

TOUCH-SAFE PTC FAN HEATER

CSF 028 | 250 W, 400 W



CSF 028 with DIN clip



CSF 028 with screw mount tabs

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

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.



TECHNICAL DATA

Heating element	PTC resistor - temperature limiting
Surface temperature	250 W: max. 122 °F (50 °C), 400 W: max. 149 °F (65 °C) each except upper protective grille at 68 °F (20 °C) ambient temperature
Overheat protection	built-in temperature limiter
Axial fan, ball bearing	service life 40,000 h at 104 °F (+40 °C)
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. (2.5mm²), stranded wire (with wire end ferrule) AWG 16 max. (1.5 mm²)
Housing	plastic according to 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), horizontal airflow
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 temperature	-40 to +158 °F (-40 to +70 °C) / -49 to +158 °F (-45 to +70 °C)
Operating / Storage	max. 90 %RH (non-condensing)
Protection class / Protection type	II (double insulated) / IP20
Approvals	UL File No. E150057, VDE

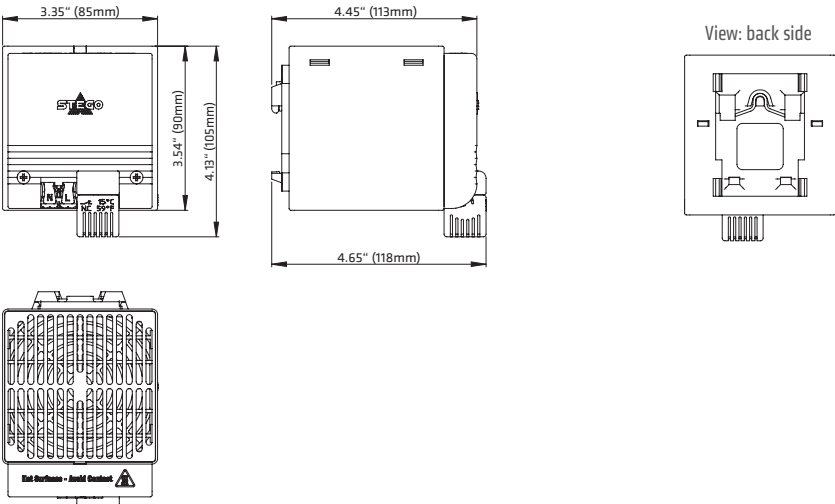
Part No. - DIN mount	Part No. - screw tab mount	Operating voltage	Heating capacity ¹	Inrush current max.	Pre-fuse T (time-delay)	Switch-off temperature ²	Switch-on temperature ²
02821.9-06	02821.9-08	AC 120 V, 50/60 Hz	250 W	6 A	10 A	59 °F (15 °C)	41 °F (5 °C)
02821.9-09	02821.9-11	AC 120 V, 50/60 Hz	250 W	6 A	10 A	77 °F (25 °C)	59 °F (15 °C)
02820.9-06	02820.9-08	AC 120 V, 50/60 Hz	400 W	9 A	10 A	59 °F (15 °C)	41 °F (5 °C)
02820.9-09	02820.9-11	AC 120 V, 50/60 Hz	400 W	9 A	10 A	77 °F (25 °C)	59 °F (15 °C)
02821.0-06	02821.0-08	AC 230 V, 50/60 Hz	250 W	9 A	10 A	59 °F (15 °C)	41 °F (5 °C)
02821.0-09	02821.0-11	AC 230 V, 50/60 Hz	250 W	9 A	10 A	77 °F (25 °C)	59 °F (15 °C)
02820.0-06	02820.0-08	AC 230 V, 50/60 Hz	400 W	15 A	16 A	59 °F (15 °C)	41 °F (5 °C)
02820.0-09	02820.0-11	AC 230 V, 50/60 Hz	400 W	15 A	16 A	77 °F (25 °C)	59 °F (15 °C)

¹ at 68 °F (20 °C) ambient temperature; ² tolerance of ±5 K

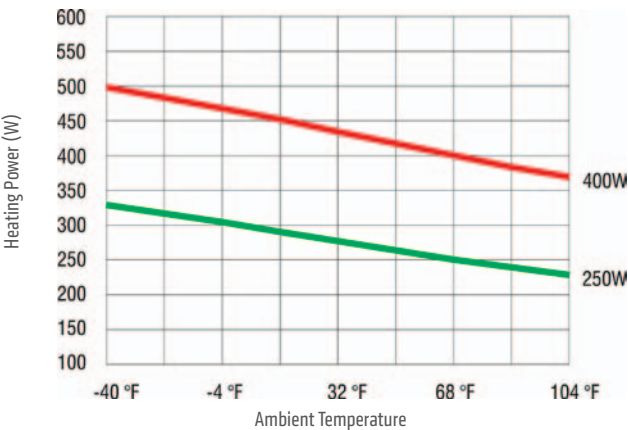
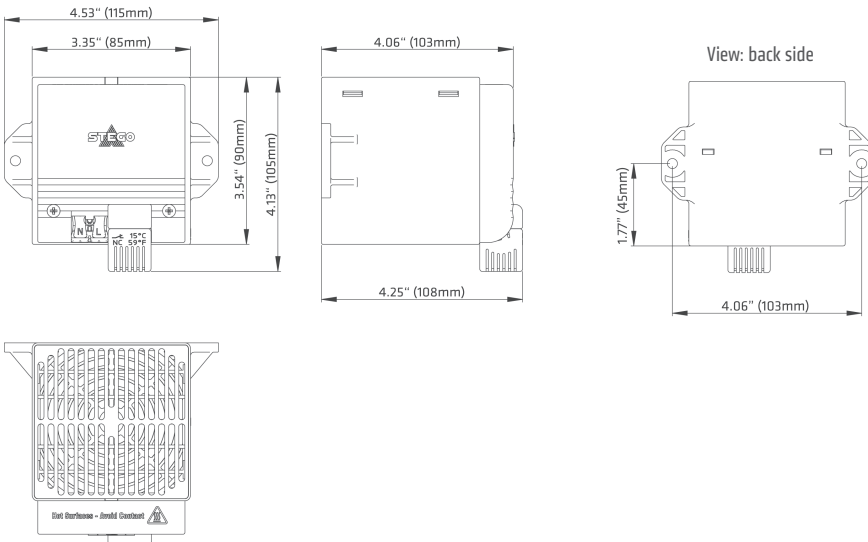
Note: Other Switch-off and Switch-on temperatures on request

TECHNICAL DRAWINGS

DIN RAIL MOUNT



SCREW TAB MOUNT



Wiring example
Fan heater CSF 028

