



DATA SHEET

MCB C100A 3-pol

C characteristic

Article number 09915311



[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

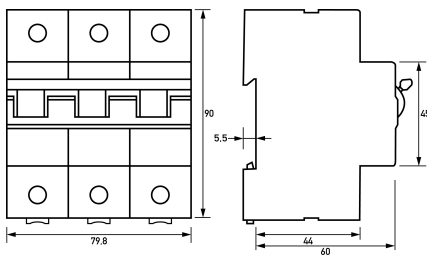
Undervoltage trips MCB USA, Operating current trips MCB ASA, Auxiliary Switches MCB HI

Technical Data

Technical Data	MCB C100A 3-pol
Series	MCB
Number of poles	3
Tripping characteristic	C
	Load circuit
Specification	Load switch contact
Rated voltage (AC)	230 V, 400 V (12 V ... 440 V)
Rated voltage (DC)	48 V (12 V ... 52 V)
Rated current (AC)	100 A
Rated short-circuit current	10 kA
max. Output O1 total rated switching capacity	10 kA
Rated impulse withstand voltage	6 kV
Rated frequency	50 Hz (40 Hz ... 60 Hz)
Current heat loss per current path	8.03 W

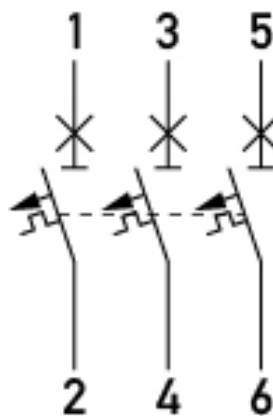
Technical Data	MCB C100A 3-pol
Overtoltage class	IV
	Screw-type terminal top and bottom (Load circuit)
Connection C1 Maximum number of conductors per terminal	2 (conductors of same type and cross-section)
Cross section solid	1-wire: 1.5 mm ² ... 50 mm ² ; 2-wire: 1.5 mm ² ... 16 mm ²
Connecting capacity 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	79.8 mm
Height	90 mm
Depth	71.5 mm
Installation depth	70 mm
Width (modules)	4.5
Design requirements/Standards	EN 60898-1
Power limitation category	3
Degree of pollution according to EN 60664	2

Dimensions



Dimensional drawing Group view

Wiring example



Wiring diagram