1. INSTALLATION

The two indicators contained in this manual have different IN case sizes (refer to section 3). Some installation details vary between these models. These differences have been clearly shown.

Note: The functions described in sections 2 to 8 are common to both models.

Installing Option Modules

Warning: Do not the panel gauge; it is a seal against dust and water.

Rear Terminal Wiring

USE COPPER CONDUCTORS (EXCEPT FOR T/C INPUT)

Output 3

These diagrams show all possible option combinations. The actual connections required depend on the meter and option selected.

Note: At first power-up the message “Gage Conf” is displayed, as described in section 5 of this manual. Access to other menus is denied until configuration mode is completed.

2. SELECT MODE

Select mode is used to access the configuration and operation menu functions. It can be accessed at any time by holding down and pressing .

Press to choose the required mode, then press to enter.

An unlock code is required to prevent unauthorized entry to Configuration & Setup mode.

Press to unlock the code, then press to proceed.

3. CONFIGURATION MODE

Select Configuration mode from Select mode (refer to section 2). Press to scroll through the parameters. White text is displayed, and up to 1 character is displayed on the lower line.

Press to set the required value. Press to display and accept the changes, otherwise the parameter will revert to previous value. To exit Configuration mode, hold down and press to return to Select mode.

Note: Parameters displayed depend on how the instrument has been configured. Refer to user guide (available from your supplier) for further details.

Parameters marked are repeated in Setup Mode.

4. OUTPUTs

Output 1

Output 2

Output 3

Output 4

Primary alarm output

Ranges: 0 to 20 mA DC output

Ranges: 4 to 20 mA DC output

Ranges: 0 to 20 mA DC output

Ranges: 4 to 20 mA DC output

Note: Display point alarm in millidegree Celsius temperature resolution of 2°C.
5. MESSAGES & ERROR INDICATIONS

These messages indicate that an alarm may require attention, or there is a problem with the signal input connection. The message legend is shown for reference.

Caution: Do not continue with the process until the issue is resolved.

6. OPERATOR MODE

This mode is entered as per user control, and can be exited from any of the configuration modes; the parameter values must be retained as entered.

Input channel parameter settings can be adjusted by pressing [Setup] and then [OK] for 1 sec.

Parameter Values Displayed and when Valid

Value must be entered. (*) Value displayed in message format. (I) Value displayed in In rpm format.

7. PRODUCT INFORMATION MODE

Fast action Product Information mode from Select mode (refer to section 2).

8. SERIAL COMMUNICATIONS

Refer to the full user guide (available from your supplier) for details.

9. SPECIFICATIONS

UNIVERSAL INPUT

Thermocouple: 0.1% of full range, ±150° (±1°C for Thermocouple CJC).
Calibration: 0°F to 100°F Calibration: ±1°C or ±1% of full range.
DC Calibration: ±0.5°C or ±1% of full range.
Sampling Rate: 4 second per channel.
Impedance: ±10Mohm, except DC mA (56) and V (476).
Sensor Break Detection: Thermocouple: open circuit, shorts to 2 V and 10 V range only. SSR alarm for thermocouple/RTD sensor break.
Isolation: Isolated from all outputs (except SSR driver).

DIGITAL INPUT

Voltage Input: 5 V, AC or DC, 50 to 125 VAC.
Alarm Contacts: Open to Close, normally closed, normally open.
Isolation: Reinforced isolation from inputs and outputs.

OUTPUTS

Relay Contact Type & Rating: Single pole double throw (SPDT), normally opening or normally closing.
LifeTime: >500,000 operations at rated voltage.
Isolation: Basic isolation from universal input and SSR outputs.

SR SR Drive

Drive Capability: SSR drive, voltage range 150 to 500 VDC.
Isolation: Not isolated from universal input or SSR driver outputs.

Failsafe Operating Voltage: 20 to 28.0 Vrms (47 to 63Hz).
Current Rating: 0.10 to 1A (full cycle rms on-state @ ±25°C).
Resolution: 6 bits to 10 bits >10-5.
Accuracy: ±0.25% (mA to 1A). Vp to 24V. One decade to 0.5% (p-p). 6 bits to 10 bits >10-5.
Isolation: Reinforced isolation from inputs and outputs.

Linear DC

Accuracy: ±0.25% (mA to 250mA). Vp to 24V. One decade to 0.5%. 6 bits to 10 bits >10-5.
Isolation: Reinforced isolation from inputs and outputs.

Physical Dimensions:

Physical: 85x45x32mm (3.35" x 1.75" x 1.26") (w x h x d).
Weight: 165g (0.36 lbs).

Environmental:

Temperature: 4°C to 55°C (Operating), −20°C to 60°C (Storage).
Humidity: 20% to 95%, non-condensing.
Supply Voltage: 100 to 240VAC ±10%, 50/60Hz, 7.5VA (for internal power supply). 220 to 480VAC 50/60Hz, 3.5VA or 225VDC 50/60Hz, 5VA (for internal power supply).

Sensor Break Detection: Electrically isolated from all inputs and outputs.

OPERATING CONDITIONS (FOR INDOOR USE)

Ambient: Temperature: 0°C to 55°C (Operating), −20°C to 60°C (Storage).
Relative Humidity: 20% to 95%, non-condensing.
Supply Voltage: 100 to 240VAC ±10%, 50/60Hz, 7.5VA
Power: 220 to 480VAC 50/60Hz, 3.5VA or 225VDC 50/60Hz, 5VA

Front Panel: Plastic 2.0mm, installation Category II.

Serial Number: 64-bit, model number, model code, year of manufacture, model range, serial number, number of digits in serial number, number of digits in serial number, number of digits in serial number, number of digits in serial number, number of digits in serial number, number of digits in serial number, number of digits in serial number, number of digits in serial number, number of digits in serial number, number of digits in serial number, number of digits in serial number.