

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		kg
			B5		kg
			V1		kg
			B3/B5	227B5024TA03	21 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.

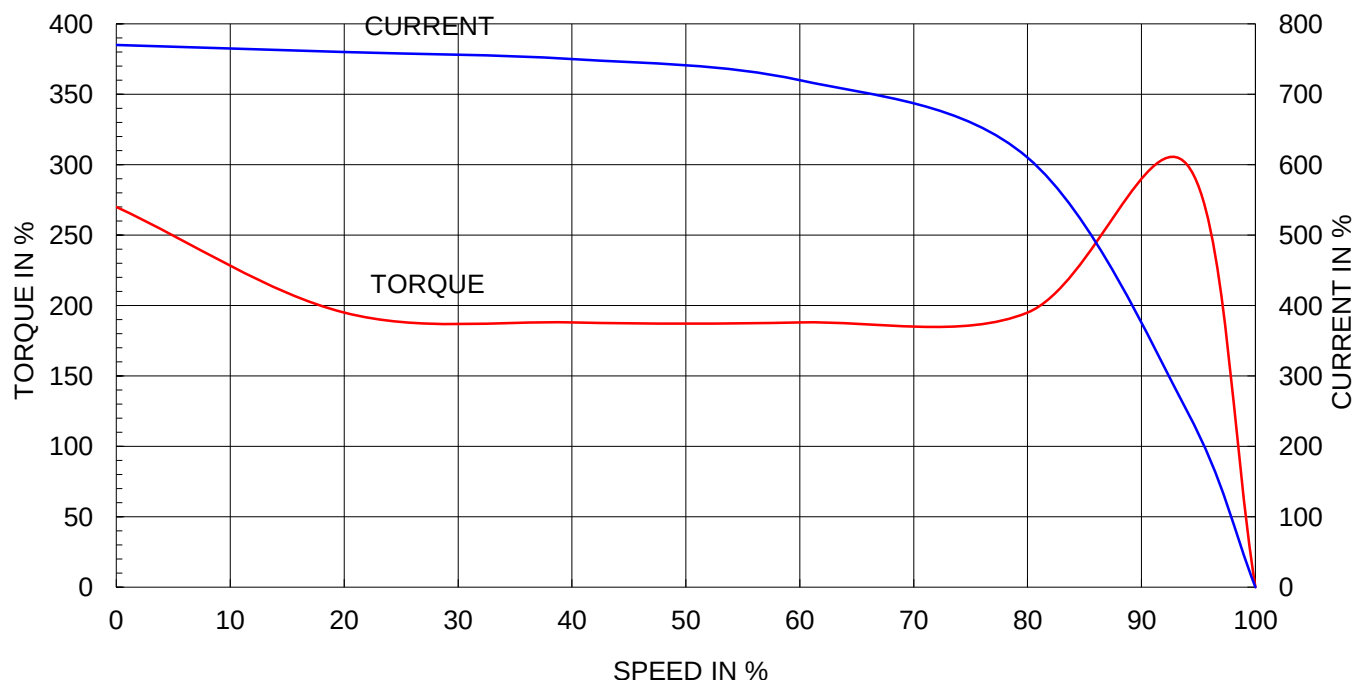
** Data is based on when the motor is supplied at rated voltage & frequency. and the data is expressed as a percentage of full-load value.

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)

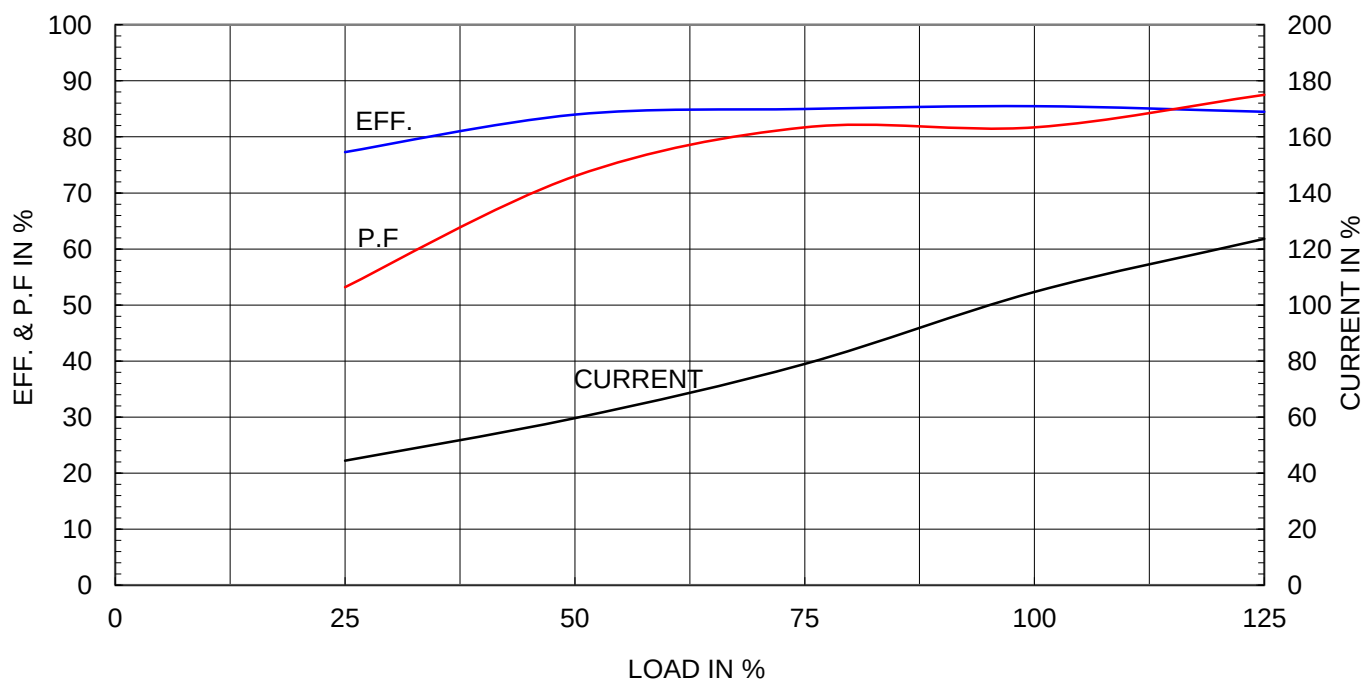
Type	:	HS
Full Load Torque	:	0.6 Kg.m
Motor moment of Inertia (J)	:	0.002 Kg.m ²
Load moment of Inertia (J)	:	0.325 Kg.m ²

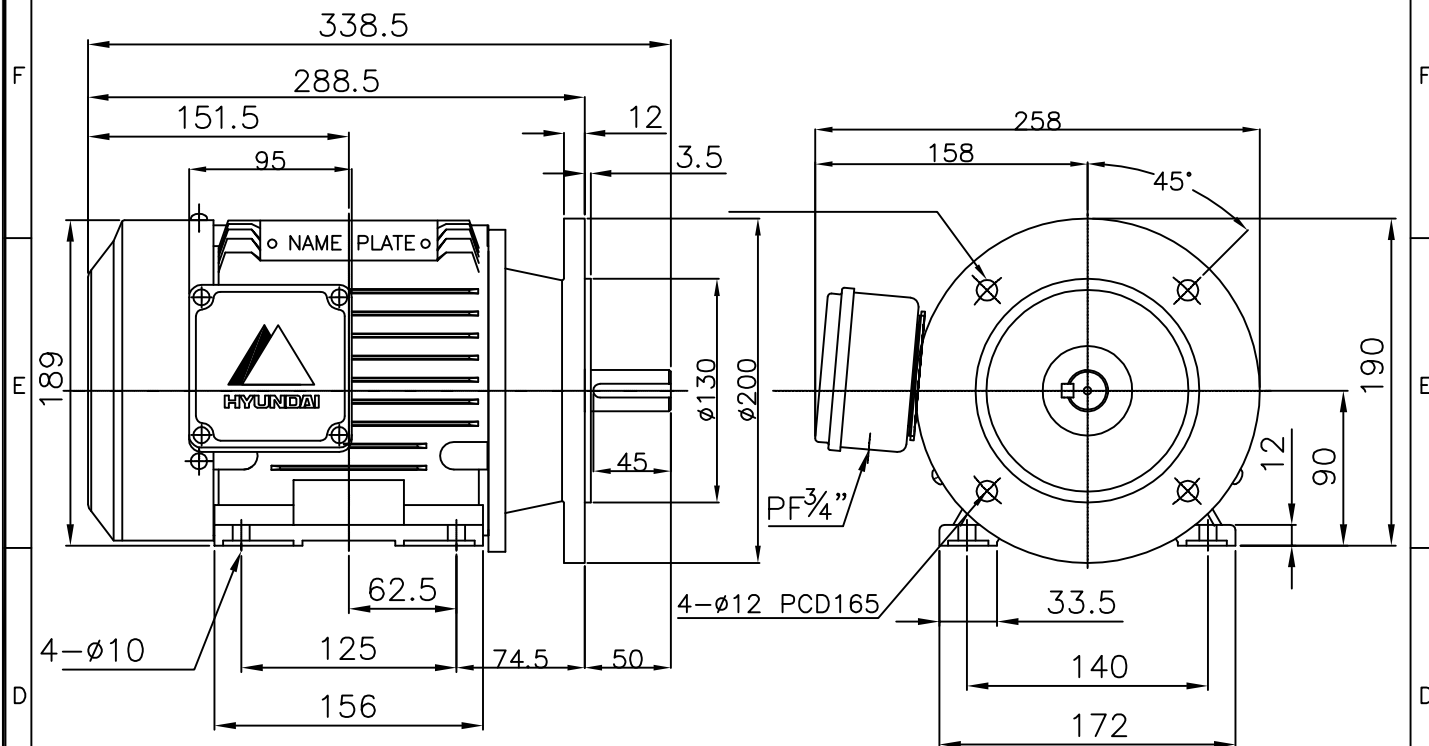
2.2 kW		2 P		60 Hz	
Speed at Full Load :				3490 RPM	
Rated Voltage	440V	380V	220V		
Full Load Current	3.9A	4.6A	7.9A		

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

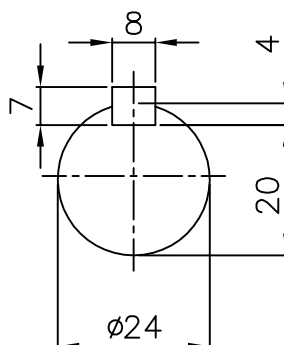




NOTE

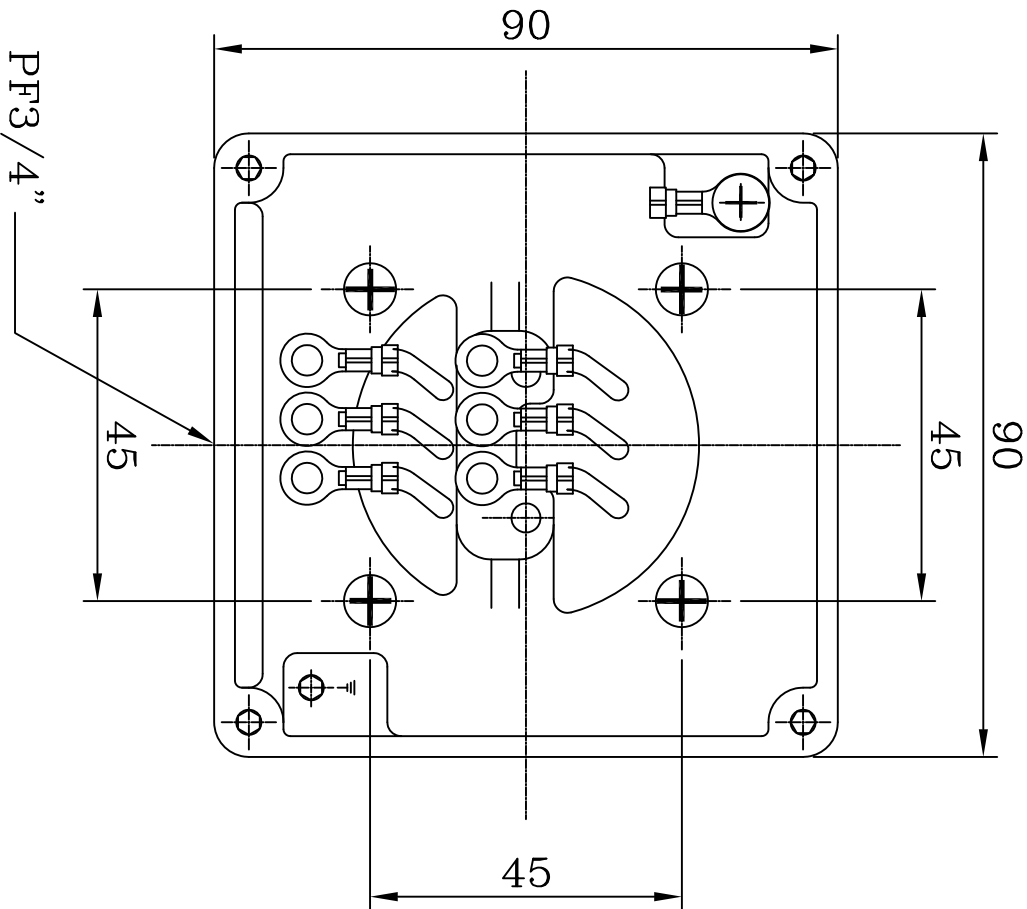
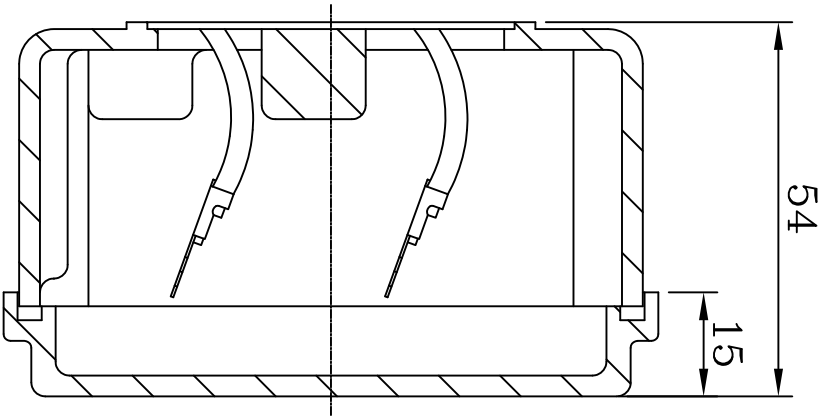
1.TOLERANCE :

CENTER HEIGHT	90	$\begin{smallmatrix} +0 \\ -0.5 \end{smallmatrix}$
BASE HOLES	$\varnothing 10$	$\begin{smallmatrix} +0.36 \\ -0 \end{smallmatrix}$
SHAFT DIAMETER	$\varnothing 24$	$\begin{smallmatrix} +0.009 \\ -0.004 \end{smallmatrix}$
FLANGE HOLES	$\varnothing 12$	$\begin{smallmatrix} +0.43 \\ -0. \end{smallmatrix}$
RABBET DIAMETER	$\varnothing 130$	$\begin{smallmatrix} +0.014 \\ -0.011 \end{smallmatrix}$
KEYWAY WIDTH	8	$\begin{smallmatrix} +0 \\ -0.036 \end{smallmatrix}$
KEYWAY DEPTH	20	$\begin{smallmatrix} +0 \\ -0.2 \end{smallmatrix}$
KEY SIZE	8*7*45	



*AL CONDUIT BOX

APPD BY	B.M.YOO	UNIT	mm	SUBJECT	FF165, IEC 90L	CAD PROJ \ FILE
CHKD BY	S.W.SEO	SCALE	1/5			IP54,55,56 B3/B5
CHKD BY	J.S.JEONG	PROJEC'N	3rd Angle	TITLE	OUTLINE	
DSND BY	C.S.KO	DATE	2008.01.12			
 HYUNDAI HEAVY INDUSTRIES CO., LTD. Electro-Electric System Division				REF. NO	B5024AA03	Sheet No. of
				DWG NO	227B5024TA03	Revision No. 0



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

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
CHKD BY	S. W. SEO	SCALE	1/0.98	TITLE	CONDUIT BOX ASSEMBLY	6 LEADS	
CHKD BY	J. S. JEONG	PROJECN	3 (3rd Angle)	REF. NO	227B1537AA1	Sheet No.	of
DSND BY	C. S. KO	DATE	2005.12.05	DWG NO	227B1537AA1	Revision No.	0