



ВВГнгд 1х50-1 ТУ У 31.3-00214534-018-2003

Power cables with copper conductors, with low fire-risk PVC-compound insulation, with low fire-risk PVC-compound outer sheath

Cables are used for laying:

- *in bunches*
- *in premises, dry ducts and tunnels, in corrosive environment*
- *in bunches, in crowded places*

Manufacturing of cable with multiwire conductors is possible

Fire safety code in accordance with ДСТУ 4809:2007: ПБ123121000

Products of this mark meet the requirements:

- *single wire cable flame retardance*
- *bunched cable flame retardance category A*
- *toxicity class Tk3 of the combustion products of nonmetallic elements (toxicity index over 120 g/m³)*
- *class ДТк1 on smoke-forming ability by smouldering of non-metallic elements (coefficient of smoke formation from 50 to 500 m²/kg)*
- *class ДПк2 on smoke-forming ability by combustion (minimum luminous flux more than 60 %)*
- *corrosive class Кк1 of combustion products of non-metallic elements (the number of halogen hydrides less than 150 mg/g, pH less than 4.3, specific conductivity more than 10 μS/mm)*

TECHNICAL SPECIFICATIONS

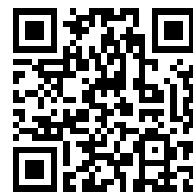
| | | |
|--|-----------------|------------------|
| Rated voltage | kV | 1 |
| Number and rated area of conductors | mm ² | 1 x 50 |
| Phase insulation thickness | mm | 1.4 |
| Permissible continuous current rating (AC of industrial frequency) * | | |
| • <i>by aerial laying</i> | A | 179 |
| • <i>by burial</i> | A | 194 |
| Permissible continuous current rating (DC) * | | |
| • <i>by aerial laying</i> | A | 227 |
| • <i>by burial</i> | A | 295 |
| Maximum permissible conductor temperature | | |
| • <i>Continuous</i> | °C | +70 |
| • <i>in emergency operation</i> | °C | +80 |
| • <i>at short circuit</i> | °C | +130 |
| Operating temperature range | °C | -50 ... +50 |
| Minimum bending radius by laying | mm | 150 |
| Rated outer diameter of the cable (for reference) ** | mm | 15 |
| Cable weight (approximate) | kg/km | 570 |
| Rated factory cable length and gross weight of the delivery on the drums | m, t | # 12: 1450 • 0.9 |

Notes:

When ordering it is necessary to agree the factory length of the product with the manufacturer

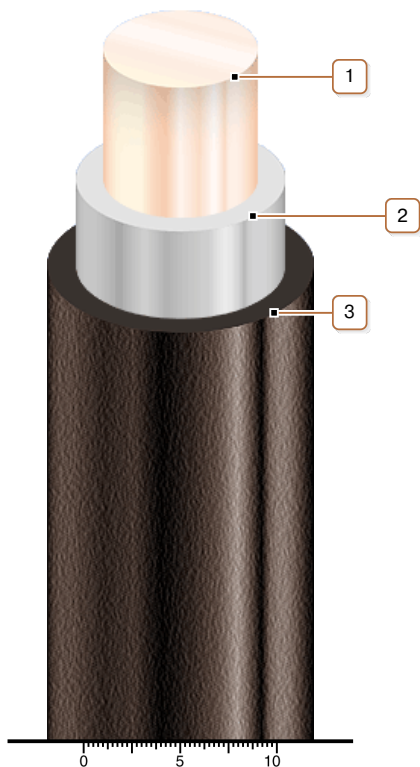
* Long permissible current loads are calculated for the following conditions: air temperature plus 25 °C, soil temperature plus 15 °C, thermal resistivity of soil 1.2 °K·m/W, laying depth in the soil 0.7 m

** The external diameter may differ from the rated up to ± 10 %



ВВГнгд 1х50-1 ТУ У 31.3-00214534-018-2003

Power cables with copper conductors, with low fire-risk PVC-compound insulation, with low fire-risk PVC-compound outer sheath



CONSTRUCTION

- 1. Copper conductor*
- 2. Low fire-risk PVC compound insulation*
- 3. Low fire-risk PVC compound outer sheath*