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ПвВГнгд-FR 3x50+1x25-1 ТУ У 31.3-00214534-055:2006



Fire resistant power cables with copper conductors, XLPE-insulated, 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

• power supply cable lines of NPP safety system equipment, circuits wiring of fire safety systems (fire alarm circuits, power supply of fire-fighting pumps, lightning of emergency exits and evacuation routes, smoke exhaust and blowing ventilation systems, evacuation elevators); for wiring in hospital surgical wings, emergency and equipment (current collectors) power supply circuits, operating in a fire emergency

Manufacturing of cable with multiwire conductors (main and additional one) is possible Manufacturing of extruded fire-resistant barrier is possible

Fire safety code in accordance with ДСТУ 4809:2007: ПБ123121080

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 $\mbox{$\Pir}$ on smoke-forming ability by smouldering of non-metallic elements (coefficient of smoke formation from 50 to 500 m²/kg)
- class ДΠκ2 on smoke-forming ability by combustion (minimum luminous flux more than 60 %)

• corrosive class K κ 1 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 μ S/mm)

• flame-resistant class FE180 under fire conditions with a temperature not less than 750 °C





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TECHNICAL SPECIFICATIONS

| Rated voltage | kV | 1 |
|--|-------|------------------|
| Number and rated area of conductors | mm² | 3 x 50 + 1 x 25 |
| Phase insulation thikness | mm | 1 |
| Permissible continious current rating (AC of industrial frequency) * | t . | |
| • by aerial laying | А | 209 |
| • by burial | А | 205 |
| Maximum permissible conductor temperature | | |
| Continious | °C | +90 |
| in emergency operation | °C | +130 |
| at short circuit | °C | +250 |
| Operating temperature range | °C | -50 +50 |
| Minimum bending radius by laying | mm | 262.5 |
| Rated outer diameter of the cable (for reference) ** | mm | 35 |
| Cable weight (approximate) | kg/km | 2320 |
| Rated factory cable length and gross weight of the delivery | m, t | # 16a: 780 • 2.1 |
| on the drums *** | | # 18: 890 • 2.5 |
| Notes: | | |

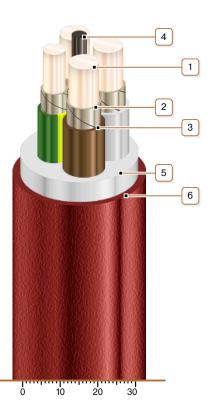
Notes:

When ordering it is neccesary 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 $^{\circ}\!K\!\cdot\!m/W$, laying depth in the soil 0.7 m

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



CONSTRUCTION

1. Copper conductor

2. Fire-resistant barrier

Note: Manufacturing of extruded fire-resistant barrier is possible

- 3. XLPE insulation
- 4. Low fire-risk PVC-compound bundle
- 5. Low fire-risk PVC-compound inner sheath
- 6. Low fire-risk PVC compound outer sheath

Note: Conductor twisting is not illustrated