



LT XLPE CABLE

Document ID: TE/QMS/F/02

DESIGN CODE : LVIS09AXSFY2003C016SA002S

| Particulars | | 3 Core X 16 Sq.mm |
|----------------------------|---|---|
| Name of Manufacturer | | Polycab India Ltd |
| Type of cable | | A2XFY |
| Voltage Grade V | | 1100 |
| No of cores X size in sqmm | | 3 Core X 16 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) | 1.91 |
| c) | Shape of the conductor | Stranded Compacted Sector |
| Insulation | | |
| a) | Material | XLPE as per IS 7098(Pt-1)/88, Latest |
| b) | Nominal thickness (mm) | 0.7 |
| c) | Core identification | Red, Yellow, Blue |
| Inner Sheath | | |
| a) | Material | Wrapping of Tapes |
| 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 PVC Type 'ST2' as per IS:5831 /84 |
| b) | Thickness (mm) | 1.24 (Min.) |
| c) | Colour of sheath | Black |
| Electrical Parameters | | |
| a) | Max. a.c. resistance of conductor at 90° C (ohm/km) | 2.45 |
| b) | Calculated Cable reactance (ohm/km) | 0.0805 |

| | | |
|----|---|-------|
| c) | Impedance of cable (ohm/km) | 2.45 |
| d) | Approx. Cable Capacitance (mfd/km) | 0.43 |
| | 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) | 1.51 |

Continuous Current carrying capacities :-

| | | |
|------|---|--|
| (a) | In Ground at 30°C (A) | 74 |
| (b) | In Air at 40°C (A) | 69 |
| | 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 | 18.0 +/- 2.0 |
| | Minimum bending radius | 12 times Overall diameter |
| | Max. Tensile strength | |
| (i) | for Cables pulled with stocking (Newtons) | $9 \times D^2$, D is the cable OD in mm |
| (ii) | for Cables pulled with pulling eyes (N) | 1,440 |
| | Embossing | POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE |
| | Printing | YEAR POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE 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 |