

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	250M		Rated Output	90 kW 120 HP			
Type	HS-90/4		Number of Poles	4			
Enclosure(Protection)	Totally Enclosed (IP55)		Rotor Type	Squirrel Cage			
Method of Cooling	IC411(FC)		Starting Method*	■			
Rated Frequency	60 Hz		Rated Voltage	220 V			
Number of Phases	3		Current	Full Load	288.9 A		
Insulation Class	■ F □ B □ H		Locked-rotor**	670 %			
Temp. Rise at full load (by resistance method)			Efficiency				
at 1.0 S.F 80 deg. C			50% Load 94.2 %				
Motor Location ■ Indoor □ Outdoor			75% Load 94.6 %				
Altitude Less than 1000 meter			100% Load 94.5 %				
Relative Humidity Less than 80 %			Power Factor(p.u)				
Ambient Temp. 40 deg. C (Max.)			50% Load 0.830				
Duty Type Continuous (S1)			75% Load 0.860				
Service Factor 1.15			100% Load 0.865				
Mounting	□ B3 ■ B5 □ V1 □ B3/B5		Speed at Full Load 1785 r.p.m				
Bearing	Type	Anti-Friction	Torque				
	DE/N-DE	6316C3 / 6313C3	Full Load 49.1 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.) 63.525 kg·m²				
Terminal Box	Main	□ Steel ■ Cast Iron	Motor 1.940 kg·m²				
	Aux.	□ Yes ■ No	Sound Pressure Level (No-load & mean value at 1m from motor)				
Location Refer to Outline Drawing			82 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	TJ50BP51	570 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.

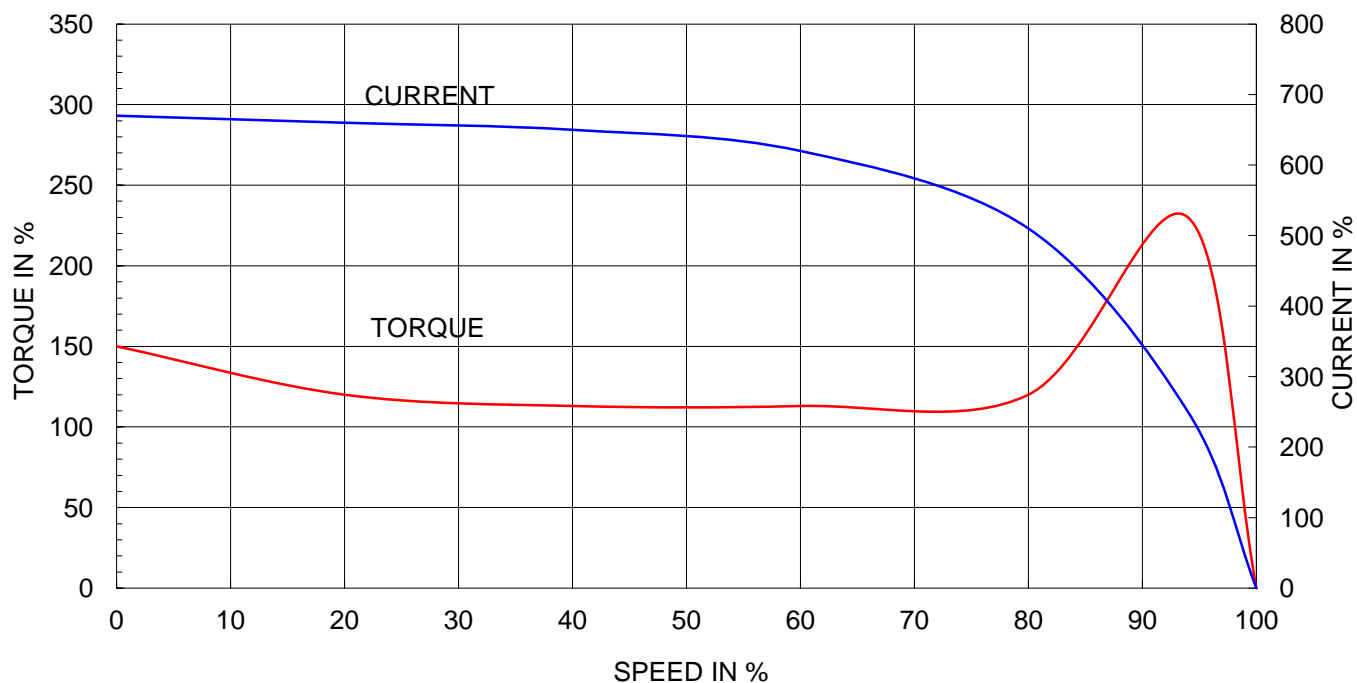
* In case of Inverter-Fed Motor, performance data is based on sine wave tests.

** 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.

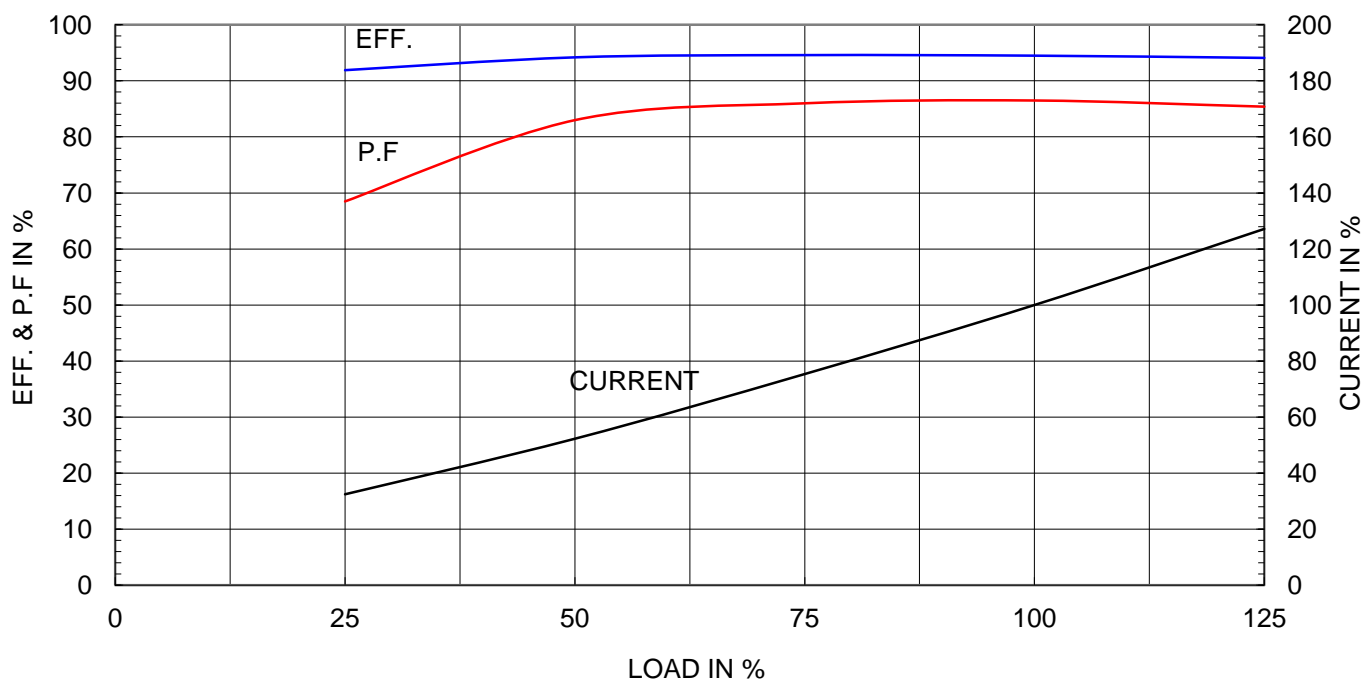
Type	:	HS
Full Load Torque	:	49.1 Kg.m
Motor moment of Inertia (J)	:	1.940 Kg.m ²
Load moment of Inertia (J)	:	63.525 Kg.m ²

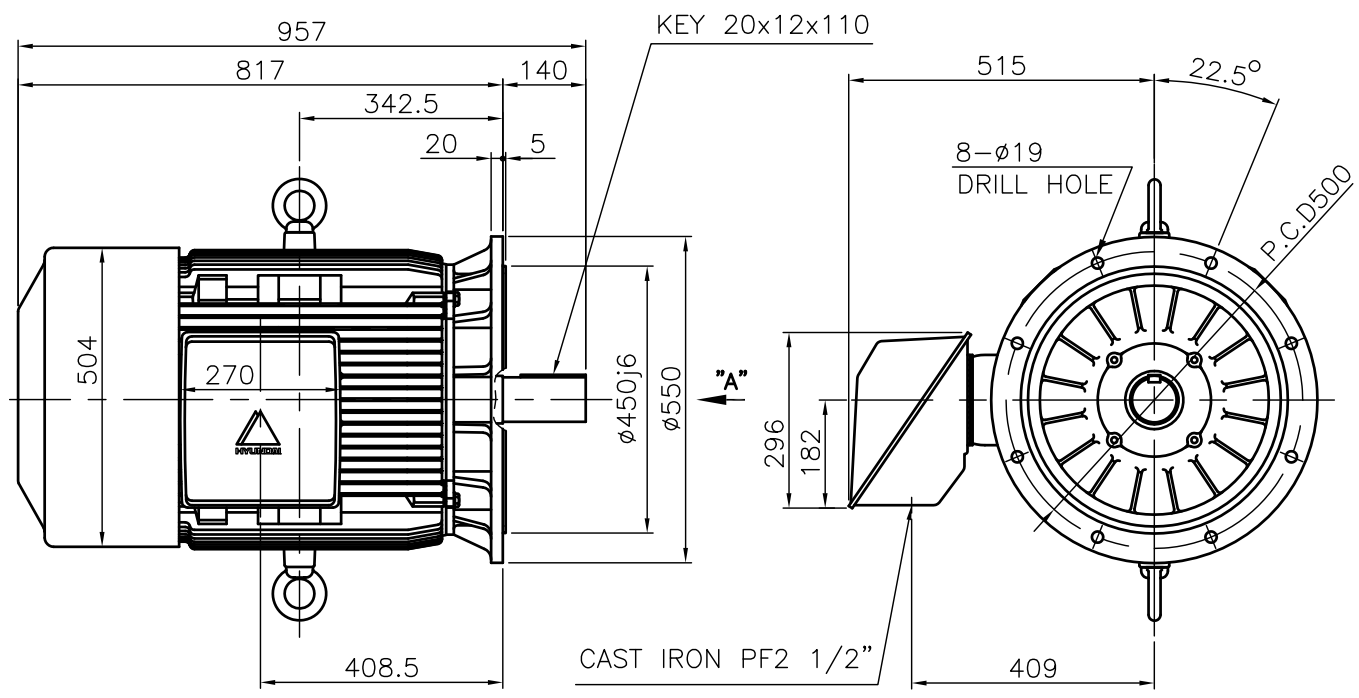
90 kW		4 P		60 Hz	
Speed at Full Load :				1785 RPM	
Rated Voltage	440V	380V	220V		
Full Load Current	144.5A	167.3A	288.9A		

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



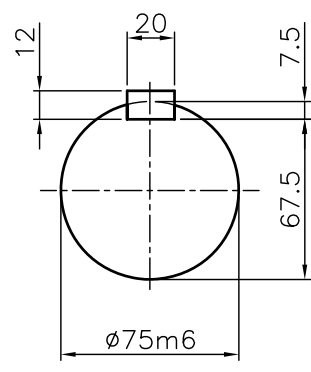


NOTE

1.TOLERANCE :

RABBET DIAMETER	$\phi 450j6$	± 0.020
SHAFT DIAMETER	$\phi 75m6$	$+0.030$ $+0.011$
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

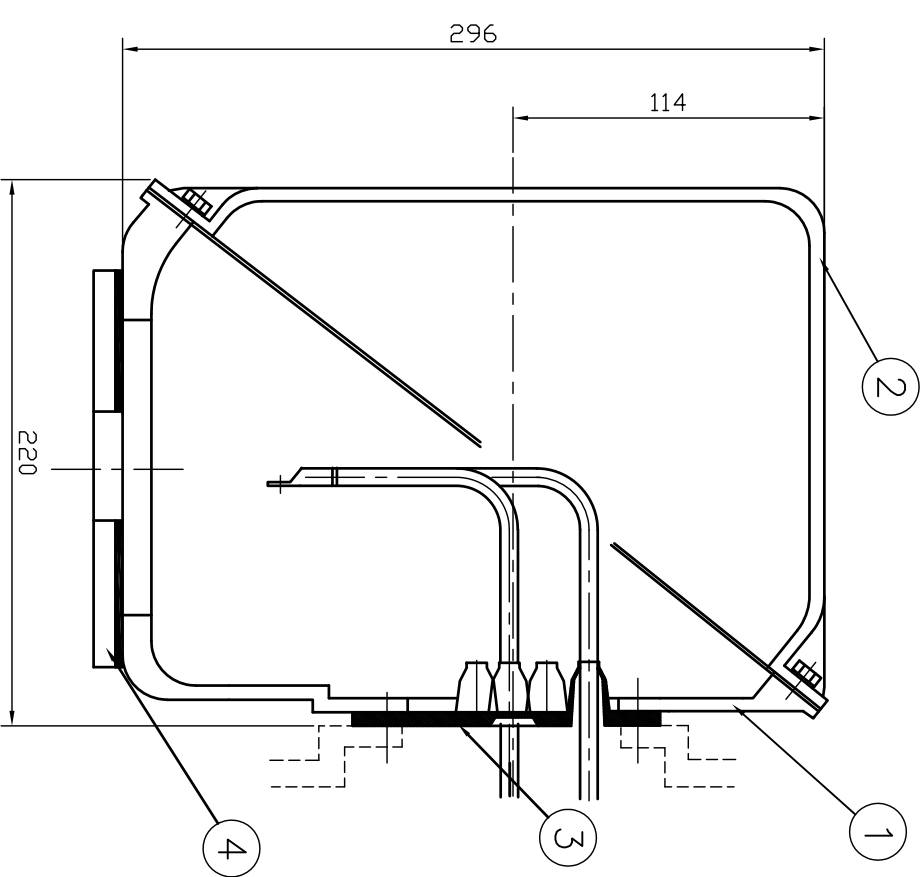
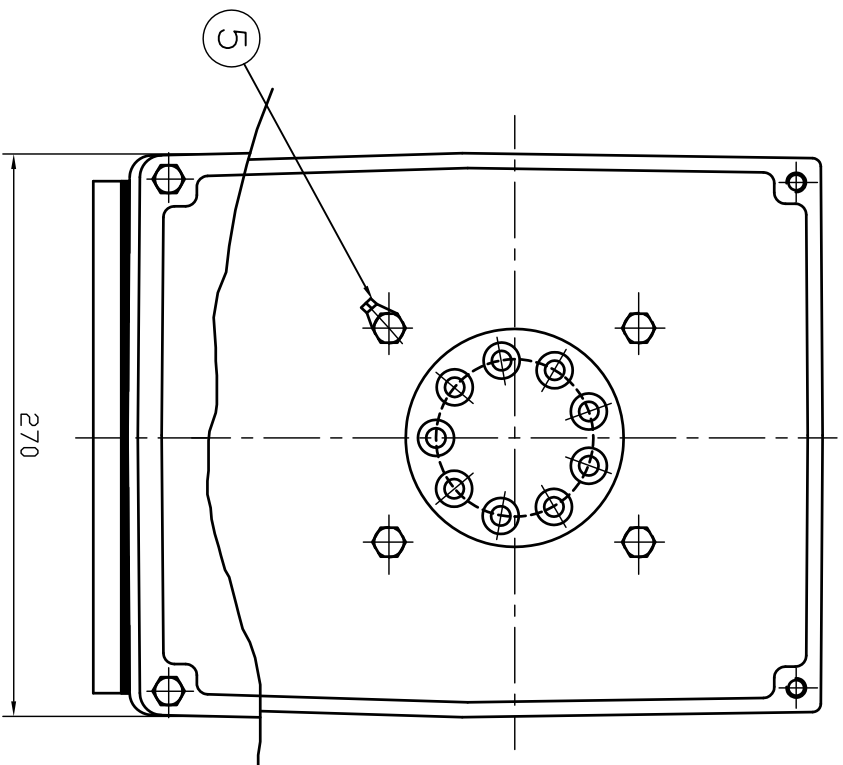
TEFC STANDARD

CAD PROJ \ FILE
MMSTDMTR/TJ50BP5

APPD BY	KANG K.J.	UNIT	MM
CHKD BY	KIM O.J.	SCALE	1/13
CHKD BY	LEE N.D.	PROJEC'N	3rd Angle
DSND BY	KIM RYANG GYU	DATE	2007.03.23

SUBJECT	KS Fr.250 TEFC
TITLE	OUTLINE THREE-PHASE INDUCTION MOTOR

REF. NO	L3-Series	Sheet No.	of
DWG NO	TJ50BP51	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 \ 35016882
				REF. NO	3M-016882	Sheet No. of
				DWG NO	3M-016882	Revision No.

