

# FRNC power cable N2XH-J/-O (B2ca)



**Application:** Low-smoke, zero-halogen, flame-retardant power cable. For fixed indoor installation as well as in concrete, but not for direct burial in ground or application in water.

## Construction and technical data:

<b>CPR-classification according to EN 50575:</b>	B2ca
<b>Standard:</b>	VDE 0276-604
<b>Conductor material:</b>	copper, bare
<b>Conductor construction:</b>	class 1, from 25 sqmm class 2
<b>Insulation:</b>	XLPE 2X11
<b>Sheathing material:</b>	FRNC-compound HM4
<b>Colour of outer sheath:</b>	black
<b>Flame-retardant:</b>	DIN EN 50266-2-4/VDE 0482-266-2-4/IEC 60332-3-24 (cat. C)
<b>Smoke density:</b>	DIN EN 61034/IEC 61034
<b>Halogen-free:</b>	DIN EN 50267/IEC 60754
<b>Max. temperature at conductor, °C:</b>	90 °C
<b>Permitted outer cable temperature, fixed, °C:</b>	-30 - +70 °C
<b>Permitted outer cable temperature, moved, °C:</b>	-5 - +70 °C
<b>Bending radius, fixed installation, multicore:</b>	12 x Ø
<b>Bending radius, fixed installation, singlecore:</b>	15 x Ø



*The products and information presented here are for technical calculation only. They are subject to technical progress and in no way represent the ability of shipment. Outer diameters are approximately.*

**N2XH-J (B2ca)****Nominal voltage U<sub>o</sub>:** 0.6 kV**Nominal voltage U:** 1 kV**Maximum permitted operating voltage in** 1.2 kV**three-phase systems:****Test voltage:** 4 kV**Protective conductor:** yes**Core identification:** colours acc. to VDE 0293 (HD 308);

more than 5 cores: gn-ye + numbers

part no.	part name		RI [Ohm/km]	Wi [mm]	I <sub>bl</sub> [A]	I <sub>k</sub> [kA]	R <sub>bv</sub> [mm]	Ø [mm]	F <sub>zv</sub> [N]	Cu	G [kg]
014904	03X1.5	RE	12.1	0.7	24	0.21	144	9.5	225	43	179
014905	03X2.5	RE	7.41	0.7	32	0.36	156	11	375	72	225
014906	03X4	RE	4.61	0.7	42	0.57	168	11.5	600	115	291
014907	03X6	RE	3.08	0.7	53	0.86	180	12.8	900	173	371
014908	03X10	RE	1.83	0.7	74	1.43	192	14.5	1500	288	523
014909	03X16	RE	1.15	0.7	98	2.29	240	16.8	2400	461	773
014910	03X35	SM	0.524	0.9	162	5.01	300	25	5250	1008	1600
015728	03X35	RM	0.524	0.9	162	5.01	289	24.1	5250	1008	1418
015791	03X50	SMv	0.387	1	197	7.15	312	23.8	7500	1440	1632
014911	03X25/16	RM	0.727	0.9	133	3.58	288	23.5	3750	874	1200
014912	03X35/16	SM	0.524	0.9	162	5.01	312	25.5	5250	1162	1640
015777	03X50/25	RMv	0.387	1	197	7.15	344	28.7	7500	1680	2143
014913	03X50/25	SMv	0.387	1	197	7.15	384	28	7500	1680	2200
015331	03X95/50	SMv	0.19	1.1	308	13.59	492	35.5	14250	3216	3900
014914	03X95/50	SMv	0.193	1.1	308	13.59	492	35.5	14250	3216	3900
014915	03X120/70	SMv	0.153	1.2	359	17.16	540	38.8	18000	4128	4800
014916	03X150/70	SMv	0.124	1.4	412	21.45	588	45.5	22500	4992	5750
014917	03X185/95	SMv	0.0991	1.6	475	26.46	660	47	27750	6240	7200
014918	03X240/120	SMv	0.0754	1.7	564	34.32	744	53	36000	8064	9150
014919	04X1.5	RE	12.1	0.7	24	0.21	156	10.5	300	58	208
014920	04X2.5	RE	7.41	0.7	32	0.36	168	11.5	500	96	265
014921	04X4	RE	4.61	0.7	42	0.57	168	13	800	154	352
014922	04X6	RE	3.08	0.7	53	0.86	192	13.8	1200	230	454
014923	04X10	RE	1.83	0.7	74	1.43	216	16.2	2000	384	647
014924	04X16	RE	1.15	0.7	98	2.29	240	18.4	3200	614	964
014925	04X25	RM	0.727	0.9	133	3.58	312	25	5000	960	1446
014926	04X35	SM	0.524	0.9	162	5.01	348	27.4	7000	1344	1906
014927	04X50	SMv	0.387	1	197	7.15	384	28	10000	1920	2530
014928	04X70	SMv	0.268	1.1	250	10.01	444	35	14000	2688	3418
014929	04X95	SMv	0.193	1.1	308	13.59	492	37.5	19000	3648	4574
014930	04X120	SMv	0.153	1.2	359	17.16	576	43	24000	4608	5300
014931	04X150	SMv	0.124	1.4	412	21.45	600	47	30000	5760	6350
014932	04X185	SMv	0.0991	1.6	475	26.46	636	51.5	37000	7104	7800
014933	04X240	SMv	0.0754	1.7	564	34.32	696	55.5	48000	9216	10300
015211	04X300	SMv	0.0601	1.8	649	42.9	697	58.1	60000	11520	12416
014934	05X1.5	RE	12.1	0.7	24	0.21	180	11.5	375	72	243
014935	05X2.5	RE	7.41	0.7	32	0.36	180	12.1	625	120	310
014936	05X4	RE	4.61	0.7	42	0.57	192	14	1000	192	413
014937	05X6	RE	3.08	0.7	53	0.86	204	14.5	1500	288	536
014938	05X10	RE	1.83	0.7	74	1.43	228	17.5	2500	480	776
014939	05X16	RE	1.15	0.7	98	2.29	264	20	4000	768	1165
014940	05X25	RM	0.727	0.9	133	3.58	300	26.5	6250	1200	1766
014941	05X35	RM	0.524	0.9	162	5.01	346	30	8750	1680	2155

part no.	part name		RI [Ohm/km]	Wi [mm]	Ibl [A]	Ik [kA]	Rbv [mm]	Ø [mm]	Fzv [N]	Cu	G [kg]
014942	05X50	RMv	0.387	1	197	7.15	384	35	12500	2400	2569
015147	05X70	RMv	0.268	1.1	250	10.01	480	40	17500	3360	3621
015148	05X95	RMv	0.193	1.1	308	13.59	540	45	23750	4560	5438
015261	05X120	RMv	0.153	1.2	359	17.16	576	48	30000	5760	6774
014943	07X1.5	RE	12.1	0.7	24	0.21	168	13.5	525	101	206
014944	07X6	RE	3.08	0.7	53	0.86	191	16	2100	403.2	569
014945	10X1.5	RE	12.1	0.7	24	0.21	204	14.5	750	144	287
014946	12X1.5	RE	12.1	0.7	24	0.21	204	15	900	173	328
014947	14X1.5	RE	12.1	0.7	24	0.21	204	16.5	1050	202	383
014948	19X1.5	RE	12.1	0.7	24	0.21	228	19	1425	274	484
014949	24X1.5	RE	12.1	0.7	24	0.21	264	22	1800	346	603
014950	30X1.5	RE	12.1	0.7	24	0.21	276	23	2250	432	730
014951	40X1.5	RE	12.1	0.7	24	0.21	312	26	3000	576	1200
014952	07X2.5	RE	7.41	0.7	32	0.36	180	14.5	875	168	287
014953	10X2.5	RE	7.41	0.7	32	0.36	216	17.5	1250	240	472
014954	12X2.5	RE	7.41	0.7	32	0.36	216	18	1500	288	472
014955	14X2.5	RE	7.41	0.7	32	0.36	228	19	1750	336	670
014956	19X2.5	RE	7.41	0.7	32	0.36	252	21	2375	456	840
014957	24X2.5	RE	7.41	0.7	32	0.36	300	25	3000	576	1050
014958	30X2.5	RE	7.41	0.7	32	0.36	312	26	3750	720	1230
014959	07X4	RE	4.61	0.7	42	0.57	180	15	1400	269	530
014960	12X4	RE	4.61	0.7	42	0.57	234	21	2400	461	820
014961	01X4	RE	4.61	0.7		0.57	135	6.5	200	38	140
014962	01X6	RE	3.08	0.7		0.86	150	10	300	58	160
014963	01X10	RE	1.83	0.7		1.43	165	11	500	96	210
014964	01X16	RE	1.15	0.7		2.29	128	8.5	800	154	270
015366	01X16	RM	1.15	0.7		2.29	132	8.8	800	154	192
014965	01X25	RM	0.727	0.9		3.58	158	10.5	1250	240	380
014966	01X35	RM	0.524	0.9		5.01	173	11.5	1750	336	490
014967	01X50	RMv	0.387	1		7.15	195	13	2500	480	620
014968	01X70	RMv	0.268	1.1		10.01	218	14.5	3500	672	830
014969	01X95	RMv	0.193	1.1		13.59	247	16.5	4750	912	1200
014970	01X120	RMv	0.153	1.2		17.16	330	19	6000	1152	1250
014971	01X150	RMv	0.124	1.4		21.45	300	20	7500	1440	1700
014972	01X185	RMv	0.0991	1.6		26.46	345	23	9250	1776	2200
014973	01X240	RMv	0.0754	1.7		34.32	375	25	12000	2304	2750
015174	01X300	RMv	0.0601	1.8	697	42.9	413	27.5	15000	2880	2954

## N2XH-O (B2ca)

**Nominal voltage U<sub>o</sub>:** 0.6 kV

**Nominal voltage U:** 1 kV

**Maximum permitted operating voltage in** 1.2 kV

**three-phase systems:**

**Test voltage:** 4 kV

**Protective conductor:** no

**Core identification:** colours acc. to HD 308;

more than 5 cores: numbers

part no.	part name		RI [Ohm/km]	Wi [mm]	Ibl [A]	Ik [kA]	Rbv [mm]	Ø [mm]	Fzv [N]	Cu	G [kg]
014874	01X4	RE	4.61	0.7	44	0.57	135	6.5	200	38	140
014875	01X6	RE	3.08	0.7	56	0.86	150	7.5	300	58	160
014876	01X10	RE	1.83	0.7	77	1.43	165	8.3	500	96	210
014877	01X16	RE	1.15	0.7	102	2.29	180	9	800	154	270

part no.	part name		RI [Ohm/km]	Wi [mm]	Ibl [A]	Ik [kA]	Rbv [mm]	Ø [mm]	Fzv [N]	Cu	G [kg]
014878	01X25	RM	0.727	0.9	138	3.58	210	11.2	1250	240	380
014879	01X35	RM	0.524	0.9	170	5.01	225	12	1750	336	490
014880	01X50	RMv	0.387	1	207	7.15	240	14	2500	480	620
014881	01X70	RMv	0.268	1.1	263	10.01	270	15.5	3500	672	830
014882	01X95	RMv	0.193	1.1	325	13.59	300	17.9	4750	912	1200
014883	01X120	RMv	0.153	1.2	380	17.16	330	19.1	6000	1152	1250
014884	01X150	RMv	0.124	1.4	437	21.45	360	21	7500	1440	1700
014885	01X185	RMv	0.0991	1.6	507	26.46	390	23.5	9250	1776	2200
014886	01X240	RMv	0.0754	1.7	604	34.32	435	26.2	12000	2304	2750
014887	01X300	RMv	0.0601	1.8	697	42.9	450	28.5	15000	2880	3300
014888	01X400	RMv	0.047	2	811	57.2	480	32	20000	3840	4420
014889	01X500	RMv	0.0366	2.2	940	71.5	555	35.2	25000	4800	4866
014890	02X1.5	RE	12.1	0.7	24	0.21	144	9	150	29	180
014891	03X1.5	RE	12.1	0.7	24	0.21	144	9.5	225	43	179
014892	02X2.5	RE	7.41	0.7	32	0.36	146	10	250	48	210
014893	02X4	RE	4.61	0.7	42	0.57	156	12	400	77	270
015169	02X6	RE	3.08	0.7	53	0.86	144	12	600	115	247
014894	02X10	RE	1.83	0.7	74	1.43	192	13.8	1000	192	450
015626	02X16	RE	1.15	0.7	98	2.29	237	15.8	1600	307	535
014895	04X4	RE	4.61	0.7	42	0.57	180	13	800	154	352
014896	04X6	RE	3.08	0.7	53	0.86	192	13.8	1200	230	454
014897	04X10	RE	1.83	0.7	74	1.43	216	16.2	2000	384	647
014898	04X16	RE	1.15	0.7	98	2.29	240	18.4	3200	614	964
014899	04X25	RM	0.727	0.9	133	3.58	312	25	5000	960	1446
014900	04X35	SM	0.524	0.9	162	5.01	348	27.4	7000	1344	1906
014901	04X50	SMv	0.387	1	197	7.15	384	28	10000	1920	2530
014902	04X70	SMv	0.268	1.1	250	10.01	444	35	14000	2688	3418
014903	04X95	SMv	0.193	1.1	308	13.59	492	37.5	19000	3648	4574
015130	04X120	SMv	0.153	1.2	359	17.16	576	48	24000	4608	5300

RI	Conductor resistance
Wi	Insulation wall thickness
Ibl	Ampacity in air (30 °C)
Ik	Short-circuit current (1 s)
Rbv	Bending radius, fixed installation
Ø	outer diameter approx.
Fzv	Tensile strength (during installation)
Cu	Copper weight (GER)
G	net weight per 1000