





7, Autogennaya Str., Kharkov, 61099, Ukraine. Phone: (+38-057) 728-1244, 728-1241. Fax: (+38-057) 728-1243, (+38-0572) 946-830 E-mail: market@yuzhcable.com.ua

АПвЭогВнгд-30 3х95 ТУ У 31.3-00214534-017-2003

Three-core power cables with aluminium conductors, flame-retardant, with XLPE, collective screen, with longitudinal sealing and PVC compound outer sheath, with low smoke and gas emission

Technical cable requirements correspond to IEC 60502-2

Cables are used for laying:

- in premises, tunnels, ducts, mines, dry soil and outdoor under shelter
- · in bunches
- at sites, where low smoke and gas emission are required (NPP, subway, large industrial facilities, high-rise buildings, etc.)

It is possible to manufacture cables with an integrated fiber-optic module.

Order entry example:

АПвЭогВнгд-30 3х95/35 (ОМ) ТУ У 31.3-00214534-017-2003

In conjunction with the DTS system, the integrated fiber-optic module can act as a distributed cable line temperature sensor.

It is possible to manufacture cable with sealed conductors.

Order entry example:

АПвЭогВнгд-30 3х95/35 (г) ТУ У 31.3-00214534-017-2003

Fire safety code in accordance with ДСТУ 4809:2007: ПБ132121000

Products of this mark meet the requirements:

- · single wire cable flame retardance
- bunched cable flame retardance category B
- toxicity class Tk2 of the combustion products of nonmetallic elements (toxicity index from 40 up to 120 g/m³)
- class $\Pi T \kappa 1$ 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 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)







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TECHNICAL SPECIFICATIONS

| Rated voltage | kV | 30 |
|---|-------|-----------------------|
| Maximum voltage | kV | 36 |
| Number and rated area of conductors | mm² | 3 x 95 |
| Insulation thikness | mm | 8 |
| Minimum screen cross-section | mm² | 35 |
| Permissible short circuit current across the screen of | kA | 7.1 |
| minimum cross-section | | |
| Maximum permissible short-circuit current in core | kA | 8.9 |
| Permissible continious current rating * | | |
| • by aerial laying | Α | 236 |
| • by burial | Α | 203 |
| Partial discharge factor for rated voltage, not more than | рС | 6 |
| Maximum permissible conductor temperature | | |
| Continious | ° C | +90 |
| • in emergency operation | ° C | +130 |
| • at short circuit | ° C | +250 |
| Operating temperature range (in climate version NF) | ° C | -50 +50 |
| Operating temperature range (in climate version T) | ° C | -25 +65 |
| Minimum bending radius by laying | mm | 1328 |
| Rated outer diameter of the cable (for reference) ** | mm | 83 |
| Cable weight (approximate) | kg/km | 6320 |
| Rated factory cable length and gross weight of the delivery | m, t | # 25УД-90: 420 • 4.2 |
| on the drums *** | | # 26УД-100: 604 • 5.6 |
| | | # 30УД-130: 825 • 8.1 |

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: conductor temperature 90 °C, air temperature 30 °C, soil temperature 20 °C, load factor 1.0, thermal resistivity of soil 1.5 °K·m/W, laying depth in the ground 0.8 m, shields are grounded at both ends of the line

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

^{***} Отклонение фактической массы брутто от указанного значения может составлять ± 7 %







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CONSTRUCTION

- 1. Central polyethylene bundle
- 2. Aluminium multiwire compacted conductor
- · It is possible to manufacture cable with a single-wire conductor
- · It is possible to manufacture cable with sealed conductors.
- 3. Inner extruded semiconducting layer
- 4. XLPE insulation
- 5. Outer extruded semiconducting layer
- 6. Lapping layer of semiconductive swellable tape
- 7. Extruded filling of semiconducting polyethylene
- 8. Lapping layer of semiconductive swellable tape
- 9. Copper screen
- 10. Lapping layer of glass tape
- 11. Low fire-risk PVC compound outer sheath

Note: Conductor twisting is not illustrated