

AC INDUCTION MOTOR DATA SHEET

Model No.or RFQ No.		Item No.		Rev. No. [0]			
Project Name		Project No.		Quantity sets			
GENERAL SPECIFICATION			PERFORMANCE DATA				
Frame Size	200LL		Rated Output	45 kW 60 HP			
Type	HLP-45/4		Number of Poles	4			
Enclosure(Protection)	Totally Enclosed (IP55)		Rotor Type	Squirrel Cage			
Method of Cooling	IC411(FC)		Starting Method*	☒ D.O.L ☐ Y- Δ			
Rated Frequency	60 Hz		Rated Voltage	440 V 380 V 220 V			
Number of Phases	3		Current	Full Load 75.8 A 87.8 A 151.6 A			
Insulation Class	☒ F ☐ B ☐ H		Locked-rotor**	745 % 745 % 745 %			
Temp. Rise at full load (by resistance method)			Efficiency				
at 1.0 S.F 80 deg. C			50% Load 93.2 %				
Motor Location	☒ Indoor ☐ Outdoor		75% Load 95.1 %				
Altitude	Less than 1000 meter		100% Load 95.0 %				
Relative Humidity	Less than 80 %		Power Factor(p.u)				
Ambient Temp.	40 deg. C (Max.)		50% Load 0.740				
Duty Type	Continuous (S1)		75% Load 0.795				
Service Factor	1.15		100% Load 0.820				
Mounting	☐ B3 ☒ B5 ☐ V1 ☐ B3/B5		Speed at Full Load 1775 r.p.m				
Bearing	Type	Anti-Friction	Torque				
	DE/N-DE	6313ZC3 / 6211ZC3	Full Load 24.7 kg·m				
	Lubricant	Grease(Gadus S2 V 100 2)	Locked-rotor** 150 %				
External Thrust	Not applicable		Breakdown** 210 %				
Coupling Method	☒ Direct ☐ V-Belt		Moment of Inertia (J)				
Shaft Extension	☒ Single ☐ Double		Load(Max.) 26.000 kg·m²				
Terminal Box	Main	☐ Steel ☒ Cast Iron	Motor 0.546 kg·m²				
	Aux.	☐ Yes ☒ No	Sound Pressure Level (No-load & mean value at 1m from motor)				
	Location	Refer to Outline Drawing	78 dB(A)				
Application			Vibration 2.2 mm/sec (r.m.s)				
Area classification	Non-Hazardous		Permissible number of				
Type of Ex-Protection	Not applicable		consecutive starts Cold 3 times				
Applicable Standard	KS,IEC, NEMA MG1 Part30(Vpeak)		Hot 2 times				
			Paint	Munsell No.	4.4PB5.5/5.6(VL-451)		
ACCESSORIES			SUBMITTAL DRAWING				
			Outline Dimension Drawing \ Motor Weight(Approx.)				
			B3	LM-T1207B3PL001	320 kg		
			B5	LM-T1207B5PL001	330 kg		
			V1	LM-T1207V1PL001	330 kg		
			B3/B5	LM-T1207B4PL001	330 kg		
			Main T-Box Ass'y	3M-145864			
SPARE PARTS			REMARK				
			Premium Efficiency				
			*. For use on PWM VFD 10:1VT, 3:1CT@1.0S.F&F Temp. rise				
			Date	DSND	CHKD	CHKD	APPD
			2015-09-05	R.G. KIM	-	O.J. KIM	S.H. GO

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.

Type : HLP-45/4

Full Load Torque : 24.7 kg.m

Motor moment of Inertia (J) : 0.546 kg.m²

Load moment of Inertia (J) : 26.000 kg.m²

45 kW

4 P

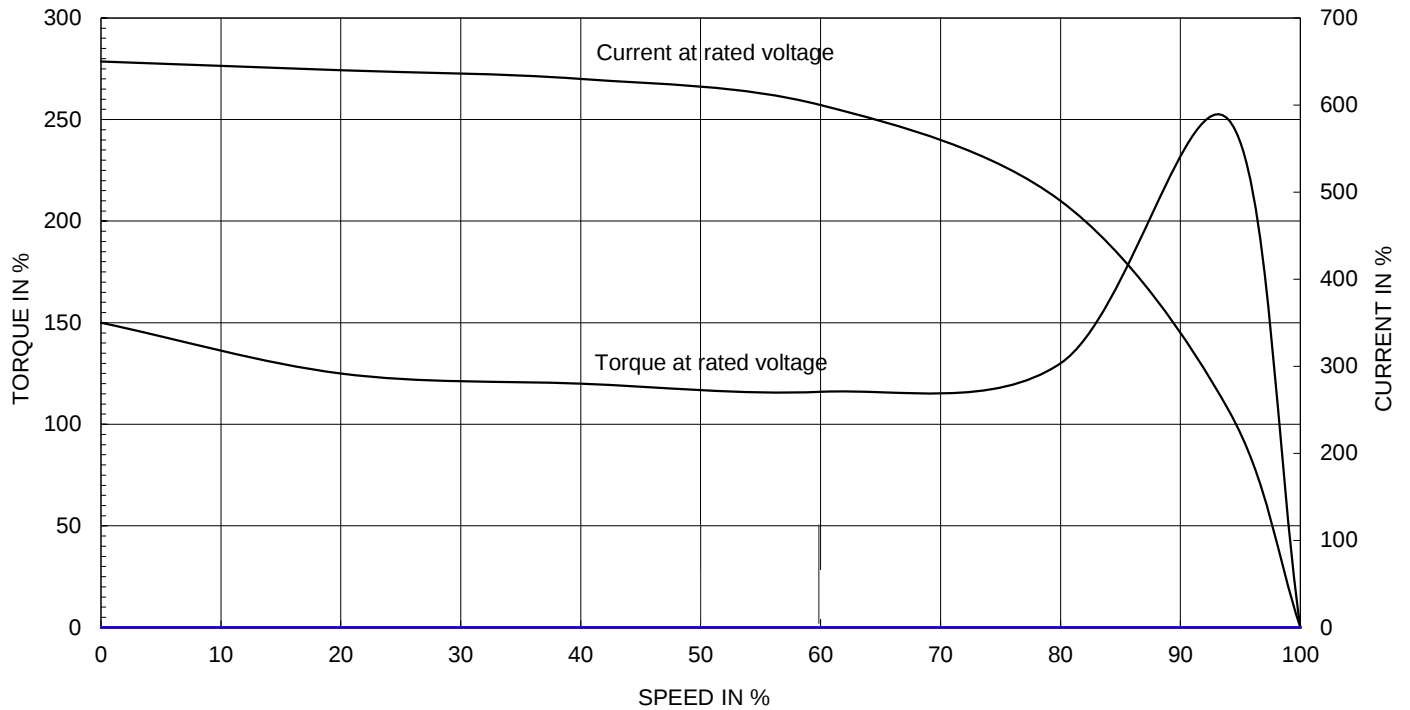
60 Hz

Speed at Full Load : 1775 RPM

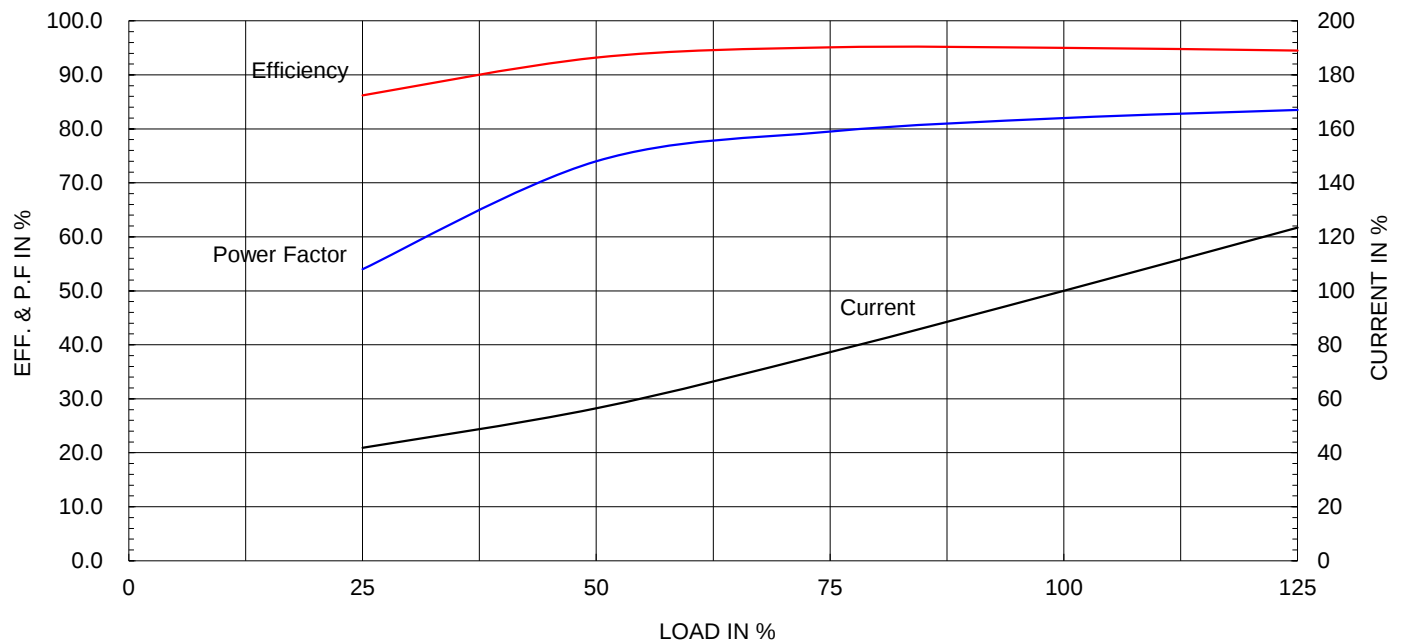
Rated Voltage 220V

Full Load Current 151.6A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

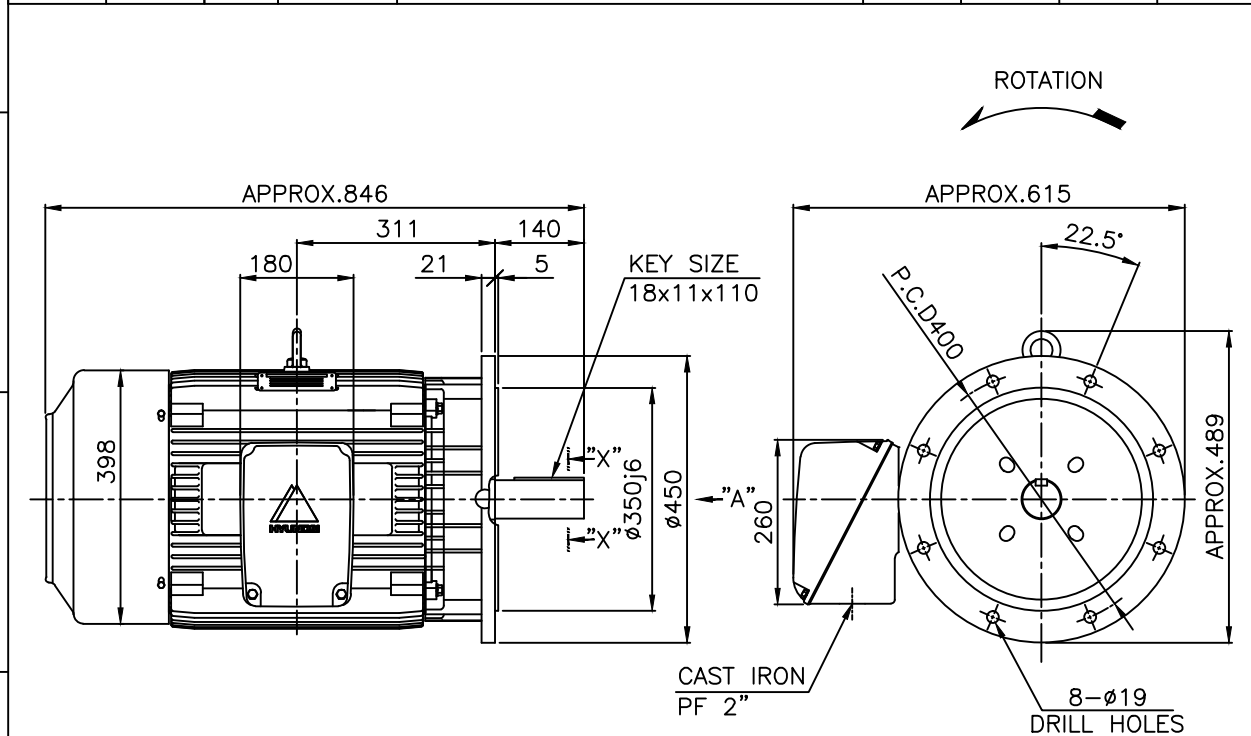


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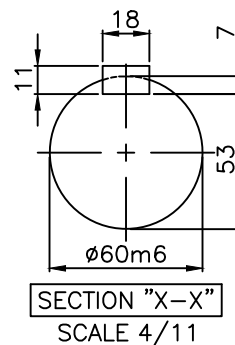
1	2	3	4
▽	50S	REV	DATE
▽▽	12.5S		
▽▽▽	3.2S		
▽▽▽▽	0.4S		



NOTE

1.TOLERANCE :

FLANGE HOLES	Ø19	$+0.52$ 0
RABBET DIAMETER	Ø350	± 0.018
SHAFT DIAMETER	Ø60	$+0.030$ $+0.011$
KEYWAY WIDTH	18	0 -0.043
KEYWAY DEPTH	7	$+0.2$ 0
KEY WIDTH	18	0 -0.043
KEY HEIGHT	11	0 -0.110



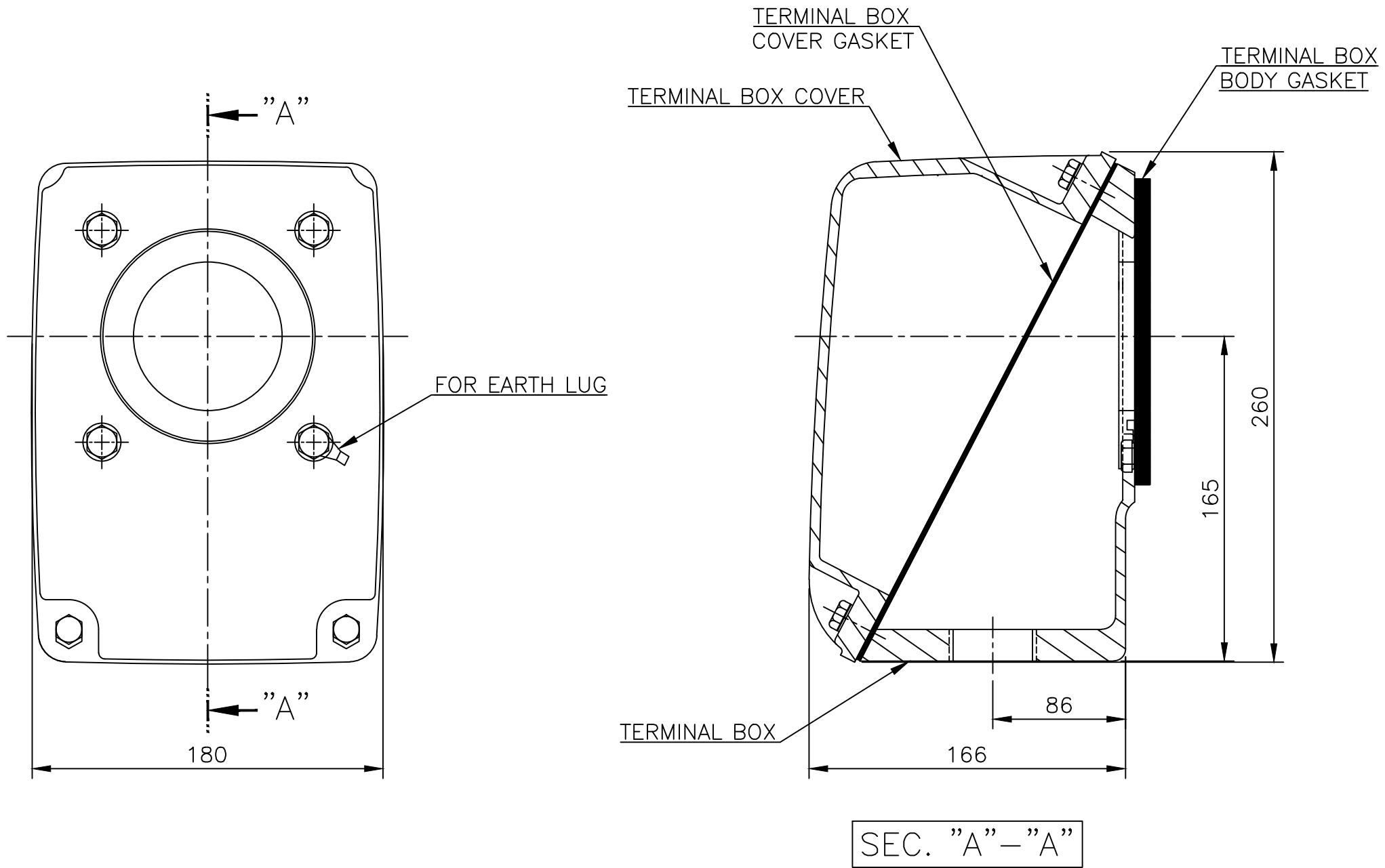
APPD BY	S.K.HAN	UNIT	mm	SUBJECT	KS, IEC Fr.200LL-4~20P	DWG SIZE
CHKD BY	S.Y.KIM	SCALE	1/11	TITLE	OUTLINE	A4 (1:11)
CHKD BY	R.G.KIM	PROJEC'N	3각법 (3rd Angle)	REF. NO		Sheet No. of
DSND BY	S.H.YUN	DATE	2018-08-08	DWG NO	LM-T1207B5PL001	Revision No. 1

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▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY	일반기공차	일반재공차
							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.200 (CAST IRON)			DWG SIZE	
CHKD	BY	S.Y.KIM		SCALE	1/2		TITLE Main Terminal Box Assembly					A3 (1:2)
CHKD	BY	R.G.KIM		PROJEC'N	3각법 (3rd Angle)							
DSND	BY	H.K.LEE		DATE	2011-08-30							
							REF. NO	227B8003CB5		Sheet No.	of	
							DWG NO	3M-145864		Revision No.	2	
6		7		8		9						