



## HT XLPE CABLE

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DESIGN CODE : MVIS12AXSFY2003C240SA001S

| Particulars   | 3 Core X 240 Sq.mm                                    |
|---|---|
| Name of Manufacturer  | POLYCAB INDIA LTD                                     |
| Type of Cable   | A2XFY   |
| Voltage Grade kV  | 12.7/22 (E)   |
| No of cores X size in sqmm  | 3 Core X 240 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%   |
| <b>Conductor</b>  |   |
| 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)           | 0.125   |
| c) Shape  | Stranded Compacted Circular                           |
| <b>Conductor Screening</b>  |   |
| a) Material   | Extruded Semi-conducting Compound                     |
| b) Nominal thickness (mm)   | 0.3   |
| <b>Insulation</b>   |   |
| a) Material   | XLPE as per IS 7098(Pt-2)/2011                        |
| b) Nominal thickness (mm)   | 6   |
| c) Core identification  | By Coloured strips(Red, Yellow, Blue)                 |
| <b>Insulation Screening</b>   |   |
| (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               |
| <b>Inner Sheath</b>   |   |
| a) Material   | Extruded PVC Type ST2 to IS:5831, latest              |

|  |   |
|--|---|
| b) Minimum thickness (mm)  | 0.7   |
| <b>Armouring</b>   |   |
| 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%   |
| <b>Outer Sheath</b>  |   |
| (i) Material   | Extruded PVC Type 'ST2' as per IS:5831, latest  |
| (ii) Thickness (mm)  | 2.84 (Min.)   |
| (iii) Colour of sheath   | Black   |
| <b>Electrical Parameters</b>                                     |   |
| a) Max. a.c. resistance of conductor at 90° C (ohm/km)           | 0.161   |
| b) Approx. Cable Capacitance (mfd/km)                            | 0.27  |
| c) Approx. Cable reactance (ohm/km)                              | 0.0983  |
| d) Impedance of cable (ohm/km)                                   | 0.189   |
| <b>Continuous Current carrying capacities :-</b>                 |   |
| (a) In Ground at 30°C (A)  | 312   |
| (b) In Air at 40°C (A)   | 393   |
| Short Circuit rating of conductor for the duration of 1 sec (kA) | 22.68   |
| 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)                                    | 77.0 ± 3.0  |
| Embossing  | YEAR POLYCAB ELECTRIC 12.7/22 KV (E) GRADE XLPE   |
| Printing   | YEAR POLYCAB ELECTRIC 12.7/22 KV (E) GRADE XLPE<br>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  |