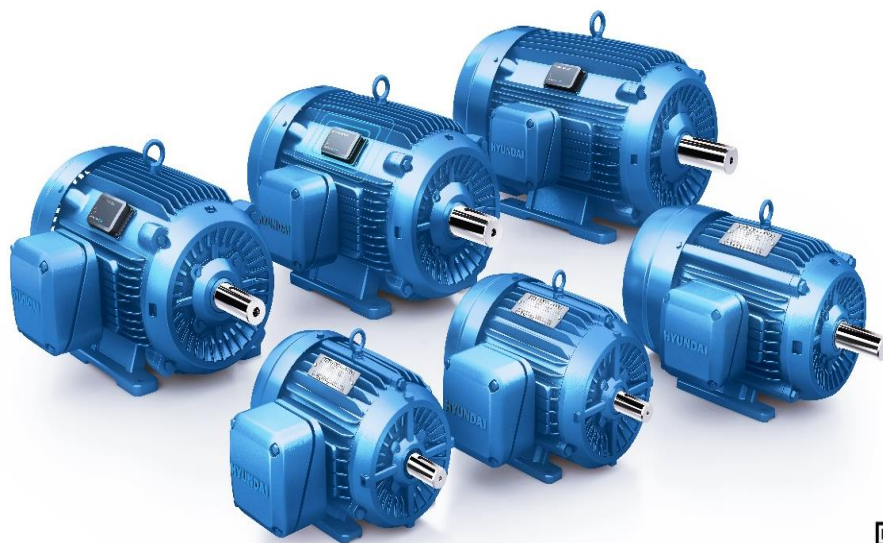


Customer :  
Project Name :  
Project No. :  
Revision No. :

# SPECIFICATION for INDUCTION MOTOR



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

# AC INDUCTION MOTOR DATA SHEET

|              |               |             |  |          |          |
|--------------|---------------|-------------|--|----------|----------|
| Catalog No.  | HES10-36-132S | Item No.    |  | Rev. No. | [      ] |
| Project Name |               | Project No. |  | Quantity | sets     |

| GENERAL SPECIFICATION                          |                                                                            | PERFORMANCE DATA                         |                                                              |             |        |
|------------------------------------------------|----------------------------------------------------------------------------|------------------------------------------|--------------------------------------------------------------|-------------|--------|
| Frame Size                                     | 132S                                                                       | Rated Output                             | 7.5 kW      10 HP                                            |             |        |
| Type                                           | PJP                                                                        | 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                            |                                                              | 460 V       | 230 V  |
| Number of Phases                               | 3                                                                          | Current                                  | Full Load                                                    | 12.3 A      | 24.6 A |
| Insulation Class                               | F                                                                          |                                          | Locked-rotor**                                               | 870 %       | 870 %  |
| Temp. Rise at full load (by resistance method) |                                                                            | Efficiency                               |                                                              |             |        |
| at 1.0 S.F                                     | 80 deg. C                                                                  | 50% Load      87.2 %                     |                                                              |             |        |
| Motor Location                                 | <input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor           | 75% Load      89.2 %                     |                                                              |             |        |
| Altitude                                       | Less than 1,000 meter                                                      | 100% Load      90.2 %                    |                                                              |             |        |
| Relative Humidity                              | Less than 80 %                                                             | Power Factor(p.u)                        |                                                              |             |        |
| Ambient Temp.                                  | 40 deg. C (Max.)                                                           | 50% Load      0.700                      |                                                              |             |        |
| Duty Type                                      | Continuous ( S1 )                                                          | 75% Load      0.800                      |                                                              |             |        |
| Service Factor                                 | 1.15                                                                       | 100% Load      0.850                     |                                                              |             |        |
| Mounting                                       | B3                                                                         | Speed at Full Load                       | 3520 r.p.m                                                   |             |        |
| Bearing                                        | Type                                                                       | Anti-Friction                            | Torque                                                       |             |        |
|                                                | DE/N-DE                                                                    | 6208ZZC3 / 6208ZZC3                      | Full Load      15.01 lb.ft                                   |             |        |
|                                                | Lubricant                                                                  | Grease(Polyrex-EM)                       | Locked-rotor**      220 %                                    |             |        |
| External Thrust                                | Not applicable                                                             |                                          | Breakdown**      260 %                                       |             |        |
| Coupling Method                                | <input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt | Moment of Inertia (J)                    |                                                              |             |        |
| Shaft Extension                                | Single                                                                     | Load(Max.)      8.187 lb.ft2             |                                                              |             |        |
| Terminal                                       | Main                                                                       | Cast Iron                                | Motor      0.332 lb.ft2                                      |             |        |
| Box                                            | Aux.                                                                       | No                                       | Sound Pressure Level (No-load & mean value at 1m from motor) |             |        |
|                                                | Location                                                                   | Refer to Outline Drawing                 | 73 dB(A)                                                     |             |        |
| Application                                    |                                                                            | Vibration      2.8 mm/s (r.m.s)          |                                                              |             |        |
| Area classification                            | Hazardous                                                                  | Permissible number of                    |                                                              |             |        |
| Type of Ex-Protection                          | Class I&II, Division 2                                                     | Cold      3 times                        |                                                              |             |        |
| Applicable Standard                            | IEC, CSA C390                                                              | consecutive starts      Hot      2 times |                                                              |             |        |
|                                                |                                                                            | Paint                                    | PANTONE                                                      | PANTONE279C |        |

| ACCESSORIES | SUBMITTAL DRAWING                                                                                        |
|-------------|----------------------------------------------------------------------------------------------------------|
|             | Outline Dimension Drawing \ Motor Weight(Approx.)                                                        |
|             | B3      LM-T2131B3PTV09      150 lb.                                                                     |
|             |                                                                                                          |
|             |                                                                                                          |
|             | REMARK                                                                                                   |
|             | 1. IE3 (Premium efficiency) according to IEC60034-30-1                                                   |
|             | 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. CSA Certification                                                                                     |
|             | - Class I, Division 2, Group A, B, C & D                                                                 |
|             | - Class II, Division 2 Group E, F & G (Group E : up to 200Fr.)                                           |
|             | 4. Service Factor 1.15 and Temperature rise B are applicable under the condition of sine wave power.     |
|             | 5. Service Factor 1.25 is applicable to motors of 100HP or less with temperature rise F & Non-Hazardous. |
|             | 6. Temp. code : T3C(160°C) at sine wave                                                                  |
|             | Date      DSND      CHKD      CHKD      APPD                                                             |
|             | 2025-09-19      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.

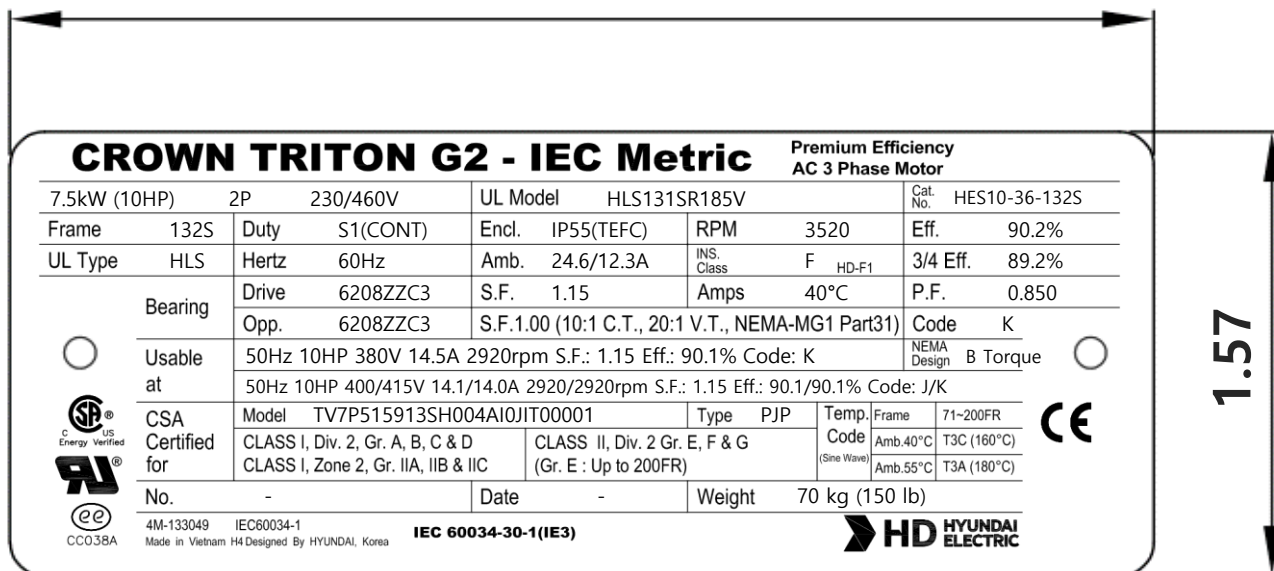
\* In case of Inverter-Fed Motor, performance data is based on sine wave tests. It may be different from test data of Inverter combined motor.

\*\* Data is based on rated voltage & frequency and is expressed as a percentage of full-load value.

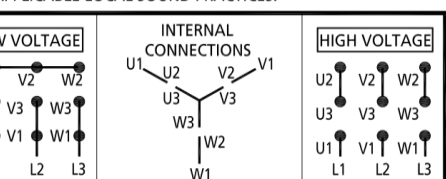
| REV | DATE | CONTENTS | REVD BY | CHKD BY | CHKD BY | APPD BY |
|-----|------|----------|---------|---------|---------|---------|
|     |      |          |         |         |         |         |
|     |      |          |         |         |         |         |
|     |      |          |         |         |         |         |

## ■ MAIN NAMEPLATE

3.94



## ■ WIRING DIAGRAM

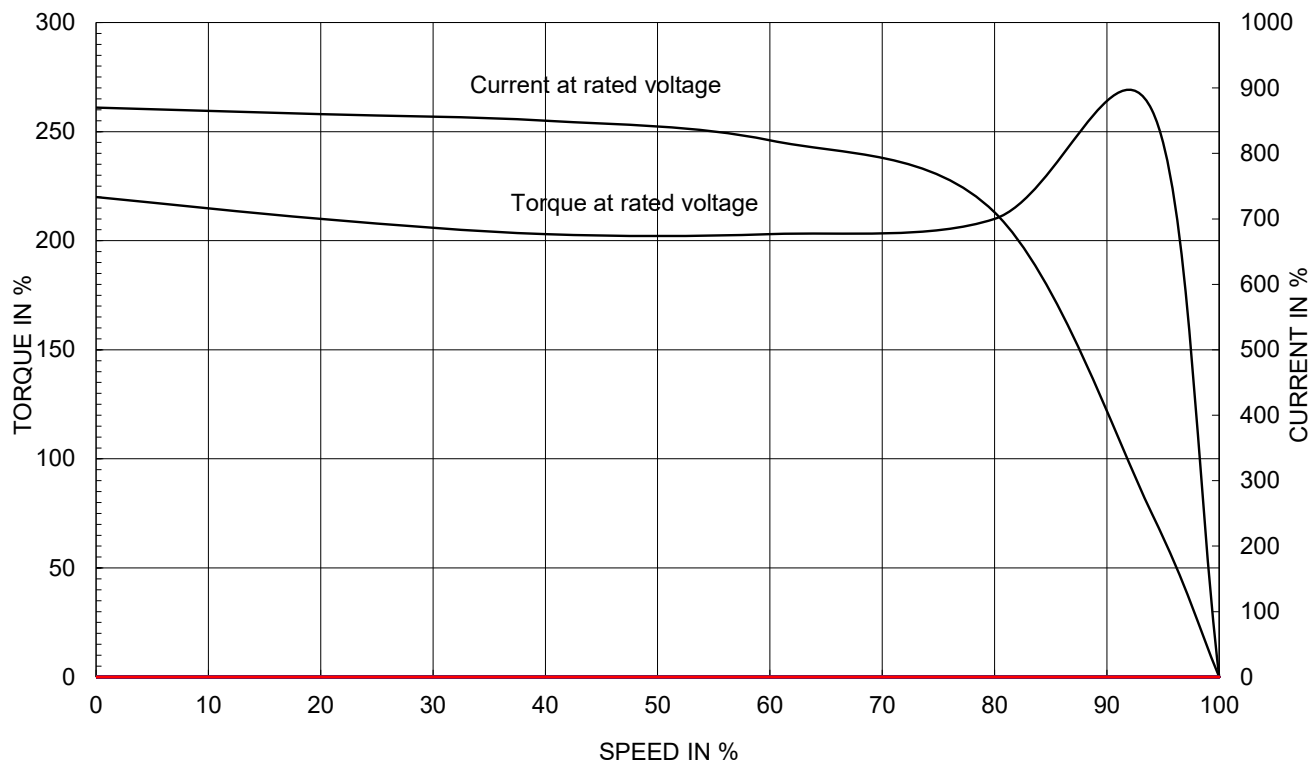
| <b>D.O.L<br/>(INVERTER &amp; SOFT STARTER)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>WYE-DELTA<br/>(Y-D)</b>                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| <div data-bbox="322 1182 769 1323">  <h1 data-bbox="386 1182 769 1216">WARNING</h1> </div> <div data-bbox="322 1323 769 1429"> <p>IMPROPER INSTALLATION, CONNECTION, OPERATION, GROUNDING OF THIS MOTOR MAY CAUSE SERIOUS INJURY TO PERSONNEL OR MOTOR FAILURE. READ INSTRUCTIONS CAREFULLY. GROUNDING SHOULD BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND APPLICABLE LOCAL SOUND PRACTICES.</p> </div> <div data-bbox="322 1429 769 1606">  </div> <div data-bbox="322 1606 769 1706"> <p>KEEP FINGERS AND FOREIGN OBJECTS AWAY FROM OPENINGS AND ROTATING PARTS DISCONNECT ALL POWER SOURCES BEFORE TOUCHING INTERNAL PARTS TO AVOID ELECTRICAL SHOCK.</p> <p>4M-130355</p> </div> | <div data-bbox="833 1182 1335 1323"> <h1 data-bbox="833 1182 1335 1323">N/A</h1> </div> |

|                                                                                                                               |         |          |            |                   |                                                   |                   |
|-------------------------------------------------------------------------------------------------------------------------------|---------|----------|------------|-------------------|---------------------------------------------------|-------------------|
| APPD BY                                                                                                                       | S.Y.KIM | UNIT     | INCH       | SUBJECT           | CSA Class I, Division2 Severe Duty (IEC, 71 -132) | DWG SIZE          |
| CHKD BY                                                                                                                       | I.K.KIM | SCALE    | NONE       |                   |                                                   | A4 ( 1:1 )        |
| CHKD BY                                                                                                                       | R.G.KIM | PROJEC'N | 3rd Angle  |                   |                                                   |                   |
| DSND BY                                                                                                                       | S.H.LEE | DATE     | 2024.06.07 |                   |                                                   |                   |
| <div> <b>HD</b> HYUNDAI<br/>ELECTRIC</div> |         |          |            | TITLE             |                                                   |                   |
|                                                                                                                               |         |          |            | NAMEPLATE DRAWING |                                                   |                   |
|                                                                                                                               |         |          |            | REF. NO           | 4M-133049 / 4M-130355                             | Sheet No.    of   |
|                                                                                                                               |         |          |            | DWG NO            | NP-HES10-36-132S                                  | Revision No.    0 |

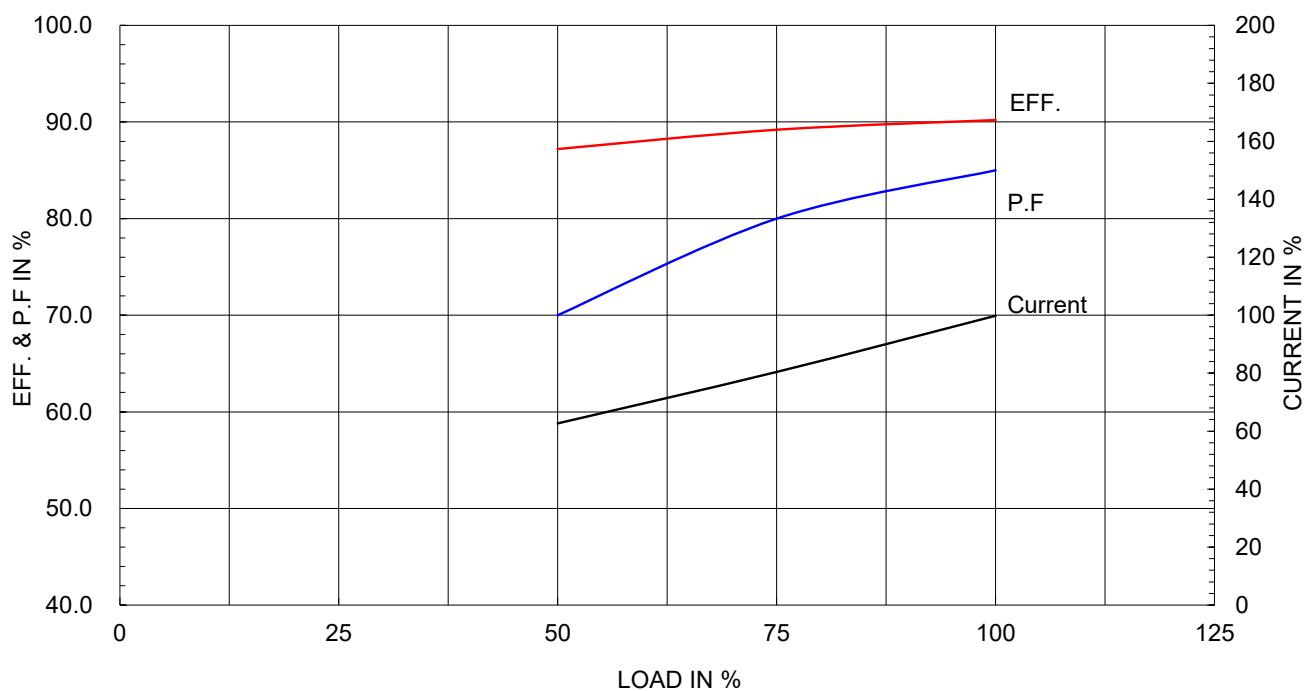
|                               |       |        |
|-------------------------------|-------|--------|
| Type :                        | PJP   |        |
| Full Load Torque :            | 15.01 | lb.ft  |
| Load moment of Inertia (J) :  | 8.187 | lb.ft2 |
| Motor moment of Inertia (J) : | 0.332 | lb.ft2 |

|                      |      |          |       |
|----------------------|------|----------|-------|
| 7.5kW                | 10HP | 2 P      | 60 Hz |
| Speed at Full Load : |      | 3520 RPM |       |
| Rated Voltage        |      | 460V     | 230V  |
| Full Load Current    |      | 12.3A    | 24.6A |

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



| 1    | 2     | 3   | 4    |
|------|-------|-----|------|
| ▽    | 50S   | REV | DATE |
| ▽▽   | 12.5S |     |      |
| ▽▽▽  | 3.2S  |     |      |
| ▽▽▽▽ | 0.4S  |     |      |

G

F

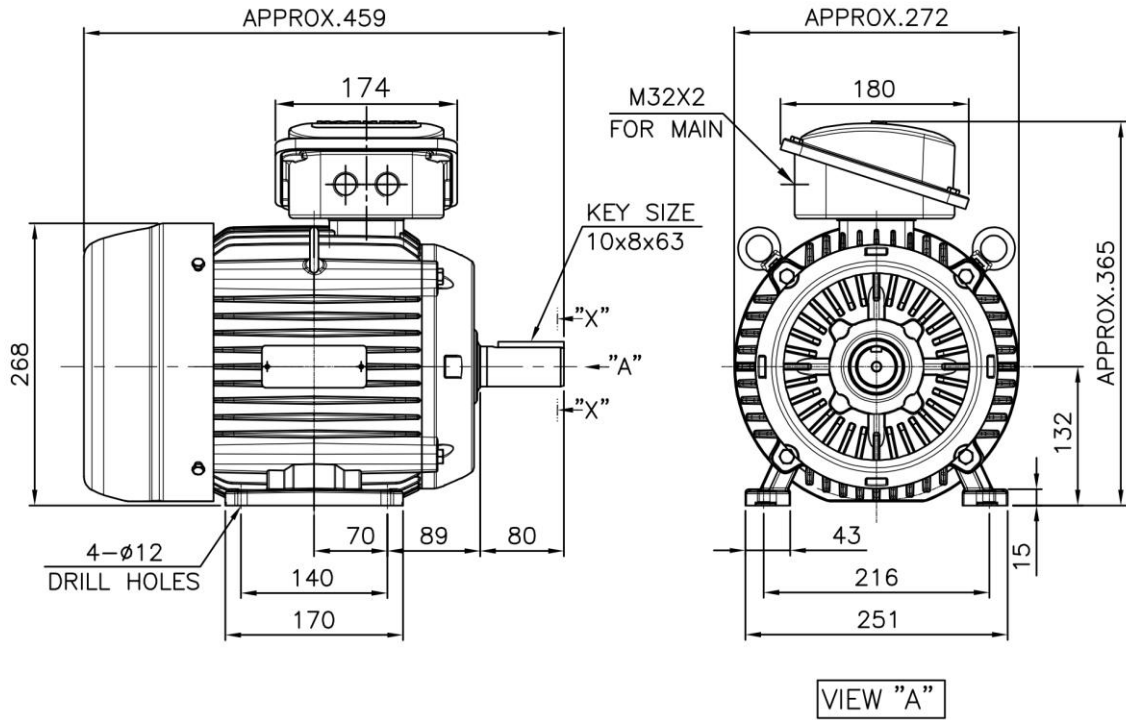
E

D

C

B

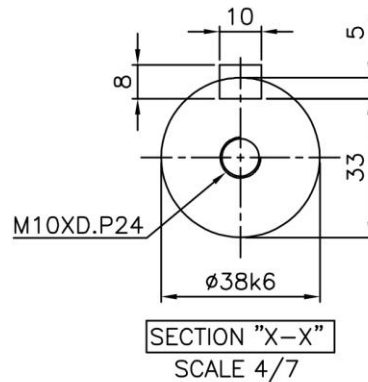
A



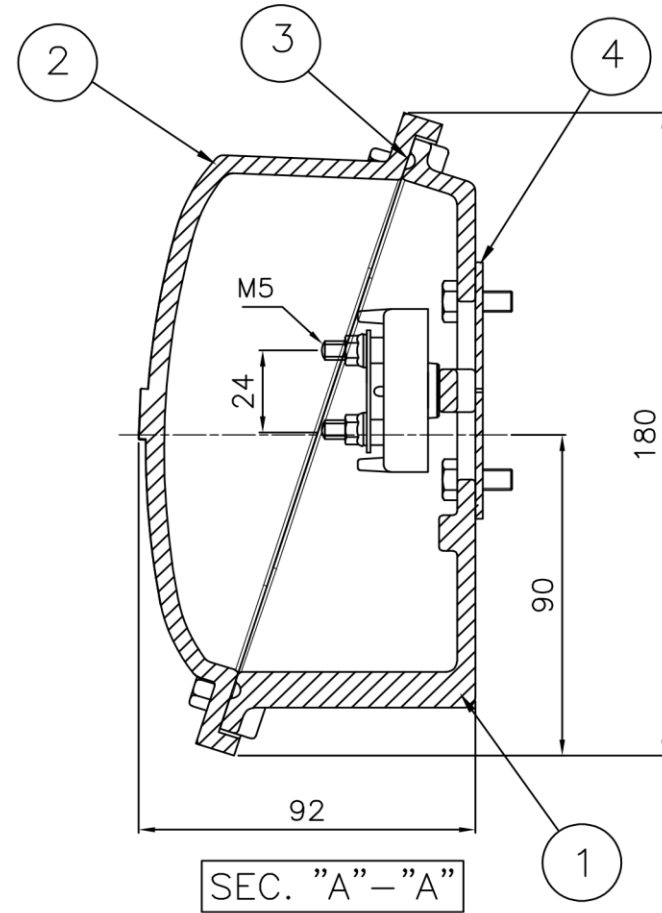
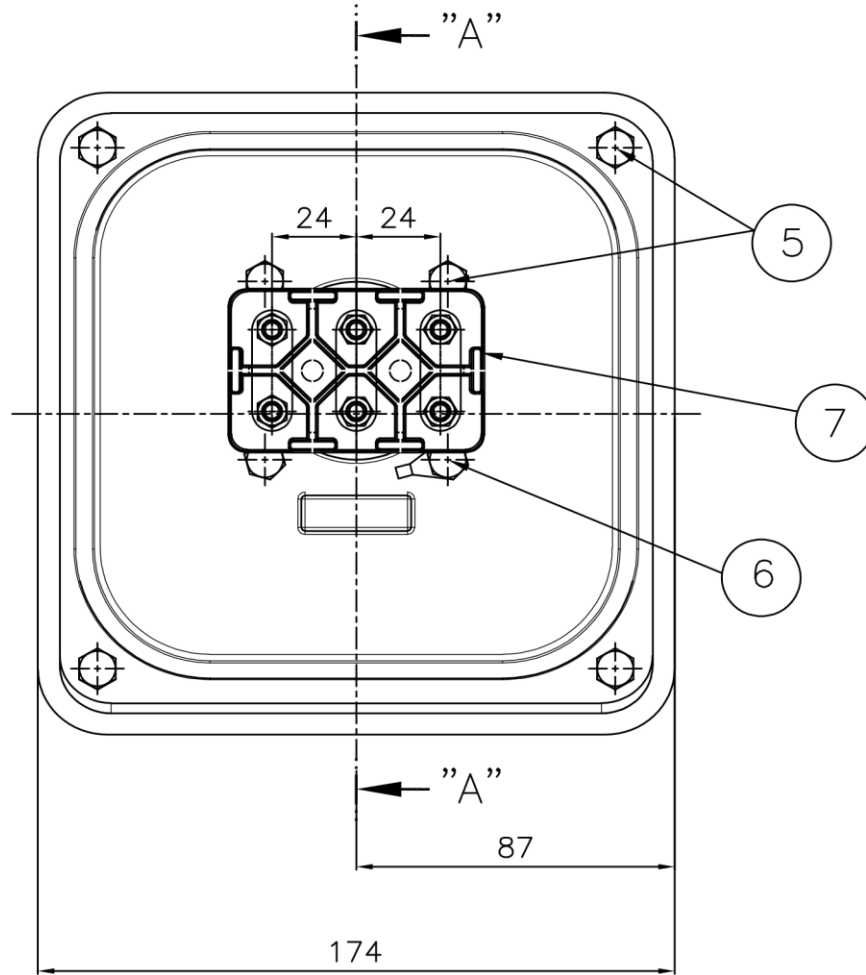
### NOTE

#### 1.TOLERANCE :

|                |           |                                                          |
|----------------|-----------|----------------------------------------------------------|
| CENTER HEIGHT  | 132       | $\begin{smallmatrix} 0 \\ -0.5 \end{smallmatrix}$        |
| BASE HOLES     | $\phi 12$ | $\begin{smallmatrix} +0.43 \\ 0 \end{smallmatrix}$       |
| SHAFT DIAMETER | $\phi 38$ | $\begin{smallmatrix} +0.018 \\ +0.002 \end{smallmatrix}$ |
| KEYWAY WIDTH   | 10        | $\begin{smallmatrix} 0 \\ -0.036 \end{smallmatrix}$      |
| KEYWAY DEPTH   | 5         | $\begin{smallmatrix} +0.2 \\ 0 \end{smallmatrix}$        |
| KEY WIDTH      | 10        | $\begin{smallmatrix} 0 \\ -0.036 \end{smallmatrix}$      |
| KEY HEIGHT     | 8         | $\begin{smallmatrix} 0 \\ -0.090 \end{smallmatrix}$      |



|         |          |          |            |         |                 |              |            |
|---------|----------|----------|------------|---------|-----------------|--------------|------------|
| APPD BY | S.Y.KIM  | UNIT     | mm         | SUBJECT | IEC 132S        | DWG SIZE     | A4 ( 1:7 ) |
| CHKD BY | I.K.KIM  | SCALE    | 1/7        | TITLE   | OUTLINE         | Sheet No.    | of         |
| CHKD BY |          | PROJEC'N | 3rd Angle  | DWG NO  | LM-T2131B3PTV09 | Revision No. | 0          |
| DSND BY | C.W.PARK | DATE     | 2022-04-15 |         |                 |              |            |



|                                                                                       |                        |          |            |                             |                    |        |              |            |
|---------------------------------------------------------------------------------------|------------------------|----------|------------|-----------------------------|--------------------|--------|--------------|------------|
| 1                                                                                     | TERMINAL BLOCK         | STD      | M5         |                             |                    |        |              | 7          |
| 1                                                                                     | GROUND TERMINAL LUG    | CU       | --         |                             |                    |        |              | 6          |
| 8                                                                                     | BOX+FRAME HEX BOLT     | S45C     | M6         |                             |                    |        |              | 5          |
| 1                                                                                     | BOX GASKET             | NBR      | --         |                             |                    |        |              | 4          |
| 1                                                                                     | COVER GASKET (O--RING) | NBR      | --         |                             |                    |        |              | 3          |
| 1                                                                                     | CONDUIT BOX COVER      | CAST     | --         |                             |                    |        |              | 2          |
| 1                                                                                     | CONDUIT BOX            | CAST     | --         |                             |                    |        |              | 1          |
| Q'TY                                                                                  | DESCRIPTION            | MATERIAL | DIMENSION  | WEIGHT                      | PART NO.           | REMARK | NO.          |            |
| APPD BY                                                                               | S.Y.KIM                | UNIT     | mm         | SUBJECT                     | FR.132 (CAST IRON) |        |              | DWG SIZE   |
| CHKD BY                                                                               | I.K.KIM                | SCALE    | 1/1.5      | TITLE<br>TERMINAL BOX ASS'Y |                    |        |              | A3 (1:1.5) |
| CHKD BY                                                                               | -                      | PROJEC'N | 3rd Angle  |                             |                    |        |              |            |
| DSND BY                                                                               | S.H.LEE                | DATE     | 2021-12-17 |                             |                    |        |              |            |
|  |                        |          |            | REF. NO                     |                    |        | Sheet No.    | of         |
|                                                                                       |                        |          |            | DWG NO                      | 3M-241772          |        | Revision No. | 0          |
| 6                                                                                     |                        | 7        |            | 8                           |                    | 9      |              |            |

| 일반가공공차 |      |          |      | 일반재공공차 |      |          |      |
|--------|------|----------|------|--------|------|----------|------|
| 1-4    | ±0.1 | 6-30     | ±0.5 | 1-4    | ±0.1 | 6-30     | ±0.5 |
| 4-18   | ±0.2 | 30-120   | ±0.8 | 4-18   | ±0.2 | 30-120   | ±0.8 |
| 18-63  | ±0.3 | 120-315  | ±1.2 | 18-63  | ±0.3 | 120-315  | ±1.2 |
| 63-250 | ±0.5 | 315-1000 | ±2.0 | 63-250 | ±0.5 | 315-1000 | ±2.0 |
| 250-   | ±0.8 | 1000-    | ±3.0 | 250-   | ±0.8 | 1000-    | ±3.0 |