HYUNDAI ELECTRIC

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

SPECIFICATION
for
INDUCTION MOTOR

0		For Bidding			
No.	DATE	DESCRIPTION	PREPARED BY	CHECKED BY	APPROVED BY

HYUNDAI ELECTRIC

AC INDUCTION MOTOR DATA SHEET

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

GENERAL SPECIFICATION

Frame Size		90L
Type		HLP-1.5/4
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
Bearing	Type	Anti-Friction
	DE/N-DE	6205ZZC3 / 6204ZZC3
	Lubricant	Grease
External Thrust		Not applicable
Coupling Method		☑ Direct ☐ V-Belt
Shaft Extension		☑ Single ☐ Double
Terminal Box	Main	☑ Aluminum ☐ 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		1.5 kW	2.0 HP
Number of Poles		4	
Rotor Type		Squirrel Cage	
Starting Method*		☑ D.O.L	☐ Y-Δ
Rated Voltage		440 V	
Current	Full Load	2.8 A	
	Locked-rotor**	930 %	
Efficiency			
	100% Load	86.5 %	
Power Factor(p.u)			
	100% Load	0.810	
Speed at Full Load		1745 r.p.m	
Torque			
	Full Load	0.8 kg·m	8.2
	Locked-rotor**	320 %	2.7 kg·m
	Breakdown**	300 %	2.5 kg·m
Moment of Inertia (J)			
	Load(Max.)	1.256 $kg \cdot m^2$	
	Motor	0.003 $kg \cdot m^2$	
Sound Pressure Level (No-load & mean value at 1m from motor)		55 dB(A)	
Vibration		1.6 mm/sec (peak)	
Permissible number of consecutive starts		Cold 20 times	
		Hot 15 times	
Paint	Munsell No.	PHANTONE 279C	

ACCESSORIES

SPARE PARTS

SUBMITTAL DRAWING

Outline Dimension Drawing	\ Motor Weight(Approx.)	
B3	LM-T1095B3PLV01	30 kg

REMARK

*. Premium efficiency(IE3) acc. to KS C 4202
*. SSEN Series
*. For use on PWM VFD 10:1VT,3:1CT@1.0S.F&F Temp.rise

FOR BIDDING

Date	DSND	CHKD	CHKD	APPD
2021-04-26				

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

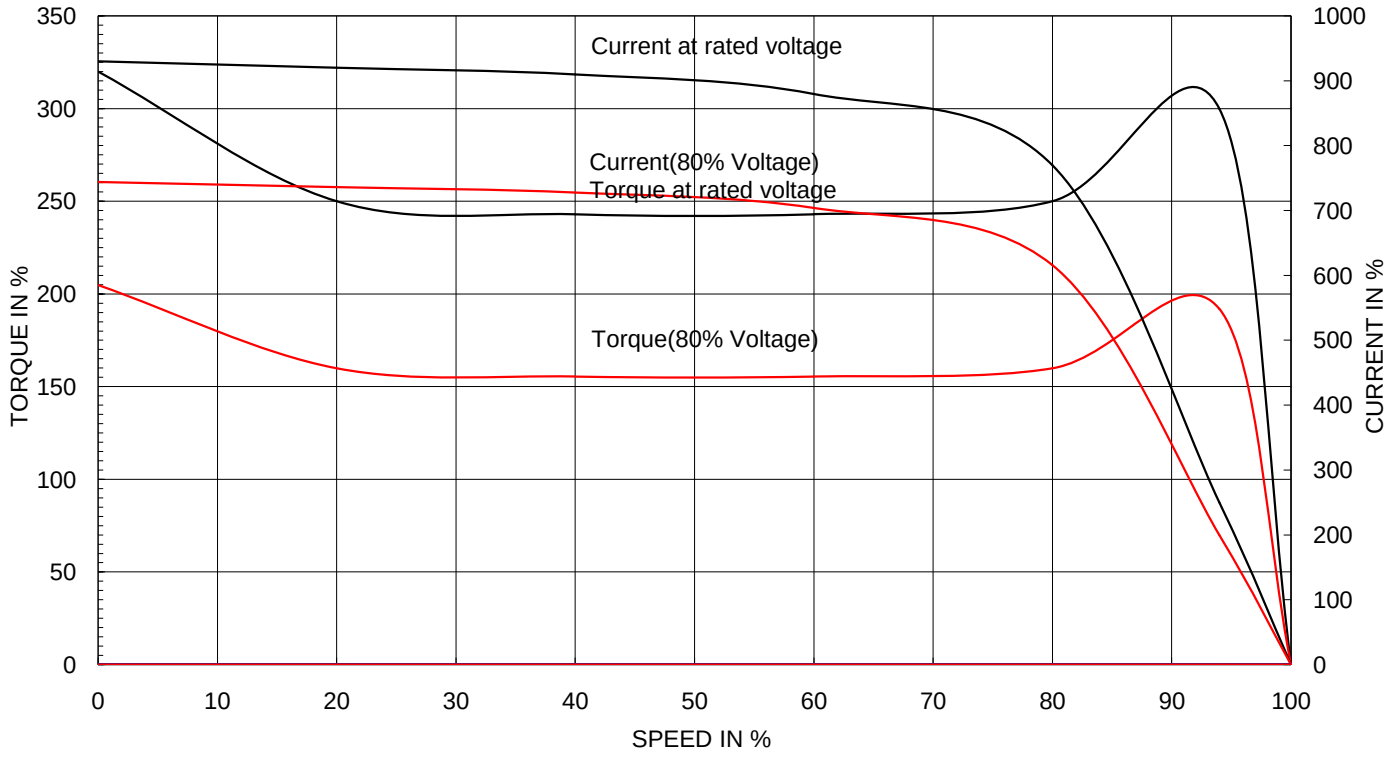
CURVE NO.

Type : HLP-1.5/4			
Full Load Torque :	0.8	kg.m	
Load moment of Inertia (J) :	-	$kg.m^2$	
Motor moment of Inertia (J) :	0.003	$kg.m^2$	

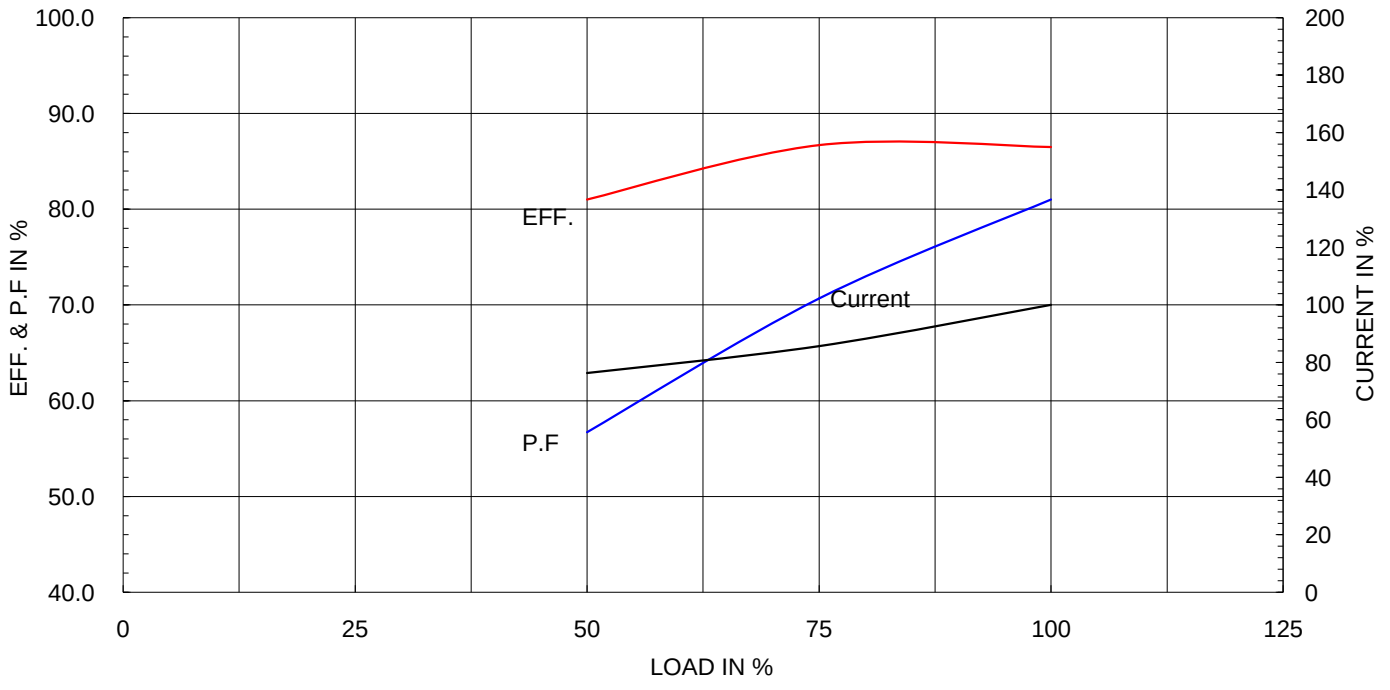
1.5	kW	4	P	60	Hz
Speed at Full Load :				1745	RPM

Rated Voltage	440		
Full Load Current	2.8A		

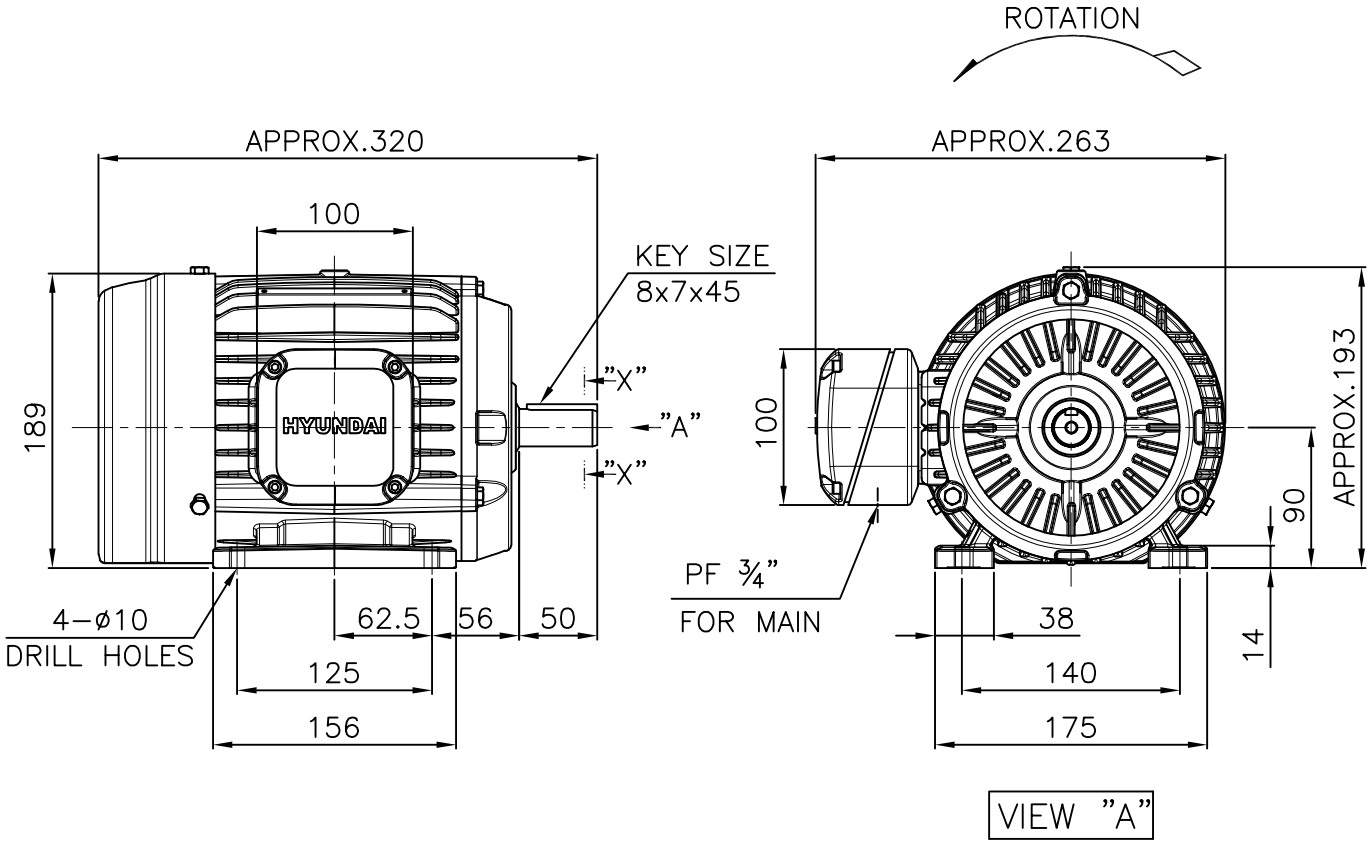
SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



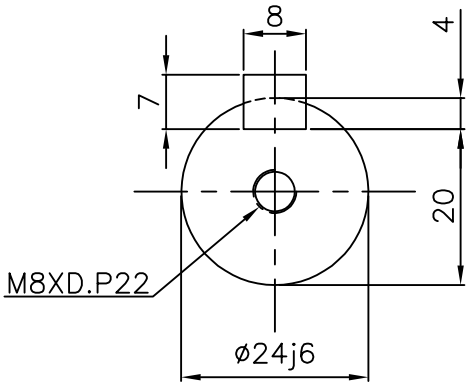
	50S	REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
▽	50S							
▽▽	12.5S							
▽▽▽	3.2S							
▽▽▽▽	0.4S							



NOTE

1.TOLERANCE :

CENTER HEIGHT	90	$^{0}_{-0.5}$
BASE HOLES	ø10	$^{+0.36}_{0}$
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	$^{0}_{-0.090}$



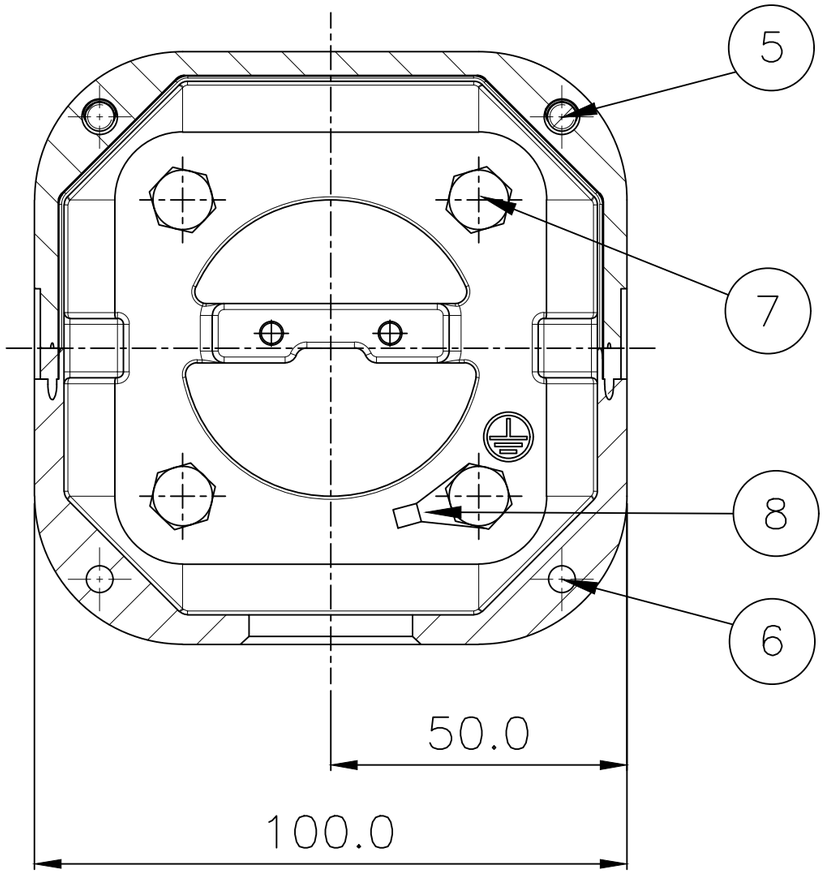
SECTION "X-X"

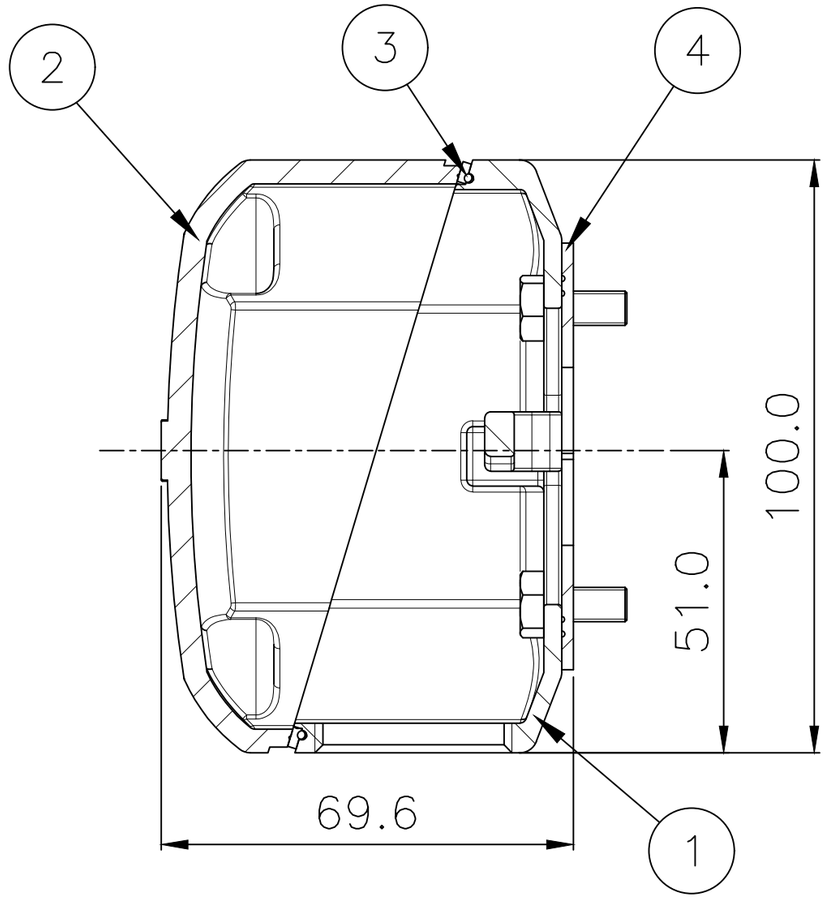
SCALE 5/5

APPD BY	S.K.HAN	UNIT	mm
CHKD BY	S.Y.KIM	SCALE	1/6
CHKD BY	I.K.KIM	PROJEC'N	3각법(3rd Angle)
DSND BY	S.H.LEE	DATE	2019.06.18

SUBJECT	KS, IEC Fr.90L		DWG SIZE A4 (1:6)
TITLE	OUTLINE		
REF. NO			Sheet No. of
DWG NO	LM-T1095B3PLV01		Revision No. 0

HYUNDAI ELECTRIC





Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
1	GROUND TERMINAL LUG	CU	--				8
4	BOX+FRAME HEX BOLT	S45C	M6 X L15				7
2	COVER+BOX HEX BOLT	S45C	M5 X L20				6
2	COVER+BOX HEX BOLT	S45C	M5 X L40				5
1	BOX GASKET	NBR	--				4
1	COVER GASKET	NBR	--				3
1	CONDUIT BOX COVER	AL	--				2
1	CONDUIT BOX	AL	--				1

▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

일반기공공차		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

APPD BY	S.K.HAN	UNIT	mm
CHKD BY	I.K.KIM	SCALE	1/1
CHKD BY	–	PROJEC'N	3rd Angle
DSND BY	S.H.LEE	DATE	2020-06-19

HYUNDAI ELECTRIC

SUBJECT: SSEN SERIES 90FR.

DWG SIZE: A3 (1:1)

TITLE: TERMINAL BOX ASS'Y

REF. NO

DWG NO

Sheet No. of

Revision No. 0