

# ELMARK<sup>®</sup>

The Brand of Electricity

## MINIATURE CIRCUIT BREAKERS (MCB) C60N



---

### 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 industrial buildings with high contamination level of the electric systems
- 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  $I_{cs} = 75\% I_{cu}$
- Isolating voltage:  $\geq 2000V$
- Electrical wear resistance (number of cycles): 8000
- 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 10  $I_n$ ; used to protect main power supply cables and conventional consumers
- Joining terminal: Combined screw clamp made of 1.5 cold extruded Q235-A material with additional coating
- 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:  $960^{\circ}C / 3s$
- Heat resistance of internal non-electrical components:  $850^{\circ}C / 10 s$
- 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 2.24 $\mu m$
  - drawing effort: from 200 to 400N/mm

# TECHNICAL SPECIFICATION

# ELMARK®

The Brand of Electricity

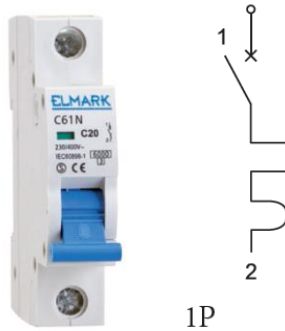
## MINIATURE CIRCUIT BREAKERS (MCB)

- contact head of the movable contact – composition: silver graphite CAg(5)
- static contact – composition: pure copper T2Y2
- composition of the contact head: silver graphite CAg(5)
- Power supply (conducting)
  - power supply busbar 1P63, 2P63, 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 +65°C ±2°C

### Variants:



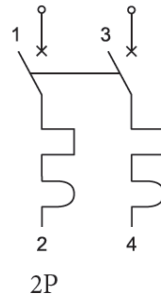
Type	Number of poles	Rated current I <sub>n</sub> (A)	Breaking capacity (kA)	Recommended sections of the conductors (g/mm <sup>2</sup> )	Packing/Box (pcs)	Catalogue number Curve C
C61N / 1A	1P	1	6	1.0	12 / 240	<b>41100</b>
C61N / 2A	1P	2	6	1.0	12 / 240	<b>41102</b>
C61N / 4A	1P	4	6	1.0	12 / 240	<b>41104</b>
C61N / 6A	1P	6	6	1.0	12 / 240	<b>41106</b>
C61N / 10A	1P	10	6	1.5	12 / 240	<b>41110</b>
C61N / 16A	1P	16	6	2.5	12 / 240	<b>41116</b>
C61N / 20A	1P	20	6	2.5	12 / 240	<b>41120</b>
C61N / 25A	1P	25	6	4.0	12 / 240	<b>41125</b>
C61N / 32A	1P	32	6	6.0	12 / 240	<b>41132</b>
C61N / 40A	1P	40	6	10.0	12 / 240	<b>41140</b>
C61N / 50A	1P	50	6	10.0	12 / 240	<b>41150</b>
C61N / 63A	1P	63	6	16.0	12 / 240	<b>41163</b>

# TECHNICAL SPECIFICATION

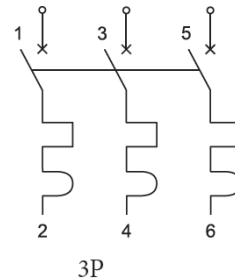
# ELMARK®

The Brand of Electricity

## MINIATURE CIRCUIT BREAKERS (MCB)



Type	Number of poles	Rated current In (A)	Breaking capacity (kA)	Recommended sections of the conductor (g/mm <sup>2</sup> )	Packing/Box (pcs)	Catalogue number Curve C
C62N / 2A	2P	2	6	1.0	6 / 120	<b>41202</b>
C62N / 4A	2P	4	6	1.0	6 / 120	<b>41204</b>
C62N / 6A	2P	6	6	1.0	6 / 120	<b>41206</b>
C62N / 10A	2P	10	6	1.5	6 / 120	<b>41210</b>
C62N / 16A	2P	16	6	2.5	6 / 120	<b>41216</b>
C62N / 20A	2P	20	6	2.5	6 / 120	<b>41220</b>
C62N / 25A	2P	25	6	4.0	6 / 120	<b>41225</b>
C62N / 32A	2P	32	6	6.0	6 / 120	<b>41232</b>
C62N / 40A	2P	40	6	10.0	6 / 120	<b>41240</b>
C62N / 50A	2P	50	6	10.0	6 / 120	<b>41250</b>
C62N / 63A	2P	63	6	16.0	6 / 120	<b>41263</b>



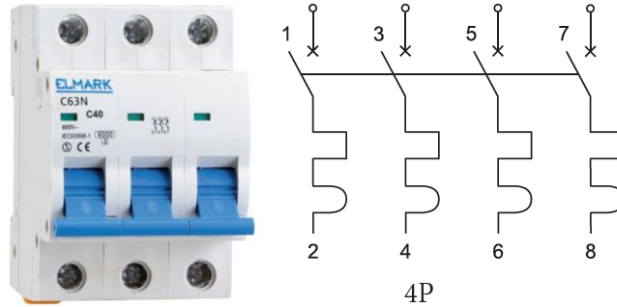
Type	Number of poles	Rated current In (A)	Breaking capacity (kA)	Recommended sections of the conductor (g/mm <sup>2</sup> )	Packing/Box (pcs)	Catalogue number Curve C
C63N/2A	3P	2	6	1.0	4 / 80	<b>41302</b>
C63N/4A	3P	4	6	1.0	4 / 80	<b>41304</b>
C63N / 6A	3P	6	6	1.0	4 / 80	<b>41306</b>
C63N / 10A	3P	10	6	1.5	4 / 80	<b>41310</b>
C63N / 16A	3P	16	6	2.5	4 / 80	<b>41316</b>
C63N / 20A	3P	20	6	2.5	4 / 80	<b>41320</b>
C63N / 25A	3P	25	6	4.0	4 / 80	<b>41325</b>
C63N / 32A	3P	32	6	6.0	4 / 80	<b>41332</b>
C63N / 40A	3P	40	6	10.0	4 / 80	<b>41340</b>
C63N / 50A	3P	50	6	10.0	4 / 80	<b>41350</b>
C63N / 63A	3P	63	6	16.0	4 / 80	<b>41363</b>

# TECHNICAL SPECIFICATION

## MINIATURE CIRCUIT BREAKERS (MCB)

**ELMARK**

The Brand of Electricity



Type	Number of poles	Rated current In (A)	Breaking capacity (kA)	Recommended sections of the conductor (g/mm <sup>2</sup> )	Packing/Box (pcs)	Catalogue number Curve C
C64N / 2A	4P	2	6	1.0	3 / 60	<b>41402</b>
C64N / 4A	4P	4	6	1.0	3 / 60	<b>41404</b>
C64N / 6A	4P	6	6	1.0	3 / 60	<b>41406</b>
C64N / 10A	4P	10	6	1.5	3 / 60	<b>41410</b>
C64N / 16A	4P	16	6	2.5	3 / 60	<b>41416</b>
C64N / 20A	4P	20	6	2.5	3 / 60	<b>41420</b>
C64N / 25A	4P	25	6	4.0	3 / 60	<b>41425</b>
C64N / 32A	4P	32	6	6.0	3 / 60	<b>41432</b>
C64N / 40A	4P	40	6	10.0	3 / 60	<b>41440</b>
C64N / 50A	4P	50	6	10.0	3 / 60	<b>41450</b>
C64N / 63A	4P	63	6	16.0	3 / 60	<b>41463</b>

### Standards:

- EN 60898-1:2003/A1:2004
- EN 60898-1:2003/A11:2005
- EN 60898-1:2003/A13:2012

