

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

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# SPECIFICATION for INDUCTION MOTOR



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

# AC INDUCTION MOTOR DATA SHEET

|                                                |                                                                                             |                                                                                 |                                                                                                                      |                                                                        |               |      |      |
|------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------|------|------|
| Model No.or RFQ No.                            |                                                                                             | Item No.                                                                        |                                                                                                                      | Rev. No. [      ]                                                      |               |      |      |
| Project Name                                   |                                                                                             | Project No.                                                                     |                                                                                                                      | Quantity      sets                                                     |               |      |      |
| <b>GENERAL SPECIFICATION</b>                   |                                                                                             |                                                                                 | <b>PERFORMANCE DATA</b>                                                                                              |                                                                        |               |      |      |
| Frame Size                                     | 132M                                                                                        |                                                                                 | Rated Output                                                                                                         | 5.5 kW      7.5 HP                                                     |               |      |      |
| Type                                           | HLP-5.5/6                                                                                   |                                                                                 | Number of Poles                                                                                                      | 6                                                                      |               |      |      |
| Enclosure(Protection)                          | Totally Enclosed / IP55                                                                     |                                                                                 | Rotor Type                                                                                                           | Squirrel Cage                                                          |               |      |      |
| Method of Cooling                              | IC411(FC)                                                                                   |                                                                                 | Starting Method*                                                                                                     | <input checked="" type="checkbox"/> D.O.L <input type="checkbox"/> Y-Δ |               |      |      |
| Rated Frequency                                | 60 Hz                                                                                       |                                                                                 | Rated Voltage                                                                                                        | 440 V                                                                  |               |      |      |
| Number of Phases                               | 3                                                                                           |                                                                                 | Current                                                                                                              | Full Load                                                              | 11.3 A        |      |      |
| Insulation Class                               | <input checked="" type="checkbox"/> F <input type="checkbox"/> B <input type="checkbox"/> H |                                                                                 | Locked-rotor**                                                                                                       | 750 %                                                                  |               |      |      |
| Temp. Rise at full load (by resistance method) |                                                                                             |                                                                                 | Efficiency                                                                                                           |                                                                        |               |      |      |
| at 1.0 S.F      80 deg. C                      |                                                                                             |                                                                                 |                                                                                                                      |                                                                        |               |      |      |
| Motor Location                                 | <input checked="" type="checkbox"/> Indoor <input type="checkbox"/> Outdoor                 |                                                                                 |                                                                                                                      |                                                                        |               |      |      |
| Altitude                                       | Less than 1000 meter                                                                        |                                                                                 | 100% Load      91.0 %                                                                                                |                                                                        |               |      |      |
| Relative Humidity                              | Less than 80 %                                                                              |                                                                                 | Power Factor(p.u)                                                                                                    |                                                                        |               |      |      |
| Ambient Temp.                                  | 40 deg. C (Max.)                                                                            |                                                                                 |                                                                                                                      |                                                                        |               |      |      |
| Duty Type                                      | Continuous (S1)                                                                             |                                                                                 | 100% Load      0.700                                                                                                 |                                                                        |               |      |      |
| Service Factor                                 | 1.15                                                                                        |                                                                                 | Speed at Full Load      1175 r.p.m                                                                                   |                                                                        |               |      |      |
| Mounting                                       | B3                                                                                          |                                                                                 | Torque                                                                                                               |                                                                        |               |      |      |
| Bearing                                        | Type                                                                                        | Anti-Friction                                                                   |                                                                                                                      |                                                                        |               |      |      |
|                                                | DE/N-DE                                                                                     | 6208ZZC3 / 6208ZZC3                                                             | Full Load                                                                                                            | 4.6 kg·m      44.7                                                     |               |      |      |
|                                                | Lubricant                                                                                   | Grease                                                                          | Locked-rotor**                                                                                                       | 170 %      7.8 kg·m                                                    |               |      |      |
| External Thrust                                | Not applicable                                                                              |                                                                                 | Breakdown**                                                                                                          | 250 %      11.4 kg·m                                                   |               |      |      |
| Coupling Method                                | <input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-Belt                  |                                                                                 | Moment of Inertia (J)                                                                                                |                                                                        |               |      |      |
| Shaft Extension                                | <input checked="" type="checkbox"/> Single <input type="checkbox"/> Double                  |                                                                                 | Load(Max.)      11.398 kg·m <sup>2</sup>                                                                             |                                                                        |               |      |      |
| Terminal                                       | Main                                                                                        | <input checked="" type="checkbox"/> Aluminum <input type="checkbox"/> Cast Iron | Motor      0.052 kg·m <sup>2</sup>                                                                                   |                                                                        |               |      |      |
| Box                                            | Aux.                                                                                        | <input type="checkbox"/> Yes <input type="checkbox"/> No                        | Sound Pressure Level (No-load & mean value at 1m from motor)                                                         |                                                                        |               |      |      |
|                                                | Location                                                                                    | Refer to Outline Drawing                                                        | 57 dB(A)                                                                                                             |                                                                        |               |      |      |
| Application                                    |                                                                                             |                                                                                 | Vibration      1.6 mm/sec (peak)                                                                                     |                                                                        |               |      |      |
| Area classification                            | Non-Hazardous                                                                               |                                                                                 | Permissible number of                                                                                                |                                                                        |               |      |      |
| Type of Ex-Protection                          | Not applicable                                                                              |                                                                                 | consecutive starts                                                                                                   |                                                                        |               |      |      |
| Applicable Standard                            | KS, IEC, NEMA MG1 Part30(Vpeak)                                                             |                                                                                 | Cold      20 times                                                                                                   |                                                                        |               |      |      |
|                                                |                                                                                             |                                                                                 | Hot      15 times                                                                                                    |                                                                        |               |      |      |
|                                                |                                                                                             |                                                                                 | Paint                                                                                                                | Munsell No.                                                            | PHANTONE 279C |      |      |
| <b>ACCESSORIES</b>                             |                                                                                             |                                                                                 | <b>SUBMITTAL DRAWING</b>                                                                                             |                                                                        |               |      |      |
|                                                |                                                                                             |                                                                                 | Outline Dimension Drawing \ Motor Weight(Approx.)                                                                    |                                                                        |               |      |      |
|                                                |                                                                                             |                                                                                 | B3      LM-T0133B3PLV01      75 kg                                                                                   |                                                                        |               |      |      |
|                                                |                                                                                             |                                                                                 |                                                                                                                      |                                                                        |               |      |      |
|                                                |                                                                                             |                                                                                 |                                                                                                                      |                                                                        |               |      |      |
|                                                |                                                                                             |                                                                                 | <b>REMARK</b>                                                                                                        |                                                                        |               |      |      |
|                                                |                                                                                             |                                                                                 | *. Premium efficiency(IE3) acc. to KS C 4202                                                                         |                                                                        |               |      |      |
|                                                |                                                                                             |                                                                                 | *. SSEN Series                                                                                                       |                                                                        |               |      |      |
|                                                |                                                                                             |                                                                                 | *. For use on PWM VFD 10:1VT,3:1CT@1.0S.F&F Temp.rise                                                                |                                                                        |               |      |      |
| <b>SPARE PARTS</b>                             |                                                                                             |                                                                                 | <div style="border: 2px solid red; padding: 10px; text-align: center; font-size: 2em; color: red;">FOR BIDDING</div> |                                                                        |               |      |      |
|                                                |                                                                                             |                                                                                 |                                                                                                                      |                                                                        |               |      |      |
|                                                |                                                                                             |                                                                                 |                                                                                                                      |                                                                        |               |      |      |
|                                                |                                                                                             |                                                                                 |                                                                                                                      |                                                                        |               |      |      |
|                                                |                                                                                             |                                                                                 | Date                                                                                                                 | DSND                                                                   | CHKD          | CHKD | APPD |
|                                                |                                                                                             |                                                                                 | 2021-04-29                                                                                                           |                                                                        |               |      |      |

Type : HLP-5.5/6

Full Load Torque : 4.6 kg.m

 Load moment of Inertia (J) : - kg.m<sup>2</sup>

 Motor moment of Inertia (J) : 0.052 kg.m<sup>2</sup>

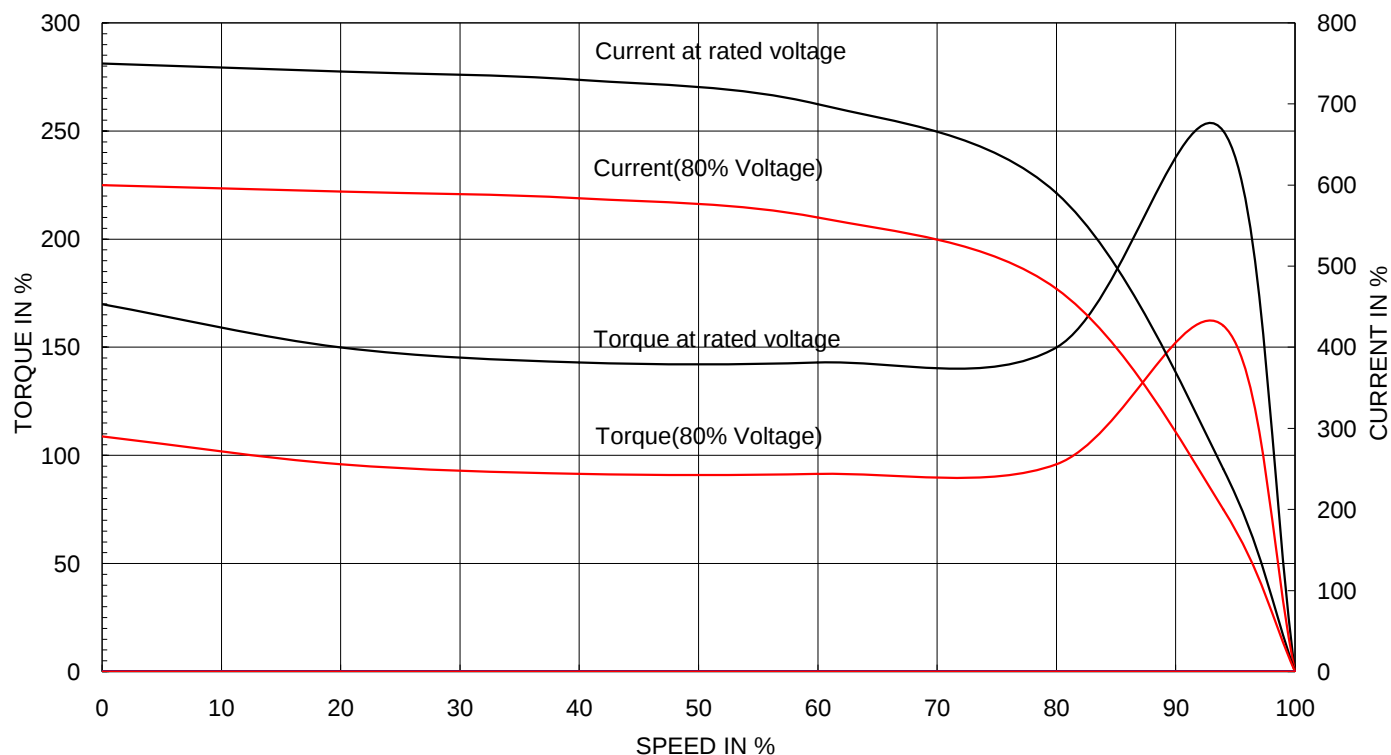
5.5 kW 6 P 60 Hz

Speed at Full Load : 1175 RPM

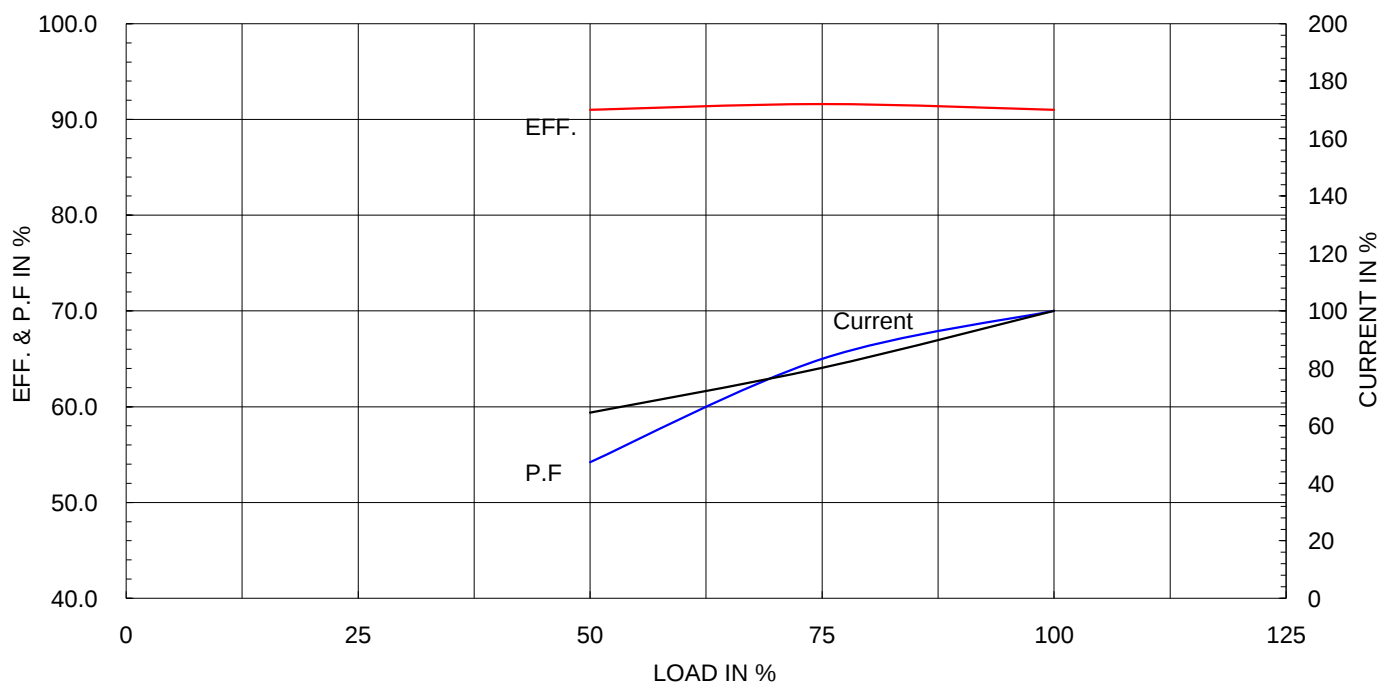
Rated Voltage 440

Full Load Current 11.3A

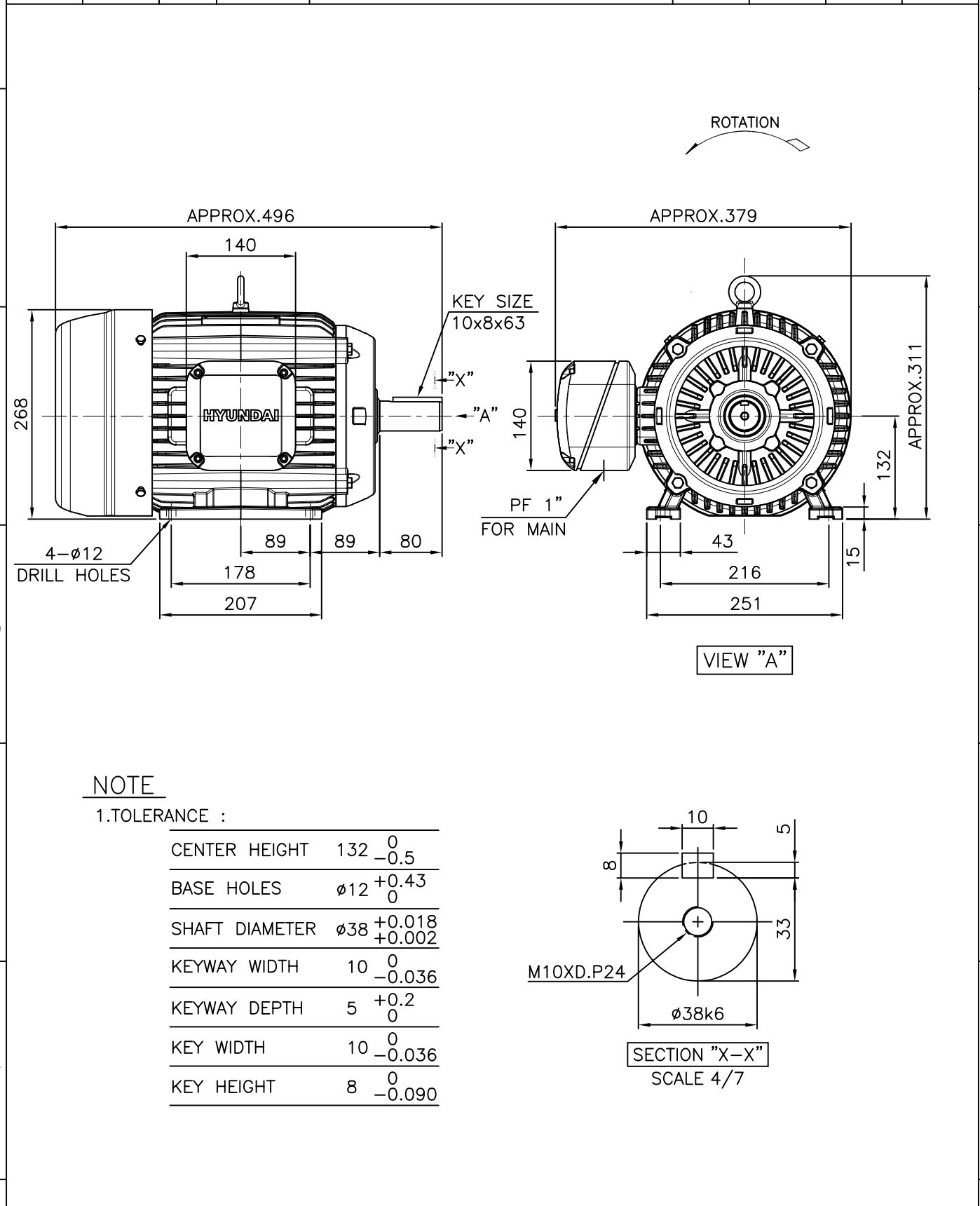
SPEED VS TORQUE &amp; CURRENT CURVE



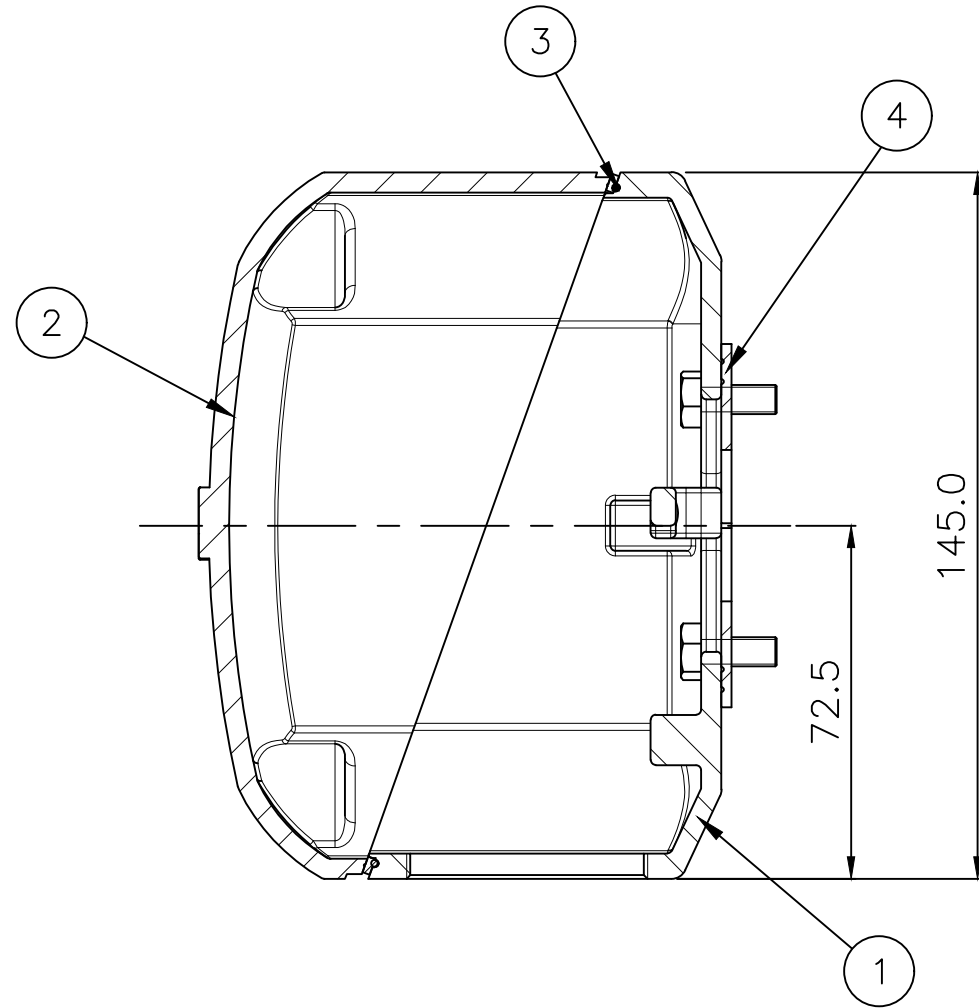
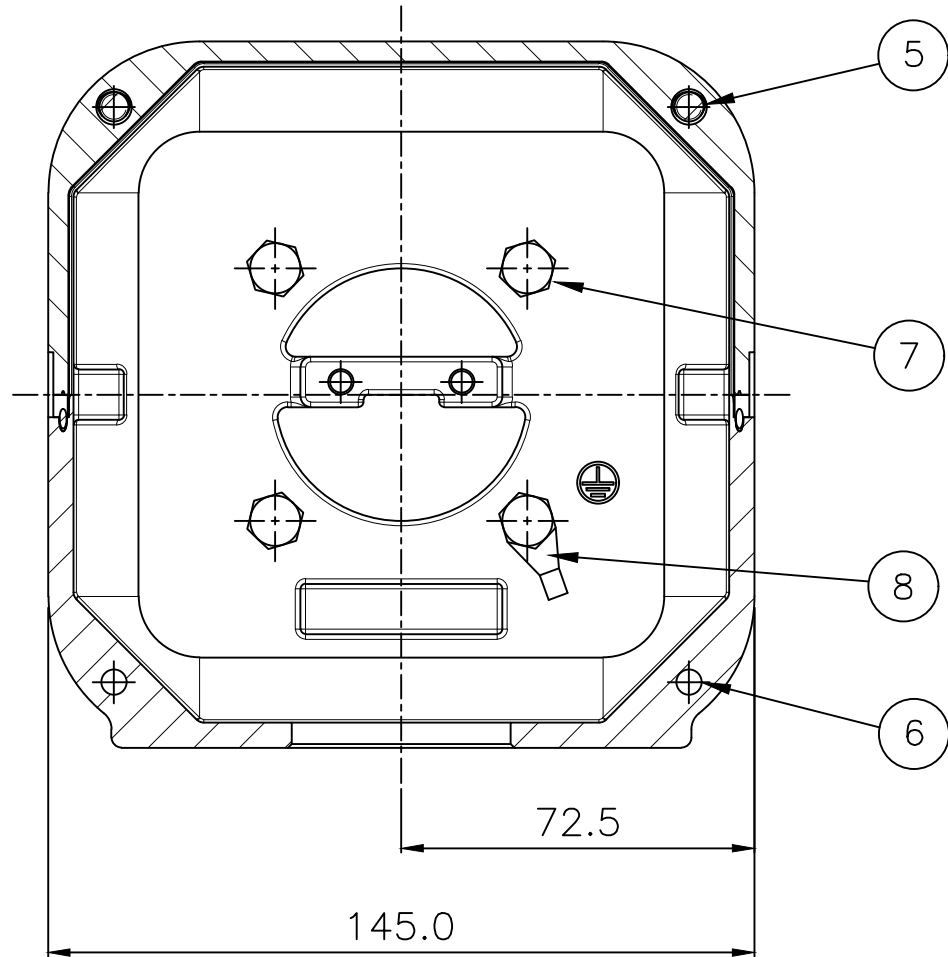
OUTPUT VS EFF., P.F &amp; CURRENT CURVE



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



|                     |         |          |                 |         |                 |                |
|---------------------|---------|----------|-----------------|---------|-----------------|----------------|
| APPD BY             | S.K.HAN | UNIT     | mm              | SUBJECT | KS, IEC Fr.132M | DWG SIZE       |
| CHKD BY             | S.Y.KIM | SCALE    | 1/7             |         |                 | A4 ( 1:7 )     |
| CHKD BY             | I.K.KIM | PROJEC'N | 3각법 (3rd Angle) | TITLE   | OUTLINE         |                |
| DSND BY             | S.H.LEE | DATE     | 2019.06.17      |         |                 |                |
| HYUNDAI<br>ELECTRIC |         |          |                 | REF. NO |                 | Sheet No. of   |
|                     |         |          |                 | DWG NO  | LM-T1133B3PLV01 | Revision No. 0 |



|      |       |
|------|-------|
| ▽    | 50S   |
| ▽▽   | 12.5S |
| ▽▽▽  | 3.2S  |
| ▽▽▽▽ | 0.4S  |

| REV | DATE | CONTENTS | REVD BY | CHKD BY | CHKD BY | APPD BY | 일반가공공차 |      |         |      | 일반재관공차 |      |          |      |
|-----|------|----------|---------|---------|---------|---------|--------|------|---------|------|--------|------|----------|------|
|     |      |          |         |         |         |         | 1-4    | ±0.1 | 6-30    | ±0.5 | 4-18   | ±0.2 | 30-120   | ±0.8 |
|     |      |          |         |         |         |         | 18-63  | ±0.3 | 120-315 | ±1.2 | 63-250 | ±0.5 | 315-1000 | ±2.0 |
|     |      |          |         |         |         |         | 250-   | ±0.8 | 1000-   | ±3.0 |        |      |          |      |

|                                                                                       |                     |          |            |         |                       |            |                |
|---------------------------------------------------------------------------------------|---------------------|----------|------------|---------|-----------------------|------------|----------------|
| 1                                                                                     | GROUND TERMINAL LUG | CU       | --         |         |                       |            | 8              |
| 4                                                                                     | BOX+FRAME HEX BOLT  | S45C     | M6 X L15   |         |                       |            | 7              |
| 2                                                                                     | COVER+BOX HEX BOLT  | S45C     | M6 X L25   |         |                       |            | 6              |
| 2                                                                                     | COVER+BOX HEX BOLT  | S45C     | M6 X L65   |         |                       |            | 5              |
| 1                                                                                     | BOX GASKET          | NBR      | --         |         |                       |            | 4              |
| 1                                                                                     | COVER GASKET        | NBR      | --         |         |                       |            | 3              |
| 1                                                                                     | CONDUIT BOX COVER   | AL       | --         |         |                       |            | 2              |
| 1                                                                                     | CONDUIT BOX         | AL       | --         |         |                       |            | 1              |
| Q'TY                                                                                  | DESCRIPTION         | MATERIAL | DIMENSION  | WEIGHT  | PART NO.              | REMARK     | NO.            |
| APPD BY                                                                               | S.K.HAN             | UNIT     | mm         | SUBJECT | SSEN SERIES 100-132FR |            | DWG SIZE       |
| CHKD BY                                                                               | I.K.KIM             | SCALE    | 1/1.5      | TITLE   |                       | A3 (1:1.5) |                |
| CHKD BY                                                                               | —                   | PROJEC'N | 3rd Angle  |         |                       |            |                |
| DSND BY                                                                               | 이승호                 | DATE     | 2020-06-19 |         |                       |            |                |
|  |                     |          |            | REF. NO | Sheet No. of          |            |                |
|                                                                                       |                     |          |            | DWG NO  | 3M-234756             |            | Revision No. 0 |
| 6                                                                                     |                     | 7        |            | 8       |                       | 9          |                |