



HT XLPE CABLE

Document ID: TE/QMS/F/02

DESIGN CODE : MVIS13AXSFY2003C400SA001S

Particulars		3 Core X 400 Sq.mm
Name of Manufacturer		POLYCAB INDIA LTD
Type of Cable		A2XFY
Voltage Grade kV		19/33 (E)
No of cores X size in sqmm		3 Core X 400 Sq.mm
Maximum conductor temperature under normal operating conditions		90°C
Maximum conductor temperature at the termination of short circuit		250°C
Permissible Voltage Variation		± 10%
Permissible Frequency Variation		± 5%
Combined Voltage & Frequency variation		± 10%
Conductor		
a) Material		H4 Grade Aluminium as per Class 2 of IS: 8130, 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		By Coloured strips(Red,Yellow,Blue)
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
c) Earth fault Current withstand capacity of Cu Tape for 1 sec (KA)		0.46 kA for 1 Sec, All 3 Cores Combined
Inner Sheath		
a) Material		Extruded PVC Type ST2 to IS:5831, latest

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		
(i)	Material	Extruded PVC Type 'ST2' as per IS:5831, latest
(ii)	Thickness (mm)	3.00 (Min.)
(iii)	Colour of sheath	Black
Electrical Parameters		
a)	Max. a.c. resistance of conductor at 90° C (ohm/km)	0.102
b)	Approx. Cable Capacitance (mfd/km)	0.24
c)	Approx. Cable reactance (ohm/km)	0.101
d)	Impedance of cable (ohm/km)	0.144
Continuous Current carrying capacities :-		
(a)	In Ground at 30°C (A)	400
(b)	In Air at 40°C (A)	519
Short Circuit rating of conductor for the duration of 1 sec (kA)		37.79
Standard to which the cables confirm		IS 7098 Part 2/2011, IS 8130/2013, IS 5831/1984, IS 3975/1999 etc. with latest up to date amendments
Approx. Overall diameter (mm)		100.0 ± 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.
Minimum Bending radius(mm)		15 times Overall diameter
Standard Drum Length (mtr)		500 +/- 5%
Non-Standard Drum Length (Mtr.)		Maximum 5% of order quantity