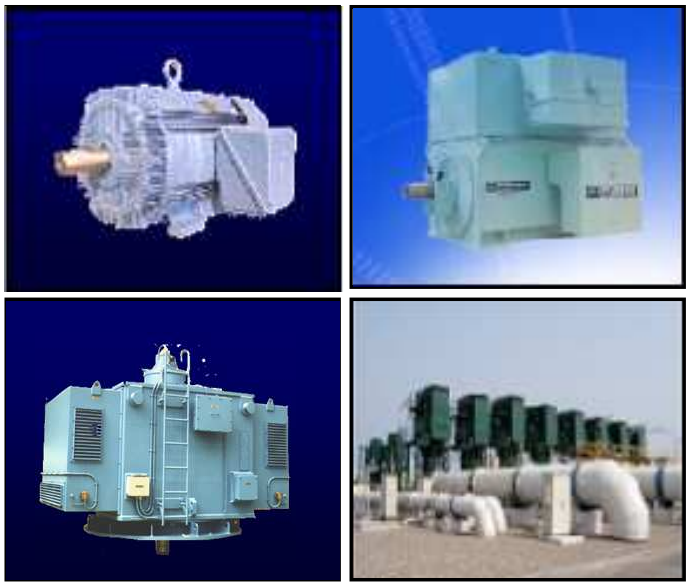
HYUNDAI
HEAVY INDUSTRIES CO.,LTD.

Customer : 현대모터산업(주)
Project Name :
Project No. : 17-101-597-001
Revision No. : 0

SPECIFICATION for INDUCTION MOTOR



0	2017-06-21	For Approval	H.J.KIM	S.Y.KIM	S.K.HAN
No.	DATE	DESCRIPTION	PREPARED BY	CHECKED BY	APPROVED BY

HYUNDAI HEAVY INDUSTRIES CO.,LTD.

AC INDUCTION MOTOR DATA SHEET

Model No.or RFQ No		Item No.		Rev. No.	[0]
Project Name		Project No.	17-101-597-001	Quantity	1 set

GENERAL SPECIFICATION

Frame Size		200L
Type		HLP
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 ℃
Motor Location		■ Indoor ☐ Outdoor
Altitude		Less than 1000m
Relative Humidity		Less than 80 %
Ambient Temp.		40 ℃ MAX.
Duty Type		Continuous(S1)
Service Factor		1.15
Mounting		☐ B3 ■ B5 ☐ V1 ☐ B3/B5
Bearing	Type	Anti-Friction
	DE/N-DE	6212ZC3 / 6211ZC3
	Lubricant	Grease(Polyrex-EM)
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

PERFORMANCE DATA

Rated Output		37 kW		50 HP
Number of Poles		2		
Rotor Type		Squirrel Cage		
Starting Method*		■ D.O.L	☐ Y-Δ	
Rated Voltage		380 V		
Current	Full Load	67.2 A		
	Locked-rotor**	800 %		
Efficiency				
	50% Load	90.0 %		
	75% Load	92.0 %		
	100% Load	93.0 %		
Power Factor(p.u)				
	50% Load	0.750		
	75% Load	0.850		
	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.)	4.8 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	Pantone No.	279C		

ACCESSORIES

SPARE PARTS

SUBMITTAL DRAWING

Outline Dimension Drawing	\	Motor Weight(Approx.)
B5	LM-17101597-1	327 kg
Main T-Box Ass'y	TB-17101597-1	

REMARK

*.Premium Efficiency(IE3)

Date	DSND	CHKD	CHKD	APPD
2017-06-21	H.J.KIM	I.K.HWANG	S.Y.KIM	S.K.HAN

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.
** The data are based on rated voltage & frequency, and data are expressed as a percentage of full load value.

HYUNDAI HEAVY INDUSTRIES CO.,LTD.

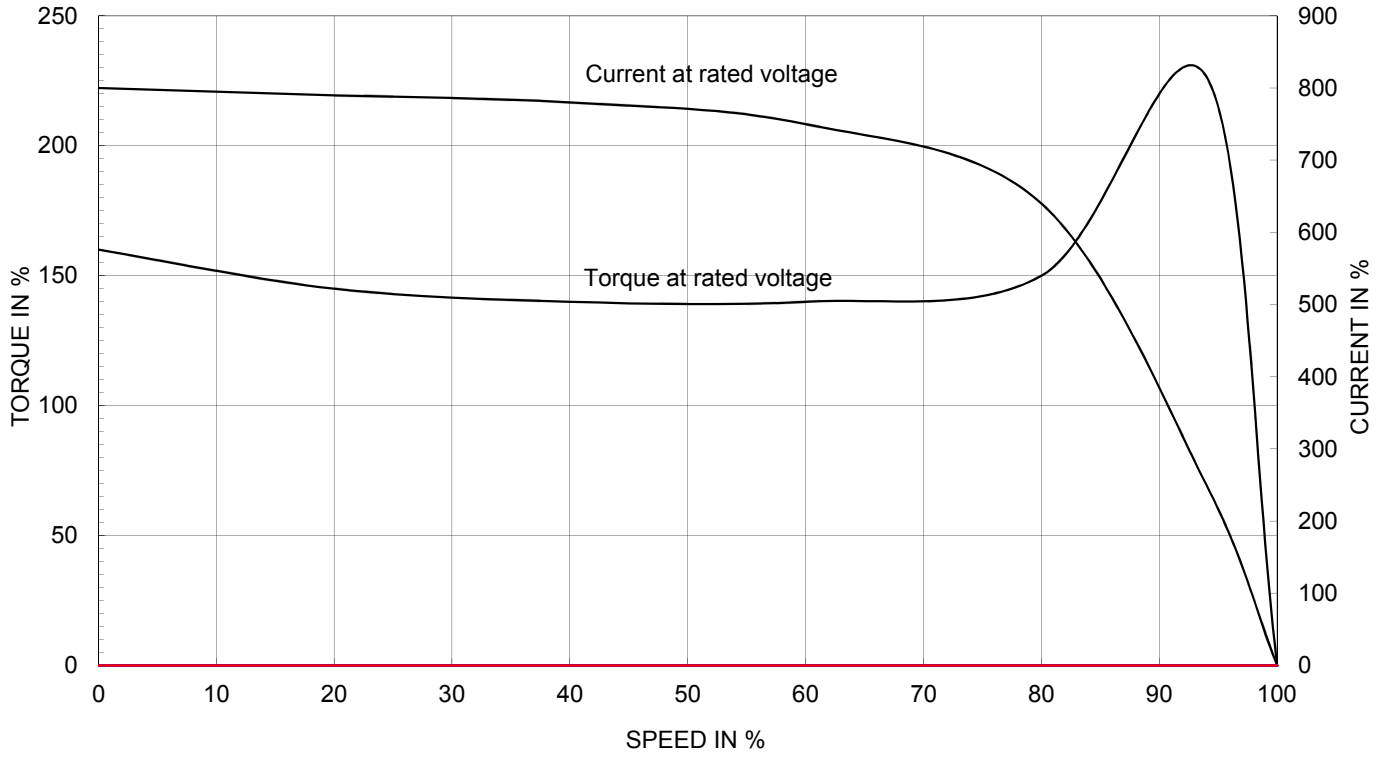
PERFORMANCE CURVE

CURVE NO.

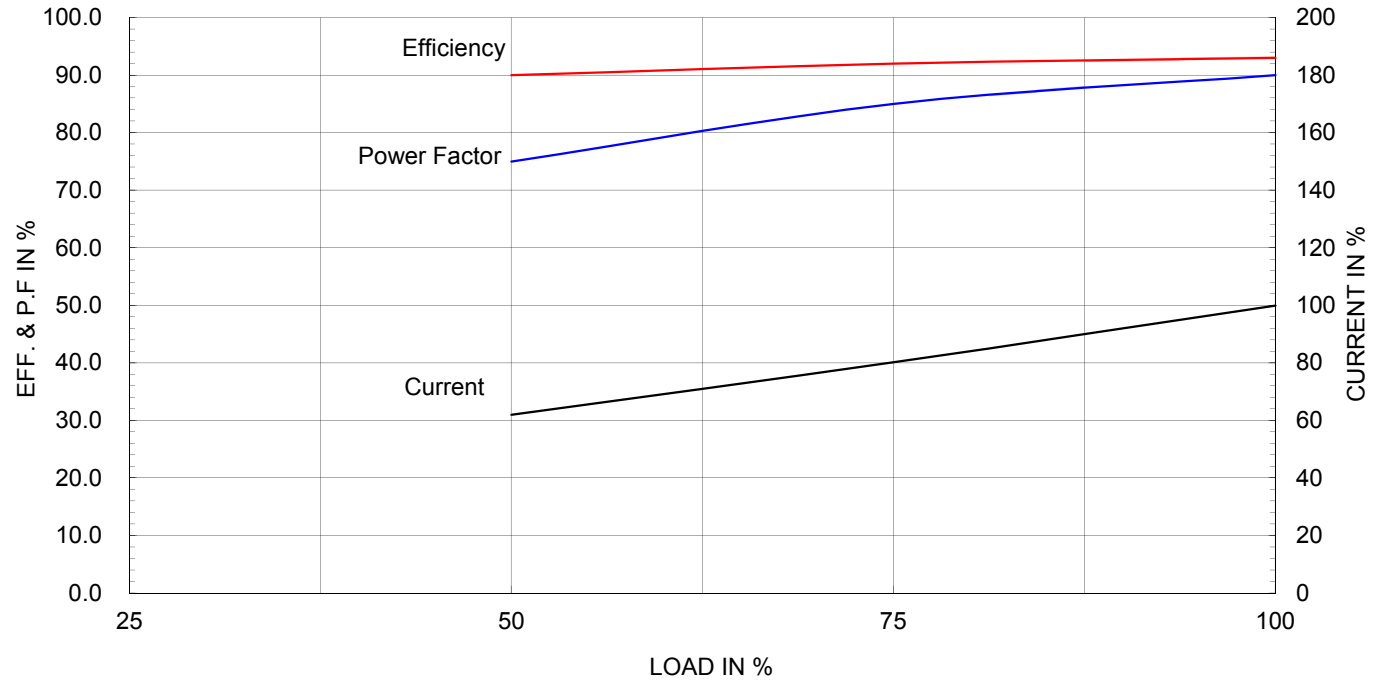
C-17101597-1

Type : HLP		37 kW	2 P	60 Hz
Full Load Torque :	10.1 kg.m	Speed at Full Load :		3560 RPM
Load moment of Inertia (J) :	- kg·m²	Rated Voltage	380 V	
Motor moment of Inertia (J) :	0.168 kg·m²	Full Load Current	67.2A	

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



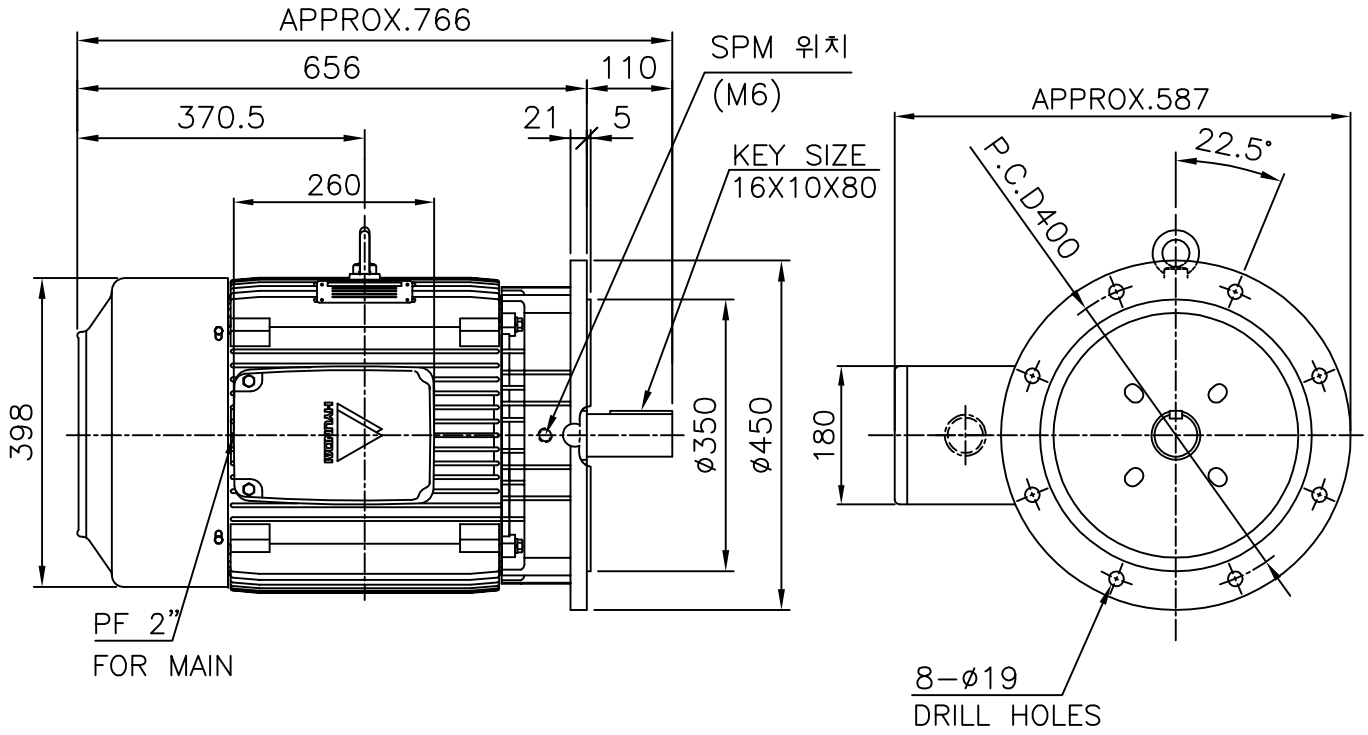
HYUNDAI HEAVY INDUSTRIES CO., LTD.

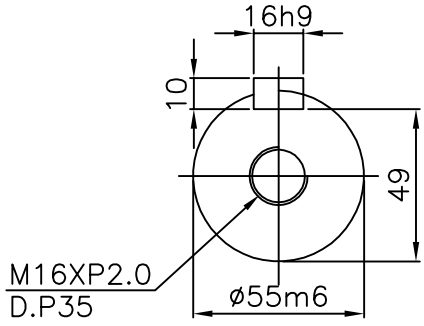
TEFC
THREE PHASE INDUCTION MOTOR

TYPE HLP

CAST IRON FRAME

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY





SECTION "X-X"

SCALE 4/10

NOTE

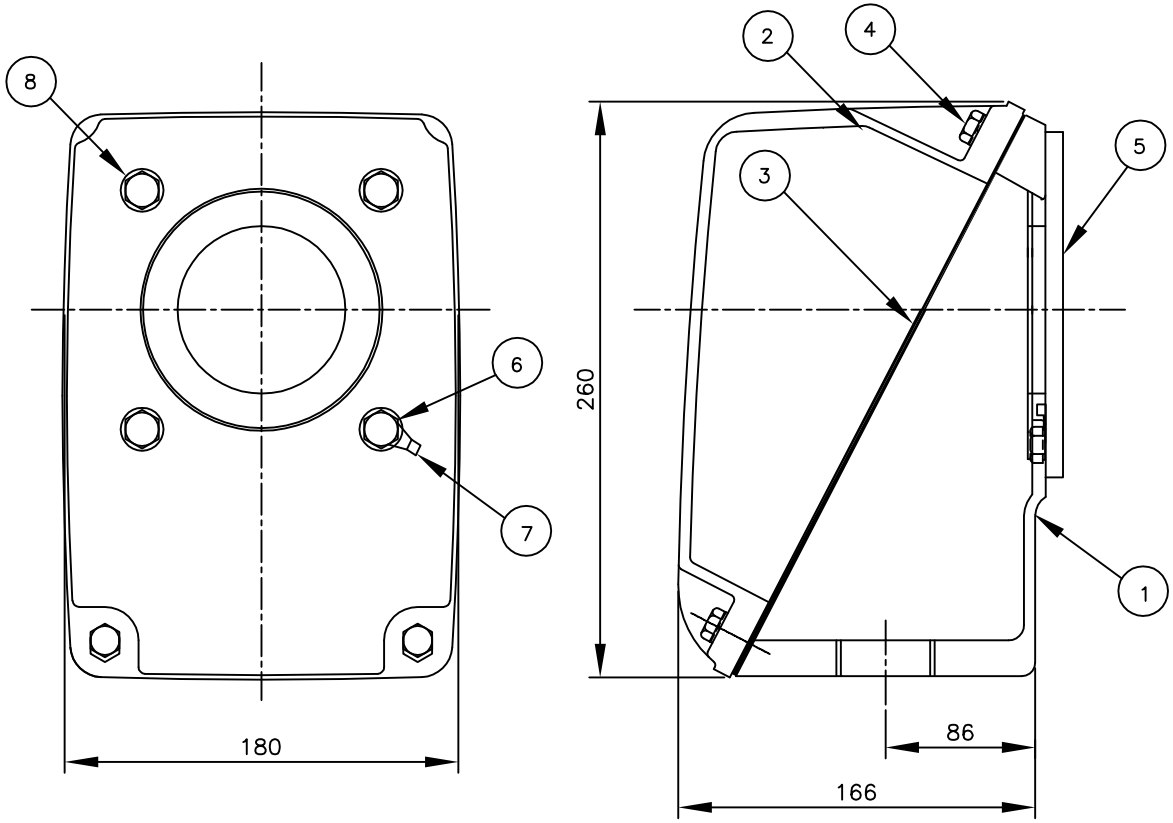
1.TOLERANCE :

FLANGE HOLES	$ø19\ ^{+0.52}_{0}$
RABBET DIAMETER	$ø350\ ^{+0.018}_{-0.018}$
SHAFT DIAMETER	$ø55\ ^{+0.030}_{+0.011}$
KEYWAY WIDTH	$16\ ^{0}_{-0.043}$
KEYWAY DEPTH	$49\ ^{0}_{-0.2}$

APPD BY	S.K.HAN	UNIT	mm
CHKD BY	S.Y.KIM	SCALE	1/10
CHKD BY	–	PROJEC'N	3rd Angle
DSND BY	H.J.KIM	DATE	2017-06-21

SUBJECT	KS 200L 2P	CAD PROJ \ FILE	XSDNKS\B2020AB09
TITLE	OUTLINE		
REF. NO	B2020AB09	Sheet No.	of
DWG NO	LM-17101597-1	Revision No.	0

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



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	M10XL35	4
7	TERMINAL GROUND	CU	T1.6	1
8	WASHER	S45C	M8 X L10	4

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.

APPD BY	S.K.HAN	UNIT	mm	SUBJECT	FR 200
CHKD BY	S.Y.KIM	SCALE	1/2	TITLE	Terminal Box Arrangement
CHKD BY	–	PROJEC'N	3각법(3rd Angle)		
DSND BY	H.J.KIM	DATE	2017-06-21		

HYUNDAI HEAVY INDUSTRIES CO., LTD.

REF. NO		Sheet No.	of
DWG NO	TB-17101597-1	Revision No.	0

DWG SIZE: A3 (1/2)