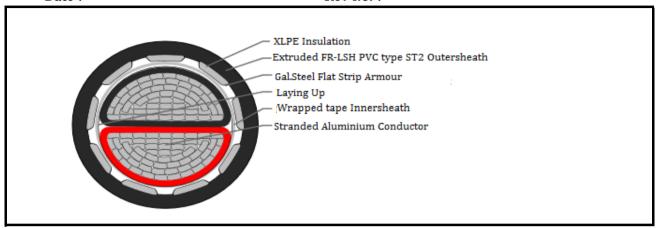


Polycab Wires Private Limited

<u>Manufacturing Data Sheet:</u> <u>Low Voltage XLPE Cable</u>

Design Code: LVIS09AXSFYL002C035SA001S
Date: Rev No.:



| S.No | Particulars | 2 X 35 MM ² |
|------|-----------------------------------------------------|------------------------------------------------------------|
| 1 | Name of Manufacturer | Polycab Wires Pvt. Ltd |
| 2 | Type of cable | A2XFY |
| 3 | Voltage Grade V | 1100 |
| 4 | No of cores X size in sqmm | 2 X 35 |
| 5 | Conductor | |
| a) | Material | H2/H4 Grade Aluminium as per Class 2 of IS: 8130/84,latest |
| b) | Max. d.c. resistance of conductor at 20° C (ohm/km) | 0.868 |
| c) | Shape of the conductor | Stranded Compacted Sector |
| 6 | Insulation | |
| a) | Material | XLPE as per IS 7098(Pt-1)/88, Latest |
| b) | Nominal thickness (mm) | 0.9 |
| c) | Core Identification | Red, Black |
| 7 | Inner Sheath | |
| a) | Material | Wrapping of Tapes |
| b) | Minimum thickness (mm) | 0.3 |
| 8 | Armouring | |
| a) | Material | Galvanised Steel |
| b) | Type of armouring | Flat Strip |
| c) | Nominal size of armour (mm) ± 10% | 4.0 x 0.8 |
| 9 | Outer Sheath | |
| a) | Material | Extruded FR-LSH PVC Type ST2 as per IS:5831/84 |
| b) | Thickness (mm) | 1.40 (Min.) |
| c) | Colour of outer sheath. | 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 |



Polycab Wires Private Limited

| S.No | Particulars | 2 X 35 MM² |
|------|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| 10 | Electrical Parameters | |
| a) | Max. a.c. resistance of conductor at 90° C (ohm/km) | 1.11 |
| b) | Calculated Cable reactance (ohm/km) | 0.0787 |
| c) | Impedance of cable (ohm/km) | 1.11 |
| d | Approx. Cable Capacitance (mfd/km) | 0.50 |
| 11 | Maximum conductor temperature under normal operating conditions | 90°C |
| 12 | Maximum conductor temperature at the termination of short circuit | 250°C |
| 13 | Short Circuit rating of conductor for the duration of 1 sec (kA) | 3.31 |
| 14 | Continuous Current carrying capacities :- | |
| (a) | In Ground at 30°C (A) | 136 |
| (b) | In Air at 40°C (A) | 133 |
| 15 | Applicable Standard | IS 8130/84,IS 7098 Part I/88, IS 5831/84, IS 3975/88 etc. with latest up to date amendments |
| 16 | Approx. overall diameter of the cable in mm | 20.0 ± 2.0 |
| 17 | Minimum bending radius | 12 times Overall diameter |
| 18 | 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) | 2,100 |
| 19 | Standard Drum Length with ± 5% tolerance (m) | 1000 ± 5% |
| 20 | Non-Standard Drum Length mtrs | Max. 5% Order Quantity |
| 22 | Printing | YEAR POLYCAB ELECTRIC 1100 VOLTS 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.