

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	DESIGN DATA UNDERGROUND CABLES FERRORESONANT CRITICAL LENGTH 22000 VOLTS			
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