

## Temperature and Process AutoTuning PID Controllers

Dual display of process and setpoint value, Control and Limit Alarm relays plus Ramp-to-Setpoint control

### Features:

- Dual 4-digit LED displays of process and setpoint values
- User friendly menus and tactile keypad for easy programming
- One-touch autotuning for quick setup and precise control
- Includes Limit Alarm relay(s) with 8 programmable modes and adjustable deadband provides for dual control (heat and cool)
- Countdown timer for setting delay of alarm relay activation
- Single stage Ramp Soak and Auto/manual control modes
- Model 48VTR is UL, CSA and CE approved
- Complete with mounting brackets and screw terminals



### Ordering Information:

Complete part number below with desired specifications.

- 48VTR**    ☐ ☐ .....1/16 DIN PID Controller
- 96VTR**    ☐ ☐ .....1/4 DIN PID Controller
- 1** .....Thermocouple inputs (User selectable J,K,T,B,E,R,S,N)
- R** .....RTD Input (Pt 100 ohm)
- A** .....4-20mA Process inputs (Programmable to engineering units)
- V** .....1-5VDC Process inputs (Programmable to engineering units)
- 1** .....5 Amp at 110 VAC Relay control output
- 2** .....Pulsed 24 VDC control output
- 3** .....4-20 mA control output
- 404216** .....1/16 DIN NEMA-4X Cover

### Specifications:

Inputs:	Type K	-58 to 2498 °F (-50 to 1370 °C)
	Type J	-58 to 1830 °F (-50 to 1000 °C)
	Type B	32 to 3272 °F ( 0 to 1800 °C)
	Type T	-454 to 752 °F (-270 to 400 °C)
	Type E	-58 to 1382 °F (-50 to 750 °C)
	Type R/Type S	32 to 3182 °F ( 0 to 1750 °C)
	Type N	-58 to 2372 °F (-50 to 1300 °C)
	PT100Ω RTD	-392 to 932 °F (-200 to 500 °C)
	DC current/DC voltage	4-20mA DC, Load <3 ohms/1-5 VDC

Output Relay:	5 Amps@ 110V, SPDT (resistive load)
DC Voltage:	24 VDC (pulsed) (drive for SSR)
DC Current:	4-20mA resistive. Impedance 600W or less
Alarm Relay:	48VTR 5 Amp @ 110V, SPST (resistive load) 96VTR
Accuracy:	± 0.2% FS + 1 digit
Temp. stability:	5µV / °C
Sampling Time:	0.25 Seconds
Display:	4 digit; Red LED (Process) Green LED (Setpoint)
LED Status:	Control/Alarm, Manual mode, Autotune
Control Modes:	Proportional Band: 0.0 to 100.0% (Autotuneable) Integral Time: 0 to 3000 seconds (Autotuneable) Derivative Time: 0 to 3000 seconds (Autotuneable)
Cycle time:	1 to 100 seconds
Anti-Reset:	Inhibit integral action outside proportional band
Manual Reset:	0 to 100% of proportional band
Hysteresis :	0.0 to 25.5% of full scale
Front Panel:	Lexan, Drip/Dust proof (IEC IP55 Standard)
Power Supply:	85 to 260 VAC, 50/60 Hz (6 watt)
Operating Temp:	14 to 122 °F (-10 to 50°C)
Panel cutout:	48VTR 1.77x1.77" (45x45mm) 96VTR 3.58x3.58" (91x91mm), 4" deep