

AC INDUCTION MOTOR DATA SHEET

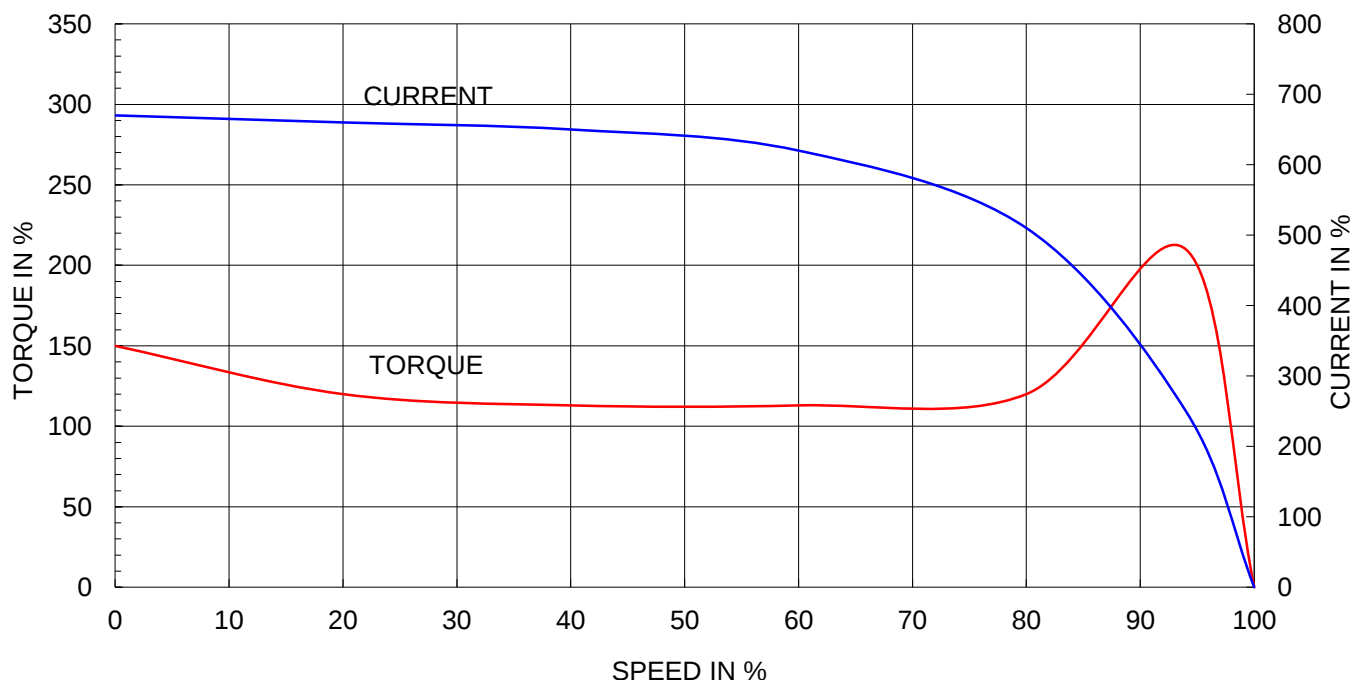
Model No.or RFQ No.		Item No.		Rev. No. [0]			
Project Name		Project No.		Quantity sets			
GENERAL SPECIFICATION			PERFORMANCE DATA				
Frame Size	200LL		Rated Output	45 kW 60 HP			
Type	HS-45/4		Number of Poles	4			
Enclosure(Protection)	Totally Enclosed (IP55)		Rotor Type	Squirrel Cage			
Method of 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	76.0 A 88.0 A 152.0 A		
Insulation Class	☒ F ☐ B ☐ H			Locked-rotor**	670 % 670 % 670 %		
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 93.7 %				
Altitude Less than 1000 meter			100% Load 93.6 %				
Relative Humidity Less than 80 %			Power Factor(p.u)				
Ambient Temp. 40 deg. C (Max.)			50% Load 0.775				
Duty Type Continuous (S1)			75% Load 0.820				
Service Factor 1.15			100% Load 0.830				
Mounting	☒ B3 ☐ B5 ☐ V1 ☐ B3/B5		Speed at Full Load 1775 r.p.m				
Bearing	Type	Anti-Friction	Torque				
	DE/N-DE	6313ZC3 / 6211ZC3	Full Load 24.7 kg·m				
	Lubricant	Grease(Gadus S2 V 100 2)	Locked-rotor** 150 %				
External Thrust		Not applicable	Breakdown** 210 %				
Coupling Method		☒ Direct ☐ V-Belt	Moment of Inertia (J)				
Shaft Extension		☒ Single ☐ Double	Load(Max.) 26.000 kg·m²				
Terminal Box	Main	☐ Steel ☒ Cast Iron	Motor 0.546 kg·m²				
	Aux.	☐ Yes ☒ No	Sound Pressure Level (No-load & mean value at 1m from motor)				
	Location	Refer to Outline Drawing	78 dB(A)				
Application			Vibration 2.2 mm/sec (r.m.s)				
Area classification		Non-Hazardous	Permissible number of				
Type of Ex-Protection		Not applicable	consecutive starts Cold 3 times				
Applicable Standard		KS,IEC,NEMA MG1 Part30(Vpeak)	Hot 2 times				
			Paint	Munsell No.	4.0PB5.4/5.5(VL-451)		
ACCESSORIES			SUBMITTAL DRAWING				
			Outline Dimension Drawing \ Motor Weight(Approx.)				
			B3	227B1940CB02	320 kg		
			B5		kg		
			V1		kg		
			B3/B5		kg		
			Main T-Box Ass'y	227B8003CB5			
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.

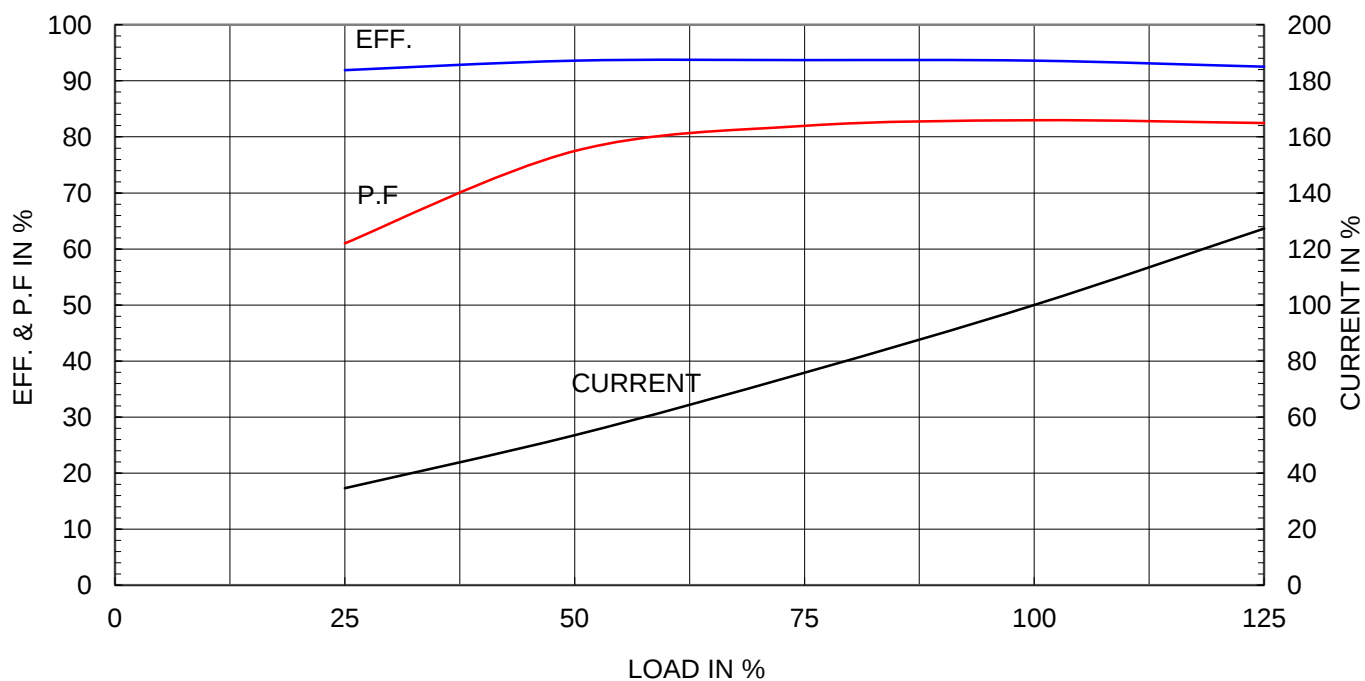
Type	:	HS
Full Load Torque	:	24.7 Kg.m
Motor moment of Inertia (J)	:	0.546 Kg.m ²
Load moment of Inertia (J)	:	26.000 Kg.m ²

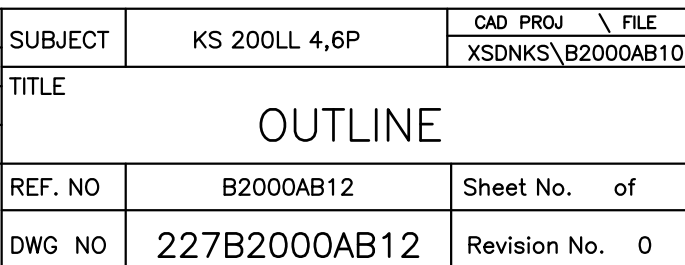
45 kW		4 P		60 Hz	
Speed at Full Load :				1775 RPM	
Rated Voltage	440V	380V	220V		
Full Load Current	76.0A	88.0A	152.0A		

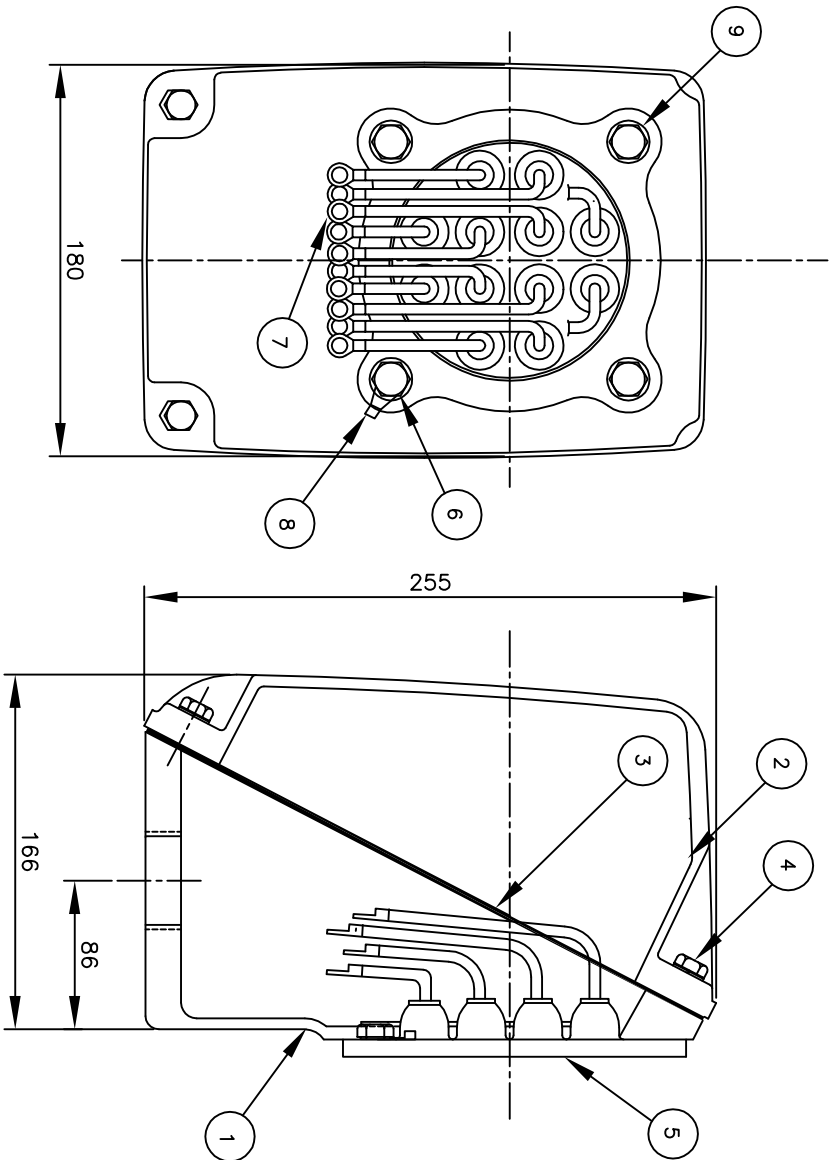
SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE







PT	DESCRIPTION	MATERIAL	DIMENSION	Q.TY
1	CONDUIT BOX	FC20		1
2	C/B COVER	FC20		1
3	GASKET(COVER)	N.B.R	T2X170X210	1
4	SCREW(COVER)	S45C	M8XL20	4
5	GASKET(C/B)	N.B.R		1
6	SCREW(C/B)	S45C	M8XL20	4
7	TERMINAL LUG	CU	T1.6	
8	TERMINAL GROUND	CU	T1.6	1
9	WASHER	S45C	M8 X L10	4

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
APPD	BY KIM JIN HONG	UNIT	MM				
CHKD	BY KIM YU SUNG	SCALE	1/2				
CHKD	BY GO SECK HAN	PROJECT	3 [2] [1] [2] (3rd Angle)				
DSND	BY LEE KWANG SOO	DATE	94.12.20				
				REF. NO.	B8003CB5	Sheet No.	of
				DWG NO.	227B8003CB5	Revision No.	0



HYUNDAI
HEAVY INDUSTRIES CO., LTD.
& POWER SYSTEMS

CONDUIT BOX
& COVER ASS'Y