



INFORMATION

The Fuzzy Logic plus PID microprocessor-based temperature controllers, incorporate one bright, easy to read 4-digit LED display, indicating process value and set point value. The Fuzzy Logic technology enables a process to reach a predetermined set point in the shortest time, with the minimum of overshoot during power-up or external load disturbance.

FEATURES

- Easy-to-use
- Fuzzy modified PID heat & cool control
- Fast A-D sampling rate (5 times/s)
- Universal input (PT100, thermocouple) with high accuracy 18-bit A-D
- Analog output (linear current or voltage) uses high accuracy 15-bit D-A
- RS-485 RS-232 interface
- Programming port provided on board
- Support manual control & auto-tune function
- Wide variety of alarm mode selection
- Lockout protection control
- Bumpless transfer during failure mode
- Soft-start ramp and dwell timer
- Bright display stabilized with digital filter
- Front panel sealed to NEMA 4X & IP65 (model C21)
- UL/CSA/CE approval
- High performance with low cost

STANDARD SPECIFICATIONS

INPUT

Thermocouple (T/C)	type J, K, T, E, B, R, S, N.
RTD	PT100 ohm RTD (DIN 43760/BS1904 or JIS)
Linear	4-20, 0-20mA, 0-10V, etc.
Range	User configurable, refer to Table above.
Accuracy	Refer to Table above
Cold Junction Compensation	0.1°C / °C ambient typical.
Sensor Break Protection	Protection mode configurable.
External Resistance	100 ohms max.
Normal Mode Rejection	60dB
Common Mode Rejection	120dB
Sample Rate	5 times / second

CONTROL

Proportion Band	0-100% of SPAN
Rest (Integral)	0-3600 seconds
Rate (Derivative)	0-1000 seconds
Ramp Rate	0-2000°C / Hour (0-3600°F / Hour)
Dwell	0-3600 minutes
ON-OFF	With adjustable hysteresis (0-20%of SPAN)
Cycle Time	0-120 seconds
Control Action	Direct (for cooling) and reverse (for heating)

INTERFACE

Process Display	0.4" green LED, 4 digits
Status Indicator	Control out and alarm

POWER

Rating	90-240VAC,50/60Hz
Consumption	Less than 5VA

ENVIRONMENTAL & PHYSICAL

Operating Temperature	-10°C ~ 50°C
Humidity	0 to 90% RH (non-codensing)
Insulation	20M ohms min. (500VDC)
Breakdown	AC2000V, 50/60Hz, 1 minute
Vibraton	10-55Hz, amplitude 1mm
Shock	200 m/s ² (20g)
Weight	110 grams
Dimension	24(H)x48(W)x99mrn (depth behind panel)
Panel cutout	22 +0.5 x 45 +0.5 mm