



## Fan Heater 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						
			Max. current	Axial Fan		
Part No.	<u>Voltage</u>	Power <sup>1)</sup>	(inrush)	(ball bearing)	Thermostat range	<u>Weight</u>
02700.0-00	220-240 VAC	400W (50 Hz)	11A	20 cfm (35 m <sup>3</sup> /h)	0 - 60°C	2 lbs/0.9 kg
02701.0-00	220-240 VAC	550W (50 Hz)	13A	26 cfm (45 m³/h)	0 - 60°C	2.4 lbs/1.1 kg
02700.9-00	100-120 VAC	550W (60 Hz)	14A	20 cfm (35 m³/h)	32 - 140°F	2 lbs/0.9 kg
02701.9-00	100-120 VAC	650W (60 Hz)	15A	26 cfm (45 m <sup>3</sup> /h)	32 - 140°F	2.4 lbs/1.1 kg

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

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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 mm²)
Mounting:	Clip for 35 mm DIN rail (EN 50022)
Protection class:	II (double insulated)
Protection type:	IP 20
Agency approvals:	UL

## Determining the required heater size:

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

 $P_{_{\! H}} = \text{Required heating power for your application in Watts (W)}$ 

 $P_{\nu}~=$  Heating power generated by existing components (e.g. a transformer) in Watts (W)

 $A \ = \ Exposed \ enclosure \ surface \ area \ in \ square \ meters \ (m^2)$ 

 $\Delta T=$  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

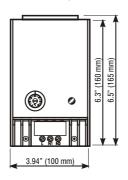
k = Heat transmission coefficient of the enclosure material used:

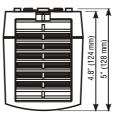
Painted steel: 5.5W/m²K Stainless steel: 3.7W/m²K Aluminum: 12W/m²K Polyester/Plastic: 3.5W/m²K

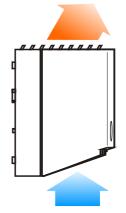
For outdoor applications it is recommended to double the heating power.

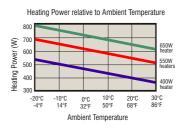
## Applications:

Electrical & Electronic enclosures Telecommunications systems Automatic teller machines (ATM's) Access & Parking control systems Display panels Personnel booths Ticket dispensers For spacing, add 2" clearance to heat sensitive parts.









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.