## роџ゙눈 <br> Polycab Wires Private Limited

```
Manufacturing Data Sheet:
Design Code : MVIS11AXSFYLO03C150SA001S
Date :
Rev No. :
```



| S.No | Particulars | $3 \times 150 \mathrm{MM}^{2}$ |
| :---: | :---: | :---: |
| 1 | Name of Manufacturer | Polycab Wires Pvt. Ltd |
| 2 | Type of Cable | A2XFY |
| 3 | Voltage Grade kV | 11/11 |
| 4 | No of cores X size in sqmm | $3 \times 150$ |
| 5 a) | Maximum conductor temperature under normal operating conditions | $90^{\circ} \mathrm{C}$ |
| b) | Maximum conductor temperature at the termination of short circuit | $250{ }^{\circ} \mathrm{C}$ |
| 6 a) | Permissible Voltage Variation | $\pm 10 \%$ |
| b) | Permissible Frequency Variation | $\pm 5 \%$ |
| c) | Combined Voltage \& Frequency variation | $\pm 10 \%$ |
| 7 | Conductor |  |
| a) | Material | H4 Grade Aluminium as per Class 2 of IS: 8130/84,latest |
| b) | Maximum d.c. resistance of conductor at $20^{\circ}$ C (ohm/km) | 0.206 |
| c) | Shape | Stranded Compact Circular |
| 8 | Conductor Screening |  |
| a) | Material | Extruded Semi-conducting Compound |
| b) | Nominal thickness (mm) | 0.3 |
| 9 | Insulation |  |
| a) | Material | XLPE as per IS 7098(Pt-2)/2011, latest |
| b) | Nominal thickness (mm) | 5.5 |
| c) | Core Identification | By coloured strips (Red, Yellow \& Blue) |
| 10 | Insulation Screening |  |
| (i) | Non - Metallic |  |
| a) | Material | Extruded Semi-conducting Compound |
| b) | Nominal thickness (mm) | 0.3 |
| (ii) | Metallic |  |
| a) | Material | Single layer of copper tape |
| 11 | Inner Sheath |  |


| S.No | Particulars | $3 \mathrm{X} 150 \mathrm{MM}^{2}$ |
| :---: | :---: | :---: |
| a) | Material | Extruded PVC Type ST2 to IS:5831/84 |
| b) | Minimum thickness (mm) | 0.7 |
| 12 | Armouring |  |
| a) | Material | Gal.Steel |
| b) | Type of armouring | Flat Strip |
| c) | Nominal size of armour (mm) $\pm 10 \%$ | $4.0 \times 0.8$ |
| 13 | Outer Sheath |  |
| a) | Material | Extruded FR-LSH PVC Type ST2 to IS:5831/84 |
| b) | Thickness (mm) | 2.52 (Min.) |
| c) | Outer Sheath Colour | Black |
|  | 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 |
| 14 | Electrical Parameters |  |
| a) | Max. a.c. resistance of conductor at $90^{\circ} \mathrm{C}$ (ohm/km) | 0.265 |
| b) | Approx. Cable Capacitance (mfd/km) | 0.24 |
| c) | Approx. Cable reactance (ohm/km) | 0.104 |
| d) | Impedance of cable (ohm/km) | 0.285 |
| 15 | Continuous Current carrying capacities :- |  |
| (a) | In Ground at $30^{\circ} \mathrm{C} \quad(\mathrm{A})$ | 242 |
| (b) | In Air at $40^{\circ} \mathrm{C}$ (A) | 288 |
| 16 | Short Circuit rating of conductor for the duration of $1 \mathrm{sec}(\mathrm{kA})$ | 14.17 |
| 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) | $66 \pm 3 \mathrm{~mm}$ |
| 19 | Standard Drum Length with $\pm 5 \%$ tolerance (m) | $500 \pm 5 \%$ |
| 20 | Non-Standard Drum Length mtrs | Max. 5\% Order Quantity |
| 22 | Printing | YEAR POLYCAB ELECTRIC 11/11 KV (UE) GRADE XLPE FR-LSH, CABLE SIZE, CABLE TYPE WITH SEQUENTIAL MARKING at every one meter interval. |
| Note:-The values given above are subject to tolerances as per the relevant standards. |  |  |

