HD HYUNDAI ELECTRIC

Essential for Today
Potential for Tomorrow

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

SPECIFICATION
for
INDUCTION MOTOR

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

AC INDUCTION MOTOR DATA SHEET
EXPLOSION PROOF TYPE

Catalog No.	IXHHI15-18-254T	Item No.		Rev. No.	[ ]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION

Frame Size		254T
Type		XJP
Enclosure(Protection)		Totally Enclosed / IP55
Method of Cooling		IC411(FC)
Rated Frequency		60 Hz
Number of Phases		3
Insulation Class		F
Temp. Rise at full load (by resistance method)		
	at 1.0 S.F	80 deg. C
Motor Location		☐ Indoor ☐ Outdoor
Altitude		Less than 1,000 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	6309ZC3 / 6309ZC3
	Lubricant	Grease(Polyrex-EM)
External Thrust		Not applicable
Coupling Method		☑ Direct ☐ V-belt
Shaft Extension		Single
Terminal Box	Main	Cast Iron
	Aux.	No
	Location	Refer to Outline Drawing
Application		
Area classification		Hazardous
Type of Ex-Protection		Class I, Division 1
Applicable Standard		NEMA MG1, CSA C390, UL674

PERFORMANCE DATA

Rated Output		11 kW		15 HP
Number of Poles		4		
Rotor Type		Squirrel Cage		
Starting Method*		D.O.L		
Rated Voltage		575 V	460 V	230 V
Current	Full Load	14.6 A	18.2 A	36.4 A
	Locked-rotor**	750 %	750 %	750 %
Efficiency				
	50% Load	89.4 %		
	75% Load	91.4 %		
	100% Load	92.4 %		
Power Factor(p.u)				
	50% Load	0.670		
	75% Load	0.770		
	100% Load	0.820		
Speed at Full Load		1775 r.p.m		
Torque				
	Full Load	43.66 lb.ft		
	Locked-rotor**	200 %		
	Breakdown**	240 %		
Moment of Inertia (J)				
	Load(Max.)	88.098 lb.ft2		
	Motor	2.136 lb.ft2		
Sound Pressure Level (No-load & mean value at 1m from motor)		74 dB(A)		
Vibration		3.8 mm/sec (peak)		
Permissible number of consecutive starts		Cold 3 times		
		Hot 2 times		
Paint	Munsell No.	4.0PB5.4/5.5(VL-451)		

ACCESSORIES

*. W.T.D.(Thermostat, 145°C) : 1EA/Ph.

SPARE PARTS

SUBMITTAL DRAWING

Outline Dimension Drawing	\ Motor Weight(Approx.)	
B3	LM-U0254B3TL001	310 lb.

REMARK

1. Premium efficiency according to NEMA MG1
2. Inverter Duty @ 1.0 S.F & F Temp. rise & Amb. max 45°C
   -. 10:1 VT (20:1 VT at 50% load)
   -. 10:1 CT (1 hour duty, 4:1 continuous)
   -. CHP up to 1.5 times base speed, NEMA MG1 Part31
3. UL Certification
   -. Class I, Division 1, Group C&D
4. Temperature Code (Sine wave)
   -. T2D(215°C) at 40°C Amb. / T2C(230°C) at 55°C Amb.
   -. T4(135°C) with Winding Temperature Detector

Date	DSND	CHKD	CHKD	APPD
2025-07-30	S.H. LEE	I.K. KIM	R.G. KIM	S.W. KIM

[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 done according to maker standard, if not mentioned.

* In case of Inverter-Fed Motor, performance data is based on sine wave tests. It may be different from test data of Inverter combined motor.

** Data is based on rated voltage & frequency and is expressed as a percentage of full-load value.

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REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

▣ MAIN NAMEPLATE

4.72

2.36

CROWN TRITON Explosion Proof — Premium Efficiency AC 3 Phase Motor

C SA US Energy Verified Only — CC038A — c UL US LISTED

15HP 4P 230/460V			Cat. No. IXHHI15-18-254T	Amps	36.4/18.2A
Model LATER			INS. Class F HD-F1	Hertz	60Hz
Type XJP	Duty CONT		Code J	NEMA Nom. Eff.	92.4%
Frame 254T	Encl. TEFC		S.F. 1.15 on sine wave power	3/4 Eff.	91.4%
Bearing	Drive 6309ZC3		S.F. 1.00 on PWM or IGBT power	NEMA Design	B Torque
	Opp. 6309ZC3		RPM 1775	Amb.	40°C
Usable at	50Hz 15HP 380V 24.3A 1460rpm S.F.: 1.15 Eff.: 91.0% Code: F				
	50Hz 15HP 400/415V 23.5/23.2A 1465/1470rpm S.F.: 1.15 Eff.: 91.0/91.0% Code: G/H				
UL Certified for	Class Ⅰ,Div. 1, Group C&D / Class Ⅰ,Zone 1, Group ⅡA & ⅡB 10:1VT(20:1 at 50% load) 4:1CT(10:1 1hour duty at lowest RPM) CHP upto 1.5 time base speed,NEMA MGI part 31.Amb max 45°C for inverter duty.		Temp. Code (sine wave)	T2D at 40°C Amb. / T2C at 55°C Amb. T4 With Thermostat TH01 145°C TH02	
No. -			Date -	Weight 310 lb	

4M-136066
(NEMA 250~280Fr.)

Made in Korea H1

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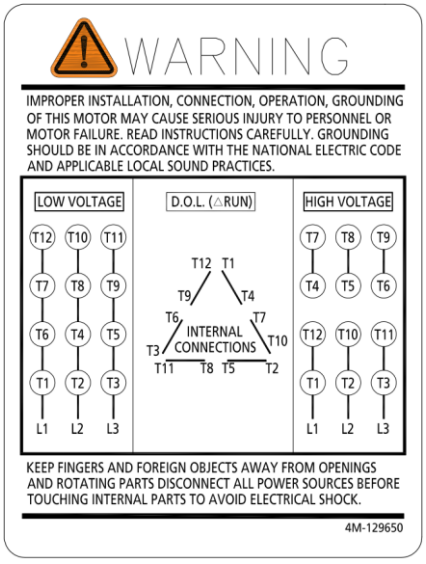
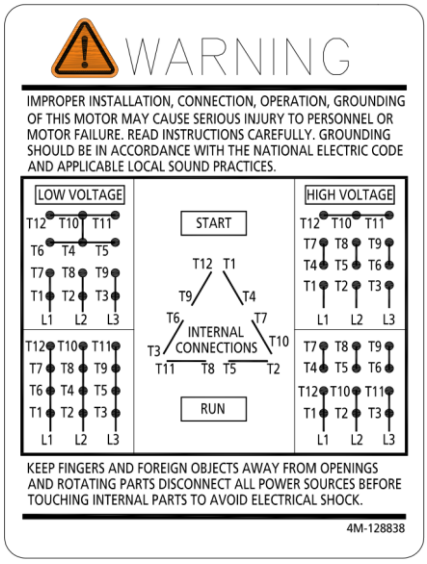
▣ WIRING DIAGRAM

D.O.L (INVERTER & SOFT STARTER)



WYE-DELTA (Y-D)



APPD BY	S.Y.KIM	UNIT	INCH
CHKD BY	I.K.KIM	SCALE	NONE
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle
DSND BY	S.H.LEE	DATE	2024.06.07

HD HYUNDAI ELECTRIC

SUBJECT	UL Class I, Division1 (IXHHI, 254-286)	DWG SIZE	A4 (1:1)
TITLE	NAMEPLATE DRAWING		
REF. NO	4M-136066 / 4M-129650	Sheet No.	of
DWG NO	NP-IXHHI15-18-254T	Revision No.	0

HYUNDAI ELECTRIC

PERFORMANCE CURVE

CURVE NO.

PC-IXHHI15-18-254T

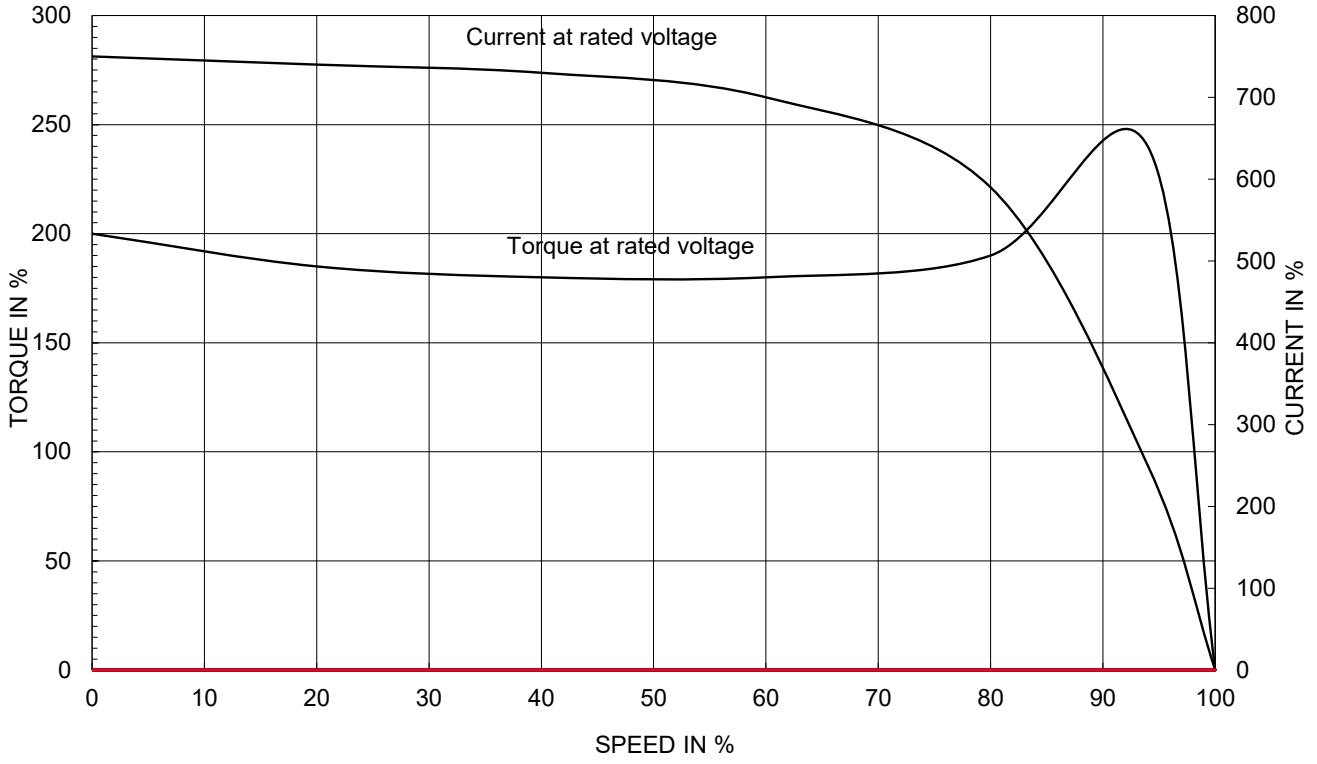
Type :	XJP	
Full Load Torque :	43.66	lb.ft
Load moment of Inertia (J) :	88.098	lb.ft2
Motor moment of Inertia (J) :	2.136	lb.ft2

11kW 15HP 4 P 60 Hz

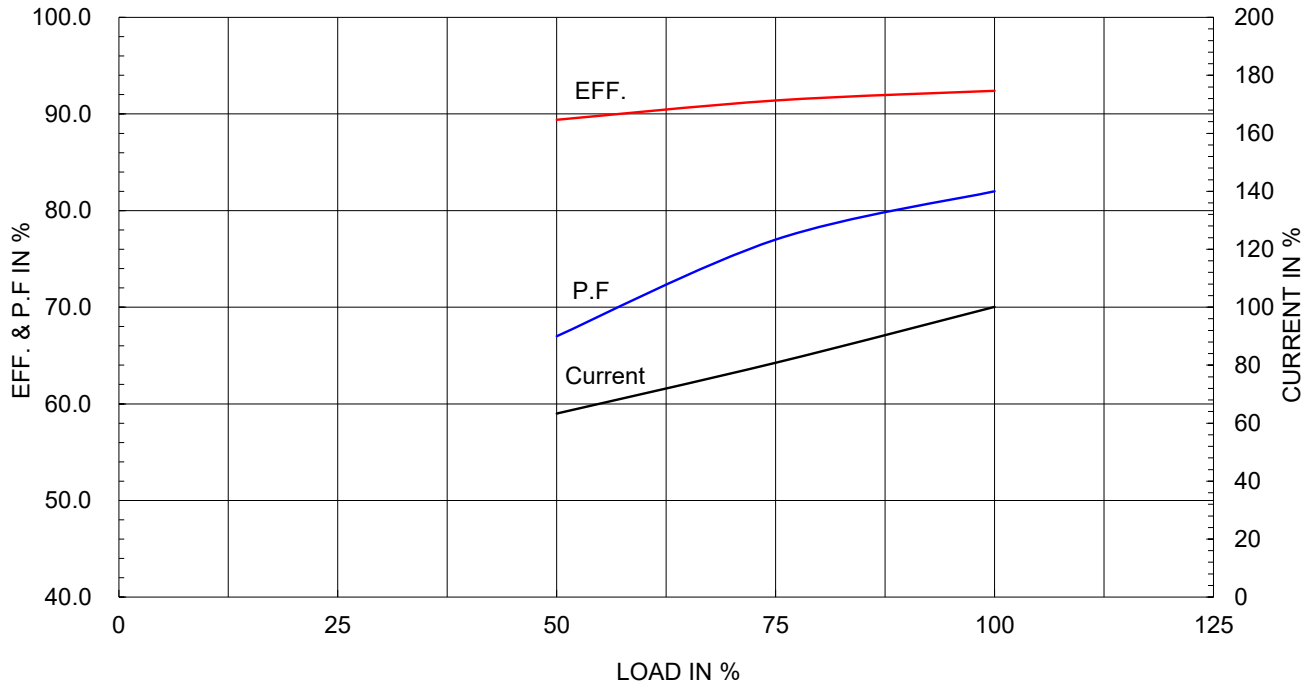
Speed at Full Load : 1775 RPM

Rated Voltage	575V	460V	230V
Full Load Current	14.6A	18.2A	36.4A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



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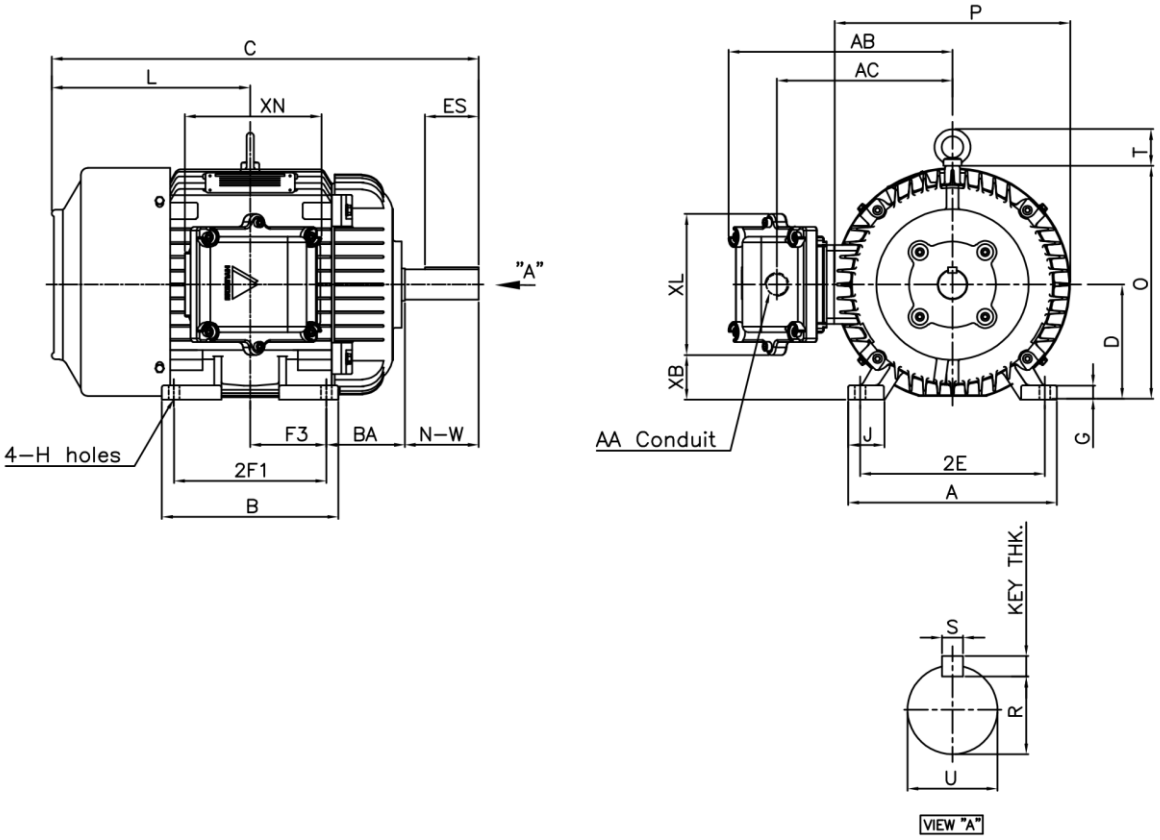
▽	50S	REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
▽▽	12.5S							
▽▽▽	3.2S							
▽▽▽▽	0.4S							

Class I Division 1



DIMENSIONS

MOUNTING									CONDUIT BOX						APPROX. WGT.(LB)
A	B	2E	2F1	2F2	F3	G	J	H	AA	AB	AC	XB	XL	XN	
11.30	9.56	10.00	8.25	–	4.13	0.72	1.93	0.53	1.25	12.01	9.51	2.39	7.72	7.32	310

OVERALL							SHAFT					KEY THK.	BEARING	
BA	C	D	L	O	P	T	U	N–W	KEYWAY				DRIVE END	OPP. DRIVE END
									R	ES	S			
4.25	23.13	6.25	10.75	12.75	12.76	2.01	1.625	4.00	1.416	2.91	0.375	0.375	6309ZC3	6309ZC3

NOTE

1. Dimension "D" tolerance : +0.00inch – 0.03inch (143T–365T) ; +0.000inch – 0.06inch (404T–449T)
2. Dimension "U" tolerance : +0.000inch – 0.005inch (143T–215T), +0.000inch – 0.001inch (254T–449T)
3. Dimension "R" tolerance : +0.000inch – 0.015inch

APPD BY	S.Y.KIM	UNIT	inch
CHKD BY	R.G.KIM	SCALE	1/10
CHKD BY		PROJEC'N	3rd Angle
DSND BY	J.H.JEON	DATE	2021-04-15

SUBJECT	NEMA 254T	DWG SIZE A4 (1:10)
TITLE	OUTLINE	
REF. NO	.	Sheet No. of
DWG NO	LM-U0254B3TL001	Revision No. 0

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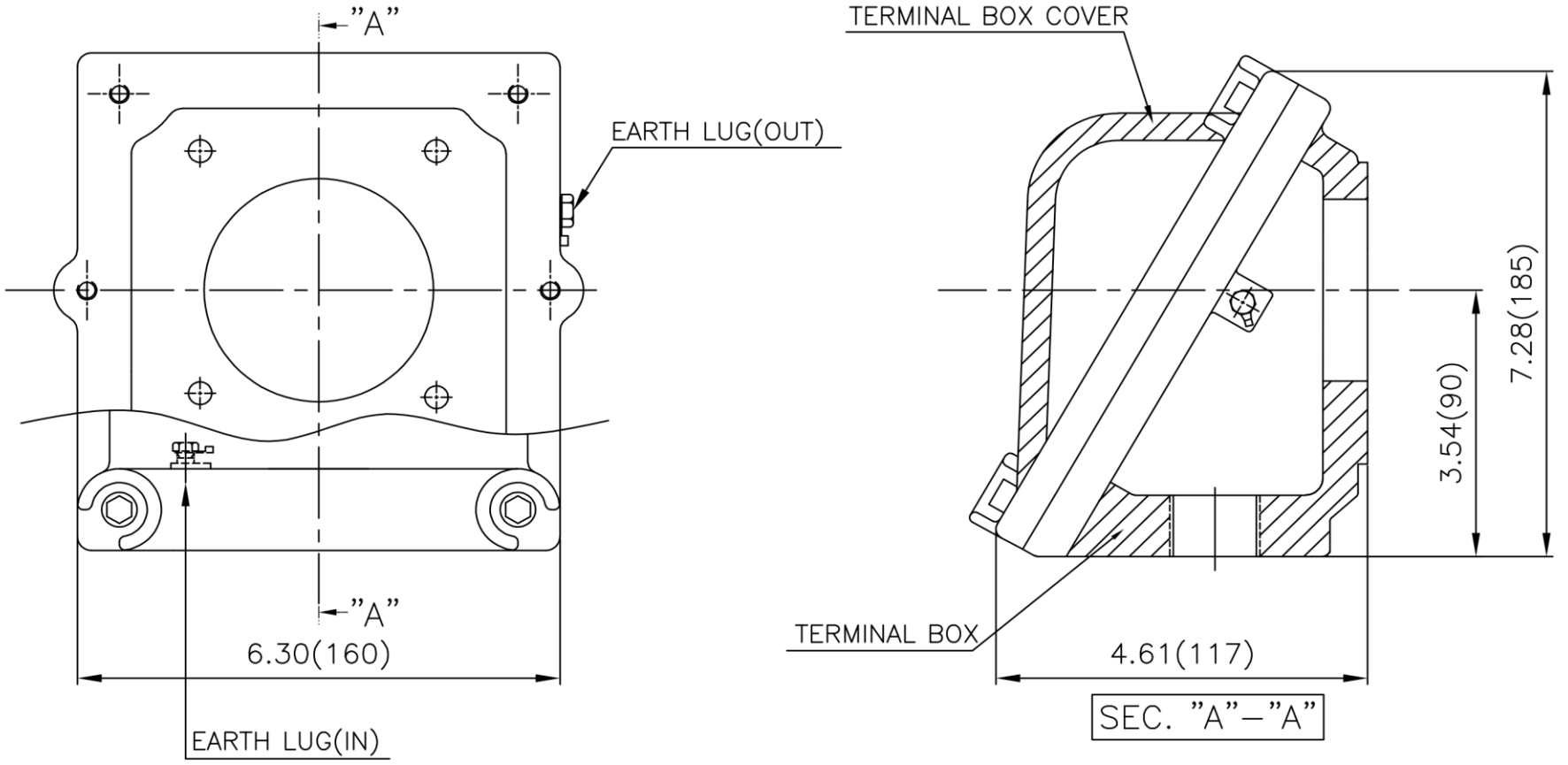
Cls. I Div. 1



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▽	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

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
APPD BY	S.Y.KIM	UNIT	inch(mm)	SUBJECT	NEMA FR. 250~280(CAST IRON)		DWG SIZE A3 (1:1.5)
CHKD BY	R.G.KIM	SCALE	1/1.5	TITLE	MAIN TERMINAL BOX ASS'Y		
CHKD BY		PROJEC'N	3rd Angle				
DSND BY	김은진	DATE	2023-11-08	REF. NO		Sheet No. of	
				DWG NO	3M–248637	Revision No. 0	

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