Time Electronics
7079 Loop Ancillaries Calibrator Module

Description

A simple operation module suitable for powering process instrumentation such as pressure transmitters that require an external loop supply (4 to 20 mA). For automated testing using EasyCal software, an RS-232 connection is configured inside the CalBench console to a control centre module, when fitted (for example an 8060, 7051 or CC12).

0 to 199.99 mA Measurement: Measure current by connecting the 7079 in series with the circuit under test (the loop must have external power or use 24V supply on module). The display will show the current flow in the circuit together with the polarity.

Continuity Test: To test circuit continuity, the user connects the circuit under test in series with the 7079 continuity terminals. If a circuit exists, an audible alarm will sound and visual indication will show. The threshold for this test is approximately 100 Ω.

Output 24 V: A separate isolated 24 V DC supply is provided to enable the powering up of 4 to 20 mA loops for instrumentation under test. This output is overload protected with an auto re-settable fuse. The 24 V is present at the output terminals whilst the CalBench is switched on. Simply connect the circuit to be powered to these terminals.

To power a 2 wire 4 to 20 mA system and monitor the current (when external power is not available) simply connect the 24 V output terminals and loop current measure terminals in series with the 2 wire circuit.

RS-232 Readback: An RS-232 port is provided for connection to a control centre module. EasyCal software can then be used to readback the loop current on demand, to allow automatic calibration of pressure transmitters.

Features

- Loop measure 0 to 200 mA

- 4.5 digit display

- Continuity test

- 24 V output for powering 4 - 20 mA loops

- Overload protection to loop

- Supply line protection by F250 mA fuse

- EasyCal software communication via RS-232

Specifications

Range .... Loop current measurement 0 to 199.99 mA.

Resolution .... 10 μA.

Resistance ....Loop load 5 Ω.

Accuracy .... 0.05 % of reading ±1 digit.

Loop drive .... 24 V, 50 mA max - isolated and with short circuit protection.

Continuity ....Threshold: 100 Ω with audio and visual warning.

Terminals .... 4 mm shrouded sockets.

Interface .... RS-232. Connected internally to control centre or rear of the console.

Module width .... 80 mm (primary or secondary console fitting).

Ordering Information

7079 ....Loop Ancillaries Calibrator Module

C175 ....Traceable calibration certificate (Factory)

C121 ....Accredited calibration certificate (ISO 17025)

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