

# METRACLIP | 63 / 64

## Milliampere Current Clamp

### for Measuring Fault, Process Signal Current

 3-349-487-03  
 2/11.08

- 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
- Connector sockets for data logger (max. output: 100 mV DC)

#### Applications

- Accurate direct current measurement in light current range
- Alternating current measurement
- 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.

##### Data Interface

A data logger can be connected to the measuring instrument (e.g. a multimeter with memory). 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.

##### Flexible 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.

#### 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 VDE 0843, part 20	Electrical equipment for control technology and laboratory use – EMC requirements

#### Characteristic Values

##### Measuring Ranges: Direct Current after Zero Balancing

METRACLIP 63			
Range	Measuring Range	Resolution	Accuracy
100 mA	0.1 ... ±50.00 mA	0.01 mA	±1% rdg. ±5 digits
	±50.01 ... ±99.99 mA		±1% rdg. ±10 digits
1000 mA	1 ... ±300 mA	0.1 mA	±1% rdg. ±10 digits
	±300 ... ±700 mA		±2% rdg. ±10 digits
	±700 ... ±999.9 mA		±3% rdg. ±10 digits
METRACLIP 64			
Range	Measuring Range	Resolution	Accuracy
100 mA	0.1 ... ±99.99 mA	0.01 mA	±1% rdg. ±10 digits
1000 mA	1 ... ±300 mA	0.1 mA	±1% rdg. ±10 digits
	±300 ... ±700 mA		±2% rdg. ±10 digits
	±700 ... ±999.9 mA		±3% rdg. ±10 digits

##### Measuring Ranges

##### Alternating Current for METRACLIP 63 / 64

Range	Measuring Range	Resolution	Accuracy
100 mA	0 ... 99.99 mA	0.01 mA	±1% rdg. ±10 digits (50/60 Hz)
1000 mA	0 ... 999.9 mA	0.1 mA	±1% rdg. ±10 digits (50/60 Hz)
10 A	0 ... 9.999 A	0.001 mA	±1% rdg. ±10 digits (50/60 Hz)

Key

rdg. = reading (measured value)

# METRACLIP 63 / 64

## Milliampere Current Clamp

### Reference Conditions

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

### Influencing Quantities

#### METRACLIP 63

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  
< 8% relative humidity  
(no condensation allowed)

Storage temperature  
range: 10° C ...+60° C  
< 75% 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

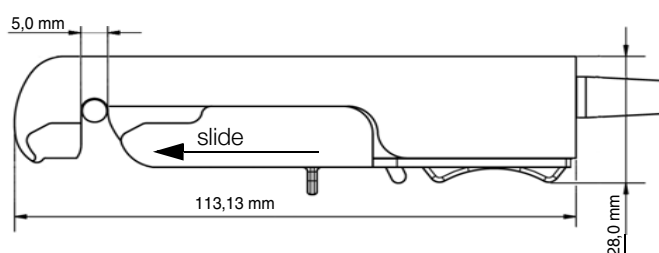
### Mechanical Design

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

### Order Information

Description	Type	Article Number
Milliampere current clamp	<b>METRACLIP 63</b>	M311G
Milliampere current clamp	<b>METRACLIP 64</b>	M311H

For additional information regarding accessories please refer to

- the data sheet for the respective device or our Measuring Instruments and Testers catalogue.
- [www.gossenmetrawatt.com](http://www.gossenmetrawatt.com)