# CABLES

POLYCAB







## HT XLPE CABLE

**TDS Doc.No:PIL/TE/250425/002333**

**DESIGN CODE : MVIS18AXSFYL003C300SA001S**

| Particulars | 3C X 300 Sqmm |
|---|---|
| Name of Manufacturer | Polycab India Ltd |
| Type of Cable | A2XFY |
| Voltage Grade kV | 6.6/6.6 |
| No of cores X size in sqmm | 3 X 300 |
| Maximum conductor temperature under normal operating conditions | 90°C |
| 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) | 0.1 |
| 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) | 3.6 |
| c) Core identification | By Coloured strips(Red,Yellow,Blue) |
| **Insulation Screening** | |
| Non - Metallic | |
| a) Material | Extruded Semi-conducting Compound |
| b) Nominal thickness (mm) | 0.3 |
| 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 | 0.46 kA for 1 Sec, 3 Core Combined |

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|---|---|
| **Inner Sheath** | |
| a) Material | Extruded PVC Type 'ST2' as per IS:5831, latest |
| b) Minimum thickness (mm) | 0.7 |
| **Armouring** | |
| a) Material | Gal.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 FR-LSH PVC Type 'ST2' as per IS:5831, latest |
| b) Thickness (mm) | 2.68 (Min.) |
| c) Colour of sheath | Black |
| **Electrical Parameters** | |
| a) Max. a.c. resistance of conductor at 90° C (ohm/km) | 0.13 |
| b) Approx. Cable Capacitance (mfd/km) | 0.45 |
| c) Approx. Cable reactance (ohm/km) | 0.0851 |
| d) Impedance of cable (ohm/km) | 0.155 |
| **Continuous Current carrying capacities :-** | |
| a) In Ground at 30°C (A) | 354 |
| b) In Air at 40°C (A) | 441 |
| Short Circuit rating of conductor for the duration of 1 sec (kA) | 28.35 |
| 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) | 74.0 ± 3.0 |
| Embossing | YEAR POLYCAB ELECTRIC 6.6/6.6 KV (UE) GRADE XLPE FR-LSH |
| Printing | YEAR POLYCAB ELECTRIC 6.6/6.6 KV (UE) GRADE XLPE FR-LSH CABLE SIZE CABLE TYPE WITH SEQUENTIAL MARKING at every one meter interval. |
| **FR-LSH PROPERTIES** | |
| 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 |



Note:-The values given above are subject to tolerances as per the relevant standards