

CABLE	STOCK CODE	Rac Ω/km	X50 Ω/km	Power Factor	MVA.km
Copper 1 core XLPE 35 sqmm. Trefoil configuration	232074	0.668	0.149	0.75	43.8
				0.8	42.15
				0.85	40.72
				0.9	39.53
				0.95	38.68
				1	39.42
Copper 1 core XLPE 35 sqmm. Flat touching configuration	232074	0.668	0.17	0.75	42.84
				0.8	41.33
				0.85	40.04
				0.9	39
				0.95	38.31
				1	39.42
Copper 1 core XLPE 120 sqmm. Trefoil configuration	232082	0.196	0.121	0.75	116.03
				0.8	114.86
				0.85	114.4
				0.9	114.99
				0.95	117.58
				1	133.94
Copper 1 core XLPE 120 sqmm. Flat touching configuration	232082	0.196	0.147	0.75	107.89
				0.8	107.55
				0.85	107.97
				0.9	109.54
				0.95	113.4
				1	133.7
Copper 1 core XLPE 240 sqmm. Trefoil configuration	232090	0.097	0.109	0.75	181.9
				0.8	184.2
				0.85	188.23
				0.9	195.13
				0.95	208.13
				1	268.32
Copper 1 core XLPE 240 sqmm. Flat touching configuration	232090	0.097	0.133	0.75	163.88
				0.8	167.26
				0.85	172.5
				0.9	180.88
				0.95	196.12
				1	266.75
Aluminium 1 core XLPE 35 sqmm. Trefoil configuration	407180	1.11	0.158	0.75	28
				0.8	26.73
				0.85	25.61
				0.9	24.65
				0.95	23.86
				1	23.73
Aluminium 1 core XLPE 35 sqmm. Flat touching configuration	407180	1.11	0.171	0.75	27.75
				0.8	26.52
				0.85	25.45
				0.9	24.52
				0.95	23.77
				1	23.73

CABLE	STOCK CODE	Rac Ω/km	X50 Ω/km	Power Factor	MVA.km
Aluminium 1 core XLPE 95 sqmm. Trefoil configuration	407181	0.411	0.136	0.75	66.05
				0.8	64.13
				0.85	62.55
				0.9	61.39
				0.95	60.87
				1	64.04
Aluminium 1 core XLPE 95 sqmm. Flat touching configuration	407181	0.411	0.148	0.75	64.78
				0.8	63.04
				0.85	61.64
				0.9	60.65
				0.95	60.34
				1	64.03
Aluminium 1 core XLPE 240 sqmm. Trefoil configuration	411618	0.161	0.121	0.75	131.32
				0.8	130.91
				0.85	131.41
				0.9	133.31
				0.95	138.01
				1	162.67
Aluminium 1 core XLPE 240 sqmm. Flat touching configuration	411618	0.161	0.142	0.75	122.71
				0.8	123.09
				0.85	124.42
				0.9	127.28
				0.95	133.26
				1	162.33
Aluminium 1 core XLPE 400 sqmm. Trefoil configuration	407179	0.101	0.111	0.75	176.63
				0.8	178.71
				0.85	182.44
				0.9	188.89
				0.95	201.12
				1	257.83
Aluminium 1 core XLPE 400 sqmm. Flat touching configuration	407179	0.101	0.123	0.75	167.69
				0.8	170.35
				0.85	174.72
				0.9	181.96
				0.95	195.35
				1	257.15
Aluminium 1 core XLPE 500 sqmm. Trefoil configuration	407177	0.0798	0.107	0.75	201.65
				0.8	205.63
				0.85	211.85
				0.9	221.85
				0.95	240.09
				1	324.49
Aluminium 1 core XLPE 500 sqmm. Flat touching configuration	407177	0.0798	0.119	0.75	190.05
				0.8	194.61
				0.85	201.49
				0.9	212.32
				0.95	231.86
				1	323.19

CABLE	STOCK CODE	Rac Ω/km	X50 Ω/km	Power Factor	MVA.km
Copper 3 core PAPER 25 sqmm.	9076	0.856	0.124	0.75	36.24
				0.8	34.6
				0.85	33.17
				0.9	31.93
				0.95	30.92
				1	30.77
Copper 3 core PAPER 120 sqmm.	9084	0.181	0.089	0.75	135.3
				0.8	132.91
				0.85	131.26
				0.9	130.65
				0.95	131.9
				1	145.24
Copper 3 core PAPER 240 sqmm.		0.09	0.081	0.75	217.64
				0.8	218.49
				0.85	221.06
				0.9	226.38
				0.95	237.39
				1	290.46
Aluminium 3 core XLPE 400 sqmm.	407178	0.102	0.098	0.75	186.37
				0.8	187.58
				0.85	190.34
				0.9	195.63
				0.95	206.15
				1	256

NOTES:
1. DATA DERIVED FROM ASSUMING 40°C AMBIENT TEMPERATURE AND 25°C SOIL TEMPERATURE.
2. DIRECT BURIAL DEPTH OF 1M.
3. ONE CIRCUIT ARRANGEMENT.
4. SOIL THERMAL RESISTIVITY OF 1.2°C/M/W.
5. VOLTAGE DROP OF 6%
6. DEFINITIONS:
Rac = RESISTANCE AT 50Hz AND CONDUCTOR TEMPERATURE OF 90°C
X50 = EQUIVALENT STAR REACTANCE AT 50Hz

3	240SQMM AL SINGLE CORE DATA UPDATED	A.T.	SEP'11	B.C.	S.C.
2	NEW CHART	J.C.	AUG'08	A.T.	S.C.
NO	DESCRIPTION	DRN	DATE	CKD	APPD
AMENDMENTS					



DES	T. TANG	POWER STANDARD DRAWING		
DRN	PMC	DESIGN DATA UNDERGROUND CABLES POWER TRANSFER CAPACITY - 22000 VOLTS		
CKD	A. GREENWOOD			
APPD	C. H. YAU			
SCALE	N. T. S.			
ISSUED	MAR'94	A3	DRAWING NUMBER	S02-4-2-08
ALL DIM.	IN mm			
DRAFTING STANDARD TO A.S.1100		CAD PRODUCT - DO NOT AMEND MANUALLY		