



## Description

The 9790 is a heavy duty current transformer mounted in a steel case. It is suitable for use with Time Electronics 5025 and 5051 multifunction calibrators, as well as the 5077 power calibrator. It extends the AC current capability to 100 A RMS. The maximum compliance voltage is approximately 0.3 V at 100 A. In order to achieve this, very low resistance connecting leads must be used. Connection is via front mounted terminals.

## Operation

To use the 9790 in testing applications the set up is straightforward but the appropriate leads and connectors must be used.

Connect the 20 A primary input terminals to the calibrator using suitable leads. Leads and connectors must be of low resistance and suitable for 20 A, recommended minimum wire size 4 mm<sup>2</sup>.

Connect the 100 A secondary output terminals to the load using suitable leads. Leads and connectors must be of very low resistance and suitable for 100 A, recommended wire size 16 mm<sup>2</sup>, with a maximum outer diameter of 9 mm.

Keep leads as short as possible. The total impedance of the secondary circuit at 50/60 Hz must be less than 3 mΩ for operation at 100 A.

## Specifications

Current.....	100 A RMS maximum.
VA rating.....	30 VA Maximum.
Compliance.....	0.3 V RMS at 100 A increasing to 0.5 V rms at 20 A.
Operating frequency.....	50/60 Hz only.
Ratio error.....	5A to 50A 0.15 %. 50 A to 100A 0.2 %.
Note: The final accuracy must be calculated as the Calibrator specification plus the 9790 Ratio Error.	
Phase error.....	< 0.05° from 5 % to 120 % of full load current (100 A).
Classification.....	Conforms to BS EN6004-1 class 0.1 at 50 Hz.
Dimensions.....	W 317 x H 275 x D 177 mm
Weight.....	9.2 kg.

## Features

- For use with the 5077 power calibrator
- Compatible with the 5025/5051 multifunction calibrators
- Robust clamp action 100 A terminals
- 20 A input terminal posts take 4 mm plugs, spade connectors, or bare wired ends
- Portable steel case with carry handle
- Fully potted transformer with heavy duty internal connection
- Primary and secondary phase connection clearly marked
- Durable grey paint finish

## Ordering Information

9790..... 100 A Current Transformer

Due to continuous development Time Electronics reserves the right to change specifications without prior notice.