

Platinum™ Series C10 Controller-Indicator-Transmitter



Athena's Platinum Series C10 is the smallest 1/32 DIN (48 x 24 mm) size panel-mounted line and combines all the functionality of a temperature controller-indicator-transmitter without losing the standard features found in more complex control devices such as auto-tune and IP65 front panel protection. Available options include serial communications, analog retransmission output, and transmitter power supply.

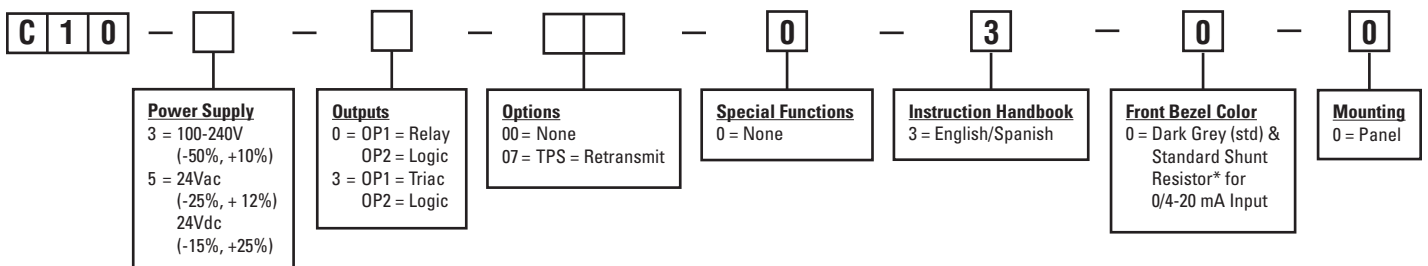
- ▲ Field-Configurable Universal Inputs
- ▲ Bumpless Auto/Manual Transfer
- ▲ (IP65) Dust and Splash-Proof Front Panel
- ▲ On/Off Through Full PID Operation
- ▲ Adjustable Hysteresis and Deadband
- ▲ Outputs Configurable as Alarms
- ▲ Field-Configurable Process or Deviation Alarms
- ▲ CE Compatibility

Range Information



Input	Range	Input	Range
"J"	32°F to 1112°F (0°C to 600°C)	"S"	32°F to 2912°F (0°C to 1600°C)
"K"	32°F to 2192°F (0°C to 1200°C)	"T"	-328°F to 752°F (-200°C to 400°C)
"L"	32°F to 1112°F (0°C to 600°C)	"RTD"	-99.9°F to 572°F (-99.9°C to 300°C)
Millivolt Linear (scalable)	0 to 20 mA (4 - 20 mA) 0 to 10 mA (0 - 50 mA)	"RTD"	-328°F to 1112°F (-200°C to 600°C)

Ordering Information



* Standard Shunt-Resistor without field calibration = 1.10% input accuracy
 High Accuracy Shunt Resistor without field calibration = 0.20% input accuracy
 Either Shunt Resistor with field calibration = 0.10% input accuracy

Technical Specifications

Operating Limits

Ambient Temperature	32°F to 131°F (0°C to 55°C)
Relative Humidity Tolerance	5-95% min - condensing
Power	100-240 Vac, 24 Vac/Vdc
Power Consumption	1.6 W max

Performance

Accuracy	0.25% ± 1 digit (T/C and RTD) 0.1% ± 1 digit (mA* and mV)
Setpoint Resolution	1.0 count/0.1 count
Repeatability	± 1.0 count
Temperature Stability	2 µ V/°C
Process Sampling	0.5 sec
Digital Filtering	Adjustable 1-30 sec

Control Characteristics

Setpoint Limits	Span of sensor
Alarms	Adjustable for high/low; selectable for process deviation
Proportional Band	0.5 to 999.9%
Integral	0.1 to 100.0 min
Derivative	0.1 to 10.00 min
Cycle Time	1 to 200 sec
Control Hysteresis	0.1 to 10.0%
Dead band	Span of sensor
(Output at 1 & 2)	
Auto-Tune	Operator initiated from front panel
Manual Control	Operator initiated from front panel

Inputs

Thermocouple	J, K, L, S, T, Maximum lead resistance 100 ohms for rated accuracy
RTD	Platinum 2- and 3-wire, 100 ohms at 0°C, DIN curve standard (0.00385)
Linear	U-5 mV/10-50 mV, 0-20 mA/4-20 mA
Display Scalable	-1999 to 9999

Outputs

0 = OP1 = Relay	SPST relay N.O., 2 A/250 V~, or 4A/120 V~ (for resistive loads) (SSR drive) not isolated: 5 V~, ±10%, 30 mA max
OP2 = Logic	
3 = OP1 = Triac	1 A/250 V ~ for contactor coil (SSR drive) not isolated: 5 V~, ±10%, 30 mA max
OP2 = Logic	

Alarm Type

(Configurable through output operating mode – see manual)

Mechanical Characteristics

Display	4 digit LED display
Numeric Range	-1999 to 9999
Front Panel Rating	IP65
Front Panel Cutout	45 mm x 22.2 mm
Connections	Screw terminal

Specifications subject to change without notice

