

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	22 kW 30 HP			
Type	HL-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 34.9 A	40.4 A 69.7 A		
Insulation Class	☒ F ☐ B ☐ H		Locked-rotor**	650 %	650 % 650 %		
Temp. Rise at full load (by resistance method)			Efficiency				
at 1.0 S.F 80 deg. C			50% Load	90.5 %			
Motor Location	☒ Indoor ☐ Outdoor		75% Load	91.5 %			
Altitude	Less than 1000 meter		100% Load	91.0 %			
Relative Humidity	Less than 80 %		Power Factor(p.u)				
Ambient Temp.	40 deg. C (Max.)		50% Load	0.865			
Duty Type	Continuos (S1)		75% Load	0.900			
Service Factor	1.00		100% Load	0.910			
Mounting	☐ B3 ☒ B5 ☐ V1 ☐ B3/B5		Speed at Full Load	3540 r.p.m			
Bearing	Type	Anti-Friction	Torque				
	DE/N-DE	6310ZZC3 / 6310ZZC3	Full Load	6.1 kg·m			
	Lubricant	Grease(Polyrex-EM)	Locked-rotor**	180 %			
External Thrust	Not applicable		Breakdown**	220 %			
Coupling Method	☒ Direct ☐ V-Belt		Moment of Inertia (J)				
Shaft Extension	☒ Single ☐ Double		Load(Max.)	2.850 kg·m²			
Terminal Box	Main	☐ Steel ☒ Cast Iron	Motor	0.080 kg·m²			
	Aux.	☐ Yes ☒ No	Sound Pressure Level (No-load & mean value at 1m from motor)	86 dB(A)			
	Location	Refer to Outline Drawing	Vibration	2.2 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	227B2022AA07	211 kg		
			V1		kg		
			B3/B5		0 kg		
			Main T-Box Ass'y	227B1470LB			
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.

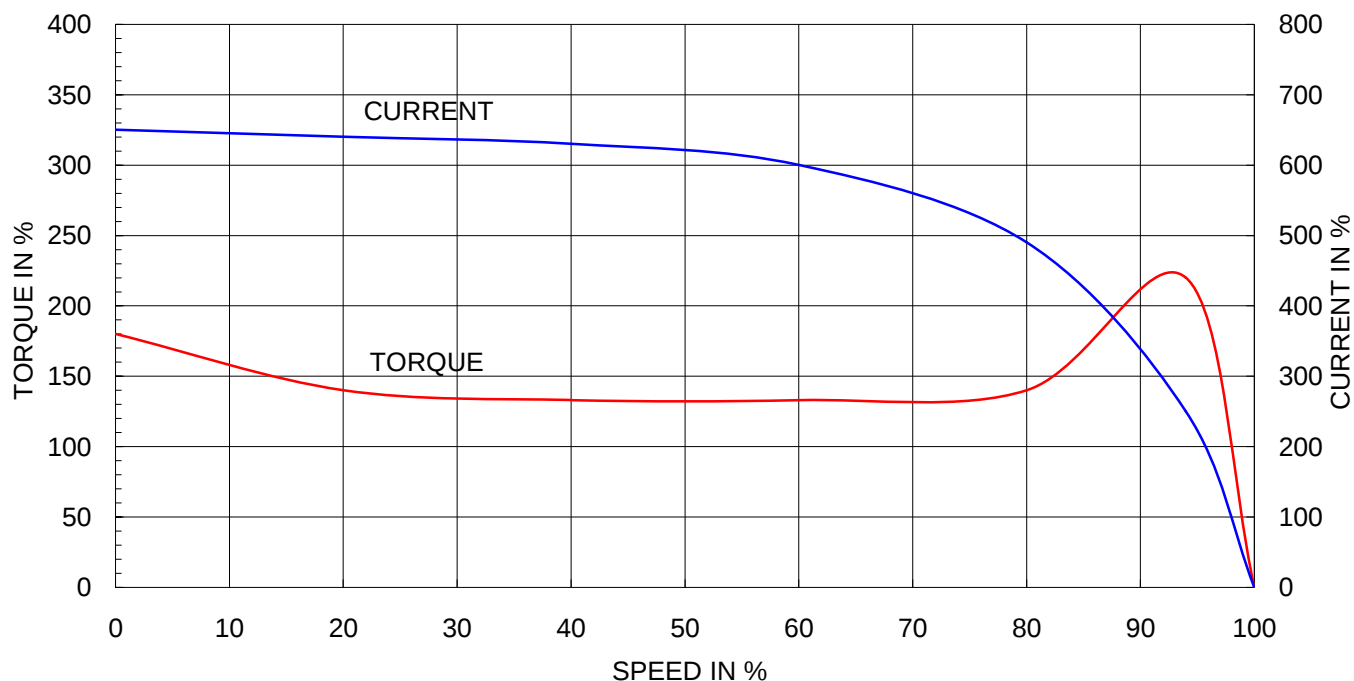
* In case of Inverter-Fed Motor, performance data is based on sine wave tests.

** 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.

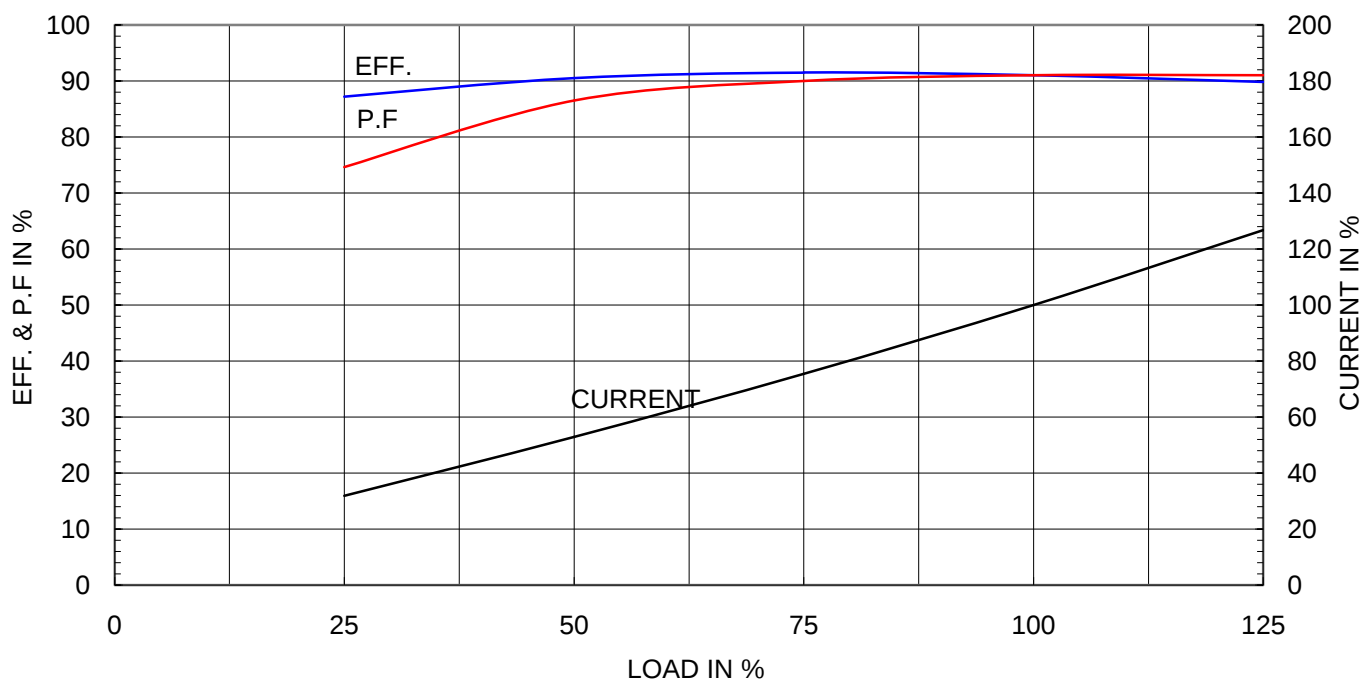
Type	:	HL-XP
Full Load Torque :	6.1	Kg.m
Motor moment of Inertia (J) :	0.080	Kg.m ²
Load moment of Inertia (J) :	2.850	Kg.m ²

22 kW		2 P		60 Hz	
Speed at Full Load :				3540 RPM	
Rated Voltage	440V	380V	220V		
Full Load Current	34.9A	40.4A	69.7A		

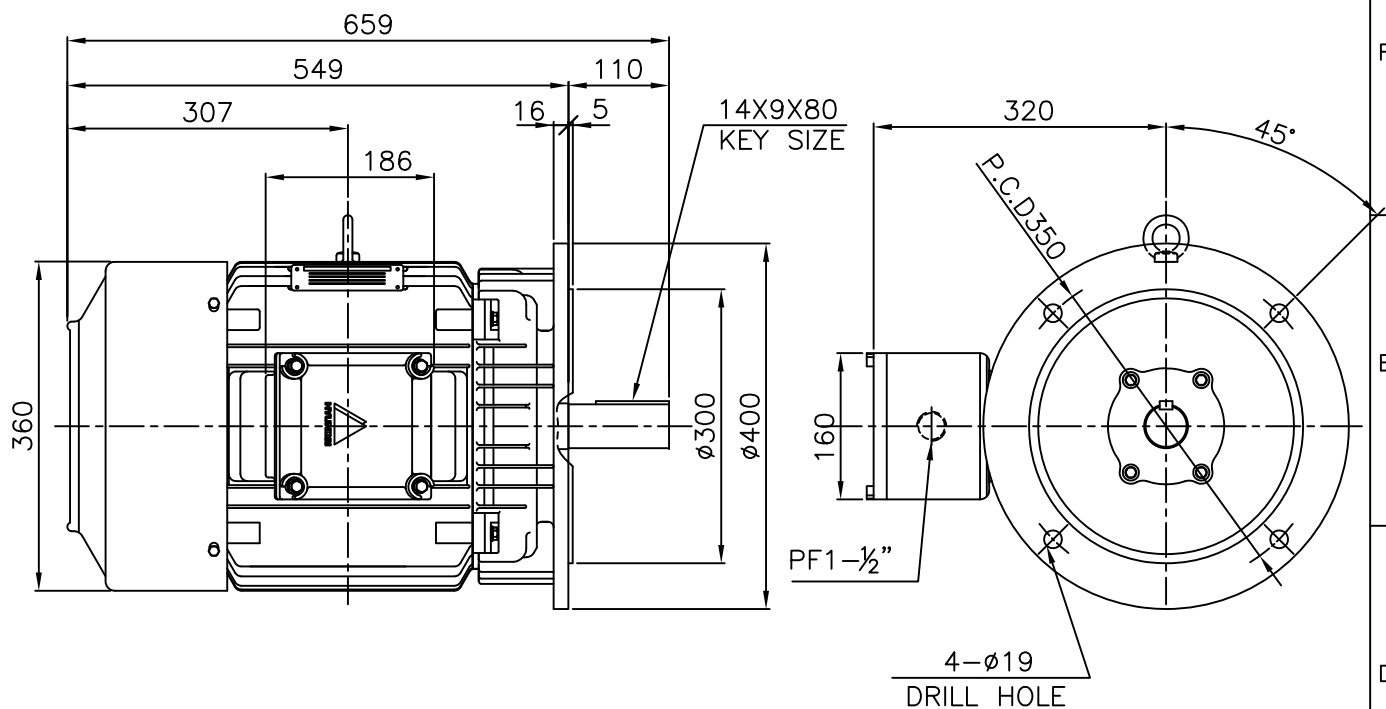
SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



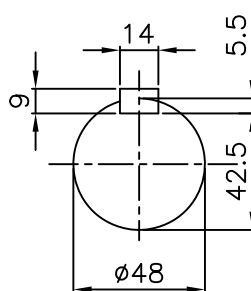
Exd II



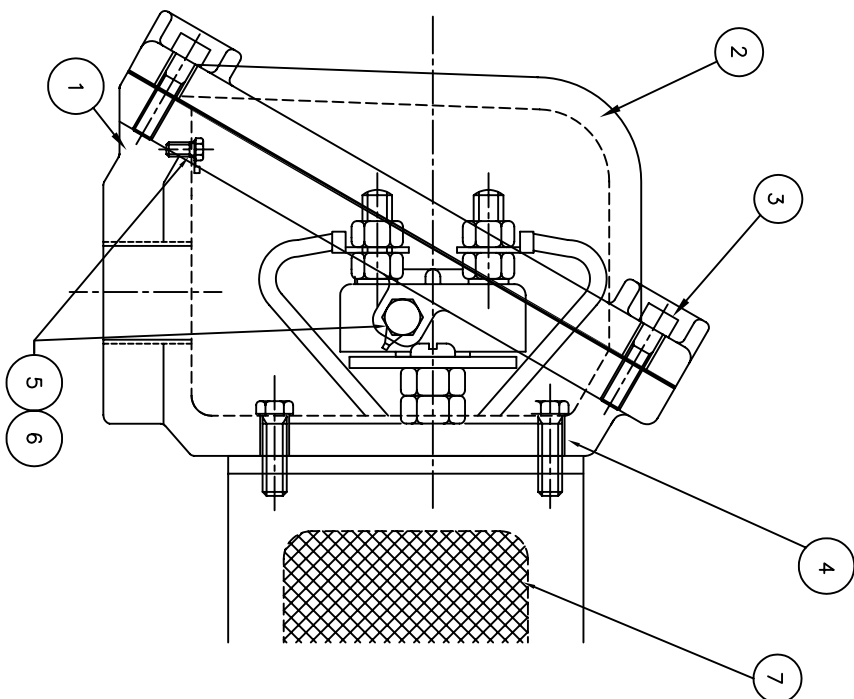
NOTE

1.TOLERANCE :

FLANGE HOLES	$\phi 19$	$+0.43$ 0
RABBET DIAMETER	$\phi 300$	$+0.016$ -0.013
SHAFT DIAMETER	$\phi 48$	$+0.018$ $+0.002$
KEYWAY WIDTH	14	0 -0.043
KEYWAY DEPTH	5.5	$+0.2$ 0



APPD BY	Y. S. KIM	UNIT	mm	SUBJECT	KS 180M	CAD PROJ \ FILE	
CHKD BY	K. S. LEE	SCALE	1/8.5			XSDNKS\B2022AA07	
CHKD BY	-----	PROJEC'N	3rd Angle			TITLE	OUTLINE
DSND BY	I. K. KIM	DATE	2008.10.22				
 HYUNDAI HEAVY INDUSTRIES CO., LTD. Electro-Electric System Division				REF. NO	B2022AA07	Sheet No. of	
				DWG NO	227B2022AA07	Revision No. 0	



1	TERMINAL BLOCK								8
.	SEALING COMPOUND		D4C29C						7
2	GRD TERMINAL LUG		CU						6
2	GRD. BOLT		S45C						5
4	T/B + FRAME BOLT		S45C						4
4	T/B + COVER BOLT		S45C						3
1	TERMINAL BOX COVER		FC15						2
1	TERMINAL BOX		FC15						1
	ASSEMBLY								
Q'TY	DESCRIPTION	MATERIAL		DIMENSION	WEIGHT	PART NO.	REMARK	NO.	
APPD BY	UNIT	MM		SUBJECT	IEC 160/180RF d2G4		CAD PROJ. \ FILE \		
CHKD BY	SCALE	N/S					XSMOUT\7B1468LB		
CHKD BY	PROJE'CN	3 45(3rd Angle)		TITLE					
DSND BY	DATE	99.2.2		MAIN TERMINAL BOX					
				REF. NO	7B1470LB		Sheet No.	of	
				DWG NO	227B1470LB		Revision No.	0	
 HYUNDAI HEAVY INDUSTRIES CO., LTD. ELECTRICAL ENGINEERING DIVISION									