Product data sheet

Specifications

MicroLogic 5.0Xi control unit, MasterPact MTZ, no wireless, UL/ ANSI

LV857609

Main

Range	MasterPacT
Device short name	MicroLogic 5.0 Xi
Product or Component Type	Control unit
Device Application	Equipment protection, monitoring and control
Circuit breaker application	Distribution UL/ANSI 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 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) ANSI 49 Instantaneous short-circuit protection ANSI 50 Short time short-circuit protection ANSI 51
Trip unit rating	3000 A 5000 A 3600 A 600 A 1600 A 400 A 4000 A 800 A 1200 A 6000 A 2000 A 2500 A 3200 A 1000 A

Complementary

Control Type	Wired control
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)

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

[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	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 I²t=on 0…0.4 s I²t=off
Instantaneous pick-up adjustment type Ii	Adjustable
[Ii] 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 Ii enable on/off
[Ii 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 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 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	USB peer to peer 115 kbauds
Data recording	Maintenance logs Alarm logs Data logs Min/max of instantaneous values Time stamping Event logs

Environment

Standards	EN/IEC 60947-2 EN/IEC 60092-202 EN/IEC 60947-1 EN/IEC 60255-1
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
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	<= 6561.68 ft (2000 m) without derating <= 13123.36 ft (4000 m) with operational voltage derating 600 V AC <= 16404.2 ft (5000 m) with operational voltage derating 560 V AC

Ordering and shipping details

GTIN	3606481732118

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	2.441 in (6.200 cm)
Package 1 Width	3.740 in (9.500 cm)
Package 1 Length	8.504 in (21.600 cm)
Package weight(Lbs)	11.873 oz (336.600 g)

Unit Type of Package 2	S03
Number of Units in Package 2	15
Package 2 Height	11.811 in (30.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	12.017 lb(US) (5.451 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	120
Package 3 Height	29.134 in (74.000 cm)
Package 3 Width	23.622 in (60.000 cm)
Package 3 Length	31.496 in (80.000 cm)
Package 3 Weight	112.436 lb(US) (51.000 kg)

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	**51 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**
Carbon footprint of the manufacturing phase [A1 to A3]	**29 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]	**20 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.8 kg CO2 eq.**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
EU RoHS Directive	**Compliant with Exemptions**
SCIP Number	**Fe0e6f4e-df3c-4360-9977-32248ec09b55**
REACh Regulation	**REACh Declaration**
California proposition 65	**WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov**
Halogen content performance	**Product contains halogen above thresholds**
PVC free	**Yes**
Silicon free	**No**

Use Longer

Lifetime extension

Repair	**No**

Use Again

Repack and remanufacture

Recyclability potential, in %	**4**
Circularity Profile	**End of Life Information**
Removable battery	**User replaceable**

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.**