

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	180M		Rated Output	15 kW 20 HP			
Type	HS		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 28.9 A	33.5 A 57.8 A		
Insulation Class	☒ F ☐ B ☐ H		Locked-rotor**	650 %	650 % 650 %		
Temp. Rise at full load (by resistance method)	at 1.0 S.F 80 deg. C		Efficiency	50% Load 89.7 %			
Motor Location	☒ Indoor ☐ Outdoor			75% Load 90.5 %			
Altitude	Less than 1000 meter			100% Load 90.2 %			
Relative Humidity	Less than 80 %		Power Factor(p.u)	50% Load 0.626			
Ambient Temp.	40 deg. C (Max.)			75% Load 0.712			
Duty Type	Continuos (S1)			100% Load 0.755			
Service Factor	1.15		Speed at Full Load	1175 r.p.m			
Mounting	☒ B3 ☐ B5 ☐ V1 ☐ B3/B5		Torque	Full Load 12.4 kg·m			
Bearing	Type	Anti-Friction		Locked-rotor** 150 %			
	DE/N-DE	6310ZZC3 / 6310ZZC3		Breakdown** 230 %			
	Lubricant	Grease(Polyrex-EM)	Moment of Inertia (J)	Load(Max.) 26.500 kg·m²			
External Thrust	Not applicable			Motor 0.210 kg·m²			
Coupling Method	☒ Direct ☐ V-Belt		Sound Pressure Level (No-load & mean value at 1m from motor)	68 dB(A)			
Shaft Extension	☒ Single ☐ Double		Vibration	2.2 mm/sec (r.m.s)			
Terminal	Main	☐ Steel ☒ Cast Iron	Permissible number of consecutive starts	Cold 3 times	Hot 2 times		
Box	Aux.	☐ Yes ☒ No	Paint	Munsell No.	4.0PB5.4/5.5(VL-451)		
	Location	Refer to Outline Drawing	SUBMITTAL DRAWING				
Application			Outline Dimension Drawing \ Motor Weight(Approx.)				
Area classification	Non-Hazardous		B3	227B2000AB07	177 kg		
Type of Ex-Protection	Not applicable		B5		kg		
Applicable Standard	KS,IEC,NEMA MG1 Part30(Vpeak)		V1		kg		
ACCESSORIES			B3/B5		kg		
			Main T-Box Ass'y	227B8008LA2			
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.

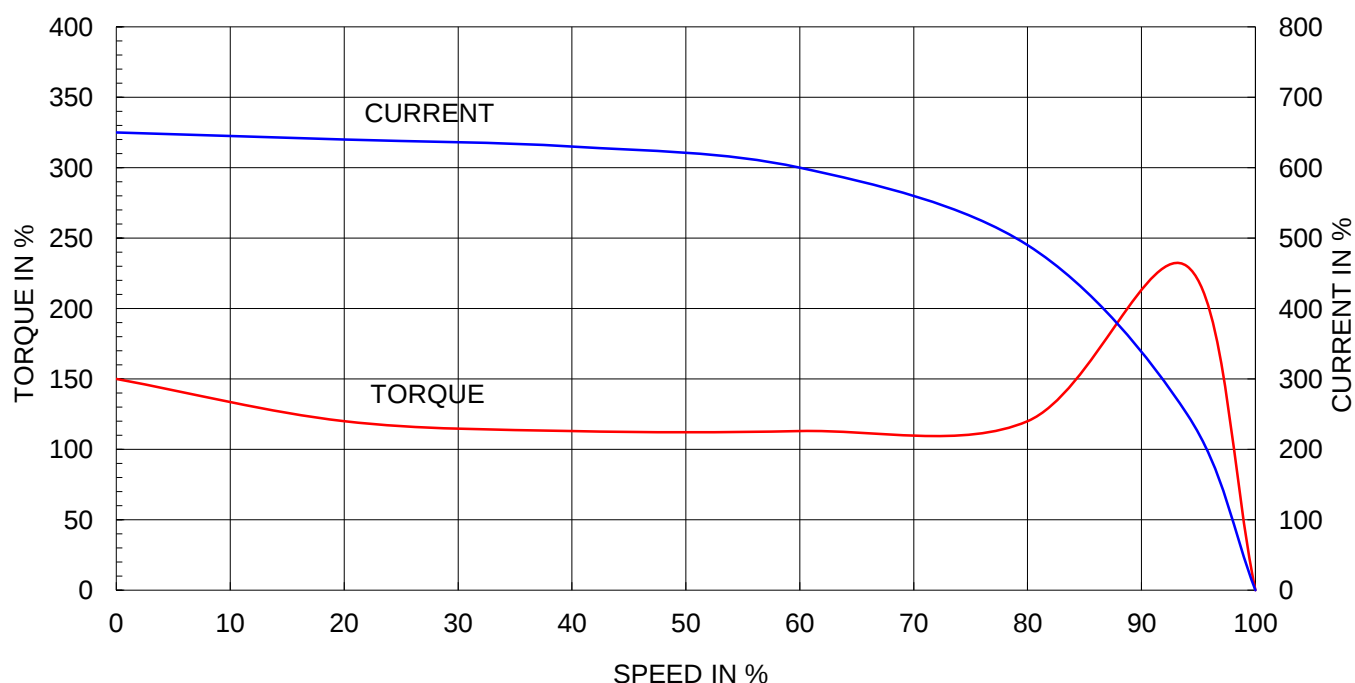
** Data is based on when the motor is supplied at rated voltage & frequency. and the data is expressed as a percentage of full-load value.

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)

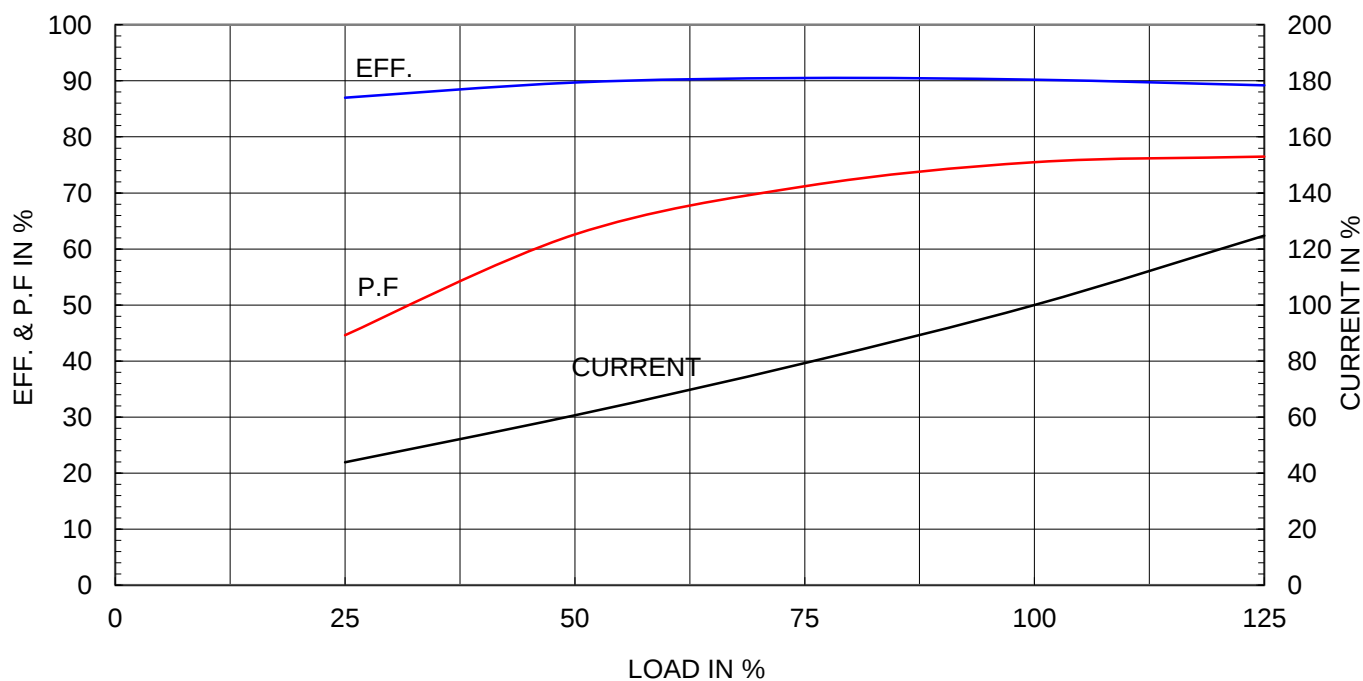
Type	:	HS
Full Load Torque	:	12.4 Kg.m
Motor moment of Inertia (J)	:	0.210 Kg.m ²
Load moment of Inertia (J)	:	26.500 Kg.m ²

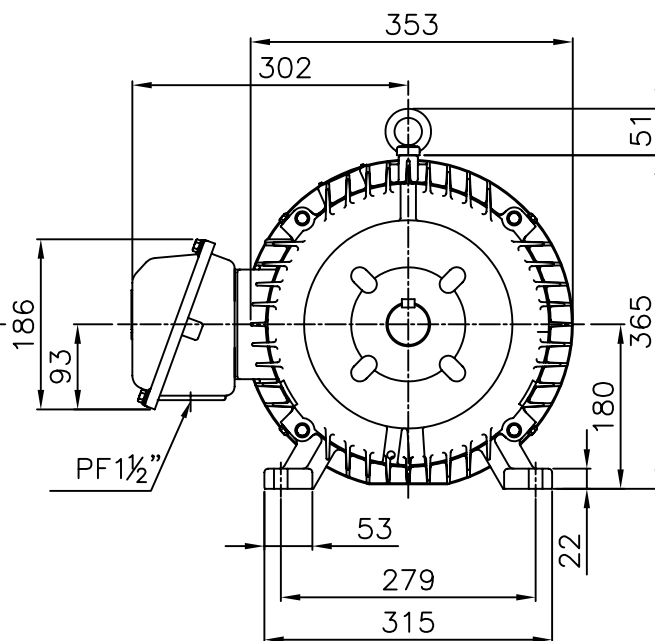
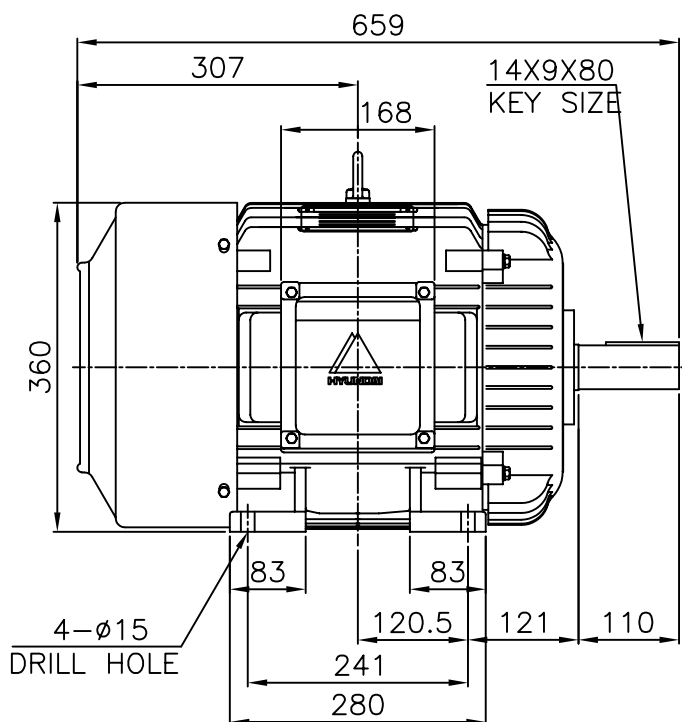
15 kW		6 P		60 Hz	
Speed at Full Load :				1175 RPM	
Rated Voltage	440V	380V	220V		
Full Load Current	28.9A	33.5A	57.8A		

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

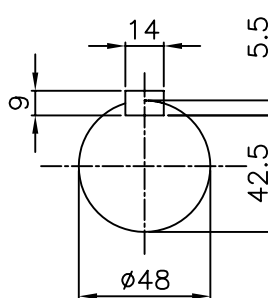




NOTE

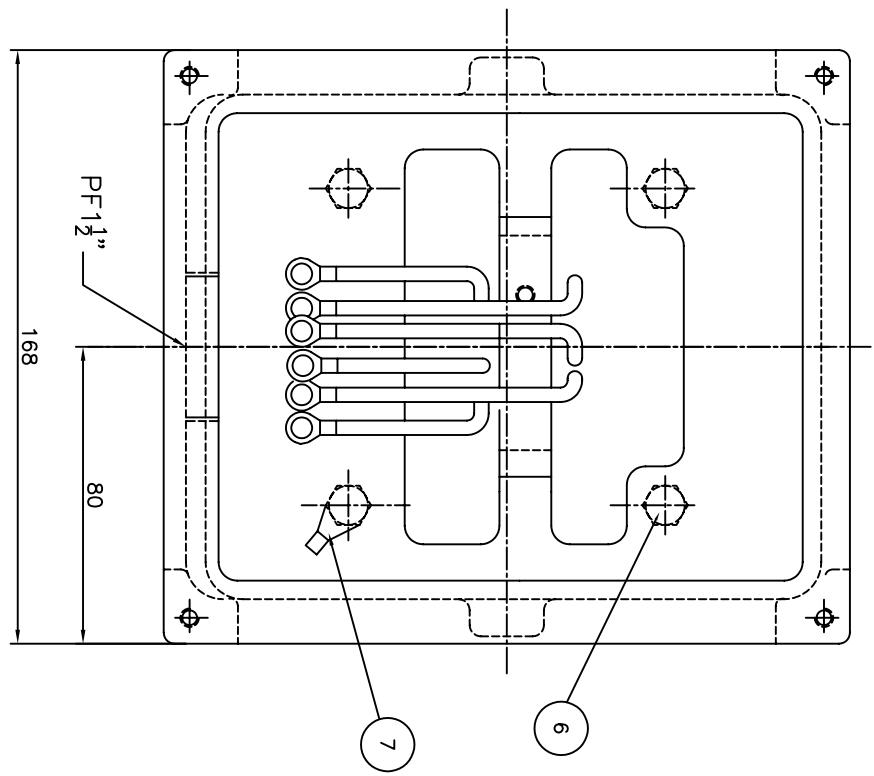
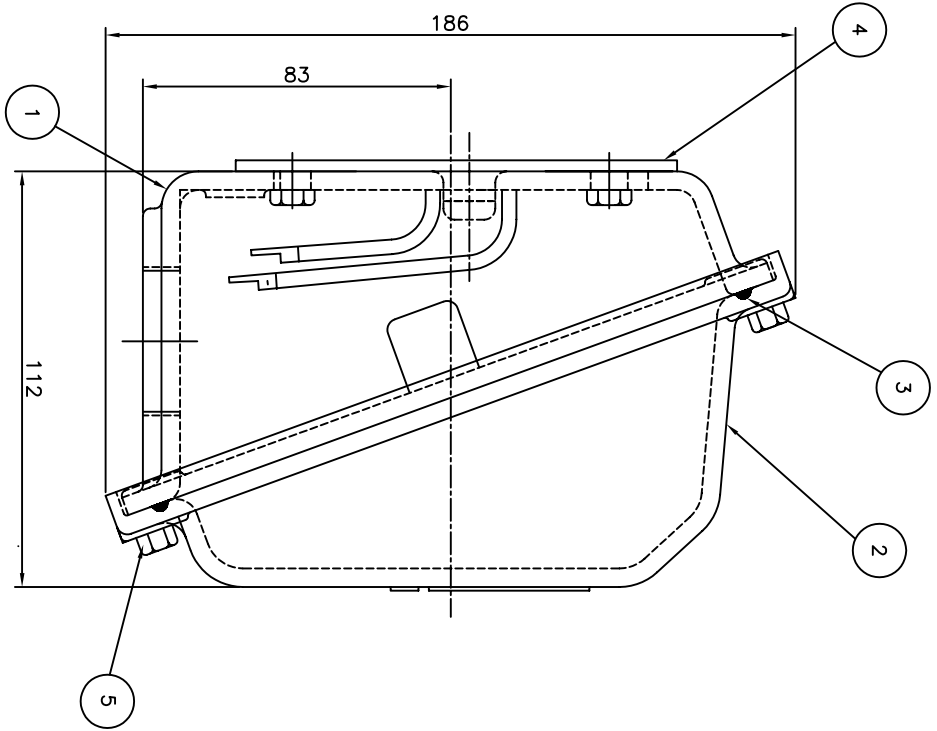
1.TOLERANCE :

CENTER HEIGHT	180	$\begin{smallmatrix} 0 \\ -0.5 \end{smallmatrix}$
BASE HOLES	$\phi 15$	$\begin{smallmatrix} +0.43 \\ 0 \end{smallmatrix}$
SHAFT DIAMETER	$\phi 48$	$\begin{smallmatrix} +0.018 \\ +0.002 \end{smallmatrix}$
KEYWAY WIDTH	14	$\begin{smallmatrix} 0 \\ -0.043 \end{smallmatrix}$
KEYWAY DEPTH	5.5	$\begin{smallmatrix} +0.2 \\ 0 \end{smallmatrix}$



CAST IRON CONDUIT BOX

APPD BY	J. H. KIM	UNIT	mm	SUBJECT	KS 180M	CAD PROJ \ FILE
CHKD BY	Y. S. KIM	SCALE	1/8.5			XSDNKS\B2000AB07
CHKD BY	S. H. KO	PROJEC'N	3rd Angle	TITLE OUTLINE		
DSND BY	I. K. KIM	DATE	2002.10.26			
 HYUNDAI HEAVY INDUSTRIES CO., LTD. Electro-Electric System Division				REF. NO	B2000AB07	Sheet No. of
				DWG NO	227B2000AB07	Revision No. 0



PT	DESCRIPTION	MATERIAL	DIMENSION	Q'TY
1	CONDUIT BOX	FC15	---	1
2	CONDUIT BOX COVER	FC15	---	1
3	O-RING / COVER	EPDM	φ4	1
4	BOX GASKET	NBR	---	1
5	COVER+BOX HEX BOLT	S45C	M6 X L20	4
6	BOX+FRAME HEX BOLT	S45C	M8 X L20	4
7	GROUND TERMINAL LUG	CU	---	1

REV	DATE	CONTENTS	REV'D BY	CHK'D BY	CHK'D BY	APP'D BY
1						
2						
3						
4						
5						
6						
7						
8						
9						

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
APP'D BY	KIM.Y.S	UNIT	MM				
CHK'D BY	KO.S.H	SCALE	1:1				
CHK'D BY	---	PROJEC'N	3-4# (3rd Angle)				
DSND BY	Y.J.HWANG	DATE	2005.02.16				
TITLE				TERMINAL BOX ASSEMBLY			
REF. NO.				227B8008LA2			
DWG NO.				227B8008LA2			
Revision No.				0			