



ПвБВнгд 4x50-1 ТУ У 31.3-00214534-018-2003

Power cables with copper conductors, XLPE-insulated, galvanized steel-tape armoured, 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 places, where small mechanical impacts on cable are possible, including tensile forces
- 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 Kk1 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 |
| Permissible continuous current rating (AC of industrial frequency) * | | |
| • by aerial laying | A | 194 |
| • by burial | A | 190 |
| Maximum permissible conductor temperature | | |
| • Continuous | °C | +90 |
| • in emergency operation | °C | +130 |
| • at short circuit | °C | +250 |
| 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 | 2770 |
| Rated factory cable length and gross weight of the delivery on the drums *** | m, t | # 14: 540 • 1.7 # 16a: 870 • 2.7 # 18: 1000 • 3.2 |

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. XLPE insulation
3. Low fire-risk PVC-compound bundle
4. Low fire-risk PVC-compound inner sheath
5. Double galvanized steel-tape armour
6. Low fire-risk PVC compound outer sheath

Note: Conductor twisting is not illustrated

