1000 SERIES
ANALOG CONTROLLER/ LIMIT DEVICE

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ORDERING

TYPE OF UNIT

0	Controller
1	High Limit
2	Low Limit

FIXED CHARACTER

INPUT

11	J T/C	0 to 400 C	40 to 750 F
12	J T/C	0 to 750 C	40 to 1400 F
13	J T/C	0 to 120 C	32 to 250 F
14	J T/C	0 to 540 C	30 to 1000 F
21	K T/C	0 to 1350 C	50 to 2500 F
31	T T/C	-100 to 200 C	(Celsius scale only)
32	T T/C	-100 to 200 C	-150 to 400 F
41	R T/C	200 to 1660 C	400 to 3000 F
51	B T/C	500 to 1800 C	900 to 3300 F
61*	S T/C	200 to 1650 C	400 to 3000 F
71*	E T/C	0 to 750 C	

OUTPUT 1

1	Relay - SPST N.O. Contact
2	SSR Driver
3	Relay SPDT N.O./N.C. Contact

FIXED CHARACTER

OPTIONS

0	None
1	Remote Reset

VOLTAGE

1	115 VAC
2	230 VAC

STANDARD JUMPER CONFIGURATION

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.

WARRANTY
This instrument is backed by the Partlow comprehensive 1 year warranty. A complete warranty statement is published in the back of the product instruction manual. If you have further questions about warranties, please contact the Partlow factory.

ORDERING INFORMATION
For pricing and additional ordering information, refer to Form 3265, Electronic Price Book, Page 5.

Controller

LR39885

High/Low Limit

Approved



DESCRIPTION

The 1000 Series solid state non-indicating analog controller/limit device 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. It is available as an on/off controller or as a high or low limit safety device.

All versions are UL recognized and CSA certified as controllers and limit devices are FM approved.

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

SPECIFICATIONS

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.
Setpoint	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.
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.
Reset	Limit devices include switch to reset the control once the alarm condition is re moved.

Performance

Measurement Error Limit	–1% of span at 25 C
Ambient Temperature Error	0.04% of span per degree C deviation from 25 C.
Line Voltage	115 or 230 VAC, – 10% 50/60Hz
Power Consumption	15VA maximum
Operating Temperature	0 to 55 C, 32 to 131 F
Storage Temperature	-40 to 65 C, -40 to 149 F
Humidity	0 to 90% RH, Extreme 0 to 95% RH, non- condensing
Dimensions	1/4 DIN front panel, 5.8" deep
Weight	3 pounds maximum
Vibration	0.5 to 100 Hz at 0.5g

Agency Approvals

Controls	UL and CSA
Limits	FM