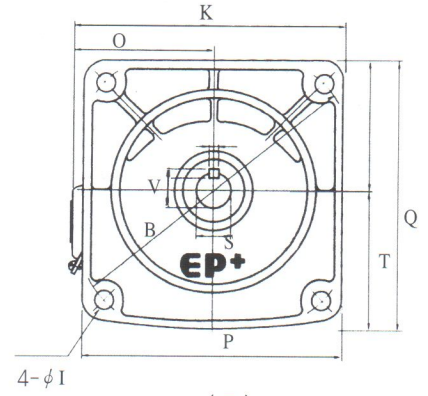
KW(HP)	TYPE	RATIO	L	F	O	A	B	C	D	E	H	I	K	Q	S	U	V	KEY
0.20(1/4)	22	1/ 5-1/100	310	138	123	130	78	55	12	40	88	154	12	137	22	103	24.5	6'6'35
0.40(1/2)	22	1/ 5-1/100	320	138	123	130	78	55	12	40	88	154	12	137	22	103	24.5	6'6'35
0.40(1/2)	28	1/ 5-1/100	339	138	123	135	90	65	14	45	105	175	12	162	28	125	31.0	8'7'40
0.75(1)	32	1/ 5-1/100	400	150	137	180	135	73	18	55	135	218	15	206	32	173	35.0	10'8'50
0.75(1)	38	1/ 5-1/100	455	150	137	215	150	89	20	65	153	259	15	235	38	192	41.0	10'8'60
1.50(2)	38	1/ 5-1/100	463	182	157	215	150	89	20	65	153	259	15	235	38	192	41.0	10'8'60
1.50(2)	45	1/ 5-1/100	490	182	157	232	155 (172)	101	25	70	172	292	19	267	45	205	48.5	14'9'65
2.20(3)	45	1/ 5-1/100	496	213	182	232	155 (172)	101	25	70	172	292	19	267	45	205	48.5	14'9'65
2.20(3)	50	1/10-1/100	514	213	182	240	160 (245)	108	25	75	181	300	19	281	50	210	53.5	14'9'70
3.75(5)	45	1/ 5-1/100	513	213	182	232	155 (172)	101	25	70	172	292	19	267	45	205	48.5	14'9'65
3.75(5)	50	1/ 10-1/100	531	213	182	240	160 (245)	108	25	75	181	300	19	281	50	210	53.5	14'9'70
3.75(5)	55	1/ 5-1/100	567	213	182	270	190 (290)	118	30	85	205	340	24	314	55	248	59.0	16'10'80
5.50(7.5)	55	1/ 5-1/100	613	274	228	270	190 (290)	118	30	85	205	340	24	314	55	248	59.0	16'10'80
5.50(7.5)	65	1/ 5-1/100	656	274	228	310	230 (320)	125	32	95	235	390	24	365	65	288	69.0	18'11'90
7.50(7.5)	55	1/ 5-1/100	651	274	228	270	190 (290)	118	30	85	205	340	24	314	55	248	59.0	16'10'80
7.50(10)	65	1/ 5-1/100	649	274	228	310	230 (320)	125	32	95	235	390	24	365	65	288	69.0	18'11'90
11.0(15)	70	1/ 5-1/100	781	315	240	360	275 (350)	140	38	105	270	452	28	417	70	340	74.5	20'12'100
15.0(20)	70	1/ 5-1/100	826	315	240	360	275 (350)	140	38	105	270	452	28	417	70	340	74.5	20'12'100

*()숫자로 작업가능

EP+(Efficiency & Power Plus) Geared Motor



(I)

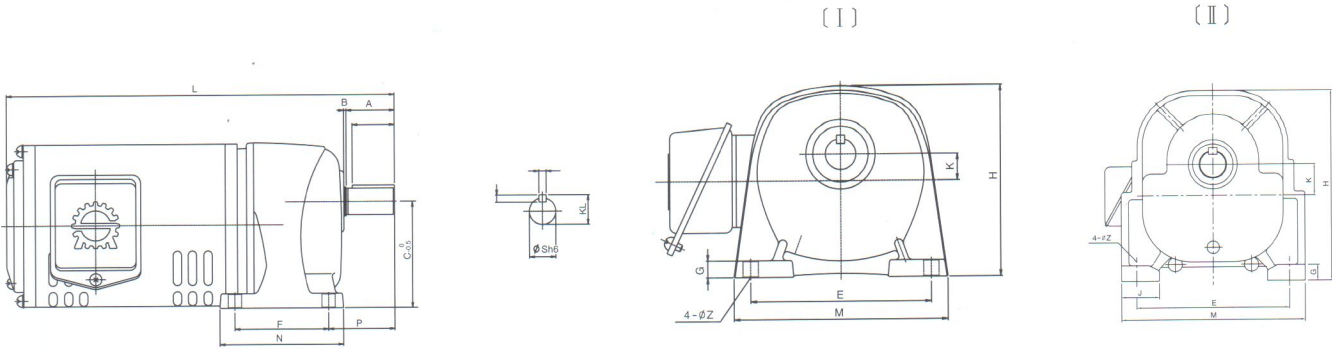


(II)

THREE PHASE VERTICAL

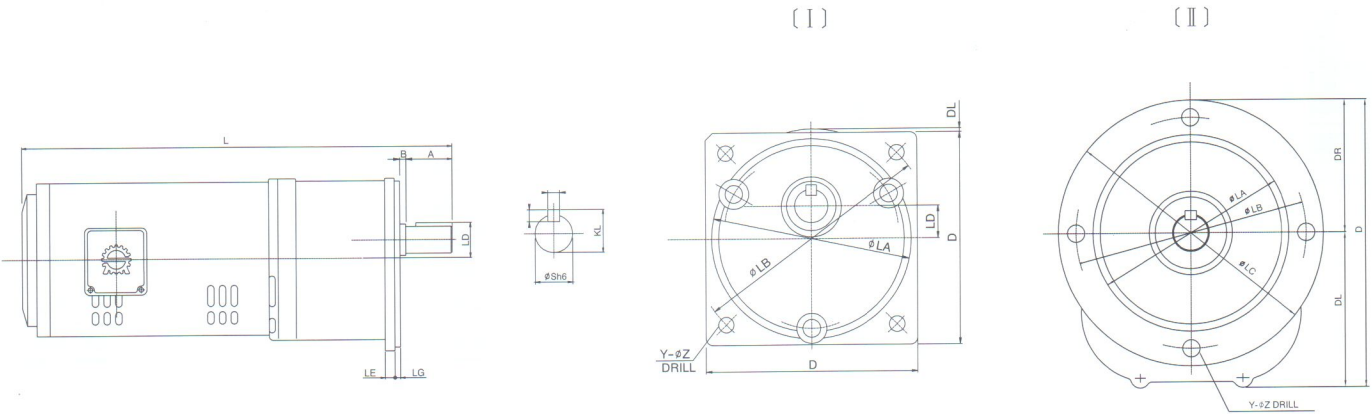
KW(HP)	TYPE	RATIO	L	F	O	A	B	C	D	E	I	K	P	Q	S	T	V	KEY
0.20(1/4)	22 (I)	1/ 5-1/100	310	138	123	120	175	46	12	40	11	198	150	150	22		24.5	6'6'35
0.20(1/2)	22 (I)	1/ 5-1/100	320	138	123	120	175	46	12	40	11	198	150	150	22		24.5	6'6'35
0.40(1/2)	28 (II)	1/ 5-1/100	339	138	123	150	198	50	15	45	11	215	166	166	28		31.0	8'7'40
0.75(1)	32 (II)	1/ 5-1/100	100	150	137	180	280	63	15	55	13	251	230	248	32	133	35.0	10'8'50
0.75(1)	38 (II)	1/40-1/100	445	150	137	230	330	73	18	65	18	251	284	295	38	152	41.0	10'8'60
1.50(2)	38 (II)	1/ 5-1/100	463	182	157	230	330	73	18	65	18	299	284	295	38	157	41.0	10'8'60
1.50(2)	45 (II)	1/20-1/100	477	182		250	370	77	21	70	22		320	335	45	175	48.5	14'9'65
2.20(3)	45 (II)	1/ 5-1/100	496	213	182	250	370	77	21	70	22	342	320	329	45	169	48.5	14'9'65
2.20(3)	50 (II)	1/ 10-1/100	514	213	182	270	400	84	25	75	22	352	340	350	50	180	53.5	14'9'70
3.75(5)	45 (II)	1/ 5-1/100	513	213	182	250	370	77	21	70	22	342	320	329	45	169	48.5	14'9'65
3.75(5)	50 (II)	1/ 10-1/100	531	213	182	270	400	84	25	75	22	352	340	350	50	180	53.5	14'9'70
3.75(5)	55 (II)	1/ 5-1/100	580	213		290	450	93	30	85	27		370	390	55	205	59.0	16'10'80
5.50(7.5)	55 (II)	1/ 5-1/100	613	274	228	290	450	93	30	85	27	413	370	390	55	202	59.0	16'10'80
5.50(7.5)	65 (II)	1/ 5-1/100	656	274	228	350	500	104	35	95	27	433	410	440	65	235	69.0	18'11'90
7.50(10)	55 (II)	1/ 5-1/100	651	274	228	290	450	93	30	85	27	413	370	390	55	202	59.0	16'10'80
7.50(10)	65 (II)	1/ 5-1/100	694	274	228	350	500	104	35	95	27	433	410	440	65	235	69.0	18'11'90

■ 구형 HORIZONTAL TYPE



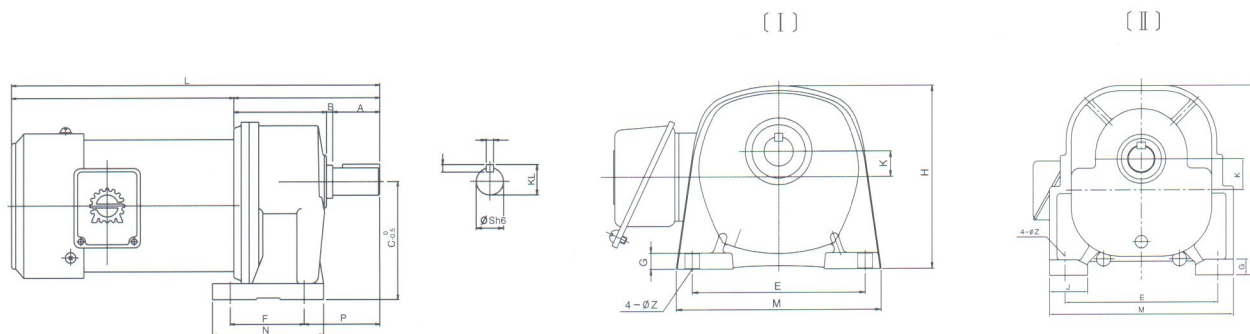
PHASE	KW(HP)	TYPE	RATIO	FIG	A	B	C	E	F	G	H	J	K	L	M	N	P	S	KL	O	KEY	WEIGHT
SINGLE	0.20(1/4)	22	1/ 5-1/100	I	38	5	95	130	60	13	143	32	19	395	161	90	61	22	25		7*7*30	
	0.75(1)	32	1/ 5-1/100	II	58	7	135	180	135	18	220	43	36	407	214	170	73.5	32	35.3		10*8*45	

■ 구형 VERTICAL TYPE



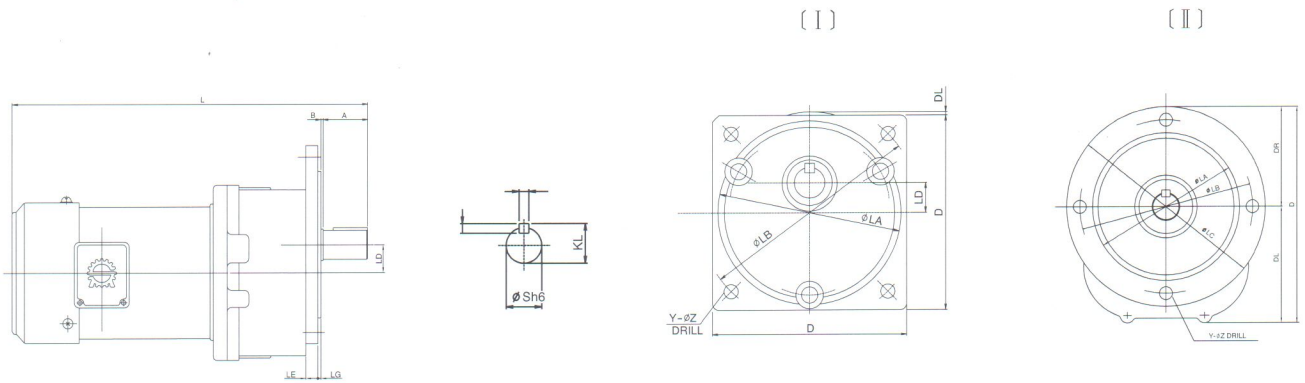
PHASE	KW(HP)	TYPE	RATIO	FIG	A	B	D	DL	DR	K	L	LA	LB	LC	LD	LE	LG	S	KL	Y	Z	KEY	WEIGHT
SINGLE	0.20(1/4)	22	1/ 5-1/100	I	38	5	140	5			395	132	160		21.5	8	4.5	22	25	4	12	7*7*30	
	0.75(1)	32	1/ 5-1/100	II	58	7	249	134	115	0	407	170	200	230	36	15	3	32	35.3	4	15	10*8*45	

■ 구형 HORIZONTAL TYPE



PHASE	KW(HP)	TYPE	RATIO	FIG	A	B	C	E	F	G	H	J	K	L	M	N	P	S	KL	O	KEY	WEIGHT
THREE	0.20(1/4)	22(I)	1/ 5-1/100	I	38	5	95	130	60	13	143	32	19	298	161	90	61	22	25	123	7*7*30	10
	0.40(1/2)	22(I)	1/ 5-1/100	I	38	5	95	130	60	13	143	32	19	305	161	90	61	22	25	123	7*7*30	16
	0.40(1/2)	28(II)	1/ 5-1/100	II	41	3	118	150	114	16	186	43	26	332	182	148	60	28	31.3	123	8*7*35	20
	0.75(1)	32(II)	1/ 5-1/100	II	58	7	135	180	135	18	220	43	36	396	214	170	73.5	32	35.3	131	10*8*45	27
	0.75(1)	38(II)	1/ 5-1/100	II	58	3	153	214	150	22	244	51	36.5	423	254	190	83	38	41.3	131	10*8*45	41
	1.10(2)	38(II)	1/ 5-1/100	II	58	3	153	214	150	22	244	51	36.5	467	254	190	83	38	41.3	152	10*8*45	47
	1.10(2)	45(I)	1/ 5-1/100	II	82	5	172	232	172	24	285	61	42.1	510	283	218	106.5	45	48.8	152	14*9*65	61
	2.20(3)	45(I)	1/ 5-1/100	II	82	5	172	232	172	24	285	61	42.1	492	283	218	106.5	45	48.8	177	14*9*65	70
	2.20(3)	50(I)	1/10-1/100	II	82	5	181	241	245	28	300	74	40.5	526	315	307	121	50	54.3	177	16*10*70	86
	3.75(5)	45(I)	1/ 5-1/100	II	82	5	172	232	172	24	285	61	42.1	522	283	218	106.5	45	48.8	177	14*9*65	78
	3.75(5)	50(I)	1/10-1/100	II	82	5	181	241	245	28	300	74	40.5	556	315	307	121	50	54.3	177	16*10*70	94

■ 구형 VERTICAL TYPE

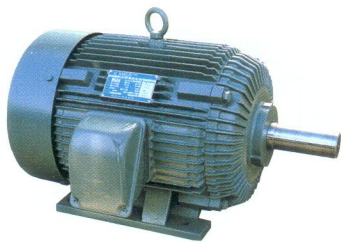
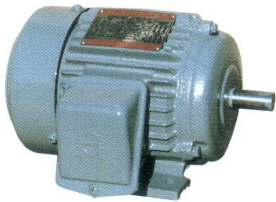


PHASE	KW(HP)	TYPE	RATIO	FIG	A	B	D	DL	DR	K	L	LA	LB	LC	LD	LE	LG	S	KL	Y	Z	KEY	WEIGHT
THREE	0.20(1/4)	22(I)	1/5-1/100	I	38	5	140	113	5		298	132	160		19	8	4.5	22	25	4	12	7*7*30	9
	0.40(1/2)	22(I)	1/5-1/100	I	38	5	140	113	5		308	132	160		19	8	4.5	22	25	4	12	7*7*30	15
	0.40(1/2)	28(II)	1/5-1/100	II	41	3	205	110	96	5	332	140	165	191	26	14	3	28	31.3	4	12	8*7*35	21
	0.75(1)	32(II)	1/10-1/100	II	58	7	249	134	115	0	396	170	200	230	36	15	3	32	35.3	4	15	10*8*45	27
	0.75(1)	38(II)	1/10-1/100	II	58	3	281	151	130	8	423	200	230	260	36.5	16	4	38	41.5	4	15	10*8*45	41
	1.10(2)	38(II)	1/10-1/100	II	58	3	281	151	130	8	467	200	230	260	36.5	16	4	38	41.5	4	15	10*8*45	46
	1.10(2)	45(I)	1/10-1/100	II	82	5	322	167	155	5	510	240	275	310	42.1	18	4	45	48.8	4	19	14*9*65	59
	2.20(3)	45(I)	1/10-1/100	II	82	5	322	167	155	5	492	240	275	310	42.1	18	4	45	48.8	4	19	14*9*65	68
	2.20(3)	50(I)	1/10-1/100	II	82	5	349	179	170	5	526	275	310	340	40.5	18	4	50	54.3	6	15	16*10*70	76
	3.75(5)	45(I)	1/10-1/100	II	82	5	322	167	155	5	522	240	275	310	42.1	18	4	45	48.8	4	19	14*9*65	76
	3.75(5)	50(I)	1/10-1/100	II	82	5	349	179	170	5	556	275	310	340	40.5	18	4	50	54.3	6	15	16*10*70	84

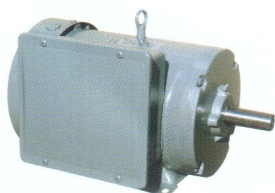
Products

SHIN MYUNG MOTORS

삼상 (Three Phase Induction Motors)



단상 (Single Phase Induction Motors)



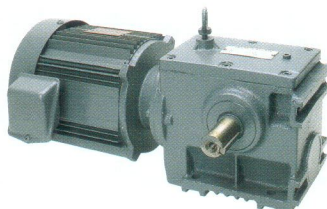
유압펌프용 (For Hydraulic Pump)



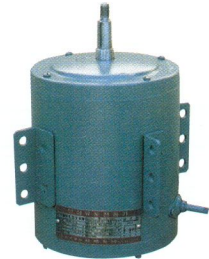
방진형 (Cradle Base)



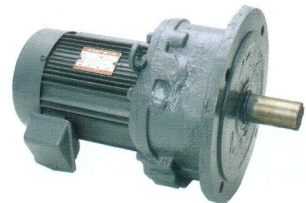
G / M (Helical-Worm G/M)



건조기용 (For Furnace)



G / M (Geared Motors)



V / T (Flange Type Motors)



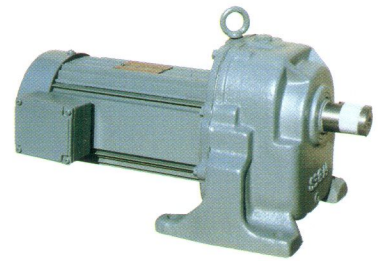
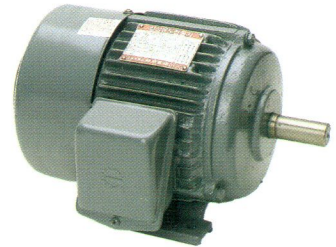
세탁기용 (For Laundry)



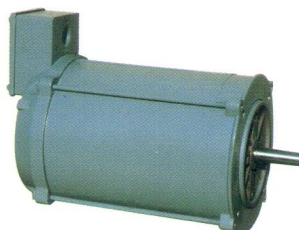
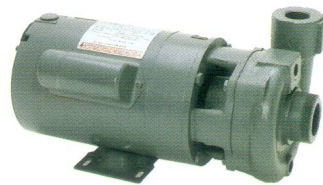
공작기계용 (For Machine Tools)



B / K (Brake Motors)



그외 특수품 (Specials)



목공용 (For Wood Work)



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