



XGB

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

APPLICATION

XGB are fire retardant power cables for domestic and industrial applications with a voltage rating of 1kV. This product range is suitable for use indoor and outdoor, protected by ducts for mechanical and UV protection. They are suitable for use in public buildings including airports, hospitals and railway stations and in any environment which would be sensitive to smoke and corrosive gases in the event of a fire due to the concentration of people or the presence of valuable equipment, especially in difficult evacuation conditions.

CONSTRUCTION

Conductors: Cu annealed conductors, class 1 or class 2 according to EN 60228

Insulation: XLPE compound DIX 1

Bedding: Extruded elastomere or plastomere compound or plastic tape

Sheath: LSOH compound, type G

TECHNICAL CHARACTERISTICS

Test voltage: 4 kV

Rated voltage: 0,6/1 kV

Bending radius (min): single-core – 15D;
multicore- 12D

Min. laying temperature: 0°C

Operating temperature: -15°C to 60°C

Max. conductor temperature: 90°C

Max. short-circuit temperature: 250°C

Flame propagation: EN 60332-1-2

Fire propagation: EN 50339, EN 60332-3-24

Low emission of halogen and corrosive gases:
EN 60754-1 i EN 60754-2

Smoke density: EN 61034-2

STANDARD

NBN HD 604 S1, part 4G

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

CERTIFICATION



International
Electrotechnical
Commission



SINGLE- CORE CABLES:

| NOMINAL CROSS-SECTION | CONDUCTOR SHAPE | MAX. RESISTANCE AT 20°C | CURRENT CAPACITY IN AIR | CURRENT CAPACITY IN EARTH | OUTER DIAM. (APPROX.) | | METAL WEIGHT | CABLE WEIGHT (APPROX.) |
|-----------------------|-----------------|-------------------------|-------------------------|---------------------------|-----------------------|------|--------------|------------------------|
| | | | | | mm | mm | | |
| mm ² | | Ω/km | A | A | MIN | MAX | kg/km | kg/km |
| 1x1,5 | RE | 12,1 | - | - | 5,0 | 6,5 | 14,4 | 45 |
| 1x2,5 | RE | 7,41 | 34 | 45 | 5,5 | 7,0 | 24,0 | 58 |
| 1x4 | RE | 4,61 | 44 | 55 | 6,0 | 7,5 | 38,4 | 77 |
| 1x6 | RE | 3,08 | 57 | 70 | 6,5 | 8,1 | 57,6 | 100 |
| 1x10 | RE | 1,830 | 77 | 90 | 7,5 | 9,0 | 96,0 | 145 |
| 1x16 | RM | 1,150 | 102 | 115 | 8,5 | 10,1 | 153,6 | 210 |
| 1x25 | RM | 0,727 | 135 | 150 | 10,0 | 11,8 | 240,0 | 312 |
| 1x35 | RM | 0,524 | 169 | 180 | 11,5 | 13,1 | 336,0 | 418 |
| 1x50 | RM | 0,387 | 207 | 210 | 12,5 | 14,8 | 480,0 | 578 |
| 1x70 | RM | 0,268 | 268 | 260 | 14,5 | 16,7 | 672,0 | 787 |
| 1x95 | RM | 0,193 | 328 | 310 | 16,5 | 18,8 | 912,0 | 1050 |
| 1x120 | RM | 0,153 | 382 | 350 | 18,0 | 20,6 | 1152,0 | 1309 |
| 1x150 | RM | 0,124 | 443 | 395 | 18,5 | 23,0 | 1440,0 | 1633 |
| 1x185 | RM | 0,0991 | 509 | 450 | 21,0 | 25,2 | 1776,0 | 1999 |
| 1x240 | RM | 0,0754 | 604 | 520 | 23,5 | 28,2 | 2304,0 | 2572 |
| 1x300 | RM | 0,0601 | 699 | 585 | 26,0 | 31,0 | 2880,0 | 3193 |

current capacity values are according to DIN VDE 0298-4 standard

TWO- CORE CABLES:

| NOMINAL CROSS-SECTION | CONDUCTOR SHAPE | MAX. RESISTANCE AT 20°C | CURRENT CAPACITY IN AIR | CURRENT CAPACITY IN EARTH | OUTER DIAM. (APPROX.) | | METAL WEIGHT | CABLE WEIGHT (APPROX.) |
|-----------------------|-----------------|-------------------------|-------------------------|---------------------------|-----------------------|------|--------------|------------------------|
| | | | | | mm | mm | | |
| mm ² | | Ω/km | A | A | MIN | MAX | kg/km | kg/km |
| 2x1,5 | RE | 12,1 | 23 | 30 | 7,5 | 10,7 | 28,8 | 159 |
| 2x2,5 | RE | 7,41 | 32 | 40 | 8,5 | 11,6 | 48,0 | 197 |
| 2x4 | RE | 4,61 | 42 | 50 | 9,0 | 12,8 | 76,8 | 251 |
| 2x6 | RE | 3,08 | 54 | 65 | 10,0 | 13,9 | 115,2 | 316 |
| 2x10 | RE | 1,830 | 75 | 90 | 12,5 | 15,8 | 192,0 | 438 |
| 2x16 | RM | 1,150 | 100 | 120 | 14,5 | 17,9 | 307,2 | 610 |
| 2x25 | RM | 0,727 | 127 | 150 | 18,0 | 21,8 | 480,0 | 912 |
| 2x35 | RM | 0,524 | 157 | 175 | 21,0 | 24,4 | 672,0 | 1193 |

current capacity values are according to DIN VDE 0298-4 standard

THREE- CORE CABLES:

| NOMINAL CROSS-SECTION | CONDUCTOR SHAPE | MAX. RESISTANCE AT 20°C | CURRENT CAPACITY IN AIR | CURRENT CAPACITY IN EARTH | OUTER DIAM. (APPROX.) | | METAL WEIGHT | CABLE WEIGHT (APPROX.) |
|-----------------------|-----------------|-------------------------|-------------------------|---------------------------|-----------------------|------|--------------|------------------------|
| | | | | | mm | mm | | |
| mm ² | | Ω/km | A | A | MIN | MAX | kg/km | kg/km |
| 3x1,5 | RE | 12,1 | 23 | 30 | 8,0 | 11,1 | 43,2 | 178 |
| 3x2,5 | RE | 7,41 | 32 | 40 | 9,0 | 12,2 | 72,0 | 227 |
| 3x4 | RE | 4,61 | 42 | 50 | 9,5 | 13,5 | 115,2 | 295 |
| 3x6 | RE | 3,08 | 54 | 65 | 10,5 | 14,7 | 172,8 | 379 |
| 3x10 | RE | 1,830 | 75 | 90 | 12,5 | 16,7 | 288,0 | 539 |
| 3x16 | RM | 1,150 | 100 | 120 | 15,5 | 19,1 | 460,8 | 774 |
| 3x25 | RM | 0,727 | 127 | 150 | 18,0 | 23,2 | 720,0 | 1154 |
| 3x35 | RM | 0,524 | 157 | 175 | 21,5 | 26,2 | 1008,0 | 1538 |
| 3x50 | SM | 0,387 | 192 | 205 | 22,0 | 29,8 | 1440,0 | 1696 |
| 3x70 | SM | 0,268 | 246 | 250 | 25,5 | 33,5 | 2016,0 | 2338 |
| 3x95 | SM | 0,193 | 299 | 305 | 28,5 | 37,7 | 2736,0 | 3113 |
| 3x120 | SM | 0,153 | 346 | 345 | 31,5 | 41,1 | 3456,0 | 3903 |
| 3x150 | SM | 0,124 | 399 | 390 | 36,0 | 46,3 | 4320,0 | 4887 |
| 3x185 | SM | 0,0991 | 456 | 440 | 39,5 | 51,4 | 5328,0 | 6012 |
| 3x240 | SM | 0,0754 | 538 | 510 | 44,5 | 58,0 | 6912,0 | 7748 |
| 3x300 | SM | 0,0601 | 620 | 580 | 50,0 | 63,6 | 8640,0 | 9626 |

current capacity values are according to DIN VDE 0298-4 standard

FOUR- CORE CABLES WITH REDUCED CORE:

| NOMINAL CROSS-SECTION | CONDUCTOR SHAPE | MAX. RESISTANCE AT 20°C | CURRENT CAPACITY IN AIR | CURRENT CAPACITY IN EARTH | OUTER DIAM. (APPROX.) | | METAL WEIGHT | CABLE WEIGHT (APPROX.) |
|-----------------------|-----------------|-------------------------|-------------------------|---------------------------|-----------------------|------|--------------|------------------------|
| | | | | | mm | mm | | |
| mm ² | | Ω/km | A | A | MIN | MAX | kg/km | kg/km |
| 3x25+16 | RM/RE | 0,727/1,150 | 127 | 150 | 19,5 | 24,2 | 873,6 | 1264 |
| 3x35+16 | RM/RE | 0,524/1,150 | 157 | 175 | 23,0 | 26,8 | 1161,6 | 1637 |
| 3x50+25 | RM/RM | 0,387/0,727 | 192 | 205 | 25,5 | 32,4 | 1680,0 | 2300 |
| 3x70+35 | SM/SM | 0,268/0,524 | 246 | 250 | 28,5 | 36,8 | 2352,0 | 2729 |
| 3x95+50 | SM/SM | 0,193/0,387 | 299 | 305 | 33,5 | 41,3 | 3216,0 | 3685 |
| 3x120+70 | SM/SM | 0,153/0,268 | 346 | 345 | 37,0 | 45,7 | 4128,0 | 4688 |
| 3x150+70 | SM/SM | 0,124/0,268 | 399 | 390 | 43,0 | 51,2 | 4992,0 | 5655 |
| 3x185+95 | SM/SM | 0,0991/0,193 | 456 | 440 | 45,5 | 57,2 | 6240,0 | 7059 |
| 3x240+120 | SM/SM | 0,0754/0,153 | 538 | 510 | 53,0 | 65,5 | 8064,0 | 9059 |
| 3x300+150 | SM/SM | 0,0601/0,268 | 620 | 580 | 59,0 | 73,7 | 10080,0 | 11272 |

current capacity values are according to DIN VDE 0298-4 standard

FOUR- CORE CABLES:

| NOMINAL CROSS-SECTION | CONDUCTOR SHAPE | MAX. RESISTANCE AT 20°C | CURRENT CAPACITY IN AIR | CURRENT CAPACITY IN EARTH | OUTER DIAM. (APPROX.) | | METAL WEIGHT | CABLE WEIGHT (APPROX.) |
|-----------------------|-----------------|-------------------------|-------------------------|---------------------------|-----------------------|------|--------------|------------------------|
| | | | | | mm | mm | | |
| mm ² | | Ω/km | A | A | MIN | MAX | kg/km | kg/km |
| 4x1,5 | RE | 12,1 | 23 | 30 | 8,5 | 21,1 | 57,6 | 205 |
| 4x2,5 | RE | 7,41 | 32 | 40 | 9,5 | 13,1 | 96,0 | 264 |
| 4x4 | RE | 4,61 | 42 | 50 | 10,5 | 14,6 | 153,6 | 349 |
| 4x6 | RE | 3,08 | 54 | 65 | 12,0 | 16,0 | 230,4 | 455 |
| 4x10 | RE | 1,830 | 75 | 90 | 14,0 | 18,4 | 384,0 | 664 |
| 4x16 | RM | 1,150 | 100 | 120 | 17,0 | 21,0 | 614,4 | 953 |
| 4x25 | RM | 0,727 | 127 | 150 | 20,5 | 25,6 | 960,0 | 1439 |
| 4x35 | RM | 0,524 | 157 | 175 | 24,5 | 29,0 | 1344,0 | 1925 |
| 4x50 | SM | 0,387 | 192 | 205 | 26,0 | 34,0 | 1920,0 | 2241 |
| 4x70 | SM | 0,268 | 246 | 250 | 29,0 | 28,9 | 2688,0 | 3088 |
| 4x95 | SM | 0,193 | 299 | 305 | 33,5 | 43,2 | 3648,0 | 4119 |
| 4x120 | SM | 0,153 | 346 | 345 | 37,0 | 47,8 | 4608,0 | 5185 |
| 4x150 | SM | 0,124 | 399 | 390 | 41,0 | 53,4 | 5760,0 | 6460 |
| 4x185 | SM | 0,0991 | 456 | 440 | 46,0 | 59,3 | 7104,0 | 7974 |
| 4x240 | SM | 0,0754 | 538 | 510 | 53,0 | 67,6 | 6216,0 | 10272 |
| 4x300 | SM | 0,524 | 620 | 580 | 59,0 | 68,7 | 11520,0 | 12761 |

current capacity values are according to DIN VDE 0298-4 standard

FIVE- CORE CABLES:

| NOMINAL CROSS-SECTION | CONDUCTOR SHAPE | MAX. RESISTANCE AT 20°C | CURRENT CAPACITY IN AIR | CURRENT CAPACITY IN EARTH | OUTER DIAM. (APPROX.) | | METAL WEIGHT | CABLE WEIGHT (APPROX.) |
|-----------------------|-----------------|-------------------------|-------------------------|---------------------------|-----------------------|------|--------------|------------------------|
| | | | | | mm | mm | | |
| mm ² | | Ω/km | A | A | MIN | MAX | kg/km | kg/km |
| 5x1,5 | RE | 12,1 | 23 | 30 | 9,5 | 13,0 | 72 | 234 |
| 5x2,5 | RE | 7,41 | 32 | 40 | 10,5 | 14,2 | 120 | 306 |
| 5x4 | RE | 4,61 | 42 | 50 | 11,5 | 15,8 | 192 | 408 |
| 5x6 | RE | 3,08 | 54 | 65 | 13,0 | 17,3 | 288 | 536 |
| 5x10 | RE | 1,830 | 75 | 90 | 15,5 | 19,8 | 480 | 789 |
| 5x16 | RM | 1,150 | 100 | 120 | 18,0 | 23,1 | 768 | 1151 |
| 5x25 | RM | 0,727 | 127 | 150 | 23,5 | 28,1 | 1200 | 1730 |

current capacity values are according to DIN VDE 0298-4 standard