(N)A2XS(FL)2Y 19/33KV CPR F

Aluminum medium voltage cables 33kV

Fca CPR

Medium voltage cables for rated voltages from 6 kV (Um = 7,2 kV) up to 33 kV (Um = 36 kV) used in outdoor applications such as industrial installations and electrical stations. The cables are suitable for laying in ground, in trench or in ducts, in water, free in air or indoors. The ingress of water in case of a damaged outer sheath is limited by the longitudinal and transversal watertight screen area.
Conductor shape round, class 2 = stranded; black outer sheath

STANDARDS AND CERTIFICATIONS

RoHS REACH

EN 60228	Conductors of insulated cables
IEC 60502-2	Cables for rated voltages from 6 kV (Um = 7,2 kV) up to 30 kV (Um = 36 kV)
EN 60754-1	Test on gases evolved during combustion of materials from cables. Halogen acid gas content.

CABLE DESIGN

Conductor material	Aluminium
Core insulation material	XLPE
Screen construction	Wire screen and counterhelix tape
Screen material	Copper, bare
Longitudinal water blocking screen	Yes
Longitudinal water blocking cable	Yes
Longitudinal water blocking construction	Water swellable tape(s)
Radial water blocking cable	Yes
Material outer sheath	Polyethylene (PE)
Cable shape	Round

ELECTRICAL & THERMAL PARAMETERS

Nominal voltage U0 [V]	19,000
Nominal voltage U [V]	33,000
Test voltage [kV]	63
Rated voltage U0/U (Um)	19/33 (36) kV
Max. conductor temperature [°C]	90
Max. conductor temperature at short circuit [°C]	250
Laying temperature (min) [°C]	-20
Laying temperature (max) [°C]	50

CHEMICAL PROPERTIES

CPR reaction to fire	Fca
Resistant to UV	Yes
UV resistant	Yes
Silicon free	Yes
Lead free	Yes

CHARACTERISTICS

Outdoor installation	Yes
Underground installation	Yes
Suitable as installation cable	Yes
Bending radius (rule)	During installing: 15 x D single-core cables

SUSTAINABILITY COMMITMENT

Our commitment to a low-carbon future remains unwavering as we strive to create sustainable solutions while upholding quality standards. We prioritize sustainability and environmental protection in our daily operations, collaborating with local communities to ensure workplace safety and safeguard the areas we operate in.

Sustainability and environmental responsibility is evident also in our **packaging** solutions across the CEE region. We use fully recyclable drum cover foils to minimize environmental impact. Our packaging for rings is made from 30% recycled materials, supporting a circular economy. Additionally, our boxes are made from recyclable, environment-friendly cardboard, promoting eco-conscious choices. By choosing Prysmian, you are not only selecting high-quality products but also contributing to a greener future.

Check for more details about our sustainability commitment here: Sustainability: report and responsibility.

CABLE PROPERTIES

Basic construction	SAP code	Nominal thickness insulation [mm]	Nominal diameter over insulation [mm]	Nominal outer diameter [mm]	Cable weight [kg/km]	Bending radius, during laying (min) [mm]	Conductor resistance at 20° C [Ohm/km]	Short circuit current conductor (1sec) [kA]	Short circuit current screen (1sec) [kA]	DOP number
1x120RM/16	17010100187	8	30.4	38.1	1,275	572	0.253	11.6	2.6	
1x150RM/25	20396841	8	31	39.8	1,469	600	0.206	14.5	6.7	1003520
1x150RM/35	17170001071	8	31	39.8	1,562	600	0.206	14.5	8.5	1003520
1x240RM/25	20406878	8	35	44	1,855	660	0.125	23.1	7.1	1003520
1x240RM/35	17170001072	8	35	44	1,954	660	0.125	23.1	8.7	1003520
1x300RM/25	20396831	8	37.7	46.7	2,132	704	0.1	28.8	7.2	1003520
1x400RM/35	20406955	8	40.6	50	2,563	750	0.0778	38.3	9.3	1003520
1x500RM/35	20396710	8	43.6	53.2	2,973	798	0.0605	47.8	9.4	1003520
1x630RM/35	20396832	8	46.9	56.8	3,489	851	0.0469	60.2	9.7	1003520
1x800RM/35	20414885	8	51.1	61	4,132	915	0.0367	76.5	10	1003520
1x1000RM/35	17170001065	8	55.3	65.7	4,855	986	0.0291	95.3	10.2	1003520
1x1200RM/35	17170001066	8	59.2	69.8	5,497	1,047	0.0247	114	10.4	1003520

CURRENT CARRYING CAPACITY

Cross-section (mm²)	Direct in ground trefoil (A)	Direct in ground flat spaced (A)	Air trefoil (A)	Air flat spaced (A)
70	186	192	230	278
95	221	229	280	338
120	252	260	324	391
150	281	288	368	440
185	317	324	424	504
240	367	373	502	593
300	414	419	577	677
400	470	466	673	769
500	535	524	781	884
630	608	578	903	996
800	681	630	1029	1105
1000	753	681	1165	1219
1200	885	790	1274	1305

Ground temperature: 20°C; Air temperature: 30°C
Depth of laying: 0,8 m; Soil resistivity, moist: 1,5 K.m/W
Screen bonded at both ends

ADDITIONALTECHNICAL PARAMETERS

(N)A2XS(FL)2Y 1200/35 19/33 kV

- I = 788,3 A
- C = 0,408 µF/km
- L = 0,293 mH/km
- RDC(20˚C) = 0,0247 Ω/km
- R+ = 0,0442 Ω/km
- X+ = 0,0920 Ω/km
- R0 = 0,3420 Ω/km
- X0 = 0,0405 Ω/km
- Z = R + jX
- XC = 7,803 kΩ/km

Inputs:

- Soil resistivity: 1,5Kxm/W;
- Soil temperature: 20˚C;
- Air temperature: : 35˚C;
- Single circuit;
- Trefoil formation;
- Directly buried;
- Metallic screen connected solidly bonded (at both ends);
- Load factor: 1;
- Laying depth: 0,8 m for MV and 0,5 m for LV.