### **Combined Branch Protection and Semiconductor Fusing**

# Protect Branch Circuits and Solid State Power Controllers With One Fuse



To meet national and local electrical code requirements for branch circuit protection and to protect solid state power controllers, such as Watlow's DIN-A-MITE®, a DFJ fuse is recommended. Watlow® offers fast-acting DFJ fuses and holders in amperage ratings covering the range of load currents appropriate for use with the entire DIN-A-MITE power controller and EZ-ZONE® ST integrated controller families.

DFJ fuses protect personnel from injury, protect equipment from damage and are required to minimize damage in the event of a short circuit and achieve short circuit current ratings for Watlow DIN-A-MITE power controllers and EZ-ZONE ST controllers.

#### **Features and Benefits**

# Combination semiconductor and branch circuit protection

- Fulfills electrical code requirements for branch circuit protection
- Provides protection required for short circuit rating (SCCR) of Watlow products up to 200kA
- Protects valuable semiconductor-based power controllers from damage in the event of a shorted heater
- Simplifies cabinet design
- Reduces wiring time
- · Reduces number of components and cost

#### **DIN-rail mount**

• Ensures easy installation

#### Lockout/tagout

Protects service personnel

#### Open fuse indicator

Provides quick troubleshooting of blown fuses



#### **Fuse Selection Guide**

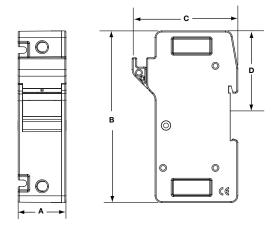
Use a DFJ fuse to protect both a branch circuit or power cable and the solid state power controller on the circuit with a single fuse.

- 1. Select a fuse with an amperage rating at least 125 percent of the connected load (or the next standard size above.)
- 2. Select a fuse with an l²t rating not greater than the l²t rating of the solid state power controller. See the specification sheet for the power controller to be protected for l²t specification. See DFJ fuse l²t below.
- 3. Use a Watlow recommended fuse. SCCR ratings for Watlow power controllers are only valid with Watlow recommended fuses and only up to 480VAC. For applications above 480VAC or products other than DIN-A-MITE or EZ-ZONE ST contact your Watlow representative.

	I <sup>2</sup> T up to 480V (A <sup>2</sup> Sec)	Watlow Part Number	Bussman Equivalent Fuse Part Number	Watlow Single Fuse Holder Part Number	Bussman Holder Equivalent Part Number	Holder Dimensions (in.)			
Fuse Amp Rating						Α	В	С	D
20	151	0808-0325-0020	DFJ-20	0808-0326-1530	CH30J1I	1.28	4.59	2.80	2.30
30	414	0808-0325-0030	DFJ-30	0808-0326-1530	CH30J1I	1.28	4.59	2.80	2.30
40	1080	0808-0325-0040	DFJ-40	0808-0326-3560	CH60J1I	1.58	4.88	2.80	2.50
50	2268	0808-0325-0050	DFJ-50	0808-0326-3560	CH60J1I	1.58	4.88	2.80	2.50
60	2909	0808-0325-0060	DFJ-60	0808-0326-3560	CH60J1I	1.58	4.88	2.80	2.50
80	3521	0808-0325-0080	DFJ-80	0808-0326-7010	J60100-1CR	1.95	6.28	2.28	1.5
100	7920	0808-0325-0100	DFJ-100	0808-0326-7010	J60100-1CR	1.95	6.28	2.28	1.5

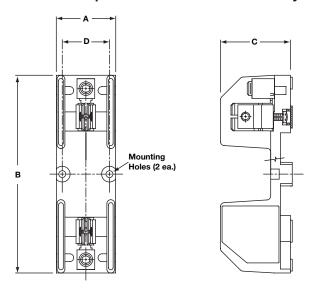
#### **Dimensional Drawings**

#### 15 to 30 and 35 to 60 Amp Fuse Holders



Mounts on 35 mm DIN-rail (DIN EN 50022 35 x 7.5 mm)

#### 80 to 100 Amp Fuse Holder Panel Mount Only



Mounting holes: 0.22 in. (5.5 mm) dia. hole with 0.50 in. (12.7 mm) dia. x 0.27 in. (6.9 mm) deep counter sink bore

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

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

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