

# Product datasheet

Specifications



## Circuit breaker frame, MasterPacT MTZ1 16H2, for MicroLogic Active, 1600A, 50kA/440VAC 50/60Hz (Icu), 3P, fixed

LV947151

### 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	3P
Control unit	Without control unit
Product compatibility	control unit MicroLogic Active 1.0 E control unit MicroLogic Active 1.0 EP control unit MicroLogic Active 2.0 A control unit MicroLogic Active 2.0 AP control unit MicroLogic Active 2.0 E control unit MicroLogic Active 2.0 EP control unit MicroLogic Active 5.0 A control unit MicroLogic Active 5.0 AP control unit MicroLogic Active 5.0 E control unit MicroLogic Active 5.0 EP control unit MicroLogic Active 6.0 A control unit MicroLogic Active 6.0 AP control unit MicroLogic Active 6.0 E 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	Fixed

### Complementary

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

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

<b>[Icm] rated short-circuit making capacity</b>	105 kA 220/415 V AC at 50/60 Hz 105 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
<b>Integrated instantaneous protection (DIN in kA peak)</b>	81...99 kA
<b>Sensor rating</b>	800 A 1000 A 1250 A 1600 A
<b>[U<sub>i</sub>] rated insulation voltage</b>	1000 V AC 50/60 Hz
<b>[U<sub>imp</sub>] rated impulse withstand voltage</b>	12 kV
<b>Power dissipation in W</b>	220 W
<b>Power dissipation per pole</b>	73.3 W
<b>Maximum breaking time</b>	25 ms
<b>Maximum closing response time</b>	50 ms
<b>Mounting support</b>	Base plate Rails
<b>Upside connection</b>	Front Rear
<b>Downside connection</b>	Front Rear
<b>Connection pitch</b>	70 mm
<b>Mechanical durability</b>	12500 cycles with maintenance
<b>Electrical durability</b>	6000 cycles 440 V AC 50/60 Hz conforming to EN/IEC 60947-2 3000 cycles 690 V AC 50/60 Hz conforming to EN/IEC 60947-2
<b>Height (H)</b>	301 mm
<b>Width (W)</b>	276 mm
<b>Depth (D)</b>	196 mm
<b>Net weight</b>	14 kg
<b>Standards</b>	EN/IEC 60947-1 EN/IEC 60947-2
<b>Product certifications</b>	CE CCC EAC

## Environment

<b>IP degree of protection</b>	IP3X conforming to EN/IEC 60529
<b>IK degree of protection</b>	IK07 conforming to EN 50102
<b>Pollution degree</b>	3 conforming to IEC 60664-1
<b>Ambient air temperature for operation</b>	-25...70 °C
<b>Temperature derating table</b>	40 °C ( 1600 A ) 45 °C ( 1600 A ) 50 °C ( 1600 A ) 55 °C ( 1600 A ) 60 °C ( 1560 A ) 65 °C ( 1520 A ) 70 °C ( 1480 A )
<b>Ambient air temperature for storage</b>	-40...85 °C
<b>Operating altitude</b>	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
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## 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	1 353 kg CO2 eq.
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Carbon footprint of the manufacturing phase [A1 to A3]	113 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	3 kg CO2 eq.
Carbon footprint of the installation phase [A5]	6 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	1 194 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	37 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
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### 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

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