## DATASHEET - PL6-C16/1

Part no.

Miniature circuit breaker (MCB), 16 A, 1p, characteristic: C



PL6-C16/1 Catalog No. 286533



Similar to illustration

| Delivery program                                     |                 |    |  |
|--|-----------------|----|--|
| Basic function                                       |                 |    | Miniature circuit-breakers                             |
| Number of poles                                      |                 |    | 1 pole   |
| Tripping characteristic                              |                 |    | С  |
| Application  |                 |    | Switchgear for residential and commercial applications |
| Rated current  | In              | А  | 16   |
| Rated switching capacity according to IEC/EN 60898-1 | I <sub>cn</sub> | kA | 6  |
| Product range  |                 |    | PL6  |
|  |                 |    |  |

## **Technical data Electrical**

Rated switching capacity according to IEC/EN 60898-1

kA

6

I<sub>cn</sub>

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

| Technical data for design verification   |                   |    |   |
|--|-------------------|----|---|
| Rated operational current for specified heat dissipation   | In                | А  | 16  |
| Heat dissipation per pole, current-dependent   | P <sub>vid</sub>  | w  | 0   |
| Equipment heat dissipation, current-dependent  | P <sub>vid</sub>  | w  | 2.2   |
| Static heat dissipation, non-current-dependent   | P <sub>vs</sub>   | W  | 0   |
| Heat dissipation capacity  | P <sub>diss</sub> | 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 |
| EC/EN 61439 design verification  |                   |    |   |
| 10.2 Strength of materials and parts   |                   |    |   |
| 10.2.2 Corrosion resistance  |                   |    | Meets the product standard's requirements.                                  |
| 10.2.3.1 Verification of thermal stability of enclosures   |                   |    | Meets the product standard's requirements.                                  |
| 10.2.3.2 Verification of resistance of insulating materials to no  | ormal he          |    | Meets the product standard's requirements.                                  |
| 10.2.3.3 Verification of resistance of insulating materials to ab<br>and fire due to internal electric effects | onormal           |    | Meets the product standard's requirements.                                  |
| 10.2.4 Resistance to ultra-violet (UV) radiation   |                   |    | Meets the product standard's requirements.                                  |
| 10.2.5 Lifting   |                   |    | Does not apply, since the entire switchgear needs to be evaluated.          |
| 10.2.6 Mechanical impact   |                   |    | Does not apply, since the entire switchgear needs to be evaluated.          |
| 10.2.7 Inscriptions  |                   |    | Meets the product standard's requirements.                                  |
| 10.3 Degree of protection of ASSEMBLIES  |                   |    | Does not apply, since the entire switchgear needs to be evaluated.          |
| 10.4 Clearances and creepage distances   |                   |    | Meets the product standard's requirements.                                  |
| 10.5 Protection against electric shock   |                   |    | Does not apply, since the entire switchgear needs to be evaluated.          |
| 10.6 Incorporation of switching devices and components   |                   |    | Does not apply, since the entire switchgear needs to be evaluated.          |
| 10.7 Internal electrical circuits and connections  |                   |    | Is the panel builder's responsibility.                                      |
| 10.8 Connections for external conductors   |                   |    | Is the panel builder's responsibility.                                      |
| 10.9 Insulation properties   |                   |    |   |
| 10.9.2 Power-frequency electric strength   |                   |    | Is the panel builder's responsibility.                                      |
| 10.9.3 Impulse withstand voltage   |                   |    | Is the panel builder's responsibility.                                      |
| 10.9.4 Testing of enclosures made of insulating material   |                   |    | Is the panel builder's responsibility.                                      |

| 10.10 Temperature rise              | The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices. |
|-------------------------------------|--|
| 10.11 Short-circuit rating          | Is the panel builder's responsibility. The specifications for the switchgear must be observed.                                   |
| 10.12 Electromagnetic compatibility | Is the panel builder's responsibility. The specifications for the switchgear must be observed.                                   |
| 10.13 Mechanical function           | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.                         |

## **Technical data ETIM 8.0**

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) (ecl@ss10.0.1-27-14-19-01 [AAB905014])

| Built-in depth  | mm  | 70.5     |
|---|-----|----------|
| Release characteristic  |     | c        |
| Number of poles (total)   |     | 1        |
|   |     |          |
| Number of protected poles   |     | 1        |
| Rated current   | A   | 16       |
| Rated voltage   | V   | 230      |
| Rated insulation voltage Ui   | V   | 440      |
| Rated impulse withstand voltage Uimp                                      | kV  | 4        |
| Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V  | kA  | 6        |
| Voltage type  |     | AC       |
| Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V  | kA  | 6        |
| Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 | kA  | 0        |
| Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 | kA  | 0        |
| Frequency   | Hz  | 50 - 60  |
| Current limiting class  |     | 3        |
| Flush-mounted installation  |     | No       |
| Concurrently switching neutral conductor                                  |     | No       |
| Over voltage category   |     | 3        |
| Pollution degree  |     | 2        |
| Additional equipment possible   |     | Yes      |
| Width in number of modular spacings                                       |     | 1        |
| Degree of protection (IP)   |     | IP20     |
| Ambient temperature during operating                                      | °C  | -25 - 75 |
| Connectable conductor cross section multi-wired                           | mm² | 1 - 25   |
| Connectable conductor cross section solid-core                            | mm² | 1 - 25   |
| Explosion-proof   |     | No       |