

METRACLIP 41 / 410

AC / DC current clamps

3-349-590-03
8/12.16

- **METRACLIP 41:** suitable for automotive production, manufacturing, service as well as for 4 ... 20 mA in the industrial sector
- **METRACLIP 410:** suitable for application as a classic electrician's tool
- Opening angles of current clamp brackets
 - METRACLIP 41:** 25 mm dia.
 - METRACLIP 410:** 25 mm dia.
- TRMS reading
- Autoranging
- Measured value storage (DATA HOLD)
- Automatic zero balancing
- Auto Power Off
- Using advanced Hall Effect technology
- UL listed



Applications

The **METRACLIP 41/410**-current clamp meters have been designed for accurate, contactless measurement of AC and DC currents as well as for complex waveform currents.

Features

Power Saving Circuit

The devices are switched off automatically after 10 minutes if none of its keys has been activated during this time. Automatic shutdown can be deactivated.

DATA HOLD

The measured value can be retained in the display via the HOLD key.

Automatic Zero Balancing

By pressing the zero balancing key, the output voltage is automatically balanced to zero.

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 measurement, control and laboratory use – EMC requirements |

Characteristic Values

| | METRACLIP 41 | METRACLIP 410 |
|-------------------------------------|----------------------------------|------------------------------------|
| Measuring Range¹⁾ | 0 ... 4 ... 40 A | 0 ... 100 ... 400 A |
| Resolution | ... 4 A: 1 mA ... 40 A: 10 mA | ... 40A: 10 mA ... 400A: 100 mA |
| Overload capacity (60 s) | 200 A | 600 A |
| General accuracy | ±1% of rdg. ±5 D ²⁾ | ±1% of rdg. ±5 D |
| Temperature Coefficient | ±0.1% of rdg./°C | |
| Frequency range | DC and 15 ... 400 Hz | |

1) DC or AC_{pk}

2) Specification applicable for DC and 15 ... 200 Hz

General:

DC accuracy ±1% of rdg., ±5 digits

Operating voltage 300 V AC_{RMS} or DC

Key: rdg. = reading (measured value)

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Reference Conditions

Ambient temperature: 23 °C ±1 °C
Relative humidity: maximum 80% for temperatures up to 31°C decreasing linearly to 40% relative humidity at 50°C.
(no condensation allowed)

LCD Panel

Display 7-segment characters
Number of places 3½ digits, max. display 3999

Ambient Conditions

Operating temperature range -10 °C ... +50 °C
< 80% relative humidity
(no condensation allowed)
Storage temperature range with batteries removed -25 °C ... + 85 °C
Elevation max. 2000 m
Deployment indoors; outdoors only within specified ambient conditions

Power Supply

Batteries 9 V alkaline battery; PP3, MN1604 or IEC6LR61
Service life **METRACLIP 41**: approx. 15 hrs.
METRACLIP 410: approx. 50 hrs.
Automatic shutdown The device is switched off automatically after 10 minutes if none of its keys has been activated during this time. Automatic shutdown can be deactivated.

Electrical Safety

Measuring category CAT III 300 V
Pollution degree 2

Electromagnetic Compatibility (EMC)

Interference emission/
Interference immunity EN 61326-2-2:2013

Mechanical Design

Dimensions 193 mm x 64 mm x 31 mm
Weight approx. 235 g
Current clamp opening 25 mm dia.
Protection IP40

Standard Equipment

- 1 AC / DC current clamp
- 1 9 V alkaline battery
- 1 Operating instructions

Accessory Case (not included)



Order Information

| Description | Type | Article Number |
|------------------------------------|------------------------------------|----------------|
| AC / DC current clamp | METRACLIP 41 ¹⁾ | M320A |
| AC / DC current clamp | METRACLIP 410 ¹⁾ | M320B |
| Tasche für METRACLIP 41/410 | Case_ METRACLIP41_410 | Z320A |

¹⁾ Factory calibration certificate optionally available