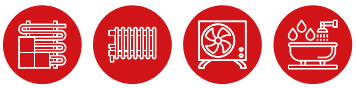
Flat HIU station BA-HF

The flat HIU station is an efficient solution for decentralized heat supply and combines precise temperature control for drinking water and underfloor heating. Thanks to the thermostatic temperature controller for drinking water and the thermostatic heating circuit controller, a constant temperature is ensured, regardless of tap intervals or heating water temperatures.
The compact hard foam insulation box provides excellent thermal insulation and is fully recyclable.

Suitable for:



- **Thermostatic temperature controller:** Ensures a constant hot water temperature and automatically adjusts to operating conditions.
- **Thermostatic heating circuit controller:** Ensures demand-based temperature control of the underfloor heating. Provides an even distribution of heat.
- **Hard foam insulated box:** Recyclable material with excellent thermal insulation
- **Optional with unregulated heating circuit:** Offers simple and flexible connection options.
- **Differential pressure regulator:** Stabilizes differential pressure in primary circuit and ensures constant flow control.
- **Scald protection:** Integrated thermal hot water mixer in the hot water outlet. (optional)
- **Protection and comfort:** Includes water hammer damper for a secure water supply.
- **Insulated cold water pipes:** Prevents heat transfer and increases energy efficiency.
- **Stainless steel piping:** Robust, corrosion-resistant pipes (18x1 mm).
- **Low-profile design:** Compact depth of 130 mm.

Image includes expansion modules

Domestic hot water preparation
The drinking water is heated using the flow principle through a stainless steel plate heat exchanger only when it is needed. The thermostatic temperature controller ensures that the hot water temperature remains constant regardless of the amount of tapped water, the heating water temperature or usage intervals. An integrated differential pressure regulator stabilizes the pressure in the heating system and ensures a constant flow rate. The station can be connected to heating systems with buffer storage tanks as well as directly to a secondary district heating network or a combined heat and power plant. A universal installation section for cold water and heat meters is integrated into the insulation box.

We recommend the additional installation of thermostatic mixing valves to avoid temperature fluctuations in the hot water outlet.

ORDER NO.	
2240002	Flush-mounted, copper plate heat exchanger, hot water capacity M
2240004	Flush-mounted, copper plate heat exchanger, hot water capacity XL
2240102	Flush-mounted, stainless steel plate heat exchanger, hot water capacity M
2240104	Flush-mounted, stainless steel plate heat exchanger, hot water capacity XL
2240012	Surface-mounted, copper plate heat exchanger, hot water capacity M
2240014	Surface-mounted, copper plate heat exchanger, hot water capacity XL
2240112	Surface-mounted, stainless steel plate heat exchanger, hot water capacity M
2240114	Surface-mounted, stainless steel plate heat exchanger, hot water capacity XL

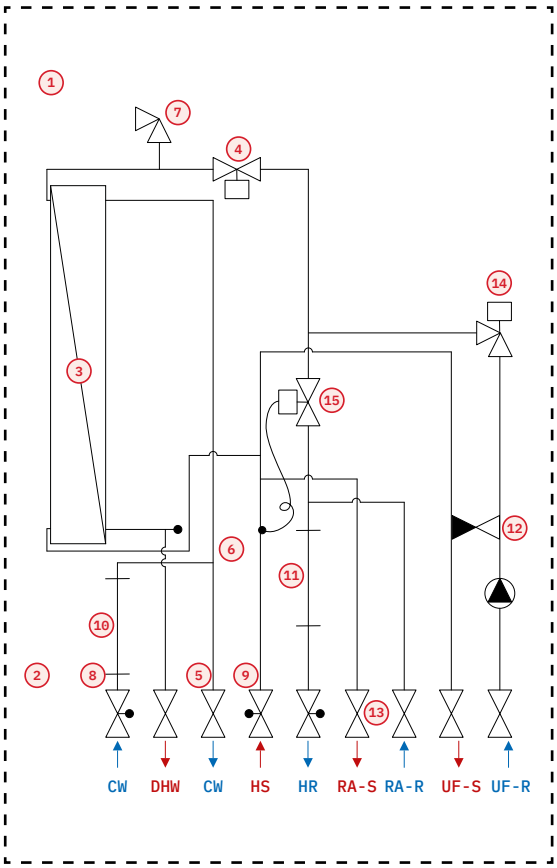
	HEATING PRIMARY	HEATING SECONDARY	
	BUFFER STORAGE	HEATING	DRINKING WATER
Pressure rating:	PN 6	PN 6	PN 10
Max. temperature:	90 °C	60 °C	75 °C
Connection dimensions:	DN 25	DN 20	DN 20
Thread:	G1" internal thread	G¾" internal thread	G¾" internal thread
Dimensions (WxHxD):	Flush-mounted: 738 x 826 x 130-175 mm / Surface-mounted: 760 x 930 x 140 mm		
Niche size (WxHxD):	Flush-mounted: min. 759 x 836 x 135-180 mm		

PERFORMANCE EXAMPLE: HEAT EXCHANGER				
HOT WATER CAPACITY:	M (36 KW)		XL (51 KW)	
PERFORMANCE INDICATOR	PI2**	PI1*	PI2**	PI1*
Hot water output:	39,2 kW	36,9 kW	49,7 kW	46,6 kW
Supply / Return temperature primary:	70 / 27,2 °C	60 / 20,1 °C	70 / 26,7 °C	60 / 19,6 °C
CW inlet/ HW outlet temperature:	10 / 60 °C	10 / 45 °C	10 / 60 °C	10 / 45 °C
DHW tap capacity max.:	11,2 l/min	15,1 l/min	14,2 l/min	19,1 l/min
Pressure loss secondary DHW ***:	196 mbar	355 mbar	316 mbar	566 mbar
Pressure loss primary Heating ***:	286 mbar	286 mbar	447 mbar	447 mbar
Heating flow rate primary:	800 l/h	800 l/h	1000 l/h	1000 l/h
38 °C DHW tap quantity after CW admixture:	20,1 l/min	18,9 l/min	25,5 l/min	23,9 l/min
40 °C DHW tap quantity after CW admixture:	18,7 l/min	17,6 l/min	23,8 l/min	22,3 l/min

*** without cold water meter or heat meter

(at 2 bar cold water pressure and 350 mbar heating)

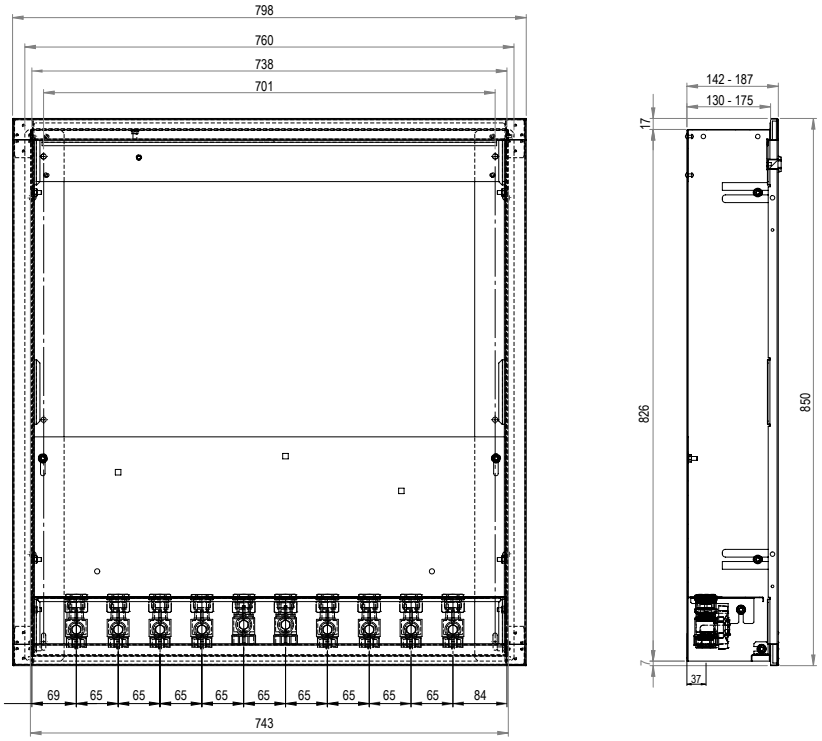
PI2 = Performance indicator 2: at a set hot water temperature of 60 °C; at a primary flow temperature of 70 °C; at a cold water temperature of 10 °C
PI1 = Performance indicator 1: at a set hot water temperature of 45 °C; at a primary flow temperature of 60 °C; at a cold water temperature of 10 °C



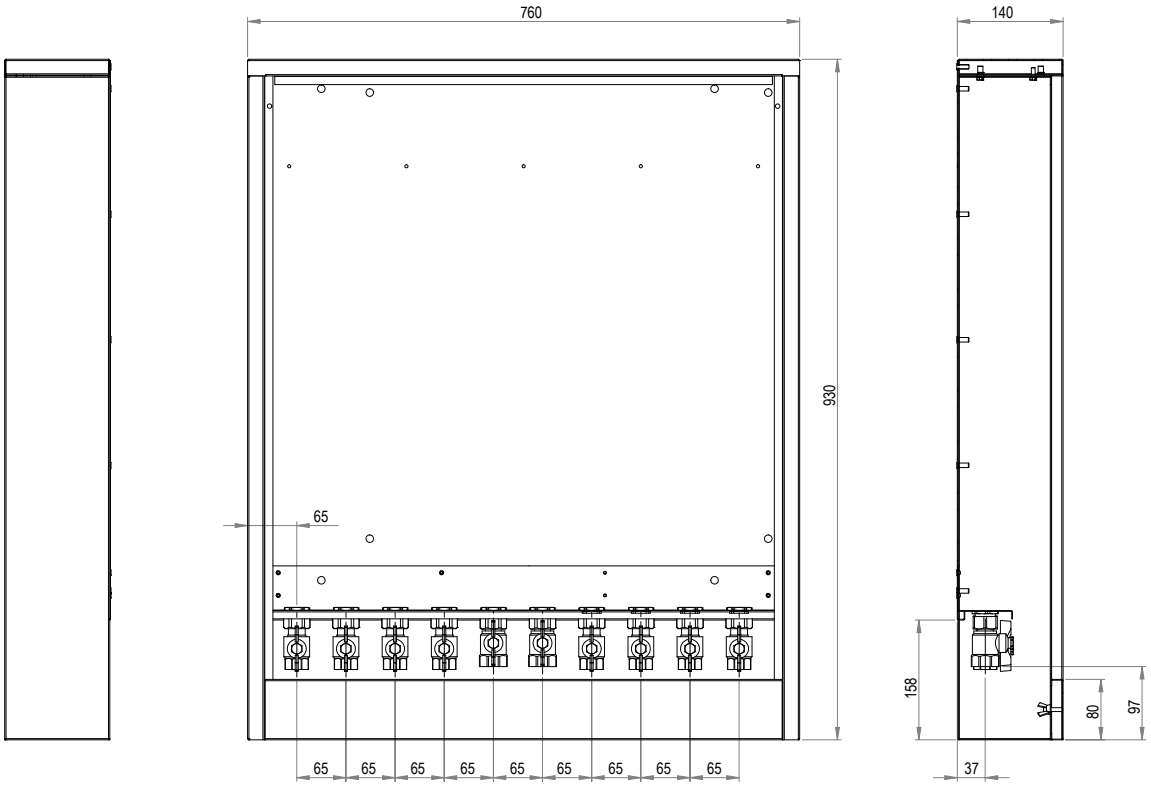
SCHEMATIC	
1	Built-in cabinet
2	Connection rail with ball valves
3	Plate heat exchanger
4	Thermostatic temperature controller for drinking water
5	Cold water outlet
6	Cold water maximum limiter (optional)
7	Ventilation and drainage
8	Strainer insert CW (optional)
9	Strainer insert HS (optional)
10	Cold water meter fitting piece G¾" - 110 mm
11	Heat meter fitting piecer G¾" - 110 mm
12	Underfloor control unit (low temperature NT)
13	Radiator outlet (high temperature HT) (optional)
14	Thermostatic temperature controller for underfloor heating
15	Differential pressure regulator

DIMENSIONS FOR INSTALLATION

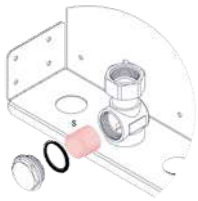
FLUSH-MOUNTED



SURFACE-MOUNTED



EXPANSION MODULES & ACCESSORIES



ORDER NO.

1000100 Module S1

Strainer insert

Strainer insert for removing dirt particles in the system, with a pressure loss of 80 mbar. Optimal protection for the entire system thanks to reliable filtering.

ORDER NO.

1000105 Module VR

Volume flow controller

Dynamic volume flow controller for hydraulic balancing. Externally adjustable, DN 15, adjustment range up to 1330 l/h, K_{vs} 2,7. Ensures stable flow rates under changing load conditions.

ORDER NO.

1000108 Module Hygiene Plus-A

Hygiene Plus

Hygienic “cold” plate heat exchanger with electric priority circuit and temperature maintenance, including drinking water mixer (scald protection)

ORDER NO.

1000120 Module ZV

Zone valve

G½" zone valve with the option of integrating an actuator (M30x1,5 mm), mounted secondarily in the radiator circuit. It enables precise control of the heating circuit and offers flexibility in room temperature regulation.

ORDER NO.

1000123 Module HK

Radiator connection

Supply and return connection piping with G¾" shut-off ball valves and strainer insert. Piping is connected to the high-temperature outlets of the station and the ball valves are integrated into the strip.