SCR Power Controller Delivers Up to 100 Amperes in a Smart Package

The DIN-A-MITE® D silicon controlled rectifier (SCR) power controller provides an inexpensive, versatile product for controlling heat in an efficient package. This controller is designed and manufactured with the quality features expected from Watlow®. The mounting footprint matches that of the industry standard mercury displacement relay, but there is no need to worry about mercury, the DIN-A-MITE controller is mercury free.

The DIN-A-MITE Style D is capable of zero cross switching up to 100 amperes single-phase, at 600VAC at 86°F (30°C), depending on the model selected. Combining the input of two or three controllers allows control of three-phase loads. The controller is completely touch-safe and includes on-board, front-accessible, semiconductor fuses. Options include a current transformer for load current monitoring and a shorted output alarm. The controller is UL® 508, C-UL® and CE approved making it ideal for panels and cabinets that require agency approvals.

Variable time-base, 4-20mA process control and VAC/VDC input contactor options are available. All options are model number dependent and factory configurable. This power controller also includes 200KA short circuit current rating (SCCR) tested up to 480VAC to minimize damage in the event of a short circuit when used with required fusing.

Watlow’s DIN-A-MITE D is available through Watlow SELECT®, a program that enables you to quickly identify, configure and receive your thermal products faster and easier than ever before. With SELECT, you use a variety of tools to guide your decision, configure products for an exact fit and quickly receive your order. Visit www.watlow.com/select to learn more.

Features and Benefits

200KA SCCR with proper fusing
• Minimizes damage in the event of a short circuit

Standard panel mount
• Provides same mount as industry standard 100A MDR

Compact size
• Reduces panel space and cost

Touch-safe terminals
• Increases safety for installer and user

Mercury free
• Assures environmental safety

Faster switching with solid state
• Saves energy and extends heater life

UL® 508 listed, C-UL®, RoHS 2 and CE with filter
• Meets applications requiring agency approval

Back-to-back SCR design
• Ensures a rugged design

On-board semiconductor fusing
• Provides quick access with no extra mounting necessary

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UL® and C-UL® are registered trademarks of the Underwriter’s Laboratories, Inc.

Cooper Bussman® is a registered trademark of Cooper Bussman, Inc.
Agency Approvals
- EN 61326-1: Industrial Immunity Class A Emissions
- Not suitable for Class B emissions environment
- 2006/95/EC Low Voltage Directive
- EN 50178 Safety Requirements

UL® 508-listed and C-UL® File E73741

Control Input Terminals
- Compression: will accept 26 to 12 AWG (0.13 to 3.3 mm²) wire

Line and Load Terminals
- Compression: will accept 6 to 2 AWG (13.3 to 33.6 mm²) wire

Operating Environment
- Operating temperature range: -4 to 176°F (-20 to 80°C)
- 0 to 90% RH (relative humidity), non-condensing
- Vibration: 2 g, 10Hz to 150Hz, applied in any one of three axes
- Storage temperature: -40 to 185°F (-40 to 85°C)
- Insulation tested to 3,000 meters
- Installation Category III, pollution degree 2

Mounting
- Back-panel mounting; fits the same mounting pattern as a 100A, single-phase mercury displacement relay
- On-board semiconductor fusing

Dimensions
- 7.3 in. (185 mm) high x 2.6 in. (66 mm) wide x 9.4 in. (239 mm) deep
- Weight: 6.5 lb (2.95kg)

Specifications are subject to change without notice.

Output Rating Curve

<table>
<thead>
<tr>
<th>Current (Amperes) Into a Resistive Load</th>
<th>Max. Internal Enclosure Ambient Temperature (˚C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>50</td>
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</table>

| DIN-A-MITE Style D Natural Convection Ratings at 100% On |

<table>
<thead>
<tr>
<th>DIN-A-MITE Style D Natural Convection Ratings at 100% On</th>
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<tr>
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Ordering Information

Part Number

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<tr>
<th>1</th>
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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
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<th>11</th>
<th>12</th>
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</thead>
<tbody>
<tr>
<td>D</td>
<td>D</td>
<td>Phase</td>
<td>Cooling &amp; Current Rating</td>
<td>Line &amp; Load Voltage</td>
<td>Control</td>
<td>Current Sensing or Alarm</td>
<td>User Manual</td>
<td>Custom Options</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Phase
- 1 = 1-phase, 1 controlled leg

Cooling and Current Rating (see rating curve)
- 0 = Natural convection

Line and Load Voltage
- 02 = 24 to 48VAC
- 24 = 120 to 240VAC
- 48 = 277 to 480VAC
- 60 = 277 to 600VAC

Control
- C0 = 4.5 to 32VDC input, contactor output
- F0 = 4 to 20mA DC input, variable time-base output
- K1 = 22 to 26VAC input, contactor output
- K2 = 100 to 120VAC input, contactor output
- K3 = 200 to 240VAC input, contactor output

Current Sensing or Alarm
- 0 = No alarm
- 1 = Load current transformer
- S = Shorted SCR alarm

User Manual
- 0 = English
- 1 = German
- 2 = Spanish
- 3 = French

Custom Options
- 00 = Standard part

Recommended Semiconductor Fuse

<table>
<thead>
<tr>
<th>Watlow Part Nbr.</th>
<th>Cooper Bussman® Part Nbr.</th>
</tr>
</thead>
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<tr>
<td>0808-0096-0000</td>
<td>170N3437</td>
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