

TECHNICAL SPECIFICATION

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 current up to 6000A

Technical data

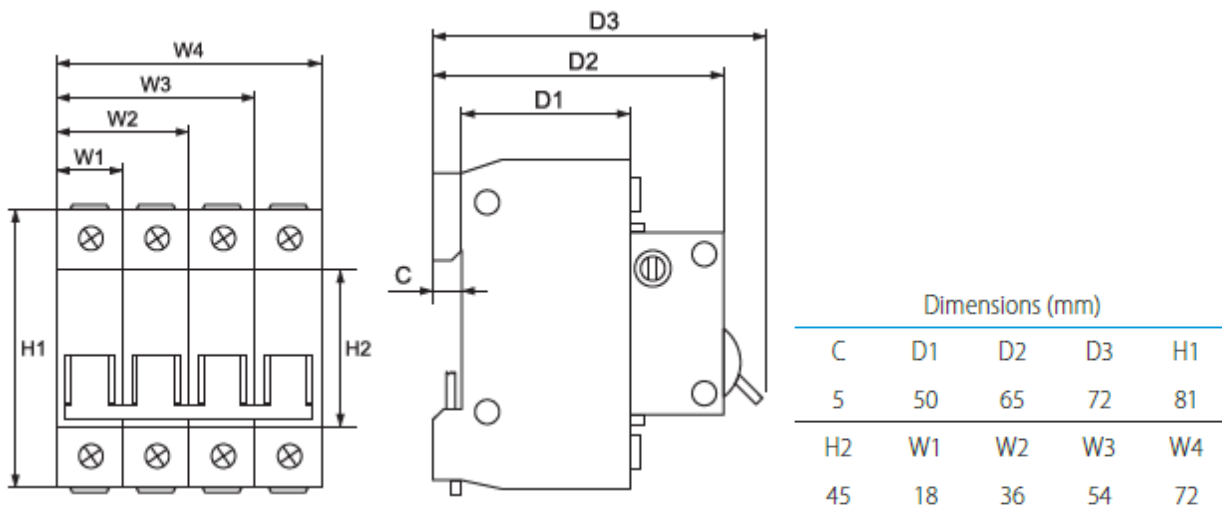
- Rated voltage:230/400V;50/60Hz
- Breaking capacity (cycle O-CO) in accordance with standard EN 60 898-1:6000A
- Rated breaking capacity $I_{cs}=75\% I_{cu}$
- Isolating voltage $\geq 2000V$
- Electrical wear resistance (number of cycles): 8000
- Mechanical (number of cycles):50000
- Class of current limiting:3
- IP code: IP>20
- Tripping curve:
 - B – the maximum current release breaks between 3 and 5 I_n ; used to protect long circuits and generators
 - 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
- 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: <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 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)

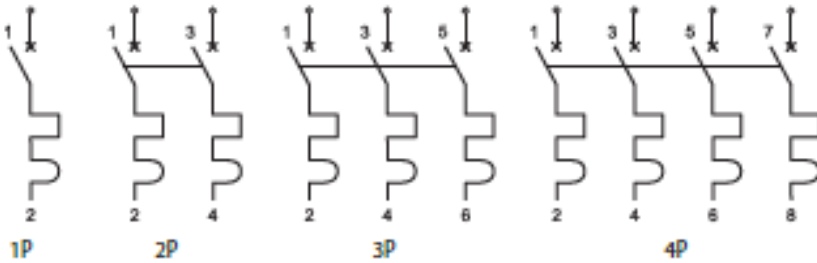
Mounting

- Vertical
- Din-rail
- For mounting in housing or industrial environment without serious interference
- Ambient temperature -5°C to +65°C ±2°C

Dimensions



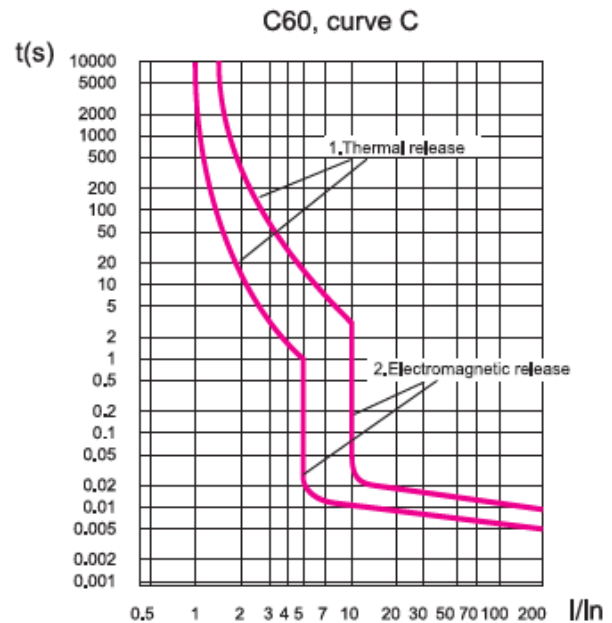
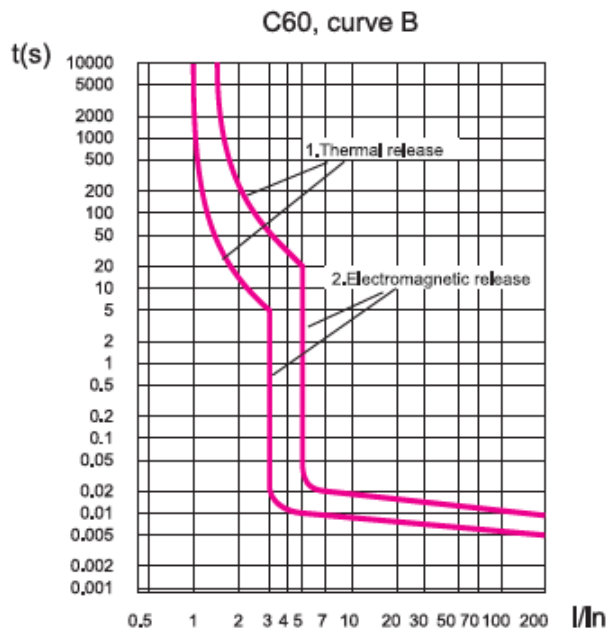
Schemes



C6xN

|—— number of poles (1,2,3,4)
 |—— breaking capacity in (kA)
 |—— tripping curve C

C x —— rated current in (A)
 |—— tripping curve C,B



Products

- MCB C61N, MCB C62N, MCB C63N, MCB C64N

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	Catalogue number Curve B
C61N / 1A	1P	1	6	1.0	12 / 240	41100N	41501N
C61N / 2A	1P	2	6	1.0	12 / 240	41102N	41502N
C61N / 4A	1P	4	6	1.0	12 / 240	41104N	41504N
C61N / 6A	1P	6	6	1.0	12 / 240	41106N	41506N
C61N / 10A	1P	10	6	1.5	12 / 240	41110N	41510N
C61N / 16A	1P	16	6	2.5	12 / 240	41116N	41516N
C61N / 20A	1P	20	6	2.5	12 / 240	41120N	41520N
C61N / 25A	1P	25	6	4.0	12 / 240	41125N	41525N
C61N / 32A	1P	32	6	6.0	12 / 240	41132N	41532N
C61N / 40A	1P	40	6	10.0	12 / 240	41140N	41540N
C61N / 50A	1P	50	6	10.0	12 / 240	41150N	41550N
C61N / 63A	1P	63	6	16.0	12 / 240	41163N	41563N

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	Catalogue number Curve B
C62N / 2A	2P	2	6	1.0	6 / 120	41202N	41602N
C62N / 4A	2P	4	6	1.0	6 / 120	41204N	41604N
C62N / 6A	2P	6	6	1.0	6 / 120	41206N	41606N
C62N / 10A	2P	10	6	1.5	6 / 120	41210N	416010N
C62N / 16A	2P	16	6	2.5	6 / 120	41216N	41616N
C62N / 20A	2P	20	6	2.5	6 / 120	41220N	41620N
C62N / 25A	2P	25	6	4.0	6 / 120	41225N	41625N
C62N / 32A	2P	32	6	6.0	6 / 120	41232N	41632N
C62N / 40A	2P	40	6	10.0	6 / 120	41240N	41640N
C62N / 50A	2P	50	6	10.0	6 / 120	41250N	41650N
C62N / 63A	2P	63	6	16.0	6 / 120	41263N	41663N

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	Catalogue number Curve B
C63N / 2A	3P	2	6	1.0	4 / 80	41302N	41701N
C63N / 4A	3P	4	6	1.0	4 / 80	41304N	41702N
C63N / 6A	3P	6	6	1.0	4 / 80	41304N	41704N
C63N / 10A	3P	10	6	1.5	4 / 80	41306N	41706N
C63N / 16A	3P	16	6	2.5	4 / 80	41310N	41710N
C63N / 20A	3P	20	6	2.5	4 / 80	41316N	41716N
C63N / 25A	3P	25	6	4.0	4 / 80	41320N	41720N
C63N / 32A	3P	32	6	6.0	4 / 80	41325N	41725N
C63N / 40A	3P	40	6	10.0	4 / 80	41332N	41732N
C63N / 50A	3P	50	6	10.0	4 / 80	41340N	41740N
C63N / 63A	3P	63	6	16.0	4 / 80	41350N	41750N

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	Catalogue number Curve B
C64N / 2A	4P	2	6	1.0	3 / 60	41402N	41802N
C64N / 4A	4P	4	6	1.0	3 / 60	41404N	41804N
C64N / 6A	4P	6	6	1.0	3 / 60	41406N	41804N
C64N / 10A	4P	10	6	1.5	3 / 60	41410N	41810N
C64N / 16A	4P	16	6	2.5	3 / 60	41416N	41816N
C64N / 20A	4P	20	6	2.5	3 / 60	41420N	41820N
C64N / 25A	4P	25	6	4.0	3 / 60	41425N	41825N
C64N / 32A	4P	32	6	6.0	3 / 60	41432N	41832N
C64N / 40A	4P	40	6	10.0	3 / 60	41440N	41840N
C64N / 50A	4P	50	6	10.0	3 / 60	41450N	41850N
C64N / 63A	4P	63	6	16.0	3 / 60	41463N	41863N

Standards:

EN60898-1:2003/A1:2004

EN60898-1:2003/A11:2005

EN60898-1:2003/A13:2012

