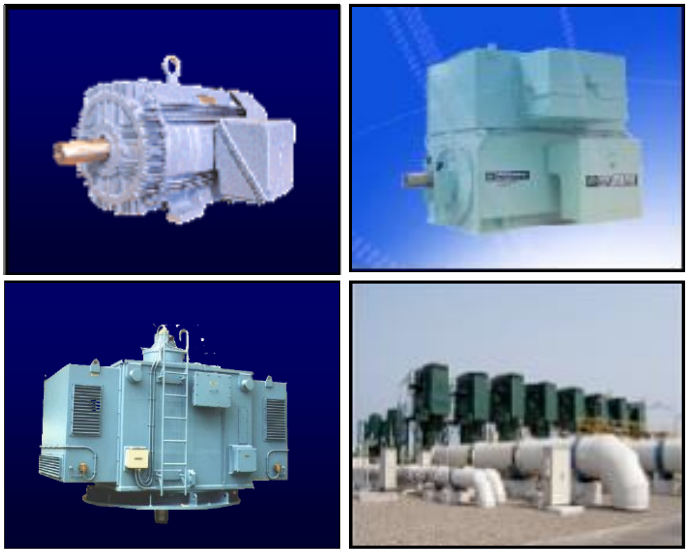
HYUNDAI ELECTRIC

Customer :
Project Name :
Project No. :
Revision No. :

SPECIFICATION for INDUCTION MOTOR



HYUNDAI ELECTRIC

Contents

HYUNDAI ELECTRIC

AC INDUCTION MOTOR DATA SHEET

Model No.or RFQ No.	4606KSTD40SSDS1STFE3V11DL0SDS	Item No.		Rev. No.	[ ]
Project Name		Project No.		Quantity	

GENERAL SPECIFICATION

Frame Size		160M
Type		HLP-11/4
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
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	6309ZZC3 / 6309ZZC3
	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		Not applicable
Type of Ex-Protection		Non-Hazardous
Applicable Standard		KS, IEC, NEMA MG1 Part30(Vpeak)

PERFORMANCE DATA

Rated Output		11 kW	15 HP	
Number of Poles		4		
Rotor Type		Squirrel Cage		
Starting Method*		■ D.O.L	☐ Y-Δ	
Rated Voltage		460 V		
Current	Full Load	18.4 A		
	Locked-rotor**	750 %		
Efficiency				
	50% Load	91.4 %		
	75% Load	92.5 %		
	100% Load	92.4 %		
Power Factor(p.u)				
	50% Load	0.642		
	75% Load	0.757		
	100% Load	0.814		
Speed at Full Load		1775 r.p.m		
Torque				
	Full Load	6.0 kg·m		
	Locked-rotor**	200 %		
	Breakdown**	240 %		
Moment of Inertia (J)				
	Load(Max.)	9.000 kg·m²		
	Motor	0.090 kg·m²		
Sound Pressure Level (No-load & mean value at 1m from motor)		74 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

SPARE PARTS

SUBMITTAL DRAWING

Outline Dimension Drawing		\ Motor Weight(Approx.)	
	V1	LM-T1163V1PL001	124 kg
Main T-Box Ass'y		3M-145860	

REMARK

*.Premium Efficiency(IE3)

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

Date	DSND	CHKD	CHKD	APPD
2018-04-25	R.G. KIM	-	O.J. 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 ELECTRIC

PERFORMANCE CURVE

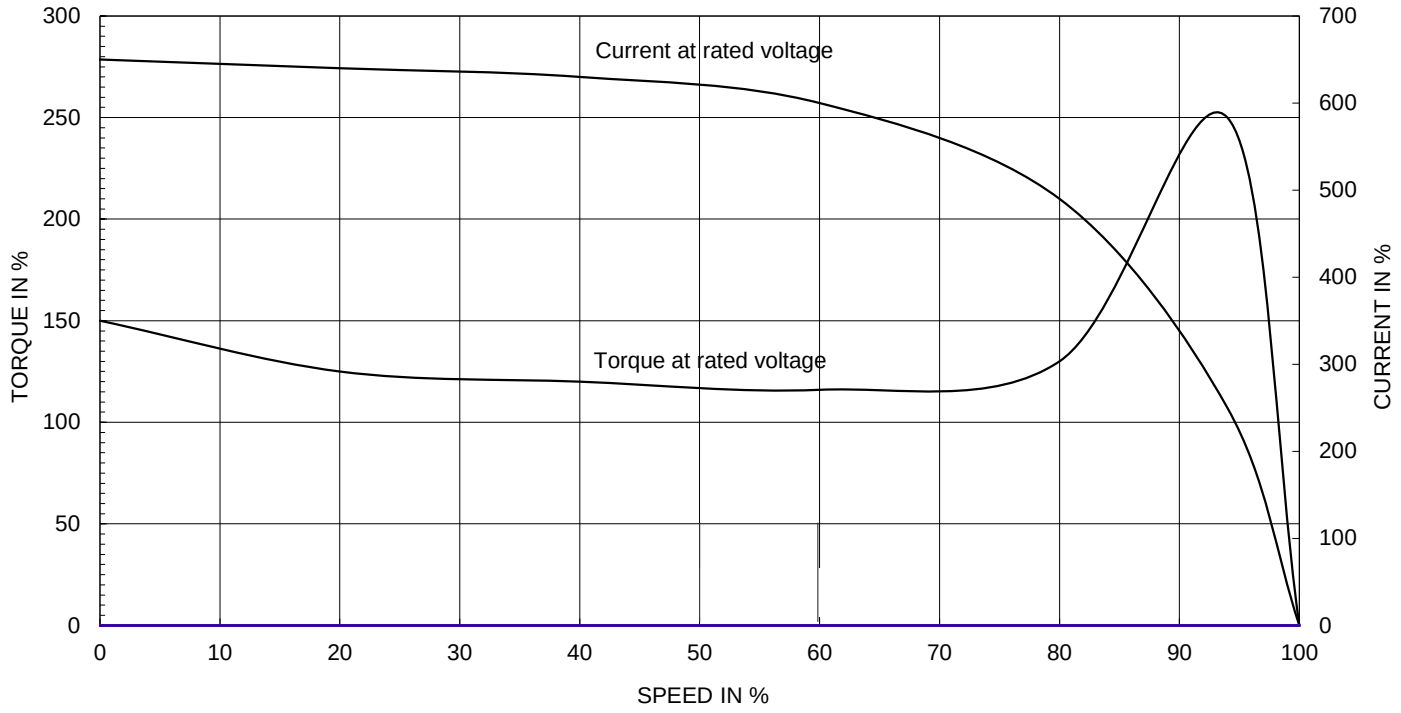
CURVE NO.

P-O1124606KSTD40S

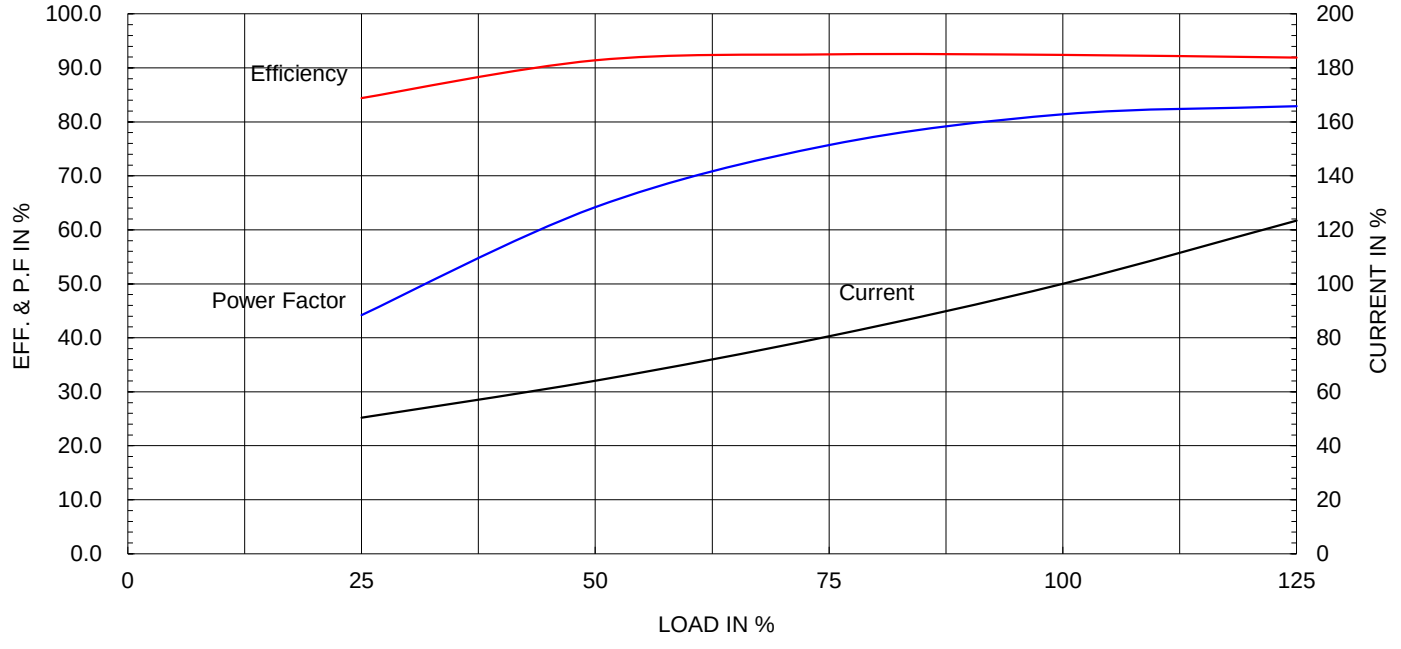
Type :	HLP-11/4		
Full Load Torque :	6.0	kg.m	
Motor moment of Inertia (J) :	0.090	$kg.m^2$	
Load moment of Inertia (J) :	9.000	$kg.m^2$	

11 kW	4 P	60 Hz	
Speed at Full Load :		1775 RPM	
Rated Voltage	460V		
Full Load Current	18.4A		

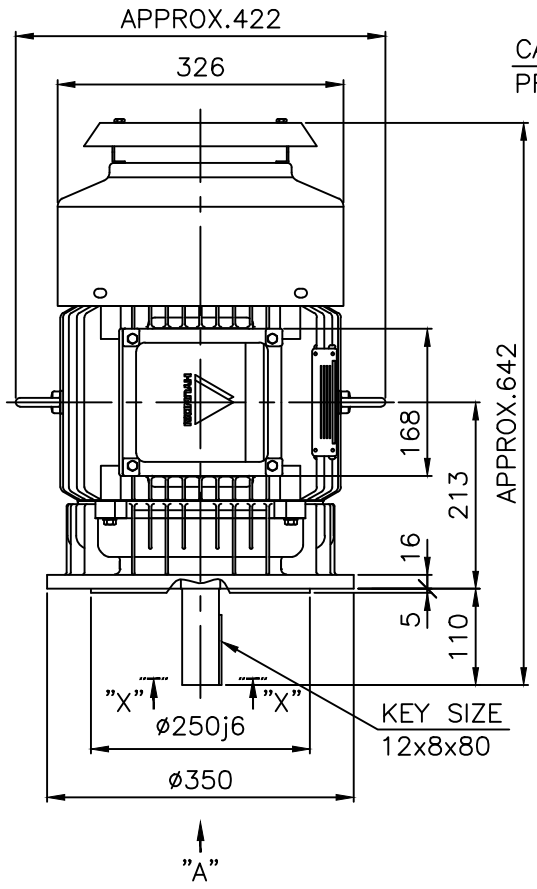
SPEED VS TORQUE & CURRENT CURVE

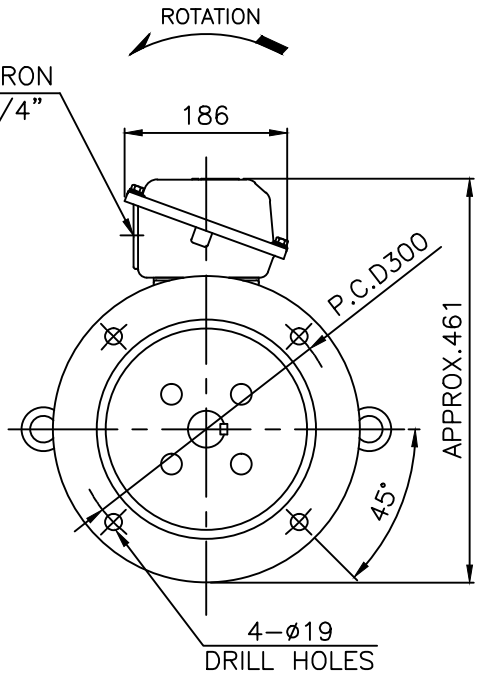


OUTPUT VS EFF., P.F & CURRENT CURVE



▽	50S	REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
▽▽	12.5S							
▽▽▽	3.2S							
▽▽▽▽	0.4S							



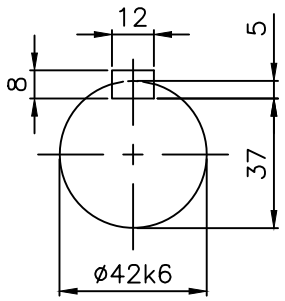


VIEW "A"

NOTE

1.TOLERANCE :

FLANGE HOLES	ø19	+0.52 0
RABBET DIAMETER	ø250	+0.016 −0.013
SHAFT DIAMETER	ø42	+0.018 +0.002
KEYWAY WIDTH	12	0 −0.043
KEYWAY DEPTH	5	+0.2 0
KEY WIDTH	12	0 −0.043
KEY HEIGHT	8	0 −0.090

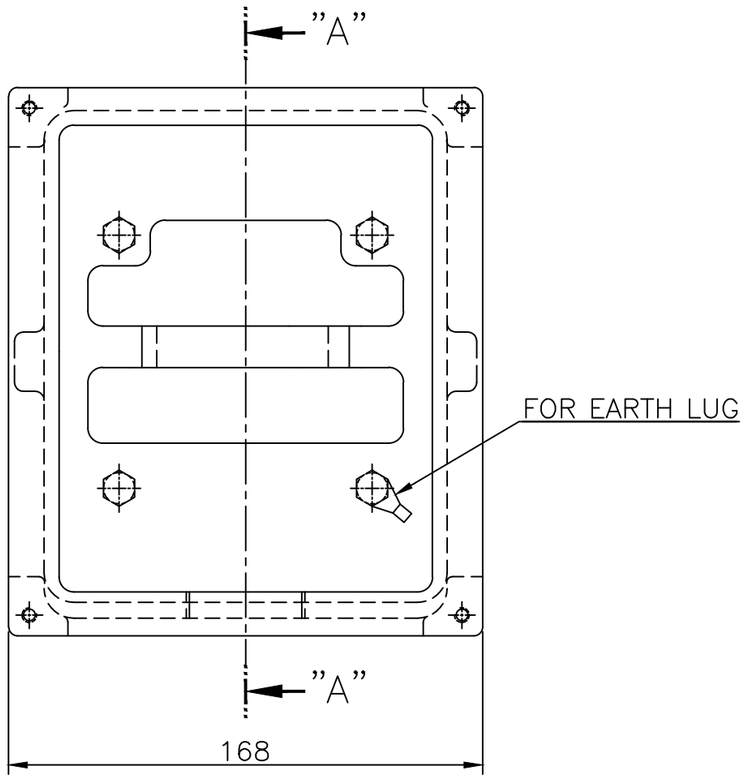


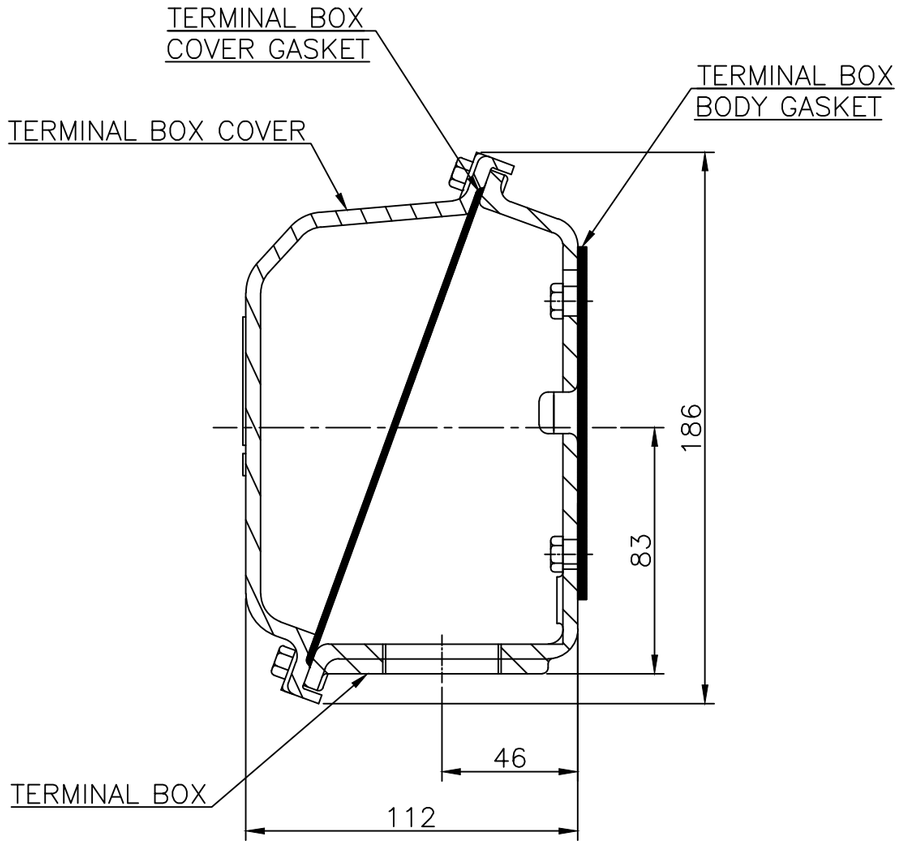
SECTION "X-X"
SCALE 4/8

APPD BY	S.K.HAN	UNIT	mm
CHKD BY	S.Y.KIM	SCALE	1/8
CHKD BY	R.G.KIM	PROJEC'N	3각법(3rd Angle)
DSND BY	S.H.YUN	DATE	2018-07-04

HYUNDAI ELECTRIC

SUBJECT	KS, IEC Fr.160M	DWG SIZE	A4 (1:8)
TITLE	OUTLINE		
REF. NO		Sheet No.	of
DWG NO	LM-T1163V1PL001	Revision No.	1





SEC. "A"–"A"

▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

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	S.K.HAN	UNIT	mm	SUBJECT	FR.160~180 (CAST IRON)		DWG SIZE A3 (1:2)
CHKD BY	S.Y.KIM	SCALE	1/2				
CHKD BY	R.G.KIM	PROJEC'N	3각법(3rd Angle)	TITLE	Main Terminal Box Assembly		
DSND BY	H.K.LEE	DATE	2011–08–30	REF. NO	227B8008LA2	Sheet No.	of
HYUNDAI ELECTRIC				DWG NO	3M–145860	Revision No.	2