

SIGNAL AND BLOCKING CABLES WITH WATER-BLOCKING MATERIALS, IN ALUMINUM SHEATH

СБВБАШв, СБВБАШп, СБВБАБпШп, СБВБАуБпШп
 SBVBAShv, SBVBAShp, SBVBABpShp, SBVBAuBpShp

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TU 16.K71-354-2005

Cable type	OKP codes	Fire safety Class
СБВБАШв	35 6559 1600	O1.8.2.5.4
СБВБАШп	35 6559 1700	O2.8.2.5.4
СБВБАБпШп	35 6559 2000	
СБВБАуБпШп	35 6559 2100	

APPLICATION

The cables are intended for electrical installations of emergency systems, centralized control and blocking systems, fire alarm systems and automatic systems at nominal voltage 380 VAC with frequency 50 Hz or 700 VDC.

Climatic versions: УХЛ and Т, categories 2, 3, 5 acc. to GOST 15150.

СБВБАШв – for laying in conduits, tunnels, cable galleries, in plastic tubing, if the cable is not exposed to considerable tension forces, in areas without high electromagnetic effect.

СБВБАШп – for laying in plastic tubing, in ground, in conditions of aggressive environment, if the cable is not exposed to considerable tension forces, in areas without high electromagnetic effect.

СБВБАБпШп – for laying in grounds of all categories, except for the ones exposed to cryosolic deformations (heaving, frost fissures), in areas with high electromagnetic effect, unnavigable and unfloatable sluggish rivers.

СБВБАуБпШп – the same, and in areas with extra high electromagnetic effect.

DESIGN

Conductor – made of soft round copper wire with nominal cross-sections 0,9 or 1,0 mm.

Conductor insulation – insulating PE compound, nominal wall thickness is 0,55 mm.

Cable core – pairs together with yarns of water-blocking material are stranded into a cable core.

Reference conductor – multi-wire conductor made of soft copper wire with nominal cross-section 0,12 - 0,40 mm² insulated with foamed PE or with discontinuous PE insulation.

Belt wrapping – water-blocking tape, PETF tape, water-blocking tape, PETF tape, water-blocking tape, crepe paper tape, water-blocking tape.

Extruded aluminum sheath (welded aluminum sheath is possible):

- for cable СБВБАуБпШп – reinforced aluminum sheath.

Bedding:

- for cables СБВБАБпШп, СБВБАуБпШп – bitumen, PE sheath, crepe paper, bitumen, crepe paper, bitumen;

Armour:

- for cables СБВБАБпШп, СБВБАуБпШп - two steel tapes;

Outer covering:

- for cables СБВБАШп, СБВБАБпШп, СБВБАуБпШп – bitumen and protective jacket of PE;
- for cable СБВБАШв – bitumen, inner PE sheath and protective jacket of PVC compound;

TECHNICAL PROPERTIES

Property	Current frequency, kHz	Standard value
Conductor resistance per 1000 m and temperature 20°C, Ohm, max.: - for conductor dia. 0,9 mm - for conductor dia. 1,0 mm	DC	28,8 23,3

Insulation resistance per 1000 m and 20°C, MOhm, min.: - of conductors - between reference conductor and aluminum sheath	DC	4000 5
Conductors resistance unbalance in working pair per 1000 m, Ohm, max.: - for conductor dia. 0,9 mm - for conductor dia. 1,0 mm	DC	0,8 0,5
Test voltage during 1 minute, V - between conductors - between all conductors connected together and aluminum sheath	0,05	2500 3000
Mutual capacitance per 1000 m, nF, max:	0,8	70
Attenuation factor per 1000 m and temperature 20°C, dB/km, max., for cables: - with conductor dia. 0,9 mm - with conductor dia. 1,0 mm	0,8	0,95 0,85
NEXT per 300 m, dB, min.: - for 100 % values - for 90 % values	0,8	68,0 72,0
Ideal protective action factor of cable metallic coverings at direct-axis internal voltage 30 V/km, max., for cables: - СБВБАШв - СБВБАБпШп - СБВБАуБпШп	0,05	0,70 0,30 0,10
Insulation resistance per 1000 m and temperature 20°C, MOhm, min.: - between aluminum sheath and armour - of outer covering type Шп type Шв PE protective covering	DC	100,0 10,0 5,0 10,0
Cable transportation conditions considering climatic factors shall comply with storage conditions 6 acc. to GOST 15150-69.		
Cable storage conditions considering climatic factors shall comply with conditions 8 acc. to GOST 15150-69.		
Laying temperature:	from -10°C	
Operation temperature by fixed installation: - for cables with PE sheath - for cables with PVC compound sheath - relative air humidity at temperature up to +35°C	from -50°C to +60°C from -40°C to +60°C up to 98 %	
Bending radius by laying and installation: - not less than 15 max. cable diameters over aluminum sheath		
Warranty operation period Manufacturer guarantees the cable compliance with requirements of above specification if user observes the transportation, storage, laying, installation and operation conditions.	4,5 years	
Service life of cables:	min. 20 years	
Cable factory length: min. 600 m.		
Cable delivery performed on wooden drums acc. to GOST 5151-79.		
Climatic version T – cable СБВБАШв is not manufactured in tropical version.		

Cables СБВБАШв, СБВБАШп, СБВБАБпШп are manufactured with following number of pairs – 3, 4, 7, 10, 12, 14, 16, 18, 21, 24, 27, 30.

Cable СБВБАуБпШп is manufactured with following number of pairs – 7, 10, 12, 14, 16, 19, 21, 24, 27, 30.