

SYSTEM VOLTAGE: 11KV

CABLE	ITEM NUMBER	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	Nylon: 9381 Termitex: 407183	0.232	0	300	51
				500	86
				750	129
				1000	172

CABLE	ITEM NUMBER	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 3 Core Screened PAPER 300 sqmm	9480	1.05	0	300	11
				500	19
				750	28
				1000	38

CABLE	ITEM NUMBER	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 95 sqmm	Nylon: 9407 Termitex: 407184	0.324	0	300	37
				500	61
				750	92
				1000	123

CABLE	ITEM NUMBER	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 3 Core Screened PAPER 400 sqmm	9506	1.17	0	300	10
				500	17
				750	25
				1000	34

CABLE	ITEM NUMBER	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 240 sqmm	Nylon: 9423 Termitex: 401315	0.463	0	300	25
				500	43
				750	64
				1000	86

CABLE	ITEM NUMBER	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 3 Core Screened XLPE 400 sqmm	Termitex: 407186	0.584	0	300	20
				500	34
				750	51
				1000	68

CABLE	ITEM NUMBER	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 400 sqmm	Nylon: 9431 Termitex: 407185	0.584	0	300	20
				500	34
				750	51
				1000	68

CABLE	ITEM NUMBER	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 3 Core Screened XLPE 500 sqmm	Termitex: 407188	0.648	0	300	18
				500	30
				750	46
				1000	61

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Aluminium 1 Core XLPE 500 sqmm	Termitex: 407187	0.648	0	300	18
				500	30
				750	46
				1000	61


CABLE	ITEM NUMBER	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
Copper 3 Core Belted PAPER 50 sqmm	9282	0.185	0.062	300	53
				500	89
				750	133
				1000	178

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Copper 1 Core XLPE 300 sqmm	414409	0.545	0	300	22
				500	36
				750	55
				1000	73

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Copper 3 Core Belted PAPER 185 sqmm	9286	0.31	0.103	300	31
				500	53
				750	79
				1000	106

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 OR IF SINGLE PHASE CABLE PROTECTION DEVICE OPERATES.
4. WHERE CABLE LENGTHS CAN NOT BE LIMITED TO BELOW THE ABOVE CRITICAL LENGTH THEN A 3 PHASE SWITCH MUST BE INSTALLED.
5. WHERE CABLE PROTECTION SCHEMES ARE INSTALLED, IF CABLE CRITICAL LENGTHS ARE EXCEEDED THE PROTECTION DEVICE SHALL DE-ENERGISE ALL THREE PHASES UNDER ANY FAULT CONDITION

4 UPDATE NOTES INCLUDING PROTECTION REQUIREMENTS 3 TITLEBLOCK & DRAWING NUMBER FORMATTED 2 300sqmm COPPER XLPE CABLE ADDED 1 NEW CHART	C.W.M. K.T. A.T. J.C.	FEB'20 APR'19 SEP'11 AUG'08	B.C. C.C. B.C. A.T.	B.V. C.C. S.C. S.C.	DES	T. TANG	POWER STANDARD DRAWING		
					DRN	PMC	DESIGN DATA		
					CKD	A. GREENWOOD	UNDERGROUND CABLES		
					APPD	J. KING	FERRORESONANT CRITICAL LENGTH		
SCALE	N.T.S.	11000 VOLTS							
ISSUED	OCT'94	A3	DRAWING NUMBER	S02-04-02-09					
ALL DIM. IN mm	DRAFTING STANDARD TO A.S.1100					CAD PRODUCT - DO NOT AMEND MANUALLY			
NO	DESCRIPTION	DRN	DATE	CKD	APPD				
AMENDMENTS									

