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АПвЭогВнгд-15 3x120 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-15 3х120/50 (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-15 3х120/50 (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	15
Maximum voltage	kV	17.5
Number and rated area of conductors	mm²	3 x 120
Insulation thikness	mm	4.5
Minimum screen cross-section	mm²	50
Permissible short circuit current across the screen of	kA	10.2
minimum cross-section		
Maximum permissible short-circuit current in core	kA	11.3
Permissible continious current rating *		
• by aerial laying	Α	273
• by burial	Α	232
Partial discharge factor for rated voltage, not more than	рC	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	1104
Rated outer diameter of the cable (for reference) **	mm	69
Cable weight (approximate)	kg/km	4790
Rated factory cable length and gross weight of the delivery	m, t	# 22УД-60: 339 • 2.5
on the drums ***		# 25УД-90: 611 • 4.5
Matan		

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 $\pm\,7\,\%$





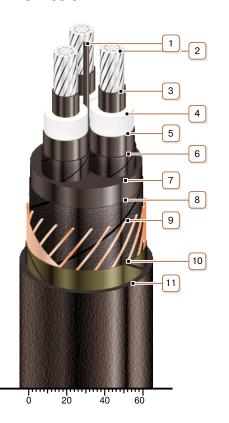




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CONSTRUCTION

- 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