

## АПвБВнгд 3х50 (ож)-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

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/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 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

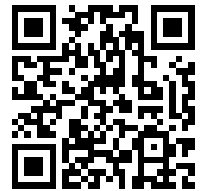
|                                                                              |                 |                                     |
|------------------------------------------------------------------------------|-----------------|-------------------------------------|
| Rated voltage                                                                | kV              | 1                                   |
| Number and rated area of conductors                                          | mm <sup>2</sup> | 3 x 50                              |
| Phase insulation thickness                                                   | mm              | 1                                   |
| Permissible continious current rating (AC of industrial frequency) *         |                 |                                     |
| • by aerial laying                                                           | A               | 158                                 |
| • by burial                                                                  | A               | 157                                 |
| 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              | 232.5                               |
| Rated outer diameter of the cable (for reference) **                         | mm              | 31                                  |
| Cable weight (approximate)                                                   | kg/km           | 1440                                |
| Rated factory cable length and gross weight of the delivery on the drums *** | m, t            | # 14: 610 • 1.1<br># 16a: 990 • 1.7 |

Notes:

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

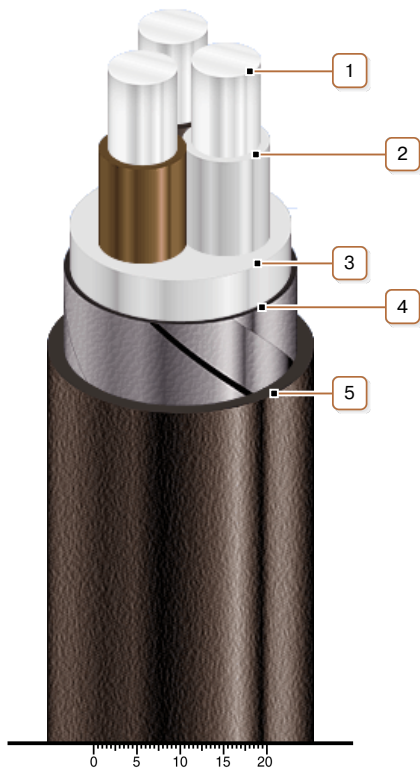
\* Long permissible current loads are calculated for the following conditions: air temperature plus 25 °C, soil temperature plus 15 °C, thermal resistivity of soil 1.2 °K·m/W, laying depth in the soil 0.7 m

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



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### CONSTRUCTION

1. Aluminium 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

*Note: Conductor twisting is not illustrated*