



Figure 1: Elstein BST construction panel 750 x 750 mm equipped with HTSL

Elstein BST construction panels are thermally insulated infrared radiation areas, which are equipped with HTSL ceramic IR heaters.

All parts of the housing are made from stainless steel. Therefore HTSL radiators with a single power up to 1000 W can be used.

An insulating layer, which is designed for high thermal loads and placed on the rear of the heaters, leads to a significant reduction of the temperature in the wiring compartment of BST construction panels. At the same time the efficiency increases up to 10 %.

The BST construction panels are factory assembled so that the user only has to do the wiring, insert the BST panel in a steel section frame to be made on site and connect the panel with the electricity mains.

Elstein BST construction panels are available in dimensions from 125 x 125 mm to 1000 x 1500 mm.

Length in mm

Inner dim. (Outer dim.) [No. of rad.]	125 (136) [1]	250 (261) [2]	375 (386) [3]	500 (511) [4]	625 (636) [5]	750 (761) [6]	875 (886) [7]	1000 (1011) [8]	1125 (1136) [9]	1250 (1261) [10]	1375 (1386) [11]	1500 (1511) [12]		Radiator wattage
125 (136) [1]	0.25 to 1.00	0.50 to 2.00	0.75 to 3.00	1.00 to 4.00	1.25 to 5.00	1.50 to 6.00	1.75 to 7.00	2.00 to 8.00	2.25 to 9.00	2.5 to 10.00	2.75 to 11.00	3.00 to 12.00	kW	250 W to 1000 W
250 (261) [2]	0.5 to 2.00	1.00 to 4.00	1.50 to 6.00	2.00 to 8.00	2.50 to 10.00	3.00 to 12.00	3.50 to 14.00	4.00 to 16.00	4.50 to 18.00	5.00 to 20.00	5.50 to 22.00	6.00 to 24.00	kW	250 W to 1000 W
375 (386) [3]	0.75 to 3.00	1.50 to 6.00	2.25 to 9.00	3.00 to 12.00	3.75 to 15.00	4.50 to 18.00	5.25 to 21.00	6.00 to 24.00	6.75 to 27.00	7.50 to 30.00	8.25 to 33.00	9.00 to 36.00	kW	250 W to 1000 W
500 (511) [4]	1.00 to 4.00	2.00 to 8.00	3.00 to 12.00	4.00 to 16.00	5.00 to 20.00	6.00 to 24.00	7.00 to 28.00	8.00 to 32.00	9.00 to 36.00	10.00 to 40.00	11.00 to 44.00	12.00 to 48.00	kW	250 W to 1000 W
625 (636) [5]	1.25 to 5.00	2.50 to 10.00	3.75 to 15.00	5.00 to 20.00	6.25 to 25.00	7.50 to 30.00	8.75 to 35.00	10.00 to 40.00	11.25 to 45.00	12.50 to 50.00	13.75 to 55.00	15.00 to 60.00	kW	250 W to 1000 W
750 (761) [6]	1.50 to 6.00	3.00 to 12.00	4.50 to 18.00	6.00 to 24.00	7.50 to 30.00	9.00 to 36.00	10.50 to 42.00	12.00 to 48.00	13.50 to 54.00	15.00 to 60.00	16.50 to 66.00	18.00 to 72.00	kW	250 W to 1000 W
875 (886) [7]	1.75 to 7.00	3.50 to 14.00	5.25 to 21.00	7.00 to 28.00	8.75 to 35.00	10.50 to 42.00	12.25 to 49.00	14.00 to 56.00	15.75 to 63.00	17.50 to 70.00	19.25 to 77.00	21.00 to 84.00	kW	250 W to 1000 W
1000 (1011) [8]	2.00 to 8.00	4.00 to 16.00	6.00 to 24.00	8.00 to 32.00	10.00 to 40.00	12.00 to 48.00	14.00 to 56.00	16.00 to 64.00	18.00 to 72.00	20.00 to 80.00	22.00 to 88.00	24.00 to 96.00	kW	250 W to 1000 W

Maximum surface rating 64.0 kW/m² Weight approx. 62 kgs/m² Other dimensions and surface ratings available on request
The outer dimensions indicated in the table do not include the mounting fishplates.

Figure 2: Overview of the standard dimensions, outer dimensions (), number of radiators [] and the connected loads in kW

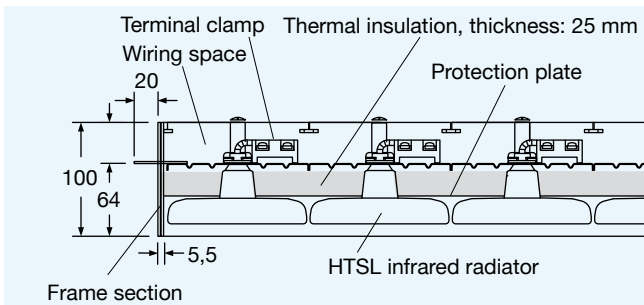


Fig. 3: Structural design of the BST construction panel
Dimensions in mm



Fig. 4: Wiring space of a BST construction panel

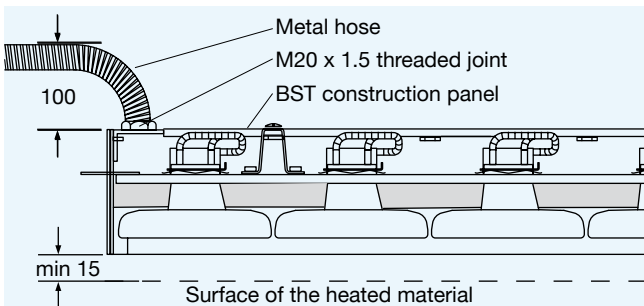


Fig. 5: Arrangement of the connection unit for establishing the mains connection. Dimensions in mm



Fig. 6: BST construction panel, inserted in a steel section frame

Standard scope of delivery (variants available on request)

Ceramic infrared radiators HTSL and T-HTSL, fitted

Radiators can be chosen from the radiator power ratings 250 W, 400 W, 600 W, 800 W and 1000 W. Mixed radiator wattages can also be fitted. One radiator with integrated thermocouple (T-HTSL) is provided for each construction panel.

Thermal insulation layer

A thermal insulation is integrated between the rear of the radiators and the mounting sheets.

Frame sections with mounting fishplates and capping sections both made from stainless steel, fitted

These components are used to surround the ceramic infrared radiators fixed to the MBO mounting sheets and to hang the BST construction panel into a steel section frame to be built on site.

AK bipolar terminal clamps, fitted and connected with radiator power leads

For the electrical wiring of the individual radiators in conjunction with heat resistant insulated nickel wires and the connection of the thermocouple in conjunction with the heat resistant insulated thermo line.

Mounting units, enclosed, individual parts are not fitted

A mounting unit contains an angle section, up to 3 heat resistant flexible metal hoses with a length of 1m and screw fitting accessories. The hoses are used to hold the nickel wire and thermo line and to protect them from mechanical stress. The mounting units can be fixed to anywhere on the BST frame section.

Wiring material (nickel wire, thermo line), enclosed

Nickel wire (2.5 mm², max. 500 °C, max. 11 A) is supplied for the electrical wiring of the ceramic infrared radiators. The thermo line (1 mm², max. 400 °C) is used to connect the thermocouple to the controller. The Elstein product range includes a compensating line (1.5 mm², max. 100 °C) for extending this connection outside the IR radiation area.

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