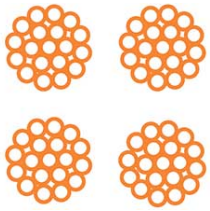
A2XSYT, A2XS2YT

6/10, 12/20, 20/35 kV

Medium Voltage Power Cables

Aerial bundled cables with PE (SY) and PVC (S2Y) sheath



Construction:

Conductor	: round, stranded and compacted aluminium, class 2.
Semi-conductive layer	: semi-conductive XLPE compound.
Insulation	: XLPE type XI 1.
Semi-conductive layer	: semi-conductive XLPE compound around insulation.
Wrapping	: layer of semi-conductive tape helically wrapped.
Metal screen	: CU wires concentrically laid and one contact of CU tape with thickness of 0.1 mm.
Optional metal screen	: one or more overlapping CU tapes with min. thickness of 0.1 mm.
Separator	: polyester tape helically wrapped.
PE sheath (A2XSYT)	: PE compound, black color for each phase conductor and steel.
PVC sheath (A2XS2YT)	: PVC compound, black color for each phase conductor and steel.
Messenger (for 10, 20 kV)	: galvanized steel messenger 50 mm². Mass of zinc coated.
Messenger (for 35 kV)	: galvanized steel messenger 70 mm² .
Cores assembly	: three single-phase cables twisted around a steel messenger as an aerial bundled cable.

Standards:

Cable	: HD 620.S2, SRPS N.C5.231.
Conductors	: EN 60228.
Conductor shape	: RM - class 2 conductor acc. to IEC 60228 and VDE 0295.

Applications:

These cables are suitable for middle voltage power distribution in distribution networks (6/10(12);12/20(24);20/35(40) kV). They may be put on the overhead lines in old and residential areas. Provides a shortcut to electrification without affecting the townscape and its environs. This cables can be strung safely on the same poles with low-voltage and telecommunication cables.

Any other sections available upon request.

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Technical data and tests:

Operating voltage	: 6/10; 12/20; 20/35 kV.
Test voltage = 2.5Uo(HD.620.S2), AC (50Hz) - 5 min	: 6/10 kV = 15 kV; 12/20 kV = 30 kV; 20/35 kV = 50 kV.
Highest system voltage, Umax	: 6/10 kV = max. 12 kV; 12/20 kV = max. 24 kV; 20/35 kV = max. 40 kV.
Conductor resistance at 20° C	: according to EN 60228 class 2.
Core temperature, max	: 90° C in continuous operation.
Max. short circuit temperature	: 250° C , not more than 5 sec.
Overload temperature	: 130° C / 100h per year max.
Laying temperature	: no less than - 5° C.
Level of partial discharge	: no more than 2pC.
Bending radius, min	: 15 x D.
Dielectric factor of losses, 50 Hz	: at 20°C, (0.8-3)x10-4.
Spec.volume insulation resistance	: at 20°C, min 10^{15} Ω x cm.
Intensity of electric field	: max. 6.9-5.3 kV/mm.
Tests for cable	: according to HD 620.S2.
Test for messenger	: according to HD 620.S2.
Max. tensile force during laying	: for Cu conductors - 50 N/mm^2. for Al conductors - 30 N/mm^2.
Breaking load of messenger, min	: for 50 mm^2 = 60 kN. for 70 mm^2 = 82 kN.
Modulus of elasticity of messenger	: 175 kN/mm^2
Packing length on wooden drums	: min. 200 m.

Available constructions:

Single Al core	:1x(25 - 150)mm^2
Standard cross section of metallic screen for conductor sizes	:
from 25 mm^2 to 120 mm^2	: 16mm^2;
from 150 mm^2 to 300 mm^2	: 25mm^2;
from 400 mm^2 to 630 mm^2	: 35mm^2.

Any other sections available upon request.

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