1. IMPORTANT SAFEGUARDS

ELECTRIC SHOCK HAZARD: Read and understand all instructions before installing, servicing or operating this controller. Failure to do so could result in equipment or property damage as well as personal injury and even death.

HIGH VOLTAGE is used in the operation of this equipment; DEATH ON CONTACT may result if personnel fail to observe safety precautions. Lay the area containing high-voltage connections near a source or operating this equipment.

ELECTRIC SHOCK HAZARD: Any installation involving control equipment must be performed by a qualified and properly licensed electrician in accordance with the National Electrical Code/authority to eliminate shock hazard.

Installation Guidance

• Installation should only be performed by technically competent personnel.
• Standards compliance shall be met by properly fitting the final installation.
• It is the responsibility of the installing engineer to ensure safety is configured.
• Local regulations regarding electrical installation & safety must be observed.
• Impairment of protection will occur if the product is used in a manner not specified.

High temperature components, e.g. relays, maintain high voltage even after the unit is turned off due to their high thermal inertia. During continuous operation, the heat sink can reach very high temperatures, and returns automatically to the first Operator Mode screen. Alternatively press & to enter Setup from Operator mode and clear Control is Enabled Pop Up Alert.

2. INSTALLATION

During continuous operation, bake-in temperatures may reach very high temperatures, and keep a high temperature even after the unit is turned off due to their high thermal inertia.

3. FRONT PANEL

Navigation & Editing

Press &  to highlight and edit a parameter value. Press & to change the parameter value, then press within 60 seconds to confirm changes.

Navigating to Setup Mode or Advance Configuration from Operator Mode:

Setup Mode - press &
Returning to Operator Mode:
Press & to move back one level. After 120 seconds without key presses the unit returns automatically to the first Operator Mode screen.

4. SETUP

IMPORTANT Note: When powered up for the first time, or after a factory reset (default) the instrument enters Setup. The device remains in Setup, and will keep powering up into Setup, until all parameters have been reviewed and the user exits Setup. Some parameters may be hidden depending on configuration & hardware. Alternatively press & to enter Setup from Operator mode and & to exit.

5. OPERATOR MODE

6. SPECIFICATIONS

IMPORTANT: Check your product code for exact hardware fitted. PROPROCESS INPUT

Thermocouple: ±0.25% of full range, ±0.1% of span - for Thermocouple CJC Calibration: Factor calibration is accurate ±0.5% of span above -100°C, below -10°C accuracy is within ±0.5%. For -50°C accuracy below -10°C recalibrate using procedure in manual. B58437, B58438: 1°C accuracy from 0°C to 180°C, ±5°C accuracy from 180°C to 1000°C, accuracy below 1000°C not specified.

PT100 Calibration: ±0.25% of full range, ±0.1% of span - for PT100 Calibration: -100°C to 180°C, ±5°C accuracy below 100°C, accuracy below 100°C not specified.

DC Calibration: ±0.25% of full range, ±1°C accuracy from 0°C to 180°C, ±5°C accuracy from 180°C to 1000°C, accuracy below 1000°C not specified.
## ADVANCED CONFIGURATION

### 7. ADVANCED CONFIGURATION

Advanced Configuration gives access to all possible parameters; however, the device hides parameters that are irrelevant to your exact product specification & configuration.

Press [ ] to exit to level 1. Depending upon which menu you enter it may be necessary to exit to level 2 to access Locked parameters.

- **Advanced Lock**: Enter Code & Press [ ] to access.
- **Select Language**: English

### ADVANCED CONFIGURATION NAVIGATION

Enter by pressing [ ] or [ ] to navigate to the required menu, then press [ ] to enter.
- **Press [ ] to exit up 1 level**.

### USER CALIBRATION MENU

- **Single-point offset or two-point calibration adjustment for process input. Can be used to accommodate sensors.**

### SETPOINT MENU

- **Enable**
  - **Enableable**: Enableable. Enables the display to show temperature on the process input. On Times are also displayed. (Setpoint keeping s function)
  - **Disabled**: Disables the display to show temperature on the process input. On Times are also displayed. (Setpoint keeping s function)

### OUTPUTS MENU

- **Primary**: Heat, Cool, Dual, PV, or SP

### INFORMATION MENU (READ ONLY)

- **Parameter**: Description
  - **P1**: Alarm 1 Low Limit
  - **P2**: Alarm 2 Low Limit
  - **P3**: Alarm 1 High Limit
  - **P4**: Alarm 2 High Limit

### OPTIONS MENU

- **Parameter**: Description
  - **Option 1**: Default 1

### OPERATOR SCREENS MENU

- **Parameter**: Description
  - **Control Enabled**: Control Enabled
  - **Alarm State**: Alarm State
  - **Latch State**: Latch State
  - **Show**: Show
  - **Minimum PV**: Minimum PV
  - **Maximum PV**: Maximum PV
  - **Remaining Delay Time**: Remaining Delay Time

### DIAGRAMS MENU

- **Parameter**: Description
  - **Display Lock codes & Factory Defaults:** Display Lock codes & Factory Defaults
  - **Controller**: Controller

### SETTINGS MENU

- **Parameter**: Description
  - **Password**: Password
  - **Display**: Display
  - **Time**: Time
  - **Unit Address**: Unit Address
  - **PV Retransmit**: PV Retransmit
  - **Linear**: Linear
  - **Display Value**: Display Value
  - **Alarm Inhibit**: Alarm Inhibit

### ADVANCED OPTION MENU

- **Parameter**: Description
  - **Advanced**: Advanced Option

### COMMUNICATIONS MENU

- **Parameter**: Description
  - **Data Rate**: Data Rate
  - **Types**: Types
  - **Config**: Config

### PRODUCTION MENU

- **Parameter**: Description
  - **Unit ID**: Unit ID
  - **Unit Type**: Unit Type
  - **Rev**: Rev

### INFORMATION MENU (READ ONLY)

- **Parameter**: Description
  - **PV Retransmit**: PV Retransmit
  - **Linear**: Linear

### SETPOINT MENU

- **Parameter**: Description
  - **Enable**: Enableable. Enables the display to show temperature on the process input. On Times are also displayed. (Setpoint keeping s function)
  - **Disable**: Disables the display to show temperature on the process input. On Times are also displayed. (Setpoint keeping s function)

### OUTPUTS MENU

- **Parameter**: Description
  - **Primary**: Heat, Cool, Dual, PV, or SP
  - **Secondary**: Secondary
  - **Output 3**: Output 3
  - **Output 4**: Output 4
  - **Output 5**: Output 5

### SETPOINT MENU

- **Parameter**: Description
  - **Enable**: Enableable. Enables the display to show temperature on the process input. On Times are also displayed. (Setpoint keeping s function)