

TECHNICAL SPECIFICATION

Miniature circuit breakers (MCB) C60DC SERIES



Functions:

- for lowering constant current voltaic arc and use of the breaker at constant current consumer protection
- protection of the electrical circuits from overload or short circuits of the outer circuit at alternating current and constant current power supply circuits
- it can be used as a device for commutation and control of electrical circuits
- in combination with auxiliary devices it allows remote control, commutation or indication of the protected circuit
- for mounting in industrial buildings
- allows protection of consumers generating short circuit current up to 6000A at alternating current power supply

Technical data

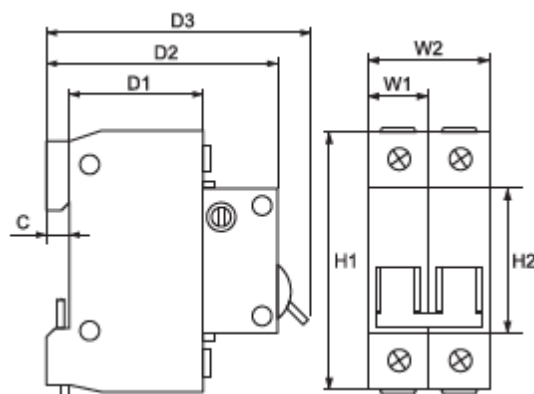
- Rated voltage:230 ;50/60Hz
- Breaking capacity (cycle O-CO) in accordance with standard EN 60 898-1:6000A
- Rated breaking capacity $I_{cs}=75\% I_{cu}$
- Isolating voltage $\geq 2000V$
- Electrical wear resistance (number of cycles): 4000
- Mechanical (number of cycles):50000
- Class of current limiting:3
- IP code: IP>20
- Tripping curve:
C - the maximum current release breaks between 5 and 10In; used to protect power supply cables and conventional consumers
- Joining terminal: flat (tunnel) screw terminal with composition 1.5 coldly draw-plated plane Q235-A
- Plastic box – not keeping the burning material nylon PA66, UV rays wear resistance
- Status indicator
- Heat resistance of internal non-electrical components 850°C / 10s
- Box permittivity strength: > 18MV/m
- Abnormal heating wear resistance and fire of the outer parts: 960°C/3s
- Tightening moment: 1.33Nm
- Power supply (conducting)
 - power supply busbar 1P63A, 2P63A, 3P63A
 - rigid conductors up to 25mm
 - flexible conductors up to 16mm
- Maximum current release containing
 - copper coil – composition: pure copper T2 type

- resistance: from 0.6 to 180m
- welding effort: <math><150\ 000\ \text{N/mm}</math>
- bimetal plate – composition: 5J158 to TB180 depending on the current
- thickness 0.6mm (up to 40A) and 0.8mm (up to 63A)
- magnetic core – composition coldly draw-plated metal wire(1Gr18Ni9)
- thickness: 1.15 to 2.24 μm
- drawing effort: from 200 to 400N/mm
- contact head of the moveable contact – composition silver graphite CAg(5)
- dimensions 3x3x0.8 (up to 40A) and 4x4x0.8 (up to 63A)
- static contact – composition: pure copper T2Y2
- composition of the contact head: silver graphite CAg(5)

Mounting

- Vertical
- Din-rail
- For mounting in housing or industrial environment without serious interference
- Ambient temperature -5°C to $+65^{\circ}\text{C} \pm 2^{\circ}\text{C}$

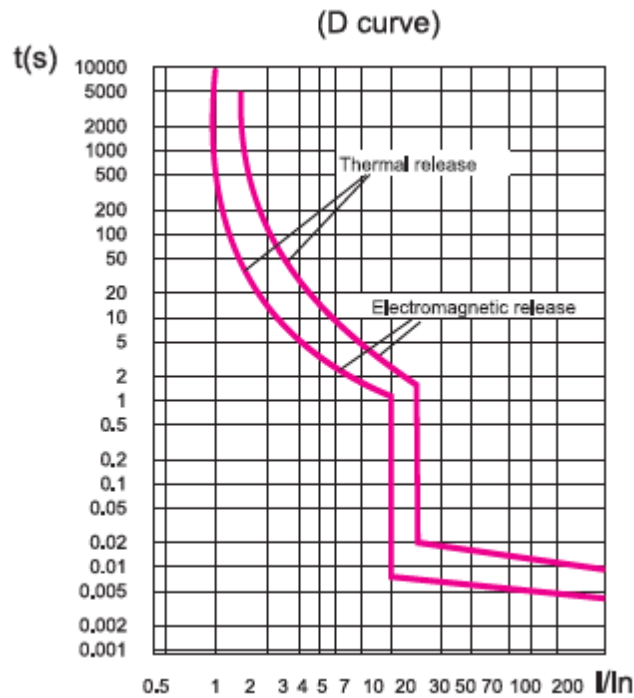
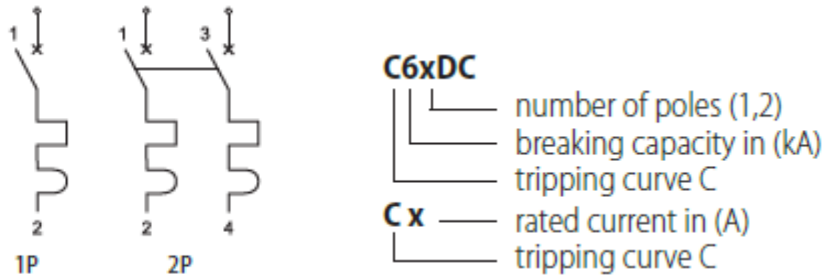
Dimensions



Dimensions (mm)

C	D1	D2	D3
5	49	65	72
H1	H2	W1	W2
78	45	18	36

Schemes



Products

- MCB 61DC

Type	Number of poles	Rated current In(A)	Breaking capacity (kA)	Recommended section of the conductor (g/mm ²)	Packing / box	Catalogue number Curve C
61DC / 1A	1P	1	6	1.0	12 / 240	41164
61DC / 2A	1P	2	6	1.0	12 / 240	41165
61DC / 4A	1P	4	6	1.0	12 / 240	41166
61DC / 6A	1P	6	6	1.0	12 / 240	41167
61DC / 10A	1P	10	6	1.5	12 / 240	41168
61DC / 16A	1P	16	6	2.5	12 / 240	41169
61DC / 20A	1P	20	6	2.5	12 / 240	41170
61DC / 25A	1P	25	6	4.0	12 / 240	41171
61DC / 32A	1P	32	6	6.0	12 / 240	41172
61DC / 40A	1P	40	6	10.0	12 / 240	41173
61DC / 50A	1P	50	6	10.0	12 / 240	41174
61DC / 63A	1P	63	6	16.0	12 / 240	41175

- MCB62DC

Type	Number of poles	Rated current In(A)	Breaking capacity (kA)	Recommended section of the conductor (g/mm ²)	Packing / box (pcs)	Catalogue number Curve C
62DC / 2A	2P	2	6	1.0	6 / 120	41176
62DC / 4A	2P	4	6	1.0	6 / 120	41177
62DC / 6A	2P	6	6	1.0	6 / 120	41178
62DC / 10A	2P	10	6	1.5	6 / 120	41179
62DC / 16A	2P	16	6	2.5	6 / 120	41181
62DC / 20A	2P	20	6	2.5	6 / 120	41182
62DC / 25A	2P	25	6	4.0	6 / 120	41183

Standarts

EN60898-1:2003

EN60898-2:2006