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		200L
Type		HLP-37/4
Enclosure(Protection)		Totally Enclosed (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		Continuous (S1)
Service Factor		1.15
Mounting		■ B3 ☐ B5 ☐ V1 ☐ B3/B5
Bearing	Type	Anti-Friction
	DE/N-DE	6313ZC3 / 6211ZC3
	Lubricant	Grease(Gadus S2 V 100 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		Non-Hazardous
Type of Ex-Protection		Not applicable
Applicable Standard		KS,IEC, NEMA MG1 Part30(Vpeak)

PERFORMANCE DATA

Rated Output		37 kW	50 HP	
Number of Poles		4		
Rotor Type		Squirrel Cage		
Starting Method*		■ D.O.L	☐ Y- △	
Rated Voltage		440 V	380 V	220 V
Current	Full Load	62.7 A	72.5 A	125.3 A
	Locked-rotor**	800 %	800 %	800 %
Efficiency				
	50% Load	93.3 %		
	75% Load	94.5 %		
	100% Load	94.5 %		
Power Factor(p.u)				
	50% Load	0.740		
	75% Load	0.795		
	100% Load	0.820		
Speed at Full Load		1780 r.p.m		
Torque				
	Full Load	20.2 kg·m		
	Locked-rotor**	150 %		
	Breakdown**	220 %		
Moment of Inertia (J)				
	Load(Max.)	20.200 kg·m²		
	Motor	0.350 kg·m²		
Sound Pressure Level (No-load & mean value at 1m from motor)				
		77 dB(A)		
Vibration		2.2 mm/sec (r.m.s)		
Permissible number of consecutive starts	Cold	3 times		
	Hot	2 times		
Paint	Munsell No.	4.4PB5.5/5.6(VL-451)		

ACCESSORIES

SUBMITTAL DRAWING

Outline Dimension Drawing \ Motor Weight(Approx.)			
B3	LM-T1205B3PL001	297	kg
B5	LM-T1205B5PL001	327	kg
V1	LM-T1205V1PL001	327	kg
B3/B5	LM-T1205B4PL001	327	kg
Main T-Box Ass'y	3M-145864		

SPARE PARTS

REMARK

Premium Efficiency

*. For use on PWM VFD 10:1VT, 3:1CT@1.0S.F&F Temp. rise

Date	DSND	CHKD	CHKD	APPD
2015-09-05	R.G. KIM	-	O.J. KIM	S.H. GO

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-HLP-37/4

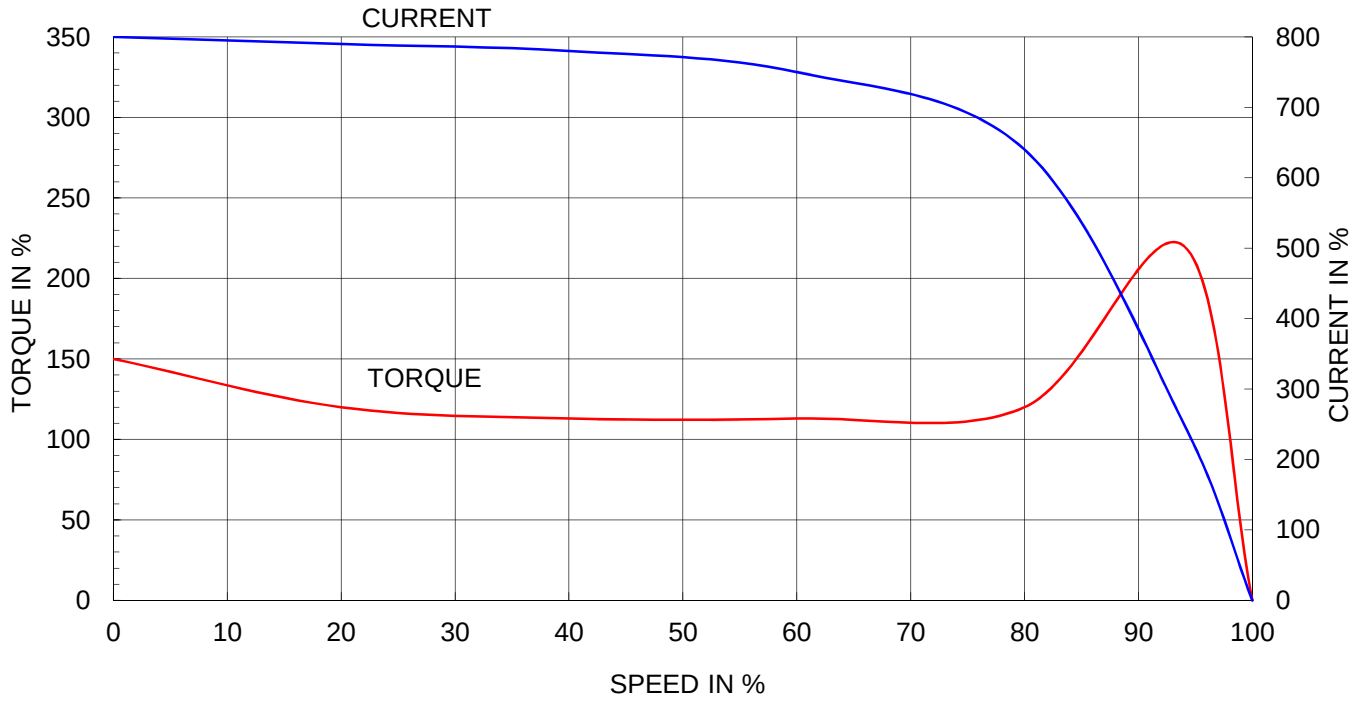
Type :	HLP-37/4	
Full Load Torque :	20.2	Kg.m
Motor moment of Inertia (J) :	0.350	$Kg.m^2$
Load moment of Inertia (J) :	20.200	$Kg.m^2$

37 kW 4 P 60 Hz

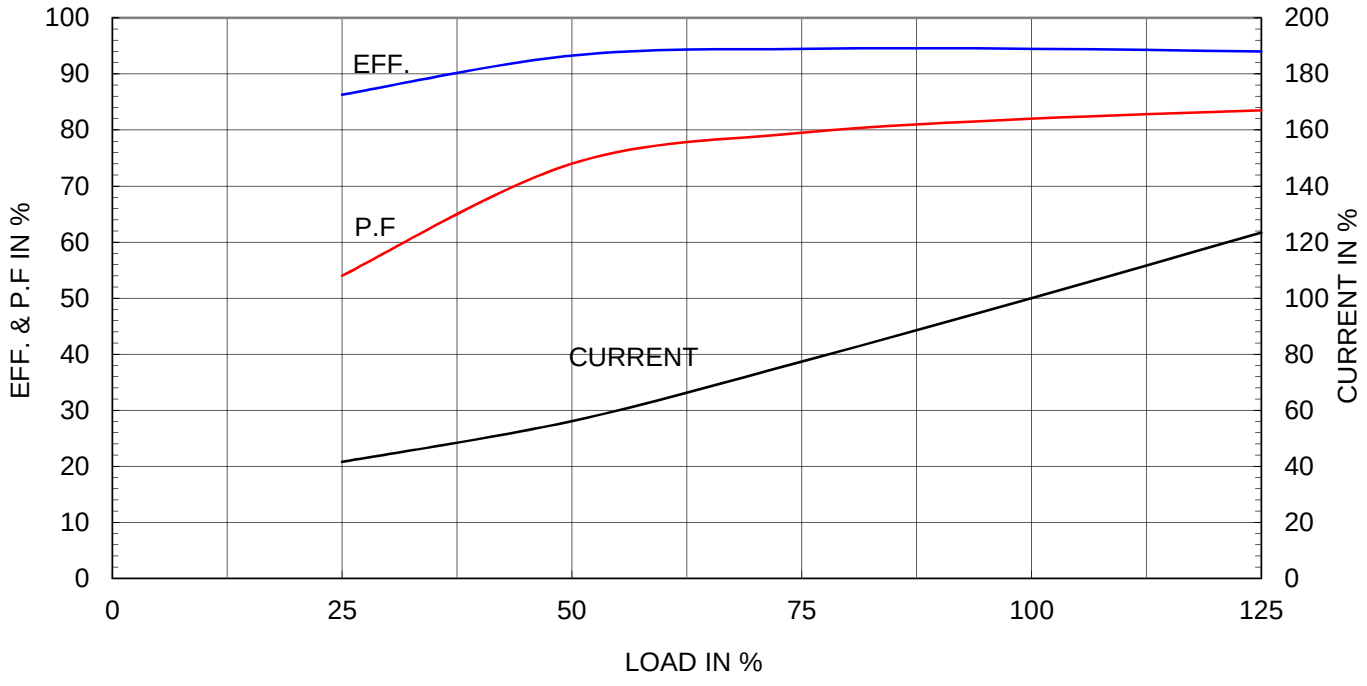
Speed at Full Load : 1780 RPM

Rated Voltage	440V	380V	220V	
Full Load Current	62.7A	72.5A	125.3A	

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



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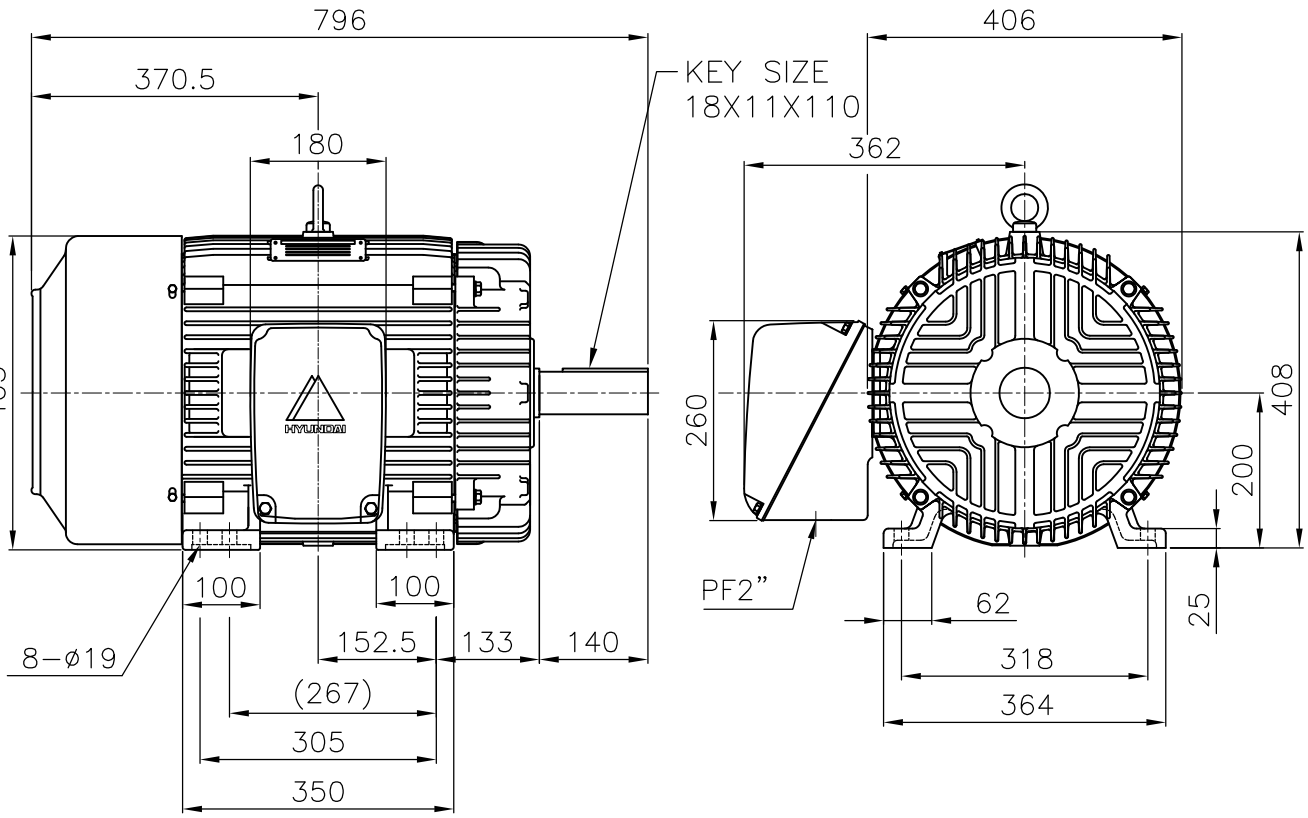
TEFC
THREE PHASE INDUCTION MOTOR

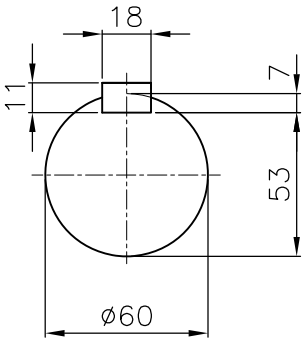
TYPE	HL, HLS
	CAST IRON FRAME



NOTE

1.TOLERANCE :

CENTER HEIGHT	$200^{+0}_{-0.5}$
BASE HOLES	$ø19^{+0.43}_{-0}$
SHAFT DIAMETER	$ø60^{+0.030}_{+0.011}$
KEYWAY WIDTH	$18^{+0}_{-0.043}$
KEYWAY DEPTH	$7^{+0.2}_{-0}$



CAST IRON CONDUIT BOX

APPD BY	J. H. KIM	UNIT	mm
CHKD BY	Y. S. KIM	SCALE	1/10
CHKD BY	S. H. KO	PROJEC'N	3rd Angle
DSND BY	I. K. KIM	DATE	2002.10.31

SUBJECT	KS 200L 4,6P	CAD PROJ \ FILE: XSDNKS\B2000AB10
TITLE	OUTLINE	
REF. NO	B2000AB10	Sheet No. of
DWG NO	LM–T1205B3PL001	Revision No. 0

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Electro–Electric System Division

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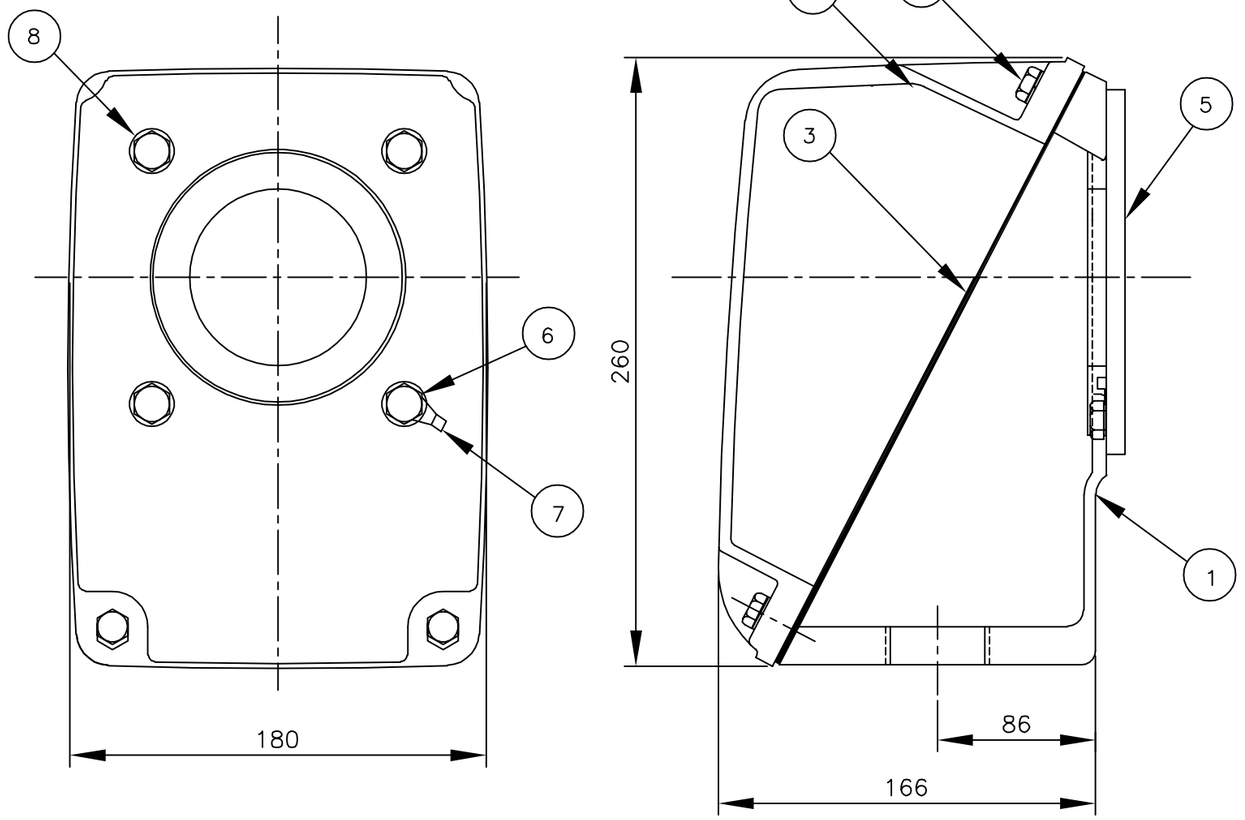

PT	DESCRIPTION	MATERIAL	DIMENSION	Q,TY
1	CONDUIT BOX	FC20		1
2	C/B COVER	FC20		1
3	GASKET(COVER)	N.B.R	T2X170X210	1
4	SCREW(COVER)	S45C	M8XL20	4
5	GASKET(C/B)	N.B.R		1
6	SCREW(C/B)	S45C	M8XL20	4
7	TERMINAL GROUND	CU	T1.6	1
8	WASHER	S45C	M8 X L10	4

▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
⚠1	12.01.27	CABLE 및 TAP 표시 삭제.	김양규	김옥진	김진홍	강경중

일반가공공차		일반제관공차	
1–4	±0.1	6–30	±0.5
4–18	±0.2	30–120	±0.8
18–63	±0.3	120–315	±1.2
63–250	±0.5	315–1000	±2.0
250–	±0.8	1000–	±3.0

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
APPD BY	강경중	UNIT	mm	SUBJECT	IEC–Fr.200		DWG SIZE A3 (1:2)
CHKD BY	이노덕	SCALE	1/2				
CHKD BY	김인규	PROJEC'N	3각법(3rd Angle)	TITLE	Main Terminal Box Assembly		
DSND BY	김은성	DATE	2011–08–30	REF. NO	227B8003CB5		Sheet No. of
HYUNDAI HEAVY INDUSTRIES CO., LTD.				DWG NO	3M–145864		Revision No. 1