



CRN TECNOPART, S.A.

Sant Roc 30
 08340 VILASSAR DE MAR (Barcelona)
 Tel 902 404 748 - 937 591 484 Fax 937 591 547
 e-mail: crn@crntp.com [http:// www.crntecnopart.com](http://www.crntecnopart.com)

ELSTEIN
IRE- 090.20E



**HLS
 HIGH PERFORMANCE RADIATOR**

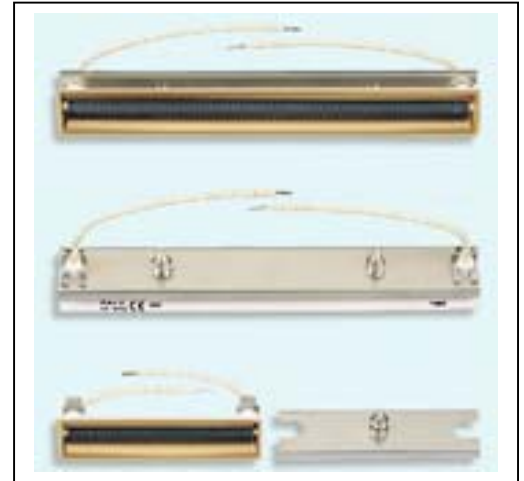
Elstein HLS high performance radiators are ceramic infrared rod radiators, which can be used for operating temperatures up to 1000 °C and surface ratings up to 87 kW/m².

HLS series radiators have a gold-plated ceramic parabolic reflector and transfer up to 80% of the energy supplied as infrared radiation to the material to be heated.

In this way, HLS radiators allow material temperatures of up to 700 °C or high throughput speeds. The typical operating temperature of 1000 °C is reached in less than one minute.

HLS series radiators are therefore particularly suitable for use in plant construction, in which special solutions have to be drawn up for the customer's specific needs and for applications requiring high outputs


Elstein HLS high performance radiators are available in two designs with 750 W / 230 V and for pairwise serial connection with 375 W / 115 V.



As supports for the 2 models, and to facilitate the construction of panels are manufactured metal mount 2 Profiles

The MPO of 248 x 33 mm for the emitter HLS
 The MPO / 2 of 122 x 33 mm for the emitter HLS / 2

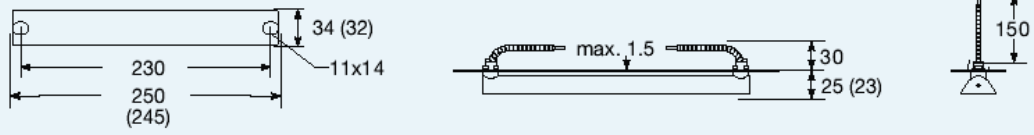
Type, weight, wattage a 230 V	HLS	245 x 34 mm	120 g	750 W 230 V	
	HLS/2	122 x 34 mm	60 g	375 W 115 V	
Surface rating				87	kW/m ²
Typical operating temperature				1000	°C
Maximum permissible temperature				1100	°C
Wavelength range				2 - 10	µm

Standard design	Thermocouple radiators	Variants
HLS operating voltage 230 V HLS/2 operating voltage 115 V HLS leads 150 mm HLS/2 leads 90 mm Parabolic reflector gold-plated on the inside	Kit T-HLS and T-HLS/2 for selfassembly, consisting of 1) HLS or HLS/2 2) Platinum-thermocouple type S 3) Thermocouple clamp 	Special wattages Special voltages Extended leads Leads with ring terminals

Elstein HLS radiators must be operated with temperature control to avoid damage due to overheating. The power can be controlled using proprietary sheathed thermocouples as well as Elstein platinum-thermocouples (both type S, Pt-PtRh) in conjunction with TRD 1 temperature controllers, TSE thyristor switching units and further accessories.
 IR radiation areas can be assembled using MPO mounting profiles.
 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.

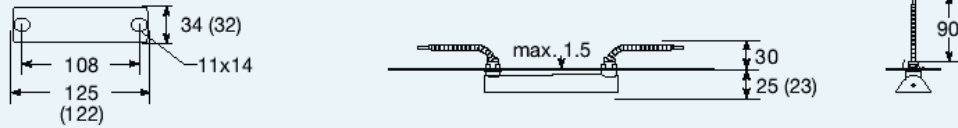
Dimensiones en mm. de los distintos modelos HLS y soportes MPO

HLS



T-HLS: The length 250 (245) extends due to the thermocouple clamp by 6 mm

HLS/2



T-HLS/2: The length 125 (122) extends due to the thermocouple clamp by 6 mm

T-HLS and T-HLS/2

HLS series with platinum thermocouple type S (blue printed), assembled

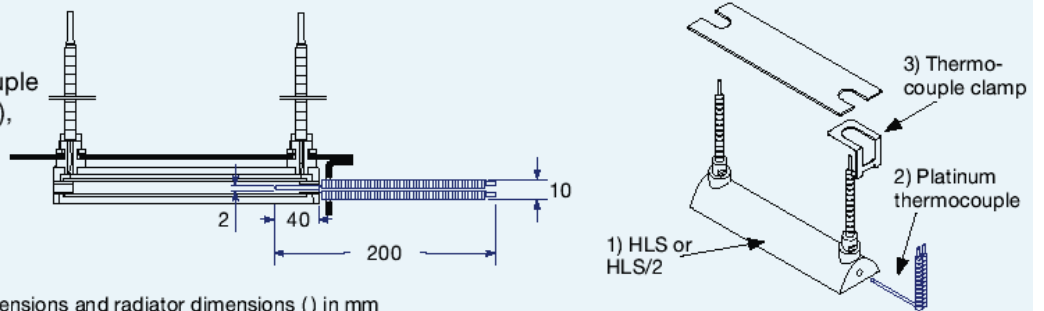
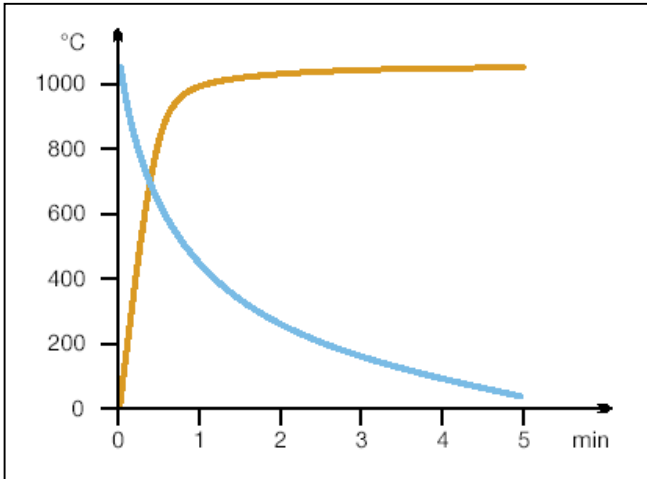
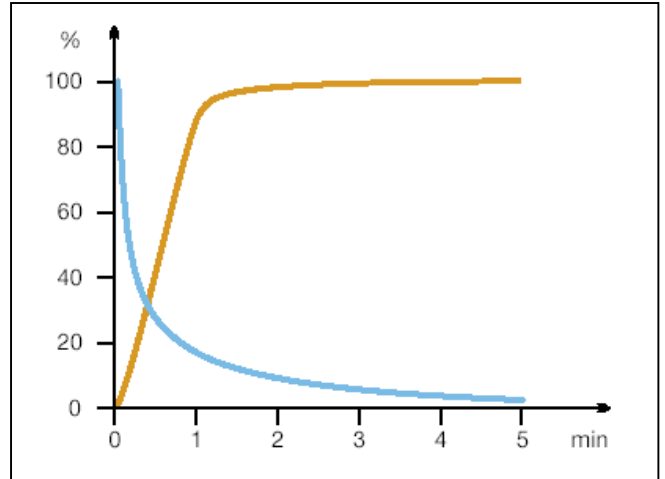


Figure 60: Mounting dimensions and radiator dimensions () in mm



Radiator temperatures

Heating-up: red curve
Cooling-down: blue curve



Radiant powers

Heating-up: red curve
Cooling-down: blue curve