CABLES

POLYCAB



LT XLPE CABLE

TDS Doc.No:PIL/TE/250425/000512

DESIGN CODE : LVIS09AXSFYF3.5C050SA002S

Particulars			3.5 Core X 50 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 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)	Main	0.641
		Neutral	1.2
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	1
		Neutral	0.9
c)	Core identification		Red,Yellow,Blue,Black
Inner Sheath			
a)	Material		Extruded PVC Type ST2 as per IS:5831/84
b)	Minimum thickness (mm)		0.3
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 FR PVC Type 'ST2' as per IS:5831
b)	Thickness (mm)		1.40 (Min.)
c)	Colour of outer sheath.		Black
Electrical Parameters			
a)	Max. a.c. resistance of conductor at 90° C (ohm/km)		0.822

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b)	Calculated Cable reactance (ohm/km)	0.0780
c)	Impedance of cable (ohm/km)	0.826
d	Approx. Cable Capacitance (mfd/km)	0.53
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
Continuous Current carrying capacities :-		
(a)	In Ground at 30°C (A)	134
(b)	In Air at 40°C (A)	138
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		27.5 +/- 2.0
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)	5250
Embossing		POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE FR
Printing		YEAR POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE FR CABLE SIZE CABLE TYPE WITH SEQUENTIAL MARKING at every one meter interval.
Standard Drum Length (Mtr.)		1000 ± 5%
Non-Standard Drum Length (Mtr.)		Maximum 5% of order quantity and Min Individual Non-Standard Drum 200 meters
FR PROPERTIES		
a)	Oxygen Index	Min. 29% as per ASTM D- 2863
b)	Temperature Index	Min. 250 Deg.C as per ASTM D- 2863
c)	Flammability Test	As per IEC:332-I

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