



Miniature circuit breaker (MCB), 50A, 1pole+N, type D characteristic



Part no. **PLZ6-D50/1N**  
 Catalog No. **113430**

Similar to illustration

**Design verification as per IEC/EN 61439**

| Technical data for design verification                   |            |    |  |                                                                             |
|----------------------------------------------------------|------------|----|--|-----------------------------------------------------------------------------|
| Rated operational current for specified heat dissipation | $I_n$      | A  |  | 50                                                                          |
| Heat dissipation per pole, current-dependent             | $P_{vid}$  | W  |  | 0                                                                           |
| Static heat dissipation, non-current-dependent           | $P_{vs}$   | W  |  | 0                                                                           |
| Heat dissipation capacity                                | $P_{diss}$ | W  |  | 0                                                                           |
| Operating ambient temperature min.                       |            | °C |  | -25                                                                         |
| Operating ambient temperature max.                       |            | °C |  | 75                                                                          |
|                                                          |            |    |  | linear, per +1 °C, results in a 0.5% reduction of current carrying capacity |

**Technical data ETIM 7.0**

| Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)                                                                                                                               |  |                 |  |          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------|--|----------|
| Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ec@ss10.0.1-27-14-19-01 [AAB905014]) |  |                 |  |          |
| Release characteristic                                                                                                                                                                                           |  |                 |  | D        |
| Number of poles (total)                                                                                                                                                                                          |  |                 |  | 2        |
| Number of protected poles                                                                                                                                                                                        |  |                 |  | 1        |
| Rated current                                                                                                                                                                                                    |  | A               |  | 50       |
| Rated voltage                                                                                                                                                                                                    |  | V               |  | 230      |
| Rated insulation voltage $U_i$                                                                                                                                                                                   |  | V               |  | 440      |
| Rated impulse withstand voltage $U_{imp}$                                                                                                                                                                        |  | kV              |  | 4        |
| Rated short-circuit breaking capacity $I_{cn}$ EN 60898 at 230 V                                                                                                                                                 |  | kA              |  | 6        |
| Rated short-circuit breaking capacity $I_{cn}$ EN 60898 at 400 V                                                                                                                                                 |  | kA              |  | 6        |
| Rated short-circuit breaking capacity $I_{cu}$ IEC 60947-2 at 230 V                                                                                                                                              |  | kA              |  | 0        |
| Rated short-circuit breaking capacity $I_{cu}$ IEC 60947-2 at 400 V                                                                                                                                              |  | kA              |  | 0        |
| Voltage type                                                                                                                                                                                                     |  |                 |  | AC       |
| Frequency                                                                                                                                                                                                        |  | Hz              |  | 50 - 60  |
| Current limiting class                                                                                                                                                                                           |  |                 |  | 3        |
| Suitable for flush-mounted installation                                                                                                                                                                          |  |                 |  | No       |
| Concurrently switching N-neutral                                                                                                                                                                                 |  |                 |  | Yes      |
| Over voltage category                                                                                                                                                                                            |  |                 |  | 3        |
| Pollution degree                                                                                                                                                                                                 |  |                 |  | 2        |
| Additional equipment possible                                                                                                                                                                                    |  |                 |  | Yes      |
| Width in number of modular spacings                                                                                                                                                                              |  |                 |  | 2        |
| Built-in depth                                                                                                                                                                                                   |  | mm              |  | 70.5     |
| Degree of protection (IP)                                                                                                                                                                                        |  |                 |  | IP20     |
| Ambient temperature during operating                                                                                                                                                                             |  | °C              |  | -25 - 55 |
| Connectable conductor cross section multi-wired                                                                                                                                                                  |  | mm <sup>2</sup> |  | 1 - 25   |
| Connectable conductor cross section solid-core                                                                                                                                                                   |  | mm <sup>2</sup> |  | 1 - 25   |