

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	90L		Rated Output	2.2 kW 3 HP			
Type	HS		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 3.9 A	4.6 A 7.9 A		
Insulation Class	☒ F ☐ B ☐ H		Locked-rotor**	770 %	770 % 770 %		
Temp. Rise at full load (by resistance method)			Efficiency				
at 1.0 S.F 80 deg. C			50% Load 84.0 %				
Motor Location	☒ Indoor ☐ Outdoor		75% Load 85.0 %				
Altitude	Less than 1000 meter		100% Load 85.5 %				
Relative Humidity	Less than 80 %		Power Factor(p.u)				
Ambient Temp.	40 deg. C (Max.)		50% Load 0.730				
Duty Type	Continuos (S1)		75% Load 0.817				
Service Factor	1.15		100% Load 0.855				
Mounting	☒ B3 ☐ B5 ☐ V1 ☐ B3/B5		Speed at Full Load 3490 r.p.m				
Bearing	Type	Anti-Friction	Torque				
	DE/N-DE	6205ZZ / 6204ZZ	Full Load 0.6 kg·m				
	Lubricant	Grease(SML4)	Locked-rotor** 270 %				
External Thrust	Not applicable		Breakdown** 300 %				
Coupling Method	☒ Direct ☐ V-Belt		Moment of Inertia (J)				
Shaft Extension	☒ Single ☐ Double		Load(Max.) 0.325 kg·m²				
Terminal Box	Main	☐ Steel ☒ Cast Iron	Motor 0.002 kg·m²				
	Aux.	☐ Yes ☒ No	Sound Pressure Level (No-load & mean value at 1m from motor)				
	Location	Refer to Outline Drawing	75 dB(A)				
Application			Vibration 1.6 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	227B5000TA03	18 kg		
			B5		kg		
			V1		kg		
			B3/B5		kg		
			Main T-Box Ass'y	227B1537AA			
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
			2011-04-14	W.H.BACK	S. J. RA	O. J. KIM	J. H. KIM

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.

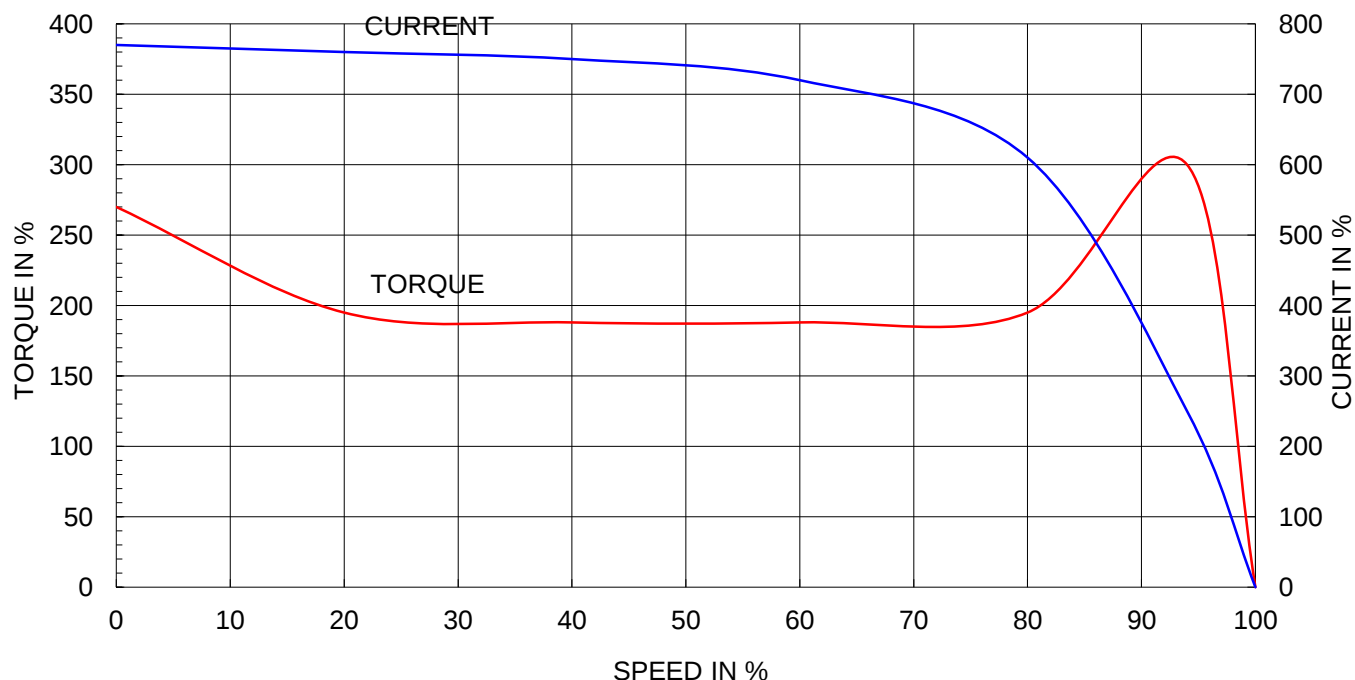
** Data is based on when the motor is supplied at rated voltage & frequency. and the data is expressed as a percentage of full-load value.

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)

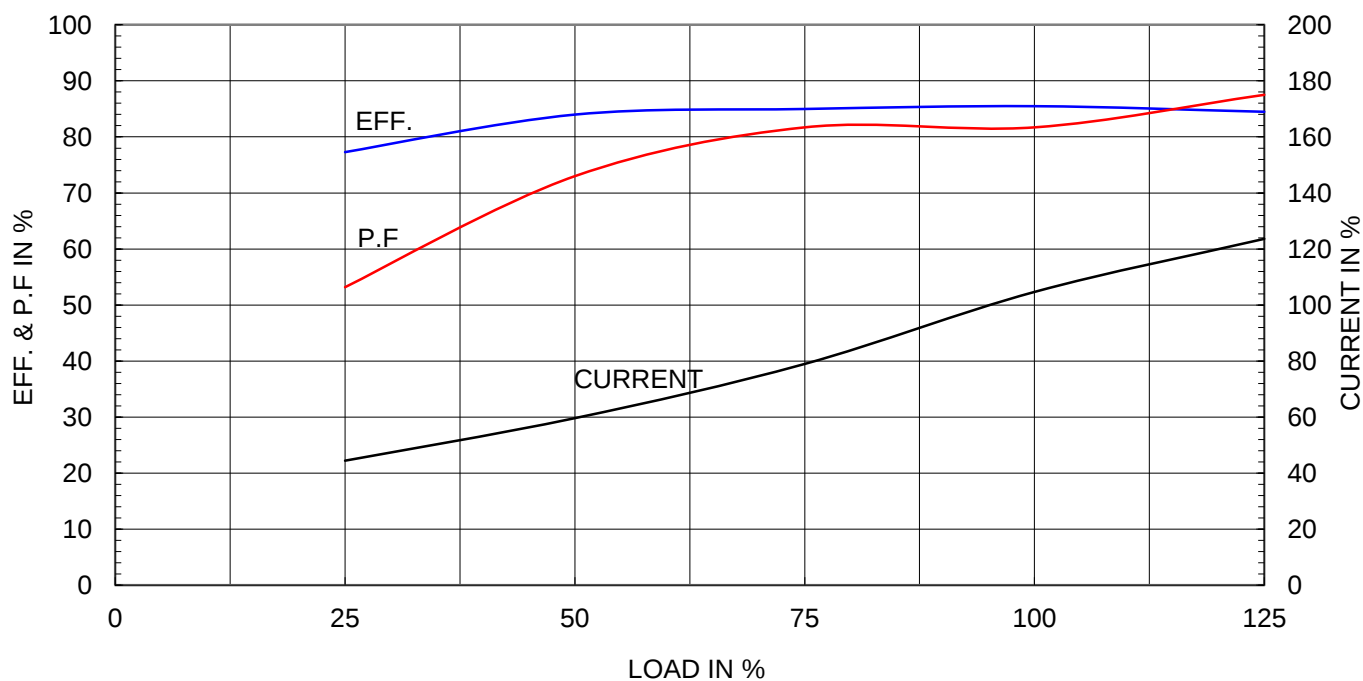
Type	:	HS
Full Load Torque	:	0.6 Kg.m
Motor moment of Inertia (J)	:	0.002 Kg.m ²
Load moment of Inertia (J)	:	0.325 Kg.m ²

2.2 kW		2 P		60 Hz	
Speed at Full Load :				3490 RPM	
Rated Voltage	440V	380V	220V		
Full Load Current	3.9A	4.6A	7.9A		

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE





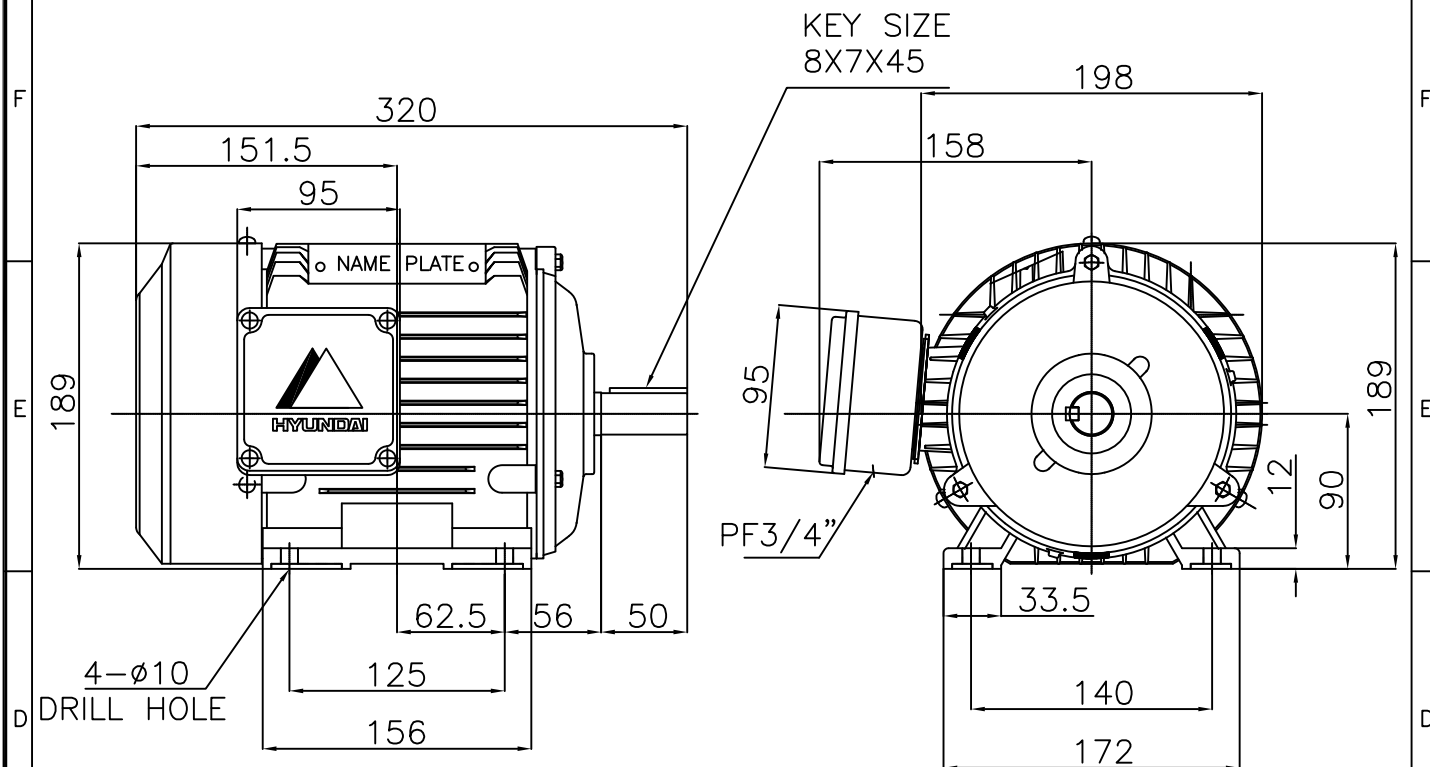
TEFC

THREE PHASE INDUCTION MOTOR

TYPE

HL, HLS, HS

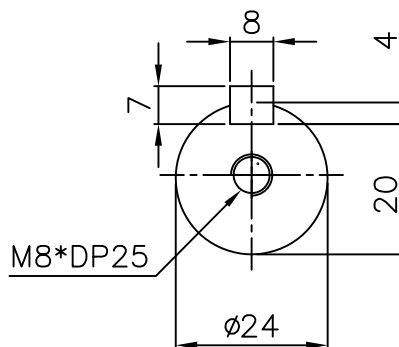
AL FRAME



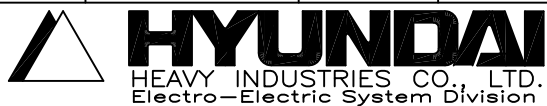
NOTE

1.TOLERANCE :

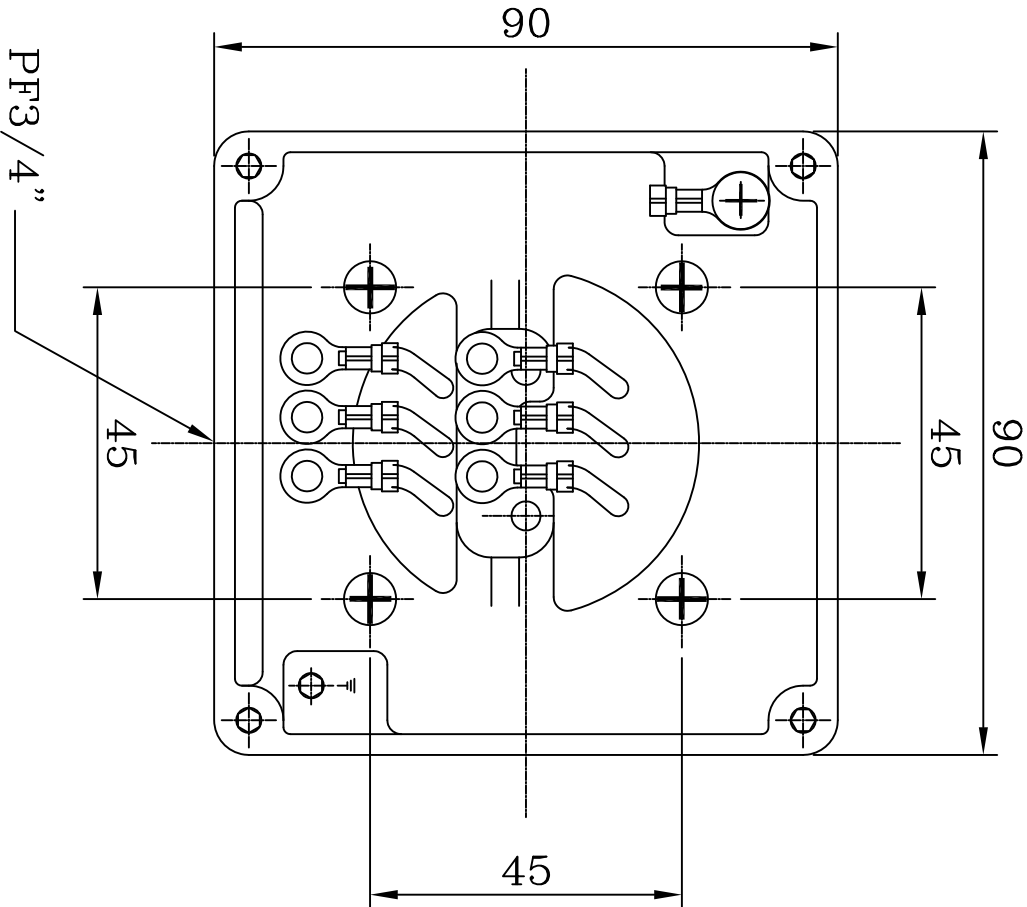
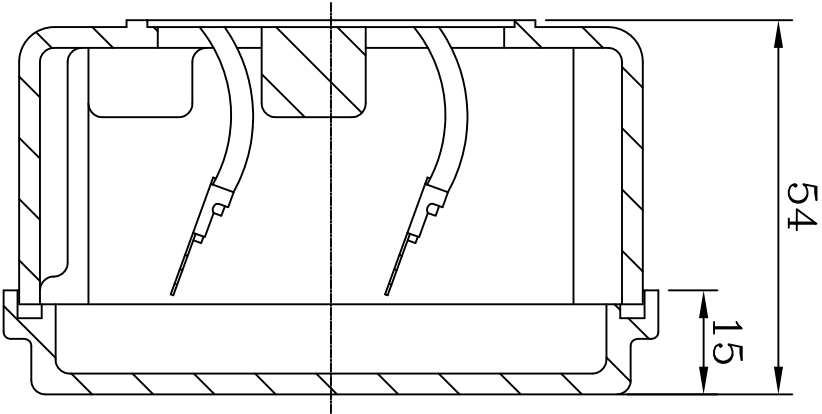
CENTER HEIGHT	90	$+0$ -0.5
BASE HOLES	$\phi 10$	$+0.36$ -0
SHAFT DIAMETER	$\phi 24$	$+0.009$ -0.004
KEYWAY WIDTH	8	$+0$ -0.036
KEYWAY DEPTH	4	$+0.2$ -0



APPD BY	B.M.YOO	UNIT	mm
CHKD BY	S.W.SEO	SCALE	1/5
CHKD BY	J.S.JEONG	PROJEC'N	3rd Angle
DSND BY	C.S.KO	DATE	2008.01.12



SUBJECT	IEC 90L	CAD PROJ \ FILE
TITLE	OUTLINE	IP54,55,56
REF. NO	B5000TA03	Sheet No. of
DWG NO	227B5000TA03	Revision No. 0



QTY		DESCRIPTION		MATERIAL		DIMENSION		WEIGHT		PART NO.		REMARK		NO.	
APPD BY	B. M. YOO	UNIT	MM	SUBJECT		CB ASM (FR71--90)		CAD PROJ FILE		IP95		6 LEADS		TITLE	
CHKD BY	S. W. SEO	SCALE	1/0.98	CHKD BY		J. S. JEONG		PROJECN		3 (3rd Angle)		DSND BY		C. S. KO	
DATE		2005.12.05		REF. NO		227B1537AA1		DWG NO		227B1537AA1		Revision No.		0	
HYUNDAI		HEAVY INDUSTRIES CO., LTD.		INDUSTRIAL & POWER SYSTEMS		227B1537AA1		Sheet No.		of		CONDUIT BOX ASSEMBLY		6 LEADS	