

# C2XH , N2XH

**Cablu de energie cu izolatie in polietilena reticulata si manta fara halogen**



**Standard de fabricatie:** SR HD 604 S1, IEC 60502-1;

**Tensiune nominala U<sub>0</sub>/U(U<sub>m</sub>):** 0.6/1(1.2) kV

**Tensiunea de incercare:** 4 kV, 50 Hz, timp de 5 minute.

## Domeniul de utilizare

Cablurile sunt destinate pentru instalatii electrice fixe in centrale electrice, in cladiri publice, gari, aeroporturi, statiuni de metrou, supermarketuri, sali de spectacole, spitale, muzeu etc. La ardere cablurile nu degaja gaze toxice si corosive si au emisie redusa de fum.

Cablurile se pot instala in locuri umede, dar nu direct in apa sau in pamant.

**Temperatura conductorului in functionarea de durata:**  
-30 °C ÷ +90°C

**Temperatura maxima a conductorului in scurtcircuit (max 5 s):** +250°C

**Temperatura minima a cablului la montaj (masurata pe manta):** -5°C

## Conductor

Conductor cupru, conf SR EN 60228

## Izolatia

Polietylена reticulata (XLPE), tip DIX 3

## Manta

Poliolefina, tip HM4 fara halogen.

Caburile sunt cu intarziere marita la propagarea flacarii conf. SR EN 60332-3-24/ cat.C si sunt certificate conf. SR EN 50575: clasele B2ca-s1,d0,a1 / B2ca-s1,d1,a1 ; Corozivitatea gazelor de ardere conf. SR EN 60754-2

- ✓ pH : ≥ 4.3
- ✓ Conductivitatea: < 2.5 μS\*cm<sup>-1</sup>

\* Densitatea fumului conf. SR EN 61034-1

\* Permeabilitatea lumii: ≥ (50-70) %

## Marcaj pe manta

SC ELECTROPLAST SA, simbol cablu, tensiune de lucru, an de fabricatie, B2ca-s1,d0,a1 / B2ca-s1,d1,a1

## Raza minima de curbura la instalare

15 x diametrul cablului- cablu monofilar

12 x diametrul cablului- cablu multifilar

## Forța maxima de tractiune la pozare

50 N/mm<sup>2</sup>

## Cod de culori

- 1 conductor: negru sau galben-verde
- 2 conductoare: albastru, maro
  - galben-verde, negru, pt sect >10mm<sup>2</sup>
- 3 conductoare-maro,negru,gri
  - galben-verde, albastru, maro
- 4 conductoare: -albastru, maro, negru, gri
  - galben-verde, maro, negru, gri
- 5 conductoare: -albastru, maro, negru, gri, negru
  - galben-verde, albastru, maro, negru, gri

\* Mai mult de 5 conductoare:

- conductoare negre numerotate
- galben-verde, conductoare negre numerotate

**Crosslinked insulated (XLPE) halogen free sheathed power cables**

**Reference standard:** SR HD 604 S1; IEC 60502-1;

**Rated voltage U<sub>0</sub>/U(U<sub>m</sub>):** 0.6/1(1.2) kV

**Test voltage:** 4 kV, 50 Hz, for 5 minutes.

## Applications

Cables are designed for fixed wirings in power stations, public buildings, train stations, airports, subway stations, supermarkets, concert/ theatre halls, hospitals, museums etc. They do not release toxic or corrosive gases during combustion and have low smoke emission.

The cables can be laid in wet environments, but not directly in the water or under the earth.

**Conductor temperature in long-run operation:** -30°C ÷ +90°C

**Max. conductor temperature in short-circuit (max 5 s):**  
+250°C

**Minimum cable temperature during installation (measured on sheath surface):** -5°C

## Conductor

Copper conductor, according to SR EN 60228

## Insulation

Crosslinked polyethylene (XLPE), DIX 3 type.

## Sheath

Polyolefin, HM4 type.

Extra flame retardant cables, according to EN 60332-3-24/C category, they are SR EN 50575 certified: class B2ca-s1,d0,a1 / B2ca-s1,d1,a1 ;

Corrosivity of gases evolved acc. to SR EN 60754-2

- ✓ pH: ≥ 4.3
- ✓ Conductivity: < 2.5 μS\*cm<sup>-1</sup>

\* Smoke density according SR EN 61034-1

\* Light permeability: ≥(50-70) %

## Sheath marking

SC ELECTROPLAST SA, cable symbol , operational voltage, manufacture year, B2ca-s1,d0,a1 / B2ca-s1,d1,a1

## Min. bending radius at installation

15 x cable diameter- single-core cable

12 x cable diameter- multi-core cable

## Max. tensile strain at installation

50 N/mm<sup>2</sup>

## Color coding

- 1 conductor: -black or yellow-green
- 2 conductors- blue, brown
  - yellow-green, black for sect>10 mm<sup>2</sup>
- 3 conductors- brown, black, grey
  - yellow-green, blue, brown
- 4 conductors- blue, brown, black, grey
  - yellow-green, brown, black, grey
- 5 conductors- blue, brown, black, grey, black
  - yellow-green, blue, brown, black, grey

\* More than 5 conductors:

- numbered black conductors
- yellow-green, numbered black conducto

## C2XH , N2XH

**Cablu de energie cu izolatie din polietilena reticulata si manta fara halogen**

**Crosslinked insulated (XLPE) halogen free sheathed power cables**



Tipodimensiune cablu <i>Cable size</i>	Tip conductor <i>Cond. type</i>	Grosime radiala izolatie <i>Insulation's radial thickness</i>	Grosime radiala manta <i>Sheath's radial thickness</i>	Rezistenta electrica max, la 20°C <i>Max. resistance at 20°C</i>	Diametru exterior <i>Outer diameter</i>	Masa inf <i>Mass inf</i>	Performanta la flacara (conf. SR EN 50575) <i>CPR fire performance (acc. to SR EN 50575)</i>
		mm	mm	Ω/km	mm	kg/km	
1x16	re	0.7	1.2	1.15	10.5	228	B2ca-s1,d1,a1
1x25	rm	0.9	1.2	0.727	12.5	279	B2ca-s1,d1,a1
1x35	rm	0.9	1.2	0.524	13.5	369	B2ca-s1,d1,a1
1x50	rm	1.0	1.2	0.387	15.0	492	B2ca-s1,d1,a1
1x70	rm	1.0	1.2	0.268	17.0	687	B2ca-s1,d1,a1
1x95	rm	1.1	1.3	0.193	16.2	929	B2ca-s1,d1,a1
1x120	rm	1.2	1.3	0.153	17.9	1145	B2ca-s1,d1,a1
1x150	rm	1.4	1.3	0.124	19.6	1391	B2ca-s1,d1,a1
1x185	rm	1.6	1.4	0.0991	22.0	1817	B2ca-s1,d1,a1
1x240	rm	1.7	1.4	0.0754	24.4	2332	B2ca-s1,d1,a1
1x300	rm	1.8	1.5	0.0601	26.9	2906	B2ca-s1,d1,a1
1x400	rm	2.0	1.6	0.0470	31.8	3898	B2ca-s1,d1,a1
2x1.5	re	0.7	1.2	12.1	8.7	115	B2ca-s1,d0,a1
2x2.5	re	0.7	1.2	7.41	9.5	146	B2ca-s1,d0,a1
2x2.5	rm	0.7	1.2	7.41	10.0	164	B2ca-s1,d0,a1
2x4	re	0.7	1.2	4.61	10.4	189	B2ca-s1,d0,a1
2x6	re	0.7	1.2	3.08	11.4	246	B2ca-s1,d0,a1
2x10	re	0.7	1.2	1.83	13.0	351	B2ca-s1,d0,a1
2x16	re	0.7	1.2	1.15	14.8	496	B2ca-s1,d0,a1
2x25	rm	0.9	1.3	0.727	18.8	780	B2ca-s1,d0,a1
2x35	rm	0.9	1.4	0.524	21.0	1026	B2ca-s1,d0,a1
3x1.5	re	0.7	1.2	12.1	9.0	128	B2ca-s1,d0,a1
3x2.5	re	0.7	1.2	7.41	9.8	167	B2ca-s1,d0,a1
3x2.5	rm	0.7	1.2	7.41	10.3	185	B2ca-s1,d0,a1
3x4	re	0.7	1.2	4.61	10.7	220	B2ca-s1,d0,a1
3x4	rm	0.7	1.2	4.61	11.4	243	B2ca-s1,d0,a1
3x6	re	0.7	1.2	3.08	11.8	292	B2ca-s1,d0,a1
3x6	rm	0.7	1.2	3.08	12.7	324	B2ca-s1,d0,a1
3x10	re	0.7	1.2	1.83	13.5	428	B2ca-s1,d0,a1
3x16	re	0.7	1.3	1.15	15.6	624	B2ca-s1,d0,a1
3x16+10	re	0.7/0.7	1.3	1.15/1.83	17.1	711	B2ca-s1,d0,a1
3x25	rm	0.9	1.3	0.727	19	963	B2ca-s1,d0,a1
3x25+16	rm/re	0.9/0.7	1.4	0.727/1.15	21.1	1144	B2ca-s1,d0,a1
3x35	sm	0.9	1.4	0.524	19.1	1100	B2ca-s1,d1,a1
3x35+16	rm/re	0.9/0.7	1.4	0.524/1.15	22.9	1518	B2ca-s1,d0,a1
3x50	sm	1.0	1.8	0.387	24.1	1519	B2ca-s1,d1,a1
3x70	sm	1.1	1.9	0.268	28.7	2140	B2ca-s1,d1,a1
3x95	sm	1.1	1.9	0.193	30.5	2844	B2ca-s1,d1,a1
3x95+50	sm/sm	1.1/1.0	1.9	0.193; 0.387	30.9	3276	B2ca-s1,d1,a1
3x120	sm	1.2	2.0	0.153	33.5	3519	B2ca-s1,d1,a1
3x120+70	sm/sm	1.2/1.1	2.1	0.153/0.268	34.3	4150	B2ca-s1,d1,a1

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**Crosslinked insulated (XLPE) halogen free sheathed power cables**



Tipodimensiune cablu <i>Cable size</i>	Tip conductor <i>Cond. type</i>	Grosime radiala izolatie <i>Insulation's radial thickness</i>	Grosime radiala manta <i>Sheath's radial thickness</i>	Rezistenta electrica max, la 20°C <i>Max. resistance at 20°C</i>	Diametru exterior <i>Outer diameter</i>	Masa inf <i>Mass inf</i>	Performanta la flacara (conf. SR EN 50575) <i>CPR fire performance (acc. to SR EN 50575)</i>
		mm	mm	Ω/km	mm	kg/km	
3x150	sm	1.4	2.2	0.124	37.5	4334	B2ca-s1,d1,a1
3x150+70	sm/sm	1.4/1.1	2.1	0.124/0.268	35.7	4903	B2ca-s1,d1,a1
3x150+95	sm/sm	1.4/1.1	2.1	0.124/0.193	35.7	5130	B2ca-s1,d1,a1
3x185	sm	1.6	2.3	0.0991	41.3	5453	B2ca-s1,d1,a1
3x185+95	sm/sm	1.6/1.1	2.3	0.0991/0.193	42.3	6293	B2ca-s1,d1,a1
3x240	sm	1.7	2.4	0.0754	44.3	6977	B2ca-s1,d1,a1
3x240+120	sm/sm	1.7/1.2	2.6	0.0754/0.153	51.9	8147	B2ca-s1,d1,a1
4x1.5	re	0.7	1.2	12.1	9.9	157	B2ca-s1,d0,a1
4x2.5	re	0.7	1.2	7.41	10.8	206	B2ca-s1,d0,a1
4x2.5	rm	0.7	1.2	7.41	11.4	229	B2ca-s1,d0,a1
4x4	re	0.7	1.2	4.61	11.9	278	B2ca-s1,d0,a1
4x4	rm	0.7	1.2	4.61	12.6	305	B2ca-s1,d0,a1
4x6	re	0.7	1.2	3.08	13.1	371	B2ca-s1,d0,a1
4x10	re	0.7	1.3	1.83	15.3	558	B2ca-s1,d0,a1
4x16	re	0.7	1.3	1.15	17.4	806	B2ca-s1,d0,a1
4x25	rm	0.9	1.4	0.727	22.2	1262	B2ca-s1,d0,a1
4x25+16	rm;re	0.9/0.7	1.4	0.727/1.15	24	1490	B2ca-s1,d0,a1
4x35	sm	0.9	1.4	0.524	21.3	1440	B2ca-s1,d1,a1
4x35+16	rm;re	0.9/0.7	1.5	0.524/1.15	27.3	1999	B2ca-s1,d0,a1
4x50	sm	1.0	1.5	0.387	26.5	1986	B2ca-s1,d1,a1
4x50+25	rm;rm	1.0/0.9	1.6	0.387/0.727	30.9	2634	B2ca-s1,d0,a1
4x70	sm	1.1	1.5	0.268	29.7	2741	B2ca-s1,d1,a1
4x70+35	rm;rm	1.1/0.9	1.7	0.268/0.524	35.9	3696	B2ca-s1,d0,a1
4x95	sm	1.1	1.6	0.193	33.3	3711	B2ca-s1,d1,a1
4x95+50	rm;rm	1.1/1.0	1.8	0.193/0.387	40.7	4963	B2ca-s1,d0,a1
4x120	sm	1.2	1.7	0.153	36.9	4609	B2ca-s1,d1,a1
4x120+70	rm;rm	1.2/1.1	1.8	0.153/0.268	45.3	6207	B2ca-s1,d0,a1
4x150	sm	1.4	1.8	0.124	40.7	5672	B2ca-s1,d1,a1
4x150+70	rm;rm	1.4/1.1	1.9	0.124/0.268	50.1	7493	B2ca-s1,d0,a1
4x185	sm						
4x240	sm	1.7	1.9	0.0754	50.5	9216	B2ca-s1,d1,a1
5x1.5	re	0.7	1.2	12.1	10.6	188	B2ca-s1,d0,a1
5x2.5	re	0.7	1.2	7.41	11.7	249	B2ca-s1,d0,a1
5x2.5	rm	0.7	1.2	7.41	12.4	276	B2ca-s1,d0,a1
5x4	re	0.7	1.2	4.61	12.9	337	B2ca-s1,d0,a1
5x4	rm	0.7	1.2	4.61	13.7	372	B2ca-s1,d0,a1
5x6	re	0.7	1.2	3.08	14.3	453	B2ca-s1,d0,a1
5x6	rm	0.7	1.2	3.08	15.4	505	B2ca-s1,d0,a1
5x10	re	0.7	1.3	1.83	16.6	683	B2ca-s1,d0,a1
5x16	re	0.7	1.3	1.15	19.1	990	B2ca-s1,d0,a1

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**Cablu de energie cu izolatie din polietilena reticulata si manta fara halogen**

**Crosslinked insulated (XLPE) halogen free sheathed power cables**

Tipodimensiune cablu <i>Cable size</i>	Tip conductor <i>Cond. type</i>	Grosime radiala izolatie <i>Insulation's radial thickness</i>	Grosime radiala manta <i>Sheath's radial thickness</i>	Rezistenta electrica max, la 20°C <i>Max. resistance at 20°C</i>	Diametru exterior <i>Outer diameter</i>	Masa inf <i>Mass inf</i>	Performanta la flacara (conf. SR EN 50575) <i>CPR fire performance (acc. to SR EN 50575)</i>
		mm	mm	Ω/km	mm	kg/km	
5x25	rm	0.9	1.4	0.727	24.4	1553	B2ca-s1,d0,a1
5x35	rm	0.9	1.5	0.524	27.3	2082	B2ca-s1,d0,a1
5x50	rm	1.0	1.6	0.387	31.3	2791	B2ca-s1,d0,a1
5x70	rm	1.1	1.7	0.268	36.3	3886	B2ca-s1,d0,a1
5x95	rm	1.1	1.8	0.193	41.1	5380	B2ca-s1,d0,a1
5x120	rm	1.2	1.8	0.153	45.7	6675	B2ca-s1,d0,a1
5x150	rm	1.4	1.9	0.124	50.5	8202	B2ca-s1,d0,a1
7x1.5	re	0.7	1.2	12.1	11.5	223	B2ca-s1,d0,a1
7x2.5	re	0.7	1.2	7.41	12.6	301	B2ca-s1,d0,a1
7x4	re	0.7	1.2	4.61	14.0	415	B2ca-s1,d0,a1
8x1.5	re	0.7	1.2	12.1	12.5	288	B2ca-s1,d0,a1
8x2.5	re	0.7	1.3	7.41	14.9	425	B2ca-s1,d0,a1
8x4	re	0.7	1.3	4.61	16.5	546	B2ca-s1,d0,a1
10x1.5	re	0.7	1.2	12.1	13.4	336	B2ca-s1,d0,a1
10x2.5	re	0.7	1.3	7.41	15.9	497	B2ca-s1,d0,a1
10x4	re	0.7	1.3	4.61	17.8	647	B2ca-s1,d0,a1
12x1.5	re	0.7	1.3	12.1	14.0	373	B2ca-s1,d0,a1
12x2.5	re	0.7	1.3	7.41	16.4	544	B2ca-s1,d0,a1
12x4	re	0.7	1.3	4.61	18.3	717	B2ca-s1,d0,a1
14x1.5	re	0.7	1.3	12.1	14.7	415	B2ca-s1,d0,a1
14x2.5	re	0.7	1.3	7.41	17.2	606	B2ca-s1,d0,a1
14x4	re	0.7	1.3	4.61	19.2	806	B2ca-s1,d0,a1

