



# DP18 Series

## Options R1 / R2

### Single & Dual Setpoint Options

INSTRUCTION SHEET

M2119/1294



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

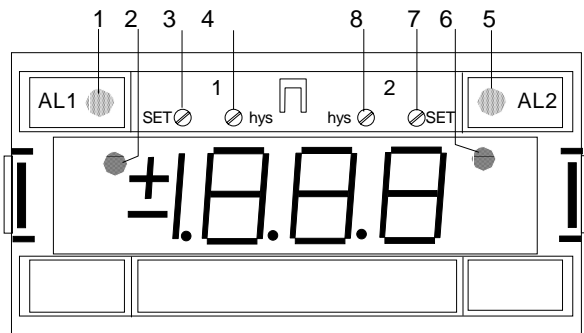
THE SETPOINTS CONTROLLER BOARD ALLOWS THE USE OF TEMPERATURE METERS AS CONTROLLERS IN ON/OFF MODE AND AS CONTROLLERS OF MAXIMUM (HIGH SETPOINT) AND/OR MINIMUM (LOW SETPOINT) IN OTHER MODELS. THE VERSATILITY OF THIS UNIT ALLOWS THE PROGRAMMING OF THE FOLLOWING FUNCTIONS :

- 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

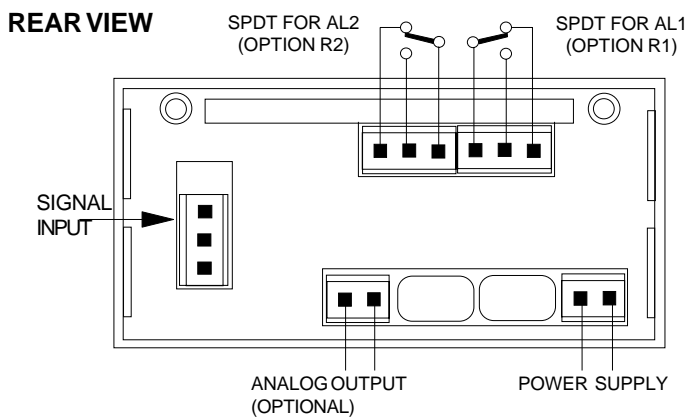
### SETPOINT PROGRAMMING

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 SHOWS AGAIN THE SIGNAL INPUT. USE THE SAME PROCESS FOR THE SETPOINT "2".

### FRONT VIEW WITHOUT UPPER PROTECTION COVER



### CONNECTIONS

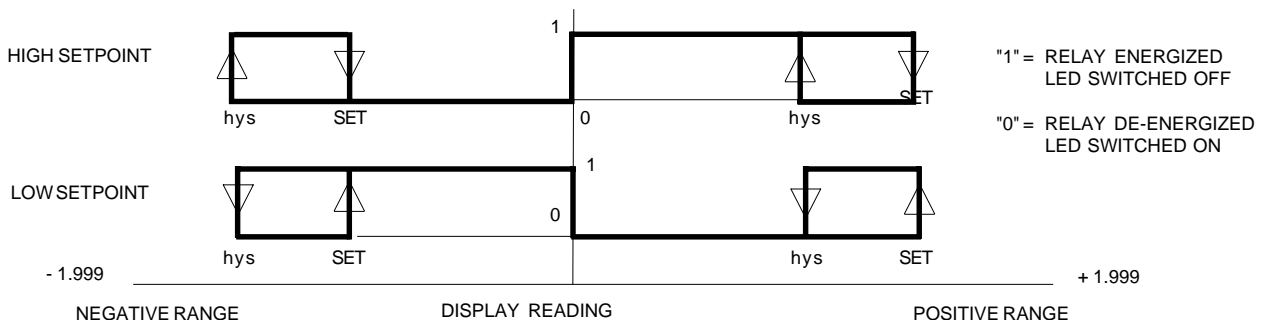


|   |
|---|
| <b>OPTION R1</b>  |
| <b>SETPOINT 1 (AL1)</b>   |
| 1 - THIS PUSHBUTTON ALLOWS THE DISPLAY OF SETPOINT<br>2 - THIS LED LAMP IS ON WHEN THE RELAY IS ENERGIZED<br>3 - POTENTIOMETER FOR SETPOINT REGULATION<br>4 - POTENTIOMETER FOR DEADBAND REGULATION |
| <b>OPTION R2</b>  |
| <b>SETPOINT 2 (AL2)</b>   |
| 5 - THIS PUSHBUTTON ALLOWS THE DISPLAY OF SETPOINT<br>6 - THIS LED LAMP IS ON WHEN THE RELAY IS ENERGIZED<br>7 - POTENTIOMETER FOR SETPOINT REGULATION<br>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 sc. (Standard)  
0.4 - 0.8 - 1.6 sc. (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

### RELAYS OPERATING DIAGRAM



NOTE : LEDS ACTUATION "2" AND "6" IS OPPOSITE TO THE RELAYS ACTUATION

# STANDARD FEATURES

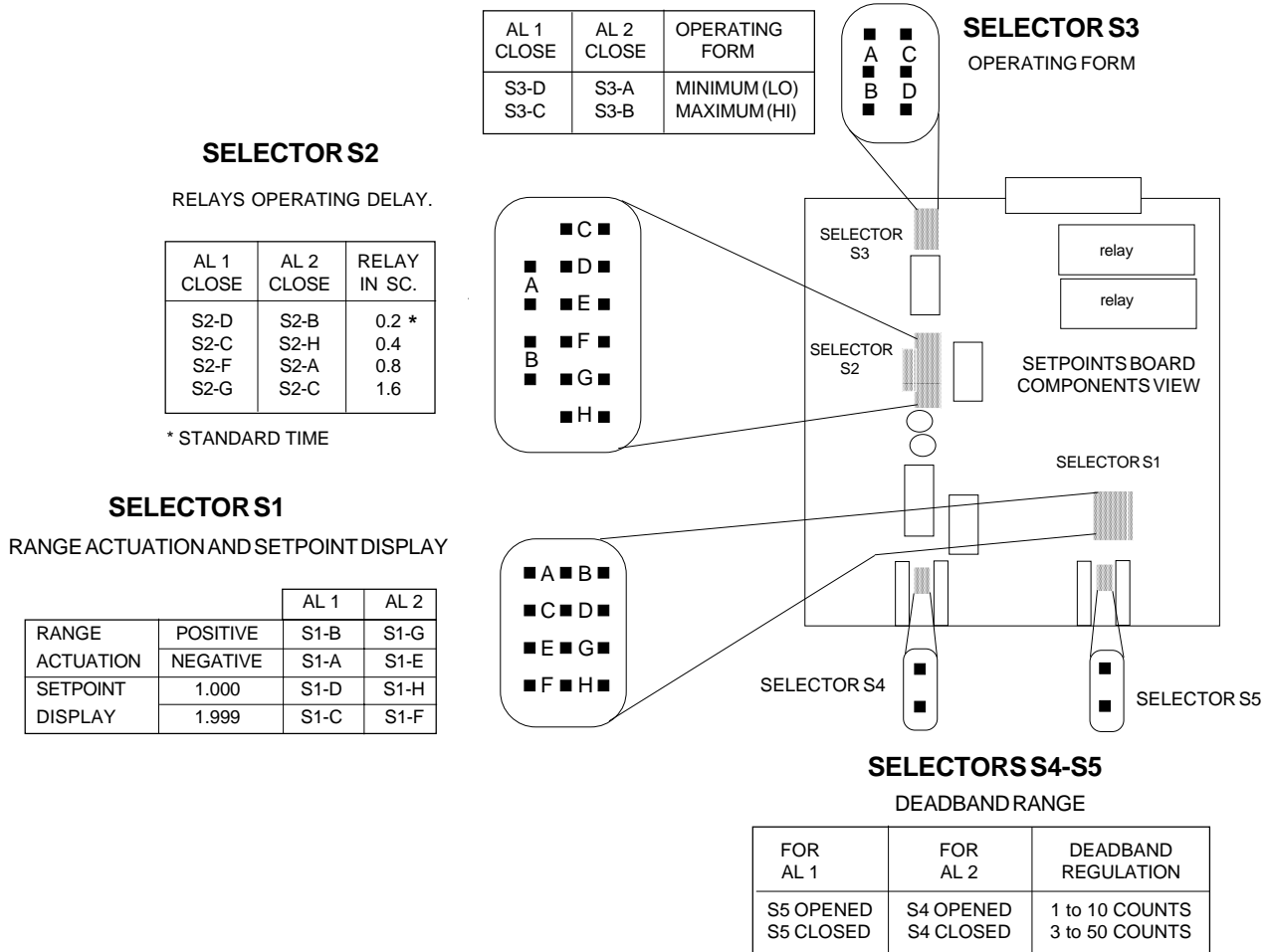
## FACTORY SET-UP SELECTION

|            |                               |                          |                  |
|------------|-------------------------------|--------------------------|------------------|
| OPTION R1: | AL1 AS A HIGH SETPOINT (MAX.) | DEADBAND . . . . .       | 1 to 10 COUNTS   |
| OPTION R2: | AL1 AS A HIGH SETPOINT (MAX.) | RELAYS DELAY . . . . .   | 0.2 sc.          |
|            | AL2 AS A LOW SETPOINT (MIN.)  | SETPOINT DISPLAY . . . . | 0 to 1999 COUNTS |
|            |                               | RANGE ACTUATION . . . .  | POSITIVE         |

## INTERNAL JUMPERS PROGRAMMING

SELECT THE DESIRED CONFIGURATION FROM THE CHARTS BELOW, THEN INSTALL THE PUSH-ON JUMPERS INDICATED ON THE SELECTORS S1, S2, S3, S4 AND S5.

IF A DECIMAL POINT IS REQUIRED, REFER TO THE APPROPRIATE MAIN ASSEMBLY DATA SHEET FOR LOCATION AND CONFIGURATION PROCEDURE.



## WARRANTY

OMEGA warrants this unit to be free of defects in materials and workmanship and to give satisfactory service for a period of **13 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; moisture 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 triacs.

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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**SPECIAL CONDITION:** Should this equipment be used in or with any nuclear installation or activity, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the equipment in such a manner.



## Servicing USA and Canada: Call OMEGA Toll Free

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|--|--|
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| Sales Service: 1-800-826-6342/1-800-TC-OMEGA <sup>SM</sup><br>Customer Service: 1-800-622-2378/1-800-622-BEST <sup>SM</sup><br>Engineering Service: 1-800-872-9436/1-800-USA-WHEN <sup>SM</sup><br>TELEX: 996404 EASYLINK: 62968934 CABLE: OMEGA |  |

## Servicing Europe: United Kingdom Sales and Distribution Center

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## RETURN REQUESTS/INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA ENGINEERING Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

FOR **WARRANTY** RETURNS, please 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.

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 to cover the COST of the repair/calibration.
2. Model and serial number of product, and
3. Repair instructions and/or specific problems relative to the product.

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