

AC INDUCTION MOTOR DATA SHEET

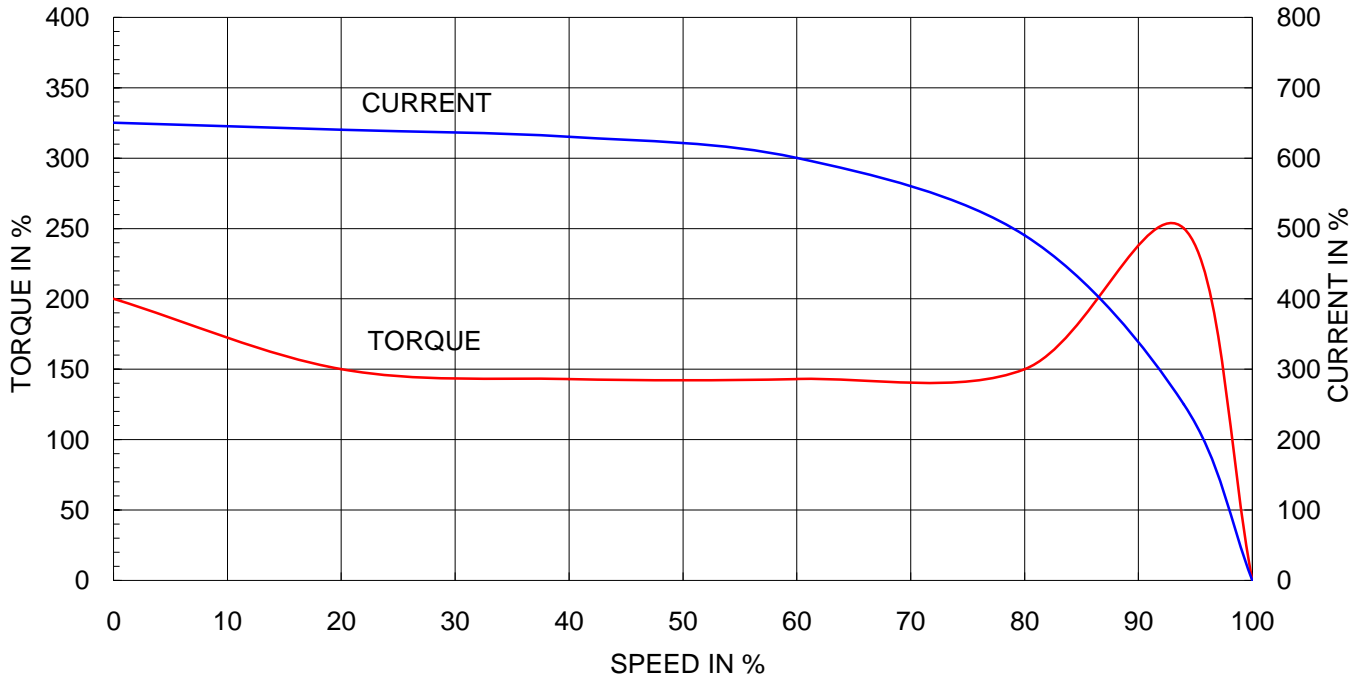
Model No.or RFQ No.		Item No.		Rev. No.	[0]
Project Name		Project No.		Quantity	sets
GENERAL SPECIFICATION			PERFORMANCE DATA		
Frame Size	160L	Rated Output	18.5 kW 25 HP		
Type	HL-XP	Number of Poles	2		
Enclosure(Protection)	Explosion Proof (IP55)	Rotor Type	Squirrel Cage		
Method of Cooling	IC411(FC)	Starting Method*	<input checked="" type="checkbox"/> D.O.L <input type="checkbox"/> Y- Δ		
Rated Frequency	60 Hz	Rated Voltage	440 V	380 V	220 V
Number of Phases	3	Current	Full Load	30.3 A	35.1 A 60.6 A
Insulation Class	<input checked="" type="checkbox"/> F <input type="checkbox"/> B <input type="checkbox"/> 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	<input type="checkbox"/> Indoor <input checked="" type="checkbox"/> 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	0.836		
Duty Type	Continuos (S1)	75% Load	0.867		
Service Factor	1.00	100% Load	0.880		
Mounting	<input type="checkbox"/> B3 <input type="checkbox"/> B5 <input checked="" type="checkbox"/> V1 <input type="checkbox"/> B3/B5	Speed at Full Load	3535 r.p.m		
Bearing	Type	Anti-Friction			
	DE/N-DE	6309ZZC3 / 6309ZZC3	Torque		
	Lubricant	Grease(Polyrex-EM)	Full Load	5.1 kg·m	
External Thrust	Not applicable				
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-Belt	Locked-rotor**	200 %		
Shaft Extension	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double	Breakdown**	250 %		
Terminal	Main	<input type="checkbox"/> Steel <input checked="" type="checkbox"/> Cast Iron	Moment of Inertia (J)		
Box	Aux.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Load(Max.)	2.500 kg·m ²	
	Location	Refer to Outline Drawing	Motor	0.059 kg·m ²	
Application		Sound Pressure Level (No-load & mean value at 1m from motor)	80 dB(A)		
Area classification	Hazardous	Vibration	2.2 mm/sec (r.m.s)		
Type of Ex-Protection	Ex d IIB T4	Permissible number of consecutive starts	Cold	3 times	
Applicable Standard	KS,IEC	Hot	2 times		
		Paint	Munsell No.	4.0PB5.4/5.5(VL-451)	
ACCESSORIES		SUBMITTAL DRAWING			
		Outline Dimension Drawing	Motor Weight(Approx.)		
		B3			kg
		B5			kg
		V1	227B2062AA06	162	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.

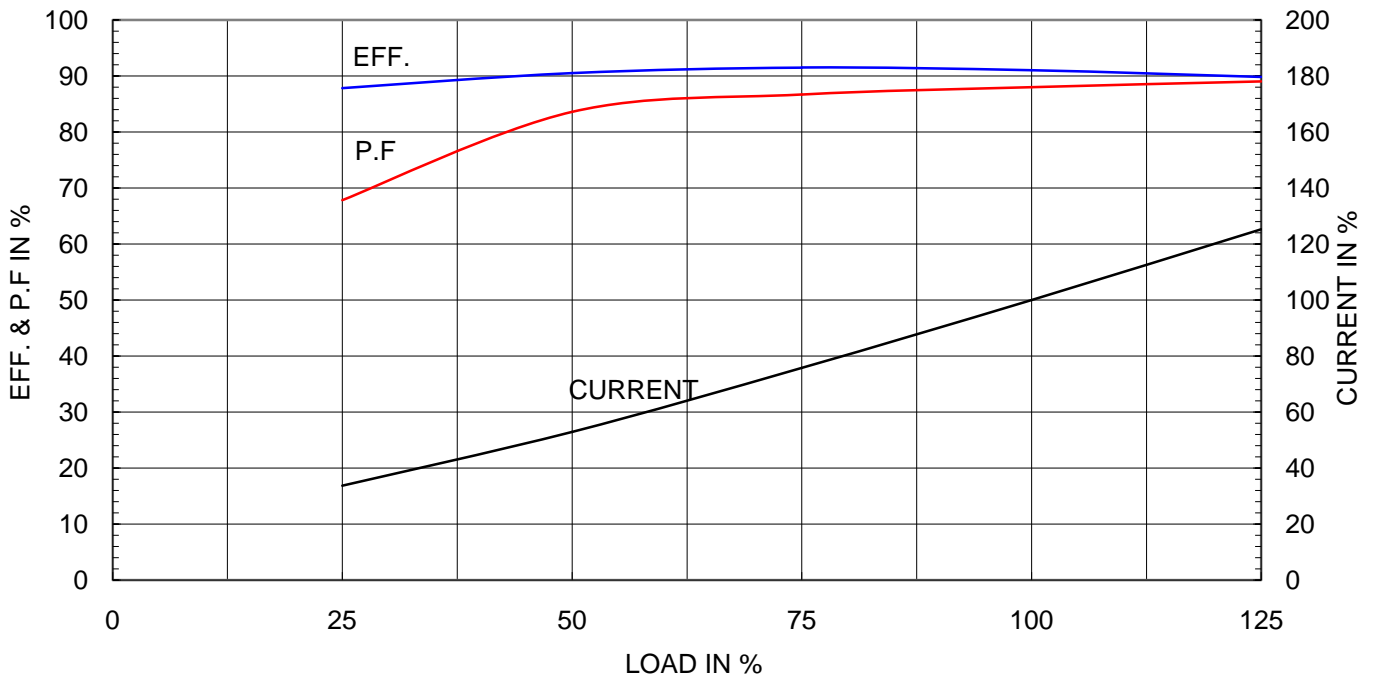
Type	:	HL-XP
Full Load Torque	:	5.1 Kg.m
Motor moment of Inertia (J)	:	0.059 Kg.m ²
Load moment of Inertia (J)	:	2.500 Kg.m ²

18.5 kW	2 P	60 Hz	
Speed at Full Load :		3535 RPM	
Rated Voltage	440V	380V	220V
Full Load Current	30.3A	35.1A	60.6A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE





TEFC

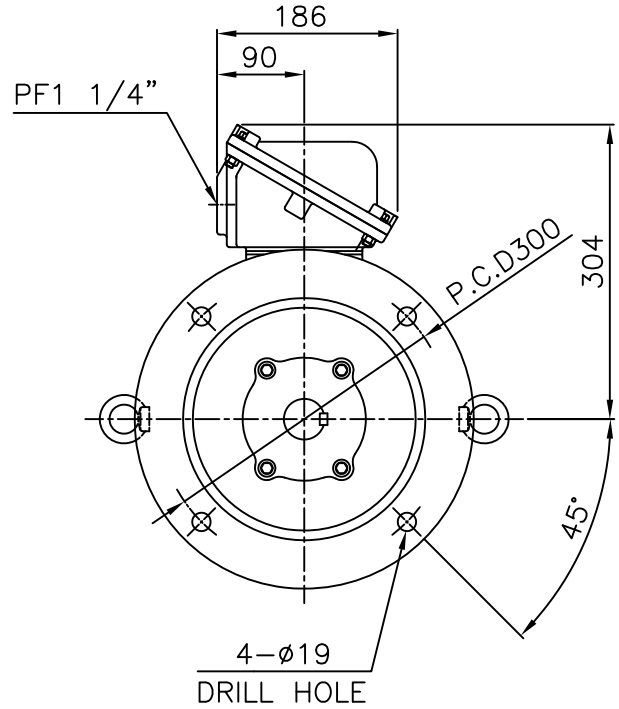
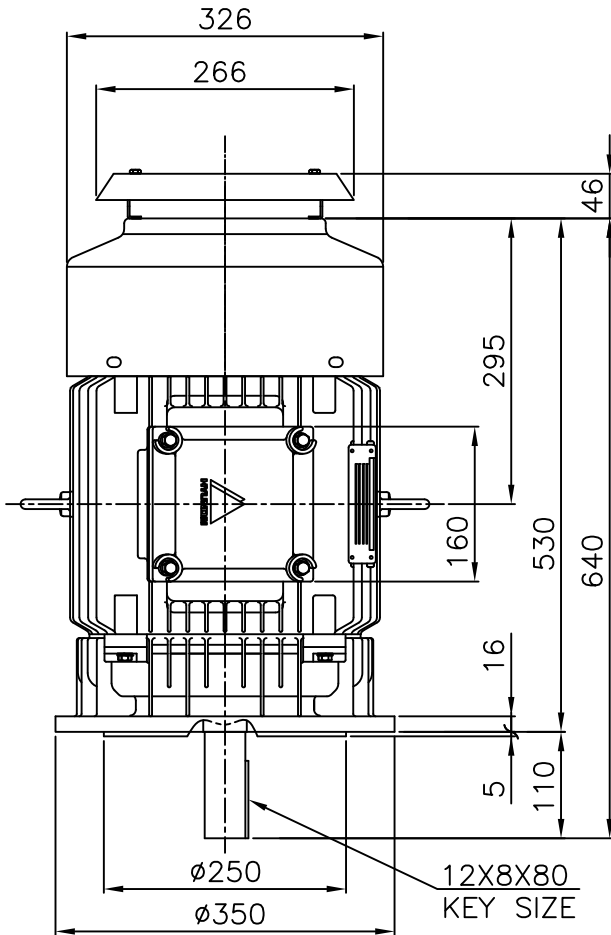
THREE PHASE INDUCTION MOTOR

TYPE

HL, HLS

CAST IRON FRAME

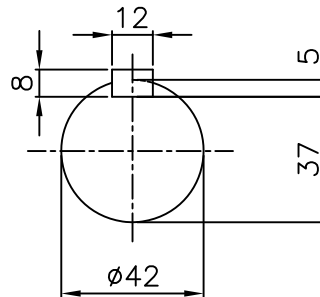
Exd II



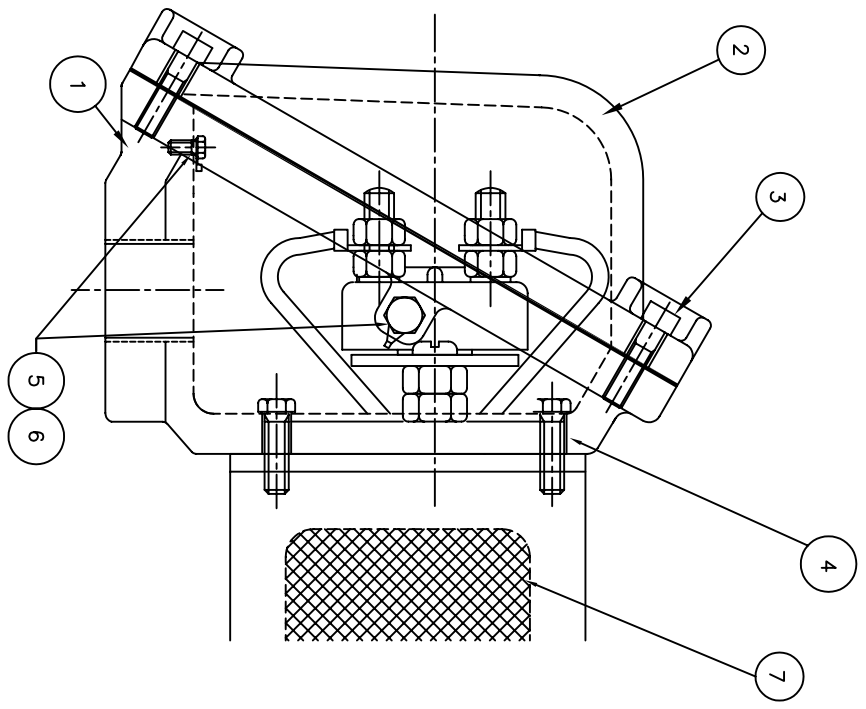
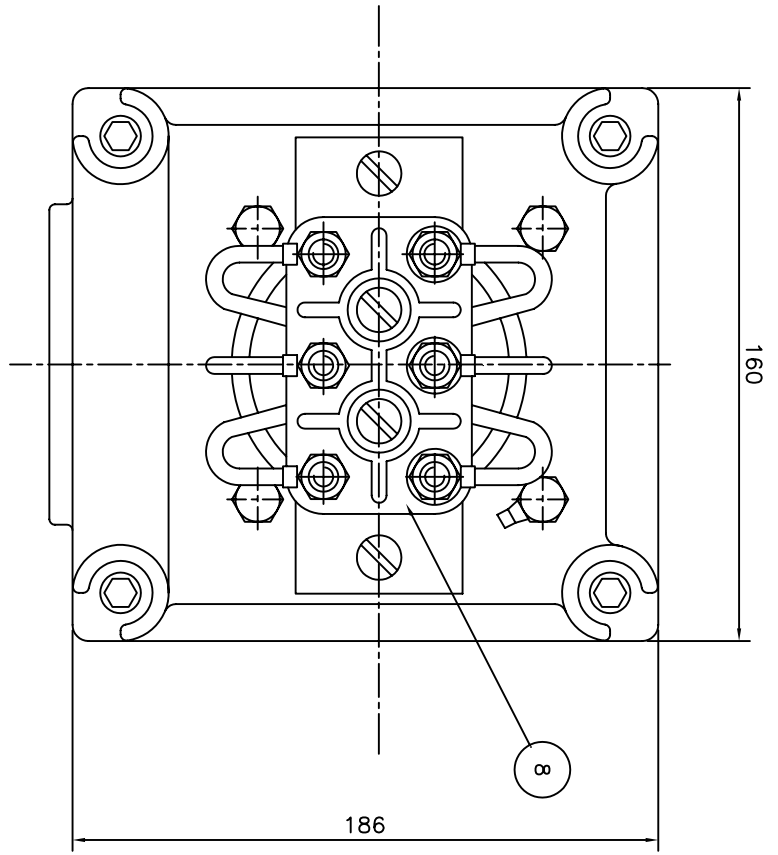
NOTE

1.TOLERANCE :

FLANGE HOLES	$\phi 19$	$+0.43$ 0
RABBET DIAMETER	$\phi 250$	$+0.016$ -0.013
SHAFT DIAMETER	$\phi 42$	$+0.018$ $+0.002$
KEYWAY WIDTH	12	0 -0.043
KEYWAY DEPTH	5	$+0.2$ 0



APPD BY	Y. S. KIM	UNIT	mm	SUBJECT	KS 160L	CAD PROJ \ FILE
CHKD BY	K. S. LEE	SCALE	1/8			XSDNKS\B2062AA06
CHKD BY	-----	PROJEC'N	3rd Angle	TITLE OUTLINE		
DSND BY	I. K. KIM	DATE	2008.10.22			
				REF. NO	B2062AA06	Sheet No. of
				DWG NO	2272062AA06	Revision No. 0



Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
1	TERMINAL BLOCK	D4C29C					8
1	SEALING COMPOUND	CU					7
2	GRD TERMINAL LUG	S45C					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 ASSEMBLY	FC15					1

APPD BY	UNIT	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
CHKD BY	SCALE	N/S					
CHKD BY	PROJEC'N	3*4# (3rd Angle)					
DSND BY	DATE	99.2.2					
DSND BY	DATE	99.2.2					

APPD BY	UNIT	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
CHKD BY	SCALE	N/S					
CHKD BY	PROJEC'N	3*4# (3rd Angle)					
DSND BY	DATE	99.2.2					
DSND BY	DATE	99.2.2					



REF. NO	DWG NO	SHEET NO.	TOTAL SHEETS
7B1470LB	227B1470LB	7B1470LB	0

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
1						
2						
3						
4						

TITLE	REF. NO	DWG NO	SHEET NO.	TOTAL SHEETS
MAIN TERMINAL BOX	7B1470LB	227B1470LB	7B1470LB	0