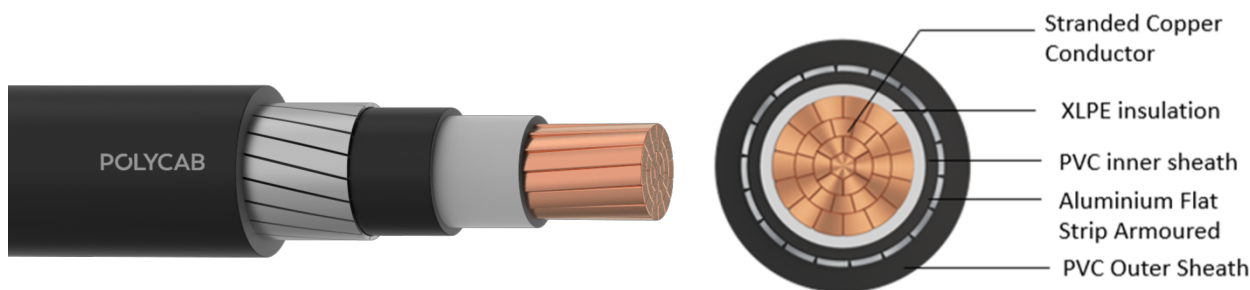


POLYCAB LV CU IEC 60502-1 0.6/1 KV SC SFA

Power Cable, 0.6/1 (1.2) KV AC



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB LV CU IEC 60502-1 0.6/1 KV SC SFA, stranded compacted copper conductor, XLPE insulated, and PVC sheathed armoured cable confirming to IEC 60502-1 is suitable for fixed installation such as distribution network or industrial installation. These cable cables are designed for systems with rated AC voltage 1KV ($U_m=1.2$ KV) & ≤ 1.5 KV (with a maximum 1.8 KV DC) between two live conductor.

CHARACTERISTICS

Voltage Rating

Nominal Voltage: 0.6/1 (1.2) kV

Operation Temperature

Max. operating temperature up to 90°C

Max. Short Circuit Temperature: 250°C

CONSTRUCTION

- Conductor: Circular Compacted or Stranded Copper conductor as per IEC 60228, class 2
- Insulation: XLPE as per IEC 60502-1
- Inner covering: Extruded or Lapped PVC
- Armouring: Aluminium Flat Strip armoured (FSA)
- Outer Sheath: Extruded Polyvinylchloride (ST2) or Polyethylene (ST7) or Halogen free (ST8) as per IEC 60502-1

Core Identification

Red / Yellow / Blue / Black / Natural

Bending Radius:

Fixed Installation: 12 x Overall diameter

Test Voltage

3.5kV AC

OUTSTANDING FEATURES

- High life
- High Insulation
- Resistance
- Flame retardant
- Low Halogen
- Low smoke
- UV resistant

STANDARD FOLLOWS

IEC 60228

IEC 60502-1

IEC 60332-1-2

COMPLIANCE

Conductor resistance IEC 60228

Insulation resistance IEC 60502-1

Shrinkage test IEC 60811-503

Flame Retardant test IEC 60332-1-2

OUR ACCREDITATIONS



APPROVAL



POLYCAB LV CU IEC 60502-1 0.6/1 KV SC SFA

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Weight & Dimension Data

| Product Code | Nominal Cross-sectional Area | Nominal Thickness | | | Armouring dimension | Overall Diameter (Approx.) | Weight (Approx.) Kg/Km |
|----------------------|------------------------------------|-------------------|-------------------|--------|------------------------|----------------------------------|------------------------------|
| | | Insulation | Inner covering | Sheath | | | |
| | mm ² | mm | mm | mm | n x mm | mm | |
| LVIE07CXAFY2001C095S | 95 | 1.10 | 1.00 | 1.60 | 4 x 0.5 | 19.6 | 1175 |
| LVIE07CXAFY2001C120S | 120 | 1.20 | 1.00 | 1.60 | 4 x 0.5 | 21.3 | 1425 |
| LVIE07CXAFY2001C150S | 150 | 1.40 | 1.00 | 1.70 | 4 x 0.5 | 23.3 | 1750 |
| LVIE07CXAFY2001C185S | 185 | 1.60 | 1.00 | 1.80 | 4 x 0.5 | 25.5 | 2150 |
| LVIE07CXAFY2001C240S | 240 | 1.70 | 1.00 | 1.80 | 4 x 0.5 | 27.9 | 2700 |
| LVIE07CXAFY2001C300S | 300 | 1.80 | 1.00 | 1.90 | 4 x 0.5 | 30.4 | 3325 |
| LVIE07CXAFY2001C400S | 400 | 2.00 | 1.20 | 2.10 | 4 x 0.5 | 34.0 | 4150 |
| LVIE07CXAFY2001C500S | 500 | 2.20 | 1.20 | 2.20 | 4 x 0.5 | 38.1 | 5425 |
| LVIE07CXAFY2001C630S | 630 | 2.40 | 1.20 | 2.30 | 4 x 0.5 | 41.9 | 6725 |
| LVIE07CXAFY2001C800S | 800 | 2.60 | 1.40 | 2.40 | 4 x 0.5 | 46.5 | 8450 |
| LVIE07CXAFY2001C01KS | 1000 | 2.80 | 1.40 | 2.60 | 4 x 0.5 | 51.2 | 10475 |

Electrical Characteristics:

Current rating and maximum DC conductor resistance.

| Nominal Cross-sectional area | Buried direct in the ground at 20°C | | In single way Ducts at 30°C | | In air at 30°C | | Maximum DC conductor Resistance at 20°C |
|------------------------------------|--|---------|-----------------------------|---------|----------------|---------|--|
| | Flat touching | Trefoil | Flat touching | Trefoil | Flat touching | Trefoil | |
| mm ² | Amp. | Amp. | Amp. | Amp. | Amp. | Amp. | Ω/km |
| 95 | 337 | 281 | 256 | 233 | 374 | 333 | 0.193 |
| 120 | 383 | 319 | 291 | 264 | 436 | 389 | 0.153 |
| 150 | 428 | 355 | 324 | 294 | 495 | 443 | 0.124 |
| 185 | 483 | 401 | 365 | 330 | 571 | 515 | 0.0991 |
| 240 | 556 | 461 | 420 | 379 | 674 | 608 | 0.0754 |
| 300 | 622 | 515 | 469 | 422 | 770 | 697 | 0.0601 |
| 400 | 703 | 580 | 528 | 473 | 894 | 811 | 0.047 |
| 500 | 785 | 646 | 589 | 525 | 1023 | 928 | 0.0366 |
| 630 | 870 | 714 | 651 | 578 | 1162 | 1057 | 0.0283 |
| 800 | 947 | 779 | 707 | 626 | 1297 | 1185 | 0.0221 |
| 1000 | 1010 | 834 | 751 | 668 | 1417 | 1307 | 0.0176 |

Maximum conductor temperature

90°C

Ambient air temperature

30°C

Ground temperature

20°C

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Depth of laying
Thermal resistivity of soil

750 mm
1.5 K.m/W

De-Rating Factor

Current rating de-rating factors for other than 30°C ambient air temperature.

| Air Temperature | 20 | 25 | 35 | 40 | 45 | 50 | 55 | 60 |
|------------------|------|------|------|------|------|------|------|------|
| De-rating factor | 1.08 | 1.04 | 0.96 | 0.91 | 0.87 | 0.82 | 0.76 | 0.71 |

Current rating de-rating factors for other than 20°C ground temperature.

| Ground Temperature | 10 | 15 | 25 | 30 | 35 | 40 | 45 | 50 |
|--------------------|------|------|------|------|------|------|-----|------|
| De-rating factor | 1.07 | 1.04 | 0.96 | 0.93 | 0.89 | 0.85 | 0.8 | 0.76 |

Current rating de-rating factors for other than 30°C ground temperature for cables in Ducts.

| Ground Temperature | 15 | 25 | 35 | 40 | 45 | 50 |
|--------------------|------|------|------|------|------|------|
| De-rating factor | 1.12 | 1.04 | 0.96 | 0.91 | 0.87 | 0.82 |

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