

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

IEEE841 TYPE

Catalog No.	IEEE600-36-5812S-IBBRSRSHSP	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION		PERFORMANCE DATA				
Frame Size	5812S	Rated Output	450 kW 600 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	529.9 A	662.4 A 1,324.9 A	
Insulation Class	F		Locked-rotor**	710 %	710 % 710 %	
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		888.0 lb.ft		
Terminal Box	Main	Locked-rotor**		150 %		
	Aux.	Breakdown**		250 %		
Location	Refer to Outline Drawing	Moment of Inertia (J)				
Application		Load(Max.)		453.394 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	IEEE841, NEMA MG1, CSA C390			89 dB(A)		
ACCESSORIES		SUBMITTAL DRAWING				
*. B.T.D.(Pt 100 Ω at 0°C,Single) : 2EA/Motor *. W.T.D.(Pt 100 Ω at 0°C) : 2EA/Ph. *. Space Heater : 1EA/Motor		Outline Dimension Drawing \ Motor Weight(Approx.)				
		B3	LM-I5812B3C7001	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.				
SPARE PARTS		Date	DSND	CHKD	CHKD	APPD
1. Spare Axial Fan (C.W Direction)		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	CHKD BY	CHKD BY	APPD BY

4.72

CROWN TRITON

Premium Efficiency AC 3 Phase Motor

600HP	2P	460V	Cat. No.	IEEE600-36-5812S-IBBRSRSHSP		
Model	LATER	INS. Class	F	Amps	662.4	
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	

IEEE Std 841-2021

4M-136445

Made in Korea H1

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	CSA Class I, Division2 IEEE841 (XL)	DWG SIZE	A4 (1:1)
TITLE	NAMEPLATE DRAWING		
REF. NO	4M-136445	Sheet No.	of
DWG NO	NP-IEEE600-36-5812S-IBBRSRSHSP	Revision No.	0

1

2

3

4



PERFORMANCE CURVE

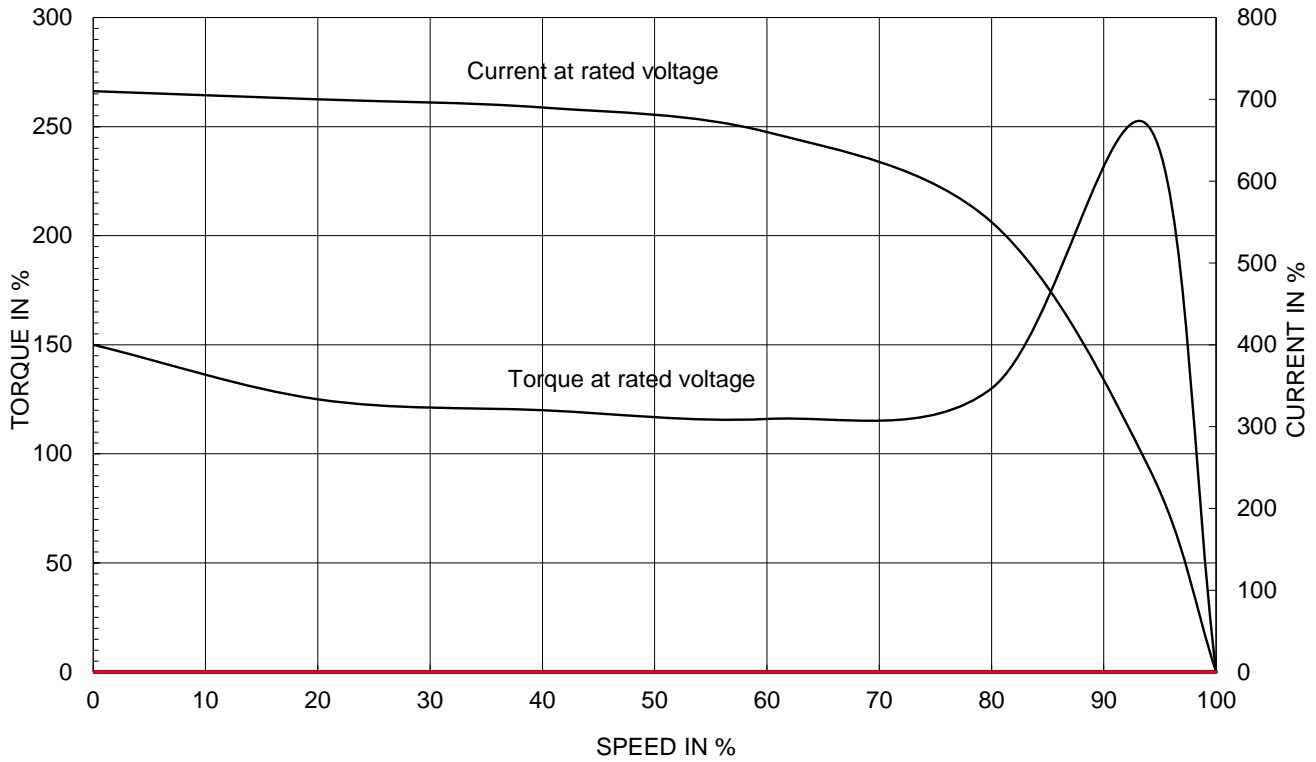
CURVE NO.

PC-IEEE600-36-5812S-IBBRSRSHSP

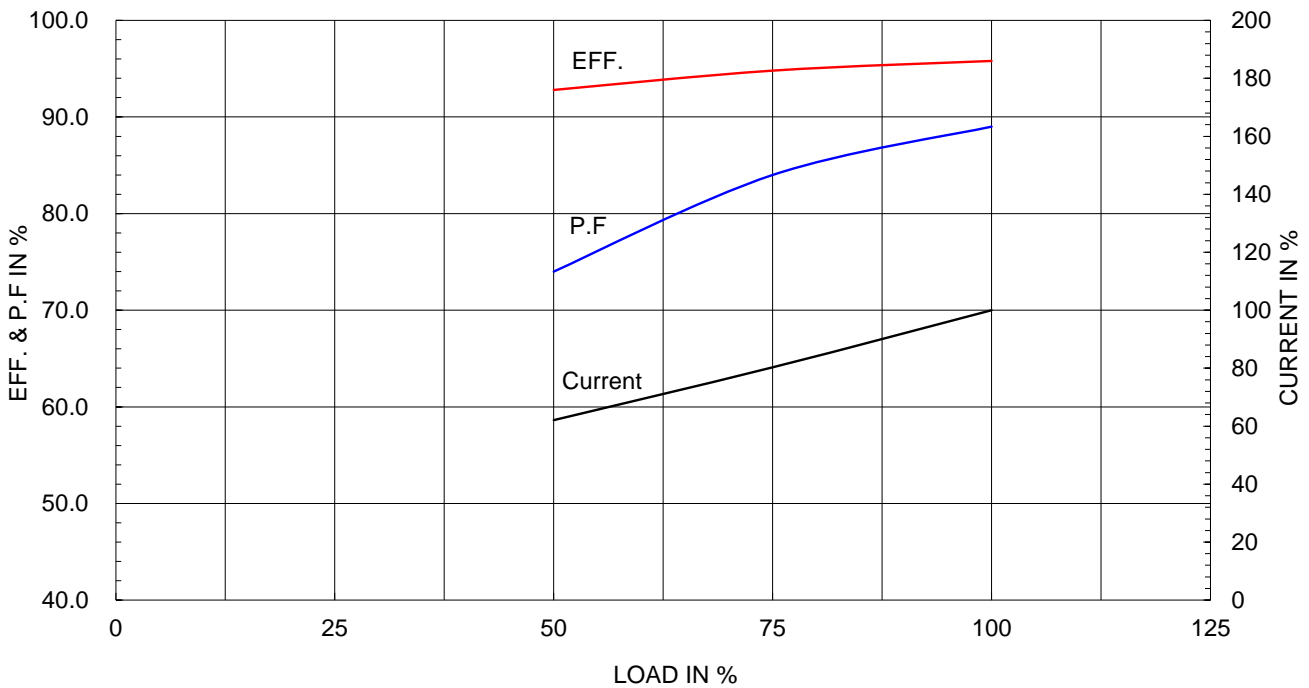
Type :	HNE6
Full Load Torque :	888.0 lb.ft
Load moment of Inertia (J) :	453.394 lb.ft2
Motor moment of Inertia (J) :	121.840 lb.ft2

450kW 600HP	2 P	60 Hz
Speed at Full Load :		3570 RPM
Rated Voltage	575V	460V 230V
Full Load Current	529.9A	662.4A #####

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

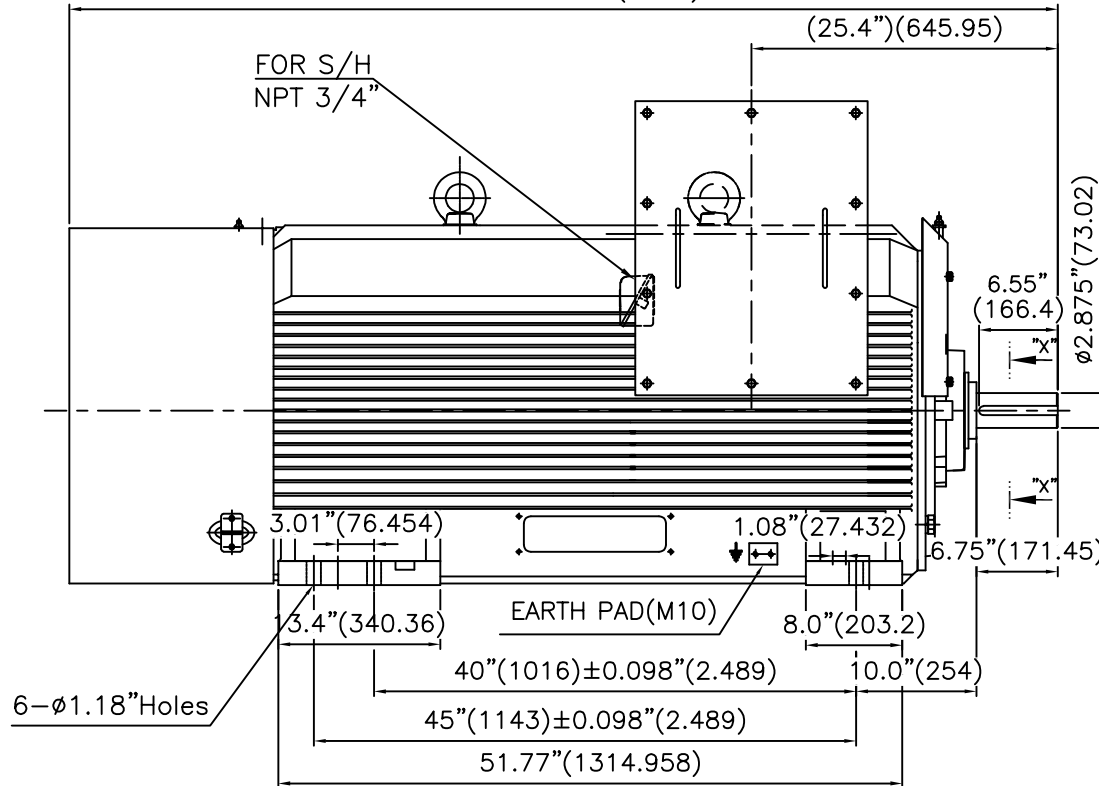


THIS DRAWING IS PROPRIETARY TO HYUNDAI ELECTRIC. NO PART OF THIS DRAWING MAY BE REPRODUCED WITHOUT THE PERMISSION OF HYUNDAI ELECTRIC.

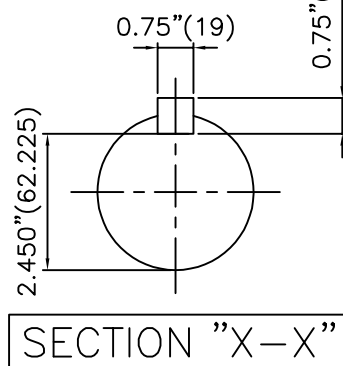
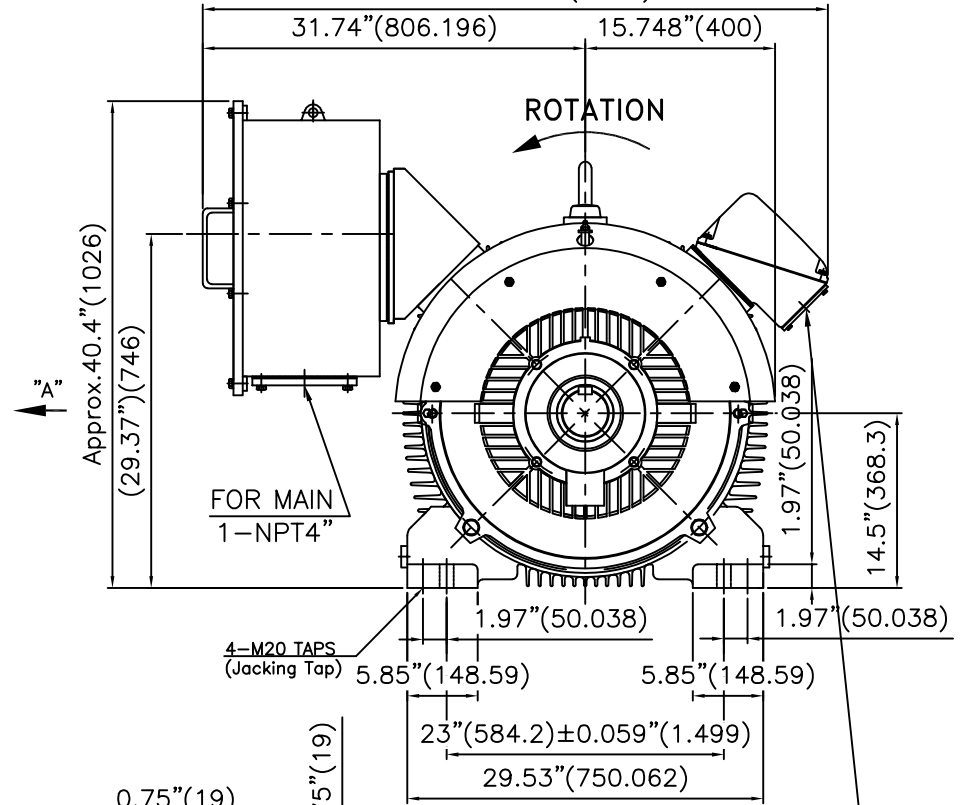
본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급주의)

IEEE841

APPROX.82.04"(2084)



APPROX.51.87"(1318)



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 :

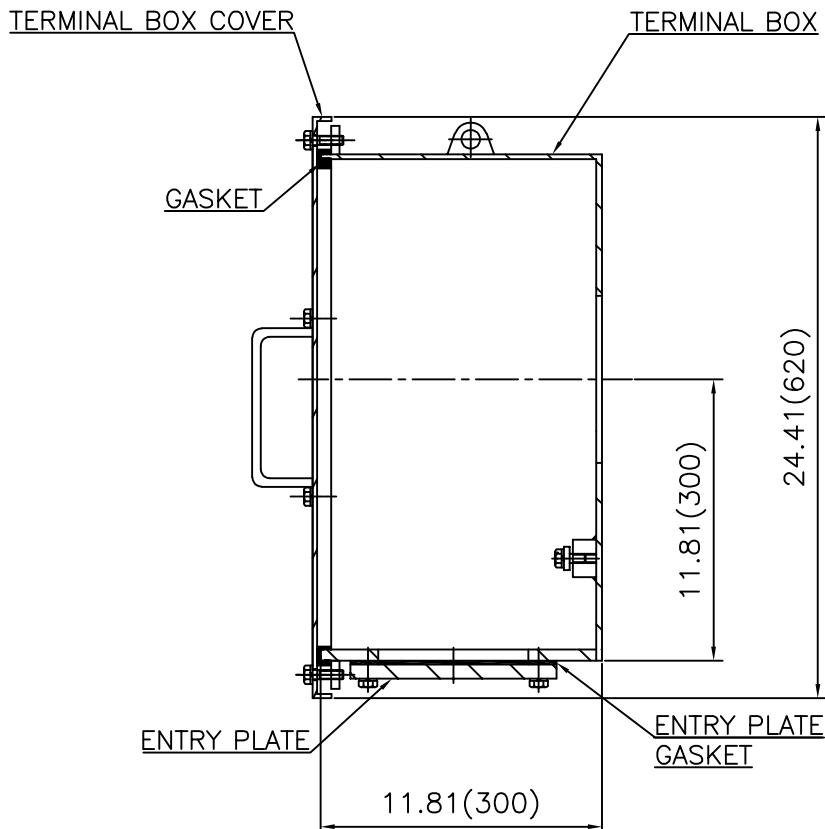
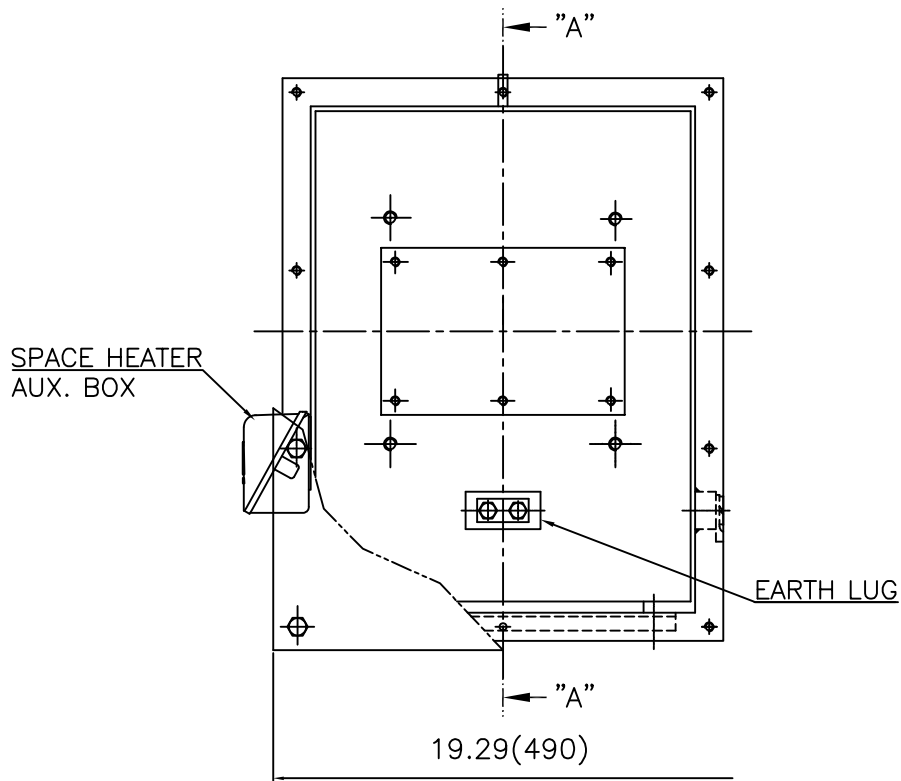
CENTER HEIGHT	14.5	+0.000	-0.060
SHAFT DIAMETER	ø2.875	+0.000	-0.001
KEYWAY WIDTH	0.75	+0.003	-0.000

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-I5812B3C7001	Revision No.



REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
1						

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



SEC. "A" - "A"

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
1						
2						
3						
4						

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	박승희	DATE	2023-10-25	DWG NO	3M-248512	Revision No.	0



Cls. I&II, Div. 2 IEEE 841

본 도면은 HD현대일렉트릭(주) 재산이며
허가없이 복사할 수 없음 (취급주의)

THIS DRAWING IS PROPRIETARY TO HYUNDAI ELECTRIC. NO PART OF THIS DRAWING
MAY BE REPRODUCED WITHOUT THE PERMISSION OF HYUNDAI ELECTRIC.

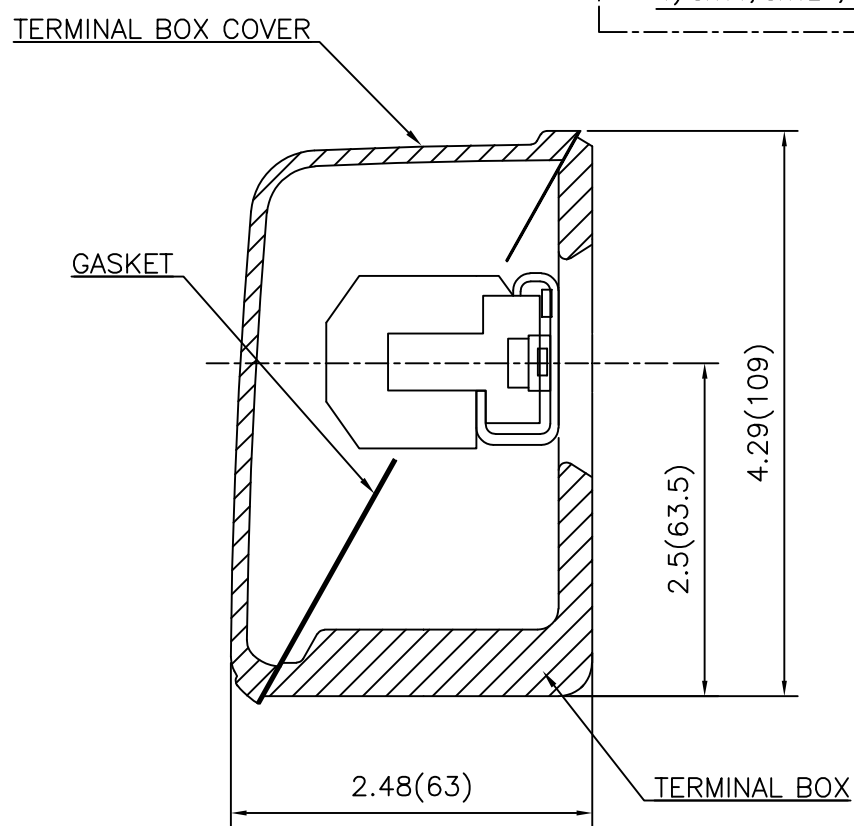
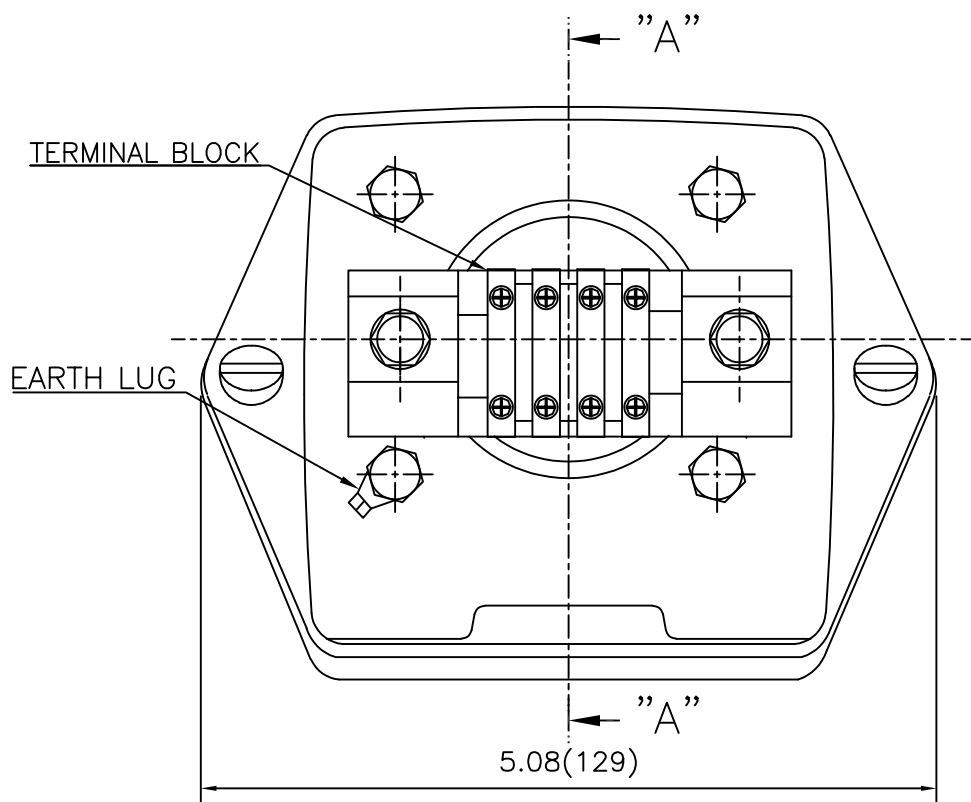


REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

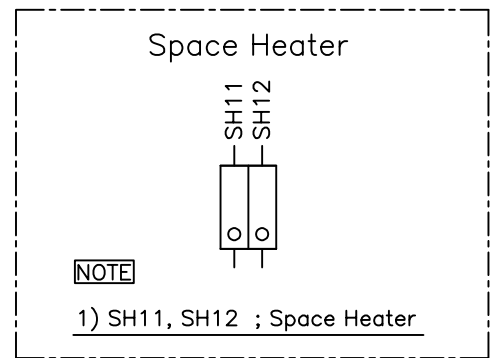
APPD BY	S.Y.KIM	UNIT	inch(mm)	SUBJECT	FR.360 (CAST IRON)	DWG SIZE	A3 (1:2.2)	
CHKD BY		SCALE	1/1	TITLE	AUX. TERMINAL BOX ASS'Y	REF. NO		
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	DWG NO		3M-165277	Sheet No.	of
DSND BY	배승희	DATE	2024-01-18			DWG NO	3M-165277	
							Revision No.	0



**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.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