



## АПвБВнгд 1х500-1 ТУ У 31.3-00214534-018-2003

Power cables with aluminium 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*

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

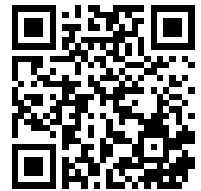
|  |                 |                                     |
|--|-----------------|-------------------------------------|
| Rated voltage  | kV              | 1                                   |
| Number and rated area of conductors  | mm <sup>2</sup> | 1 x 500                             |
| Phase insulation thickness   | mm              | 2.2                                 |
| Permissible continuous current rating (AC of industrial frequency) *         |                 |                                     |
| • <i>by aerial laying</i>  | A               | 800                                 |
| • <i>by burial</i>   | A               | 599                                 |
| Permissible continuous current rating (DC) *                                 |                 |                                     |
| • <i>by aerial laying</i>  | A               | 1030                                |
| • <i>by burial</i>   | A               | 949                                 |
| Maximum permissible conductor temperature                                    |                 |                                     |
| • <i>Continuous</i>  | °C              | +90                                 |
| • <i>in emergency operation</i>  | °C              | +130                                |
| • <i>at short circuit</i>  | °C              | +250                                |
| Operating temperature range  | °C              | -50 ... +50                         |
| Minimum bending radius by laying   | mm              | 410                                 |
| Rated outer diameter of the cable (for reference) **                         | mm              | 41                                  |
| Cable weight (approximate)   | kg/km           | 2600                                |
| Rated factory cable length and gross weight of the delivery on the drums *** | m, t            | # 18: 660 • 2.2<br># 20: 1050 • 3.4 |

Notes:

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

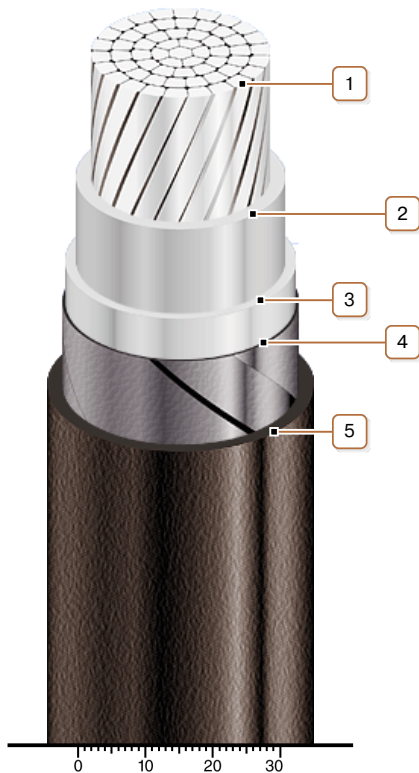
\* Long permissible current loads are calculated for the following conditions: air temperature plus 25 °C, soil temperature plus 15 °C, thermal resistivity of soil 1.2 °K·m/W, laying depth in the soil 0.7 m

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



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### CONSTRUCTION

1. Aluminium multiwire compacted conductor
2. XLPE insulation
3. Low fire-risk PVC-compound inner sheath
4. Double galvanized steel-tape armour
5. Low fire-risk PVC compound outer sheath