Refer to drawing no. 10491-603-604. All bolts to be M10 x 60mm galvanized and strapped to poles and where it is in contact with stay wire.

- Install bundled conductor in black poly sleeve where it is.
- 1 LV phases: 20mm
- 1 LV phase and earth: 20mm
- 2 LV phases: 40mm
- 2 LV phases: 20mm
- Minimum clearance between: 2LV phase and earth: 20mm

**Notes:**

- Wooden spacer for LV underground cable
- LV underground cable
- 25mm O.D. x 25mm internal diameter, with UV stable poly outer sheath.
- Single oval slot armature:
  - 100 x 50 x 11mm galvanized channel
  - 800 x 600 x 20mm concrete foot
  - LV underground cable
- Photocall:
- LV bundled conductor / LV poly cable
- LV distribution box
- Cable marker labelled: Earth Sp. for explosion fuses
- Danger notice
- Barbed wire twisted around poles
- Strut pole
- Rivet: feet from 500mm below to 2.5m above ground level.
- Rivet: edge of arm of earth conductor
- Substation design board:
  - 100 x 50 x 11mm galvanized angle iron
  - 50 x 12mm galvanized slot iron
  - 100 x 50 x 11mm galvanized channel iron
  - 180 x 65 x 19mm galvanized channel iron
  - 200 x 75 x 25mm galvanized channel iron
- MV to 2049 LV pole mounted transformer Substation
- MV expansion fuse
- MV lightning arrester
- MV station insulation

**Legend:**
NOTE: Steelwork to be hot dip galvanised after manufacture.

KNEE BRACE FOR ANGLE CROSS-ARM

END ELEVATION

FRONT ELEVATION

PLAN

ALL HOLES 25MM Ø

ROUND BAR

16MM Ø M5

25MM INSIDE RADIUS
Legend:

1. Pole
2. Bonding Hardware
3. 22mm (0.87 in) HD Base of Conductor
4. 22kV Line Conductor
5. 22kV Line Insulator

Front Elevation

Side Elevation

630 mm
NOTES

1. Pole Not To Be Drilled Or Cut
2. To Conductor Strain Point
3. But Shall Be Close As Possible
4. O/H Line Conductor Configuration
5. Dimension To Suit Particular

SIZ ES OF POLE
6. 80 x 100mm Galvanised Flat Bar Both
7. 20mm Ø Bolt
8. 600 x 600 x 150mm Concrete Block
9. Danger Notice
10. Barbed Wire Twisted Around Prop

LEGEND

SEE NOTE A
NOTE

1. Weatherproof rubber end caps
2. Black PVC pipe taped to pole
3. Door or notice
4. Steel wire
5. Future Telexon Ohm plant
6. Connection to
7. Conduits supplied with
8. Stainless steel strap
9. PVC cable ties
10. Insulation piercing connectors
11. Service cable strain clamp
12. Eye bolt M18
13. LV bundle conductor strain clamp
14. Pivotal bolt M16
15. Conduit service connection box
16. LV bundle conductor french system
17. Adjustable service connection cable

LEGEND
**Legend**

1. 450 x 350 x 30mm Laminated Wooden Mounting Board Fixed To Wall With 4 Galvanized Steel Bolts / Self-Tapping Screws
2. 96mm Hole For Screw Entry
3. KM Meter Keypad (User Interface Unit)
4. 6mm ø Hole For Fixing Screws
5. To Secure Fixing Screws
6. KM Ready Board

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**Mechanical Board**

- **Screen**
- **KM Meter Keypad**
- **KM Ready Board**

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**Rear View Elevation**

- 460 mm

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**Front View Elevation**

- 550 mm

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**And Ready Board**

- **Excluding KM Meter Keypad**
- **Side View Elevation**
The mounting board shall be mounted so that the top of the board is 1800mm above the floor.

6. The mounting board shall be mounted with the equipment not be mounted within 100mm from any water tap.

5. Mount the split prepared with meter keps (L1) and relay board as backfill.

4. If the soil around the 4.5m pole is not suitable for compaction, fill up the ground level then add two layers of the mixture of the ratio 1:4 to be used.

3. Where the wall and structure of the house are found to be unsuitable for the attachment, the service cable, then an alternative method to be used.

2. Where the roof is supported by wooden beams or if these conditions are to determine the best method of connection.

1. It is the contractor's responsibility to evaluate each aspect.
1. Connection box to be supplied with consumer service. Box to be provided complete with min. 25m long.

2. All conductor tail ends’ colour coded heat shrink tags to be installed on conductor to identify live, neutral and earth. Blue & white conductors to be installed on live terminals, black with earth terminal, red with neutral terminal.

3. All metal parts to be stainless steel. Stainless steel earth strap to be installed on earth terminations.

4. Connection box to ensure that the cables are of suitable size to accommodate all the equipment.

5. Conductor to be supplied with suitable insulated end caps.


7. Earth bar.

8. Neutral bar.

9. 4 x Shunt arrestors (optional).

10. BP MCB / meter label to indicate EFR no. served.

11. Pre-paralleled for LV consumer.

12. Door in open position.

13. Exposed & accessible to keep provision with a door that is opened.

14. Suitable to be supplied with suitable mounting brackets suitable for PV arrays. The PV arrays to be fed to the consumer box (CSC9) fitted with polyethylene pole mounted consumer unit and control units (MOUs) fixed to DIN rail.

15. Connection to phases.

16. Terminals to be insulated conductor complete with shroud.

17. Handle (cable) to clip on frame.

18. 440V MV system.
BULK INFRASTRUCTURE WORK AND ELECTRIFICATION OF 200 HOUSES AT KRUISFONTEIN IN HUMANSDORP

CONSULTANTS
CLINKSCALES MAUGHAN-BROWN

CONTRACTORS

CONTRACTOR'S NAME

TELEPHONE NUMBER

FUNDER
DEPARTMENT OF ENERGY
TEL: 043 703 6000

AMOUNT
R5,2 mil
(2020/21)