



RZ1-K

Power cable 0,6/1 kV with Cu conductors, XLPE insulated and HFFR sheathed

APPLICATION

Power cable suitable for fixed installation in dry and damp environment, on or under plaster, on cable trays, same as in walls and concrete. Not intended for direct laying in ground or water. For outdoor application can be laid in tubes, but in that case should be taken all precautionary measures necessary to prevent water penetration into the tubes. Suitable for supply systems in an emergency. Appropriate for application in all situations where people and material goods need to be protected in case of fire. Recommended for public buildings frequented by a lot of people, and for buildings of high material value, for industrial complexes, electric power plants, transformer stations, municipal facilities, hotels, shopping malls, hospitals, schools, airports, underground railways and similar. Concentric conductor serves as electromagnetic screen, which could also be applied as neutral conductor.

CONSTRUCTION

Conductors: Cu, class 5 according to EN 60228

Insulation: : XLPE compound, type DIX 3

Bedding: Extruded elastomere or plastomere LSZH compound

Sheat: LSZH compound, type DMZ-E

CORE IDENTIFICATION

According to HD 308 S2

Insulation Color:

Single-core: ● Green/Yellow OR ● Black

2-core: ● Brown ● Blue

3-core (a): ● Green/Yellow ● Brown ● Blue

3-core (b): ● Black ● Brown ● Grey

4-core (a): ● Green/Yellow ● Brown ● Black ● Grey

4-core (b): ● Blue ● Brown ● Black ● Grey

5-core: ● Green/Yellow ● Blue ● Brown ● Black ● Grey

Outer Sheath Colour:

● Green

Other colours available on request

TECHNICAL CHARACTERISTICS

CPR class: Cca- s1, d1, a1

Test voltage: 4 Kv

Rated voltage: 0,6/1 kV

Bending radius (min): 5xD

Min. laying temperature: -15°C

Max. working temperature: 90°C

Max. short-circuit temperature: 250°C

Flame retardant: IEC 60332-1-2

Fire retardant: IEC 60332-3-24

Halogen free: IEC 60754

Low smoke emission: IEC 61034

STANDARD

UNE 21123-4, IEC 60502-1

CERTIFICATION



SINGLE - CORE CABLES:

| NOMINAL CROSS-SECTION | MAX. RESISTANCE AT 20°C | CURRENT CAPACITY IN AIR | CURRENT CAPACITY IN EARTH | OUTER DIAM. (APPROX.) | METAL WEIGHT | CABLE WEIGHT (APPROX.) |
|-----------------------|-------------------------|-------------------------|---------------------------|-----------------------|--------------|------------------------|
| mm ² | Ω/km | A | A | mm | kg/km | kg/km |
| 1x10 | 1,910 | 77 | 89 | 8,6 | 96,0 | 163,2 |
| 1x16 | 1,210 | 102 | 115 | 9,5 | 153,6 | 230,4 |
| 1x25 | 0,780 | 138 | 148 | 11,0 | 240,0 | 336,1 |
| 1x35 | 0,554 | 170 | 177 | 12,1 | 336,0 | 444,5 |
| 1x50 | 0,386 | 207 | 209 | 13,6 | 480,0 | 607,7 |
| 1x70 | 0,272 | 263 | 256 | 15,2 | 672,0 | 820,9 |
| 1x95 | 0,206 | 325 | 307 | 16,8 | 911,2 | 1079,7 |
| 1x120 | 0,161 | 380 | 349 | 18,4 | 1152,0 | 1342,3 |
| 1x150 | 0,129 | 437 | 393 | 20,2 | 1440,0 | 1660,2 |
| 1x185 | 0,106 | 507 | 445 | 22,1 | 1776,0 | 2029,4 |
| 1x240 | 0,0801 | 604 | 517 | 24,5 | 2304,0 | 2594,3 |
| 1x300 | 0,0641 | 679 | 583 | 26,7 | 2880,0 | 3205,9 |
| 1x400 | 0,0486 | 811 | 663 | 30,4 | 3840,0 | 4242,1 |
| 1x500 | 0,0384 | 940 | 749 | 33,7 | 4800,0 | 6626,4 |
| 1x630 | 0,0287 | 1083 | 843 | 37,4 | 6048,0 | 8374,2 |

TWO - CORE CABLES:

| NOMINAL CROSS-SECTION | MAX. RESISTANCE AT 20°C | CURRENT CAPACITY IN AIR | CURRENT CAPACITY IN EARTH | OUTER DIAM. (APPROX.) | METAL WEIGHT | CABLE WEIGHT (APPROX.) |
|-----------------------|-------------------------|-------------------------|---------------------------|-----------------------|--------------|------------------------|
| mm ² | Ω/km | A | A | mm | kg/km | kg/km |
| 2x1,5 | 13,3 | 24 | 31 | 10,0 | 28,8 | 138,1 |
| 2x2,5 | 7,98 | 32 | 40 | 10,8 | 48,0 | 173,1 |
| 2x4 | 4,95 | 42 | 52 | 11,8 | 76,8 | 222,7 |
| 2x6 | 3,3 | 53 | 64 | 12,8 | 115,2 | 283,2 |
| 2x10 | 1,910 | 74 | 86 | 14,4 | 192,0 | 397,7 |
| 2x16 | 1,210 | 98 | 112 | 16,2 | 307,2 | 559,0 |
| 2x25 | 0,780 | 133 | 145 | 19,2 | 480,0 | 824,1 |
| 2x35 | 0,554 | 162 | 174 | 21,4 | 672,0 | 1087,0 |
| 2x50 | 0,386 | 197 | 206 | 24,4 | 960,0 | 1485,7 |
| 2x70 | 0,272 | 250 | 254 | 27,6 | 1344,0 | 2001,2 |
| 2x95 | 0,206 | 308 | 305 | 31,2 | 1824,0 | 2649,9 |
| 2x120 | 0,161 | 359 | 348 | 34,6 | 2304,0 | 3308,2 |
| 2x150 | 0,129 | 412 | 392 | 38,4 | 2880,0 | 4110,1 |
| 2x185 | 0,106 | 475 | 444 | 42,4 | 3552,0 | 5043,2 |
| 2x240 | 0,0801 | 564 | 517 | 48,0 | 4608,0 | 6511,6 |

THREE - CORE CABLES:

| NOMINAL CROSS-SECTION | MAX. RESISTANCE AT 20°C | CURRENT CAPACITY IN AIR | CURRENT CAPACITY IN EARTH | OUTER DIAM. (APPROX.) | METAL WEIGHT | CABLE WEIGHT (APPROX.) |
|-----------------------|-------------------------|-------------------------|---------------------------|-----------------------|--------------|------------------------|
| mm ² | Ω/km | A | A | mm | kg/km | kg/km |
| 3x1,5 | 13,3 | 24 | 31 | 10,5 | 43,2 | 158,2 |
| 3x2,5 | 7,98 | 32 | 40 | 11,3 | 72,0 | 203,2 |
| 3x4 | 4,95 | 42 | 52 | 12,4 | 115,2 | 267,6 |
| 3x6 | 3,3 | 53 | 64 | 13,5 | 172,8 | 347,4 |
| 3x10 | 1,910 | 74 | 86 | 15,2 | 288,0 | 500,2 |
| 3x16 | 1,210 | 98 | 112 | 17,1 | 460,8 | 718,3 |
| 3x25 | 0,780 | 133 | 145 | 20,4 | 720,0 | 1070,3 |
| 3x35 | 0,554 | 162 | 174 | 22,8 | 1008,0 | 1426,5 |
| 3x50 | 0,386 | 197 | 206 | 25,2 | 1440,0 | 1959,3 |
| 3x70 | 0,272 | 250 | 254 | 28,9 | 2016,0 | 2676,0 |
| 3x95 | 0,206 | 308 | 305 | 32,5 | 2736,0 | 3543,1 |
| 3x120 | 0,161 | 359 | 348 | 36,2 | 3456,0 | 4434,8 |
| 3x150 | 0,129 | 412 | 392 | 40,5 | 4320,0 | 5538,7 |
| 3x185 | 0,106 | 475 | 444 | 44,8 | 5328,0 | 6802,9 |
| 3x240 | 0,0801 | 564 | 517 | 50,3 | 6912,0 | 8783,8 |
| 3x300 | 0,0641 | 649 | 585 | 55,5 | 8640,0 | 10878,4 |
| 3x400 | 0,0486 | 761 | 710 | 64,9 | 11520,0 | 14428,2 |

FOUR - CORE CABLES:

| NOMINAL CROSS-SECTION | MAX. RESISTANCE AT 20°C | CURRENT CAPACITY IN AIR | CURRENT CAPACITY IN EARTH | OUTER DIAM. (APPROX.) | METAL WEIGHT | CABLE WEIGHT (APPROX.) |
|-----------------------|-------------------------|-------------------------|---------------------------|-----------------------|--------------|------------------------|
| mm ² | Ω/km | A | A | mm | kg/km | kg/km |
| 4x1,5 | 13,3 | 24 | 31 | 11,2 | 57,6 | 183,6 |
| 4x,25 | 7,98 | 32 | 40 | 12,1 | 96,0 | 239,8 |
| 4x4 | 4,95 | 42 | 52 | 13,4 | 153,6 | 320,6 |
| 4x6 | 3,3 | 53 | 64 | 14,6 | 230,4 | 421,5 |
| 4x10 | 1,910 | 74 | 86 | 16,5 | 384,0 | 615,7 |
| 4x16 | 1,210 | 98 | 112 | 18,7 | 614,4 | 894,5 |
| 4x25 | 0,780 | 133 | 145 | 22,3 | 960,0 | 1341,0 |
| 4x35 | 0,554 | 162 | 174 | 25,0 | 1344,0 | 1796,9 |
| 4x50 | 0,386 | 197 | 206 | 28,0 | 1920,0 | 2494,2 |
| 4x70 | 0,272 | 250 | 254 | 32,7 | 2688,0 | 3419,8 |
| 4x95 | 0,206 | 308 | 305 | 36,1 | 3648,0 | 4529,4 |
| 4x120 | 0,161 | 359 | 348 | 40,4 | 4608,0 | 5692,3 |
| 4x150 | 0,129 | 412 | 392 | 45,0 | 5760,0 | 7123,8 |
| 4x185 | 0,106 | 475 | 444 | 50,0 | 7104,0 | 8772,1 |
| 4x240 | 0,0801 | 564 | 517 | 56,2 | 9216,0 | 11267,0 |
| 4x300 | 0,0641 | 649 | 585 | 61,9 | 11520,0 | 13962,3 |
| 4x400 | 0,0486 | 761 | 710 | 65,3 | 15360,0 | 18388,6 |

FIVE - CORE CABLES:

| NOMINAL CROSS-SECTION | MAX. RESISTANCE AT 20°C | CURRENT CAPACITY IN AIR | CURRENT CAPACITY IN EARTH | OUTER DIAM. (APPROX.) | METAL WEIGHT | CABLE WEIGHT (APPROX.) |
|-----------------------|-------------------------|-------------------------|---------------------------|-----------------------|--------------|------------------------|
| mm ² | Ω/km | A | A | mm | kg/km | kg/km |
| 5x1,5 | 13,3 | 24 | 31 | 12,0 | 72 | 211,1 |
| 5x2,5 | 7,98 | 32 | 40 | 13,0 | 120 | 279,2 |
| 5x4 | 4,95 | 42 | 52 | 14,4 | 192 | 377,1 |
| 5x6 | 3,3 | 53 | 64 | 15,7 | 288 | 500,1 |
| 5x10 | 1,910 | 74 | 86 | 17,9 | 480 | 737,2 |
| 5x16 | 1,210 | 98 | 112 | 20,3 | 768 | 1078,8 |
| 5x25 | 0,780 | 133 | 145 | 24,4 | 1200 | 1624,2 |
| 5x35 | 0,554 | 162 | 174 | 27,4 | 1680 | 2183,7 |
| 5x50 | 0,386 | 197 | 206 | 31,8 | 2400 | 3061,6 |
| 5x70 | 0,272 | 250 | 254 | 36,3 | 3360 | 4192,4 |
| 5x95 | 0,206 | 308 | 305 | 41,0 | 4560 | 5585,4 |
| 5x120 | 0,161 | 359 | 348 | 45,6 | 5760 | 6993,3 |
| 5x150 | 0,129 | 412 | 392 | 51,2 | 7200 | 8733,3 |
| 5x185 | 0,106 | 475 | 444 | 56,8 | 8880 | 10753,8 |
| 5x240 | 0,0801 | 564 | 517 | 63,6 | 11520 | 13872,8 |

