

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	280L		Rated Output	160 kW 214 HP	
Type	HLP-160/2		Number of Poles	2	
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 240.5 A 278.5 A 481.0 A	
Insulation Class	☒ F ☐ B ☐ H		Locked-rotor**	770 % 770 % 770 %	
Temp. Rise at full load (by resistance method)			Efficiency		
at 1.0 S.F 80 deg. C			50% Load 93.9 %		
Motor Location	☒ Indoor ☐ Outdoor		75% Load 95.4 %		
Altitude	Less than 1000 meter		100% Load 95.4 %		
Relative Humidity	Less than 80 %		Power Factor(p.u)		
Ambient Temp.	40 deg. C (Max.)		50% Load 0.875		
Duty Type	Continuous (S1)		75% Load 0.895		
Service Factor	1.15		100% Load 0.915		
Mounting	☒ B3 ☐ B5 ☐ V1 ☐ B3/B5		Speed at Full Load 3570 r.p.m		
Bearing	Type	Anti-Friction	Torque		
	DE/N-DE	6314C3 / 6314C3	Full Load 43.7 kg·m		
	Lubricant	Grease(Gadus S2 V 100 2)	Locked-rotor** 150 %		
External Thrust	Not applicable		Breakdown** 230 %		
Coupling Method	☒ Direct ☐ V-Belt		Moment of Inertia (J)		
Shaft Extension	☒ Single ☐ Double		Load(Max.) 14.380 kg·m²		
Terminal Box	Main	☐ Steel ☒ Cast Iron	Motor 2.540 kg·m²		
	Aux.	☐ Yes ☒ No	Sound Pressure Level (No-load & mean value at 1m from motor)		
	Location	Refer to Outline Drawing	92 dB(A)		
Application			Vibration 2.2 mm/sec (r.m.s)		
Area classification	Non-Hazardous		Permissible number of consecutive starts		
Type of Ex-Protection	Not applicable		Cold 3 times		
Applicable Standard	KS,IEC, NEMA MG1 Part30(Vpeak)		Hot 2 times		
ACCESSORIES			Paint	Munsell No.	4.4PB5.5/5.6(VL-451)
	SUBMITTAL DRAWING				
	Outline Dimension Drawing \ Motor Weight(Approx.)				
	B3	LM-T1285B3CL001	860	kg	
	B5	LM-T1285B5CL001	930	kg	
	V1	LM-T1285V1CL001	930	kg	
	B3/B5	LM-T1285B4CL001	895	kg	
	Main T-Box Ass'y 3M-016882				
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

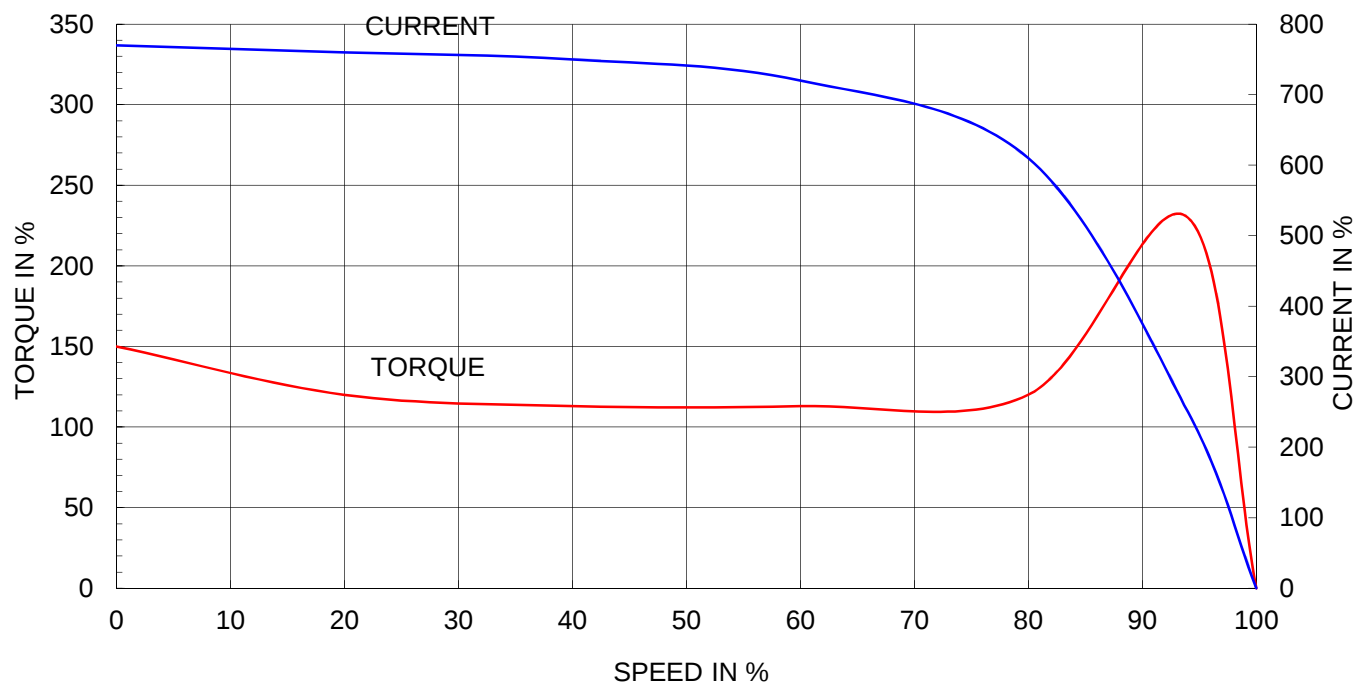
Note: Others not mentioned in this data sheet shall be in accordance with maker standard.
 Above technical data are only design values and shall be guaranteed with tolerance of applicable standard.
 Inspection and performance test shall be maker standard, if not mentioned.
 * In case of Inverter-Fed 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.

HHI W230-131-1 * In case of Inverter or V.V.V.F Motor:Performance data is based on sine wave tests. A4(210mm X 297mm)

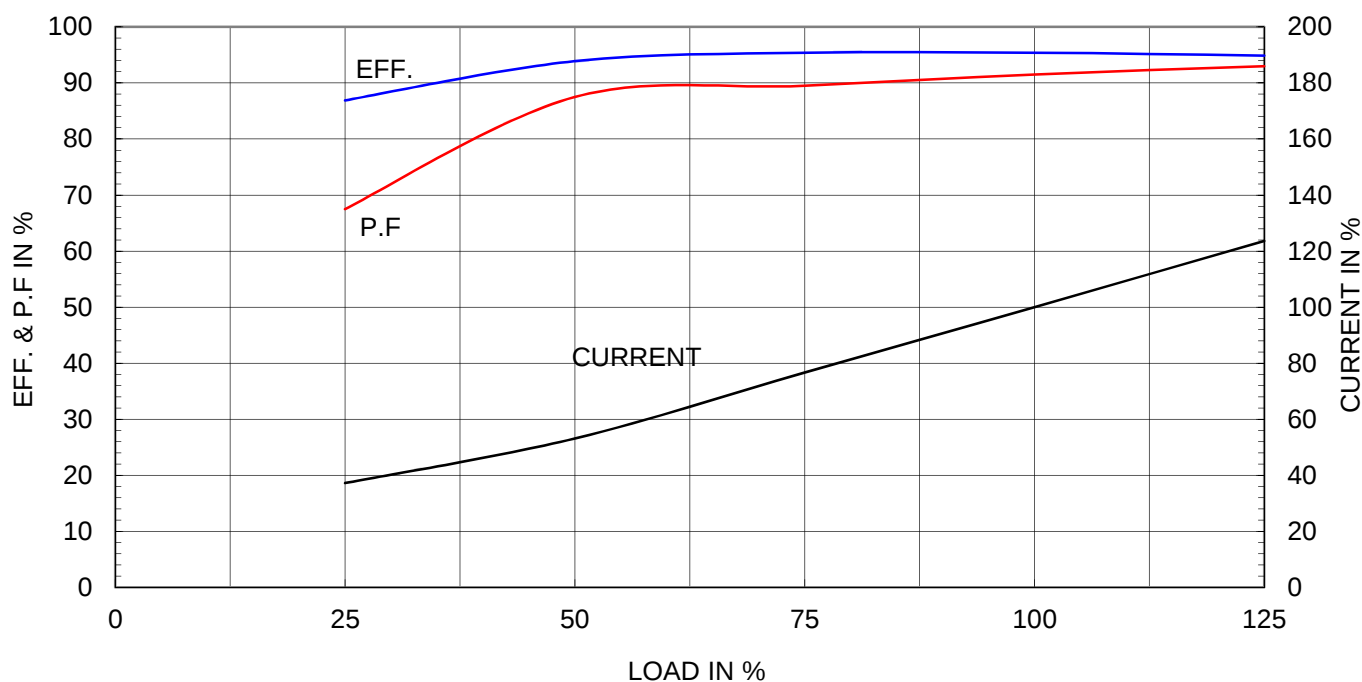
Type	:	HLP-160/2
Full Load Torque	:	43.7 Kg.m
Motor moment of Inertia (J)	:	2.540 Kg.m ²
Load moment of Inertia (J)	:	14.380 Kg.m ²

160 kW		2 P		60 Hz	
Speed at Full Load :				3570 RPM	
Rated Voltage	440V	380V	220V		
Full Load Current	240.5A	278.5A	481.0A		

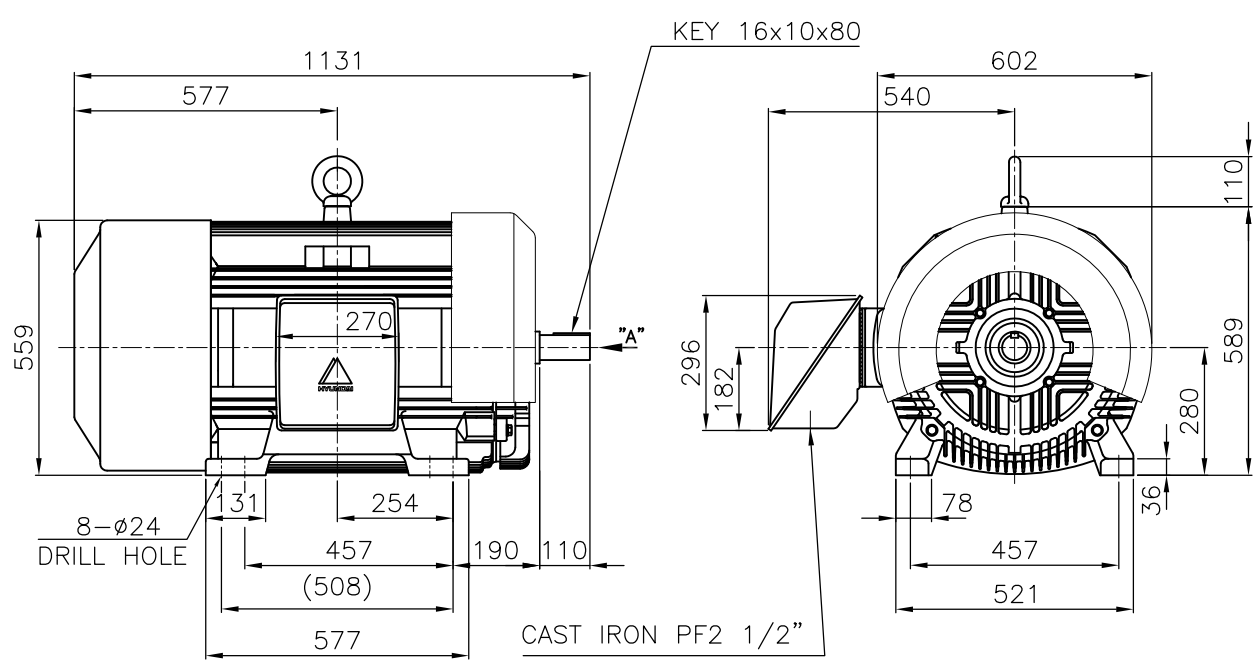
SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



1	2	3	4
 HYUNDAI HEAVY INDUSTRIES CO., LTD.		TEFC THREE PHASE INDUCTION MOTOR	TYPE (1) TNB , TDB CAST IRON FRAME

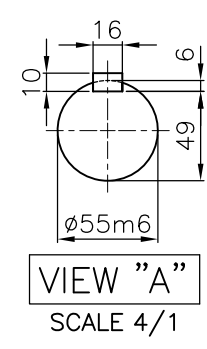


NOTE

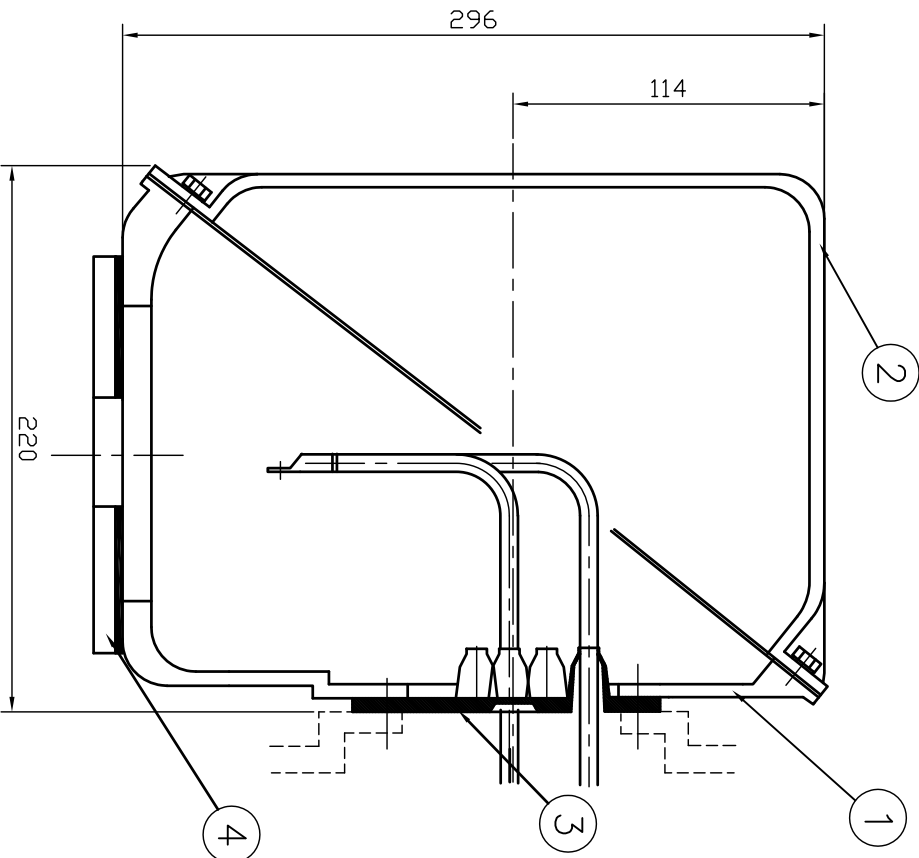
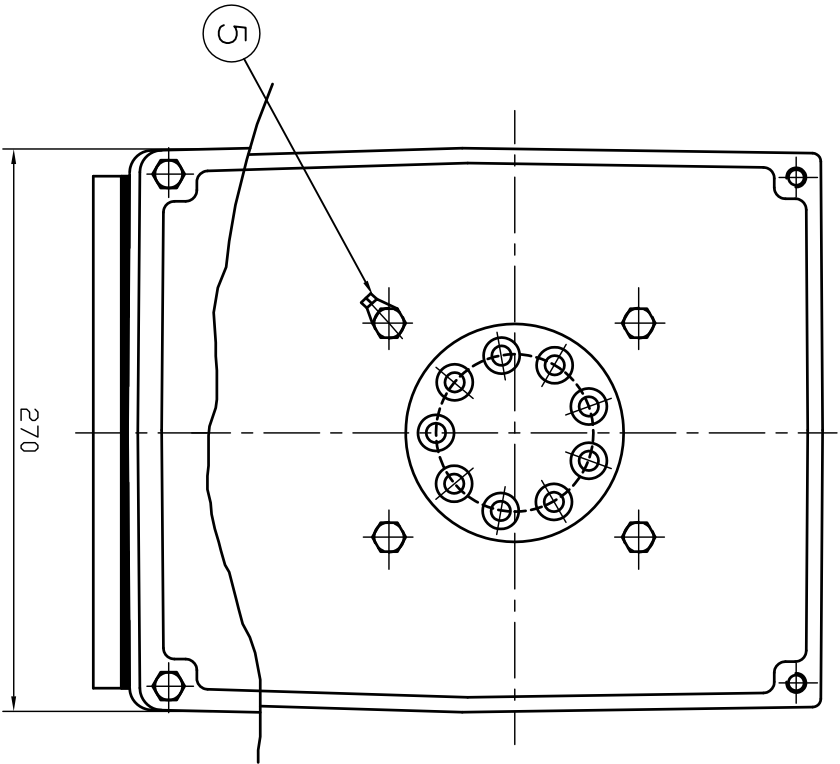
1.TOLERANCE :

CENTER HEIGHT	280 ⁰ _{-1.0}
BASE HOLE	ø24 ^{+0.43} ₀
SHAFT DIAMETER	ø55 ^{+0.030} _{+0.011}
KEYWAY WIDTH	16 ^{-0.018} _{-0.061}
KEYWAY DEPTH	6 ^{+0.2} ₀
KEY WIDTH	16 ⁰ _{-0.043}
KEY HEIGHT	10 ⁰ _{-0.090}

2.The type (1)-"TNB , TDB" is for HHI's standard products and it can be changed for customer's requirements or detail designing.



				TEFC STANDARD	
APPD BY	KANG K.J.	UNIT	MM	SUBJECT	KS Fr.280L TEFC
CHKD BY	KIM O.J.	SCALE	1/17	TITLE OUTLINE THREE-PHASE INDUCTION MOTOR	
CHKD BY	LEE N.D.	PROJEC'N	3rd Angle		
DSND BY	KIM RYANG GYU	DATE	2007.03.23		
 HYUNDAI HEAVY INDUSTRIES CO., LTD. INDUSTRIAL & POWER SYSTEMS				REF. NO	L2-Series
				DWG NO	LM-T1285B3CL001
				Sheet No. of	
				Revision No. 0	



REV	DATE	CONTENTS	REV'D BY	CHK'D BY	Q.P. CHK	APP'D BY
1						

1	EARTH TERMINAL LUG					5
1	CABLE ENTRY PLATE					4
1	GASKET	NBR				3
1	TERMINAL BOX COVER	CAST IRON				2
1	TERMINAL BOX BODY	CAST IRON				1
QTY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK NO.
APP'D BY	김진오	UNIT	MM	SUBJECT	HLA6 - 250,280Fr.	CAD PROJ. & FILE & T-BOX-M \ 38016882
Q.P. CHK	주영걸	SCALE	NONE	TITLE	(CAST IRON)	
CHK'D BY	권오철	PROJEC'T	3 권(3rd Angle)	TERMINAL BOX ASS'Y		
DSND BY	김헌태	DATE	92.06.05	REF. NO		Sheet No. of
				DWG NO	3M-016882	Revision No.