Time Electronics

9780 Clamp Meter Adaptor

- ***Twin coils fitted as standard***
- ***Ratios 1:1 and 50:1***
- ***Primary current up to 22A***
- ***Simulated current up to 1100A***
- ***AC or DC***
- ***Frequency up to 90Hz***
- ***Max drive voltage 3V***
- ***Low resistance test leads included***

DESCRIPTION

A precision adaptor for use with calibrated AC or DC sources and allows accurate calibration of a wide range of clamp meters. It is built onto a solid quality 20mm thick high insulation base plate, with the twin coils potted into a recess on the top side of the base, forming a strong bond. The foam protective mat allows accurate positioning of the clamp meter being calibrated. Three heavy duty terminal posts with removable caps provide connection to the clamp adaptor, the black centre post is the common connection and the two red posts allow selection of the x1 or x50 turn coils. The quality low resistance test lead set supplied is made of multi strand (735/0.12mm) oxygen free copper and is terminated with 8AWG gold plated ring and plug terminals.

When used with a high current multifunction calibrator such as the Time Electronics 5025 or 5051, clamp calibration up to 1100A is possible. Two coil options are available, firstly a 1:1 coil (x1) i.e. 10A in, 10A out. Secondly the specially designed 50 turn coil (x50) which gives 1:50 i.e. 10A in, 500A out.

SPECIFICATIONS

0 TO 22 AMPS. TRANSFER RATIO 50 TO 1 OR 1 TO 1

Calibrator	O/P Frequency	Amp Turns	Accuracy (% of O/P)	plus Floor (Amps)
0.2A to 2.2A	DC	10 – 110	0.5	0.05
2.2A to 22A	DC	110 – 1100	0.5	0.15
0.2A to 2.2A	45 – 65 Hz	10 – 110	0.5	0.2
0.2A to 2.2A	65 – 90 Hz	10 – 110	1	0.25
2.2A to 22A	45 – 65 Hz	110 – 1100	0.5	0.7
2.2A to 22A	65 – 90 Hz	110 – 1100	1	0.9

The above specification applies for use with general purpose clamp meters such as the Fluke 801-1000 or LEM LH1020.

Current loops ..... 2 provided: a 1 to 1 ratio and a 50 to 1 ratio

Maximum allowed primary current ..... 22A RMS. The frequency range is 45 to 90Hz.

Series resistance ..... 1 turn coil = approximately 1mΩ
50 turn coil = approximately 0.11Ω. Inductance = 1mH.

Operation ratings ..... The 9780 is rated for continuous operation at 10A. At 22A the duty cycle should be a maximum of 3 minutes on and 6 minutes off.

Maximum drive voltage ..... 3V DC or 3V RMS AC

Dimensions / Weight ..... W240 x D280 x H85mm / Weight: 3.9kg

When used with older style clamp meters where substantial operating power is required it should be noted that additional power is required from the current source. For example a 1000A Ferranti clamp on ammeter requires at least 50% more power from the current source. This will require increased power transfer through the clamp meter adaptor and therefore the on to off time should be increased to 1 to 10 ie 1 minute on and 10 minutes off.

ORDERING INFORMATION

9780 ..... **Clamp Meter Adaptor**

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