Product datasheet

Specifications



Circuit breaker frame, MasterPacT MTZ1 12H2, for MicroLogic Active, 1250A, 50kA/440VAC 50/60Hz (Icu), 3P, drawout

LV947231

Main

Range	MasterPacT
Product name	MasterPacT MTZ1 Active
Product or component type	Circuit breaker
Device short name	MTZ1 12 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	1250 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 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

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 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
Integrated instantaneous protection (DIN in kA peak)	81…99 kA
Sensor rating	630 A 800 A 1000 A 1250 A
[Ui] rated insulation voltage	1000 V AC 50/60 Hz
[Uimp] rated impulse withstand voltage	12 kV
Power dissipation in W	250 W
Power dissipation per pole	83.3 W
Maximum breaking time	25 ms
Maximum closing response time	50 ms
Mounting support	Base plate Rails
Upside connection	Front Rear
Downside connection	Front 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 3000 cycles 690 V AC 50/60 Hz conforming to EN/IEC 60947-2
Height (H)	Drawout circuit breaker with chassis: 322 mm Drawout circuit breaker without chassis: 259 mm
Width (W)	Drawout circuit breaker with chassis: 288 mm Drawout circuit breaker without chassis: 236 mm
Depth (D)	Drawout circuit breaker with chassis: 291 mm Drawout circuit breaker without chassis: 223 mm
Net weight	30 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/IEC 62262
Pollution degree	3 conforming to IEC 60664-1
Ambient air temperature for operation	-25…70 °C
Temperature derating table	40 °C (1250 A) 45 °C (1250 A) 50 °C (1250 A) 55 °C (1250 A) 60 °C (1250 A) 65 °C (1200 A) 70 °C (1140 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	**1 690 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**232 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**6 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**12 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**1 364 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**76 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**No**
SCIP Number	**16fac76b-9b6f-4616-9270-c1fea4a5e42c**
EU RoHS Directive	**Compliant By Exemption**
REACh Regulation	**Reference contains Substances of Very High Concern above the threshold**
Halogen-free status	**Product contains halogen above thresholds**
PVC free	**No**
Silicone-free	**No**

Use Again

Repack and remanufacture

Recyclability potential, in %	**90**
End of life manual availability	**End of Life Information**
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**