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# ПвЭгПу-150 1x1600 ТУ У 31.3-00214534-060:2011



Power cables with copper conductor, with XLPE, longitudinal screen sealing and strengthened polyethylene outer sheath

For the cable of this mark correspond the foreign-made analogues:  $\Pi B \Pi y \Gamma$  (RU)

Technical cable requirements correspond to IEC 60840

Cables are used for laying:

- in soil (trenches)
- on difficult route sections, according to the unique specification
- in the air, including cable structures, if provided the additional fire protection

It is possible to manufacture cables with extruded semiconductor layer along outer sheath. Order entry example:

ПвЭгПу-П-150 1х1600/95 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:

ПвЭгПу-150 1х1600/95 (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:  $\Pi B \Im \Gamma \Pi y$ -150 1x1600/95 ( $\Gamma$ ) TY Y 31.3-00214534-060:2011





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## **TECHNICAL SPECIFICATIONS**

Rated voltage	kV	150	
Maximum voltage	kV	170	
Conductor rated area	mm <sup>2</sup>	1600	
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	14.2	
minimum cross-section			
Maximum permissible short-circuit current in core	kA	229	
Permissible continious current rating by aerial laying *			
in trefoil formation with double-side screen earthing	А	1602	
in trefoil formation with single-side screen earthing or	А	1982	
cross screen earthing			
plane with double-side screen earthing	А	1379	
plane with single-side screen earthing or cross screen	А	2364	
earthing			
Permissible continious current rating by burial *			
<ul> <li>in trefoil formation with double-side screen earthing</li> </ul>	A	1092	
<ul> <li>in trefoil formation with single-side screen earthing or</li> </ul>	A	1424	
cross screen earthing			
<ul> <li>plane with double-side screen earthing</li> </ul>	А	865	
<ul> <li>plane with single-side screen earthing or cross screen</li> </ul>	А	1524	
earthing			
Maximum permissible conductor temperature			
Continious	°C	+90	
<ul> <li>in emergency operation</li> </ul>	°C	+130	
at short circuit	°C	+250	
Operating temperature range	°C	-60 +50	
Minimum bending radius by laying	mm	1808	
Rated outer diameter of the cable (for reference) **	mm	113	
Cable weight (approximate)	kg/km	23950	
Notos			

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 °K  $\cdot$  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  $\pm$  10 %

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



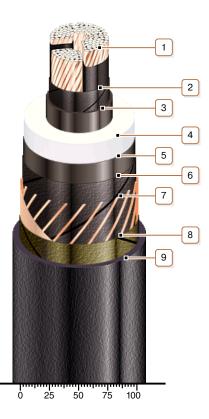


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## CONSTRUCTION

- 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

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 nonwoven cloth tape

### 9. Strengthened polyethylene outer sheath

Note: It is possible to manufacture cable with extruded semiconductor layer along outer sheath