

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.	HSDE300-12-L449T-IBSH	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	L449T	Rated Output	225 kW			300 HP
Type	PJP	Number of Poles	6			
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	280.7 A	350.9 A	701.9 A
Insulation Class	F	Locked-rotor**	675 %	675 %	675 %	
Temp. Rise at full load (by resistance method)	at 1.0 S.F		Efficiency			
	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	0.690		
Duty Type	Continuous (S1)		75% Load	0.790		
Service Factor	1.15		100% Load	0.840		
Mounting	B3	Speed at Full Load	1185 r.p.m			
Bearing	Type	Anti-Friction	Torque			
	DE/N-DE	NU322 / 6318C3-INS.	Full Load	1,337.6 lb.ft		
	Lubricant	Grease(Polyrex-EM)	Locked-rotor**	135 %		
External Thrust	Not applicable		Breakdown**	220 %		
Coupling Method	<input type="checkbox"/> Direct <input type="checkbox"/> V-belt		Moment of Inertia (J)			
Shaft Extension	Single		Load(Max.)	3,240.000 lb.ft2		
Terminal Box	Main	Cast Iron	Motor	172.297 lb.ft2		
	Aux.	Yes	Sound Pressure Level (No-load & mean value at 1m from motor)			
	Location	Refer to Outline Drawing	80 dB(A)			
Application			Vibration			
Area classification	Hazardous		3.8 mm/sec (peak)			
Type of Ex-Protection	Class I&II, 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

*. Space Heater : 1EA/Motor

SPARE PARTS

SUBMITTAL DRAWING

Outline Dimension Drawing	Motor Weight(Approx.)		
B3	LM-T044XB3UE001	3320 lb.	

REMARK

- Premium efficiency according to NEMA MG1
- Inverter Duty @ 1.0 Service Factor & F Temperature rise
 - 10:1 VT (20:1 VT at 50% load)
 - 10:1 CT
 - CHp up to 1.5 times base speed, NEMA MG1 Part31
- NDE side : Insulated bearing
- CSA Certification
 - Class I, Division 2, Group A, B, C & D; Temp code : T3
 - Class II, Division 2 Group F & G; Temp code : T3
- Shaft material : AISI4140

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.

1	2	3	4
REV	DATE	CONTENTS	REVD BY

4.72

CROWN TRITON


Premium Efficiency AC 3 Phase Motor

300HP 6P 460V		Cat. No. HSDE300-12-L449T-IBSH	
Model	LATER	INS. Class	F
Type	PJP	Duty	CONT
Frame	L449T	Encl.	TEFC
Bearing	Drive	NU322	S.F. 1.15
	Opp.	6318C3-INS.	RPM 1185
Usable at		NEMA Nom. Eff. 95.8%	
CSA Certified for	CLASS I, Div. 2, Gr. A, B, C & D	CLASS II, Div. 2, Gr. F & G	Temp. Code (sine wave)
	CLASS I, Zone 2, Gr. IIA, IIB, & IIC		Frame L440FR - 500FR
			Amb. 40°C T3 (200°C)
No.	-	Date	-
4M-136053		Weight 3320 lb	

MARINE DUTY IIEEE45 Made in Korea H1 **HD HYUNDAI ELECTRIC**

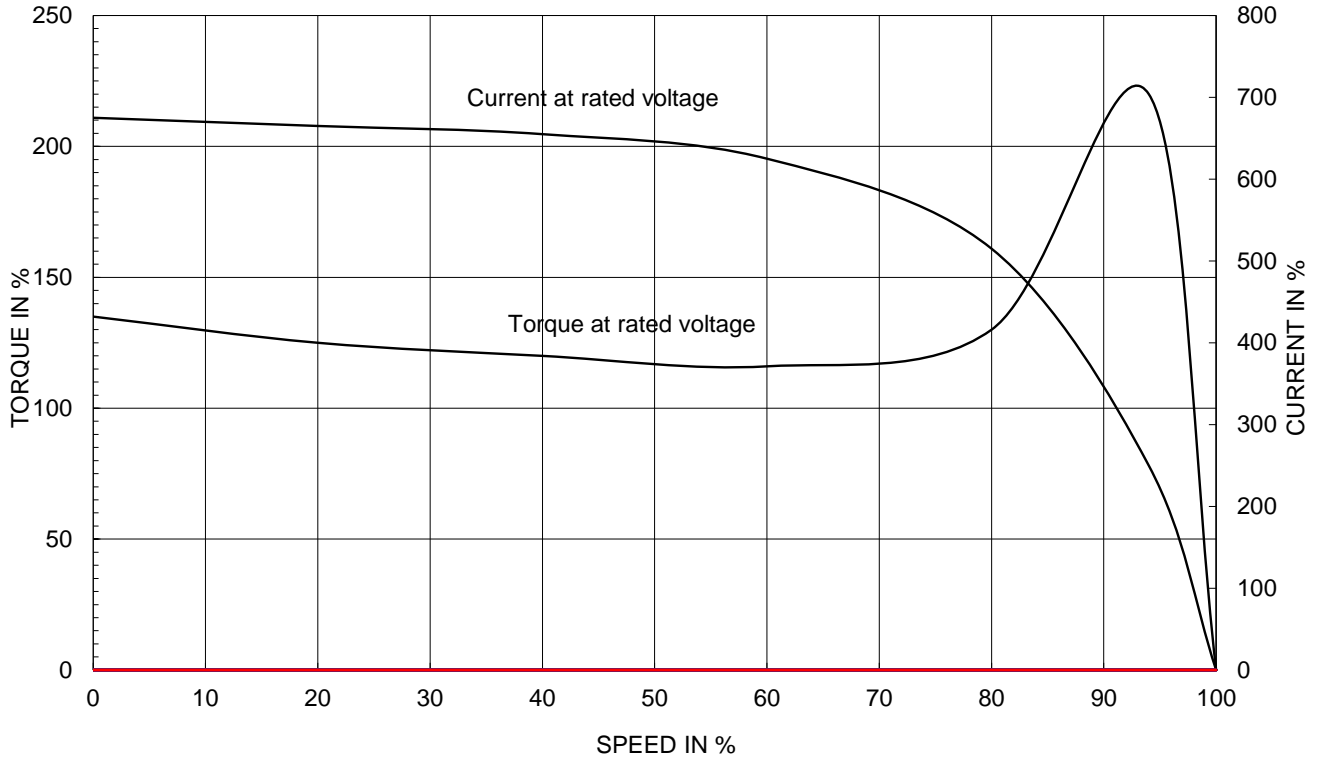
2.36

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 Severe Duty (HSDE ,L449-500)	DWG SIZE
CHKD BY	I.K.KIM	SCALE	NONE			A4 (1:1)
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	TITLE NAMEPLATE DRAWING		
DSND BY	S.H.LEE	DATE	2024.06.07			
				REF. NO	4M-136053	Sheet No. of
				DWG NO	NP-HSDE300-12-L449T-IBSH	Revision No. 0

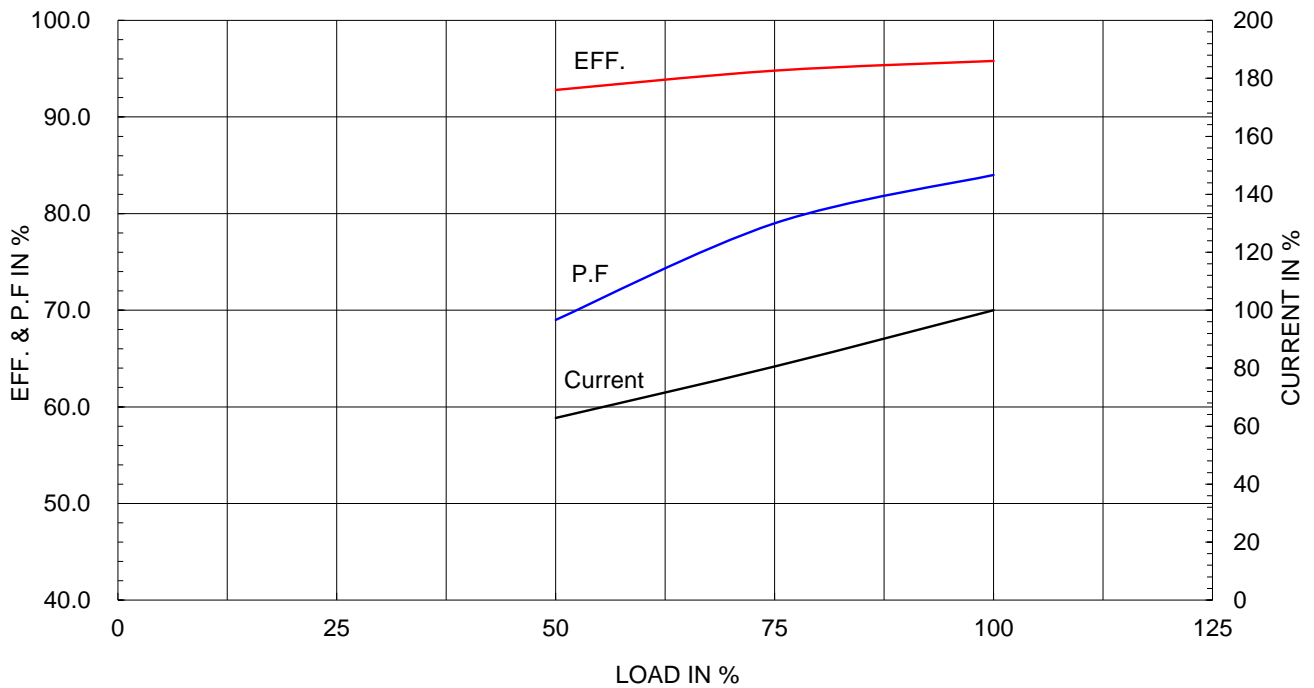
Type :	PJP
Full Load Torque :	1337.6 lb.ft
Load moment of Inertia (J) :	3240.000 lb.ft ²
Motor moment of Inertia (J) :	172.297 lb.ft ²

225kW 300HP	6 P	60 Hz
Speed at Full Load :		1185 RPM
Rated Voltage	575V	460V 230V
Full Load Current	280.7A	350.9A 701.9A

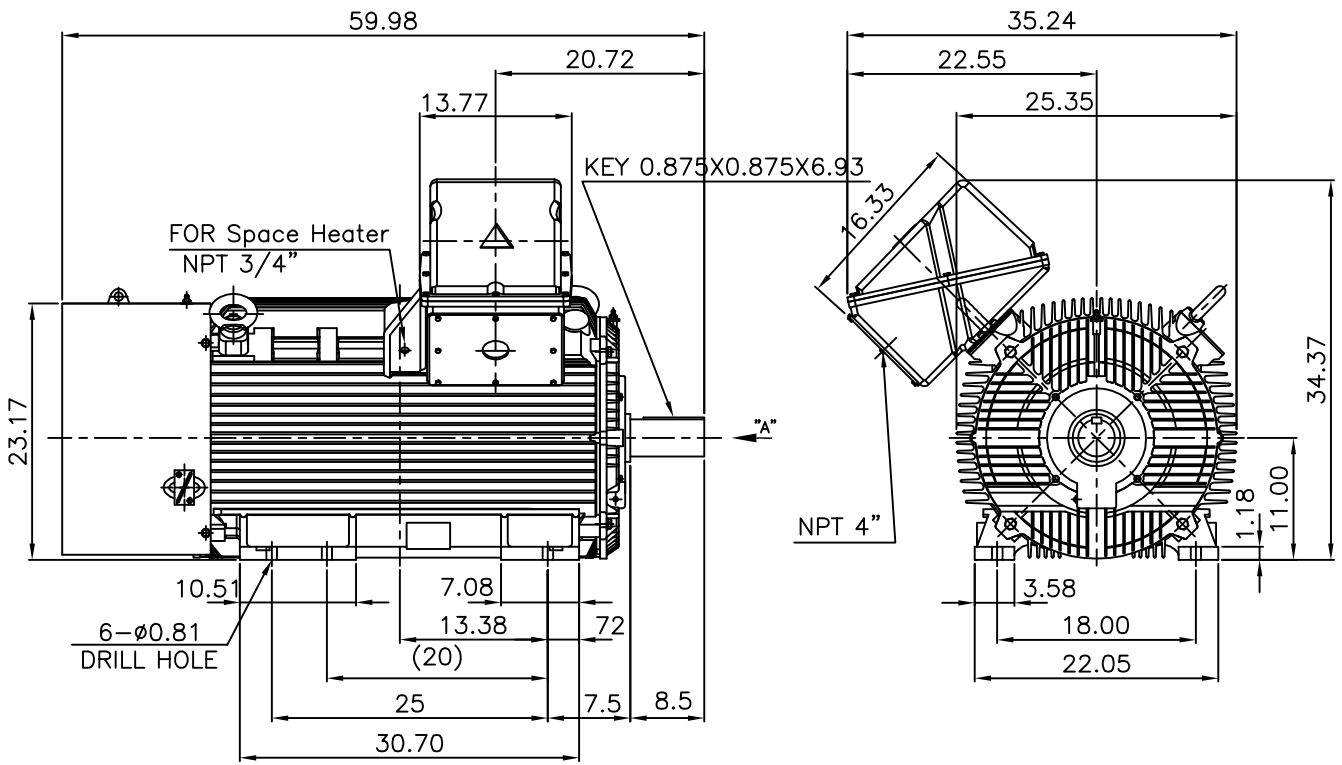
SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



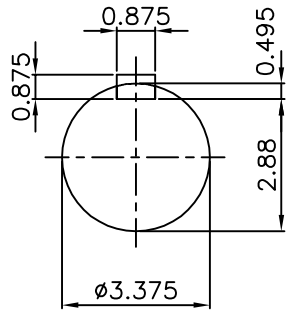
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▽▽▽	3.2S							
▽▽▽▽	0.4S							



NOTE

1.TOLERANCE :

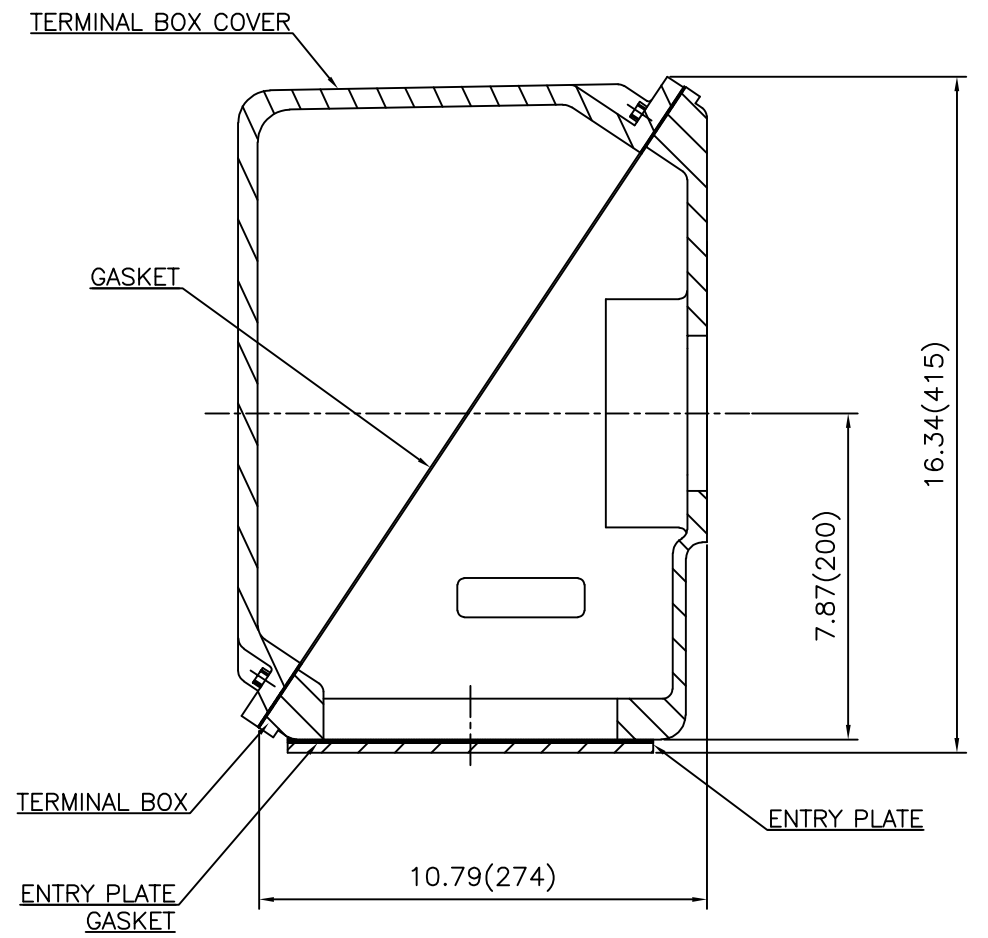
CENTER HEIGHT	11	+0.000	-0.060
SHAFT DIAMETER	ø3.375	+0.000	-0.001
KEYWAY WIDTH	0.875	+0.003	-0.000



VIEW "A"

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	Fr.L449T	DWG SIZE
CHKD BY	O.J.KIM	SCALE	1/18			A4 (1:18)
CHKD BY	R.G.KIM	PROJEC'N	3각법 (3rd Angle)	TITLE		NEMA STD SHAFT(4140 SHAFT) OUTLINE
DSND BY	H.K.LEE	DATE	2021-04-27			

**Cls. I&II, Div. 2
IEEE 841**



SEC. "A" - "A"

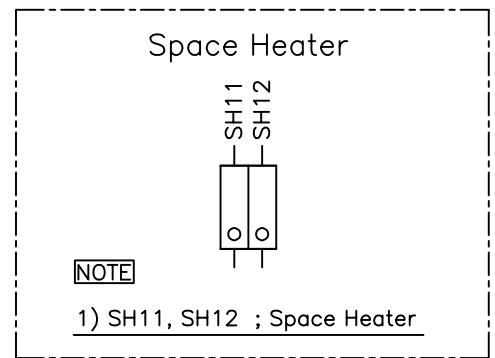
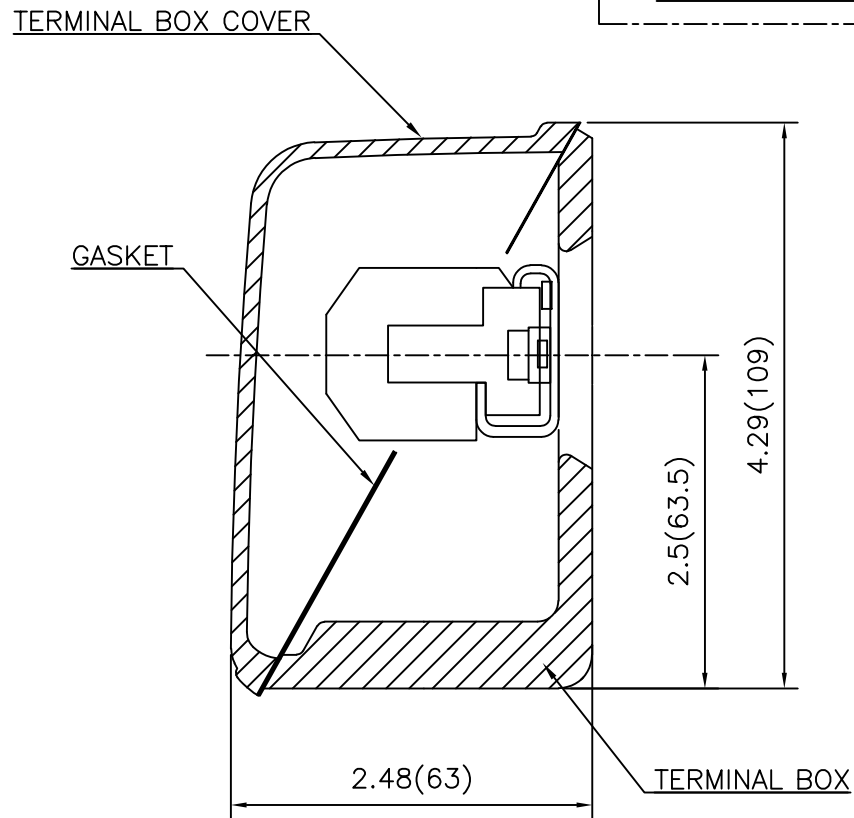
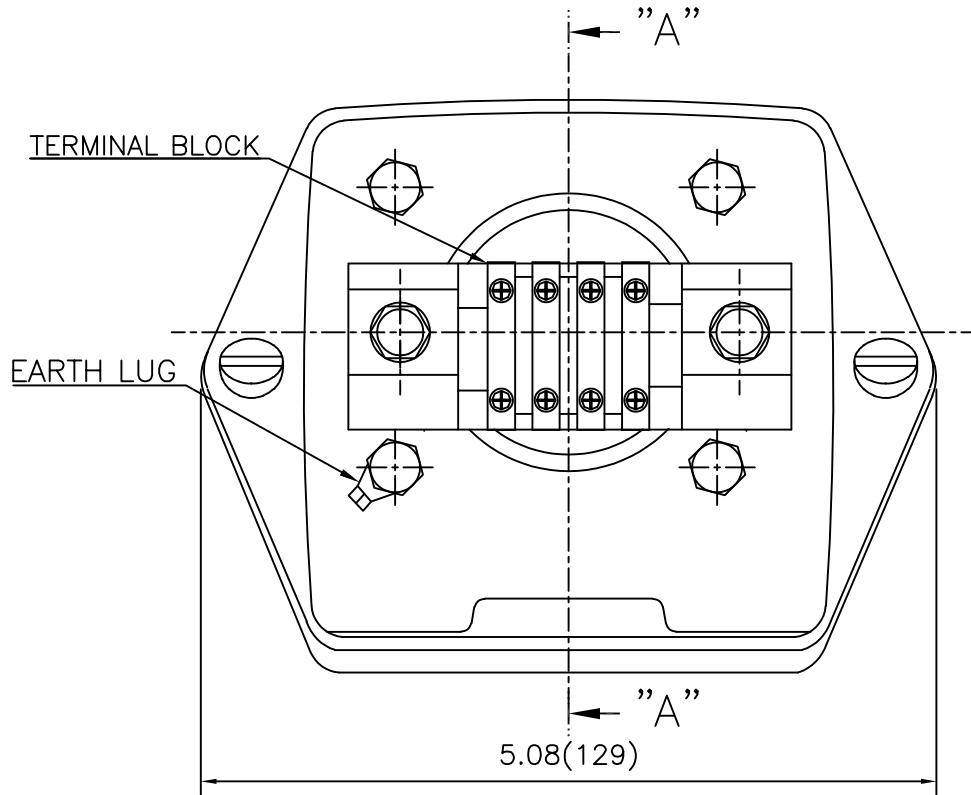
REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

APPD BY	S.Y.KIM	UNIT	inch(mm)	SUBJECT	FR. L440 (CAST IRON)	DWG SIZE
CHKD BY		SCALE	1/3.5	TITLE	MAIN TERMINAL BOX ASS'Y	A3 (1:3.5)
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle			
DSND BY	최승희	DATE	2023-10-19			
				REF. NO		Sheet No. of
				DWG NO	3M-248452	Revision No. 0

**Cls. I&II, Div. 2
IEEE 841**

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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-165277	Revision No. 0