



C-SERIES OTC25 DIGITAL TEMPERATURE CONTROLLER

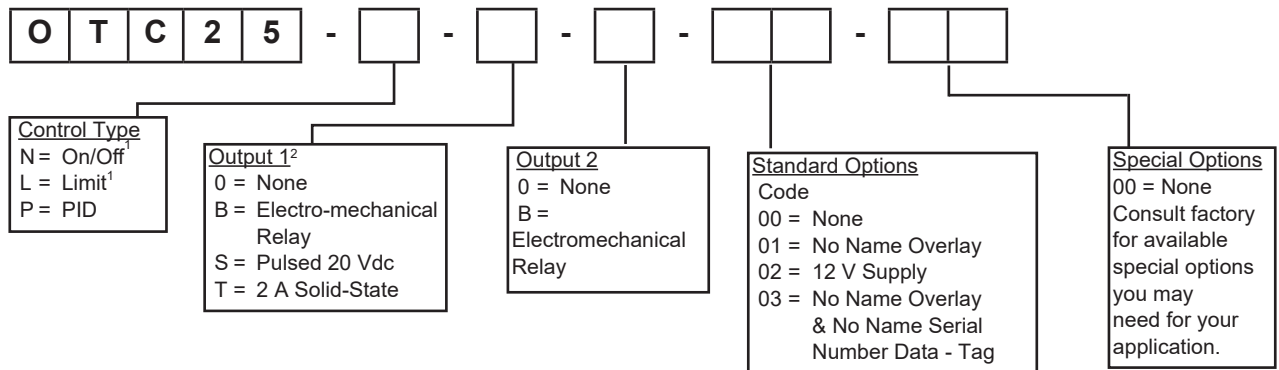
The Athena OTC25 is a 1/4 DIN panel mounted, digital controller that can be used for precise control of a single loop with two independent outputs. The controller accepts thermocouple input, and a large easy-to-read digital LED display is selectable for either setpoint or process temperature.

KEY FEATURES

- ▲ Accepts Type J (OTC25-N & L) or Type J and K (OTC25-P) Thermocouple Input
- ▲ Adjustable Output Hysteresis to Prevent Rapid Cycling Around Setpoint Temperature
- ▲ Adjustable Deviation Alarm Flashes When Measured Temperature Exceeds or Falls Below Setpoint Temperature
- ▲ NEMA 4X (IP65) Front Bezel, Splash-Proof and Resistant to Dust
- ▲ Discrete Status Indicators Illuminate When Temperature Display, Setpoint Display, Limit Display, or Heat/Cool Output is Active
- ▲ RU, cRU, CE, and FM Approvals



ORDERING INFORMATION



TECHNICAL SPECIFICATIONS

OPERATING LIMITS

Ambient Temperature	32°F to 140°F (0°C to 60°C)
Relative Humidity Tolerance	90% R.H. maximum, non-condensing
Line Voltage	100 to 250 Vac 50/60 Hz
Power Consumption	Less than 6 VA (instrument)

PERFORMANCE

Accuracy	±0.3% of FS, ± one digit
Temperature Stability	5 µV/°C maximum
TC Cold End Tracking	0.05°C/°C ambient
Noise Rejection	Common mode > 100 dB Series mode > 70 dB
Process Sampling	3.7 Hz (270 ms)

CONTROL CHARACTERISTICS

Setpoint Limits	0°F to 900°F (0°C to 482°C)
Control Hysteresis	2°F to 252°F (1°C to 140°C)
Display Offset	-126°F to +126°F (-70°C to 70°C)
Deviation Alarm	Off, 1°F to 252°F (Off, 1°C to 140°C)

INPUTS

Thermocouple	OTC25-N	Type J
	OTC25-L	Type J
	OTC25-P	Type J or K
	Maximum lead resistance, 100 ohms for rated accuracy	

OUTPUTS

B	5 A @ 120 Vac, 3 A @ 240 Vac electromechanical relay
T	Solid-state relay, 2 A (Output 1), 1 A (Output 2)
S	Pulsed 20 Vdc

MECHANICAL CHARACTERISTICS

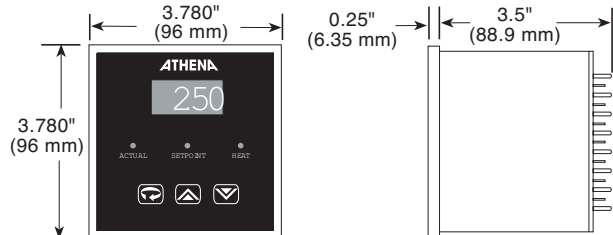
Display	3-digit, 0.56" (14.2 mm) Orange
Discrete Indicators	Setpoint: Amber Actual: Amber O1: Orange O2: Orange Limit: Orange
Front Panel Rating	NEMA 4X (IP65)
Connections	Fast-on style
Front Panel Cutout	3.622" x 3.622" (92 mm x 92 mm)
Proportional Band	On/off or nominal 5°F to 50°F (3°C - 30°C)
Offset (manual reset)	Adjustable over 100% of proportional band

MECHANICAL CHARACTERISTICS (CONTINUED)

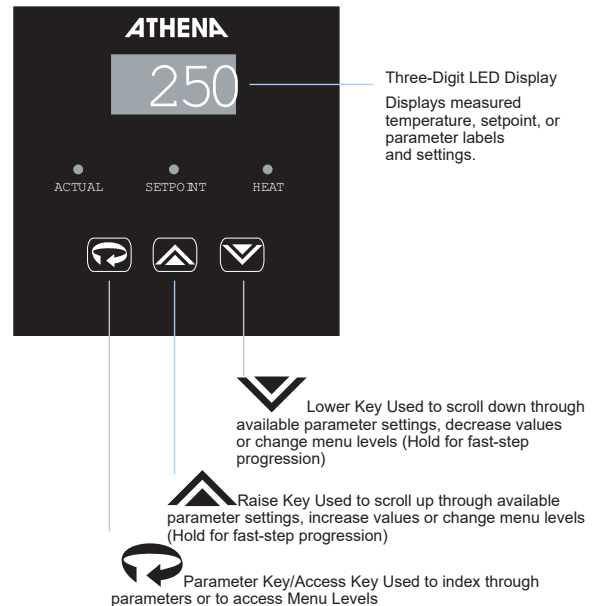
Rate (derivative)	0.5 to 40 sec
Reset (integral)	0.7, 1, 2 or 4 min via internal switches
Common Mode	Maximum error ±1°C with 240 V, 60 Hz applied
Rejection	As a common mode signal between sensor input and chassis ground
Series Mode Rejection	Maximum error = 1°C with series mode signal of 100 mV pk-to-pk at 60 Hz
Ambient Temperature	32°F to 131°F (0°C to 55°C)
Dimensions	Front Panel - 3.780 sq. in. (96 mm ²) Depth Behind Panel - 3.780" (96 mm) Panel cutout - 3.622 sq. in. (92 mm ²)

Specifications subject to change without notice.

Panel Cutout: 3.622" sq. (92 mm)



Front Panel Controls and Indicators



Athena Controls, Inc.
Plymouth Meeting, PA 19462 USA
T: 1.610.828.2490
Email: mktg@athenacontrols.com
www.athenacontrols.com