

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	225S		Rated Output	55 kW 75 HP			
Type	HS-55/2		Number of Poles	2			
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	84.8 A 98.2 A 169.6 A		
Insulation Class	☒ F ☐ B ☐ H			Locked-rotor**	630 % 630 % 630 %		
Temp. Rise at full load (by resistance method)			Efficiency				
at 1.0 S.F 80 deg. C			50% Load 92.7 %				
Motor Location	☒ Indoor ☐ Outdoor		75% Load 93.1 %				
Altitude	Less than 1000 meter		100% Load 93.0 %				
Relative Humidity	Less than 80 %		Power Factor(p.u)				
Ambient Temp.	40 deg. C (Max.)		50% Load 0.898				
Duty Type	Continuous (S1)		75% Load 0.915				
Service Factor	1.15		100% Load 0.915				
Mounting	☒ B3 ☐ B5 ☐ V1 ☐ B3/B5		Speed at Full Load 3570 r.p.m				
Bearing	Type	Anti-Friction	Torque				
	DE/N-DE	6213C3 / 6213C3	Full Load 15.0 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.) 5.750 kg·m²				
Terminal Box	Main	☐ Steel ☒ Cast Iron	Motor 0.628 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 consecutive starts				
Type of Ex-Protection	Not applicable		Cold 3 times				
Applicable Standard	KS,IEC,NEMA MG1 Part30(Vpeak)		Hot 2 times				
ACCESSORIES			Paint Munsell No. 4.0PB5.4/5.5(VL-451)				
			SUBMITTAL DRAWING				
			Outline Dimension Drawing \ Motor Weight(Approx.)				
			B3	TJ2SAC51	350 kg		
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.

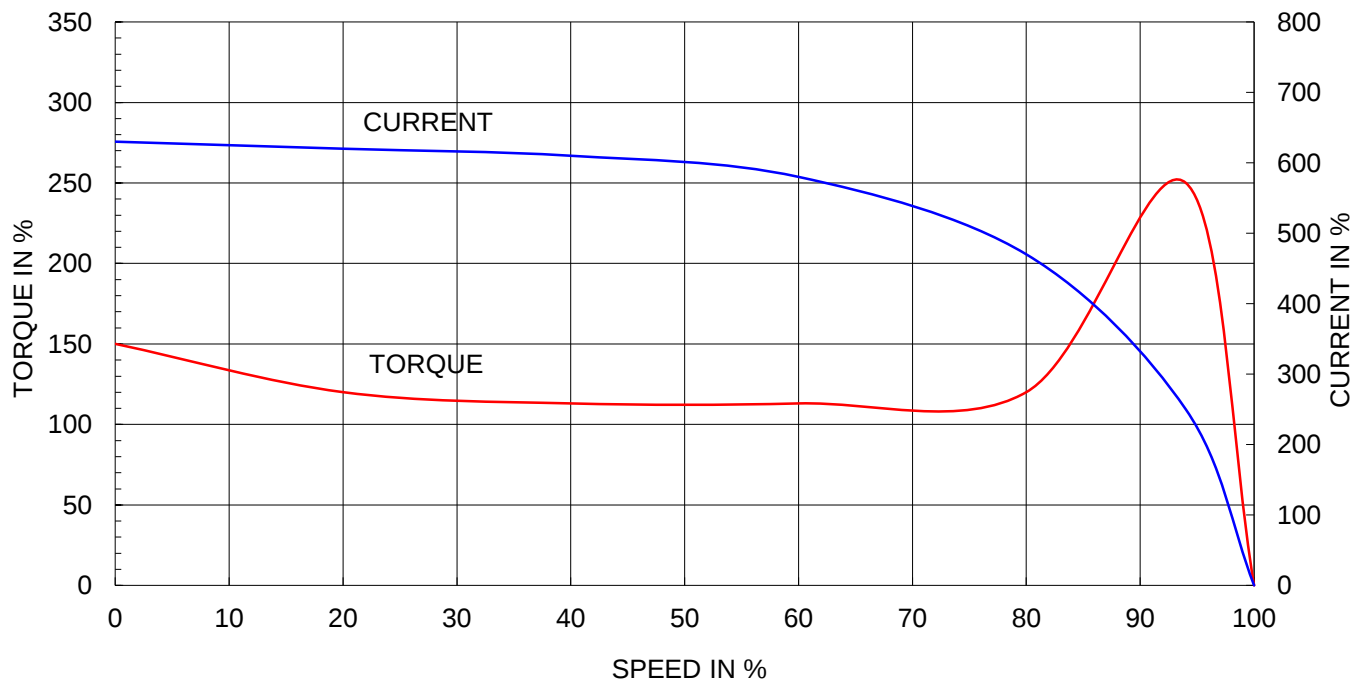
* In case of Inverter-Fed Motor, performance data is based on sine wave tests.

** 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.

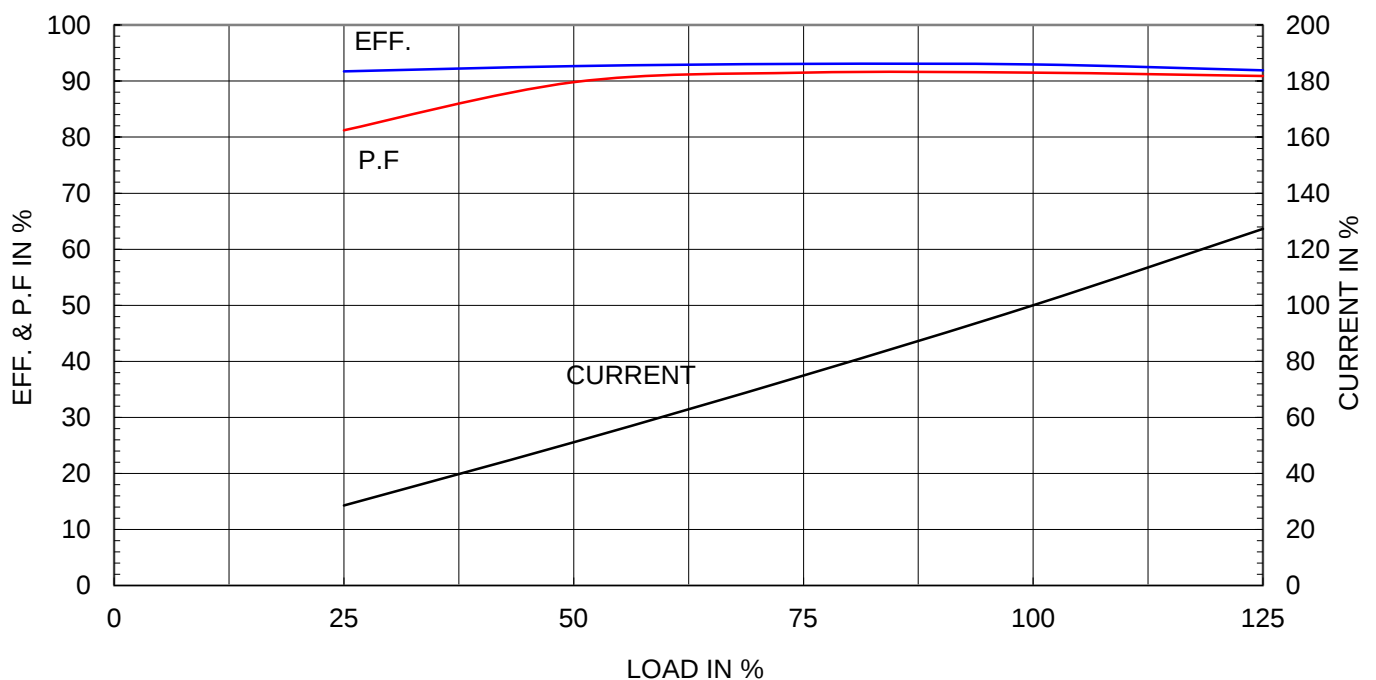
Type	:	HS
Full Load Torque	:	15.0 Kg.m
Motor moment of Inertia (J)	:	0.628 Kg.m ²
Load moment of Inertia (J)	:	5.750 Kg.m ²

55 kW		2 P		60 Hz	
Speed at Full Load :				3570 RPM	
Rated Voltage	440V	380V	220V		
Full Load Current	84.8A	98.2A	169.6A		

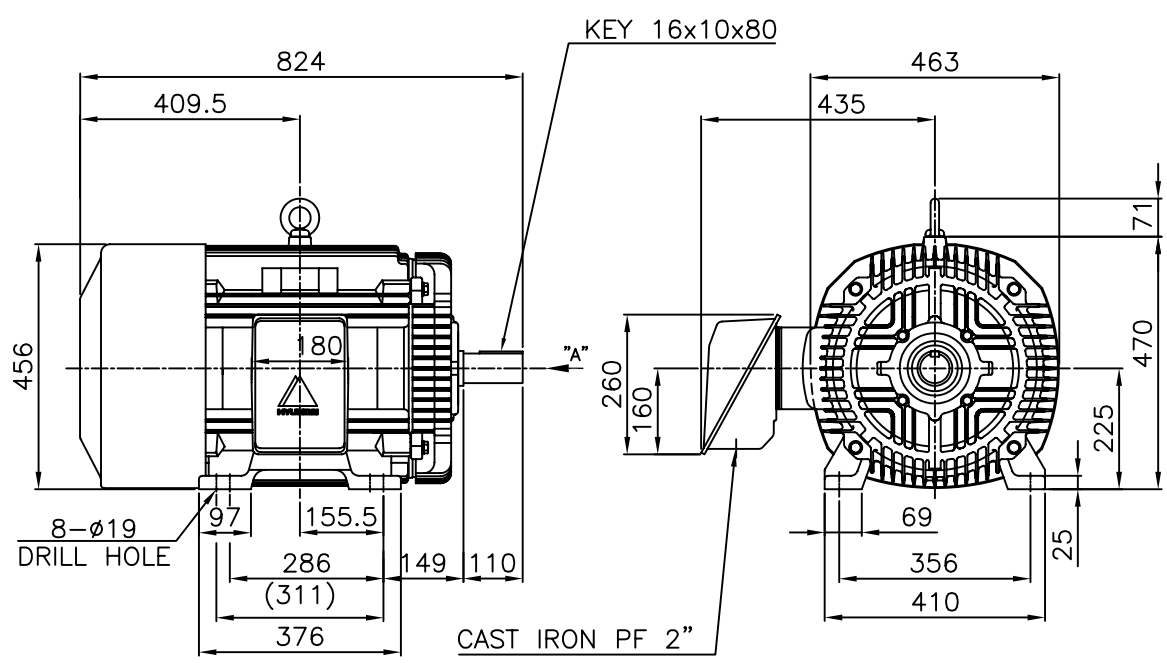
SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



1		2		3		4	
 HYUNDAI HEAVY INDUSTRIES CO., LTD.		TEFC THREE PHASE INDUCTION MOTOR		TYPE		⁽¹⁾ TNB , TDB CAST IRON FRAME	

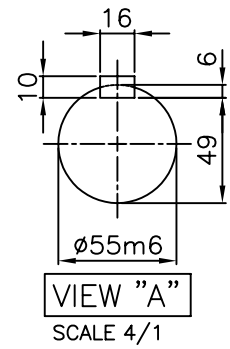


NOTE

1.TOLERANCE :

CENTER HEIGHT	225 ⁰ _{-0.5}
BASE HOLE	ø19 ^{+0.43} ₀
SHAFT DIAMETER	ø55 ^{+0.030} _{+0.011}
KEYWAY WIDTH	16 ^{-0.018} _{-0.061}
KEYWAY DEPTH	6 ^{+0.2} ₀
KEY WIDTH	16 ⁰ _{-0.043}
KEY HEIGHT	10 ⁰ _{-0.090}

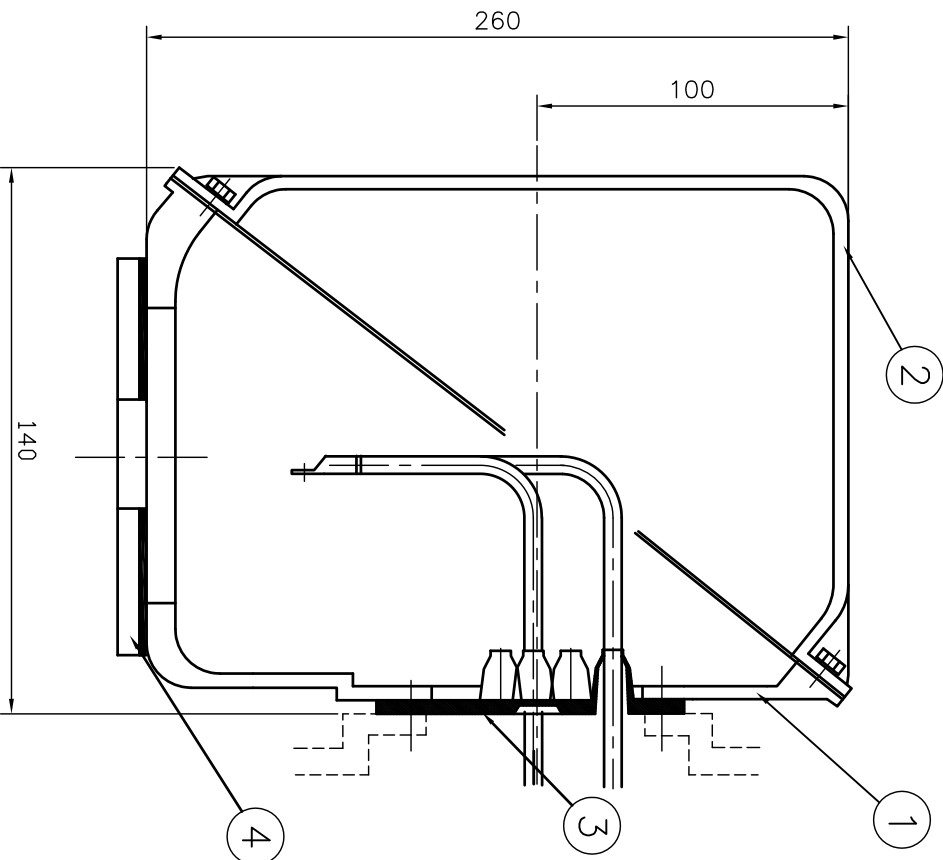
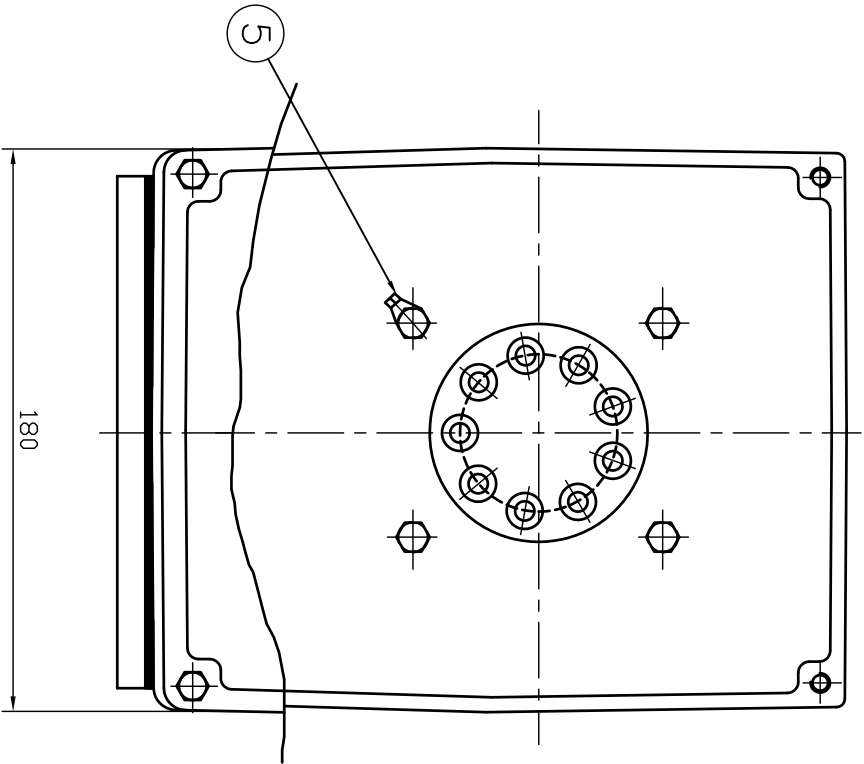
2.The type (1)—"TNB , TDB" is for HHI's standard products and it can be changed for customer's requirements or detail designing.



TEFC STANDARD	
CAD PROJ	\ FILE
MMSTDMTR/TJ2SAC51	

APPD BY	KANG K.J.	UNIT	MM
CHKD BY	KIM O.J.	SCALE	1/15
CHKD BY	LEE N.D.	PROJEC'N	3rd Angle
DSND BY	KIM RYANG GYU	DATE	2007.03.23

SUBJECT	KS Fr.225S TEFC	
TITLE	OUTLINE THREE-PHASE INDUCTION MOTOR	
REF. NO	L2-Series	Sheet No. of
DWG NO	TJ2SAC51	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	SUBJECT	HLA6 - 200, 225Fr.	CAD PROJ. & FILE & T-BOX-M \ 3M016881
Q.P. CHK	주영걸	SCALE	NONE	TITLE	(CAST IRON)	
CHK'D BY	권오철	PROJEC'T	3 & 2 (3rd Angle)	TERMINAL BOX ASS'Y		
DSND BY	김헌태	DATE	92.06.05	REF. NO		Sheet No. of
				DWG NO	3M-016881	Revision No. 0