N2XS(F)2Y

Medium Voltage Cables

DESCRIPTION

}>Designed for high-performance network environmentsThe N2XS(F)2Y complies with common standards DIN VDE 0276-620, HD 620 S2 and IEC 60502, and is suitable for installation indoors, in cable ducts, outdoors, in water, underground, and on cable trays. This cable proves its strengths especially in utility grids, industrial plants, and power stations - wherever durability, watertightness, and safety are essential.Structure and technical characteristicsInside is a bare, multi-stranded copper conductor (Class 2), surrounded by an extruded XLPE insulation with inner and bonded outer conductive layer. A longitudinally watertight, conductive tape, a copper wire screen with counter helix, and an additional longitudinally watertight layer ensure the design's integrity. The black PE outer sheath (Type DMP2) provides high mechanical strength.Applications and benefitsThe N2XS(F)2Y is suitable for underground installation, resistant to aggressive environmental conditions, and withstands temperatures up to +90 °C in continuous operation and +250 °C in short-circuit conditions. It is free from silicone and cadmium-containing substances and, thanks to its partial discharge-free design, particularly suitable for networks with the highest demands on electrical operational safety and longevity.

TECHNICAL DATA

CPR class	Fca	**Flame retardant**	no
Maximal operating conductor temperature (°C)	+90 °C	**Maximal short-circuit temperature (°C)**	+250 °C
Minimal storage temperature (°C)	-35 °C	**Minimal temperature for laying (°C)**	-20 °C
Minimum sheath thickness (mm)	2.1 mm	**Nominal insulation thickness (mm)**	5.5 mm
Operating temperature range (°C)	-35-+90 °C	**Rated voltage (kV)**	12/20 kV

Shape of conductor	RM	Test voltage (kV)	42 kV

CROSS-SECTION DATA — 6/10 kV

Cores & CS	LF	LD mm	ID mm	DI mm	MWD mm	AD mm	BR	G kg	RI Ohm	BK	SBL 30	SBE 20
1x50/16	RM	8.2	3.4	16.3	2.1	26	375	928	0.387	7.1	238	220
1x70/16	RM	9.8	3.4	17.9	2.1	26	390	1155	0.268	10	294	268
1x95/16	RM	11.3	3.4	19.4	2.1	28	420	1410	0.193	13.6	358	320
1x120/16	RM	12.8	3.4	20.9	2.1	30	450	1683	0.153	17.1	413	363
1x150/25	RM	14.2	3.4	22.3	2.1	31	465	2052	0.124	21.4	468	405
1x185/25	RM	15.8	3.4	23.9	2.1	32	480	2384	0.099	26.4	535	456
1x240/25	RM	18.3	3.4	26.4	2.1	35	525	2964	0.075	34.3	631	526
1x300/25	RM	20.7	3.4	28.8	2.1	37	555	3624	0.06	42.9	722	591
1x400/35	RM	23.3	3.4	31.4	2.1	40	600	4575	0.047	57.2	827	662
1x500/35	RM	26.5	3.4	34.6	2.1	43	645	5598	0.037	71.4	949	744

CROSS-SECTION DATA — 12/20 kV

Cores & CS	LF	LD mm	ID mm	DI mm	MWD mm	AD mm	BR	G kg	RI Ohm	BK	SBL 30	SBE 20
1x35/16	RM	7.2	5.5	19.5	2.1	28	420	949	0.524	5	200	189
1x50/16	RM	8.2	5.5	20.5	2.1	29	435	1079	0.387	7.1	239	222
1x70/16	RM	9.8	5.5	22.1	2.1	31	465	1315	0.268	10	297	271
1x95/16	RM	11.3	5.5	23.6	2.1	32	480	1580	0.193	13.6	361	323
1x120/16	RM	12.8	5.5	25.1	2.1	34	510	1862	0.153	17.1	416	367
1x150/25	RM	14.2	5.5	26.5	2.1	35	525	2212	0.124	21.4	470	409
1x185/25	RM	15.8	5.5	28.1	2.1	37	555	2585	0.099	26.4	538	461
1x240/25	RM	18.3	5.5	30.6	2.1	39	585	3181	0.075	34.3	634	532
1x300/25	RM	20.7	5.5	33	2.1	42	630	3851	0.06	42.9	724	599
1x400/35	RM	23.3	5.5	35.6	2.1	44	660	4795	0.047	57.2	829	671
1x500/35	RM	26.5	5.5	38.8	2.1	47	705	5873	0.037	71.4	953	754

CROSS-SECTION DATA — 18/30 kV

Cores & CS	LF	LD mm	ID mm	DI mm	MWD mm	AD mm	BR	G kg	RI Ohm	BK	SBL 30	SBE 20
1x50/16	RM	8.2	8	25.5	2.1	34	510	1292	0.387	7.1	241	225
1x70/16	RM	9.8	8	27.1	2.1	36	540	1542	0.268	10	299	274
1x95/16	RM	11.3	8	28.6	2.1	37	555	1818	0.193	13.6	363	327
1x120/16	RM	12.8	8	30.1	2.1	39	585	2110	0.153	17.1	418	371
1x150/25	RM	14.2	8	31.5	2.1	40	600	2473	0.124	21.4	472	414
1x185/25	RM	15.8	8	33.1	2.1	42	630	2854	0.099	26.4	539	466

1x240/25	RM	18.3	8	35.6	2.1	44	660	3468	0.075	34.3	635	539
1x300/25	RM	20.7	8	38	2.1	47	705	4164	0.06	42.9	725	606
1x400/35	RM	23.3	8	40.6	2.1	49	735	5131	0.047	57.2	831	680
1x500/35	RM	26.5	8	43.8	2.4	53	795	6235	0.037	71.4	953	765