

Product datasheet

Specifications



MicroLogic Active 5.0E control unit,
no wireless, MasterPacT MTZ1/
MTZ2/MTZ3 circuit breakers, LSI
protections

LV947602

Main

Range	MasterPacT
Device short name	MicroLogic Active 5.0 E
Product or component type	Control unit
Device application	Equipment protection, monitoring and control
Circuit breaker application	Distribution IEC standard
Range compatibility	MasterPacT MTZ1 Active circuit breaker MasterPacT MTZ2 Active circuit breaker MasterPacT MTZ3 Active circuit breaker
Poles	4P 3P
Protected poles description	3P 3d 4P 3d 4P 3d + N/2 4P 4d 4P 3d + OSN
[Ue] rated operational voltage	690 V AC, +/- 10 %
Network type	AC
Network frequency	50/60 Hz
Trip unit technology	Electronic
Trip unit protection functions	LSI
Protection type	Overload protection (long time) conforming to ANSI 49 Instantaneous short-circuit protection conforming to ANSI 50 Short time short-circuit protection conforming to ANSI 51
Trip unit rating	250 A 400 A 630 A 800 A 1000 A 1250 A 1600 A 2000 A 2500 A 3200 A 4000 A 5000 A 6300 A

Complementary

Control type	Wired control
Mounting mode	Fixed Drawout

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

Neutral protection setting	1 x Ir (4P 4d) 0.5 x Ir (4P 3d + N/2) 1.6 x Ir (4P 3d + OSN) No protection (4P 3d)
[Ir] long time pick-up adjustment range	0.4...1 x In adjustable in step of 1 A
Long time delay adjustment type	Adjustable in step of 0.5 s
[tr] long-time delay adjustment range	0.5...30 s at 6 x Ir
Thermal memory	Yes
[Isd] short-time pick-up adjustment range	1.5...10 x Ir adjustable in step of 0.1 x Ir
Short-time delay adjustment type	Adjustable
[tsd] short-time delay adjustment range	0.1...0.8 s I ² t=on 0...0.8 s I ² t=off
Instantaneous pick-up adjustment type li	Adjustable
[Ii] instantaneous pick-up adjustment range	2...15 x In adjustable in step of 0.1 x In li enable on/off
[li mode] instantaneous delay adjustment range	20 ms in standard
Zone selective interlocking ZSI	With
Network and machine diagnosis type	System (HMI) health state overview: circuit breaker health state Contacts state: circuit breaker health state MicroLogic service life: circuit breaker health state Tripping cause indication: circuit breaker tripping cause Identification card: diagnostic data Configured alarms synthesis: diagnostic data Monitored function: diagnostic data Operation: diagnostic data MicroLogic test: test Protection test: test Selectivity test: test Trip context information: crisis management Operation: advanced diagnostic Breaker service life: circuit breaker health state
Type of measurement	Energy meter Ammeter
Energy management	Measurement ,active, reactive and apparent energy Measurement ,electrical network Measurement ,energy
Metering type	Current I1, I2, I3, Iavg RMS Neutral current IN RMS Ground fault current Ig RMS Voltage V12, V23, V31, VLLavg RMS Voltage V1N, V2N, V3N, VLNavg RMS Active power P, P1, P2, P3 total Active energy Ep IN/OUT/tot Power factor Demand current I1, I2, I3, In, Iavg Frequency Phase sequence Unbalance current
Measurement voltage	208...828 V AC 50/60 Hz phase to phase 120...480 V AC 50/60 Hz phase to neutral
Frequency measurement range	40...70 Hz

Measurement accuracy	Current I1, I2, I3, Iavg, Idemand for MTZ1: +/- 1.5 % 40...1600 x 1.2 A Current I1, I2, I3, Iavg, Idemand for MTZ2: +/- 1.5 % 40...4000 x 1.2 A Current I1, I2, I3, Iavg, Idemand for MTZ3: +/- 1.5 % 80...6300 x 1.2 A Neutral current IN: +/- 1.5 % Ground fault current Ig: +/- 10 % Voltage V12, V23, V31, VLLavg: +/- 0.5 % 208...690 x 1.2 V Voltage V1N, V2N, V3N, VLNavg: +/- 0.5 % 120...400 x 1.2 V Active power P, P1, P2, P3, Pdemand: +/- 2 % Active energy Ep IN/OUT/tot: +/- 2 % Power factor: +/- 2 % Frequency: +/- 0.005 Hz Unbalance current: +/- 0.5 %
Accuracy class	Class 0.5: unbalance voltage
Display type	LCD display - 320 x 240 pixels
Communication port protocol	NFC peer to peer 28800 bauds conforming to ISO 15963 USB peer to peer 115 kbauds
Data recording	Data logs Event logs Alarm logs Time stamping Maintenance logs Min/max of instantaneous values

Environment

Standards	EN/IEC 60947-2 EN/IEC 60092-202 EN/IEC 60947-1 EN/IEC 60255-1 EN/IEC 61010-1
Mounting location	Indoor use only
Environmental characteristic	Wet location not approved for use conforming to IEC 61010-1
Electromagnetic compatibility	Electrostatic discharge immunity test conforming to IEC 61000-4-2 Susceptibility to electromagnetic fields conforming to IEC 61000-4-3 Electrical fast transient/burst immunity test conforming to IEC 61000-4-4 1.2/50 µs shock waves immunity test conforming to IEC 61000-4-5 Conducted RF disturbances conforming to IEC 61000-4-6 Conducted and radiated emissions A conforming to CISPR 22
Overvoltage category	IV conforming to IEC 61010-1
Measurement category	Category IV conforming to IEC 61010-2-30
Pollution degree	3 conforming to IEC 60947-1
Ambient air temperature for operation	-25...70 °C (operating) -35 °C (for start-up of product)
Relative humidity	95 % at 55 °C conforming to IEC 60068-2-30
Operating altitude	<= 2000 m without derating <= 4000 m with operational voltage derating 600 V AC <= 5000 m with operational voltage derating 560 V AC

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	6 cm
Package 1 Width	10 cm
Package 1 Length	21 cm
Package 1 Weight	3 kg

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	19 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Carbon footprint of the manufacturing phase [A1 to A3]	14 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.1 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	5 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.7 kg CO2 eq.

Use Better



Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Compliant with Exemptions
SCIP Number	Fcd3b9fe-bf44-449d-96b9-7cfc67b6e92b
REACH Regulation	REACH Declaration
Halogen-free status	Product contains halogen above thresholds
PVC free	Yes
Silicone-free	No

Use Longer



Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

Recyclability potential, in %	5
End of life manual availability	End of Life Information
Removable battery	User replaceable
Take-back	No