



Series 1000™

Very Easy to Use - Dial Setpoint

1/4 DIN Analog Controller / Limit Device

DESCRIPTION

The Series 1000 are versatile analog controllers designed for rugged, reliable, low cost control of process variables in harsh industrial environments, even those plagued by environmental electronic noise.

Available as a non-indicating analog on/off controller or high or low limit device, it offers a quality level not commonly found in comparably priced devices. It is a 1/4 DIN instrument with a depth of only 5.8 inches. All versions are UL recognized and CSA certified as controllers and limit devices are FM approved.

The Series 1000 can accommodate J, K, T, R, B, and S thermocouples. Outputs are either SPST or SPDT electro-mechanical relay or solid state relay drivers.

APPLICATIONS:

Ideal for temperature control or high or low limit applications requiring a value-priced, non-display, dial set controller.

INDUSTRIES:

- Industrial and lab ovens/furnaces, plastics and thermal forming
- Form/fill and seal
- Packaging applications
- And any others where low cost and simplicity are critical requirements.

FEATURES/BENEFITS

- Non-display, easy dial setting
- 1/4 DIN panel mount
- Thermocouple input
- Sensor fault detection
- Relay or SSR driver output
- High or Low Limit or On/Off control

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SPECIFICATIONS*

STANDARD FEATURES

Output via relay or SSR driver
Available inputs for popular thermocouple types
Sensor fault detection
Optional Remote Reset

ENVIRONMENTAL CHARACTERISTICS

Operating Temperature: 0 to 55°C, 32 to 131°F
Storage Temperature: -40 to 65°C, -40 to 149°F
Humidity: 0 to 95% RH, non condensing

ELECTRICAL

Line Voltage: 115 or 230 VAC, $\pm 10\%$, 50/60Hz
Power Consumption: 15VA maximum

INPUTS

Thermocouple types: J, K, T, R, S and B
Sensor Fault Detection: Upscale or downscale for thermocouple inputs

OUTPUTS

Relay: SPST or SPDT
115VAC: 5.0A Resistive; 1/8 HP or 250VA
230VAC: 5.0A Resistive; 1/8 HP or 250VA
SSR Driver: Open collector output short circuit protected at 40mA maximum.
Provides 5VDC at 23mA or 3VDC at 30mA.

INDICATORS

High or Low Limit devices incorporate an alarm indication with green and red LEDs.
On/Off controllers incorporate a red LED that denotes the output relay is energized and a green LED to indicate power.

SETPOINT ADJUSTMENT

Adjusted via a potentiometer which is fitted with a knob.
Limit devices are equipped with a clamp arrangement providing a lock to prevent setpoint changes.

RESET

Limit devices include switch to reset the control once the alarm condition is removed.

PERFORMANCE

Measurement Accuracy: $\pm 1\%$ of span, at 25 deg C
Ambient Temperature Error: $\pm 0.04\%$ of span /deg C deviation from 25 deg C
Noise Rejection:
Common mode: $>85\text{dB}$ at 60Hz, 115VAC maximum
Normal Mode: $>65\text{dB}$ at 60 Hz) or greater, 0.5V p-pmax. for no relay chatter with 1% hysteresis

PHYSICAL DIMENSIONS

Dimensions: 1/4 DIN front panel, 147mm (5.8") deep
Weight: 3 lbs. maximum
Vibration: 0.5 to 100Hz at 0.5g

RATINGS/AGENCY APPROVALS

UL & cUL recognized (E67237)
CSA (LR39885)
FM (120694.MMO) Limit Only

WARRANTY

1 year

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Partlow Brand Series 1000 Data Sheet (7/05)

PARTLOW™ brand

Series 1000™

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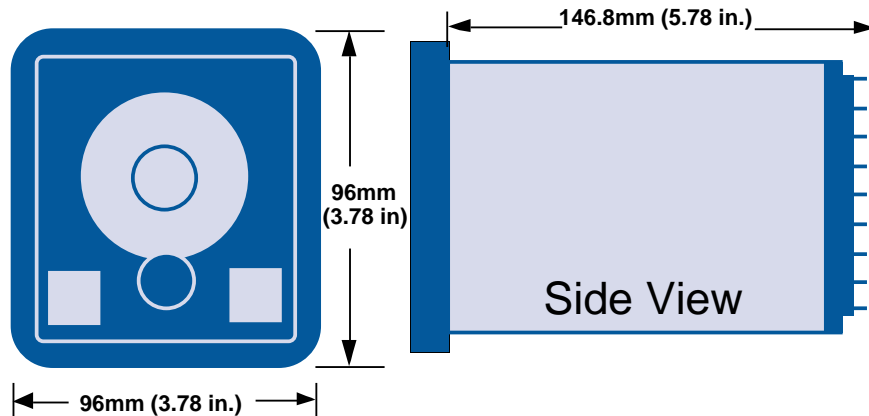
Controllers

MODELS

Code 1: Model #	Code 2: Type	Code 3: Input (Code - Type T/C - C - F)	Code 4: Output	Code 5: Options	Code 6: Voltage	Code 7: Jumper Config
10	0		0			
I/4 DIN Analog Temperature Controller and Limit Device	0 Controller 1 High Limit 2 Low Limit	11 J 0 to 400 C 40 to 750 F 12 J 0 to 750 C 40 to 1400 F 13 J 0 to 120 C 32 to 250 F 14 J 0 to 540 C 30 to 1000 F 21 K 0 to 1350 C 50 to 2500 F (C Only) 31 T -100 to 200 C -150 to 400 F 32 T -100 to 200 C -150 to 400 F 41 R 200 to 1660 C 400 to 3000 F 51 B 500 to 1800 C 900 to 3300 F 61* S 200 to 1650 C 400 to 3000 F 71* E 0 to 750 C	1 Relay - SPST N.O. Contact 2 SSR Driver 3 Relay SPDT N.O./N.C. Contact	0 None 1 Remote Reset	1 115 VAC 2 230 VAC	000 High Limit with Upscale Sensor Break 001 Low Limit with Downscale Sensor Break 101 On/Off Direct Controller (Cooling) with Downscale Break 200 On/Off Reverse Controller (Heating) with Upscale Sensor Break

* Available only on a High Limit

DIMENSIONS - 1/4 DIN



Panel Cutout: 92mm x 92mm (3.62" x 3.62")

Headquarters: 1675 Delany Road • Gurnee, IL 60031-1282 • USA
 Phone: +1 847.662.2666 • Fax: +1 847.662.6633

Satellite Locations:

North America: North Carolina, South Carolina, Connecticut, Massachusetts, New York, Canada, British Virgin Islands • **Europe:** United Kingdom, Italy, France, Germany, Spain, Slovakia • **Latin America:** Brazil • **Asia:** China, Japan, Korea, Singapore

Customer Service:

Tel.: +1.800.390.6405
 Fax: +1.910.879.5486
 partlow.custserv@dancon.com

Technical Support

Tel.: +1.800.866.6659
 Fax: +1.847.782.5277
 partlow.techsupport@dancon.com



www.partlow.com • www.danaherindustrialcontrols.com

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A division of
Danaher, a
Fortune 500
company with
offices in 30
countries around
the world.

More Available. With factories around the world, global sales and applications support, and an expansive network of distributors, we stay close to our customers - shortening lead times and fostering responsiveness. Three-day lead time is standard, with same-day shipments available on many of our products.

More Selection. We have a broad selection of controllers to meet application requirements in a variety of industries. User-configurable, accurate and flexible, with low, mid, or high level performance ranges, our controller products meet your system and budgetary requirements.

More Reliable. Our experience with more than 25,000 customers has taught us to design controllers that are reliable and durable, with quality standards that meet six sigma requirements.

For additional information or a full-line catalog, contact DICG Customer Service or visit our web site.

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