# **DATASHEET - PLHT-C125/3N**



### Miniature circuit breaker (MCB), 125A, 3Np, C-Char, AC

Powering Business Worldwide\*

Part no. PLHT-C125/3N Catalog No. 248067

Similar to illustration

| Delivery program        |    |   |  |
|-------------------------|----|---|--|
| Basic function          |    |   | Miniature circuit-breakers                                     |
| Number of poles         |    |   | 3 pole+N   |
| Tripping characteristic |    |   | C  |
| Application             |    |   | Switchgear for industrial and advanced commercial applications |
| Rated current           | In | Α | 125  |

kA

15

PLHT

 $\mathbf{I}_{\mathrm{cu}}$ 

# **Technical data**

Rated switching capacity acc. to IEC/EN 60947-2

**Electrical** 

Product range

|--|

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

| lesign verification as per IEC/EN 61439   |                   |    |  |
|---|-------------------|----|--|
| echnical data for design verification   |                   |    |  |
| Rated operational current for specified heat dissipation  | In                | Α  | 125  |
| Heat dissipation per pole, current-dependent  | P <sub>vid</sub>  | W  | 0  |
| Equipment heat dissipation, current-dependent   | P <sub>vid</sub>  | W  | 36.86  |
| 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 | 55   |
|   |                   |    | linear, per +1 °C, results in a 0.35% reduction of current carrying capacity   |
| C/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 normal heat  |                   |    | Meets the product standard's requirements.   |
| 10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects $$ |                   |    | 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 7.0

| lechnical 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) (ecl@ss10.0.1-27-14-19-01 [AAB905014]) |  |     |          |  |  |  |
| Release characteristic  |  |     | С        |  |  |  |
| Number of poles (total)   |  |     | 4        |  |  |  |
| Number of protected poles   |  |     | 3        |  |  |  |
| Rated current   |  | Α   | 125      |  |  |  |
| Rated voltage   |  | V   | 400      |  |  |  |
| Rated insulation voltage Ui   |  | V   | 440      |  |  |  |
| Rated impulse withstand voltage Uimp  |  | kV  | 4        |  |  |  |
| Rated short-circuit breaking capacity Icn EN 60898 at 230 V   |  | kA  | 0        |  |  |  |
| Rated short-circuit breaking capacity Icn EN 60898 at 400 V   |  | kA  | 0        |  |  |  |
| Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V  |  | kA  | 15       |  |  |  |
| Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V  |  | kA  | 15       |  |  |  |
| 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   |  |     | 6        |  |  |  |
| Built-in depth  |  | mm  | 75       |  |  |  |
| Degree of protection (IP)   |  |     | IP20     |  |  |  |
| Ambient temperature during operating  |  | °C  | -25 - 55 |  |  |  |
| Connectable conductor cross section multi-wired   |  | mm² | 2.5 - 50 |  |  |  |
| Connectable conductor cross section solid-core  |  | mm² | 2.5 - 50 |  |  |  |
|   |  |     |          |  |  |  |