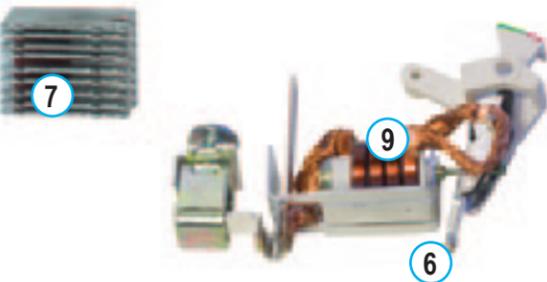
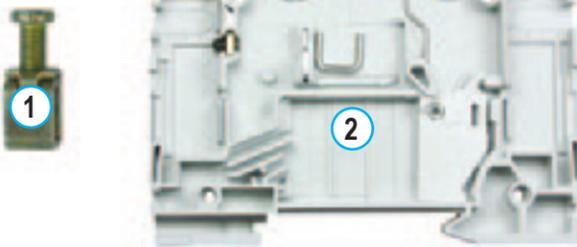




- TERMINAL ①
- NON-FLAMMABLE COVER ②
- JUMP KNUCKLE ③
- HANDLE ④
- LOCK KNUCKLE ⑤
- MOVABLE CONTACT ⑥
- ARC CHAMBER ⑦
- STATIC CONTACT ⑧
- MAXIMUM CURRENT RELEASE ⑨
- AUXILIARY CONTACT (accessory) ⑩
- UNDER VOLTAGE RELEASE (accessory) ⑪
- SHUNT RELEASE (accessory) ⑫



### Characteristics

Circuit breakers are automatically-operated electrical switches, designed to protect electrical circuits from damage caused by overload or short circuit. They can also be used as devices for commutation and control of electrical circuits. They differ in the following characteristics:

- \* Operating voltage: 230, 400V
- \* Number of poles: 1, 2, 3, 4
- \* Breaking curve:
  - curve B – breaks between 3 and 5 I<sub>n</sub>, used for low voltage short circuit currents (long circuits and generators)
  - curve C – breaks between 5 and 10 I<sub>n</sub>, used for protection of main power supply cables and conventional consumers
  - curve D – breaks between 10 and 20 I<sub>n</sub>, used for protection of industrial consumers with high initial current flow (electric motors)
- \* Breaking capacity: 4.5, 6, 10kA



**C4xN** — constructive series  
          — number of poles (1;2;3;4)

**C x** — rated current  
          — breaking curve C

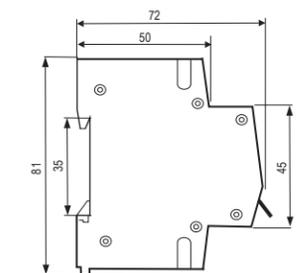
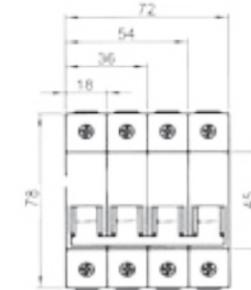
**Documents corresponding to the product:**  
Standard EN60898-1  
EN 60947-2

### 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 housing and industrial buildings
- for mounting at a distance from the transformer post from 150 to 850 m
- allows protection of consumers generating short circuit currents up to 6000 A

### Technical data:

- \* Rated voltage: 230/400V; 50/60Hz
- \* Breaking capacity (cycle O-CO) in accordance with standard EN 60 898-1: 6000A
- \* Rated breaking capacity I<sub>cs</sub>= 75% I<sub>cu</sub>
- \* Isolating voltage: ≥2000V
- \* Electrical wear resistance (number of cycles): 4000
- \* Mechanical (number of cycles): 20000
- \* Class of current limiting: 3
- \* IP code: IP>20
- \* Breaking curve:
  - B curve – the overload and short-circuit protection is activated at 3-5 I<sub>n</sub>. Used for protection of big length cables and power generators.
  - C – the maximum current release breaks between 5 and 10 I<sub>n</sub>; 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°C / 3s
- \* 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)
  - thickness: 1.15 to 2.24µm
  - drawing effort: from 200 to 400N/mm
  - contact head of the movable contact – composition: silver graphite CAg(5)
  - dimension 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)
- \* Power supply (conducting)
  - power supply busbar 1P63, 3P63
  - rigid conductors up to 25 mm
  - flexible conductors up to 16 mm
- \* Tightening moment: 1.33Nm



### Mounting:

- \* vertical
- \* DIN-rail
- \* for mounting in housing or industrial environment without serious interference
- \* ambient temperature: -5°C to + 40°C±2° C

Type	Rated current I <sub>n</sub> (A)	Breaking capacity (kA)	Recommended sections of the conductors (g/mm <sup>2</sup> )	Packing/Box (pcs)	Catalogue number Curve C	Catalogue number Curve B
C41N / 2A	2	4.5	1.0	12 / 240	41460	41460B
C41N / 4A	4	4.5	1.0	12 / 240	41461	41461B
C41N / 6A	6	4.5	1.0	12 / 240	41451	41451B
C41N / 10A	10	4.5	1.5	12 / 240	41452	41452B
C41N / 16A	16	4.5	2.5	12 / 240	41453	41453B
C41N / 20A	20	4.5	2.5	12 / 240	41454	41454B
C41N / 25A	25	4.5	4.0	12 / 240	41455	41455B
C41N / 32A	32	4.5	6.0	12 / 240	41456	41456B
C41N / 40A	40	4.5	10.0	12 / 240	41457	41457B
C41N / 50A	50	4.5	10.0	12 / 240	41458	41458B
C41N / 63A	63	4.5	16.0	12 / 240	41459	41459B

