Watlow's New WATCONNECT® SERIES C1 Control Panel is Quickly Configured for 1 or 2 Loops

Watlow's WATCONNECT® SERIES C1 is a new extension to the WATCONNECT standard control panel family. It is a simple to order, simple to setup, single-phase standard control panel that is quickly configured for 1 or 2 loops and delivered within two weeks. WATCONNECT control panels integrate Watlow's high-quality temperature controller and power controller products for a complete thermal solution.

Watlow® customers will be impressed with the speed and ease of specifying, selecting, pricing, ordering and delivery. WATCONNECT standard control panels are flexible and scalable pre-engineered solutions intended to be used with resistive thermal loads.

Features and Benefits

Full documentation provided for all WATCONNECT control panels at the time of quotation
• Eliminates lengthy approval process and phone calls

WATCONNECT enclosure easily mounts to wall or frame
• Decreases installation time

Terminal block located inside the panel
• Provides easy access for input entries

Bottom power entries
• Allows for easy connections inside the panel

IP-20 finger-safe construction
• Decreases chance of electrical shock for service and maintenance personnel

Features and Benefits (con't)

Fast acting fuses
• Protects sensitive solid state components from damaging currents

Carbon steel and fiberglass reinforced polyester enclosure materials available
• Offers economical solution for the user's application

Supports a wide variety of sensor inputs including ASTM thermocouple Types J, K and T, 3 wire 100 ohm RTD and 4 to 20mA process input
• Provides the customer a variety of process signals to ensure compatibility with field equipment

Watlow process temperature controller coupled with the DIN-A-MITE® power switching device provides superior thermal performance through tight process temperature control
• Delivers full system solution for a variety of applications

WATLOW
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WATCONNECT C1 SERIES Standard Control Panels Include:

- UL®/cUL® listed control panels for installation in indoor and non-hazardous locations
- Configurable for 1 or 2 thermal loops, 18 full load amps per loop
- 120/240V, single phase power
- FRP enclosure (single loop 4X option)
- Carbon steel (single or 2 loop Type 4)
- Wall or frame mount enclosures with hinged door, sized to accommodate bottom power entry
- Limited access and increased safety through the use of mechanical latches that secure the hinged door to the enclosure
- Fused branch circuit protection ensures protection of system load and panel components
- EZ-ZONE® PM6 process control with integrated high limit reduces complexity
- DIN-A-MITE® family of solid state SCR power switching devices with zero cross output firing and touch-safe terminals provide outstanding reliability
- Safety mechanical contactor(s) removes power to system load in the event of a high limit and/or safety situation
- Process controllers come pre-programmed for the configured options and operation, reducing overall set-up time

- Operator interface features:
  - Illuminated control power on/off switch (one per panel) for increased visibility of control status (status determination at a glance)
  - Illuminated heater enables (one for each control loop) increases visibility of heater power status (status determination at a glance)
  - Illuminated heater high temperature light
  - Main power disconnect (optional)
- Weight chart

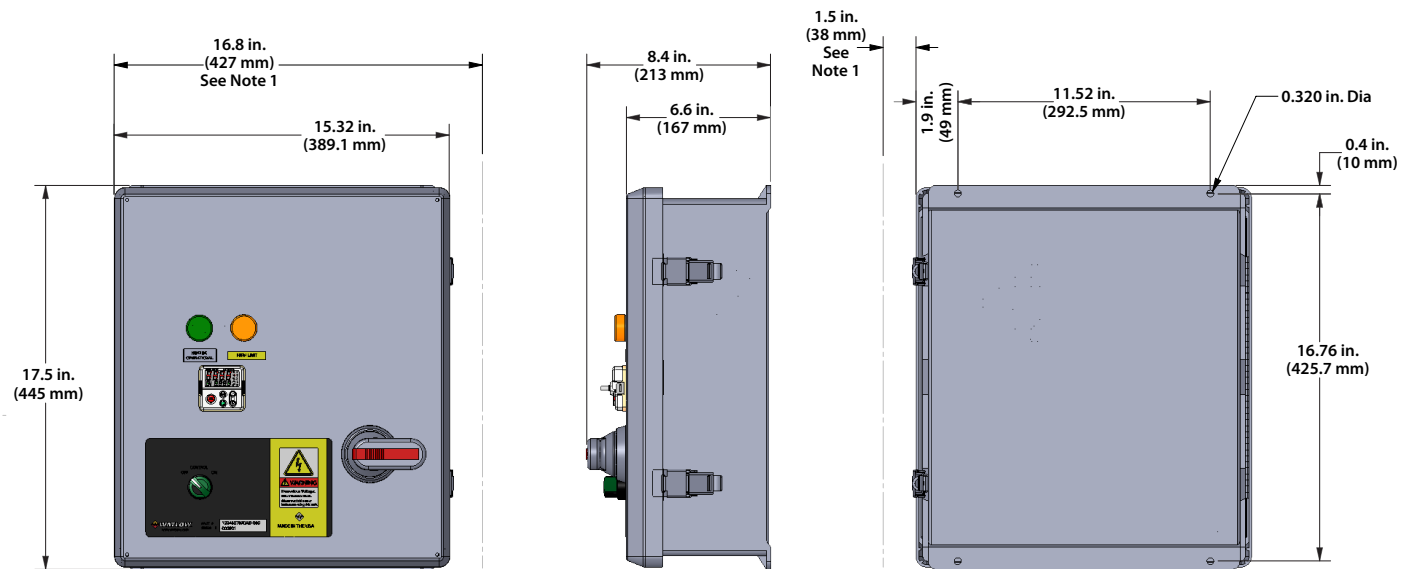| Weight Per Panel	
FRP single loop	24 lbs
Carbon steel single loop	38 lbs
Carbon steel two loop	42 lbs

Environment (Indoor applications only)

- Operating temperature: 0 to 104°F (-18 to 40°C)
- Storage temperature: -40 to 185°F (-40 to 85°C)
- Relative humidity: 0 to 90%, non-condensing

Agency Approvals

- Preconfigured and certified to UL®/cUL® certified/listed for non-hazardous locations
- Non-hazardous panels certified to one or more of the following:
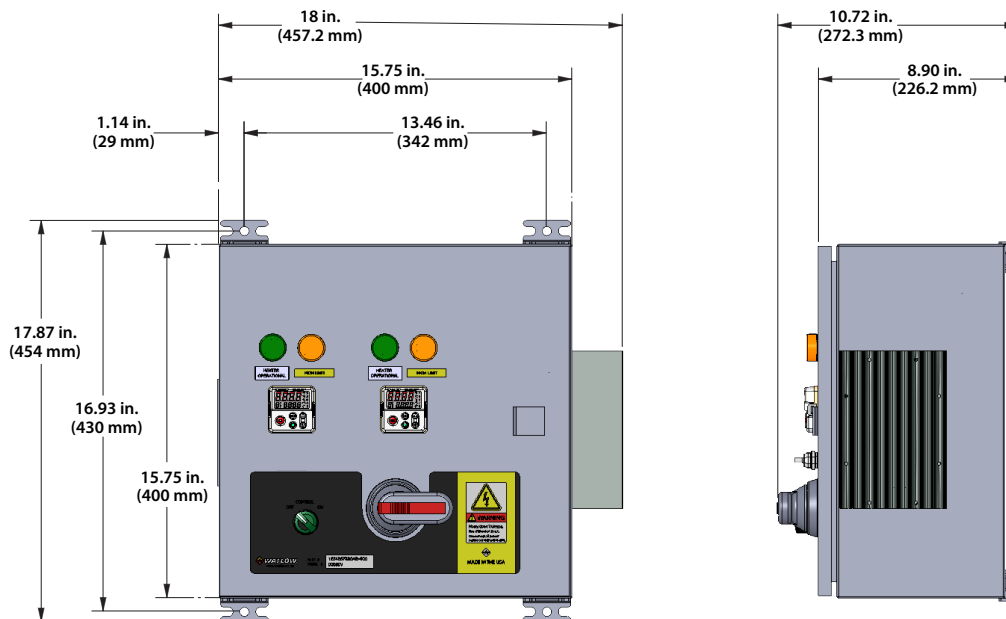 - Type 4, 4X, 1, 12 and IP65 (indoor use)

Dimensional Drawings

Single-Loop, FRP Enclosure (4X Option)

16.8 in. (427 mm) See Note 1
15.32 in. (389.1 mm)
17.5 in. (445 mm)
8.4 in. (213 mm)
6.6 in. (167 mm)
1.5 in. (38 mm) See Note 1
1.9 in. (49 mm)
11.52 in. (292.5 mm)
0.320 in. Dia
0.4 in. (10 mm)
16.76 in. (425.7 mm)

Note 1. Allowance for locking latch travel.

Note: Shown with optional main disconnect.

Single and Two-Loop Carbon Steel Enclosure (Two Loop Shown)

18 in. (457.2 mm)
15.75 in. (400 mm)
1.14 in. (29 mm)
13.46 in. (342 mm)
17.87 in. (454 mm)
16.93 in. (430 mm)
15.75 in. (400 mm)
10.72 in. (272.3 mm)
8.90 in. (226.2 mm)

Note: Shown with optional main disconnect.

Ordering Information

WATCONNECT C1 Extra Small—Non-Hazardous Location (Indoor Only)

SERIES C1
Extra small, non-hazardous control panel

Standard Features					
SCCR	Process Controller Type	Control Mode	Hi Limit(s) per Loop/Zone	Operators	Communications
5kAIC	EZ-ZONE PM6	PID	1	Std	Remote shutdown input + Std bus connection (to TBs)

Configurations						Standard Options			
	Total # of Control Loops or Zones	Total # of Branch Circuits in Panel	Full Load Amps/ Branch Circuit	# Phases Switched	Branch Load Connection(s)	Enclosure	Hi-Limit Type	Main Disconnect	Certification
Base 1	1	1	18	1	Power distribution block (7 connections/ branch)	Carbon steel (Type 4/1/12/IP65)	Integrated (with process controller)	None (on/off switch)	UL®/cUL® listed for non-hazardous environment
Base 2	1	2	18 (36 total amps)	1	Power distribution block (7 connections/ branch)	Carbon steel (Type 4/1/12/IP65)	Integrated (with process controller)	None (on/off switch)	UL®/cUL® listed for non-hazardous environment
Base 3	2	2	18 (36 total amps)	1	Power distribution block (7 connections/ branch)	Carbon steel (Type 4/1/12/IP65)	Integrated (with process controller)	None (on/off switch)	UL®/cUL® listed for non-hazardous environment

Voltage (must select one)
120V single phase (power + neutral + ground)
240V single phase (power + power + ground)

Process Sensor (must select one)
K
RTD
J
T
4-20mA

Limit Sensor (must select one)
K
RTD
J
T
4-20mA

Enclosure Option
FRP Type 4X/1/12/IP65 (one branch circuit only)

Hi-Limit Option
Discrete (separate controller)

Disconnect Option
Main power disconnect switch with lock out/tag out handle (not fuse protected)

Certification Option
Future option

Communications Accessory Option
USB to Std Bus cord/convertor (cord in box)

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