

Customer :
Project Name :
Project No. :
Revision No. :

SPECIFICATION for INDUCTION MOTOR



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| 0 | | For Bidding | | | |
| No. | DATE | DESCRIPTION | PREPARED BY | CHECKED BY | APPROVED BY |



AC INDUCTION MOTOR DATA SHEET

IEEE841 TYPE

| | | | | | |
|--------------|---------------------------|-------------|--|----------|------|
| Catalog No. | IEEE350-12-L449T-IBBRSRSH | Item No. | | Rev. No. | [] |
| Project Name | | Project No. | | Quantity | sets |

| GENERAL SPECIFICATION | | | PERFORMANCE DATA | | | | | |
|--|--|--------------------------|--|----------------|------------------|---------|-------|--|
| Frame Size | L449T | | Rated Output | 261 kW | | 350 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 | 325.7 A | 407.1 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 | | | | | |
| Motor Location | <input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor | | 50% Load | | 92.8 % | | | |
| Altitude | Less than 1,000 meter | | 75% Load | | 94.8 % | | | |
| Relative Humidity | Less than 80 % | | 100% Load | | 95.8 % | | | |
| Ambient Temp. | 40 deg. C (Max.) | | Power Factor(p.u) | | | | | |
| Duty Type | Continuous (S1) | | 50% Load | | 0.690 | | | |
| Service Factor | 1.15 | | 75% Load | | 0.790 | | | |
| Mounting | B3 | | 100% Load | | 0.840 | | | |
| Bearing | Type | Anti-Friction | Speed at Full Load | | | | | |
| | DE/N-DE | NU322 / 6318C3-INS. | 1185 r.p.m | | | | | |
| | Lubricant | Grease(Polyrex-EM) | Torque | | | | | |
| External Thrust | Not applicable | | Full Load | | 1,551.7 lb.ft | | | |
| Coupling Method | <input type="checkbox"/> Direct <input type="checkbox"/> V-belt | | Locked-rotor** | | 120 % | | | |
| Shaft Extension | Single | | Breakdown** | | 200 % | | | |
| Terminal | Main | Cast Iron | Moment of Inertia (J) | | | | | |
| Box | Aux. | Yes | Load(Max.) | | 3,240.000 lb.ft2 | | | |
| | Location | Refer to Outline Drawing | Motor | | 172.297 lb.ft2 | | | |
| Application | | | Sound Pressure Level (No-load & mean value at 1m from motor) | | | | | |
| Area classification | Hazardous | | 80 dB(A) | | | | | |
| Type of Ex-Protection | Class I&II, Division 2 | | Vibration | | | | | |
| Applicable Standard | IEEE841, NEMA MG1, CSA C390 | | 3.8 mm/sec (peak) | | | | | |
| ACCESSORIES *. 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 | | | Permissible number of consecutive starts | | | | | |
| | | | Cold | | 2 times | | | |
| | | | Hot | | 1 time | | | |
| | | | Paint | Munsell No. | 7.5BG6/1.5 | | | |
| | | | SUBMITTAL DRAWING | | | | | |
| Outline Dimension Drawing \ Motor Weight(Approx.) | | | | | | | | |
| B3 | | LM-I044XB3U7001 | 3380 lb. | | | | | |
| REMARK | | | | | | | | |
| 1. Premium efficiency according to NEMA MG1 | | | | | | | | |
| 2. 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 | | | | | | | | |
| 3. NDE side : Insulated bearing | | | | | | | | |
| 4. CSA Certification | | | | | | | | |
| -. Class I, Division 2, Group A, B, C & D; Temp code : T3 | | | | | | | | |
| -. Class II, Division 2 Group F & G; Temp code : T3 | | | | | | | | |
| 5. Shaft material : AISI4140 | | | | | | | | |
| SPARE PARTS | | | | | | | | |
| 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 |
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4.72

CROWN TRITON


Premium Efficiency AC 3 Phase Motor

| | | | |
|-----------------------------|--------------------------------------|-------------------------------------|------------------------|
| 350HP 6P 460V | | Cat. No. IEEE350-12-L449T-IBBRSRSH | |
| 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 | - |
| IEEE Std 841-2021 4M-136054 | | MARINE DUTY IEEE45 Made in Korea H1 | |

2.36

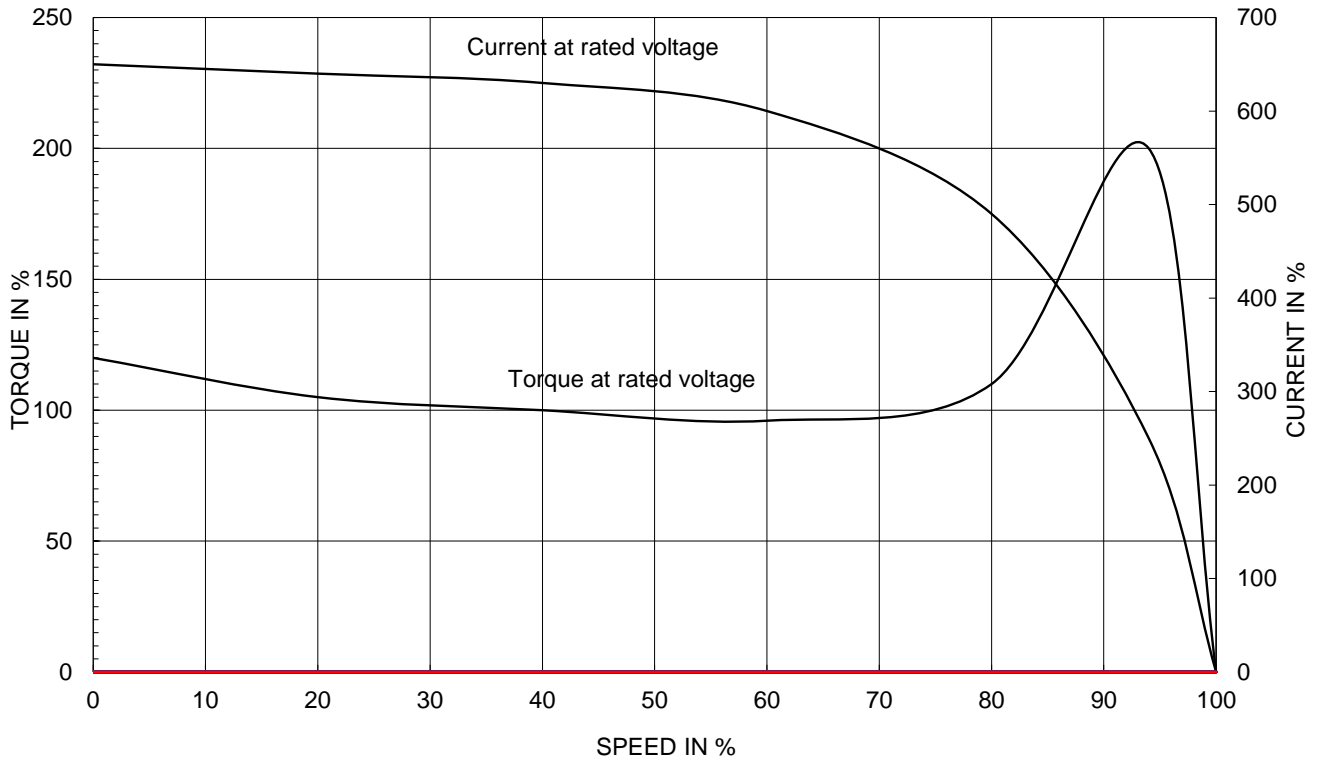


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|---|---------|----------|------------|-----------------------------------|-------------------------------------|-----------------------|
| APPD BY | S.Y.KIM | UNIT | INCH | SUBJECT | CSA Class I, Division2 IEEE841 (XL) | DWG SIZE |
| CHKD BY | I.K.KIM | 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-136054 | Sheet No. of |
| | | | | DWG NO | NP-IEEE350-12-L449T-IBBRSRSH | Revision No. 0 |

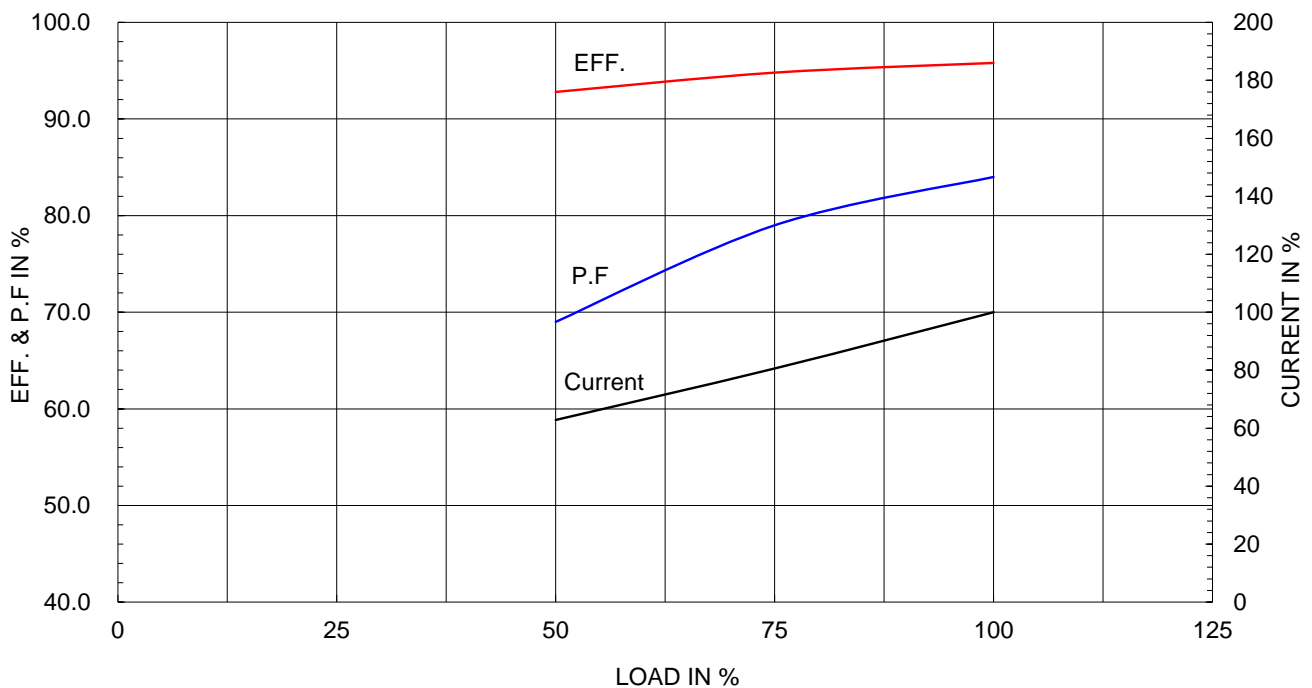
| | | |
|-------------------------------|----------|--------------------|
| Type : | PJP | |
| Full Load Torque : | 1551.7 | lb.ft |
| Load moment of Inertia (J) : | 3240.000 | lb.ft ² |
| Motor moment of Inertia (J) : | 172.297 | lb.ft ² |

| | | | |
|----------------------|--------|--------|----------|
| 261kW | 350HP | 6 P | 60 Hz |
| Speed at Full Load : | | | 1185 RPM |
| Rated Voltage | 575V | 460V | 230V |
| Full Load Current | 325.7A | 407.1A | 814.2A |

SPEED VS TORQUE & CURRENT CURVE

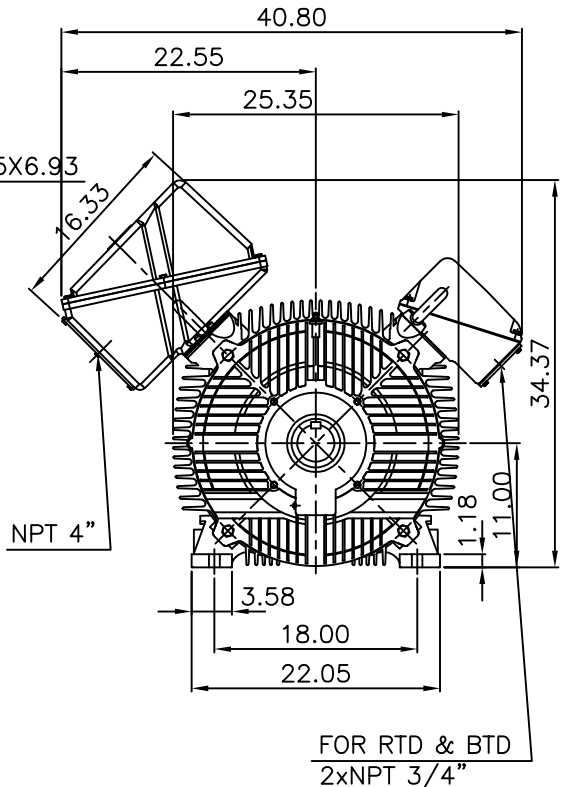
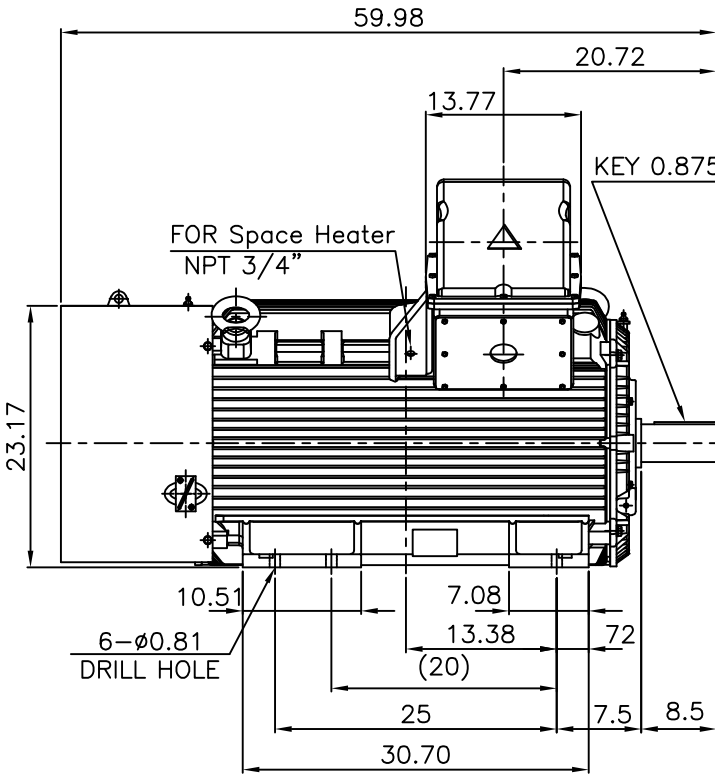


OUTPUT VS EFF., P.F & CURRENT CURVE



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| ▽ | 50S | REV | DATE | CONTENTS | REVD BY | CHKD BY | CHKD BY | APPD BY |
| ▽▽ | 12.5S | | | | | | | |
| ▽▽▽ | 3.2S | | | | | | | |
| ▽▽▽▽ | 0.4S | | | | | | | |

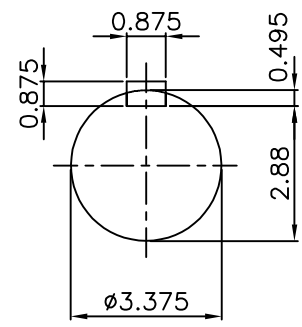
IEEE841



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 |

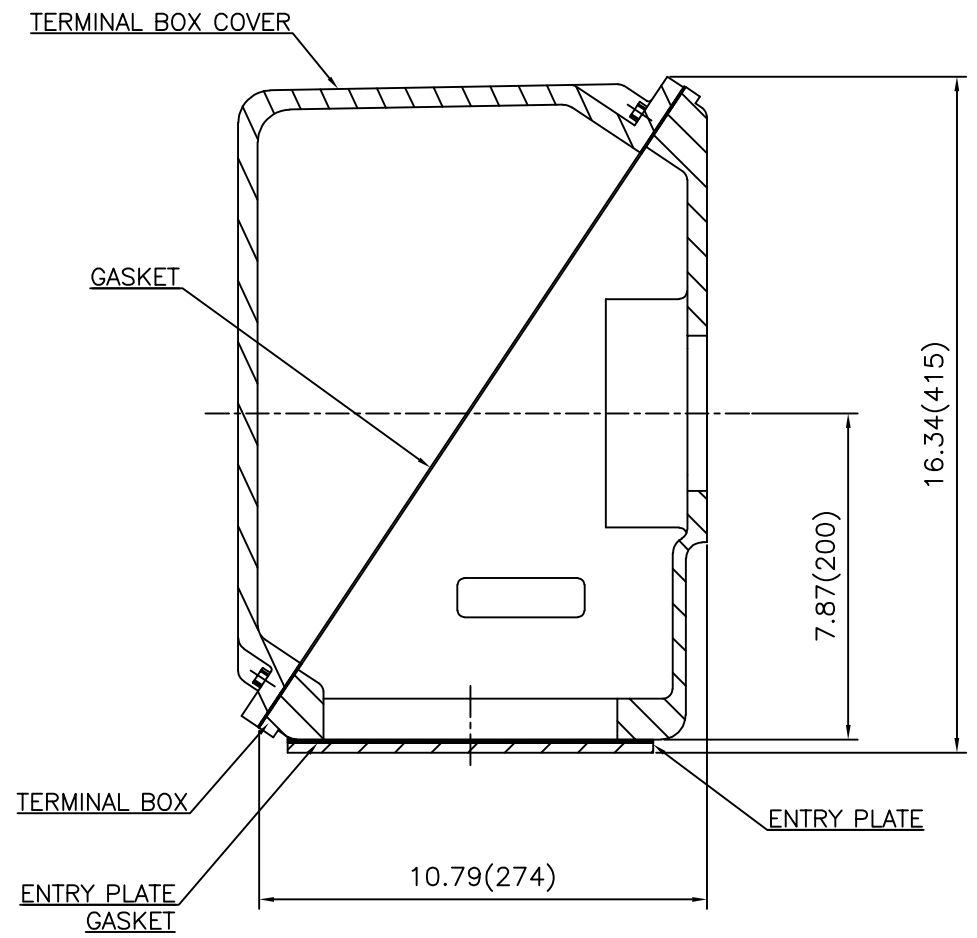
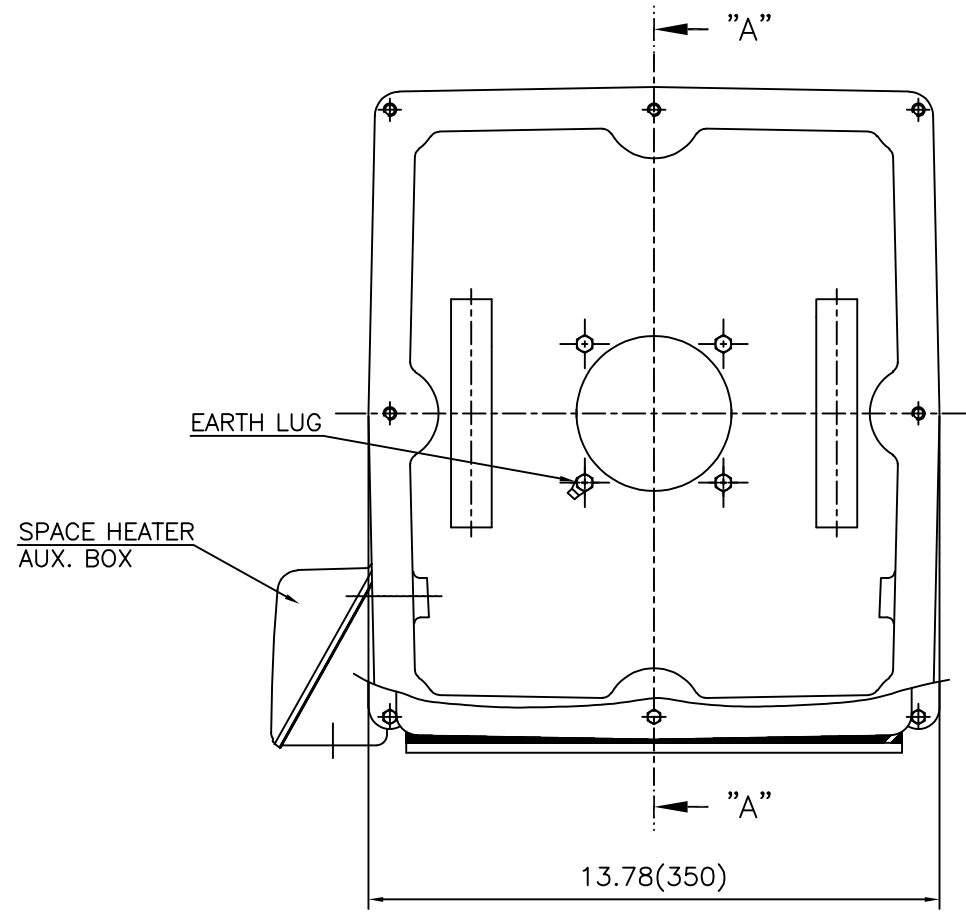


VIEW "A"

| | | | | | | | |
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| APPD BY | S.Y.KIM | UNIT | INCH | SUBJECT | Fr.L449T | DWG SIZE | A4 (1:18) |
| CHKD BY | O.J.KIM | SCALE | 1/18 | TITLE | NEMA STD SHAFT(4140 SHAFT) OUTLINE | | |
| CHKD BY | R.G.KIM | PROJEC'N | 3각법(3rd Angle) | REF. NO | | Sheet No. | of |
| DSND BY | H.K.LEE | DATE | 2021-04-27 | DWG NO | LM-1044XB3U7001 | Revision No. | 0 |



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SEC. "A" - "A"

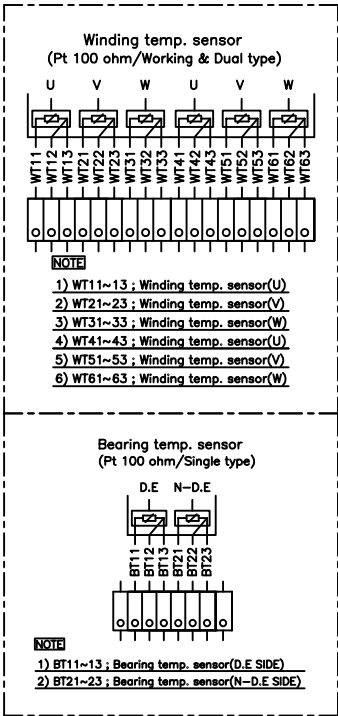
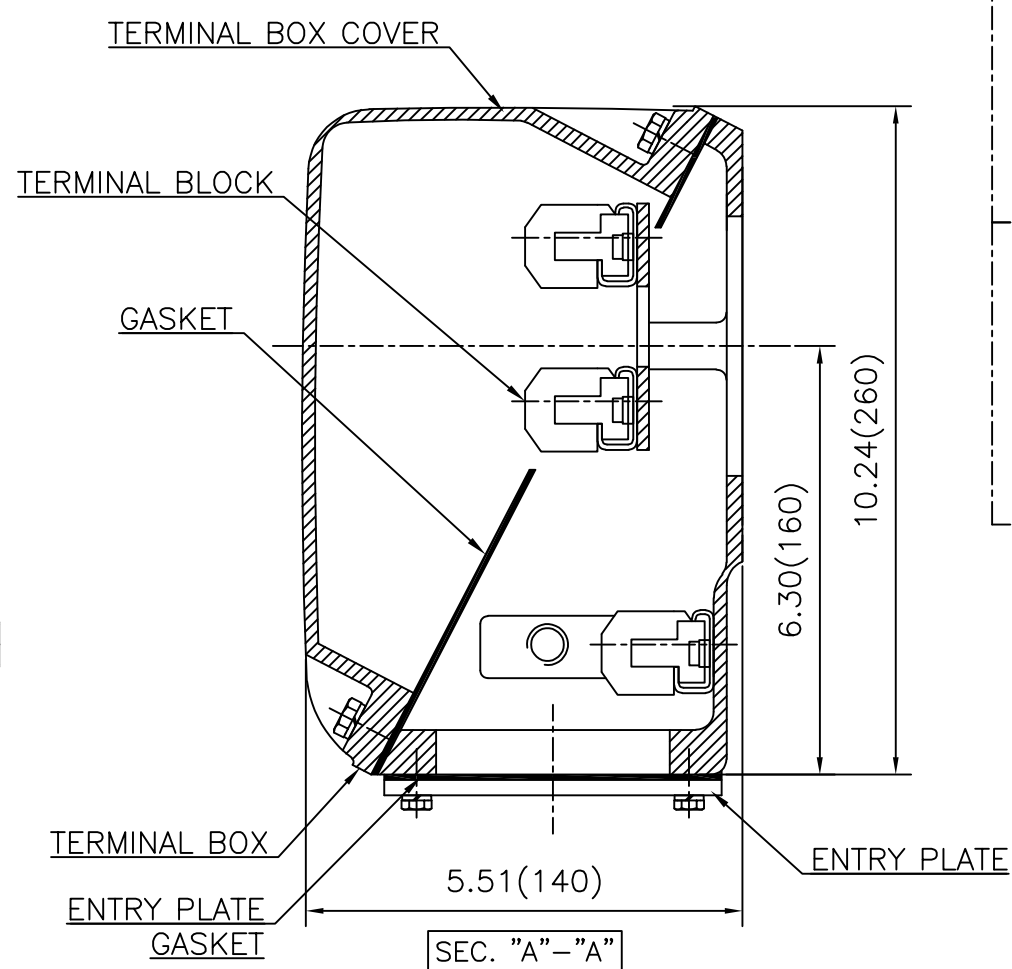
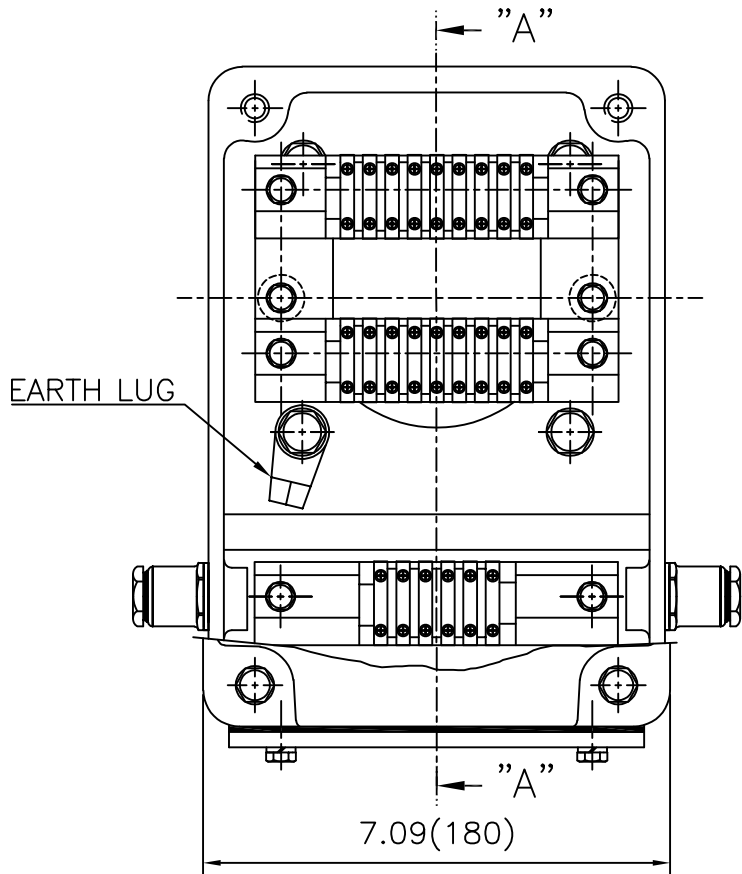
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| APPD BY | S.Y.KIM | UNIT | inch(mm) | SUBJECT | FR. L440 (CAST IRON) | DWG SIZE |
| CHKD BY | | SCALE | 1/3.5 | TITLE | MAIN TERMINAL BOX ASS'Y | A3 (1:3.5) |
| CHKD BY | R.G.KIM | PROJEC'N | 3rd Angle | | | |
| DSND BY | 최승희 | DATE | 2023-10-19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

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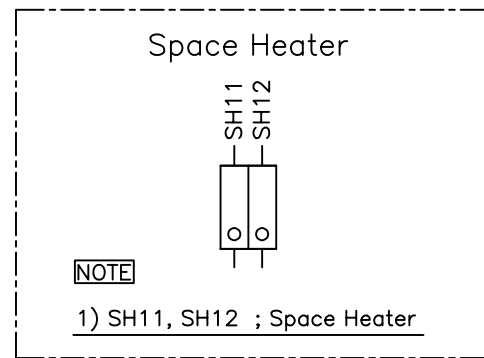
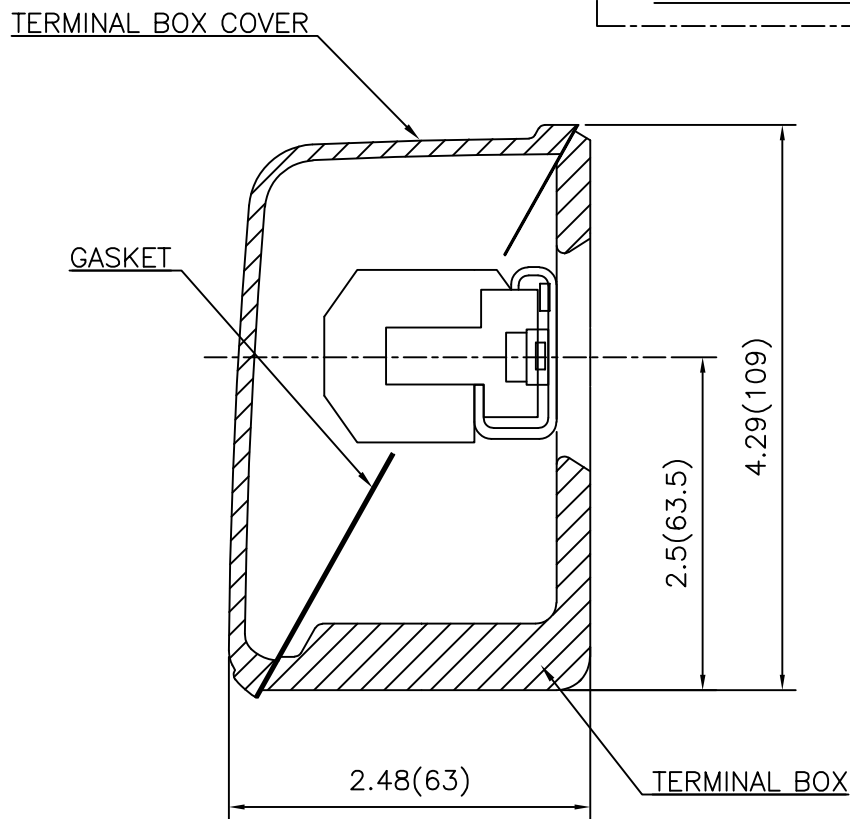
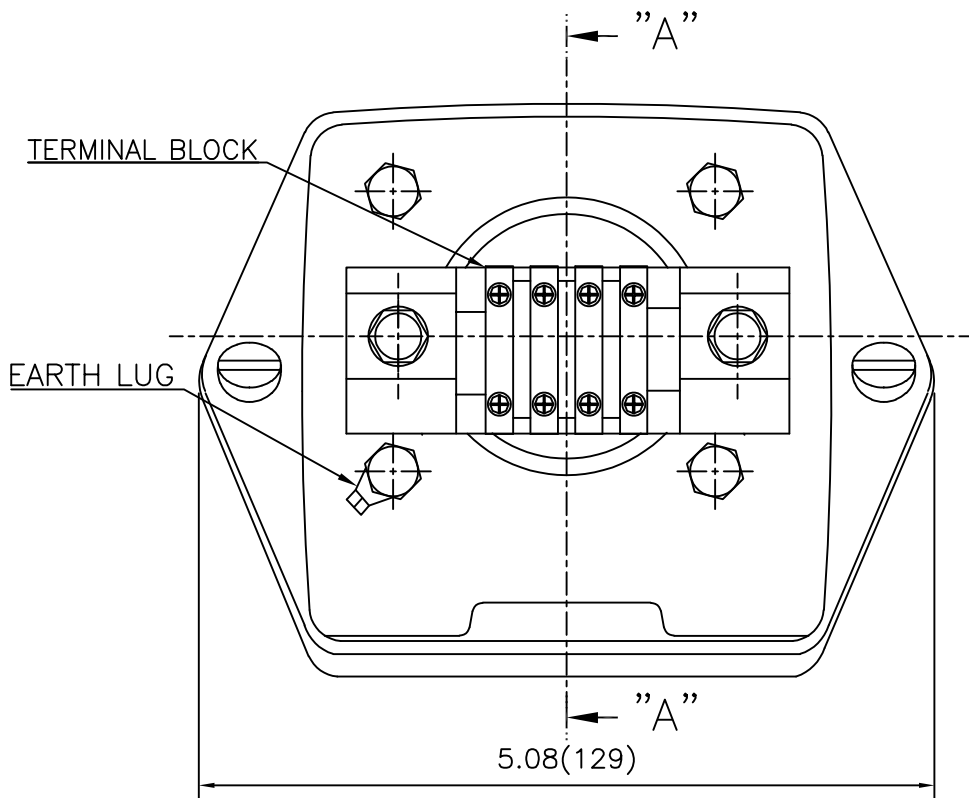
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| APPD BY | S.Y.KIM | UNIT | inch(mm) | SUBJECT | FR.360 (CAST IRON) | DWG SIZE | A3 (1:2.2) |
| CHKD BY | | SCALE | 1/1 | TITLE | AUX. TERMINAL BOX ASS'Y | REF. NO | Sheet No. of |
| CHKD BY | R.G.KIM | PROJEC'N | 3rd Angle | DWG NO | | 3M-165277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

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| 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 |

