



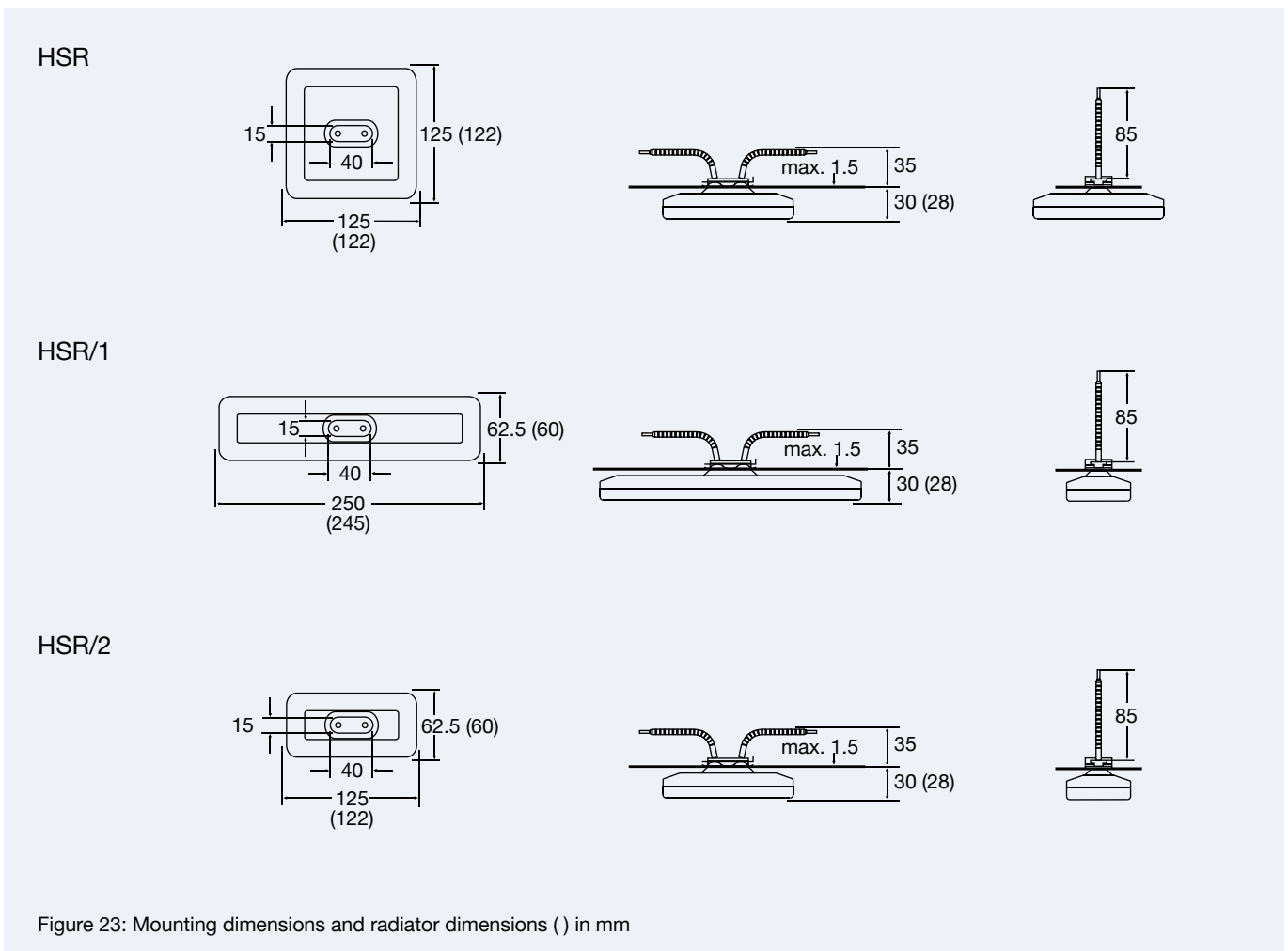
Figure 22: Elstein HSR series

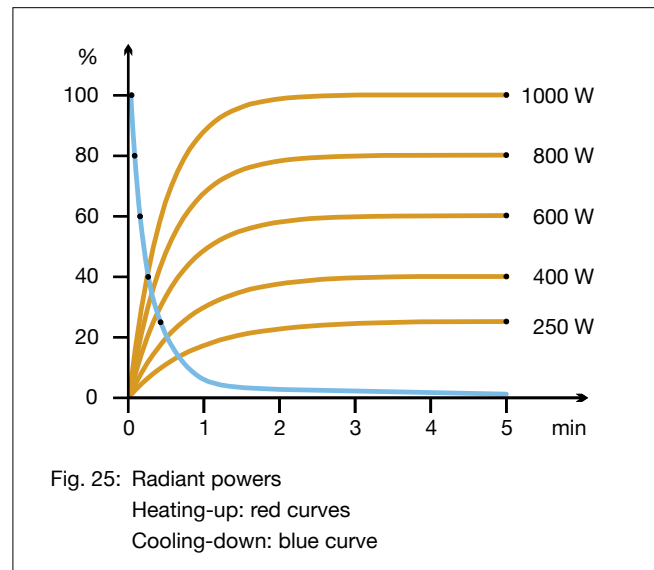
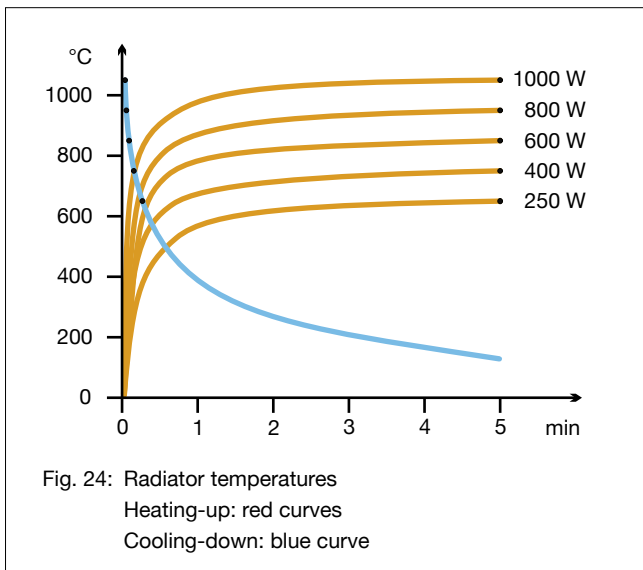
Elstein HSR high speed radiators are quick-reaction ceramic infrared panel radiators, designed for operating temperatures up to 900 °C and surface ratings up to 64 kW/m².

The external characteristics of the HSR radiators is their visible heating coil, which is installed in a ceramic body. The heat released in the wiring space by this design is up to 65 % less compared to infrared radiators with a heating coil embedded in ceramic.

HSR high speed radiators are particularly suitable for use in clocked production processes, for frequent tool changes or if the temperature has to drop quickly in case of transfer disruptions, in order to prevent damage to the production plant.

Elstein HSR high speed radiators are available in three designs and cover the power range from 125 W to 1000 W.





Type, weight, wattage	HSR	220 g	250	400	600	800	1000	W
	HSR/1	220 g	250	400	600	800	1000	W
	HSR/2	125 g	125	200	300	400	500	W
Surface rating			16.0	25.6	38.4	51.2	64.0	kW/m ²
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	Thermocouple radiators	Variants
Operating voltage 230 V Ceramic moulding Leads 85 mm Elstein standard socket Mounting set Integrated thermal insulation	Not available. For means of controlling output see below.	Special wattages Special voltages Extended leads Live leads with ring terminals

The power can be adjusted using proprietary power controllers or by means of pyrometers with standard thermocouple signal output in conjunction with TRD temperature controllers.

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

Further information and safety information are given in the mounting instruction enclosed with each radiator.