N2XS(FL)2Y

6/10 kV, 12/20 kV, 18/30 kV, Copper conductor, XLPE insulated, PE sheath, longitudinally and laterally waterproof

TECHNICAL DATA

Medium voltage cable acc. to DIN VDE 0276-620, HD 620 S2, IEC 60502

Temperature range	during installation -20°C
Permissible operating temperature of the conductor	+90°C
Short circuit temperature at the conductor	+250°C (Short circuit temperature max. 5 s)
Nominal voltage	see table
Operating voltage	see table
Test voltage	see table
Minimum bending radius	15x Outer-Ø

CABLE STRUCTURE

- Copper conductor bare, stranded acc. to DIN VDE 0295 Class 2 / IEC 60228 Class 2
- Inner conductive layer
- Core insulation: XLPE acc. to HD 620 S2 (compound type DIX8)
- Outer conductive layer
- Longitudinally waterproof, conductive wrapping
- Screen: braiding of copper wires with one or two counter helix conductors
- Longitudinally waterproof wrapping
- Aluminium wrapping, firmly welded to the outer sheath
- Outer sheath: PE acc. to HD 620 S2 (compound type DMP2)
- Sheath colour: black

PROPERTIES

- for outdoor use
- direct burial
- the materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers

APPLICATION

Installation primarily for power utility grids and in cable ducts, outdoors, underground and in water, and also on pallets for manufacturing plants, switchgear and power stations. The resistant Al/PE-laminated sheathing acts as a cross water barrier. It inhibits the diffusion of water. In case ofsheathing damage, water impact is contained at the flaw. The cable can be severely mechanically stressed during installation and operation. The internal conductive layer between conductor and VPE insulation and the adherent external conductive layer on the VPE insulation guarantees a design with high operational safety and no partial discharge.

NOTES

- rm = round, stranded conductor
- the conductor is metrically (mm²) constructed, AWG numbers are approximated, and are for reference only
- the PE outer sheath is not flame retardant acc. to DIN EN 60332-1-2
- for maximum operational reliability, the core insulation and the outer conductive layer are simultaneously extruded and permanently welded together. For installation, a peeling tool is recommended.

6/10 kV

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Operating voltage[1] max. kV	Test voltage kV	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
33054	1 x 35 rm / 16	2	12	21	28.0	518.0	860.0
33055	1 x 50 rm / 16	1	12	21	30.0	662.0	1000.0
33056	1 x 70 rm / 16	2/0	12	21	32.0	854.0	1350.0
33057	1 x 95 rm / 16	3/0	12	21	33.0	1094.0	1680.0
33058	1 x 120 rm / 16	4/0	12	21	34.0	1334.0	2070.0
33059	1 x 150 rm / 25	300 kcmil	12	21	36.0	1723.0	2350.0
33060	1 x 185 rm / 25	350 kcmil	12	21	38.0	2059.0	2710.0
33061	1 x 240 rm / 25	500 kcmil	12	21	40.0	2587.0	3260.0
38049	1 x 300 rm / 25	600 kcmil	12	21	42.0	3163.0	3850.0
38050	1 x 400 rm / 35	750 kcmil	12	21	46.0	4234.0	4740.0
38051	1 x 500 rm / 35	1000 kcmil	12	21	49.0	5194.0	5800.0
38052	1 x 630 rm / 35	1250 kcmil	12	21	51.0	6442.0	7120.0

12/20 kV

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Operating voltage[1] max. kV	Test voltage kV	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
38053	1 x 35 rm / 16	2	24	42	33.0	518.0	1020.0
33066	1 x 50 rm / 16	1	24	42	35.0	662.0	1170.0

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12/20 kV

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Operating voltage[1] max. kV	Test voltage kV	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
33067	1 x 70 rm / 16	2/0	24	42	36.0	854.0	1470.0
33083	1 x 95 rm / 16	3/0	24	42	38.0	1094.0	1860.0
33069	1 x 120 rm / 16	4/0	24	42	39.0	1334.0	2260.0
33070	1 x 150 rm / 25	300 kcmil	24	42	41.0	1723.0	2550.0
33071	1 x 185 rm / 25	350 kcmil	24	42	43.0	2059.0	2920.0
33072	1 x 240 rm / 25	500 kcmil	24	42	45.0	2587.0	3490.0
33073	1 x 300 rm / 25	600 kcmil	24	42	47.0	3163.0	4090.0
33074	1 x 400 rm / 35	750 kcmil	24	42	50.0	4234.0	5010.0
33075	1 x 500 rm / 35	1000 kcmil	24	42	54.0	5194.0	6090.0
38054	1 x 630 rm / 35	1250 kcmil	24	42	55.0	6442.0	7440.0

18/30 kV

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Operating voltage[1] max. kV	Test voltage kV	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
34312	1 x 50 rm / 16	1	36	63	36.0	662.0	1400.0
38055	1 x 70 rm / 16	2/0	36	63	40.0	854.0	1710.0
38056	1 x 95 rm / 16	3/0	36	63	42.0	1094.0	2110.0
38057	1 x 120 rm / 16	4/0	36	63	44.0	1334.0	2520.0
38058	1 x 150 rm / 25	300 kcmil	36	63	45.0	1723.0	2830.0
34313	1 x 185 rm / 25	350 kcmil	36	63	47.0	2059.0	3210.0
38059	1 x 240 rm / 25	500 kcmil	36	63	49.0	2587.0	3790.0
34314	1 x 300 rm / 25	600 kcmil	36	63	52.0	3163.0	4430.0
34315	1 x 400 rm / 35	750 kcmil	36	63	55.0	4234.0	5390.0
38060	1 x 500 rm / 35	1000 kcmil	36	63	58.0	5194.0	6500.0
38061	1 x 630 rm / 35	1250 kcmil	36	63	60.0	6442.0	7870.0

1) max. permissible operating voltage three-phase alternating current (AC) conductor/conductor