



Circuit-breaker; 20 A; 1p; Type D characteristic

Part no. **mMCT-D20/1**
 Catalog No. **152700**

Delivery program

| | | | |
|---|----------|----|--|
| Basic function | | | Miniature circuit-breakers |
| Number of poles | | | 1 pole |
| Tripping characteristic | | | D |
| Application | | | Switchgear for industrial and advanced commercial applications |
| Rated current | I_n | A | 20 |
| Rated switching capacity acc. to IEC/EN 60947-2 | I_{cu} | kA | 25 |
| Product range | | | mMCT |

Technical data

Electrical

| | | | |
|---|------------|------------|--------------|
| Rated switching capacity acc. to IEC/EN 60947-2 | I_{cu} | kA | 25 |
| Rated insulation voltage | U_i | V | 440 |
| Rated impulse withstand voltage | U_{imp} | kV | 4 |
| lifespan | Electrical | Operations | ≥ 10000 |
| | Mechanical | Operations | ≥ 20000 |

References

| | | | |
|---|--|--|---------------------|
| Auxiliary switch for subsequent installation | | | ZP-IHK 286052 |
| Tripping signal contact for subsequent installation | | | ZP-NHK 248437 |
| Switching interlock | | | Z-IS/SPE-1TE 274418 |

Mechanical

| | | | |
|------------------------------|--|----|---|
| Standard front dimension | | mm | 45 |
| Device height | | mm | 80 |
| Mounting | | | Quick attachment with 3 latch positions for top-hat rail IEC/EN 60715 |
| Degree of Protection | | | IP20 |
| Thickness of busbar material | | mm | 0.8 - 2 |

Design verification as per IEC/EN 61439

| | | | |
|---|------------|----|-----|
| Technical data for design verification | | | |
| Rated operational current for specified heat dissipation | I_n | A | 20 |
| Heat dissipation per pole, current-dependent | P_{vid} | W | 0 |
| Equipment heat dissipation, current-dependent | P_{vid} | W | 2.7 |
| Static heat dissipation, non-current-dependent | P_{vs} | W | 0 |
| Heat dissipation capacity | P_{diss} | W | 0 |
| Operating ambient temperature min. | | °C | -30 |
| Operating ambient temperature max. | | °C | 55 |
| linear, per +1 °C, results in a 0.5% reduction of current carrying capacity | | | |

Technical data ETIM 7.0

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|--|--|--|---|
| 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) (ecI@ss10.0.1-27-14-19-01 [AAB905014]) | | | |
| Release characteristic | | | D |
| Number of poles (total) | | | 1 |

| | | |
|---|-----------------|----------|
| Number of protected poles | | 1 |
| Rated current | A | 20 |
| Rated voltage | V | 400 |
| 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 | 0 |
| Rated short-circuit breaking capacity I_{cn} EN 60898 at 400 V | kA | 0 |
| Rated short-circuit breaking capacity I_{cu} IEC 60947-2 at 230 V | kA | 25 |
| Rated short-circuit breaking capacity I_{cu} IEC 60947-2 at 400 V | kA | 25 |
| Voltage type | | AC |
| Frequency | Hz | 50 - 60 |
| Current limiting class | | 3 |
| Suitable for flush-mounted installation | | No |
| Concurrently switching N-neutral | | No |
| Over voltage category | | 3 |
| Pollution degree | | 2 |
| Additional equipment possible | | Yes |
| Width in number of modular spacings | | 1.5 |
| Built-in depth | mm | 75 |
| Degree of protection (IP) | | IP20 |
| Ambient temperature during operating | °C | -25 - 55 |
| Connectable conductor cross section multi-wired | mm ² | 2.5 - 50 |
| Connectable conductor cross section solid-core | mm ² | 2.5 - 50 |