



## **АПВЭОВ(κ)-20 3x300 ТУ У 31.3-00214534-017-2003**

Three-core power cables with aluminium conductors, with XLPE, collective screen and PVC compound outer sheath

---

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:

АПВЭОВ(κ)-20 3x300/70 (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 conductors.

Order entry example:

АПВЭОВ(κ)-20 3x300/70 (r) 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*



## АПвЭ0В(κ)-20 3x300 ТУ У 31.3-00214534-017-2003

Three-core power cables with aluminium conductors, with XLPE, collective screen and PVC compound outer sheath

### TECHNICAL SPECIFICATIONS

Rated voltage	kV	20
Maximum voltage	kV	24
Number and rated area of conductors	mm <sup>2</sup>	3 x 300
Insulation thickness	mm	5.5
Minimum screen cross-section	mm <sup>2</sup>	70
Permissible short circuit current across the screen of minimum cross-section	kA	14.2
Maximum permissible short-circuit current in core	kA	28.2
Permissible continuous current rating *		
• <i>by aerial laying</i>	A	475
• <i>by burial</i>	A	384
Partial discharge factor for rated voltage, not more than	pC	6
Maximum permissible conductor temperature		
• <i>Continuous</i>	°C	+90
• <i>in emergency operation</i>	°C	+130
• <i>at short circuit</i>	°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	1360
Rated outer diameter of the cable (for reference) **	mm	85
Cable weight (approximate)	kg/km	8870
Rated factory cable length and gross weight of the delivery on the drums	m, t	# 25УД-90: 420 • 5.3 # 26УД-100: 604 • 7.2 # 30УД-130: ***806 • 10.0

#### Notes:

When ordering it is necessary 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 1.5 °K·m/W, laying depth in the ground 0.8 m, shields are grounded at both ends of the line

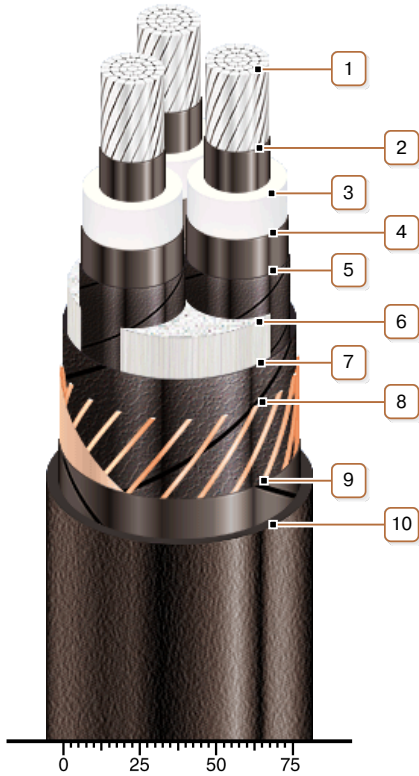
\*\* The external diameter may differ from the rated up to ± 10 %

\*\*\* Option delivery on not full drum



## АПвЭоВ(κ)-20 3x300 ТУ У 31.3-00214534-017-2003

Three-core power cables with aluminium conductors, with XLPE, collective screen and PVC compound outer sheath



### CONSTRUCTION

**1. Aluminium multiwire compacted conductor**

*Note: It is possible to manufacture cable with sealed conductors.*

**2. Inner extruded semiconducting layer**

**3. XLPE insulation**

**4. Outer extruded semiconducting layer**

**5. Lapping layer of semiconductive swellable tape**

**6. Interstitial filler with polypropylene bundles**

**7. Lapping layer of semiconductive swellable tape**

**8. Copper screen**

**9. Lapping layer of synthetic paper**

**10. PVC compound outer sheath**

*Note: Conductor twisting is not illustrated*