



**NOTES:**

1. EXCEPT WHERE OTHERWISE SPECIFIED THE CABLE SHALL COMPLY WITH AS1429.
2. THE CABLE SHALL BE PERMANENTLY MARKED WITH MANUFACTURERS IDENTIFICATION, YEAR OF MANUFACTURE, VOLTAGE RATING, CONDUCTOR MATERIAL AND CROSS SECTIONAL AREA, AND INSULATION MATERIAL AT INTERVALS ALONG ITS OUTER SHEATH.
3. THE CABLE SHALL ALSO HAVE CONSECUTIVE NUMBERS PRINTED ALONG ITS OUTER SHEATH NOMINALLY SPACED AT ONE METRE INTERVALS.
4. THE CABLE SHALL BE WOUND ON ITS DRUM TO ENSURE LEGIBILITY OF THE INFORMATION IN NOTES 2 AND 3.
5. THE CABLE SHALL BE "DRY CURED".
6. ALL RATINGS EXCEPT FOR 630sq.mm CABLES, ARE BASED ON TOUCHING TREFOIL CONFIGURATION WITH 40°C AMBIENT AIR TEMPERATURE, BURIAL DEPTH OF 0.8M, SOIL TEMPERATURE OF 25°C AND SOIL THERMAL RESISTIVITY OF 12°C.M/W.
7. ALL CABLE ENDS SHALL BE FITTED WITH MASTIC LINED HEATSHRINK CAPS AT ALL TIMES EXCEPT WHEN THE CABLE IS IN THE JOINTING OR TERMINATION PROCESS.
8. 630sq.mm CABLE RATINGS BASED ON 150mm DIAMETER HD CONDUITS IN TOUCHING TREFOIL CONFIGURATION WITH ONE CABLE PER CONDUIT, 40°C AMBIENT AIR TEMPERATURE, 25°C SOIL TEMPERATURE, 0.8m BURIAL DEPTH AND SOIL THERMAL RESISTIVITY OF 12°C.M/W
9. REFER TO STSP 02-003 FOR FURTHER DETAILS.
10. DIMENSIONS GIVEN ARE NOMINAL UNLESS NOTED OTHERWISE.

| ITEM                               | UNITS  | 1   | 2       | 3       | 4       |
|------------------------------------|--------|---|---------|---------|---------|
| ITEM NUMBER                        | -      | 286047  | 286054  | 286062  | 413426  |
| CONDUCTOR AREA                     | SQ.mm  | 35  | 120     | 240     | 630     |
| CONDUCTOR DIAMETER                 | mm     | 7.0   | 12.8    | 18.2    | 29.6    |
| CONDUCTOR SCREEN SEMI-CON MIN.     | mm     | 0.3   | 0.3     | 0.3     | 0.3     |
| XLPE INSULATION THICKNESS          | mm     | 5.5   | 5.5     | 5.5     | 5.5     |
| DIAMETER OVER XLPE INSULATION      | mm     | 20  | 25.8    | 31.5    | 43.2    |
| INSULATION SCREEN SEMI-CON MIN.    | mm     | 0.6   | 0.6     | 0.6     | 0.6     |
| WATER BLOCKING TAPE THICKNESS MIN. | mm     | 0.3   | 0.3     | 0.3     | 0.3     |
| EARTH SCREEN AREA                  | SQ.mm  | 23  | 90      | 90      | 90      |
| EARTH SCREEN FAULT RATING          | kA.1s  | 3.3   | 13.1    | 13.1    | 13.1    |
| PVC SHEATH THICKNESS               | mm     | 1.0   | 1.0     | 1.0     | 1.5     |
| DIAMETER OVER PVC                  | mm     | 26.9  | 34.8    | 39.9    | 52.6    |
| NYLON SHEATH THICKNESS MIN.        | mm     | 0.5   | 0.5     | 0.5     | 0.5     |
| HDPE SHEATH THICKNESS              | mm     | 2   | 2       | 2       | 2.5     |
| OVERALL CABLE DIAMETER             | mm     | 34.1  | 42.0    | 47.1    | 60.4    |
| CABLE LENGTH ON DRUM               | m      | 1000  | 1000    | 500     | 500     |
| BENDING RADIUS DURING INSTALL      | mm     | 1110  | 1350    | 1530    | 1950    |
| BENDING RADIUS INSTALLED           | mm     | 740   | 900     | 1020    | 1300    |
| MASS OF CABLE                      | kg/km  | 1400  | 3090    | 4360    | 8470    |
| CONDUCTOR FORM                     | -      | COMPACTED, Cu C11000 'O' ROUND, WATER BLOCKED |         |         |         |
| AC RESISTANCE @ 50Hz, 90°C         | OHM/km | 0.668   | 0.196   | 0.0978  | 0.0407  |
| INDUCTIVE REACTANCE                | OHM/km | 0.159   | 0.127   | 0.115   | 0.101   |
| POSITIVE SEQUENCE CAPACITANCE      | uF/km  | 0.156   | 0.224   | 0.289   | 0.453   |
| ZERO SEQUENCE RESISTANCE           | OHM/km | 0.75458                                       | 0.36862 | 0.29954 | 0.25320 |
| ZERO SEQUENCE REACTANCE            | OHM/km | 0.08316                                       | 0.07932 | 0.07676 | 0.05888 |
| CURRENT RATING - DIRECT BURIED     | A      | 158   | 335     | 475     | 841     |
| CURRENT RATING - IN DUCTS          | A      | 142   | 305     | 415     | 728     |
| CURRENT RATING - IN AIR            | A      | 183   | 378     | 581     | 999     |
| 3PH VOLTAGE DROP @ 50Hz, 90°C      | mV/A.m | -   | -       | -       | -       |

|            |  |
|------------|--|
| 9          | SACRIFICIAL UV STABILISED HDPE SHEATH - COLOUR BLACK                       |
| 8          | ANTI-TERMITE JACKET - EXTRUDED NYLON 11 OR 12 CONTRASTING COLOUR (BLUE)    |
| 7          | V-90 PVC SHEATH - COLOUR ORANGE  |
| 6          | CONCENTRIC HELICAL EARTH SCREEN - COPPER C11000 'O'                        |
| 5          | SEMI-CONDUCTIVE WATER BLOCKING TAPE  |
| 4          | EXTRUDED FREE STRIPPING SEMI-CONDUCTIVE MATERIAL                           |
| 3          | CROSS-LINKED POLYETHYLENE (XLPE) INSULATION - DRY CURED                    |
| 2          | EXTRUDED SEMI-CONDUCTIVE SCREEN BONDED TO INSULATION - NON-FREE STRIPPABLE |
| 1          | CONDUCTOR - COPPER C11000 'O' - WATER BLOCKED                              |
| TAG NUMBER | DESCRIPTION  |

| NO | DESCRIPTION   | AMENDMENTS | DRN    | DATE   | CKD  | APPD |
|----|---|------------|--------|--------|------|------|
| 5  | REFORMATTED TABLES. UPDATED INFORMATION. EDITED NOTE 2. |            | A.N.   | OCT'21 | A.N. | B.V. |
| 4  | UPDATE TITLE BLOCK AND CONSTRUCTION TO STSP 02-003      |            | C.W.M. | APR'20 | C.C. | B.C. |
| 3  | NOTES AND TABLE UPDATED                                 |            | A.T.   | FEB'13 | B.C. | B.C. |
| 2  | WATER BLOCKING TAPE MOVED TO OUT SIDE OF EARTH SCREEN   |            | J.C.   | MAY'10 | A.T. | S.C. |
| 1  | TAG NO 8 COLOUR AMMENDED                                |            | R.G.I. | APR'01 | *    | FRR  |

|                |        |  |  |
|----------------|--------|--|--|
| DES            | -      | <b>POWER STANDARD DRAWING</b>  |  |
| DRN            | JAL    | <b>CABLES<br/>COPPER - SINGLE CORE<br/>12.7/22KV - XLPE WATER BLOCKED<br/>HDPE SHEATHED &amp; NYLON JACKETED</b> |  |
| CKD            | SCM    |  |  |
| APPD           | PJD    |  |  |
| SCALE          | N.T.S. | <b>A3</b>  | <b>DRAWING NUMBER<br/>S02-01-01-26</b> |
| ISSUED         | JUL'95 |  |  |
| ALL DIM. IN mm |        | <b>CAD PRODUCT - DO NOT AMEND MANUALLY</b>   |  |