

TECHNICAL SPECIFICATION

Miniature circuit breakers (MCB) C40N



Functions:

- protection of the electrical circuits from overload or short circuits of the outer circuit
- 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 residential and industrial buildings
- for mounting at a distance from the transformer post from 150 to 850 m
- allows protection of consumers generating short circuit current up to 4500A

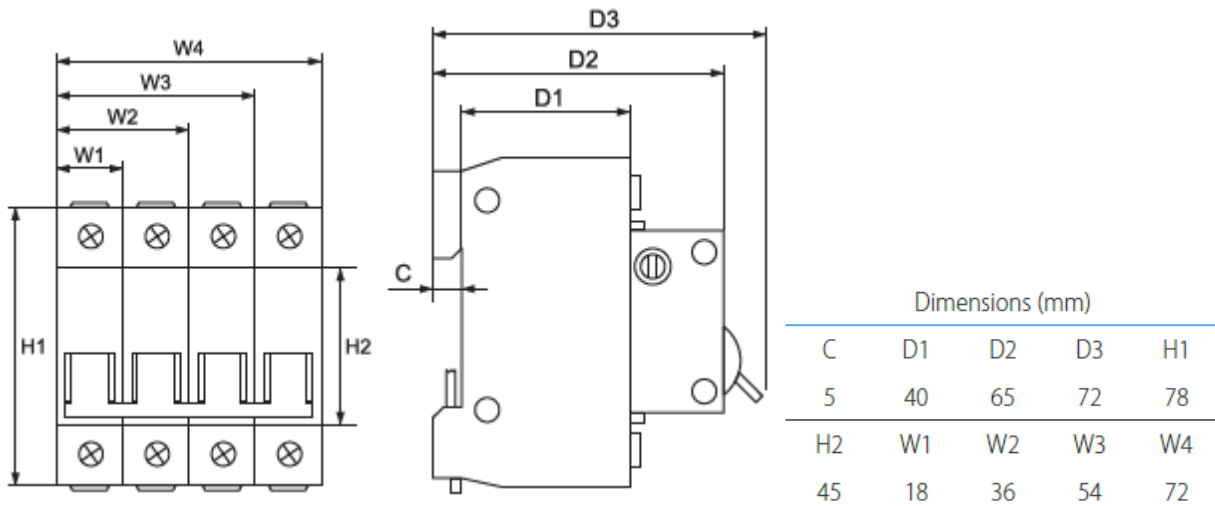
Technical data

- Rated voltage: 230/400V;50/60Hz
- Breaking capacity (cycle O-CO) in accordance with standard EN 60 898-1:4500A
- Rated breaking capacity $I_{cs}=75\% I_{cu}$
- Isolating voltage $\geq 2000V$
- Electrical wear resistance (number of cycles): 4000
- Mechanical (number of cycles): 20000
- Class of current limiting: 3
- IP code: IP>20
- Tripping:
 - C - the maximum current release breaks between 5 and $10I_n$; used to protect main 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
- Box permittivity strength: $> 18MV/m$
- Abnormal heating wear resistance and fire of the outer parts: $960^{\circ}C/3s$
- Tightening moment: 1.33Nm
- Power supply (conducting)
 - power supply busbar 1P63A, 2P63A, 3P63A
- Maximum current release containing
 - copper coil – composition: pure copper T2 type
 - resistance: from 0.6 to 180m
 - welding effort: $<150\ 000\ N/mm$
 - 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)
 - drawing effort: from 200 to 400N/mm
 - contact head of the moveable contact – composition silver graphite CAg(5)

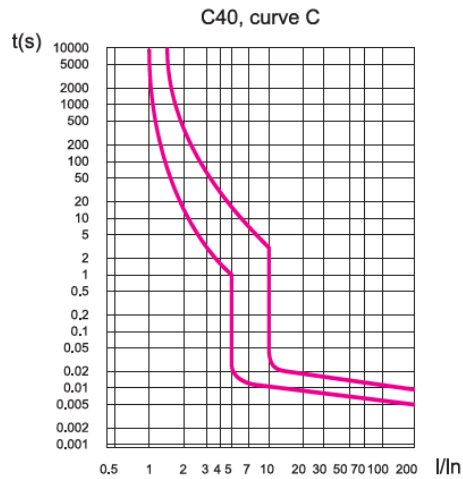
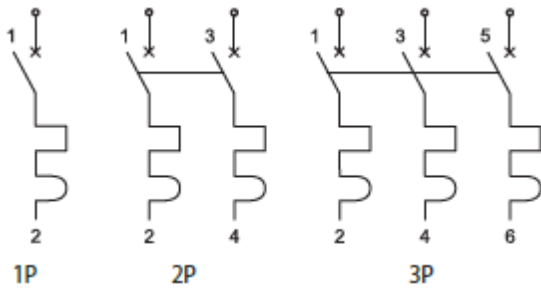
Mounting

- 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



Schemes



Products

- MCB C41N

Type	Number of poles	Rated current In(A)	Breaking capacity (kA)	Recommended section of the conductor (g/mm)	Packing/Box (pcs)	Catalog number Curve C
C41N / 2A	1P	2	4.5	1.0	12 / 240	41460C
C41N / 4A	1P	4	4.5	1.0	12 / 240	41461C
C41N / 6A	1P	6	4.5	1.0	12 / 240	41451C
C41N / 10A	1P	10	4.5	1.5	12 / 240	41452C
C41N / 16A	1P	16	4.5	2.5	12 / 240	41453C
C41N / 20A	1P	20	4.5	2.5	12 / 240	41454C
C41N / 25A	1P	25	4.5	4.0	12 / 240	41455C
C41N / 32A	1P	32	4.5	6.0	12 / 240	41456C
C41N / 40A	1P	40	4.5	10.0	12 / 240	41457C
C41N / 50A	1P	50	4.5	10.0	12 / 240	41458C
C41N / 63A	1P	63	4.5	16.0	12 / 240	41459C

- MCB C42N

Type	Number of poles	Rated current In(A)	Breaking capacity (kA)	Recommended section of the conductor	Packing /Box (pcs)	Catalog number Curve C
C42N / 6A	2P	6A	4.5	1.0	6 / 120	41470C
C42N / 10A	2P	10A	4.5	1.5	6 / 120	41471C
C42N / 16A	2P	16A	4.5	2.5	6 / 120	41472C
C42N / 20A	2P	20A	4.5	2.5	6 / 120	41473C
C42N / 25A	2P	25A	4.5	4.0	6 / 120	41474C
C42N / 32A	2P	32A	4.5	6.0	6 / 120	41475C
C42N / 40A	2P	40A	4.5	10.0	6 / 120	41476C
C42N / 50A	2P	50A	4.5	10.0	6 / 120	41477C
C42N / 63A	2P	63A	4.5	16.0	6 / 120	41478C

- **MCB C43N**

Type	Number of poles	Rated current In(A)	Breaking Capacity (kA)	Recommended section of the conductor	Packing / Box (pcs)	Catalogue number Curve C
C43N / 6A	3P	6	4.5	1.0	4 / 80	41541C
C43N / 10A	3P	10	4.5	1.5	4 / 80	41542C
C43N / 16A	3P	16	4.5	2.5	4 / 80	41543C
C43N / 20A	3P	20	4.5	2.5	4 / 80	41544C
C43N / 25A	3P	25	4.5	4.0	4 / 80	41545C
C43N / 32A	3P	32	4.5	6.0	4 / 80	41546C
C43N / 40A	3P	40	4.5	10.0	4 / 80	41547C
C43N / 50A	3P	50	4.5	10.0	4 / 80	41548C
C43N / 63A	3P	63	4.5	16.0	4 / 80	41549C

Standards:

EN60898-1:2003/A1:2004

EN60898-1:2003/A11:2005

EN60898-1:2003/A13:2012

