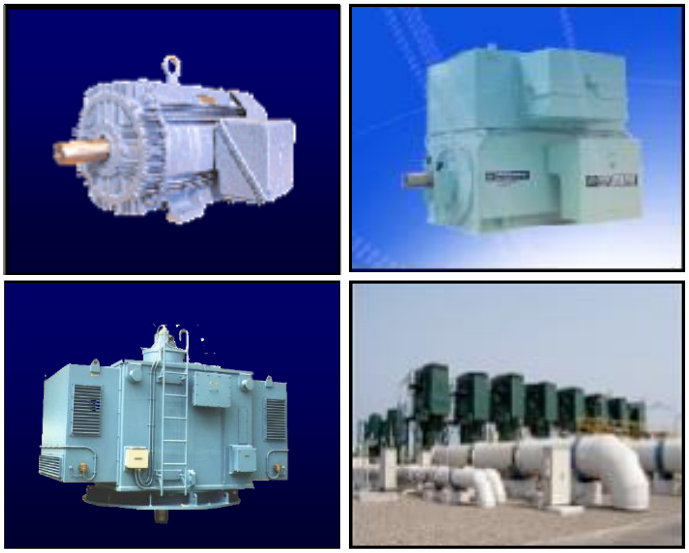
HYUNDAI ELECTRIC

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		180L
Type		HLP-30/4
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	6312ZZC3 / 6310ZZC3
	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		30 kW	40 HP	
Number of Poles		4		
Rotor Type		Squirrel Cage		
Starting Method*		■ D.O.L	☐ Y-Δ	
Rated Voltage		460 V		
Current	Full Load	48.8 A		
	Locked-rotor**	725 %		
Efficiency				
	50% Load	93.8 %		
	75% Load	94.3 %		
	100% Load	94.1 %		
Power Factor(p.u)				
	50% Load	0.735		
	75% Load	0.790		
	100% Load	0.820		
Speed at Full Load		1780 r.p.m		
Torque				
	Full Load	16.4 kg·m		
	Locked-rotor**	160 %		
	Breakdown**	220 %		
Moment of Inertia (J)				
	Load(Max.)	17.248 kg·m²		
	Motor	0.190 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.)	
V1	LM-T1185V1PL001	199 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

SPARE PARTS

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.

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PERFORMANCE CURVE

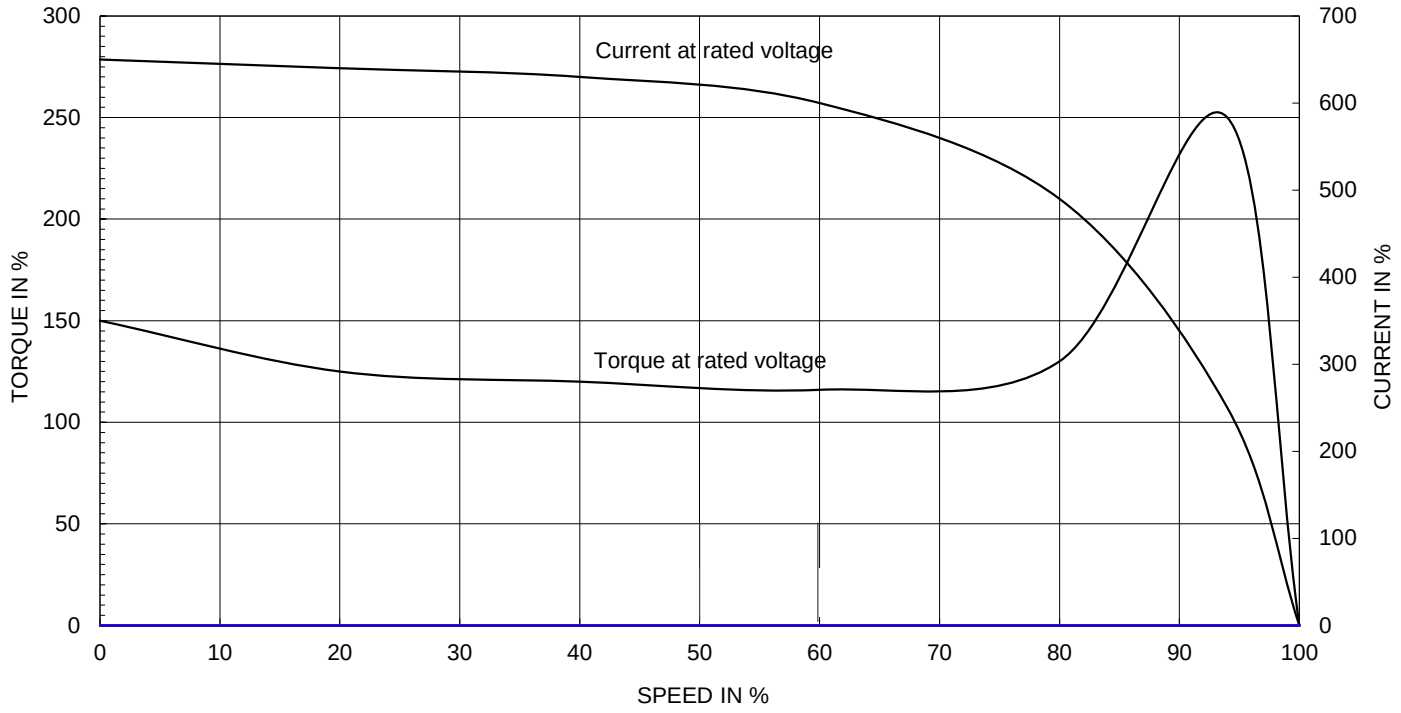
CURVE NO.

P-O3024606KSTD40S

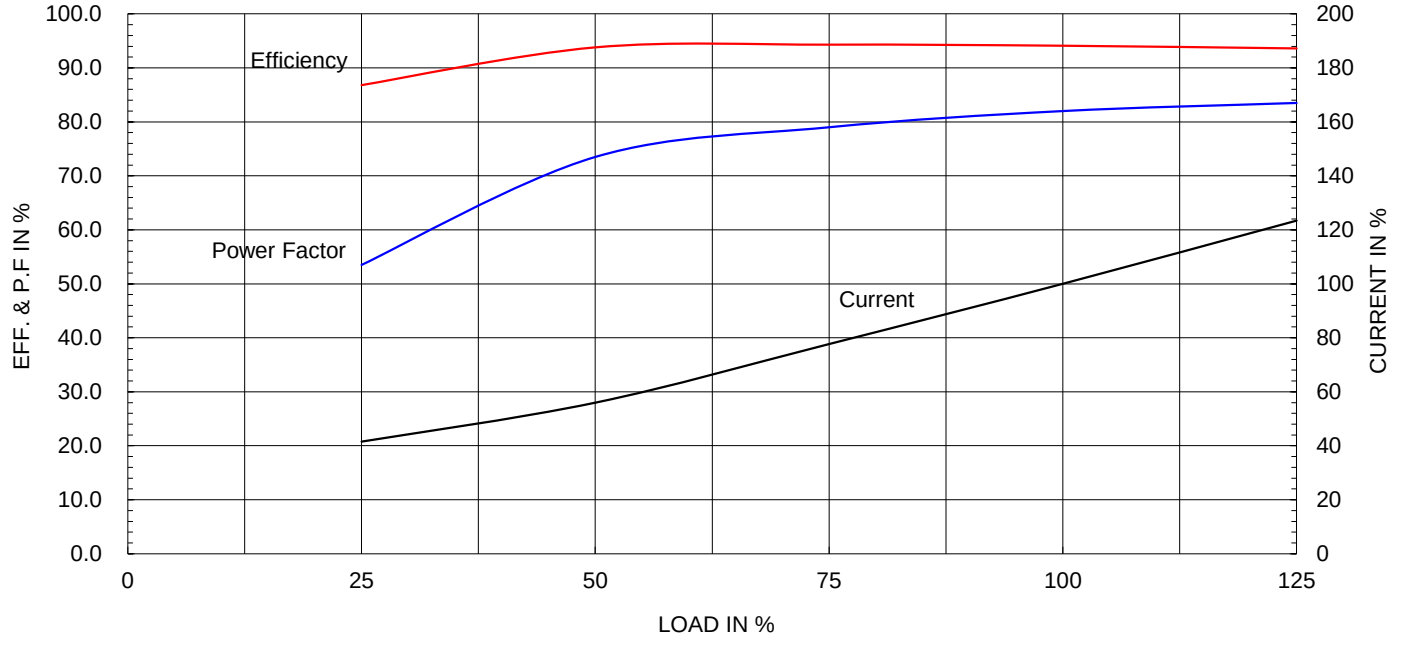
Type :	HLP-30/4		
Full Load Torque :	16.4	kg.m	
Motor moment of Inertia (J) :	0.190	$kg.m^2$	
Load moment of Inertia (J) :	17.248	$kg.m^2$	

30 kW	4 P	60 Hz	
Speed at Full Load :		1780 RPM	
Rated Voltage	460V		
Full Load Current	48.8A		

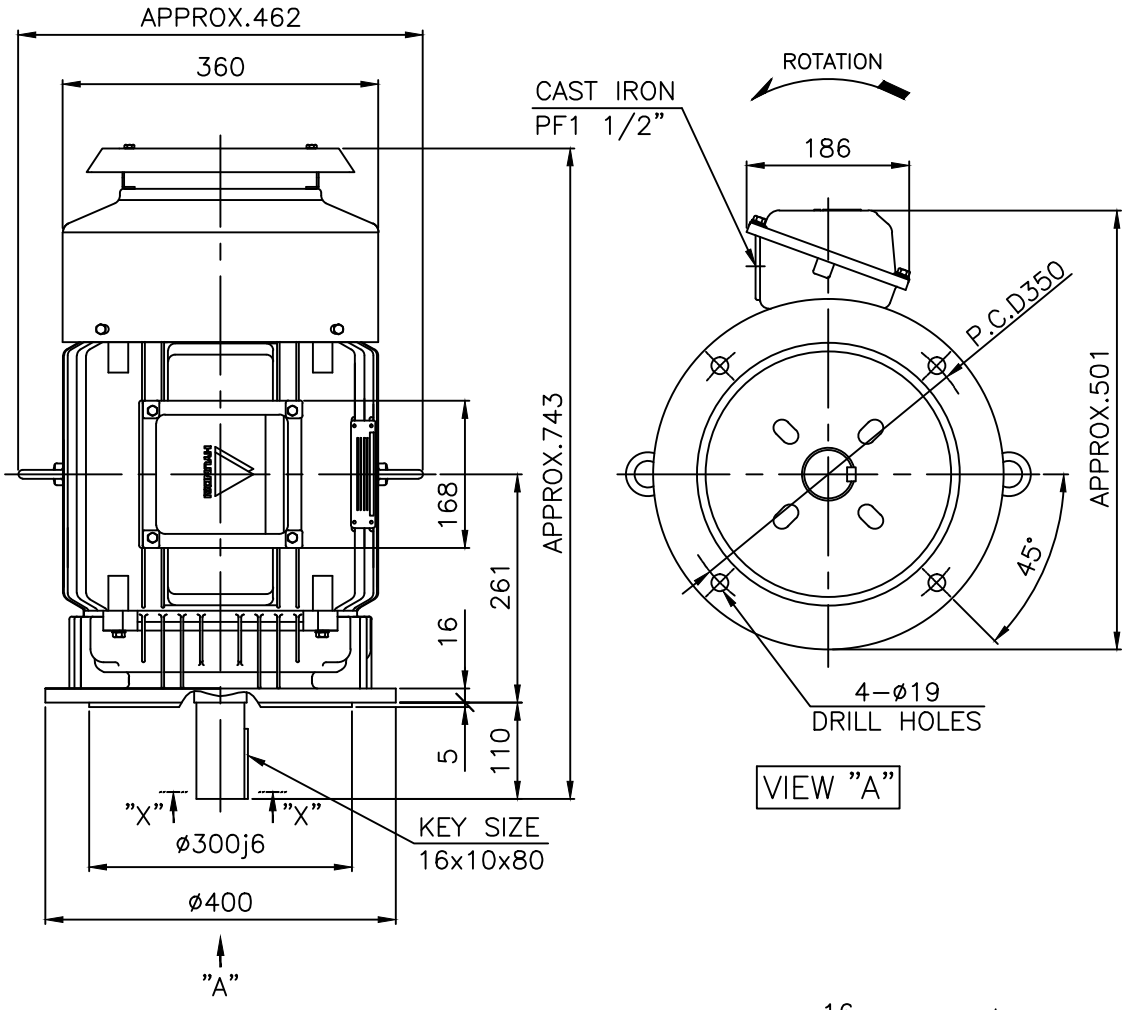
SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



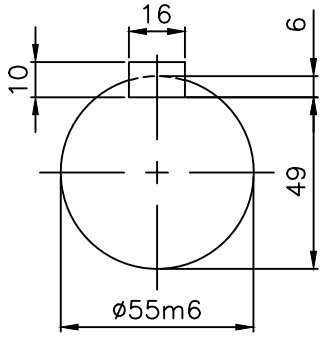
	50S	REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
▽	50S							
▽▽	12.5S							
▽▽▽	3.2S							
▽▽▽▽	0.4S							



NOTE

1.TOLERANCE :

FLANGE HOLES	ø19	+0.52 0
RABBET DIAMETER	ø300	±0.016
SHAFT DIAMETER	ø55	+0.030 +0.011
KEYWAY WIDTH	16	0 −0.043
KEYWAY DEPTH	6	+0.2 0
KEY WIDTH	16	0 −0.043
KEY HEIGHT	10	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

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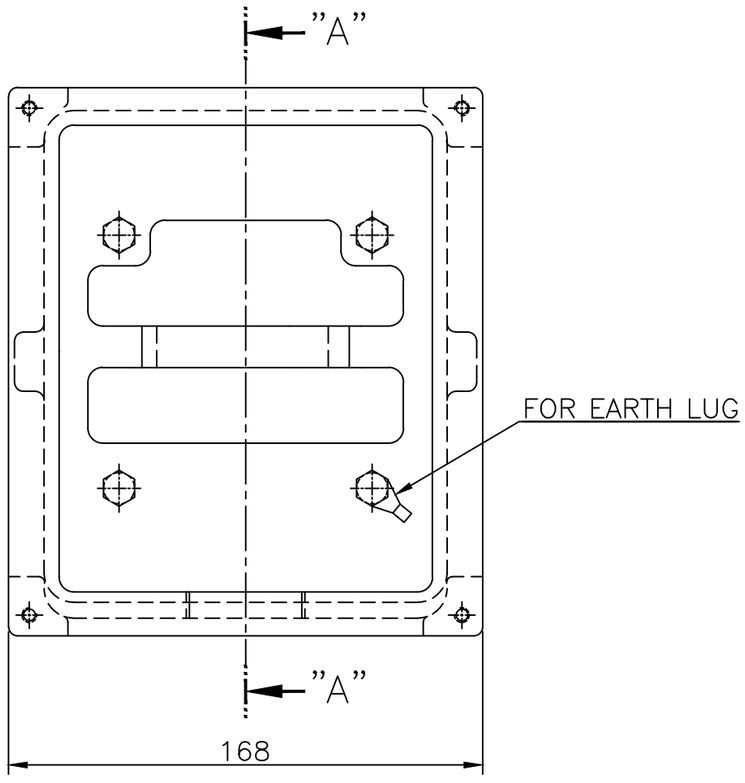
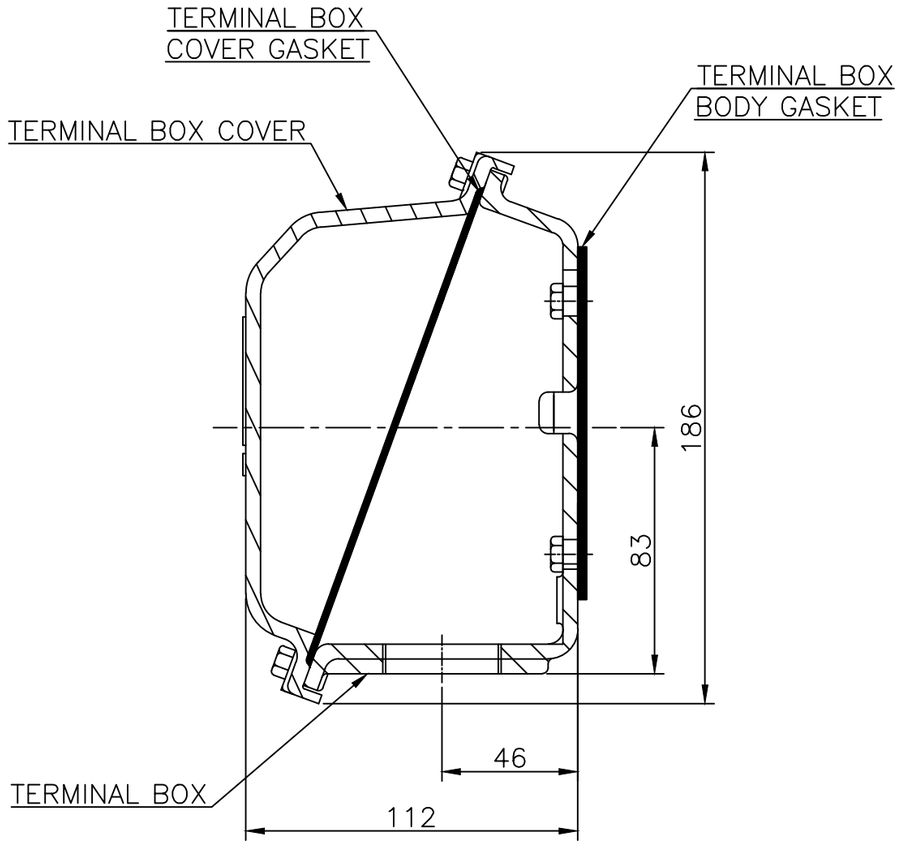
SUBJECT	KS, IEC Fr.180L		DWG SIZE A4 (1:8)
TITLE	OUTLINE		
REF. NO		Sheet No.	of
DWG NO	LM-T1185V1PL001	Revision No.	2





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