

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

Catalog No.		HSDE800-36-5812S-IBSHSP		Item No.		Rev. No. [      ]			
Project Name		Project No.		Quantity		sets			
GENERAL SPECIFICATION				PERFORMANCE DATA					
Frame Size		5812S		Rated Output		600 kW      800 HP			
Type		HNE6		Number of Poles		2			
Enclosure(Protection)		Totally Enclosed / IP55		Rotor Type		Squirrel Cage			
Method of Cooling		IC411(FC)		Starting Method*		D.O.L			
Rated Frequency		60 Hz		Rated Voltage		575 V      460 V      230 V			
Number of Phases		3		Current		Full Load      706.6 A      883.2 A      1,766.5 A			
Insulation Class		F		Locked-rotor**		650 %      650 %      650 %			
Temp. Rise at full load (by resistance method)				Efficiency					
at 1.0 S.F		80 deg. C		50% Load		92.8 %			
Motor Location		<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor		75% Load		94.8 %			
Altitude		Less than 1,000 meter		100% Load		95.8 %			
Relative Humidity		Less than 80 %		Power Factor(p.u)					
Ambient Temp.		40 deg. C (Max.)		50% Load		0.740			
Duty Type		Continuous ( S1 )		75% Load		0.840			
Service Factor		1.15		100% Load		0.890			
Mounting		B3		Speed at Full Load		3570 r.p.m			
Bearing		Type		Torque					
		DE/N-DE		Full Load		1,184.0 lb.ft			
		Lubricant		Locked-rotor**		130 %			
External Thrust		Not applicable		Breakdown**		240 %			
Coupling Method		<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt		Moment of Inertia (J)					
Shaft Extension		Single		Load(Max.)		574.869 lb.ft2			
Terminal Box		Main		Motor		121.840 lb.ft2			
		Aux.		Sound Pressure Level (No-load & mean value at 1m from motor)					
Location		Refer to Outline Drawing		89 dB(A)					
Application				Vibration					
Area classification		Hazardous		3.8 mm/sec (peak)					
Type of Ex-Protection		Class I, Division 2		Permissible number of consecutive starts		Cold      2 times			
Applicable Standard		NEMA MG1, CSA C390		Hot		1 time			
				Paint		Munsell No. 4.0PB5.4/5.5(VL-451)			
ACCESSORIES				SUBMITTAL DRAWING					
*. Space Heater : 1EA/Motor				Outline Dimension Drawing \ Motor Weight(Approx.)					
				B3		LM-T5812B3CE001		6730 lb.	
				REMARK					
				1. Premium efficiency according to NEMA MG1 2. Inverter Duty @ 1.0 Service Factor & F Temperature rise -. 10:1 VT -. 2:1 CT 3. NDE side : Insulated bearing 4. CSA Certification -. Class I, Division 2, Group A, B, C & D; Temp code : T3A 5. Shaft material : AISI4140 6. Uni-directional CCW viewed from drive end.					
				Date		DSND      CHKD      CHKD      APPD			
				2024-07-13		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

4.72

**CROWN TRITON**  
Premium Efficiency AC 3 Phase Motor

800HP	2P	460V	Cat. No.	HSDE800-36-5812S-IBSHSP			
Model	LATER		INS. Class	F	Amps	883.2	
Type	HNE6	Duty	CONT	Code	G	Amb. 40°C	
Frame	5812S	Encl.	TEFC	S.F.	1.15	RPM 3570	
Bearing	Drive	6316C3	S.F.1.00 (2:1 C.T., 10:1 V.T., NEMA-MG1 Part31)			3/4 Eff.	94.8%
	Opp.	6316C3-INS.				NEMA Design	B Torque
Usable at							
CSA Certified for	CLASS I, Div. 2, Gr. A, B, C & D			Temp. Code (sine wave)	Frame	580FR	
					Maximum Amb. 50°C	T3A (180°C)	
No.	-	Date	-	Weight	6730 lb		

4M-136358      Made in Korea H1     

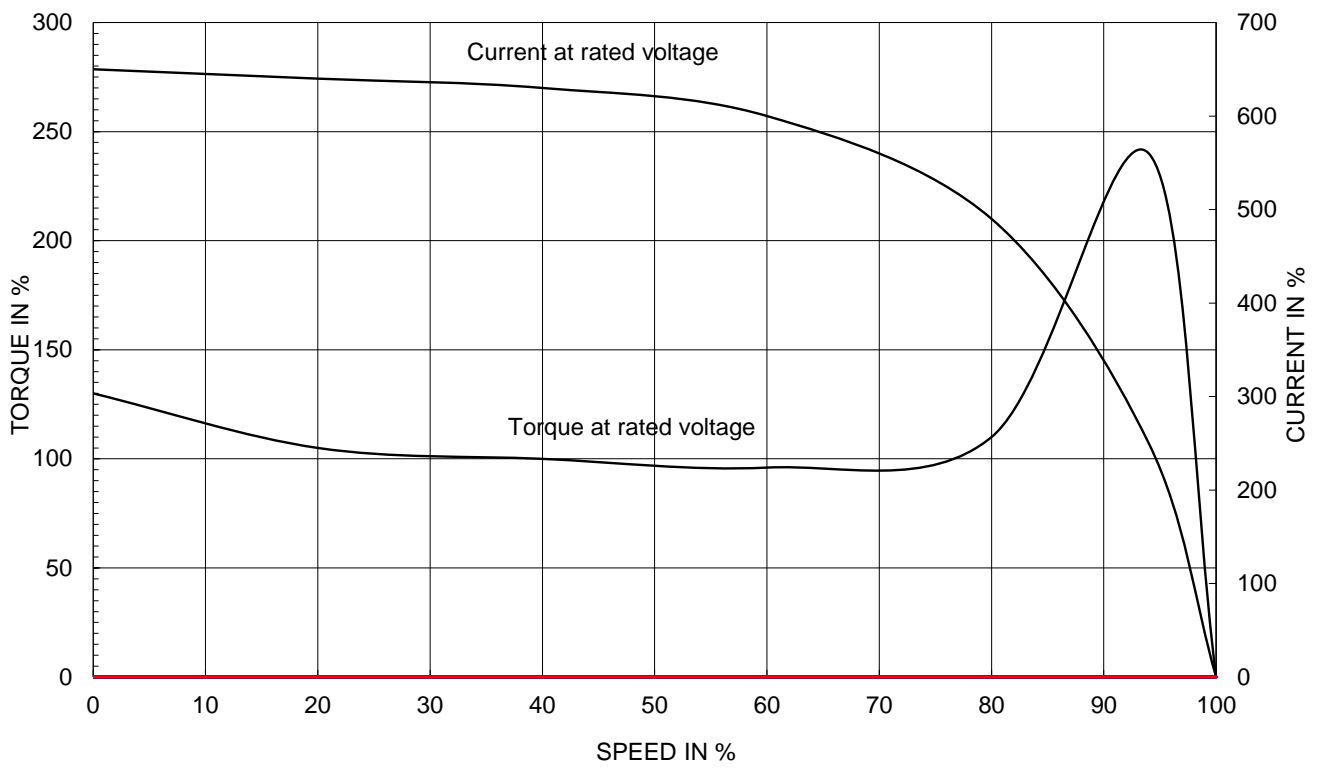
2.36

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 Severe Duty (HSDE ,5812)	DWG SIZE
CHKD BY	I.K.KIM	SCALE	NONE			A4 ( 1:1 )
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	TITLE <b>NAMEPLATE DRAWING</b>		
DSND BY	S.H.LEE	DATE	2024.06.07			
				REF. NO	<b>4M-136358</b>	Sheet No. of
				DWG NO	NP-HSDE800-36-5812S-IBSHSP	Revision No. <b>0</b>

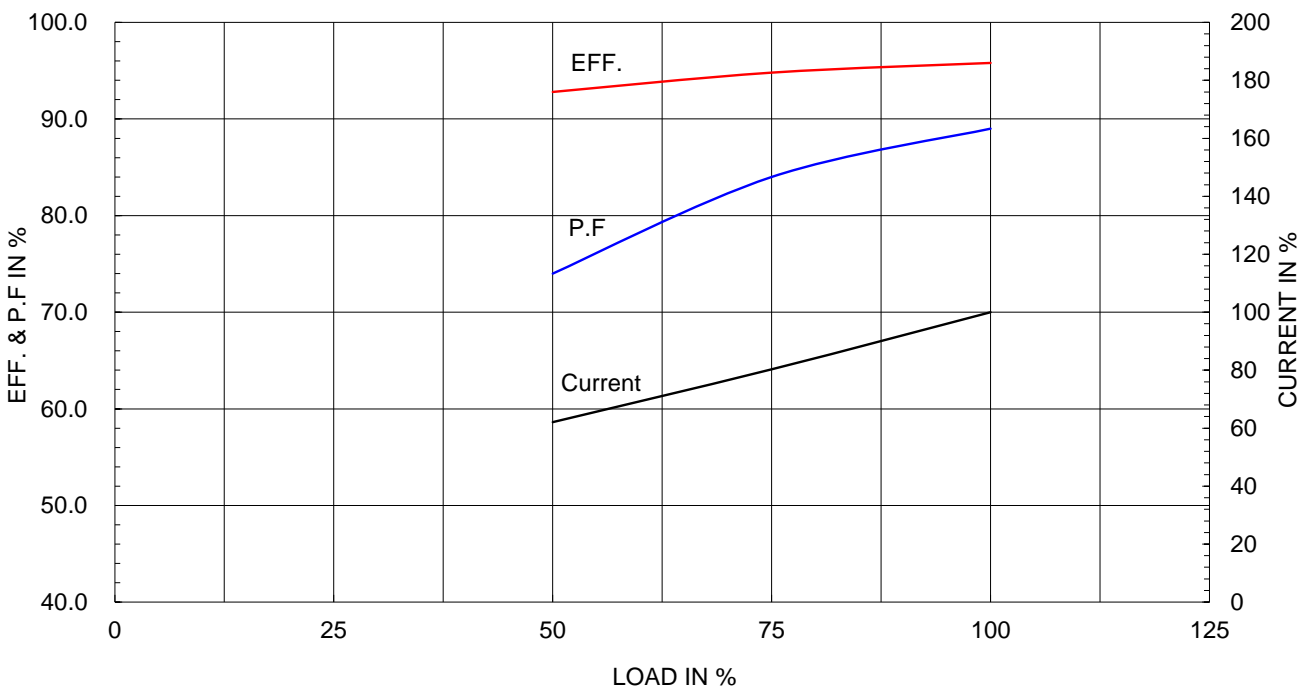
Type :	HNE6
Full Load Torque :	1184.0 lb.ft
Load moment of Inertia (J) :	574.869 lb.ft2
Motor moment of Inertia (J) :	121.840 lb.ft2

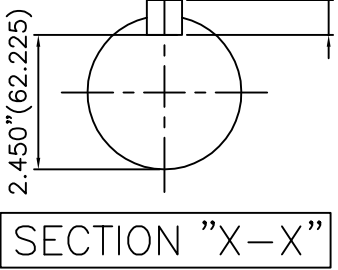
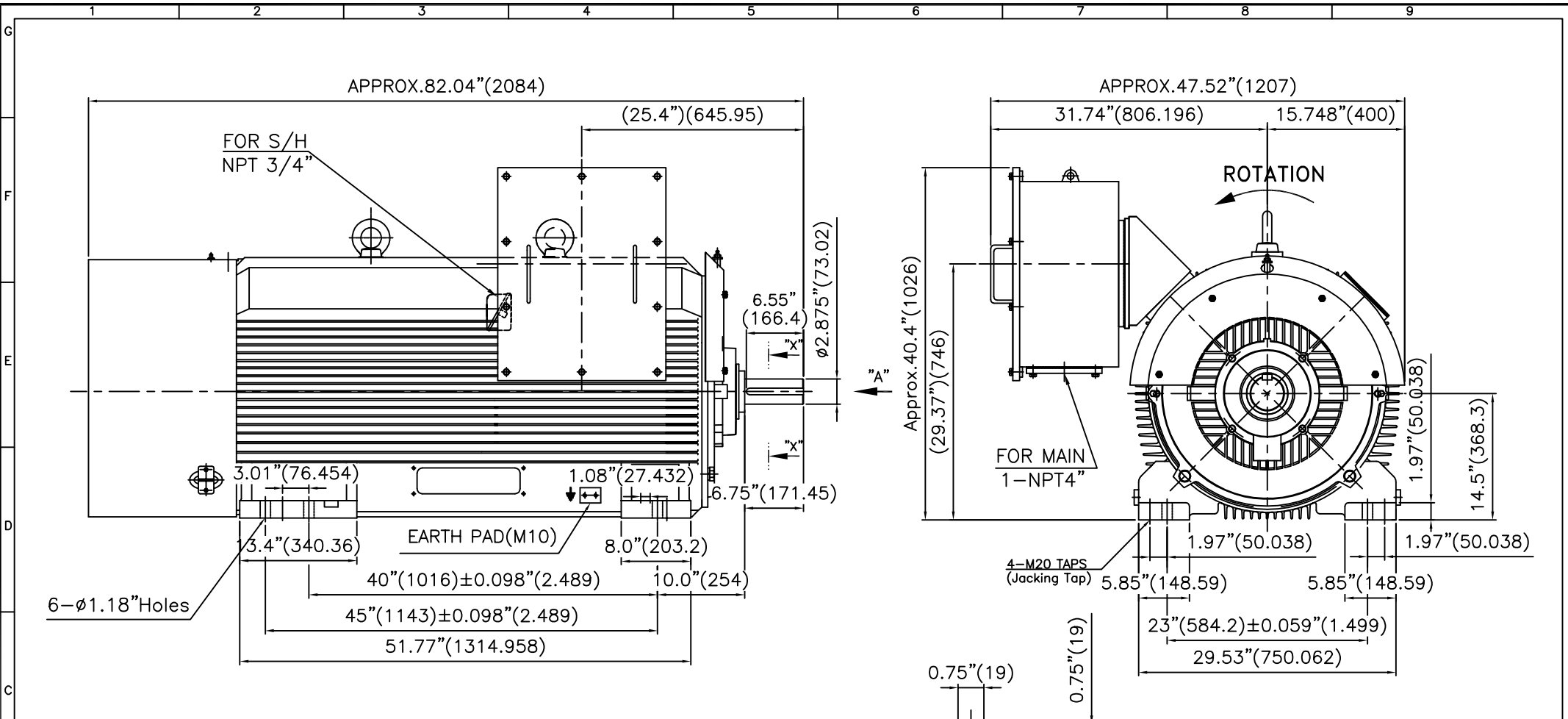
600kW 800HP	2 P	60 Hz
Speed at Full Load :		3570 RPM
Rated Voltage	575V	460V 230V
Full Load Current	706.6A	883.2A #####

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE





VIEW "A"

**TECHNICAL INFORMATION**

**1) BEARING & LUBRICANT LIST**

BEARING	Drive End	Non-Drive End
Bearing Type	6316C3	6316C3
Lubricant Type	GREASE	GREASE
Grease Type	Mobil(Polyrex-EM)	Mobil(Polyrex-EM)
Initial Charge Quantity	200 g	200 g
Mark-Up	Quantity	33 g
	Interval	2 MONTHS

**2) TOLERANCE :**

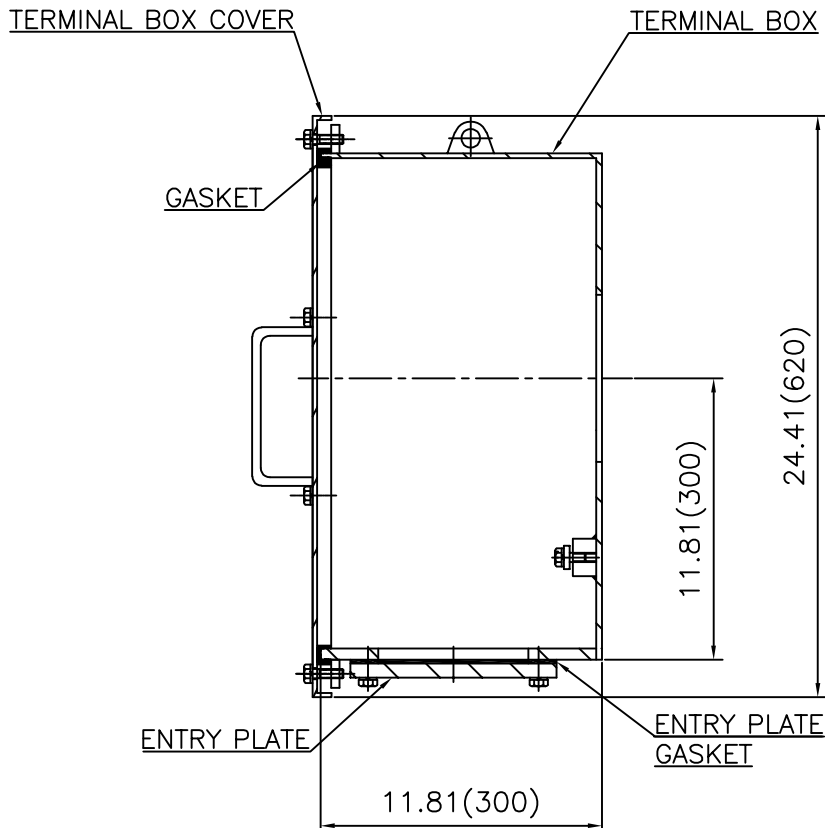
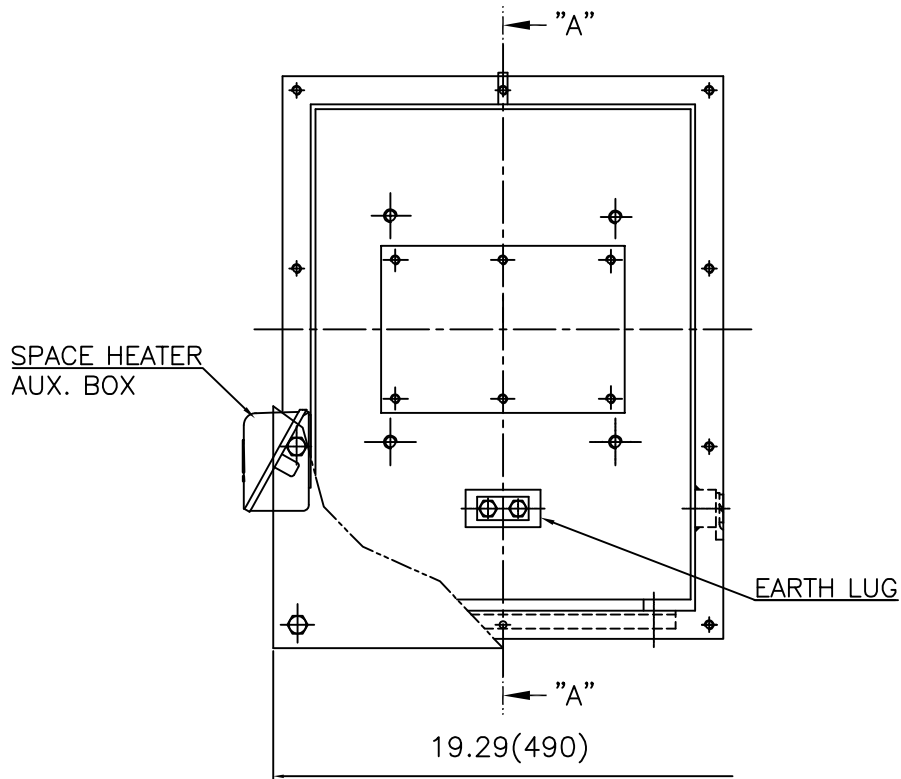
CENTER HEIGHT	14.5	+0.000	-0.060
SHAFT DIAMETER	Ø2.875	+0.000	-0.001
KEYWAY WIDTH	0.75	+0.003	-0.000

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK
APPD BY	S.K.HAN	UNIT	INCH(MM)	SUBJECT	Fr.5812-2P	
CHKD BY	S.Y.KIM	SCALE	1/12	TITLE	OUTLINE	
CHKD BY	R.G.KIM	PROJEC'N	3각법 (3rd Angle)	REF. NO		Sheet No. of
DSND BY	M.S.HA	DATE	2019.05.16	DWG NO	LM-T5812B3CE001	Revision No.



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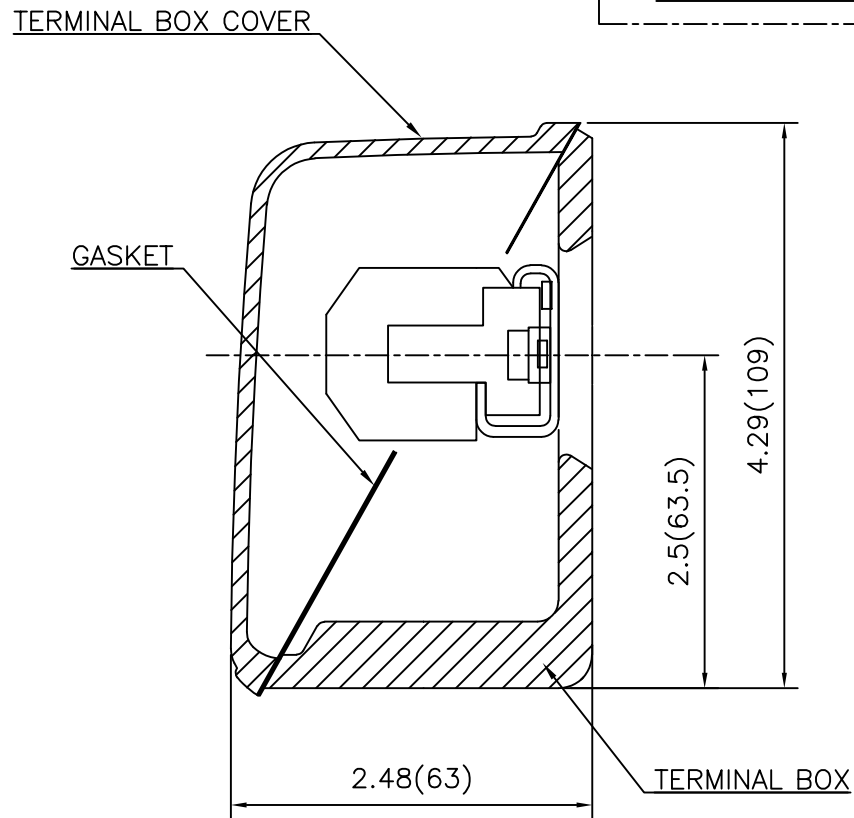
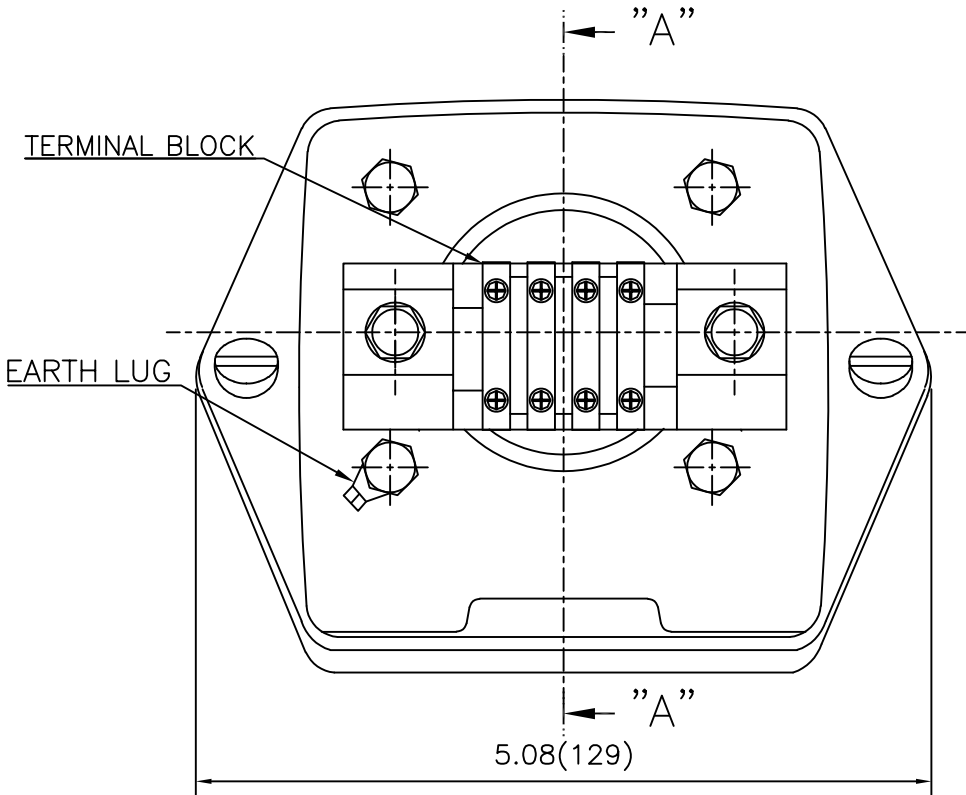
SEC. "A" - "A"

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APPD BY	S.Y.KIM	UNIT	inch(mm)	SUBJECT	FR.580 (STEEL)	DWG SIZE	A3 (1:6)
CHKD BY		SCALE	1/6	TITLE	MAIN TERMINAL BOX ASS'Y		
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	REF. NO		Sheet No.	of
DSND BY	백승희	DATE	2023-10-25	DWG NO	3M-248512	Revision No.	0



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REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

APPD BY	S.Y.KIM	UNIT	inch(mm)	SUBJECT	FR.180 (CAST IRON)	DWG SIZE
CHKD BY		SCALE	1/1	TITLE	SUB. TERMINAL BOX ASS'Y	A3 (1:1.1)
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle			
DSND BY	배승희	DATE	2024-01-18			
				REF. NO		Sheet No. of
				DWG NO	3M-165278	Revision No. 0