

COMPACT SEMICONDUCTOR FAN HEATER

CS 028 / CSL 028 | 150 W to 400 W



Photo: Fan Heater CSL 028

- > Small, compact design
- > Quiet in operation

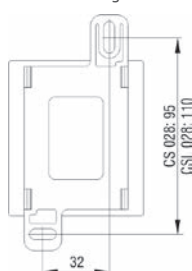
- > Dynamic heating up
- > Clip or screw fixing

Fan heater prevents formation of condensation and provides an evenly distributed interior air temperature in enclosures with electric/electronic components. The heater is connected using the internal terminal connectors. The small size of the CS / CSL 028 makes it ideal for use in enclosures where space is at a premium.

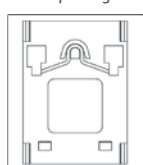


View: back side

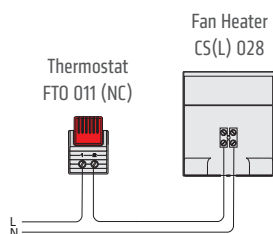
Screw fixing



Clip fixing



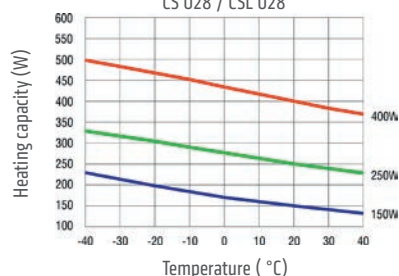
Example of connection



TECHNICAL DATA

Heating element	PTC resistor – temperature limiting
Surface temperature	150 W/250 W: max. +50 °C (+122 °F), 400 W: max. +65 °C (+149 °F) each except upper protective grille at +20 °C (+68 °F) ambient temperature
Axial fan, ball bearing	air flow, free flow CS 028: 13.8 m³/h CSL 028: 45 m³/h (AC 230 V), 54 m³/h (AC 120 V) service life 40,000 h at +40 °C (+104 °F)
Connection	2-pole clamp max. 2.5 mm² (CSL 028 with strain relief), clamping screw torque 0.8 Nm max.
Casing	plastic according to UL94 V-0, black
Mounting	clip for 35 mm DIN rail, EN 60715 or screw fixing (Ø 5.3 mm)
Fitting position	vertical airflow (air outlet up)
Operating/Storage temperature	-45 to +70 °C (-49 to +158 °F)
Operating/Storage humidity	max. 90 % RH (non-condensing)
Protection type/Protection class	IP20 / II (double insulated)
Approvals	UL File No. E150057 (according to UL 5084, NITW File on request), EAC, VDE only: 230 V
Note	other voltages on request

Heating capacity / Ambient temperature diagram
CS 028 / CSL 028



Art. No. clip fixing	Art. No. screw fixing	Series	Operating voltage	Heating capacity ¹	Inrush current max.	Recommended pre-fuse T (time-delay)	Dimensions (H x W x D)	Weight (approx.)
02800.0-00	02800.0-01	CS 028	AC 230 V, 50/60 Hz	150 W	12.0 A	10.0 A	75 x 65 x 90 mm	0.3 kg
02811.0-00	02811.0-01	CSL 028	AC 230 V, 50/60 Hz	250 W	9.0 A	10.0 A	90 x 85 x 111 mm	0.5 kg
02810.0-00	02810.0-01	CSL 028	AC 230 V, 50/60 Hz	400 W	15.0 A	16.0 A	90 x 85 x 111 mm	0.5 kg
02800.9-00	02800.9-01	CS 028	AC 120 V, 50/60 Hz	150 W	6.0 A	10.0 A	75 x 65 x 90 mm	0.3 kg
02811.9-00	02811.9-01	CSL 028	AC 120 V, 50/60 Hz	250 W	6.0 A	10.0 A	90 x 85 x 111 mm	0.5 kg
02810.9-00	02810.9-01	CSL 028	AC 120 V, 50/60 Hz	400 W	9.0 A	10.0 A	90 x 85 x 111 mm	0.5 kg

¹ at +20 °C (+68 °F) ambient temperature