Time Electronics
1067 Resistance Decade Box



Description

A precision resistance decade box suitable for a wide range of simulation work. High accuracy, long term stability, and low temperature coefficient make the 1067 ideal for simulating and calibrating precision Pt100 sensors and temperature indicators/meters that use resistive sensors.

Special care has been taken in the construction of the 1067 to ensure that the residual end resistance is as low and as stable as possible. Multiple self-cleaning silver alloy contacts are used for each position to ensure outstanding performance and long life.

Housed in a robust metal case the 1067 is fully screened and low thermal emf terminals are used. The slimline design means it takes up minimum bench space and is easily transportable.

Resistance is selected by dialling the value required using the rotary switches. This enables precise setting with a clear unambiguous indication. Each decade is scaled from 0 to 11 and therefore allows convenient overlap of the set values. The maximum value settable is 12,222.21 ohms.

Features

- 10 mΩ to 12 kΩ
- 0.01 % accuracy
- Precision Pt100 simulation
- Low temperature coefficient
- In-line readout
- Excellent long term stability
- 6 digit resolution
- Fully screened

Specifications

Range / Resolution..... 0 to 12 kΩ / 10 mΩ steps.

Number of decades..... 6, each decade settable from 0 to 11.

Accuracy ..... ± 0.01 % of setting ± 2 mΩ, after deduction of residual end resistance ± 1 mΩ for residual variation.
(At calibration temp of 22 °C)

Residual resistance..... Less than 10 mΩ. Less than 1 mΩ variation.

Power rating..... 0.35 watt per resistor.

Voltage Rating..... 200 V DC at maximum resistance setting.

Stability..... 20 ppm/year (> 1 Ω), 100 ppm/year (< 1 Ω).

Current rating..... 10 mΩ range: 3 A / 100 mΩ range: 2 A / 1 Ω range: 600 mA 10 Ω range: 200 mA / 100 Ω range: 60 mA / 1 kΩ range: 20 mA.

Insulation..... Case to resistance terminals 2 kV DC maximum.

Temperature coefficient ..... Less than 10 ppm/°C (> 1 Ω). Less than 20 ppm/°C (< 1 Ω).

Operating torque ..... Less than 0.1 Nm.

Contacts ..... Make before break – silver alloy.

Dimensions / Weight..... W 355 x H 63 x D 89 mm / 1.1 kg.

Ordering Information

1067.....Precision Resistance Decade Box

C161.....Traceable calibration certificate (Factory)

C114.....Accredited calibration certificate (ISO 17025)

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

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