

1/16 DIN Advanced, Full Featured PID Temperature Controller

- Dual Display, 4 digit, 7 segment LED
- TC/RTD Input, Analog Input
- ON/OFF, PID, PID Autotune
- C/F degrees selectable
- Heat Cool PID
- Ramp Soak
- Soft Start
- 1/16 DIN (48 x 48 mm)

SPECIFICATIONS

DIGITS	4 digit, 7 segment LED Dual Display Height of Upper display: 0.3785" Height of Lower display: 0.2720"
LED INDICATIONS	Relay On, Alarm, Manual Mode, Tune
INPUTS	Thermocouple (J,K,T,R,S,C,E,B,N,L,U,W) Platinel II, RTD (Pt100) DC Analog Inputs (-5 to 56mv, 0 to 10v, 0 to 20 ma)
SAMPLING TIME	200 ms
INPUT FILTER (FTC)	0.2 to 10.0 sec
RESOLUTION	1/0.1 deg for TC/RTD only Fixed 1 deg resolution for R&S Type TC) Decimal point position selectable: 1/0.1/0.01/0.001 for analog input
TEMPERATURE UNIT:	C/F deg selectable
INDICATION ACC:	For TC inputs 0.25% of F.S. $\pm 1^\circ$ R&S type TC inputs 0.5% of F.S. ± 2 deg (20 min of warm up time for TC inputs) For RTD inputs 0.1% of F.S. ± 1 deg For Analog Input $\pm 0.5\%$, ± 1 digit (F.S. = Full Scale)

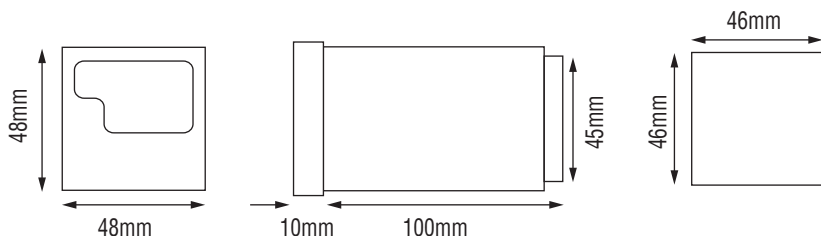
CONTROL 1 OUTPUT SPECIFICATIONS	Contact Rating (SPST): 5a @ 230VAC / 30VDC resistive SSR Drive (Voltage Pulse): 18VDC 20ma Current: 0/4 to 20ma dc (loop impedance 500 ohms max Voltage: 0 to 5/10 VDC (load resistance 10K ohms min)
ALARM 2 OUTPUT SPECIFICATION	Contact Rating (SPST): 5a @ 230VAC / 30VDC resistive SSR DRIVE: 12VDC 20ma
FUNCTIONAL SPECIFICATION	Control Action: PID, On-Off Proportional Band (P): 0.0 to 400.0 deg Integral Time (I): 0 to 3600 sec Derivative Time (D): 0 to 200 sec Cycle Time: 0.1 to 100.0 sec Hysteresis Width: 0.1 to 99.9 deg Manual Reset Value: -99.9 to 99.9 deg
HEAT COOL PID	Control Action: PID Cycle Time: 0.1 to 100 sec Proportional Gain: 0.0 to 400.0 deg Deadband: Programmable from setpoint low limit to setpoint high limit
ALARMS	Modes: Deviation high/low, Absolute high/low, band, sensor break Hysteresis: 0.1 to 99.9 deg
RAMP SOAK	Ramp Range: 1 to 9999 deg/hr. Soak Time: 0 to 1440 min Soft Start Time: 0 to 999 min.
SUPPLY VOLTAGE	85 to 270V AC/DC (50/60 Hz)
POWER CONSUMPTION	6VA max @ 230 VAC
RETRANSMISSION	Current: 0/4 to 20ma DC (loop impedance 500 ohms max) Voltage: 0 to 5/10V DC (load resistance 10k ohms min) Update Rate: 100msec
SERIAL COMMUNICATION	Interface Standard: RS485 Communication Address: 1 to 99, maximum of 32 units per line Transmission mode: Half duplex Transmission protocol: MODBUS RTU Transmission distance: 500 m maximum Transmission speed: 9600, 4800, 1200, 600, 300 bits/sec.
TEMPERATURE	Operating: 0 to 50°C (32 to 122°F) Storage: -20 to 75°C (-4 to 167°F)
HUMIDITY (NON CONDENSING)	95% RH
WEIGHT:	6.4 oz.
PROTECTION LEVEL	IP65 for faceplate

COMPLIANCE

IEC/EN 61326 (EMI/EMC)

IEC/EN 61010 Revision 3 2010 Edition (Safety)

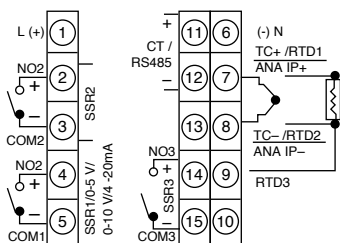
UL 61010 Revision 3 2010 Edition (Safety)

DIMENSIONS

CURus Cable Size (AWG): 16-13

Stud Hole for Lug (inch): 0.137

Tightening Torque (lb-inch): 7

TERMINAL CONNECTIONS**ORDERING INFORMATION**

PART NO.	OUTPUT 1	OUTPUT 2	OUTPUT 3	COMMUNICATION (RS485)	SUPPLY VOLTAGE
ATC500000100	Relay	Relay	Relay		85-270V AC/DC
ATC500000400	Relay	Relay	Relay	Yes	85-270V AC/DC
ATC500010500	Relay	12V DC SSR	12V DC SSR	Yes	85-270V AC/DC
ATC500200100	4-20ma	Relay	Relay		85-270V AC/DC
ATC500200400	4-20ma	Relay	Relay	Yes	85-270V AC/DC
ATC500300100	0-10V	Relay	Relay		85-270V AC/DC
ATC500300400	0-10v	Relay	Relay	Yes	85-270V AC/DC

Note: Other models, options and accessories available. Please consult factory.