



SERIES 32B, 16B, 8B, & 4B



# TEMPERATURE/PROCESS LOOP CONTROLLERS

Universal Input, Dual Control Output, RS-485 Communication



32B



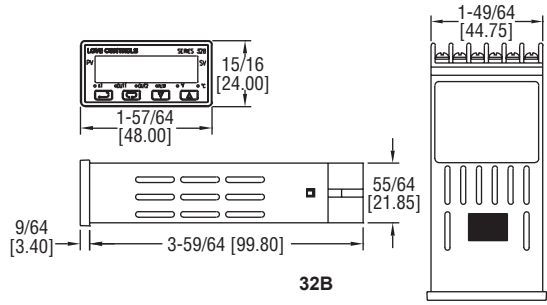
16B



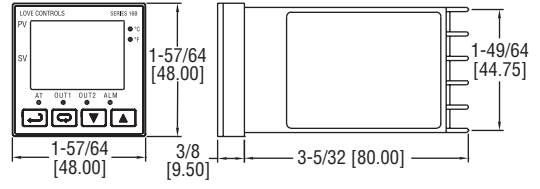
8B



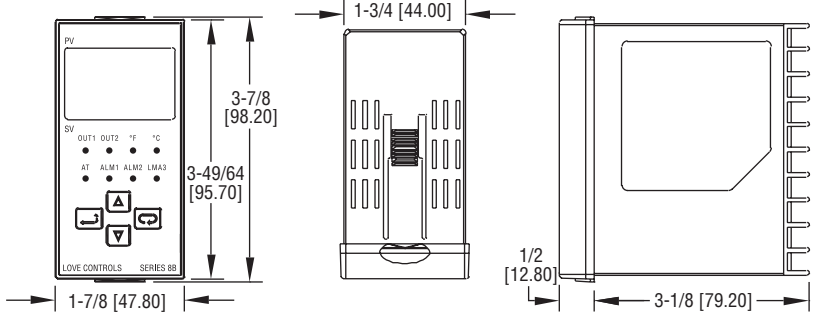
4B



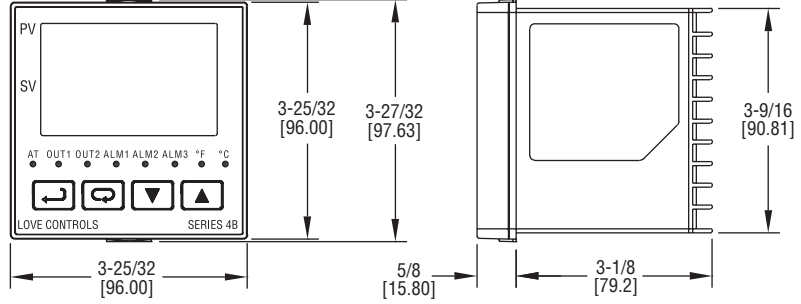
32B



16B



8B



4B

The **SERIES 32B, 16B, 8B, & 4B** Temperature/Process controllers offer advanced control features for the most demanding temperature or process applications. Offered in 4 standard DIN cutout housing sizes, these controllers are designed with dual, 4 digit LED displays for local indication of the process value, setpoint, and output conditions.

**FEATURES/BENEFITS**

- Universal input accepts process transmitters, RTD's or thermocouple signals
- On/off, PID, or manual output control
- RS-485 standard on all models
- Stage control program for up to 64 ramp/soak actions

**APPLICATIONS**

- Oven, boiler, or chiller control
- Hot plates/melt pots
- Packaging equipment
- Environmental chambers
- Medical equipment
- Food service equipment

SPECIFICATIONS	
<b>Inputs:</b>	Thermocouple, RTD, DC voltages or DC current.
<b>Display:</b>	Two 4 digit, 7 segment LED's. PV: Red, SV: Green.
<b>Accuracy:</b>	±0.25% span, ±1 least significant digit.
<b>Power Requirements:</b>	100 to 240 VAC, 50/60 Hz; Optional 24 VDC.
<b>Power Consumption:</b>	5 VA max.
<b>Operating Temperature:</b>	32 to 122°F (0 to 50°C).
<b>Memory Backup:</b>	Nonvolatile memory.
<b>Control Output Ratings:</b>	Relay: SPST, 3 A @ 250 VAC resistive for 32B; SPST, 5 A @ 250 VAC resistive for 16B; SPDT, 5 A @ 250 VAC resistive for 8B and 4B; Voltage pulse: 14 VDC (max. 40 mA); Current: 4 to 20 mA; Linear voltage: 0 to 10 V.
<b>Communication:</b>	RS-485 Modbus® ASCII/RTU communication protocol.
<b>Weight:</b>	32B and 16B: 4 oz (114 g); 8B and 4B: 15 oz (425 g).
<b>Front Panel Rating:</b>	IP56.
<b>Agency Approvals:</b>	CE, cULus.

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Universal Input, Dual Control Output, RS-485 Communication

MODEL CHART - 32B				
Model	Supply Power	Output 1	Output 2	Price
32B-23	100 to 240 VAC	Voltage pulse	Relay	\$89.00
32B-23-LV	24 VDC	Voltage pulse	Relay	99.00
32B-33	100 to 240 VAC	Relay	Relay	89.00
32B-33-LV	24 VDC	Relay	Relay	99.00
32B-53	100 to 240 VAC	Current	Relay	89.00
32B-53-LV	24 VDC	Current	Relay	99.00

MODEL CHART - 16B				
Model	Supply Power	Output 1	Output 2	Price
16B-23	100 to 240 VAC	Voltage pulse	Relay	\$99.00
16B-23-LV	24 VDC	Voltage pulse	Relay	109.00
16B-33	100 to 240 VAC	Relay	Relay	99.00
16B-33-LV	24 VDC	Relay	Relay	109.00
16B-53	100 to 240 VAC	Current	Relay	99.00
16B-53-LV	24 VDC	Current	Relay	109.00
16B-63	100 to 240 VAC	Linear voltage	Relay	99.00
16B-63-LV	24 VDC	Linear voltage	Relay	109.00

MODEL CHART - 8B				
Model	Supply Power	Output 1	Output 2	Price
8B-23	100 to 240 VAC	Voltage pulse	Relay	\$109.00
8B-23-LV	24 VDC	Voltage pulse	Relay	109.00
8B-33	100 to 240 VAC	Relay	Relay	109.00
8B-33-LV	24 VDC	Relay	Relay	109.00
8B-53	100 to 240 VAC	Current	Relay	109.00
8B-53-LV	24 VDC	Current	Relay	109.00
8B-63	100 to 240 VAC	Linear voltage	Relay	109.00
8B-63-LV	24 VDC	Linear voltage	Relay	109.00

MODEL CHART - 4B				
Model	Supply Power	Output 1	Output 2	Price
4B-23	100 to 240 VAC	Voltage pulse	Relay	\$129.00
4B-23-LV	24 VDC	Voltage pulse	Relay	129.00
4B-33	100 to 240 VAC	Relay	Relay	129.00
4B-33-LV	24 VDC	Relay	Relay	129.00
4B-53	100 to 240 VAC	Current	Relay	129.00
4B-53-LV	24 VDC	Current	Relay	129.00
4B-63	100 to 240 VAC	Linear voltage	Relay	129.00
4B-63-LV	24 VDC	Linear voltage	Relay	129.00
4B-33-986/U	120 VAC	Relay	Relay	629.00

**Application Note:**

When using a relay output to operate a contactor or solenoid an R/C snubber should be installed across the coil to prevent damage to the controller relays.



4B-33-986/U Benchtop Controller

INPUT RANGES	
Input Types	Range
K Type TC	-328 to 2372°F (-200 to 1300°C)
J Type TC	-148 to 2192°F (-100 to 1200°C)
T Type TC	-328 to 752°F (-200 to 400°C)
E Type TC	32 to 1112°F (0 to 600°C)
W Type TC	-328 to 2372°F (-200 to 1300°C)
R Type TC	32 to 3092°F (0 to 1700°C)
S Type TC	32 to 3092°F (0 to 1700°C)
B Type TC	212 to 3272°F (100 to 1800°C)
L Type TC	-328 to 1562°F (-200 to 850°C)
U Type TC	-328 to 932°F (-200 to 500°C)
JPt 100 RTD	-4 to 752°F (-20 to 400°C)
Pt 100 RTD	-328 to 1562°F (-200 to 850°C)
0 to 5 V	-999 to 9999
0 to 10 V	-999 to 9999
0 to 20 mA*	-999 to 9999
4 to 20 mA*	-999 to 9999
0 to 50 mV	-999 to 9999

\*Requires 250 Ω precision resistor across input terminals

ACCESSORIES		
Model	Description	Price
MN-1	Mini-Node™ RS-485 to USB Converter	\$77.50
SCD-SW	Configuration software	35.00(N)
A-277	250 Ω precision resistor	7.00(N)
A-600	R/C snubber	18.50
A-900	Weatherproof front mount enclosure	120.00
A-901	Weatherproof internal mount enclosure with window	226.00

(N) Items are net priced and are not subject to any discount.



A-600



MN-1



A-900



A-901

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