Manufacturing Data Sheet:
Design Code : LVIS09AXSFY2002C120SA002S
Date :

Low Voltage XLPE Cable

Rev No. :


| S.No | Particulars | $2 \mathrm{X} 120 \mathrm{MM}^{2}$ |
| :---: | :---: | :---: |
| 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 | $2 \times 120$ |
| 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 $20^{\circ} \mathrm{C}$ (ohm/km) | 0.253 |
| 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) | 1.2 |
| c) | Core Identification | Red, Black |
| 7 | Inner Sheath |  |
| a) | Material | Wrapping of Tapes |
| b) | Minimum thickness (mm) | 0.4 |
| 8 | Armouring |  |
| a) | Material | Galvanised Steel |
| b) | Type of armouring | Flat Strip |
| c) | Nominal size of armour (mm) $\pm 10 \%$ | $4.0 \times 0.8$ |
| 9 | Outer Sheath |  |
| a) | Material | Extruded PVC Type ST2 as per IS:5831/84 |
| b) | Thickness (mm) | 1.56 (Min.) |
| c) | Colour of outer sheath. | Black |
| 10 | Electrical Parameters |  |
| a) | Max. a.c. resistance of conductor at $90^{\circ} \mathrm{C}$ (ohm/km) | 0.325 |
| b) | Calculated Cable reactance (ohm/km) | 0.0713 |
| c) | Impedance of cable (ohm/km) | 0.333 |
| d | Approx. Cable Capacitance (mfd/km) | 0.67 |


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| :---: | :---: | :---: |
| 11 | Maximum conductor temperature under normal operating conditions | $90^{\circ} \mathrm{C}$ |
| 12 | Maximum conductor temperature at the termination of short circuit | $250^{\circ} \mathrm{C}$ |
| 13 | Short Circuit rating of conductor for the duration of $1 \mathrm{sec}(\mathrm{kA})$ | 11.34 |
| 14 | Continuous Current carrying capacities :- |  |
| (a) | In Ground at $30^{\circ} \mathrm{C} \quad$ (A) | 266 |
| (b) | In Air at $40^{\circ} \mathrm{C}$ (A) | 287 |
| 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 | Nominal overall diameter of the cable in mm | $\mathbf{3 0 . 5} \pm 2.0$ |
| 17 | Minimum bending radius | 12 times Overall diameter |
| 18 | Max. Tensile strength |  |
| (i) | for Cables pulled with stocking (Newtons) | $9 \times \mathrm{D}^{2}, \mathrm{D}$ is the cable OD in mm |
| ii) | for Cables pulled with pulling eyes (N) | 7,200 |
| 19 | Standard Drum Length with $\pm 5 \%$ tolerance (m) | $1000 \pm 5 \%$ |
| 20 | Non-Standard Drum Length mtrs | Max. 5\% Order Quantity |
| 22 | Printing | YEAR POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE, 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. |  |  |

