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Universal-Temperature-Controller RE71R

Temperature controller PCE-RE71R

Universal temperature controller for various input signals / Relay output / High-contrast LCD display / Setpoint and actual value display

The temperature controller is a universally applicable temperature controller. The universal input from the temperature controller ensures that a wide variety of sensor types can be connected to the controller. The temperature controller is installed in a panel cut-out of 45 x 45 mm / 1.8 x 1.8 in. The assembly in the dash panel is done with a compression fitting. The high-contrast LCD ensures that the setpoint and actual value can always be read by the temperature controller even in bad ambient light.

On the back standard screw terminals are available for connecting sensors and control units to the temperature controller. The universal temperature controller with mains voltage is operated in the range between 100 ... 240V AC. Thus, the temperature controller is available worldwide.

- Universal input
- Self-optimization
- FUZZY PID and on-off control
- High contrast LCD display
- Relay output
- Panel mounting

Specifications:

Entrance

Universal input

Thermocouples: K, S, R, E, J, B, N, T, B
WRe3-WRe25, WRe5-WRe26.
Resistance sensors: Cu50, Pt100.
Process signals:: 0 ... 5, 1 ... 5 V,
0 ... 1V, 0 ... 20 mV, 0 ... 75 mV, 0 ... 100 mV
± 5V, ± 1V, ± 20mV, ± 100mV, 0 ... 10-mA,
0 ... 20-mA, 4 ... 20-mA etc.

Measuring and display areas outputs

Type K: -50 ... 1300°C / -58 ... 2372°F
Type S: -50 ... 1700°C / -58 ... 3092°F
Type R: -50 ... 1700°C / -58 ... 3092°F
Type T: -200 ... 350°C / -328 ... 662°F
Type E: 0 ... 800°C / 32 ... 1472°F
Type J: 0 ... 1000°C / 32 ... 1832°F
Type B: 200 ... 1800°C / 392 ... 3272°F
Type N: 0 ... 1300°C / 32 ... 2372°F
WRe3-WRe25: 0 ... 2300°C / 32 ... 4172°F
WRe5-WRe26: 0 ... 2300°C / 32 ... 4172°F
Cu50: -50 ... 150°C / -58 ... 302°F
Pt100: -200 ... 600°C / -328 ... 1112°F
Process signals: -9990 ... 30,000 user-defined

Accuracy	$\pm 0.15\%$ of v. Mb. + 1 digit
Resolution	Type K: K, E, T, N, J, CU50, Pt100: 0.1°C / 0.18°F Type S, R: 1°C / 0.18°F
Adjustable decimal point	0; 0.0; 0.00; 0,000
Measuring time	80 ms
Temperature drift	$\leq 0.015\%$ v. Mb / °C / °F
Control behavior	On / off control, PID with self-optimization
Display	High contrast LCD display
Representable units	°C / °F
Output	Relay: 250V AC / 3 A; 30V DC / 5A
Rule types	On-off control Fuzzy PID control
Operating conditions	0 ... 60°C / 32 ... 140°F, max. 90% rh
Dimensions	48 x 48 x 86 mm / 1.9 x 1.9 x 3.4 in
Assembly	45 x 45 mm / 1.8 x 1.8 in panel cutout
Voltage supply	100 ... 240V AC / DC @ 50/60 Hz
Input	< 5.2 VA
Weight	About 150 g / < 1 lb

Delivery scope:

- 1 x Temperature controller PCE-RE71R
- 1 x Seal
- 1 x Mounting device
- 1 x Protective cover
- 1 x User manual