

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-160/4		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 248.0 A 287.2 A 496.0 A			
Insulation Class	☒ F ☐ B ☐ H		Locked-rotor**	755 % 755 % 755 %			
Temp. Rise at full load (by resistance method)			Efficiency				
at 1.0 S.F 80 deg. C			50% Load 95.4 %				
Motor Location ☒ Indoor ☐ Outdoor			75% Load 96.3 %				
Altitude Less than 1000 meter			100% Load 96.2 %				
Relative Humidity Less than 80 %			Power Factor(p.u)				
Ambient Temp. 40 deg. C (Max.)			50% Load 0.806				
Duty Type Continuous (S1)			75% Load 0.862				
Service Factor 1.15			100% Load 0.880				
Mounting	☒ B3 ☐ B5 ☐ V1 ☐ B3/B5		Speed at Full Load	1785 r.p.m			
Bearing	Type	Anti-Friction	Torque				
	DE/N-DE	6318C3 / 6316C3	Full Load 87.3 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.) 97.250 kg·m²				
Terminal Box	Main	☐ Steel ☒ Cast Iron	Motor 3.653 kg·m²				
	Aux.	☐ Yes ☒ No	Sound Pressure Level (No-load & mean value at 1m from motor)				
	Location	Refer to Outline Drawing	85 dB(A)				
Application			Vibration 2.2 mm/sec (r.m.s)				
Area classification	Non-Hazardous		Permissible number of				
Type of Ex-Protection	Not applicable		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-T1285B3PL001 840 kg				
			B5 LM-T1285B5PL001 910 kg				
			V1 LM-T1285V1PL001 910 kg				
			B3/B5 LM-T1285B4PL001 875 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

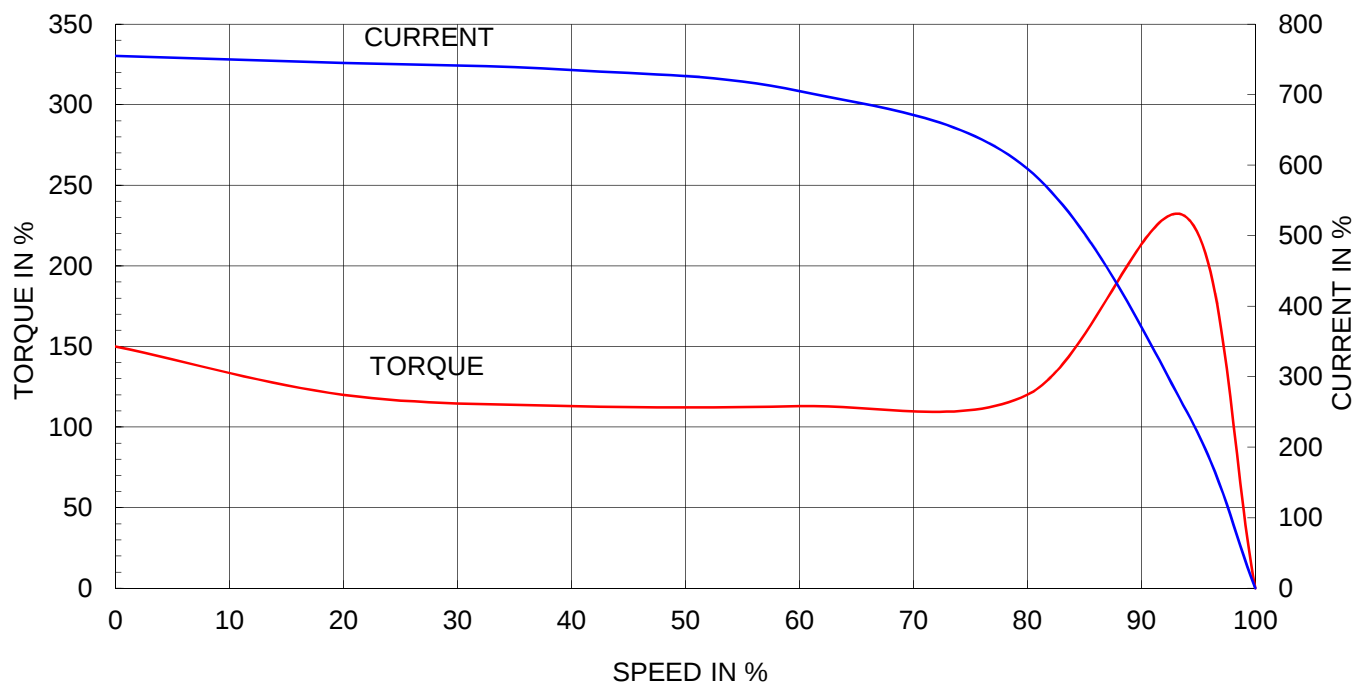
Note: Others not mentioned in this data sheet shall be in accordance with maker standard.
 Above technical data are only design values and shall be guaranteed with tolerance of applicable standard.
 Inspection and performance test shall be maker standard, if not mentioned.
 * In case of Inverter-Fed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

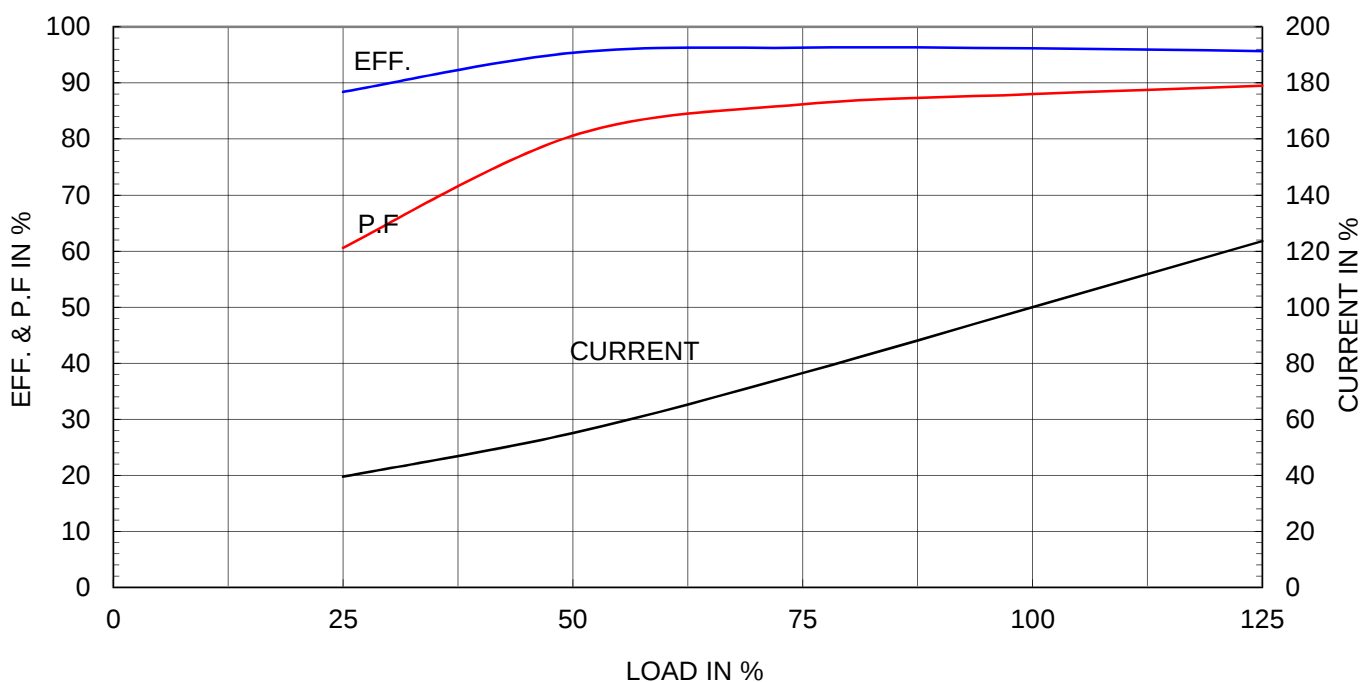
Type	:	HLP-160/4
Full Load Torque	:	87.3 Kg.m
Motor moment of Inertia (J)	:	3.653 Kg.m ²
Load moment of Inertia (J)	:	97.250 Kg.m ²

160 kW		4 P		60 Hz	
Speed at Full Load :				1785 RPM	
Rated Voltage	440V	380V	220V		
Full Load Current	248.0A	287.2A	496.0A		

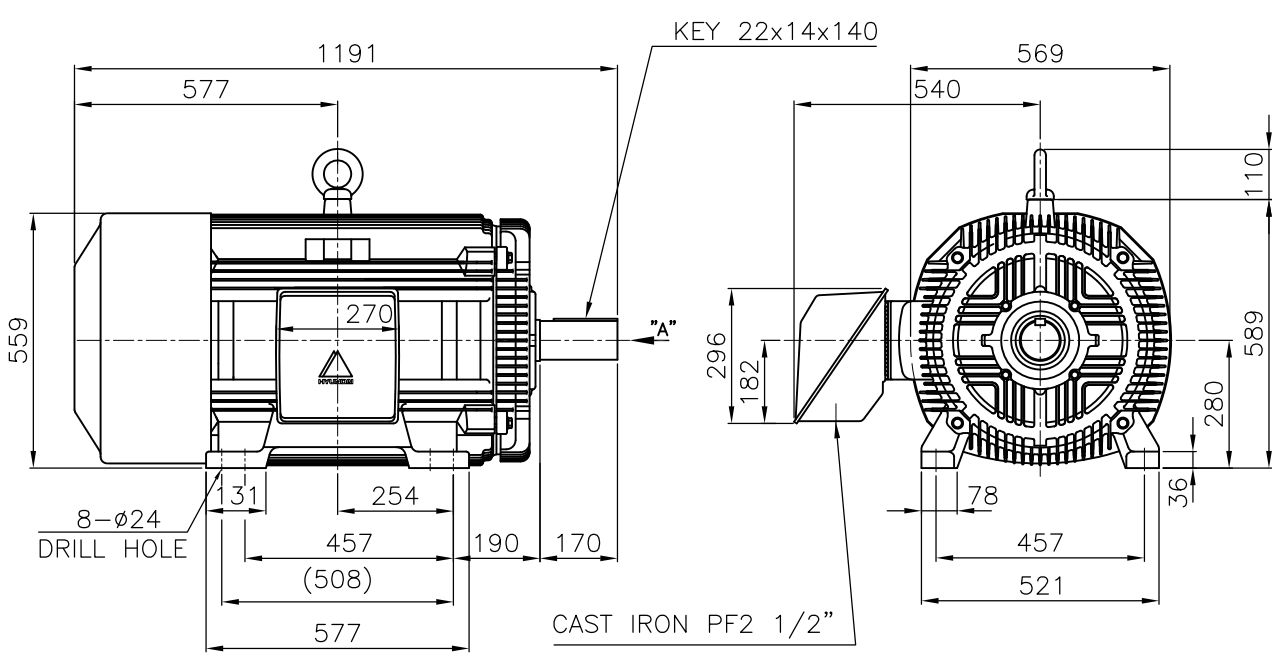
SPEED VS TORQUE & CURRENT CURVE



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	

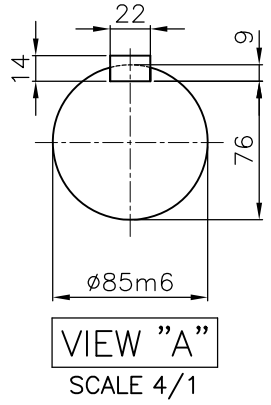


NOTE

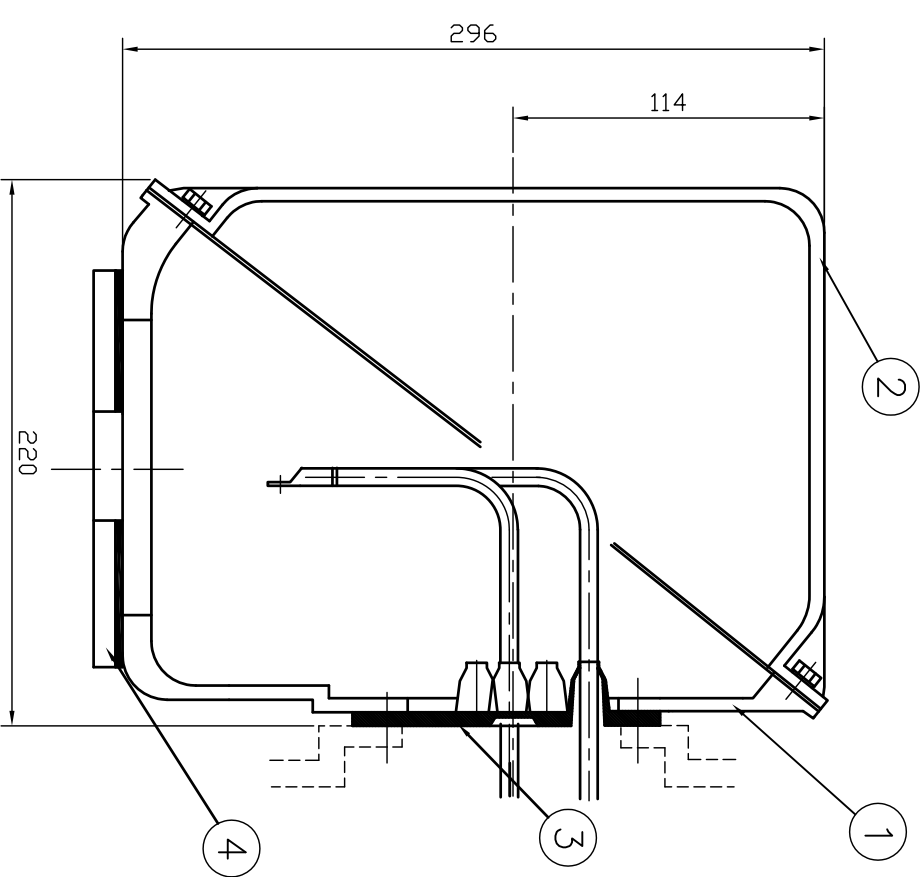
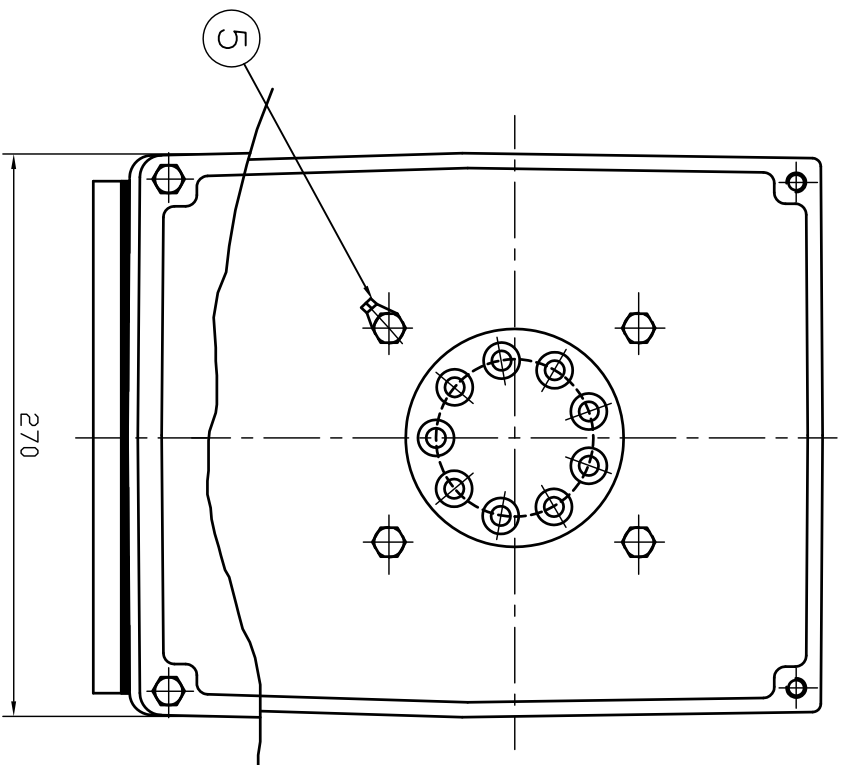
1.TOLERANCE :

CENTER HEIGHT	280 ⁰ _{-1.0}
BASE HOLE	ø24 ^{+0.43} ₀
SHAFT DIAMETER	ø85 ^{+0.035} _{+0.013}
KEYWAY WIDTH	22 ^{-0.022} _{-0.074}
KEYWAY DEPTH	9 ^{+0.2} ₀
KEY WIDTH	22 ⁰ _{-0.052}
KEY HEIGHT	14 ⁰ _{-0.110}

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	
CHKD BY	LEE N.D.	PROJEC'N	3rd Angle	OUTLINE	
DSND BY	KIM RYANG GYU	DATE	2007.03.23	THREE-PHASE INDUCTION MOTOR	
 HYUNDAI HEAVY INDUSTRIES CO., LTD. INDUSTRIAL & POWER SYSTEMS				REF. NO	L2-Series
				DWG NO	LM-T1285B3PL001
				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
Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK NO.
APP'D BY	김진오	UNIT	MM			
Q.P. CHK	주영걸	SCALE	NONE			
CHK'D BY	권오철	PROJEC'T	3번(3rd Angle)			
DSND BY	김헌태	DATE	92.06.05			
				SUBJECT	HLA6 - 250,280Fr.	CAD PROJ. & FILE &
				TITLE	(CAST IRON)	T-BOX-M \ 38016882
				REF. NO	3M-016882	Sheet No. of
				DWG NO	3M-016882	Revision No.

