



7, Autogennaya Str., Kharkov, 61099, Ukraine. Phone: (+38-057) 728-1244, 728-1241. Fax: (+38-057) 728-1243, (+38-0572) 946-830 E-mail: market@yuzhcable.com.ua

ПвЭВнгд-20 1x1000 ТУ У 31.3-00214534-017-2003

Power cables with copper conductors, flame-retardant, with XLPE, with PVC compound outer sheath and with low smoke and gas emission

For the cable of this mark correspond the foreign-made analogues: $\Pi B B H \Gamma(B)$ -LS (RU) • $\Pi B B H \Gamma(A)$ -LS (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
- 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 cable with a segmented conductor

It is possible to manufacture cables with an integrated fiber-optic module. Order entry example: ПвЭВнгд-20 1x1000/70 (OM) 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: ПвЭВнгд-20 1x1000/70 (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/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 m²/kg)

• class ДΠκ2 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 μ S/mm)





7, Autogennaya Str., Kharkov, 61099, Ukraine. Phone: (+38-057) 728-1244, 728-1241. Fax: (+38-057) 728-1243, (+38-0572) 946-830 E-mail: market@yuzhcable.com.ua

ПвЭВнгд-20 1x1000 ТУ У 31.3-00214534-017-2003

Power cables with copper conductors, flame-retardant, with XLPE, with PVC compound outer sheath and with low smoke and gas emission

TECHNICAL SPECIFICATIONS

Rated voltage	kV	20
Maximum voltage	kV	24
Number and rated area of conductors	mm²	1 x 1000
Insulation thikness	mm	5.5
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	143
Permissible continious current rating *		
 by aerial laying in trefoil formation 	А	1460
• by aerial flat laying	А	1516
by burial in trefoil formation	А	881
• by burial flat	А	732
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	992
Rated outer diameter of the cable (for reference) **	mm	62
Cable weight (approximate)	kg/km	11490
Rated factory cable length and gross weight of the delivery	m, t	# 22УД-60: 475 • 6.4
on the drums ***		# 25УД-90: **** 733 • 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, thermal resistivity of soil 1.5 °K • 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 \pm 10 %

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

**** Option delivery on not full drum



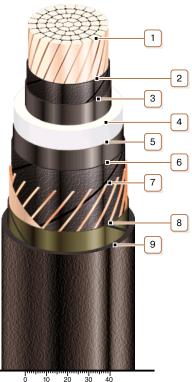


7, Autogennaya Str., Kharkov, 61099, Ukraine. Phone: (+38-057) 728-1244, 728-1241. Fax: (+38-057) 728-1243, (+38-0572) 946-830 E-mail: market@yuzhcable.com.ua

ПвЭВнгд-20 1х1000 ТУ У 31.3-00214534-017-2003



Power cables with copper conductors, flame-retardant, with XLPE, with PVC compound outer sheath and with low smoke and gas emission



CONSTRUCTION

- 1. Copper multiwire compact conductor
- Notes: • It is possible to manufacture cable with a segmented conductor · It is possible to manufacture cable with sealed conductor.
- 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 glass tape
- 9. Low fire-risk PVC compound outer sheath

10 20 30 40