

Strip Heaters

375 Finned Strip

Like its 375 strip counterpart, the 375 finned strip heater is constructed of highly-compacted MgO-based insulation, which conducts heat efficiently from the nickel-chrome element wire to the sheath. Two inch wide (51 mm) plated steel fins are attached in a way that maximizes surface contact so heat is displaced and transferred into the air faster.

Performance Capabilities

- Aluminized steel sheath temperatures to 595°C (1100°F)
- UL® approved to 240V~(ac) (File No. E52951)
- CSA approved to 600V~(ac) (File No. LR7392)

Features and Benefits

Nickel-chrome element wire is centered in the heater

- Assures uniform heat

Two inch (51 mm) wide plated fins are attached

- Maximizes surface contact so heat is displaced and transferred into the air faster

Aluminized steel sheath

- Operates at higher temperatures
- Resists corrosion better than iron-sheath heaters

Optional 430 stainless steel sheath

- Available for more corrosive environments

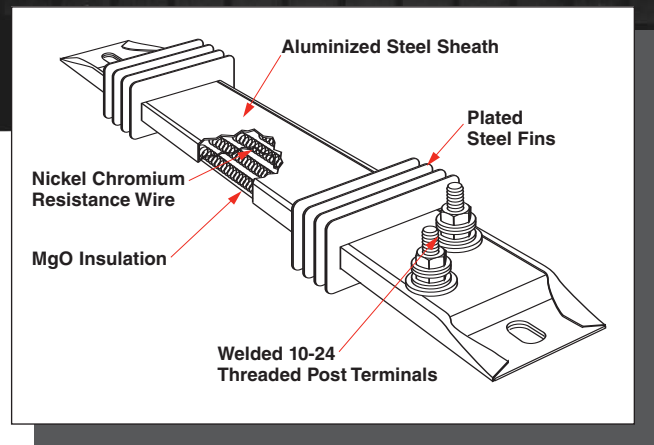
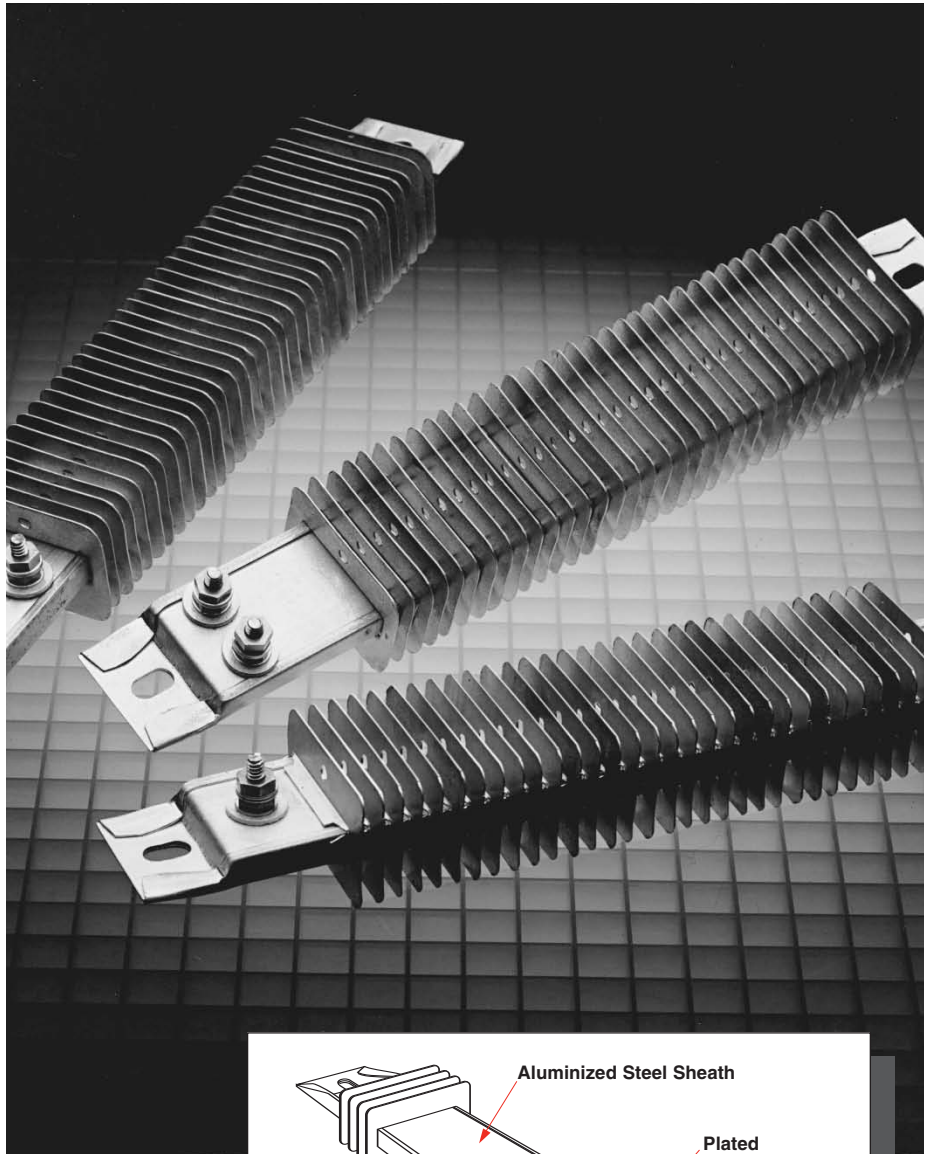
Welded post terminals

- Produces strong, trouble-free connections

Rigid 3/8 inch (9.5 mm) thick design

- Enables the heater to fit into many existing applications

Available lengths from 5 1/2 inches (140 mm) to 48 inches (1220 mm)



Strip Heaters

Applications

- Shrink tunnels
- Duct heaters
- Space heaters
- Drying ovens
- Incubators
- Air heating
- Load bank resistors
- Heat curing
- Ink drying
- Food warmers
- Moisture protection
- Process welding
- Dehumidifiers
- Stress relieving ovens

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Applications and Technical Data

Calculating Watt Density

Use the graph and formulas to make certain the maximum allowable watt density for the heater will not be exceeded in the application.

Open air watt density is calculated for total heated surface area.

Formulas:

$$\text{Watt Density} = \frac{\text{Wattage}}{\text{Heated Area}}$$

Heated Area

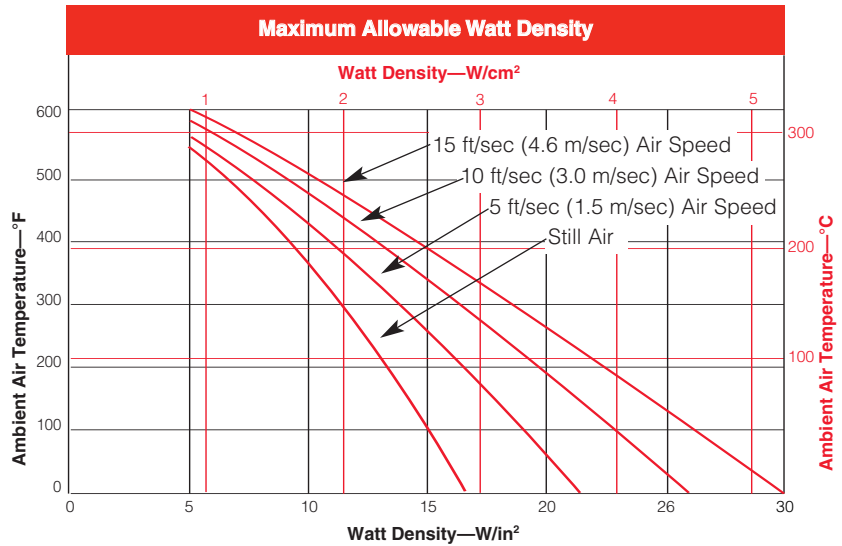
$$\begin{aligned} \text{(Offset Terminals)} &= [\text{Overall Length (A)} - 4.00 \text{ in.}] \times 3.75 \text{ in.} \\ &= [\text{Overall Length (A)} - 101.6 \text{ mm}] \times 95.25 \text{ mm} \end{aligned}$$

Heated Area

$$\begin{aligned} \text{(Parallel Terminals)} &= [\text{Overall Length (A)} - 3.12 \text{ in.}] \times 3.75 \text{ in.} \\ &= [\text{Overall Length (A)} - 79.25 \text{ mm}] \times 95.25 \text{ mm} \end{aligned}$$

Heated Area

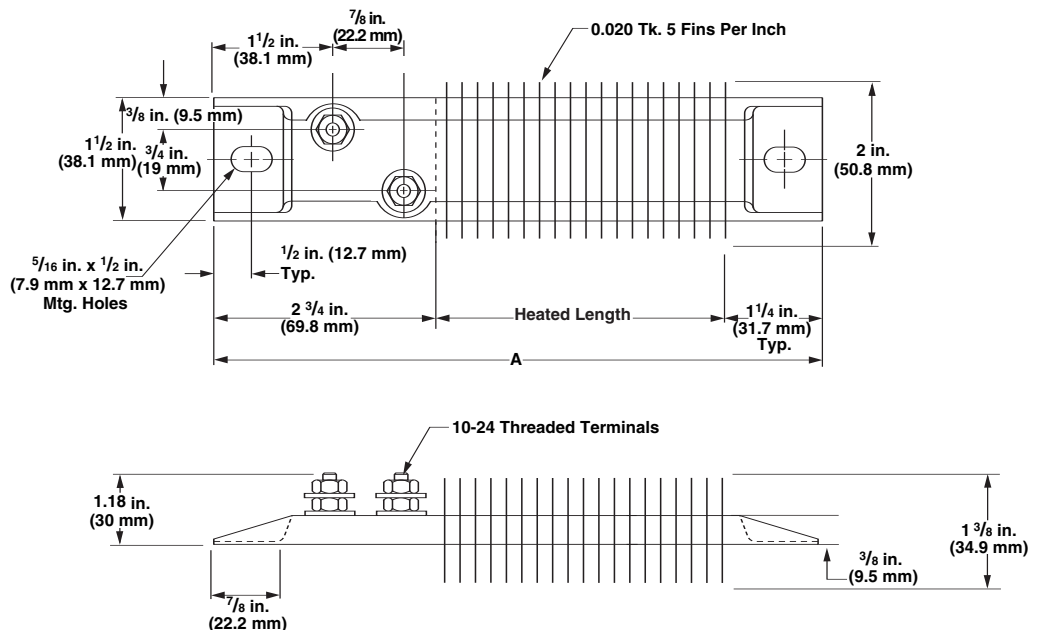
$$\begin{aligned} \text{(One-on-One Terminals)} &= [\text{Overall Length (A)} - 4.25 \text{ in.}] \times 3.75 \text{ in.} \\ &= [\text{Overall Length (A)} - 107.95 \text{ mm}] \times 95.25 \text{ mm} \end{aligned}$$



Termination Options

Offset Terminals

Two 10-24 threaded post terminals are offset from each other on the same end.



Strip Heaters

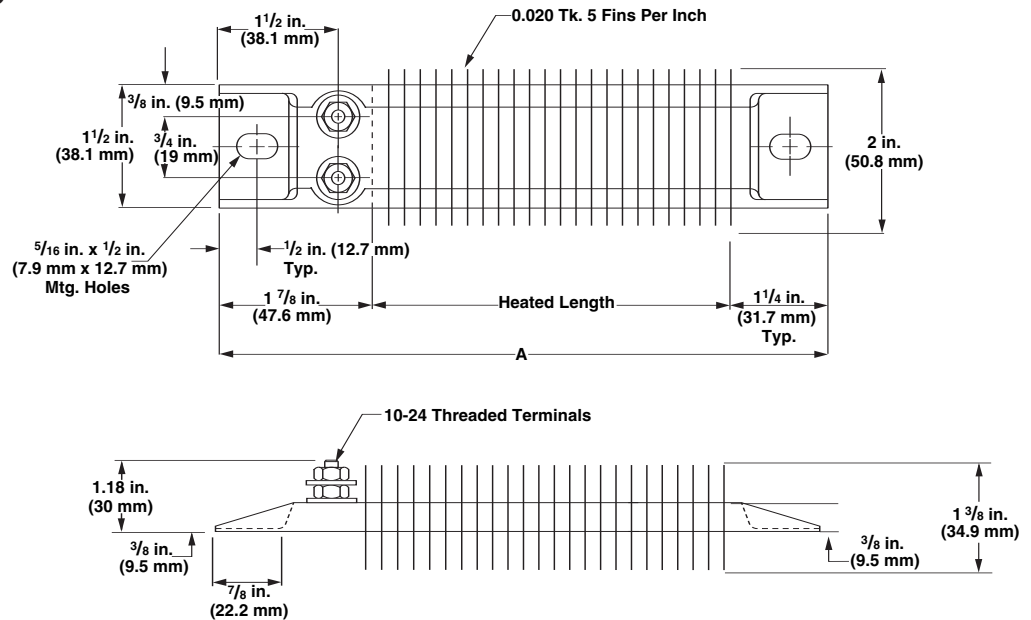
375 Finned Strip

Termination Options

continued

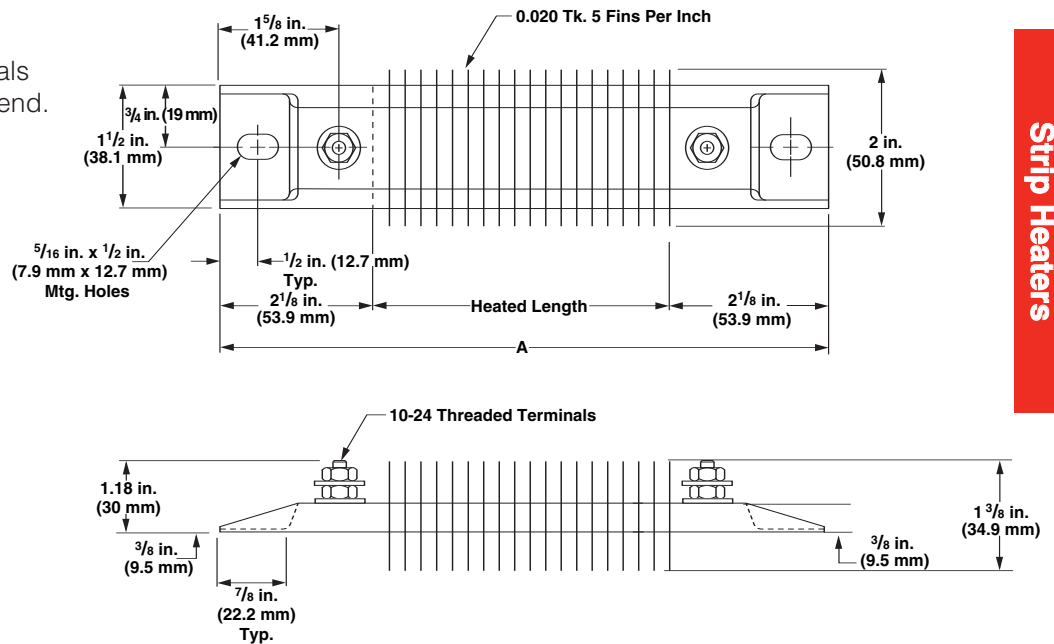
Parallel Terminals

Two 10-24 threaded post terminals are used; both terminals on one end.



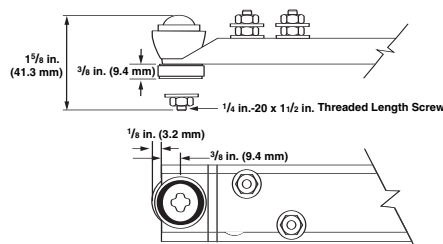
One-on-One Terminals

Two 10-24 threaded post terminals are used; one terminal on each end.



Secondary Insulation Bushings

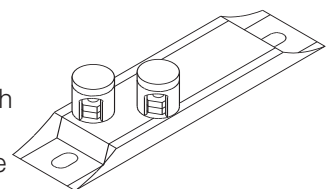
Insulators are suitable for use when air heating and/or voltage to ground is a concern. Secondary insulation bushing kit part number **Z5230** contains one set of bushings for one heater. To accommodate the bushings, $1\frac{17}{32} \times 1\frac{1}{16}$ inch



diameter mounting holes **must** be specified when ordering.

Ceramic Terminal Covers

A convenient and economical way to insulate post terminals. Sized for standard length posts. Screws have 10-24 thread size. These are supplied as an accessory item and shipped separately. Specify **Z-4918** and quantity.



Strip Heaters

F.O.B.: St. Louis, Missouri

375 Finned Strip

How to Order

To order stock 375 finned strip heater, specify:

- 375 finned strip
- Quantity
- Watlow code number
- Voltage
- Wattage
- Removal of mounting tabs, if desired

If stock units do not meet application needs, Watlow can manufacture 375 finned strip heaters to special requirements. For **made-to-order** units, please specify, in addition to above information:

- Width
- Length, including mounting tabs
- Terminal type (offset, parallel or one-on-one)

Availability

Assembly Stock: Shipment within three working days

Made-to-Order: Please consult your Watlow sales engineer or authorized distributor.

Width in. (mm)	Termination	Length in. (mm)	Volts	Power (Watts)	W/in2 (W/cm2)	Approx. Net Wt. lbs (kg)	Availability	Code No.
1½ (38.1)	Parallel	5½ (139.7)	120	125	14 (2.1)	0.5 (0.23)	Assy. Stock	SGA1J5JY2
	Parallel	5½ (139.7)	120	250	28 (4.3)	0.5 (0.23)	Assy. Stock	SGA1J5JY3
	Parallel	6 (152.4)	120	150	14 (2.1)	0.5 (0.23)	Assy. Stock	SGA1J6AY1
	Parallel	6 (152.4)	240	150	14 (2.1)	0.5 (0.23)	Assy. Stock	SGA1J6AY2
	Parallel	6 (152.4)	120	300	28 (4.3)	0.5 (0.23)	Assy. Stock	SGA1J6AY3
	Parallel	6 (152.4)	240	300	28 (4.3)	0.5 (0.23)	Assy. Stock	SGA1J6AY4
	Offset	7½ (190.5)	120	150	12 (1.8)	0.7 (0.32)	Assy. Stock	SGA1J7JW1
	Offset	7½ (190.5)	240	200	15 (2.3)	0.7 (0.32)	Assy. Stock	SGA1J7JW3
	Offset	8 (203.2)	120	150	10 (1.5)	0.7 (0.32)	Assy. Stock	SGA1J8AW2
	Offset	8 (203.2)	240	150	10 (1.5)	0.7 (0.32)	Assy. Stock	SGA1J8AW3
	Offset	8 (203.2)	120	175	12 (1.8)	0.7 (0.32)	Assy. Stock	SGA1J8AW4
	Offset	8 (203.2)	120	250	17 (2.6)	0.7 (0.32)	Assy. Stock	SGA1J8AW6
	Offset	8 (203.2)	240	250	17 (2.6)	0.7 (0.32)	Assy. Stock	SGA1J8AW7
	Offset	8 (203.2)	120	400	27 (4.2)	0.7 (0.32)	Assy. Stock	SGA1J8AW8
	Offset	8 (203.2)	240	400	27 (4.2)	0.7 (0.32)	Assy. Stock	SGA1J8AW9
	Offset	8 (203.2)	120	500	33 (5.1)	0.7 (0.32)	Assy. Stock	SGA1J8AW10
	Offset	8 (203.2)	240	500	33 (5.1)	0.7 (0.32)	Assy. Stock	SGA1J8AW11
	Offset	10½ (266.7)	120	250	10 (1.5)	0.9 (0.40)	Assy. Stock	SGA1J10JW1
	Offset	10½ (266.7)	240	250	10 (1.5)	0.9 (0.40)	Assy. Stock	SGA1J10JW2
	Offset	10½ (266.7)	120	350	14 (2.1)	0.9 (0.40)	Assy. Stock	SGA1J10JW3
	Offset	10½ (266.7)	240	350	14 (2.1)	0.9 (0.40)	Assy. Stock	SGA1J10JW4
	Offset	10½ (266.7)	120	400	16 (2.5)	0.9 (0.40)	Assy. Stock	SGA1J10JW5
	Offset	10½ (266.7)	240	400	16 (2.5)	0.9 (0.40)	Assy. Stock	SGA1J10JW6
	Offset	12 (304.8)	120	250	8 (1.2)	1.0 (0.45)	Assy. Stock	SGA1J12AW1
	Offset	12 (304.8)	240	250	8 (1.2)	1.0 (0.45)	Assy. Stock	SGA1J12AW2
	Offset	12 (304.8)	120	350	12 (1.8)	1.0 (0.45)	Assy. Stock	SGA1J12AW3
	Offset	12 (304.8)	240	350	12 (1.8)	1.0 (0.45)	Assy. Stock	SGA1J12AW4
	Offset	12 (304.8)	120	500	17 (2.6)	1.0 (0.45)	Assy. Stock	SGA1J12AW5
	Offset	12 (304.8)	240	500	17 (2.6)	1.0 (0.45)	Assy. Stock	SGA1J12AW6

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Note: 375 finned strip heaters with one-on-one terminations are available only as a manufactured item. Please contact a Watlow sales engineer for additional information.

Note: ⅝ x ½ inch (7.9 x 12.7 mm) mounting slots are supplied on all 375 finned strip heaters. Tabs can be removed upon request.

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Width in. (mm)	Termination	Length in. (mm)	Volts	Power (Watts)	W/in2 (W/cm2)	Approx. Net Wt. lbs (kg)	Availability	Code No.
1½ (38.1)	Offset	14 (355.6)	120	300	8 (1.2)	1.2 (0.54)	Assy. Stock	SGA1J14AW1
	Offset	14 (355.6)	240	300	8 (1.2)	1.2 (0.54)	Assy. Stock	SGA1J14AW2
	Offset	14 (355.6)	120	500	13 (2.0)	1.2 (0.54)	Assy. Stock	SGA1J14AW3
	Offset	14 (355.6)	240	500	13 (2.0)	1.2 (0.54)	Assy. Stock	SGA1J14AW4
	Offset	15¼ (387.4)	120	325	8 (1.2)	1.4 (0.64)	Assy. Stock	SGA1J15EW1
	Offset	15¼ (387.4)	240	325	8 (1.2)	1.4 (0.64)	Assy. Stock	SGA1J15EW2
	Offset	15¼ (387.4)	240	500	12 (1.8)	1.4 (0.64)	Assy. Stock	SGA1J15EW3
	Offset	17¾ (454.0)	120	350	8 (1.2)	1.6 (0.73)	Assy. Stock	SGA1J17RW1
	Offset	17¾ (454.0)	240	375	9 (1.4)	1.6 (0.73)	Assy. Stock	SGA1J17RW4
	Offset	17¾ (454.0)	120	500	12 (1.8)	1.6 (0.73)	Assy. Stock	SGA1J17RW5
	Offset	17¾ (454.0)	240	500	12 (1.8)	1.6 (0.73)	Assy. Stock	SGA1J17RW6
	Offset	17¾ (454.0)	120	750	18 (2.8)	1.6 (0.73)	Assy. Stock	SGA1J17RW7
	Offset	17¾ (454.0)	240	750	18 (2.8)	1.6 (0.73)	Assy. Stock	SGA1J17RW8
	Offset	17¾ (454.0)	120	1000	24 (3.7)	1.6 (0.73)	Assy. Stock	SGA1J17RW9
	Offset	17¾ (454.0)	240	1000	24 (3.7)	1.6 (0.73)	Assy. Stock	SGA1J17RW10
	Offset	19½ (495.3)	240	350	6 (0.9)	1.7 (0.77)	Assy. Stock	SGA1J19JW2
	Offset	19½ (495.3)	240	500	9 (1.4)	1.7 (0.77)	Assy. Stock	SGA1J19JW4
	Offset	19½ (495.3)	240	750	13 (2.0)	1.7 (0.77)	Assy. Stock	SGA1J19JW5
	Offset	19½ (495.3)	240	1000	17 (2.6)	1.7 (0.77)	Assy. Stock	SGA1J19JW6
	Offset	21 (533.4)	240	500	8 (1.2)	1.9 (0.86)	Assy. Stock	SGA1J21AW4
	Offset	21 (533.4)	120	750	12 (1.8)	1.9 (0.86)	Assy. Stock	SGA1J21AW5
	Offset	21 (533.4)	240	750	12 (1.8)	1.9 (0.86)	Assy. Stock	SGA1J21AW6
	Offset	23¾ (603.3)	240	500	7 (1.0)	2.1 (0.95)	Assy. Stock	SGA1J23NW3
	Offset	23¾ (603.3)	120	1000	14 (2.1)	2.1 (0.95)	Assy. Stock	SGA1J23NW6
	Offset	23¾ (603.3)	240	1000	14 (2.1)	2.1 (0.95)	Assy. Stock	SGA1J23NW7
	Offset	23¾ (603.3)	240	1500	20 (3.1)	2.1 (0.95)	Assy. Stock	SGA1J23NW8
	Offset	25½ (647.7)	120	500	6 (0.9)	2.3 (1.0)	Assy. Stock	SGA1J25JW2
	Offset	25½ (647.7)	240	500	6 (0.9)	2.3 (1.0)	Assy. Stock	SGA1J25JW3
	Offset	25½ (647.7)	240	750	9 (1.4)	2.3 (1.0)	Assy. Stock	SGA1J25JW5
	Offset	25½ (647.7)	240	1000	12 (1.8)	2.3 (1.0)	Assy. Stock	SGA1J25JW6
	Offset	26¾ (679.5)	240	700	8 (1.2)	2.4 (1.1)	Assy. Stock	SGA1J26NW2
	Offset	26¾ (679.5)	240	1000	12 (1.8)	2.4 (1.1)	Assy. Stock	SGA1J26NW3
	Offset	30½ (774.7)	240	750	8 (1.2)	2.7 (1.2)	Assy. Stock	SGA1J30JW2
	Offset	33½ (850.9)	240	750	7 (1.0)	3.0 (1.4)	Assy. Stock	SGA1J33JW1
	Offset	35¾ (911.2)	240	1000	8 (1.2)	3.2 (1.5)	Assy. Stock	SGA1J35RW2
	Offset	35¾ (911.2)	240	1500	13 (2.0)	3.2 (1.5)	Assy. Stock	SGA1J35RW3
	Offset	38½ (977.9)	240	1500	11 (1.7)	3.4 (1.5)	Assy. Stock	SGA1J38JW3
	Offset	42½ (1079.5)	240	1500	10 (1.5)	3.8 (1.7)	Assy. Stock	SGA1J42JW1
	Offset	47¾ (1216.0)	240	2250	16 (2.4)	4.3 (2.0)	Assy. Stock	SGA1J47RW2

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Note: 5/16 x 1/2 inch (7.9 x 12.7 mm) mounting slots are supplied on all 375 finned strip heaters. Tabs can be removed upon request.