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.	IXHHI7.5-18-213T	Item No.		Rev. No.	[ ]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION

Frame Size		213T
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	6208ZZC3 / 6208ZZC3
	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		5.5 kW		7.5 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	7.82 A	9.78 A	19.6 A
	Locked-rotor**	940 %	940 %	940 %
Efficiency				
	50% Load	88.7 %		
	75% Load	90.7 %		
	100% Load	91.7 %		
Power Factor(p.u)				
	50% Load	0.620		
	75% Load	0.720		
	100% Load	0.770		
Speed at Full Load		1775 r.p.m		
Torque				
	Full Load	21.83 lb.ft		
	Locked-rotor**	190 %		
	Breakdown**	250 %		
Moment of Inertia (J)				
	Load(Max.)	46.042 lb.ft2		
	Motor	0.570 lb.ft2		
Sound Pressure Level (No-load & mean value at 1m from motor)		69 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-U1213B3TL001	160 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, 10.5Hz to 60Hz 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)
   -. T2C(230°C) at 40°C Amb. / T2B(260°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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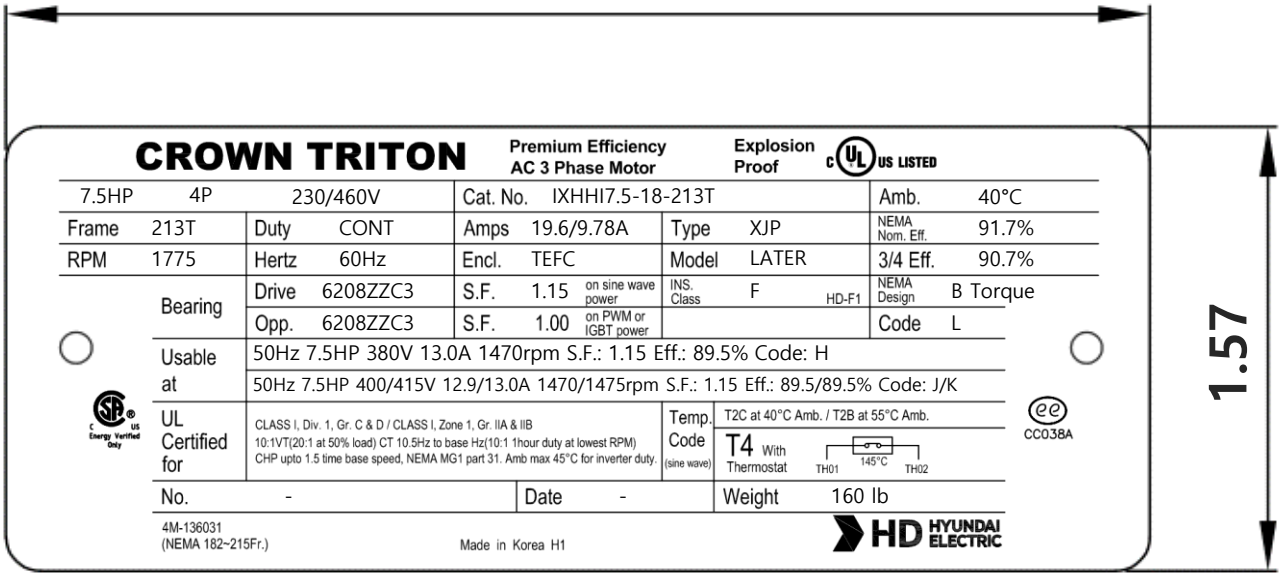
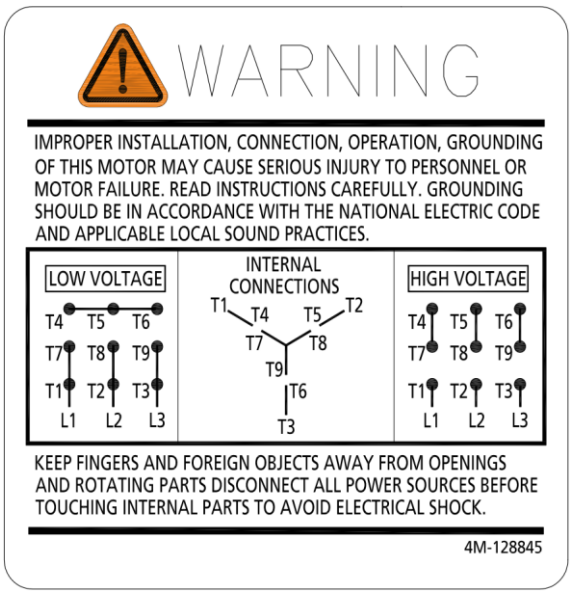
REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

▣ MAIN NAMEPLATE

3.94



▣ WIRING DIAGRAM

D.O.L (INVERTER & SOFT STARTER)	WYE-DELTA (Y-D)
	N/A

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

SUBJECT	UL Class I, Division1 (IXHHI, 182-215)		DWG SIZE A4 (1:1)
TITLE	NAMEPLATE DRAWING		
REF. NO	4M-136031 / 4M-128845	Sheet No.	of
DWG NO	NP-IXHHI7.5-18-213T	Revision No.	0

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HYUNDAI ELECTRIC

PERFORMANCE CURVE

CURVE NO.

PC-IXHHI7.5-18-213T

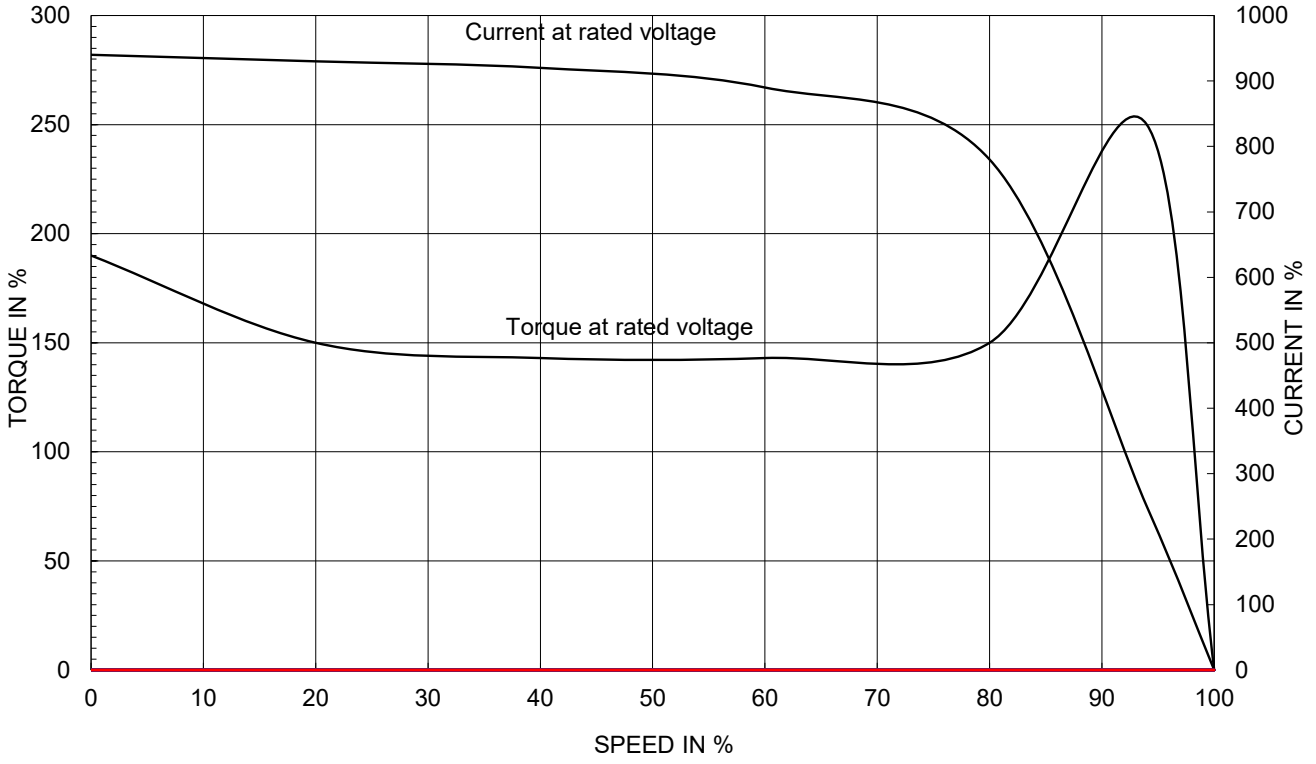
Type :	XJP	
Full Load Torque :	21.83	lb.ft
Load moment of Inertia (J) :	46.042	lb.ft2
Motor moment of Inertia (J) :	0.570	lb.ft2

5.5kW 7.5HP 4 P 60 Hz

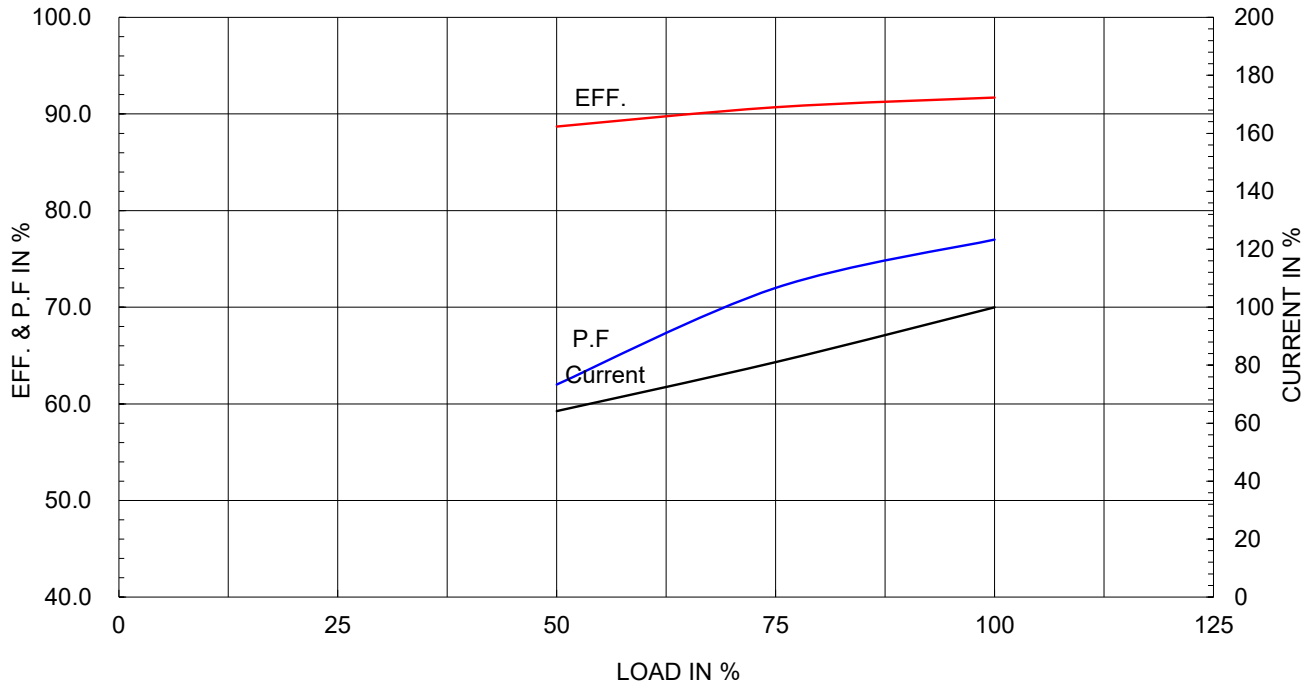
Speed at Full Load : 1775 RPM

Rated Voltage	575V	460V	230V
Full Load Current	7.82A	9.78A	19.6A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



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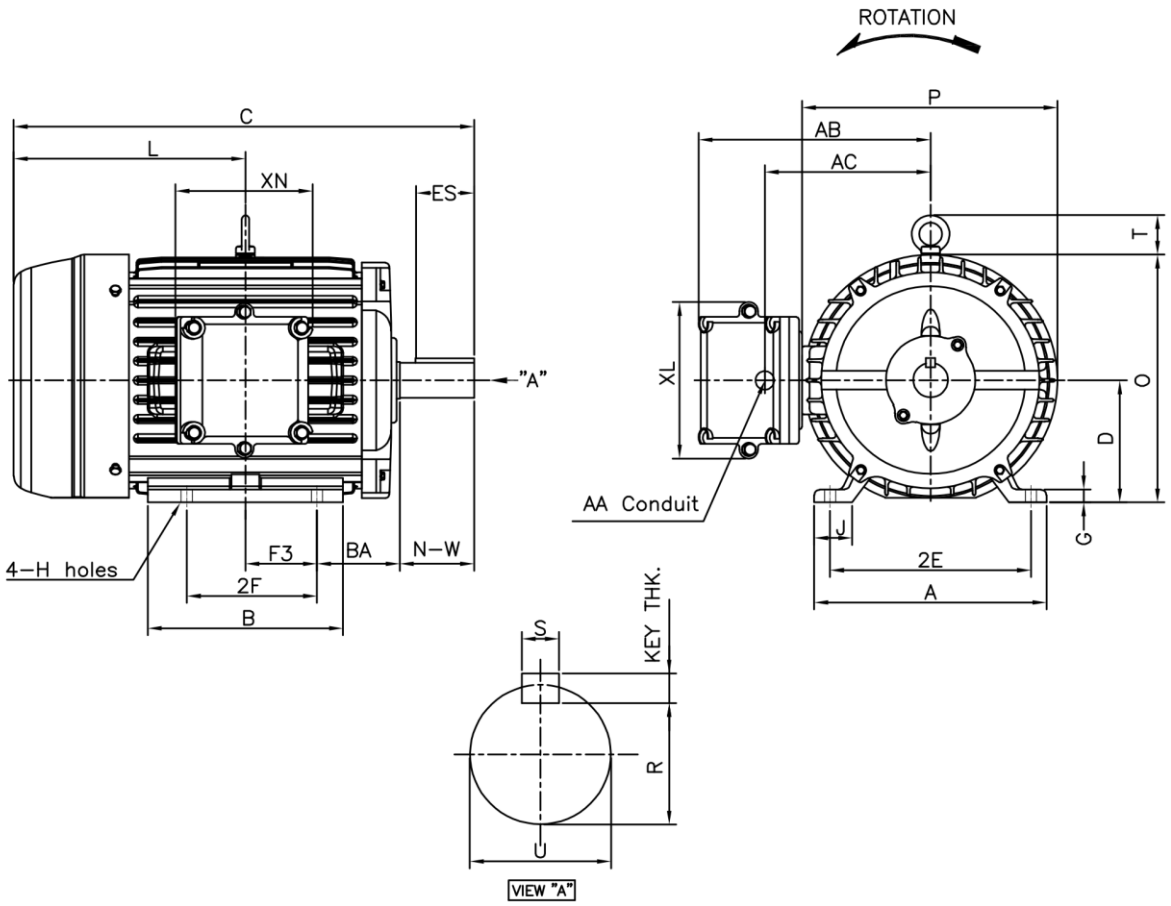
허가없이 복사할 수 없음 (취급유의)

	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	2F	–	F3	G	J	H	AA	AB	AC	XB	XL	XN	
9.84	8.26	8.50	5.50	–	3.03	0.55	1.61	0.41	1.00	9.80	7.01	–	6.69	5.98	160

OVERALL							SHAFT					KEY THK.	BEARING	
BA	C	D	L	O	P	T	U	N–W	KEYWAY				DRIVE END	OPP. DRIVE END
									R	ES	S			
3.50	19.48	5.25	9.80	10.59	10.83	1.69	1.375	3.38	1.201	2.41	0.312	0.312	6208ZZC3	6208ZZC3

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.W.KIM	UNIT	INCH
CHKD BY	I.K.KIM	SCALE	1/7
CHKD BY	-	PROJEC'N	3각법(3rd Angle)
DSND BY	S.H.BAE	DATE	2025-07-24

SUBJECT	NEMA 213T		DWG SIZE A4 (1:7)
TITLE	OUTLINE		
REF. NO		Sheet No.	of
DWG NO	LM-U1213B3TL001	Revision No.	0

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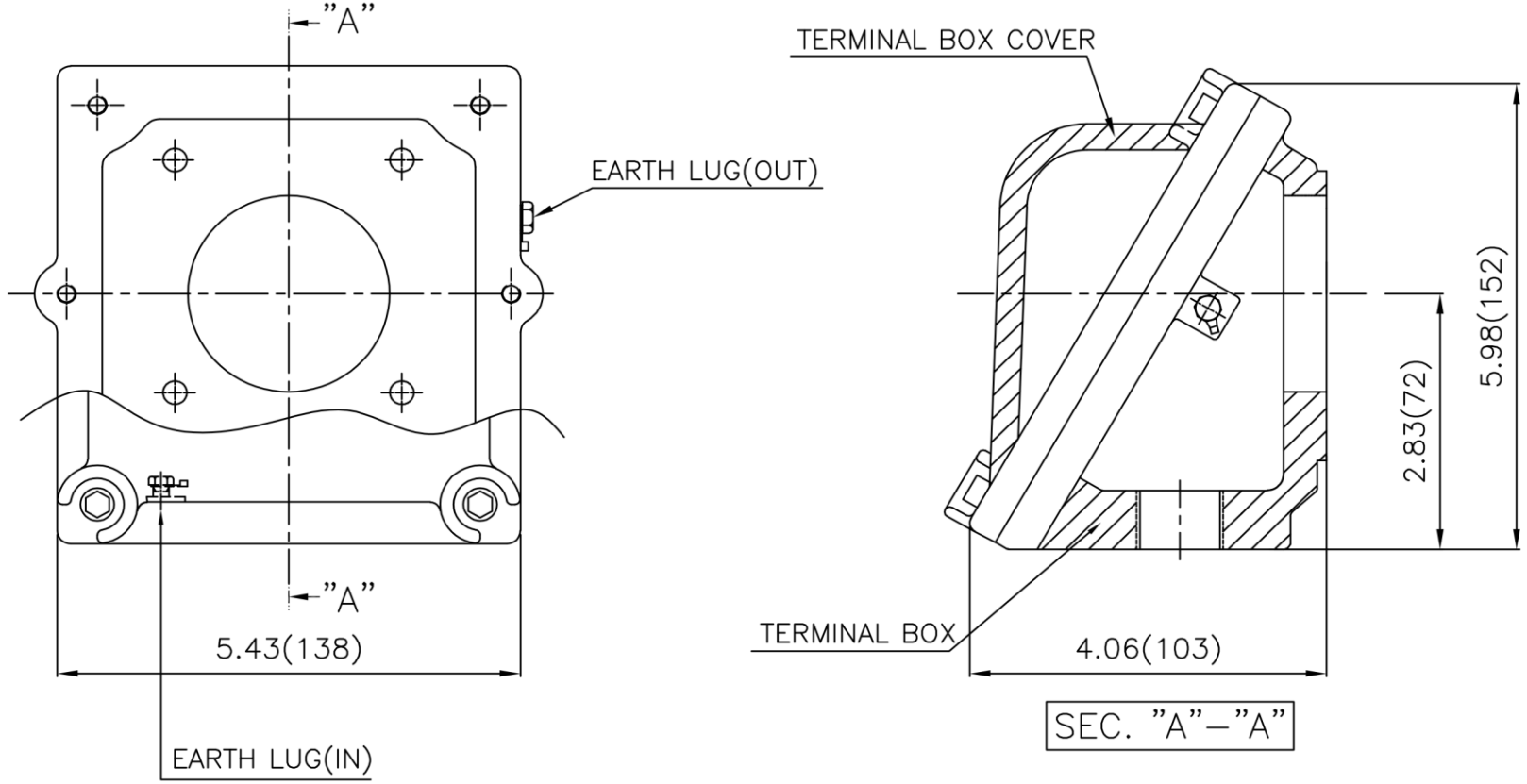
Cls. I Div. 1



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▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

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

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
APPD BY	S.Y.KIM	UNIT	Inch(mm)	SUBJECT	NEMA FR. 180~210(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	2023-10-24	REF. NO		Sheet No. of	
				DWG NO	3M–248496	Revision No. 0	

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