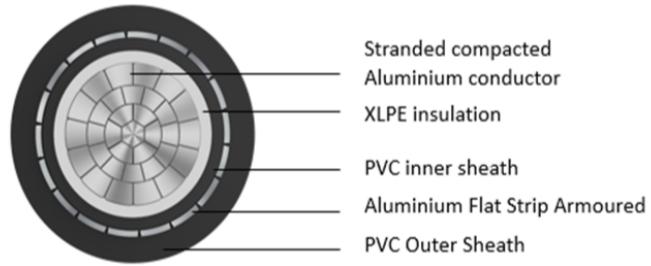


POLY CAB LV AL IEC 60502-1 0.6/1 KV SC SFA Power Cable, 0.6/1 (1.2) KV AC

POLY CAB
IDEAS. CONNECTED.



Images not to scale. Follow table for dimensions

APPLICATION

POLY CAB LV AL IEC 60502-1 0.6/1 KV SC SFA, stranded compacted aluminium 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: +90°C

Max. Short Circuit Temperature: 250°C

CONSTRUCTION

- Conductor: Circular Compacted or Stranded Aluminium 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



POLYCAT LV AL IEC 60502-1 0.6/1 KV SC SFA

Power Cable, 0.6/1 (1.2) KV AC

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Weight & Dimension Data

| Product Code | Nominal Cross-sectional Area | Nominal Thickness | | | Nominal Diameter | | Weight (Approx.) |
|----------------------|------------------------------|-------------------|----------------|--------|---------------------|------------------|------------------|
| | | Insulation | Inner covering | Sheath | Armouring dimension | Overall Diameter | |
| | | mm ² | mm | mm | mm | n x mm | mm |
| LVIE07AXAFY2001C095S | 95 | 1.10 | 1.00 | 1.60 | 4 x 0.5 | 19.6 | 570 |
| LVIE07AXAFY2001C120S | 120 | 1.20 | 1.00 | 1.60 | 4 x 0.5 | 21.3 | 680 |
| LVIE07AXAFY2001C150S | 150 | 1.40 | 1.00 | 1.70 | 4 x 0.5 | 23.3 | 800 |
| LVIE07AXAFY2001C185S | 185 | 1.60 | 1.00 | 1.80 | 4 x 0.5 | 25.5 | 950 |
| LVIE07AXAFY2001C240S | 240 | 1.70 | 1.00 | 1.80 | 4 x 0.5 | 27.9 | 1150 |
| LVIE07AXAFY2001C300S | 300 | 1.80 | 1.00 | 1.90 | 4 x 0.5 | 30.4 | 1400 |
| LVIE07AXAFY2001C400S | 400 | 2.00 | 1.20 | 2.10 | 4 x 0.5 | 34.0 | 1750 |
| LVIE07AXAFY2001C500S | 500 | 2.20 | 1.20 | 2.20 | 4 x 0.5 | 38.1 | 2230 |
| LVIE07AXAFY2001C630S | 630 | 2.40 | 1.20 | 2.30 | 4 x 0.5 | 41.9 | 2750 |
| LVIE07AXAFY2001C800S | 800 | 2.60 | 1.40 | 2.40 | 4 x 0.5 | 46.5 | 3400 |
| LVIE07AXAFY2001C01KS | 1000 | 2.80 | 1.40 | 2.60 | 4 x 0.5 | 51.2 | 4180 |

Electrical Characteristics:

Current ratting 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. | Ω/km |
| 95 | 262 | 218 | 199 | 181 | 290 | 259 | 0.32 |
| 120 | 298 | 248 | 226 | 206 | 339 | 304 | 0.253 |
| 150 | 333 | 276 | 252 | 229 | 385 | 345 | 0.206 |
| 185 | 377 | 313 | 285 | 258 | 447 | 403 | 0.164 |
| 240 | 436 | 362 | 329 | 298 | 528 | 477 | 0.125 |
| 300 | 490 | 406 | 369 | 333 | 606 | 550 | 0.1 |
| 400 | 559 | 463 | 421 | 378 | 712 | 648 | 0.0778 |
| 500 | 635 | 524 | 476 | 426 | 826 | 754 | 0.0605 |
| 630 | 716 | 590 | 536 | 477 | 955 | 872 | 0.0469 |
| 800 | 799 | 657 | 596 | 528 | 1091 | 998 | 0.0367 |
| 1000 | 877 | 718 | 652 | 575 | 1229 | 1124 | 0.0291 |

**POLY CAB LV AL IEC 60502-1 0.6/1 KV SC SFA
Power Cable, 0.6/1 (1.2) KV AC**

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| | |
|-------------------------------|-----------|
| Maximum conductor temperature | 90°C |
| Ambient air temperature | 30°C |
| Ground temperature | 20°C |
| Depth of laying | 750 mm |
| Thermal resistivity of soil | 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 |