

TOUCH-SAFE HEATER (SEMICONDUCTOR)

CSF 060 | 50 W to 150 W



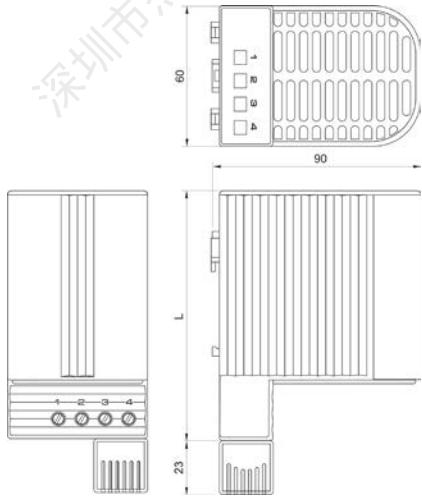
- > Low surface temperature
- > Integrated thermostat
- > Quick mounting due to clip fixing

- > Double insulated (plastic)
- > Wide voltage range
- > Small size

Touch-safe heater for the use in enclosures with electrical/electronic components. The design of the heater supports the natural convection which results in a high air-current of warm air. The surface temperatures on the accessible side surfaces of the housing are kept down as a result of the heater design. This model with plug-in thermostat does not require additional wiring. The heaters are designed for permanent operation. This heater is also available in a version without thermostat (CS 060).

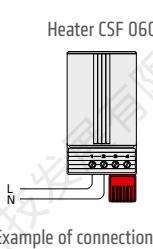


TECHNICAL DATA

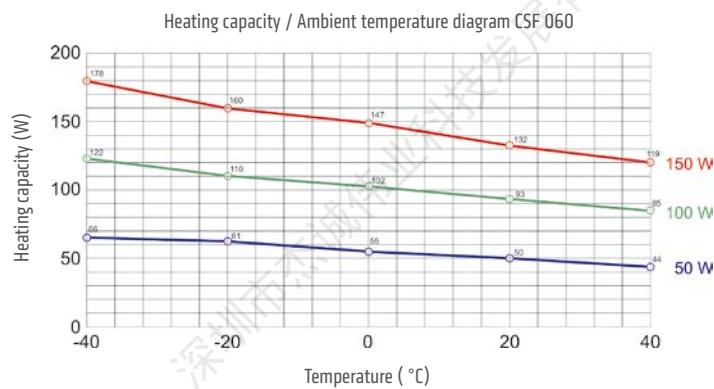


| | |
|----------------------------------|---|
| Operating voltage | AC 120 – 240 V ¹ (min. 110 V, max. 265 V) |
| Heating element | PTC resistor – temperature limiting |
| Surface temperature | < +80 °C (+176 °F), except upper protective grille |
| Connection | 2-pole terminal 2.5 mm ² , torque 0.8 Nm max. |
| Casing | plastic according to UL94 V-0, black |
| Mounting | clip for 35 mm DIN rail, EN 60715 |
| Fitting position | vertical airflow (air outlet up, connection on bottom) |
| Operating/Storage temperature | -40 to +70 °C (-40 to +158 °F) / -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 | VDE, UL File No. E150057, EAC |

¹ Operating with voltages below AC 140 V reduces heating performance by approx. 10 %.



Example of connection



| Art. No. | Heating capacity ² | Inrush current (max.) | Recommended pre-fuse T (time-delay) | Air outlet temperature ³ | Switch-off temperature ⁴ | Switch-on temperature ⁴ | Dimensions | Weight (approx.) |
|------------|-------------------------------|-----------------------|-------------------------------------|-------------------------------------|-------------------------------------|------------------------------------|------------------|------------------|
| 06001.0-00 | 50 W | 2.5 A | 4.0 A | +86 °C (+186.8 °F) | +15 °C (+59 °F) | +5 °C (+41 °F) | 110 x 60 x 90 mm | 0.3 kg |
| 06002.0-00 | 50 W | 2.5 A | 4.0 A | +86 °C (+186.8 °F) | +25 °C (+77 °F) | +15 °C (+59 °F) | 110 x 60 x 90 mm | 0.3 kg |
| 06011.0-00 | 100 W | 4.5 A | 8.0 A | +120 °C (+248 °F) | +15 °C (+59 °F) | +5 °C (+41 °F) | 110 x 60 x 90 mm | 0.3 kg |
| 06012.0-00 | 100 W | 4.5 A | 8.0 A | +120 °C (+248 °F) | +25 °C (+77 °F) | +15 °C (+59 °F) | 110 x 60 x 90 mm | 0.3 kg |
| 06021.0-00 | 150 W | 8.0 A | 10.0 A | +145 °C (+293 °F) | +15 °C (+59 °F) | +5 °C (+41 °F) | 150 x 60 x 90 mm | 0.5 kg |
| 06022.0-00 | 150 W | 8.0 A | 10.0 A | +145 °C (+293 °F) | +25 °C (+77 °F) | +15 °C (+59 °F) | 150 x 60 x 90 mm | 0.5 kg |

² ambient temperature – see Heating capacity / ambient temperature diagram; ³ measured 50 mm above protective grille; ⁴ tolerance of ±5 K

Note: Other switch-off and switch-on temperatures on request.