

# Infrared Heaters



**SFH Super Flat Radiators** are ceramic infrared radiators in flat design. They reach operating temperatures up to 800°C and surface ratings up to 64 kW/m<sup>2</sup>. The radiators of the SFH series are very suited for applications, which require space-saving installation. The borders of SFH radiators are used as bearing surface on a metal mounting sheet or reflector. For each radiator a corresponding rounded mounting hole is required to place the heaters into them. When mounting SFH super flat radiators a heat insulation can be added additionally. A temperature resistant insulating material like Elstein THI thermal insulation sheet can be applied on site directly on the back of the radiator. SFH super flat radiators are available in four designs and cover the power range from 60 W to 1000 W.

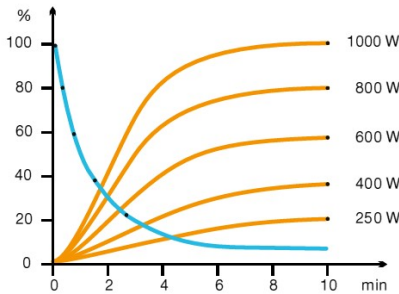


Fig. 3: Radiator temperatures  
Heating-up: red curves  
Cooling-down: blue curve

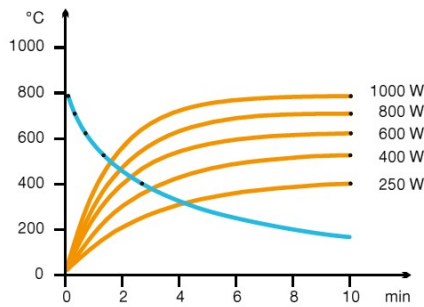
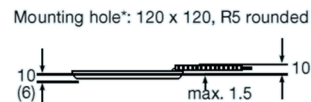
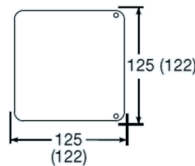
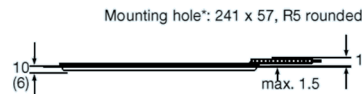
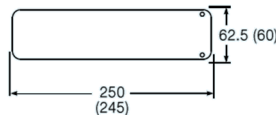


Fig. 4: Radiant powers  
Heating-up: red curves  
Cooling-down: blue curve

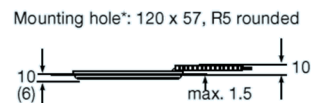
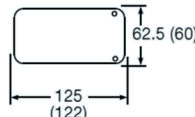
## SFH



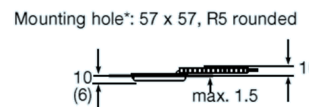
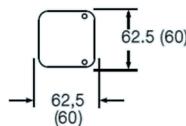
## SFH/1



## SFH/2

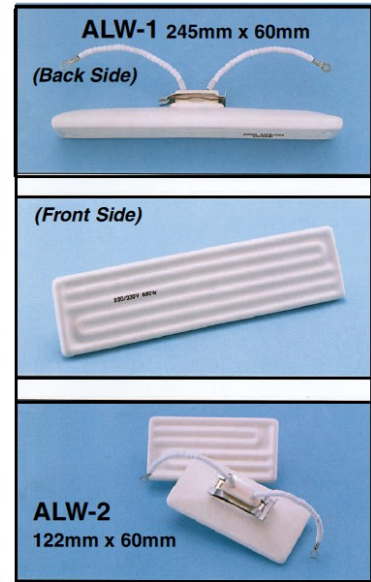
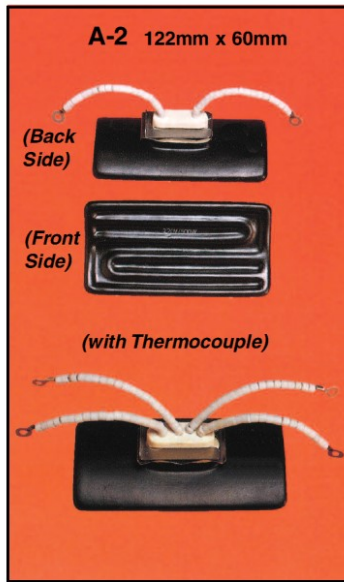
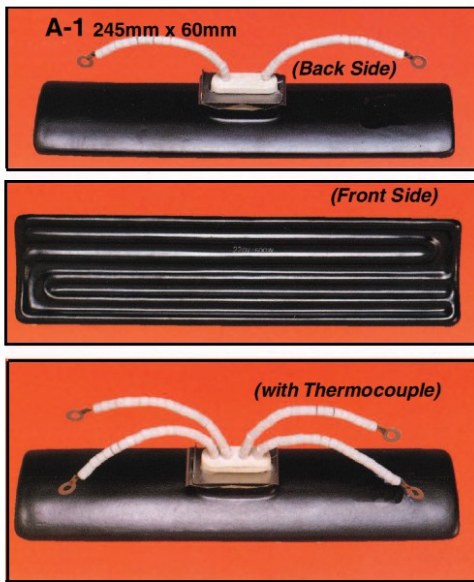


## SFH/5



SFH/1 SFH 160g	250w	400w	600w	800w	1000w
SFH/2 85g	125w	200w	300w	400w	500w
SFH/4 45g	60w	100w	150w	200w	250w
Surface Rating	16.0 kW/m <sup>2</sup>	25.6 kW/m <sup>2</sup>	38.4 kW/m <sup>2</sup>	51.2 kW/m <sup>2</sup>	64.0 kW/m <sup>2</sup>
Typical Op. Temp.	440°C	540°C	630°C	720°C	800°C
Max. Permissible Temp.	900°C	900°C	900°C	900°C	900°C
Wavelength Range	2-10µm	2-10µm	2-10µm	2-10µm	2-10µm

# Infrared Heaters

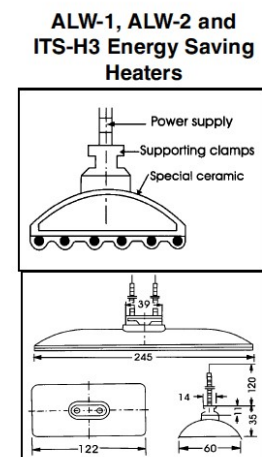
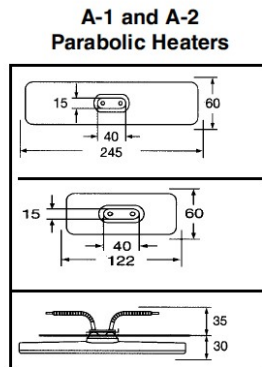


**Parabolic Ceramic Infrared Heaters 4.7" (12 cm) Beaded Leads with Ring Tongue Connectors:**

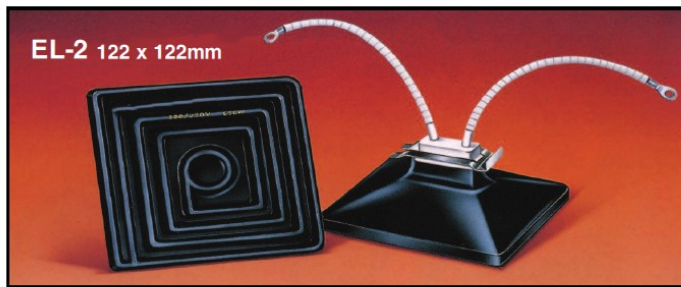
Part Number	Size	Color	Voltage	Wattage	Surface Temp
A-1-1000-B-2	245 x 60 mm	Black	220/230	1000	780°C
A-1-1000-B-4	245 x 60 mm	Black	480	1000	780°C
A-1-650-B-2	245 x 60 mm	Black	220/230	650	650°C
A-1-650-B-4	245 x 60 mm	Black	480	650	650°C
A-1-400-B-2	245 x 60 mm	Black	220/230	400	500°C
A-1-1000-Y-2	245 x 60 mm	Yellow	220/230	1000	780°C
A-1-1000-Y-4	245 x 60 mm	Yellow	480	1000	780°C
A-1-650-Y-2	245 x 60 mm	Yellow	220/230	650	650°C
A-1-650-Y-4	245 x 60 mm	Yellow	480	650	650°C
A-2-500-B-2	122 x 60 mm	Black	220/230	500	780°C
A-2-325-B-2	122 x 60 mm	Black	220/230	325	650°C
A-2-500-Y-2	122 x 60 mm	Yellow	220/230	500	780°C
A-2-325-Y-2	122 x 60 mm	Yellow	220/230	325	650°C
A-1-1000-B-2-K	245 x 60 mm	Black	220/230	1000	780°C
A-1-1000-B-4-K	245 x 60 mm	Black	480	1000	780°C
A-1-650-B-2-K	245 x 60 mm	Black	220/230	650	650°C
A-1-650-B-4-K	245 x 60 mm	Black	480	650	650°C
A-1-1000-Y-2-K	245 x 60 mm	Yellow	220/230	1000	780°C
A-1-1000-Y-4-K	245 x 60 mm	Yellow	480	1000	780°C
A-1-650-Y-2-K	245 x 60 mm	Yellow	220/230	650	650°C
A-1-650-Y-4-K	245 x 60 mm	Yellow	480	650	650°C
A-2-500-B-2-K	122 x 60 mm	Black	220/230	500	780°C

**Energy Saving Flat Bottom Hollow Ceramic Infrared Heaters 4.7" (12 cm) Beaded Leads with Ring Tongue Connectors:**

Part Number	Size	Color	Voltage	Wattage	Surface Temp
ALW-1-1000-W-2	245 x 60 mm	White	220/230	1000	750°C
ALW-1-1000-W-4	245 x 60 mm	White	480	1000	750°C
ALW-2-500-W-2	122 x 60 mm	White	220/230	500	750°C
ITS-H3-250-W-2	60 x 60 mm	White	220/230	250	750°C
ALW-1-1000-W-2-K	245 x 60 mm	White	220/230	1000	750°C
ALW-1-1000-W-4-K	245 x 60 mm	White	480	1000	750°C
ALW-2-500-W-2-K	122 x 60 mm	White	220/230	500	750°C
ITS-H3-250-W-2-K	60 x 60 mm	White	220/230	250	750°C

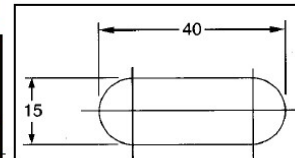
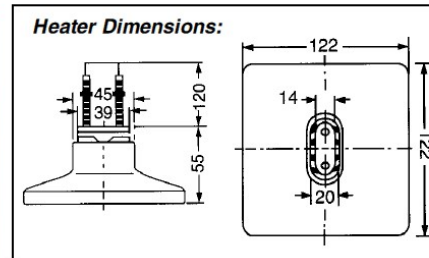


# Infrared Heaters



**Energy Saving Flat Bottom Square (122 x 122 mm) Hollow Ceramic Infrared Heaters 4.7" (12 cm) Beaded Leads with Ring Tongue Connectors:**

Part Number	Size	Color	Voltage	Wattage	Surface Temp
EL-2-800-B-2	122 x 122	Black	220/230	800	720°C
EL-2-650-B-2	122 x 122	Black	220/230	650	650°C
EL-2-800-B-2-K	122 x 122	Black	220/230	800	720°C
EL-2-650-B-2-K	122 x 122	Black	220/230	650	650°C



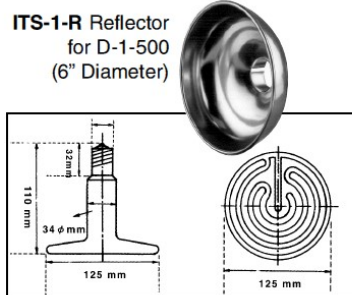
Cutout for:  
A-1, A-2, AWL-1,  
AWL-2, ITS-H3 and  
EL-2 Heaters

**Reflectors:**



ITS-A-EL

ITS-2-R-5 Aluminized Steel Reflector 5" Long  
ITS-2-R-10 Aluminized Steel Reflector 10" Long  
ITS-A-EL Stand-Off Mounting Bracket



**Energy Saving Round Bottom 5" Diameter (125 mm) Hollow Ceramic Infrared Heaters Height: 4.33" (110 mm) Socket Type: E26x32**

Part Number	Size	Color	Voltage	Wattage	Surface Temp
D-1-500-B-2	125	Black	220/230	500	600°C
D-1-500-B-1	125	Black	120	500	600°C

**Terminal Blocks:**

ITS-1



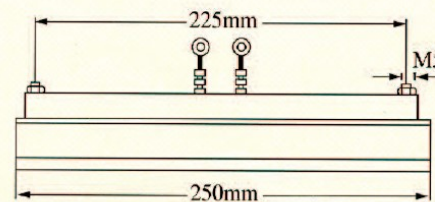
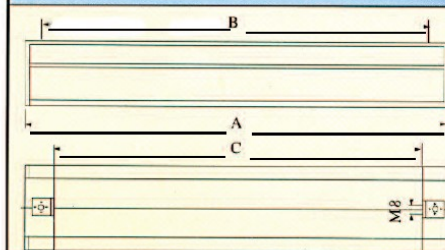
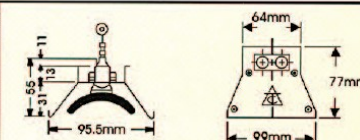
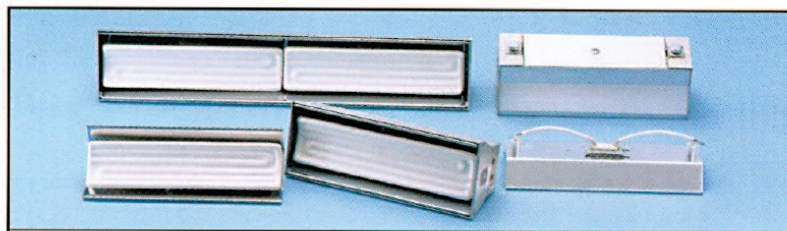
ITS-2



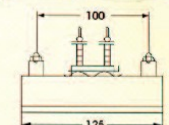
ITS-1 2-Pole Terminal Block (1.56" W x 1.625" L x 1" H); 10 amp maximum per pole @ 932°F (500°C)  
ITS-2 3-Pole Terminal Block (2.5" W x 1.625" L x 1" H); 10 amp maximum per pole @ 932°F (500°C)



ITS-26 Screw Base Receptacle for above items (250 V maximum)



	A	B	C
AF-250	255	217	190
AF-500	505	467	440
AF-750	755	717	690
AF-1000	1005	967	940
AF-1250	1255	1217	1190



**Aluminum Housings for the above Ceramic Infrared Heaters:**

- AF-250** Housing for Ceramic Infrared Heaters for A-1 and AWL-1 Series Heaters (1 heater @ 245 mm long)
- AF-500** Housing for Ceramic Infrared Heaters for A-1 and AWL-1 Series Heaters (2 heaters @ 245mm long)
- AF-750** Housing for Ceramic Infrared Heaters for A-1 and AWL-1 Series Heaters (3 heaters @ 245mm long)
- AF-1000** Housing for Ceramic Infrared Heaters for A-1 and AWL-1 Series Heaters (4 heaters @ 245mm long)
- AF-1250** Housing for Ceramic Infrared Heaters for A-1 and AWL-1 Series Heaters (5 heaters @ 245mm long)