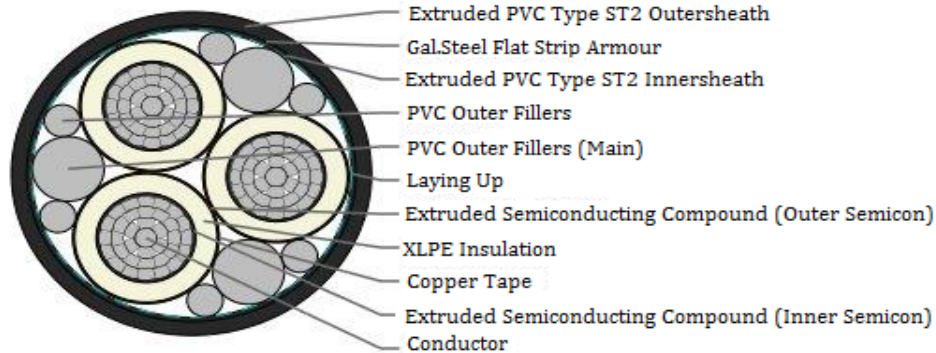


**Manufacturing Data Sheet:**
**High Voltage XLPE Cable**
**Design Code : MVIS15AXSFY2003C095SA001S**
**Date :**
**Rev No. :**


| S.No | Particulars   | 3 X 95 MM <sup>2</sup>                                   |
|------|---|--|
| 1    | Name of Manufacturer  | Polycab Wires Pvt. Ltd                                   |
| 2    | Type of Cable   | A2XFY  |
| 3    | Voltage Grade kV  | 3.8/6.6  |
| 4    | No of cores X size in sqmm  | 3 X 95   |
| 5 a) | Maximum conductor temperature under normal operating conditions   | 90°C   |
| b)   | Maximum conductor temperature at the termination of short circuit | 250°C  |
| 6 a) | Permissible Voltage Variation                                     | ± 10%  |
| b)   | Permissible Frequency Variation                                   | ± 5%   |
| c)   | Combined Voltage & Frequency variation                            | ± 10%  |
| 7    | <b>Conductor</b>  |  |
| a)   | Material  | H4 Grade Aluminium as per Class 2 of IS: 8130/84, latest |
| b)   | Maximum d.c. resistance of conductor at 20° C (ohm/km)            | 0.320  |
| c)   | Shape   | Stranded Compact Circular                                |
| 8    | <b>Conductor Screening</b>  |  |
| a)   | Material  | Extruded Semi-conducting Compound                        |
| b)   | Nominal thickness (mm)  | 0.3  |
| 9    | <b>Insulation</b>   |  |
| a)   | Material  | XLPE as per IS 7098(Pt-2)/2011, latest                   |
| b)   | Nominal thickness (mm)  | 2.8  |
| c)   | <b>Core Identification</b>  | By coloured strips (Red, Yellow & Blue)                  |
| 10   | <b>Insulation Screening</b>                                       |  |
| (i)  | <b>Non - Metallic</b>   |  |
| a)   | Material  | Extruded Semi-conducting Compound                        |
| b)   | Nominal thickness (mm)  | 0.3  |
| (ii) | <b>Metallic</b>   |  |
| a)   | Material  | Single layer of copper tape                              |
| 11   | <b>Inner Sheath</b>   |  |

| S.No | Particulars  | 3 X 95 MM <sup>2</sup>  |
|------|--|---|
| a)   | Material   | Extruded PVC Type ST2 to IS:5831/84   |
| b)   | Minimum thickness (mm)   | 0.5   |
| 12   | <b>Armouring</b>   |   |
| a)   | Material   | Gal.Steel   |
| b)   | Type of armouring  | Flat Strip  |
| c)   | Nominal size of armour (mm) $\pm$ 10%                            | 4.0 x 0.8   |
| 13   | <b>Outer Sheath</b>  |   |
| a)   | Material   | Extruded PVC Type ST2 to IS:5831/84   |
| b)   | Thickness (mm)   | 1.88 (Min.)   |
| c)   | Outer Sheath Colour  | Black   |
| 14   | <b>Electrical Parameters</b>                                     |   |
| a)   | Max. a.c. resistance of conductor at 90° C (ohm/km)              | 0.411   |
| b)   | Approx. Cable Capacitance (mfd/km)                               | 0.35  |
| c)   | Approx. Cable reactance (ohm/km)                                 | 0.0958  |
| d)   | Impedance of cable (ohm/km)                                      | 0.422   |
| 15   | <b>Continuous Current carrying capacities :-</b>                 |   |
| (a)  | In Ground at 30°C (A)  | 191   |
| (b)  | In Air at 40°C (A)   | 221   |
| 16   | Short Circuit rating of conductor for the duration of 1 sec (kA) | 8.98  |
| 17   | Standard to which the cables confirm                             | IS 8130/84, IS 7098 Part 2/2011, IS 5831/84, IS 3975/88 etc. with latest up to date amendments                                      |
| 18   | Nominal Overall diameter (mm)                                    | <b>47.0 <math>\pm</math> 2.0</b>  |
| 19   | Standard Drum Length with $\pm$ 5% tolerance (m)                 | 500 $\pm$ 5%  |
| 20   | Non-Standard Drum Length mtrs                                    | Max. 5% Order Quantity  |
| 22   | <b>Printing</b>  | <b>YEAR POLYCAB ELECTRIC 3.8/6.6 KV (E) GRADE XLPE, CABLE SIZE, CABLE TYPE WITH SEQUENTIAL MARKING at every one meter interval.</b> |

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