



LT XLPE CABLE

TDS Doc.No:PIL/TE/250425/001583

DESIGN CODE : LVIS09AXSFY23.5C500SA001S

Particulars		3.5 Core X 500 Sq.mm	
Name of Manufacturer		Polycab India Ltd	
Type of cable		A2XFY	
Voltage Grade V		1100	
No of cores X size in sqmm		3.5 Core X 500 Sq.mm	
Conductor			
a)	Material	H2/H4 Grade Aluminium as per Class 2 of IS: 8130/2013, latest	
b)	Max. d.c. resistance of conductor at 20° C (ohm/km)	Main	0.0605
		Neutral	0.125
c)	Shape of the conductor	Stranded Compacted Sector	
Insulation			
a)	Material	XLPE as per IS 7098(Pt-1)/88, Latest	
b)	Nominal thickness (mm)	Main	2.2
		Neutral	1.7
c)	Core identification	Red, Yellow, Blue, Black	
Inner Sheath			
a)	Material	Wrapping of Tapes	
b)	Minimum thickness (mm)	0.7	
Armouring			
a)	Material	Galvanised Steel	
b)	Type of armouring	Flat Strip	
c)	Nominal size of armour (mm)	4.0 x 0.8	
d)	Tolerance on armour dimensions	± 10%	
Outer Sheath			
a)	Material	Extruded PVC Type 'ST2' as per IS:5831	
b)	Thickness (mm)	2.68 (Min.)	
c)	Colour of outer sheath.	Black	
Electrical Parameters			
a)	Max. a.c. resistance of conductor at 90° C (ohm/km)	0.0809	

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b) Calculated Cable reactance (ohm/km)	0.0700
c) Impedance of cable (ohm/km)	0.107
d) Approx. Cable Capacitance (mfd/km)	0.74
Maximum conductor temperature under normal operating conditions	90°C
Maximum conductor temperature at the termination of short circuit	250°C
Short Circuit rating of conductor for the duration of 1 sec (kA)	47.24

Continuous Current carrying capacities :-

(a) In Ground at 30°C (A)	478
(b) In Air at 40°C (A)	612
Applicable Standard	IS 7098 Part I/88, IS 8130/2013, IS 5831/84, IS 3975/1999 etc. with latest up to date amendments
Approx. overall diameter of the cable in mm	73.0 ± 3.0
Minimum bending radius	12 times Overall diameter
Max. Tensile strength	
(i) for Cables pulled with stocking (Newtons)	9 x D ² , D is the cable OD in mm
(ii) for Cables pulled with pulling eyes (N)	52,200
Embossing	POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE
Printing	YEAR POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE CABLE SIZE, CABLE TYPE WITH SEQUENTIAL MARKING at every one meter interval.
Standard Drum Length (Mtr.)	500 ± 5%
Non-Standard Drum Length (Mtr.)	Maximum 5% of order quantity