

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	280S	Rated Output	90 kW	120 HP	
Type	HS-90/6	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	145.9 A	169.0 A
Insulation Class	☒ F ☐ B ☐ H		Locked-rotor**	650 %	650 %
Temp. Rise at full load (by resistance method)		Efficiency			
at 1.0 S.F	80 deg. C		50% Load	93.6 %	
Motor Location	☒ Indoor ☐ Outdoor		75% Load	94.2 %	
Altitude	Less than 1000 meter		100% Load	94.1 %	
Relative Humidity	Less than 80 %	Power Factor(p.u)			
Ambient Temp.	40 deg. C (Max.)		50% Load	0.771	
Duty Type	Continuous (S1)		75% Load	0.839	
Service Factor	1.15		100% Load	0.860	
Mounting	☒ B3 ☐ B5 ☐ V1 ☐ B3/B5	Speed at Full Load	1185 r.p.m		
Bearing	Type	Anti-Friction	Torque		
	DE/N-DE	6318C3 / 6316C3	Full Load	74.0 kg·m	
	Lubricant	Grease(Gadus S2 V 100 2)	Locked-rotor**	170 %	
External Thrust	Not applicable		Breakdown**	250 %	
Coupling Method	☒ Direct ☐ V-Belt	Moment of Inertia (J)			
Shaft Extension	☒ Single ☐ Double		Load(Max.)	130.225 kg·m²	
Terminal	Main		Motor	4.135 kg·m²	
Box	Aux.		Sound Pressure Level (No-load & mean value at 1m from motor)		
	Location	Refer to Outline Drawing		77 dB(A)	
Application		Vibration	2.2 mm/sec (r.m.s)		
Area classification	Non-Hazardous	Permissible number of consecutive starts	Cold	3 times	
Type of Ex-Protection	Not applicable		Hot	2 times	
Applicable Standard	KS,IEC,NEMA MG1 Part30(Vpeak)	Paint	Munsell No.	4.0PB5.4/5.5(VL-451)	

ACCESSORIES	SUBMITTAL DRAWING			
	Outline Dimension Drawing \ Motor Weight(Approx.)			
	B3	TJ8SAP51	690	kg
	B5			kg
	V1			kg
	B3/B5			kg
	Main T-Box Ass'y	3M-016882		

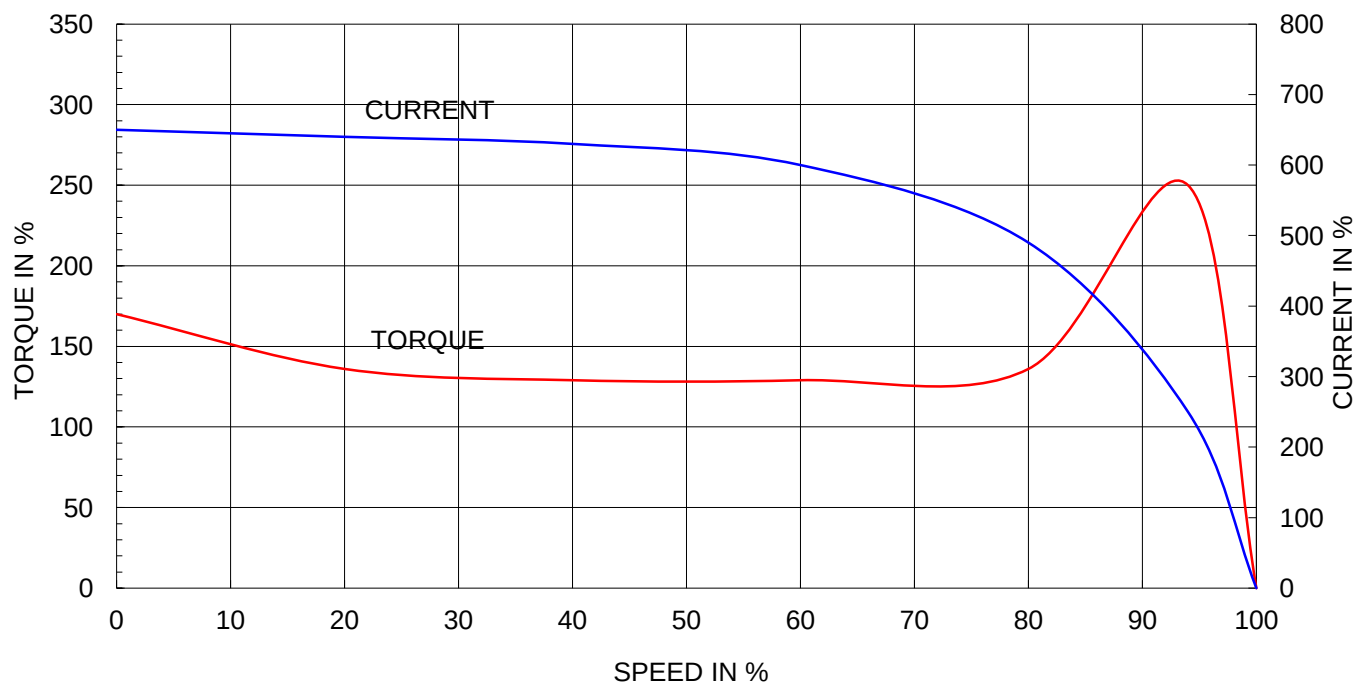
SPARE PARTS	REMARK		High Efficiency		
	*. For use on PWM VFD 10:1VT, 3:1CT@1.0S.F&F Temp. rise				
	Date	DSND	CHKD	CHKD	APPD
	2010-05-28	R.G. KIM	O.J. KIM	J.H. KIM	K.J. KANG

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.

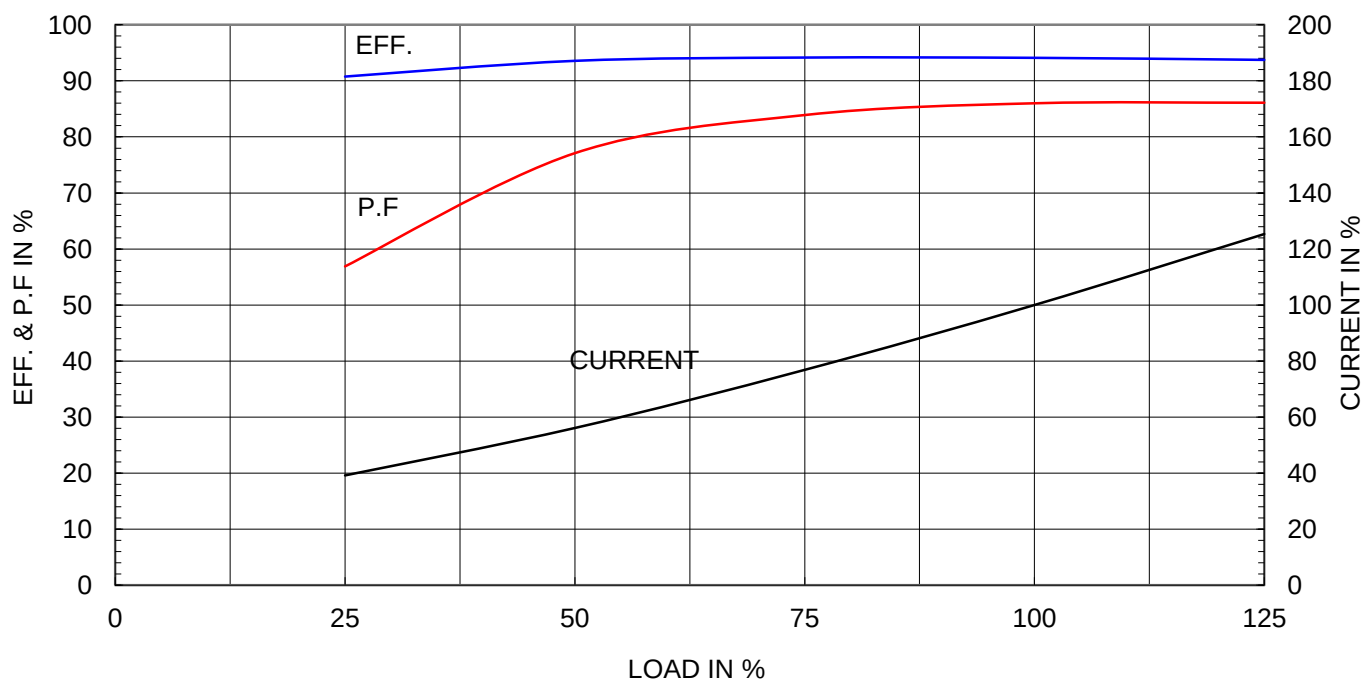
Type	:	HS
Full Load Torque	:	74.0 Kg.m
Motor moment of Inertia (J)	:	4.135 Kg.m ²
Load moment of Inertia (J)	:	130.225 Kg.m ²

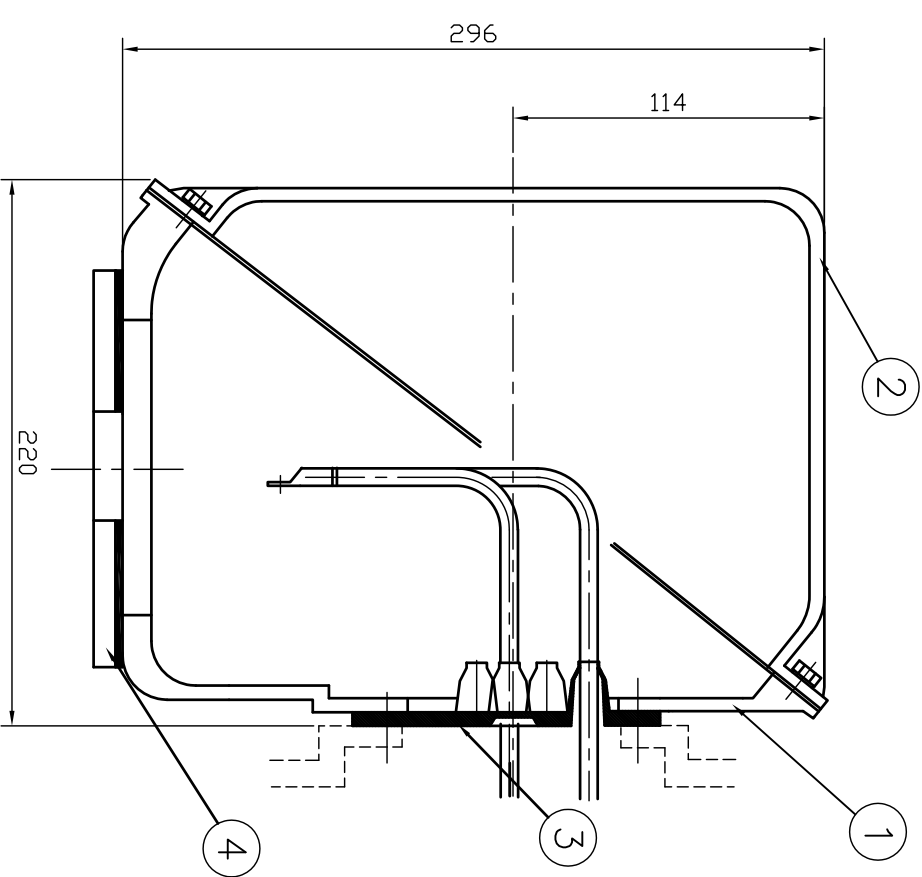
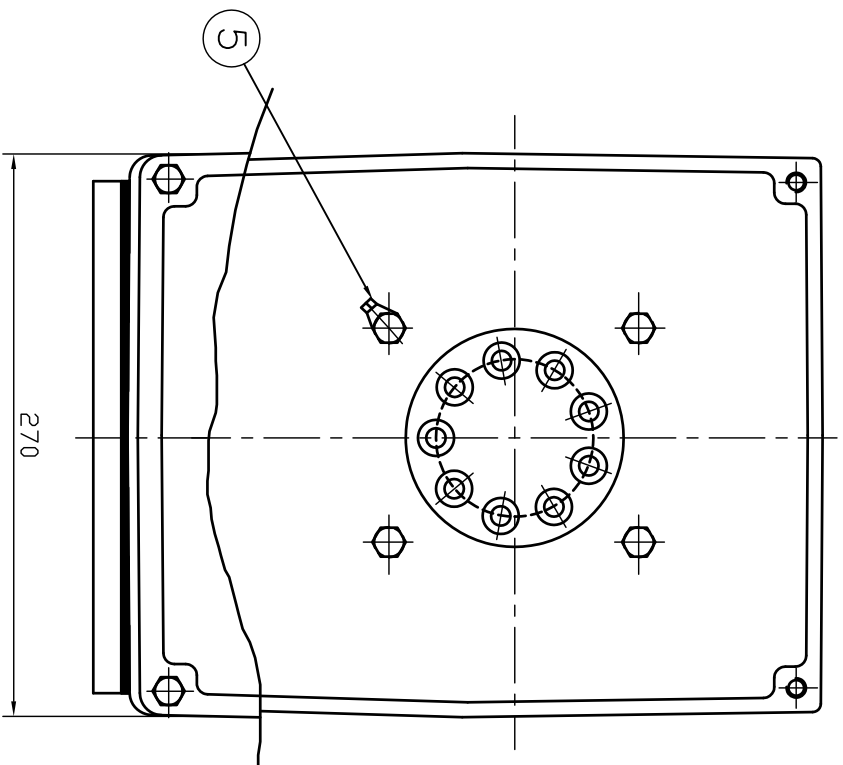
90 kW		6 P		60 Hz	
Speed at Full Load :				1185 RPM	
Rated Voltage	440V	380V	220V		
Full Load Current	145.9A	169.0A	291.9A		

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE





REV	DATE	CONTENTS	REV'D BY	CHK'D BY	Q.P. CHK	APP'D BY
1						

1	EARTH TERMINAL LUG					5
1	CABLE ENTRY PLATE					4
1	GASKET	NBR				3
1	TERMINAL BOX COVER	CAST IRON				2
1	TERMINAL BOX BODY	CAST IRON				1
QTY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK NO.
APP'D BY	김진오	UNIT	MM	SUBJECT	HLA6 - 250,280Fr.	CAD PROJ. & FILE
Q.P. CHK	주영걸	SCALE	NONE	TITLE	(CAST IRON)	T-BOX-M \ 38016882
CHK'D BY	권오철	PROJEC'T	3 2nd (3rd Angle)	TERMINAL BOX ASS'Y		
DSND BY	김헌태	DATE	92.06.05	REF. NO		Sheet No. of
				DWG NO	3M-016882	Revision No.