

## MCBs - Miniature circuit breakers ETIMAT P

### Advantages of miniature circuit breakers ETIMAT P

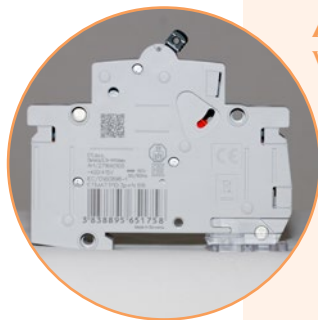
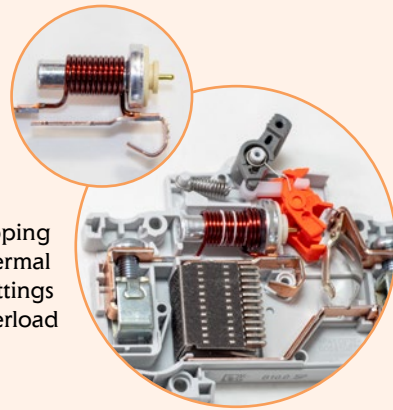


#### TESTED AND PROVEN QUALITY OF EACH MCB PRODUCED EXACT TRACEABILITY AND HIGHEST QUALITY CONTROL

- Fully automated assembly line with 17 different tests and measurements during assembly process to ensure best functionality of each finished product
- All important components are marked with a DMC code, containing individual test results and thus ensuring exact traceability and highest quality control of every MCB

#### UNIQUE TECHNOLOGY FOR PRECISE OVERLOAD TRIPPING THROUGH THE ENTIRE LIFE CYCLE

While other MCBs on the market are adjusted to the desired tripping characteristic afterwards, ETIMAT P uses a new integrated thermal release, preventing both manual tampering of overload settings and material deterioration, ensuring a precise and reliable overload tripping through the entire life cycle of the MCB.

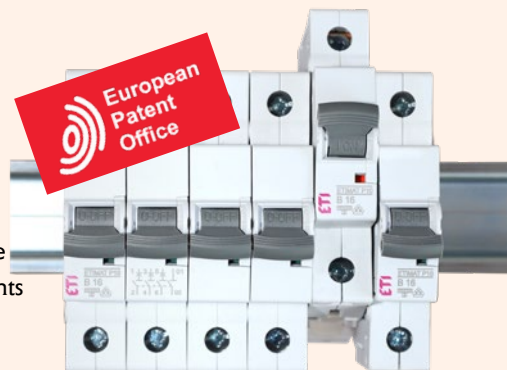


#### ALL REQUIRED DATA READILY AVAILABLE WITH A SINGLE QR CODE SCAN

- Every product has a QR code with a link to the product webpage with all relevant information, instruction manuals and other technical materials.
- All important technical data is printed on the front and side of the MCB
- Every product is marked with EAN code

#### SUPERIOR TECHNICAL FEATURES

- reduced power dissipation
- high electrical endurance: 20.000 operation cycles
- operation in DC circuits with voltage up to 60V DC/pole
- construction solutions protected by two European patents



#### SPECIAL VERSIONS TOGGLE POSITION INDICATES TRIPPING LESS ROOM FOR USER ERROR

- Reset version:  
In case of overcurrent, the button moves to the "trip" (middle) position. In case of manual turn off, the button moves to the "off" (lowest) position (only ETIMAT P10).

Miniature circuit breakers

**WIDE RANGE OF AUXILIARY DEVICES AND ACCESSORIES AND EASE OF INSTALLATION**

→ possibility of mounting up to 3 auxiliary / signal switches



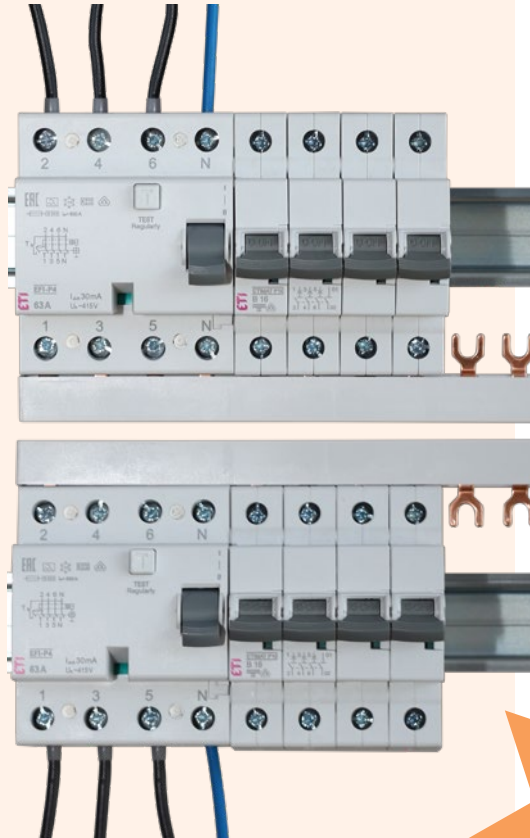
→ Terminal cover



→ Locking device



→ Double connection possibility - all MCBs can be simultaneously connected to busbar and conductor, both from above and below



→ supply possibility from top or bottom

→ possibility to connect wires to terminals up to 25 mm<sup>2</sup>

→ same profile as our other modular devices resulting in a coordinated and streamlined look to the installation

**AVAILABLE IN 2023**

**ATTENTION TO DETAILS**

→ Trip-free mechanism ensures that MCB trips even if the toggle is held in ON position

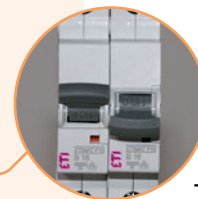
→ Separate indication of contacts' real state (independent of the toggle position) ensures additional user safety

→ green flag: contacts open, red flag: contacts closed

→ Better protection of terminals against touching the parts under voltage



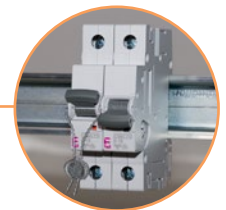
→ Sturdy pins on 4-module devices



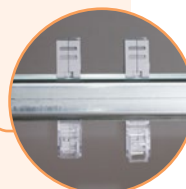
→ "ON/OFF" mark on the switch button



→ Possibility of sealing in "ON" or "OFF" position



→ Space for labeling



→ NO WOBBLE™ technology new snapping unit enables easy, firm and secure DIN-rail mounting and replacement

Miniature circuit breaker ETIMAT P10 - NEW GENERATION

2023

Rated short-circuit capacity  
**10 kA**

Rated current  
**0,5 - 63 A**

Tripping characteristic  
**B, C, D, K, Z**



1-pole

| I <sub>n</sub> [A] | U <sub>n</sub> [V] | Code No. B | Code No. C | Code No. D | Code No. K | Code No. Z | Packaging [pcs] |
|--------------------|--------------------|------------|------------|------------|------------|------------|-----------------|
| 0,5                | 240/415            | -          | 001901021  | 001901041  | 001901061  | 001901081  | 12/108          |
| 1                  | 240/415            | 001901002  | 001901022  | 001901042  | 001901062  | 001901082  | 12/108          |
| 1,6                | 240/415            | 001901003  | 001901023  | 001901043  | 001901063  | 001901083  | 12/108          |
| 2                  | 240/415            | 001901004  | 001901024  | 001901044  | 001901064  | 001901084  | 12/108          |
| 3                  | 240/415            | 001901005  | 001901025  | 001901045  | 001901065  | 001901085  | 12/108          |
| 4                  | 240/415            | 001901006  | 001901026  | 001901046  | 001901066  | 001901086  | 12/108          |
| 6                  | 240/415            | 001901007  | 001901027  | 001901047  | 001901067  | 001901087  | 12/108          |
| 10                 | 240/415            | 001901008  | 001901028  | 001901048  | 001901068  | 001901088  | 12/108          |
| 13                 | 240/415            | 001901009  | 001901029  | 001901049  | 001901069  | 001901089  | 12/108          |
| 16                 | 240/415            | 001901010  | 001901030  | 001901050  | 001901070  | 001901090  | 12/108          |
| 20                 | 240/415            | 001901011  | 001901031  | 001901051  | 001901071  | 001901091  | 12/108          |
| 25                 | 240/415            | 001901012  | 001901032  | 001901052  | 001901072  | 001901092  | 12/108          |
| 32                 | 240/415            | 001901013  | 001901033  | 001901053  | 001901073  | 001901093  | 12/108          |
| 40                 | 240/415            | 001901014  | 001901034  | 001901054  | -          | -          | 12/108          |
| 50                 | 240/415            | 001901015  | 001901035  | 001901055  | -          | -          | 12/108          |
| 63                 | 240/415            | 001901016  | 001901036  | -          | -          | -          | 12/108          |



1-pole + N

| I <sub>n</sub> [A] | U <sub>n</sub> [V] | Code No. B | Code No. C | Code No. D | Code No. K | Code No. Z | Packaging [pcs] |
|--------------------|--------------------|------------|------------|------------|------------|------------|-----------------|
| 0,5                | 240                | -          | 001901121  | 001901141  | 001901161  | 001901181  | 6/54            |
| 1                  | 240                | 001901102  | 001901122  | 001901142  | 001901162  | 001901182  | 6/54            |
| 1,6                | 240                | 001901103  | 001901123  | 001901143  | 001901163  | 001901183  | 6/54            |
| 2                  | 240                | 001901104  | 001901124  | 001901144  | 001901164  | 001901184  | 6/54            |
| 3                  | 240                | 001901105  | 001901125  | 001901145  | 001901165  | 001901185  | 6/54            |
| 4                  | 240                | 001901106  | 001901126  | 001901146  | 001901166  | 001901186  | 6/54            |
| 6                  | 240                | 001901107  | 001901127  | 001901147  | 001901167  | 001901187  | 6/54            |
| 10                 | 240                | 001901108  | 001901128  | 001901148  | 001901168  | 001901188  | 6/54            |
| 13                 | 240                | 001901109  | 001901129  | 001901149  | 001901169  | 001901189  | 6/54            |
| 16                 | 240                | 001901110  | 001901130  | 001901150  | 001901170  | 001901190  | 6/54            |
| 20                 | 240                | 001901111  | 001901131  | 001901151  | 001901171  | 001901191  | 6/54            |
| 25                 | 240                | 001901112  | 001901132  | 001901152  | 001901172  | 001901192  | 6/54            |
| 32                 | 240                | 001901113  | 001901133  | 001901153  | 001901173  | 001901193  | 6/54            |
| 40                 | 240                | 001901114  | 001901134  | 001901154  | -          | -          | 6/54            |
| 50                 | 240                | 001901115  | 001901135  | 001901155  | -          | -          | 6/54            |
| 63                 | 240                | 001901116  | 001901136  | -          | -          | -          | 6/54            |

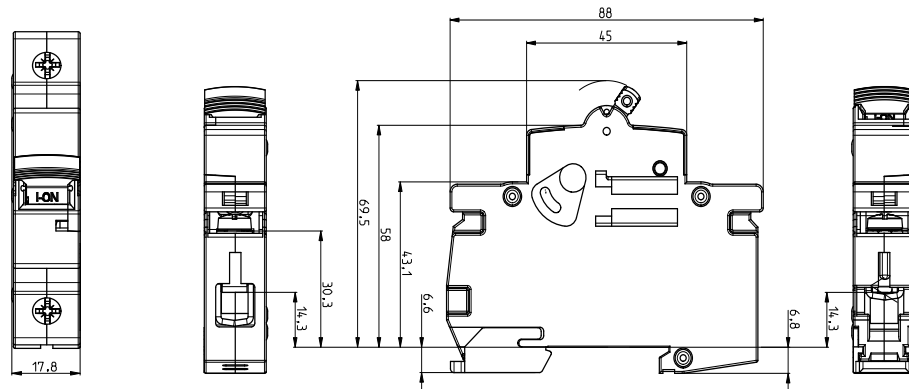


2-pole

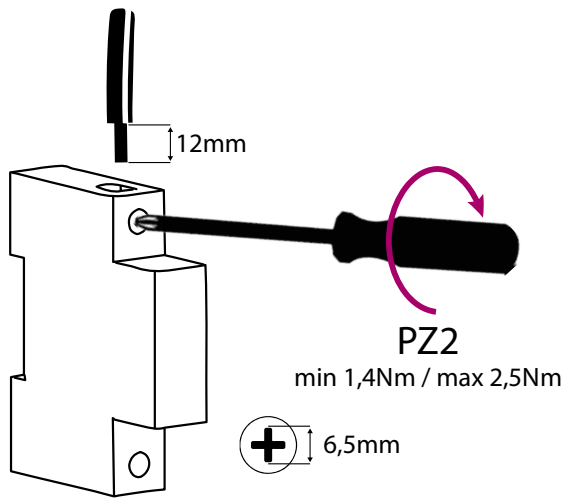
| I <sub>n</sub> [A] | U <sub>n</sub> [V] | Code No. B | Code No. C | Code No. D | Code No. K | Code No. Z | Packaging [pcs] |
|--------------------|--------------------|------------|------------|------------|------------|------------|-----------------|
| 0,5                | 415                | -          | 001901221  | 001901241  | 001901261  | 001901281  | 6/54            |
| 1                  | 415                | 001901202  | 001901222  | 001901242  | 001901262  | 001901282  | 6/54            |
| 1,6                | 415                | 001901203  | 001901223  | 001901243  | 001901263  | 001901283  | 6/54            |
| 2                  | 415                | 001901204  | 001901224  | 001901244  | 001901264  | 001901284  | 6/54            |
| 3                  | 415                | 001901205  | 001901225  | 001901245  | 001901265  | 001901285  | 6/54            |
| 4                  | 415                | 001901206  | 001901226  | 001901246  | 001901266  | 001901286  | 6/54            |
| 6                  | 415                | 001901207  | 001901227  | 001901247  | 001901267  | 001901287  | 6/54            |
| 10                 | 415                | 001901208  | 001901228  | 001901248  | 001901268  | 001901288  | 6/54            |
| 13                 | 415                | 001901209  | 001901229  | 001901249  | 001901269  | 001901289  | 6/54            |
| 16                 | 415                | 001901210  | 001901230  | 001901250  | 001901270  | 001901290  | 6/54            |
| 20                 | 415                | 001901211  | 001901231  | 001901251  | 001901271  | 001901291  | 6/54            |
| 25                 | 415                | 001901212  | 001901232  | 001901252  | 001901272  | 001901292  | 6/54            |
| 32                 | 415                | 001901213  | 001901233  | 001901253  | 001901273  | 001901293  | 6/54            |
| 40                 | 415                | 001901214  | 001901234  | 001901254  | -          | -          | 6/54            |
| 50                 | 415                | 001901215  | 001901235  | 001901255  | -          | -          | 6/54            |
| 63                 | 415                | 001901216  | 001901236  | -          | -          | -          | 6/54            |

Miniature circuit breaker ETIMAT P10 - NEW GENERATION

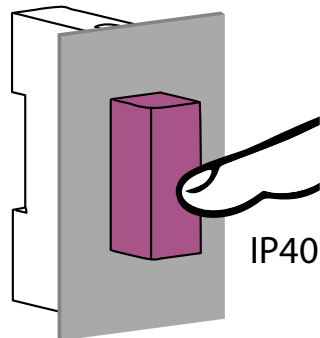
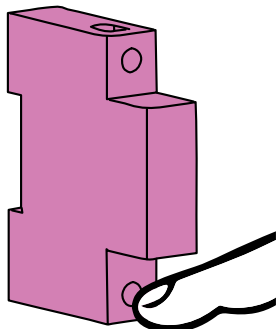
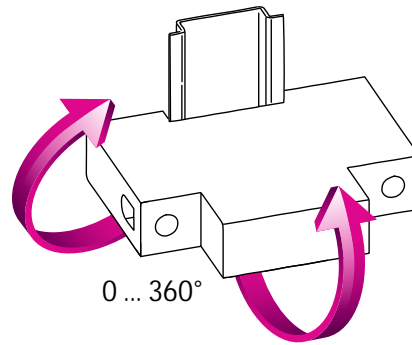
| Technical data                                 |   |
|--|---|
| Rated voltage                                  | 240/415V AC; max 60V DC/pol                 |
| Min. operating voltage                         | 12V AC/DC                                   |
| Max operating voltage                          | 250/440V AC                                 |
| Rated current                                  | B:1-63A, C:0.5-63A,D:0.5-63A, K&Z:0.5-32A   |
| Rated frequency                                | 50/60Hz                                     |
| Rated insulation voltage                       | 500V  |
| Rated impulse withstand voltage                | 6kV (acc. to 60947-2)                       |
| Shock resistance                               | 30g, min 2 shocks, t=13ms                   |
| Rated short-circuit capacity                   | 10 kA                                       |
| Energy limiting class                          | 3; B,C                                      |
| Tripping characteristic                        | B, C, D, K, Z                               |
| Back-up fuse                                   | 100A gG                                     |
| Index of protection                            | IP 20 (IP 40)                               |
| Terminals                                      | 1-25mm <sup>2</sup> , min 1,4Nm / max 2,5Nm |
| Terminal screw                                 | M5 (Pozidrive PZ2)                          |
| Mechanical endurance                           | 20.000 op. cycles                           |
| Electrical endurance                           | 20.000 op. cycles                           |
| Ambient temperature                            | max -40°C ... +70°C                         |
| Storage temperature                            | max -60°C ... +70°C                         |
| Supply possibility                             | top or bottom                               |
| Build-in width                                 | 18mm/pol                                    |
| Insulating class                               | B   |
| Overvoltage category                           | III   |
| Pollution degree                               | 2   |
| Mounting on the rail                           | EN 60715                                    |
| Mounting position                              | any   |
| Sealing possibility                            | ✓   |
| Terminal cover                                 | ✓   |
| Contact position indicator                     | ✓   |
| Locking device                                 | ✓   |
| Resistance to vibrations acc. to IEC 60068-2-7 | 5g (10,60 & 500Hz)                          |
| Standards                                      | IEC/EN 60898-1, IEC 60947-2                 |



| Tripping characteristics |                      |               |             |
|--------------------------|----------------------|---------------|-------------|
| Characteristic           | Test current         | Tripping time | Result      |
| B, C, D                  | 1,13 I <sub>n</sub>  | t ≥ 3600 s    | No tripping |
| B, C, D                  | 1,45 I <sub>n</sub>  | t < 3600 s    | Tripping    |
| B, C, D                  | 2,55 I <sub>n</sub>  | 1s < t < 60 s | Tripping    |
| B                        | 3,00 I <sub>n</sub>  | t ≤ 0,1 s     | No tripping |
| C                        | 5,00 I <sub>n</sub>  | t ≤ 0,1 s     | No tripping |
| D                        | 10,00 I <sub>n</sub> | t ≤ 0,1 s     | No tripping |
| B                        | 5,00 I <sub>n</sub>  | t < 0,1 s     | Tripping    |
| C                        | 10,00 I <sub>n</sub> | t < 0,1 s     | Tripping    |
| D                        | 20,00 I <sub>n</sub> | t < 0,1 s     | Tripping    |
| K, Z                     | 1,05 I <sub>n</sub>  | t > 7200 s    | No Tripping |
| K, Z                     | 1,20 I <sub>n</sub>  | t < 7200 s    | Tripping    |
| K                        | 8,00 I <sub>n</sub>  | t ≤ 0,2 s     | No Tripping |
| K                        | 12,00 I <sub>n</sub> | t < 0,2 s     | Tripping    |
| Z                        | 2,00 I <sub>n</sub>  | t ≤ 0,2s      | No Tripping |
| Z                        | 3,00 I <sub>n</sub>  | t < 0,2s      | Tripping    |



Any mounting position



| Conductor cross-section [mm <sup>2</sup> ] | Number of single conductors, rigid, single-wire CU conductor |   |   |   |   |
|--|--|---|---|---|---|
|  | 1  | 2 | 3 | 4 | 5 |
| 1,5  | ✓  | ✓ | ✓ | ✓ | ✗ |
| 2,5  | ✓  | ✓ | ✓ | ✗ | ✗ |
| 4  | ✓  | ✓ | ✓ | ✗ | ✗ |
| 6  | ✓  | ✓ | ✗ | ✗ | ✗ |
| 10   | ✓  | ✓ | ✗ | ✗ | ✗ |
| 16   | ✓  | ✗ | ✗ | ✗ | ✗ |
| 25   | ✓  | ✗ | ✗ | ✗ | ✗ |

| Conductor cross-section [mm <sup>2</sup> ] | Number of single conductors, flexible Cu conductors without cable ferrule |   |   |   |   |   |
|--|---|---|---|---|---|---|
|  | 1   | 2 | 3 | 4 | 5 | 6 |
| 1,5  | ✓   | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2,5  | ✓   | ✓ | ✓ | ✓ | ✓ | ✓ |
| 4  | ✓   | ✓ | ✓ | ✓ | ✓ | ✓ |
| 6  | ✓   | ✓ | ✓ | ✗ | ✗ | ✗ |
| 10   | ✓   | ✓ | ✗ | ✗ | ✗ | ✗ |
| 16   | ✓   | ✗ | ✗ | ✗ | ✗ | ✗ |
| 25   | ✓   | ✗ | ✗ | ✗ | ✗ | ✗ |

Remark: When you use more than 2 cables you have to be careful how those cables are inserted, due to insure proper pressure on each cable

Combination of rigid single-wire and flexible multi-wire Cu conductors is not allowed

Technical data

