

# TOUCH-SAFE PTC FAN HEATER

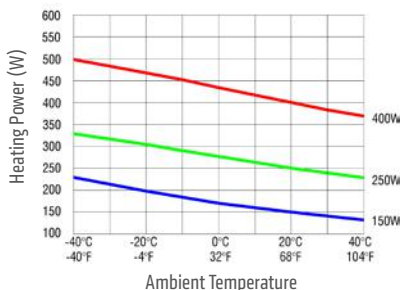
## CS 028 / CSL 028 | 150 W to 400 W



Fan Heaters CSL 028/CS 028  
with DIN clip



Fan Heaters CSL 028/CS 028  
with screw mount tabs



> Compact size  
> Quiet operation

> DIN rail or screw mount available  
> Heating power adjusts to ambient temperature

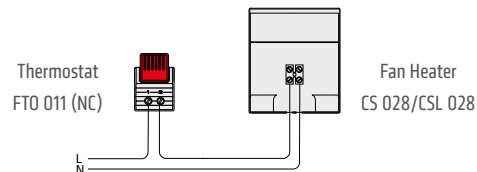
The CS 028 / CSL 028 fan heaters prevent formation of condensation and provide an evenly distributed interior air temperature in enclosures. The heaters are connected using the internal terminal connectors. The surface temperatures on the accessible side surfaces of the housing are minimized as a result of the heater design. The small size of the CS 028 / CSL 028 heaters make them ideal for use in enclosures where space is at a premium.



### TECHNICAL DATA

Heating element	PTC resistor – temperature limiting
Axial fan, ball bearing	service life 40,000 h at 104 °F (40 °C)
Air flow, free blowing	CS 028: 8 cfm (13.8 m³/h) CSL 028: 32 cfm (54 m³/h) @ AC 120 V; 26 cfm (45 m³/h) @ AC 230 V
Connection	2-pole terminal AWG 14 max. (2.5 mm²) with strain relief, torque 0.8 Nm max.
Housing	plastic, UL 94V-0, black
Mounting	screw mount (Ø 2.1"/5.3 mm) or clip for 35 mm DIN rail, EN 60715
Mounting position	vertical
Dimensions	see drawings
Operating / Storage temperature	-49 to +158 °F (-45 to +70 °C)
Operating / Storage humidity	max. 90 % RH (non-condensing)
Protection class / Protection type	II (double insulated) / IP20
Note	other voltages available upon request

### Wiring example



### FAN HEATER CS 028

Part No. DIN mount	Part No. screw mount	Operating voltage	Heating capacity <sup>1</sup>	Max. current (inrush)	Recommended pre-fuse T (time-delay)	Weight (approx.)	Approvals		
02800.9-00	02800.9-01	AC 120 V, 50/60 Hz	150 W	6.0 A	10.0 A	10.6 oz. (300 g)	UL File No. E234324	-	EAC
02800.0-00	02800.0-01	AC 230 V, 50/60 Hz	150 W	12.0 A	10.0 A	10.6 oz. (300 g)	UL	VDE	EAC

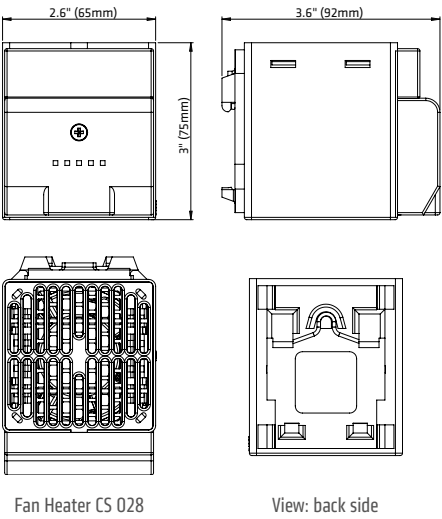
### FAN HEATER CSL 028

Part No. DIN mount	Part No. screw mount	Operating voltage	Heating capacity <sup>1</sup>	Max. current (inrush)	Recommended pre-fuse T (time-delay)	Weight (approx.)	Approvals		
02811.9-00	02811.9-01	AC 120 V, 50/60 Hz	250 W	6.0 A	10.0 A	17.6 oz. (500 g)	UL File No. E234324	-	EAC
02810.9-00	02810.9-01	AC 120 V, 50/60 Hz	400 W	9.0 A	10.0 A	17.6 oz. (500 g)	UL File No. E234324	-	EAC
02811.0-00	02811.0-01	AC 230 V, 50/60 Hz	250 W	9.0 A	10.0 A	17.6 oz. (500 g)	UL	VDE	EAC
02810.0-00	02810.0-01	AC 230 V, 50/60 Hz	400 W	15.0 A	16.0 A	17.6 oz. (500 g)	UL	VDE	EAC

<sup>1</sup> at 68 °F (20 °C) ambient temperature

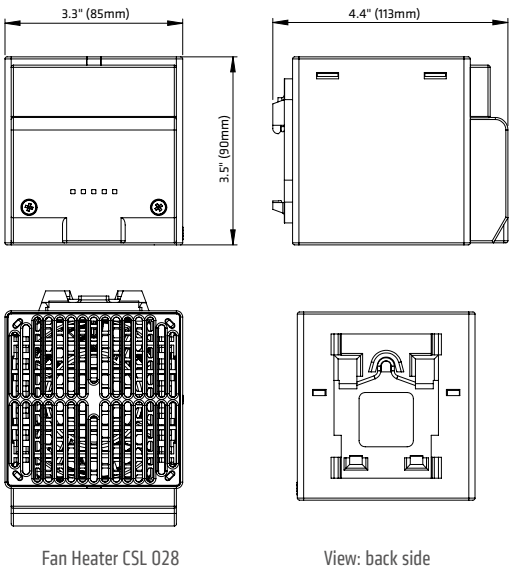
DIMENSIONED DRAWINGS

DIN RAIL MOUNT



Fan Heater CS 028

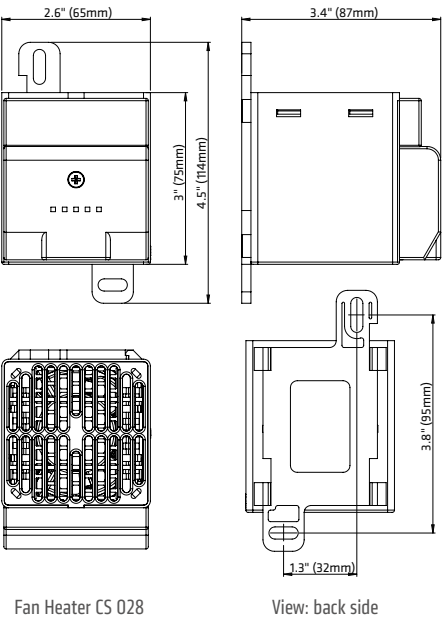
View: back side



Fan Heater CSL 028

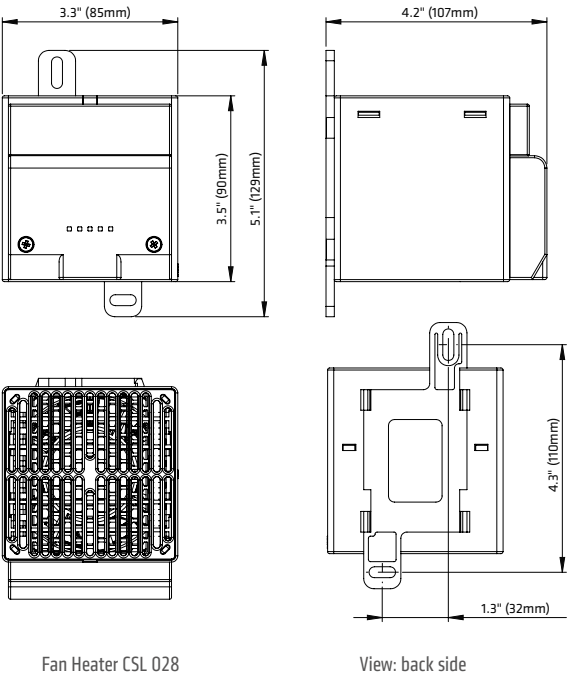
View: back side

SCREW MOUNT



Fan Heater CS 028

View: back side



Fan Heater CSL 028

View: back side

ACCESSORY PART FOR FAN HEATER CSL 028

Air guide for improved heat distribution

The air guide is an accessory part for use with the fan heater CSL 028. It can easily be clipped onto the protective grille of the fan heater without use of any tools, and diverts the exiting warm air by 45°. This results in an overall improved heat distribution within an enclosure or cabinet. The temperature above the protective grille is reduced by up to 68 °F/20 °C (measured approx. 3.9"/100 mm above protective grille) and may make the use of custom heat ducts obsolete.



Air guide Part No. 252017

Fan heater with air guide

Part No.	Dimensions <sup>2</sup>	Plastic	1 Packing unit	Weight (approx.)
252017	3.3 x 3.3 x 0.5" (85 x 85 x 12 mm)	UL 94V-0, black	1 piece	1.2 oz. (35 g)

<sup>2</sup> Dimensions when mounted on fan heater.