

METRACLIP | 63 / 64

Milliampere Current Clamp

for Measuring Fault, Process Signal Current

3-349-487-03
7/12.16

- Measuring ranges: DC 100 mA / 1000 mA
AC 100 mA / 1000 mA / 10 A
- Switching back and forth between DC and AC measurements
- Zero balancing for DC measurements
- Measured value storage (DATA HOLD)
- Power saving circuit
- Current clamp with 1.2 meter cable length
- Analog output for the connection of recording instruments, e.g. storage multimeters

Applications

- Accurate direct current measurement in light current range
- Alternating current measurement of sinusoidal current
- Leakage current measurement with grounded conductors
- Leakage current measurement in single and 3-phase systems



Features

Power Saving Circuit

The device is switched off automatically after 10 minutes if none of its keys have been activated during this time. Automatic shutdown can be deactivated.

Analog Output

The analog output (0 ... 100 mV DC) is designed for connecting a recording instrument (e.g. storage multimeter). This makes it possible to record measurements which last for several hours.

Indication of Overranging

Visual indication is provided in the event that the measuring range is exceeded („OL.“ is displayed).

Remote Current Clamp

The current clamp is connected to the measuring instrument by means of a cable with a length of 1.2 meters. This allows for measurement at difficult-to-access locations.

Characteristic Values

Measuring Ranges: Direct Current after Zero Balancing

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Range	Measuring Range	Resolution	Accuracy
100 mA	0.10 ... ±50.00 mA	0.01 mA	±1% rdg. ±5 digits
	±50.01 ... ±99.99 mA		±1% rdg. ±10 digits
1000 mA	1.0 ... ±300.0 mA	0.1 mA	±1% rdg. ±10 digits
	±300.1 ... ±700.0 mA		±2% rdg. ±10 digits
	±700.1 ... ±999.9 mA		±3% rdg. ±10 digits
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Range	Measuring Range	Resolution	Accuracy
100 mA	0.10 ... ±99.99 mA	0.01 mA	±1% rdg. ±10 digits
1000 mA	1.0 ... ±300.0 mA	0.1 mA	±1% rdg. ±10 digits
	±300.1 ... ±700.0 mA		±2% rdg. ±10 digits
	±700.1 ... ±999.9 mA		±3% rdg. ±10 digits

Measuring Ranges

Alternating Current for METRACLIP 63 / 64

Range	Measuring Range	Resolution	Accuracy
100 mA	0.00 ... 99.99 mA	0.01 mA	±1% rdg. ±10 digits (50/60 Hz)
1000 mA	0.0 ... 999.9 mA	0.1 mA	±1% rdg. ±10 digits (50/60 Hz)
10 A	0.000 ... 9.999 A	0.001 A	±1% rdg. ±10 digits (50/60 Hz)

Key

rdg. = reading (measured value)

Applicable Regulations and Standards

IEC 61010-1/EN 61010-1/ VDE 0411-1	Safety requirements for electrical equipment for measurement, control and laboratory use – General requirements
EN 60529 VDE 0470, part 1	Test instruments and test procedures Degrees of protection provided by enclosures (IP code)
EN 61010-2-032/ VDE 0411-2-032	Special requirements for current clamps
DIN EN 61326	Electrical equipment for control technology and

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Reference Conditions

Ambient temperature 23 °C ±5 °C
Relative humidity Max. 85% (no condensation allowed)

Influencing Quantities

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Geomagnetism influence Less than ±0.5 mA
Magnetization influence Less than ±0.5 mA at 1.5 A DC on/off
Influence caused by open/
closed current clip Less than ±0.7 mA

METRACLIP 64

Geomagnetism influence Less than ±2.0 mA
Magnetization influence Less than ±2.0 mA at 1.5 A DC on/off
Influence caused by open/
closed current clip Less than ±1.0 mA

Ambient Conditions

Operating temperature range 0 °C ... +50 °C
< 85% relative humidity
(no condensation allowed)

Storage temperature range 10 °C ... +60 °C
< 70% relative humidity
(no condensation allowed)

Power Supply

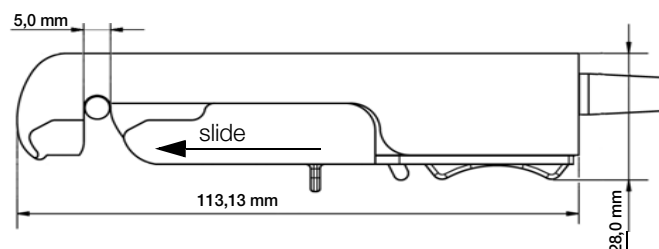
Batteries 4 type LR6 (AA)
Service life With alkaline manganese: approx. 200 hrs.
Battery test "B" is displayed automatically when
battery voltage is too low.
Automatic shutdown The device is switched off automatically
after 10 minutes if none of its keys have
been activated during this time. Automatic
shutdown can be deactivated.

Electrical Safety

Dielectric strength 3700 V AC / 1 minute between current
clamp core and handle
Measuring category CAT II 600 V / CAT III 300 V
Maximum voltage 600 V AC within the measuring circuit

Mechanical Design

Dimensions W x H x D: 78 x 155 x 23 mm
Weight Approx. 280 g
Current clamp cable length 1.2 meters
Opening capacity of current clamp jaws:
METRACLIP 63: 5 mm diameter
METRACLIP 64: 30 mm diameter
Dimensions **METRACLIP 63:** W x H x D: 19 x 113 x 28 mm
METRACLIP 64: W x H x D: 33 x 170 x 24 mm
Current clamp design **METRACLIP 63:**



Scope of Delivery

- 1 measuring instrument
- 1 current clamp
- 4 LR6 batteries
- 1 carrying pouch
- 1 set of operating instructions
- 1 data logger cable, consisting of two cables à 1,8 m
each with 1 contact-protected plug and 1 alligator clip

Order Information

Description	Type	Article Number
Milliampere current clamp	METRACLIP 63	M311G
Milliampere current clamp	METRACLIP 64	M311H

Factory calibration certificate optionally available