

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	280LL		Rated Output	160 kW 214 HP			
Type	HLP-160/6		Number of Poles	6			
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 254.8 A 295.1 A 509.7 A			
Insulation Class	☒ F ☐ B ☐ H		Locked-rotor**	800 % 800 % 800 %			
Temp. Rise at full load (by resistance method)			Efficiency				
at 1.0 S.F 80 deg. C			50% Load 95.7 %				
Motor Location	☒ Indoor ☐ Outdoor		75% Load 96.0 %				
Altitude	Less than 1000 meter		100% Load 95.8 %				
Relative Humidity	Less than 80 %		Power Factor(p.u)				
Ambient Temp.	40 deg. C (Max.)		50% Load 0.726				
Duty Type	Continuous (S1)		75% Load 0.814				
Service Factor	1.15		100% Load 0.860				
Mounting	☒ B3 ☐ B5 ☐ V1 ☐ B3/B5		Speed at Full Load 1185 r.p.m				
Bearing	Type	Anti-Friction	Torque				
	DE/N-DE	6318C3 / 6316C3	Full Load 131.5 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.) 224.250 kg·m²				
Terminal Box	Main	☐ Steel ☒ Cast Iron	Motor 7.288 kg·m²				
	Aux.	☐ Yes ☒ No	Sound Pressure Level (No-load & mean value at 1m from motor)				
	Location	Refer to Outline Drawing	80 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-T1287B3PL001	1100 kg	
			B5		LM-T1287B5PL001	1170 kg	
			V1		LM-T1287V1PL001	1170 kg	
			B3/B5		LM-T1287B4PL001	1135 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.

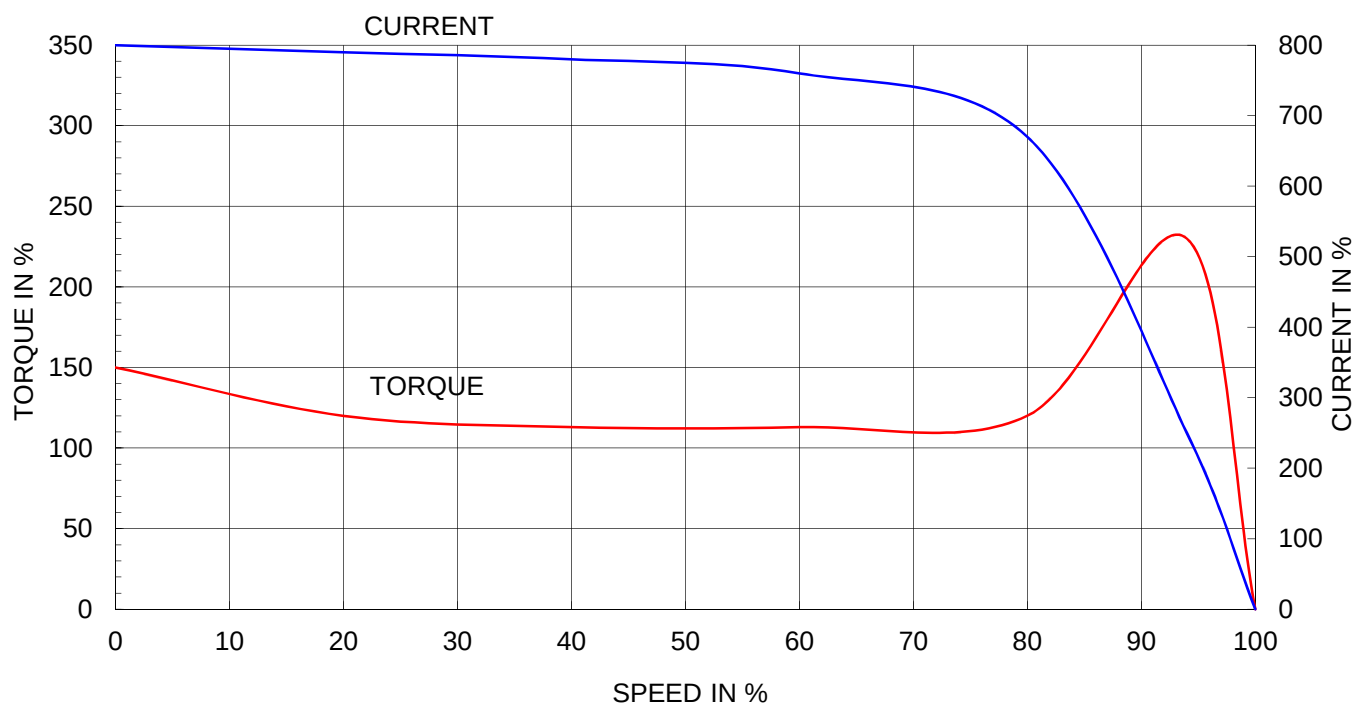
* In case of Inverter-Fed Motor, performance data is based on sine wave tests.

** 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.

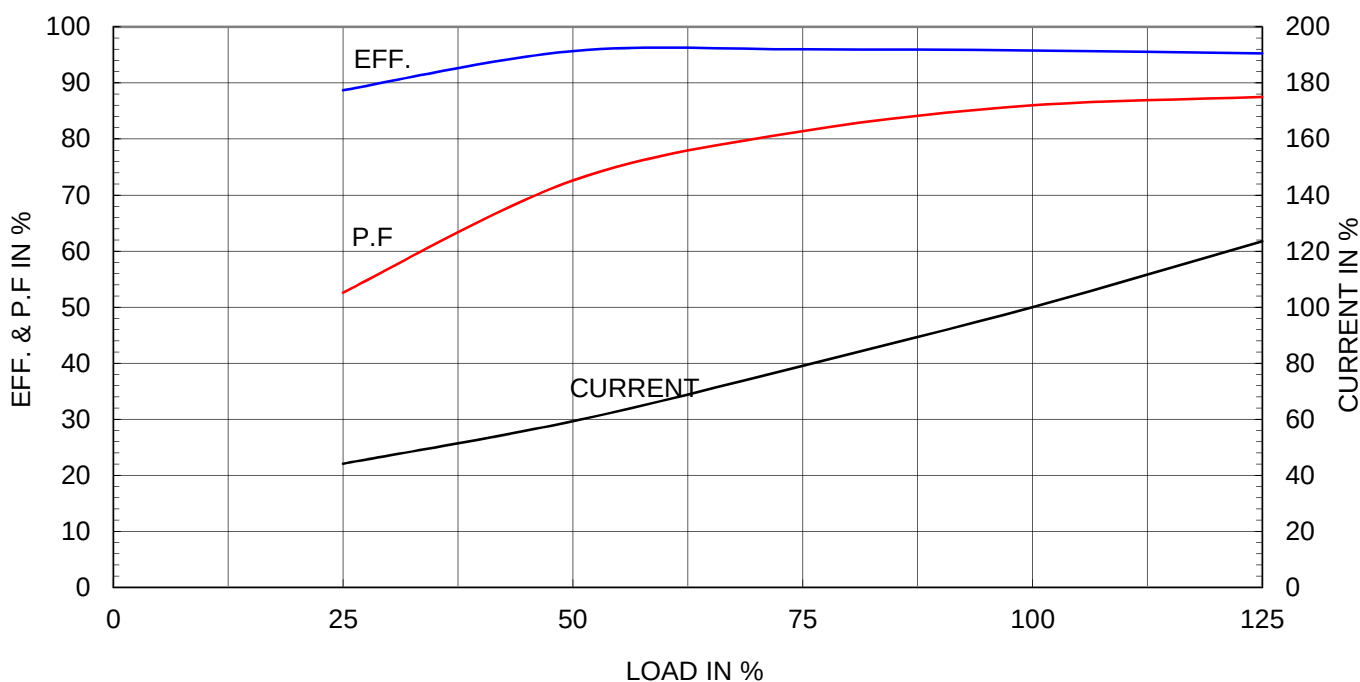
Type	:	HLP-160/6
Full Load Torque	:	131.5 Kg.m
Motor moment of Inertia (J)	:	7.288 Kg.m ²
Load moment of Inertia (J)	:	224.250 Kg.m ²

160 kW		6 P		60 Hz	
Speed at Full Load :				1185 RPM	
Rated Voltage	440V	380V	220V		
Full Load Current	254.8A	295.1A	509.7A		

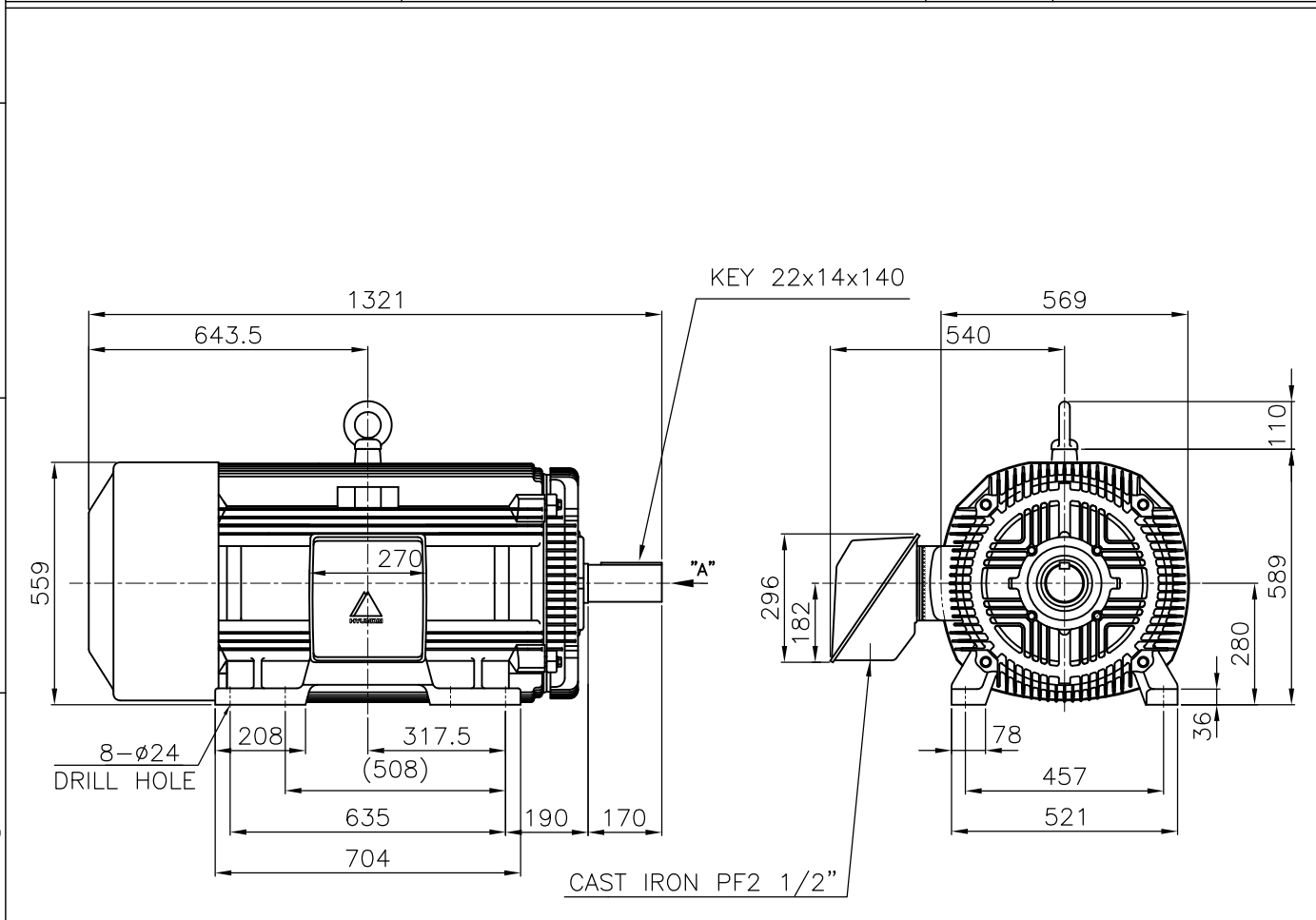
SPEED VS TORQUE & CURRENT CURVE



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	

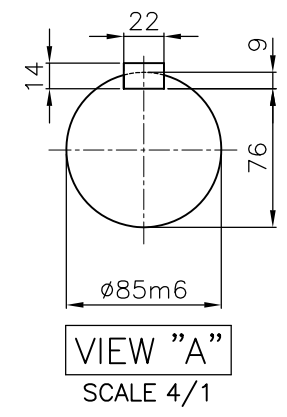


NOTE

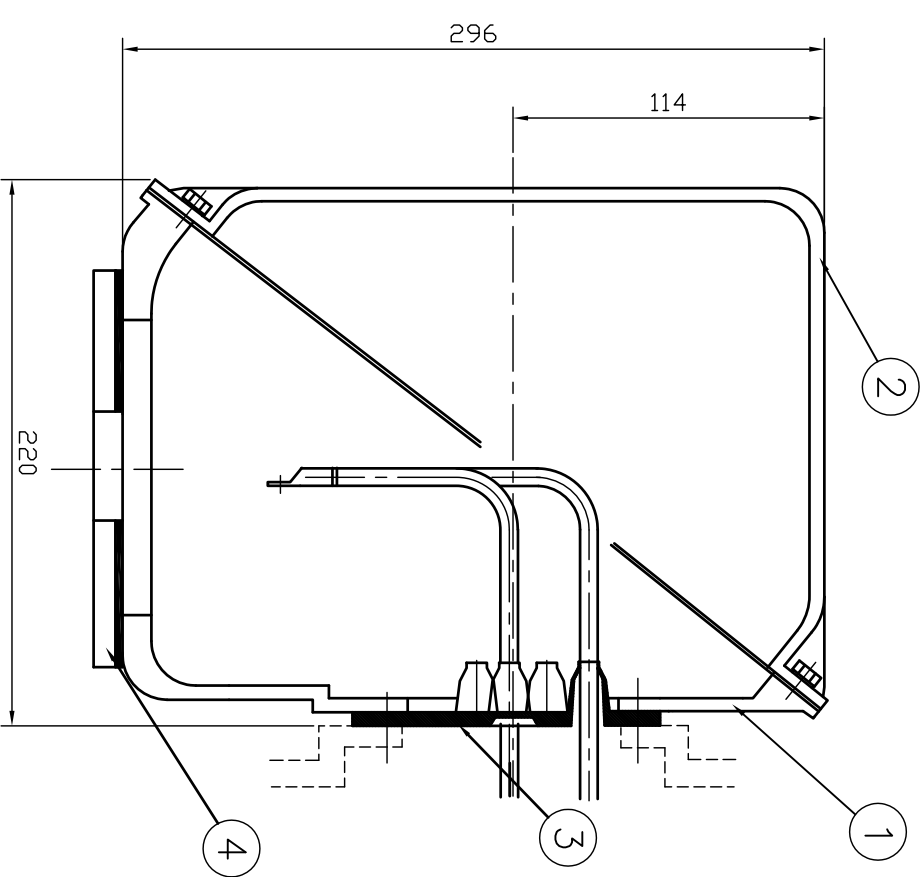
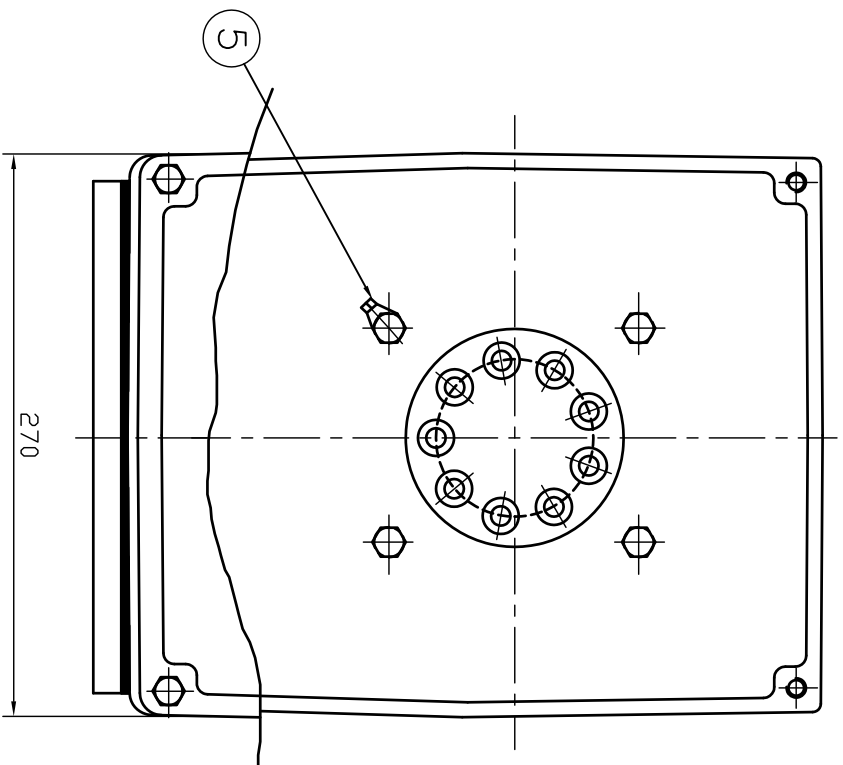
1.TOLERANCE :

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

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.280LL TEFC
CHKD BY	KIM O.J.	SCALE	1/17	TITLE	CAD PROJ \ FILE
CHKD BY	LEE N.D.	PROJEC'N	3rd Angle		MMSTDMTR/TJ8XAP51
DSND BY	KIM RYANG GYU	DATE	2007.03.23		
 HYUNDAI HEAVY INDUSTRIES CO., LTD. INDUSTRIAL & POWER SYSTEMS				REF. NO	L2-Series
				DWG NO	LM-T1287B3PL001
				THREE-PHASE INDUCTION MOTOR	
				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 & 2 (3rd Angle)	TERMINAL BOX ASS'Y		
DSND BY	김헌태	DATE	92.06.05	REF. NO		Sheet No. of
				DWG NO	3M-016882	Revision No.

