

| | | | |
|--|--|---------------------------|-------------|
| MODEL NUMBER | HHI20-36-256TC | | |
| HORSEPOWER | 20 | | |
| RPM / POLES | 3600 / 2 | | |
| VOLTAGE / PHASE | 230 / 460 V / 3 | | |
| FRAME | 256TC | | |
| ENCLOSURE / DEGREE OF PROTECTION | TEFC / IP55 | | |
| FREQUENCY | 60 HZ | | |
| FULL LOAD SPEED | 3535 RPM | | |
| SERVICE FACTOR | 1.15 SF at 40° C / 1.0 SF at 65° C | | |
| INSULATION CLASS | F Class N Varnish | | |
| FULL LOAD AMPS; 230 / 460 | 46.2 / 23.1 A Usable On 208 V At 51.1 A | | |
| LOCKED ROTOR CURRENT (% Full Load) | 650 / 650 % | | |
| NEMA CODE LETTER | G | | |
| EFFICIENCY / POWER FACTOR | <u>LOAD</u> | <u>EFF.</u> | <u>P.F.</u> |
| | 100 % | 91.7 % | 89.0 % |
| | 75 % | 91.7 % | 87.2 % |
| | 50 % | 91.2 % | 82.0 % |
| DUTY CYCLE | S1 / Continuous | | |
| TORQUE | <u>FULL LOAD</u> | <u>LRT</u> | <u>BDT</u> |
| | 29.9 lb.ft. | 180 % | 250 % |
| NEMA DESIGN | B | | |
| MOMENT OF INERTIA | <u>LOAD (Max.)</u> | <u>MOTOR</u> | |
| | 54.580 lb.ft. ² | 1.163 lb.ft. ² | |
| SOUND PRESSURE LEVEL (No Load 1 M From Motor) | 77 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 | 6309ZC3 | | |
| OPPOSITE DRIVE-END BEARING | 6309ZC3 | | |
| GREASE TYPE | Mobil Polyrex EM | | |
| MOUNTING | F1 (F2 Suitable), W6, W8, B3, V5, V6 | | |
| ROTATION | Bi-Directional | | |
| APPROXIMATE WEIGHT | 300 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





TEFC

THREE PHASE INDUCTION MOTOR

TYPE

LP, JP

CAST IRON FRAME

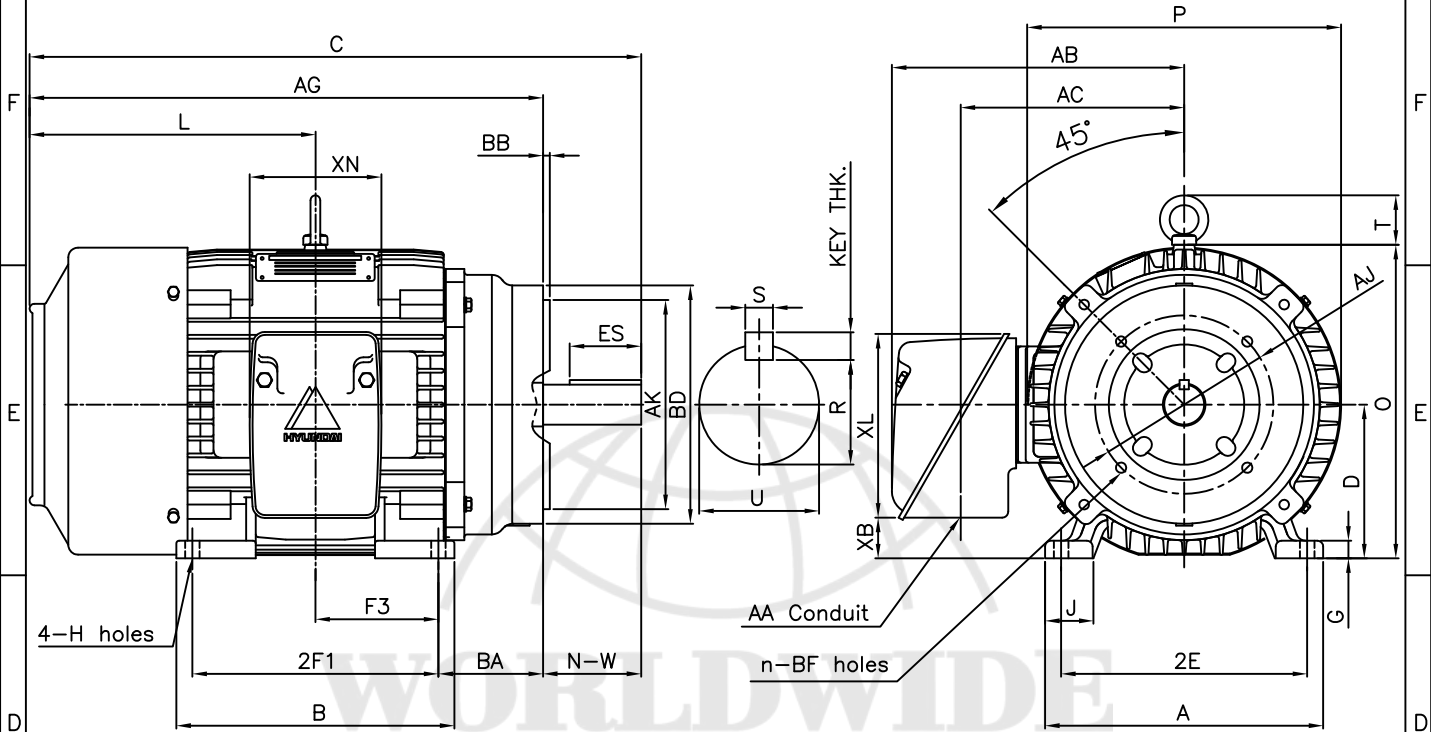
FRAME SIZE

OUTPUT(HP)

POLES

Hz

TIME RATING



DIMENSIONS

| F L A N G E | | | | | | M O U N T I N G | | | | | | | | |
|-------------|------|------|------|--------|---|-----------------|-------|-------|-------|-----|------|------|------|------|
| AJ | AK | BD | BB | BF | n | A | B | 2E | 2F1 | 2F2 | F3 | G | J | H |
| 7.25 | 8.50 | 9.68 | 0.25 | 1/2-13 | 4 | 11.30 | 11.30 | 10.00 | 10.00 | - | 5.00 | 0.72 | 1.93 | 0.53 |

| C O N D U I T B O X | | | | | | O V E R A L L | | | | | | | | APPROX. WGT.(LB) |
|---------------------|-------|------|------|------|------|---------------|------|-------|------|-------|-------|-------|------|------------------|
| AA | AB | AC | XB | XL | XN | AG | BA | C | D | L | O | P | T | |
| 1.25 | 11.88 | 9.08 | 2.63 | 7.56 | 6.61 | 20.86 | 4.25 | 24.86 | 6.25 | 11.61 | 12.75 | 12.76 | 2.01 | 300 |

| S H A F T | | | | | KEY THK. | B E A R I N G | |
|-----------|------|--------|------|-------|----------|---------------|----------------|
| U | N-W | KEYWAY | | | | DRIVE END | OPP. DRIVE END |
| | | R | ES | S | | | |
| 1.625 | 4.00 | 1.416 | 2.91 | 0.375 | 0.375 | 6309ZC3 | 6309ZC3 |

NOTE

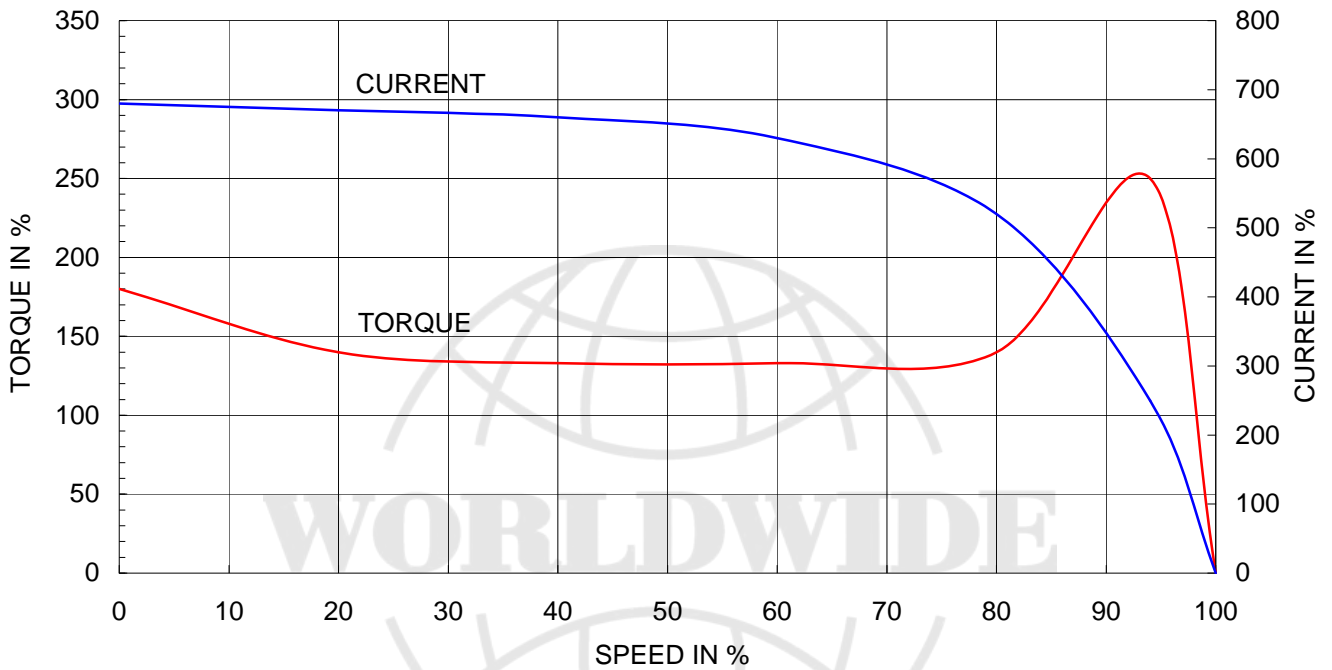
- 1.Dimension "D" tolerance : +0.00inch - 0.03inch
- 2.Dimension "U" tolerance : +0.000inch - 0.0005inch
- 3.Dimension "R" tolerance : +0.000inch - 0.015inch

| | | | | | | |
|---------|-----------|----------|------------|-------------------------|-----------------|-----------------|
| APPD BY | KIM.Y.S | UNIT | INCH | SUBJECT | NEMA 256TC(KIT) | CAD PROJ \ FILE |
| CHKD BY | KO.S.H | SCALE | N/S | | | XSMOUTN\A1308AA |
| CHKD BY | | PROJEC'N | 3rd Angle | TITLE OUTLINE | | |
| DSND BY | Y.J.HWANG | DATE | 2004.11.19 | | | |
| | | | | REF. NO | A1308AA | Sheet No. of |
| | | | | DWG NO | 350A1308AA | Revision No. 0 |

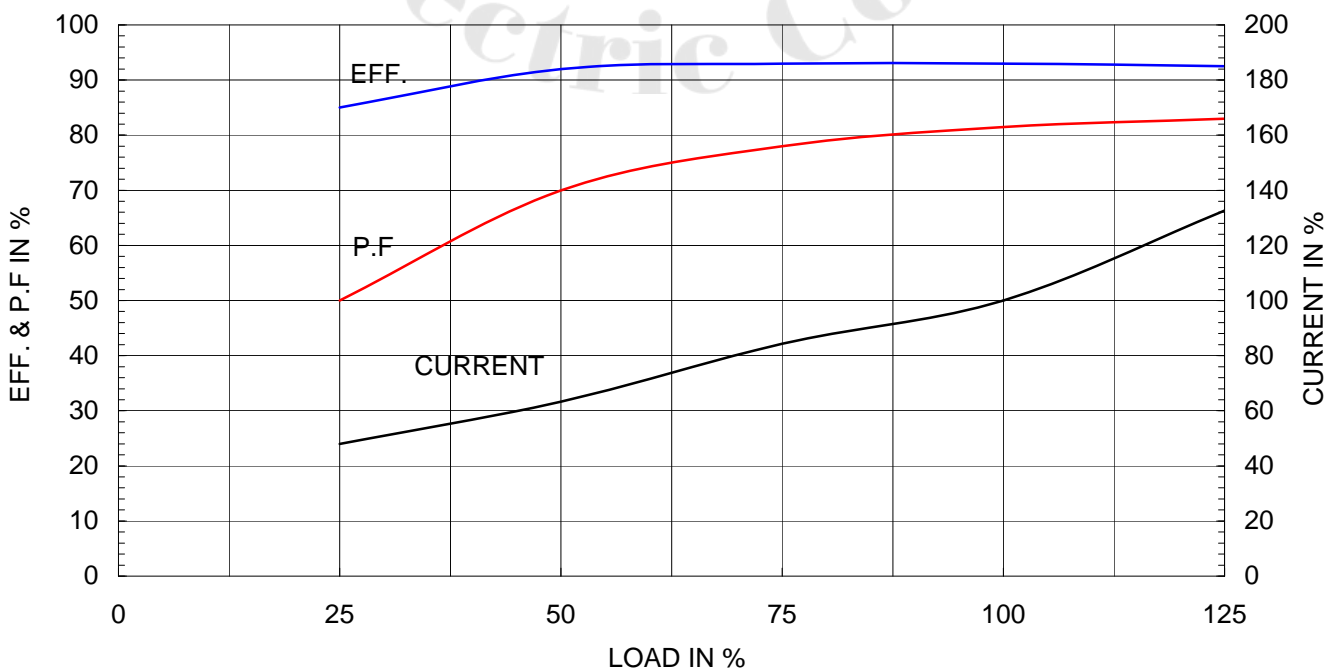
| | |
|-------------------------------|---------------------------|
| Type : | PLP |
| Full Load Torque : | 29.9 lb.ft |
| Motor moment of Inertia (J) : | 1.163 lb.ft ² |
| Load moment of Inertia (J) : | 54.580 lb.ft ² |

| | | |
|-------------------|------------------------|-------|
| 15 kW | 20 HP | 60 Hz |
| 2 P | Rated Speed : 3535 RPM | |
| Rated Voltage | 575V | 460V |
| Full Load Current | 18.5A | 23.1A |

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



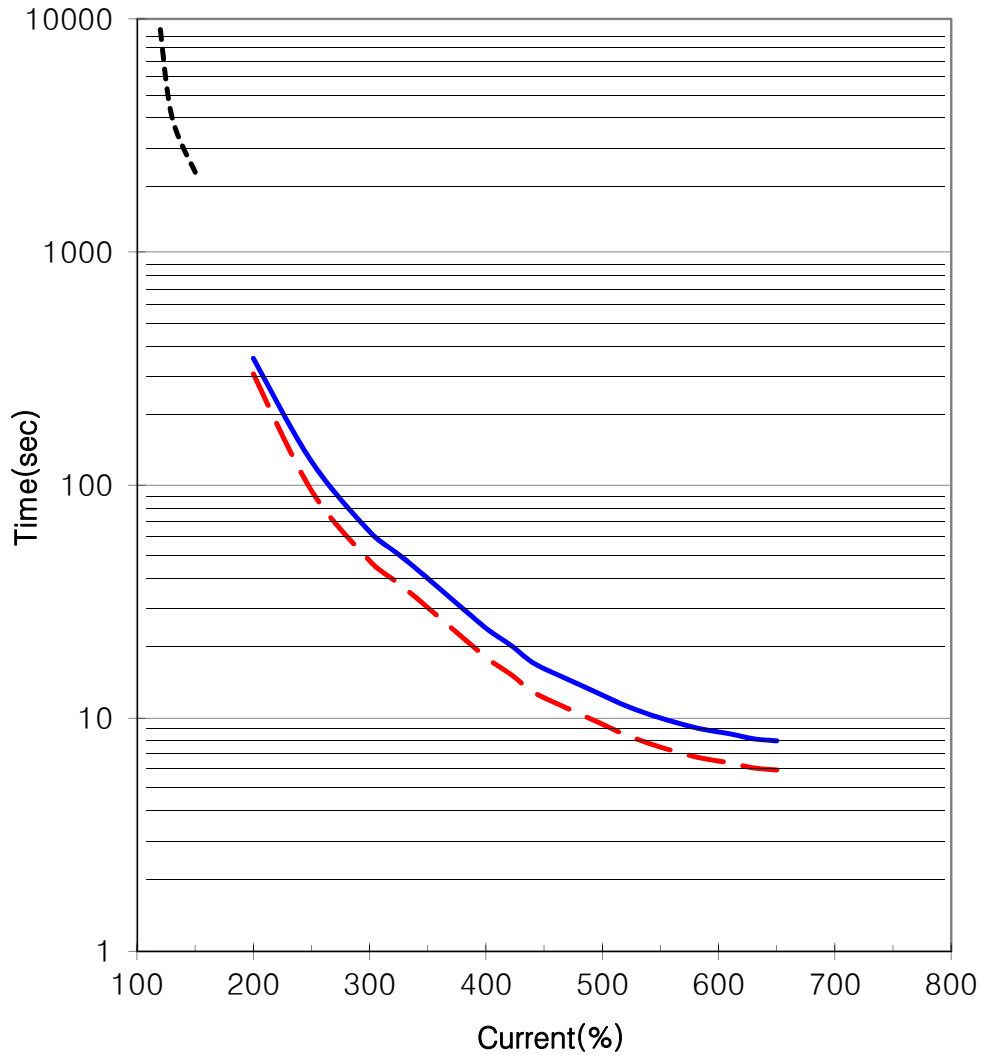


THERMAL LIMIT & TIME CURRENT CURVE

CURVE NO.

T-PLP20-36-256TC

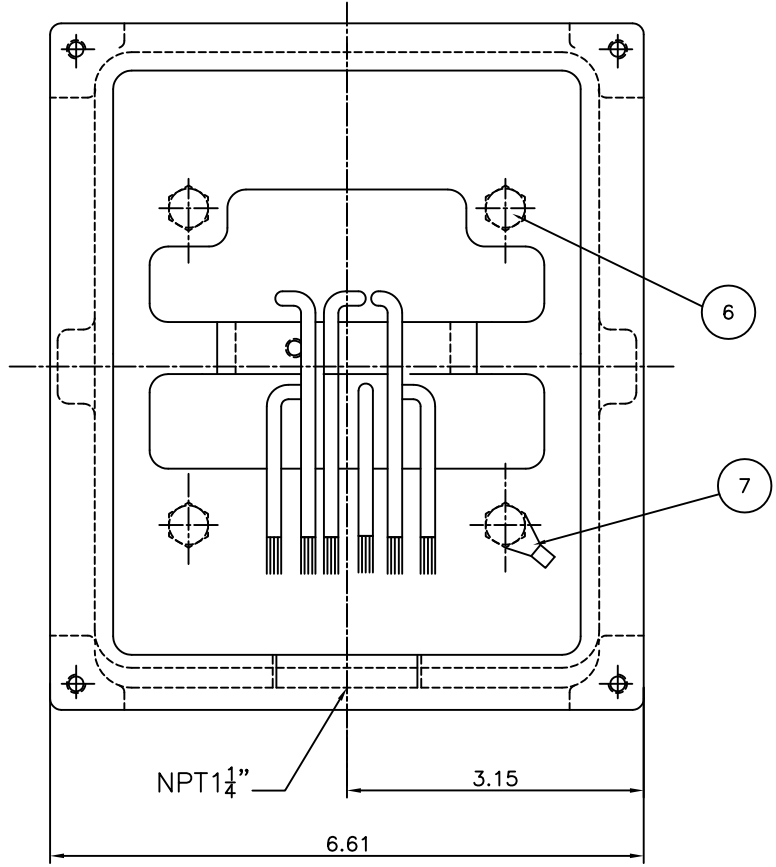
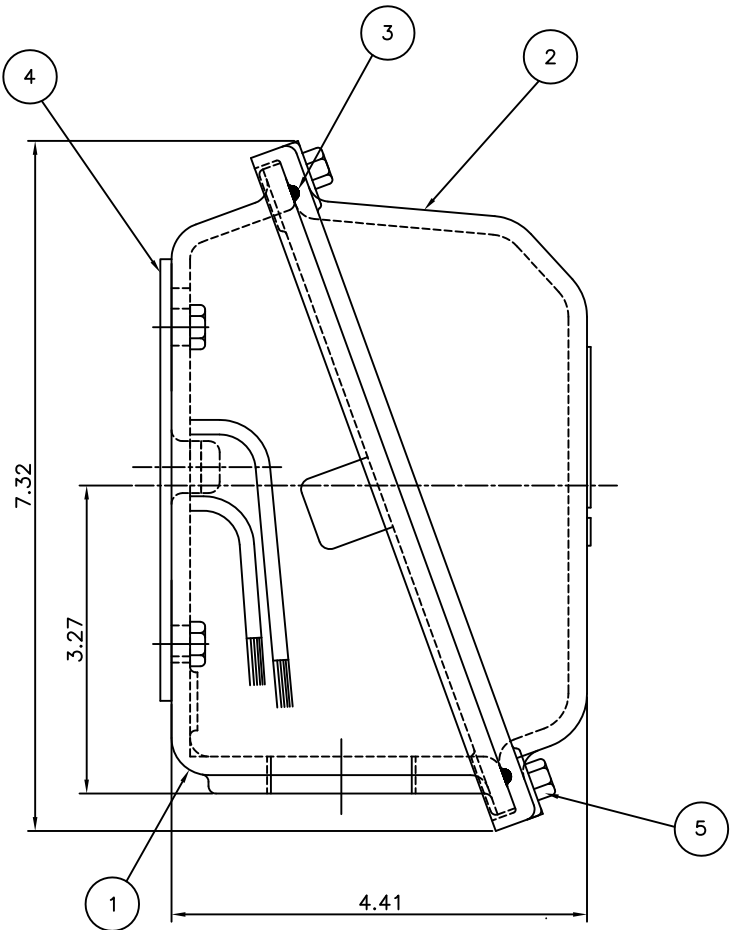
| | | | | | | | |
|--------------------|------------------------|---------------|----|----------|-------|----|----|
| Type : | PLP20-36-256T | 20 | HP | 2 | P | 60 | Hz |
| FULL LOAD TORQUE : | 29.9 lb.ft | RATED SPEED : | | 3535 rpm | | | |
| J OF LOAD : | - lb.ft ² | VOLTAGE | | 460 V | 575 V | | |
| J OF MOTOR : | 1.2 lb.ft ² | RATED CURRENT | | 23.1A | 18.5A | | |



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

| STARTING TIME | SAFE STALL TIME |
|------------------------------------|--------------------------|
| - at rated voltage starting | 6 sec. at Hot condition |
| - at 80% of rated voltage starting | 8 sec. at Cold condition |

THIS DRAWING IS PROPRIETARY TO HHI. NO PART OF THIS DRAWING MAYBE REPRODUCED WITHOUT THE PERMISSION OF HHI.



| PT | DESCRIPTION | MATERIAL | DIMENSION | Q'TY |
|----|---------------------|----------|-----------|------|
| 1 | CONDUIT BOX | FC15 | -- | 1 |
| 2 | CONDUIT BOX COVER | FC15 | -- | 1 |
| 3 | O-RING / COVER | EPDM | ø4 | 1 |
| 4 | BOX GASKET | NBR | -- | 1 |
| 5 | COVER+BOX HEX BOLT | S45C | M6 X L20 | 4 |
| 6 | BOX+FRAME HEX BOLT | S45C | M8 X L20 | 4 |
| 7 | GROUND TERMINAL LUG | CU | -- | 1 |

| Q'TY | DESCRIPTION | MATERIAL | DIMENSION | WEIGHT | PART NO. | REMARK | NO. |
|---------|-------------|-------------|----------------|-----------------------|-------------|---------------|-----|
| APPD BY | KIM.Y.S | UNIT | INCH | SUBJECT | NEMA254/256 | CAD PROJ FILE | |
| CHKD BY | KO.S.H | SCALE | 1:1 | 227B8008NA1 | | | |
| CHKD BY | --- | PROJEC'N | 3각법(3rd Angle) | TITLE | | | |
| DSND BY | Y.J.HWANG | DATE | 2005.02.16 | TERMINAL BOX ASSEMBLY | | | |
| REF. NO | | 227B8008NA1 | | Sheet No. of | | | |
| DWG NO | | 227B8008NA1 | | Revision No. 0 | | | |



| REV | DATE | CONTENTS | REVD BY | CHKD BY | CHKD BY | APPD BY |
|-----|------|----------|---------|---------|---------|---------|
| 1 | | | | | | |
| 2 | | | | | | |
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