

PTC Fan Heater

400-650W CR 027

- 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



Technical Data CR 027

Part No.	Voltage	Power ¹⁾	Max. current (inrush)	Axial Fan (ball bearing)	Thermostat range	Weight
02700.0-00	220-240 VAC	400W (50 Hz)	11A	20 cfm (35 m ³ /h)	0 - 60°C	2 lbs/0.9 kg
02701.0-00	220-240 VAC	550W (50 Hz)	13A	26 cfm (45 m ³ /h)	0 - 60°C	2.4 lbs/1.1 kg
02700.9-00	100-120 VAC	550W (60 Hz)	14A	20 cfm (35 m ³ /h)	32 - 140°F	2 lbs/0.9 kg
02701.9-00	100-120 VAC	650W (60 Hz)	15A	26 cfm (45 m ³ /h)	32 - 140°F	2.4 lbs/1.1 kg

¹⁾ at 68°F (20°C) ambient temperature. Also, power will vary when frequency other than listed is applied.

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
Dimensions (H x W x D):	6.5 x 3.94 x 5" (165 x 100 x 128mm)
Connection:	2-pole terminal, AWG 14 max. (2.5 mm ²)
Mounting:	Clip for 35 mm DIN rail (EN 50022)
Protection class:	II (double insulated)
Protection type:	IP 20
Agency approvals:	UL

Wiring note:

Heater includes 3 terminals: L, N1, and N2. The power supply Line is connected to "L" and the Neutral to "N1" - Terminal N2 is **not** used. Also, a Ground wire is not required as the heater is made of double-insulated plastic.

Determining the required heater size:

$$P_H = (A \times T \times k) - P_V$$

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 (m²)

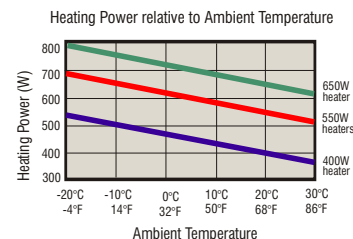
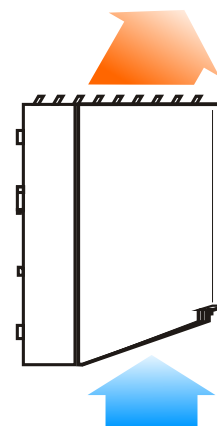
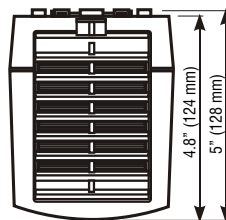
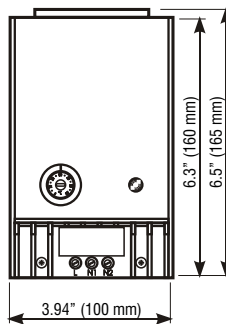
T = Temperature differential between the desired minimum interior temperature and the Lowest possible external temperature of the enclosure in Kelvin (K), 1.8°F = 1°C = 1K

k = Heat transmission coefficient of the enclosure material used:

Painted steel:	5.5W/m ² K
Stainless steel:	3.7W/m ² K
Aluminum:	12W/m ² K
Polyester/Plastic:	3.5W/m ² K

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

For spacing, add 2" clearance to heat sensitive parts.



CR027/03-07/US

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.

