

# 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	114	9.5	225	43	179
014905	03X2.5	RE	7.41	0.7	32	0.36	132	11	375	72	225
014906	03X4	RE	4.61	0.7	42	0.57	138	11.5	600	115	291
014907	03X6	RE	3.08	0.7	53	0.86	154	12.8	900	173	371
014908	03X10	RE	1.83	0.7	74	1.43	174	14.5	1500	288	523
014909	03X16	RE	1.15	0.7	98	2.29	202	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	286	23.8	7500	1440	1632
015836	03X185	SMv	0.0991	1.6	475	26.46	566	47.2	27750	5328	6022
014911	03X25/16	RM	0.727	0.9	133	3.58	282	23.5	4550	874	1200
014912	03X35/16	SM	0.524	0.9	162	5.01	306	25.5	6050	1162	1640
015777	03X50/25	RMv	0.387	1	197	7.15	344	28.7	8750	1680	2143
014913	03X50/25	SMv	0.387	1	197	7.15	336	28	8750	1680	2200
015331	03X95/50	SMv	0.193	1.1	308	13.59	426	35.5	16750	3216	3900
014914	03X95/50	SMv	0.193	1.1	308	13.59	426	35.5	16750	3216	3900
014915	03X120/70	SMv	0.153	1.2	359	17.16	466	38.8	21500	4128	4800
014916	03X150/70	SMv	0.124	1.4	412	21.45	546	45.5	26000	4992	5750
014917	03X185/95	SMv	0.0991	1.6	475	26.46	564	47	32500	6240	7200
014918	03X240/120	SMv	0.0754	1.7	564	34.32	636	53	42000	8064	9150
015846	03X300/150	SMv	0.0601	1.8	649	42.9	679	56.6	52500	10080	10982
014919	04X1.5	RE	12.1	0.7	24	0.21	126	10.5	300	58	208
014920	04X2.5	RE	7.41	0.7	32	0.36	138	11.5	500	96	265
014921	04X4	RE	4.61	0.7	42	0.57	156	13	800	154	352
014922	04X6	RE	3.08	0.7	53	0.86	166	13.8	1200	230	454
014923	04X10	RE	1.83	0.7	74	1.43	194	16.2	2000	384	647
014924	04X16	RE	1.15	0.7	98	2.29	221	18.4	3200	614	964
014925	04X25	RM	0.727	0.9	133	3.58	300	25	5000	960	1446
014926	04X35	SM	0.524	0.9	162	5.01	329	27.4	7000	1344	1906
014927	04X50	SMv	0.387	1	197	7.15	336	28	10000	1920	2530
014928	04X70	SMv	0.268	1.1	250	10.01	420	35	14000	2688	3418
014929	04X95	SMv	0.193	1.1	308	13.59	450	37.5	19000	3648	4574
014930	04X120	SMv	0.153	1.2	359	17.16	516	43	24000	4608	5300
014931	04X150	SMv	0.124	1.4	412	21.45	564	47	30000	5760	6350
014932	04X185	SMv	0.0991	1.6	475	26.46	618	51.5	37000	7104	7800
014933	04X240	SMv	0.0754	1.7	564	34.32	666	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	138	11.5	375	72	243
014935	05X2.5	RE	7.41	0.7	32	0.36	145	12.1	625	120	310
014936	05X4	RE	4.61	0.7	42	0.57	168	14	1000	192	413
014937	05X6	RE	3.08	0.7	53	0.86	174	14.5	1500	288	536
014938	05X10	RE	1.83	0.7	74	1.43	210	17.5	2500	480	776
014939	05X16	RE	1.15	0.7	98	2.29	240	20	4000	768	1165
014940	05X25	RM	0.727	0.9	133	3.58	318	26.5	6250	1200	1766

part no.	part name		RI [Ohm/km]	Wi [mm]	Ibl [A]	Ik [kA]	Rbv [mm]	Ø [mm]	Fzv [N]	Cu	G [kg]
014941	05X35	RM	0.524	0.9	162	5.01	360	30	8750	1680	2155
014942	05X50	RMv	0.387	1	197	7.15	420	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	162	13.5	525	101	206
014944	07X6	RE	3.08	0.7	53	0.86	192	16	2100	403.2	569
014945	10X1.5	RE	12.1	0.7	24	0.21	174	14.5	750	144	287
014946	12X1.5	RE	12.1	0.7	24	0.21	180	15	900	173	328
014947	14X1.5	RE	12.1	0.7	24	0.21	198	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	174	14.5	875	168	287
014953	10X2.5	RE	7.41	0.7	32	0.36	210	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	252	21	2400	461	820
014961	01X4	RE	4.61	0.7		0.57	98	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	285	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 three-phase systems:** 1.2 kV

**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	98	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	125	8.3	500	96	210
014877	01X16	RE	1.15	0.7	102	2.29	135	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	168	11.2	1250	240	380
014879	01X35	RM	0.524	0.9	170	5.01	180	12	1750	336	490
014880	01X50	RMv	0.387	1	207	7.15	210	14	2500	480	620
014881	01X70	RMv	0.268	1.1	263	10.01	233	15.5	3500	672	830
014882	01X95	RMv	0.193	1.1	325	13.59	269	17.9	4750	912	1200
014883	01X120	RMv	0.153	1.2	380	17.16	287	19.1	6000	1152	1250
014884	01X150	RMv	0.124	1.4	437	21.45	315	21	7500	1440	1700
014885	01X185	RMv	0.0991	1.6	507	26.46	353	23.5	9250	1776	2200
014886	01X240	RMv	0.0754	1.7	604	34.32	393	26.2	12000	2304	2750
014887	01X300	RMv	0.0601	1.8	697	42.9	428	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	528	35.2	25000	4800	4866
014890	02X1.5	RE	12.1	0.7	24	0.21	108	9	150	29	180
014891	03X1.5	RE	12.1	0.7	24	0.21	114	9.5	225	43	179
014892	02X2.5	RE	7.41	0.7	32	0.36	120	10	250	48	210
014893	02X4	RE	4.61	0.7	42	0.57	144	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	166	13.8	1000	192	450
015626	02X16	RE	1.15	0.7	98	2.29	190	15.8	1600	307	535
014895	04X4	RE	4.61	0.7	42	0.57	156	13	800	154	352
014896	04X6	RE	3.08	0.7	53	0.86	166	13.8	1200	230	454
014897	04X10	RE	1.83	0.7	74	1.43	194	16.2	2000	384	647
014898	04X16	RE	1.15	0.7	98	2.29	221	18.4	3200	614	964
014899	04X25	RM	0.727	0.9	133	3.58	300	25	5000	960	1446
014900	04X35	SM	0.524	0.9	162	5.01	329	27.4	7000	1344	1906
014901	04X50	SMv	0.387	1	197	7.15	336	28	10000	1920	2530
014902	04X70	SMv	0.268	1.1	250	10.01	420	35	14000	2688	3418
014903	04X95	SMv	0.193	1.1	308	13.59	450	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