



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 mm².

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 mm², 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.