

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	HK-XP		Number of Poles	2			
Enclosure(Protection)	Explosion Proof (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	1.00		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)	75 dB(A)			
	Location	Refer to Outline Drawing	Vibration	1.6 mm/sec (r.m.s)			
Application			Permissible number of consecutive starts	Cold 3 times	Hot 2 times		
Area classification	Hazardous		Paint	Munsell No.	4.0PB5.4/5.5(VL-451)		
Type of Ex-Protection	Ex d IIB T4		SUBMITTAL DRAWING				
Applicable Standard	KS,IEC		Outline Dimension Drawing \ Motor Weight(Approx.)				
ACCESSORIES			B3		kg		
			B5		kg		
			V1		kg		
			B3/B5	227B5024AD03	30 kg		
			Main T-Box Ass'y	227B1536AA			
SPARE PARTS			REMARK				
			High Efficiency				
			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.

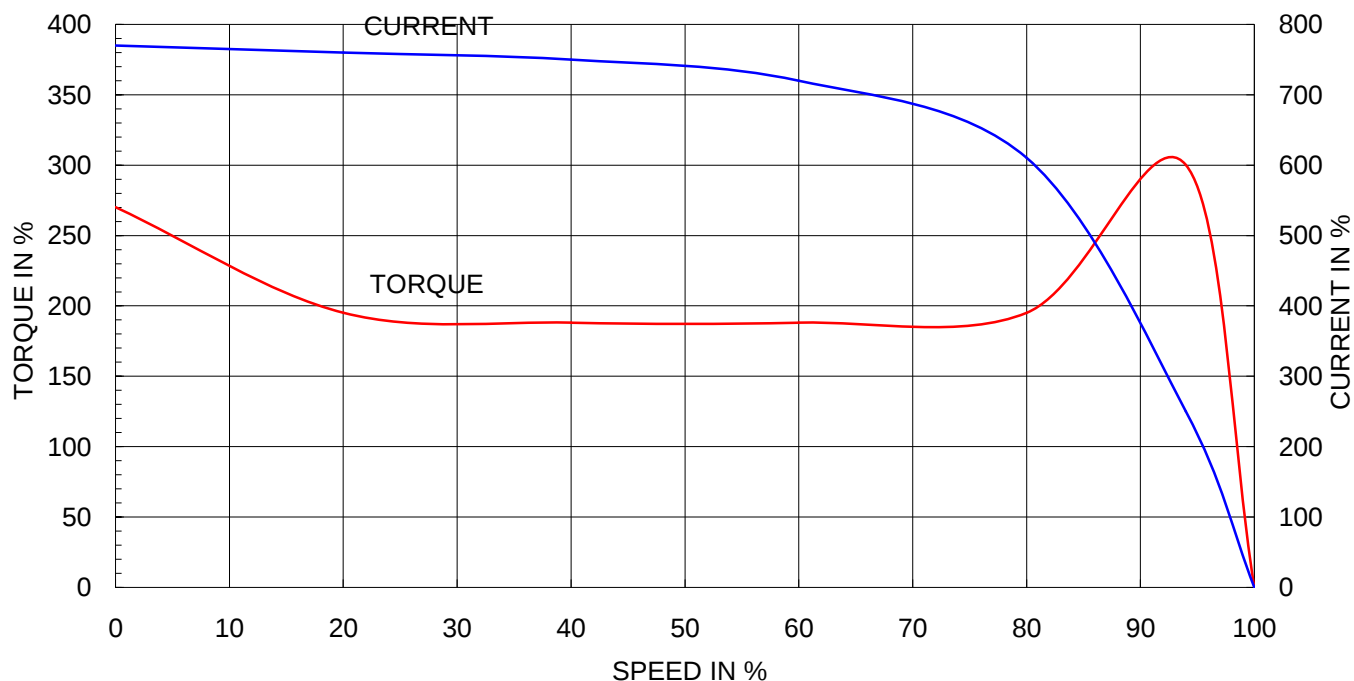
** Data is based on when the motor is supplied at rated voltage & frequency. and the data is expressed as a percentage of full-load value.

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)

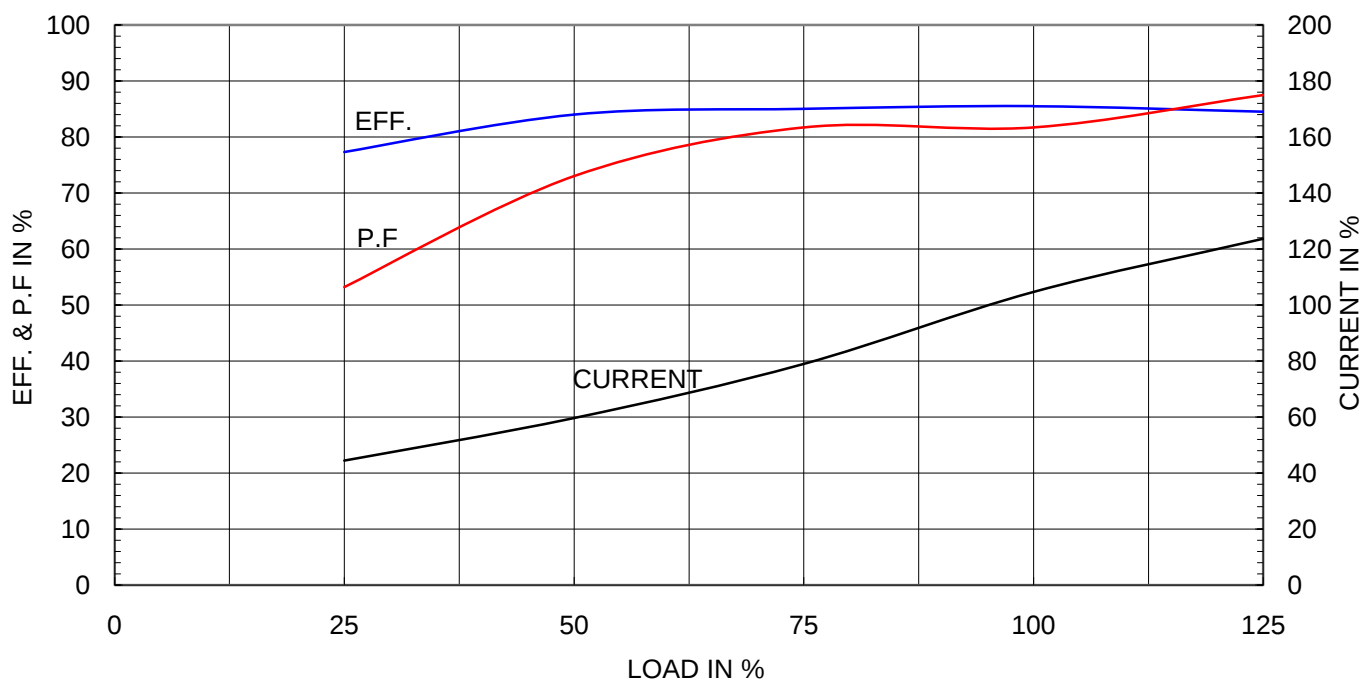
Type	:	HL-XP
Full Load Torque	:	0.6 Kg.m
Motor moment of Inertia (J)	:	0.002 Kg.m ²
Load moment of Inertia (J)	:	0.325 Kg.m ²

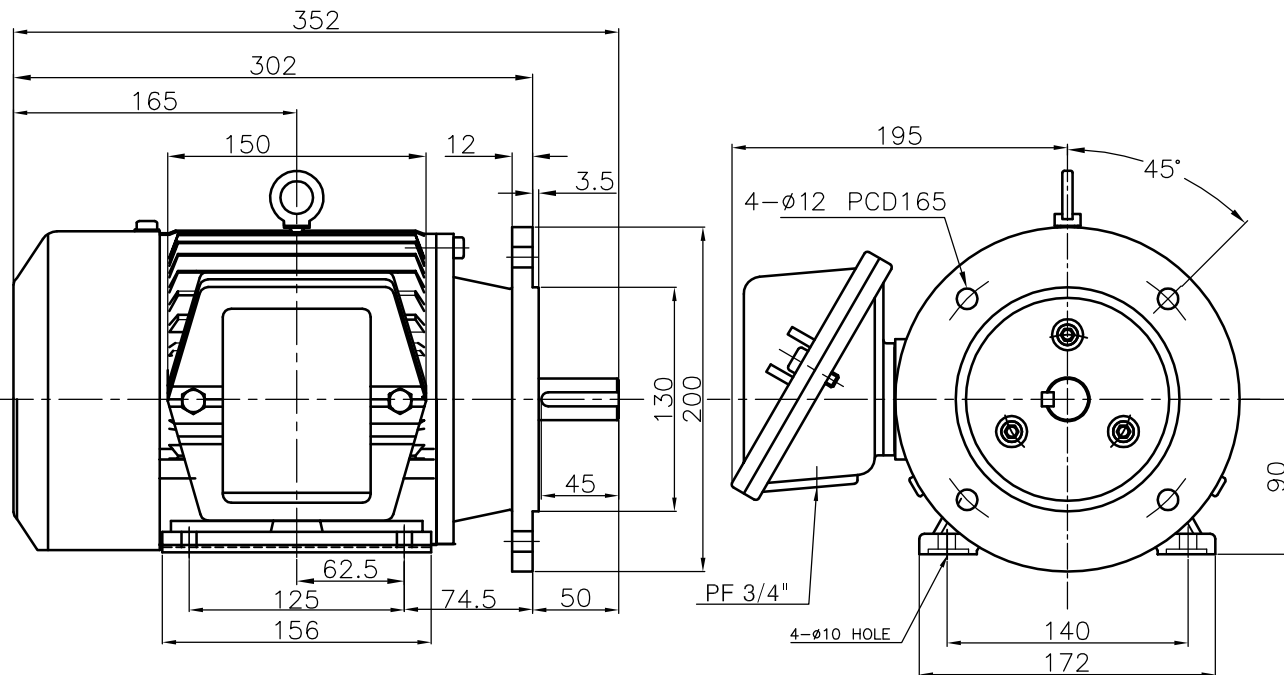
2.2 kW		2 P		60 Hz	
Speed at Full Load :				3490 RPM	
Rated Voltage	440V	380V	220V		
Full Load Current	3.9A	4.6A	7.9A		

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

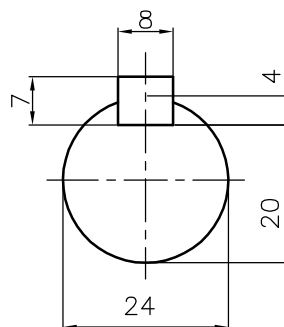




NOTE

1.TOLERANCE :

FLANGE HOLES	$\phi 12 \begin{smallmatrix} +0.43 \\ -0. \end{smallmatrix}$
RABBET DIAMETER	$\phi 130 \begin{smallmatrix} +0.014 \\ -0.011 \end{smallmatrix}$
SHAFT DIAMETER	$\phi 24 \begin{smallmatrix} +0.009 \\ -0.004 \end{smallmatrix}$
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



* CAST IRON CONDUIT BOX

APPD BY	B.M.YOO	UNIT	mm	SUBJECT	FF165, IEC 90	CAD PROJ \ FILE
CHKD BY	S.W.SEO	SCALE	1/0.34			B3/B5 D2G4
CHKD BY	J.S.JEONG	PROJEC'N	3rd Angle	OUTLINE		
DSND BY	C.S.KO	DATE	2008.01.12			
HEAVY INDUSTRIES CO., LTD. Electro-Electric System Division				REF. NO	091\091ASD2G4	Sheet No. of
				DWG NO	227B5024AD03	Revision No. 0

