


CABLE	ITEM NUMBER	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	ITEM NUMBER	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	ITEM NUMBER	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.

3 TITLEBLOCK & DRAWING NUMBER FORMATTED 2 ADDED TWO ALUMINIUM 1-CORE 240sq.mm CABLES 1 AMENDMENTS MADE TO TABLE HEADINGS & NOTES. NOTES 1 & 4 ALTERED. NOTE 6 ADDED	K.T. R.S.C. J.A.L.	APR'19 NOV'03 MAY'95	C.C. T.T.T. S.C.M.	C.C. T.T.T. P.J.D.	DES	T.TANG	POWER STANDARD DRAWING		
					DRN	PMC	DESIGN DATA UNDERGROUND CABLES POWER TRANSFER CAPACITY - 433 VOLTS		
					CKD	A.GREENWOOD			
APPD	C.H.YAU	A3 DRAWING NUMBER S02-04-02-06			DRAFTING STANDARD TO A.S.1100		CAD PRODUCT - DO NOT AMEND MANUALLY		
SCALE	N.T.S.								
ISSUED	MAR'94	AMENDMENTS							
ALL DIM.	IN mm								



NORTHERN TERRITORY