

HTS-16 Series

Characteristic

HTS-16 series heating elements are made in a thick film technology, on a stainless steel substrates. These heaters are designed for contact heating of flat surfaces. In compare with an usual tubular heating elements, heaters on stainless steel substrate provide substantially better temperature transfer and higher power at compact size. These elements can also be useful in applications, where low thickness of the heating element is important. Another application of these elements is to use as a power resistor. Heater is available in PTC version. Its main feature is self-braking which results from a very high temperature coefficient of resistance. HTS-16 series elements have outputs in the form of contact/solder fields, soldered wires, connectors, or screw terminals.

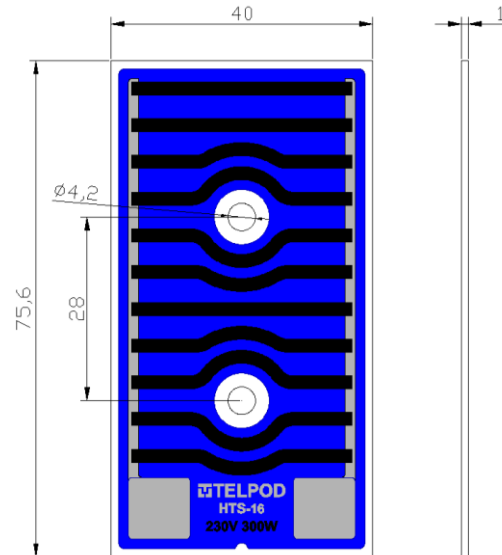


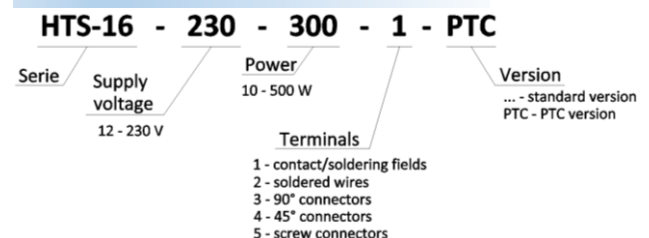
Fig. 1. Preview with dimensions [mm]

<u>Parameter</u>	<u>Value</u>
Rated power (on heatsink)	10 - 500 W
Power tolerance	±10 %
Supply voltage	12 - 240 V
Dielectric layer breakdown voltage	> 2 kV
Temperature coefficient of resistance (TCR) – standard version	±100 ppm/°C
Temperature coefficient of resistance (TCR) – PTC version	+1500 ppm/°C
Max. element temperature (on surface)	400 °C
Max. element temperature (with soldered connectors or wires)	170 °C

Typical values

Supply voltage	Rated power
230 V	100 W
230 V	300 W
230 V	500 W

Product marking





HTS-16 Series

Terminal types

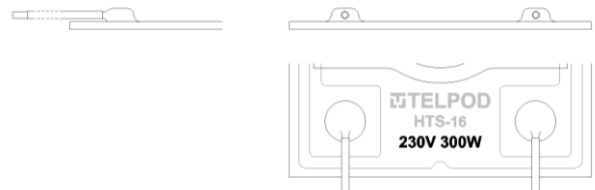
HTS-16- ... -1- ...

Contact / solder fields



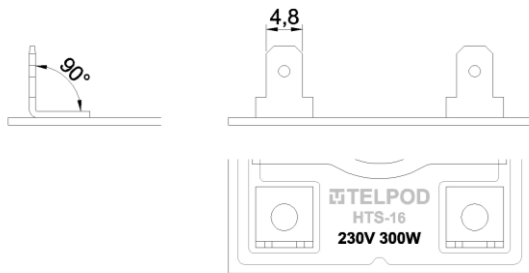
HTS-16- ... -2- ...

Soldered wires



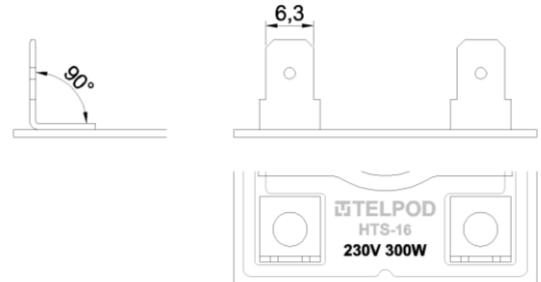
HTS-16- ... -3/4.8- ...

4.8 connectors at 90°



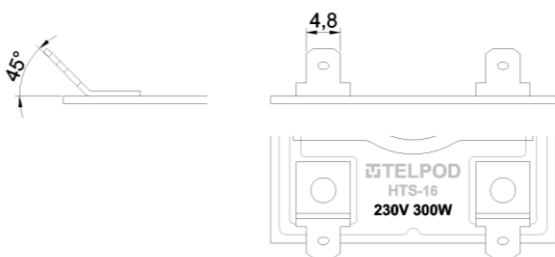
HTS-16- ... -3/6.3- ...

6.3 connectors at 90°



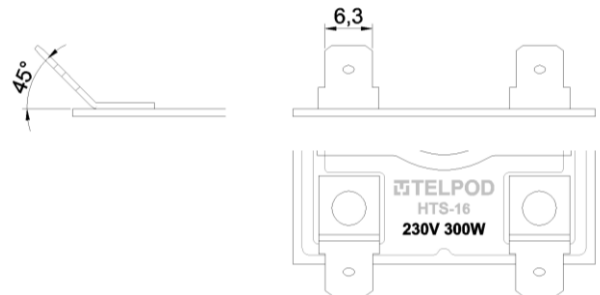
HTS-16- ... -4/4.8- ...

4.8 connectors at 45°



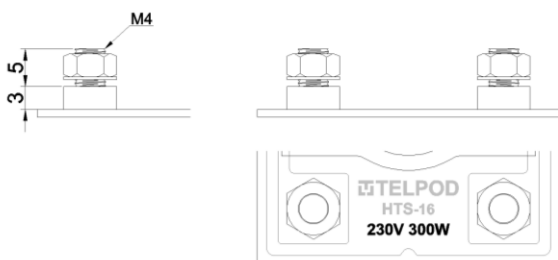
HTS-16- ... -4/6.3- ...

6.3 connectors at 45°



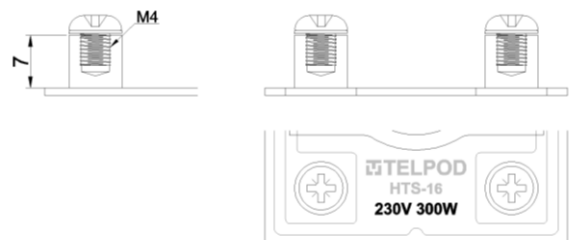
HTS-16- ... -5/A- ...

Screw connectors with the nuts



HTS-16- ... -5/B- ...

Screw connectors with the screws





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PTC heating elements

PTC (Positive Temperature Coefficient) heaters are specific elements that have a feature of self-regulation of power depending on the temperature. This attribute is result of the fact that as the temperature of an element gets higher, the resistance is also increasing, which makes the power decrease. The graphs below are exemplary performance characteristics (for heater HTS-16-230-300).

