

Product data sheet

Specifications



MicroLogic 5.0X control unit,
drawout MasterPact MTZ IEC,
without active arc flash, without
communication

LV839216

Main

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

Complementary

Mounting mode	Fixed
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

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

[tr] long-time delay adjustment range	12.5...600 s 1.5 x Ir 0.5...24 s 6 x Ir 0.7...16.6 s 7.2 x Ir
Thermal memory	Yes
[Isd] short-time pick-up adjustment range	1.5...10 x Ir adjustable in step of 0.5 x Ir embedded HMI 1.5...10 x Ir adjustable in step of 0.1 x Ir Ecoreach software or MasterPact MTZ mobile app
Short-time delay adjustment type	Adjustable
[tsd] short-time delay adjustment range	0.1...0.4 s I ² t=on 0...0.4 s I ² t=off
Instantaneous pick-up adjustment type li	Adjustable
[li] instantaneous pick-up adjustment range	2...15 x In adjustable in step of 0.5 x In embedded HMI 2...15 x In adjustable in step of 0.1 x In Ecoreach software or MasterPact MTZ mobile app li enable on/off
[li mode] instantaneous delay adjustment range	0 ms fast 20 ms 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	Power meter
Energy management	Measurement ,active, reactive and apparent energy (standard) Measurement ,electrical network (standard) Measurement ,energy (standard)
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 Reactive power Q, Q1, Q2, Q3 total Apparent power S, S1, S2, S3 total Power factor Active energy Ep IN/OUT/tot Reactive energy Eq IN/OUT/tot Apparent energy Es IN/OUT/tot Demand current I1, I2, I3, In, Iavg Demand power P, Q, S Frequency Phase sequence Earth leakage current Total current harmonic distortion THD (I) Total voltage harmonic distortion THD (V) Unbalance current Unbalance voltage
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 +/- 0.5 % 40...1600 x 1.2 A Current I1, I2, I3, Iavg, Idemand for MTZ2 +/- 0.5 % 40...4000 x 1.2 A Current I1, I2, I3, Iavg, Idemand for MTZ3 +/- 0.5 % 80...6300 x 1.2 A Neutral current IN +/- 1 % Ground fault current Ig +/- 5 % 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 +/- 1 % Reactive power Q, Q1, Q2, Q3, Qdemand +/- 2 % Apparent power S, S1, S2, S3, Sdemand +/- 1 % Power factor +/- 2 % Active energy Ep IN/OUT/tot +/- 1 % Reactive energy Ep IN/OUT/tot +/- 2 % Apparent energy Es IN/OUT/tot +/- 1 % Frequency +/- 0.005 Hz Earth leakage current +/- 10 % Unbalance current +/- 0.5 %
Accuracy class	Class 5 total current harmonic distortion THD (I) Class 0.5 unbalance voltage Class 1 active and reactive energy by pulse counting (+/- W.h, +/- VAR.h) Class 2 total voltage harmonic distortion THD (V)
Display type	LCD display - 128 x 96 pixels
Communication port protocol	Bluetooth 4.0 LE peer to peer 30 kbit/s NFC peer to peer ISO 15963 USB peer to peer 115 kbauds
Data recording	Alarm logs Time stamping Data logs Maintenance logs Min/max of instantaneous values Event logs

Environment

Standards	EN/IEC 60947-1 EN/IEC 60255-1 EN/IEC 60947-2 EN/IEC 60092-202
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
Pollution degree	3 IEC 60947-1
Ambient air temperature for operation	-13...158 °F (-25...70 °C) operating) -31 °F (-35 °C) for start-up of product)
Relative humidity	95 % 131 °F (55 °C) 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

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 >](#)

Use Better

Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No

Use Longer

Lifetime extension	
Repair	No

Use Again

Repack and remanufacture	
Take-back	No