



# Time Electronics

## 9790 100A Current Transformer



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

### 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 and the 5077 Power Calibrator. It extends the AC current capability to 100A RMS. The maximum compliance voltage is approximately 0.3V at 100A. However in order to achieve this, very low resistance connecting leads must be used. Connection is via front mounted terminals.

### OPERATION

Connect the 20A primary input terminals to the calibrator using suitable leads. Leads and connectors must be of low resistance and suitable for 20A, recommended minimum wire size 4mm<sup>2</sup>. Connect the 100A secondary output terminals to the load using suitable leads. Leads and connectors must be of very low resistance and suitable for 100A, recommended wire size 16mm<sup>2</sup>, max outer Ø: 9mm. Keep leads as short as possible.

The total impedance of the secondary circuit at 50/60 Hz must be less than 3 milli-ohm for operation at 100A.

### TECHNICAL SPECIFICATIONS

Current .....	100A RMS maximum
VA Rating.....	30VA Maximum
Compliance .....	0.3V RMS at 100A increasing to 0.5V rms at 20A
Operating Frequency .....	50/60Hz only
Ratio Error .....	5A to 50A 0.15%. 50A to 100A 0.2%
<i>Note: The final accuracy should be calculated as the Calibrator specification plus the 9790 Ratio Error</i>	
Phase Error .....	< 0.05 degree from 5% to 120% of full load current (100A)

### GENERAL SPECIFICATIONS

Classification .....	Conforms to BS EN6004-1 class 0.1 at 50Hz
Dimensions .....	W317 x H275 x D177mm
Weight .....	9.2kg

### ORDERING INFORMATION

**9790** ..... **100A Current Transformer**

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

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