

**ВВГнгд 5х4-1**  
**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*

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/m<sup>3</sup>)*
- *class ДТк1 on smoke-forming ability by smouldering of non-metallic elements (coefficient of smoke formation from 50 to 500 m<sup>2</sup>/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**

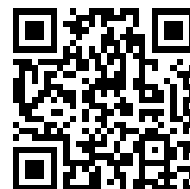
|  |                 |                  |
|--|-----------------|------------------|
| Rated voltage  | kV              | 1                |
| Number and rated area of conductors  | mm <sup>2</sup> | 5 x 4            |
| Phase insulation thickness   | mm              | 1                |
| Permissible continious current rating (AC of industrial frequency) *         |                 |                  |
| • <i>by aerial laying</i>  | A               | 33               |
| • <i>by burial</i>   | A               | 43               |
| 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              | 120              |
| Rated outer diameter of the cable (for reference) **                         | mm              | 16               |
| Cable weight (approximate)   | kg/km           | 400              |
| Rated factory cable length and gross weight of the delivery on the drums *** | m, t            | # 12: 1280 • 0.6 |

Notes:

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

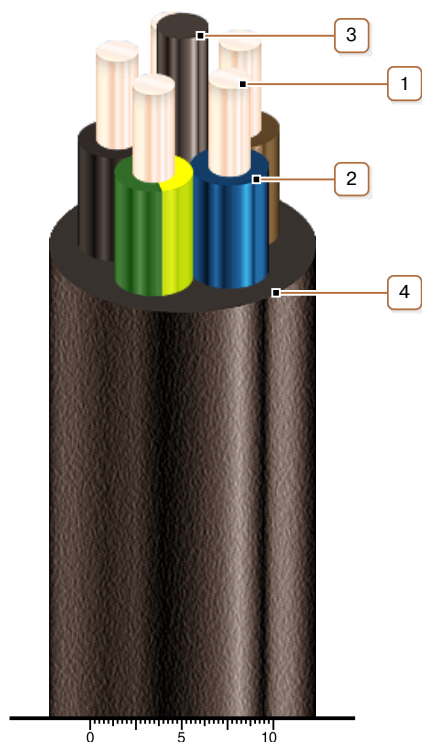
\* Long permissible current loads are calculated for the following conditions: air temperature plus 25 °C, soil temperature plus 15 °C, thermal resistivity of soil 1.2 °K·m/W, laying depth in the soil 0.7 m

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



## **ВВГнгд 5х4-1** **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 bundle
4. Low fire-risk PVC compound outer sheath

*Note: Conductor twisting is not illustrated*