

## AC INDUCTION MOTOR DATA SHEET

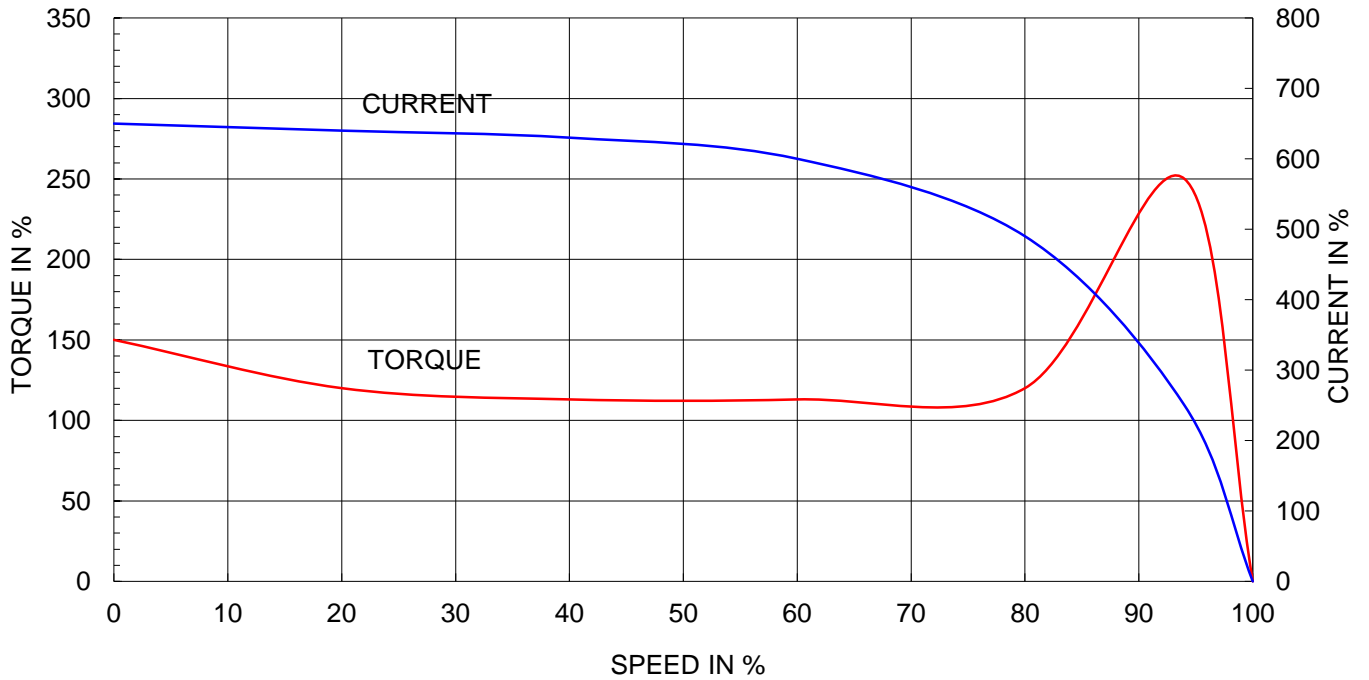
Model No.or RFQ No.		Item No.		Rev. No. [ 0 ]			
Project Name		Project No.		Quantity sets			
GENERAL SPECIFICATION			PERFORMANCE DATA				
Frame Size	250S		Rated Output	55 kW 75 HP			
Type	HS-55/6		Number of Poles	6			
Enclosure(Protection)	Totally Enclosed ( IP55 )		Rotor Type	Squirrel Cage			
Method of Cooling	IC411(FC)		Starting Method*	<input checked="" 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	90.7 A    105.0 A    181.4 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    93.1 %				
Motor Location <input checked="" type="checkbox"/> Indoor <input type="checkbox"/> 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 <input checked="" type="checkbox"/> B3 <input type="checkbox"/> B5 <input type="checkbox"/> V1 <input type="checkbox"/> 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 <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.)    112.550 kg·m <sup>2</sup>				
Terminal Box	Main	<input type="checkbox"/> Steel <input checked="" type="checkbox"/> Cast Iron		Motor    2.378 kg·m <sup>2</sup>			
	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		73 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.    4.0PB5.4/5.5(VL-451)			
ACCESSORIES			SUBMITTAL DRAWING				
			Outline Dimension Drawing \ Motor Weight(Approx.)				
			B3	TJ5SAP51	505 kg		
			B5	TJ50BP51	545 kg		
			V1	TJ50PP51	545 kg		
			B3/B5	TJ5SCP51	525 kg		
			Main T-Box Ass'y    3M-016882				
SPARE PARTS			REMARK				
			<b>High Efficiency</b>				
			*, 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.

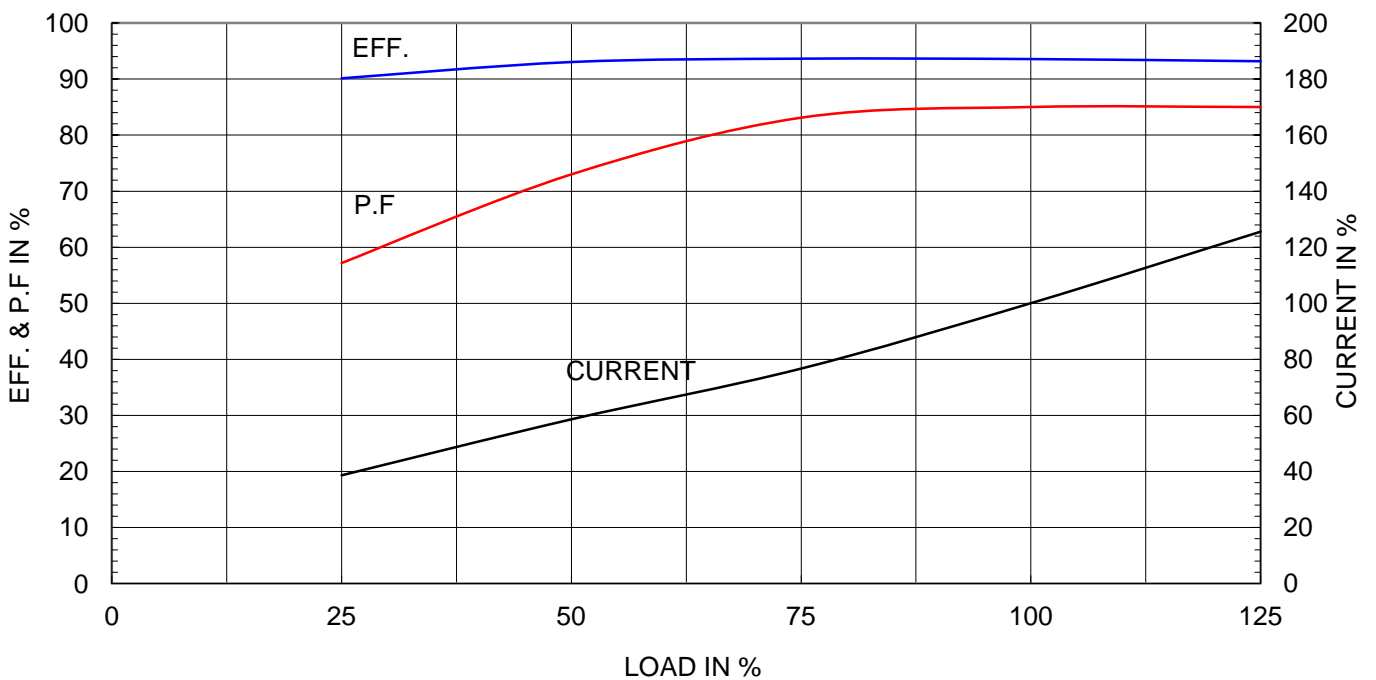
Type	:	HS
Full Load Torque	:	45.2 Kg.m
Motor moment of Inertia (J)	:	2.378 Kg.m <sup>2</sup>
Load moment of Inertia (J)	:	112.550 Kg.m <sup>2</sup>


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

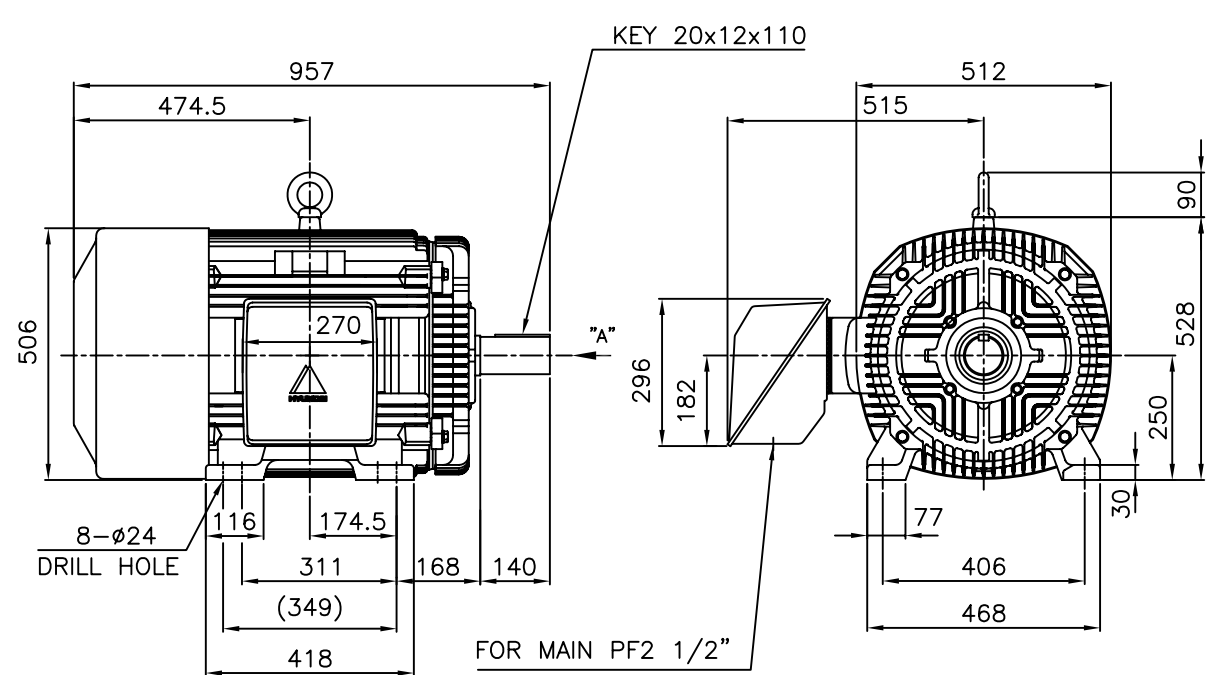
SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



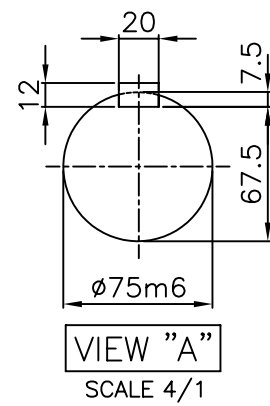
	<h1 style="margin:0;">TEFC</h1> <h2 style="margin:0;">THREE PHASE INDUCTION MOTOR</h2>	<h3 style="margin:0;">TYPE</h3>	<sup>(1)</sup> TNB , TDB CAST IRON FRAME
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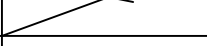

**NOTE**

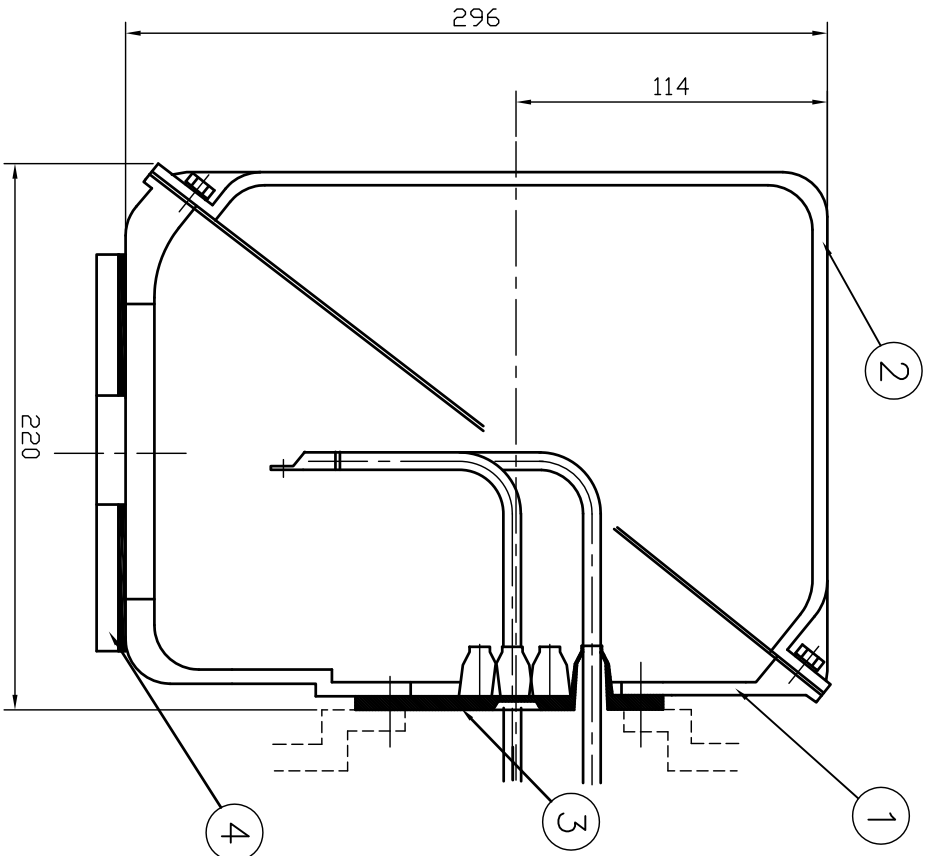
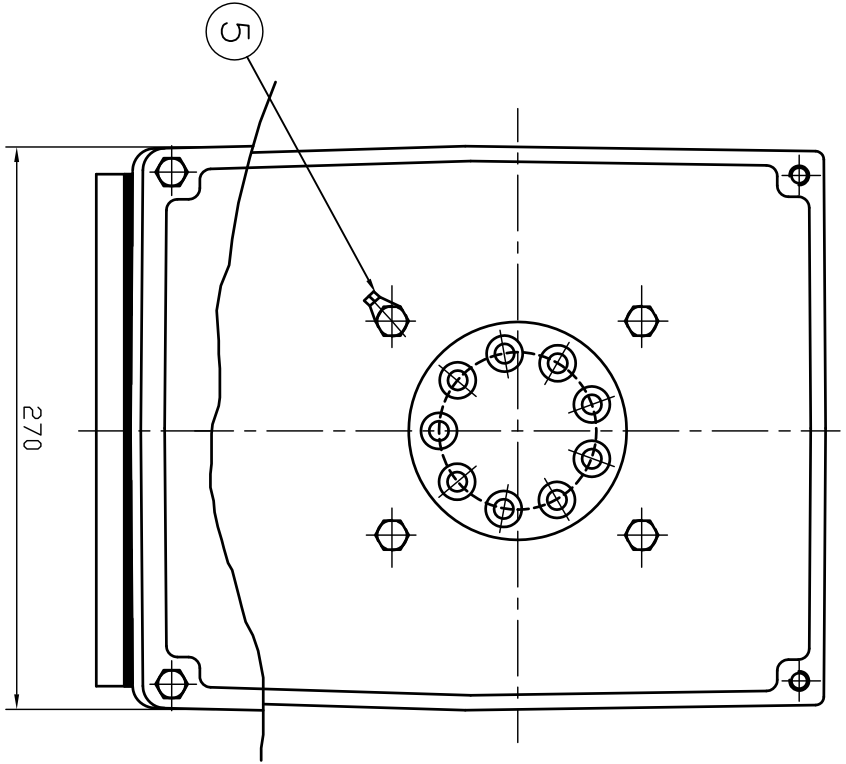
1.TOLERANCE :

CENTER HEIGHT	250	$\begin{matrix} 0 \\ -0.5 \end{matrix}$
BASE HILE	$\phi 24$	$\begin{matrix} +0.43 \\ 0 \end{matrix}$
SHAFT DIAMETER	$\phi 75$	$\begin{matrix} +0.030 \\ +0.011 \end{matrix}$
KEYWAY WIDTH	20	$\begin{matrix} -0.022 \\ -0.074 \end{matrix}$
KEYWAY DEPTH	7.5	$\begin{matrix} +0.2 \\ 0 \end{matrix}$
KEY WIDTH	20	$\begin{matrix} 0 \\ -0.052 \end{matrix}$
KEY HEIGHT	12	$\begin{matrix} 0 \\ -0.110 \end{matrix}$



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	Y.S.KIM	UNIT	MM	SUBJECT	KS Fr.250S TEFC
CHKD BY		SCALE	1/15	TITLE <b>OUTLINE</b> THREE-PHASE INDUCTION MOTOR	
CHKD BY		PROJEC'N	3rd Angle		
DSND BY	LEE NOH DUK	DATE	2008.01.18	REF. NO	L2-Series
				DWG NO	TJ5SAP51



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

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	김현태	DATE	92.06.05

REF. NO	DWG NO	REV. NO
	3M-016882	

TITLE	SUBJECT	CAD PROJ	FILE
TERMINAL BOX ASS'Y	HLAG - 250,280Fr.	T-BOX-M	3M016882

Sheet No. of	Revision No.
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