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# ПвЭоВнгд(к)-15 3х300 ТУ У 31.3-00214534-017-2003



Three-core power cables with copper conductors, flame-retardant, with XLPE, collective screen and PVC compound outer sheath and 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
- $\boldsymbol{\cdot} \text{ in bunches}$

• 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:

ПвЭоВнгд(к)-15 3х300/70 (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:

ПвЭоВнгд(к)-15 3х300/70 (г) ТУ У 31.3-00214534-017-2003

Fire safety code in accordance with ДСТУ 4809:2007: ΠБ132121000 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  $120 \text{ g/m}^3$ )

• class  $\[mu]T\kappa 1$  on smoke-forming ability by smouldering of non-metallic elements (coefficient of smoke formation from 50 to 500 m<sup>2</sup>/kg)

• class ДΠκ2 on smoke-forming ability by combustion (minimum luminous flux more than 60 %)

• corrosive class K $\kappa$ 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  $\mu$ S/mm)





 TIBIL
 IU0423-1500300003

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## **TECHNICAL SPECIFICATIONS**

Rated voltage	kV	15
Maximum voltage	kV	17.5
Number and rated area of conductors	mm²	3 x 300
Insulation thikness	mm	4.5
Minimum screen cross-section	mm²	70
Permissible short circuit current across the screen of	kA	14.2
minimum cross-section		
Maximum permissible short-circuit current in core	kA	42.9
Permissible continious current rating *		
• by aerial laying	А	606
• by burial	А	489
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	1296
Rated outer diameter of the cable (for reference) **	mm	81
Cable weight (approximate)	kg/km	13830
Rated factory cable length and gross weight of the delivery	m, t	# 25УД-90: 420 • 7.4
on the drums ***		# 26УД-100: **** 591 • 10.0
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: 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  $\pm\,7\,\%$ 

\*\*\*\* Option delivery on not full drum

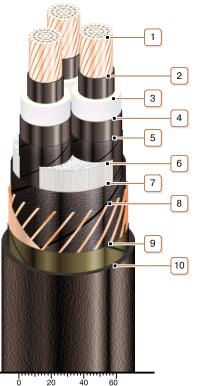




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### **CONSTRUCTION**

- 1. Copper multiwire compact conductor
- 2. Inner extruded semiconducting layer
- 3. XLPE insulation
- 4. Outer extruded semiconducting layer
- 5. Lapping layer of semiconductive swellable tape
- 6. Interstitial filler with polypropylene bundles
- 7. Lapping layer of semiconductive swellable tape
- 8. Copper screen
- 9. Lapping layer of glass tape
- 10. Low fire-risk PVC compound outer sheath

Note: Conductor twisting is not illustrated

20 40 60