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ПвЭгПнг-HF-150 1x1000 ТУ У 31.3-00214534-060:2011

Power cables with copper conductor, flame-retardant and halogen-free, with XLPE, longitudinal screen sealing and polymer compound outer sheath

For the cable of this mark correspond the foreign-made analogues: N2XSH (DE) • 2XSH (DE) • NUHKXS (PL) Technical cable requirements correspond to IEC 60840

Cables are used for laying:

• in premises, tunnels, ducts, mines, dry soil and outdoor under shelter

• at sites, where low smoke and corrosive 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 extruded semiconductor layer along outer sheath. Order entry example:

ПвЭгПнг-НF-П-150 1х1000/95 ТУ У 31.3-00214534-060:2011

An extruded semiconductor layer along outer sheath ensures the correct testing of cable line with sections of underground laying in polymer pipes.

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

Order entry example:

ПвЭгПнг-HF-150 1x1000/95 (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:

ПвЭгПнг-HF-150 1x1000/95 (г) ТУ У 31.3-00214534-060:2011

Fire safety code in accordance with ДСТУ 4809:2007: ПБ122122000

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/m³)

• class $\square T\kappa 1$ on smoke-forming ability by smouldering of non-metallic elements (coefficient of smoke formation from 50 to 500 m²/kg)

• class ДПк2 on smoke-forming ability by combustion (minimum luminous flux more than 60 %)

• corrosive class Kk2 of combustion products of non-metallic elements (the number of halogen hydrides less than 150 mg/g, pH more than 4.3, specific conductivity less than 10 μ S/mm)





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Power cables with copper conductor, flame-retardant and halogen-free, with XLPE, longitudinal screen sealing and polymer compound outer sheath

TECHNICAL SPECIFICATIONS

Maximum voltagekV170Conductor rated areamm²1000Minimum screen cross-sectionmm²35Partial discharge factor for rated voltage, not more thanpC6Permissible short circuit current across the screen ofkA10.2minimum cross-sectionminimum cross-section143Maximum permissible short-circuit current in corekA143Permissible continious current rating by aerial laying **• in trefoil formation with double-side screen earthingA1180• in trefoil formation with single-side screen earthing or cross screen earthingA1036• plane with double-side screen earthing or cross screen earthingA1036• plane with single-side screen earthing or cross screen earthingA1027Permissible continious current rating by burial ***• in trefoil formation with double-side screen earthing or cross screen earthingA1027• in trefoil formation with double-side screen earthing or cross screen earthingA1106• in trefoil formation with double-side screen earthing or cross screen earthingA1106• plane with double-side screen earthing or cross screen earthingA1106• and with single-side screen earthing or cross screen earthingA1106• and with single-side screen earthing or cross screen earthingA1106• and with double-side screen earthing or cross screen earthingA1106• and with single-side screen earthing or cross screen <th>Rated voltage</th> <th>kV</th> <th>150</th>	Rated voltage	kV	150
Minimum screen cross-sectionmm²35Partial discharge factor for rated voltage, not more thanpC6Permissible short circuit current across the screen ofkA10.2minimum cross-sectionMaximum permissible short-circuit current in corekA143Permissible continious current rating by aerial laying *••• in trefoil formation with double-side screen earthingA1180• in trefoil formation with single-side screen earthing orA1333cross screen earthingA1036• plane with double-side screen earthing or cross screenA1580earthingPermissible continious current rating by burial *•• in trefoil formation with single-side screen earthing orA1027• plane with single-side screen earthing orA1027• plane with single-side screen earthing orA1027cross screen earthingA741• in trefoil formation with single-side screen earthing orA1106earthing1106• plane with double-side screen earthing or cross screenA1106• plane with single-side screen earthing or cross screenA1106• continious°C+90•• continious°C+90• in emergency operation°C+250Operating temperature range°C-60 +50	Maximum voltage	kV	170
Partial discharge factor for rated voltage, not more thanpC6Permissible short circuit current across the screen ofkA10.2minimum cross-sectionMaximum permissible short-circuit current in corekA143Permissible continious current rating by aerial laying *1180• in trefoil formation with double-side screen earthing orA1333cross screen earthingA1036• plane with double-side screen earthing or cross screenA1580earthing1036• plane with single-side screen earthing or cross screenA1580earthing1027Permissible continious current rating by burial *• in trefoil formation with double-side screen earthing orA1027cross screen earthingA1027earthing1027Permissible continious current rating by burial *• in trefoil formation with single-side screen earthing orA1027cross screen earthingA741• plane with single-side screen earthing or cross screenA1106earthing </td <td>Conductor rated area</td> <td>mm²</td> <td>1000</td>	Conductor rated area	mm²	1000
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earthing Permissible continious current rating by burial * • in trefoil formation with double-side screen earthing or • in trefoil formation with single-side screen earthing or cross screen earthing • plane with double-side screen earthing or cross screen • plane with single-side screen earthing or cross screen A 741 • plane with single-side screen earthing or cross screen A 1106 earthing Maximum permissible conductor temperature • Continious • C +90 • in emergency operation • at short circuit Operating temperature range • C -60 +50	plane with double-side screen earthing	А	1036
Permissible continious current rating by burial *• in trefoil formation with double-side screen earthingA887• in trefoil formation with single-side screen earthing or cross screen earthingA1027• plane with double-side screen earthing or cross screenA741• plane with single-side screen earthing or cross screenA1106• continious°C+90• continious°C+90• in emergency operation°C+130• at short circuit°C+250Operating temperature range°C-60 +50	plane with single-side screen earthing or cross screen	А	1580
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 plane with single-side screen earthing or cross screen earthing Maximum permissible conductor temperature Continious C +90 in emergency operation C +130 at short circuit C +250 Operating temperature range C -60 +50 	cross screen earthing		
earthingMaximum permissible conductor temperature• Continious°C• In emergency operation°C• at short circuit°C• Contining temperature range°C• Contining temperature range°C• Contining temperature range°C	plane with double-side screen earthing	А	741
Maximum permissible conductor temperature• Continious° C• in emergency operation° C• at short circuit° C• 250Operating temperature range° C• 60 +50	plane with single-side screen earthing or cross screen	А	1106
• Continious°C+90• in emergency operation°C+130• at short circuit°C+250Operating temperature range°C-60 +50	earthing		
• in emergency operation°C+130• at short circuit°C+250Operating temperature range°C-60 +50	Maximum permissible conductor temperature		
• at short circuit°C+250Operating temperature range°C-60 +50	Continious	°C	+90
Operating temperature range°C-60 +50	in emergency operation	°C	+130
	at short circuit	°C	+250
Minimum bending radius by laving mm 1520	Operating temperature range	°C	-60 +50
minimum bending radius by laying film 1520	Minimum bending radius by laying	mm	1520
Rated outer diameter of the cable (for reference) ** mm 95	Rated outer diameter of the cable (for reference) **	mm	95
Cable weight (approximate) kg/km 18370	Cable weight (approximate)	kg/km	18370
		.	# З0УД-130: **** 389 • 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 °C, air temperature 30 °C, soil temperature 20 °C, load factor 1.0, thermal resistivity of soil 1.0 % 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 ** The external diameter may differ from the rated up to ± 10 %

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

**** Option delivery on not full drum



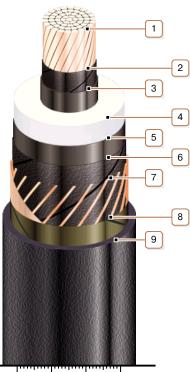


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Power cables with copper conductor, flame-retardant and halogen-free, with XLPE, longitudinal screen sealing and polymer compound outer sheath



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

Note: It is possible to manufacture a cable with a fiber optic module built into the screen, including as a DTS system sensor

8. Lapping layer of glass tape

9. Polymer compound outer sheath:flame-retardant and halogen-free Note: It is possible to manufacture cable with extruded semiconductor layer along outer sheath

0 25 50 75