105101-200010001600

ПвЭВ-20 1x1600
ТУ У 31.3-00214534-017-2003

Power cables with copper conductors, with XLPE and with PVC compound outer sheath

For the cable of this mark correspond the foreign-made analogues:
N2XSY (DE) · 2XSY (DE) · Cu/XLPE/CWS/PVC (GB) · YHKXS (PL) · ПвВ (RU)
Technical cable requirements correspond to IEC 60502-2

Cables are used for laying:
· *in premises, tunnels, ducts, mines, dry soil and outdoor under shelter*
· *single laying*

It is possible to manufacture cables with an integrated fiber-optic module.
Order entry example:
ПвЭВ-20 1x1600/95 (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 conductor.
Order entry example:
ПвЭВ-20 1x1600/95 (г) ТУ У 31.3-00214534-017-2003

Fire safety code in accordance with ДСТУ 4809:2007: ПБ100000000
Products of this mark meet the requirements:
· *single wire cable flame retardance*

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TECHNICAL SPECIFICATIONS

Rated voltage	kV	20
Maximum voltage	kV	24
Number and rated area of conductors	mm^2	1 x 1600
Insulation thikness	mm	5.5
Minimum screen cross-section	mm^2	95
Permissible short circuit current across the screen of minimum cross-section	kA	19.3
Maximum permissible short-circuit current in core	kA	229
Permissible continious current rating *		
· *by aerial laying in trefoil formation*	A	1700
· *by aerial flat laying*	A	2361
· *by burial in trefoil formation*	A	1130
· *by burial flat*	A	978
Partial discharge factor for rated voltage, not more than	pC	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	18690
Rated factory cable length and gross weight of the delivery on the drums ***	m, t	# 30УД-130: **** 382 · 10.0

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 ℃, air temperature 30 ℃, soil temperature 20 ℃, thermal resistivity of soil 1.5 ℃·m/W, laying depth in the soil 0.8 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, shields are earthed on both ends of the line

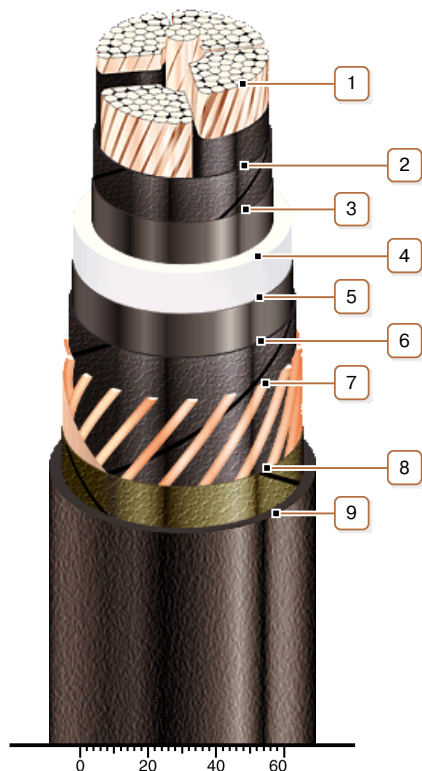*** The external diameter may differ from the rated up to ± 10 %*

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

**** Option delivery on not full drum

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CONSTRUCTION

1. Copper segmentary multiwire compact conductor
Notes:
• It is possible to manufacture cable with sealed conductor.
• Conductor segment twisting is not illustrated

2. Lapping layer of semiconductive swellable tape

3. Inner extruded semiconducting layer

4. XLPE insulation

5. Outer extruded semiconducting layer

6. Lapping layer of semiconductive swellable tape

7. Copper screen

8. Lapping layer of nonwoven cloth tape

9. PVC compound outer sheath