

## TECHNICAL SPECIFICATION

### Miniature circuit breakers (MCB) C100M



#### 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

## Technical data

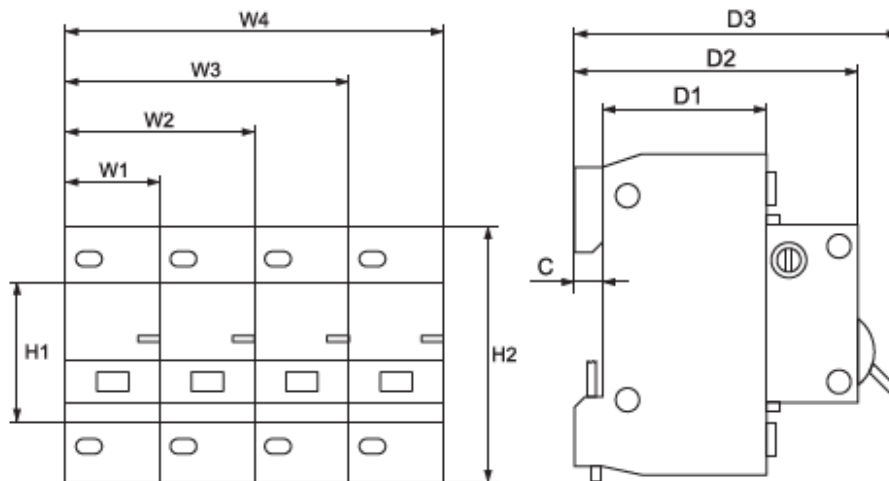
- Rated voltage:230/400V;50/60Hz
- Breaking capacity (cycle O-CO) in accordance with standard EN 60 898-1:10000A
- Rated breaking capacity  $I_{cs}=75\% I_{cu}$
- Isolating voltage  $\geq 2000V$
- Electrical wear resistance (number of cycles):  $\geq 4000$
- Mechanical (number of cycles) $\geq 20000$
- Class of current limiting:3
- IP code: IP>20
- Tripping curve: C , D
- 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  $850^{\circ}C / 10s$
- 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
  - rigid conductor up to 50
  - flexible conductor up to 35
- Maximum current release containing
  - copper coil – composition: pure copper T2 type
  - resistance: from 148 to 230m
  - welding effort:  $<150\ 000\ N/mm$
  - bimetal plate – composition: TB180/0.5
  - magnetic core – composition coldly draw-plated metal wire(1Gr18Ni9)
  - drawing effort: from  $20N/mm^2$
  - thickness: 1.15 to  $2.24\mu m$

- dimensions 6x6x1
- contact head of the moveable contact – composition silver graphite CAg(5)
- static contact – composition: pure copper T2Y2
- composition of the contact head: silver graphite CAg(5)

## Mounting

- Vertical
- Din-rail
- Possibility for labeling
- Ambient temperature  $-5^{\circ}\text{C}$  to  $+65^{\circ}\text{C} \pm 2^{\circ}\text{C}$
- For mounting in industrial environment

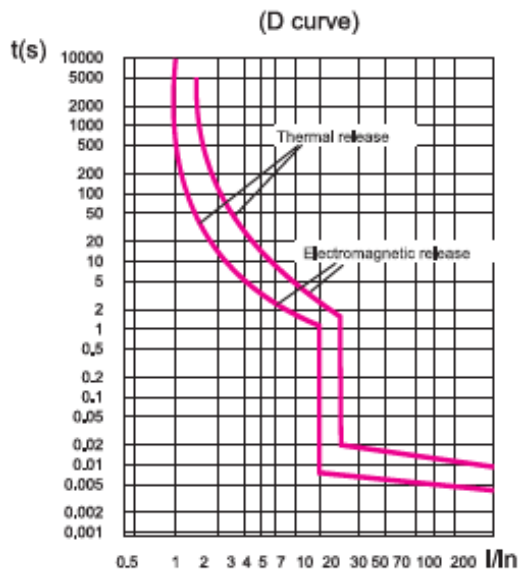
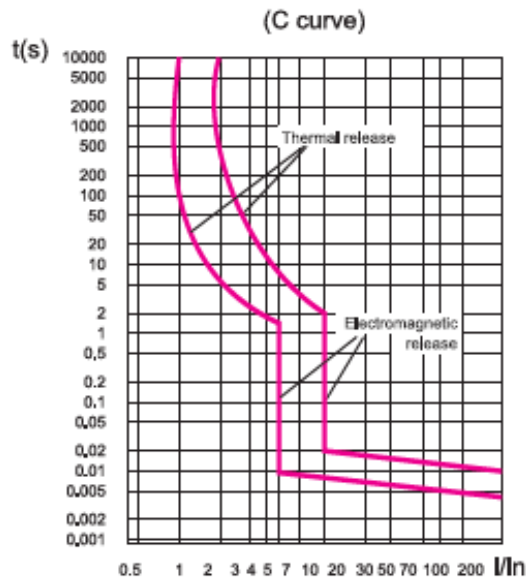
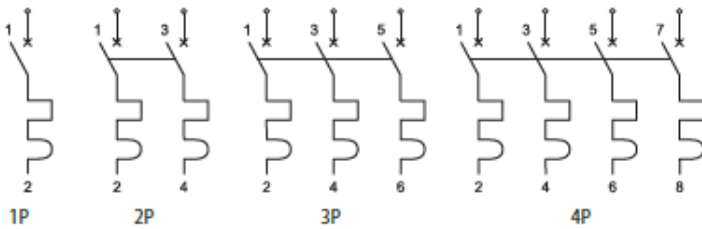
## Dimensions



Dimensions (mm)

| C  | D1 | D2 | D3 | H1  |
|----|----|----|----|-----|
| 5  | 50 | 65 | 74 | 45  |
| H2 | W1 | W2 | W3 | W4  |
| 81 | 27 | 54 | 81 | 108 |

## Schemes



## Products

### - C100M – 1P

| Type  | Number of poles | Rated current $I_n$ (A) | Breaking capacity (kA) | Packing / Box (pcs) | Catalogue number Curve C | Catalogue number Curve D |
|-------|-----------------|-------------------------|------------------------|---------------------|--------------------------|--------------------------|
| C100M | 1P              | 80                      | 10                     | 9 / 180             | 41180                    | 41180D                   |
| C100M | 1P              | 100                     | 10                     | 9 / 180             | 41190                    | 41190D                   |
| C100M | 1P              | 125                     | 10                     | 9 / 180             | 41195                    | 41195D                   |

### - C100M – 2P

| Type  | Number of poles | Rated current $I_n$ (A) | Breaking capacity (kA) | Packing / Box (pcs) | Catalogue number Curve C | Catalogue number Curve D |
|-------|-----------------|-------------------------|------------------------|---------------------|--------------------------|--------------------------|
| C100M | 2P              | 80                      | 10                     | 6 / 120             | 41280                    | 41281                    |
| C100M | 2P              | 100                     | 10                     | 6 / 120             | 41290                    | 41291                    |

- C100M – 3P

| Type  | Number of poles | Rated current In(A) | Breaking capacity (kA) | Packing / Box (pcs) | Catalogue number Curve C | Catalogue number Curve D |
|-------|-----------------|---------------------|------------------------|---------------------|--------------------------|--------------------------|
| C100M | 3P              | 80                  | 10                     | 4 / 60              | 41380                    | 41381                    |
| C100M | 3P              | 100                 | 10                     | 4 / 60              | 41390                    | 41391                    |

| Type  | Number of poles | Rated current In(A) | Breaking capacity (kA) | Packing / Box (pcs) | Catalogue number Curve C | Catalogue number Curve D |
|-------|-----------------|---------------------|------------------------|---------------------|--------------------------|--------------------------|
| C100M | 4P              | 80                  | 10                     | 3 / 60              | 41480                    | 41481                    |
| C100M | 4P              | 100                 | 10                     | 3 / 60              | 41490                    | 41491                    |

## Standarts

EN60898-1:2003

EN60947-2:2006

