



HT XLPE CABLE

TDS Doc.No:PIL/TE/250425/002389

DESIGN CODE : MVIS13AXAFY2001C400SA001S

Particulars	1 Core X 400 Sqmm
Name of Manufacturer	Polycab India Ltd
Type of Cable	A2XFaY
Voltage Grade kV	19/33
No of cores X size in sqmm	1 X 400
a) Maximum conductor temperature under normal operating conditions	90°C
b) Maximum conductor temperature at the termination of short circuit	250°C
a) Permissible Voltage Variation	± 10%
b) Permissible Frequency Variation	± 5%
c) Combined Voltage & Frequency variation	± 10%
Conductor	
a) Material	H4 Grade Aluminium as per Class 2 of IS: 8130/2013, latest
b) Maximum d.c. resistance of conductor at 20° C (ohm/km)	0.0778
c) Shape	Stranded Compacted Circular
Conductor Screening	
a) Material	Extruded Semi-conducting Compound
b) Nominal thickness (mm)	0.3
Insulation	
a) Material	XLPE as per IS 7098(Pt-2)/2011
b) Nominal thickness (mm)	8.8
c) Core identification	Natural
Insulation Screening	
(i) Non - Metallic	
a) Material	Extruded Semi-conducting Compound
b) Nominal thickness (mm)	0.3
(ii) Metallic	
a) Material	Single Layer of Copper Tape
b) Approximate thickness (mm)	0.03

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c)	Earth fault Current withstand capacity of Cu Tape kA for 1 sec	0.15 kA for 1 Sec
Inner Sheath		
a)	Material	Extruded PVC Type ST2 to IS:5831, latest
b)	Minimum thickness (mm)	0.5
Armouring		
a)	Material	Aluminium
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		
(i)	Material	Extruded PVC Type 'ST2' as per IS:5831, latest
(ii)	Thickness (mm)	2.04 (Min.)
(iii)	Colour of sheath	Black
Electrical Parameters		
a)	Max. a.c. resistance of conductor at 90° C (ohm/km)	0.101
b)	Approx. Cable Capacitance (mfd/km)	0.23
c)	Approx. Cable reactance (ohm/km)	0.109
d)	Impedance of cable (ohm/km)	0.149
Continuous Current carrying capacities :-		
(a)	In Ground at 30°C (A)	400
(b)	In Air at 40°C (A)	594
	Short Circuit rating of conductor for the duration of 1 sec (kA)	37.7900
	Standard to which the cables confirm	IS 7098 Part 2/2011, IS 8130, IS 5831, IS 3975 etc. with latest up to date amendments
	Approx. Overall diameter (mm)	49.0 ± 3.0
	Embossing	YEAR POLYCAB ELECTRIC 19/33 KV (E) GRADE XLPE
	Printing	YEAR POLYCAB ELECTRIC 19 /33 KV (E) GRADE XLPE CABLE SIZE CABLE TYPE WITH SEQUENTIAL MARKING at every one meter interval.