

SYSTEM VOLTAGE: 22kV

CABLE	STOCK CODE	CORE TO SCREEN CAPACITANCE $\mu\text{F}/\text{km}$	CORE TO CORE CAPACITANCE $\mu\text{F}/\text{km}$	TRANSFORMER RATED KVA	FERRORESONANT CRITICAL LENGTH meters
Aluminium 1 Core XLPE 35 sqmm	Termitex: 407180	0.165	0	300	18
				500	30
				750	45
				1000	60
Aluminium 1 Core XLPE 95 sqmm	Termitex: 407181	0.223	0	300	13
				500	22
				750	33
				1000	44
Aluminium 1 Core XLPE 240 sqmm	411618	0.29	0	300	9
				500	10
				750	25
				1000	34
Aluminium 1 Core XLPE 400 sqmm	Termitex: 407179	0.385	0	300	7
				500	12
				750	19
				1000	25
Aluminium 1 Core XLPE 500 sqmm	Termitex: 407177	0.425	0	300	7
				500	11
				750	17
				1000	23
Copper 1 Core XLPE 35 sqmm	232074	0.157	0	300	19
				500	31
				750	47
				1000	63

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Copper 1 Core XLPE 120 sqmm	232082	0.236	0	300	12
				500	21
				750	31
				1000	42
Copper 1 Core XLPE 240 sqmm	232090	0.308	0	300	9
				500	16
				750	24
				1000	32
Copper 3 Core screened PAPER 25 sqmm	9076	0.243	0	300	12
				500	20
				750	30
				1000	41
Copper 3 Core screened PAPER 120 sqmm	9084	0.455	0	300	6
				500	10
				750	16
				1000	21
Cooper 3 Core screened PAPER 240 sqmm		0.602	0	300	4
				500	8
				750	12
				1000	16
Aluminium 3 Core screened XLPE 400 sqmm	Termitex: 407178	0.385	0	300	7
				500	12
				750	19
				1000	25

**NOTES:**

- 1: DATA DERIVED ASSUMING MAGNETIZING CURRENT OF 0.8% OF RATED FULL LOAD CURRENT.
- 2: CRITICAL CABLE LENGTHS ROUNDED DOWN TO THE NEAREST METER.
- 3: INSTALLATIONS WITH CABLE LENGTHS GREATER THAN THE ABOVE CRITICAL LENGTH ARE LIKELY TO BE PRONE TO FERRORESONANCE DURING SINGLE PHASE SWITCHING OF TRANSFORMER.
- 4: WHERE CABLE LENGTHS CAN NOT BE LIMITED TO BELOW THE ABOVE CRITICAL LENGTH THEN A 3 PHASE SWITCH MUST BE INSTALLED.

2	240SQMM ALUMINIUM CABLE DATA UPDATED	A.T.	SEP'11	B.C.	S.C.
1	NEW CHART	J.C.	AUG'08	A.T.	S.C.
NO	DESCRIPTION	DRN	DATE	CKD	APPD
AMENDMENTS					



DES	POWER STANDARD DRAWING				
DRN	T. TANG	<b>DESIGN DATA</b> <b>UNDERGROUND CABLES</b> <b>FERRORESONANT CRITICAL LENGTH</b> <b>22000 VOLTS</b>			
CKD	PMC				
APPD	A. GREENWOOD				
SCALE	N.T.S.				
ISSUED	OCT'94	A3	DRAWING NUMBER	S02-4-2-10	
ALL DIM.	IN mm				
DRAFTING STANDARD TO A.S.1100			CAD PRODUCT - DO NOT AMEND MANUALLY		 AMDT