AC INDUCTION MOTOR DATA SHEET

Model No.or RFQ No.		Item No.		Rev. No.	[0]
Project Name		Project No.		Quantity	set

GENERAL SPECIFICATION

Frame Size		180M
Type		HLS
Enclosure(Protection)		Totally Enclosed (IP55)
Method of Cooling		IC411(FC)
Rated Frequency		50 Hz
Number of Phases		3
Insulation Class		■ F ☐ B ☐ H
Temp. Rise at full load (by resistance method)		
	at 1.0 S.F	80 deg. C
Motor Location		■ Indoor ☐ Outdoor
Altitude		Less than 1000 meter
Relative Humidity		Less than 80 %
Ambient Temp.		40 deg. C (Max.)
Duty Type		Continuous (S1)
Service Factor		1.0
Mounting		☐ B3 ■ B5 ☐ V1 ☐ B3/B5
Bearing	Type	Anti-Friction
	DE/N-DE	6310ZZC3 / 6310ZZC3
	Lubricant	Grease(Polyrex-EM)
External Thrust		Not applicable
Coupling Method		■ Direct ☐ V-Belt
Shaft Extension		■ Single ☐ Double
Terminal Box	Main	☐ Steel ■ Cast Iron
	Aux.	☐ Yes ■ No
	Location	Refer to Outline Drawing
Application		
Area classification		Non-Hazardous
Type of Ex-Protection		Not applicable
Applicable Standard		KS,IEC

PERFORMANCE DATA

Rated Output		18.5 kW	25 HP
Number of Poles		4	
Rotor Type		Squirrel Cage	
Starting Method*		■ D.O.L	
Rated Voltage		380 V	
Current	Full Load	38.7 A	
	Locked-rotor**	775 %	
Efficiency			
	50% Load	90.0 %	
	75% Load	91.3 %	
	100% Load	91.2 %	
Power Factor(p.u)			
	50% Load	0.646	
	75% Load	0.746	
	100% Load	0.796	
Speed at Full Load		1475 r.p.m	
Torque			
	Full Load	12.2 kg·m	
	Locked-rotor**	160 %	
	Breakdown**	210 %	
Moment of Inertia (J)			
	Load(Max.)	13.800 kg·m²	
	Motor	0.166 kg·m²	
Sound Pressure Level (No-load & mean value at 1m from motor)			
		75 dB(A)	
Vibration		2.2 mm/sec (r.m.s)	
Permissible number of consecutive starts		Cold 3 times	
		Hot 2 times	
Paint	Munsell No.	4.4PB5.5/5.6(VL-451)	

ACCESSORIES

SPARE PARTS

SUBMITTAL DRAWING

Outline Dimension Drawing		\ Motor Weight(Approx.)	
	B5	LM-T1183B5PL001	184 kg
Main T-Box Ass'y		3M-145860	

REMARK

*.High Efficiency(IE2)

Date	DSND	CHKD	CHKD	APPD
2026-04-14	R.G. KIM	O.J. KIM	J.H. KIM	K.J. KANG

Note: Others not mentioned in this data sheet shall be in accordance with maker standard.
Above technical data are only design values and shall be guaranteed with tolerance of applicable standard.
Inspection and performance test shall be maker standard, if not mentioned.
* In case of Inverter-Fed Motor, performance data is based on sine wave tests.
** Data is based on when the motor is supplied at rated voltage & frequency. and the data is expressed as a percentage of full-load value.

HYUNDAI ELECTRIC

PERFORMANCE CURVE

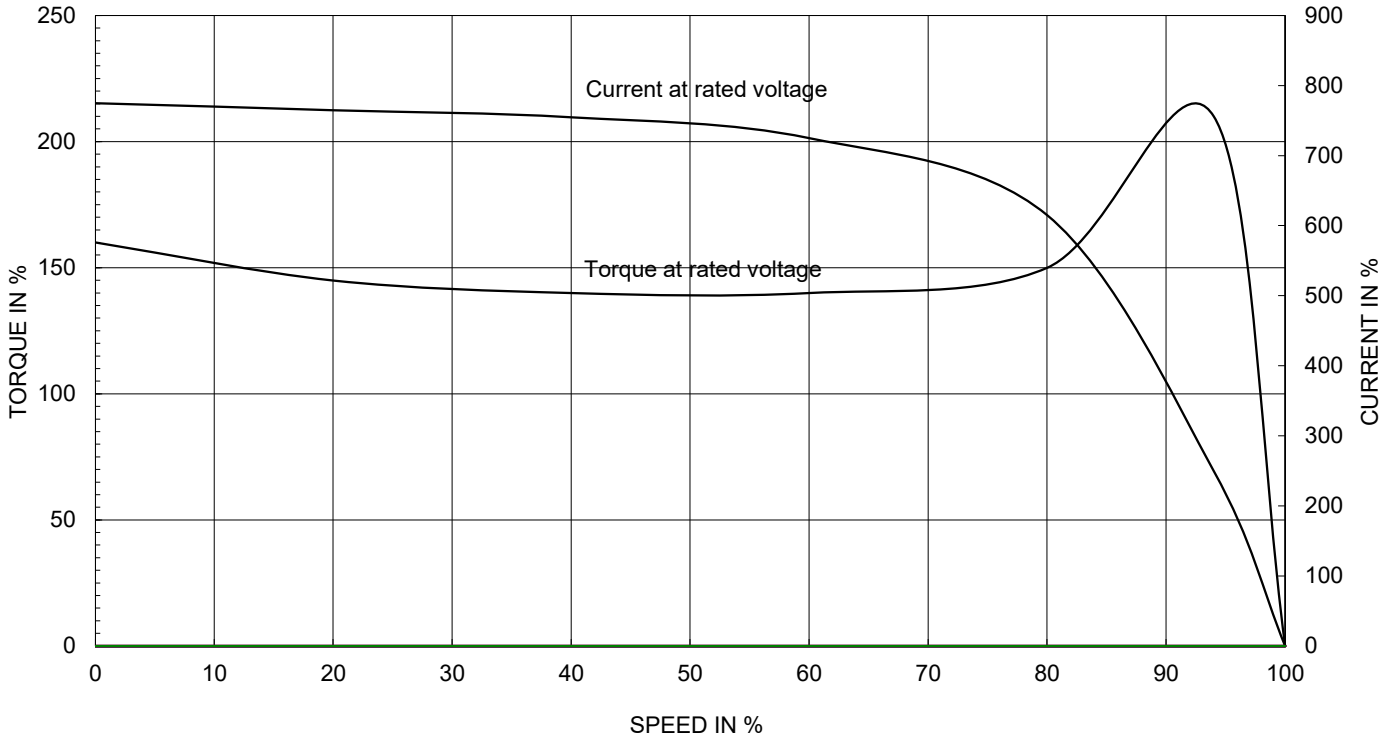
CURVE NO.

Type : HLS		
Full Load Torque :	12.2	kg.m
Load moment of Inertia (J) :	13.8	$kg.m^2$
Motor moment of Inertia (J) :	0.166	$kg.m^2$

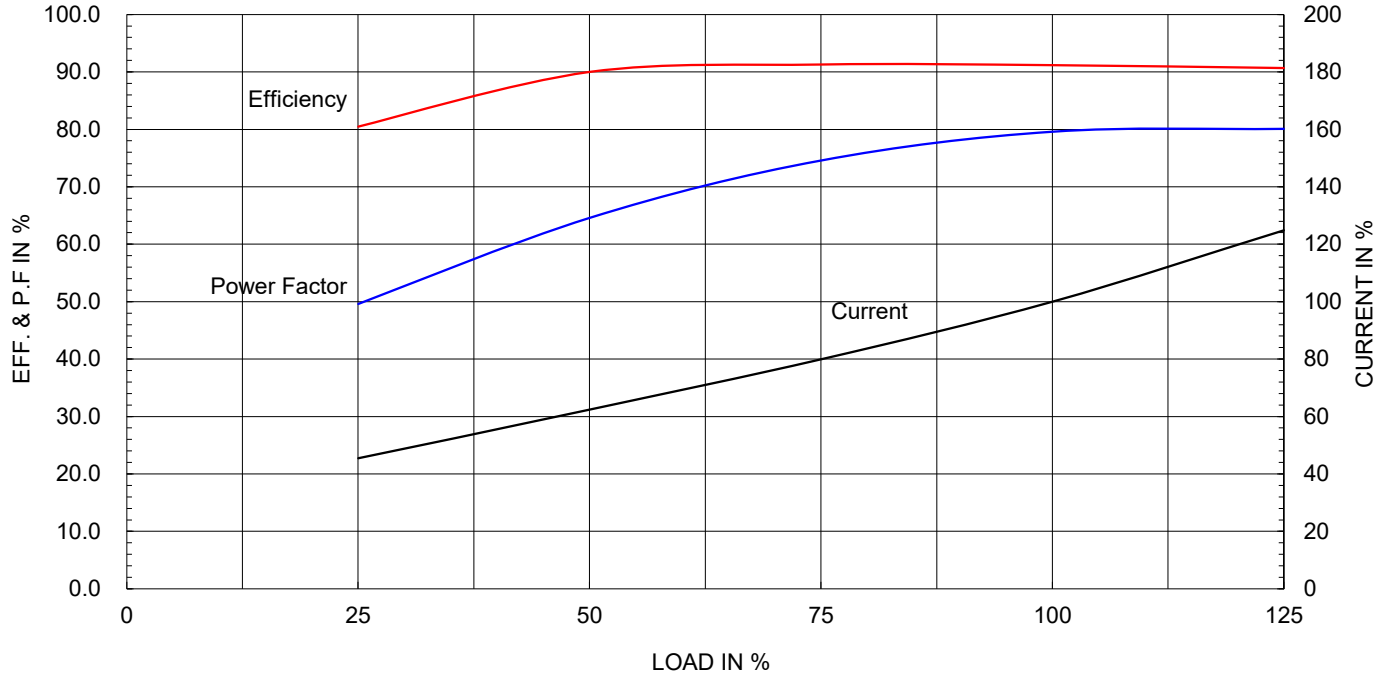
18.5 kW	4 P	50 Hz
Speed at Full Load :		1475 RPM

Rated Voltage	380V		
Full Load Current	38.7A		

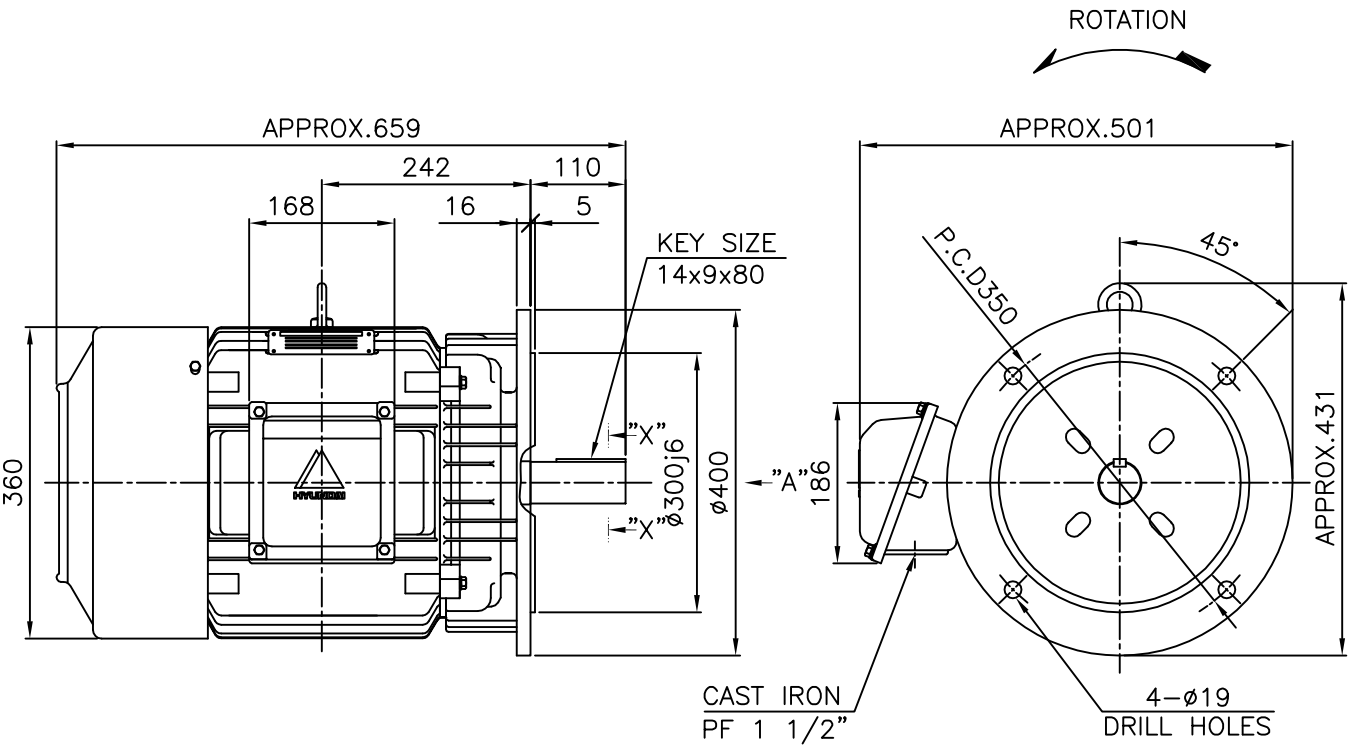
SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



		REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
▽	50S							
▽▽	12.5S							
▽▽▽	3.2S							
▽▽▽▽	0.4S							

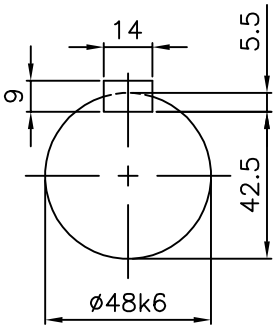


VIEW "A"

NOTE

1.TOLERANCE :

FLANGE HOLES	ø19	+0.52 0
RABBET DIAMETER	ø300	±0.016
SHAFT DIAMETER	ø48	+0.018 +0.002
KEYWAY WIDTH	14	0 −0.043
KEYWAY DEPTH	5.5	+0.2 0
KEY WIDTH	14	0 −0.043
KEY HEIGHT	9	0 −0.090

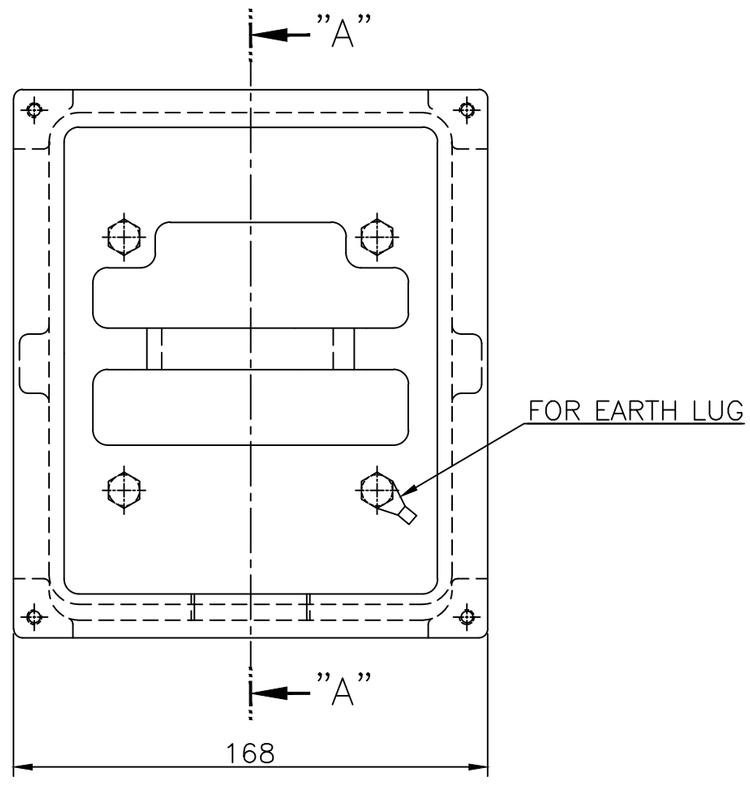


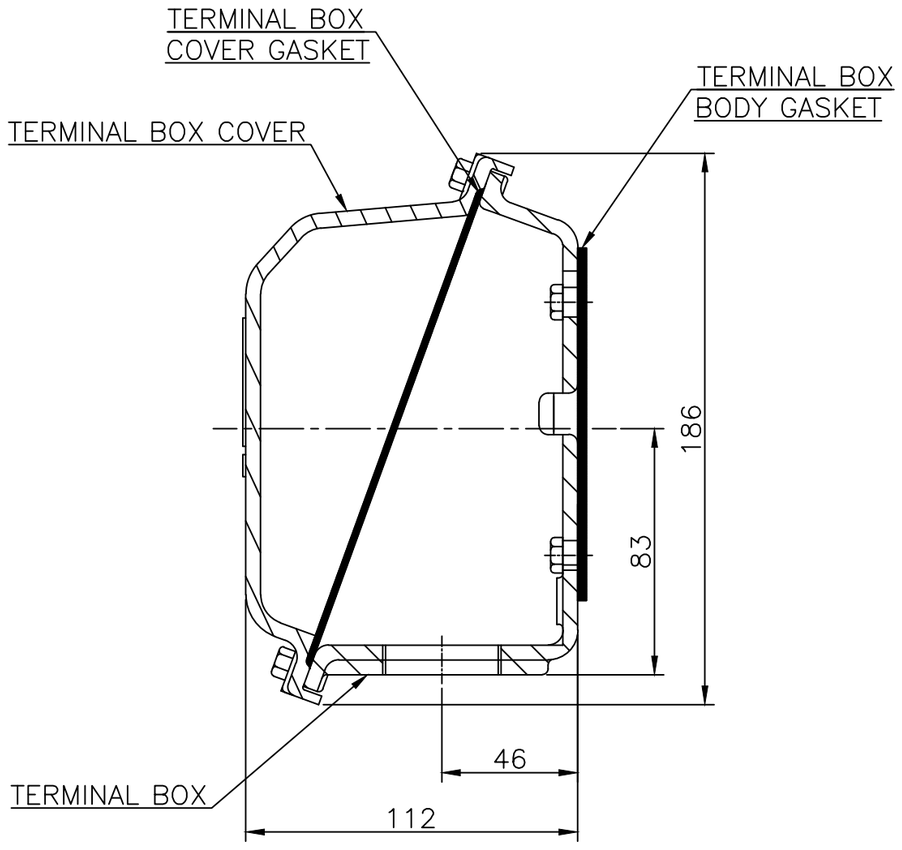
SECTION "X-X"
SCALE 4/9

APPD BY	S.K.HAN	UNIT	mm
CHKD BY	S.Y.KIM	SCALE	1/9
CHKD BY	R.G.KIM	PROJEC'N	3각법(3rd Angle)
DSND BY	S.H.YUN	DATE	2018-08-08

HYUNDAI ELECTRIC

SUBJECT	KS, IEC Fr.180M		DWG SIZE A4 (1:9)
TITLE	OUTLINE		
REF. NO		Sheet No.	of
DWG NO	LM-T1183B5PL001	Revision No.	0





SEC. "A"–"A"

▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

일반가공공차		일반제관공차	
1–4	±0.1	6–30	±0.5
4–18	±0.2	30–120	±0.8
18–63	±0.3	120–315	±1.2
63–250	±0.5	315–1000	±2.0
250–	±0.8	1000–	±3.0

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
APPD BY	S.K.HAN	UNIT	mm	SUBJECT	FR.160~180 (CAST IRON)		DWG SIZE A3 (1:2)
CHKD BY	S.Y.KIM	SCALE	1/2	TITLE	Main Terminal Box Assembly		
CHKD BY	R.G.KIM	PROJEC'N	3각법(3rd Angle)	REF. NO	227B8008LA2	Sheet No.	of
DSND BY	H.K.LEE	DATE	2011–08–30	DWG NO	3M–145860	Revision No.	2

HYUNDAI ELECTRIC