

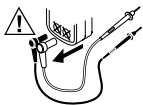
36 AC/DC True RMS *Clamp Meter* *Instruction Sheet*

Read First: Safety Information

To ensure safe operation and service of the meter, follow these instructions:

- Avoid working alone so assistance can be rendered.
- Never use the meter on a circuit with voltages higher than 600V or a frequency higher than 400 Hz fundamental. The meter may be damaged.
- Never measure current while the test leads are inserted into the input jacks.
- Do not use the meter or test leads if they look damaged.
- Use extreme caution when working around bare conductors or bus bars. Contact with the conductor could result in electric shock.
- Read the operating instructions before use and follow all safety instructions.
- Use the meter only as specified in the operating instructions; otherwise, the meter's safety features may not protect you.
- Use caution when working with voltages above 60V dc or 30V ac. Such voltages pose a shock hazard.

Symbols



To avoid electric shock, remove the test leads and any input signals from the meter terminals before performing the operation.



Meter is protected throughout by double insulation or reinforced insulation. When servicing, use only specified replacement parts.

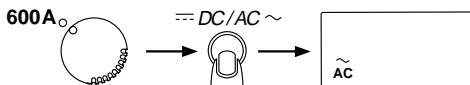
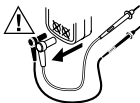


Center the conductor within the transformer jaws.

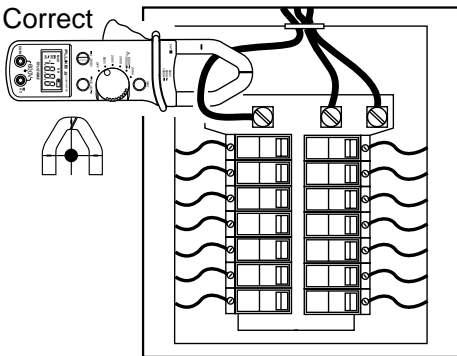


Press a button on the meter.

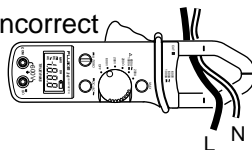
Measuring AC Current



Correct



Incorrect

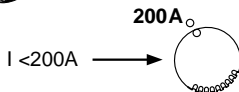
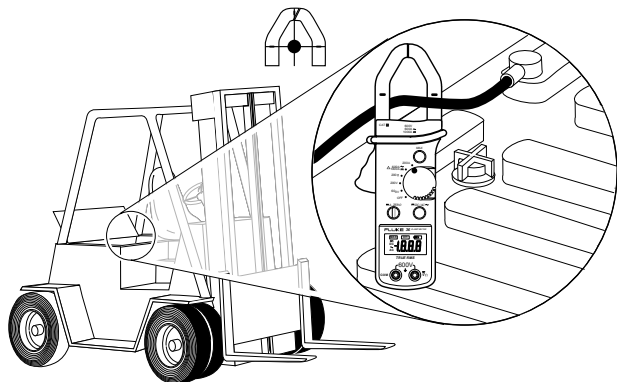
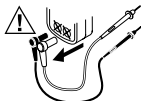


200A

$I < 200A$



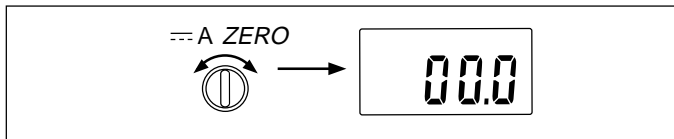
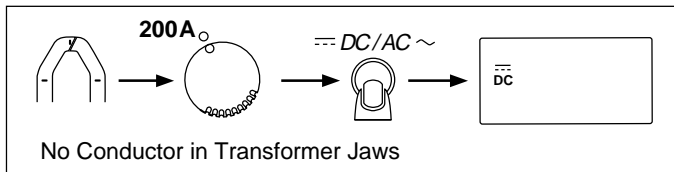
Measuring DC Current



am06i.eps

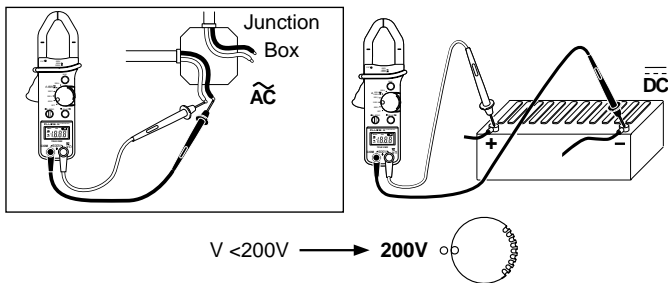
For greater accuracy on smaller currents, refer to the DC Zero procedure.

DC Zero



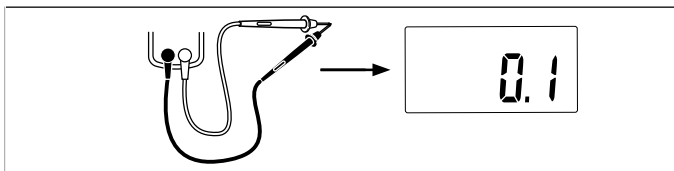
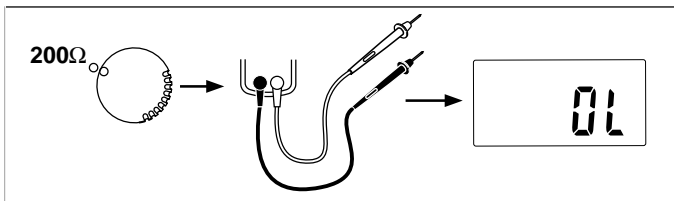
amo71.eps

Measuring Voltage



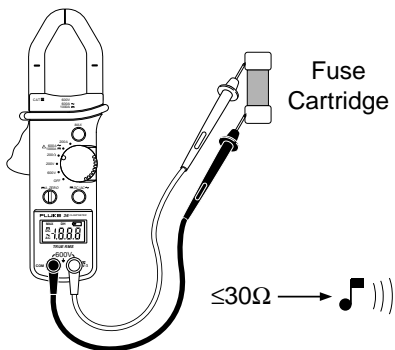
am081.eps

Testing Continuity and Resistance



am09i.eps

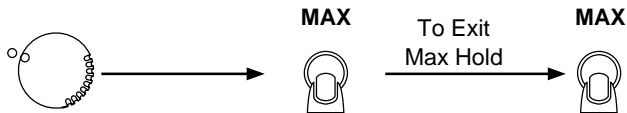
If ohms reading with shorted leads is not $\leq 0.5\Omega$, check for loose leads, incorrect function selection, or enabled Max Hold function.



am10.eps

Max Hold Function

Holds on the display the highest ac or the highest positive polarity dc reading.



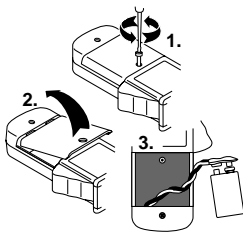
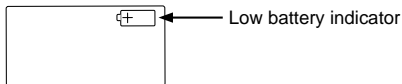
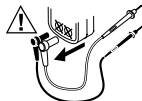
Measure after pressing MAX.

am11i.eps

Sleep Feature

To preserve battery life, the meter always turns off automatically after approximately 20 minutes. To resume operation, turn the meter OFF for 2 seconds; then select the desired function.

Replacing the Battery



am12i.eps

Service, Parts, and Accessories

⚠ Warning

- **To avoid electrical shock, do not service the meter unless you are qualified to do so.**
- **To avoid electrical shock or damage to the meter, do not get water inside the case.**

Periodically wipe the case with a damp cloth and mild detergent. Do not use abrasives or solvents.

To order service information (PN 200409) or parts, call 1-800-526-4731 (U.S.A. and Canada). From other countries, contact the nearest Fluke Service Center.

Included Accessories: TL75 Test Leads
C36 Soft Case

Optional Accessories: TL20 Industrial Test Lead Set
AC70A Alligator Clips

Contacting Fluke

For application or operation assistance or information on Fluke products, call:

800-443-5853 U.S.A. and Canada
206-356-5500 from other countries

General Specifications

Maximum voltage and frequency between any terminal and earth ground: 600V, 400 Hz fundamental

Operating Temperature: -10°C to +50°C (14°F to 122°F)

Operating Altitude: 2000m (6562 ft)

Storage Altitude: 10000m (32808 ft)

Storage Temperature: -20°C to +60°C indefinite
(-4°F to 140°F)

Temperature Coefficient: 0.05 x (specified accuracy)/°C
(<18°C or >28°C; <64°F or >82°F)

Electromagnetic Compatibility: RF field ≤ 1.6 V/m, total accuracy = specified accuracy; RF field = 3 V/m, total accuracy = specified accuracy + 3.6% of range


Humidity: up to 30°C (85°F), 95% RH; up to 40°C (104°F), 75% RH; up to 50°C (122°F), 45% RH

Battery Type: 9V, NEDA 1604A or IEC 6LR61

Battery Life: Alkaline 60 hrs. continuous

Jaw Size: One 3 cm (1.2 inch) conductor, or two 2.46 cm (0.97 inch) conductors.

Size (HxWxL): 4.5 cm x 9.5 cm x 25 cm
(1.77 x 3.75 x 9.8 inches)

Safety: UL 3111, , TÜV (pending); complies with IEC 1010-1 for use in 600V, CAT III locations (industrial)

Case Protection: IP 30 per IEC 529

Max Hold Feature: Accuracy: add 10 digits to ac and dc specification; acquisition time: 250 ms (ac); 10 ms (dc)


Continuity: Beeper on at $\leq 30\Omega$, off at $\geq 70\Omega$

RMS Settling Time: The rms converter has a longer settling time for displays reading < 100 counts. The display may read up to 5 digits with no voltage or current inputs.

True RMS Sensing: True rms sensing provides more accurate readings on circuits containing harmonics or distorted waveforms. An instrument with true rms reading indicates the true heat-providing current, which may cause overheated conductors, connections, breakers, or transformers.

Measurement Specifications

Accuracy is specified for a period of one year after calibration, at 18°C to 28°C (64°F to 82°F) with relative humidity to 90%. Instrument is true rms sensing and calibrated to the rms value of a sine wave input.

Function	Range	Accuracy*	
$\overline{\overline{\text{A}}}$	1000A 1000A 200A	0-600A, 1.9% Rdg + 4 dgts 600-1000A, 3% Rdg + 3 dgts 0-200A, 1.9% Rdg + 7 dgts	
$\overline{\overline{\text{V}}}$	600V 200V	1.0% Rdg + 3 dgts	
$\tilde{\text{A}}$ (45-400 Hz)	600A 200A	10-600A, 2% Rdg + 3 dgts 0.5-200A, 2% Rdg + 5 dgts	
$\tilde{\text{V}}$ (45-400 Hz)	600V 200V	1.5% Rdg + 3 dgts	
Ω	200 Ω	1.2% Rdg + 5 dgts	
		Crest Factor	Overload Protection 
$\overline{\overline{\text{A}}}$	1000A 1000A 200A	na	1000A
$\overline{\overline{\text{V}}}$	600V 200V	na	1200V rms continuous
$\tilde{\text{A}}$ (45-400 Hz)	600A 200A	$2 \leq \text{CF} \leq 3$, add 2% Rdg	600A continuous (CF ≤ 3)
$\tilde{\text{V}}$ (45-400 Hz)	600V 200V	≤ 3 (pk voltage $\leq 933\text{V}$)	1200V rms continuous
Ω	200 Ω	na	660V rms continuous
* See Electromagnetic Compatibility specification			

LIMITED WARRANTY & LIMITATION OF LIABILITY

Each Fluke product is warranted to be free from defects in material and workmanship under normal use and service. The warranty period is one year and begins on the date of shipment. Parts, product repairs and services are warranted for 90 days. This warranty extends only to the original buyer or end-user customer of a Fluke authorized reseller, and does not apply to fuses, disposable batteries or to any product which, in Fluke's opinion, has been misused, altered, neglected or damaged by accident or abnormal conditions of operation or handling. Fluke warrants that software will operate substantially in accordance with its functional specifications for 90 days and that it has been properly recorded on non-defective media. Fluke does not warrant that software will be error free or operate without interruption.

Fluke authorized resellers shall extend this warranty on new and unused products to end-user customers only but have no authority to extend a greater or different warranty on behalf of Fluke. Warranty support is available if product is purchased through a Fluke authorized sales outlet or Buyer has paid the applicable international price. Fluke reserves the right to invoice Buyer for importation costs of repair/replacement parts when product purchased in one country is submitted for repair in another country.

Fluke's warranty obligation is limited, at Fluke's option, to refund of the purchase price, free of charge repair, or replacement of a defective product which is returned to a Fluke authorized service center within the warranty period.

To obtain warranty service, contact your nearest Fluke authorized service center or send the product, with a description of the difficulty, postage and insurance prepaid (FOB Destination), to the nearest Fluke authorized service center. Fluke assumes no risk for damage in transit. Following warranty repair, the product will be returned to Buyer, transportation prepaid (FOB Destination). If Fluke determines that the failure was caused by misuse, alteration, accident or abnormal condition of operation or handling, Fluke will provide an estimate of repair costs and obtain authorization before commencing the work. Following repair, the product will be returned to the Buyer transportation prepaid and the Buyer will be billed for the repair and return transportation charges (FOB Shipping Point).

THIS WARRANTY IS BUYER'S SOLE AND EXCLUSIVE REMEDY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. FLUKE SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSSES, INCLUDING LOSS OF DATA, WHETHER ARISING FROM BREACH OF WARRANTY OR BASED ON CONTRACT, TORT, RELIANCE OR ANY OTHER THEORY.

Since some countries or states do not allow limitation of the term of an implied warranty, or exclusion or limitation of incidental or consequential damages, the limitations and exclusions of this warranty may not apply to every buyer. If any provision of this Warranty is held invalid or unenforceable by a court of competent jurisdiction, such holding will not affect the validity or enforceability of any other provision.

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