

CU/PVC TYPE-CK

■ Type Approved Certificates

BASEC

600/1000 V

■ Application

Single core PVC insulated flexible cables for switchgear and controlgear wiring. In the wiring of switch, control, metering, relay and instrument panels of power switchgear, and for such purposes as internal connections in rectifier equipment and its motor starters and controllers.

Max core temperature **: 90°C

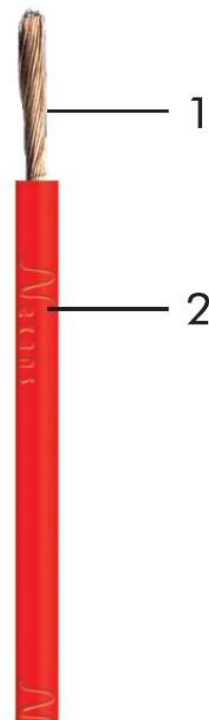
■ Design

1 Conductor

Stranded annealed flexible copper Class 5

2 Insulation

PVC



■ Core identification

1x: Brown-Blue-Black-Grey-
White-Red-Yellow/green

■ Standards

BS 6231
IEC 60228
IEC 60332-1-2



Rated Voltage $U_0/U(U_m)$
0.6/1 kV



Bending Factor
6D



Flame retardant
IEC 60332-1-2



Max Operating
Temperature
90°C



Operating Temperature
-20 °C +60 °C

Technical Characteristics

| Cables | Approximate AWG size | Outer Diameter | Current Ratings in Air | DC Voltage Drop | Weight | DC Resistance at 20°C |
|---------------------------------------|----------------------|----------------|------------------------|-----------------|---------|-----------------------|
| | (awg) | (mm) | (A) | (V/A/km) | (kg/km) | (ohm/km) |
| CU/PVC TYPE-CK 1X0.5 mm ² | 20 | 2,5 | 11 | 99,4 | 10 | 39,0 |
| CU/PVC TYPE-CK 1X0.75 mm ² | 18 | 2,7 | 14 | 66,4 | 13 | 26,0 |
| CU/PVC TYPE-CK 1X1 mm ² | 17 | 2,9 | 17 | 49,8 | 15 | 19,5 |
| CU/PVC TYPE-CK 1X1.5 mm ² | 16 | 3,2 | 21 | 34,0 | 20 | 13,3 |
| CU/PVC TYPE-CK 1X2.5 mm ² | 14 | 3,7 | 30 | 20,4 | 30 | 7,98 |
| CU/PVC TYPE-CK 1X4 mm ² | 12 | 4,4 | 41 | 12,6 | 45 | 4,95 |
| CU/PVC TYPE-CK 1X6 mm ² | 10 | 5,2 | 53 | 8,4 | 65 | 3,30 |
| CU/PVC TYPE-CK 1X10 mm ² | 8 | 6,4 | 75 | 4,88 | 110 | 1,91 |
| CU/PVC TYPE-CK 1X16 mm ² | 6 | 7,5 | 100 | 3,08 | 160 | 1,21 |
| CU/PVC TYPE-CK 1X25 mm ² | 4 | 9,5 | 136 | 1,99 | 260 | 0,780 |
| CU/PVC TYPE-CK 1X35 mm ² | 2 | 11,0 | 167 | 1,41 | 340 | 0,554 |
| CU/PVC TYPE-CK 1X50 mm ² | 1/0 | 13,0 | 204 | 0,98 | 500 | 0,386 |
| CU/PVC TYPE-CK 1X70 mm ² | 2/0 | 15,0 | 259 | 0,69 | 700 | 0,272 |
| CU/PVC TYPE-CK 1X95 mm ² | 3/0 | 17,0 | 321 | 0,53 | 900 | 0,206 |
| CU/PVC TYPE-CK 1X120 mm ² | 4/0 | 19,0 | 374 | 0,41 | 1200 | 0,161 |
| CU/PVC TYPE-CK 1X150 mm ² | 300 MCM | 21,0 | 429 | 0,33 | 1400 | 0,129 |
| CU/PVC TYPE-CK 1X185 mm ² | 350 MCM | 23,0 | 496 | 0,27 | 1700 | 0,106 |
| CU/PVC TYPE-CK 1X240 mm ² | 500 MCM | 26,0 | 595 | 0,20 | 2250 | 0,0801 |

Current ratings are based on a conductor operating temperature of 90°C and an ambient air temperature of 45°C and assumes single cable isolated in free air
All circular flexible conductors (class 5)

Current rating general conditions

The data are indicated for continuous duty operation and apply to

- Maximum conductor temperature = 90 °C
- Nominal frequencies =50 or 60 Hz



Minimum Bending Radius
After placed in position, fixed: 6 x D
During installation: 6 x D

Voltage drop

The data are based on cos q=1

And refer to BS 7671

For other laying conditions refer to the above standard

Derating Factors

| De-Rating Factors | | | | | | | |
|----------------------|----|------|-----|------|------|------|------|
| Air Temperature (°C) | 45 | 50 | 55 | 60 | 65 | 70 | 75 |
| De-Rating Factors: | 1 | 0,97 | 0,9 | 0,82 | 0,73 | 0,63 | 0,52 |

| Grouping Factors | | | | | | | |
|------------------------|-----|-----|------|-----|------|------|-----|
| No of cables in Group: | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| De-Rating Factors: | 0,8 | 0,7 | 0,65 | 0,6 | 0,56 | 0,53 | 0,5 |

Packaging Details

| | |
|--------------|---------------------------------------|
| 100m coils | up to and including 25mm ² |
| 500m coils | up to and including 50mm ² |
| Wooden drums | all sizes |

**The cables can achieve the operation temperature of 105°C.