

Customer :

Project Name :

Project No. :

Revision No. :

# SPECIFICATION for INDUCTION MOTOR



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

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# AC INDUCTION MOTOR DATA SHEET

|              |                  |             |  |          |          |
|--------------|------------------|-------------|--|----------|----------|
| Catalog No.  | HES10-18-213/5JM | Item No.    |  | Rev. No. | [      ] |
| Project Name |                  | Project No. |  | Quantity | sets     |

| GENERAL SPECIFICATION                          |           |                                                                            | PERFORMANCE DATA |                                                              |                |                      |         |        |  |
|------------------------------------------------|-----------|----------------------------------------------------------------------------|------------------|--------------------------------------------------------------|----------------|----------------------|---------|--------|--|
| Frame Size                                     |           | 215JM                                                                      |                  | Rated Output                                                 |                | 7.5 kW               |         | 10 HP  |  |
| Type                                           |           | PJP                                                                        |                  | Number of Poles                                              |                | 4                    |         |        |  |
| 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      | 10.4 A               | 13.0 A  | 26.0 A |  |
| Insulation Class                               |           | F                                                                          |                  |                                                              | Locked-rotor** | 750 %                | 750 %   | 750 %  |  |
| 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           |                  |                                                              |                |                      |         |        |  |
| Altitude                                       |           | Less than 1,000 meter                                                      |                  |                                                              |                |                      |         |        |  |
| Relative Humidity                              |           | Less than 80 %                                                             |                  | Power Factor(p.u)                                            |                |                      |         |        |  |
| Ambient Temp.                                  |           | 40 deg. C (Max.)                                                           |                  |                                                              |                |                      |         |        |  |
| Duty Type                                      |           | Continuous ( S1 )                                                          |                  |                                                              |                |                      |         |        |  |
| Service Factor                                 |           | 1.15                                                                       |                  |                                                              |                |                      |         |        |  |
| Mounting                                       |           | B35                                                                        |                  | Speed at Full Load                                           |                | 1770 r.p.m           |         |        |  |
| Bearing                                        | Type      | Anti-Friction                                                              |                  | Torque                                                       |                |                      |         |        |  |
|                                                | DE/N-DE   | 6309ZZC3 / 6208ZZC3                                                        |                  |                                                              |                |                      |         |        |  |
|                                                | Lubricant | Grease(Polyrex-EM)                                                         |                  |                                                              |                |                      |         |        |  |
| External Thrust                                |           | Not applicable                                                             |                  | Full Load                                                    |                | 29.85 lb.ft          |         |        |  |
| Coupling Method                                |           | <input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt |                  | Locked-rotor**                                               |                | 180 %                |         |        |  |
| Shaft Extension                                |           | Single                                                                     |                  | Breakdown**                                                  |                | 240 %                |         |        |  |
| Terminal Box                                   | Main      | Cast Iron                                                                  |                  | Moment of Inertia (J)                                        |                |                      |         |        |  |
|                                                | Aux.      | No                                                                         |                  |                                                              |                |                      |         |        |  |
|                                                | Location  | Refer to Outline Drawing                                                   |                  |                                                              |                |                      |         |        |  |
| Application                                    |           |                                                                            |                  | Load(Max.)                                                   |                | 62.787 lb.ft2        |         |        |  |
| Area classification                            |           | Hazardous                                                                  |                  | Motor                                                        |                | 0.712 lb.ft2         |         |        |  |
| Type of Ex-Protection                          |           | Class I&II, Division 2                                                     |                  | Sound Pressure Level (No-load & mean value at 1m from motor) |                |                      |         |        |  |
| Applicable Standard                            |           | NEMA MG1, CSA C390                                                         |                  |                                                              |                |                      |         |        |  |
|                                                |           |                                                                            |                  |                                                              |                | 62 dB(A)             |         |        |  |
|                                                |           |                                                                            |                  | Vibration                                                    |                | 3.8 mm/s (peak)      |         |        |  |
|                                                |           |                                                                            |                  | Permissible number of consecutive starts                     |                | Cold                 | 3 times |        |  |
|                                                |           |                                                                            |                  |                                                              |                | Hot                  | 2 times |        |  |
|                                                |           |                                                                            |                  | Paint                                                        | Munsell No.    | 4.0PB5.4/5.5(VL-451) |         |        |  |

| ACCESSORIES |  | SUBMITTAL DRAWING                                                                                        |                 |                       |          |          |
|-------------|--|----------------------------------------------------------------------------------------------------------|-----------------|-----------------------|----------|----------|
|             |  | Outline Dimension Drawing                                                                                |                 | Motor Weight(Approx.) |          |          |
|             |  | B35                                                                                                      | LM-T2215C4MLV25 | 190 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. CSA Certification                                                                                     |                 |                       |          |          |
| SPARE PARTS |  | - Class I, Division 2, Group A, B, C & D                                                                 |                 |                       |          |          |
|             |  | - Class II, Division 2 Group E, F & G (Group E : up to 320Fr.)                                           |                 |                       |          |          |
|             |  | 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.

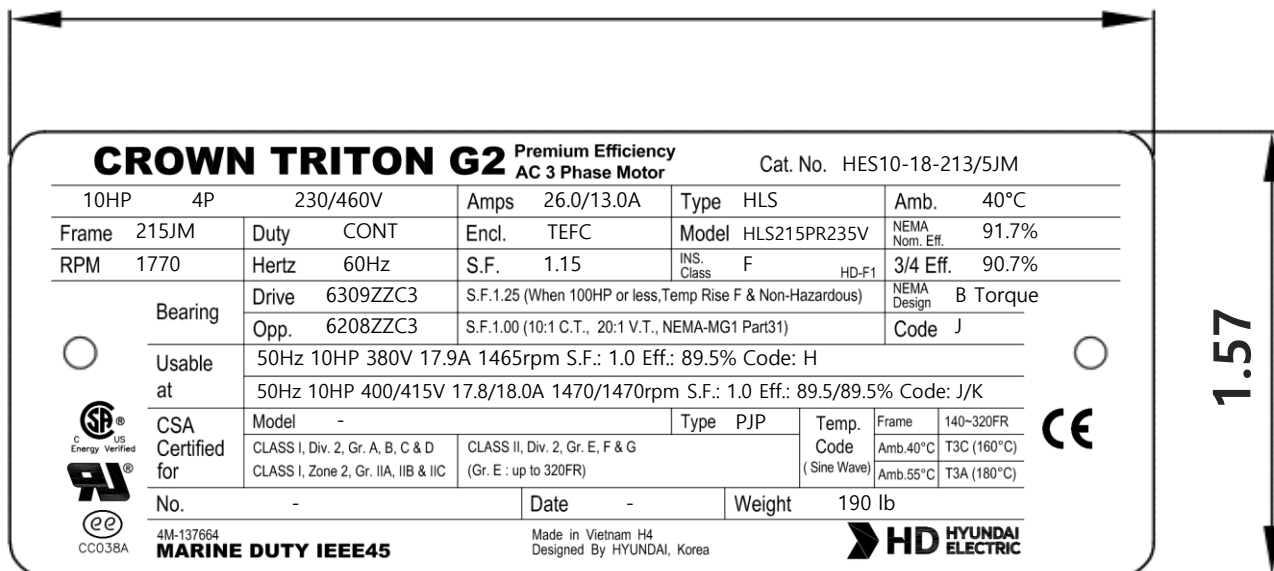
\* In case of Inverter-Fed Motor, performance data is based on sine wave tests. It may be different from test data of Inverter combined motor.

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

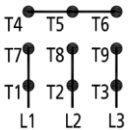
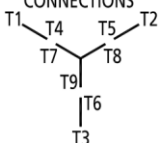
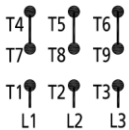
|     |      | 2        | 3 | 4       |         |         |         |
|-----|------|----------|---|---------|---------|---------|---------|
| REV | DATE | CONTENTS |   | REVD BY | CHKD BY | CHKD BY | APPD BY |
|     |      |          |   |         |         |         |         |
|     |      |          |   |         |         |         |         |
|     |      |          |   |         |         |         |         |

## ■ MAIN NAMEPLATE

3.94



## ■ WIRING DIAGRAM

| <div data-bbox="264 1093 782 1171"> <div>D.O.L<br/>(INVERTER &amp; SOFT STARTER)</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <div data-bbox="1056 1093 1272 1171"> <div>WYE-DELTA<br/>(Y-D)</div> </div> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| <div data-bbox="309 1207 724 1290">  <div>WARNING</div> </div> <div data-bbox="264 1312 782 1424"> <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="258 1429 782 1619"> <div> <div> <div>LOW VOLTAGE</div>  </div> <div> <div>INTERNAL CONNECTIONS</div>  </div> <div> <div>HIGH VOLTAGE</div>  </div> </div> <div data-bbox="264 1626 782 1693"> <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> </div> <div data-bbox="699 1711 782 1729"> 4M-128845 </div> </div> | <div data-bbox="1107 1440 1208 1489"> N/A </div>                            |

|                                                                                                                               |         |          |            |                   |                                                          |                   |
|-------------------------------------------------------------------------------------------------------------------------------|---------|----------|------------|-------------------|----------------------------------------------------------|-------------------|
| APPD BY                                                                                                                       | S.Y.KIM | UNIT     | INCH       | SUBJECT           | CSA Class I, Division2 Severe Duty (HES, JM/JP, 143-215) | 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-137664 / 4M-128845                                    | Sheet No.    of   |
|                                                                                                                               |         |          |            | DWG NO            | NP-HES10-18-213/5JM                                      | Revision No.    0 |

Type : PJP

7.5kW 10HP 4 P 60 Hz

Full Load Torque : 29.85 lb.ft

Speed at Full Load : 1770 RPM

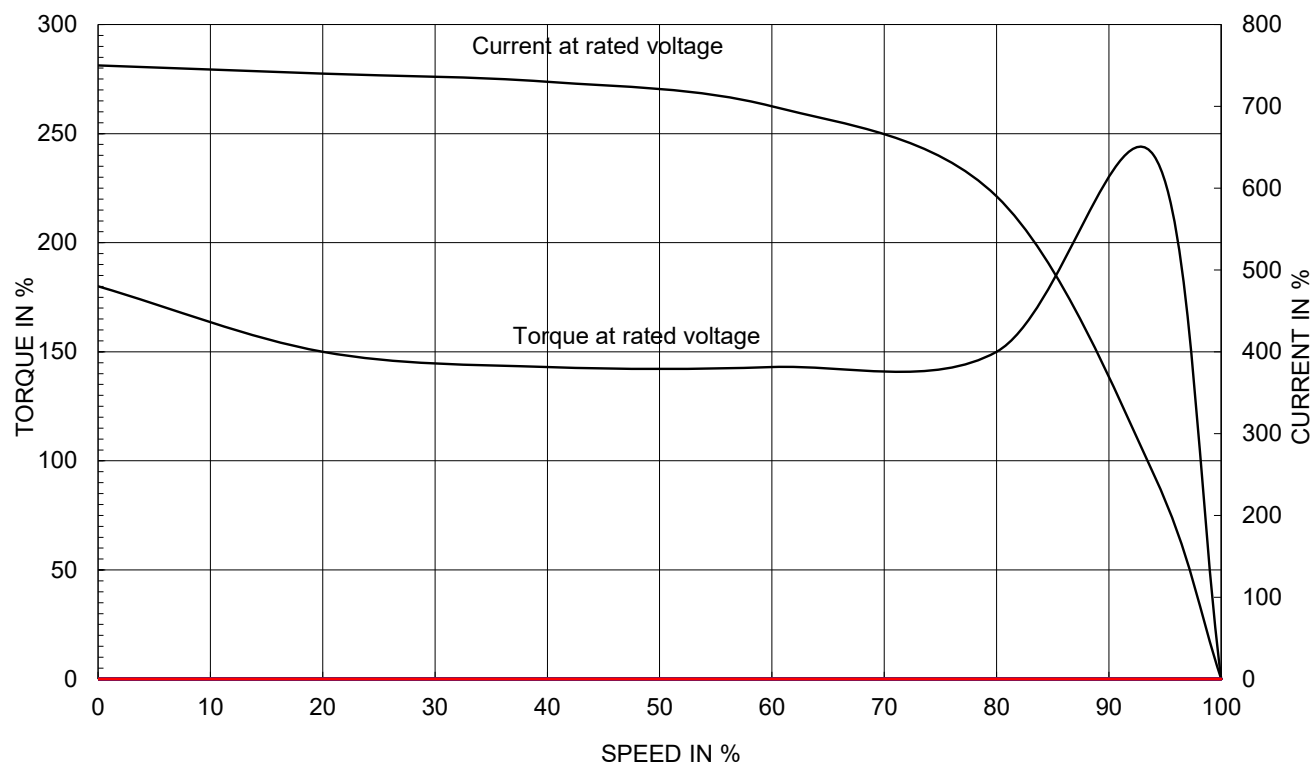
Load moment of Inertia (J) : 62.787 lb.ft<sup>2</sup>

|               |      |      |      |
|---------------|------|------|------|
| Rated Voltage | 575V | 460V | 230V |
|---------------|------|------|------|

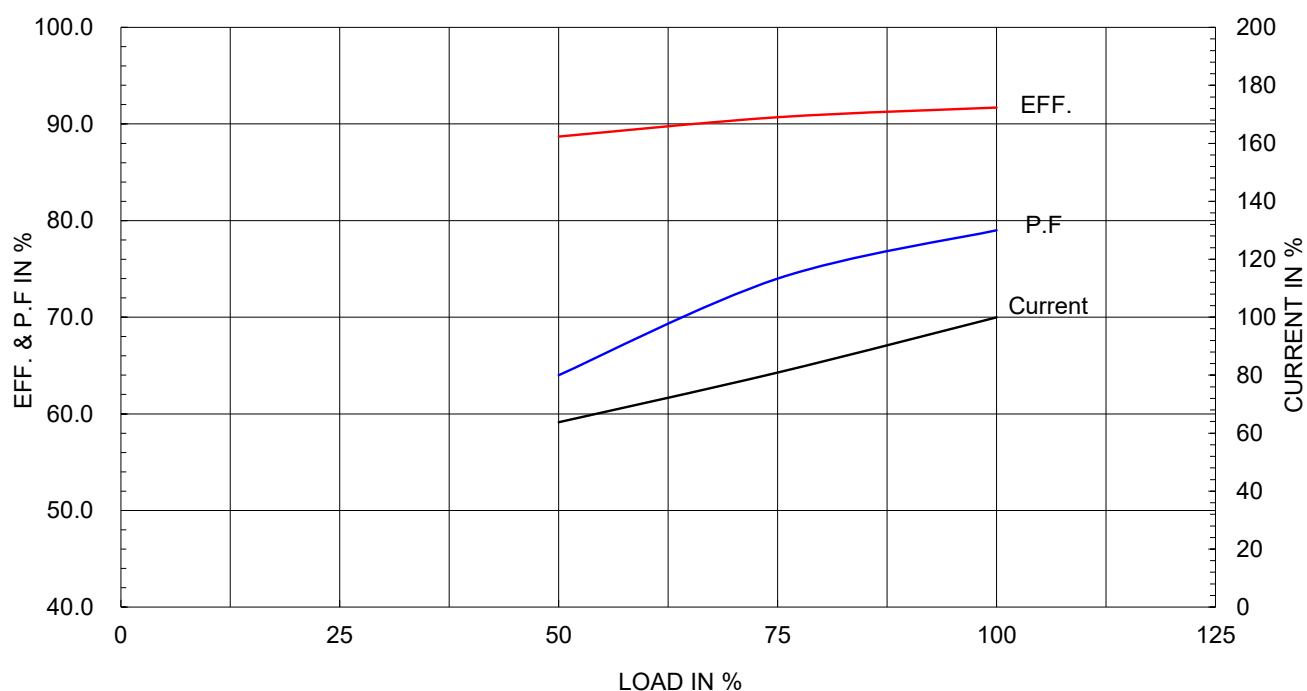
Motor moment of Inertia (J) : 0.712 lb.ft<sup>2</sup>

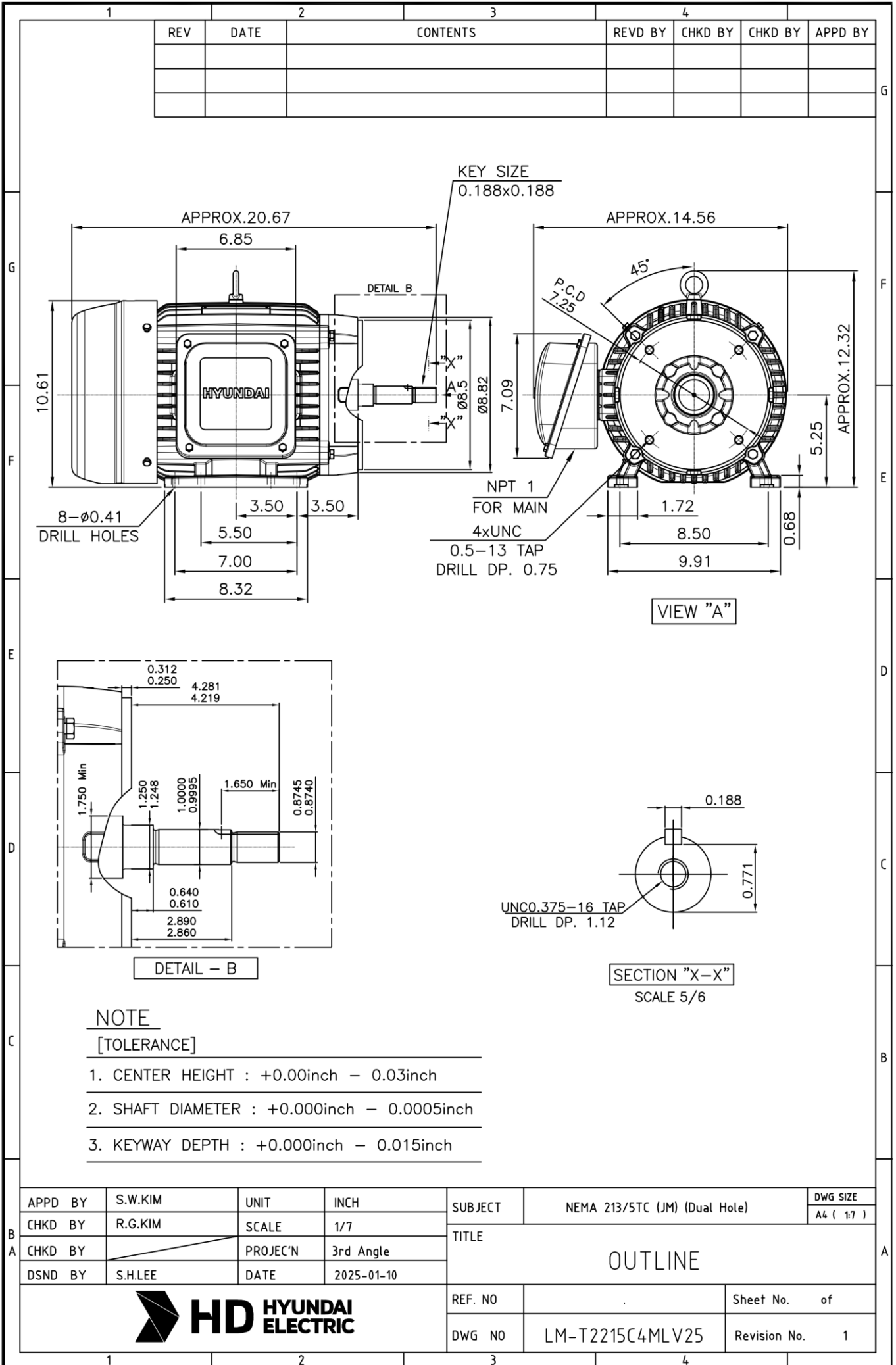
|                   |       |       |       |
|-------------------|-------|-------|-------|
| Full Load Current | 10.4A | 13.0A | 26.0A |
|-------------------|-------|-------|-------|

SPEED VS TORQUE &amp; CURRENT CURVE

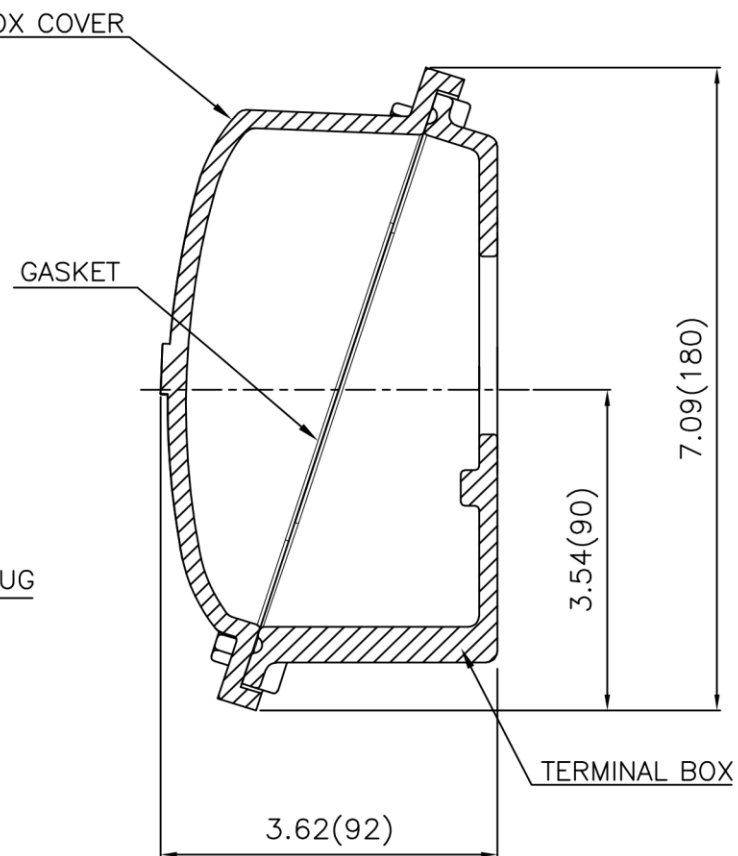
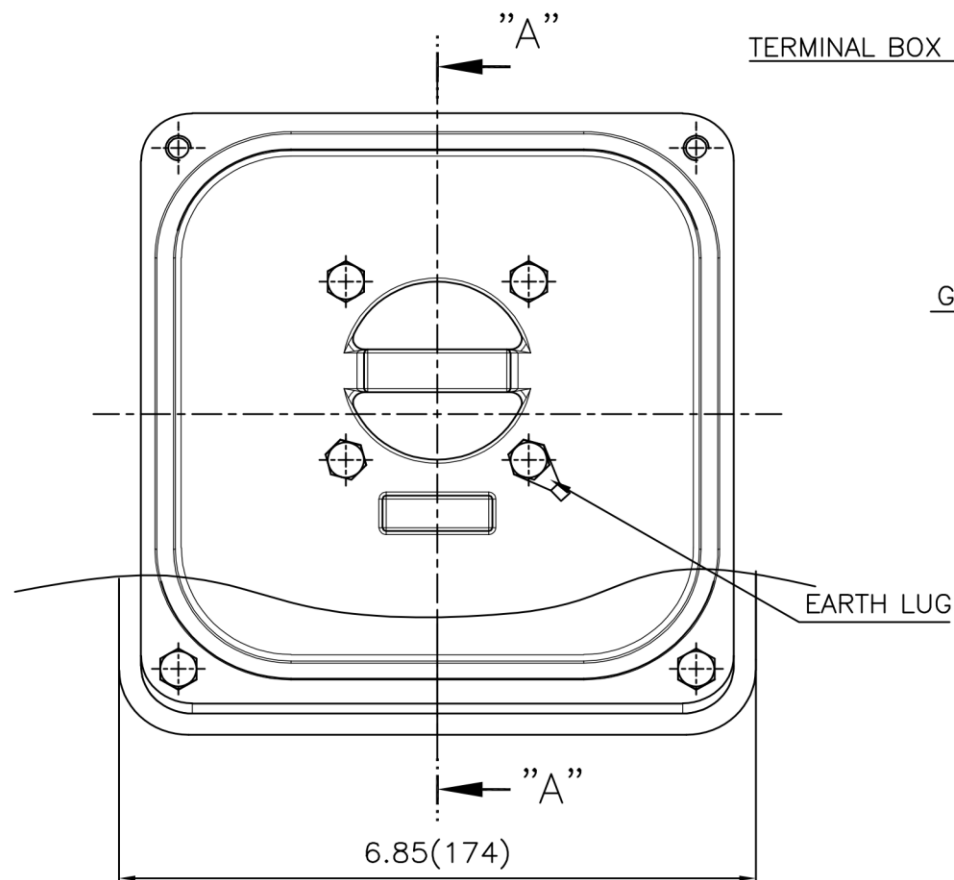


OUTPUT VS EFF., P.F &amp; CURRENT CURVE





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



SEC. "A"—"A"

|   |                                                                                     |       |
|---|-------------------------------------------------------------------------------------|-------|
| A |  | 50S   |
|   |  | 12.5S |
|   |  | 3.2S  |
|   |  | 0.4S  |

[illegible]

| Q'TY                                                                                                             |    | DESCRIPTION |  | MATERIAL | DIMENSION  |   | WEIGHT  | PART NO.            | REMARK | NO.            |
|------------------------------------------------------------------------------------------------------------------|----|-------------|--|----------|------------|---|---------|---------------------|--------|----------------|
| APPD                                                                                                             | BY | S.Y.KIM     |  | UNIT     | inch(mm)   |   | SUBJECT | FR. 210 (CAST IRON) |        | DWG SIZE       |
| CHKD                                                                                                             | BY |             |  | SCALE    | 1/1.5      |   | TITLE   |                     |        | A3 (1:1.5)     |
| CHKD                                                                                                             | BY | R.G.KIM     |  | PROJEC'N | 3rd Angle  |   |         | TERMINAL BOX ASS'Y  |        |                |
| DSND                                                                                                             | BY | 네솔의         |  | DATE     | 2023-10-19 |   |         |                     |        |                |
|  <b>HD HYUNDAI ELECTRIC</b> |    |             |  |          |            |   | REF. NO |                     |        | Sheet No. of   |
|                                                                                                                  |    |             |  |          |            |   | DWG NO  | 3M-248457           |        | Revision No. 0 |
| 6                                                                                                                |    | 7           |  | 8        |            | 9 |         |                     |        |                |