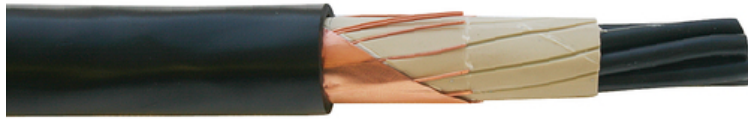


# Power cable NYCY acc. to VDE 0276-603



|   |  |
|---|--|
| <b>CPR-performance:</b>   | Eca  |
| <b>Conductor material:</b>  | copper, bare                                       |
| <b>Conductor class:</b>   | class 1, from 25 sqmm class 2                      |
| <b>Insulation:</b>  | PVC DIV 4  |
| <b>Concentric conductor:</b>  | Cu   |
| <b>Sheathing material:</b>  | PVC DMV5   |
| <b>Colour outer sheath:</b>   | black  |
| <b>Meter mark:</b>  | yes  |
| <b>Flame-retardant:</b>   | VDE 0482-332-1-2/IEC 60332-1-2                     |
| <b>UV-resistant:</b>  | yes  |
| <b>Maximum permitted conductor temperature:</b>                           | 70 °C  |
| <b>Permitted outer cable temperature, fixed:</b>                          | 70 °C  |
| <b>Permitted outer cable temperature, in motion/ during installation:</b> | -5 - +70 °C  |
| <b>Nominal voltage U<sub>0</sub>:</b>                                     | 600 V  |
| <b>Nominal voltage U:</b>   | 1 kV   |
| <b>Maximum permitted operating voltage in three-phase systems:</b>        | 1,2 kV   |
| <b>Test voltage:</b>  | 4 kV   |
| <b>Core identification:</b>   | colours acc. to HD 308; more than 5 cores: numbers |

**Application:** For fixed installation indoors, outdoors, in the ground, in water and in concrete.



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.

Table: Technical characteristics NYCY

| p/n    | part name          |    | R <sub>l</sub><br>[Ω/km] | W <sub>i</sub><br>[mm] | I <sub>bl</sub><br>[A] | I <sub>be</sub><br>[A] | I <sub>k</sub><br>[kA]mH/km | L <sub>b</sub> | R <sub>bv</sub><br>[mm] | W <sub>m</sub><br>[mm] | D <sub>A</sub><br>[mm] | F <sub>zv</sub><br>[N] [kg/km] | Cu<br>[kg/km] | G   |
|--------|--------------------|----|--------------------------|------------------------|------------------------|------------------------|-----------------------------|----------------|-------------------------|------------------------|------------------------|--------------------------------|---------------|-----|
| 080030 | NYCY 02X1,5/1,5 SW | RE | 12,1                     | 0,8                    | 19                     | 27                     | 0,17                        |                | 156                     | 1,8                    | 13                     | 150                            | 52            | 200 |
| 080031 | NYCY 02X2,5/2,5 SW | RE | 7,41                     | 0,8                    | 26                     | 36                     | 0,29                        |                | 163                     | 1,8                    | 13,6                   | 250                            | 80            | 260 |
| 080032 | NYCY 02X4/4 SW     | RE | 4,61                     | 1                      | 34                     | 47                     | 0,46                        |                | 185                     | 1,8                    | 15,4                   | 400                            | 123           | 350 |
| 080033 | NYCY 02X6/6 SW     | RE | 3,08                     | 1                      | 44                     | 59                     | 0,69                        |                | 203                     | 1,8                    | 16,9                   | 600                            | 182           | 430 |
| 080077 | NYCY 02X10/10 SW   | RE | 1,83                     | 1                      | 60                     | 79                     | 1,15                        |                | 222                     | 1,8                    | 18,5                   | 1000                           | 312           | 520 |
| 080078 | (N)YCY 02X16/16 SW | RE | 1,15                     | 1                      | 80                     | 102                    | 1,84                        |                | 246                     | 1,8                    | 20,5                   | 1600                           | 489           | 720 |
| 080035 | NYCY 03X1,5/1,5 SW | RE | 12,1                     | 0,8                    | 19                     | 27                     | 0,17                        | 0,343          | 158                     | 1,8                    | 13,2                   | 225                            | 66            | 220 |
| 080037 | NYCY 03X2,5/2,5 SW | RE | 7,41                     | 0,8                    | 26                     | 36                     | 0,29                        | 0,317          | 170                     | 1,8                    | 14,2                   | 375                            | 104           | 280 |
| 080147 | NYCY 03X2,5/10 SW  | RE | 7,41                     | 0,8                    | 26                     | 36                     | 0,29                        | 0,317          | 173                     | 1,8                    | 14,4                   | 375                            | 192           | 359 |

| p/n    | part name          |    | R <sub>i</sub><br>[Ω/km] | W <sub>i</sub><br>[mm] | I <sub>bl</sub><br>[A] | I <sub>be</sub><br>[A] | I <sub>k</sub><br>[kA] | L <sub>b</sub><br>[mH/km] | R <sub>bv</sub><br>[mm] | W <sub>m</sub><br>[mm] | D <sub>A</sub><br>[mm] | F <sub>zv</sub><br>[N] | Cu<br>[kg/km] | G<br>[kg/km] |
|--------|--------------------|----|--------------------------|------------------------|------------------------|------------------------|------------------------|---------------------------|-------------------------|------------------------|------------------------|------------------------|---------------|--------------|
| 080038 | NYCY 03X4/4 SW     | RE | 4,61                     | 1                      | 34                     | 47                     | 0,46                   | 0,316                     | 196                     | 1,8                    | 16,3                   | 600                    | 161           | 390          |
| 080039 | NYCY 03X6/6 SW     | RE | 3,08                     | 1                      | 44                     | 59                     | 0,69                   | 0,298                     | 207,6                   | 1,8                    | 17,3                   | 900                    | 240           | 500          |
| 080079 | NYCY 03X10/10 SW   | RE | 1,83                     | 1                      | 60                     | 79                     | 1,15                   | 0,278                     | 240                     | 1,8                    | 20                     | 1500                   | 408           | 680          |
| 080080 | NYCY 03X16/16 SW   | RE | 1,15                     | 1                      | 80                     | 102                    | 1,84                   | 0,262                     | 276                     | 1,8                    | 23                     | 2400                   | 643           | 1010         |
| 080040 | NYCY 04X1,5/1,5 SW | RE | 12,1                     | 0,8                    | 19                     | 27                     | 0,17                   | 0,366                     | 171                     | 1,8                    | 14,2                   | 300                    | 81            | 250          |
| 080041 | NYCY 04X2,5/2,5 SW | RE | 7,41                     | 0,8                    | 26                     | 36                     | 0,29                   | 0,34                      | 184                     | 1,8                    | 15,3                   | 500                    | 128           | 340          |
| 080042 | NYCY 04X4/4 SW     | RE | 4,61                     | 1                      | 34                     | 47                     | 0,46                   | 0,339                     | 208                     | 1,8                    | 17,3                   | 800                    | 200           | 460          |
| 080043 | NYCY 04X6/6 SW     | RE | 3,08                     | 1                      | 44                     | 59                     | 0,69                   | 0,321                     | 221                     | 1,8                    | 18,4                   | 1200                   | 297           | 580          |
| 080081 | NYCY 04X10/10 SW   | RE | 1,83                     | 1                      | 60                     | 79                     | 1,15                   | 0,301                     | 252                     | 1,8                    | 21                     | 2000                   | 504           | 765          |
| 080082 | NYCY 04X16/16 SW   | RE | 1,15                     | 1                      | 80                     | 102                    | 1,84                   | 0,285                     | 276                     | 1,8                    | 23                     | 3200                   | 796           | 1060         |
| 080044 | NYCY 05X1,5/1,5 SW | RE | 12,1                     | 0,8                    | 19                     | 27                     | 0,17                   | 0,375                     | 180                     | 1,8                    | 15                     | 375                    | 95            | 330          |
| 080076 | NYCY 05X2,5/2,5 SW | RE | 7,41                     | 0,8                    | 26                     | 36                     | 0,29                   | 0,349                     | 192                     | 1,8                    | 16                     | 625                    | 152           | 400          |
| 080083 | NYCY 05X4/4 SW     | RE | 4,61                     | 1                      | 34                     | 47                     | 0,46                   | 0,348                     | 228                     | 1,8                    | 19                     | 1000                   | 238           | 550          |
| 080084 | NYCY 05X6/6 SW     | RE | 3,08                     | 1                      | 44                     | 59                     | 0,69                   | 0,33                      | 252                     | 1,8                    | 21                     | 1500                   | 355           | 700          |
| 080045 | NYCY 07X1,5/2,5 SW | RE | 12,1                     | 0,8                    | 19                     | 27                     | 0,17                   |                           | 184                     | 1,8                    | 15,3                   | 525                    | 133           | 350          |
| 080046 | NYCY 07X2,5/2,5 SW | RE | 7,41                     | 0,8                    | 25                     | 36                     | 0,29                   |                           | 209                     | 1,8                    | 17,4                   | 875                    | 200           | 450          |
| 080047 | NYCY 07X4/4 SW     | RE | 4,61                     | 1                      | 34                     | 47                     | 0,46                   |                           | 240                     | 1,8                    | 20                     | 1400                   | 315           | 600          |
| 080085 | NYCY 07X6/6 SW     | RE | 3,08                     | 1                      | 43                     | 59                     | 0,69                   |                           | 270                     | 1,8                    | 22,5                   | 2100                   | 470           | 790          |
| 080048 | NYCY 10X1,5/2,5 SW | RE | 12,1                     | 0,8                    | 19                     | 27                     | 0,17                   |                           | 221                     | 1,8                    | 18,4                   | 750                    | 176           | 410          |
| 080049 | NYCY 10X2,5/4 SW   | RE | 7,41                     | 1                      | 25                     | 36                     | 0,29                   |                           | 245                     | 1,8                    | 20,4                   | 1250                   | 286           | 600          |
| 080086 | NYCY 10X4/6 SW     | RE | 4,61                     | 0,8                    | 34                     | 47                     | 0,46                   |                           | 282                     | 1,8                    | 23,5                   | 2000                   | 451           | 900          |
| 080050 | NYCY 12X1,5/2,5 SW | RE | 12,1                     | 0,8                    | 19                     | 27                     | 0,17                   |                           | 233                     | 1,8                    | 19,4                   | 900                    | 205           | 470          |
| 080051 | NYCY 12X2,5/4 SW   | RE | 7,41                     | 0,8                    | 25                     | 36                     | 0,29                   |                           | 246                     | 1,8                    | 20,5                   | 1500                   | 334           | 660          |
| 080069 | NYCY 12X4/6 SW     | RE | 4,61                     | 1                      | 34                     | 47                     | 0,46                   |                           | 294                     | 1,8                    | 24,5                   | 2400                   | 528           | 1060         |
| 080052 | NYCY 14X1,5/2,5 SW | RE | 12,1                     | 0,8                    | 19                     | 27                     | 0,17                   |                           | 245                     | 1,8                    | 20,4                   | 1050                   | 234           | 520          |
| 080053 | NYCY 14X2,5/6 SW   | RE | 7,41                     | 0,8                    | 25                     | 36                     | 0,29                   |                           | 258                     | 1,8                    | 21,5                   | 1750                   | 403           | 750          |
| 080073 | NYCY 16X1,5/4 SW   | RE | 12,1                     | 0,8                    | 19                     | 27                     | 0,17                   |                           | 240                     | 1,8                    | 20                     | 1200                   | 276           | 620          |
| 080054 | NYCY 16X2,5/6 SW   | RE | 7,41                     | 0,8                    | 25                     | 36                     | 0,29                   |                           | 270                     | 1,8                    | 22,5                   | 2000                   | 451           | 800          |
| 080055 | NYCY 19X1,5/4 SW   | RE | 12,1                     | 0,8                    | 19                     | 27                     | 0,17                   |                           | 270                     | 1,8                    | 22,5                   | 1425                   | 320           | 660          |
| 080056 | NYCY 19X2,5/6 SW   | RE | 7,41                     | 0,8                    | 25                     | 36                     | 0,29                   |                           | 282                     | 1,8                    | 23,5                   | 2375                   | 523           | 940          |
| 080308 | NYCY 19X4/10 SW    | RE | 4,61                     | 1                      | 34                     | 47                     | 0,46                   |                           |                         | 1,8                    | 27,1                   | 3800                   | 850           | 1376         |
| 080057 | NYCY 21X1,5/6 SW   | RE | 12,1                     | 0,8                    | 19                     | 27                     | 0,17                   |                           | 276                     | 1,8                    | 23                     | 1575                   | 369           | 790          |
| 080058 | NYCY 24X1,5/6 SW   | RE | 12,1                     | 0,8                    | 19                     | 27                     | 0,17                   |                           | 306                     | 1,8                    | 25,5                   | 1800                   | 413           | 850          |
| 080059 | NYCY 24X2,5/10 SW  | RE | 7,41                     | 0,8                    | 25                     | 36                     | 0,29                   |                           | 331                     | 1,8                    | 27,6                   | 3000                   | 696           | 1150         |
| 080223 | NYCY 24X4/10 SW    | RE | 4,61                     | 1                      | 34                     | 47                     | 0,46                   |                           | 388                     | 1,8                    | 32,3                   | 1152                   | 1042          | 1813         |
| 080068 | NYCY 30X1,5/6 SW   | RE | 12,1                     | 0,8                    | 19                     | 27                     | 0,17                   |                           | 318                     |                        | 26,5                   | 2250                   | 499           | 1020         |
| 080087 | NYCY 30X2,5/10 SW  | RE | 7,41                     | 0,8                    | 25                     | 36                     | 0,29                   |                           | 354                     | 1,8                    | 29,5                   | 3750                   | 840           | 1600         |
| 080074 | NYCY 40X1,5/10 SW  | RE | 12,1                     | 0,8                    | 19                     | 27                     | 0,17                   |                           | 360                     | 1,8                    | 30                     | 3000                   | 696           | 1280         |
| 080075 | NYCY 40X2,5/10 SW  | RE | 7,41                     | 0,8                    | 25                     | 36                     | 0,29                   |                           | 396                     | 1,8                    | 33                     | 5000                   | 1080          | 1660         |
| 080072 | NYCY 52X1,5/10 SW  | RE | 12,1                     | 0,8                    | 19                     | 27                     | 0,17                   |                           | 384                     | 1,8                    | 32                     | 3900                   | 869           | 1600         |
| 080088 | NYCY 52X2,5/10 SW  | RE | 7,41                     | 0,8                    | 25                     | 36                     | 0,29                   |                           | 420                     | 1,8                    | 35                     | 6500                   | 1368          | 2000         |
| 080089 | NYCY 61X1,5/10 SW  | RE | 12,1                     | 0,8                    | 19                     | 27                     | 0,17                   |                           | 396                     | 1,8                    | 33                     | 4575                   | 998           | 2000         |
| 080090 | NYCY 61X2,5/10 SW  | RE | 7,41                     | 0,8                    | 25                     | 36                     | 0,29                   |                           | 432                     | 1,8                    | 36                     | 7625                   | 1584          | 2280         |

The current rating in air I<sub>bl</sub> refers to an ambient temperature of 30 °C and a load factor of 1,0. The current rating in ground I<sub>be</sub> refers to ground temperature of 20 °C and a load factor of 0,7.

|     |  |
|-----|--|
| RI  | Conductor resistance                   |
| Wi  | Insulation wall thickness              |
| Ibl | Ampacity in air (30 °C)                |
| Ibe | Ampacity in ground (20 °C)             |
| Ik  | Short-circuit current (1 s)            |
| Lb  | Specific inductivity                   |
| Rbv | Bending radius, fixed installation     |
| Wm  | Wall thickness of sheath               |
| DA  | Outer diameter approx.                 |
| Fzv | Tensile strength (during installation) |
| Cu  | Copper weight (GER)                    |
| G   | weight                                 |