

| | | | |
|--|--|-----------------------------|-------------|
| MODEL NUMBER | HHI150-12-447T | | |
| HORSEPOWER | 150 | | |
| RPM / POLES | 1200 / 6 | | |
| VOLTAGE / PHASE | 460 V / 3 | | |
| FRAME | 447T | | |
| ENCLOSURE / DEGREE OF PROTECTION | TEFC / IP55 | | |
| FREQUENCY | 60 HZ | | |
| FULL LOAD SPEED | 1185 RPM | | |
| SERVICE FACTOR | 1.15 SF at 40° C / 1.0 SF at 65° C | | |
| INSULATION CLASS | F Class N Varnish | | |
| FULL LOAD AMPS; 460 | 169.5 A | | |
| LOCKED ROTOR CURRENT (% Full Load) | 680 % | | |
| NEMA CODE LETTER | G | | |
| EFFICIENCY / POWER FACTOR | <u>LOAD</u> | <u>EFF.</u> | <u>P.F.</u> |
| | 100 % | 95.8 % | 85.0 % |
| | 75 % | 96.0 % | 81.4 % |
| | 50 % | 95.7 % | 72.6 % |
| DUTY CYCLE | S1 / Continuous | | |
| TORQUE | <u>FULL LOAD</u> | <u>LRT</u> | <u>BDT</u> |
| | 654.0 lb.ft. | 140 % | 220 % |
| NEMA DESIGN | B | | |
| MOMENT OF INERTIA | <u>LOAD (Max.)</u> | <u>MOTOR</u> | |
| | 4864.159 lb.ft. ² | 106.310 lb.ft. ² | |
| SOUND PRESSURE LEVEL (No Load 1 M From Motor) | 78 dB(A) | | |
| NUMBER OF STARTS (Hot / Cold) | 2 Hot / 3 Cold | | |
| MAX. AMBIENT TEMPERATURE | 40° C at 1.15 SF / 65° C at 1.0 SF | | |
| MAX. ELEVATION | 3300 Ft. Above Sea Level | | |
| TEMPERATURE RISE (At Full Load) | 80° C | | |
| DRIVE-END BEARING | NU318 | | |
| OPPOSITE DRIVE-END BEARING | 6316C3 | | |
| GREASE TYPE | Mobil Polyrex EM | | |
| MOUNTING | F1 (F2 Suitable), W6, W8, B3, V5, V6 | | |
| ROTATION | Bi-Directional | | |
| APPROXIMATE WEIGHT | 1860 lbs. | | |
| AREA CLASSIFICATION | Class I, Division 2, Groups A, B, C, D | | |
| INVERTER RATING | 10:1 CT / 20:1 VT - Meets NEMA MG1 Part 31 | | |
| SPECIFICATION - In Accordance With | NEMA, CSA | | |



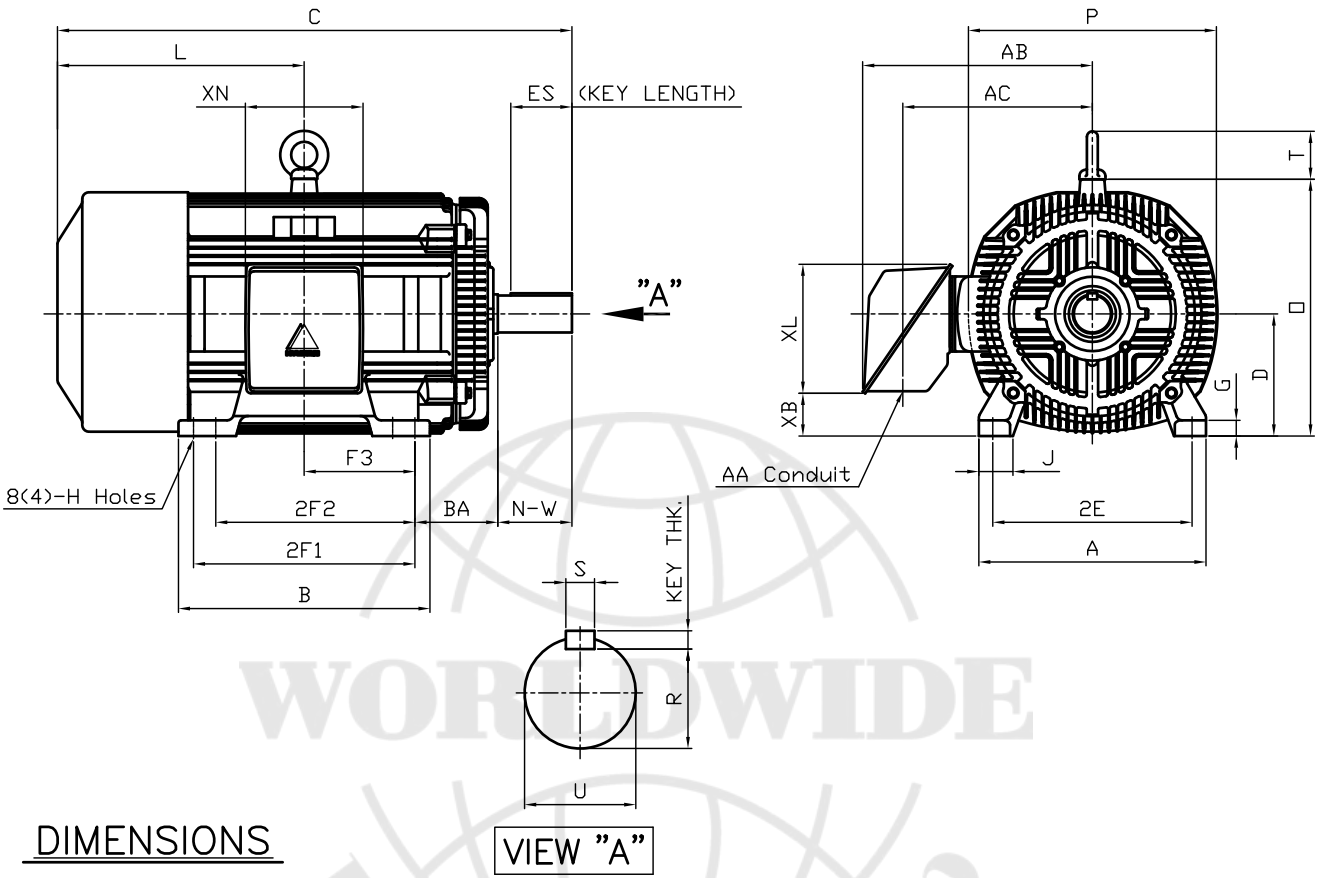
CC 038A



본 도면은 현대중공업(주) 재산이므로
허가없이 복사할 수 없음 (취급유의)

THIS DRAWING IS PROPRIETARY TO HEECO. NO PART OF THIS DRAWING
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| | | | | |
|------------|------------|--|----|--|
| | | <h1>TEFC</h1> <h2>THREE PHASE INDUCTION MOTOR</h2> | | TYPE LP, JP Cast iron frame |
| FRAME SIZE | OUTPUT(HP) | POLES | Hz | TIME RATING |
| 447T | | | 60 | CONT |



DIMENSIONS

VIEW "A"

| M O U N T I N G | | | | | | | | | C O N D U I T B O X | | | | | APPROX. WGT.(LB) | |
|-----------------|-------|-------|-------|---------|-------|------|------|------|---------------------|-------|-------|------|-------|------------------|------|
| A | B | 2E | 2F1 | 2F2 | F3 | G | J | H | AA | AB | AC | XB | XL | XN | |
| 20.51 | 22.72 | 18.00 | 20.00 | (17.99) | 10.00 | 1.42 | 3.07 | 0.81 | 3.00 | 21.26 | 18.03 | 3.83 | 11.65 | 10.63 | 1860 |

| O V E R A L L | | | | | | | S H A F T | | | KEY | BEARING | | | |
|---------------|-------|-------|-------|-------|-------|------|-----------|------|--------|------|---------|-------|-----------------|----------------|
| BA | C | D | L | O | P | T | U | N-W | KEYWAY | | | THK. | DRIVE END | OPP. DRIVE END |
| | | | | | | | | | R | ES | S | | | |
| 7.50 | 48.71 | 11.00 | 22.71 | 23.19 | 22.40 | 4.33 | 3.375 | 8.50 | 2.880 | 6.93 | 0.875 | 0.875 | 6318C3 or NU318 | 6316C3 |

NOTE

- Dimension "D" tolerance : +0.00inch - 0.03inch (143T-365T) ; +0.000inch - 0.06inch (404T-449T)
- Dimension "U" tolerance : +0.000inch - 0.005inch (143T-215T), +0.000inch - 0.001inch (254T-449T)
- Dimension "R" tolerance : +0.000inch - 0.015inch
- △ 4. 2F2 foot provision allows F1 to F2 conversion**

| Q'TY | DESCRIPTION | MATERIAL | DIMENSION | WEIGHT | PART NO. | REMARK | NO. |
|---------|-------------|----------|-----------------|---------|------------|---------------------|-----|
| APPD BY | K.J. Kang | UNIT | INCH | SUBJECT | 447T | CAD PROJ 명 \ FILE 명 | |
| Q.P CHK | | SCALE | N/S | TITLE | OUTLINE | | |
| CHKD BY | | PROJEC'N | 3 각법(3rd Angle) | REF. NO | A1119AA | Sheet No. | of |
| DSND BY | N.D.Lee | DATE | 2011.01.12 | DWG NO | 350A1119AA | Revision No. | 0 |



PERFORMANCE CURVE

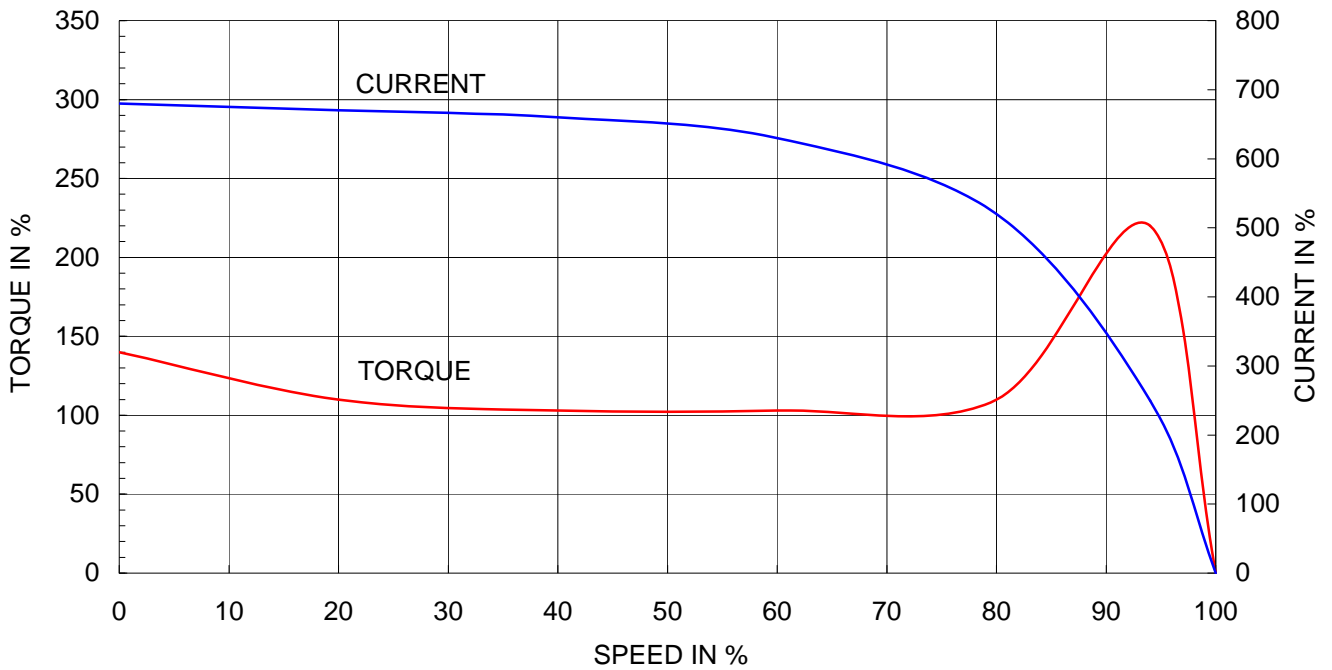
CURVE NO.

P-PLP447SR06

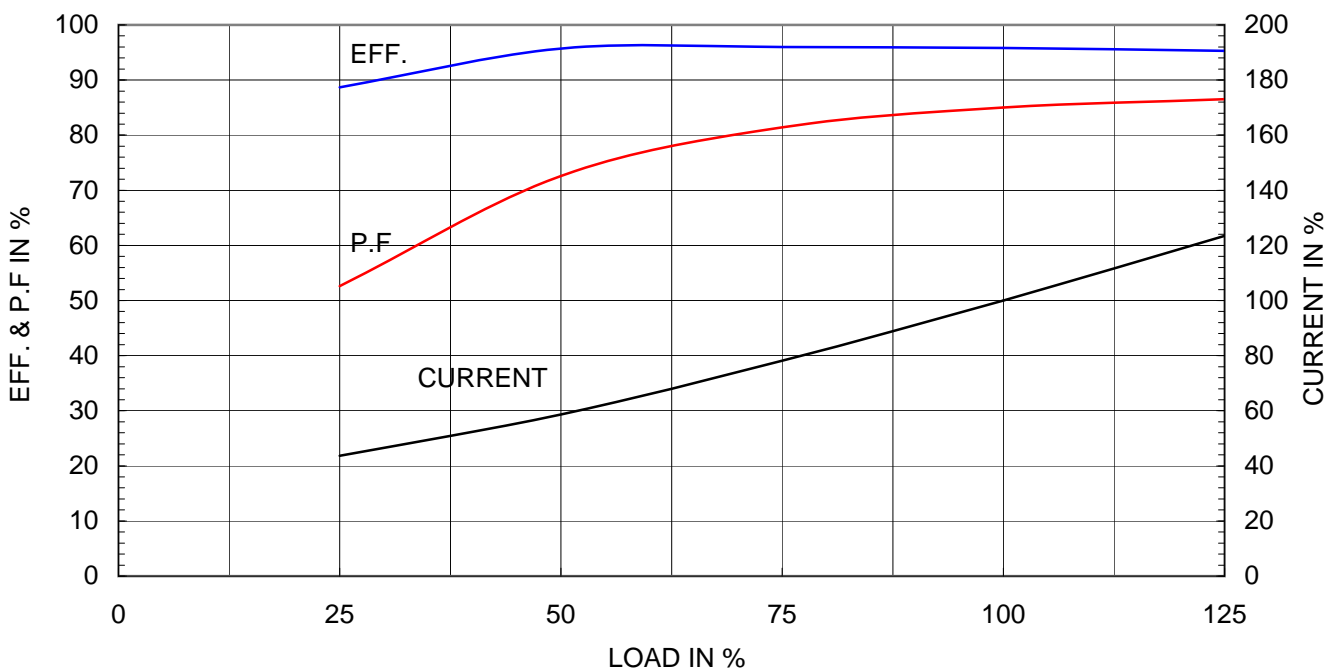
| | |
|-----------------------------|-------------------------------|
| Type | : PLP |
| Full Load Torque | : 654.0 lb.ft |
| Motor moment of Inertia (J) | : 106.310 lb.ft ² |
| Load moment of Inertia (J) | : 4864.156 lb.ft ² |

| | | | |
|-------------------|-------------|------------|--------|
| 110 kW | 150 HP | 60 Hz | |
| 6 P | Rated Speed | : 1185 RPM | |
| Rated Voltage | 575V | 460V | 230V |
| Full Load Current | 135.6A | 169.5A | 339.1A |

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE





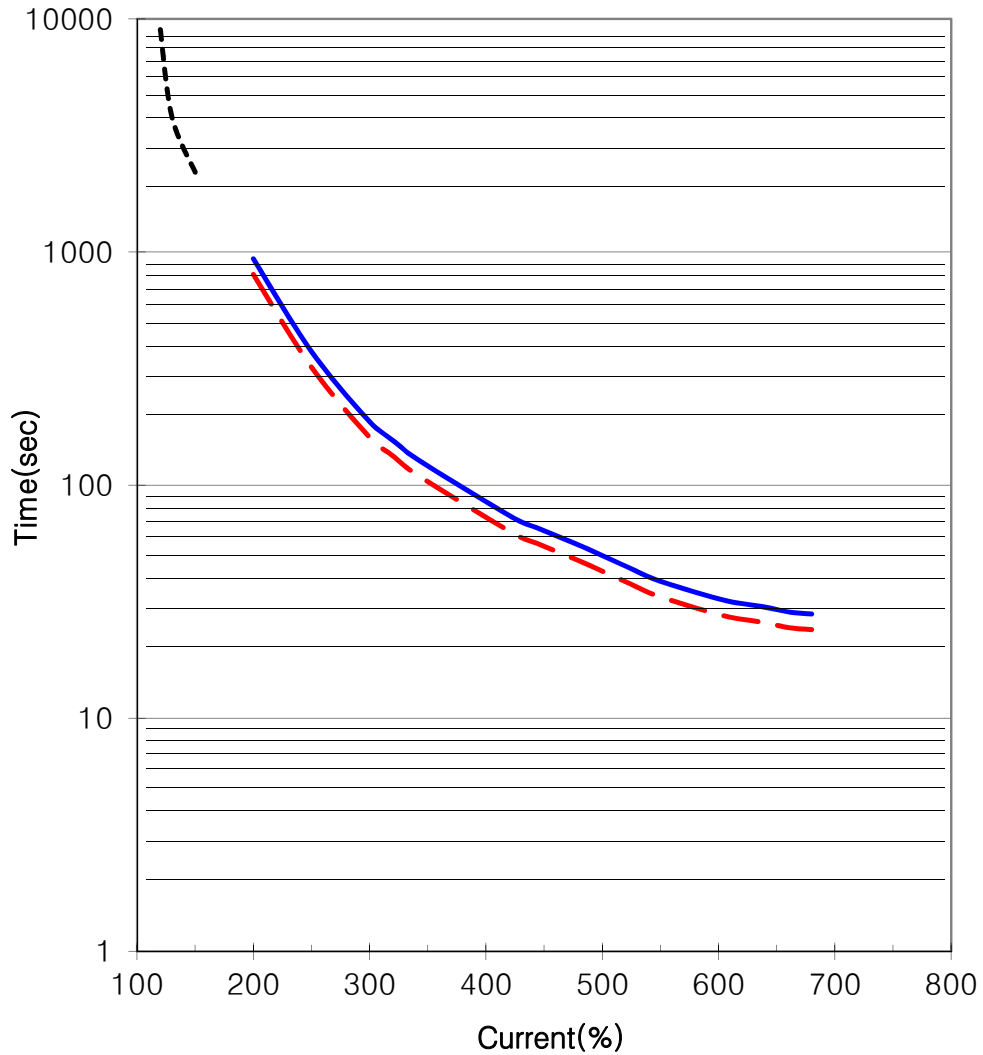
THERMAL LIMIT & TIME CURRENT CURVE

CURVE NO.

T-PLP150-12-447T

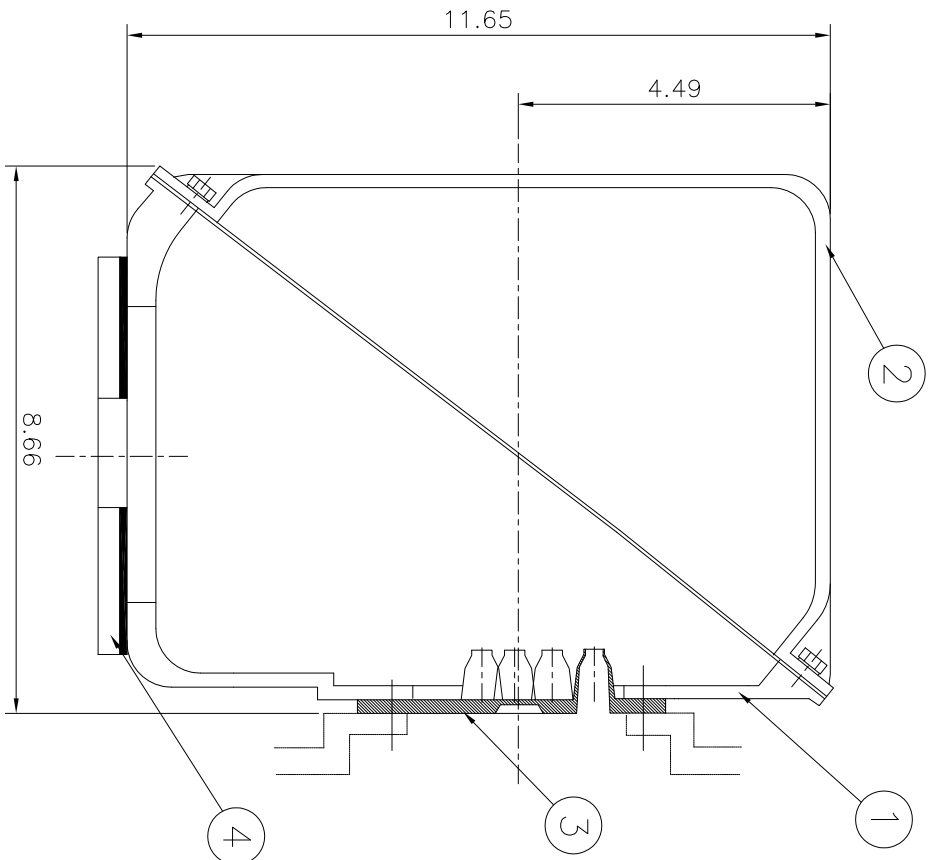
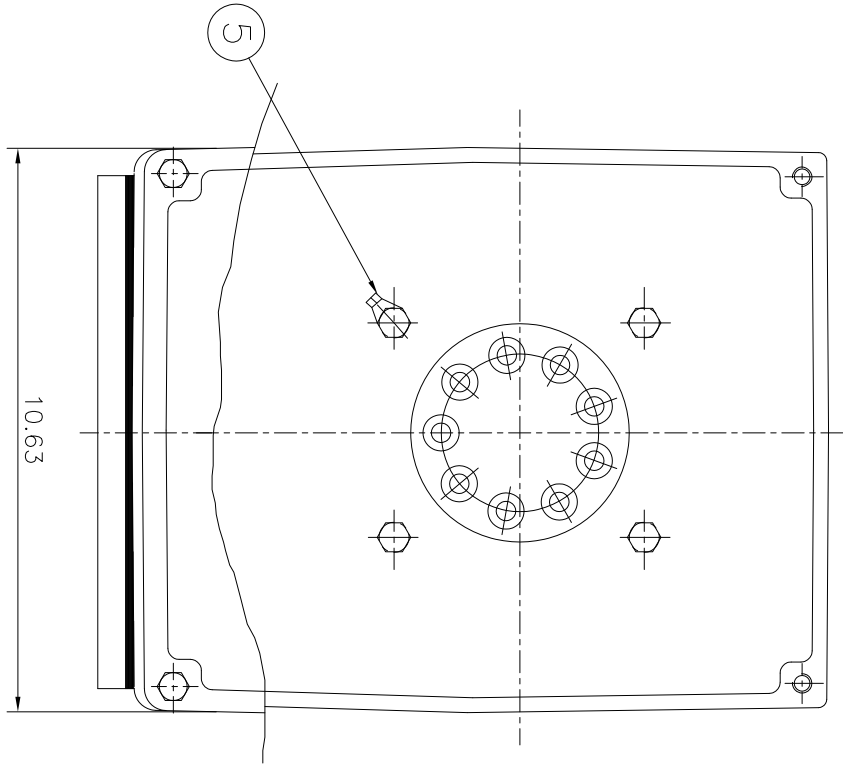
| | | |
|--------------------|----------------|--------------------|
| Type : | PLP150-12-447T | |
| FULL LOAD TORQUE : | 654.0 | lb.ft |
| J OF LOAD : | - | lb.ft ² |
| J OF MOTOR : | 106.3 | lb.ft ² |

| | | | | | |
|---------------|----|----------|--------|----|----|
| 150 | HP | 6 | P | 60 | Hz |
| RATED SPEED : | | 1185 rpm | | | |
| VOLTAGE | | 460 V | 575 V | | |
| RATED CURRENT | | 169.5A | 135.6A | | |



— THERMAL LIMIT CURVE AT COLD CONDITION
- - THERMAL LIMIT CURVE AT HOT CONDITION

| STARTING TIME | SAFE STALL TIME |
|------------------------------------|---------------------------|
| - at rated voltage starting | 24 sec. at Hot condition |
| - at 80% of rated voltage starting | 28 sec. at Cold condition |



| | |
|------|-------|
| ▽ | SOS |
| ▽▽ | 12.5S |
| ▽▽▽ | 3.2S |
| ▽▽▽▽ | 0.4S |

| REV | DATE | CONTENTS | REV'D BY | CHK'D BY | CHK'D BY | APP'D BY | 250- | 5 |
|-----|------|----------|----------|----------|----------|----------|------|---|
| 1 | | | | | | | | |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |

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

| | | | | | | | | | | |
|---|--------------------|-----------|----------------|-----------|----------|--------|-----|--|--|----------------|
| 1 | EARTH TERMINAL LUG | | | | | | | | | |
| 1 | CABLE ENTRY PLATE | | | | | | | | | |
| 1 | GASKET | NBR | | | | | | | | |
| 1 | TERMINAL BOX COVER | CAST IRON | | | | | | | | |
| 1 | TERMINAL BOX BODY | CAST IRON | | | | | | | | |
| Q'TY | DESCRIPTION | MATERIAL | DIMENSION | WEIGHT | PART NO. | REMARK | NO. | | | |
| APP'D BY | KANG KEONG JUNG | UNIT | INCH | Non Scale | | | | | | |
| CHK'D BY | KIM JIN HONG | SCALE | | | | | | | | |
| CHK'D BY | KIM OK JIN | PROJEC'N | 3차 (3rd Angle) | | | | | | | |
| DSND BY | KIM RYANG GYU | DATE | 2011-10-21 | | | | | | | |
| HYUNDAI HEAVY INDUSTRIES CO., LTD. | | | | | | | | | | |
| TITLE: Main Terminal Box Assembly | | | | | | | | | | |
| REF. NO. | | | | | | | | | | SHEET NO. of |
| DWG NO. | 3M-016882 | | | | | | | | | Revision No. 0 |