**SETPOINTS CONTROLLER BOARD, OPTION R1 (AL1) and OPTION R2 (AL2)**

The Setpoints Controller Board allows the use of temperature meters as controllers in ON/OFF mode and as controllers of maximum (high setpoint) and/or minimum (low setpoint) in other models. The versatility of this unit allows the programming of the following functions:

A - Each one of the setpoints, operating as maximum (high) or minimum (low)
B - Setpoint range, positive or negative
C - Setpoint display range, for 1,000 or 2,000 counts
D - Deadband (hysteresis) adjustable in two scales
E - Setpoints operating delay in four time scales

**SETPOINT PROGRAMMING**

Press the pushbutton "1", and the display will show the preselected value. Turn the potentiometer "3", to the right or to the left side, until the display shows the new value desired.

Depress the pushbutton "1", and the display will show again the signal input. Use the same process for the setpoint "2".

## FRONT VIEW WITHOUT UPPER PROTECTION COVER

### CONNECTIONS

- **AL1**: High setpoint
- **AL2**: Low setpoint
- **SPDT for AL2 (OPTION R2)**
- **SPDT for AL1 (OPTION R1)**
- **ANALOG OUTPUT (OPTIONAL)**
- **POWER SUPPLY**

### RELAYS OPERATING DIAGRAM

- **High setpoint**: hys SET 0 hys
- **Low setpoint**: hys SET 0 hys

**Note**: LEDs actuation "2" and "6" is opposite to the relays actuation.

**OPTION R1**

- **SETPOINT 1 (AL1)**
  1. This pushbutton allows the display of setpoint
  2. This LED lamp is on when the relay is energized
  3. Potentiometer for setpoint regulation
  4. Potentiometer for deadband regulation

**OPTION R2**

- **SETPOINT 2 (AL2)**
  5. This pushbutton allows the display of setpoint
  6. This LED lamp is on when the relay is energized
  7. Potentiometer for setpoint regulation
  8. Potentiometer for deadband regulation

## TECHNICAL FEATURES

- **Setpoint adjust in two ranges**: 0 to 1,000 counts (selectable) / 0 to 2,000 counts (standard)
- **Hysteresis of both setpoints adjustable in two ranges**: 1 to 10 counts (standard) / 5 to 50 counts (selectable)
- **Setpoint operating delay**: 0.2 sec. (standard) / 0.4 - 0.8 - 1.6 sec. (selectable)
- **Accuracy**: ± 1 count
- **Setability**: ± 1 count
- **Output relay**: 1 SPDT for each setpoint
- **Relay contacts**: Max. admissible voltage: 250 Vac.
- **Max. admissible current**: 3 Amp. non-inductives
**WARRANTY**

OMEGA warrants this unit to be free of defects in materials and workmanship and to give satisfactory service for a period of 12 months from date of purchase. OMEGA Warranty adds an additional one (1) month grace period to the normal one (1) year product warranty to cover handling and shipping time. This ensures that OMEGA’s customers receive maximum coverage on each product. If the unit should malfunction, it must be returned to the factory for evaluation. OMEGA’s Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective it will be repaired or replaced at no charge. However, this WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of being damaged as a result of excessive corrosion; or current, heat; motional or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA’s control. Components which wear or which are damaged by misuse are not warranted. These include contact points, fuses and fuses. OMEGA is glad to offer suggestions on the use of its various products. Nevertheless, OMEGA only warrants that the parts manufactured by it will be as specified and free of defects.

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2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

For non-warranty repairs or calibration, consult OMEGA for current repair calibration charges. Have the following information available before contacting OMEGA:

1. P.O. number under which the product was purchased.
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

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