

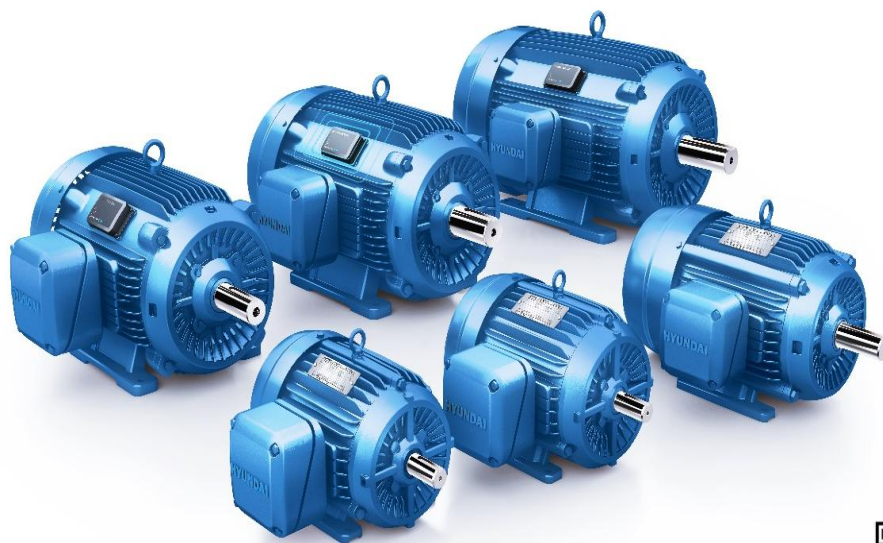
Customer :

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.  | HES10-36-213/5JP | Item No.    |  | Rev. No. | [      ] |
| Project Name |                  | Project No. |  | Quantity | sets     |

| GENERAL SPECIFICATION                          |           |                                                                            | PERFORMANCE DATA |                                                              |                |                      |                    |
|------------------------------------------------|-----------|----------------------------------------------------------------------------|------------------|--------------------------------------------------------------|----------------|----------------------|--------------------|
| Frame Size                                     |           | 215JP                                                                      |                  | 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                                                |                | 575 V                | 460 V      230 V   |
| Number of Phases                               |           | 3                                                                          |                  | Current                                                      | Full Load      | 9.71 A               | 12.1 A      24.3 A |
| Insulation Class                               |           | F                                                                          |                  |                                                              | Locked-rotor** | 680 %                | 680 %      680 %   |
| 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                                                     |                | 0.710                |                    |
| Duty Type                                      |           | Continuous ( S1 )                                                          |                  | 75% Load                                                     |                | 0.810                |                    |
| Service Factor                                 |           | 1.15                                                                       |                  | 100% Load                                                    |                | 0.860                |                    |
| Mounting                                       |           | B35                                                                        |                  | Speed at Full Load                                           |                | 3525 r.p.m           |                    |
| Bearing                                        | Type      | Anti-Friction                                                              |                  | Torque                                                       |                |                      |                    |
|                                                | DE/N-DE   | 6309ZZC3 / 6208ZZC3                                                        |                  | Full Load                                                    |                | 14.99 lb.ft          |                    |
|                                                | Lubricant | Grease(Polyrex-EM)                                                         |                  | Locked-rotor**                                               |                | 160 %                |                    |
| 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.)                                                   |                | 11.159 lb.ft2        |                    |
| Terminal Box                                   | Main      | Cast Iron                                                                  |                  | Motor                                                        |                | 0.451 lb.ft2         |                    |
|                                                | Aux.      | No                                                                         |                  | Sound Pressure Level (No-load & mean value at 1m from motor) |                |                      |                    |
| Location                                       |           | Refer to Outline Drawing                                                   |                  |                                                              |                | 73 dB(A)             |                    |
| Application                                    |           |                                                                            |                  | Vibration                                                    |                | 3.8 mm/s (peak)      |                    |
| Area classification                            |           | Hazardous                                                                  |                  | Permissible number of consecutive starts                     |                | Cold                 | 3 times            |
| Type of Ex-Protection                          |           | Class I&II, Division 2                                                     |                  |                                                              |                | Hot                  | 2 times            |
| Applicable Standard                            |           | NEMA MG1, CSA C390                                                         |                  | Paint                                                        | Munsell No.    | 4.0PB5.4/5.5(VL-451) |                    |

| ACCESSORIES | SUBMITTAL DRAWING                                 |
|-------------|---------------------------------------------------|
|             | Outline Dimension Drawing \ Motor Weight(Approx.) |
|             | B35 LM-T2215C4JLV25 190 lb.                       |
|             |                                                   |
|             |                                                   |
|             |                                                   |

| REMARK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Premium efficiency according to NEMA MG1<br>2. Inverter Duty @ 1.0 Service Factor & F Temperature rise<br>-. 10:1 VT (20:1 VT at 50% load)<br>-. 10:1 CT<br>-. CHP up to 1.5 times base speed, NEMA MG1 Part31<br>3. CSA Certification<br>-. Class I, Division 2, Group A, B, C & D<br>-. Class II, Division 2 Group E, F & G (Group E : up to 320Fr.)<br>4. Service Factor 1.15 and Temperature rise B are applicable under the condition of sine wave power.<br>5. Service Factor 1.25 is applicable to motors of 100HP or less with temperature rise F & Non-Hazardous.<br>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.

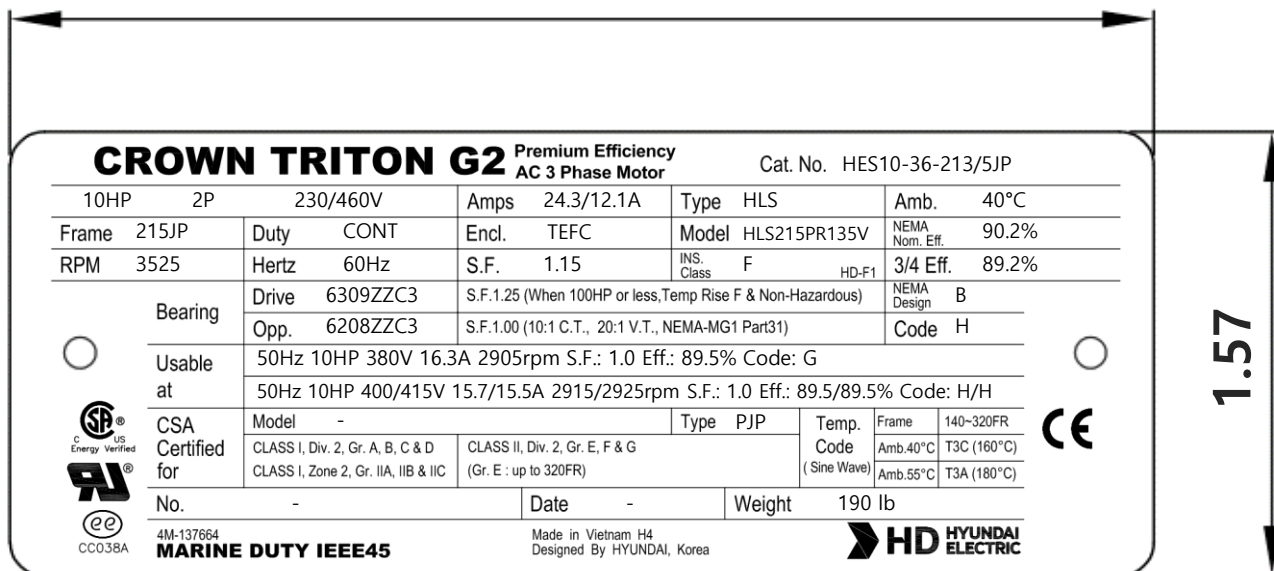
\* In case of Inverter-Fed Motor, performance data is based on sine wave tests. It may be different from test data of Inverter combined motor.

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

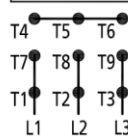
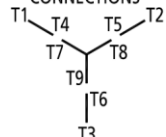
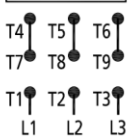
| 1   |      | 2        | 3       | 4       |         |         | 5 |
|-----|------|----------|---------|---------|---------|---------|---|
| REV | DATE | CONTENTS | REVD BY | CHKD BY | CHKD BY | APPD BY |   |
|     |      |          |         |         |         |         |   |
|     |      |          |         |         |         |         |   |
|     |      |          |         |         |         |         |   |

## ■ MAIN NAMEPLATE

3.94



## ■ WIRING DIAGRAM

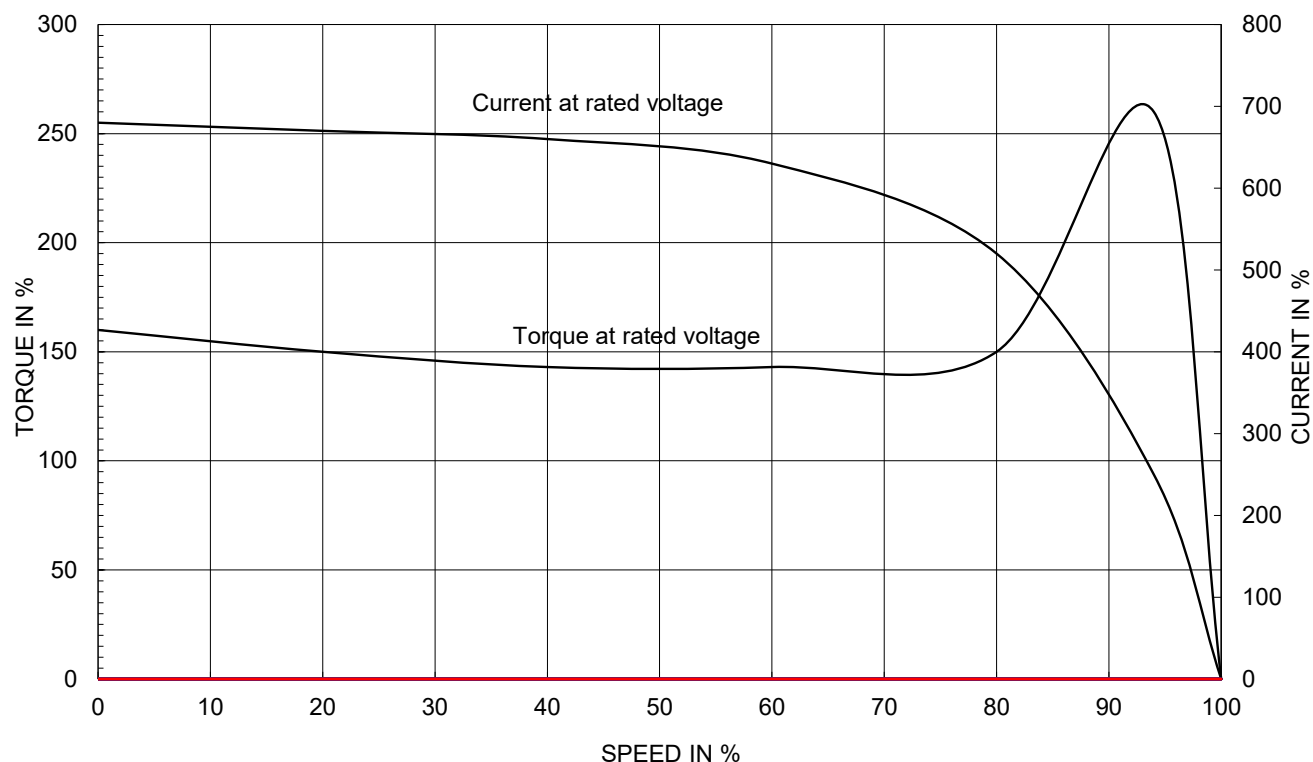
| <div data-bbox="258 1090 769 1160"> <div>D.O.L<br/>(INVERTER &amp; SOFT STARTER)</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <div data-bbox="1050 1090 1265 1160"> <div>WYE-DELTA<br/>(Y-D)</div> </div> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| <div data-bbox="233 1182 807 1753"> <div>  <div>WARNING</div> </div> <div> <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> <div> <div>LOW VOLTAGE</div>  </div> <div> <div>INTERNAL CONNECTIONS</div>  </div> <div> <div>HIGH VOLTAGE</div>  </div> </div> <div> <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>4M-128845</div> </div> | <div data-bbox="1101 1435 1201 1485"> <div>N/A</div> </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  | TITLE   | NAMEPLATE DRAWING                                        |                |
| DSND BY                                                                             | S.H.LEE | DATE     | 2024.06.07 |         |                                                          |                |
|  |         |          |            | REF. NO | 4M-137664 / 4M-128845                                    | Sheet No. of   |
|                                                                                     |         |          |            | DWG NO  | NP-HES10-36-213/5JP                                      | Revision No. 0 |

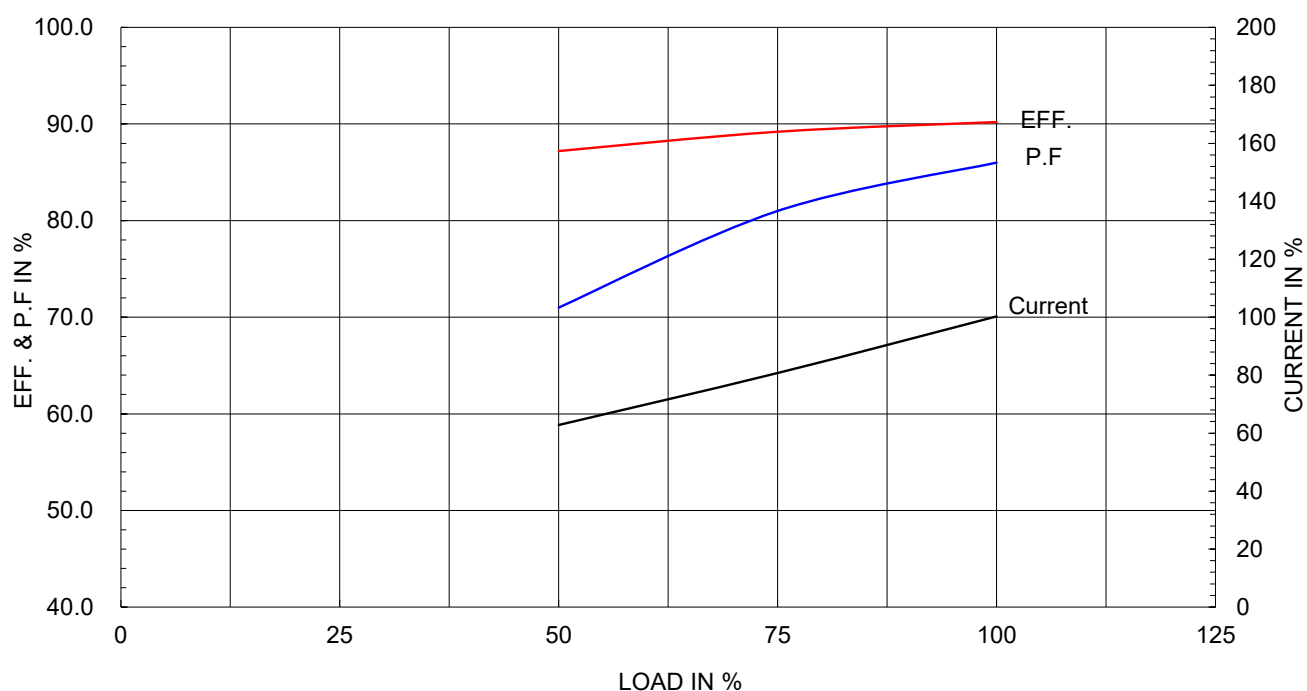
|                               |        |        |
|-------------------------------|--------|--------|
| Type :                        | PJP    |        |
| Full Load Torque :            | 14.99  | lb.ft  |
| Load moment of Inertia (J) :  | 11.159 | lb.ft2 |
| Motor moment of Inertia (J) : | 0.451  | lb.ft2 |

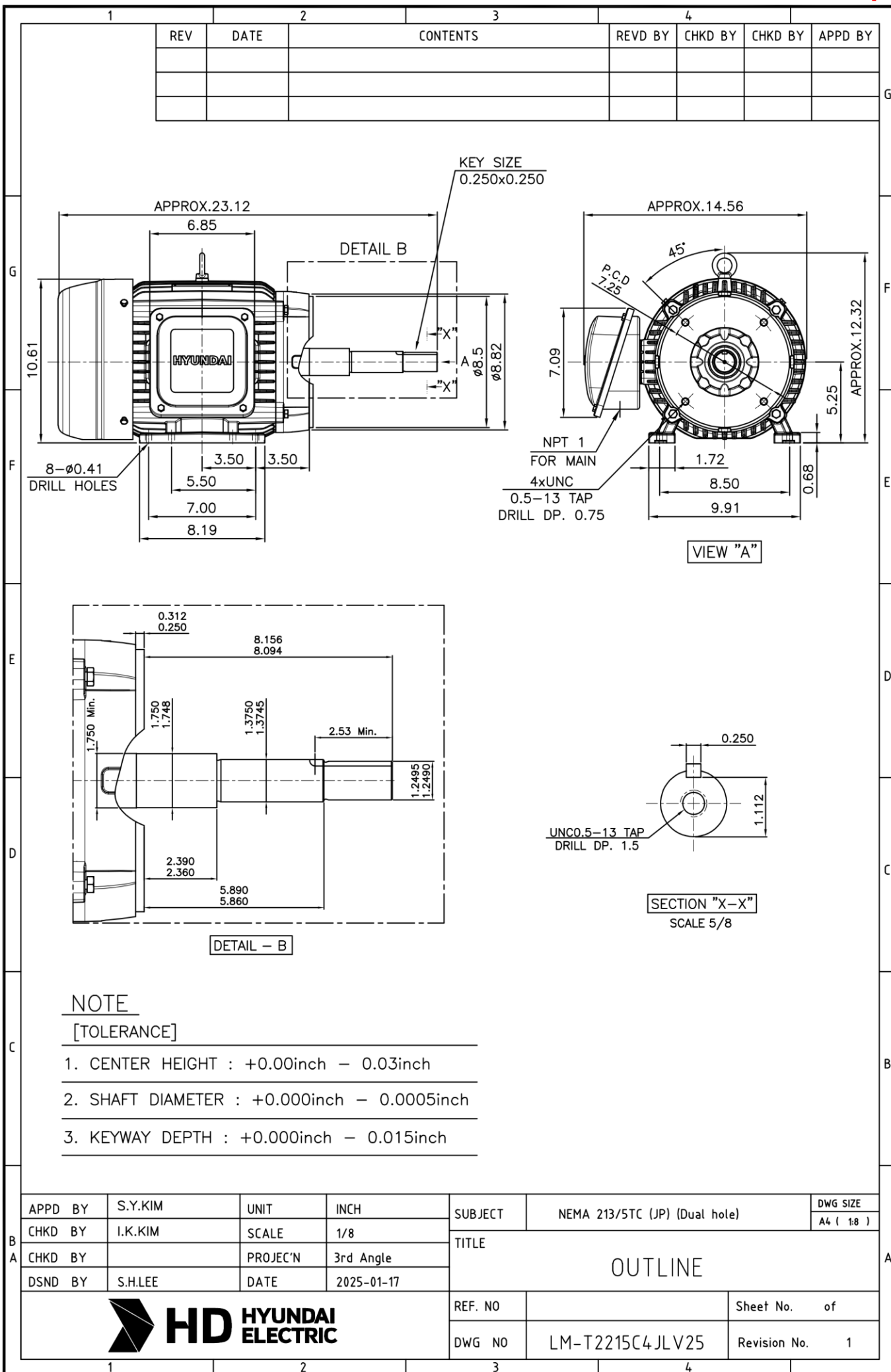
|                      |       |       |          |
|----------------------|-------|-------|----------|
| 7.5kW                | 10HP  | 2 P   | 60 Hz    |
| Speed at Full Load : |       |       | 3525 RPM |
| Rated Voltage        | 575V  | 460V  | 230V     |
| Full Load Current    | 9.71A | 12.1A | 24.3A    |

SPEED VS TORQUE &amp; CURRENT CURVE

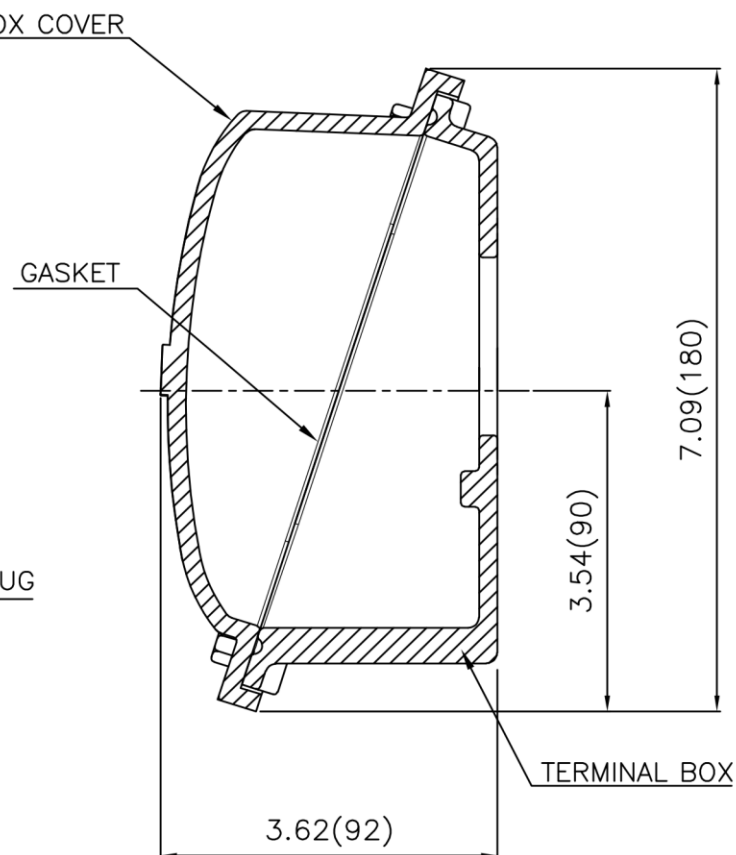
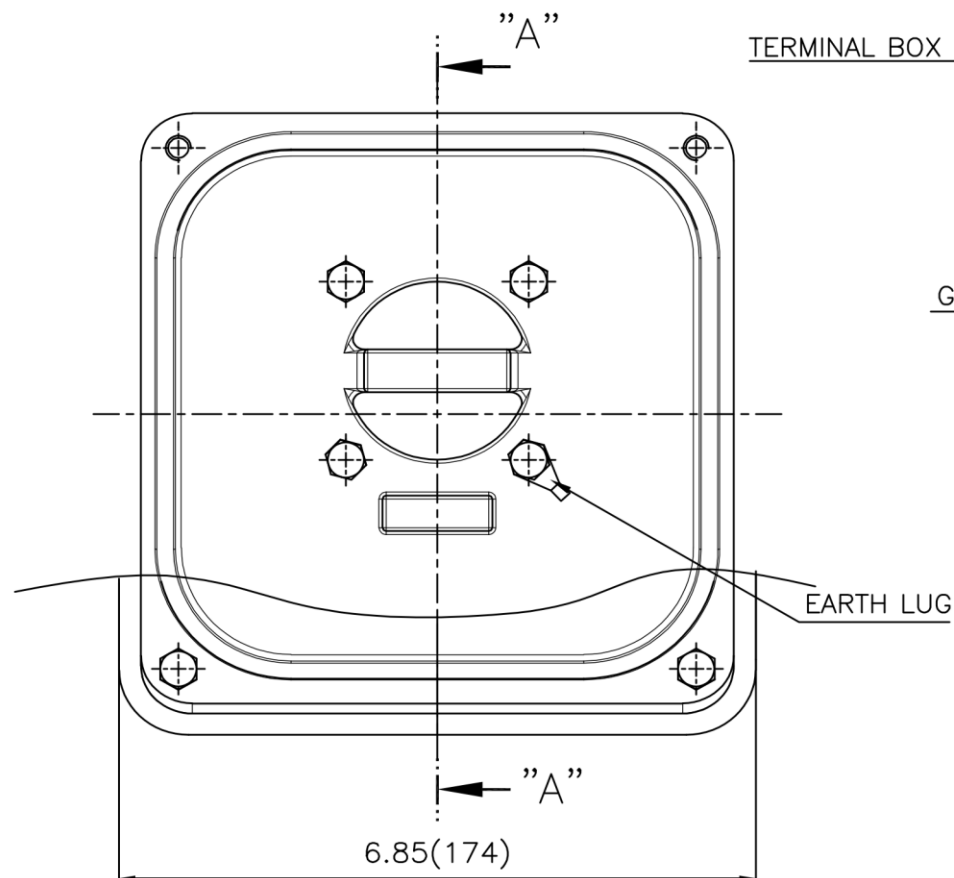


OUTPUT VS EFF., P.F &amp; CURRENT CURVE





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



SEC. "A"—"A"

|   |      |       |
|---|------|-------|
|   | ▽    | 50S   |
|   | ▽▽   | 12.5S |
|   | ▽▽▽  | 3.2S  |
| A | ▽▽▽▽ | 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<br>TERMINAL BOX ASS'Y |                     |          |              |          | A3 (1:1.5) |
| CHKD                                                                                                             | BY | R.G.KIM     | PROJEC'N | 3rd Angle  |                             |                     |          |              |          |            |
| DSND                                                                                                             | BY | 박승원         | DATE     | 2023-10-19 |                             |                     |          |              |          |            |
|  <b>HD HYUNDAI ELECTRIC</b> |    |             |          |            | REF. NO                     |                     |          | Sheet No.    | of       |            |
|                                                                                                                  |    |             |          |            | DWG NO                      | 3M-248457           |          | Revision No. | 0        |            |