

CABLE	Stock Code	Rac Ohm/km	X50 Ohm/km	Power Factor	kVA.kM
Aluminium 1 core XLPE 185 sq.mm Trefoil Configuration	9316	0.207	0.085	0.75 0.80 0.85 0.90 0.95 1.00	34.50 33.70 33.08 32.69 32.72 35.24
Aluminium 1 core XLPE 185 sq.mm Flat Touching Configuration	9316	0.207	0.099	0.75 0.80 0.85 0.90 0.95 1.00	33.06 32.45 32.01 31.82 32.09 35.22
Copper 1 core PVC 120 sq.mm Trefoil Configuration	9472	0.183	0.089	0.75 0.80 0.85 0.90 0.95 1.00	37.22 36.54 36.07 35.88 36.21 39.84
Copper 1 core PVC 120 sq.mm Flat Touching Configuration	9472	0.183	0.103	0.75 0.80 0.85 0.90 0.95 1.00	35.54 35.07 34.80 34.84 35.44 39.82
ALUMINIUM 1 core XLPE 240 sq.mm Trefoil Configuration	401015	0.156	0.081	0.75 0.80 0.85 0.90 0.95 1.00	39.31 38.68 38.27 38.18 38.66 42.92
ALUMINIUM 1 core XLPE 240 sq.mm Flat Touching Configuration	401015	0.156	0.096	0.75 0.80 0.85 0.90 0.95 1.00	37.15 36.77 36.62 36.80 37.63 42.89

CABLE	Stock Code	Rac Ohm/km	X50 Ohm/km	Power Factor	kVA.kM
Copper 1 core PVC 300 sq.mm Trefoil Configuration	9498	0.075	0.086	0.75 0.80 0.85 0.90 0.95 1.00	64.54 65.41 66.92 69.47 74.27 95.56
Copper 1 core PVC 300 sq.mm Flat Touching Configuration	9498	0.075	0.0993	0.75 0.80 0.85 0.90 0.95 1.00	59.87 61.03 62.86 65.80 71.19 96.29
Copper 1 core PVC 500 sq.mm Trefoil Configuration	9464	0.050	0.084	0.75 0.80 0.85 0.90 0.95 1.00	78.41 80.69 84.03 89.22 98.56 143.49
Copper 1 core PVC 500 sq.mm Flat Touching Configuration	9464	0.050	0.0971	0.75 0.80 0.85 0.90 0.95 1.00	71.71 74.20 77.79 83.32 93.26 142.67

CABLE	Stock Code	Rac Ohm/km	X50 Ohm/km	Power Factor	kVA.kM
Copper 3.5 core PAPER 95 sq.mm	9175	0.247	0.063	0.75 0.80 0.85 0.90 0.95 1.00	32.13 30.99 30.01 29.23 28.71 29.55
Copper 3.5 core PAPER 120 sq.mm	11106	0.191	0.062	0.75 0.80 0.85 0.90 0.95 1.00	39.58 38.40 37.43 36.70 36.36 38.21
Copper 3.5 core PAPER 240 sq.mm	9225	0.095	0.062	0.75 0.80 0.85 0.90 0.95 1.00	65.04 64.51 64.39 64.89 66.59 76.66

NOTES :

1. DATA DERIVED ASSUMING 40°C AMBIENT TEMPERATURE, AND 25°C SOIL TEMPERATURE.
2. DIRECT BURIAL DEPTH OF 1 m.
3. ONE CIRCUIT ARRANGEMENT,
4. SOIL THERMAL RESISTIVITY OF 1.2° C.m/W,
5. VOLT DROP OF 4 % .
6. DEFINITIONS :
Rac = AC RESISTANCE AT 50 Hz AND CONDUCTOR TEMPERATURE OF 65°C.
X50 = EQUIVALENT STAR REACTANCE AT 50 Hz.



DES	F. TANG	N.T. STANDARD DRAWING		
DRN	pmc	DESIGN DATA UNDERGROUND CABLES POWER TRANSFER CAPACITY - 433 VOLTS		
CKD	A.GREENWOOD			
APPD	C.H.YAU			
SCALE	N.T.S.			
ISSUED	MAR'94	A3	DRAWING NUMBER	S2-4-2-6
ALL DIM. IN	mm			
DRAFTING STANDARD TO AS 1100		CAD PRODUCT — DO NOT AMEND MANUALLY		

2	ADDED TWO ALUMINIUM 1-CORE 240sq.mm CABLES	R.S.C.	T.T.T.	T.T.T.	NOV'03
1	AMENDMENTS MADE TO TABLE HEADINGS & NOTES. NOTES 1 & 4 ALTERED, NOTE 6 ADDED	J.A.L.	S.C.M.	P.J.D.	MAY'95
No.	AMENDMENT	DRN	CKD	APPD	DATE