

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

| | | | | | | | |
|--|---|---|--|--|---------------|------|------|
| Model No.or RFQ No. | | Item No. | | Rev. No. [] | | | |
| Project Name | | Project No. | | Quantity sets | | | |
| GENERAL SPECIFICATION | | | PERFORMANCE DATA | | | | |
| Frame Size | 112M | | Rated Output | 3.7 kW 5.0 HP | | | |
| Type | HKP-3.7/4 | | Number of Poles | 4 | | | |
| 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 | 6.8 A | | |
| Insulation Class | <input checked="" type="checkbox"/> F <input type="checkbox"/> B <input type="checkbox"/> H | | Locked-rotor** | 800 % | | | |
| 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 89.5 % | | | | |
| Relative Humidity | Less than 80 % | | Power Factor(p.u) | | | | |
| Ambient Temp. | 40 deg. C (Max.) | | | | | | |
| Duty Type | Continuous (S1) | | 100% Load 0.800 | | | | |
| Service Factor | 1.15 | | Speed at Full Load 1760 r.p.m | | | | |
| Mounting | B3 | | Torque | | | | |
| Bearing | Type | Anti-Friction | | | | | |
| | DE/N-DE | 6206ZZC3 / 6206ZZC3 | Full Load | 2.0 kg·m 20.1 | | | |
| | Lubricant | Grease | Locked-rotor** | 200 % 4.1 kg·m | | | |
| External Thrust | Not applicable | | Breakdown** | 240 % 4.9 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.) 3.071 kg·m ² | | | | |
| Terminal | Main | <input checked="" type="checkbox"/> Aluminum <input type="checkbox"/> Cast Iron | Motor 0.013 kg·m ² | | | | |
| 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 | 60 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 | | |
| ACCESSORIES | | | SUBMITTAL DRAWING | | | | |
| | | | Outline Dimension Drawing \ Motor Weight(Approx.) | | | | |
| | | | B3 LM-T0113B3PLV01 48 kg | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | REMARK | | | | |
| | | | *. 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 | | | | |
| SPARE PARTS | | | <div style="border: 2px solid red; padding: 10px; text-align: center; font-size: 2em; color: red;">FOR BIDDING</div> | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | Date | DSND | CHKD | CHKD | APPD |
| | | | 2021-04-26 | | | | |

Type : HKP-3.7/4

Full Load Torque : 2.0 kg.m

Load moment of Inertia (J) : - kg.m²

Motor moment of Inertia (J) : 0.013 kg.m²

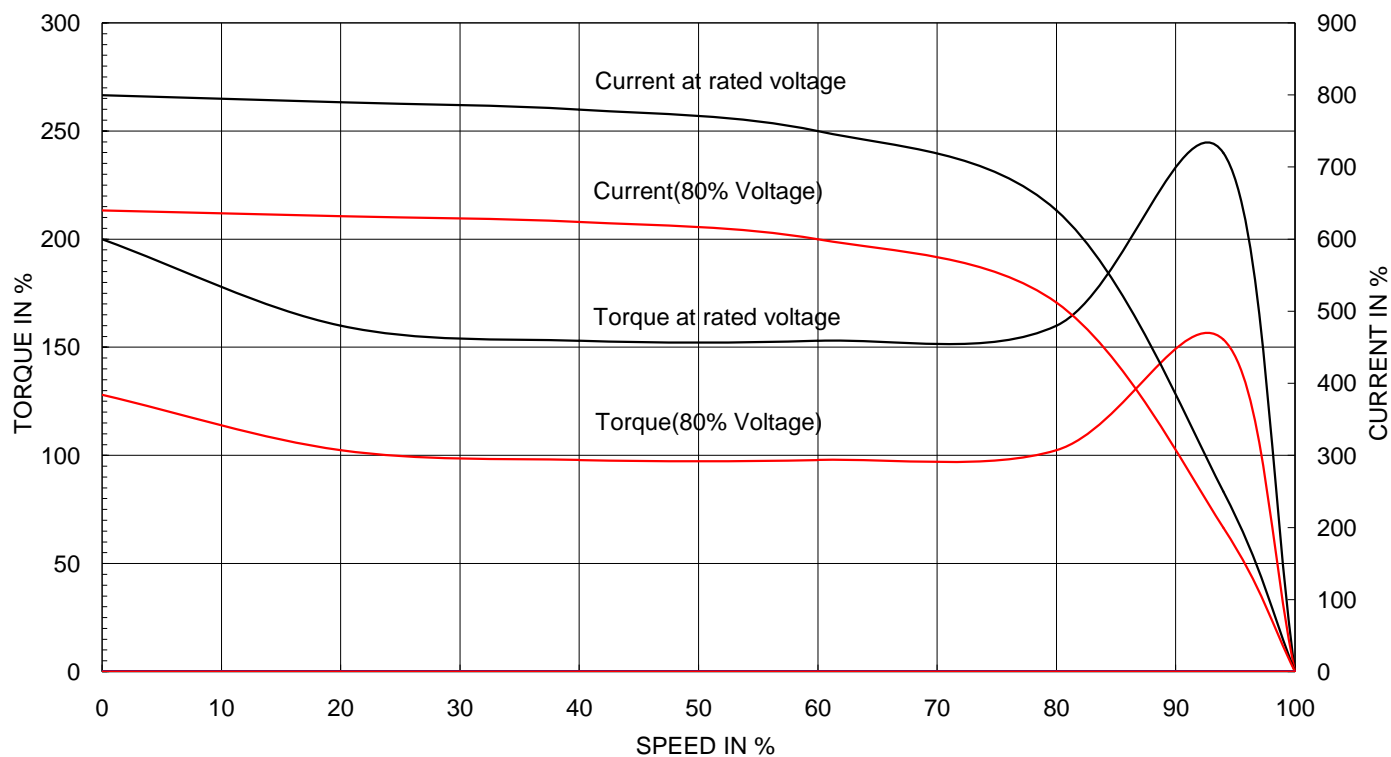
3.7 kW 4 P 60 Hz

Speed at Full Load : 1760 RPM

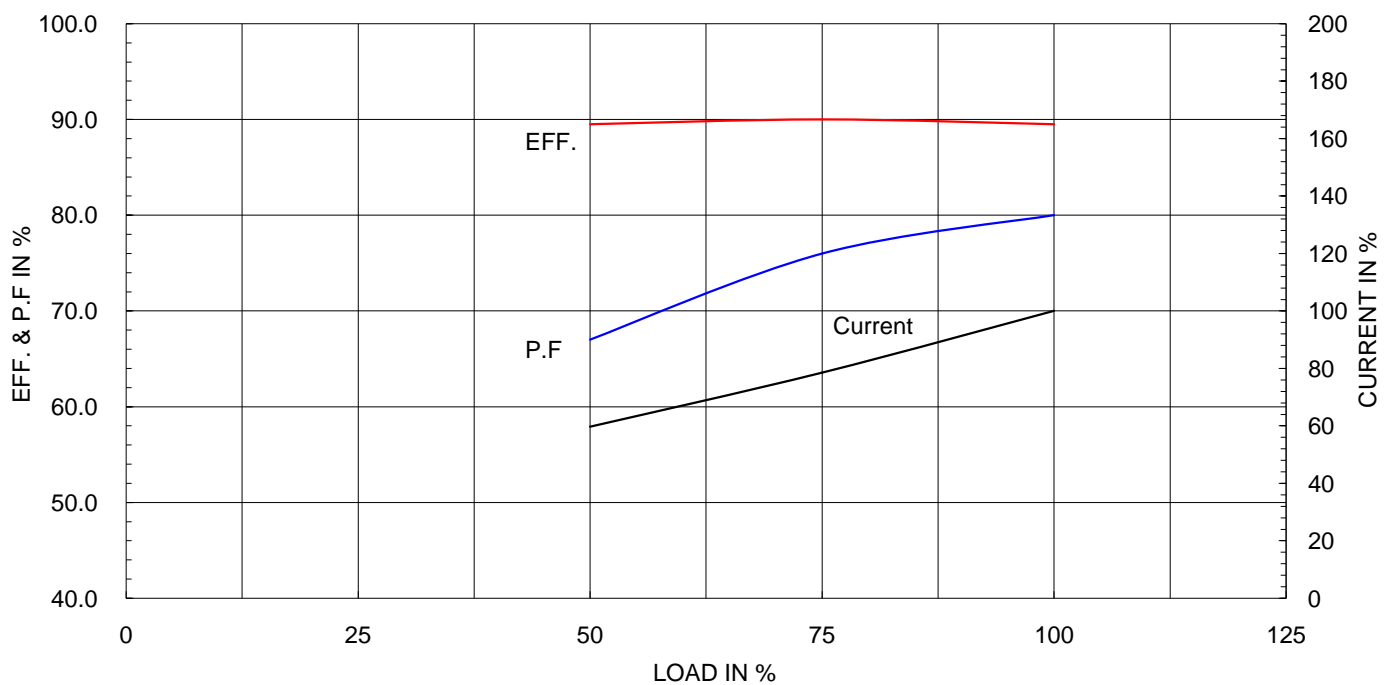
Rated Voltage 440

Full Load Current 6.8A

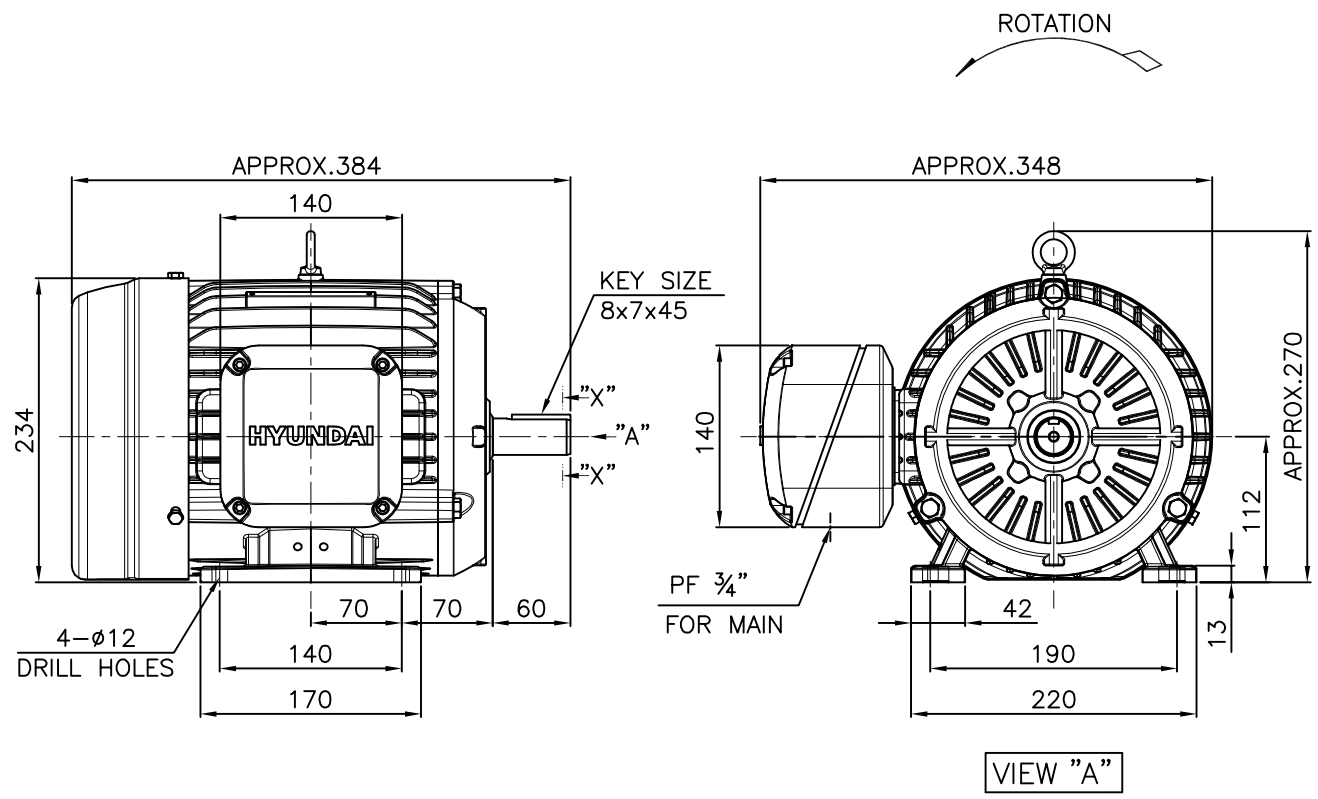
SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



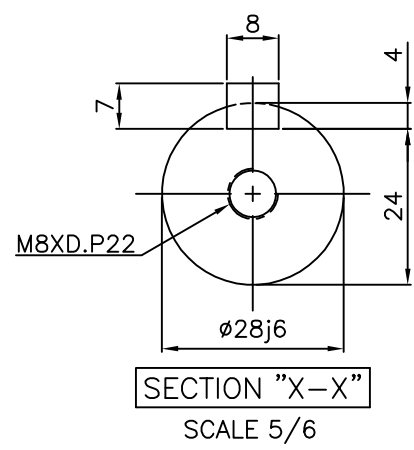
| 1 | | | 2 | | 3 | | 4 | | | |
|------|-------|-----|------|----------|---|--|---------|---------|---------|---------|
| ▽ | 50S | REV | DATE | CONTENTS | | | REVD BY | CHKD BY | CHKD BY | APPD BY |
| ▽▽ | 12.5S | | | | | | | | | |
| ▽▽▽ | 3.2S | | | | | | | | | |
| ▽▽▽▽ | 0.4S | | | | | | | | | |



NOTE

1.TOLERANCE :

| | | |
|----------------|-----------|--|
| CENTER HEIGHT | 112 | $\begin{smallmatrix} 0 \\ -0.5 \end{smallmatrix}$ |
| BASE HOLES | $\phi 12$ | $\begin{smallmatrix} +0.43 \\ 0 \end{smallmatrix}$ |
| SHAFT DIAMETER | $\phi 28$ | $\begin{smallmatrix} +0.009 \\ -0.004 \end{smallmatrix}$ |
| KEYWAY WIDTH | 8 | $\begin{smallmatrix} 0 \\ -0.036 \end{smallmatrix}$ |
| KEYWAY DEPTH | 4 | $\begin{smallmatrix} +0.2 \\ 0 \end{smallmatrix}$ |
| KEY WIDTH | 8 | $\begin{smallmatrix} 0 \\ -0.036 \end{smallmatrix}$ |
| KEY HEIGHT | 7 | $\begin{smallmatrix} 0 \\ -0.090 \end{smallmatrix}$ |



| | | | | | | | |
|---------|---------|----------|-----------------|------------------|-----------------|--------------|------------|
| APPD BY | S.K.HAN | UNIT | mm | SUBJECT | KS, IEC Fr.112M | DWG SIZE | A4 (1/6) |
| CHKD BY | S.Y.KIM | SCALE | 1/6 | TITLE OUTLINE | | | |
| CHKD BY | I.K.KIM | PROJEC'N | 3각법 (3rd Angle) | | | | |
| DSND BY | S.H.LEE | DATE | 2019.06.17 | | | | |
| | | | | REF. NO | Sheet No. of | | |
| | | | | DWG NO | LM-I1113B3PLV01 | Revision No. | 0 |

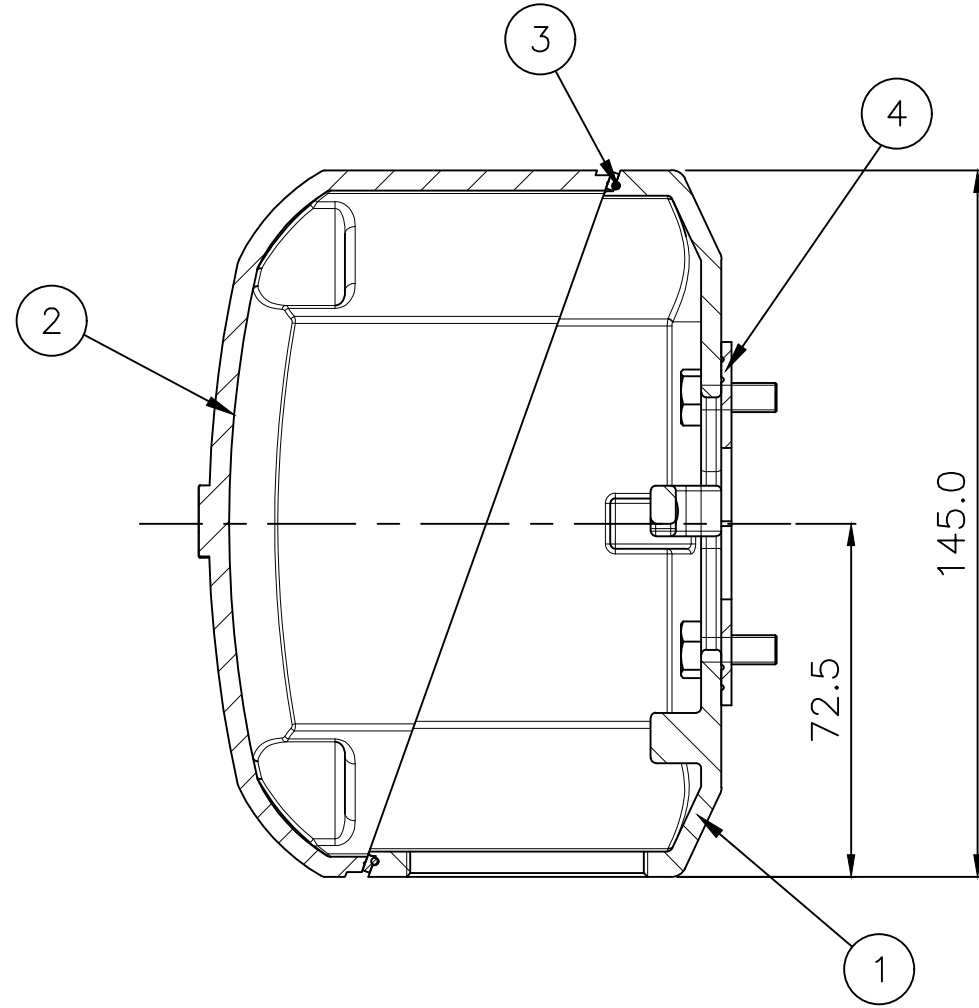
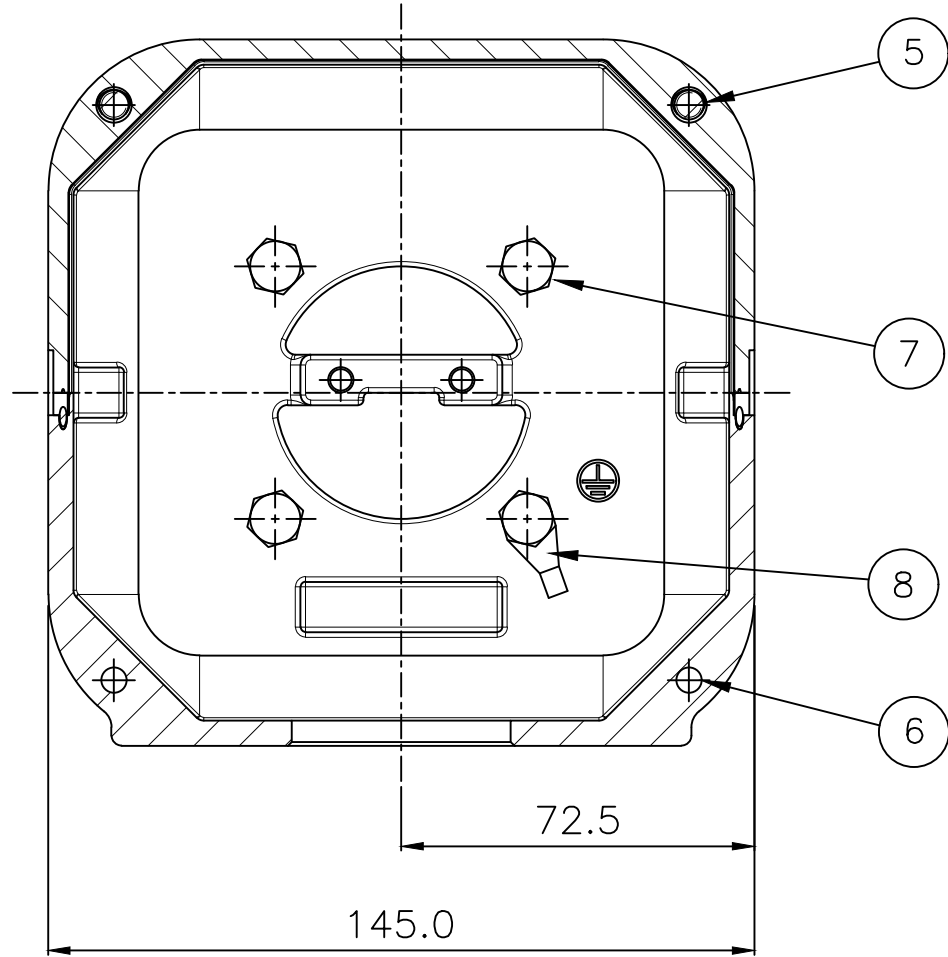
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허가없이 복사할 수 없음 (취급유의)

HYUNDAI
ELECTRIC

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

| REV | DATE | CONTENTS | REVD BY | CHKD BY | CHKD BY | APPD BY | 일반가공公差 | | | | 일반재관公差 | | | |
|-----|------|----------|---------|---------|---------|---------|--------|------|---------|------|--------|------|----------|------|
| | | | | | | | 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 A3 (1:1.5) |
| CHKD BY | I.K.KIM | SCALE | 1/1.5 | TITLE TERMINAL BOX ASS'Y | | | |
| 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 |