

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	180L		Rated Output	18.5 kW 25 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 34.2 A 39.6 A 68.3 A Locked-rotor** 680 % 680 % 680 %			
Insulation Class	☒ F ☐ B ☐ H		Efficiency	50% Load 91.2 % 75% Load 92.0 % 100% Load 91.7 %			
Temp. Rise at full load (by resistance method)			Power Factor(p.u)				
at 1.0 S.F 80 deg. C			50% Load 0.651 75% Load 0.736 100% Load 0.775				
Motor Location	☒ Indoor ☐ Outdoor		Speed at Full Load				
Altitude	Less than 1000 meter		1175 r.p.m				
Relative Humidity	Less than 80 %		Torque				
Ambient Temp.	40 deg. C (Max.)		Full Load 15.3 kg·m Locked-rotor** 160 % Breakdown** 250 %				
Duty Type	Continuos (S1)		Moment of Inertia (J)				
Service Factor	1.15		Load(Max.) 33.000 kg·m² Motor 0.257 kg·m²				
Mounting	☐ B3 ☐ B5 ☐ V1 ☒ B3/B5		Sound Pressure Level (No-load & mean value at 1m from motor)				
Bearing	Type	Anti-Friction	68 dB(A)				
	DE/N-DE	6312ZZC3 / 6310ZZC3	Vibration				
	Lubricant	Grease(Polyrex-EM)	2.2 mm/sec (r.m.s)				
External Thrust	Not applicable		Permissible number of				
Coupling Method	☒ Direct ☐ V-Belt		Cold 3 times				
Shaft Extension	☒ Single ☐ Double		Hot 2 times				
Terminal	Main	☐ Steel ☒ Cast Iron	Paint				
Box	Aux.	☐ Yes ☒ No	Munsell No. 4.0PB5.4/5.5(VL-451)				
	Location	Refer to Outline Drawing					
Application							
Area classification	Non-Hazardous						
Type of Ex-Protection	Not applicable						
Applicable Standard	KS,IEC,NEMA MG1 Part30(Vpeak)						
ACCESSORIES			SUBMITTAL DRAWING				
			Outline Dimension Drawing \ Motor Weight(Approx.)				
			B3		kg		
			B5		kg		
			V1		kg		
			B3/B5		227B2040AB08 194 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.

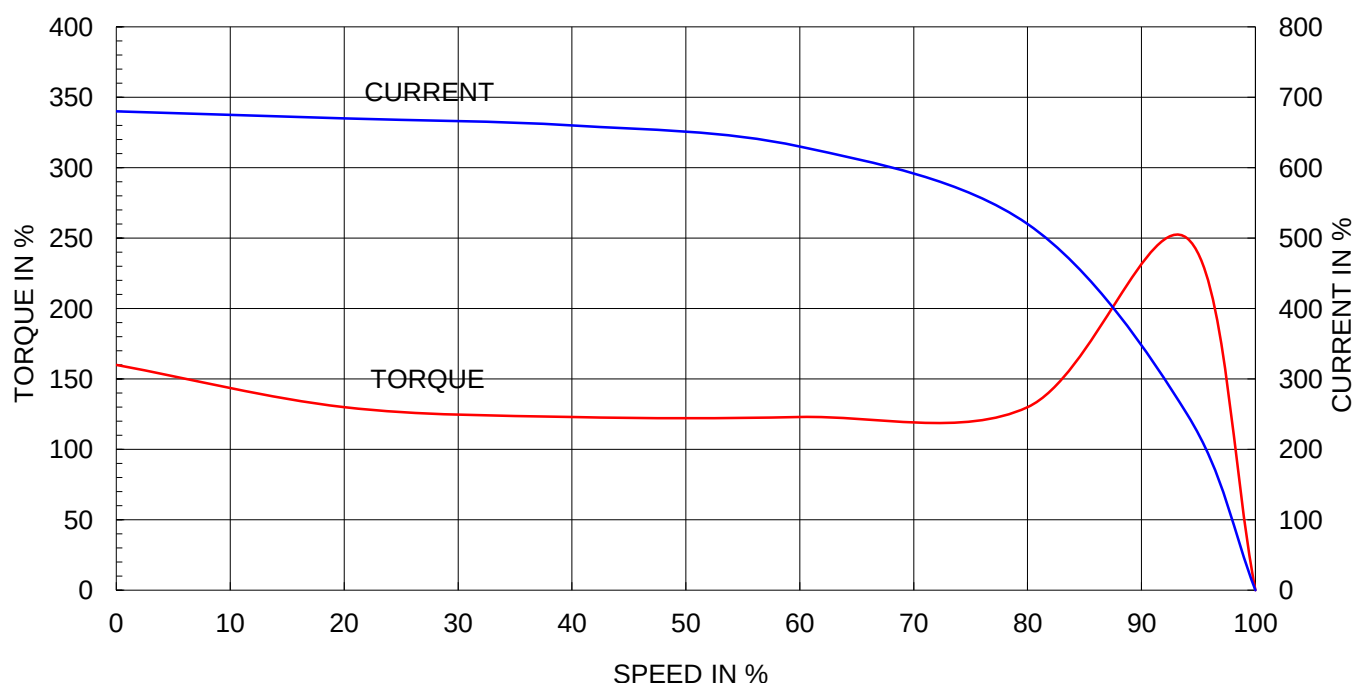
* In case of Inverter-Fed Motor, performance data is based on sine wave tests.

** 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.

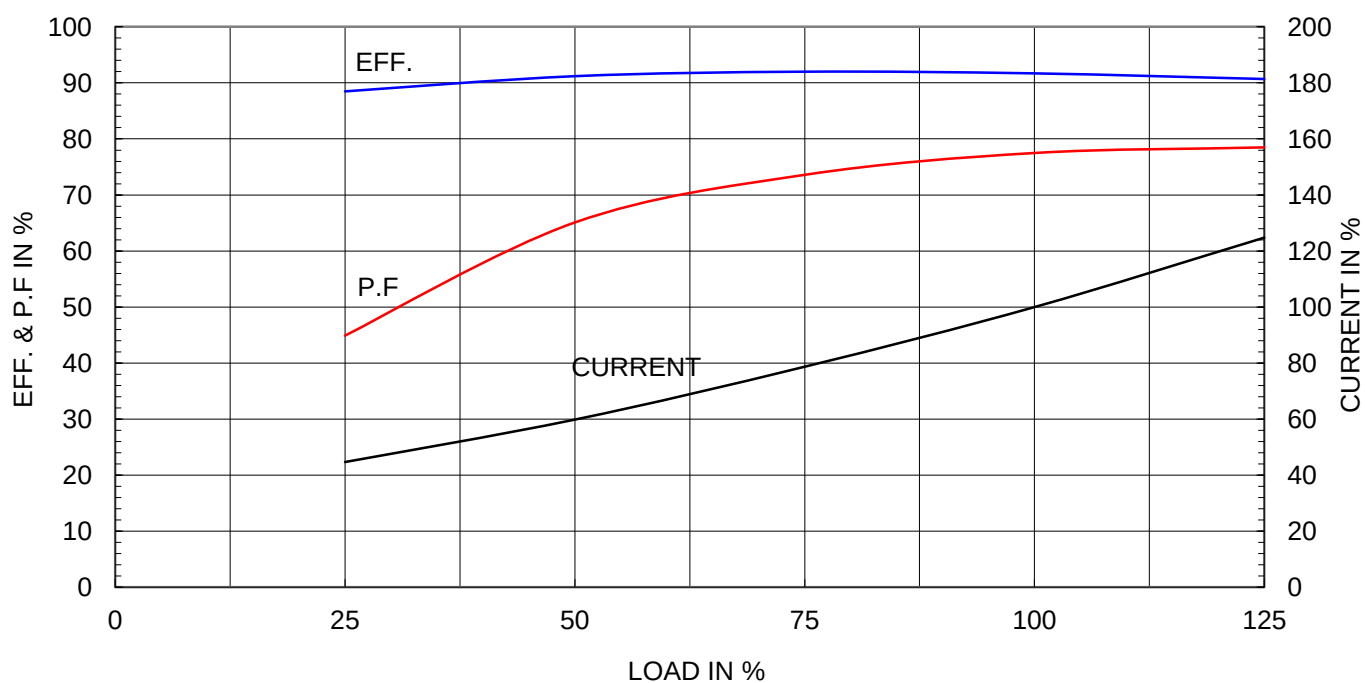
Type	:	HS
Full Load Torque	:	15.3 Kg.m
Motor moment of Inertia (J)	:	0.257 Kg.m ²
Load moment of Inertia (J)	:	33.000 Kg.m ²

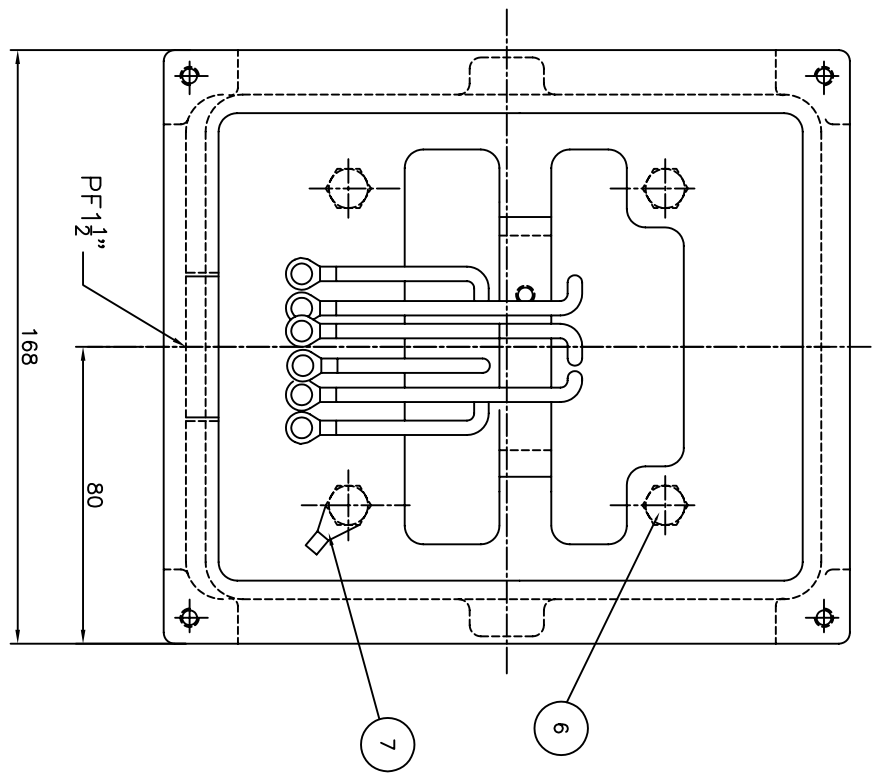
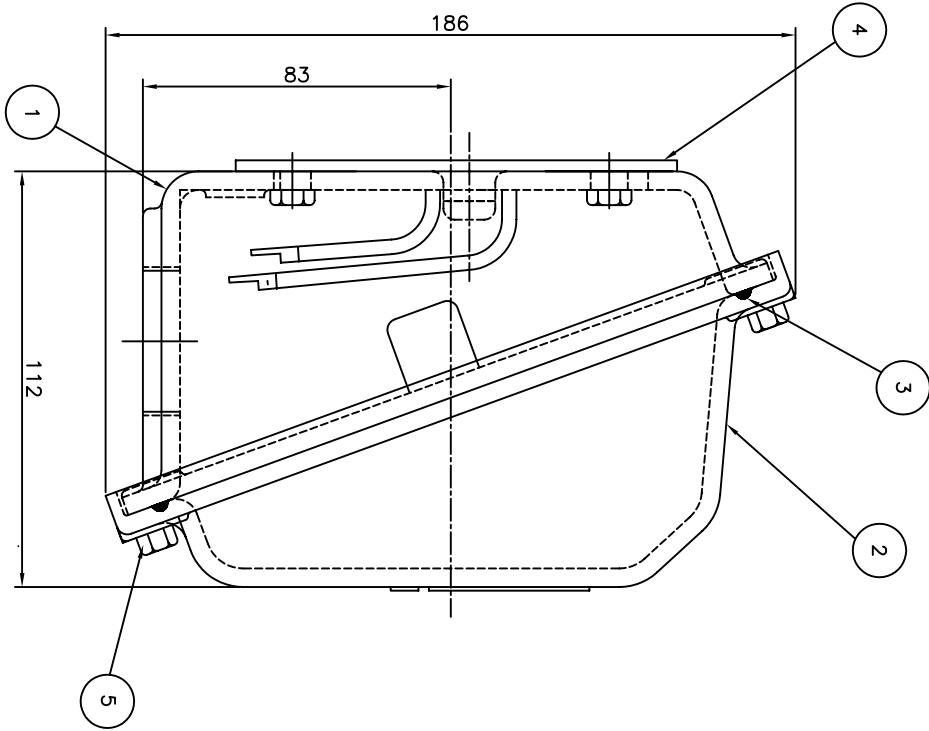
18.5 kW		6 P		60 Hz	
Speed at Full Load :				1175 RPM	
Rated Voltage	440V	380V	220V		
Full Load Current	34.2A	39.6A	68.3A		

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE





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				REF. NO.	227B8008LA2	Sheet No. of	
TERMINAL BOX ASSEMBLY				DWG NO.	227B8008LA2	Revision No. 0	