



ITEM	UNITS	1	2	3
ITEM NUMBER	-	411618	502180	500972
CONDUCTOR AREA	SQ.mm	240	400	630
CONDUCTOR DIAMETER	mm	18.0	23.5	29.9
CONDUCTOR SCREEN SEMI-CON MIN.	mm	0.3	0.3	0.3
XLPE INSULATION THICKNESS	mm	5.5	5.5	5.5
DIAMETER OVER XLPE INSULATION	mm	29.6	35.1	54.5
INSULATION SCREEN SEMI-CON MIN.	mm	0.6	0.6	0.6
WATER BLOCKING TAPE THICKNESS MIN.	mm	0.3	0.3	0.3
EARTH SCREEN AREA	SQ.mm	90	90	90
EARTH SCREEN FAULT RATING	kA.1s	13.1	13.1	13.1
PVC SHEATH THICKNESS	mm	1	1.5	1.5
DIAMETER OVER PVC	mm	39.9	46	52.6
NYLON SHEATH THICKNESS MIN.	mm	0.5	0.5	0.5
HDPE SHEATH THICKNESS	mm	2	2.5	2.5
OVERALL CABLE DIAMETER	mm	46.6	54.0	57.7
CABLE LENGTH ON DRUM	m	500	500	750
BENDING RADIUS DURING INSTALL	mm	1250	1430	1610
BENDING RADIUS INSTALLED	mm	750	860	960
MASS OF CABLE	kg/km	2890	3730	4680
CONDUCTOR FORM	-	COMPACTED, AA1350, H68 TEMPER, ROUND, WATER BLOCKED		
AC RESISTANCE @ 50Hz, 90°C	OHM/km	0.161	0.102	0.0632
INDUCTIVE REACTANCE	OHM/km	0.116	0.108	0.101
POSITIVE SEQUENCE CAPACITANCE	uF/km	0.289	0.347	0.422
ZERO SEQUENCE RESISTANCE	OHM/km	0.34887	0.31013	0.29079
ZERO SEQUENCE REACTANCE	OHM/km	0.07676	0.07691	0.07493
CURRENT RATING - DIRECT BURIED	A	352	455	593
CURRENT RATING - IN DUCTS	A	313	403	523
CURRENT RATING - IN AIR	A	452	606	822
3PH VOLTAGE DROP @ 50Hz, 90°C	mV/A.m	0.34	0.272	-

NOTES:

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

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 '0'
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 - ALUMINIUM ALLOY 1350 TEMPER H68 - WATER BLOCKED
TAG NUMBER	DESCRIPTION

NO	DESCRIPTION	DRN	DATE	CKD	APPD
4	UPDATED TABLE. REFORMATTED TABLES AND NOTES. RENUMBERED ITEMS.	A.N.	OCT'21	A.N.	B.V.
3	UPDATE TITLE BLOCK AND CONSTRUCTION TO STSP 02-003	C.C.	APR'20	C.C.	B.C.
2	ITEM 2 ADDED	C.M.	NOV'13	B.C.	B.C.
1	TABLE AND NOTES UPDATED. ITEM 3 ADDED	A.T.	FEB'13	B.C.	B.C.
0	ISSUED FOR CONSTRUCTION	J.C.	SEP'11	B.C.	S.C.



DES	-	POWER STANDARD DRAWING	
DRN	JAL	CABLES ALUMINIUM - SINGLE CORE 12.7/22KV - XLPE - WATER BLOCKED HDPE SHEATHED NYLON JACKETED	
CKD	SCM		
APPD	PJD		
SCALE	N.T.S.	A3	DRAWING NUMBER S02-01-01-38
ISSUED	JUL'95		
ALL DIM. IN mm			
DRAFTING STANDARD TO A.S.1100		CAD PRODUCT - DO NOT AMEND MANUALLY	

