FLUKE®

373

Clamp Meter

Users Manual

PN 3612805
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Introduction

⚠⚠Warning

Read "Safety Information" before you use the Meter.

The Fluke 373 Clamp Meter (the Meter) measures true-rms ac and dc voltage, ac current, resistance, and capacitance.

How to Contact Fluke

To contact Fluke, call one of the following telephone numbers:

- Technical Support USA: 1-800-44-FLUKE (1-800-443-5853)
- Calibration/Repair USA: 1-888-99-FLUKE (1-888-993-5853)
- Canada: 1-800-36-FLUKE (1-800-363-5853)
- Europe: +31 402-675-200
- Japan: +81-3-3434-0181
- Singapore: +65-738-5655
- Anywhere in the world: +1-425-446-5500

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Safety Information

A **Warning** identifies conditions and actions that pose hazard(s) to the user; A **Caution** identifies conditions and procedures that could cause Meter damage, equipment under test damage, or permanent loss of data.

Symbols used on the Meter and in this manual are explained in Table 1.

⚠⚠Warning

To prevent possible electrical shock or personal injury, follow these guidelines:

- **Use the Meter only as specified in this manual or the protection provided by the Meter can be compromised.**
- **Examine the case before you use the Meter. Look for cracks or missing plastic. Carefully look at the insulation around the connectors.**
- **Never measure ac current while the test leads are inserted into the input jacks.**
- **Make sure the battery door is closed and latched before operating the Meter.**

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- **Remove the test leads from the Meter before the battery door is opened.**
- **Examine the test leads for damaged insulation or exposed metal. Check test lead continuity. Replace damaged test leads before using the Meter.**
- **Do not use the Meter if it operates incorrectly. Protection can be compromised. When in doubt, have the Meter serviced.**
- **Do not use the Meter around explosive gas, vapor or in damp or wet environments.**
- **When measuring, keep fingers behind the Tactile Barrier. See "The Meter" ①.**
- **Use only type AA batteries, properly installed in the Meter case, to power the Meter.**
- **To avoid false readings that can lead to electrical shock and injury, replace the batteries as soon as the low battery indicator ( ) appears.**
- **When servicing the Meter, use only specified replacement parts.**
- **Have the Meter serviced only by qualified service personnel.**
- **Be careful around voltages > 30 V ac rms, 42 V ac peak, or 60 V dc. Such voltages pose a shock hazard.**
- **Do not apply more than the rated voltage, as marked on the Meter, between the terminals or between any terminal and earth ground.**
- **When using the probes, keep fingers behind the finger guards on the probes.**

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- **Connect the common test lead before connecting the live test lead. When disconnecting test leads, disconnect the live test lead first.**
- **Do not work alone so assistance can be rendered in an emergency.**
- **Use extreme caution when working around bare conductors or bus bars. Contact with the conductor could result in electric shock.**
- **Adhere to local and national safety codes. Individual protective equipment must be used to prevent shock and arc blast injury where hazardous live conductors are exposed.**
- **Disconnect circuit power and discharge all high-voltage capacitors before you measure resistance, continuity, or capacitance.**
- **Do not measure current in circuits carrying more than 600 V or 600 A with the Meter Jaw.**
- **Never operate the Meter with the back cover removed or the case open.**

⚠Caution

To avoid possible damage to the Meter or to equipment under test:

- **Use the proper jacks, function, and range for the measurement application.**
- **Clean the case and accessories with a damp cloth and mild detergents only. Do not use abrasives or solvents. Make sure all water is removed before use.**

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Table 1. Symbols

Symbol	Meaning	Symbol	Meaning
~	AC (Alternating Current)	⏚	Earth ground
⎓	DC (Direct Current)		Do not dispose of this product as unsorted municipal waste. Go to Fluke's website for recycling information.
⚠	Hazardous voltage	CE	Conforms to European Union directives.
⚠	Risk of Danger. Important information. See Manual.		Conforms to relevant North American Safety Standards.
	Battery	⧈	Double insulated
	Examined and licensed by TÜV Product Services.	N10140	Conforms to relevant Australian standards.

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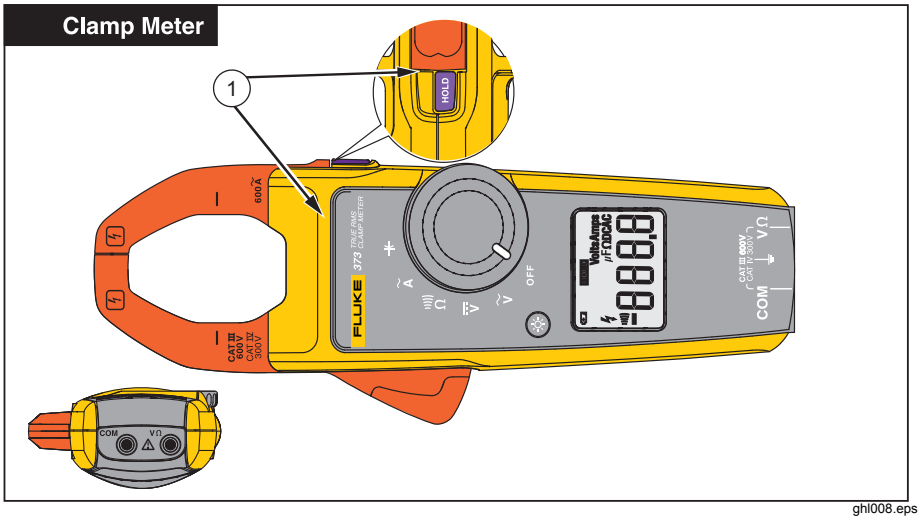
Symbol	Meaning	Symbol	Meaning
CAT III	IEC Measurement Category III CAT III equipment has protection against transients in equipment in fixed-equipment installations, such as distribution panels, feeders and short branch circuits, and lighting systems in large buildings.	CAT IV	IEC Measurement Category IV CAT IV equipment has protection against transients from the primary supply level, such as an electricity Meter or an overhead or underground utility service.
	Application around and removal from HAZARDOUS LIVE conductors is permitted.		

Note

The Measurement Category (CAT) and voltage rating of any combination of test probe, test probe accessory, current clamp accessory, and the Meter is the LOWEST rating of any individual component.

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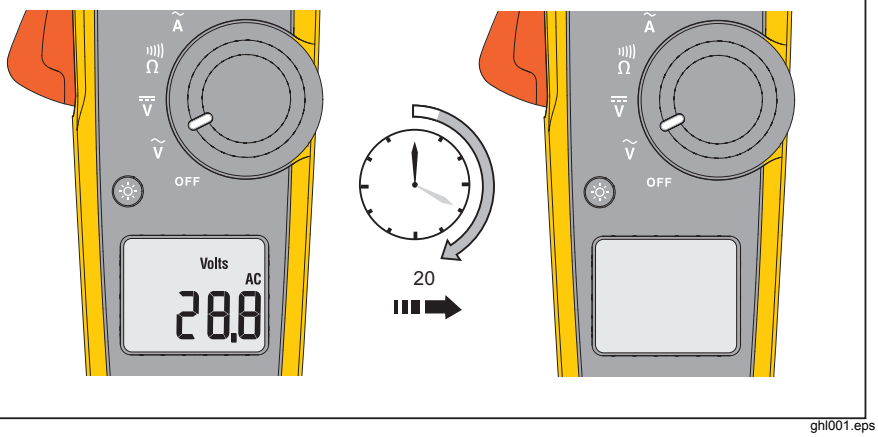
The Meter



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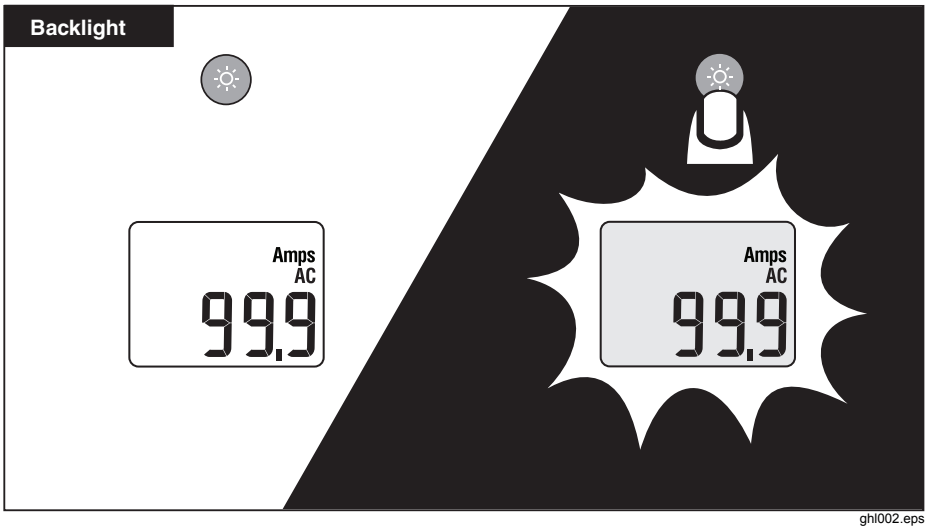
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Auto Off

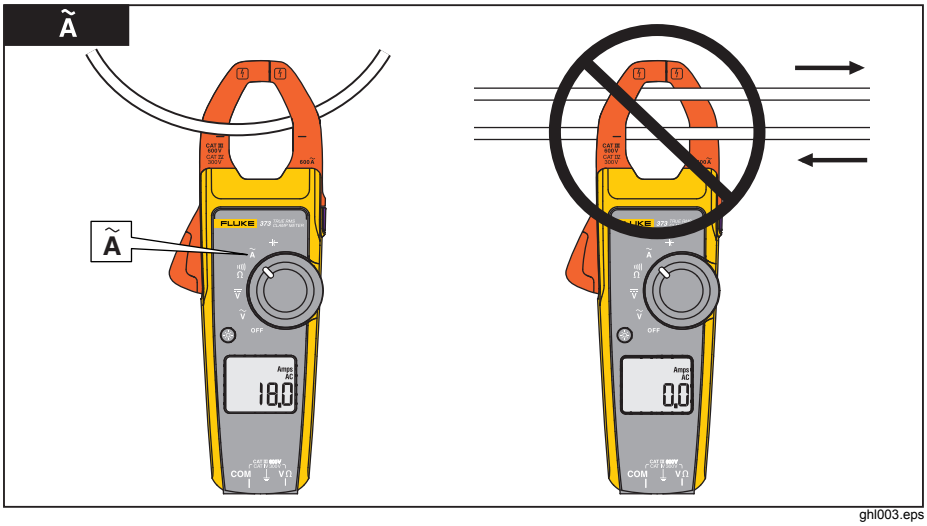


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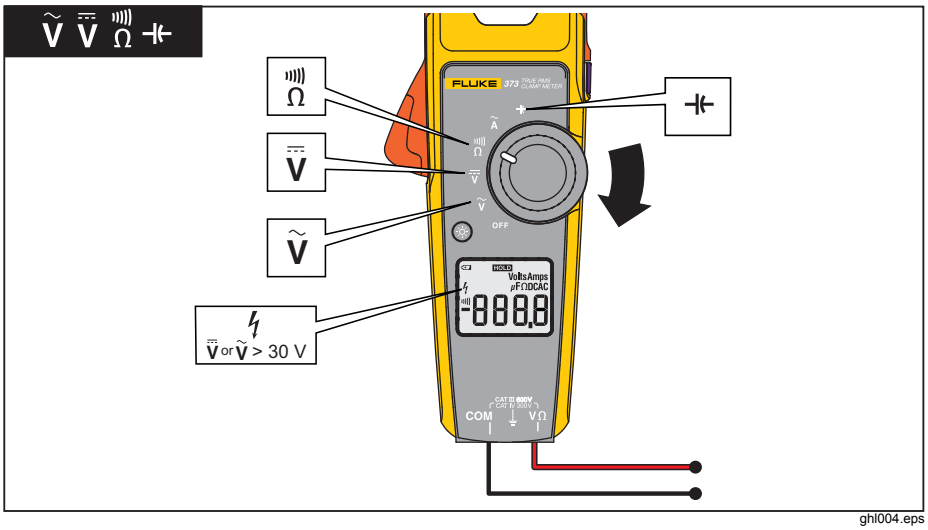


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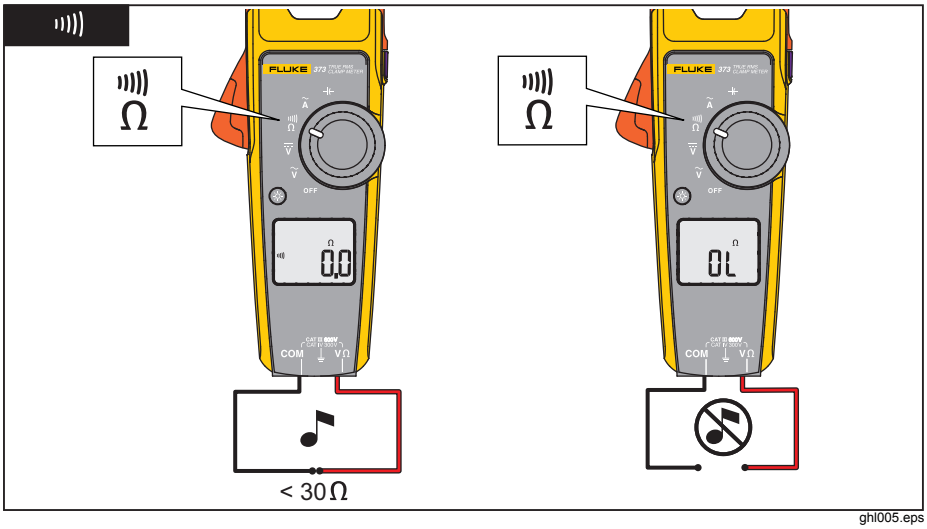
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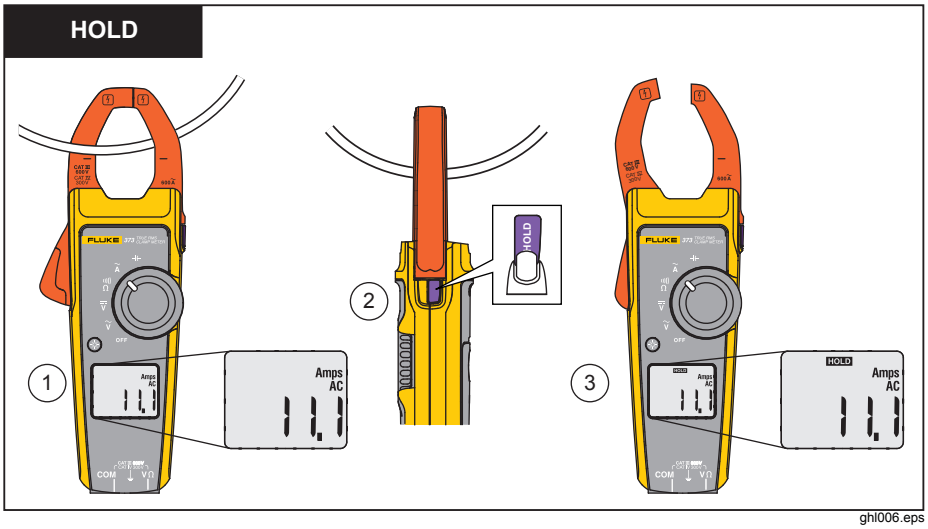
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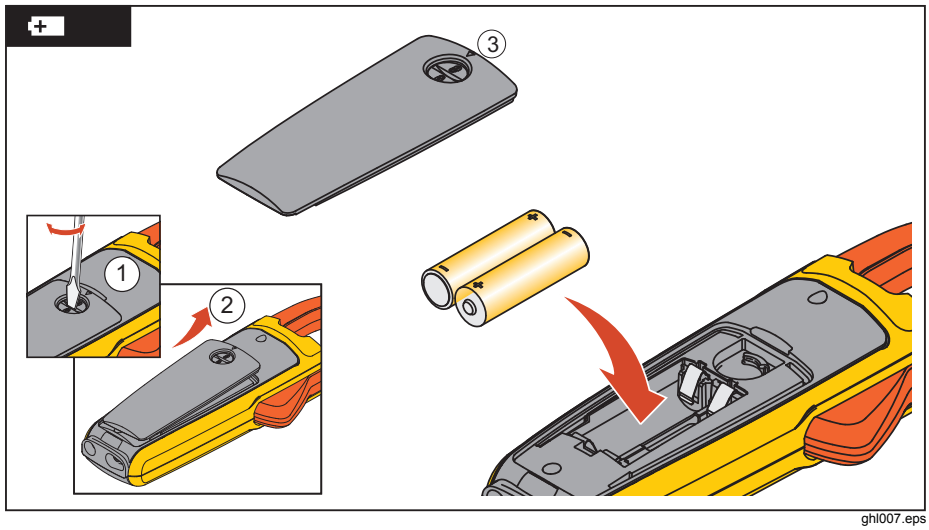
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Electrical Specifications

AC Current

Range ..... 600.0 A

Resolution ..... 0.1 A

Accuracy ..... 2 % ± 5 digits (48 – 62 Hz)

Crest Factor (50/60 Hz) ..... 2.5 @ 600 A

AC Voltage

Range ..... 600.0 V

Resolution ..... 0.1 V

Accuracy ..... 1.0 % ± 5 digits (48 – 62 Hz)

DC Voltage

Range ..... 600.0 V

Resolution ..... 0.1 V

Accuracy ..... 1 % ± 5 digits

Resistance

Range ..... 600.0 Ω/6000 Ω

Resolution ..... 0.1 Ω/1 Ω

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Accuracy	1 % ± 5 digits
Continuity Beeper	≤ 30 Ω

Capacitance

Range	10.0 – 100.0 µF / 1000 µF
Resolution	0.1 µF/1 µF
Accuracy	1.9 % ± 2 digits

Mechanical Specifications

Size (L x W x H)	232 mm x 85 mm x 45 mm
Weight	370 g

Environmental Specifications

Operating Temperature	-10 °C to +50 °C
Storage Temp	-40 °C to +60 °C
Operating Humidity	Non condensing (< 10 °C) ≤ 90 % RH (at 10 °C to 30 °C) ≤ 75 % RH (at 30 °C to 40 °C) ≤ 45 % RH (at 40 °C to 50 °C) (Without Condensation)

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Operating Altitude	3000 meters
Storage Altitude	12,000 meters
EMI, EMC	Meets all applicable requirements in EN61326-1:2006
Temperature Coefficients	Add 0.1 x specified accuracy for each degree C above 28 °C or below 18 °C
Safety Compliance	ANSI/ISA S82.02.01:2004 CAN/CSA-C22.2 No. 61010-1-04 IEC/EN 61010-1:2001, 600V CAT III, 300V CAT IV Pollution Degree 2 EN/IEC 61010-2-32:2002 EN/IEC 61010-031:2002/A1:2008 CE
Agency Approvals	c SP us, N10140, TÜV
Batteries	2 AA, NEDA 15A, IEC LR6

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