Compact Solid State Power Controller Delivers Big Performance

Watlow's DIN-A-MITE[®] Style A power controller provides a low-cost, highly compact and versatile solid state option for controlling electric heat. You also get all the quality you expect from a Watlow designed and manufactured product. DIN rail and back panel mounting is standard on every controller. There is no need to worry about mercury, the DIN-A-MITE controller is mercury free.

Capabilities include single-phase zero cross switching up to 25 amps at 600V~(ac) (see rating curve). A unique integrated design removes the guesswork associated with selecting a proper heat sink and adequate terminations for the application.

Variable time base, 4-20mA process control or $V \approx (ac/dc)$ input contactor versions are available. All configurations are model number dependent and factory selectable.

The DIN-A-MITE power controller is made in the USA.

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Your Authorized Watlow Distributor Is:



Features and Benefits

DIN rail or standard panel mount

• Versatile, quick and low-cost installation

Compact size

· Reduced panel space; less cost

Touch-safe terminals

- Increased safety for installer/user
- No mercury
 - Environmentally safe product

Faster switching with solid state

- Saves energy and extends heater life
- UL® 508 listed, C-UL® and CE with filter
- Meets applications requiring agency approval

Back-to-back SCR design

Rugged design



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Specifications

Operator Interface

- Command signal input
- Input indicator light LED

Amperage

- Single-phase, see the output rating curve
- Maximum I²t for fusing: 4000A²sec
- Latching current: 200mA
- Holding current: 100mA
- Power dissipation is 1.2 watts per amp switched

Line Voltage

- 20V~(ac) to 660V~(ac) model number dependent. See ordering information
- Off-state leakage: 1mA at 25°C (77°F) maximum
- 50/60Hz independent

Control Mode-Zero Cross

- Input Control Signal Type C: V=(dc) input contactor
- Input Control Signal Type K: V~(ac) input contactor
- To increase service life on contactor input models, the cycle time should be less than three seconds
- Input Control Signal Type F: 4 to 20mA=(dc) proportional variable time base control

Input Command Signal

- AC contactor
- 24V~(ac) ±10 percent, 120V~(ac) +10/-25 percent, 240V~(ac) +10/-25 percent @ 25mA maximum per controlled leg • DC Contactor
- 4.5V= to 32V=(dc): maximum current @ 4.5 V=(dc) is 8mA
- Loop powered linear current
- 4mA⁻⁻⁻⁻ to 20mA⁻⁻⁻(dc): loop-powered. Input Type F0 option only (Requires current source with 6.2V⁻⁻⁻(dc) available. No more than three DIN-A-MITE inputs can be connected in series)

Agency Approvals

- UL[®] 508-listed and C-UL[®] File E73741
- CE with proper filter: 89/336/EEC Electromagnetic Compatibility Directive 73/23/EEC Low Voltage Directive
 - EN 61326 Industrial Immunity Cass A Emissions
 - EN 50178 Safety requirements

Input Terminals

- Compression: will accept 0.2 mm² to 2 mm² (24 to 14 AWG) wire Line and Load Terminals
- Compression: will accept 0.8 \mbox{mm}^2 to 8.4 \mbox{mm}^2 (18 to 8 AWG) wire

Operating Environment

- Up to 80°C (176°F). See the output rating curve chart for your application
- 0 to 90 percent RH (relative humidity), non-condensing
- Installation only tested to 3,000 meters
- Units are suitable for "Pollution degree 2"

Mounting

Options include DIN rail or standard back panel mounting.

- The DIN rail specification is: DIN EN 50022, 35 mm by 7.5 mm
- Mount the cooling fins vertically

Dimensions

- Height: 95 mm (3.7 in.) high x 45 mm (1.8 in.) wide x
- 98 mm (3.9 in.) deep
- Weight: 0.32 kg (0.71 lb)

Specifications are subject to change without notice.

Ordering Information

To order, complete the code number on the right with the information below.

DIN-A-MITE

Style A = Solid State Power Controller

D A 1 Q	
Phase 1 = 1 phase, 1 controlled leg	
0 = Natural convection current rating 18A @ 50°C (See derating curve for current rating at other temperatures)	
Line & Load Voltage 02 = 24 to 48V~(ac) 24 = 100 to 240V~(ac) 60 = 277 to 600V~(ac)	
Input Type $C0 = 4.5 \text{ to } 32V \Rightarrow (dc) \text{ contactor}$ $F0 = 4 \text{ to } 20\text{m} \Rightarrow (dc) \text{ proportional}$ $K1 = 22 \text{ to } 26V \sim (ac) \text{ contactor}$ $K2 = 100 \text{ to } 120V \sim (ac) \text{ contactor}$ $K3 = 200 \text{ to } 240V \sim (ac) \text{ contactor}$	
Manual Language 0 = English 1 = German 2 = Spanish 3 = French	
Custom Parts Designation 00 = Standard parts	

Recommended Semiconductor Fuse and Fuse Holder

	Watlow	Bussmann	Ferraz
Fuse	17-8025	FWC25A10F	L330014
Holder	17-5110	B24202	G81219

Output Rating Curve



To be automatically connected to the nearest North American Technical and Sales Office call:

1-800-WATLOW2

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