

series 1000

ZYTRON

DIGITAL TEMP CONTROLS & INDICATORS

The Series 1000 digital indicating ON-OFF or time proportioning controls can provide accurate and highly reliable temperature indication and control for many applications. These controllers offer a low cost alternative to more expensive DIN style controls when sophisticated PID control algorithms are not required. Options such as integral or remote set point adjustment, PRTD, Thermocouple or Solid State sensor inputs and relay or DC outputs further enhances its versatility. The Series 1000 can also be supplied as a simple digital thermometer if only temperature indication is required.

PRODUCT applications

- Incubators
- Packaging Machines
- Industrial Ovens & Dryers
- Commercial Cooking Equip
- Environmental Chambers
- Laboratory Equipment
- Photographic Baths

HIGHLIGHTS

- low cost
- snap-in panel mounting
- miniature size
- bright .56"H LEDs
- full two-year parts & labor warranty

FEATURES

- 3-digit red LED display
- Fully isolated sensor circuit
- 12VAC C.T. (3-wire) power input

OPTIONS

- 24VAC (2-wire) power input
- °F or °C display units
- Integral or remote setpoint adjustment
- Push-to-read setpoint
- Green or yellow LEDs



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specifications

Power Input:	12.6VAC \pm 10%, 50/60Hz, 3VA max.
Sensor Type:	100 Ohm PRTD or J, K, T Thermocouple
Display Type:	3 Digit Red LED, .56" high standard; (Yellow or Green LEDs available)
Display Range:	0 to 999°F or °C (sensor dependent) \pm 999 or \pm 99.9 (optional)
Accuracy:	\pm 0.2% of reading \pm 1 LSD from -150 to 750°F * \pm 0.4% of reading \pm 1 LSD from 750 to 999°F * \pm 1% of reading \pm 1 LSD from 0 to 999°F (TC) <small>* these specs for PRTD only</small>
Sensor Fault Prot:	Digits blank, decimal point illuminates and output de-energizes with open sensor
Isolation:	1500VAC minimum between power input terminals and sensor terminals.
Amb. Oper. Temp:	0°C to 60°C (32°F to 140°F)
Setpoint Options:	Remote pot with knob & calibrated scale Integral 10-T Pot & Push-to-Read SP switch Fixed SP with rear access trim pot adj.
Setpoint Range:	See Ordering Information for standard ranges (Contact factory for custom ranges)
Output Type:	SPDT Relay rated 3.8/1.9A G.P. & 1.5/.8A P.D. @ 120/240VAC or 12VDC @ 30MA to drive SSR
Output Mode:	Open-on-Rise (Heating) standard; Close-on-Rise (Cooling) optional
Control Mode:	On-Off with 2°F Hyst. or Time Proportioning with BW 1.5% of span & cycle rate 2-5 seconds typical; (Proportioning only available with 12VDC output)
Load Lamp:	Red LED indicates output energized

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ordering information

MODEL 1003 - 1 F 2 - P 1

SERIES 1000

- 02 Digital Thermometer
- 03 ON-OFF Temp Control with Remote SP Pot
- 04 ON-OFF Temp Control with Push-to-Set SP
- 13 Time Proportioning Temp Control with Remote SP
- 14 Time Proportioning Temp Control w/ Push-to-Set SP

DISPLAY RANGE

- 1 +0 to +999
- 2 0.0 to +99.9
- 3 -999 to +999
- 4 -99.9 to +99.9

DISPLAY UNITS

- F Fahrenheit
- C Celsius

SETPOINT RANGE

- INDICATOR ONLY
- 1 0 to 250°F (0 to 120°C)
- 2 0 to 500°F (0 to 260°C)
- 3 0 to 1000°F (0 to 540°C)
- 4 68 to 140°F (20 to 60°C)
- 5 -150 to 300°F (-100 to 150°C)

SENSOR

- P 100 Ohm PRTD
- J Type "J" Thermocouple
- K Type "K" Thermocouple
- T Type "T" Thermocouple

OUTPUT

- INDICATOR ONLY
- 1 3A Relay
- 2 12VDC @ 30MA

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