

# Flat HIU station BA-H

The flat HIU station was developed to combine highly efficient heating and hot water supply with precise control.

It ensures a stable and reliable heat supply thanks to an advanced control system that flexibly adapts operation to different requirements.

Its compact design enables a space-saving installation, while the high-quality materials ensure durability and low-maintenance operation.

Suitable for:



- † **Thermostatic temperature controller:** Ensures a constant hot water temperature and automatically adjusts to operating conditions.
- † **Hard foam insulated box:** Recyclable material with excellent thermal insulation.
- † **Unregulated heating connection:** Offers simple and flexible connection options.
- † **Differential pressure regulator:** Stabilizes differential pressure in primary circuit and ensures constant flow control.
- † **Protection and comfort:** Includes water hammer damper for a secure water supply.
- † **Scald protection:** Integrated thermal hot water mixer in the hot water outlet. (optional)
- † **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.	
2100002	Flush-mounted, copper plate heat exchanger, hot water capacity M
2100004	Flush-mounted, copper plate heat exchanger, hot water capacity XL
2100102	Flush-mounted, stainless steel plate heat exchanger, hot water capacity M
2100104	Flush-mounted, stainless steel plate heat exchanger, hot water capacity XL
2100012	Surface-mounted, copper plate heat exchanger, hot water capacity M
2100014	Surface-mounted, copper plate heat exchanger, hot water capacity XL
2100112	Surface-mounted, stainless steel plate heat exchanger, hot water capacity M
2100114	Surface-mounted, stainless steel plate heat exchanger, hot water capacity XL

	HEATING PRIMARY BUFFER STORAGE	HEATING SECONDARY 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: 593 x 826 x 130-175 mm / Surface-mounted: 615 x 930 x 140 mm		
Niche size (WxHxD):	Flush-mounted: min. 613 x 836 x 135-180 mm		

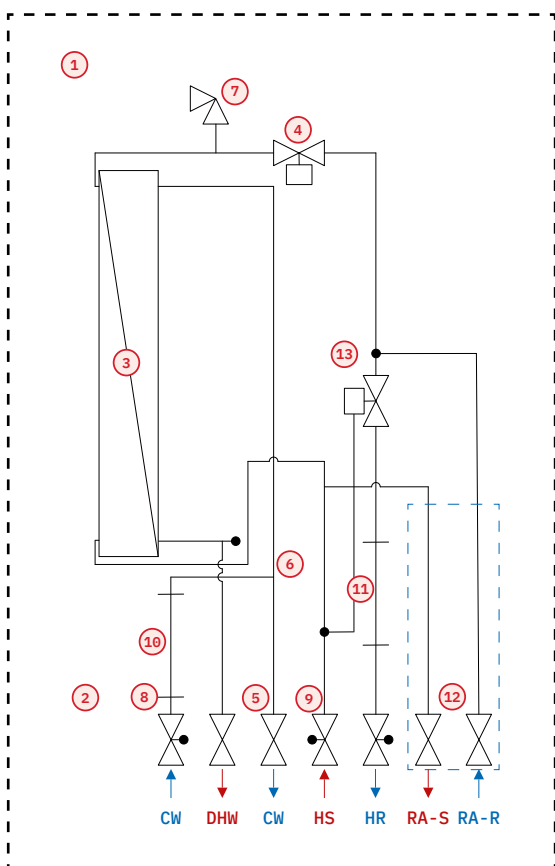
PERFORMANCE EXAMPLE: HEAT EXCHANGER				
HOT WATER CAPACITY:	M (36 kW)		XL (51 kW)	
PERFORMANCE INDICATOR	PI2**	PI1*	PI2**	PI1*
Hot water output:	39,2 kW	36,9 kW	49,7 kW	46,6 kW
Supply / Return temperature primary:	70 / 27,2 °C	60 / 20,1 °C	70 / 26,7 °C	60 / 19,6 °C
CW inlet/ HW outlet temperature:	10 / 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

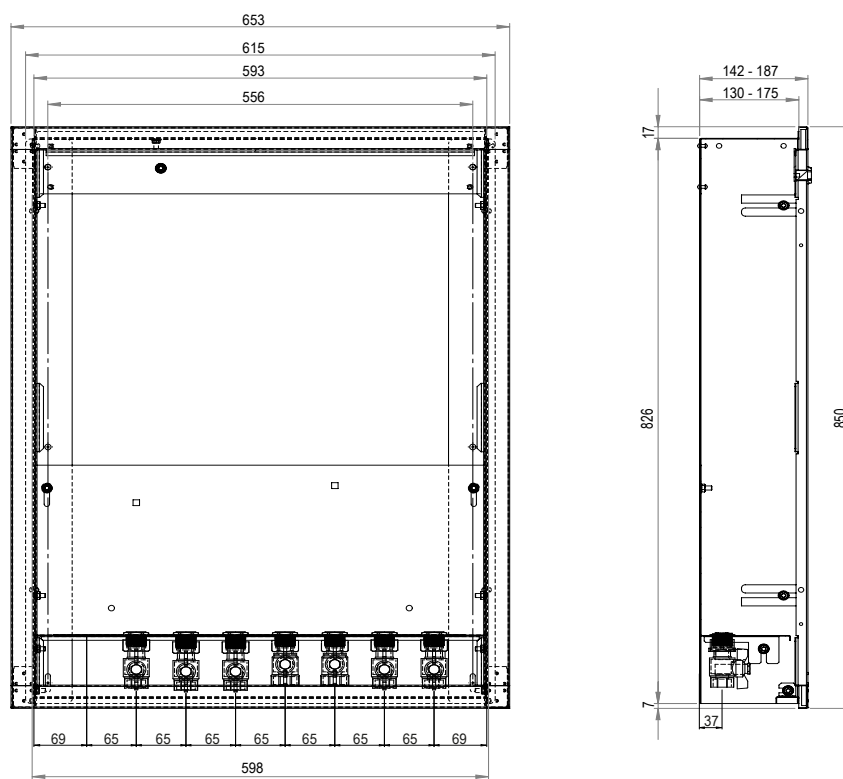


## SCHEMATIC

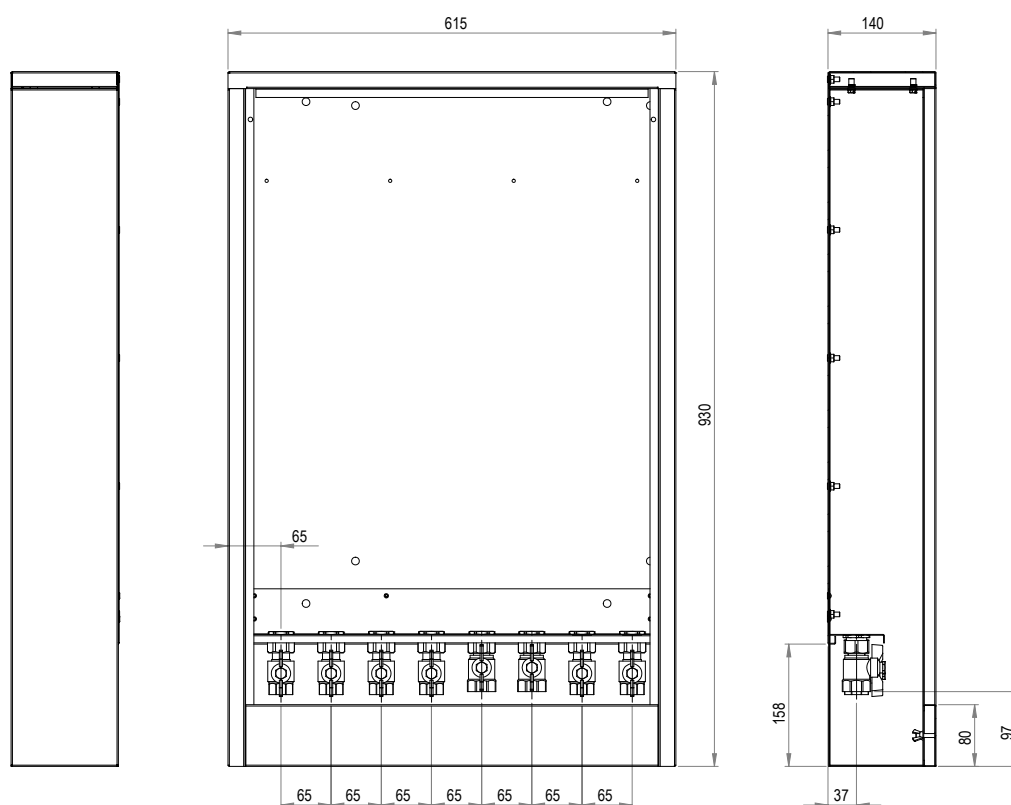
- 1 Built-in cabinet
- 2 Connection rail with ball valves
- 3 Plate heat exchanger
- 4 Thermostatic temperature controller for drinking water
- 5 Cold water outlet
- 6 Cold water maximum limiter (optional)
- 7 Ventilation and drainage
- 8 Strainer insert CW (optional)
- 9 Strainer insert HS (optional)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

## DIMENSIONS FOR INSTALLATION

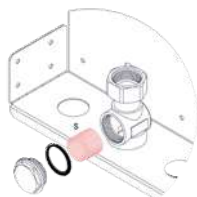
FLUSH - MOUNTED



SURFACE - MOUNTED



## EXPANSION MODULES &amp; 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.

**1000117** Module D2

## Differential pressure regulator

Differential pressure regulator secondary (station inlet) for maintaining the differential pressure during significant load changes. DN 15, continuously adjustable from 50 to 650 mbar, incl. connecting capillary tube 3 mm,  $K_{vs}$  2,9.



## ORDER NO.

**1000120** Module ZV

## Zone valve

G $\frac{1}{2}$ " 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.