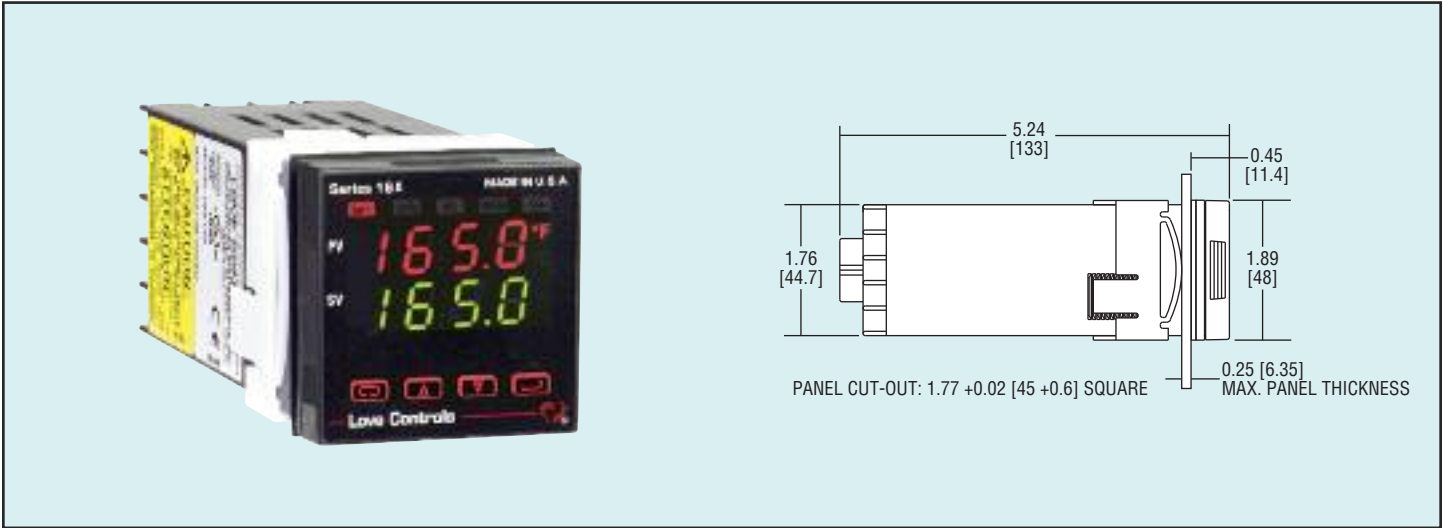




Series  
16A

# Temperature/Process Controller

1/16 DIN, Universal Input, Fuzzy Logic, Self-Tune PID



**Latest microprocessor** based technology affords full programmability with complete array of features in compact ultra low cost unit. 16A Series Temperature/Process Controller features universal input, Self-Tune PID, Fuzzy Logic, and dual four-digit LED displays for process and set point value. Selectable inputs can be thermocouple, RTD, current or voltage. Available outputs are solid-state relay, relay, pulsed voltage, or proportional current. Programmable alarm (optional) can be reset automatically or manually. Front panel is waterproof and corrosion resistant (UL type 4X), making it ideal for sanitary applications. Replace electronics without wiring changes (via removable front panel). Self diagnostics, nonvolatile memory and selectable control modes are all designed for greater productivity. Four security levels are password protected. On-off, P, PI or PID manual tune control functions can be selected or the controller will Self-Tune automatically for best PID control.

The 16A2 offers the best value in Standard Features in a Process and Temperature control. In addition to the features listed above, the 16A2 offers Peak/Valley indication, Percent Output indication, Digital Input Filter, and a host of others.

Model	Alarm	Output A	Output B
16A2111	Yes	SSR	SSR
16A2030	No	Relay	None
16A2133	Yes	Relay	Relay
16A2130	Yes	Relay	None
16A2020	No	15 VDC	None
16A2110	Yes	SSR	None
16A2050	No	Current	None

For Enhanced Ramp and Soak features, change 16A2 to 16A3

## ACCESSORIES

- MN-1**, Mini-Node™ USB/RS-485 converter
- LoveLinks III**, Configuration software
- A-600**, R/C snubber

## SPECIFICATIONS

**Selectable Inputs:** Thermocouple, RTD, DC voltage, or DC current (see input ranges).

**Display:** Two four-digit LED displays, 0.3 in (7.62 mm) high.

**Display Resolution:** 1 degree or 0.1 degree (sensor dependent), or 1 count.

**Accuracy:** ±0.25% of span ±1 least significant digit.

**Supply Voltage:** 100 to 240 VAC nominal, +10% -15%, 50 to 400 Hz single phase; 132 to 240 VDC +10% -20%.

**Operating Temperature:** 14 to 131°F (-10 to 55°C).

**Power Consumption:** 5 VA maximum.

### Control Output Ratings:

SSR: 2.0 A at 240 VAC resistive at 77°F (25°C). De-rates to 1.0 A at 130°F (55°C). Minimum load of 100 mA;

DC SSR: 1.75 A at 32 VDC maximum;

Relay: SPST, 3A at 240 VAC resistive, 1.5 A @ 240 VAC inductive;

Pilot duty rating: 250 VA, 2 A @ 120 VAC, 1 A @ 240 VAC;

Alarm relay: SPST, 3 A @ 240 VAC resistive; 1.5 A @ 240 VAC inductive. Pilot duty rating: 240 VA, 2 A @ 120 VAC or 1 A @ 240 VAC;

Switched voltage: 15 VDC at 20 mA;

Proportional current: 0 to 20 mADC, scalable, into 600 ohms maximum.

**Weight:** 8 oz (227 g).

**Agency Approvals:** UL E83725, CE.

**Front Panel Rating:** NEMA 4X (IP66).

**Serial Communications (Optional):** RS-232 or RS-485 with either

LoveLink™ Software or Modbus® RTU protocol.

### OPTIONS (Add as a suffix to model number)

**-934\*\***, Process Signal Output, PV or SV.

Isolated 0 to 20 mADC

**-936\*\***, Process Signal Output, PV or SV.

Isolated 0 to 10 VDC

**-992\*\***, RS-485 Serial Communications Lovelink™ Protocol

**-993\*\***, RS-232 Serial Communications Lovelink™ Protocol

**-995\*\***, RS-232 Serial Communications Modbus RTV Protocol

**-996\*\***, RS-485 Serial Communications Modbus RTV Protocol

**-9502**, 12-24 VDC/VAC power input

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