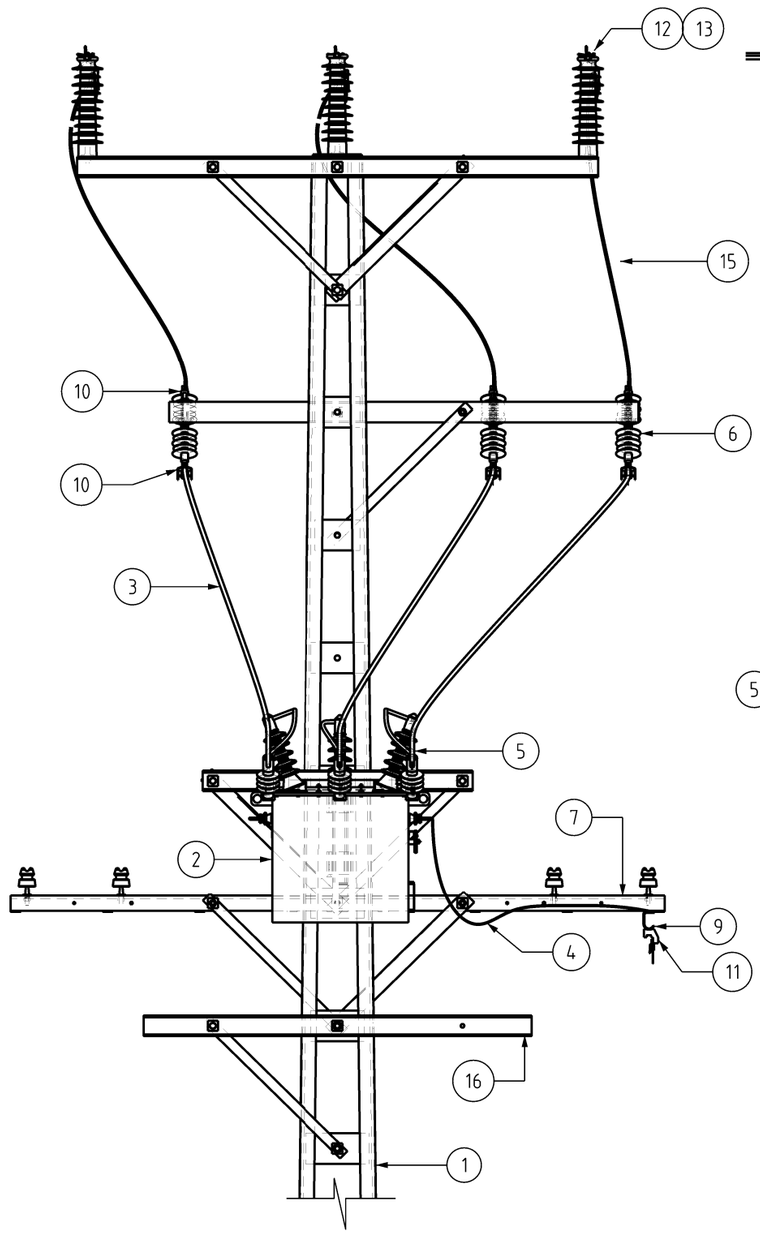
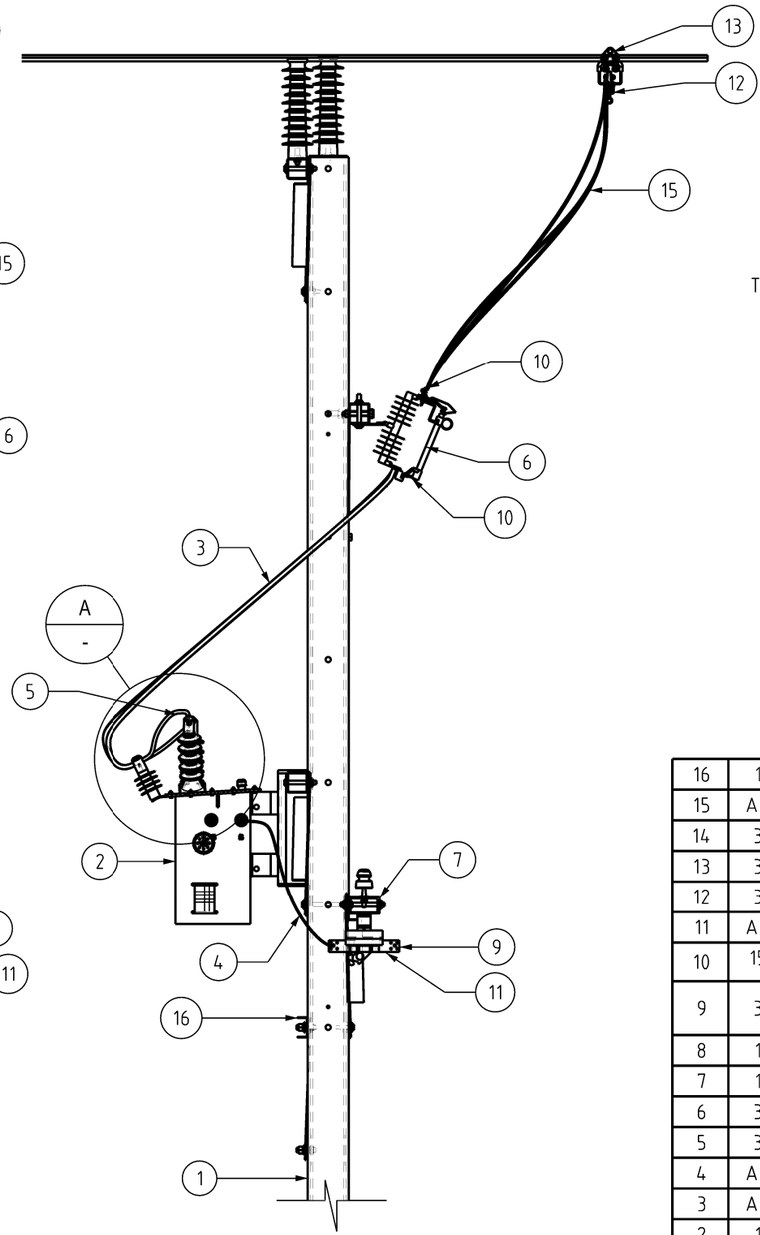
REFER TO SHEET 2 FOR SPECIAL INSTALLATION INSTRUCTIONS.



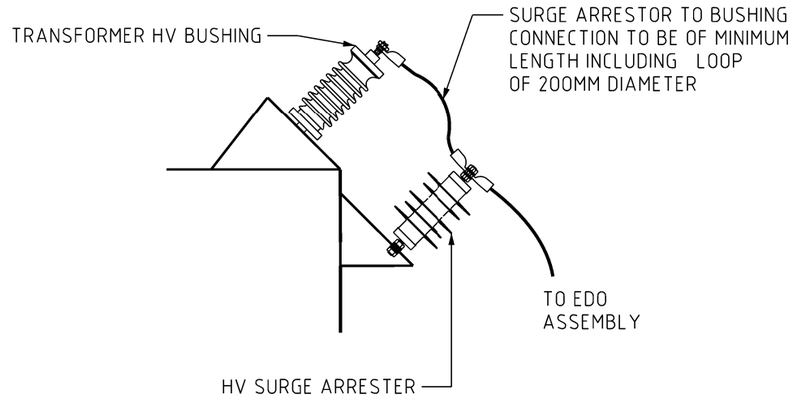

FRONT VIEW

SCALE N.T.S.




SIDE VIEW

SCALE N.T.S.




A / - DETAIL A

SCALE N.T.S.

| ITEM | QTY. | DESCRIPTION | ITEM NUMBER | DRG No. |
|---|---|---|---|---|
| 16 | 1 | CROSSARM LV SERVICE | 298554 | S01-01-02-11 |
| 15 | AR | 70SQMM LV FLEXIBLE | 406718 | S02-01-01-34 |
| 14 | 3 | SURGE DIVERTER - LV | 10041 | S01-02-06-05 |
| 13 | 3 | CLAMP ALUMINIUM BAIL LIVE LINE | 238915/239020 | S01-01-04-10 |
| 12 | 3 | LIVE LINE CLAMP GP | 2121 | S01-01-04-17 |
| 11 | AR | BELLMOUTH LUG | REFER TABLE | S02-01-02-11 |
| 10 | 15 | LUG 70 sq.mm | 406766 | S02-01-02-11 |
| 9 | 3 | ISOLATING SWITCH - LV | REFER TABLE | S01-01-06-01 OR S01-01-06-08 |
| 8 | 1 | POLE TOP UNIT - HV | - | S01-02-02-33 |
| 7 | 1 | POLE TOP UNIT - LV - TYPE 'a' | - | S01-02-02-01 |
| 6 | 3 | SWITCH FUSE ASSEMBLY- 22 kV EDO | 3863 | S01-01-06-06 |
| 5 | 3 | POLYMER SURGE DIVERTER - HV | - | S01-01-04-19 |
| 4 | AR | CABLE - LV - SINGLE CORE | REFER TABLE | S02-01-01-34 |
| 3 | AR | CABLE - LV- XLPE 70 Sq mm Cu | 406733 | S02-01-01-35 |
| 2 | 1 | TRANSFORMER - HANGING TYPE | - | S01-01-09-01 |
| 1 | 1 | POLE STRUCTURE | - | S01-02-05-24 |

MATERIAL SCHEDULE

| NO | DESCRIPTION | DRN | DATE | CKD | APPD |
|---|---|---|---|---|---|
| 29 | SHEET 2 AMENDED. | J.R. | AUG'25 | B.B. | B.V. |
| 28 | SHEET 2 AMENDED. | P.BH. | FEB'23 | B.C. | B.V. |
| 27 | SHEET 2 AMENDED. | C.C. | MAR'21 | B.V. | H.E. |
| 26 | DRAWING UPDATED NOTES 8, 15, 16 & 17, LV SERVICE ARM | C.C. | MAY'20 | H.E. | B.C. |
| 25 | TITLEBLOCK & DRAWING NUMBERS FORMATTED | K.T. | JAN'19 | C.C. | C.C. |

AMENDMENTS

PowerWater
NORTHERN TERRITORY

| | |
|---|---|
| DES | T.M-L. |
| DRN | PMC |
| CKD | N.S. |
| APPD | B.T.KENT |
| SCALE | N.T.S |
| ISSUED | FEBRUARY 1991 |
| ALL DIM. IN mm | |
| DRAFTING STANDARD TO A.S.1100 | |

POWER STANDARD DRAWING

SUBSTATIONS, STEP DOWN, SINGLE POLE
GENERAL ARRANGEMENT
SHEET 1 OF 2

A3

DRAWING NUMBER S01-02-06-01_1

CAD PRODUCT - DO NOT AMEND MANUALLY

29 AMDT

## NOTES:

1. POLYMER HOUSED SURGE DIVERTERS REPLACE SUPERSEDED PORCELAIN HOUSED SURGE ARRESTERS. REFER S01-01-04-19.
2. IF BOLTED CABLE LUG (ITEM NUMBER 5785) HAS BEEN USED ON OLDER INSTALLATIONS, REPLACE WITH SUITABLE COMPRESSION LUG.
3. WHERE GREATER THAN 500KVA TRANSFORMER IS REQUIRED, INSTALL A GROUND MOUNTED SUBSTATION.
4. REFER S01-02-06-05 FOR LV OVERHEAD MAINS CONNECTION DETAILS.
5. HV CABLE CONNECTING FROM THE HV OVERHEAD MAINS TO THE EDO ASSEMBLY SHALL BE A FLEXIBLE CABLE. REFER TO S02-01-01-34. HV CABLE CONNECTING FROM THE EDO ASSEMBLY TO THE HV SURGE ARRESTERS AND HV TRANSFORMER BUSHINGS SHALL BE A HARD DRAWN CABLE. REFER TO S02-01-01-35.
6. ALL LV CABLING SHALL BE A FLEXIBLE CABLE.
7. REFER TO S01-02-05-24 FOR POLE STRUCTURE.
8. REFER TO S01-02-03-11, S01-02-03-12 OR S01-02-03-13 FOR UNDERGROUND EARTHING ARRANGEMENTS
9. REFER TO S01-02-03-23 FOR POLE STRUCTURE EARTHING ARRANGEMENTS.
10. ALL CONNECTIONS SHALL BE GREASED.
11. REFER TO DETAIL A, SHEET 1 FOR HV SURGE ARRESTER AND HV BUSHING CONNECTION ARRANGEMENT
12. REFER TO S04-02-04-02 SECTION FOR ABC TERMINATIONS.
13. LV SERVICE ARM SHALL BE INSTALLED AT THE SAME ORIENTATION AS LV ARM OR TRANSFORMER HANGING ARM IF STAND ALONE SUB (ie.NO LV ARM).
14. BRACES FOR LV SUB ARM TO BE ANGLE BRACES.
15. ANGLE BRACE ONLY REQUIRED FOR 500kVA T/F CROSSARM.
16. IF NECESSARY BRACES FOR SUB ARM, LV ARM AND SERVICE ARM CAN GO UP INSTEAD OF DOWN.
17. NO STAYS TO BE INSTALLED ABOVE THE T/F.
18. FOR LARGE CONSUMER CONNECTION DETAILS REFER TO S01-02-06-18.
19. A) TRANSFORMERS UP TO 200KVA CAN BE INSTALLED ON B, C OR D POLES ON THE WEAK OR STRONG SIDE.
    B) 315KVA TRANSFORMERS WEIGHING EQUAL OR GREATER THAN 1.7 TONNE ARE TO BE ERECTED ON C OR D TYPE POLES.
    C) FOR NON-INDUSTRIAL AREAS PREFERENCE IS FOR 500KVA TRANSFORMERS TO BE ERECTED ON D TYPE POLES IN THE STRONG DIRECTION. ALTERNATIVELY THE WEAK SIDE OF D TYPE POLES MAY BE PERMITTED IF THE CONDUCTOR SPANS ON BOTH SIDES OF TRANSFORMER POLES ARE EQUAL.
    D) FOR INDUSTRIAL AREAS ALL TRANSFORMER SHALL BE MOUNTED ON "D" TYPE POLE AND ON THE STRONG SIDE, REGARDLESS OF TRANSFORMER SIZE.

MATERIAL SELECTION TABLE - LV SIDE

| T / F SIZE (kVA) | LV CABLE | | | LUG | | BI METAL CLAMP | | ISOLATING SWITCH | |
|---|---|---|---|---|---|---|---|---|---|
| | ITEM NUMBER | SIZE | QTY | ITEM NUMBER | QTY | ITEM NUMBER | QTY | ITEM NUMBER | QTY |
| 15 | 402707 | 35/70 sq.mm | 15 m | 402689 | 2 | 2295 | 2 | 2220 | 3 |
| 25 | 402707 | 35/70 sq.mm | 15 m | 402689 | 4 | 2295 | 4 | 2220 | 3 |
| 50 | 402707 | 35/70 sq.mm | 15 m | 402689 | 4 | 2295 | 4 | 2220 | 3 |
| 63 | 402707 | 70 sq.mm | 15m | 402689 | 4 | 2295 | 4 | 2220 | 3 |
| 100 | 402707 | 70 sq.mm | 15 m | 402689 | 10 | 2295 | 4 | 2246 | 3 |
| | | | | | 4 | | | 2220 | 3 |
| 200 | 300368 | 1x150 sq.mm | 15 m | 402692 | 10 | 2295 | 4 | 2246 | 3 |
| | | | | | 4 | | | 2220 | 3 |
| 315 | 300368 | 1x150 sq.mm | 15 m | 402692 | 14 | 2295 | 4 | 2246 | 3 |
| 500 | 400784 | 1x300 sq.mm | 15 m | 402695 | 14 | 2295 | 4 | 2170 | 3 |

| NO | DESCRIPTION | DRN | DATE | CKD | APPD |
|---|---|---|---|---|---|
| 29 | REVISED ISOLATING SWITCH ITEM NUMBER FOR 315 kVA TRANSFORMER. CHANGED FROM 2170 TO 2246. | J.R. | AUG'25 | B.B | B.V. |
| 28 | NOTE 19 ADDED. | P.BH. | FEB'23 | B.C. | B.V. |
| 27 | UPDATE NOTE 13. | C.C. | MAR'21 | B.V. | H.E. |
| 26 | DRAWING UPDATED NOTES 8, 15, 16 & 17, LV SERVICE ARM | C.C. | MAY'20 | H.E. | B.C. |
| 25 | TITLEBLOCK & DRAWING NUMBERS FORMATTED | K.T. | JAN'19 | C.C. | C.C. |

AMENDMENTS

PowerWater NORTHERN TERRITORY

DES T.M-L.
DRN PMC
CKD N.S.
APPD B.T.KENT
SCALE N.T.S
ISSUED FEBRUARY 1991
ALL DIM. IN mm
DRAFTING STANDARD TO A.S.1100

POWER STANDARD DRAWING

SUBSTATIONS, STEP DOWN, SINGLE POLE
GENERAL ARRANGEMENT
SHEET 2 OF 2

A3

DRAWING NUMBER S01-02-06-01_2

29 AMDT

CAD PRODUCT - DO NOT AMEND MANUALLY