Ceramic Infrared Panel Radiators

Elstein HTS high temperature radiators are ceramic infrared panel radiators, which can be used for operating temperatures up to 860 °C and surface ratings up to 64 kW/m².

HTS series radiators are produced using a hollow-casting ceramic process and are filled with thermal insulation material. This improves the radiant power output to the material to be heated.

Furthermore, there is a significant reduction in heat dissipated in the wiring space, so that additional insulation of the heating area is usually not required.

Compared with IR radiators, which are produced using full-poured casting processes, HTS radiators have a considerably reduced heating-up time and, depending on the type of application, enable energy savings of up to 25 %.

Elstein HTS high temperature radiators are available in four designs and cover the power range from 60 W to 1000 W.

Figure 39: Elstein HTS series

HTS

Figure 40: Mounting dimensions and radiator dimensions ( ) in mm
HTS

Fig. 41: Radiator temperatures  
Heating-up: red curves  
Cooling-down: blue curve

Fig. 42: Radiant powers  
Heating-up: red curves  
Cooling-down: blue curve

<table>
<thead>
<tr>
<th>Type, weight, wattage</th>
<th>HTS/1, HTS</th>
<th>220 g</th>
<th>250</th>
<th>400</th>
<th>600</th>
<th>800</th>
<th>1000</th>
<th>W</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HTS/2</td>
<td>125 g</td>
<td>125</td>
<td>200</td>
<td>300</td>
<td>400</td>
<td>500</td>
<td>W</td>
</tr>
<tr>
<td></td>
<td>HTS/4</td>
<td>75 g</td>
<td>60</td>
<td>100</td>
<td>150</td>
<td>200</td>
<td>250</td>
<td>W</td>
</tr>
</tbody>
</table>

| Surface rating        | 16.0       | 25.6  | 38.4 | 51.2 | 64.0 | kW/m² |
| Typical operating temperature | 450 | 570  | 700  | 810  | 860  | °C |
| Maximum permissible temperature | 900 | 900  | 900  | 900  | 900  | °C |
| Wavelength range      | 2          | -     | 10   |      | μm   |

**Standard design**
- Operating voltage 230 V
- Ceramic hollow casting
- Integrated thermal insulation
- Leads 85 mm
- Elstein standard socket
- Mounting set

**Thermocouple radiators**
- Designation T-HTS, T-HTS/1, T-HTS/2, T-HTS/4
- Integrated thermocouple
- Type K (NiCr-Ni)
- TC leads 100 mm

**Variants**
- Special wattages
- Special voltages
- Extended leads
- Leads with ring terminals

The power can be controlled using thermocouple radiators together with TRD 1 temperature controllers, TSE thyristor switching units and other accessories.

IR radiation areas can be assembled using REO reflectors, REF construction sets, EBF and EBI construction elements, MBO mounting sheets as well as BSH and BSI construction panels.

The national safety regulations must be complied with for the respective application, for example, the IEC or EN standard 60519-1, Safety in electrical heating installations.

Our instructions for mounting, operation and safety must be observed.