

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		250S		Rated Output		55 kW 75 HP			
Type		HS-55/6		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 90.7 A 105.0 A 181.4 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		93.1 %			
Motor Location		☐ Indoor ☒ Outdoor		75% Load		93.7 %			
Altitude		Less than 1000 meter		100% Load		93.6 %			
Relative Humidity		Less than 80 %		Power Factor(p.u)					
Ambient Temp.		40 deg. C (Max.)		50% Load		0.730			
Duty Type		Continuous (S1)		75% Load		0.831			
Service Factor		1.15		100% Load		0.850			
Mounting		☐ B3 ☐ B5 ☒ V1 ☐ B3/B5		Speed at Full Load		1185 r.p.m			
Bearing	Type	Anti-Friction		Torque					
	DE/N-DE	6316C3 / 6313C3		Full Load		45.2 kg·m			
	Lubricant	Grease(Gadus S2 V 100 2)		Locked-rotor**		150 %			
External Thrust		Not applicable		Breakdown**		250 %			
Coupling Method		☒ Direct ☐ V-Belt		Moment of Inertia (J)					
Shaft Extension		☒ Single ☐ Double		Load(Max.)		112.550 kg·m²			
Terminal Box	Main	☐ Steel ☒ Cast Iron		Motor		2.378 kg·m²			
	Aux.	☐ Yes ☒ No		Sound Pressure Level (No-load & mean value at 1m from motor)					
	Location	Refer to Outline Drawing				73 dB(A)			
Application				Vibration		2.2 mm/sec (r.m.s)			
Area classification		Non-Hazardous		Permissible number of consecutive starts		Cold 3 times Hot 2 times			
Type of Ex-Protection		Not applicable		Paint		Munsell No. 4.0PB5.4/5.5(VL-451)			
Applicable Standard		KS,IEC,NEMA MG1 Part30(Vpeak)		SUBMITTAL DRAWING					
ACCESSORIES				Outline Dimension Drawing \ Motor Weight(Approx.)					
				B3		kg			
				B5		kg			
				V1		TJ50PP51 545 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.

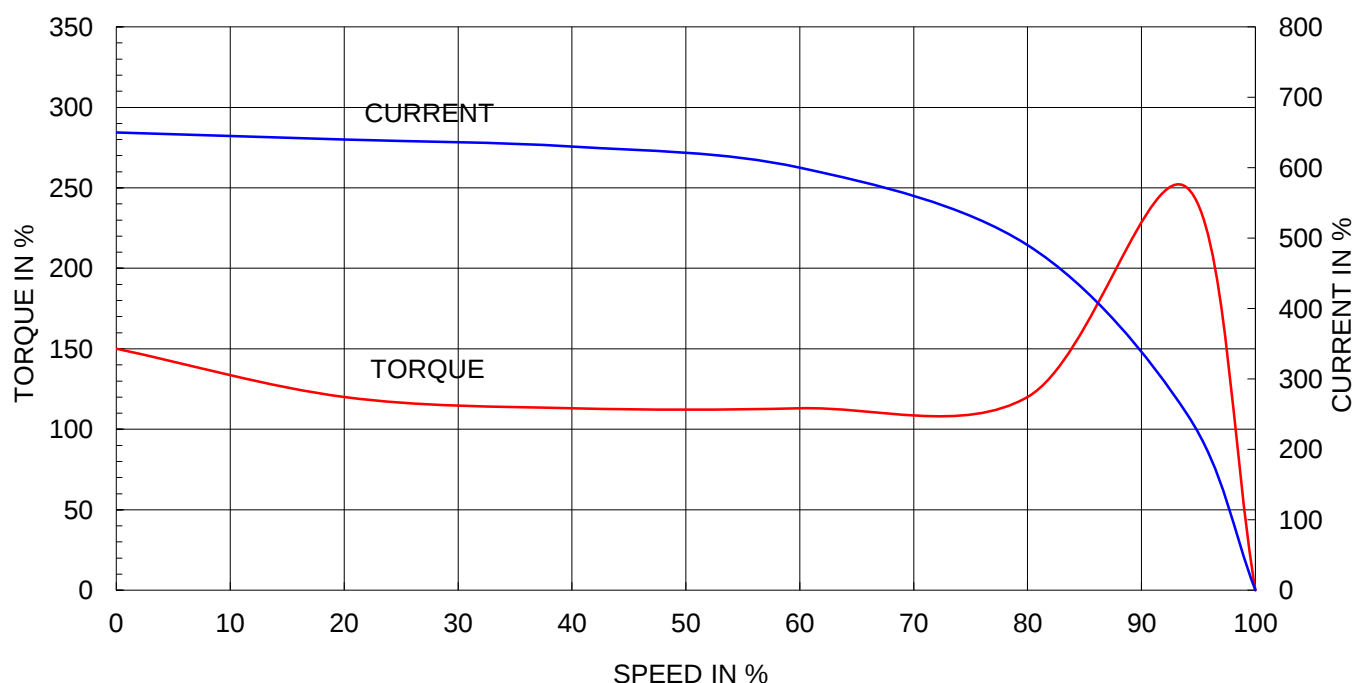
** Data is based on when the motor is supplied at rated voltage & frequency, and the data is expressed as a percentage of full-load value.

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)

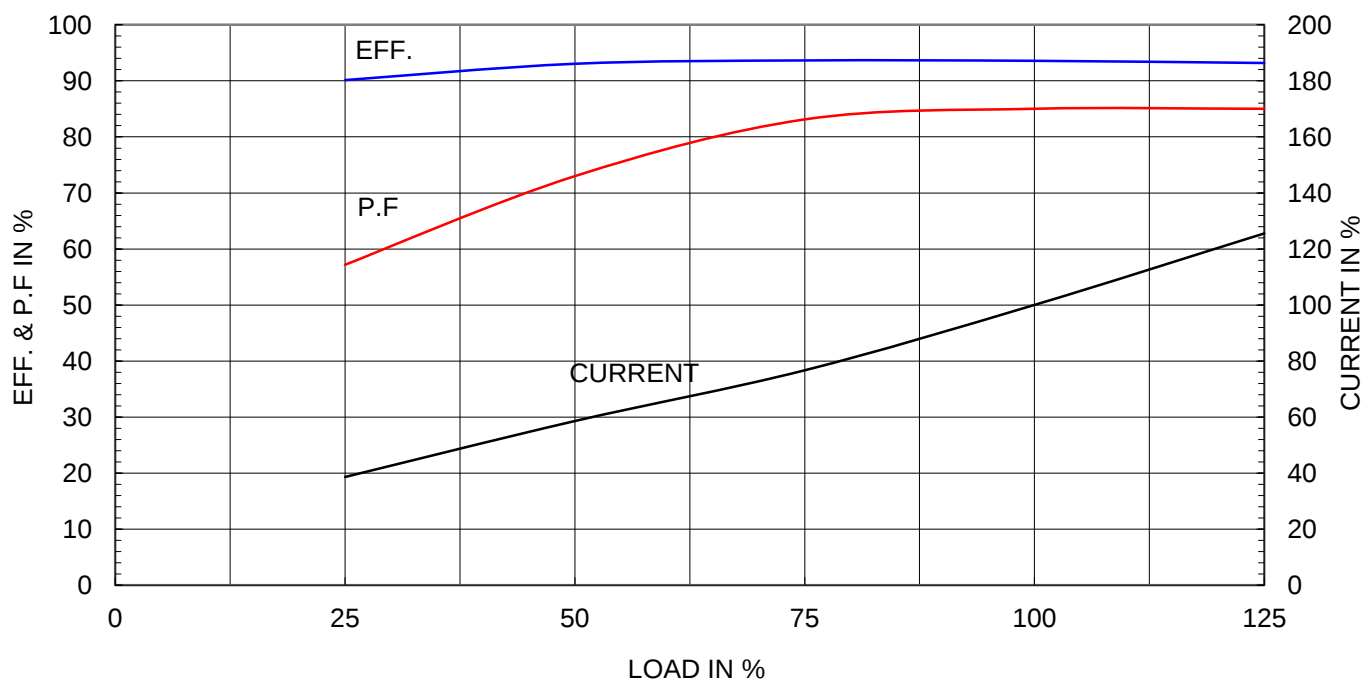
Type	:	HS
Full Load Torque	:	45.2 Kg.m
Motor moment of Inertia (J)	:	2.378 Kg.m ²
Load moment of Inertia (J)	:	112.550 Kg.m ²

55 kW		6 P		60 Hz	
Speed at Full Load :				1185 RPM	
Rated Voltage	440V	380V	220V		
Full Load Current	90.7A	105.0A	181.4A		

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



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

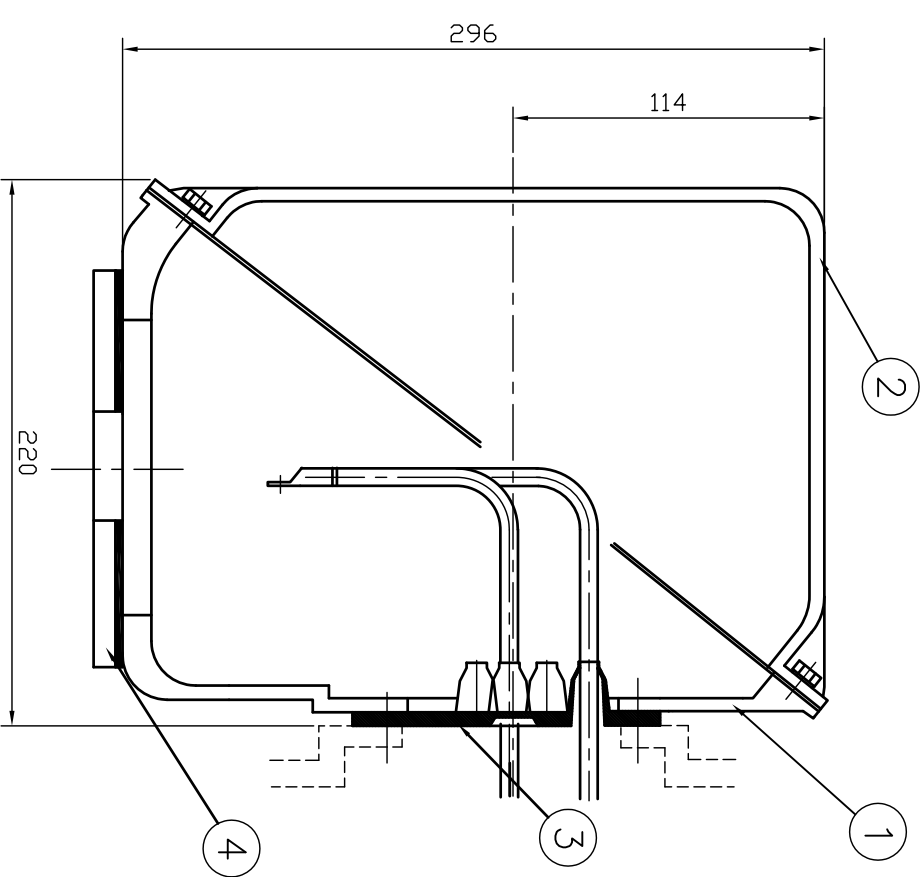
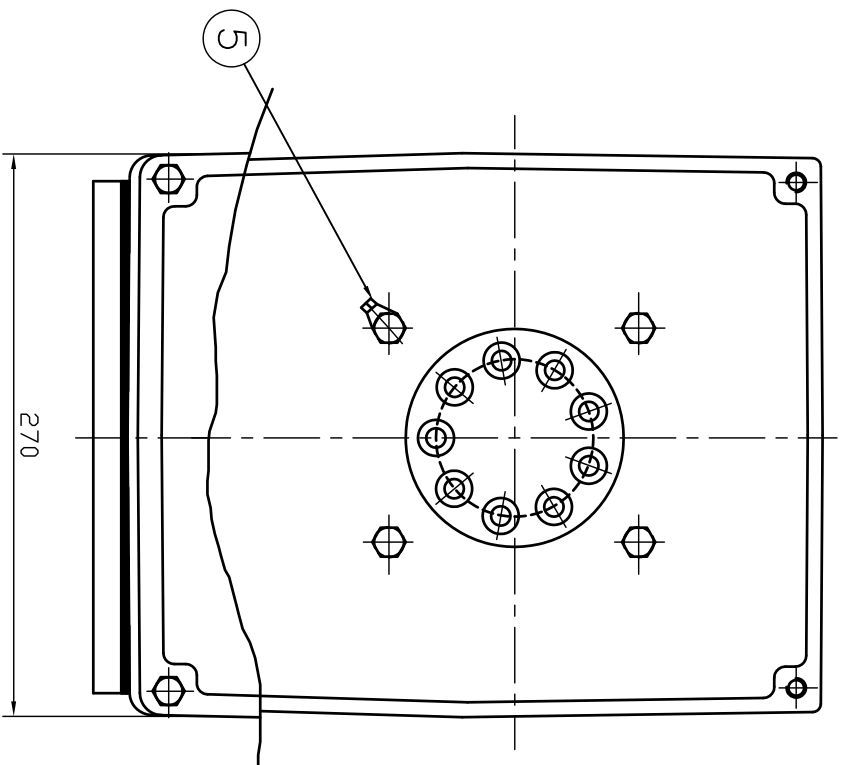
1.TOLERANCE :

RABBET DIAMETER	ø450j6	±0.020
SHAFT DIAMETER	ø75m6	+0.030 +0.011
KEYWAY WIDTH	20P9	-0.022 -0.074
KEYWAY DEPTH	7.5	+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			
APPD BY	KANG K.J.	UNIT	MM	SUBJECT	KS Fr.250 TEFC		CAD PROJ \ FILE		
CHKD BY	KIM O.J.	SCALE	1/13	TITLE OUTLINE THREE-PHASE INDUCTION MOTOR					MMSTD MTR/TJ50PP51
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	L3-SERIES		Sheet No.	of	
				DWG NO	TJ50PP51		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
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.

