N2XS(FL)2Y

Medium Voltage Cables

DESCRIPTION

The N2XS(FL)2Y cable is a longitudinally watertight medium-voltage cable with a copper conductor, XLPE insulation, and a tightly bonded Al/PE sheath. It offers maximum operational safety for critical infrastructures and provides reliable protection against penetrating moisture.

TECHNICAL DATA

Al Foil	Yes
CE-Conformity	yes
Colour of insulation	uncoloured
Colour of sheath	black
Conductive tape below screen	Yes
Conductor	Copper
Copper wire screen and tape	Yes
CPR class	Fca
Flame retardant	no
Insulation	XLPE
Maximal operating conductor temperature (°C)	+90
Maximal short-circuit temperature (°C)	+250
Minimal storage temperature (°C)	-35
Minimal temperature for laying (°C)	-20
Non conducting tape above screen	Yes
Packaging	wooden or metal drums
Sheath	PE

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CROSS-SECTION DATA — 6/10 kV

Voltage	Test voltage	Operating temperature range
6/10 kV	21 kV	-35-+90 °C
Conductor temperature (max.)	**Short-circuit temperature (max.)**	**Minimum laying temperature**
+90 °C	+250 °C	-20 °C
Minimum storage temperature	**CPR class**	**Flame retardant**
-35 °C	Fca	no

Designation	Cond.	C [uF/km]	DI [mm]	RI [Ohm/km]	Wi [mm]	Ibl [A]	Ibe [A]	Ik [kA]	Wm [mm]	Rbv [mm]	Ø [mm]	G [kg/km]
1x50/16	Cu	0.24	16.3	0.387	3.4	238	220	7.1	2.1	520	26	1010
1x70/16	Cu	0.28	17.9	0.268	3.4	294	268	10	2.1	560	28	1238
1x95/16	Cu	0.3	19.4	0.193	3.4	358	320	13.6	2.1	580	29	1495
1x120/16	Cu	0.34	20.9	0.153	3.4	413	363	17.1	2.1	620	31	1773
1x150/25	Cu	0.36	22.3	0.124	3.4	468	405	21.4	2.1	640	32	2119
1x185/25	Cu	0.4	23.9	0.099	3.4	535	456	26.4	2.1	680	34	2483
1x240/25	Cu	0.44	26.4	0.075	3.4	631	526	34.3	2.1	720	36	3073
1x300/25	Cu	0.48	28.8	0.06	3.4	722	591	42.9	2.1	780	39	3737
1x400/35	Cu	0.54	31.4	0.047	3.4	827	662	57.2	2.1	840	42	4697
1x500/35	Cu	0.61	34.6	0.037	3.4	949	744	71.4	2.1	880	44	5729

CROSS-SECTION DATA — 12/20 kV

Voltage	Test voltage	Operating temperature range
12/20 kV	42 kV	-35 - + 90 / -35 - +90 °C
Conductor temperature (max.)	**Short-circuit temperature (max.)**	**Minimum laying temperature**
+90 °C	+250 °C	-20 °C
Minimum storage temperature	**CPR class**	**Flame retardant**
-35 °C	Fca	no

Designation	Cond.	C [uF/km]	DI [mm]	RI [Ohm/km]	Wi [mm]	Ibl [A]	Ibe [A]	Ik [kA]	Wm [mm]	Rbv [mm]	Ø [mm]	G [kg/km]
1x50/16	Cu	0.17	20.5	0.387	5.5	239	222	7.1	2.1	600	30	1166
1x70/16	Cu	0.19	22.1	0.268	5.5	297	271	10	2.1	640	32	1409
1x95/16	Cu	0.21	23.6	0.193	5.5	361	323	13.6	2.1	660	33	1675
1x120/16	Cu	0.23	25.1	0.153	5.5	416	367	17.1	2.1	700	35	1968
1x150/25	Cu	0.25	26.5	0.124	5.5	470	409	21.4	2.1	720	36	2320
1x185/25	Cu	0.27	28.1	0.099	5.5	538	461	26.4	2.1	760	38	2697
1x240/25	Cu	0.3	30.6	0.075	5.5	634	532	34.3	2.1	800	40	3303
1x300/25	Cu	0.32	33	0.06	5.5	724	599	42.9	2.1	860	43	3978

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Designation	Cond.	C [uF/km]	Dl [mm]	Rl [Ohm/km]	Wi [mm]	Ibl [A]	Ibe [A]	Ik [kA]	Wm [mm]	Rbv [mm]	Ø [mm]	G [kg/km]
1x400/35	Cu	0.36	35.6	0.047	5.5	829	671	57.2	2.1	900	45	4925
1x500/35	Cu	0.4	38.8	0.037	5.5	953	754	71.4	2.1	980	49	6006

CROSS-SECTION DATA — 18/30 kV

Voltage	Test voltage	Operating temperature range
18/30 kV	63 kV	-35-+90 °C
Conductor temperature (max.)	**Short-circuit temperature (max.)**	**Minimum laying temperature**
+90 °C	+250 °C	-20 °C
Minimum storage temperature	**CPR class**	**Flame retardant**
-35 °C	Fca	no

Designation	Cond.	C [uF/km]	Dl [mm]	Rl [Ohm/km]	Wi [mm]	Ibl [A]	Ibe [A]	Ik [kA]	Wm [mm]	Rbv [mm]	Ø [mm]	G [kg/km]
1x50/16	Cu	0.13	25.5	0.387	8	241	225	7.1	2.1	700	35	1405
1x70/16	Cu	0.15	27.1	0.268	8	299	274	10	2.1	740	37	1646
1x95/16	Cu	0.16	28.6	0.193	8	363	327	13.6	2.1	760	38	1926
1x120/16	Cu	0.17	30.1	0.153	8	418	371	17.1	2.1	800	40	2227
1x150/25	Cu	0.19	31.5	0.124	8	472	414	21.4	2.1	820	41	2590
1x185/25	Cu	0.2	33.1	0.099	8	539	466	26.4	2.1	860	43	2975
1x240/25	Cu	0.22	35.6	0.075	8	635	539	34.3	2.1	900	45	3594
1x300/25	Cu	0.24	38	0.06	8	725	606	42.9	2.1	960	48	4300
1x400/35	Cu	0.26	40.6	0.047	8	831	680	57.2	2.1	1020	51	5290
1x500/35	Cu	0.29	43.8	0.037	8	953	765	71.4	2.4	1080	54	6403