



AC INDUCTION MOTOR DATA SHEET

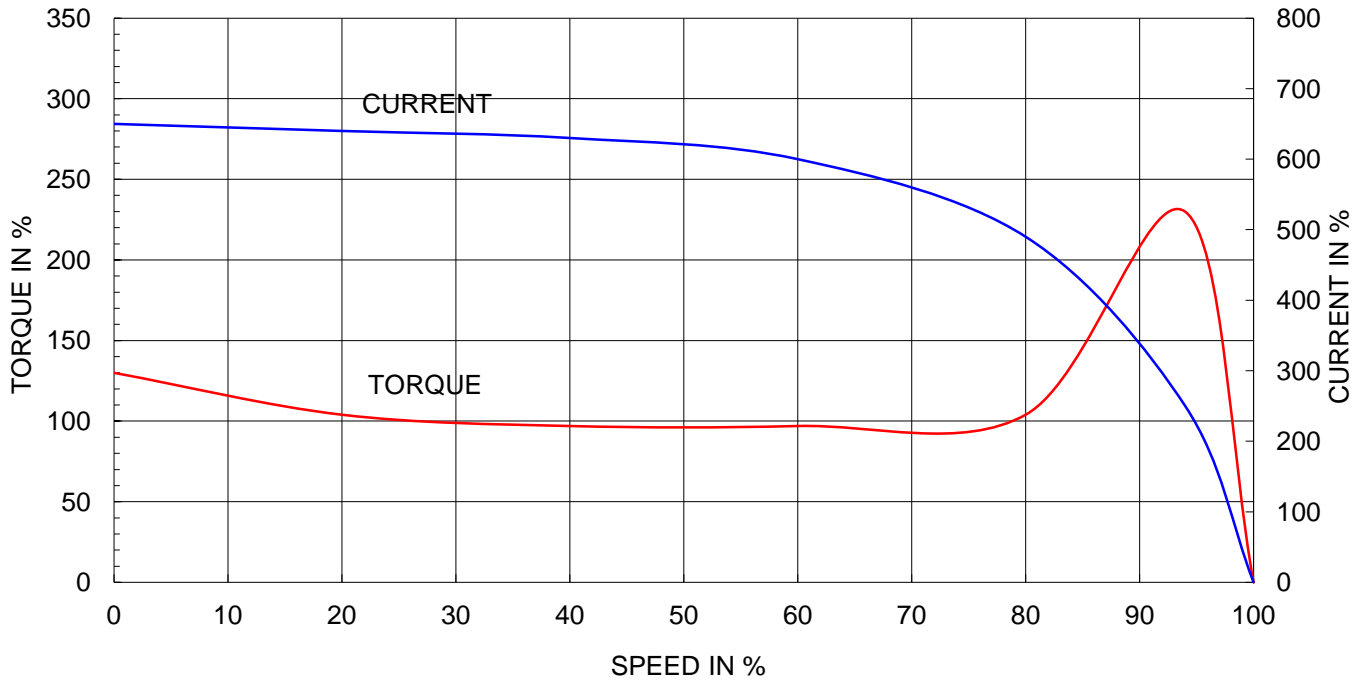
Model No.or RFQ No.		Item No.		Rev. No. [0]			
Project Name		Project No.		Quantity sets			
GENERAL SPECIFICATION			PERFORMANCE DATA				
Frame Size	250M		Rated Output	90 kW 120 HP			
Type	HS-90/2		Number of Poles	2			
Enclosure(Protection)	Totally Enclosed (IP55)		Rotor Type	Squirrel Cage			
Method of Cooling	IC411(FC)		Starting Method*	<input type="checkbox"/> D.O.L <input type="checkbox"/> Y- Δ			
Rated Frequency	60 Hz		Rated Voltage	440 V	380 V 220 V		
Number of Phases	3		Current	Full Load	138.1 A 159.9 A 276.2 A		
Insulation Class	<input checked="" type="checkbox"/> F <input type="checkbox"/> B <input type="checkbox"/> 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 92.8 %				
Motor Location <input checked="" type="checkbox"/> Indoor <input type="checkbox"/> Outdoor			75% Load 94.1 %				
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 0.869				
Duty Type Continuous (S1)			75% Load 0.898				
Service Factor 1.15			100% Load 0.905				
Mounting <input checked="" type="checkbox"/> B3 <input type="checkbox"/> B5 <input type="checkbox"/> V1 <input type="checkbox"/> B3/B5			Speed at Full Load 3570 r.p.m				
Bearing	Type	Anti-Friction		Torque			
	DE/N-DE	6313C3 / 6313C3		Full Load	24.6 kg-m		
	Lubricant	Grease(Gadus S2 V 100 2)		Locked-rotor**	130 %		
External Thrust Not applicable			Breakdown** 230 %				
Coupling Method <input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-Belt			Moment of Inertia (J)				
Shaft Extension <input checked="" type="checkbox"/> Single <input type="checkbox"/> Double			Load(Max.) 10.050 kg-m ²				
Terminal Box	Main	<input type="checkbox"/> Steel <input checked="" type="checkbox"/> Cast Iron	Motor 1.143 kg-m ²				
	Aux.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Sound Pressure Level (No-load & mean value at 1m from motor)				
	Location	Refer to Outline Drawing		88 dB(A)			
Application			Vibration 2.2 mm/sec (r.m.s)				
Area classification Non-Hazardous			Permissible number of consecutive starts				
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	TJ5MAC51	530 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.

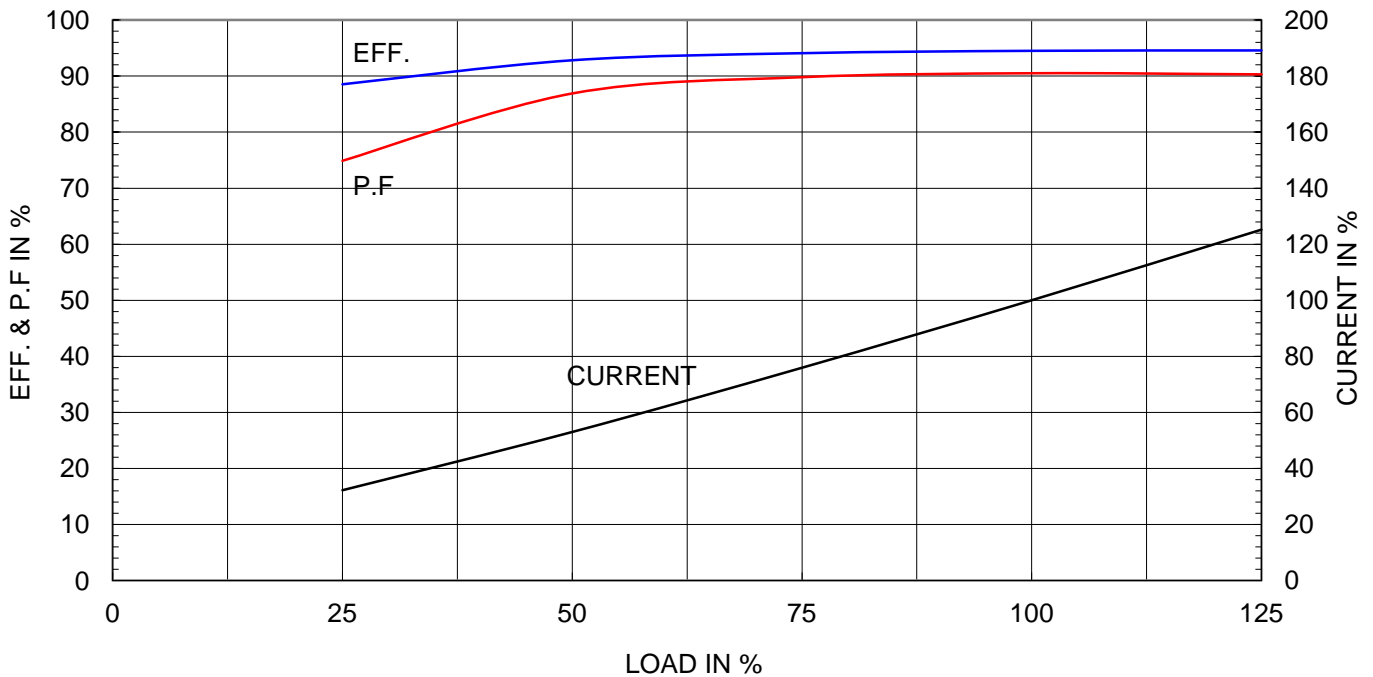
Type	:	HS
Full Load Torque	:	24.6 Kg.m
Motor moment of Inertia (J)	:	1.143 Kg.m ²
Load moment of Inertia (J)	:	10.050 Kg.m ²

90 kW	2 P	60 Hz	
Speed at Full Load :		3570 RPM	
Rated Voltage	440V	380V	220V
Full Load Current	138.1A	159.9A	276.2A

SPEED VS TORQUE & CURRENT CURVE




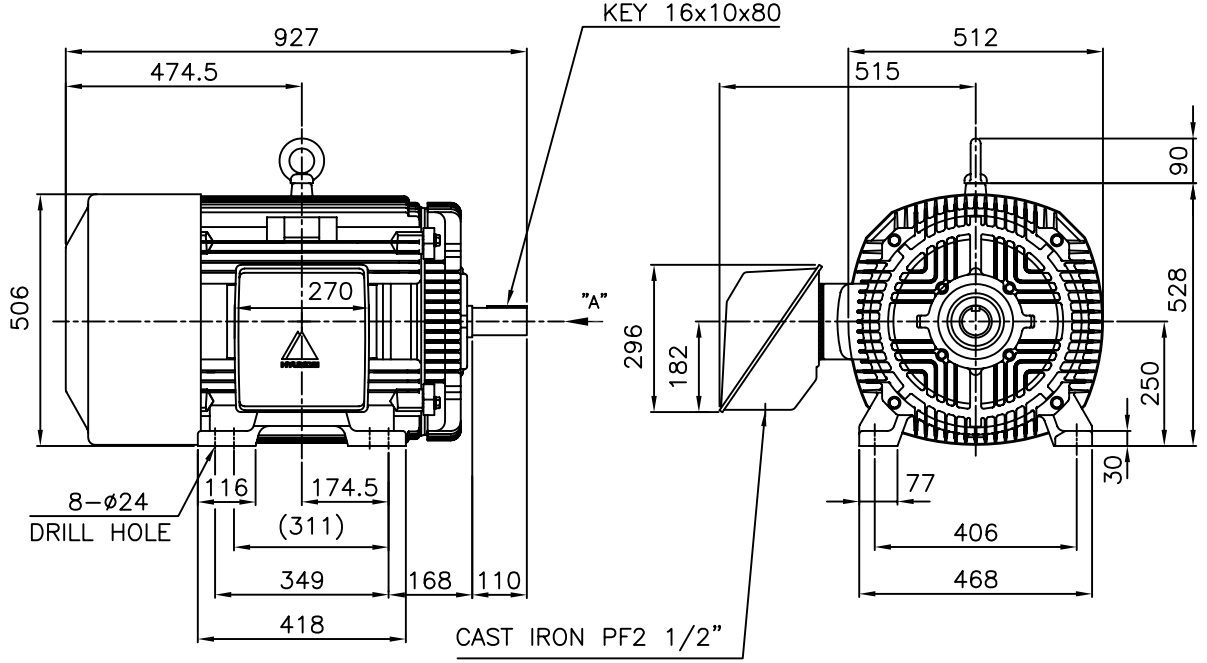
OUTPUT VS EFF., P.F & CURRENT CURVE



본 도면은 현대중공업(주) 재산이므로
허가없이 복사할 수 없습니다 (취급유의)

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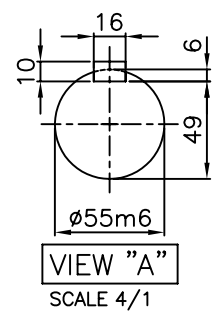
	<h1 style="margin:0;">TEFC</h1> <h2 style="margin:0;">THREE PHASE INDUCTION MOTOR</h2>	<h3 style="margin:0;">TYPE</h3> <p style="margin:0;">(1) TNB , TDB</p> <p style="margin:0;">CAST IRON FRAME</p>
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NOTE

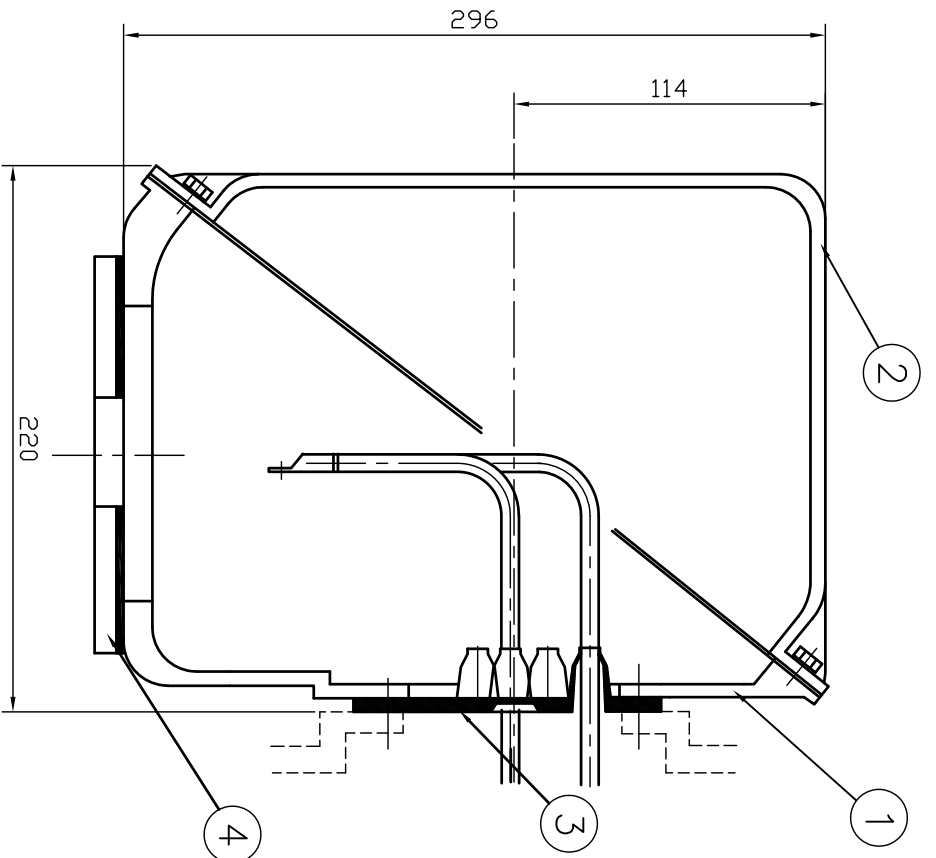
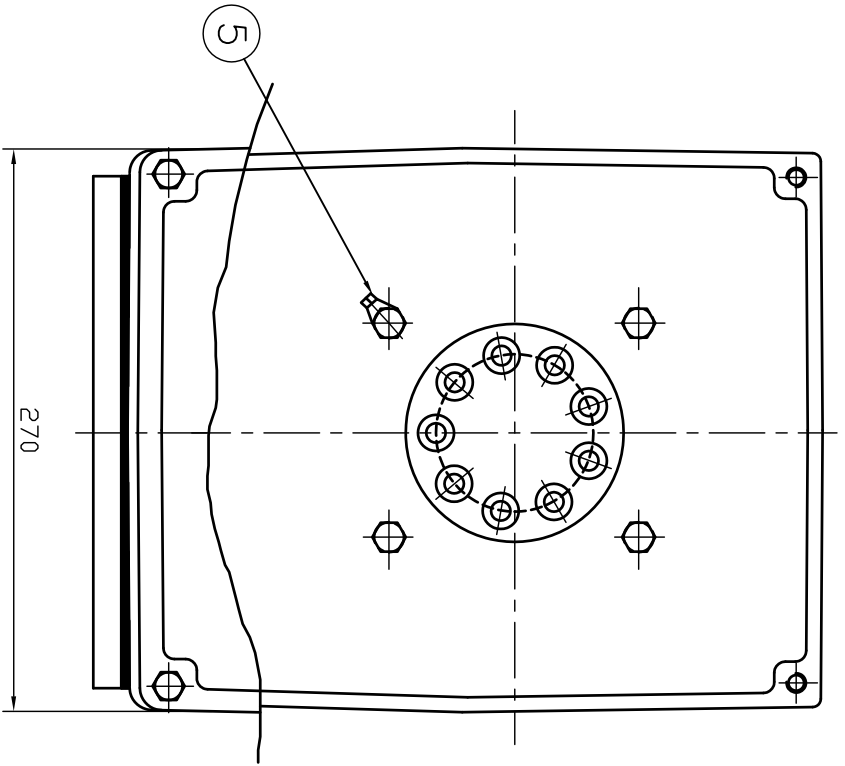
1. TOLERANCE :

CENTER HEIGHT	250 $\begin{smallmatrix} 0 \\ -0.5 \end{smallmatrix}$
BASE HOLE	$\phi 24 \begin{smallmatrix} +0.43 \\ 0 \end{smallmatrix}$
SHAFT DIAMETER	$\phi 55 \begin{smallmatrix} +0.030 \\ +0.011 \end{smallmatrix}$
KEYWAY WIDTH	16 $\begin{smallmatrix} -0.018 \\ -0.061 \end{smallmatrix}$
KEYWAY DEPTH	6 $\begin{smallmatrix} +0.2 \\ 0 \end{smallmatrix}$
KEY WIDTH	16 $\begin{smallmatrix} 0 \\ -0.043 \end{smallmatrix}$
KEY HEIGHT	10 $\begin{smallmatrix} 0 \\ -0.090 \end{smallmatrix}$



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.250M TEFC	
CHKD BY	KIM O.J.	SCALE	1/15			CAD PROJ \ FILE MMSTDMTR/TJ5MAC51
CHKD BY	LEE N.D.	PROJEC'N	3rd Angle	TITLE OUTLINE THREE-PHASE INDUCTION MOTOR		
DSND BY	KIM RYANG GYU	DATE	2007.03.23			
				REF. NO	L2-Series	Sheet No. of
				DWG NO	TJ5MAC51	Revision No. 0



REV	DATE	CONTENTS	REV'D BY	CHK'D BY	Q.P. CHK	APP'D BY
1						
2						
3						
4						

QTY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
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

APP'D BY	권진오	UNIT	MM
Q.P. CHK	주영철	SCALE	NONE
CHK'D BY	권오철	PROJEC'N	3 권(3rd Angle)
DSND BY	김헌태	DATE	92.06.05

REF. NO	DWG NO	SHEET NO	TITLE
	3M-016882		TERMINAL BOX ASS'Y (CAST IRON)

CAD PROJ	FILE
T-BOX-M	3M016882