



HT XLPE CABLE

TDS Doc.No:PIL/TE/250425/002530

DESIGN CODE : MVIS11AXAFYL001C630SA001S

Particulars		1 Core X 630 Sqmm
Name of Manufacturer		Polycab India Ltd
Type of Cable		A2XFaY
Voltage Grade kV		11/11
No of cores X size in sqmm		1 Core X 630 Sq.mm
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)		0.0469
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)		5.5
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

c)	Earth fault Current withstand capacity of Cu Tape kA for 1 sec	0.15 kA for 1 Sec
<b>Inner Sheath</b>		
a)	Material	Extruded PVC Type ST2 to IS:5831, latest
b)	Minimum thickness (mm)	0.5
<b>Armouring</b>		
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%
<b>Outer Sheath</b>		
(i)	Material	Extruded FR-LSH PVC Type 'ST2' as per IS:5831, latest
(ii)	Thickness (mm)	1.88 (Min.)
(iii)	Colour of sheath	Black
<b>Electrical Parameters</b>		
a)	Max. a.c. resistance of conductor at 90° C (ohm/km)	0.063
b)	Approx. Cable Capacitance (mfd/km)	0.42
c)	Approx. Cable reactance (ohm/km)	0.0933
d)	Impedance of cable (ohm/km)	0.11
<b>Continuous Current carrying capacities :-</b>		
(a)	In Ground at 30°C (A)	514
(b)	In Air at 40°C (A)	778
	Short Circuit rating of conductor for the duration of 1 sec (kA)	59.52
	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)	49.5 ± 3.0
	Embossing	YEAR POLYCAB ELECTRIC 11/11 KV (UE) GRADE XLPE FR-LSH
	Printing	YEAR POLYCAB ELECTRIC 11/11 KV (UE) GRADE XLPE FR-LSH CABLE SIZE CABLE TYPE WITH SEQUENTIAL MARKING at every one meter interval.
<b>FR-LSH PROPERTIES</b>		
a)	Oxygen Index	Min. 29% as per ASTM D- 2863
b)	Temperature Index	Min. 250 Deg.C as per ASTM D- 2863
c)	Smoke Density Rating	Max. 60% as per ASTM D- 2843
d)	Acid Gas Generation	Max. 20% as per IEC- 754- 1
e)	Flammability Test	As per IEC:332-I