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# ПвЭВнг-60 1x120 ТУ У 31.3-00214534-060:2011

Power cables with copper conductor, flame-retardant, with XLPE and PVC compound outer sheath

For the cable of this mark correspond the foreign-made analogues:

 $\Pi$ вВнг(B) (RU) •  $\Pi$ вВнг(A) (RU)

Technical cable requirements correspond to IEC 60840

Cables are used for laying:

- in premises, tunnels, ducts, mines, dry soil and outdoor under shelter
- · in bunches

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

Order entry example:

ПвЭВнг-60 1х120/95 (ОМ) ТУ У 31.3-00214534-060:2011

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 conductor.

Order entry example:

ПвЭВнг-60 1х120/95 (г) ТУ У 31.3-00214534-060:2011

Fire safety code in accordance with ДСТУ 4809:2007: ПБ130000000

Products of this mark meet the requirements:

- · single wire cable flame retardance
- · bunched cable flame retardance category B







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### **TECHNICAL SPECIFICATIONS**

Rated voltage	kV	60
Maximum voltage	kV	72.5
Conductor rated area	mm²	120
Minimum screen cross-section	mm²	35
Partial discharge factor for rated voltage, not more than	рС	6
Permissible short circuit current across the screen of	kA	5.1
minimum cross-section		
Maximum permissible short-circuit current in core	kA	17.2
Permissible continious current rating by aerial laying *		
in trefoil formation with double-side screen earthing	Α	405
in trefoil formation with single-side screen earthing or	Α	414
cross screen earthing		
plane with double-side screen earthing	Α	455
plane with single-side screen earthing or cross screen	Α	491
earthing		
Permissible continious current rating by burial *		
in trefoil formation with double-side screen earthing	Α	346
in trefoil formation with single-side screen earthing or	Α	355
cross screen earthing		
plane with double-side screen earthing	Α	342
plane with single-side screen earthing or cross screen	Α	370
earthing		
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	752
Rated outer diameter of the cable (for reference) **	mm	47
Cable weight (approximate)	kg/km	3070
Rated factory cable length and gross weight of the delivery	m, t	# 22УД-60: 814 • 3.4
on the drums ***		

#### Notes:

When ordering it is neccesary to agree the factory length of the product with the manufacturer

<sup>\*</sup> 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 1.0 °K•m/W, laying depth in the ground 1.5 m, while laying in flat formation the distance between cables in clear is equal to the cable diameter, while laying in trefoil formation cables are laid side by side

<sup>\*\*</sup> The external diameter may differ from the rated up to  $\pm$  10 %

<sup>\*\*\*</sup> Отклонение фактической массы брутто от указанного значения может составлять ± 7 %



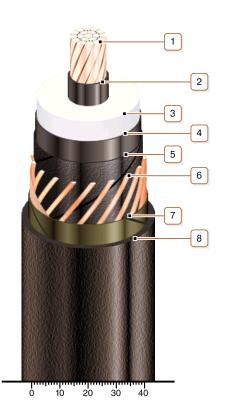




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### **CONSTRUCTION**

1. Copper multiwire compact conductor

Note: It is possible to manufacture cable with sealed 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. Lapping layer of glass tape
- 8. Low flammable PVC compound outer sheath