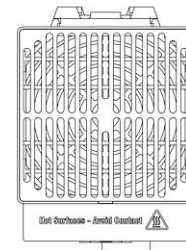
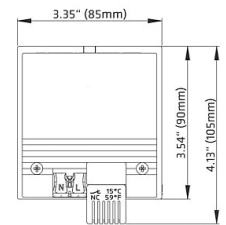
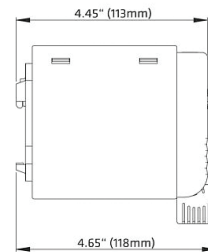


CSF 028

FAN HEATERS | 250 W, 400 W TOUCH-SAFE PTC FAN HEATER

The CSF 028 fan heater prevents formation of condensation and provides evenly distributed interior air temperature in enclosures. The touch-safe plastic housing and the small size makes it ideal for use in enclosures with a high packing density. The heater is equipped with a fixed set point thermostat and is easily wired via external pressure clamps. Two different mounting options are available - DIN rail or screw tabs. The robust screw tab mounting is particularly suitable for applications with high vibration.

Heating Element	PTC resistor - temperature limiting
Overheat Protection	built-in temperature limiter
Axial Fan, Free Blowing	32 cfm (54 m³/h) @ AC 120 V---26 cfm (45 m³/h) @ AC 230 V
Connection	2-pole dual pressure clamp for solid wire AWG 14 max. (2.5 mm²), stranded wire (with wire end ferrule) AWG 16 max. (1.5 mm²)
Housing	plastic, UL 94V-0, black
Mounting	clip for 35 mm DIN rail, EN 60715 or screw mount (Ø 5.5 mm), clamping torque 2 Nm max., washers must be used
Mounting Position	vertical airflow (air outlet up)
Dimensions	models with DIN clip: 4.13 x 3.35 x 4.65" (105 x 85 x 118 mm), models w/ screw tabs: 4.13 x 4.53 x 4.25" (105 x 115 x 108 mm)
Weight	17.6 oz. (500 g)
Operating / Storage Temp.	-40 to +158 °F (-40 to +70 °C) / -49 to +158 °F (-45 to +70 °C)
Operating / Storage Humidity	max. 90 %RH (non-condensing)
Protection Class / Type	II (double insulated) / IP20



Dimensioned Drawings.

- Compact size
- Quiet operation
- Integrated pre-set thermostat
- Heating power adjusts to ambient temperature
- DIN rail or screw tab mount available



Part No. DIN Mount	Part No. Screw Mount	Operating voltage	Heating capacity*	Max. current (inrush)	Rec. pre-fuse T (time-delay)	Switch-off temp**	Switch-on temp**	Approvals
02821.9-06	02821.9-08	AC 120 V, 50/60 Hz	250 W	6.0 A	10.0 A	59 °F	41 °F	UL File No. E234324 - EAC
02821.9-09	02821.9-11	AC 120 V, 50/60 Hz	250 W	6.0 A	10.0 A	77 °F	59 °F	UL File No. E234324 - EAC
02820.9-06	02820.9-08	AC 120 V, 50/60 Hz	400 W	9.0 A	10.0 A	59 °F	41 °F	UL File No. E234324 - EAC
02820.9-09	02820.9-11	AC 120 V, 50/60 Hz	400 W	9.0 A	10.0 A	77 °F	59 °F	UL File No. E234324 - EAC
02821.0-06	02821.0-08	AC 230 V, 50/60 Hz	250 W	9.0 A	10.0 A	59 °F	41 °F	UL/VDE/EAC
02821.0-09	02821.0-11	AC 230 V, 50/60 Hz	250 W	9.0 A	10.0 A	77 °F	59 °F	UL/VDE/EAC
02820.0-06	02820.0-08	AC 230 V, 50/60 Hz	400 W	15.0 A	16.0 A	59 °F	41 °F	UL/VDE/EAC
02820.0-09	02820.0-11	AC 230 V, 50/60 Hz	400 W	15.0 A	16.0 A	77 °F	59 °F	UL /VDE/EAC

*at 68 °F (20 °C) ambient temperature.

** tolerance of ±5 K. Note: Other Switch-off and Switch-on temperatures on request.