



DATA SHEET
MCB Co80A 3-pol+N
C characteristic
 Article number 09915370



[Internetlink](#)

symbolic image



Function

An important stipulation of DIN VDE 0100 is to protect cables, lines and installation devices from overload and short-circuits. This requirement can be met using miniature circuit-breakers (MCBs). In industrial installations and also in commercial buildings, they often take on additional protection of equipment and devices where there are usually higher requirements than when used in residential buildings. Miniature circuit-breakers utilise both the magnetic and heat effect of the electrical current. If the current jumps to a value that is too high when a short-circuit occurs, the MCB interrupts the circuit using the magnetic field of an energised coil. The heat that develops when there is continuous overload causes the bimetal to warp, which trips the breaker. Miniature circuit-breakers of series MCB have a high rated short-circuit current of 10 kA. Double-sided two-tier terminals enable the use of large cross-sections for conductors and phase bars. Miniature circuit-breakers with characteristic C are primarily suitable for power circuits with high switch-on or peak currents, as their short-circuit trip value is five to ten times the rated current. They replace the former G characteristic.

Features

high-quality miniature circuit-breakers 1+N in 1 module width unit for space-saving installation, switching position indicator red/green, Protection against wires being lodged behind terminals, extensive range of accessories which can be retro-fitted, rated currents up to 40 A, rated switching capacity 6 kA as per EN 60898

Mounting

quick fastening to mounting rail, any installation position

Applications

suitable for use in power supplies for industrial facilities and purpose-built buildings or buildings for commercial use

Accessories

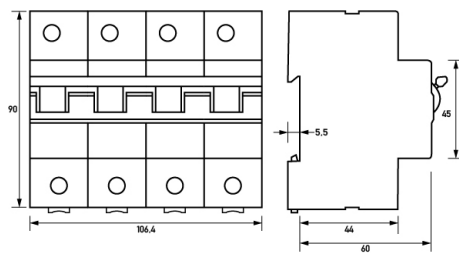
MCB USA, MCB ASA, MCB HI 21, MCB HI 11

Technical Data

| Technical Data | MCB Co80A 3-pol+N |
|---|-------------------------|
| Series | MCB |
| Number of poles | 3+N |
| Tripping characteristic | C |
| Operating voltage (AC) | 230 V, 400 V |
| Operating frequency | 50 Hz (40 Hz ... 60 Hz) |
| Specification | Load circuit |
| Rated voltage (AC) | 12 V ... 440 V |
| Rated voltage (DC) | 48 V (12 V ... 52 V) |
| Rated current (AC) | 80 A |
| Rated short-circuit current | 10 kA |
| max. Output O1 total rated switching capacity | 10 kA |
| Rated impulse withstand voltage | 6 kV |
| Current heat loss per current path | 5.79 W |

| Technical Data | MCB Co8oA 3-pol+N |
|---|---|
| | Screw-type terminal top and bottom (Load circuit) |
| Max number of wires per terminal | 2 |
| Cross section solid | 1-wire: 1.5 mm ² ... 50 mm ² ; 2-wire: 1.5 mm ² ... 16 mm ² |
| Connecting capacity flexible | 2-wire: 1.5 mm ² ... 16 mm ² |
| Cross section stranded | 1-wire: 1.5 mm ² ... 50 mm ² ; 2-wire: 1.5 mm ² ... 16 mm ² |
| Tightening torque | max. 3.5 Nm |
| General data description | General data |
| Operating position | any |
| Mechanical endurance | min. 10000 cycles |
| Electrical endurance | min. 4000 cycles |
| Ambient temperature | -30 °C ... 55 °C |
| Housing type | Distributor housing |
| Mounting type | Mounting rail |
| Housing material | Thermoplastic resin |
| Protection class | IP20 |
| sealable | true |
| Width | 106.4 mm |
| Height | 90 mm |
| Depth | 71.5 mm |
| Installation depth | 70 mm |
| Width (modules) | 6 |
| Design requirements/Standards | EN 60898-1 |
| Power limitation category | 3 |
| Degree of pollution according to EN 60664 | 2 |
| Overvoltage class | IV |

Dimensions



Wiring example

