# Compact Solid State Power Controller Delivers Big Performance

The Watlow® 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≂(ac/dc) input contactor versions are available. All configurations are model number dependent and factory selectable. This power controller also includes 200KA short circuit current rating (SCCR) tested up to 480V~(ac) to prevent arch flash with required fusing.

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

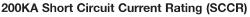
Watlow® and DIN-A-MITE® are registered trademarks of Watlow Electric Manufacturing Company.

 $\text{UL}^{\scriptsize{\texttt{o}}}$  and  $\text{C-UL}^{\scriptsize{\texttt{o}}}$  are registered trademarks of the Underwriter's Laboratories, Inc.

#### **Your Authorized Watlow Distributor Is:**



## **Features and Benefits**



Prevents arc flash

### **DIN-rail** or standard panel mount

• Versatile, quick and low-cost installation

#### Compact size

• Reduces panel space; less cost

#### **Touch-safe terminals**

Increases 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

Insures a rugged design





# **Specifications**

#### **Operator Interface**

- Command signal input
- Input indicator light LED

#### **Amperage**

- Single phase, see the output rating curve
- Max. I2t for fusing: 4000A2sec
- Latching current: 200mA
- Holding current: 100mA
- Power dissipation is 1.2 watts per amp switched
- 200KA SCCR, Type 1 and 2 approved with the recommended fusing; see user manual.

#### Line Voltage

- 20 to 660V~(ac) model number dependent; see ordering information
- Off-state leakage: 1mA at 77°F (25°C) max.
- 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; 3 cycles on, 3 cycles off at 50% power

#### Input Command Signal

- AC contactor
  - 24V~(ac) ±10%, 120V~(ac) +10/-25%, 240V~(ac) +10/-25% @ 25mA max, per controlled leg
- DC Contactor
  - 4.5V= to 32V=(dc): max. current @ 4.5 V=(dc) is 8mA per lea
- 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 to 2 mm<sup>2</sup> (24 to 14 AWG) wire

#### **Line and Load Terminals**

• Compression: will accept 0.8 to 8.4 mm<sup>2</sup> (18 to 8 AWG) wire

#### **Operating Environment**

- Up to 176°F (80°C); see the output rating curve chart for your application
- 0 to 90% 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**

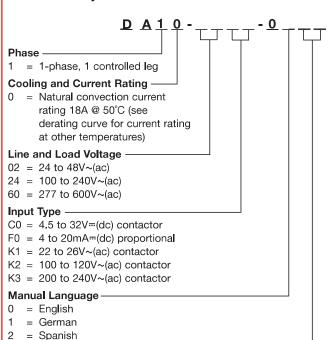
- Height: 3.7 in. (95 mm) high x 1.8 in. (45 mm) wide x 3.9 in. (98 mm) deep
- Weight: 0.71 lb (0.32kg)

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



# 00 = Standard parts

 Watlow
 Cooper Bussmann®
 Ferraz Shawmut

 Fuse
 17-8025
 FWC25A10F
 L330014

 Holder
 17-5110
 B24202
 G81219

Recommended Semiconductor Fuse and Fuse Holder

# **Output Rating Curve**

**Custom Parts Designation -**

3

= French



Cooper  ${\tt Bussman^{\circ}}$  is a registered trademark of Cooper Bussman, Inc.

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

# 1-800-WATLOW2 • www.watlow.com • info@watlow.com

International Technical Sales Offices: Australia, +61-3-9335-6449 • China, +86-21-6106-1425 • France, +33 1 3073-2425 • Germany, +49 (0) 7253-9400-0 • Italy, +39 (0) 2 458-8841 • Japan, +81-3-3518-6630 • Korea, +82-2-2628-5770 • Malaysia, +60-3-8076-8741 • Mexico, +52 (442) 217-6235 • Singapore, +65-6773-9488 • Spain, +34 91 675 1292 • Sweden, +46 35-27-1166 • Taiwan, +886-7-288-5168 • United Kingdom, +44 (0) 115-964-0777