

 <b>POLYCAB</b> <i>Connection Zindagi Ka</i>	Document ID: TE/QMS/F/02 Rev. No. : 00 Issued Date : 02/04/2018
	<b>Cable Description:</b> 1100V, Stranded Class 2 Aluminium Conductor, XLPE insulated, Wrapping of Tape inner sheath, Galvanised Steel Flat strip armour, Extruded PVC Type ST2 Outer sheath, as per IS 7098 Part 1/1988

I	Technical Data of LT XLPE Cables	CABLE SIZE
II	CABLE CODE	LVIS09AXSFY23.5C185SA002S
<b>S.No</b>	<b>Particulars</b>	<b>3.5 Core X 185 Sq.mm</b>
1	Name of Manufacturer	Polycab India Ltd
2	Type of cable	A2XFY
3	Voltage Grade V	1100
4	No of cores X size in sqmm	3.5 Core X 185 Sq.mm
5	<b>Conductor</b>	
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)	0.164
	Neutral	0.320
c)	Shape of the conductor	Stranded Compacted Sector
6	<b>Insulation</b>	
a)	Material	XLPE as per IS 7098(Pt-1)/88, Latest
b)	Nominal thickness (mm) Main	1.6
	Neutral	1.1
c)	Core identification	Red, Yellow, Blue, Black
7	<b>Inner Sheath</b>	
a)	Material	Wrapping of Tapes
b)	Minimum thickness (mm)	0.5
8	<b>Armouring</b>	
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%
9	<b>Outer Sheath</b>	
a)	Material	Extruded PVC Type 'ST2' as per IS:5831
b)	Thickness (mm)	1.88 (Min.)
c)	Colour of outer sheath.	Black
10	<b>Electrical Parameters</b>	
a)	Max. a.c. resistance of conductor at 90° C (ohm/km)	0.212
b)	Calculated Cable reactance (ohm/km)	0.0720
c)	Impedance of cable (ohm/km)	0.224
d)	Approx. Cable Capacitance (mfd/km)	0.63
11	Maximum conductor temperature under normal operating conditions	90°C
12	Maximum conductor temperature at the termination of short circuit	250°C
13	Short Circuit rating of conductor for the duration of 1 sec (kA)	17.48
14	<b>Continuous Current carrying capacities :-</b>	
(a)	In Ground at 30°C (A)	282
(b)	In Air at 40°C (A)	329
15	Applicable Standard	IS 7098 Part I/88, IS 8130/2013, IS 5831/84, IS 3975/1999 etc. with latest up to date amendments
16	Approx. overall diameter of the cable in mm	45.5 +/- 2.0
17	Minimum bending radius	12 times Overall diameter
18	Max. Tensile strength	
(i)	for Cables pulled with stocking (Newtons)	9 x D <sup>2</sup> , D is the cable OD in mm
(ii)	for Cables pulled with pulling eyes (N)	19,500
19	Embossing	POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE
20	Printing	YEAR POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE CABLE SIZE, CABLE TYPE WITH SEQUENTIAL MARKING at every one meter interval.
21	Standard Drum Length (Mtr.)	500 ± 5%
22	Non-Standard Drum Length (Mtr.)	Maximum 5% of order quantity

Note:-The values given above are subject to tolerances as per the relevant standards.