

Cable Code: CHTNXC050003RD0>
Description: LCL/IMP CU/XLPE/SWA/PVC 11kV COPPER CABLE 3x50.00MM RED - Loose
Reference: 0
Standard: IEC 60502-2



Main Application:

Power cables for power networks, underground and in cable ducting.

Parameters:

| | | |
|-------------------|--|-----------------------------|
| Physical | Conductor | Stranded Copper |
| | Insulation | XLPE material |
| | Armouring | Galvanised Steel Wire |
| | Sheathing | PVC |
| | Cross sectional area | 50 sq mm |
| | No. of Cores: | 3 |
| | Core Colours: | 3 |
| | Nom. Overall Diameter | 49.6 mm |
| | Nom. Weight | 4648 kg/m |
| Electrical | Rated Voltage (U_0/U) | 6.35/11(12) kV |
| | Max. Conductor D.C Resistance | 20°C 0.387 Ohms |
| | Max. Conductor A.C Resistance | @ 90°C 0.494 Ohms |
| | Charging Current | 0.525 A/Km |
| | Dielectric Losses | 13.33 W/Km |
| | Current Rating | Direct in Ground 214 A |
| | Current Rating | In Duct 0 A |
| | Current Rating | Installed in Free Air 227 A |
| | Approx. Volt Drop | 0 mV/A/m |
| | Inductive Reactance of Cable at 50Hz (approx.) | 0.11 Ω/km |
| Thermal | Capacitance of Cable (approx.) | 0.316 μF/km |
| | Short Circuit Current Rating for 1 second duration | 7.15 kA |
| | Maximum conductor operating temperature: | 90 °C |
| | Maximum screen operating temperature: | 80 °C |
| Mechanical | Lowest installation temperature: | 0 °C |
| | Maximum short-circuit conductor temperature: | 250 °C |
| Chemical | Tensile load | 0 N/mm ² |
| | Min. bending radii | 745 mm |
| Chemical | Resistance to oil: | According to IEC Standard |
| | Weather resistance: | |

BASIC ASSUMPTION FOR CURRENT RATINGS & RATING FACTORS

The current ratings of cables as indicated in various tables have been calculated on certain assumed conditions.

In actual practice these conditions may be different. Therefore to determine the actual current ratings as per installation conditions, the tabulated ratings shall be multiplied with appropriate factors

- i. Maximum permissible temperature: 90°C for XLPE insulation, 70°C for general purpose PVC, 85°C for HR PVC
- ii. Ground/Duct temperature: 20°C
- iii. Air temperature: 30°C
- iv. Thermal resistivity of soil: 1.2°C m/W
- v. Thermal resistivity of Dielectric 650°C cm/W for PVC, 350°C cm/W for XLPE
- vi. Cables are installed in a single circuit
- vii. Frequency 50Hz
- viii. Depth of laying: 500mm

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