

# series 120

## SOLID STATE TEMPERATURE CONTROL

**ZYTRON**

The Series 120/120R family of low cost, solid state temperature controls provide an ideal upgrade path for cost sensitive applications which can benefit from the improved performance and reliability of an electronic controller. A wide variety of control configurations, mounting arrangements and sensor types allow these controllers to readily replace bulb & capillary or other more expensive electronic controls. CE mark, now available on selected models, satisfies the requirements for European applications.

### PRODUCT applications

- Dryers
- Holding Cabinets
- Environmental Chambers
- Packaging Equipment
- Fryers, Griddles & Ovens
- Steam Kettles
- Laboratory Baths
- Steam Cleaning Equipment
- Incubators
- Hot Melt Dispensers

### HIGHLIGHTS

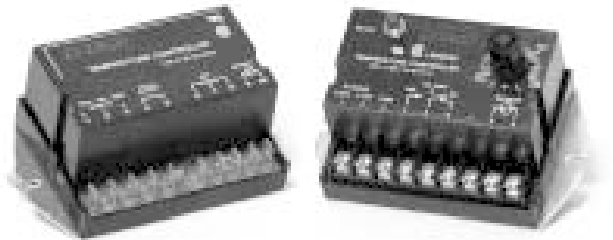
- low cost
- completely enclosed
- UL Class 2 low voltage sensor circuit
- variety of mounting options
- CE mark on selected models
- full two-year parts & labor warranty

### FEATURES

- 115/230VAC field selectable input
- ON-OFF control mode standard
- 20 AMP output relay on most models
- NTC thermistor, PRTD or TC sensors

### OPTIONS

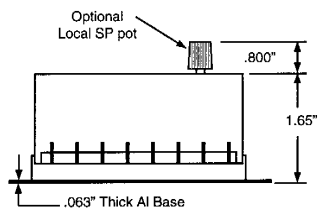
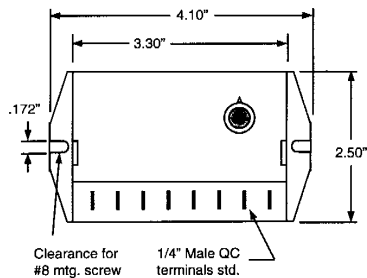
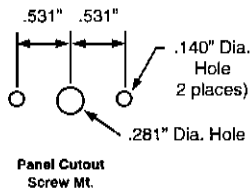
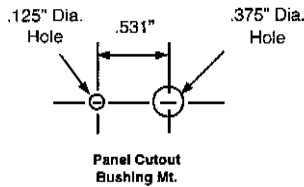
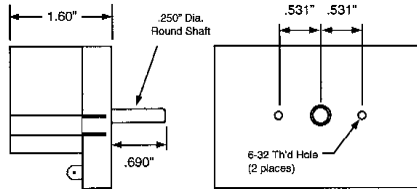
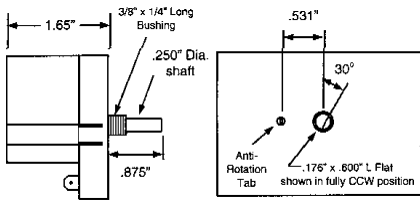
- 24VAC input voltage
- Time proportioning mode available
- Fixed, remote or local setpoint adjustments
- Encapsulated versions available
- Custom setpoint ranges



# series 120

## SOLID STATE TEMPERATURE CONTROL

# specifications



### Power Input:

115/230VAC +/-15%, 50/60Hz  
(field selectable); 24VAC +/-10% optional

### Control Output:

SPST N.O. Relay rated 20 Amp Res. and 1 Amp Pilot Duty @ 120/240VAC (thermistor & RTD controllers only)  
SPST N.O. Relay rated 3.8(1.9) Amps Res. and 1.5(0.8) Amp Pilot Duty @ 120/240VAC (thermocouple controllers only)

### Control Mode:

On-Off with 2°F (specials on request)

### Sensor Type:

Thermistor, RTD or Thermocouple

### Setpoint Range:

Overlapping ranges from 0°F to 2000°F depending on sensor type selected (specify when ordering)

### Setpoint Accuracy:

Typically better than 1% of span

### Stability:

Typically better than +/-1°F over allowable ambient operating temperature or with +/-10% line voltage variation

### Amb. Oper. Temp:

0°C to 70°C (32°F to 158°F)

### Oper. Relative Humidity:

5 to 90%, non-condensing

**ZYTRON**

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SOLID STATE TEMPERATURE CONTROL

ordering information

MODEL 120 R - D 1 8 - TH 21 - T

**SERIES 120**

**MOUNTING**

- Sub-panel Mtg.
- R Panel Mtg. with Integral Setpoint pot

**SETPOINT ADJ**

**CONTROL MODE**

- A Remote SP/Proportioning
- B Local SP/Proportioning
- C Remote SP/On-Off
- D Local SP/On-Off
- E Local SP/Hi Limit (auto reset)
- F Local SP/Hi Limit (manual reset)

**INPUT VOLTAGE**

- 1 115VAC
- 2 230VAC
- 3 115/230VAC (field selectable)
- 4 24VAC

**OUTPUT TYPE/RATING**

- 1 10 Amp relay
- 2 1 Amp Triac
- 4 10 Amp Triac
- 5 20 Amp remote Triac
- 7 3 Amp relay
- 8 20 Amp Relay
- 9 24VDC to drive external SSR
- 22 Open collector transistor

**ADDITIONAL OPTIONS**

- T Snap Track Mtg.

**STANDARD RANGES**

\* NOTE: Use suffix 00 for un-calibrated ranges

**NTC THERMISTOR THERMOCOUPLE**

21	60F to 250F	01	0F to 250F
22	200F to 400F	02	0F to 500F
23	200F to 550F	03	0F to 1000F
24	150F to 450F	04	0F to 2000F
25	150F to 350F		
26	50F to 160F		
27	0F to 100F		
28	70F to 140F		

**PRTD**

02	0F to 500F
03	0F to 1000F
04	32F to 212F
05	0F to 250F
06	70F to 140F

**SENSOR TYPE**

- TH Thermistor
- PT PRTD
- JT "J" T/C
- KT "K" T/C
- TT "T" T/C
- ET "E" T/C

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