



LT XLPE CABLE

TDS Doc.No:PIL/TE/250425/001710

DESIGN CODE : LVIS09AXAWYF001C800SA001S

Particulars	1 Core X 800 Sq.mm
Name of Manufacturer	Polycab India Ltd
Type of cable	A2XWaY
Voltage Grade V	1100
No of cores X size in sqmm	1 Core X 800 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)	0.0367
c) Shape of the conductor	Stranded Compacted Circular
Insulation	
a) Material	XLPE as per IS 7098(Pt-1)/88, Latest
b) Nominal thickness (mm)	3.1
c) Core identification	Natural
Armouring	
a) Material	Aluminium
b) Type of armouring	Round Wire
c) Nominal size of armour (mm)	2
d) Tolerance on armour dimensions	± 0.050 mm
Outer Sheath	
a) Material	Extruded FR 'PVC Type 'ST2' as per IS:5831
b) Thickness (mm)	1.88 (Min.)
c) Colour of sheath	Black
Electrical Parameters	
a) Max. a.c. resistance of conductor at 90° C (ohm/km)	0.0521
b) Calculated Cable reactance (ohm/km)	0.0823
c) Impedance of cable (ohm/km)	0.0974
d) Approx. Cable Capacitance (mfd/km)	0.82

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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)	75.59
Continuous Current carrying capacities :-	
(a) In Ground at 30°C (A)	608
(b) In Air at 40°C (A)	907
Applicable Standard	IS 7098 Part I/88, IS 8130/2013, IS 5831/84 etc. with latest up to date amendments
Approx. overall diameter of the cable in mm	48.5 ± 3.0
Minimum bending radius	15 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)	24,000
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.)	500 ± 5%
Non- Standard Drum Length (Mtr.)	Maximum 5% of order quantity
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