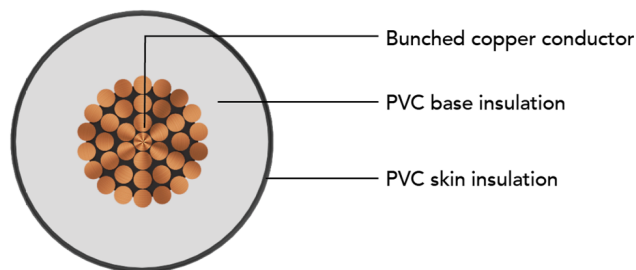


POLYCAB Type BK BS 6231

Switch gear and Control gear wiring Cable, 600/1000 V AC

POLYCAB
IDEAS. CONNECTED.



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB Type BK BS 6231 single core non-sheathed thermoplastic insulated cable is suitable for wiring of switch, control metering, relay & instrument panels of power switchgear and for such purpose as internal connections in rectifier equipment and its motor starters and controllers.

CHARACTERISTICS

Voltage Rating

600/1000 V

Operation Temperature

Fixed: -15°C to 70° C

Bending Radius

Fixed installation - 8 x Overall Diameter

CONSTRUCTION

- Plain annealed copper conductor as per BS EN/IEC 60228, class 5
- Insulated with Polyvinyl Chloride Type TI 1 to EN 50363-3

Core Identification

Black/Blue/Brown/Grey/Orange/Pink/Red/Turquoise/Violet/White/Yellow

Test Voltage

3500V AC at (20±5) °C

OUTSTANDING FEATURES

- Flexible
- High insulation resistance
- Smooth and Glossy finish
- Panel wiring
- Flame propagation

STANDARD FOLLOWS

BS EN/IEC 60228

BS EN 50363-3

BS 6231

IEC 60332-1-2

COMPLIANCE

Conductor resistance test BS EN/IEC 60228

Insulation resistance BS 6231

Flammability test BS EN/IEC 60332-1-2

OUR ACCREDITATIONS



APPROVAL



POLYCAB Type BK BS 6231

Switch gear and Control gear wiring Cable, 600/1000 V AC

WEIGHT & DIMENSION DATA :

| Product Code | Nominal cross sectional area mm ² | Insulation thickness mm | Overall Diameter (Approx.) mm | Weight (Approx.) kg/km |
|----------------------|---|----------------------------|----------------------------------|---------------------------|
| LDBS07CYUAYA001C0.5S | 0.5 | 0.8 | 2.63 | 11 |
| LDBS07CYUAYA001C.75S | 0.75 | 0.8 | 2.8 | 14 |
| LDBS07CYUAYA001C001S | 1 | 0.8 | 2.97 | 18 |
| LDBS07CYUAYA001C1.5S | 1.5 | 0.8 | 3.27 | 23 |
| LDBS07CYUAYA001C2.5S | 2.5 | 0.8 | 3.7 | 33 |
| LDBS07CYUAYA001C004S | 4 | 0.8 | 4.3 | 50 |
| LDBS07CYUAYA001C006S | 6 | 0.8 | 4.8 | 69 |
| LDBS07CYUAYA001C010S | 10 | 1 | 6.33 | 117 |
| LDBS07CYUAYA001C016S | 16 | 1 | 7.6 | 174 |
| LDBS07CYUAYA001C025S | 25 | 1.2 | 9.57 | 269 |
| LDBS07CYUAYA001C035S | 35 | 1.2 | 10.73 | 368 |
| LDBS07CYUAYA001C050S | 50 | 1.4 | 12.93 | 525 |
| LDBS07CYUAYA001C070S | 70 | 1.4 | 14.77 | 721 |
| LDBS07CYUAYA001C095S | 95 | 1.6 | 16.67 | 974 |
| LDBS07CYUAYA001C120S | 120 | 1.6 | 18.4 | 1213 |
| LDBS07CYUAYA001C150S | 150 | 1.8 | 20.57 | 1492 |
| LDBS07CYUAYA001C185S | 185 | 2 | 22.67 | 1873 |
| LDBS07CYUAYA001C240S | 240 | 2.2 | 25.53 | 2396 |

Electrical characteristics

Current carrying capacity and maximum DC conductor resistance.

| Nominal cross sectional area | Reference Method A (enclosed in conduit in thermally insulating wall etc.) | | Reference Method B (enclosed in conduit on a wall or in trunking etc.) | | Reference Method C (clipped direct) | | Maximum DC conductor resistance at 20°C |
|------------------------------|---|---------------------------------|---|---------------------------------|---|--|---|
| | 2 cables, single-phase a.c. or d.c. | 3 or 4 cables, three-phase a.c. | 2 cables, single-phase a.c. or d.c. | 3 or 4 cables, three-phase a.c. | 2 cables, single-phase a.c. or d.c. flat and touching | 3 or 4 cables, three-phase a.c. flat and touching or trefoil | |
| mm ² | Amp. | Amp. | Amp. | Amp. | Amp. | Amp. | Ω/km |
| 1 | 10.5 | 10 | 13 | 11 | 15 | 13 | 19.5 |
| 1.5 | 14 | 13 | 17 | 15 | 19 | 17 | 13.3 |
| 2.5 | 19 | 17 | 23 | 20 | 26 | 24 | 7.98 |
| 4 | 25 | 23 | 30 | 27 | 35 | 31 | 4.95 |

POLYCAB Type BK BS 6231

Switch gear and Control gear wiring Cable, 600/1000 V AC

| Nominal cross sectional area | Reference Method A (enclosed in conduit in thermally insulating wall etc.) | | Reference Method B (enclosed in conduit on a wall or in trunking etc.) | | Reference Method C (clipped direct) | | Maximum DC conductor resistance at 20°C |
|------------------------------|---|---------------------------------|---|---------------------------------|---|--|---|
| | 2 cables, single-phase a.c. or d.c. | 3 or 4 cables, three-phase a.c. | 2 cables, single-phase a.c. or d.c. | 3 or 4 cables, three-phase a.c. | 2 cables, single-phase a.c. or d.c. flat and touching | 3 or 4 cables, three-phase a.c. flat and touching or trefoil | |
| mm ² | Amp. | Amp. | Amp. | Amp. | Amp. | Amp. | Ω/km |
| 6 | 32 | 29 | 39 | 34 | 45 | 41 | 3.3 |
| 10 | 44 | 40 | 54 | 48 | 62 | 56 | 1.91 |
| 16 | 58 | 56 | 72 | 65 | 83 | 75 | 1.21 |
| 25 | 78 | 71 | 98 | 86 | 111 | 101 | 0.78 |
| 35 | 96 | 86 | 121 | 107 | 137 | 125 | 0.554 |
| 50 | 115 | 105 | 146 | 130 | 177 | 162 | 0.386 |
| 70 | 146 | 132 | 186 | 166 | 227 | 208 | 0.272 |
| 95 | 177 | 159 | 225 | 201 | 275 | 253 | 0.206 |
| 120 | 204 | 182 | 261 | 232 | 320 | 294 | 0.161 |
| 150 | 233 | 210 | 291 | 254 | 370 | 339 | 0.129 |
| 185 | 265 | 238 | 331 | 287 | 423 | 388 | 0.106 |
| 240 | 311 | 277 | 388 | 336 | 500 | 458 | 0.0801 |

The ambient temperature is 30°C,
Conductor operating temperature 70°C.
The above table is in accordance with Table 4D1A of BS 7671:2018

De-Rating Factor

De-rating factor for 70°C thermoplastic insulated cable

| Air Temperature | 35°C | 40°C | 45°C | 50°C | 55°C |
|------------------|------|------|------|------|------|
| De-Rating Factor | 0.91 | 0.82 | 0.71 | 0.58 | 0.41 |