

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	280S		Rated Output	90 kW 120 HP			
Type	HS-90/6		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	145.9 A 169.0 A 291.9 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 93.6 %				
Motor Location ☒ Indoor ☐ Outdoor			75% Load 94.2 %				
Altitude Less than 1000 meter			100% Load 94.1 %				
Relative Humidity Less than 80 %			Power Factor(p.u)				
Ambient Temp. 40 deg. C (Max.)			50% Load 0.771				
Duty Type Continuous (S1)			75% Load 0.839				
Service Factor 1.15			100% Load 0.860				
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 74.0 kg·m				
	Lubricant	Grease(Gadus S2 V 100 2)	Locked-rotor** 170 %				
External Thrust		Not applicable					
Coupling Method		☒ Direct ☐ V-Belt					
Shaft Extension		☒ Single ☐ Double					
Terminal Box	Main	☐ Steel ☒ Cast Iron	Moment of Inertia (J)				
	Aux.	☐ Yes ☒ No	Load(Max.) 130.225 kg·m²				
	Location	Refer to Outline Drawing	Motor 4.135 kg·m²				
Application			Sound Pressure Level (No-load & mean value at 1m from motor)				
Area classification Non-Hazardous			77 dB(A)				
Type of Ex-Protection Not applicable			Vibration 2.2 mm/sec (r.m.s)				
Applicable Standard KS,IEC,NEMA MG1 Part30(Vpeak)			Permissible number of consecutive starts				
			Cold 3 times				
			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		kg		
			V1		kg		
			B3/B5		TJ8SCP51 725 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.

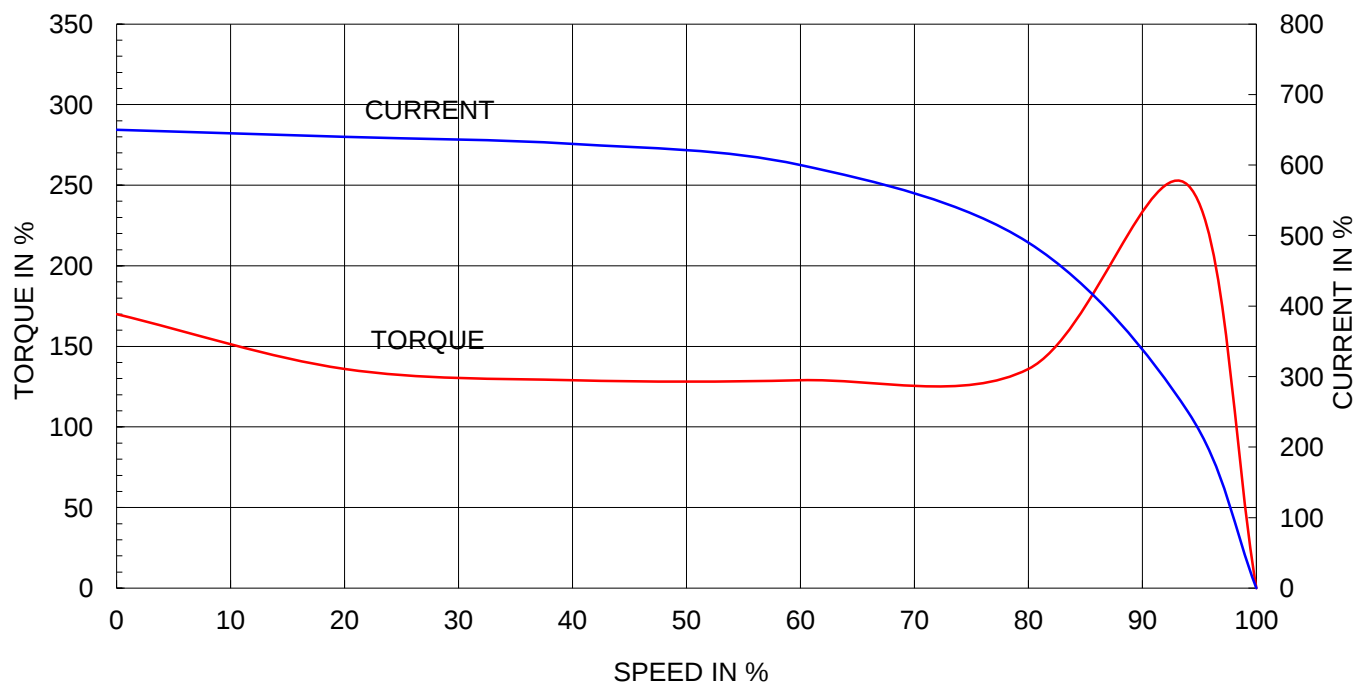
** Data is based on when the motor is supplied at rated voltage & frequency. and the data is expressed as a percentage of full-load value.

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)

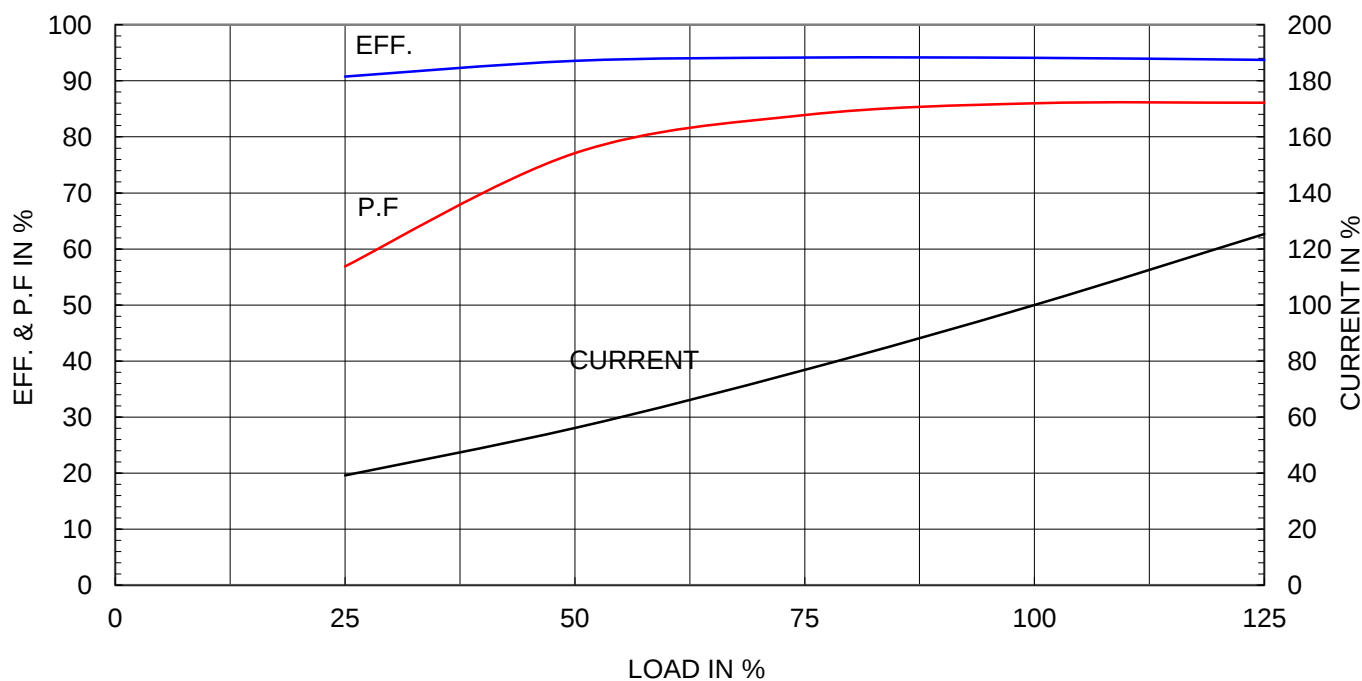
Type	:	HS
Full Load Torque	:	74.0 Kg.m
Motor moment of Inertia (J)	:	4.135 Kg.m ²
Load moment of Inertia (J)	:	130.225 Kg.m ²

90 kW		6 P		60 Hz	
Speed at Full Load :				1185 RPM	
Rated Voltage	440V	380V	220V		
Full Load Current	145.9A	169.0A	291.9A		

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE





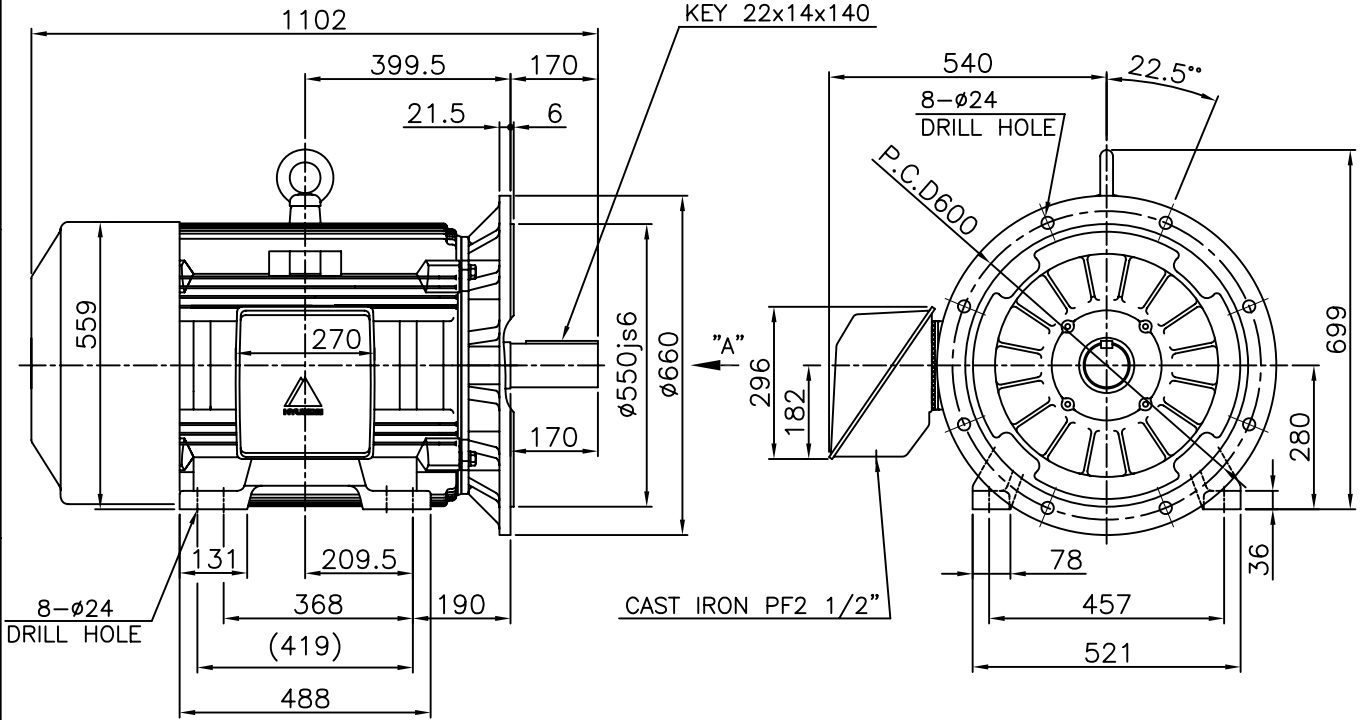
TEFC

THREE PHASE INDUCTION MOTOR

TYPE

(1) TNB , TDB

CAST IRON FRAME

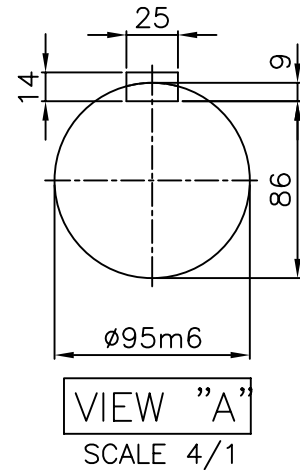


NOTE

1.TOLERANCE :

CENTER HEIGHT	280 _{-1.0} ⁰
BASE HOLE	ø24 ₀ ^{+0.43}
SHAFT DIAMETER	ø95 _{+0.013} ^{+0.035}
KEYWAY WIDTH	25 _{-0.074} ^{-0.022}
KEYWAY DEPTH	9 ₀ ^{+0.2}
KEY WIDTH	25 _{-0.052} ⁰
KEY HEIGHT	14 _{-0.110} 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.

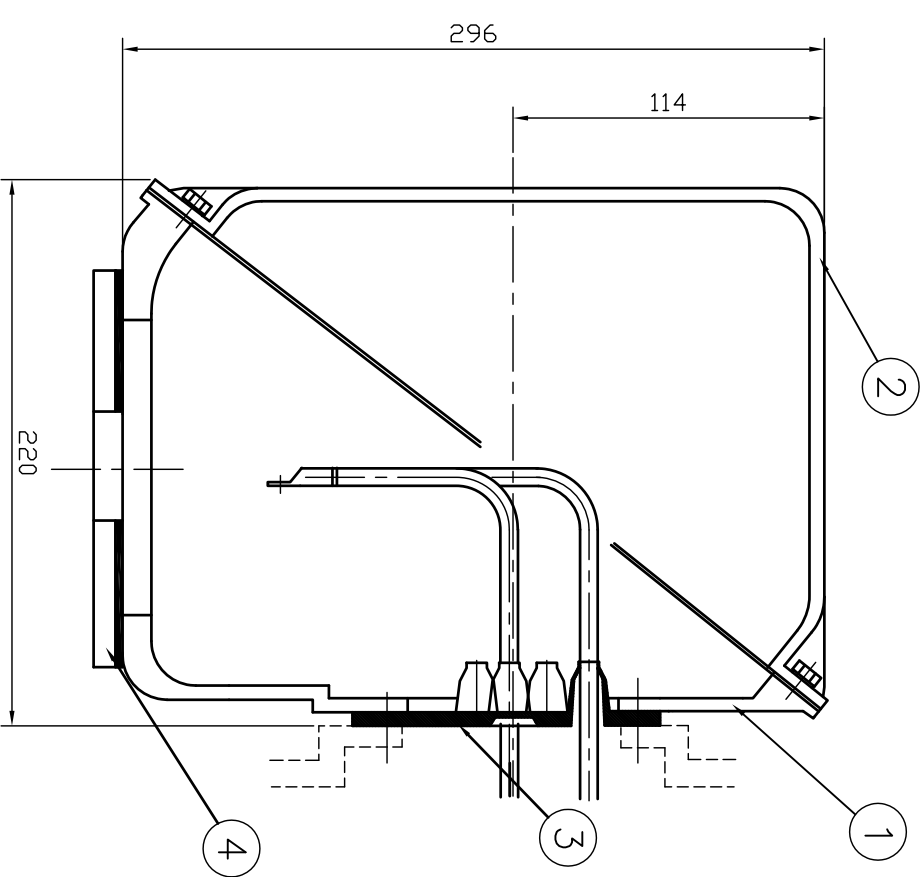
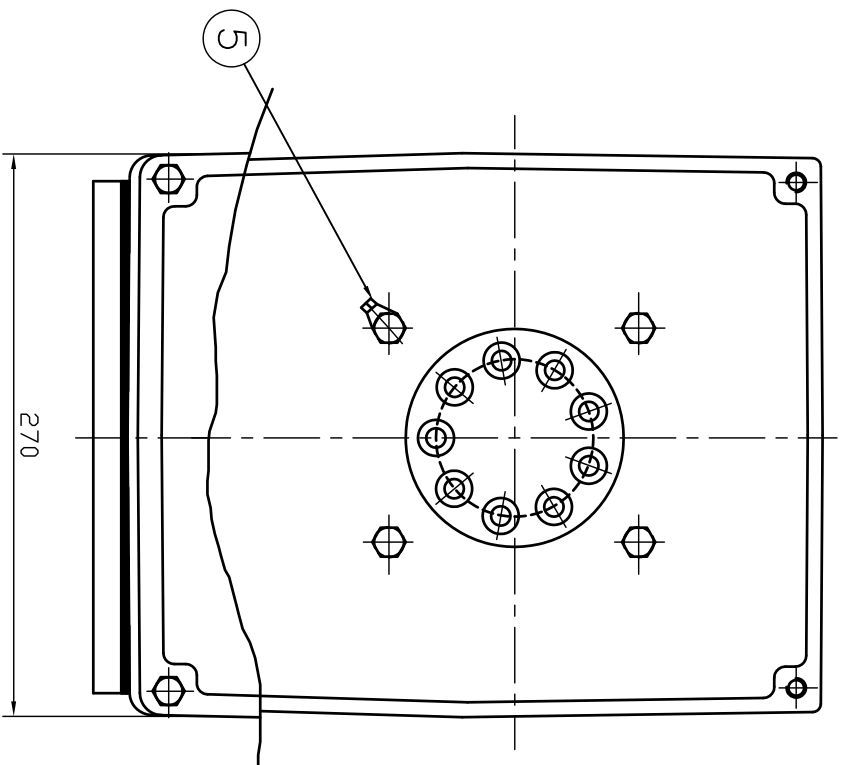


TEFC STANDARD

APPD BY	KANG K.J.	UNIT	MM
CHKD BY	KIM O.J.	SCALE	1/15
CHKD BY		PROJEC'N	3rd Angle
DSND BY	KIM RYANG GYU	DATE	2002.07.26

SUBJECT	KS Fr.280S TEFC	CAD PROJ \ FILE	MMSTDMTR/TJ8SCP51
TITLE	OUTLINE THREE-PHASE INDUCTION MOTOR		
REF. NO	L2-Series	Sheet No.	of
DWG NO	TJ8SCP51	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			CAD PROJ. & FILE
Q.P. CHK	주영걸	SCALE	NONE			T-BOX-M \ 38016882
CHK'D BY	권오철	PROJEC'T	3 권(3rd Angle)			
DSND BY	김헌태	DATE	92.06.05			
				SUBJECT	HLA6 - 250,280Fr.	
				TITLE	(CAST IRON)	
				TERMINAL BOX ASS'Y		
				REF. NO		Sheet No. of
				DWG NO	3M-016882	Revision No.

