

# Product datasheet

Specifications



Circuit breaker frame, MasterPacT MTZ2 20N1, for MicroLogic Active, 2000A, 42kA/440VAC 50/60Hz (Icu), 3P, drawout

LV948286

## Main

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                          | MasterPacT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Product name                   | MasterPacT MTZ2 Active                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Product or component type      | Circuit breaker                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Device short name              | MTZ2 20 N1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Device application             | Power distribution protection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Poles description              | 3P                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 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             | 2000 A at 40 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Performance type               | N1 42 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 | 42 kA at 220/415 V AC 50/60 Hz<br>42 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  | 42 kA at 220/415 V AC 50/60 Hz<br>42 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>22 kA 3 s                                                                                    |

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 | 88 kA 220/415 V AC at 50/60 Hz                             |
|                                           | 88 kA 440 V AC at 50/60 Hz                                 |
|                                           | 88 kA 525 V AC at 50/60 Hz                                 |
|                                           | 88 kA 690 V AC at 50/60 Hz                                 |
| Sensor rating                             | 1000 A                                                     |
|                                           | 1250 A                                                     |
|                                           | 1600 A                                                     |
|                                           | 2000 A                                                     |
| [Ui] rated insulation voltage             | 1000 V AC 50/60 Hz                                         |
| [Uimp] rated impulse withstand voltage    | 12 kV                                                      |
| Power dissipation in W                    | 470 W                                                      |
| Power dissipation per pole                | 156.7 W                                                    |
| Maximum breaking time                     | 25 ms                                                      |
| Maximum closing response time             | 70 ms                                                      |
| Mounting support                          | Base plate                                                 |
|                                           | Rails                                                      |
| Upside connection                         | Front                                                      |
|                                           | Rear                                                       |
| Downside connection                       | Front                                                      |
|                                           | Rear                                                       |
| Connection pitch                          | 115 mm                                                     |
| Mechanical durability                     | 20000 cycles with maintenance                              |
| Electrical durability                     | 6000 cycles 690 V AC 50/60 Hz conforming to EN/IEC 60947-2 |
|                                           | 8000 cycles 440 V AC 50/60 Hz conforming to EN/IEC 60947-2 |
| Height (H)                                | Drawout circuit breaker with chassis: 439 mm               |
|                                           | Drawout circuit breaker without chassis: 301 mm            |
| Width (W)                                 | Drawout circuit breaker with chassis: 441 mm               |
|                                           | Drawout circuit breaker without chassis: 378 mm            |
| Depth (D)                                 | Drawout circuit breaker with chassis: 403 mm               |
|                                           | Drawout circuit breaker without chassis: 331 mm            |
| Net weight                                | 90 kg                                                      |
| Standards                                 | EN/IEC 60947-1                                             |
|                                           | EN/IEC 60947-2                                             |
| Product certifications                    | CE                                                         |
|                                           | CCC                                                        |
|                                           | 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 ( 2000 A )                |
|                                       | 45 °C ( 2000 A )                |
|                                       | 50 °C ( 2000 A )                |
|                                       | 55 °C ( 2000 A )                |
|                                       | 60 °C ( 1900 A )                |
|                                       | 65 °C ( 1830 A )                |
|                                       | 70 °C ( 1750 A )                |
| Ambient air temperature for storage   | -40...85 °C                     |
| Operating altitude                    | 0...2000 m without derating     |
|                                       | 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                       | 3 261 kg CO2 eq.                              |
| Environmental Disclosure                               | <a href="#">Product Environmental Profile</a> |
| Carbon footprint of the manufacturing phase [A1 to A3] | 504 kg CO2 eq.                                |
| Carbon footprint of the distribution phase [A4]        | 11 kg CO2 eq.                                 |
| Carbon footprint of the installation phase [A5]        | 12 kg CO2 eq.                                 |
| Carbon footprint of the use phase [B2, B3, B4, B6]     | 2 549 kg CO2 eq.                              |
| Carbon footprint of the end-of-life phase [C1 to C4]   | 184 kg CO2 eq.                                |

## Use Better



### Materials and Substances

|                                        |                                                                                                                                       |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Packaging made with recycled cardboard | Yes                                                                                                                                   |
| Packaging without single use plastic   | No, we have minimized the use of plastic in the packaging in compliance with regulations and considering quality and safety standards |
| SCIP Number                            | 584555c5-79df-4e54-a0be-1388f30e1540                                                                                                  |
| EU RoHS Directive                      | <a href="#">Compliant By Exemption</a>                                                                                                |
| REACH Regulation                       | <a href="#">Reference contains Substances of Very High Concern above the threshold</a>                                                |
| Halogen-free status                    | Product contains halogen above thresholds                                                                                             |
| PVC free                               | Yes                                                                                                                                   |
| Silicone-free                          | No                                                                                                                                    |

## Use Longer



### Lifetime extension

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

## Use Again



### Repack and remanufacture

|                                 |                                                                                                                                                                                                                 |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Recyclability potential, in %   | 92                                                                                                                                                                                                              |
| End of life manual availability | <a href="#">End of Life Information</a>                                                                                                                                                                         |
| Take-back                       | Yes                                                                                                                                                                                                             |
| 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

