

# N2XH , C2XH

**Cablu de energie cu izolatie din polietilena reticulata si manta fara halogen cu rezistenta marita la propagarea flacarii**

**Power cable with XLPE insulation and halogen free sheath (Low Smoke Zero Halogens)**

Standard	Aprobari /Approvals	Ambalare / Packaging
SR HD 604 S1; IEC 60502-1, ST 139 Rev 2 :2022	Certificat de omologare tehnica feroviara Nr.176, 177/2022, AFER Buc Railway Technical Approval Certificate No 176,177//2022, AFER Buc Romania	Tambur/ drum

CARACTERISTICI		CHARACTERISTICS		
<b>Utilizare:</b> Cablurile sunt destinate pentru instalatii electrice fixe in centrale electrice, in cladiri publice, gari, aerogari, statii de metrou, supermarketuri, sali de spectacole, spitale 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		<b>Applicability :</b> The cables are designed for fixed wirings in power stations, public buildings, train stations, airports, underground stations, supermarkets, concert / theater halls, hospitals etc. The cables do not release toxic or corrosive fumes during combustions and have low smoke emission. The cables can be laid in wet environments, but not directly in the water or under the earth.		
Tensiune nominala U <sub>0</sub> /U	0.6/1 kV	Rated voltage U <sub>0</sub> /U	0.6/1 kV	
Tensiune de incercare	3.5 kV ca sau 8.4 kV cc, 5 min	Test voltage	3.5 kV ac or 8.4 kV dc, 5 min	
Rezistivitatea de volum specifica, min,	la 20 °C -10 <sup>15</sup> la 90 °C -10 <sup>12</sup>	Volume resistivity at , min	at 20 °C -10 <sup>15</sup> at 90 °C -10 <sup>12</sup>	
Constanta rezistentei de izolatie	90 °C:min 3.67 MΩ*km	Insulation resistance constant at	90 °C:min 3.67 MΩ*km	
Temperatura minima de instalare pe cablu	-5°C	The minim temperature of de cable during installation	-5°C	
Temperatura maxima de lucru	+90°C	Max.permissible operating temperature	+90°C	
Temperatura maxima de scurt-circuit	+250°C (max 5 sec)	Max. short-circuit temperature	+250°C (max 5 sec)	
Temperatura de utilizare normala	-30°C ++90°C	Normal operational temperature range	-30°C + +90°C	
Temperatura minima de montaj	-5°C	Temperature during installation	-5°C	
Temperatura masurata pe manta	-10°C ++90°C	Temperature measured on the sheath	-10°C + +90°C	
Conformitate RoHS	Da	RoHS compliancy	Yes	
Conformitate REACH	Da	REACH compliancy	Yes	
Conductor de cupru	Conductor unifilar (re), conductor multifilar (rm), sau sector-multifilar (sm), conf SR EN 60228	Copper conductor	Solid conductor (re), concentrically stranded (rm), or sector-shaped (sm) according to SR EN 60228	
Izolatie	Polietilena reticulata (XLPE)	Insulation	Crosslinked polyethylene (XLPE)	
Umplutura	Material plastic fara halogeni	Filling	Halogen-free plastic	
Manta exterioara	Poliiolefina fara halogen, tip HM4;  Cablurile sunt cu intarziere marita la propagarea flacarii conf. SR EN 60332-3-24/ cat. C Corozivitatea gazelor de ardere conf SR EN 60754-2: * pH ≥ 4.3 * Conductivitatea ≤ 10 μS/mm Densitatea fumului, conf. SR EN 61034-2. permeabilitatea luminii ≥ (50-70) %	Outer sheath	Halogen-free polyolefine, HM4 type.  The cables are extra flame retardant according to EN 60332-3-24/ Category C Corrosivity of gases evolved according SR EN 60754-2: * pH ≥ 4.3 * Conductivity ≤ 10 μS/mm Smoke density according SR EN 61034-2. Light permeability : ≥ (50-70) %	
Marcaj pe manta	SC ELECTROPLAST SA, simbol cablu, tensiune de lucru, luna, an de fabricatie, marcaj de lungime. Exemplu de marcaj : N2XH 4x2,5 mm <sup>2</sup> 0.6/1 kV ELECTROPLAST SA 00/0000 0000	Sheath marking	SC ELECTROPLAST SA, cable symbol, operational voltage, months, manufacture year, length marking Example: N2XH 4x2,5 mm <sup>2</sup> 0.6/1 kV ELECTROPLAST SA 00/0000 0000	
Raza minima de curbura la instalare	Min. 12 x diametrul cablului	Min. bending radius at installation	Min. 12 x cable diameter	
Forta maxima de tractiune la pozare	50 N/mm <sup>2</sup>	Max. tensile strain during installation	50 N/mm <sup>2</sup>	
Cod de culori conf SR HD 308 S2 (nr. de conductoare)	1	negru / galben-verde	1	black / yellow-green
	2	albastru, maro / galben-verde, negru, pt sect >10mm <sup>2</sup>	2	blue, brown yellow-green, black for sect>10 mm <sup>2</sup>
	3	maro, negru, gri / galben-verde, albastru, maro	3	brown, black, grey yellow-green, blue, brown
	4	albastru, maro, negru, gri / galben-verde, maro, negru, gri	4	blue, brown, black, grey yellow-green, brown, black, grey
	5	albastru, maro, negru, gri, negru / galben-verde, albastru, maro, negru, gri	5	blue, brown, black, grey, black yellow-green, blue, brown, black, grey
>5	conductoare negre numerotate sau galben-verde si conductoare numerotate	>5	numbered black conductors or yellow-green and numbered conductors	

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Power cable with XLPE insulation and halogen free sheath (Low Smoke Zero Halogens)

Tipodimensiune cablu <i>Cable size</i>	Tip conductor <i>Cond. type</i>	Grosime radiala izolatie <i>Insulation's radial thickness</i> mm	Grosime radiala manta <i>Sheath's radial thickness</i> mm	Rezistenta electrica max, la 20°C <i>Max. resistance at 20°C</i> Ω/km	Diametru exterior <i>Outer diameter</i> mm
1x4	re	0.7	1.2	4.61	7.6
1x6	re	0.7	1.2	3.08	8.2
1x10	re	0.7	1.2	1.83	9.2
1x16	re	0.7	1.2	1.15	10.5
1x25	rm	0.9	1.2	0.727	12.5
1x35	rm	0.9	1.2	0.524	13.5
1x50	rm	1.0	1.2	0.387	15.0
1x70	rm	1.1	1.2	0.268	17.0
1x95	rm	1.1	1.3	0.193	16.2
1x120	rm	1.2	1.3	0.153	17.9
1x150	rm	1.4	1.3	0.124	19.6
1x185	rm	1.6	1.4	0.0991	22.0
1x240	rm	1.7	1.4	0.0754	24.4
1x300	rm	1.8	1.5	0.0601	26.9
1x400	rm	2.0	1.5	0.0470	30.2
1x630	rm	2.4	1.7	0.0283	40.3
2x1.5	re	0.7	1.2	12.1	8.7
2x2.5	re	0.7	1.2	7.41	9.5
2x2.5	rm	0.7	1.2	7.41	10.0
2x4	re	0.7	1.2	4.61	10.4

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2x6	re	0.7	1.2	3.08	11.4
2x10	re	0.7	1.2	1.83	13.0
2x16	re	0.7	1.2	1.15	14.8
2x25	rm	0.9	1.3	0.727	18.8
2x35	rm	0.9	1.4	0.524	21.0
3x1.5	re	0.7	1.2	12.1	9.0
3x2.5	re	0.7	1.2	7.41	9.8
3x2.5	rm	0.7	1.2	7.41	10.3
3x4	re	0.7	1.2	4.61	10.7
3x4	rm	0.7	1.2	4.61	11.4
3x6	re	0.7	1.2	3.08	11.8
3x6	rm	0.7	1.2	3.08	12.7
3x10	re	0.7	1.2	1.83	13.5
3x16	re	0.7	1.3	1.15	15.6
3x16+10	re	0.7/0.7	1.3	1.15/1.83	17.1
3x25	rm	0.9	1.3	0.727	19
3x25+16	rm/re	0.9/0.7	1.4	0.727/1.15	21.1
3x35	sm	0.9	1.4	0.524	19.1
3x35+16	rm/re	0.9/0.7	1.4	0.524/1.15	22.9
3x50	sm	1.0	1.8	0.387	24.1

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3x50+25	sm/rm	1.0/0.9	1.8	0.387/0.727	24.1
3x70	sm	1.1	1.9	0.268	28.7
3x70+35	sm/rm	1.1/0.9	1.8	0.268/0.524	27.3
3x95	sm	1.1	1.9	0.193	30.5
3x95+50	sm/rm	1.1/1.0	1.9	0.193; 0.387	30.9
3x120	sm	1.2	2.0	0.153	33.5
3x120+70	sm/rm	1.2/1.1	2.1	0.153/0.268	34.3
3x150	sm	1.4	2.2	0.124	37.5
3x150+70	sm/rm	1.4/1.1	2.1	0.124/0.268	35.7
3x150+95	sm/rm	1.4/1.1	2.1	0.124/0.193	35.7
3x185	sm	1.6	2.3	0.0991	41.3
3x185+95	sm/rm	1.6/1.1	2.3	0.0991/0.193	42.3
3x240	sm	1.7	2.4	0.0754	44.3
3x240+120	sm/rm	1.7/1.2	2.6	0.0754/0.153	51.9
4x1.5	re	0.7	1.2	12.1	9.9
4x2.5	re	0.7	1.2	7.41	10.8
4x2.5	rm	0.7	1.2	7.41	11.4
4x4	re	0.7	1.2	4.61	11.9
4x4	rm	0.7	1.2	4.61	12.6
4x6	re	0.7	1.2	3.08	13.1

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4x10	re	0.7	1.3	1.83	15.3
4x16	re	0.7	1.3	1.15	17.4
4x25	rm	0.9	1.4	0.727	22.2
4x25+16	rm;re	0.9/0.7	1.4	0.727/1.15	24
4x35	sm	0.9	1.4	0.524	21.3
4x35+16	rm;re	0.9/0.7	1.5	0.524/1.15	27.3
4x50	sm	1.0	1.5	0.387	26.5
4x50+25	rm;rm	1.0/0.9	1.6	0.387/0.727	30.9
4x70	sm	1.1	1.5	0.268	29.7
4x70+35	rm;rm	1.1/0.9	1.7	0.268/0.524	35.9
4x95	sm	1.1	1.6	0.193	33.3
4x95+50	rm;rm	1.1/1.0	1.8	0.193/0.387	40.7
4x120	sm	1.2	1.7	0.153	36.9
4x120+70	rm;rm	1.2/1.1	1.8	0.153/0.268	45.3
4x150	sm	1.4	1.8	0.124	40.7
4x150+70	rm;rm	1.4/1.1	1.9	0.124/0.268	50.1
4x185	sm	1.6	1.8	0.0991	44.7
4x185+95	rm;rm	1.4/1.1	2.0	0.0991/0.193	56.2
4x240	sm	1.7	1.9	0.0754	50.5
5x1.5	re	0.7	1.2	12.1	10.6

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5x2.5	re	0.7	1.2	7.41	11.7
5x2.5	rm	0.7	1.2	7.41	12.4
5x4	re	0.7	1.2	4.61	12.9
5x4	rm	0.7	1.2	4.61	13.7
5x6	re	0.7	1.2	3.08	14.3
5x6	rm	0.7	1.2	3.08	15.4
5x10	re	0.7	1.3	1.83	16.6
5x16	re	0.7	1.3	1.15	19.1
5x25	rm	0.9	1.4	0.727	24.4
5x35	rm	0.9	1.5	0.524	27.3
5x50	rm	1.0	1.6	0.387	31.3
5x70	rm	1.1	1.6	0.268	36.1
7x1.5	re	0.7	1.2	12.1	11.5
7x2.5	re	0.7	1.2	7.41	12.6
7x4	re	0.7	1.2	4.61	14.0
8x1.5	re	0.7	1.2	12.1	12.5
8x2.5	re	0.7	1.3	7.41	14.9
8x4	re	0.7	1.3	4.61	16.5
10x1.5	re	0.7	1.2	12.1	13.4
10x2.5	re	0.7	1.3	7.41	15.9

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Tipodimensiune cablu <i>Cable size</i>	Tip conductor <i>Cond. type</i>	Grosime radiala izolatie <i>Insulation's radial thickness</i> mm	Grosime radiala manta <i>Sheath's radial thickness</i> mm	Rezistenta electrica max, la 20°C <i>Max. resistance at 20°C</i> Ω/km	Diametru exterior <i>Outer diameter</i> mm
10x4	re	0.7	1.3	4.61	17.8
12x1.5	re	0.7	1.3	12.1	14.0
12x2.5	re	0.7	1.3	7.41	16.4
12x4	re	0.7	1.3	4.61	18.3
14x1.5	re	0.7	1.3	12.1	14.7
14x2.5	re	0.7	1.3	7.41	17.2
14x4	re	0.7	1.3	4.61	19.2
19x1.5	re	0.7	1.3	12.1	16.4
19x2.5	re	0.7	1.3	7.41	19.1
19x4	re	0.7	1.4	4.61	21.6

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### Forma constructiva :



1	Conductoare rotunde, unifilare sau multifilare, din cupru	1	Monowire or multi wire, solid or stranded copper conductors
2	Conductoare izolate	2	Insulated conductors
3	Invelis comun extrudat sau din benzi	3	Filler
4	Manta exterioara	4	Outer sheath