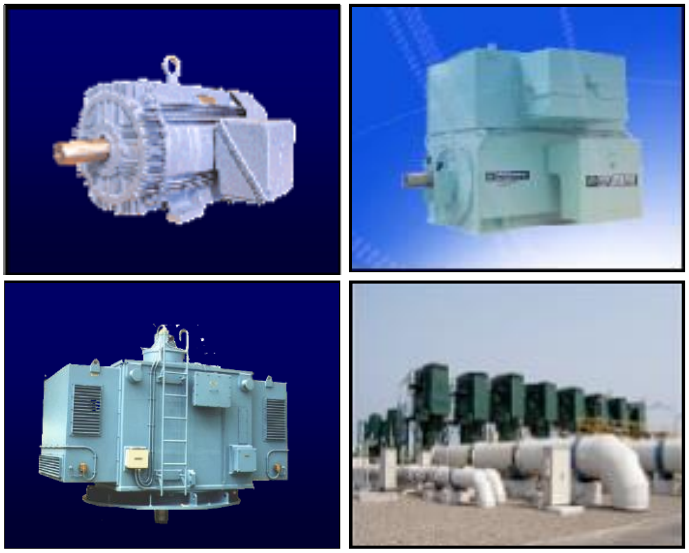
HYUNDAI ELECTRIC

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.	4606KSTD40SSDS1STFE3351DL0SDS	Item No.		Rev. No.	[ ]
Project Name		Project No.		Quantity	

GENERAL SPECIFICATION

Frame Size		90L
Type		HLP-1.5/2
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	6205ZZ / 6204ZZ
	Lubricant	Grease(HIFLEX L-3)
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		1.5 kW		2 HP
Number of Poles		2		
Rotor Type		Squirrel Cage		
Starting Method*		■ D.O.L	☐ Y-Δ	
Rated Voltage		460 V		
Current	Full Load	2.6 A		
	Locked-rotor**	950 %		
Efficiency				
	50% Load	82.0 %		
	75% Load	85.7 %		
	100% Load	85.5 %		
Power Factor(p.u)				
	50% Load	0.720		
	75% Load	0.810		
	100% Load	0.852		
Speed at Full Load		3500 r.p.m		
Torque				
	Full Load	0.4 kg·m		
	Locked-rotor**	190 %		
	Breakdown**	250 %		
Moment of Inertia (J)				
	Load(Max.)	0.250 kg·m²		
	Motor	0.002 kg·m²		
Sound Pressure Level (No-load & mean value at 1m from motor)		73 dB(A)		
Vibration		1.6 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/B5	LM-A1095B4P1001	21 kg
Main T-Box Ass'y	3M-148548	

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.

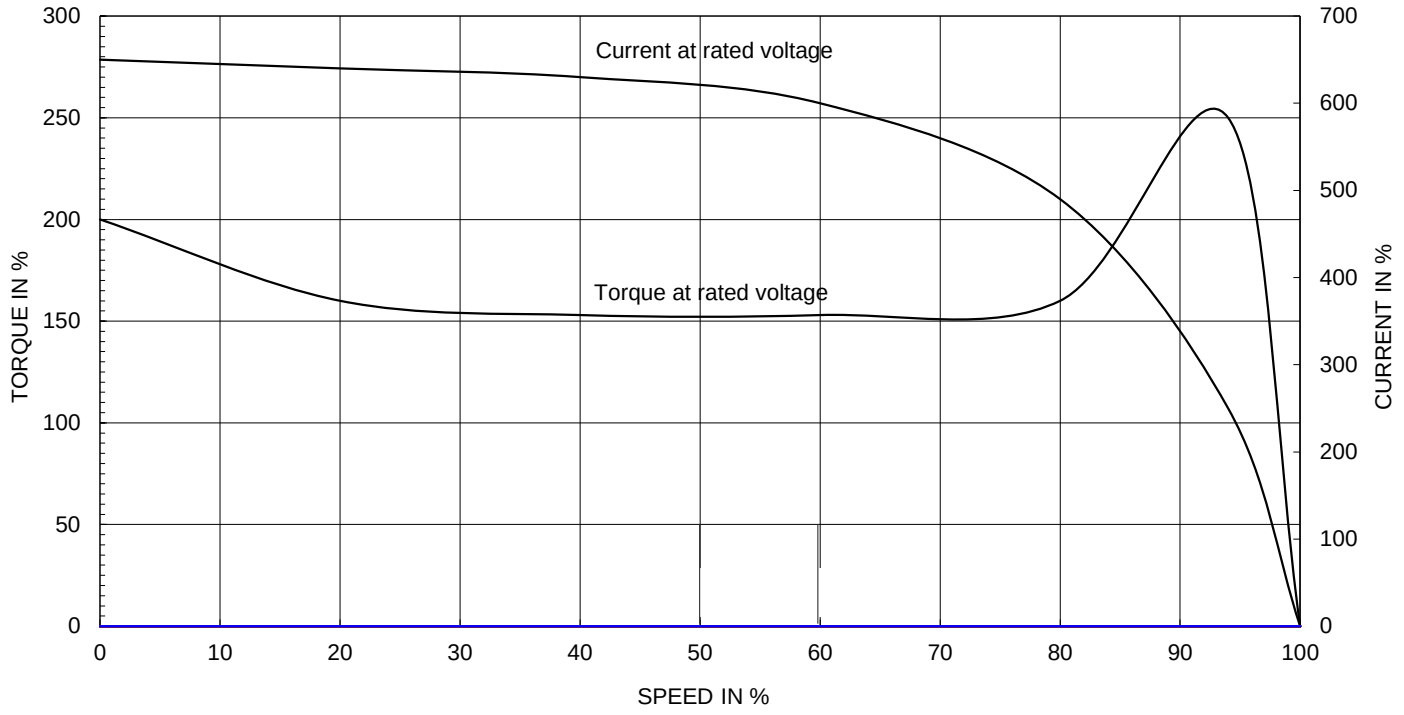
P-1P514606KSTD40S

Type :	HLP-1.5/2		
Full Load Torque :	0.4	kg.m	
Motor moment of Inertia (J) :	0.002	$kg.m^2$	
Load moment of Inertia (J) :	0.250	$kg.m^2$	

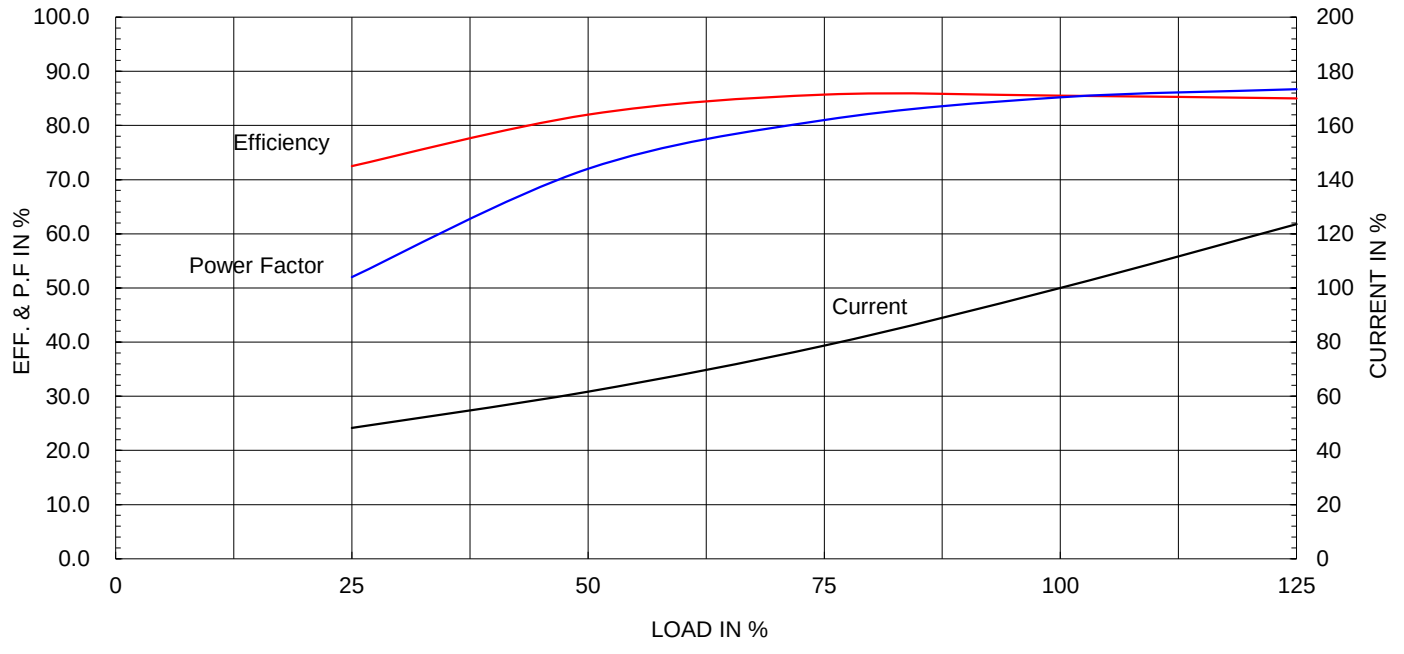
1.5 kW	2 P	60 Hz
Speed at Full Load :		3500 RPM

Rated Voltage	460V		
Full Load Current	2.6A		

SPEED VS TORQUE & CURRENT CURVE

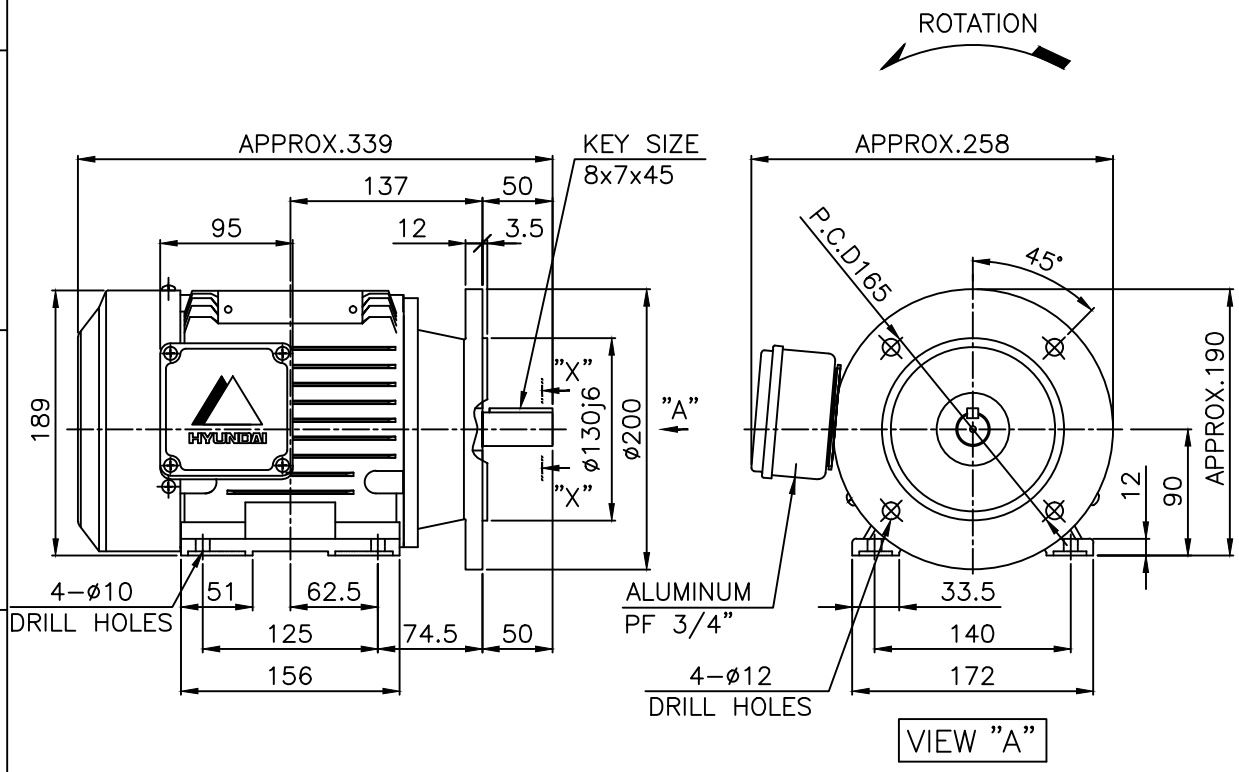


OUTPUT VS EFF., P.F & CURRENT CURVE



A4(210mm x 297mm)

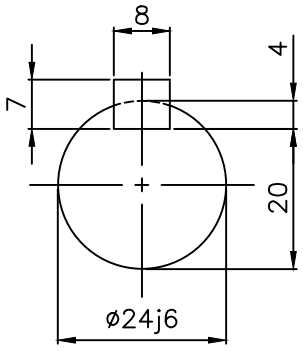
	50S	REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
▽	50S							
▽▽	12.5S							
▽▽▽	3.2S							
▽▽▽▽	0.4S							



NOTE

1.TOLERANCE :

CENTER HEIGHT	90	$^{0}_{-0.5}$
BASE HOLES	ø10	$^{+0.36}_{0}$
FLANGE HOLES	ø12	$^{+0.43}_{0}$
RABBET DIAMETER	ø130	$^{+0.014}_{-0.011}$
SHAFT DIAMETER	ø24	$^{+0.009}_{-0.004}$
KEYWAY WIDTH	8	$^{0}_{-0.036}$
KEYWAY DEPTH	4	$^{+0.2}_{0}$
KEY WIDTH	8	$^{0}_{-0.036}$
KEY HEIGHT	7	$^{0}_{-0.090}$



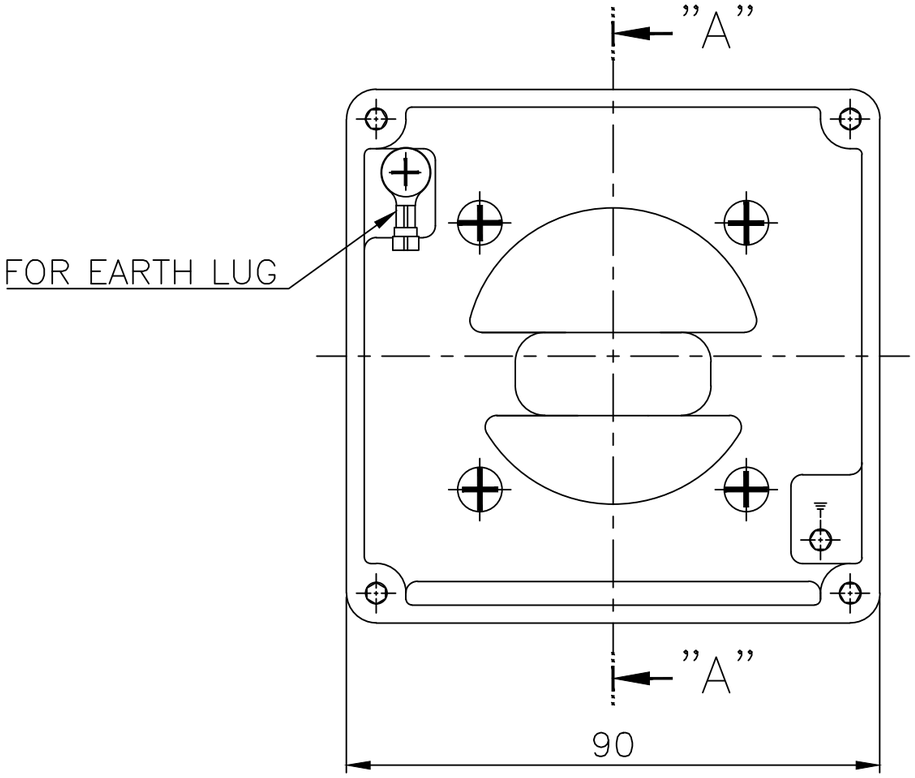
SECTION "X-X"

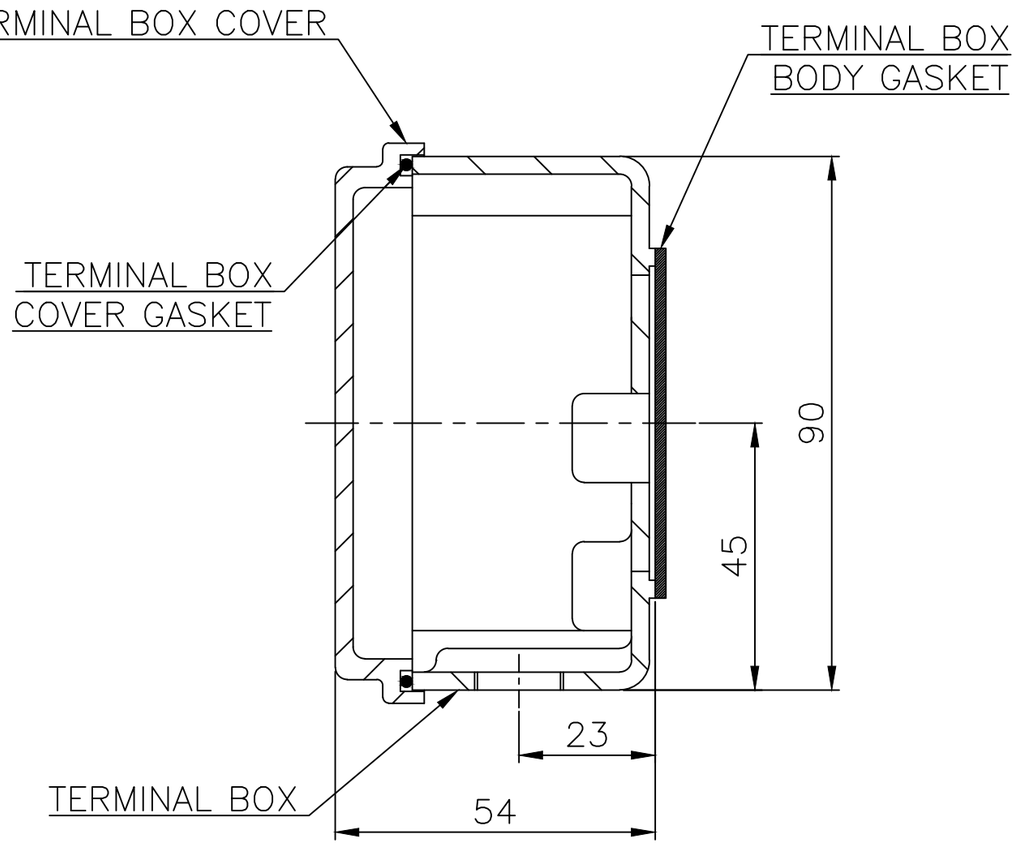
SCALE 5/5

APPD BY	S.K.HAN	UNIT	mm
CHKD BY	S.Y.KIM	SCALE	1/5
CHKD BY	R.G.KIM	PROJEC'N	3각법(3rd Angle)
DSND BY	S.H.YUN	DATE	2018-08-13

HYUNDAI ELECTRIC

SUBJECT	KS, IEC Fr.90L	DWG SIZE	A4 (1:5)
TITLE	OUTLINE		
REF. NO		Sheet No.	of
DWG NO	LM-A1095B4P1001	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
CHKD BY	S.Y.KIM	SCALE	1/1
CHKD BY	R.G.KIM	PROJEC'N	3각법(3rd Angle)
DSND BY	이혜경R	DATE	2011–10–26

HYUNDAI ELECTRIC

SUBJECT	FR.71~90 (AL)	DWG SIZE	A3 (1:1)
TITLE	Terminal Box Arrangement		
REF. NO	227B1537AA	Sheet No.	of
DWG NO	3M–148548	Revision No.	2