

# PTC FAN HEATER

## STANDARD FEATURES

- Compact fan heater in PTC technology
- Maintains minimum operating temperatures in enclosures
- Helps to prevent failure of electronic components caused by condensation and corrosion
- Heating power adjusts to ambient temperature
- Integrated adjustable thermostat and control light
- DIN rail mountable

Find additional information on this model at [kooltronic.com](http://kooltronic.com), or use the Technical Documents QR code below.

Technical Documents

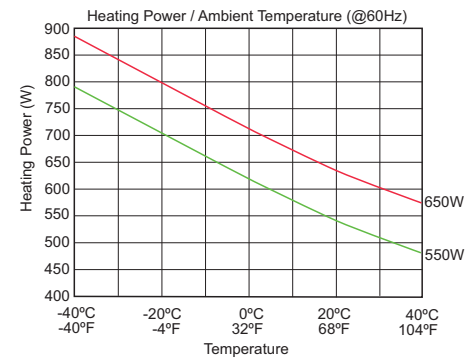
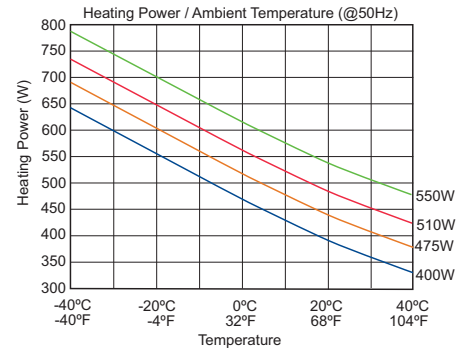
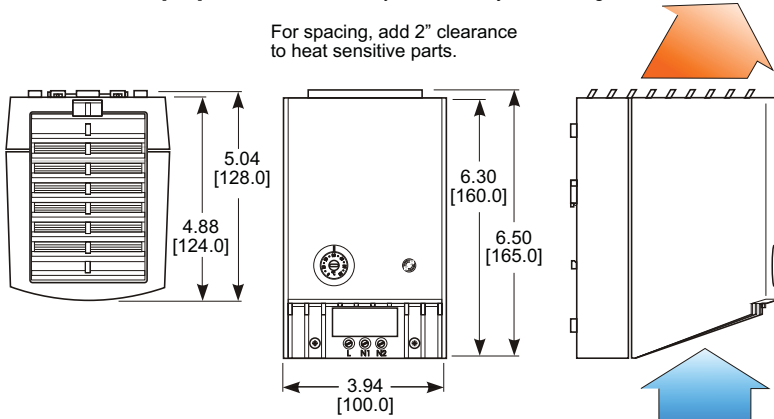


| Model No.  | Voltage    | Heating capacity (@ 50Hz)* | Heating capacity (@ 60Hz)* | Max. current (inrush) | Axial Fan (ball bearing) | Thermostat range | Weight         |
|------------|------------|----------------------------|----------------------------|-----------------------|--------------------------|------------------|----------------|
| KSFH550AT  | 100-120VAC | 400W                       | 550W                       | 14A                   | 20 cfm (35 m³/h)         | 32 - 140°F       | 2 lbs/0.9 kg   |
| KSFH650AT  | 100-120VAC | 510W                       | 650W                       | 15A                   | 26 cfm (45 m³/h)         | 32 - 140°F       | 2.4 lbs/1.1 kg |
| K2SFH400AT | 220-240VAC | 475W                       | 550W                       | 11A                   | 20 cfm (35 m³/h)         | 0 - 60°C         | 2 lbs/0.9 kg   |
| K2SFH550AT | 220-240VAC | 550W                       | 650W                       | 13A                   | 26 cfm (45 m³/h)         | 0 - 60°C         | 2.4 lbs/1.1 kg |

\*at 68°F (20°C) ambient temperature.

## DRAWINGS

Dimensions, inches [mm], are for reference only and are subject to change.



## TECHNICAL DATA

- Heating element: PTC-semiconductor/resistor, self-regulating with changing ambient temperature (see graph below)
- Overheat protection: Built-in temperature limiter in case of fan failure
- Function control light: LED
- Housing: Plastic, UL94V-0
- Connection: 2-pole terminal, AWG 14 max. (2.5 mm<sup>2</sup>)
- Mounting: Clip for 35mm DIN rail (EN 50022)
- Protection class: II (double insulated)
- Protection type: IP 20



### Applications:

- Access & Parking control systems
- Display panels
- Personnel Environmental booths
- Ticket dispensers
- Automatic teller machines (ATM's)
- Electrical & Electronic enclosures
- Telecommunications systems

**HOW TO ORDER**  
Specify model number.

Determining the required heater size:

$$P_H = (A \times \Delta T \times k) - P_v$$

- $P_H$  = Required heating power for your application in Watts (W)
- $P_v$  = Heating power generated by existing components (e.g. a transformer) in Watts (W)
- $A$  = Exposed enclosure surface area in square meters (m<sup>2</sup>)
- $\Delta T$  = Temperature differential between the desired minimum interior temperature and the lowest possible external temperature of the enclosure in Kelvin (K), 1.8°F = 1°C = 1K
- $k$  = Heat transmission coefficient of the enclosure material used:
  - Painted steel: 5.5W/m<sup>2</sup>K
  - Stainless steel: 3.7W/m<sup>2</sup>K
  - Aluminum: 12W/m<sup>2</sup>K
  - Polyester/Plastic: 3.5W/m<sup>2</sup>K

For outdoor applications it is recommended to double the heating power.

Specifications are subject to change without notice. Suitability of this product for its intended use and any associated risks must be determined by the end customer/buyer in its final application.

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