

ВВГнгд 4х50-1 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

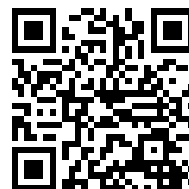
| | | |
|------------------------------------------------------------------------------|-----------------|---------------------------------------------------------|
| Rated voltage | kV | 1 |
| Number and rated area of conductors | mm ² | 4 x 50 |
| Phase insulation thickness | mm | 1.4 |
| Permissible continuous current rating (AC of industrial frequency) * | | |
| • <i>by aerial laying</i> | A | 155 |
| • <i>by burial</i> | A | 173 |
| 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 | 247.5 |
| Rated outer diameter of the cable (for reference) ** | mm | 33 |
| Cable weight (approximate) | kg/km | 2550 |
| Rated factory cable length and gross weight of the delivery on the drums *** | m, t | # 14: 540 • 1.6 # 16a: 870 • 2.5 # 18: 1000 • 3.0 |

Notes:

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

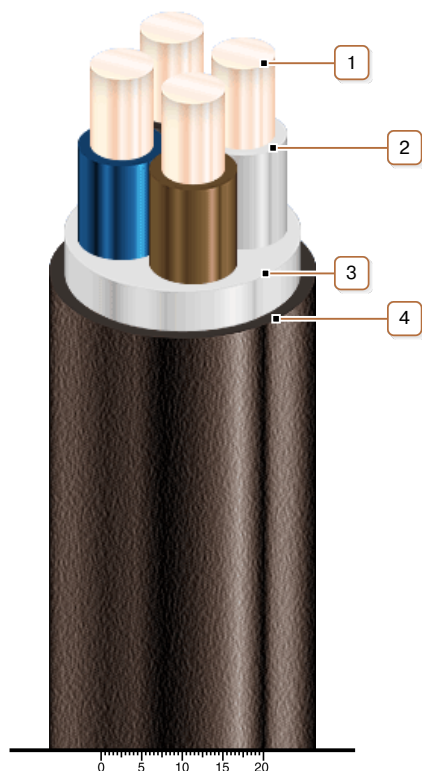
* Long permissible current loads are calculated during operation in four-wire networks with load in all the conductors for the following conditions: air temperature plus 25 °C, soil temperature plus 15 °C, thermal resistivity of soil 1.2 °K·m/W, laying depth in the soil 0.7 m

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



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CONSTRUCTION

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

Note: Conductor twisting is not illustrated