## DATASHEET - PLHT-D25/2

Miniature circuit breaker (MCB), 25A, 2p, D-Char, AC



| Part no. |  |
|----------|--|
|----------|--|

PLHT-D25/2 248017

| General specifications  |  |
|---|--|
| Product name  | Eaton Moeller series xPole - PLHT/-V MCB                       |
| Part no.  | PLHT-D25/2   |
| EAN   | 4015082480172  |
| Product Length/Depth  | 90 millimetre  |
| Product height  | 75 millimetre  |
| Product width   | 54 millimetre  |
| Product weight  | 0.452 kilogram   |
| Compliances   | RoHS conform   |
| Product Tradename   | xPole - PLHT/-V  |
| Product Type  | мсв  |
| Product Sub Type  | None   |
| Delivery program  |  |
| Application   | Switchgear for industrial and advanced commercial applications |
| Number of poles   | Two-pole   |
| Number of poles (total)                                       | 2  |
| Number of poles (protected)                                   | 2  |
| Tripping characteristic                                       | D  |
| Release characteristic  | D  |
| Amperage Rating   | 25 A   |
| Туре  | Miniature circuit breaker<br>PLHT                              |
| Technical Data - Electrical                                   |  |
| Voltage type  | AC   |
| Rated operational voltage (Ue) - max                          | 400 V  |
| Rated insulation voltage (Ui)                                 | 440 V  |
| Rated impulse withstand voltage (Uimp)                        | 4 kV   |
| Frequency rating - min  | 50 Hz  |
| Frequency rating - max  | 60 Hz  |
| Rated switching capacity (IEC/EN 60947-2)                     | 25 kA  |
| Rated short-circuit breaking capacity (EN 60898) at 230 V     | 0 kA   |
| Rated short-circuit breaking capacity (EN 60898) at 400 V     | 0 kA   |
| Rated short-circuit breaking capacity (IEC 60947-2) at 230 V  | 25 kA  |
| Rated short-circuit breaking capacity (IEC 60947-2) at 400 V  | 25 kA  |
| Overvoltage category  |  |
| Pollution degree  | 2  |
| Technical Data - Mechanical                                   |  |
| Width in number of modular spacings                           | 3  |
| Built-in depth  | 75 mm  |
| Degree of protection  | IP20   |
| Connectable conductor cross section (solid-core) - min        | 2.5 mm <sup>2</sup>  |
| Connectable conductor cross section (solid-core) - max        | 50 mm <sup>2</sup>   |
| Connectable conductor cross section (multi-wired) - min       | 2.5 mm <sup>2</sup>  |
| Connectable conductor cross section (multi-wired) - max       | 50 mm <sup>2</sup>   |
| Design verification as per IEC/EN 61439 - technical data      |  |
| Rated operational current for specified heat dissipation (In) | 25 A   |
| Heat dissipation per pole, current-dependent                  | 0 W  |
| Equipment heat dissipation, current-dependent                 | 2.8 W  |

| Static heat dissipation, non-current-dependent                                   | 0 W  |
|--|--|
| Heat dissipation capacity  | 0 W  |
| Ambient operating temperature - min  | -25 °C   |
| Ambient operating temperature - max  | 55 °C  |
| Design verification as per IEC/EN 61439  |  |
| 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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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.   |
| 10.9.2 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.                         |
| Additional information   |  |
| Current limiting class   | 3  |
| Features   | Additional equipment possible  |
| Special features   | Ambient temperature hint: a 1 °C increase results in a 0.35% linear reduction of current carrying capacity                       |
| Used with  | Miniature circuit breaker<br>PLHT  |

## Technical data FTIM 8.0

| Tecnologia electrónica, de automatización y de mando de procesos / Instalación electrónicas, equipor / Interruptor cortacircuito automático / I | Technical data ETIM 8.0  |    |         |  |  |  |  |
|---|--|----|---------|--|--|--|--|
| (ed@ss10.01-27-14-19-01 [AAB905014])Built-in depthM7Release characteristicMDNumber of poles (total)22Number of protected polesMA3Rated currentMV40Rated voltage UiKV40Rated short-circuit breaking capacity lcu according to EN 60998 at 230 VKACRated short-circuit breaking capacity lcu according to EN 60997-24 2430 VKQCRated short-circuit breaking capacity lcu according to EN 60997-24 2400 VKSSRated short-circuit breaking capacity lcu according to EN 60997-24 2400 VKSSRated short-circuit breaking capacity lcu according to EN 60997-24 2400 VKSSRated short-circuit breaking capacity lcu according to EN 60997-24 2400 VKSSRated short-circuit breaking capacity lcu according to EN 60997-24 2400 VKSSRated short-circuit breaking capacity lcu according to EN 60997-24 2400 VKSSRated short-circuit breaking capacity lcu according to EN 60997-24 2400 VKSSRated short-circuit breaking capacity lcu according to EN 60997-24 2400 VKSSRated short-circuit breaking capacity lcu according to EN 60997-24 2400 VKSSRated short-circuit breaking capacity lcu according to EN 60997-24 2400 VKSSRated short-circuit breaking capacity lcu according to EN 60997-24 2400 VKSSRated short-circuit breaking ca  | Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)   |    |         |  |  |  |  |
| Release characteristic   Image: Properties of the sector              | Tecnología electrónica, de automatización y de mando de procesos / Instalación eléctricas, equipo / Interruptor cortacircuito automático / Interruptor cortacircuito automático (ecl@ss10.0.1-27-14-19-01 [AAB905014]) |    |         |  |  |  |  |
| Number of poles (total)     Image: Pole state of poles (total)     Pole state of polestate of poles (total)     Pole state of poles (total)   | Built-in depth   | mm | 75      |  |  |  |  |
| Number of protected poles   2     Rated current   A   2     Rated voltage   V   40     Rated issulation voltage Ui   V   40     Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V   K   40     Valtage type   KA   6     Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V   KA   6     Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V   KA   0     Rated short-circuit breaking capacity Icn according to EN 60897-2 at 230 V   KA   0     Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V   KA   5     Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 200 V   KA   5     Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 200 V   KA   5     Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V   KA   5     Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V   KA   5     Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V   KA   5     Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V   KA   5     Frequerch  | Release characteristic   |    | D       |  |  |  |  |
| Rated current   A   2     Rated voltage   V   400     Rated insulation voltage Uin   V   400     Rated insulation voltage Uinp   KV   400     Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V   KA   0     Voltage type   KA   0   6     Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V   KA   0   6     Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V   KA   0   6     Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V   KA   0   6     Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V   KA   0   6     Rated short-circuit breaking capacity Icn according to EN 60897 at 400 V   KA   0   6     Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V   KA   0   5     Frequency   KA   5   5   6     Frequency   KA   0   6   6   6   6   6   6   6   6   6   6   6   6   6   6   6   6   6  | Number of poles (total)  |    | 2       |  |  |  |  |
| Rated voltage   V   40     Rated insulation voltage Uimp   V   40     Rated inpulse withstand voltage Uimp   KV   40     Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V   KA   0     Voltage type   KA   0   C     Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V   KA   0   C     Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V   KA   0   C     Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V   KA   0   C     Rated short-circuit breaking capacity Icu according to EN 60947-2 at 200 V   KA   0   S   C     Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V   KA   0   S   S   S     Frequency   Hz   Jo   S   | Number of protected poles  |    | 2       |  |  |  |  |
| Rated insulation voltage Ui   V   440     Rated inpulse withstand voltage Uimp   KV   4     Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V   KA   0     Voltage type   C   AC     Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V   KA   0     Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V   KA   0     Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V   KA   0     Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V   KA   5     Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V   KA   5     Frequency   Hz   50-60     Current limiting class   S   3  | Rated current  | А  | 25      |  |  |  |  |
| Rated impulse withstand voltage Uimp   KV   4     Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V   KA   0     Voltage type   C   AC     Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V   KA   0     Rated short-circuit breaking capacity Icn according to IEC 60947-2 at 230 V   KA   0     Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V   KA   25     Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V   KA   25     Frequency   Hz   50-60   50-60   | Rated voltage  | V  | 400     |  |  |  |  |
| Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V   kA   0     Voltage type   kA   0     Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V   kA   0     Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V   kA   0     Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V   kA   25     Frequency   KA   50 - 60     Frequency   KA   3   | Rated insulation voltage Ui  | V  | 440     |  |  |  |  |
| Voltage typeACRated short-circuit breaking capacity Icu according to EN 60898 at 400 VkARated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 VkARated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 VkAFrequencykAFrequencytaCurrent limiting classsdState distributionsdState distributionsdSt  | Rated impulse withstand voltage Uimp   | kV | 4       |  |  |  |  |
| Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V kA 0   Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V kA 25   Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V kA 25   Frequency Hz 50 - 60   Current limiting class 3   | Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V   | kA | 0       |  |  |  |  |
| Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V kA 25   Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V kA 25   Frequency Hz 50 - 60   Current limiting class G G   | Voltage type   |    | AC      |  |  |  |  |
| Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V kA 25   Frequency Hz 50 - 60   Current limiting class 3   | Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V   | kA | 0       |  |  |  |  |
| Frequency Hz 50 - 60   Current limiting class A A   | Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V  | kA | 25      |  |  |  |  |
| Current limiting class 3  | Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  | kA | 25      |  |  |  |  |
|   | Frequency  | Hz | 50 - 60 |  |  |  |  |
| Flush-mounted installation No   | 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             |     | 3        |
| 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 |
| Explosion-proof                                 |     | No       |