Time Electronics
9780 Clamp Meter Adaptor

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 20 mm 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 low resistance test lead set supplied is made of multi-strand (735/0.12 mm) oxygen free copper and is terminated with 8 AWG gold plated ring and plug terminals.

When used with a high current multifunction calibrator such as the TE 5025, 5051 or 7051, clamp calibration up to 1100 A is possible. Two coil options are available, firstly a 1:1 coil (x1) i.e. 10 A in, 10 A out. Secondly the specially designed 50 turn coil (x50) which gives 1:50, i.e. 10 A in, 500 A out.

Features

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

Specifications

0 to 22 A. Transfer ratio 50:1 or 1:1.

Calibrator	Output frequency	Amp turns	Accuracy (% of output)	Plus floor (A)
0.2 to 2.2 A	DC	10 to 110	0.5	0.05
2.2 to 22 A	DC	110 to 1100	0.5	0.15
0.2 to 2.2 A	45 to 65 Hz	10 to 110	0.5	0.2
0.2 to 2.2 A	65 to 90 Hz	10 to 110	1	0.25
2.2 to 22 A	45 to 65 Hz	110 to 1100	0.5	0.7
2.2 to 22 A	65 to 90 Hz	110 to 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.....22 A RMS. The frequency range is 45 to 90 Hz.

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

Operation ratings.....The 9780 is rated for continuous operation at 10 A.
At 22 A the duty cycle should be a maximum of 1 minutes on and 2 minutes off.

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

Dimensions / Weight.....W 240 x D 280 x H85 mm / Weight: 3.9 kg

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 1000 A 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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