

SPECIFICATIONS

General

Captured Conductor Size: 30mm maximum.

Low Battery Indicator: Red LED lighting.

Operating Temperature: 0° C to 50° C, Max 70% R.H.

Storage Temperature: -20° C to +70° C, Max 80% R.H.

Weight: 290gm typical

Dimensions: 178mm (H) x 70mm (W) x 33mm (D).

Electrical

Accuracy (At 23° ± 5° C, 70% R.H maximum)

DC Current: 0 to 600A, ± (2% reading + 2A)

AC current: 50Hz to 400Hz

0 to 400A, ± (2% reading + 2A)

400A to 500A, ± (3% reading + 2A)

500A to 600A, ± (6% reading + 2A)

Load Resistance: 10K Typical.

Output: 0 to 600mV (AC and DC) for 0 to 600A.Met



Metrohm House, Imperial Park, Imperial Way, Watford, Hertfordshire, WD24 4PP, UK

Tel: 01923 441717 Fax: 01923 446900.

Due to policy of continuous development, Martindale reserves the right to alter equipment specification and description outlined in this document without prior notice. No part of this document shall be deemed to be part of any contract for the equipment unless specifically referred to as an inclusion within such contract. © Martindale Electric Co. Ltd. 2000

MARTINDALE
● ● ● **ELECTRIC**



CT60 AC/DC Current Clamp

INSTRUCTION MANUAL

INTRODUCTION

The model CT60 AC/DC Current Clamp is an accessory which will allow your multimeter to measure electrical current up to 600 amperes AC/DC, with a frequency response up to 400Hz. When measuring current with this clamp, there is no need to break a circuit or to affect the isolation.

APPLICATION PROCEDURE

1. Insert the black 4mm plug into the COM jack and the red 4mm plug into the V- jack of any multimeter with a minimum input impedance of 10K Ω .
2. Set the power switch from "Off" to "On" position, the green LED will light to indicate that the clamp is switched on. For current measurement below 20A, set the multimeter range to 200mV AC for AC current measurements or 200mV DC for DC current measurements. The reading is directly in A. For current measurements above 200A, set the multimeter range to 2V AC or DC, depending on whether measuring AC or DC current. The reading is now A x 1000.
3. Turn the zero adjustment knob on the clamp until the multimeter reads zero.
4. Clamp the jaws around the current-carrying conductor and interpret the reading according to Step 2 above. Ensure there is only the conductor being measured inside the jaws. If you attempt to measure around both Line & Neutral for example only the difference will be measured - usually giving zero as the result.

APPLICATION NOTES

1. In the case of DC current, the output is positive when the current flows from the top to the underside of the clamp. The red 4mm plug is positive.
2. In the case of DC current measurement, a hysteresis effect can occur so that it is impossible to zero the clamp properly. To eliminate this effect, open and close the jaws several times and then zero again.
3. When there is a strong stray magnetic field, it is best to zero the clamp approximately 2 to 4 inches (50-100mm) away from the conductor to be measured. The conductor itself will have no influence at this distance. Then, clamp the jaws around the conductor and measure the current.
4. A good tip for measuring low currents is to loop an appropriate number of turns of the conductor through the jaws. The actual current is the measured value divided by the number of turns.

BATTERY REPLACEMENT

Remove the screw on the rear of the clamp, remove the battery, and replace with a 9-volt battery, NEDA 1604/PP3.