

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:

| | |
|--|---|
| CPR-classification according to EN 50575: | B2ca |
| Standard: | VDE 0276-604 |
| Conductor material: | copper, bare |
| Conductor construction: | class 1, from 25 sqmm class 2 |
| Insulation: | XLPE 2X11 |
| Sheathing material: | FRNC-compound HM4 |
| Colour of outer sheath: | black |
| Flame-retardant: | DIN EN 50266-2-4/VDE 0482-266-2-4/IEC 60332-3-24 (cat. C) |
| Smoke density: | DIN EN 61034/IEC 61034 |
| Halogen-free: | DIN EN 50267/IEC 60754 |
| Max. temperature at conductor, °C: | 90 °C |
| Permitted outer cable temperature, fixed, °C: | -30 - +70 °C |
| Permitted outer cable temperature, moved, °C: | -5 - +70 °C |
| Bending radius, fixed installation, multicore: | 12 x Ø |
| Bending radius, fixed installation, singlecore: | 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_o:** 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 _{bl} [A] | I _k [kA] | R _{bv} [mm] | Ø [mm] | F _{zv} [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 |
| 015836 | 03X185 | SMv | 0.0991 | 1.6 | 475 | 26.46 | 708 | 47.2 | 27750 | 5328 | 6022 |
| 014911 | 03X25/16 | RM | 0.727 | 0.9 | 133 | 3.58 | 288 | 23.5 | 4550 | 874 | 1200 |
| 014912 | 03X35/16 | SM | 0.524 | 0.9 | 162 | 5.01 | 312 | 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 | 384 | 28 | 8750 | 1680 | 2200 |
| 015331 | 03X95/50 | SMv | 0.193 | 1.1 | 308 | 13.59 | 492 | 35.5 | 16750 | 3216 | 3900 |
| 014914 | 03X95/50 | SMv | 0.193 | 1.1 | 308 | 13.59 | 492 | 35.5 | 16750 | 3216 | 3900 |
| 014915 | 03X120/70 | SMv | 0.153 | 1.2 | 359 | 17.16 | 540 | 38.8 | 21500 | 4128 | 4800 |
| 014916 | 03X150/70 | SMv | 0.124 | 1.4 | 412 | 21.45 | 588 | 45.5 | 26000 | 4992 | 5750 |
| 014917 | 03X185/95 | SMv | 0.0991 | 1.6 | 475 | 26.46 | 660 | 47 | 32500 | 6240 | 7200 |
| 014918 | 03X240/120 | SMv | 0.0754 | 1.7 | 564 | 34.32 | 744 | 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 | 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 |

| part no. | part name | | RI [Ohm/km] | Wi [mm] | Ibl [A] | Ik [kA] | Rbv [mm] | Ø [mm] | Fzv [N] | Cu | G [kg] |
|----------|-----------|-----|-------------|---------|---------|---------|----------|--------|---------|-------|--------|
| 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 |
| 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_o: 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 |

| part no. | part name | | RI [Ohm/km] | Wi [mm] | Ibl [A] | Ik [kA] | Rbv [mm] | Ø [mm] | Fzv [N] | Cu | G [kg] |
|----------|-----------|-----|-------------|---------|---------|---------|----------|--------|---------|------|--------|
| 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 |
| 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 |