

# Infrared Radiation Systems

**EBF-R**

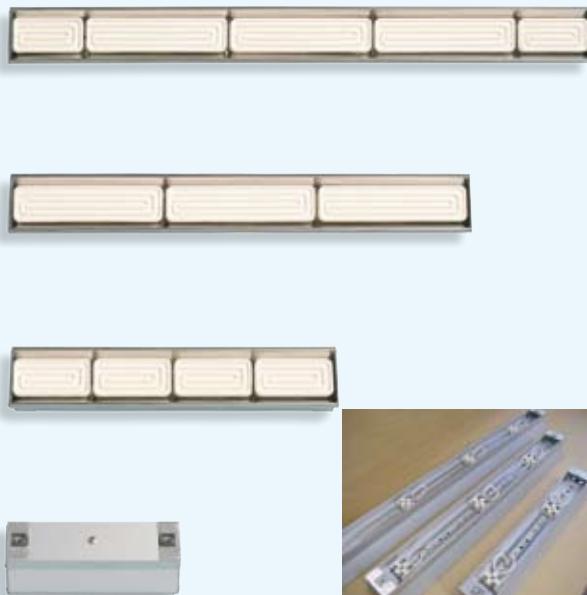


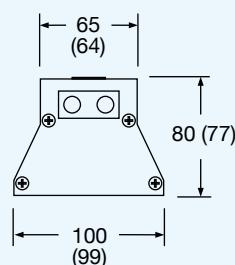
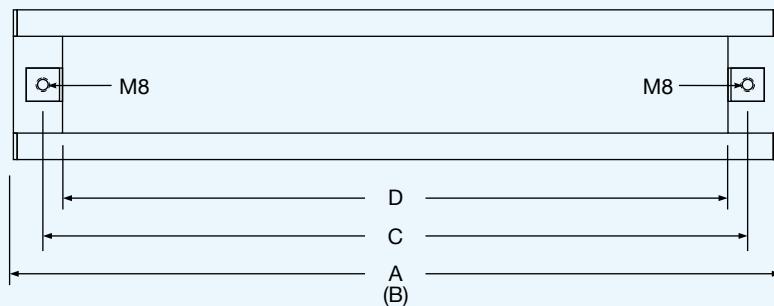
Figure 1: Elstein EBF-R equipped with radiators of the HTS series

Elstein EBF-R construction elements are supplied in assembled condition and are equipped with universal power rails. The construction elements can be equipped with Elstein ceramic panel radiators FSM, FSR, HSR/1, HTS/1, SHTS/1 and FSM/2, FSR/2, HSR/2, HTS/2, SHTS/2, whereby it is also possible to combine different radiator designs and wattages of the same types of radiators.

For positioning the universal power rails in the wiring space of EBF-R ceramic terminals are used. With the help of clamping brackets, spring washers and screws the connection of the heaters is done to the terminal points of the universal power rail. The one-sided fixing of the universal power rail to one of the terminals enables their thermal expansion without tension.

Thus the EBF-R needs to be fixed in a steel section frame to be made on site and connected up with the electricity mains.

Elstein EBF-R construction elements are available in five lengths and can also be fitted together to form flat or curved radiation panels in any installed position.



	A	B	C	D
EBF-R/25***	260	255	217	190
EBF-R/50	510	505	467	440
EBF-R/75	760	755	717	690
EBF-R/100	1010	1005	967	940
EBF-R/125	1260	1255	1217	1190

\*\*\*The standard scope of delivery for EBF-R/25 does not include a rail if a radiator with the dimensions 245 x 60 mm is mounted.

Figure 2: Mounting dimensions and EBF-R dimensions () in mm

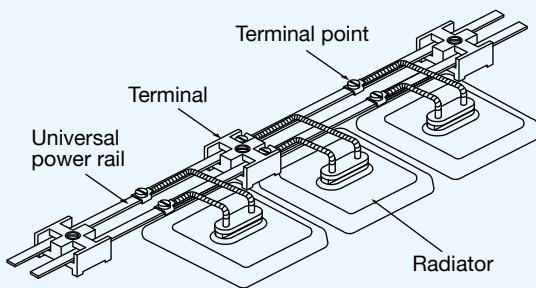


Fig. 3: Rail wiring



Fig. 4: Rail and terminal in the center of EBF-R system.  
The rails are not fixed here to the terminal.



Fig. 5: The screws connecting the radiator's leads with the rails fix also the rails to the terminal.



Fig. 6: Rail and terminal at the other end of EBF-R.  
The rails are not fixed here to the terminal.

### Standard scope of delivery (variants and other lengths are available on request)

Ceramic infrared radiators, fitted, selectable heater types:

**FSM, FSR, HSR/1, HTS/1, SHTS/1, FSM/2, FSR/2, HSR/2, HTS/2, SHTS/2**

The maximum radiator power level available is 1200 W. Mixed radiator wattages and dimensions can be fitted.

Thermocouple radiators for temperature control are installed in the EBF-R construction element at the request of the customer. Accessories for controlling the temperature, such as the TRD 1 temperature controller and TSE thyristor switching units are included in the Elstein range of products.

### REO reflectors for the radiator dimensions 245 x 60 mm and 122 x 60 mm, fitted

The REO reflectors are made from polished stainless steel. They are used for holding and fixing the radiators and reflecting the IR radiation in the direction of the material to be heated. On request, the reflectors fitted with ceramic infrared radiators are also available separately under the type designations REF/250 and REF/125.

### Extruded frame and capping sections and end pieces made from aluminium, fitted

For surrounding the ceramic infrared radiators fixed to the REO reflectors. Each EBF-R construction element includes a capping section and two end pieces. The end pieces have an M8 thread for screwing the EBF-R construction element with a steel section frame. The end pieces also include a ceramic bushing for the electricity cables and a labelled safety earth terminal.

### Universal power rails (8 x 2 mm) and terminals, both fitted, rails connected with radiator power leads

Fitted universal power rails being connected electrically with the ceramic infrared radiators. The rails have enough holes for connecting 245 x 60 mm radiators. Using radiators with smaller dimensions (122 x 60 mm) can require additional holes on the rails.

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