

# Temperature Controller Series PR 43

- Highly Accurate Performance.
- Luxurious Single 3-digit LED Display.
- Wide supply range: 110-240VAC/DC (Un), -20 to +10% of Un.
- Front keypad with 4 keys.
- Thermocouple (J & K)/RTD 3-wire (Pt-100) sensor inputs.
- Control Modes: Proportional, ON-OFF Asymmetric, ON-OFF Symmetric.
- °C & °F temperature unit selectable
- Control Output: Relay & SSR Drive (Individual products)



## Ordering Information

### ON - OFF Temperature Controller

| Cat. No. | Description  |
|----------|--|
| 151G11B  | Series PR 43, Relay Output ( 1 C/O 5A, 240 VAC / 30 VDC) |
| 151H11B  | Series PR 43, SSR driving output (12 VDC, 30 mA)         |
| 151F11B  | Series PR 43, Relay Output (1 C/O 10A, 240 VAC / 30 VDC) |

### PID Temperature Controller

| Cat. No. | Description  |
|----------|--|
| 151G12B  | Series PR 43, Relay Output ( 1 C/O 5A, 240 VAC / 30 VDC) |
| 151H12B  | Series PR 43, SSR driving output (12 VDC, 24mA)          |
| 151F12B  | Series PR 43, Relay Output (1 C/O 10A, 240 VAC / 30 VDC) |

# ON-OFF Temperature Controller Series PR 43



| Cat. No.                       | 151G11B  | 151H11B                 |                  |
|--------------------------------|--|-------------------------|------------------|
| <b>Parameters</b>              |  |                         |                  |
| Supply Voltage ( $\oplus$ )    | 110 - 240 VAC/DC   |                         |                  |
| Supply Variation               | -20% to +10% (of $\oplus$ )  |                         |                  |
| Frequency                      | 50/60 Hz   |                         |                  |
| Control Action                 | ON/OFF (Symmetric / Asymmetric) & Proportional   |                         |                  |
| Power Consumption              | 6 VA @ 265 VAC   |                         |                  |
| Temperature sensors / Inputs   | Thermocouple: J, K ; RTD: PT100 - 3 wire compensation;   |                         |                  |
| Measurement Range              | Sensor J: -5°C to 750°C / 23°F to 999°F, Sensor K: -20°C to 850°C / -4°F to 999°F, Sensor PT100 3 wire: - 100°C to 650°C / -148°F to 999°F |                         |                  |
| Measurement Accuracy           | ± 0.5% of full scale   |                         |                  |
| Resolution                     | 1°C Fixed  |                         |                  |
| Configurable Set Points        | 1  |                         |                  |
| Display                        | 7 segment, 3 digit LED display   |                         |                  |
| Keypad                         | 4-Keys:  - ESC,  - Down,  - Up,  - Enter / Select  |                         |                  |
| Output 1                       | Relay: 1 C/O<br>5A @ 240 VAC / 30 VDC  | SSR: 12 VDC, 30 mA      |                  |
| <b>LED Indications:</b>        |  |                         |                  |
|                                | OP1 (Red LED)  | Continuous ON           | Relay output ON  |
|                                | °F (Red LED)   | Continuous ON           | Display °F value |
|                                | °C (Red LED)   | Continuous OFF          | Display °C value |
| <b>Error Indications</b>       |  |                         |                  |
|                                | SBR  | SENSOR OPEN/BREAK ERROR |                  |
|                                | OVR  | OVER RANGE ERROR        |                  |
|                                | UNR  | UNDER RANGE ERROR       |                  |
| Operating Temperature          | 0°C to +50°C   |                         |                  |
| Storage Temperature            | -10°C to +60°C   |                         |                  |
| Humidity (Non Condensing)      | 80% (Rh)   |                         |                  |
| Enclosure                      | Flame Retardant UL 94 - V0   |                         |                  |
| Dimensions (W x H x D) (in mm) | 48 x 48 x 91.5   |                         |                  |
| Weight (unpacked)              | 120 g  |                         |                  |
| Mounting                       | Flush  |                         |                  |
| Certification                  |  |                         |                  |
| Degree of Protection           | IP 20 Terminal & Enclosure, IP 40 (For Front Panel only)   |                         |                  |

## EMI / EMC

|                                   |                |
|-----------------------------------|----------------|
| Harmonic Current Emissions        | IEC 61000-3-2  |
| ESD                               | IEC 61000-4-2  |
| Radiated Susceptibility           | IEC 61000-4-3  |
| Electrical Fast Transients        | IEC 61000-4-4  |
| Surges                            | IEC 61000-4-5  |
| Conducted Susceptibility          | IEC 61000-4-6  |
| Voltage Dips & Interruptions (AC) | IEC 61000-4-11 |
| Conducted Emission                | CISPR 14-1     |
| Radiated Emission                 | CISPR 14-1     |

## Environmental

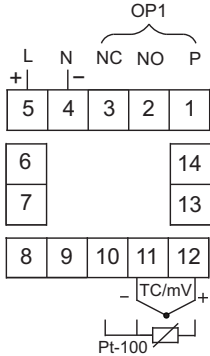
|                      |                |
|----------------------|----------------|
| Cold Heat            | IEC 60068-2-1  |
| Dry Heat             | IEC 60068-2-2  |
| Vibration            | IEC 60068-2-6  |
| Repetitive Shock     | IEC 60068-2-27 |
| Non-Repetitive Shock | IEC 60068-2-27 |

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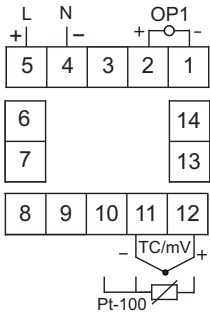


## CONNECTION DIAGRAM



151G11B/151F11B/151G12B/151F12B



151H11B / 151H12B



## TERMINAL TORQUE & CAPACITY

|  |   |
|--|---|
| <br>Ø 4...5.0 mm<br>Combi Head Bit./Flat | 0.5 N.m (4.4 lb.in)<br>0.7 N.m (6.2 lb.in)  |
|   | 2 x 2.5 mm <sup>2</sup> Solid/Stranded Wire |
| AWG  | 20 to 12                                    |

## MOUNTING DIMENSION (mm)

