







## **SWITCHBOARD CABLE**

## Document ID: TE/QMS/F/02

## **DESIGN CODE: TLBL00CPUAYF003P0.4M**

| Particulars                                  | 3P x 0.4 mm   |
|--|---|
| Manufacturer Name                            | Polycab India Limited.  |
| Cable Type                                   | Dry Telephone Unscreened Unarmoured Cable   |
| Applicable Specifications                    | Ref. GR/WIR-06/03. MAR 2002,  |
| Number of Pairs                              | 3 Pair  |
| Conductor                                    |   |
| a) Material                                  | Annealed Bare Copper Conforming to IS 8130 Latest   |
| b) Class                                     | Class 1   |
| c) Diameter Nom. (mm)                        | 0.4   |
| d) Shape of Conductor                        | Circular  |
| e) Annealing (Min.)                          | 15%   |
| Insulation                                   |   |
| a) Material                                  | HDPE Type III of ASTM D 1248/BS 6234  |
| b) Nominal Thickness of insulation (mm)      | The thickness of insulation shall be adequate to meet the electrical requirements               |
| c) Method of Application                     | Extrusion   |
| d) Colour scheme for identification of cores | As per IS-9938  |
| Cable Elements                               | Two insulated conductors uniformly twisted together to form a pair with suitable Right Hand Lay |
| Colour coding / Pair identification          | Table – 2 of GR/WIR-06/03 (Ref. Annexure-I)   |
| Twinning & Group Twinning                    | 3 Pairs twisted together for Laid-up of 3 Pr,   |
| Unit Identification                          | Not Applicable  |
| Laid up                                      | The units shall be laid up as per cable size and construction.                                  |
| Outer Sheath                                 |   |
| a) Material                                  | FR PVC  |
| b) Colour                                    | Grey  |
| c) Type                                      | ST 1 conforming to (As per IS – 5831)   |
| d) Thickness Min. (mm)                       | 0.65  |
| e) Nominal Diameter (mm)                     | 4.5 ± 1.0   |





| Electrical Test  | 0.40 mm Conductor   |
|--|---|
| a) Conductor Resistance (Max.)   | 143 Ω/Km  |
| b) Capacitance unbalance Pair to Pair (Max)  | 230 pF/km   |
| c) Insulation Resistance (Min.)  | 50 MΩ/Km  |
| d) Dielectric Strength (DC Voltage)  |   |
| 3 kV DC or 2 kV RMS Applied between each conductor and the remaining conductor bunch and earth | Withstand for 1 Minutes. There should not any breakdown of the insulation.      |
| Standard Length  | Coil Formation (90/100/500 mtr)   |
| Prominently Printing Marking on the Cable  | "YEAR" "SIZE" "POLYCAB DAMAN" "FR" SEQUENTIAL LENGTH MARKING AT EVERY ONE METER |

| Annexure-1         |                      |                      |  |  |  |
|--------------------|----------------------|----------------------|--|--|--|
| Pair Colour Coding |                      |                      |  |  |  |
|                    | Colour of Insulation | Colour of Insulation |  |  |  |
| Pairing Element    | Conductor "A"        | Conductor "B"        |  |  |  |
| 1                  | White                | Blue                 |  |  |  |
| 2                  | White                | Orange               |  |  |  |
| 3                  | White                | Green                |  |  |  |

| CABLE MAKE-UP |            |                        |  |
|---------------|------------|------------------------|--|
| No of Pairs   | No of Unit | Indentification Binder |  |
| 3 Pair        | 1 x 3 Pr   | Not Applicable         |  |

Rev. No.: 00 Issued Date: 02/04/2018