

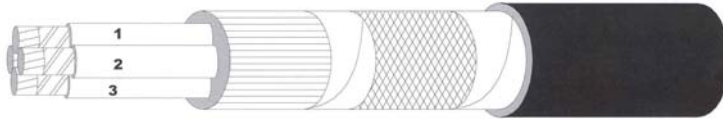


BFCU 0,6/1kV Power cable

Fire resistant, flame retardant halogen-free power cable. Enhanced oil-resistance.

BFCU 0,6/1kV

MGT/EPR/EPR/GSWB/LSf



Operating temperature : 90°C
Operating Voltage : 0,6/1kV

Application

Fixed installation for power, control and lighting in both EX- and safe areas, emergency and critical systems where requirement for fire resistance exists. For installation in areas exposed to MUD and drilling/cleaning fluids.

Standards applied

| | |
|------------------------|-------------------|
| BS 7917 / 6883 / UKOOA | - Design |
| BS 6360 class 2 | - Conductor |
| BS 7655 section 1.2 | - Insulation |
| BS 7655 section 2.6 | - Sheath |
| IEC 60332-1 | - Flame Retardant |
| IEC 60332-3-22 | - Flame Retardant |
| IEC 60331-21 | - Fire Resistant |
| IEC 60754-1,2 | - Halogen Free |
| IEC 61034-1,2 | - Low Smoke |

Construction

| | Code Letter | |
|---------------------------------|-------------|---|
| Conductor | | Tinned stranded circular copper, BS 6360, class 2 |
| Insulation | B | Mica Glass Tape / EP-rubber, GP4 to BS 7655: section 1.2 |
| Lay up / Shielding | | Cores laid up in concentric layers |
| Inner covering | F | Flame retardant and halogen-free thermoplastic compound |
| Tape over inner covering | | PET tape + rubberized Polyamide tape |
| Armour/screen | C | Galvanized steel wire braid |
| Tape over armour/screen | | PET tape + rubberized Polyamide tape |
| Outer sheath | U | Flame retardant, halogen-free, enhanced oil-resisting and mud resistant thermoset compound (LSF), SW4 to BS 7655 section 2.6 |
| Marking text | | E.g. "meter" "år" DRAKA NORSK KABEL BFCU UKOOA TYPE 3C CODE YD325 600/1000V 3C x 25 mm ² BS 7917 IEC 60331-21 IEC 60332-3-22 |
| Outer sheath colour | | Black |

Core identification power cables

All cores are numbered Offwhite - Black numbers No.1, 2, 3



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Range and dimensions

| Number of elements | Cross section core, mm ² | Conductor Diameter, mm | Insulation Thickness, mm | Thickness Inner Sheath, mm | Diameter Inner Sheath, mm | Diameter Braid Wire, mm | Thickness Outer Sheath, mm | Diameter outer sheath, mm | Weight of Cable Approx. (Kg/Km) | Copper content Approx. (kg/km) |
|--------------------|-------------------------------------|------------------------|--------------------------|----------------------------|---------------------------|-------------------------|----------------------------|---------------------------|---------------------------------|--------------------------------|
| 2 | 2.5 | 2.0 | 0.8 | 1.1 | 10 ± 0.8 | 0.3 | 1.2 | 14 ± 0.8 | 350 | 46 |
| 3 | 1.5 | 1.6 | 0.8 | 1.1 | 10 ± 0.8 | 0.3 | 1.2 | 14 ± 0.8 | 340 | 42 |
| 3 | 2.5 | 2.0 | 0.8 | 1.1 | 10.5 ± 0.8 | 0.3 | 1.3 | 15 ± 0.8 | 410 | 69 |
| 4 | 1.5 | 1.6 | 0.8 | 1.1 | 11 ± 0.8 | 0.3 | 1.3 | 15 ± 0.8 | 400 | 56 |
| 4 | 2.5 | 2.0 | 0.8 | 1.1 | 11.5 ± 0.8 | 0.3 | 1.3 | 16 ± 0.8 | 450 | 92 |
| 7 | 2.5 | 2.0 | 0.8 | 1.2 | 14 ± 0.8 | 0.3 | 1.4 | 18.5 ± 0.8 | 620 | 161 |
| 12 | 2.5 | 2.0 | 0.8 | 1.4 | 19 ± 0.8 | 0.3 | 1.6 | 24 ± 1 | 960 | 275 |
| 27 | 2.5 | 2.0 | 0.8 | 1.7 | 27.5 ± 1 | 0.45 | 1.9 | 33.5 ± 1.5 | 1900 | 618 |
| 19 | 2.5 | 2.0 | 0.8 | 1.5 | 22.5 ± 1 | 0.3 | 1.7 | 27.5 ± 1 | 1360 | 435 |
| 4 | 70 | 10.85 | 1.4 | 2.1 | 38 ± 1.5 | 0.45 | 2.4 | 45 ± 2 | 4650 | 2484 |
| 3 | 4 | 2.55 | 1.0 | 1.2 | 13 ± 0.8 | 0.3 | 1.3 | 17 ± 0.8 | 540 | 110 |
| 2 | 1.5 | 1.6 | 0.8 | 1.1 | 9.5 ± 0.5 | 0.3 | 1.2 | 13 ± 0.8 | 295 | 28 |
| 12 | 1.5 | 1.6 | 0.8 | 1.3 | 17.5 ± 0.8 | 0.3 | 1.5 | 22 ± 1 | 770 | 167 |
| 3 | 6 | 3.15 | 1.0 | 1.2 | 14.5 ± 0.8 | 0.3 | 1.4 | 18.5 ± 0.8 | 650 | 164 |
| 2 | 4 | 2.55 | 1.0 | 1.2 | 12.5 ± 0.8 | 0.3 | 1.3 | 16.5 ± 0.8 | 470 | 74 |
| 3 | 10 | 4.05 | 1.0 | 1.3 | 16.5 ± 0.8 | 0.3 | 1.5 | 21 ± 1 | 840 | 271 |
| 2 | 10 | 4.05 | 1.0 | 1.3 | 15.5 ± 0.8 | 0.3 | 1.4 | 20 ± 1 | 710 | 181 |
| 3 | 25 | 6.45 | 1.2 | 1.6 | 23.5 ± 1 | 0.3 | 1.8 | 28.5 ± 1 | 1710 | 688 |
| 2 | 6 | 3.15 | 1.0 | 1.2 | 13.5 ± 0.8 | 0.3 | 1.4 | 18 ± 0.8 | 570 | 109 |
| 2 | 16 | 5.15 | 1.0 | 1.4 | 18 ± 0.8 | 0.3 | 1.5 | 22.5 ± 1 | 780 | 289 |
| 4 | 6 | 3.15 | 1.0 | 1.3 | 16 ± 0.8 | 0.3 | 1.5 | 20.5 ± 1 | 790 | 218 |
| 4 | 35 | 7.65 | 1.2 | 1.8 | 29 ± 1 | 0.45 | 2 | 35 ± 1.5 | 2700 | 1236 |
| 2 | 35 | 7.65 | 1.2 | 1.6 | 24.5 ± 1 | 0.3 | 1.8 | 29.5 ± 1 | 1740 | 618 |
| 3 | 35 | 7.65 | 1.2 | 1.7 | 26 ± 1 | 0.45 | 1.9 | 32 ± 1.5 | 2210 | 927 |
| 3 | 16 | 5.15 | 1.0 | 1.4 | 19 ± 0.8 | 0.3 | 1.6 | 24 ± 1 | 1160 | 434 |
| 3 | 50 | 9.0 | 1.4 | 1.8 | 30.5 ± 1.5 | 0.45 | 2 | 36.5 ± 1.5 | 2890 | 1293 |
| 3 | 70 | 10.85 | 1.4 | 2 | 34.5 ± 1.5 | 0.45 | 2.2 | 41 ± 2 | 3810 | 1863 |
| 4 | 4 | 2.55 | 1.0 | 1.2 | 14.5 ± 0.8 | 0.3 | 1.4 | 18.5 ± 0.8 | 630 | 147 |
| 3 | 95 | 12.60 | 1.6 | 2.2 | 39.5 ± 1.5 | 0.45 | 2.4 | 46.5 ± 2 | 4950 | 2513 |
| 7 | 1.5 | 1.6 | 0.8 | 1.2 | 13 ± 0.8 | 0.3 | 1.3 | 17 ± 0.8 | 520 | 98 |

Ordering information

| Part number | Description | Sheath Colour | Design standard | UKOOA Code |
|-------------|-------------------------------------|---------------|-----------------|------------|
| 840073 | BFCU 0.6/1kV 2X 2.5mm ² | BLACK | BS 7917 : 1999 | YD203 |
| 840074 | BFCU 0.6/1kV 3X 1.5mm ² | BLACK | BS 7917 : 1999 | YD302 |
| 840075 | BFCU 0.6/1kV 3X 2.5mm ² | BLACK | BS 7917 : 1999 | YD303 |
| 840076 | BFCU 0.6/1kV 4X 1.5mm ² | BLACK | BS 7917 : 1999 | YD402 |
| 840077 | BFCU 0.6/1kV 4X 2.5mm ² | BLACK | BS 7917 : 1999 | YD403 |
| 840078 | BFCU 0.6/1kV 7X 2.5mm ² | BLACK | BS 7917 : 1999 | YD703 |
| 840079 | BFCU 0.6/1kV 12X 2.5mm ² | BLACK | BS 7917 : 1999 | YDA03 |
| 840108 | BFCU 0.6/1kV 27X 2.5mm ² | BLACK | BS 6883 : 1991 | YDC03 |
| 840136 | BFCU 0.6/1kV 19X 2.5mm ² | BLACK | BS 7917 : 1999 | YDB03 |
| 840151 | BFCU 0,6/1kV 4X 70 MM2 | BLACK | BS 7917 : 1999 | YD470 |
| 840153 | BFCU 0.6/1kV 3X 4mm ² | BLACK | BS 7917 : 1999 | YD304 |
| 840162 | BFCU 0.6/1kV 2X 1.5mm ² | BLACK | BS 7917 : 1999 | YD202 |
| 840165 | BFCU 0,6/1kV 12X 1,5mm2 | BLACK | BS 7917 : 1999 | YDA02 |
| 840167 | BFCU 0.6/1kV 3X 6mm ² | BLACK | BS 7917 : 1999 | YD306 |
| 840230 | BFCU 0.6/1kV 2X 4mm ² | BLACK | BS 7917 : 1999 | YD204 |
| 840233 | BFCU 0.6/1kV 3X 10mm ² | BLACK | BS 7917 : 1999 | YD310 |



BFCU 0,6/1kV Power cable

| Part number | Description | Sheath Colour | Design standard | UKOOA Code |
|-------------|------------------------------------|---------------|-----------------|------------|
| 840243 | BFCU 0,6/1kV 2X 10MM2 | BLACK | BS 7917 : 1999 | YD210 |
| 840248 | BFCU 0.6/1kV 3X 25mm ² | BLACK | BS 7917 : 1999 | YD325 |
| 840249 | BFCU 0.6/1kV 2X 6mm ² | BLACK | BS 7917 : 1999 | YD206 |
| 840250 | BFCU 0,6/1kV 2X 16 MM2 | BLACK | BS 7917 : 1999 | YD216 |
| 840257 | BFCU 0.6/1kV 4X 6mm ² | BLACK | BS 7917 : 1999 | YD406 |
| 840259 | BFCU 0.6/1kV 4X 35mm ² | BLACK | BS 7917 : 1999 | YD435 |
| 840270 | BFCU 0.6/1kV 2X 35mm ² | BLACK | BS 7917 : 1999 | YD235 |
| 840273 | BFCU 0.6/1kV 3X 35mm ² | BLACK | BS 7917 : 1999 | YD335 |
| 840297 | BFCU 0.6/1kV 3X 16mm ² | BLACK | BS 7917 : 1999 | YD316 |
| 840298 | BFCU 0.6/1kV 3X 50mm ² | BLACK | BS 7917 : 1999 | YD350 |
| 840299 | BFCU 0.6/1kV 3X 70mm ² | BLACK | BS 7917 : 1999 | YD370 |
| 840308 | BFCU 0.6/1kV 4X 4mm ² | BLACK | BS 7917 : 1999 | YD404 |
| 840309 | BFCU 0.6/1kV 3X 95mm ² | BLACK | BS 7917 : 1999 | YD370 |
| 840310 | BFCU 0.6/1kV 7X 1.5mm ² | BLACK | BS 7917 : 1999 | YD702 |

Electrical values power cables

| Number of elements | Cross section core, mm ² | Max. conductor resistance at 20°C, Ohm/km | Max. conductor resistance at 90°C, Ohm/km | Reactance at 50Hz, Ohm/km | Reactance at 60Hz, Ohm/km | Current rating IEC 60092-352 Table B.4, Ampere | Short circuit rating 1 second, Ampere |
|--------------------|-------------------------------------|---|---|---------------------------|---------------------------|--|---------------------------------------|
| 2 | 2.5 | 7.56 | 9.64 | 0.101 | 0.121 | 26 | 350 |
| 3 | 1.5 | 12.2 | 15.6 | 0.108 | 0.130 | 16 | 210 |
| 3 | 2.5 | 7.56 | 9.64 | 0.101 | 0.121 | 21 | 350 |
| 4 | 1.5 | 12.2 | 15.6 | 0.108 | 0.130 | 16 | 210 |
| 4 | 2.5 | 7.56 | 9.64 | 0.101 | 0.121 | 21 | 350 |
| 7 | 2.5 | 7.56 | 9.64 | 0.101 | 0.121 | 15.5 | 350 |
| 12 | 2.5 | 7.56 | 9.64 | 0.101 | 0.121 | 13 | 350 |
| 27 | 2.5 | 7.56 | 9.64 | 0.101 | 0.121 | 10 | 350 |
| 19 | 2.5 | 7.56 | 9.64 | 0.101 | 0.121 | 11 | 350 |
| 4 | 70 | 0.27 | 0.344 | 0.075 | 0.090 | 169 | 9800 |
| 3 | 4 | 4.7 | 5.99 | 0.100 | 0.120 | 28 | 560 |
| 2 | 1.5 | 12.2 | 15.6 | 0.108 | 0.130 | 20 | 210 |
| 12 | 1.5 | 12.2 | 15.6 | 0.108 | 0.130 | 10 | 210 |
| 3 | 6 | 3.11 | 3.97 | 0.094 | 0.112 | 36 | 840 |
| 2 | 4 | 4.7 | 5.99 | 0.100 | 0.120 | 34 | 560 |
| 3 | 10 | 1.84 | 2.35 | 0.088 | 0.105 | 50 | 1400 |
| 2 | 10 | 1.84 | 2.35 | 0.088 | 0.105 | 61 | 1400 |
| 3 | 25 | 0.734 | 0.936 | 0.081 | 0.097 | 89 | 3500 |
| 2 | 6 | 3.11 | 3.97 | 0.094 | 0.112 | 44 | 840 |
| 2 | 16 | 1.16 | 1.48 | 0.082 | 0.099 | 80 | 2240 |
| 4 | 6 | 3.11 | 3.97 | 0.094 | 0.112 | 36 | 840 |
| 4 | 35 | 0.529 | 0.675 | 0.078 | 0.094 | 110 | 4900 |
| 2 | 35 | 0.529 | 0.675 | 0.078 | 0.094 | 133 | 4900 |
| 3 | 35 | 0.529 | 0.675 | 0.078 | 0.094 | 110 | 4900 |
| 3 | 16 | 1.16 | 1.48 | 0.082 | 0.099 | 67 | 2240 |
| 3 | 50 | 0.391 | 0.499 | 0.078 | 0.093 | 137 | 7000 |
| 3 | 70 | 0.27 | 0.344 | 0.075 | 0.090 | 169 | 9800 |
| 4 | 4 | 4.7 | 5.99 | 0.100 | 0.120 | 28 | 560 |
| 3 | 95 | 0.195 | 0.249 | 0.075 | 0.090 | 205 | 13300 |
| 7 | 1.5 | 12.2 | 15.6 | 0.108 | 0.130 | 12 | 210 |



BFCU 0,6/1kV Power cable

Ambient temperature correction factors

| | | | | | | | | | | |
|-----------------|------|------|------|------|------|------|------|------|------|------|
| Ambient Temp °C | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 |
| Rating factor | 1.11 | 1.05 | 1.00 | 0.94 | 0.88 | 0.82 | 0.75 | 0.67 | 0.50 | 0.47 |

Installation recommendations

| Minimum Bending Radius during Installation | Minimum Bending Radius Fixed Installed | Maximum Tensile Load During Installation | Minimum Installation Temperature |
|--|--|--|----------------------------------|
| 8 x D | OD < 25 mm - 4 x D, OD > 25 mm - 6 x D | 50 N /mm ² | -20°C |