

# Product datasheet

Specifications



Circuit breaker frame, MasterPacT MTZ1 16H2, for MicroLogic Active, 1600A, 50kA/440VAC 50/60Hz (Icu), 4P, drawout

LV947247

## Main

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                          | MasterPacT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Product name                   | MasterPacT MTZ1 Active                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Product or component type      | Circuit breaker                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Device short name              | MTZ1 16 H2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Device application             | Power distribution protection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Poles description              | 4P                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Neutral position               | Left                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Control unit                   | Without control unit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Product compatibility          | control unit MicroLogic Active 1.0 E<br>control unit MicroLogic Active 1.0 EP<br>control unit MicroLogic Active 2.0 A<br>control unit MicroLogic Active 2.0 AP<br>control unit MicroLogic Active 2.0 E<br>control unit MicroLogic Active 2.0 EP<br>control unit MicroLogic Active 5.0 A<br>control unit MicroLogic Active 5.0 AP<br>control unit MicroLogic Active 5.0 E<br>control unit MicroLogic Active 5.0 EP<br>control unit MicroLogic Active 6.0 A<br>control unit MicroLogic Active 6.0 AP<br>control unit MicroLogic Active 6.0 E<br>control unit MicroLogic Active 6.0 EP |
| [In] rated current             | 1600 A at 40 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Performance type               | H2 50 kA 440 V AC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| [Ue] rated operational voltage | 690 V AC 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Suitability for isolation      | Yes conforming to EN/IEC 60947-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Selectivity category           | Category B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Control type                   | Push-button                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Mounting mode                  | Drawout                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

## Complementary

|                                                      |                                                                                                                          |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| [Icu] rated ultimate short-circuit breaking capacity | 50 kA at 220/415 V AC 50/60 Hz<br>50 kA at 440 V AC 50/60 Hz<br>42 kA at 525 V AC 50/60 Hz<br>42 kA at 690 V AC 50/60 Hz |
| [Ics] rated service short-circuit breaking capacity  | 50 kA at 220/415 V AC 50/60 Hz<br>50 kA at 440 V AC 50/60 Hz<br>42 kA at 525 V AC 50/60 Hz<br>42 kA at 690 V AC 50/60 Hz |
| [Icw] rated short-time withstand current             | 42 kA 0.5 s<br>42 kA 1 s<br>24 kA 3 s                                                                                    |

Excluding VAT and subject to change. Please check with your local distributor through "Where to buy"

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

|                                                      |                                                                                                                            |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| [Icm] rated short-circuit making capacity            | 105 kA 220/415 V AC at 50/60 Hz<br>105 kA 440 V AC at 50/60 Hz<br>88 kA 525 V AC at 50/60 Hz<br>88 kA 690 V AC at 50/60 Hz |
| Integrated instantaneous protection (DIN in kA peak) | 81...99 kA                                                                                                                 |
| Sensor rating                                        | 800 A<br>1000 A<br>1250 A<br>1600 A                                                                                        |
| [Ui] rated insulation voltage                        | 1000 V AC 50/60 Hz                                                                                                         |
| [Uimp] rated impulse withstand voltage               | 12 kV                                                                                                                      |
| Power dissipation in W                               | 460 W                                                                                                                      |
| Power dissipation per pole                           | 115 W                                                                                                                      |
| Maximum breaking time                                | 25 ms                                                                                                                      |
| Maximum closing response time                        | 50 ms                                                                                                                      |
| Mounting support                                     | Base plate<br>Rails                                                                                                        |
| Upside connection                                    | Front<br>Rear                                                                                                              |
| Downside connection                                  | Front<br>Rear                                                                                                              |
| Connection pitch                                     | 70 mm                                                                                                                      |
| Mechanical durability                                | 12500 cycles with maintenance                                                                                              |
| Electrical durability                                | 6000 cycles 440 V AC 50/60 Hz conforming to EN/IEC 60947-2<br>3000 cycles 690 V AC 50/60 Hz conforming to EN/IEC 60947-2   |
| Height (H)                                           | Drawout circuit breaker with chassis: 322 mm<br>Drawout circuit breaker without chassis: 259 mm                            |
| Width (W)                                            | Drawout circuit breaker with chassis: 358 mm<br>Drawout circuit breaker without chassis: 306 mm                            |
| Depth (D)                                            | Drawout circuit breaker with chassis: 291 mm<br>Drawout circuit breaker without chassis: 223 mm                            |
| Net weight                                           | 39 kg                                                                                                                      |
| Standards                                            | EN/IEC 60947-1<br>EN/IEC 60947-2                                                                                           |
| Product certifications                               | CE<br>CCC<br>EAC                                                                                                           |

## Environment

|                                       |                                                                                                                                          |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| IP degree of protection               | IP3X conforming to EN/IEC 60529                                                                                                          |
| IK degree of protection               | IK07 conforming to EN 50102                                                                                                              |
| Pollution degree                      | 3 conforming to IEC 60664-1                                                                                                              |
| Ambient air temperature for operation | -25...70 °C                                                                                                                              |
| Temperature derating table            | 40 °C ( 1600 A )<br>45 °C ( 1560 A )<br>50 °C ( 1520 A )<br>55 °C ( 1480 A )<br>60 °C ( 1440 A )<br>65 °C ( 1400 A )<br>70 °C ( 1370 A ) |
| Ambient air temperature for storage   | -40...85 °C                                                                                                                              |

|                    |                                                              |
|--------------------|--------------------------------------------------------------|
| Operating altitude | 0...2000 m without derating<br>2000 m...5000 m with derating |
|--------------------|--------------------------------------------------------------|

## Packing Units

|                              |      |
|------------------------------|------|
| Unit Type of Package 1       | PCE  |
| Number of Units in Package 1 | 1    |
| Package 1 Height             | 2 cm |
| Package 1 Width              | 1 cm |
| Package 1 Length             | 2 cm |
| Package 1 Weight             | 10 g |

## Contractual warranty

|                      |    |
|----------------------|----|
| Warranty (in months) | 18 |
|----------------------|----|



## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



### Environmental footprint

|                                                        |                                               |
|--------------------------------------------------------|-----------------------------------------------|
| Total lifecycle Carbon footprint                       | 2 758 kg CO2 eq.                              |
| Environmental Disclosure                               | <a href="#">Product Environmental Profile</a> |
| Carbon footprint of the manufacturing phase [A1 to A3] | 189 kg CO2 eq.                                |
| Carbon footprint of the distribution phase [A4]        | 5 kg CO2 eq.                                  |
| Carbon footprint of the installation phase [A5]        | 10 kg CO2 eq.                                 |
| Carbon footprint of the use phase [B2, B3, B4, B6]     | 2 492 kg CO2 eq.                              |
| Carbon footprint of the end-of-life phase [C1 to C4]   | 62 kg CO2 eq.                                 |

## Use Better



### Materials and Substances

|                                        |                                           |
|----------------------------------------|-------------------------------------------|
| Packaging made with recycled cardboard | Yes                                       |
| Packaging without single use plastic   | No                                        |
| <a href="#">EU RoHS Directive</a>      | Compliant with Exemptions                 |
| SCIP Number                            | 16fac76b-9b6f-4616-9270-c1fea4a5e42c      |
| REACH Regulation                       | <a href="#">REACH Declaration</a>         |
| Halogen-free status                    | Product contains halogen above thresholds |
| PVC free                               | No                                        |
| Silicone-free                          | No                                        |

## Use Longer



### Lifetime extension

|        |    |
|--------|----|
| Repair | No |
|--------|----|

## Use Again



### Repack and remanufacture

|                                 |                                                                                                                                                                                                                 |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Recyclability potential, in %   | 90                                                                                                                                                                                                              |
| End of life manual availability | <a href="#">End of Life Information</a>                                                                                                                                                                         |
| Take-back                       | No                                                                                                                                                                                                              |
| WEEE Label                      |  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

Technical Illustration

Dimensions

