



ITEM	DESCRIPTION
1	CONDUCTOR - H68 ALUMINIUM - WATER BLOCKED
2	EXTRUDED SEMI-CONDUCTIVE SCREEN BONDED TO INSULATION - NON-FREE STRIPPABLE
3	CROSS LINKED POLYETHYLENE INSULATION (DRY CURED)
4	EXTRUDED FREE STRIPPING SEMI-CONDUCTIVE MATERIAL
5	WATER BLOCKING TAPE
6	CONCENTRIC HELICAL EARTH SCREEN - COPPER
7	HDPE-60 OUTER SHEATH WITH 0.12% W/W CYPERMETHRIN

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 METER 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 RATING, EXCEPT FOR 630SQMM CABLES, ARE BASED ON CABLES IN TOUCHING TREFOIL CONFIGURATION, 40°C AMBIENT AIR TEMPERATURE, 25°C SOIL TEMPERATURE, 0.8M BURIAL DEPTH AND SOIL THERMAL RESISTIVITY OF 12°C.M/W.
- 630SQMM CABLE RATINGS BASED 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 CABLE ENDS SHALL BE FITTED WITH MASTIC LINED HEATSHRINK END CAPS AT ALL TIMES EXCEPT WHEN THE CABLES IS IN THE JOINTING OR TERMINATING PROCESS.

ITEM	UNITS	1	2	3	4	5
ITEM NUMBER	-	401309	401312	401315	401318	500973
CONDUCTOR AREA	sq.mm	35	95	240	400	630
CONDUCTOR DIAMETER	mm	7.1	11.5	18.1	23.5	29.9
CONDUCTOR SCREEN SEMI-CON	mm	0.3	0.3	0.3	0.3	0.3
INSULATION THICKNESS	mm	3.4	3.4	3.4	3.4	3.4
DIAMETER OVER INSULATION	mm	14.5	18.9	25.5	30.9	37.2
INSULATION SCREEN SEMI-CON	mm	1.0	1.0	1.0	1.0	1.0
EARTH SCREEN AREA	sq.mm	23	65	90	90	90
EARTH SCREEN STRANDING	No/mm	41/0.85	45/1.35	49/1.53	49/1.53	49/1.53
EARTH SCREEN FAULT RATING	KA.1sec	3.3	9.2	13.1	13.1	13.1
WATER BLOCKING TAPE THICKNESS	mm	0.3	0.3	0.3	0.3	0.3
HDPE SHEATH THICKNESS	mm	1.8	1.8	2	2.2	2.4
OVERALL CABLE DIAMETER	mm	24.2	29.8	36.8	42.8	47.8
CABLE LENGTH ON DRUM	m	1000	1000	500	500	750
BENDING RADIUS DURING INSTALL	mm	650	750	950	1100	1200
BENDING RADIUS INSTALLED	mm	400	450	600	650	750
WEIGHT OF CABLE	KG/KM	658	1268	2116	2687	-
CONDUCTOR FORM	COMPACTED, H68 ALUMINIUM, ROUND, WATER BLOCKED					
AC RESISTANCE@ 50HZ, 90°C	Ohm/km	1.11	0.411	0.160	0.102	0.062
INDUCTIVE REACTANCE	Ohm/km	0.140	0.121	0.104	0.0979	0.129
POSITIVE SEQUENCE CAPACITANCE	uF/Km	0.232	0.324	0.463	0.584	0.663
ZERO SEQUENCE RESISTANCE	Ohm/km	2.12	0.782	0.423	0.363	0.315
ZERO SEQUENCE REACTANCE	Ohm/km	0.0783	0.0608	0.0471	0.0422	0.039
CURRENT RATING IN GROUND	A	135	230	385	490	617
CURRENT RATING IN AIR	A	140	260	450	600	792
CURRENT RATING IN DUCTS	A	135	225	345	420	518
30 VOLTAGE DROP@ 50Hz, 90°C	mV/A.M	1.94	0.741	0.333	0.245	0.243

NO	DESCRIPTION	DRN	DATE	CKD	APPD
7	WATERMARK UPDATED	HE.	JAN'20	HE	B.V.
6	NOT FOR NEW CONSTRUCTION	C.C.	SEP'19	B.V.	B.C.
5	TITLEBLOCK & DRAWING NUMBER FORMATTED	K.T.	APR'19	C.C.	C.C.
4	TABLE AND NOTES UPDATED, 22KV CABLES REMOVED TO S02-01-01-39 POLYESTER TAPE LAYER REMOVED	A.T.	FEB'13	B.C.	B.C.
3	PVC SHEATH REMOVED WATER BLOCKING TAPE MOVED	J.C.	JUNE'10	A.T.	S.C.
2	CABLES ADDED, SHEET 2 ADDED, NOTES ADDED	J.C.	AUG'08	A.T.	S.C.
1	ITEM 9 & TITLE AMENDED	J.C.	MAR'08	B.C.	S.C.



DES	POWER STANDARD DRAWING		
DRN A. SCHMID	CABLES		
CKD R. SOOD	ALUMINIUM - SINGLE CORE - 11KV		
APPD S.C.	CHEMICAL ANTI-TERMITE (CYPERMETHRIN)		
SCALE N.T.S.	A3	DRAWING NUMBER	S02-01-01-36
ISSUED MAY 2007			
ALL DIM. IN mm	CAD PRODUCT - DO NOT AMEND MANUALLY		
DRAFTING STANDARD TO A.S.1100	AMDT		