

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:<u>crn@crntp.com</u> http:// www.crntecnopart.com ELSTEIN

IRE- 070.22E



HLF PANEL RADIATOR

Elstein HLF panel radiators are ceramic infrared radiators, which can be used for operating temperatures up to 700°C and surface ratings up to 42 kW/m².

The elongated socket of the HLF radiators allows inserting of a heat insulation layer between the radiation surface and the mounting sheet.

Due to this design in connection with heat insulation the radiation efficiency of a ceramic radiator was increased significantly for the first time. On the other hand a relatively thick heating panel was the consequence. In the course of the further development the heat insulation was integrated into the radiator.

This led to our HTS high temperature radiator with short standard socket. Today the radiators of the HTS series are the industrial state-of-the-art for heating and drying machines.

Elstein HLF panel radiators cover the power range from 250 W to 650 W.



Type, weight, wattage 230 V HFS 122 x 122 mm 270 g	250	400	650	W
Surface rating	16	25,6	41,6	kW
Typical operating temperature	420	510	630	° C
Maximum permissible temperature	700	700	700	° C
Wavelength range		2 - 10		μm

Standard design	Thermocouple radiators	Variants
Operating voltage 230 V Ceramic hollow casting White glaze Leads 85 mm Elstein standard socket Mounting set	Designation T-HLF Integrated thermocouple Type K (NiCr-Ni) TC leads 100 mm	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.

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.

HLF MOUNTING DIMENSIONS AND RADIATOR DIMENSIONS () IN MM





HLF/S PANEL RADIATOR

Elstein HLF/S panel radiators are ceramic infrared radiators, which can be used for operating temperatures up to 750 $^{\circ}$ C and surface ratings up to 64 kW/m².

Compared to other Elstein panel radiators the design of HLF/S-radiators is characterised by a heightened back with an extended socket.

HLF/S panel radiators are used in heating panels or machines, which are designed for the model of HLF/S radiators.

Since the Elstein HTS series with integrated thermal insulation was developed the HTS radiators represent the industrial state-of-the-art and are preferred for implementing projects of new machines and plants.

Elstein HLF/S panel radiators cover the power range from 250 W to 1000 W.



Type, weight, wattage 230 v	HLF/S 122 x 122 mm	220 g	250	400	650	800	1000	W
Surface rating			16,0	25,6	41,6	51,2	64,0	kW
Typical operating temp	perature		420	530	660	700	720	°C
Maximum permissible temperature		750	750	750	750	750	° C	
Wavelength range					2 - 10			μm

Standard design	Thermocouple radiators	Variants
Operating voltage 230 V Ceramic hollow casting White glaze Leads 85 mm Elstein standard socket Mounting set	Designation T-HLF Integrated thermocouple Type K (NiCr-Ni) TC leads 100 mm	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.

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.

