HYUNDAI HEAVY INDUSTRIES CO.,LTD.

AC INDUCTION MOTOR DATA SHEET

Model No.or RFQ No.		Item No.		Rev. No.	[0]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION

Frame Size		200LL
Type		HL-XP
Enclosure(Protection)		Explosion Proof (IP55)
Method of Cooling		IC411(FC)
Rated Frequency		60 Hz
Number of Phases		3
Insulation Class		■ F ☐ B ☐ H
Temp. Rise at full load (by resistance method)		
	at 1.0 S.F	80 deg. C
Motor Location		☐ Indoor ■ Outdoor
Altitude		Less than 1000 meter
Relative Humidity		Less than 80 %
Ambient Temp.		40 deg. C (Max.)
Duty Type		Continuos (S1)
Service Factor		1.00
Mounting		☐ B3 ☐ B5 ■ V1 ☐ B3/B5
Bearing	Type	Anti-Friction
	DE/N-DE	6212ZC3 / 6211ZC3
	Lubricant	Grease(Gadus S2 V100 2)
External Thrust		Not applicable
Coupling Method		■ Direct ☐ V-Belt
Shaft Extension		■ Single ☐ Double
Terminal Box	Main	☐ Steel ■ Cast Iron
	Aux.	☐ Yes ■ No
	Location	Refer to Outline Drawing
Application		
Area classification		Hazardous
Type of Ex-Protection		Ex d IIB T4
Applicable Standard		KS,IEC

PERFORMANCE DATA

Rated Output		37 kW	50 HP	
Number of Poles		2		
Rotor Type		Squirrel Cage		
Starting Method*		■ D.O.L	☐ Y-△	
Rated Voltage		440 V	380 V	220 V
Current	Full Load	58.4 A	67.6 A	116.8 A
	Locked-rotor**	650 %	650 %	650 %
Efficiency				
	50% Load	91.9 %		
	75% Load	92.9 %		
	100% Load	92.4 %		
Power Factor(p.u)				
	50% Load	0.855		
	75% Load	0.890		
	100% Load	0.900		
Speed at Full Load		3560 r.p.m		
Torque				
	Full Load	10.1 kg·m		
	Locked-rotor**	160 %		
	Breakdown**	230 %		
Moment of Inertia (J)				
	Load(Max.)	4.750 kg·m²		
	Motor	0.168 kg·m²		
Sound Pressure Level (No-load & mean value at 1m from motor)		86 dB(A)		
Vibration		2.2 mm/sec (r.m.s)		
Permissible number of consecutive starts		Cold 3 times		
		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	227B1616XI9	400	kg
B3/B5	0	0	kg
Main T-Box Ass'y	227B1470LA		

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.

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PERFORMANCE CURVE

CURVE NO.

P-HS-37/2

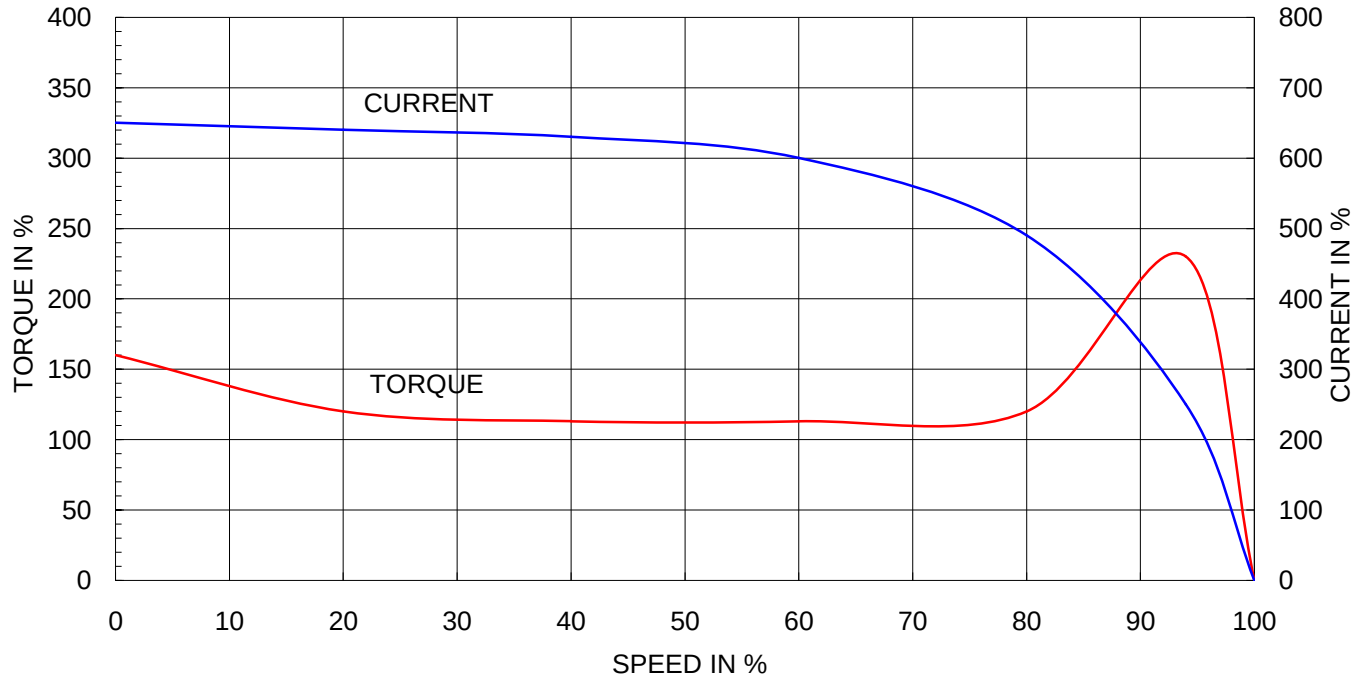
Type :	HL-XP	
Full Load Torque :	10.1	Kg.m
Motor moment of Inertia (J) :	0.168	$Kg.m^2$
Load moment of Inertia (J) :	4.750	$Kg.m^2$

37 kW 2 P 60 Hz

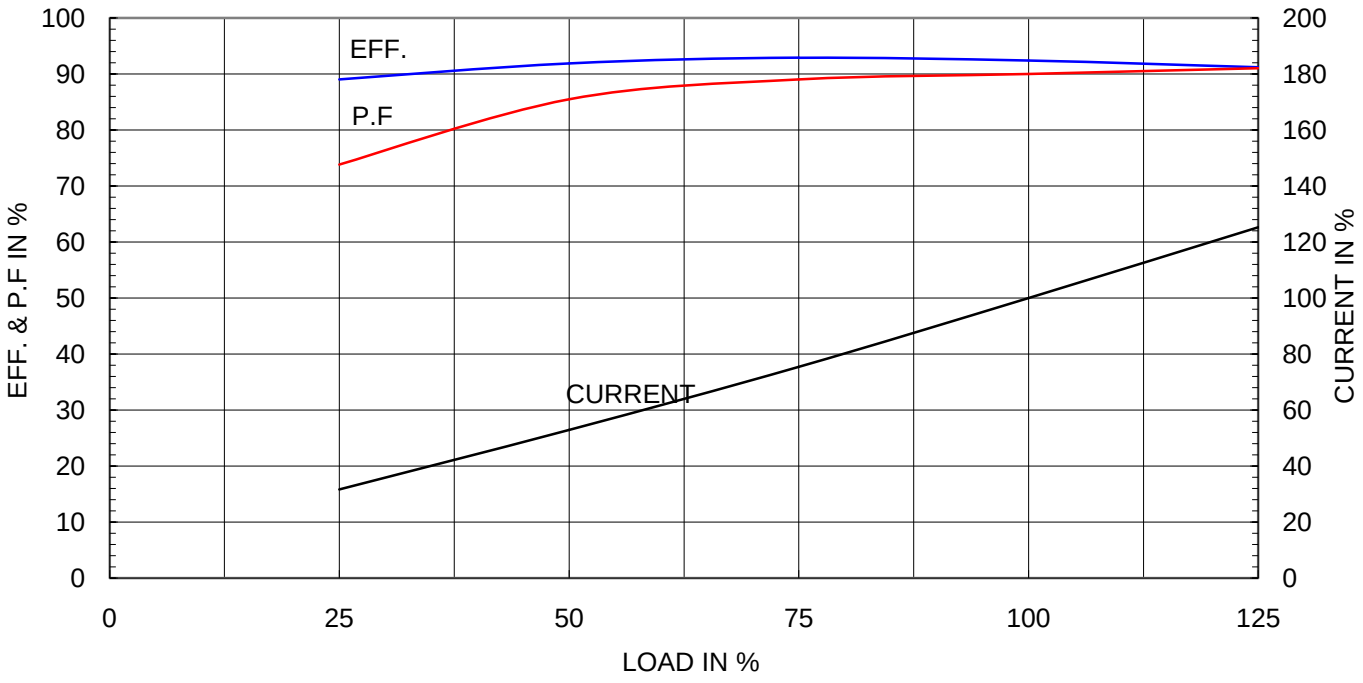
Speed at Full Load : 3560 RPM

Rated Voltage	440V	380V	220V	
Full Load Current	58.4A	67.6A	116.8A	

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



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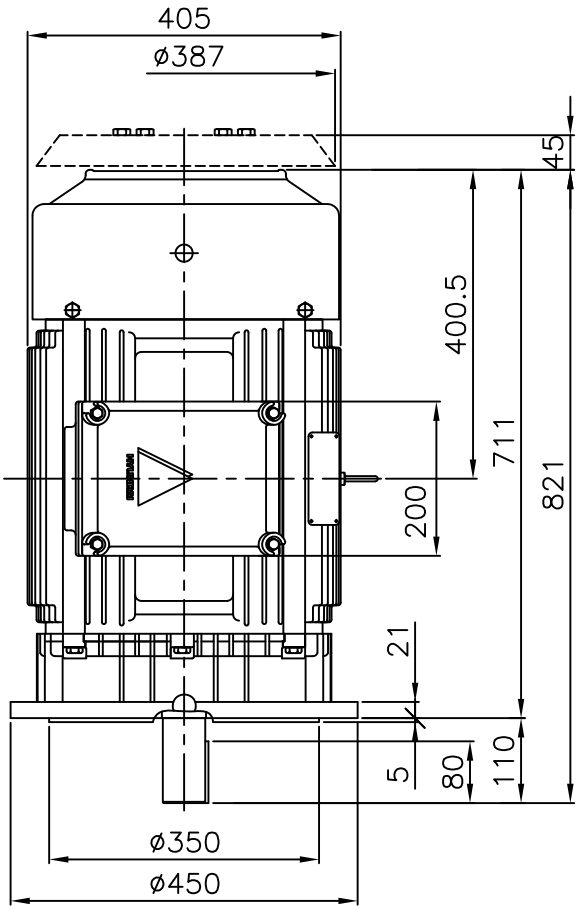
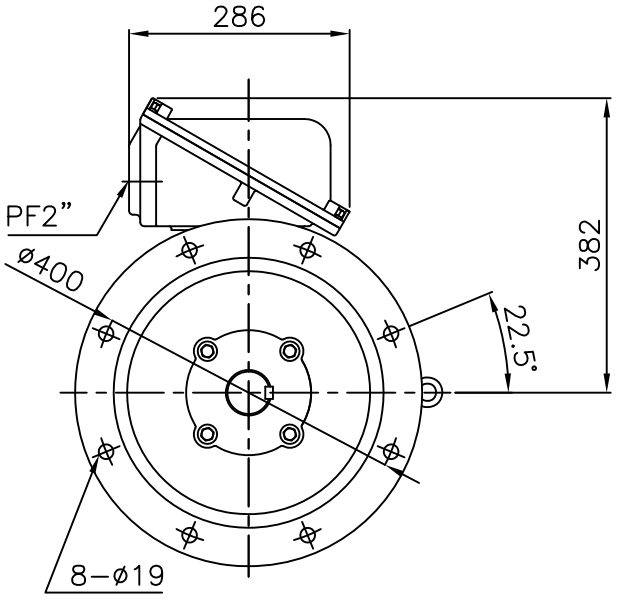
TEFC

THREE PHASE INDUCTION MOTOR

TYPE	HKS , HK
	CAST IRON FRAME

Exd II

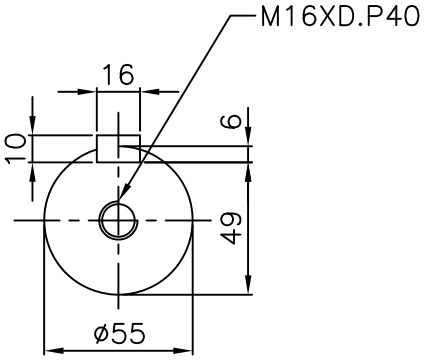




NOTE

1.TOLERANCE :

FLANGE HOLES	ø19	$^{+0.43}_{-0.}$
RABBET DIAMETER	ø350	$^{+0.018}_{-0.018}$
SHAFT DIAMETER	ø55	$^{+0.030}_{+0.011}$
KEYWAY WIDTH	16	$^{+0}_{-0.043}$
KEYWAY DEPTH	49	$^{+0}_{-0.2}$



2. REMARK
DRIP COVER WILL BE ATTACHED PER REQUEST FROM CUSTOMER ONLY.

*d2G4

APPD BY	KIM.Y.S	UNIT	mm
CHKD BY	---	SCALE	1/10
CHKD BY	KO.S.H	PROJEC'N	3rd Angle
DSND BY	LEE KWANG SOO	DATE	2008.12.05

SUBJECT	XSD KS 200LL 2P	CAD PROJ \ FILE: XSDNKS\B1616XI09
TITLE	OUTLINE	

HYUNDAI HEAVY INDUSTRIES CO., LTD.
Electro-Electric System Division

REF. NO	B1616XI09	Sheet No. of
DWG NO	227B1616XI09	Revision No. 0

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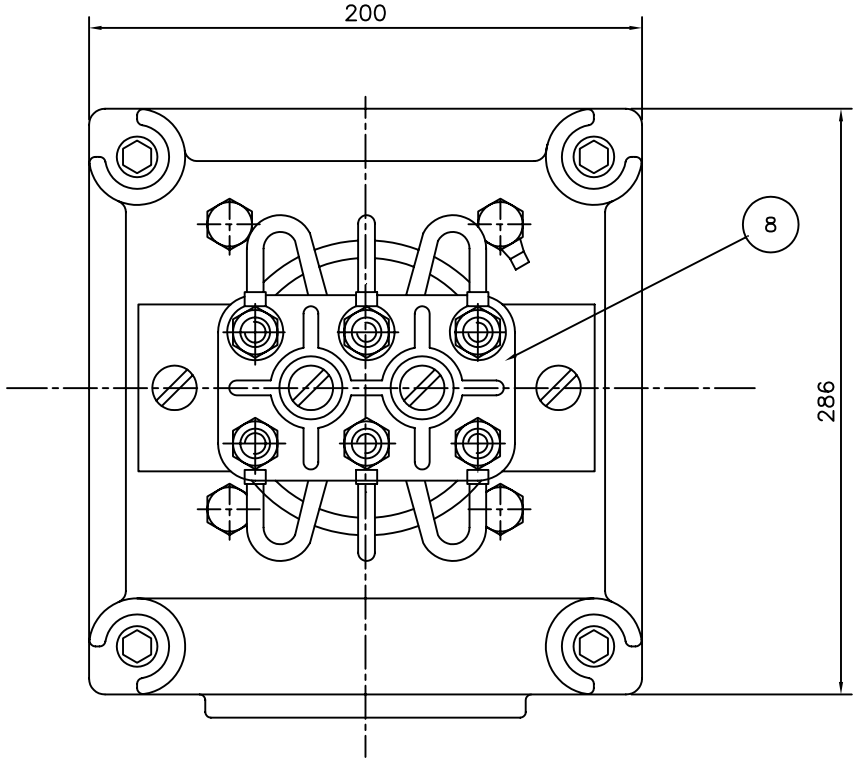

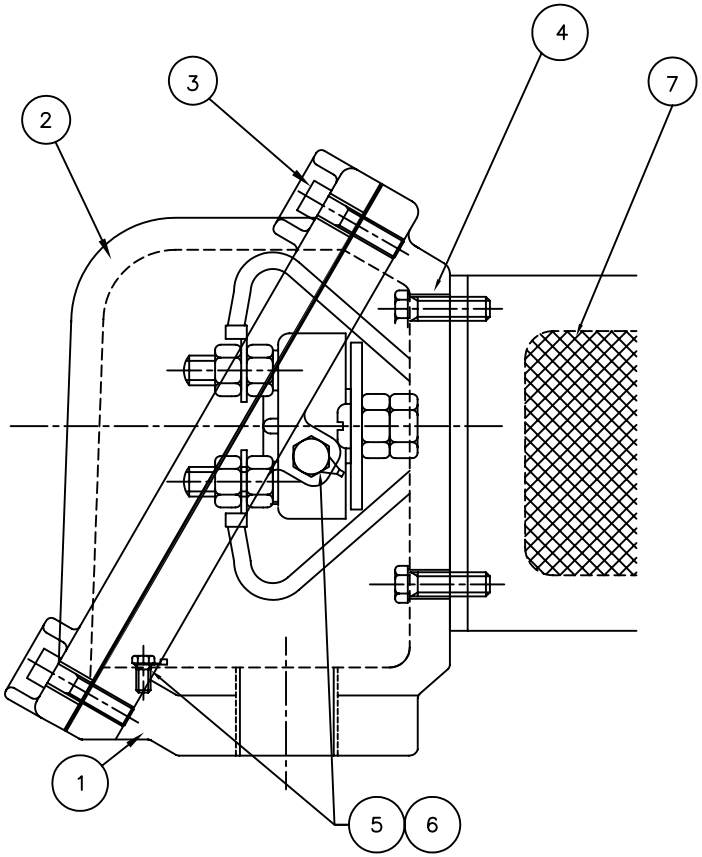

NO.	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	Q'TY
8	TERMINAL BLOCK						1
7	SEALING COMPOUND	D4C29C					.
6	GRD TERMINAL LUG	CU					2
5	GRD. BOLT	S45C					2
4	T/B + FRAME BOLT	S45C					4
3	T/B + COVER BOLT	S45C					4
2	TERMINAL BOX COVER	FC15					1
1	TERMINAL BOX	FC15					1
	ASSEMBLY						

APPD BY		UNIT	MM
CHKD BY		SCALE	N/S
CHKD BY		PROJEC'N	3 각법(3rd Angle)
DSND BY	LEE E.J.	DATE	99.2.2

SUBJECT: IEC200FR d2G4

CAD PROJ 명 \ FILE 명: XSMOUT\7B1468LB

TITLE: MAIN TERMINAL BOX

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ELECTRICAL ENGINEERING DIVISION

REF. NO	7B1470LA
DWG NO	227B1470LA

Sheet No. of

Revision No. 0

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY