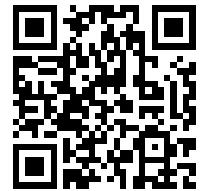




105903-200030000240

**ПВЕКВнГд-20 3x240  
ТУ У 31.3-00214534-017-2003**

Three-core power cables with copper conductors, flame-retardant, with XLPE, steel-wire armoured, with 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 places, where mechanical impacts on cable are possible, including tensile forces*
- *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:

ПвЕКВнГд-20 3x240/25 (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.

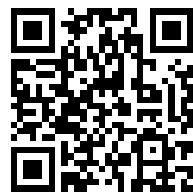
Order entry example:

ПвЕКВнГд-20 3x240/25 (г) ТУ У 31.3-00214534-017-2003

Fire safety code in accordance with ДСТУ 4809:2007: ПБ122121000

Products of this mark meet the requirements:

- *single wire cable flame retardance*
- *bunched cable flame retardance category A*
- *toxicity class Tk2 of the combustion products of nonmetallic elements (toxicity index from 40 up to 120 g/m<sup>3</sup>)*
- *class ДTk1 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)*



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### ТУ У 31.3-00214534-017-2003

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#### TECHNICAL SPECIFICATIONS

Rated voltage	kV	20
Maximum voltage	kV	24
Number and rated area of conductors	mm <sup>2</sup>	3 x 240
Insulation thickness	mm	5.5
Minimum screen cross-section	mm <sup>2</sup>	25
Permissible short circuit current across the screen of minimum cross-section	kA	5.1
Maximum permissible short-circuit current in core	kA	34.3
Permissible continuous current rating *		
• by aerial laying	A	529
• by burial	A	431
Partial discharge factor for rated voltage, not more than	pC	6
Maximum permissible conductor temperature		
• Continuous	°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	1440
Rated outer diameter of the cable (for reference) **	mm	90
Cable weight (approximate)	kg/km	17570
Rated factory cable length and gross weight of the delivery on the drums ***	m, t	# 25УД-90: 396 • 8.5 # 26УД-100: 457 • 9.8 # 30УД-130: **** 406 • 10.0

#### 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: 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

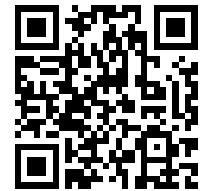
\*\* The external diameter may differ from the rated up to ± 10 %

\*\*\* Отклонение фактической массы брутто от указанного значения может составлять ± 7 %

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

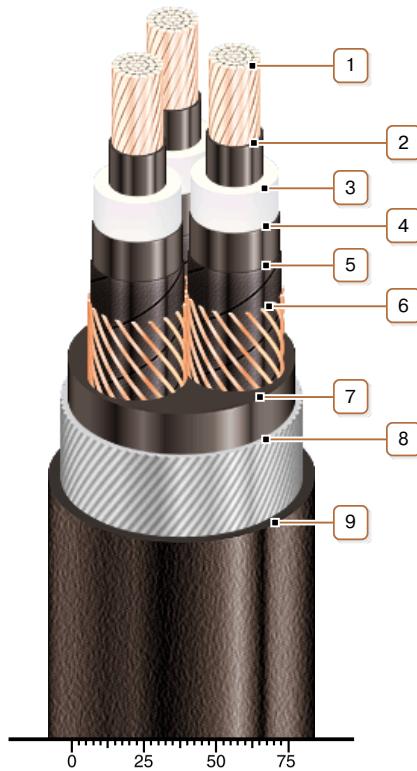


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**ПВЕКВнГд-20 3x240**  
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Three-core power cables with copper conductors, flame-retardant, with XLPE, steel-wire armoured, with PVC compound outer sheath and with low smoke and gas emission



**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. Copper screen
- Note: It is possible to manufacture a cable with a fiber optic module built into the screen, including as a DTS system sensor*
7. Extruded filling of low fire-risk PVC compound
8. Round galvanized steel-wire armour
9. Low fire-risk PVC compound outer sheath

*Note: Conductor twisting is not illustrated*