

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	Anti-Friction				
	DE/N-DE	6316C3 / 6316C3-INS.				
	Lubricant	Grease(Polyrex-EM)				
External Thrust	Not applicable					
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt	Torque				
Shaft Extension	Single	Full Load		1,184.0 lb.ft		
Terminal Box	Main	Locked-rotor**		130 %		
	Aux.	Breakdown**		240 %		
Box Location	Refer to Outline Drawing	Moment of Inertia (J)				
Application		Load(Max.)		574.869 lb.ft2		
Area classification	Hazardous	Motor		121.840 lb.ft2		
Type of Ex-Protection	Class I, Division 2	Sound Pressure Level (No-load & mean value at 1m from motor)				
Applicable Standard	NEMA MG1, CSA C390	89 dB(A)				
ACCESSORIES *. Space Heater : 1EA/Motor		SUBMITTAL DRAWING				
		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
2024-09-10	S.H. Lee	I.K. Kim	R.G. Kim	S.W. Kim		

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		2024-09-10	S.H. Lee	I.K. Kim	R.G. Kim	S.W. Kim

SPARE PARTS	
1. Spare Axial Fan (C.W Direction)	

[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

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)		NEMA Nom. Eff.	95.8%	
	Opp.	6316C3-INS.				3/4 Eff.	94.8%	
Usable at	50Hz 600HP 380V 811A 2970rpm S.F.: 1.15 Eff.: 95.8% Code: G							
	50Hz 600HP 400/415V 770.45/751.06A 2972/2975rpm S.F.: 1.15 Eff.: 95.8/95.81% Code: H/J							
CSA Certified for	CLASS I, Div. 2, Gr. A, B, C & D			Temp. Code	(sine wave)	Frame	580FR	
						Maximum Amb.	50°C	
No.	-			Date	-		Weight	6730 lb

No. 4M-136358 Date - Weight 6730 lb
 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	TITLE	NAMEPLATE DRAWING	A4 (1:1)
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle			
DSND BY	S.H.LEE	DATE	2024.06.07			
				REF. NO	4M-136358	Sheet No. of
				DWG NO	NP-HSDE800-36-5812S-IBSHSP	Revision No. 0



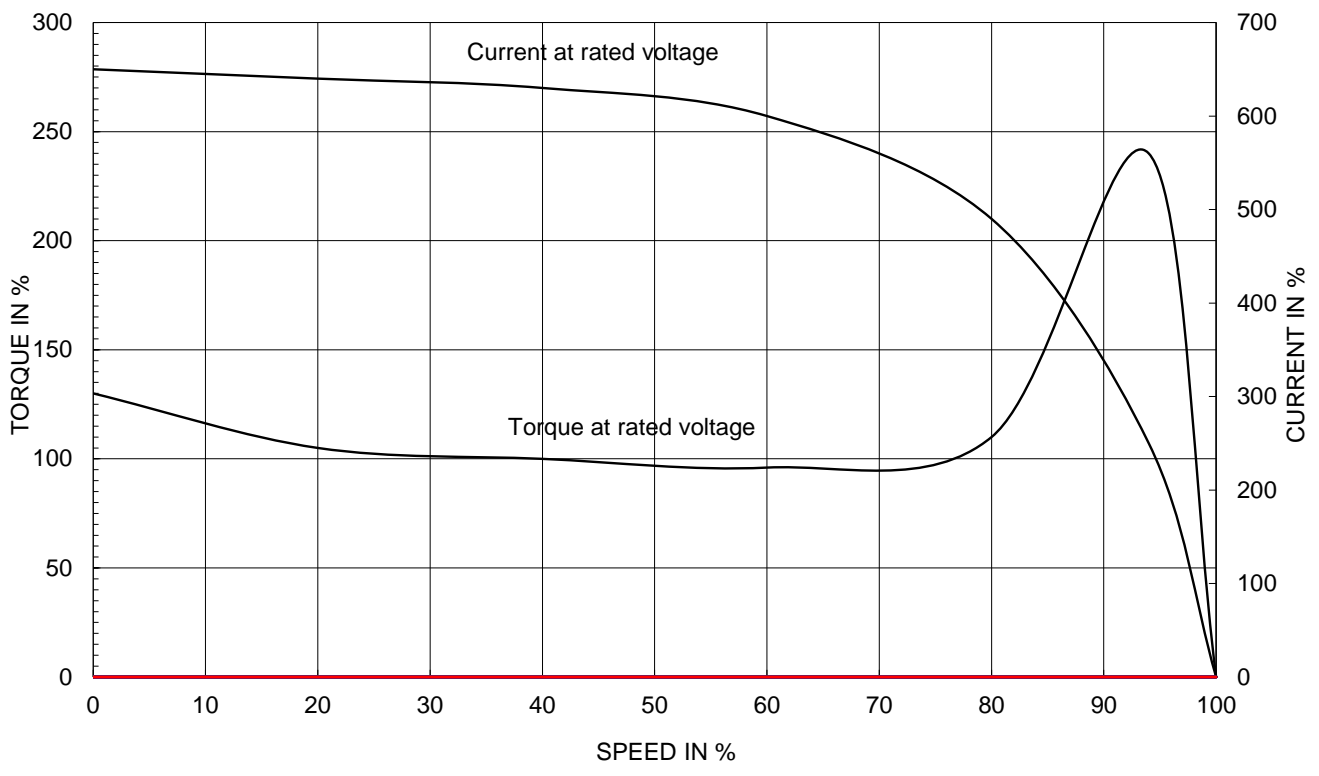
PERFORMANCE CURVE

CURVE NO.
PC-HSDE800-36-5812S-IBSHSP

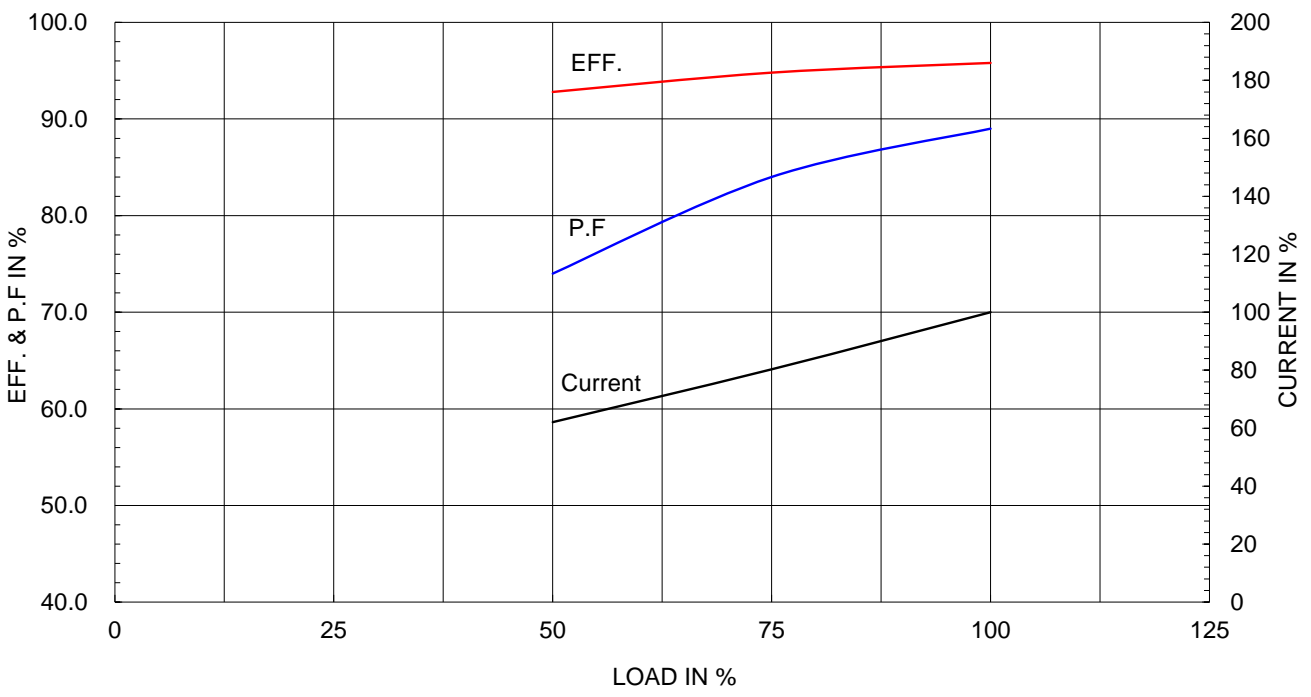
Type :	HNE6	
Full Load Torque :	1184.0	lb.ft
Load moment of Inertia (J) :	574.869	lb.ft2
Motor moment of Inertia (J) :	121.840	lb.ft2

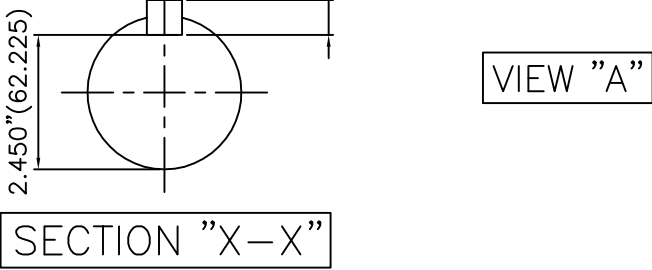
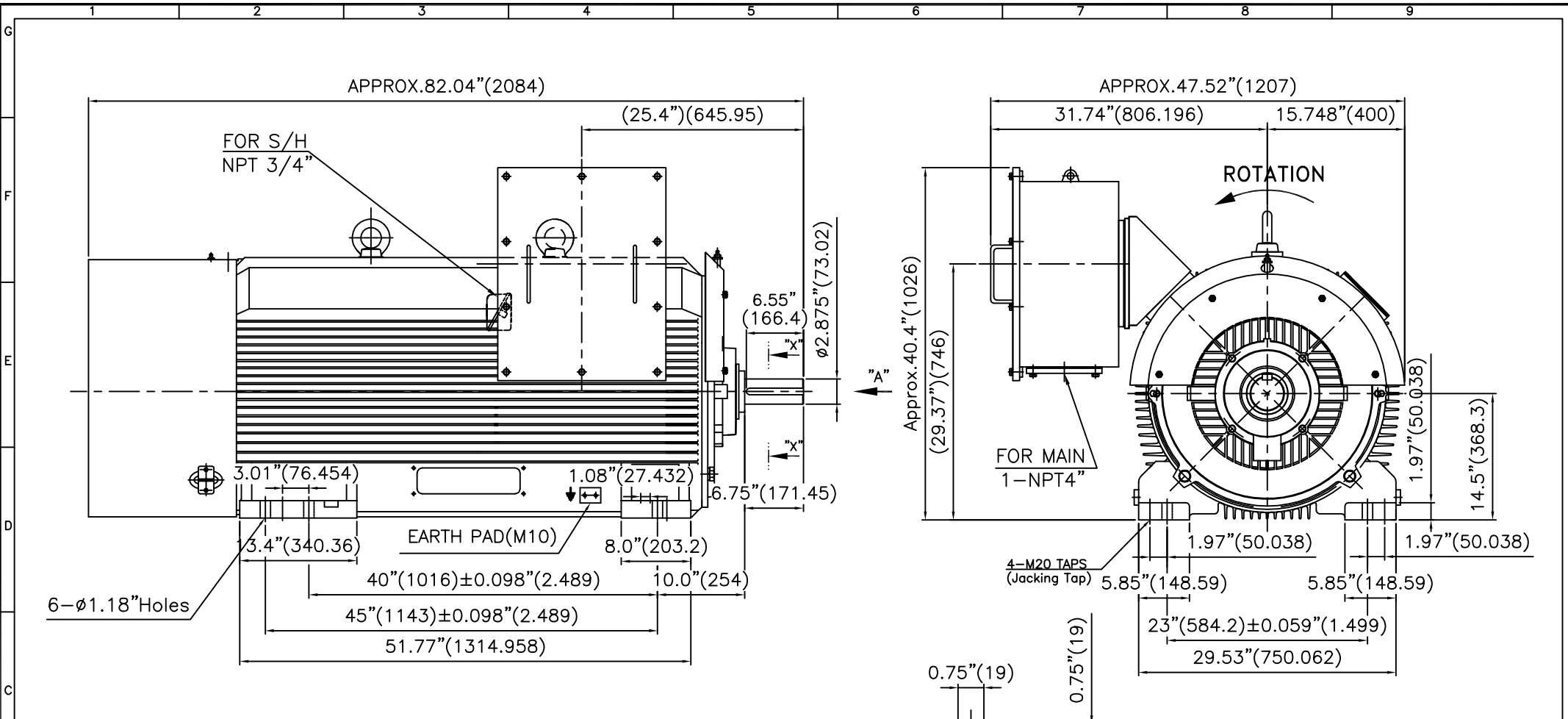
600kW	800HP	2 P	60 Hz
Speed at Full Load :			3570 RPM
Rated Voltage	575V	460V	230V
Full Load Current	706.6A	883.2A	1766.5A

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 :

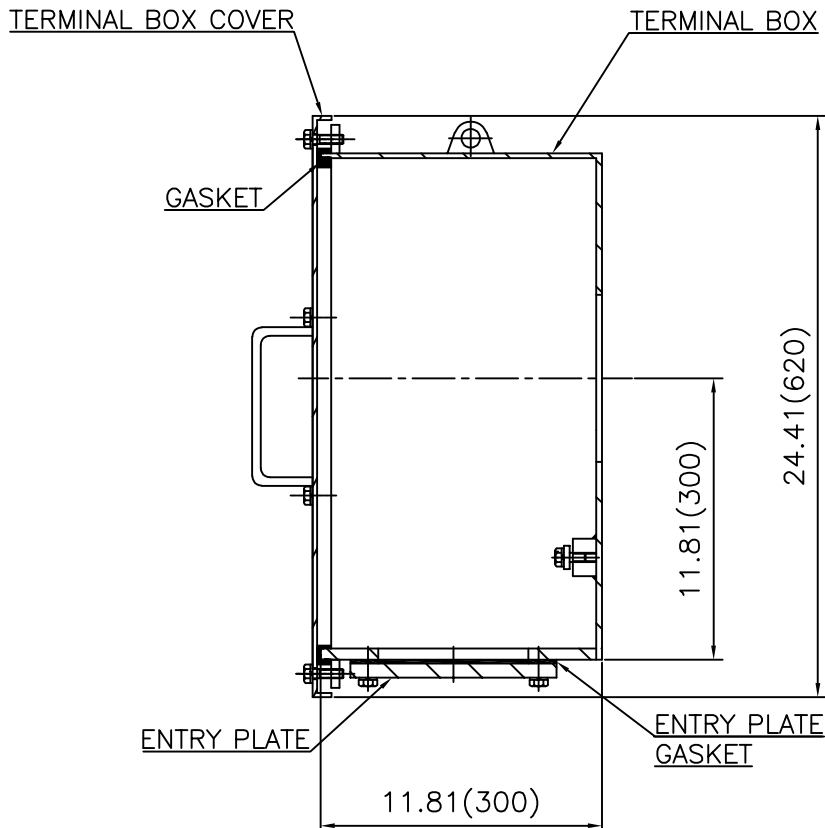
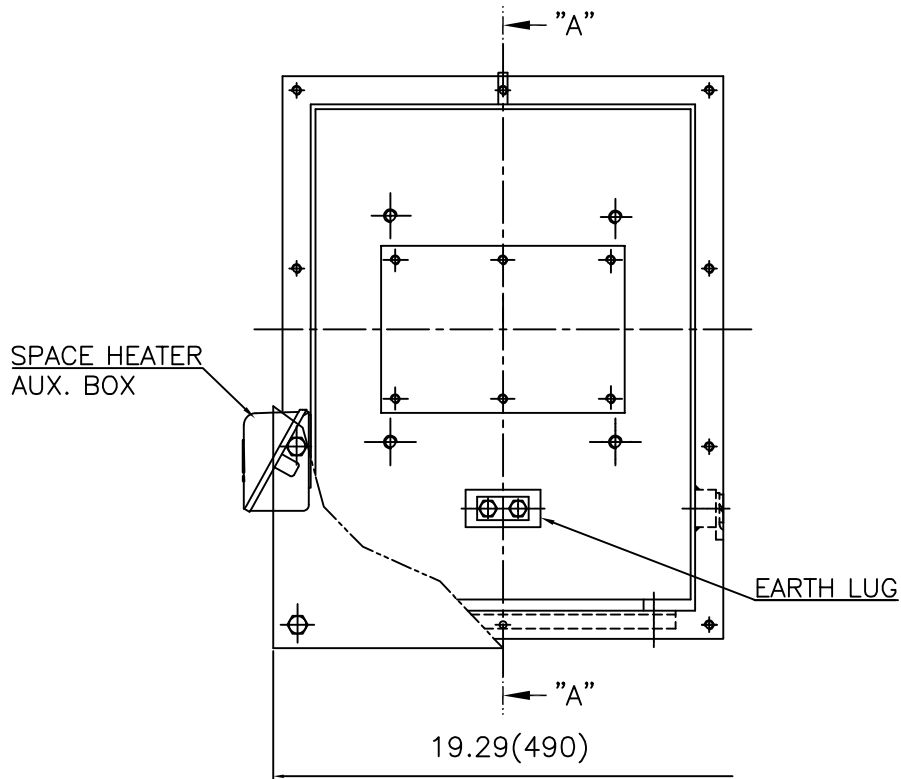
CENTER HEIGHT	14.5	+0.000	-0.060
SHAFT DIAMETER	Ø2.875	+0.000	-0.001
KEYWAY WIDTH	0.75	+0.003	-0.000

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



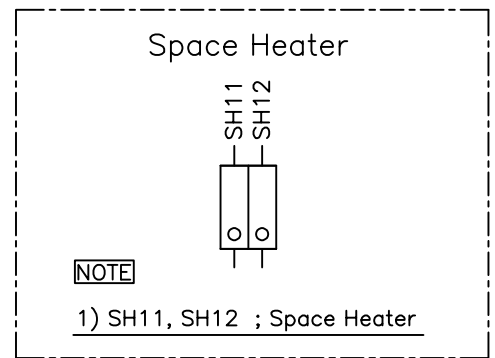
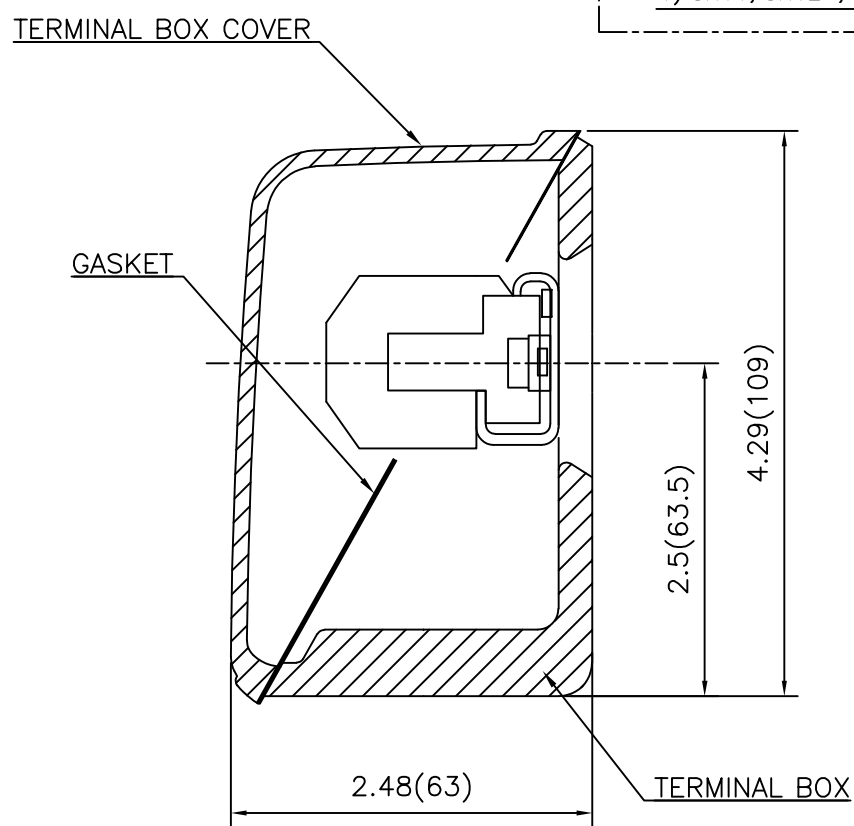
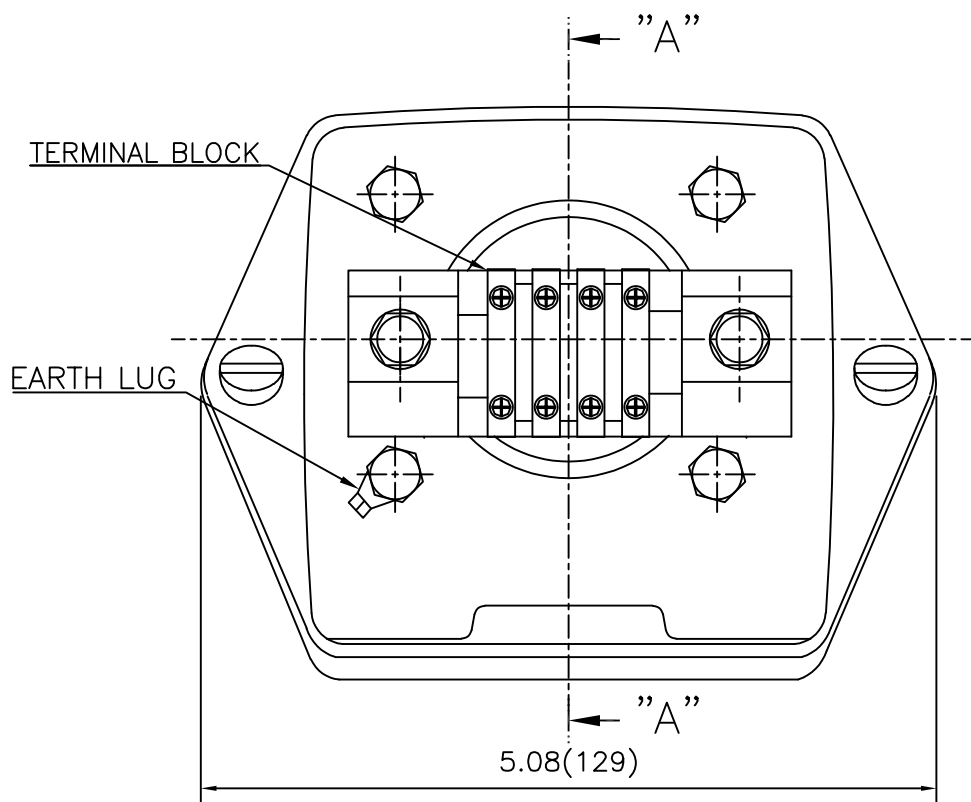
SEC. "A" - "A"

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
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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	배승희	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	A3 (1:1.1)
CHKD BY		SCALE	1/1	TITLE	SUB. TERMINAL BOX ASS'Y		
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	REF. NO		Sheet No.	of
DSND BY	배승희	DATE	2024-01-18	DWG NO	3M-165278	Revision No.	0

