

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	HS-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	254.0 A 294.1 A 508.0 A		
Insulation Class	☒ F ☐ B ☐ H		Locked-rotor**	650 %	650 % 650 %		
Temp. Rise at full load (by resistance method)			Efficiency				
at 1.0 S.F 80 deg. C			50% Load 95.0 %				
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 0.842				
Duty Type Continuous (S1)			75% Load 0.860				
Service Factor 1.15			100% Load 0.870				
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** 170 %				
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			consecutive starts Cold 3 times				
Applicable Standard KS,IEC,NEMA MG1 Part30(Vpeak)			Hot 2 times				
			Paint	Munsell No.	4.0PB5.4/5.5(VL-451)		
ACCESSORIES			SUBMITTAL DRAWING				
			Outline Dimension Drawing \ Motor Weight(Approx.)				
			B3		kg		
			B5 TJ8XPB51		1170 kg		
			V1		kg		
			B3/B5		kg		
			Main T-Box Ass'y 3M-016882				
SPARE PARTS			REMARK				
			High Efficiency				
			*. For use on PWM VFD 10:1VT, 3:1CT@1.0S.F&F Temp. rise				
			Date	DSND	CHKD	CHKD	APPD
			2010-05-28	R.G. KIM	O.J. KIM	J.H. KIM	K.J. KANG

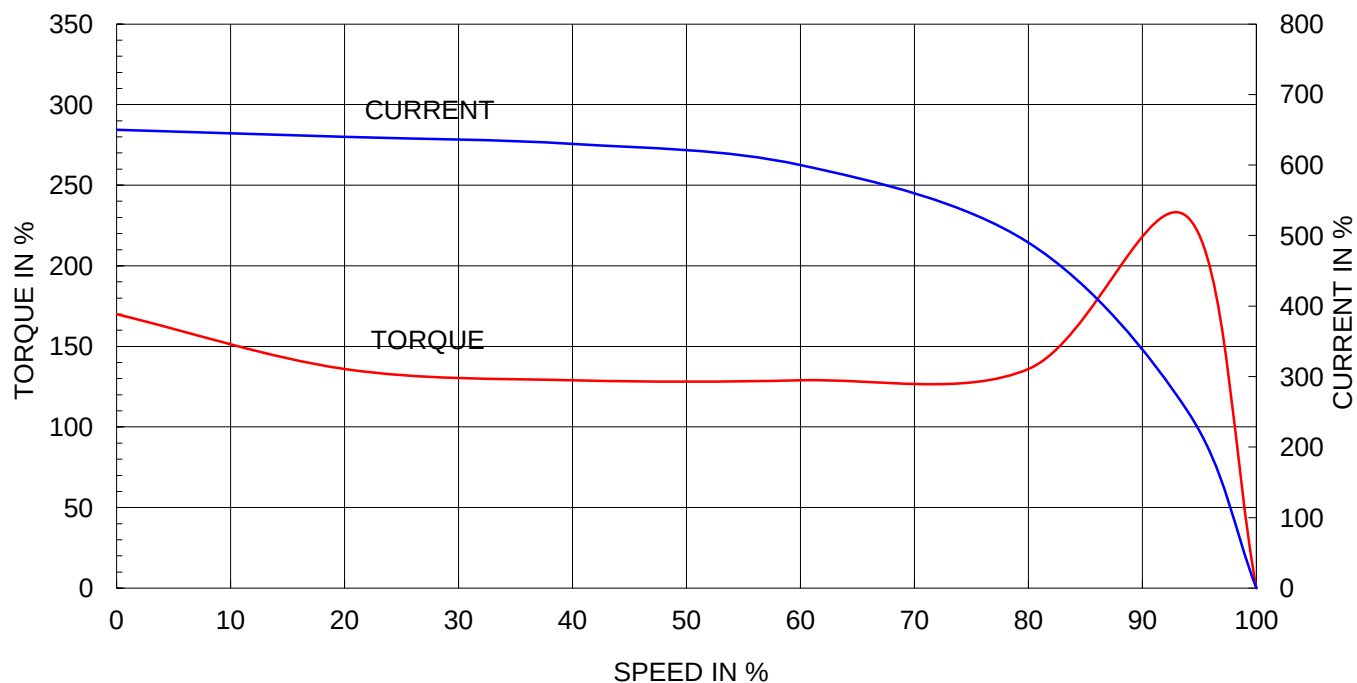
Note: Others not mentioned in this data sheet shall be in accordance with maker standard.
 Above technical data are only design values and shall be guaranteed with tolerance of applicable standard.
 Inspection and performance test shall be maker standard, if not mentioned.
 * In case of Inverter-Fed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

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)

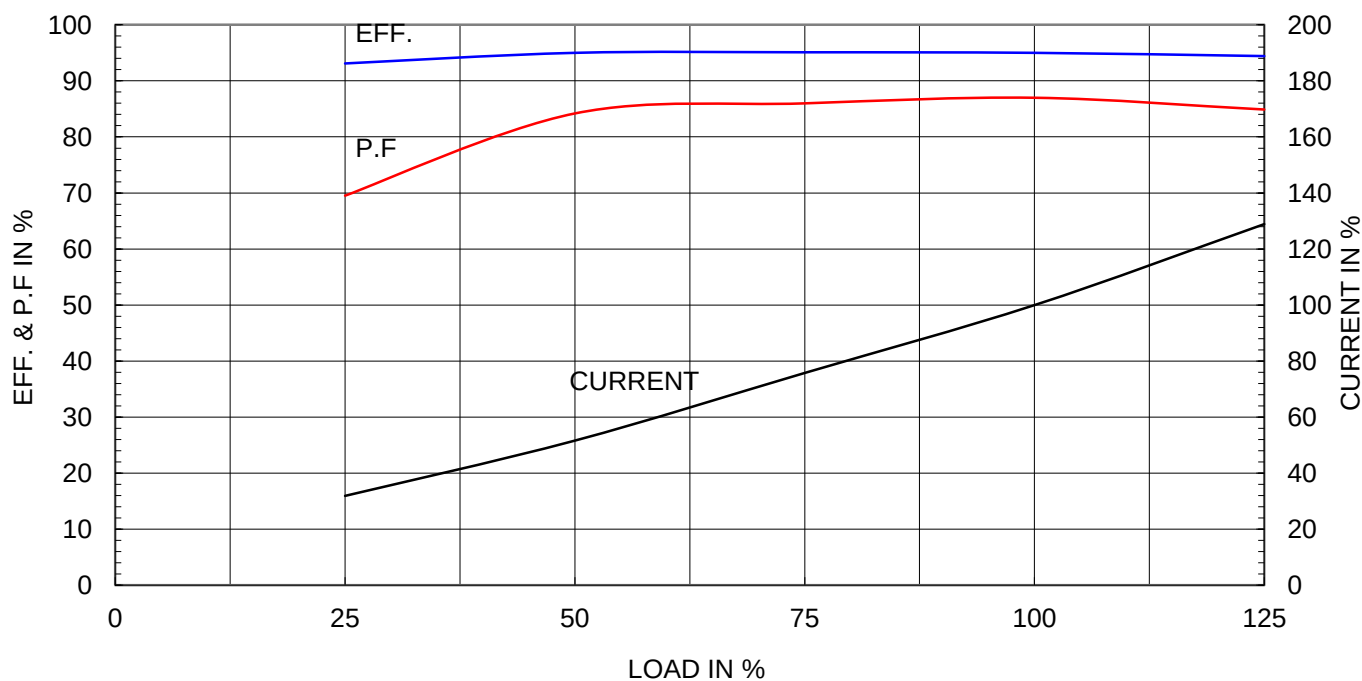
Type	:	HS
Full Load Torque	:	131.5 Kg.m
Motor moment of Inertia (J)	:	7.288 Kg.m ²
Load moment of Inertia (J)	:	224.250 Kg.m ²

160 kW		6 P		60 Hz	
Speed at Full Load :				1185 RPM	
Rated Voltage	440V	380V	220V		
Full Load Current	254.0A	294.1A	508.0A		

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE





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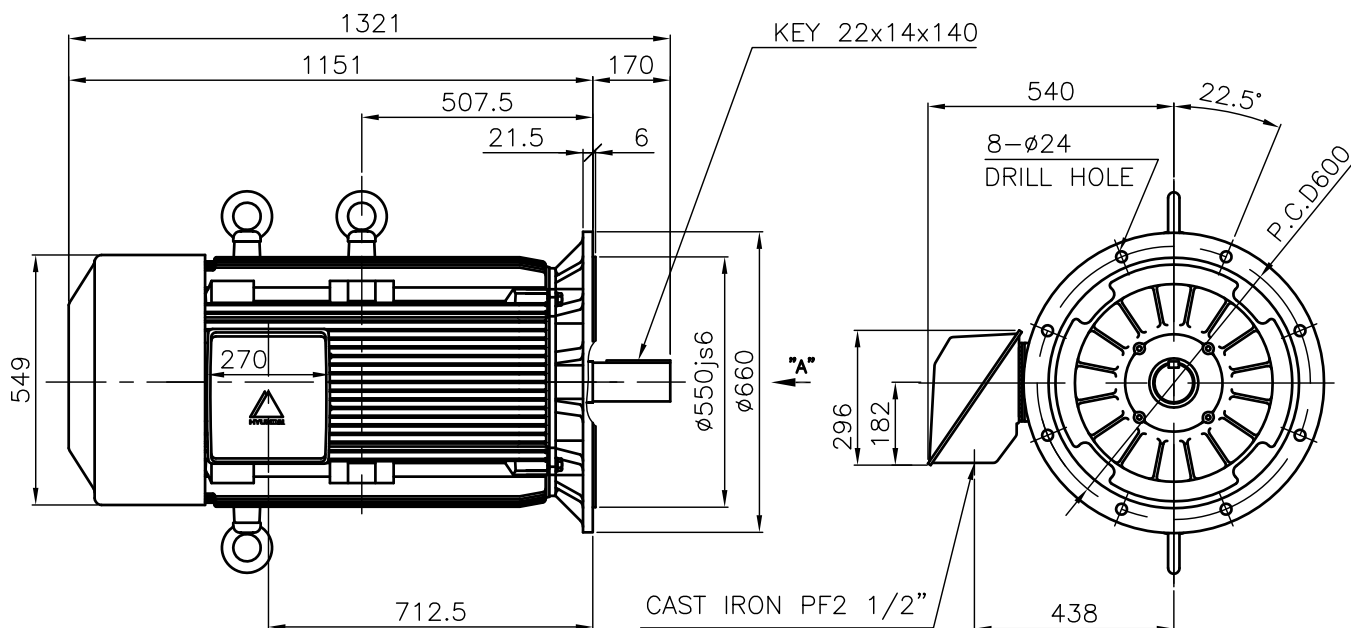
TEFC

THREE PHASE INDUCTION MOTOR

TYPE

(1) TNB , TDB

CAST IRON FRAME

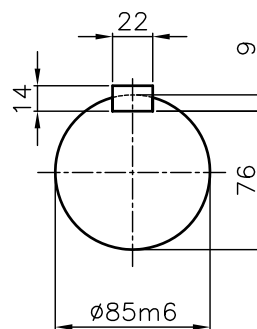


NOTE

1.TOLERANCE :

RABBIT DIAMETER	ø550js6	±0.022
SHAFT DIAMETER	ø85m6	+0.035 +0.013
KEYWAY WIDTH	22P9	-0.022 -0.074
KEYWAY DEPTH	9	+0.2 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.



VIEW "A"

SCALE 4/1

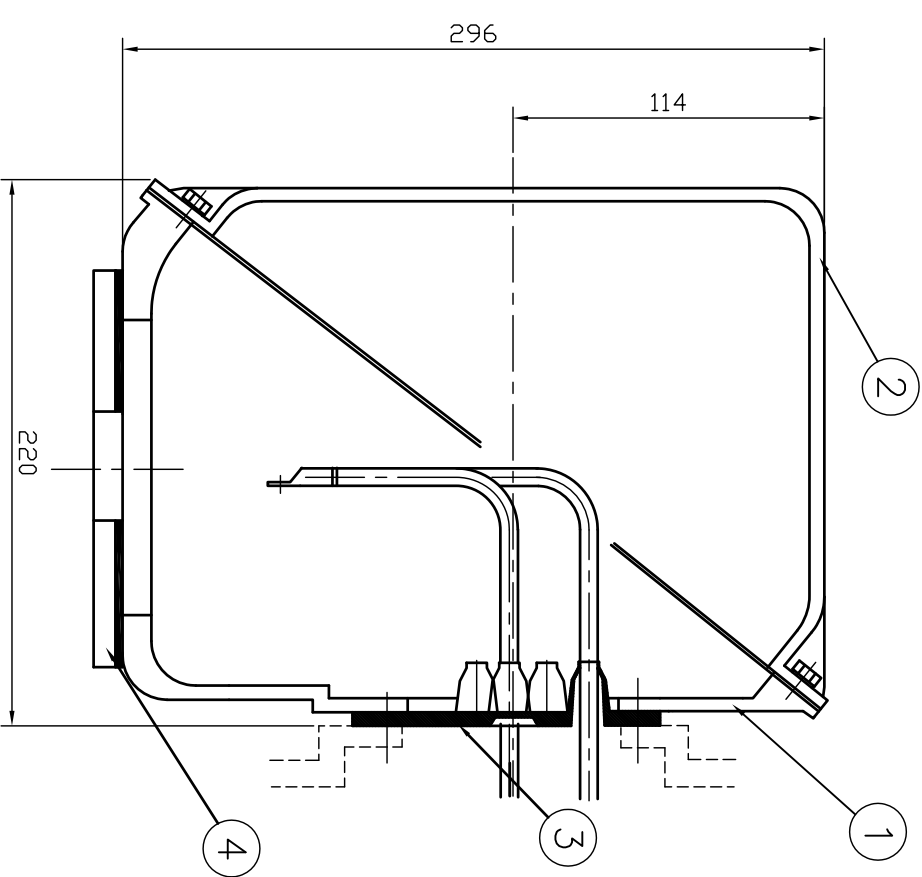
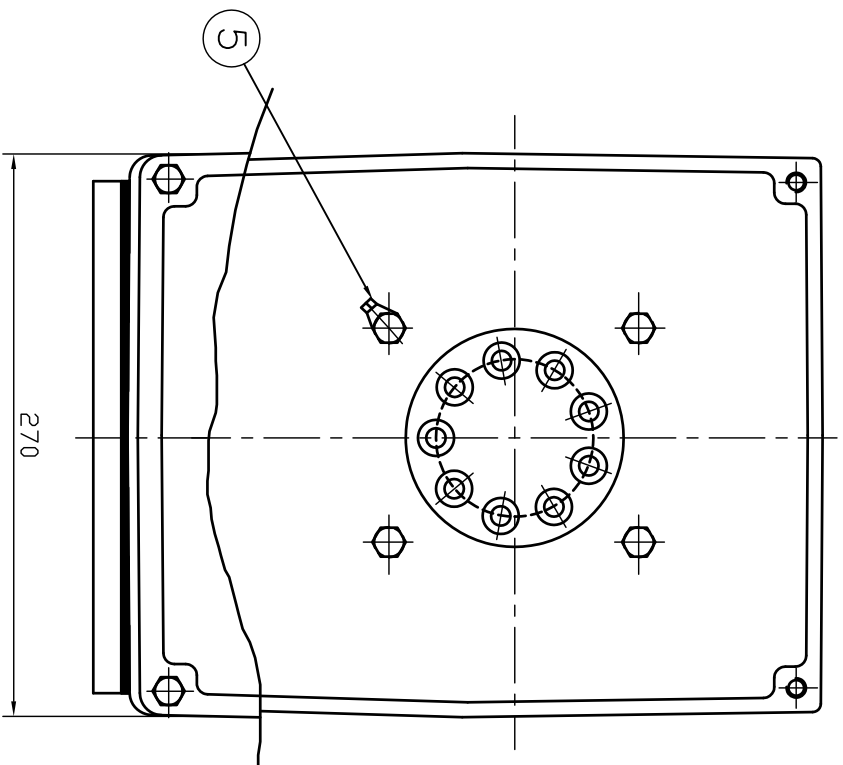
TEFC STANDARD
CAD PROJ \ FILE
MMSTDMTR/TJ8XBP51

APPD BY	KANG K.J.	UNIT	MM
CHKD BY	KIM O.J.	SCALE	1/17
CHKD BY	LEE N.D.	PROJEC'N	3rd Angle
DSND BY	KIM RYANG GYU	DATE	2007.03.23

SUBJECT	KS Fr.280LL TEFC	CAD PROJ \ FILE
		MMSTDMTR/TJ8XBP51
TITLE OUTLINE THREE-PHASE INDUCTION MOTOR		
REF. NO	L3-Series	Sheet No. of
DWG NO	TJ8XBP51	Revision No. 0



HYUNDAI
HEAVY INDUSTRIES CO., LTD.
INDUSTRIAL & POWER SYSTEMS



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 & 4 (3rd Angle)	TERMINAL BOX ASS'Y		
DSND BY	김현태	DATE	92.06.05	REF. NO		Sheet No. of
				DWG NO	3M-016882	Revision No.

