HYUNDAI ELECTRIC

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

# SPECIFICATION
# for
# INDUCTION MOTOR

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

HYUNDAI ELECTRIC

# AC INDUCTION MOTOR DATA SHEET

| | | | | | |
|---|---|---|---|---|---|
| Model No.or RFQ No. | | Item No. | | Rev. No. | [ ] |
| Project Name | | Project No. | | Quantity | sets |

## GENERAL SPECIFICATION

| | | |
|---|---|---|
| Frame Size | | 90L |
| Type | | HLP-0.75/6 |
| Enclosure(Protection) | | Totally Enclosed / IP55 |
| Method of Cooling | | IC411(FC) |
| Rated Frequency | | 60 Hz |
| Number of Phases | | 3 |
| Insulation Class | | ☑ F ☐ B ☐ H |
| Temp. Rise at full load (by resistance method) | | |
| | at 1.0 S.F | 80 deg. C |
| Motor Location | | ☑ Indoor ☐ Outdoor |
| Altitude | | Less than 1000 meter |
| Relative Humidity | | Less than 80 % |
| Ambient Temp. | | 40 deg. C (Max.) |
| Duty Type | | Continuous (S1) |
| Service Factor | | 1.15 |
| Mounting | | B3 |
| Bearing | Type | Anti-Friction |
| | DE/N-DE | 6205ZZC3 / 6204ZZC3 |
| | Lubricant | Grease |
| External Thrust | | Not applicable |
| Coupling Method | | ☑ Direct ☐ V-Belt |
| Shaft Extension | | ☑ Single ☐ Double |
| Terminal Box | Main | ☑ Aluminum ☐ Cast Iron |
| | Aux. | ☐ Yes ☐ No |
| | Location | Refer to Outline Drawing |
| Application | | |
| Area classification | | Non-Hazardous |
| Type of Ex-Protection | | Not applicable |
| Applicable Standard | | KS, IEC, NEMA MG1 Part30(Vpeak) |

## PERFORMANCE DATA

| | | | |
|---|---|---|---|
| Rated Output | | 0.75 kW | 1.0 HP |
| Number of Poles | | 6 | |
| Rotor Type | | Squirrel Cage | |
| Starting Method* | | ☑ D.O.L | ☐ Y-△ |
| Rated Voltage | | 220 V | |
| Current | Full Load | 3.4 A | |
| | Locked-rotor** | 510 % | |
| Efficiency | | | |
| | | | |
| | | | |
| | 100% Load | 82.5 % | |
| Power Factor(p.u) | | | |
| | | | |
| | | | |
| | 100% Load | 0.694 | |
| Speed at Full Load | | 1140 r.p.m | |
| Torque | | | |
| | Full Load | 0.6 kg·m | 6.3 |
| | Locked-rotor** | 200 % | 1.3 kg·m |
| | Breakdown** | 265 % | 1.7 kg·m |
| Moment of Inertia (J) | | | |
| | Load(Max.) | 1.602 $kg \cdot m^2$ | |
| | Motor | 0.003 $kg \cdot m^2$ | |
| Sound Pressure Level (No-load & mean value at 1m from motor) | | 69 dB(A) | |
| Vibration | | 1.6 mm/sec (peak) | |
| Permissible number of consecutive starts | Cold | 20 times | |
| | Hot | 15 times | |
| Paint | Munsell No. | PHANTONE 279C | |

## ACCESSORIES

## SPARE PARTS

## SUBMITTAL DRAWING

| Outline Dimension Drawing | \ Motor Weight(Approx.) | |
|---|---|---|
| B3 | LM-T1095B3PLV01 | 30 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

FOR BIDDING

| Date | DSND | CHKD | CHKD | APPD |
|---|---|---|---|---|
| 2021-04-22 | | | | |

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 maker standard, if not mentioned.
* In case of Inverter-Fed Motor, performance data is based on sine wave tests.
** Data is based on when the motor is supplied at rated voltage & frequency. and the data is expressed as a percentage of full-load value.

HYUNDAI ELECTRIC

# PERFORMANCE CURVE

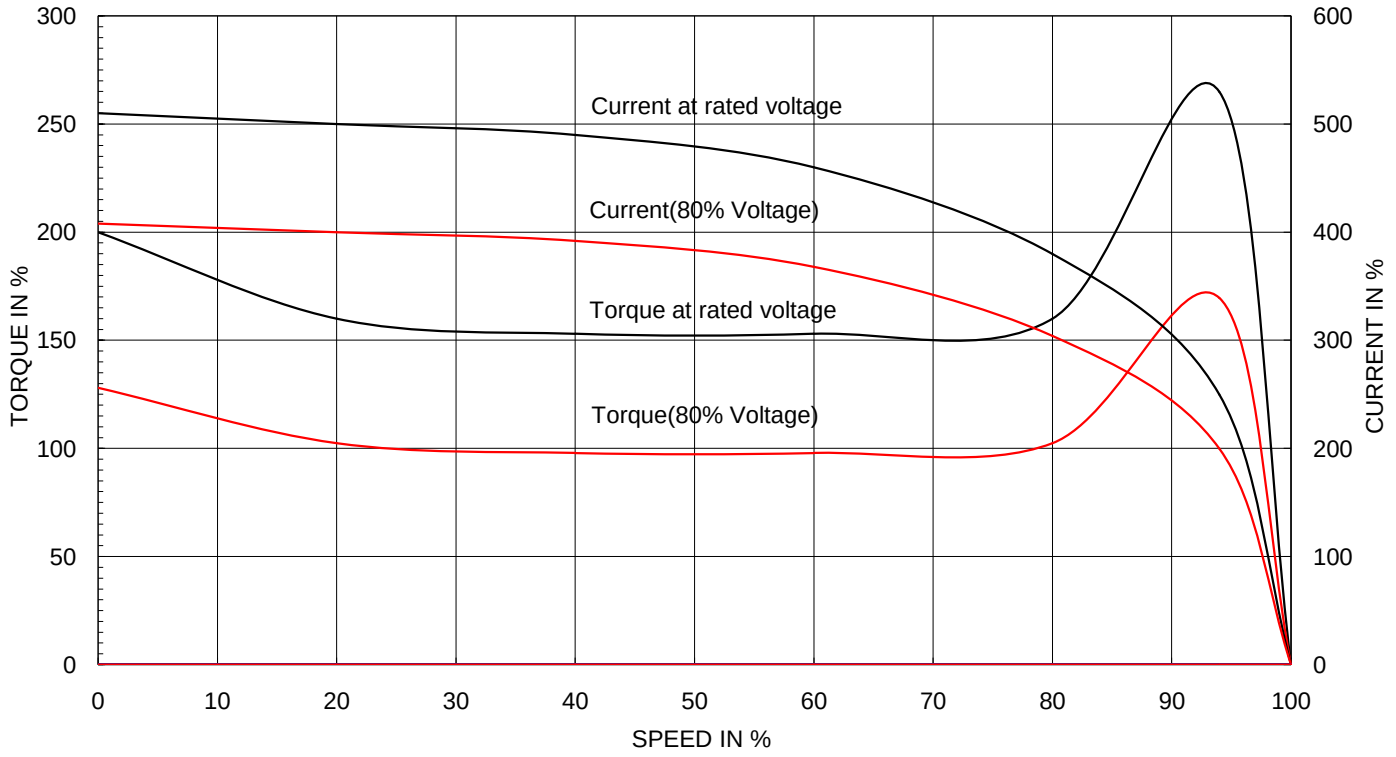
CURVE NO.

| | | | |
|---|---|---|---|
| Type : HLP-0.75/6 | | | |
| Full Load Torque : | 0.6 | kg.m | |
| Load moment of Inertia (J) : | - | $kg.m^2$ | |
| Motor moment of Inertia (J) : | 0.003 | $kg.m^2$ | |

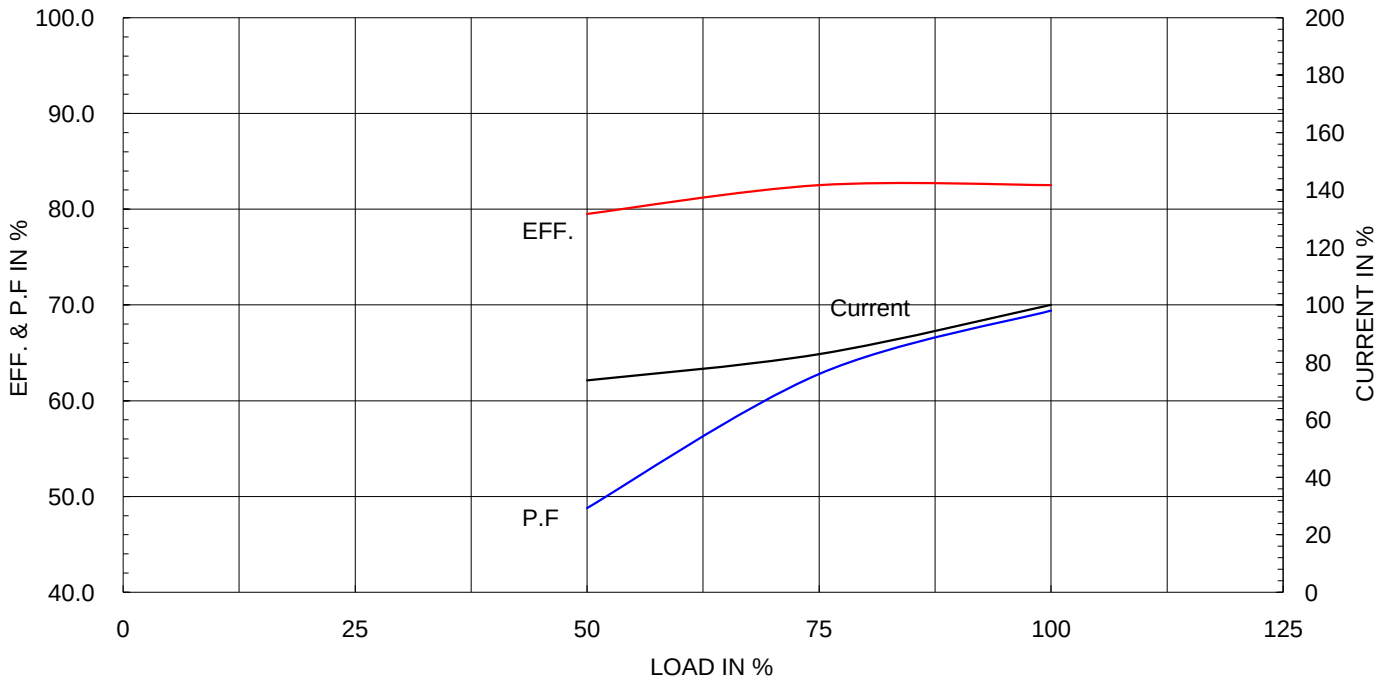
| | | | | | |
|---|---|---|---|---|---|
| 0.75 | kW | 6 | P | 60 | Hz |
| Speed at Full Load : | | | | 1140 | RPM |

| | | | |
|---|---|---|---|
| Rated Voltage | 220 | | |
| Full Load Current | 3.4A | | |

SPEED VS TORQUE & CURRENT CURVE




OUTPUT VS EFF., P.F & CURRENT CURVE



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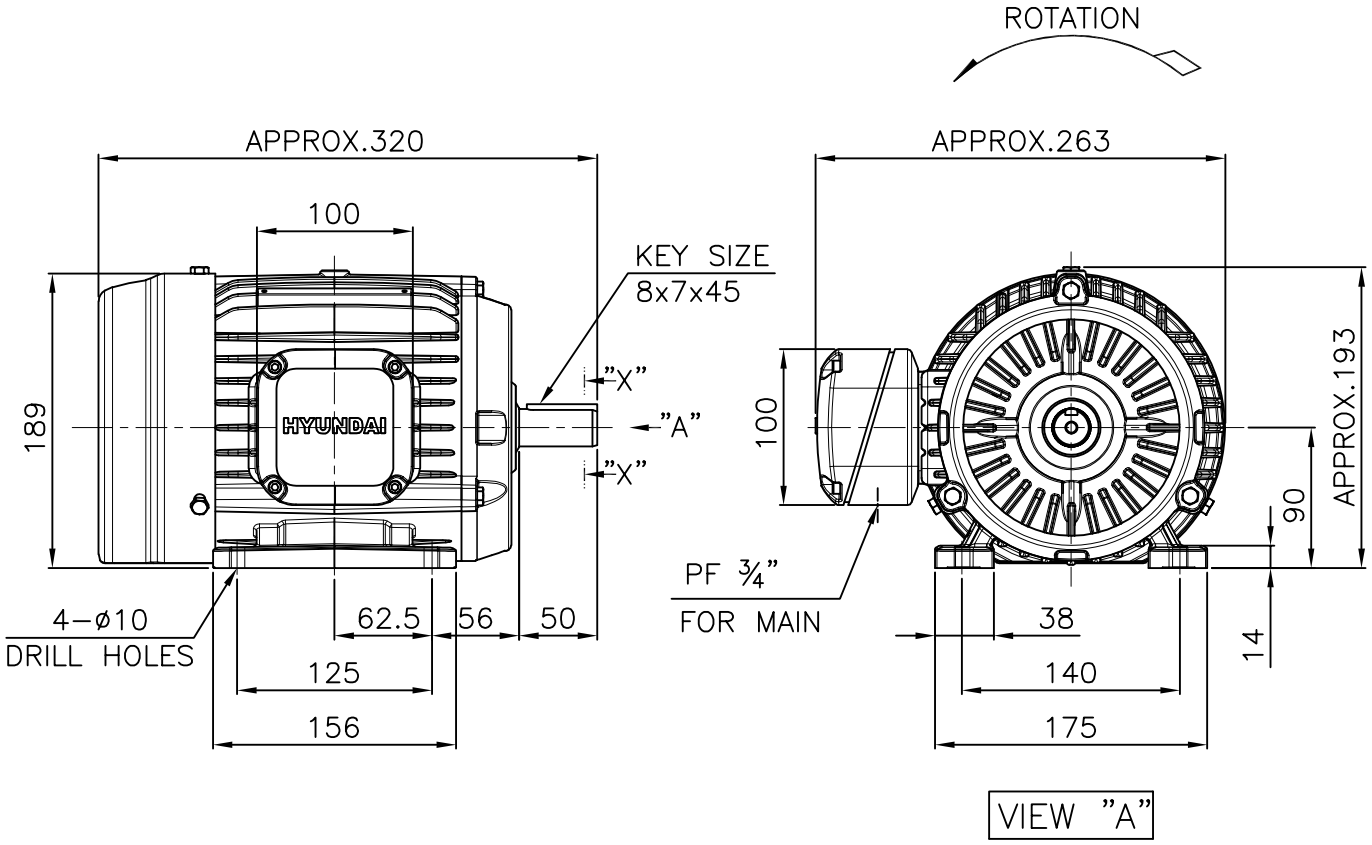
본 도면은 현대일렉트릭(주) 재산이므로
허가없이 복사할 수 없음 (취급유의)

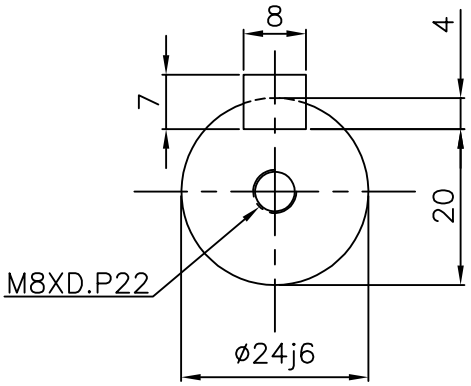
| | 50S | REV | DATE | CONTENTS | REVD BY | CHKD BY | CHKD BY | APPD BY |
|---|---|---|---|---|---|---|---|---|
| ▽ | 50S | | | | | | | |
| ▽▽ | 12.5S | | | | | | | |
| ▽▽▽ | 3.2S | | | | | | | |
| ▽▽▽▽ | 0.4S | | | | | | | |




## NOTE

1.TOLERANCE :

| | | |
|---|---|---|
| CENTER HEIGHT | 90 | $^{0}_{-0.5}$ |
| BASE HOLES | ø10 | $^{+0.36}_{0}$ |
| SHAFT DIAMETER | ø24 | $^{+0.009}_{-0.004}$ |
| KEYWAY WIDTH | 8 | $^{0}_{-0.036}$ |
| KEYWAY DEPTH | 4 | $^{+0.2}_{0}$ |
| KEY WIDTH | 8 | $^{0}_{-0.036}$ |
| KEY HEIGHT | 7 | $^{0}_{-0.090}$ |




SECTION "X-X"

SCALE 5/5

| | | | |
|---|---|---|---|
| APPD BY | S.K.HAN | UNIT | mm |
| CHKD BY | S.Y.KIM | SCALE | 1/6 |
| CHKD BY | I.K.KIM | PROJEC'N | 3각법(3rd Angle) |
| DSND BY | S.H.LEE | DATE | 2019.06.18 |

| | | | |
|---|---|---|---|
| SUBJECT | KS, IEC Fr.90L | | DWG SIZE A4 ( 1:6 ) |
| TITLE | OUTLINE | | |
| REF. NO | | | Sheet No. of |
| DWG NO | LM-T1095B3PLV01 | | Revision No. 0 |

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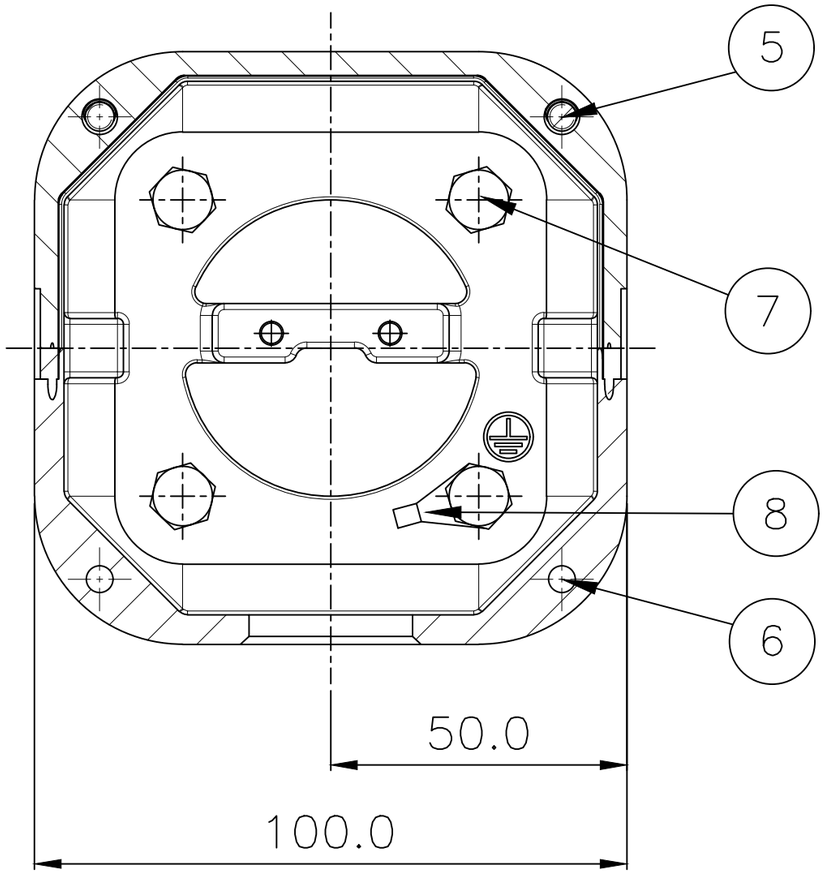


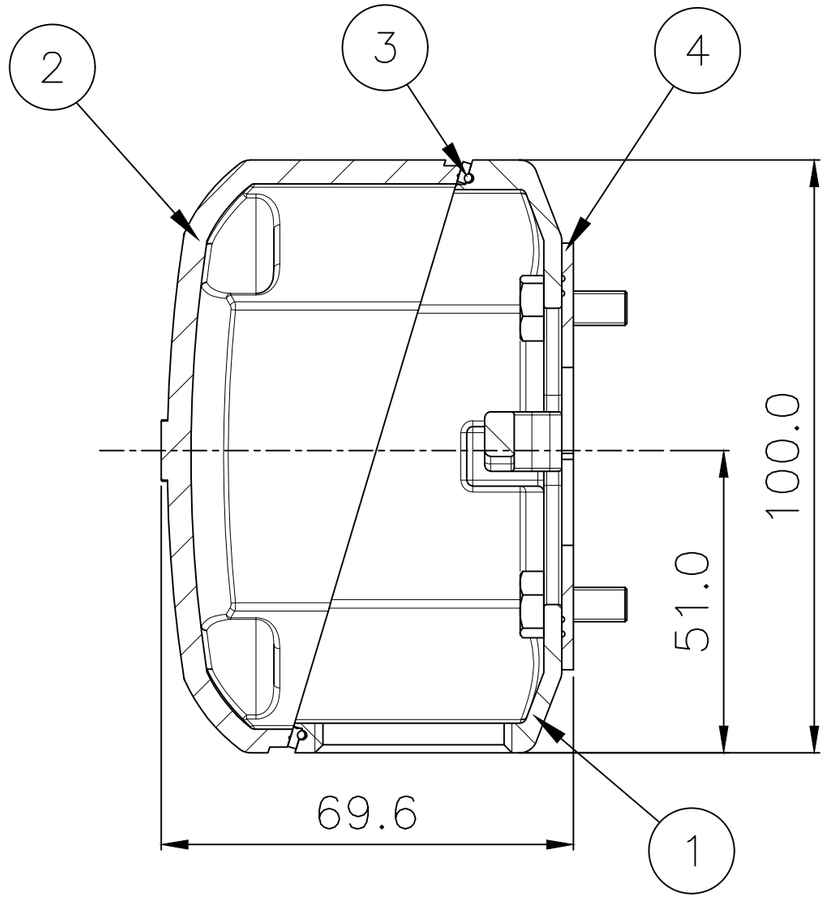


| Q'TY | DESCRIPTION | MATERIAL | DIMENSION | WEIGHT | PART NO. | REMARK | NO. |
|---|---|---|---|---|---|---|---|
| 1 | GROUND TERMINAL LUG | CU | -- | | | | 8 |
| 4 | BOX+FRAME HEX BOLT | S45C | M6 X L15 | | | | 7 |
| 2 | COVER+BOX HEX BOLT | S45C | M5 X L20 | | | | 6 |
| 2 | COVER+BOX HEX BOLT | S45C | M5 X L40 | | | | 5 |
| 1 | BOX GASKET | NBR | -- | | | | 4 |
| 1 | COVER GASKET | NBR | -- | | | | 3 |
| 1 | CONDUIT BOX COVER | AL | -- | | | | 2 |
| 1 | CONDUIT BOX | AL | -- | | | | 1 |

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

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

| 일반기공공차 | | 일반제관공차 | |
|---|---|---|---|
| 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 |

| | | | |
|---|---|---|---|
| APPD BY | S.K.HAN | UNIT | mm |
| CHKD BY | I.K.KIM | SCALE | 1/1 |
| CHKD BY | – | PROJEC'N | 3rd Angle |
| DSND BY | S.H.LEE | DATE | 2020-06-19 |

HYUNDAI ELECTRIC

SUBJECT: SSEN SERIES 90FR.

DWG SIZE: A3 ( 1:1 )

TITLE: TERMINAL BOX ASS'Y

REF. NO

DWG NO

Sheet No. of

Revision No. 0