



**HT XLPE CABLE**

**TDS Doc.No:PIL/TE/250425/001815**

**DESIGN CODE : MVIS10AXSFY2003C050SA**

Particulars	3 Core X 50 Sq.mm
Name of Manufacturer	Polycab India Ltd
Type of cable	A2XFY
Voltage Grade kV	1.9/3.3 (E)
No of cores X size in sq.mm	3 Core X 50 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)	0.641
c) Shape of the conductor	Stranded Compacted Sector
Insulation	
a) Material	XLPE as per IS 7098(Pt-2)/2011
b) Nominal thickness (mm)	2.2
c) Core identification	Red Yellow & Blue
Inner Sheath	
a) Material	Extruded PVC Type ST2 as per IS:5831/84
b) Minimum thickness (mm)	0.4
c) Inner Sheath Colour	Black
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:5831/84
b) Thickness (mm)	1.56 (Min.)
c) Colour of outer sheath	Black
Electrical Parameters	
a) Max. a.c. resistance of conductor at 90° C (ohm/km)	0.822
b) Calculated Cable reactance (ohm/km)	0.0931
c) Impedance of cable (ohm/km)	0.827

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d) Approx. Cable Capacitance (mfd/km)	0.27
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)	4.72
<b>Continuous Current carrying capacities</b>	
a) In Ground at 30°C (A)	131
b) In Air at 40°C (A)	146
Applicable Standard	IS 7098 Part 2/2011, IS 8130/2013, IS 5831/84 etc. with latest up to date amendments
Approx. overall diameter of the cable in mm	31.0 ± 3.0
Minimum bending radius	15 times Overall diameter
Max. Tensile strength	
a) for Cables pulled with stocking (Newtons)	9 x D <sup>2</sup> , D is the cable OD in mm
b) for Cables pulled with pulling eyes (N)	4,500
Embossing	POLYCAB ELECTRIC 1.9/3.3 KV (E) GRADE XLPE YEAR POLYCAB ELECTRIC 1.9/3.3 KV (E) GRADE XLPE CABLE SIZE CABLE TYPE WITH SEQUENTIAL MARKING at every one meter interval.
Printing	
Standard Drum Length (Mtr.)	1000 ± 5%
Non- Standard Drum Length (Mtr.)	5% of order quantity & Individual Non-standard drum length minimum 200 Mtrs