



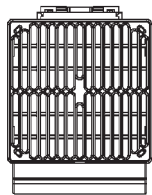
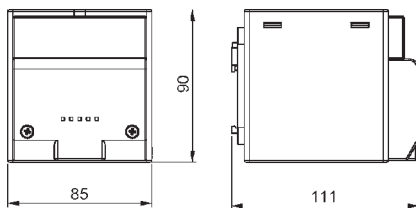
Small, compact design

Quiet in operation

Dynamic heating up

Clip or screw fixing

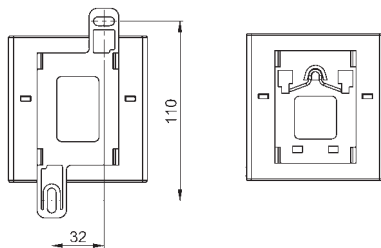
Fan heater prevents formation of condensation and provides an evenly distributed interior air temperature in enclosures with electric/electronic components. The heater is connected using the internal terminal connectors. The small size of the CSL 028 makes it ideal for use in enclosures where space is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



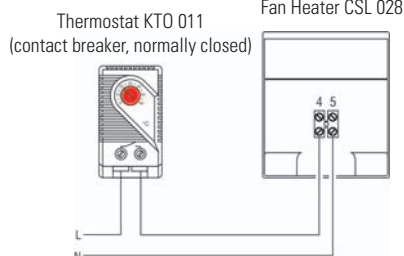
View: back side

Screw fixing

Clip fixing



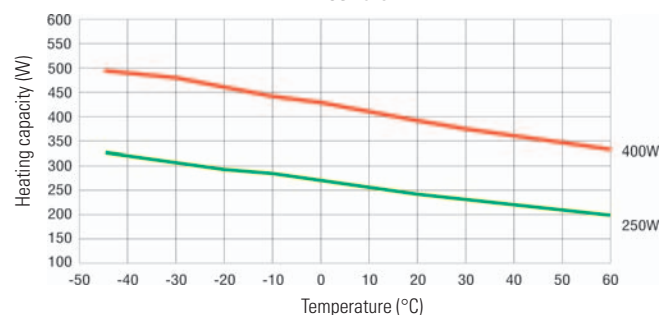
Example of connection



Technical Data

Heating element	PTC heating element
Surface temperature	250W: max. 50°C (122°F), except upper protective grille 400W: max. 65°C (149°F), except upper protective grille at 20°C (68°F) ambient temperature
Axial fan, ball bearing	air flow 45m³/h at 230VAC, air flow 54m³/h at 120VAC free flow, service life 40,000h at 40°C
Connection	2-pole clamp max. 2.5mm² with strain relief, clamping screw torque 0.8Nm max.
Casing	plastic according to UL94-0, black
Mounting	clip for 35 mm DIN rail, EN 60715 or screw fixing (Ø 5.3mm)
Fitting position	vertical
Weight	approx. 0.5kg
Operating / Storage temperature	-45 to +70°C (-49 to +158°F)
Protection type / Protection class	IP20 / II (double insulated)
Note	other voltages on request

Heating capacity / Ambient temperature diagram
CSL 028



Art. No.	Operating voltage	Heating capacity*	Inrush current max.	Dimensions	Mounting	Approvals
02811.0-00	230VAC, 50/60Hz	250W	9A	111 x 85 x 90mm	Clip fixing	VDE; (UL submitted)
02811.0-01	230VAC, 50/60Hz	250W	9A	111 x 85 x 129mm	Screw fixing	VDE; (UL submitted)
02811.9-00	120VAC, 50/60Hz	250W	6A	111 x 85 x 90mm	Clip fixing	UL submitted
02811.9-01	120VAC, 50/60Hz	250W	6A	111 x 85 x 129mm	Screw fixing	UL submitted
02810.0-00	230VAC, 50/60Hz	400W	15A	111 x 85 x 90mm	Clip fixing	VDE; (UL submitted)
02810.0-01	230VAC, 50/60Hz	400W	15A	111 x 85 x 129mm	Screw fixing	VDE; (UL submitted)
02810.9-00	120VAC, 50/60Hz	400W	9A	111 x 85 x 90mm	Clip fixing	UL submitted
02810.9-01	120VAC, 50/60Hz	400W	9A	111 x 85 x 129mm	Screw fixing	UL submitted

*at 20°C (68°F) ambient temperature