



Teknisk informasjon

Serie	Masterpact
Kortnavn utstyr	Micrologic 7.0 X
Produkt eller type komponent	Vern
Applikasjon	Equipment protection, monitoring and control
Effektbryter applikasjon	Distribution IEC standard
Kompatibel med	Masterpact MTZ1 circuit breaker Masterpact MTZ2 circuit breaker
Poles	4P 3P
Protected poles	4P 3d 4P 3d + N/2 3P 3d 4P 4d 4P 3d + OSN
[Ue] merkespenning	600 V AC, +/- 10 %
Type nettverk	AC
Nettverksfrekvens	50/60 Hz
Vernteknologi	Elektronisk
Vernfunksjoner	LSIV
Beskyttelsestype	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 Earth-leakage protection conforming to ANSI 51G
Trip område	400 A 630 A 800 A 1000 A 1250 A 1600 A 2000 A 2500 A 3200 A

Komplementær

Monteringsmetode	Fast
[Ir] long time pick-up adjustment range	0.4...1 x I _n adjustable in step of 1 A
Overlast/lang-tid tidsforsinkelsesjustering type	Adjustable in step of 0.5 s
[tr] long-time delay adjustment range	12.5...600 S at 1.5 x I _r 0.5...24 S at 6 x I _r 0.7...16.6 s at 7.2 x I _r
Termisk minne	Yes
[Isd] kort-tids/kortslutnings inntillingsområde	1.5...10 x I _r adjustable in step of 0.5 x I _r with embedded HMI 1.5...10 x I _r adjustable in step of 0.1 x I _r with Ecoreach software or Masterpact MTZ mobile app
Kort-tids/kortslutnings tidsinntillingstype	Justerbar
[tsd] innstillingsområde for tidsforsinkelse kortslutning	0.1...0.4 S I ² t=on 0...0.4 s I ² t=off
Momentan innstilling type li	Justerbar

[li] instantaneous pick-up adjustment range	2...15 x I _n adjustable in step of 0.5 x I _n with embedded HMI 2...15 x I _n adjustable in step of 0.1 x I _n with Ecoreach software or Masterpact MTZ mobile app li enable on/off
[li mode] instantaneous delay adjustment range	0 ms in fast 20 ms in standard
Jordfeilbeskyttelse	Med
Jordfeil instillingsområde	0.5...30 A adjustable in step of 0.1 A
Jordfeil tidsinstillingstype	Justerbar
[Δt] innstilling av tidsforsinkelse på jordfeil	60...800 Ms resettable time 140...1000 ms break time
Zone selektiv forrigling (logisk selektivitet) ZSI	Med
Nettverk og maskin diagnose typen	System (HMI) health state overview: circuit breaker health state standard) Contacts state: circuit breaker health state standard) Micrologic service life: circuit breaker health state standard) Tripping cause indication: circuit breaker tripping cause standard) Identification card: diagnostic data standard) Configured alarms synthesis: diagnostic data standard) Monitored function: diagnostic data standard) Operation: diagnostic data standard) Micrologic test: test standard) Protection test: test standard) Selectivity test: test standard) Trip context information: crisis management standard) Operation: advanced diagnostic standard) Breaker service life: circuit breaker health state standard)
Type måling	Effektmåler
Energiledelse	Measurement ,active, reactive and apparent energy (standard) Measurement ,electrical network (standard) Measurement ,energy (standard)
Måletypen	Current I1, I2, I3, I _n , I _g : maximum standard) Average voltage V _{avg} standard) Active power P, P1, P2, P3 standard) Reactive power Q, Q1, Q2, Q3 standard) Apparent power S, S1, S2, S3 standard) Power factor standard) Frequency standard) Total current harmonic distortion THD (I): inst, avg, avg min, avg max fundamental voltage standard) Total current harmonic distortion THD (I): inst, avg, avg min, avg max RMS voltage standard) Voltage V21, V32, V13, V1, V2, V3: instantaneous standard) Voltage V21, V32, V13, V1, V2, V3: minimum standard) Voltage V21, V32, V13, V1, V2, V3: maximum standard) Total voltage harmonic distortion THD (V): inst, avg, avg min, avg max fundamental voltage standard) Total voltage harmonic distortion THD (V): inst, avg, avg min, avg max RMS voltage standard) Demand current I1, I2, I3, I _n , I _{avg} standard) Demand power P, Q, S standard)
Målespenning	100...1200 V AC 50/60 Hz per phase
Frequency measurement range	45...250 Hz
Målenøyaktighet	Power factor: +/- 1 % Active energy E _p IN/OUT/tot: +/- 1 % - 10...10 GWh Reactive energy E _p IN/OUT/tot: +/- 2 % - 10...10 GVARh Apparent energy E _s IN/OUT/tot: +/- 1 % - 10...10 GVAh Unbalance current: +/- 0.5 % Frequency: +/- 0.005 Hz Voltage V21, V32, V13, VLLavg: +/- 0.5 % 208...690 x 1.2 V Voltage V21, V32, V13, VLNavg: +/- 0.5 % 120...400 x 1.2 V Apparent power S, S1, S2, S3, Sdemand: +/- 1 % Active power P, P1, P2, P3, Pdemand: +/- 1 % Reactive power Q, Q1, Q2, Q3, Qdemand: +/- 2 % Current I1, I2, I3, I _{avg} , Idemand for MTZ1: +/- 0.5 % 40...1600 x 1.2 A Current I1, I2, I3, I _{avg} , Idemand for MTZ2: +/- 0.5 % 40...4000 x 1.2 A
Nøyaktighets klasse	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)
Displaytype	LCD display - 128 x 96 pixels

Kommunikasjonsport protokoll	Bluetooth 4.0 LE peer to peer 30 kbit/s NFC peer to peer 28800 bauds conforming to ISO 15963 USB peer to peer 115 kbauds
Dataregistrering	Event logs Min / maks av øyeblikkelig verdier Data logs Alarmlogg Time stamping Vedlikeholdslogger

Miljø

Standarder	EN/IEC 60947-1 EN/IEC 60947-2 EN/IEC 60092-202 EN/IEC 60255-1 EN/IEC 61010-1
Montasjeplassering	Indoor use only
Miljødata	Wet location not approved for use conforming to IEC 61010-1
Elektromagnetisk kompatibilitet	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
Overspenningskategori	IV conforming to IEC 61010-1
Måling kategori	Category IV conforming to IEC 61010-2-30
Forurensningsgrad	3 conforming to IEC 60947-1
Omgivelsestemperatur for drift	-25...70 °C (operating) -35 °C (for start-up of product)
Relativ fuktighet	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

Enhetstype forpakning 1	PCE
Antall enheter forpakning 1	1
Forpakning 1 vekt	407 g
Forpakning 1 høyde	8 cm
Forpakning 1 bredde	22 cm
Forpakning 1 lengde	7 cm

Offer Sustainability

Produktets miljøstatus	Green Premium miljømerket produkt
REACH-regelverk	 REACH-erklæring
EU RoHS-direktiv	I samsvar  EU RoHS-erklæring
Kvikksølvfri	Ja
Informasjon om RoHS-unntak	 Ja
Kinas RoHS-forskrift	 Kinas RoHS-Erklæring
Miljøinformasjon	 Produktmiljøprofil
Produktets livssyklus	 Informasjon Om Levetidsslutt
PVC-fri	Ja
Halogeninnhold	Halogenfrie plastdeler i produkt

Contractual warranty

Garanti	18 months
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