Manuals+ — User Manuals Simplified.

Dwyer 16G Temperature Process Loop Controllers Owner's Manual

Contents

Dwyer 16G Temperature Process Loop Controllers

Product Information

Specifications

- Series: 16G, 8G, & 4G
- Type: Temperature/Process Loop Controllers
- Front Panel Rating: IP66
- Compliance: CE, cULus
- 0-10 V. Alarm Relay Ratings: 3 A @ 250 VAC resistive

Benefits/Features
The Series 16G, 8G, & 4G Temperature/Process Loop Controllers offer the following benefits and features:

- Multiple DIN sizes available (1/16, 1/8, and 1/4)
- Flexible output options including voltage pulse, relay, current, and linear voltage
- Various functions available such as event triggering, input retransmission, and CT input
- 24 VDC power option available
- High-quality construction with an IP66 rated front panel

Applications
The Series 16G, 8G, & 4G Temperature/Process Loop Controllers have a wide range of applications including:

- Temperature control in industrial processes
- Process control in manufacturing environments
- Automation systems

Description
The Series 16G, 8G, & 4G Temperature/Process Loop Controllers are advanced control devices designed to accurately regulate temperature or process variables in various industrial applications. With their compact design and durable construction, these controllers provide reliable and precise control over temperature and process parameters.

Dimensions

The dimensions of the Series 16G, 8G, & 4G Temperature/Process Loop Controllers are as follows:

- 16G: 1-57/64 [48.00] x 3-7/16 [87.50] x 4-21/64 [110.06]
- 8G: 1-57/64 [48.00] x 3-39/64 [91.49] x 5-33/64 [140.07]
- 4G: 3-25/32 [95.92] x 3-37/64 [91.00] x 5-53/64 [148.03]

How to Order
To order the Series 16G, 8G, & 4G Temperature/Process Loop Controllers, use the following product code format: [Series]-[DIN Size]-[Output 1]-[Output 2]-[Options]-[Function 2]-[Function 1] For example, if you want to order a Series 16G with a voltage pulse output for Output 1 and a relay output for Output 2, with 24 VDC power option, no logo, and no additional functions, the product code would be: 16G-2-3-0-LV-0-0.

Accessories

- A-277: 250 precision resistor
- A-600: R/C snubber
- A-900: Weatherproof front mount enclosure
- A-901: Weatherproof internal mount enclosure with window
- MN-1: Mini-Node RS-485 to USB Converter
- SCD-SW: Configuration software

Order Online
You can order the Series 16G, 8G, & 4G Temperature/Process Loop Controllers online at **dwyer-inst.com**.

FAQ

- Q: Can I use the Series 16G, 8G, & 4G controllers for temperature control in my manufacturing process?
- A: Yes, the Series 16G, 8G, & 4G controllers are designed for temperature control in various industrial applications and can be used in manufacturing processes.
- Q: What are the available output options for the controllers?
- A: The Series 16G, 8G, & 4G controllers offer voltage pulse, relay, current, and linear voltage output options.
- Q: Can I power the controllers with 24 VDC?
- A: Yes, the Series 16G, 8G, & 4G controllers have a 24 VDC power option available.
- Q: Are there any additional accessories available for the controllers?
- A: Yes, there are several accessories available including precision resistors, snubbers, weatherproof enclosures, RS-485 to USB converters, and configuration software.

16G   8G   4G

BENEFITS/FEATURES

- On/off, PID, fuzzy logic, or manual output control
- Constant, sloped, program (ramp/soak), or remote set point control
- 2 primary control outputs, 2 secondary/alarm relay outputs, and RS-485 standard on all models
- Remote set point, input retransmission, or event input functions available with optional hardware

APPLICATIONS

- Oven control
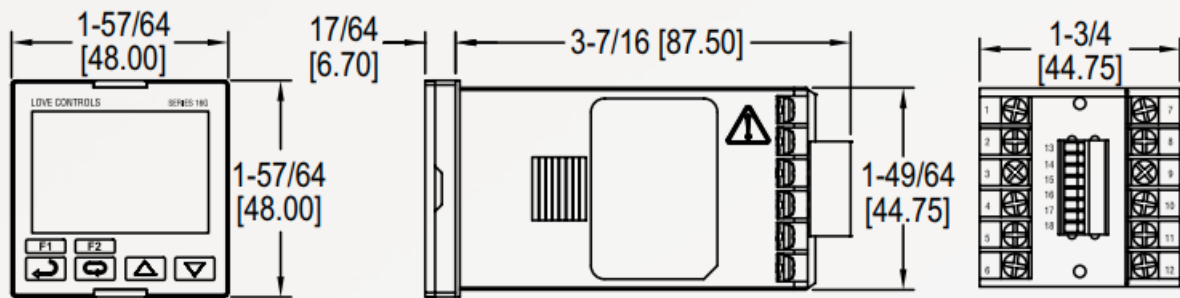- Packaging equipment
- Parts washers

DESCRIPTION

The Series 16G, 8G, & 4G Temperature/Process Loop Controllers allow for monitoring and control of temperature or process conditions. The controller features two independent control outputs for dual loop control using on/off, auto-tune or self-tune PID, fuzzy logic, or manual control methods. RS-485 interface is included with Modbus® communication protocol, for easy bench-top configuration or integration with a PLC or data control system.
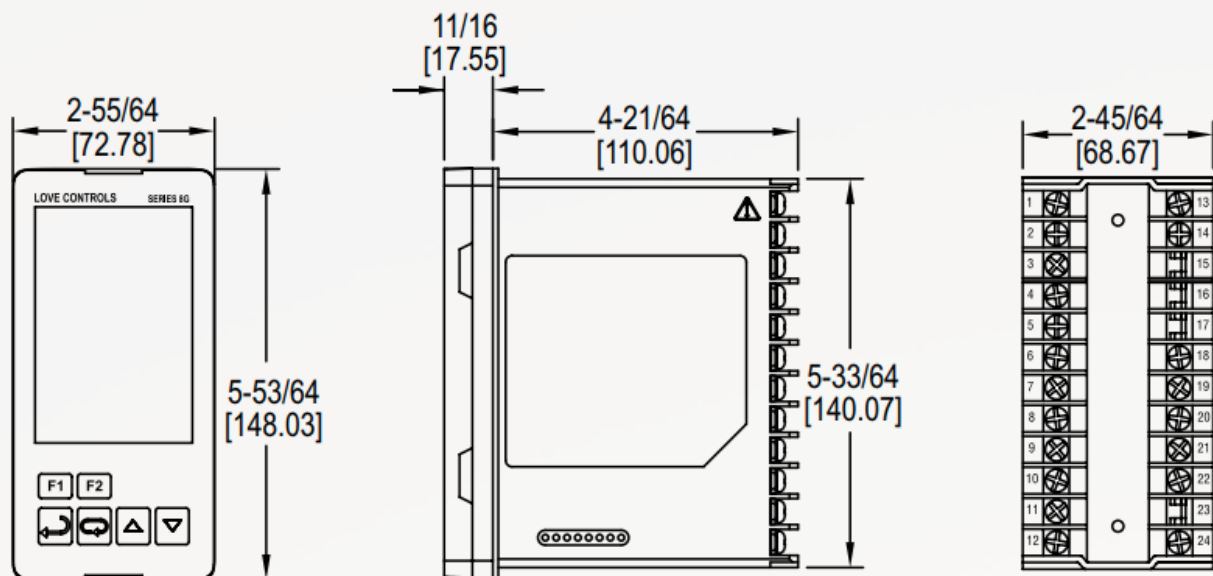
SPECIFICATIONS

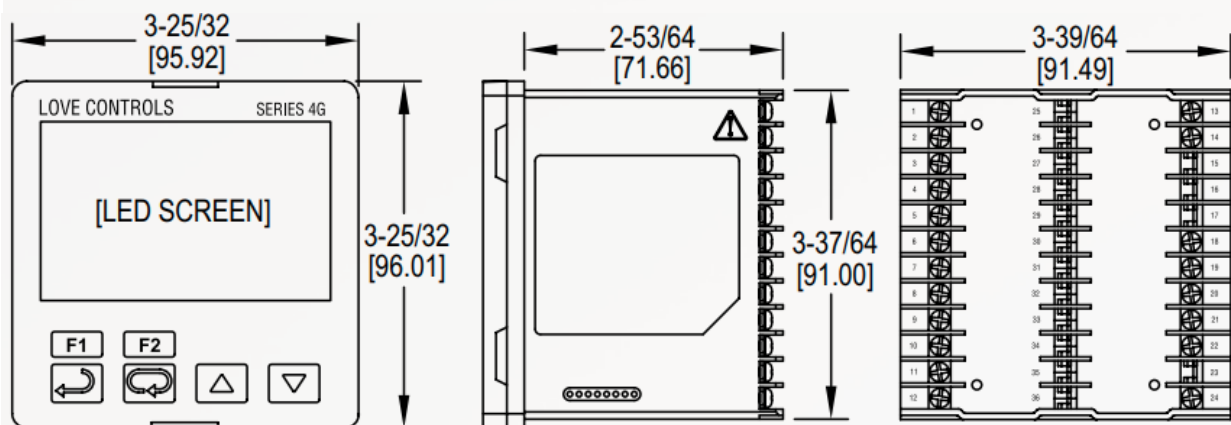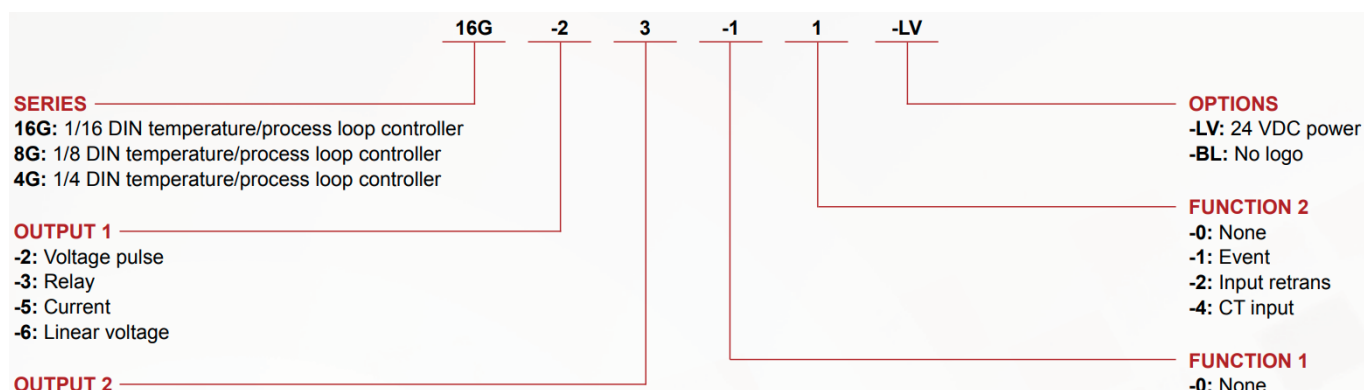| Inputs	Thermocouple, RTD, DC voltages or DC current.
Display	Process value: 4 digit, 0.47″ H (12 mm), orange LCD; Set point value: 4 digit, 0.47″ H (12 mm), green LCD.
Accuracy	±1.8°F plus ±0.3% of span (±1°C plus ±0.3% of span) at 77°F (25°C) after 20 minutes warm up.
Power Requirements:	100-240 VAC -20/+8%, 50/60 Hz; Optional 24 VDC, ±10%.
Power Consumption	5 VA max.
Operating Temperature	32 to 122°F (0 to 50°C).
Storage Temperature	-42 to 150°F (-20 to 65°C).
Memory Backup	Nonvolatile memory.
Control Output Ratings	Relay: SPST, 5 A @ 250 VAC resistive; Voltage pulse: 12 V (max. 40 mA); Current: 4-20 mA; Linear voltage: 0-10 V.
Alarm Relay Ratings	3 A @ 250 VAC resistive.
Communication	RS-485 Modbus® ASCII/RTU communication protocol.
Weight	9 oz (255g).
Front Panel Rating	IP66.
Compliance	CE, cULus.

DIMENSIONS

16G

8G

4G

HOW TO ORDER

Use the bold characters from the chart below to construct a product code.

| 16G | -2 | 3 | -1 | 1 | -LV |

SERIES
16G: 1/16 DIN temperature/process loop controller
8G: 1/8 DIN temperature/process loop controller
4G: 1/4 DIN temperature/process loop controller

OUTPUT 1
-2: Voltage pulse
-3: Relay
-5: Current
-6: Linear voltage

OUTPUT 2

OPTIONS
-LV: 24 VDC power
-BL: No logo

FUNCTION 2
-0: None
-1: Event
-2: Input retrans
-4: CT input

FUNCTION 1
-0: None

SERIES

- 16G: 1/16 DIN temperature/process loop controller
- 8G: 1/8 DIN temperature/process loop controller
- 4G: 1/4 DIN temperature/process loop controller

OUTPUT 1

- -2: Voltage pulse
- -3: Relay
- -5: Current
- -6: Linear voltage

OUTPUT 2

- -2: Voltage pulse
- -3: Relay
- -5: Current
- -6: Linear voltage

OPTIONS

- -LV: 24 VDC power
- -BL: No logo

FUNCTION 2

- -0: None
- -1: Event
- -2: Input retrans
- -4: CT input

FUNCTION 1

- -0: None

- -1: Event
- -3: Input retrans
- -4: CT input

ACCESSORIES

Model	Description
A-277	250 Ω precision resistor
A-600	R/C snubber
A-900	Weatherproof front mount enclosure
A-901	Weatherproof internal mount enclosure with window
MN-1	Mini-Node™ RS-485 to USB Converter
SCD-SW	Configuration software

ORDER ONLINE TODAY!
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Documents / Resources

Dwyer 16G Temperature Process Loop Controllers [pdf] Owner's Manual
16G Temperature Process Loop Controllers, 16G, Temperature Process Loop Controllers, Process Loop Controllers, Loop Controllers, Controllers

References

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