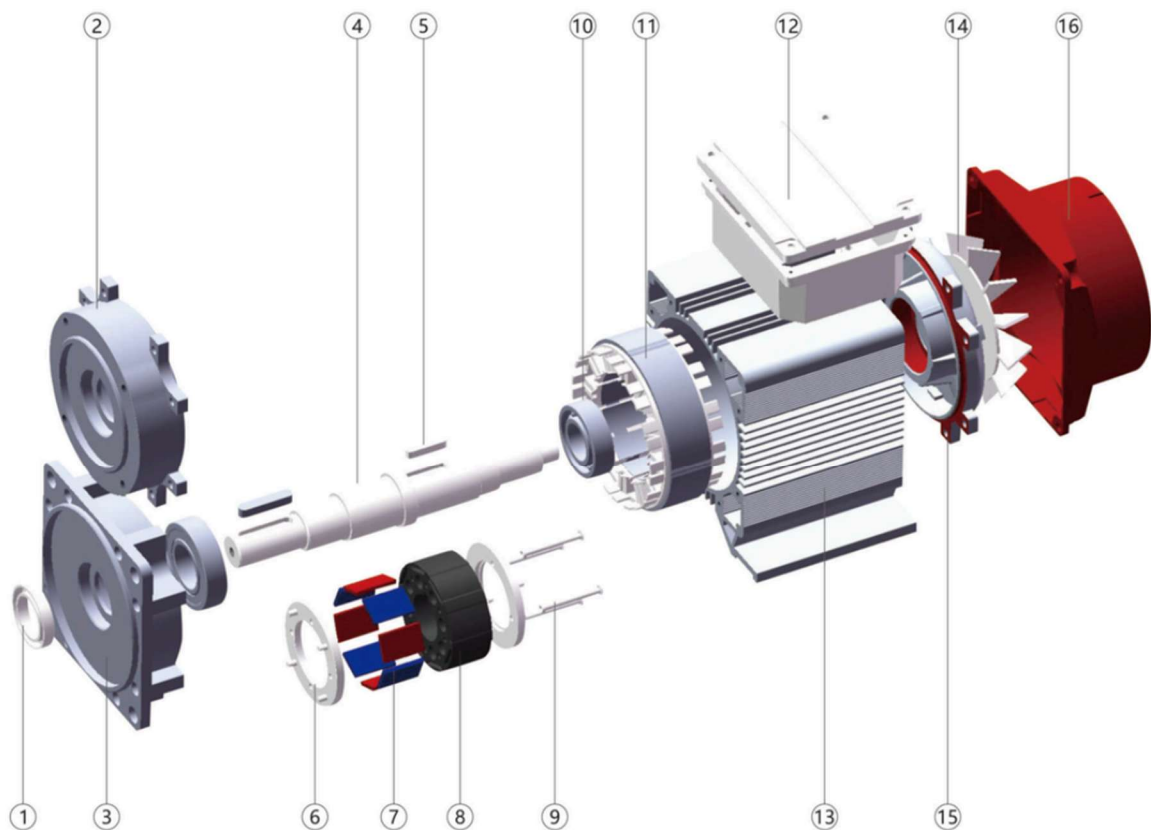


제품 분해도 Exploded View



Number	Name	Number	Name
1	Skeleton oil seal 골격 오일씰	9	Stainless steel rivet 스테인리스 리벳
2	B14 front endshield B14 앞카바	10	Bearing 베어링링
3	B5 front endshield B5 앞카바	11	Stator iron core 고정자 철심
4	Shaft 모터축	12	Terminal box 리드박스
5	A type key a형 키	13	Frame 후레임
6	Rotor cover 로타 카바	14	Fan 팬
7	Permanent magnet 영구자석	15	Rear endshield 뒷카바
8	Rotor iron core 로타 철심	16	Fan cowl 팬 카바

제품소개

SMC의 PMSM 시리즈 영구자석 동기 전동기는 적용 범위가 넓고, 고효율 · 고출력 밀도를 갖춘 신형 구동 제품입니다.

본 제품은 고성능 희토류 영구자석을 사용하였으며 인버터를 통해 구동됩니다. 넓은 속도 조절 범위와 빠르고 정밀한 동적 응답, 안정적인 회전 속도, 소형 · 경량 설계, 브러시 및 손실 부품이 없는 구조, 높은 토크, 무단 속도 제어, 정 · 역회전 제어 등의 특징을 갖추고 있습니다. 또한 높은 역률과 효율성을 제공하며, 최대 50%의 에너지 절감 효과를 실현할 수 있습니다.

반년 정도 사용하면 전동기 투자 비용 회수가 가능하며, 일반 유도전동기와 비교했을 때 부하 변동 폭이 큰 환경에서도 안정적으로 높은 효율과 높은 역률을 유지할 수 있습니다.

따라서 고효율 송풍기, 펌프, 증압기, 디지털 자동화 설비, 섬유 산업, 산업용 팬, 공기 압축기 등 다양한 분야에 적합합니다.

제품성능 및 특징

1. 고효율 · 에너지 절감

고성능 희토류 영구자석 재료와 특수한 고정자 슬롯 및 회전자구조를 적용하여, 전동기 효율이 IE5 기준에 도달하였습니다.

2. 고성능

회전 관성이 작고 시동 토크가 크며, 운전 주파수 범위가 더욱 넓습니다.

3. 소형 경량화

동일 출력의 유도전동기 대비 프레임 크기를 1~2단계 축소하여 더욱 콤팩트한 설계를 구현하였습니다.

4. 높은 신뢰성

전류 감소, 온도 상승 저감, 전동기 수명 연장 효과를 제공합니다.

5. 모듈형 설계

독립 구동 팬, 엔코더 등 다양한 모듈을 유연하게 구성할 수 있습니다.

6. 우수한 적용 성

다양한 가혹한 작업 환경은 물론, 장시간 저속 운전 및 빈번한 기동 환경에도 적용 가능합니다.

7. 높은 범용성

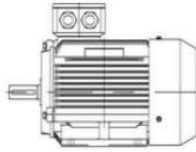
유도전동기와 동일한 구조로 설계되어 기존 유도전동기를 직접 대체할 수 있습니다.

8. 간편한 제어

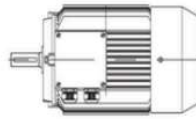
인버터 벡터 제어 방식을 적용하여 높은 제어 정밀도를 구현하고 고장 발생 요소를 줄였습니다.

설치방식

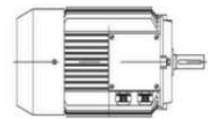
IM B3
IM 1001
63-450



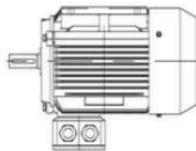
IM B6
IM 1051
63-160



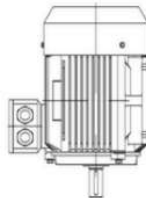
IM B7
IM 1061
63-160



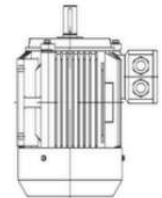
IM B8
IM 1071
63-160



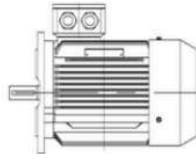
IM V5
IM 1011
63-160



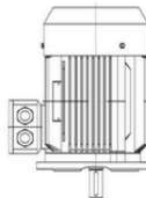
IM V6
IM 1031
63-160



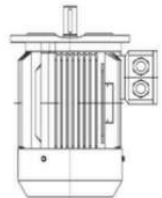
IM B5
IM 3001
63-280



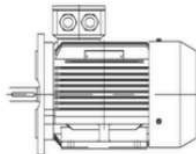
IM V1
IM 3011
63-450



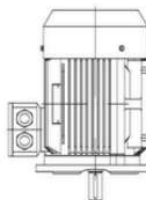
IM V3
IM 3031
63-160



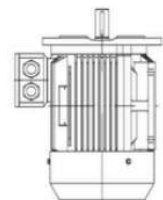
IM B35
IM 2001
63-450



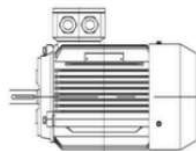
IM V15
IM 2011
63-160



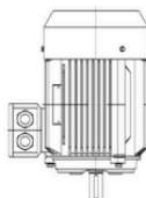
IM V35
IM 2031
63-160



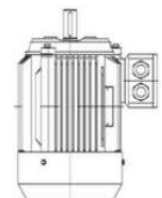
IM B14
IM 3601
63-132



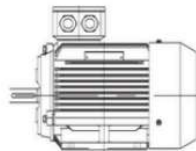
IM V18
IM 3611
63-132



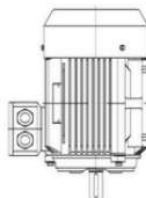
IM V19
IM 3631
63-132



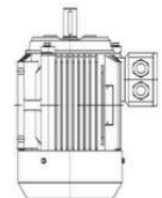
IM B34
IM 2101
63-132



IM V17
IM 2111
63-132



IM V37
IM 2131
63-132



효율 제한 값

Nominal efficiency limits(%)for 50Hz									
PN kW	Number of poles/synehromous speed				PN kW	Number of poles/synehromous speed			
	2/3000	4/1500	6/1000	8/750		2/3000	4/1500	6/1000	8/750
0.12	71.4	74.3	69.8	67.4	11	94.0	94.6	93.7	92.2
0.18	75.2	78.7	74.6	71.9	15	94.5	95.1	94.3	92.0
0.20	76.2	79.6	75.7	73.0	18.5	94.9	95.3	94.6	93.3
0.25	78.3	81.5	78.1	75.2	22	95.1	95.5	94.9	93.6
0.37	81.7	84.3	81.6	78.4	30	95.5	95.9	95.3	94.1
0.40	82.3	84.8	82.2	78.9	37	95.8	96.1	95.6	94.4
0.55	84.6	86.7	84.2	80.6	45	96.0	96.3	95.8	94.7
0.75	86.3	88.2	85.7	82.0	55	96.2	96.5	96.0	94.9
1.1	87.8	89.5	87.2	84.0	75	96.5	96.7	96.3	95.3
1.5	88.9	90.4	88.4	85.5	90	96.6	96.9	96.5	95.5
2.2	90.2	91.4	89.7	87.2	110	96.8	97.0	96.6	95.7
3	91.1	92.1	90.6	88.4	132	96.9	97.1	96.8	95.9
4	91.8	92.8	91.4	89.4	160	97.0	97.2	96.9	96.1
5.5	92.6	93.4	92.2	90.4	200	97.2	97.4	97.0	96.3
7.5	93.3	94.0	92.9	91.3	250	97.2	97.4	97.0	96.3
					315-1000	97.2	97.4	97.0	96.3

제품개요

SMC 의 PMSM 시리즈 초고효율 삼상 유도전동기는 전폐 외부 팬 냉각형 삼상 유도 전동기입니다. 이는 국제전기기술위원회(IEC) 기준에서 정의하는 가장 높은 수준의 초고효율 (Ultra Premium) 모터 등급입니다.

본 시리즈 전동기의 프레임 범위는 80~355이며, 출력 등급 및 설치 치수는 IEC60072-1 및 IEC60072-2 표준 규정을 준수합니다.

사용조건

Ambient temperature: $-15^{\circ}\text{C} < 0 < 40^{\circ}\text{C}$
 Altitude: Not exceeding 1000m
 Rated voltage: 220V-480V
 Rated Frequency: 0-200Hz
 Protection class: IP55
 Insulation class: H
 Cooling method: IC411
 Working mode: S1

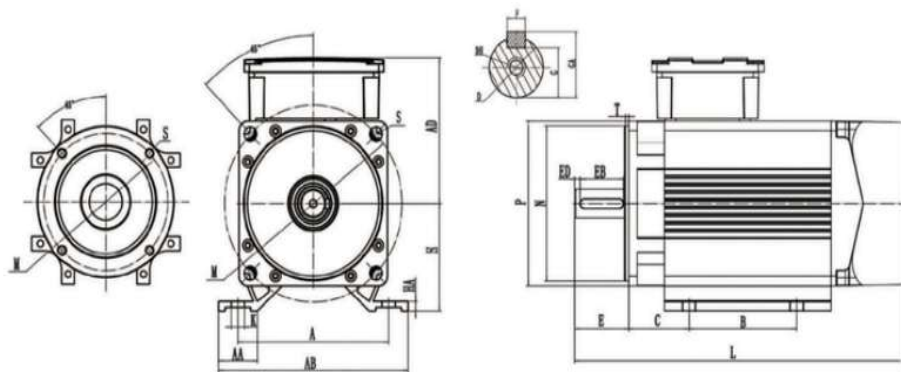
주변 온도: $-15^{\circ}\text{C} < 0 < 40^{\circ}\text{C}$
 해발 고도: 1,000m 이하
 정격 전압: 220V~480V
 주파수: 0~200Hz
 보호 등급: IP55:
 절연등급: H
 냉각 방식: IC411
 운전 방식: S1 (연속 운전)

기술사양(알루미늄 프레임)

Type	Power		Voltage (V)	Current (A)	Frequency (Hz)	Speed (r/min)	Eff (%)	Power Factor (Cos Φ)	Rated Torque (Nm)	Protection Class (IP)
	HP	kW								
ZLTZ-120-80	0.55	0.75	220	1.8	100	1500	86.1	0.96	3.5	55
ZLTZ-120-80	0.75	1.1	220	2.5	100	1500	86.7	0.96	4.8	55
ZLTZ-120-80	1.1	1.5	220	3.6	100	1500	88.6	0.96	7.0	55
ZLTZ-120-80	1.5	2.0	220	4.9	100	1500	89.3	0.96	9.5	55
ZLTZ-120-90S	1.1	1.5	220	2.5	100	1500	88.6	0.96	7.0	55
ZLTZ-120-90S	1.5	2.0	220	4.9	100	1500	89.3	0.96	9.5	55
ZLTZ-120-90L	2.2	3.0	220	7.0	100	1500	90.2	0.96	14.0	55
ZLTZ-120-90L	3.0	4.0	220	9.5	100	1500	90.5	0.96	19.0	55
ZLTZ-180-112S	4.0	5.5	220	12.6	100	1500	91.2	0.96	25.5	55
ZLTZ-180-112S	5.5	7.5	220	16.9	100	1500	92.6	0.96	35.0	55
ZLTZ-180-112L	7.5	10.0	220	22.8	100	1500	93.2	0.96	48.0	55
ZLTZ-210-132S	7.5	10.0	220	22.6	100	1500	93.4	0.96	48.0	55
ZLTZ-210-132S	11.0	15.0	220	33.7	100	1500	93.7	0.96	70.0	55
ZLTZ-120-80	0.55	0.75	220	1.8	200	3000	87.6	0.97	1.7	55
ZLTZ-120-80	0.75	1.1	220	2.5	200	3000	88.9	0.97	2.4	55
ZLTZ-120-80	1.1	1.5	220	3.5	200	3000	90.1	0.97	3.5	55
ZLTZ-120-80	1.5	2.0	220	3.0	200	3000	91.2	0.97	4.8	55
ZLTZ-120-80	2.2	3.0	220	7.0	200	3000	92.2	0.97	7.0	55
ZLTZ-120-90S	1.1	1.5	220	3.5	200	3000	90.1	0.97	3.5	55
ZLTZ-120-90S	1.5	2.0	220	4.9	200	3000	91.1	0.97	4.8	55
ZLTZ-120-90S	2.2	3.0	220	7.0	200	3000	92.2	0.97	7.0	55
ZLTZ-120-90S	3.0	4.0	220	9.5	200	3000	92.7	0.97	9.5	55
ZLTZ-120-90L	3.0	4.0	220	9.5	200	3000	92.7	0.97	9.5	55
ZLTZ-120-90L	4.0	5.5	220	12.5	200	3000	93.7	0.97	12.7	55
ZLTZ-180-112S	4.0	5.5	220	12.0	200	3000	93.7	0.97	12.7	55
ZLTZ-180-112S	5.5	7.5	220	16.7	200	3000	94	0.97	17.5	55
ZLTZ-180-112S	7.5	10.0	220	23.0	200	3000	94.5	0.97	24.0	55
ZLTZ-180-112S	11.0	10.0	220	33.0	200	3000	95	0.97	35.0	55
ZLTZ-180-112S	11.0	10.0	220	33.0	200	3000	95	0.97	35.0	55
ZLTZ-210-132S	11.0	15.0	220	32.0	200	3000	95.4	0.97	35.0	55

Type	Power		Voltage (V)	Current (A)	Frequency (Hz)	Speed (r/min)	Eff (%)	Power Factor (Cos Φ)	Rated Torque (Nm)	Protection Class (IP)
	HP	kW								
ZLTZ-120-80	0.55	0.75	380	1.1	100	1500	86.1	0.96	3.5	55
ZLTZ-120-80	0.75	1.1	380	1.5	100	1500	86.7	0.96	4.8	55
ZLTZ-120-80	1.1	1.5	380	2.0	100	1500	88.6	0.96	7.0	55
ZLTZ-120-80	1.5	2.0	380	3.0	100	1500	89.3	0.96	9.5	55
ZLTZ-120-90S	1.1	1.5	380	2.0	100	1500	88.6	0.96	7.0	55
ZLTZ-120-90S	1.5	2.0	380	3.0	100	1500	89.3	0.96	9.5	55
ZLTZ-120-90L	2.2	3.0	380	4.1	100	1500	90.2	0.96	14.0	55
ZLTZ-120-90L	3.0	4.0	380	5.6	100	1500	90.5	0.96	19.0	55
ZLTZ-180-112S	4.0	5.5	380	7.6	100	1500	91.2	0.96	25.5	55
ZLTZ-180-112S	5.5	7.5	380	10.3	100	1500	92.6	0.96	35.0	55
ZLTZ-180-112L	7.5	10.0	380	13.7	100	1500	93.2	0.96	48.0	55
ZLTZ-210-132S	7.5	10.0	380	13.7	100	1500	93.4	0.96	48.0	55
ZLTZ-210-132S	11.0	15.0	380	19.5	100	1500	93.7	0.96	70.0	55
ZLTZ-210-132L	15.0	20.0	380	27.0	100	1500	94.6	0.96	95.5	55
ZLTZ-210-132L	18.5	25.0	380	33.5	100	1500	95.1	0.96	118.0	55
ZLTZ-120-80	0.55	0.75	380	1.1	200	3000	87.6	0.97	1.7	55
ZLTZ-120-80	0.75	1.1	380	1.5	200	3000	88.9	0.97	2.4	55
ZLTZ-120-80	1.1	1.5	380	2.1	200	3000	90.1	0.97	3.5	55
ZLTZ-120-80	1.5	2.0	380	3.0	200	3000	91.2	0.97	4.8	55
ZLTZ-120-80	2.2	3.0	380	4.2	200	3000	92.2	0.97	7.0	55
ZLTZ-120-90S	1.1	1.5	380	2.1	200	3000	90.1	0.97	3.5	55
ZLTZ-120-90S	1.5	2.0	380	3.0	200	3000	91.1	0.97	4.8	55
ZLTZ-120-90S	2.2	3.0	380	4.2	200	3000	92.2	0.97	7.0	55
ZLTZ-120-90S	3.0	4.0	380	5.7	200	3000	92.7	0.97	9.5	55
ZLTZ-120-90L	3.0	4.0	380	5.7	200	3000	92.7	0.97	9.5	55
ZLTZ-120-90L	4.0	5.5	380	7.5	200	3000	93.7	0.97	12.7	55
ZLTZ-180-112S	4.0	5.5	380	7.5	200	3000	93.7	0.97	12.7	55
ZLTZ-180-112S	5.5	7.5	380	10.0	200	3000	94	0.97	17.5	55
ZLTZ-180-112S	7.5	10.0	380	13.6	200	3000	94.5	0.97	24.0	55
ZLTZ-180-112S	11.0	10.0	380	19.7	200	3000	95	0.97	35.0	55
ZLTZ-180-112L	11.0	10.0	380	19.7	200	3000	95	0.97	35.0	55
ZLTZ-180-112L	15.0	10.0	380	27.0	200	3000	95.5	0.97	48.0	55
ZLTZ-210-132S	11.0	15.0	380	19.0	200	3000	95.4	0.97	35.0	55
ZLTZ-210-132S	15.0	20.0	380	26.0	200	3000	95.6	0.97	48.0	55
ZLTZ-210-132L	18.5	25.0	380	32.0	200	3000	95.5	0.97	59.0	55
ZLTZ-210-132L	22.0	30.0	380	38.5	200	3000	96	0.97	70.0	55

외형 및 장착 치수



型号	A	AA	AB	AD	B	C	D	DH	E	EB	ED	F	G	GA	H	HA	K	L	B5					B14			
																			M	N	P	S	T	M	N	S	T
80	125	34	160	147	100	50	19	M6×16	40	30	5	6	15.5	21.5	80	10	4-Φ10	284	165	130	200	12	3.5	100	80	M6	3
90S	140	36	176	122	100	56	24	M8×19	50	40	5	8	20	27	92	8	4-Φ10	305	165	130	138	12	4	115	95	M8	3
90L	140	36	176	122	100	56	24	M8×19	50	40	5	8	20	27	92	8	4-Φ10	325	165	130	138	12	4	115	95	M8	3
112S	190	50	240	153.5	140	89	38	M10×22	80	70	7.5	10	33	41	112	10	4-Φ12	501	215	180	198	14.5	4				
112M	190	50	240	153.5	140(178)	89	38	M10×22	80	70	7.5	10	33	41	112	10	4-Φ12	541	215	180	198	14.5	4				
112L	190	50	240	153.5	140(210)	89	38	M10×22	80	70	7.5	10	33	41	112	10	4-Φ12	571	215	180	198	14.5	4				
132S	216	55	262	203	140	89	38	M12×28	80	70	7.5	10	33	41	132	18	4-Φ12	470	265	230	300	14.5	4	165	130	M10	3.5
132M	216	55	262	203	178	89	38	M12×28	80	70	7.5	10	33	41	132	18	4-Φ12	508	265	230	300	14.5	4	165	130	M10	3.5

기술사양(2극, 3,000rpm)

Type	Rated Power (kW)	Rated Speed (r/min)	Rated Torque (Nm)	Rated Current (A)	Eff (%)	Drive Unit Input	Weight (kg)
Synchronous Speed 3000r/min (2 Poles)							
ZLTZ-71-1.1-30	1.1	3000	3.5	2.3	89.8	Three Phase 220V~480V(50/60Hz)	13.8
ZLTZ-71-1.5-30	1.5	3000	4.8	3	90.9		15.0
ZLTZ-80M-2.2-30	2.2	3000	7.0	4.4	91.8		16.8
ZLTZ-80M-3-30	3	3000	9.6	5.9	92.6		18.1
ZLTZ-90S-4-30	4	3000	12.7	7.8	93.3		23.6
ZLTZ-90L-5.5-30	5.5	3000	17.5	10.6	94.0		27.5
ZLTZ-112M-7.5-30	7.5	3000	23.9	14.5	94.5		37.5
ZLTZ-112M-11-30	11	3000	35.0	21.1	95.0		42.3
ZLTZ-132S-15-30	15	3000	47.8	28.1	95.3		75.6
ZLTZ-160M-18.5-30	18.5	3000	58.9	34.4	95.6		102
ZLTZ-160M-22-30	22	3000	70.0	40.8	95.9	Three Phase 380V~480V(50/60Hz)	108
ZLTZ-180M-30-30	30	3000	95.5	55.5	96.1		142
ZLTZ-180M-37-30	37	3000	118	68.3	96.3		165
ZLTZ-180M-45-30	45	3000	143	83.0	96.4		178
ZLTZ-200L-55-30	55	3000	175	101	96.5		260
ZLTZ-225S-75-30	75	3000	239	138	96.6		273
ZLTZ-225S-90-30	90	3000	287	165	96.7		295
ZLTZ-225M-110-30	110	3000	350	202	96.7		307
ZLTZ-250M-132-30	132	3000	420	242	96.8		298
ZLTZ-250M-160-30	160	3000	509	294	96.8		322
ZLTZ-280S-200-30	200	3000	637	367	96.9		525
ZLTZ-280M-250-30	250	3000	796	458	96.9		570
ZLTZ-315S-315-30	315	3000	1003	577	97.0		763

기술사양(4극, 1,500rpm)

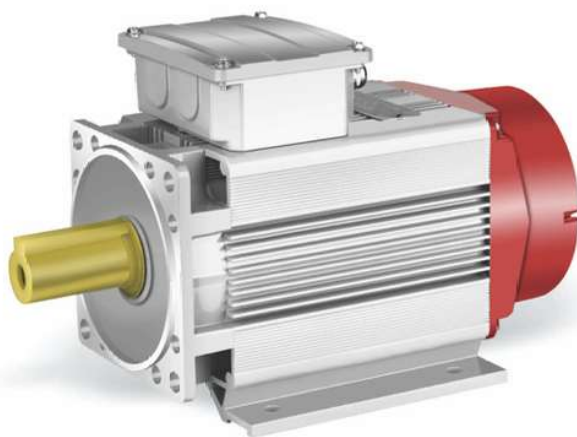
Type	Rated Power (kW)	Rated Speed (r/min)	Rated Torque (Nm)	Rated Current (A)	Eff (%)	Drive Unit Input	Weight (kg)
Synchronous Speed 1500r/min (4 Poles)							
ZLTZ-71-0.55-15	0.55	1500	3.5	1.2	85.6	Three Phase 220V~480V(50/60Hz)	14
ZLTZ-71-0.75-15	0.75	1500	4.8	1.6	87.4		15.2
ZLTZ-80M-1.1-15	1.1	1500	7.0	2.2	88.7		16.5
ZLTZ-80M-1.5-15	1.5	1500	9.6	3.0	89.9		17.8
ZLTZ-90S-2.2-15	2.2	1500	14.0	4.4	90.9		24.5
ZLTZ-90L-3-15	3	1500	19.1	5.9	91.8		27.9
ZLTZ-112M-4-15	4	1500	25.5	7.8	92.7		37.2
ZLTZ-112M-5.5-15	5.5	1500	35.0	10.6	93.4		42
ZLTZ-132S-7.5-15	7.5	1500	47.8	14.4	94.0		78
ZLTZ-132M-11-15	11	1500	70.0	20.9	94.5		86.3
ZLTZ-132M-15-15	15	1500	95.9	28.4	94.9	Three Phase 380V~480V(50/60Hz)	95.2
ZLTZ-160M-18.5-15	18.5	1500	118	34.9	95.3		114
ZLTZ-160L-22-15	22	1500	140	41.4	95.6		123
ZLTZ-180M-30-15	30	1500	191	56.2	95.8		169
ZLTZ-180M-37-15	37	1500	236	69.1	96.0		201
ZLTZ-200M-45-15	45	1500	287	83.8	96.2		285
ZLTZ-225S-55-15	55	1500	350	102	96.3		300
ZLTZ-225M-75-15	75	1500	478	139	96.4		349
ZLTZ-250M-90-15	90	1500	573	166	96.5		371
ZLTZ-250M-110-15	110	1500	700	203	96.6		405
ZLTZ-280M-132-15	132	1500	840	243	96.6		615
ZLTZ-280M-160-15	160	1500	1019	294	96.7		697
ZLTZ-315S-200-15	200	1500	1273	367	96.8		823
ZLTZ-315M-250-15	250	1500	1592	459	96.9		1011
ZLTZ-315L-315-15	315	1500	2006	579	97.0		1165
ZLTZ-355M-355-15	355	1500	2260	652	97.1		1642

기술사양(6극, 1,000rpm)

Type	Rated Power (kW)	Rated Speed (r/min)	Rated Torque (Nm)	Rated Current (A)	Eff (%)	Drive Unit Input	Weight (kg)
Synchronous Speed 1000r/min (6 Poles)							
ZLTZ-80M-0.55-10	0.55	1000	5.3	1.2	85.9	Three Phase 220V~480V(50/60Hz)	15.7
ZLTZ-80M-0.75-10	0.75	1000	7.2	1.7	87.4		15.6
ZLTZ-90S-1.1-10	1.1	1000	10.5	2.1	88.7		24.4
ZLTZ-90L-1.5-10	1.5	1000	14.3	3.1	89.9		27.1
ZLTZ-112M-2.2-10	2.2	1000	21.0	4.4	90.9		37.5
ZLTZ-112M-3-10	3	1000	28.7	5.95	91.8		41.6
ZLTZ-132S-4-10	4	1000	38.2	7.8	92.7		67
ZLTZ-132M-5.5-10	5.5	1000	52.5	10.3	93.4		72.8
ZLTZ-160M-7.5-10	7.5	1000	71.6	13.8	94.0	Three Phase 380V~480V(50/60Hz)	106
ZLTZ-160L-11-10	11	1000	105.1	20.1	94.5		115
ZLTZ-180M-15-10	15	1000	143.3	27.3	94.9		164
ZLTZ-180L-18.5-10	18.5	1000	176.7	33.4	95.3		175
ZLTZ-200L-22-10	22	1000	210.1	39.5	95.6		264
ZLTZ-200L-30-10	30	1000	286.5	53.6	95.8		288
ZLTZ-225S-37-10	37	1000	353.4	65.8	96.0		316
ZLTZ-225M-45-10	45	1000	429.8	79.7	96.2		338
ZLTZ-250M-55-10	55	1000	525.3	98	96.3		367
ZLTZ-250M-75-10	75	1000	716.3	132	96.4		445
ZLTZ-280S-90-10	90	1000	859.3	158	96.5		653
ZLTZ-280M-110-10	110	1000	1050.5	193	96.5		695
ZLTZ-315S-132-10	132	1000	1260.6	231	96.6		863
ZLTZ-315S-160-10	160	1000	1528.0	280	96.6		881
ZLTZ-315M-200-10	200	1000	1910.0	349	96.7		1126
ZLTZ-355M-250-10	250	1000	2387.5	465	96.7		1428
ZLTZ-355M-315-10	315	1000	3008.3	579	96.8		1568
ZLTZ-355M-355-10	355	1000	3390.3	653	96.8		1648

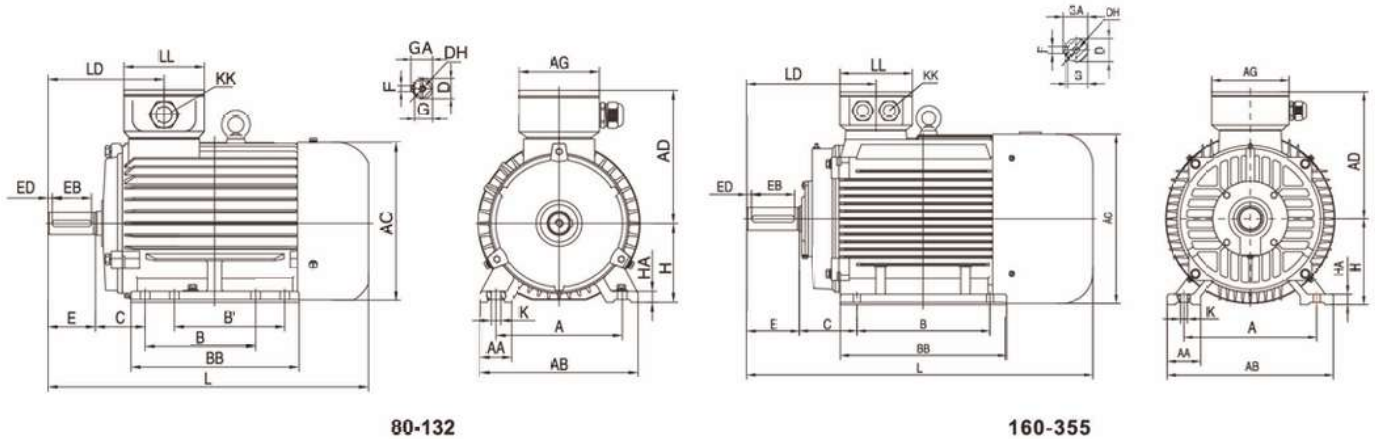
기술사양(8극, 750rpm)

Type	Rated Power (kW)	Rated Speed (r/min)	Rated Torque (Nm)	Rated Current (A)	Eff (%)	Drive Unit Input	Weight (kg)
Synchronous Speed 750r/min (8 Poles)							
ZLTZ-80M-0.55-7.5	0.55	750	7.0	1.3	77.0	Three Phase 220V~480V(50/60Hz)	16.6
ZLTZ-80M-0.75-7.5	0.75	750	9.6	1.7	78.4		17.9
ZLTZ-90S-1.1-7.5	1.1	750	10.5	2.1	88.7		24.4
ZLTZ-90L-1.5-7.5	1.5	750	14.0	3.2	82.6		28.5
ZLTZ-112M-2.2-7.5	2.2	750	28.0	4.6	84.5		38.2
ZLTZ-112M-3-7.5	3	750	38.2	6.2	85.9		43.2
ZLTZ-132S-4-7.5	4	750	50.9	8.2	87.1		65
ZLTZ-132M-5.5-7.5	5.5	750	70.0	11.1	88.3		79.8
ZLTZ-160M-7.5-7.5	7.5	750	95.5	14.9	89.3	Three Phase 380V~480V(50/60Hz)	102
ZLTZ-160L-11-7.5	11	750	140.1	21.6	90.4		119
ZLTZ-180M-15-7.5	15	750	191.0	29.2	91.2		166
ZLTZ-180L-18.5-7.5	18.5	750	235.6	35.8	91.7		203
ZLTZ-200L-22-7.5	22	750	280.1	42.5	92.1		282
ZLTZ-225S-30-7.5	30	750	382.0	57.5	92.7		318
ZLTZ-225M-37-7.5	37	750	471.1	70.6	93.1		345
ZLTZ-250M-45-7.5	45	750	573.0	85.6	93.4		372
ZLTZ-250M-55-7.5	55	750	700.3	104	93.7		403
ZLTZ-280S-75-7.5	75	750	955.0	141	94.2		645
ZLTZ-280M-90-7.5	90	750	1146.0	169	94.4		705
ZLTZ-315S-110-7.5	110	750	1400.7	206	94.7		917
ZLTZ-315S-132-7.5	132	750	1680.8	247	94.9		1035
ZLTZ-315M-160-7.5	160	750	2037.3	299	95.1		1180
ZLTZ-355M-200-7.5	200	750	2546.	373	95.4		1716
ZLTZ-355M-250-7.5	250	750	3183.3	465	95.4		1853



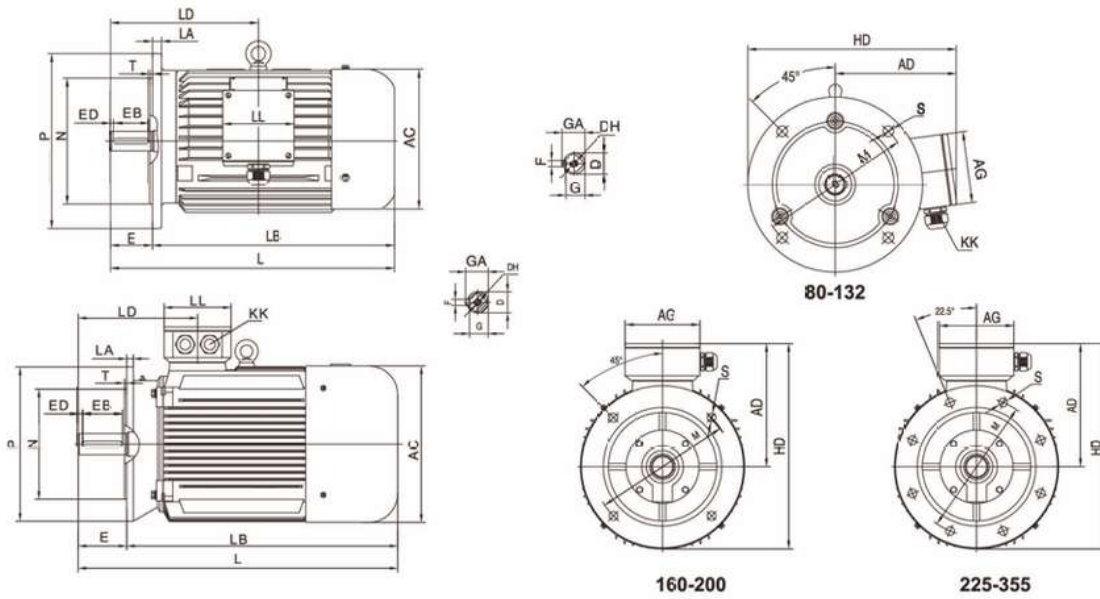
규격(사이즈)

IM B3 H80-355



Type	Pole	A	AA	AB	AC	AD	AG	B	BB	C	D	DH	E	EB	ED	F	G	GA	H	HA	K	KK	L	LD	LL
80	2,4,6,8	125	34	160	167	147	102	100	150	50	19	M6×16	40	30	5	6	15.5	21.5	80	10	4-Φ10	1-M25×1.5	305	120	102
90S	2,4,6,8	140	36	180	205	170	102	100	160	56	24	M8×19	50	40	5	8	20	27	90	12	4-Φ10	1-M25×1.5	360	145	102
90L	2,4,6,8	140	36	180	205	170	102	125	185	56	24	M8×19	50	40	5	8	20	27	90	12	4-Φ10	1-M25×1.5	390	145	102
100L	2,4,6,8	160	40	205	215	180	102	140	213	63	28	M10×22	60	50	5	8	24	31	100	14	4-Φ12	1-M32×1.5	435	150	102
112M	2,4,6,8	190	50	240	255	200	118	140	225	70	28	M10×22	60	50	5	8	24	31	112	15	4-Φ12	2-M32×1.5	450	155	110
132S	2,4,6,8	216	55	270	310	230	118	140	200	89	38	M12×28	80	65	7.5	10	33	41	132	18	4-Φ12	2-M32×1.5	510	175	110
132M	4,6,8	216	55	270	310	230	118	178	238	89	38	M12×28	80	65	7.5	10	33	41	132	18	4-Φ12	2-M32×1.5	550	175	110
160M	2,4,6,8	254	65	320	340	260	162	210	260	108	42	M16×36	110	90	10	12	37	45	160	20	4-Φ14.5	2-M40×1.5	730	260	152
160L	2,4,6,8	254	65	320	340	260	162	254	304	108	42	M16×36	110	90	10	12	37	45	160	20	4-Φ14.5	2-M40×1.5	770	260	152
180M	2,4,8	279	70	355	390	285	162	241	311	121	48	M16×36	110	90	10	14	42.5	51.5	180	22	4-Φ14.5	2-M40×1.5	810	275	152
180L	4,6,8	279	70	355	390	285	162	279	349	121	48	M16×36	110	90	10	14	42.5	51.5	180	22	4-Φ14.5	2-M40×1.5	850	275	152
200L	2,4,6,8	318	70	395	445	320	210	305	369	133	55	M20×42	110	100	5	16	49	59	200	25	4-Φ16.5	2-M50×1.5	890	300	190
225S	4,8	356	75	435	495	350	210	286	368	149	60	M20×42	140	125	7.5	18	53	64	225	28	4-Φ18.5	2-M50×1.5	870	330	190
225M	2	356	75	435	495	350	210	311	393	149	55	M20×42	110	100	5	16	49	59	225	28	4-Φ18.5	2-M50×1.5	865	330	190
225M	4,6,8	356	75	435	495	350	210	311	393	149	60	M20×42	140	125	7.5	18	53	64	225	28	4-Φ18.5	2-M50×1.5	895	330	190
250M	2	406	80	490	550	390	248	349	445	168	60	M20×42	140	125	7.5	18	53	64	250	30	4-Φ24	2-M63×1.5	1000	350	218
250M	4,6,8	406	80	490	550	390	248	349	445	168	65	M20×42	140	125	7.5	18	58	69	250	30	4-Φ24	2-M63×1.5	1000	350	218
280S	2	457	85	550	630	430	248	368	485	190	65	M20×42	140	125	7.5	18	58	69	280	35	4-Φ24	2-M63×1.5	1030	360	218
280S	4,6,8	457	85	550	630	430	248	368	485	190	75	M20×42	140	125	7.5	20	67.5	79.5	280	35	4-Φ24	2-M63×1.5	1030	360	218
280M	2	457	85	550	630	430	248	419	536	190	65	M20×42	140	125	7.5	18	58	69	280	35	4-Φ24	2-M63×1.5	1080	360	218
280M	4,6,8	457	85	550	630	430	248	419	536	190	75	M20×42	140	125	7.5	20	67.5	79.5	280	35	4-Φ24	2-M63×1.5	1080	360	218
315S	2	508	120	635	645	530	320	406	570	216	65	M20×42	140	125	7.4	18	58	69	315	45	4-Φ28	2-M63×1.5	1210	405	280
315S	4,6,8,10	508	120	635	645	530	320	406	570	216	80	M20×42	170	160	5	22	71	85	315	45	4-Φ28	2-M63×1.5	1240	435	280
315M	2	508	120	635	645	530	320	457	680	216	65	M20×42	140	125	7.5	18	58	69	315	45	4-Φ28	2-M63×1.5	1320	405	280
315M	4,6,8,10	508	120	635	645	530	320	457	680	216	80	M20×42	170	160	5	22	71	85	315	45	4-Φ28	2-M63×1.5	1350	435	280
315L	2	508	120	635	645	530	320	508	680	216	65	M20×42	140	125	7.5	18	58	69	315	45	4-Φ28	2-M63×1.5	1320	405	280
315L	4,6,8,10	508	120	635	645	530	320	508	680	216	80	M20×42	170	160	5	22	71	85	315	45	4-Φ28	2-M63×1.5	1350	435	280
355M	2	610	116	730	710	655	380	560	750	254	75	M20×50	140	130	5	20	67.5	79.5	355	52	6-Φ28	2-M63×1.5	1500	420	330
355M	4,6,8,10	610	116	730	710	655	380	560	750	254	95	M24×50	170	160	5	25	86	100	355	52	6-Φ28	2-M63×1.5	1530	450	330
355L	2	610	116	730	710	655	380	630	750	254	75	M20×50	140	130	5	20	67.5	79.5	355	52	6-Φ28	2-M63×1.5	1500	420	330
355L	4,6,8,10	610	116	730	710	655	380	630	750	254	95	M24×50	170	160	5	25	86	100	355	52	6-Φ28	2-M63×1.5	1530	450	330

IM B5 H80-355



Type	Pole	AC	AD	AG	D	DH	E	EB	ED	F	G	GA	HD	KK	L	LA	LD	LL	M	N	P	S	T
80	2,4,6,8	167	147	102	19	M6×16	40	30	5	6	15.5	21.5	255	1-M25×1.5	305	12	120	102	165	130	200	12	3.5
90S	2,4,6,8	205	170	102	24	M8×19	50	40	5	8	20	27	262	1-M25×1.5	360	12	145	102	165	130	200	12	3.5
90L	2,4,6,8	205	170	102	24	M8×19	50	40	5	8	20	27	262	1-M25×1.5	390	12	145	102	165	130	200	12	3.5
100L	2,4,6,8	215	180	102	28	M10×22	60	50	5	8	24	31	299	1-M32×1.5	435	13	150	102	215	180	250	14.5	4
112M	2,4,6,8	255	200	118	28	M10×22	60	50	5	8	24	31	315	2-M32×1.5	450	14	155	110	215	180	250	14.5	4
132S	2,4,6,8	310	230	118	38	M12×28	80	65	7.5	10	33	41	353	2-M32×1.5	510	14	175	110	265	230	300	14.5	4
132M	4,6,8	310	230	118	38	M12×28	80	65	7.5	10	33	41	353	2-M32×1.5	550	14	175	110	265	230	300	14.5	4
160M	2,4,6,8	340	260	162	42	M16×36	110	90	10	12	37	45	426	2-M40×1.5	730	15	260	152	300	250	350	18.5	5
160L	2,4,6,8	340	260	162	42	M16×36	110	90	10	12	37	45	426	2-M40×1.5	770	15	260	152	300	250	350	18.5	5
180M	2,4,8	390	285	162	48	M16×36	110	90	10	14	42.5	51.5	445	2-M40×1.5	810	15	275	152	300	250	350	18.5	5
180L	4,6,8	390	285	162	48	M16×36	110	90	10	14	42.5	51.5	445	2-M40×1.5	850	15	275	152	300	250	350	18.5	5
200L	2,4,6,8	445	320	210	55	M20×42	110	100	5	16	49	59	499	2-M50×1.5	890	17	300	190	350	300	400	18.5	5
225S	4,8	495	350	210	60	M20×42	140	125	7.5	18	53	64	547	2-M50×1.5	870	20	330	190	400	350	450	18.5	5
225M	2	495	350	210	55	M20×42	110	100	5	16	49	59	547	2-M50×1.5	865	20	330	190	400	350	450	18.5	5
225M	4,6,8	495	350	210	60	M20×42	140	125	7.5	18	53	64	547	2-M50×1.5	895	20	330	190	400	350	450	18.5	5
250M	2	550	390	248	60	M20×42	140	125	7.5	18	53	64	633	2-M63×1.5	1000	22	350	218	500	450	550	18.5	5
250M	4,6,8	550	390	248	65	M20×42	140	125	7.5	18	58	69	633	2-M63×1.5	1000	22	350	218	500	450	550	18.5	5
280S	2	630	430	248	65	M20×42	140	125	7.5	18	58	69	662	2-M63×1.5	1030	22	360	218	500	450	550	18.5	5
280S	4,6,8	630	430	248	75	M20×42	140	125	7.5	20	67.5	79.5	662	2-M63×1.5	1030	22	360	218	500	450	550	18.5	5
280M	2	630	430	248	65	M20×42	140	125	7.5	18	58	69	662	2-M63×1.5	1080	22	360	218	500	450	550	18.5	5
280M	4,6,8	630	430	248	75	M20×42	140	125	7.5	20	67.5	79.5	662	2-M63×1.5	1080	22	360	218	500	450	550	18.5	5
315S	2	645	530	320	65	M20×42	140	125	7.5	18	58	69	857	2-M63×1.5	1210	22	405	280	600	550	660	24	6
315S	4,6,8,10	645	530	320	80	M20×42	170	160	5	22	71	85	857	2-M63×1.5	1240	22	435	280	600	550	660	24	6
315M	2	645	530	320	65	M20×42	140	125	7.5	18	58	69	857	2-M63×1.5	1320	22	405	280	600	550	660	24	6
315M	4,6,8,10	645	530	320	80	M20×42	170	160	5	22	71	85	857	2-M63×1.5	1350	22	435	280	600	550	660	24	6
315L	2	645	530	320	65	M20×42	140	125	7.5	18	58	69	857	2-M63×1.5	1320	22	405	280	600	550	660	24	6
315L	4,6,8,10	645	530	320	80	M20×42	170	160	5	22	71	85	857	2-M63×1.5	1350	22	435	280	600	550	660	24	6
355M	2	710	655	380	75	M20×50	140	130	5	20	67.5	79.5	1042	2-M63×1.5	1500	25	420	330	740	680	800	24	6
355M	4,6,8,10	710	655	380	95	M24×50	170	160	5	25	86	100	1042	2-M63×1.5	1530	25	450	330	740	680	800	24	6
355L	2	710	655	380	75	M20×50	140	130	5	20	67.5	79.5	1042	2-M63×1.5	1500	25	420	330	740	680	800	24	6
355L	4,6,8,10	710	655	380	95	M24×50	170	160	5	25	86	100	1042	2-M63×1.5	1530	25	450	330	740	680	800	24	6