

INDUSTRIAL AUTOMATION PRODUCT

MICROLOGIC 6.0 A

Electronic Trip Unit with Ammeter and Ground-Fault Protection

Schneider Electric MICROLOGIC 6.0 A is an electronic circuit-breaker trip unit with ammeter and ground-fault protection. It measures circuit current and commands the compatible breaker to trip according to the approved LSIG protection settings.

IDENTITY	VERIFIED VALUE
Manufacturer	Schneider Electric
System family	MicroLogic A Electronic Trip Units
Part number	MICROLOGIC 6.0 A
Country	France
HS code	8537101190

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Technical Specifications

Technical values below are limited to the named Schneider Electric product record.

PARAMETER	VALUE
Trip-unit designation	MicroLogic 6.0 A
Protection functions	Long-time; short-time; instantaneous; ground fault
Current measurement	RMS
Measured currents	I1; I2; I3; IN; Ig
Stored current maxima	I1max; I2max; I3max; INmax; Igmax
Long-time pickup Ir	0.4; 0.5; 0.6; 0.7; 0.8; 0.9; 0.95; 0.98; 1 x In
Long-time delay tr at 6 x Ir	0.5; 1; 2; 4; 8; 12; 16; 20; 24 s
Short-time pickup Isd	1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 x Ir
Short-time pickup accuracy	+/-10%
Short-time delay tsd; I2t OFF	0; 0.1; 0.2; 0.3; 0.4 s
Short-time delay tsd; I2t ON	0.1; 0.2; 0.3; 0.4 s
Instantaneous pickup Ii	2; 3; 4; 6; 8; 10; 12; 15 x In; OFF
Instantaneous pickup accuracy	+/-10%
Instantaneous fixed delay	20 ms

PARAMETER	VALUE
Ground-fault modes	Residual; Source Ground Return
Ground-fault pickup selector	Positions A through I
Ground-fault delay tg; I2t OFF	0; 0.1; 0.2; 0.3; 0.4 s
Ground-fault delay tg; I2t ON	0.1; 0.2; 0.3; 0.4 s
Source-ground-return sensor distance	10 m maximum
ZSI logic signal	0 or 5 V
ZSI cable impedance	2.7 Ohm maximum per 300 m
ZSI terminal conductor	0.4 to 2.5 mm2
ZSI conductor maximum section	3.5 mm2 including insulation
ZSI total cable length	3000 m maximum
ZSI output fan-out	10 inputs maximum
ZSI input fan-in	100 devices maximum
Display current threshold	0.2 x In

VERIFIED PRODUCT RECORD

DATA GROUP	VERIFIED VALUE
Installed host / carrier	compatible MasterPacT or PowerPacT circuit breaker
Companion hardware	matching adjustable long-time rating plug
Field connection	optional external source-ground-return sensor
Primary system function	Combines selective overcurrent protection with equipment ground-fault protection
Controlled acceptance duty	Selective protection in low-voltage distribution switchboards

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System Role and Architecture

Schneider Electric MICROLOGIC 6.0 A is an electronic circuit-breaker trip unit with ammeter and ground-fault protection. It measures circuit current and commands the compatible breaker to trip according to the approved LSIG protection settings.

FUNCTION 1

Combines selective overcurrent protection with equipment ground-fault protection

FUNCTION 2

Measures phase, neutral and ground-fault currents for local ammeter display

FUNCTION 3

Coordinates upstream and downstream trip units through zone selective interlocking

FUNCTION 4

Supports controlled replacement, rating-plug checks and secondary-injection testing

Matched system components

- compatible MasterPacT or PowerPacT circuit breaker
- matching adjustable long-time rating plug
- optional external source-ground-return sensor
- approved trip-unit test equipment

SYSTEM INTEGRATION RECORD

INTEGRATION ITEM	DOCUMENTED ROLE
Installed host / carrier	compatible MasterPacT or PowerPacT circuit breaker
Companion hardware	matching adjustable long-time rating plug
Field connection	optional external source-ground-return sensor
Primary system function	Combines selective overcurrent protection with equipment ground-fault protection
Controlled acceptance duty	Selective protection in low-voltage distribution switchboards

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Applications and Engineering Context

Selective protection in low-voltage distribution switchboards

Combines selective overcurrent protection with equipment ground-fault protection

Ground-fault protection for feeder and main circuit breakers

Measures phase, neutral and ground-fault currents for local ammeter display

Zone-selective-interlocking coordination between breaker levels

Coordinates upstream and downstream trip units through zone selective interlocking

Current monitoring and protection verification during commissioning

Supports controlled replacement, rating-plug checks and secondary-injection testing

TECHNICAL NOTE

Before installing MICROLOGIC 6.0 A, isolate the breaker, match the breaker frame and rating plug, record every LSIG and neutral setting, then verify the restored settings and trip functions with approved test equipment.

MODEL-SPECIFIC ACCEPTANCE EVIDENCE

CHECK	ACCEPTANCE CONDITION
Identity	MICROLOGIC 6.0 A / MICROLOGIC 6.0 A recorded
Physical interface	compatible MasterPacT or PowerPacT circuit breaker
Companion check	matching adjustable long-time rating plug
Functional proof	Combines selective overcurrent protection with equipment ground-fault protection
Application test	Selective protection in low-voltage distribution switchboards

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Engineering Precautions

1

Verify the complete MICROLOGIC 6.0 A designation, breaker frame and rating-plug execution before work.

2

Open, isolate and discharge all breaker power sources before removing the trip unit or rating plug.

3

Record Ir, tr, Isd, tsd, li, Ig, tg, neutral and I2t selections before replacement.

4

Preserve ZSI terminal identity and install the required Z3-Z4-Z5 jumper when ZSI is not used.

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For source-ground-return protection, keep the external sensor circuit within the documented distance and wiring rules.

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
MICROLOGIC 6.0 A	Electronic trip unit with ammeter and ground-fau	Open product page
MICROLOGIC 6.0 E	Electronic trip unit with LSIG protection and en	Open product page

MANUFACTURER SOURCE RECORD

MicroLogic 2.0A, 3.0A, 5.0A, and 6.0A Electronic Trip Units Instruction Bulletin

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