Flat HIU station BA-WP 4

This flat HIU station was specially developed for use with heat pumps and ensures optimum heat transfer at low supply temperatures. The precise thermostatic control automatically adapts to changing conditions.
Its sophisticated design helps to maximize the efficiency of heat pump systems. Thanks to its compact design, it is easy to install and requires very little space.

Suitable for:

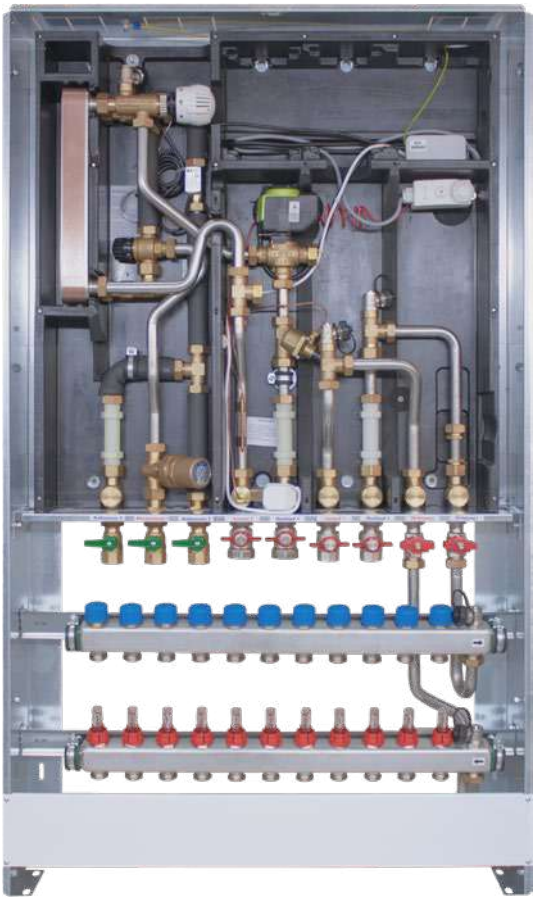


Image includes expansion modules

- **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.
- **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
- **Additional heating circuit:** Includes a heat meter installation section for floor distributors and radiator heating.
- **Stainless steel piping:** Robust, corrosion-resistant pipes (18x1 mm).
- **Low-profile design:** Compact depth of 130 mm.

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.

4-wire system
The 4-wire system enables precise consumption measurement for underfloor heating and radiator heating. The cabinet is equipped with an extra screw fitting section that allows the two heating circuits to be separated and measured.

ORDER NO.	
2220004	Flush-mounted, copper plate heat exchanger, hot water capacity XL
2220104	Flush-mounted, stainless steel plate heat exchanger, hot water capacity XL
2220014	Surface-mounted, copper plate heat exchanger, hot water capacity XL
2220114	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 1297-1470 x 130-175 mm / Surface-mounted: 760 x 1520 x 140 mm		
Niche size (WxHxD):	Flush-mounted: min. 758 x 1307 x 135-180 mm		

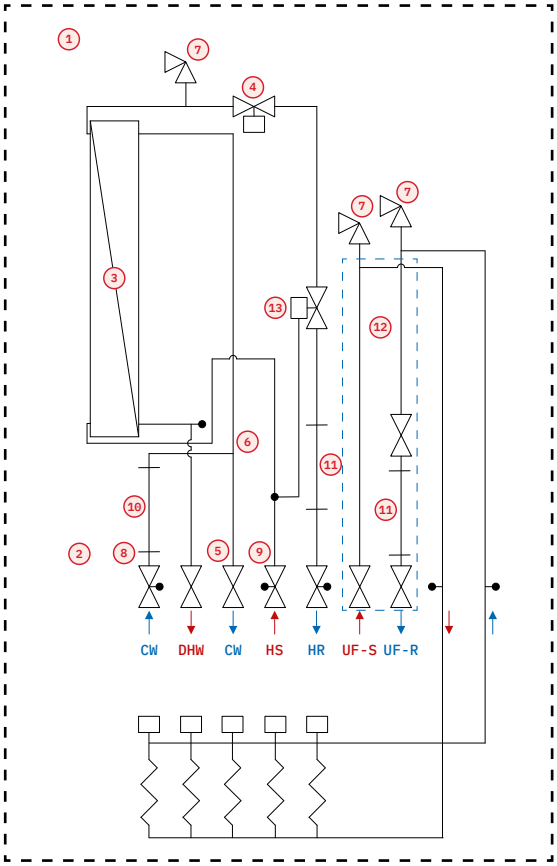
PERFORMANCE EXAMPLE: HEAT EXCHANGER				
HOT WATER CAPACITY:	XL (51 KW)			
PERFORMANCE INDICATOR				PI1*
Hot water output:	26 kW	34,9 kW	38,6 kW	46,6 kW
Supply / Return temperature primary:	45 / 22,4 °C	50 / 19,8 °C	55 / 21,6 °C	60 / 19,6 °C
CW inlet/ HW outlet temperature:	10 / 40 °C	10 / 40 °C	10 / 45 °C	10 / 45 °C
DHW tap capacity max.:	12,4 l/min	16,6 l/min	15,8 l/min	19,1 l/min
Pressure loss secondary DHW ***:	241 mbar	432 mbar	388 mbar	566 mbar
Pressure loss primary Heating ***:	447 mbar	447 mbar	447 mbar	447 mbar
Heating flow rate primary:	1000 l/h	1000 l/h	1000 l/h	1000 l/h
38 °C DHW tap quantity after CW admixture:	13,3 l/min	17,9 l/min	19,8 l/min	23,9 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

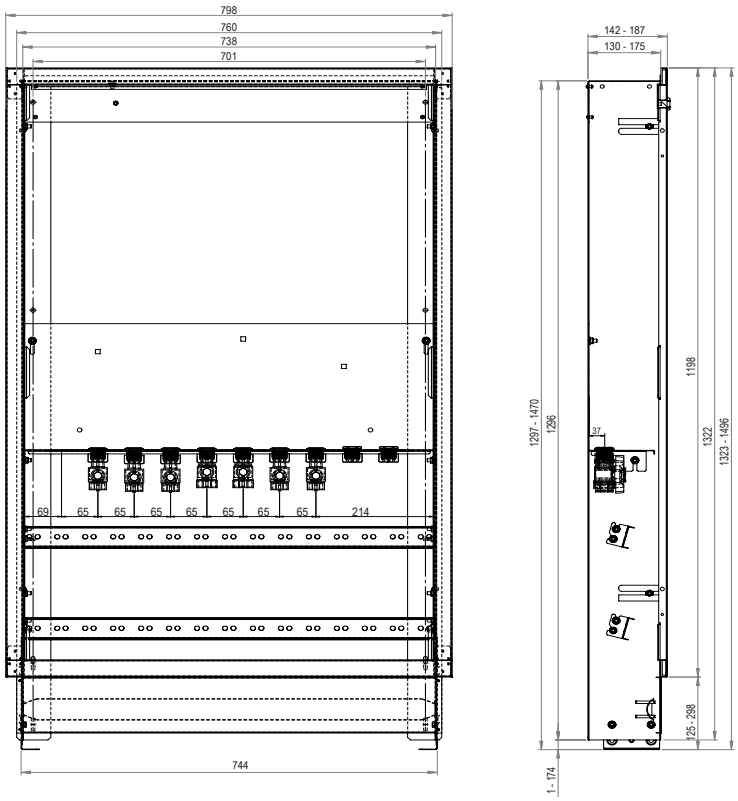
*PI1 = Performance indicator 1: at a set hot water temperature of 45 °C; at a primary flow temperature of 60 °C; at a cold water temperature of 10 °C



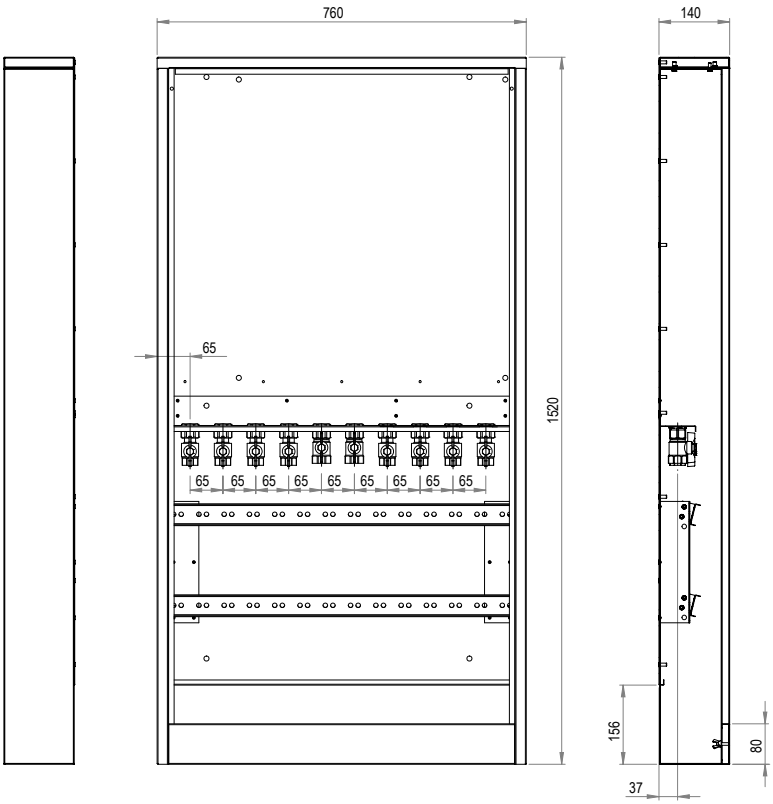
SCHEMATIC	
1	Built-in cabinet
2	Connection rail with ball valves
3	Plate heat exchanger
4	Thermostatic temperature controller for drinking water
5	Cold water outlet
6	Cold water maximum limiter (optional)
7	Ventilation and drainage
8	Strainer insert CW (optional)
9	Strainer insert HS (optional)
10	Cold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

DIMENSIONS FOR INSTALLATION

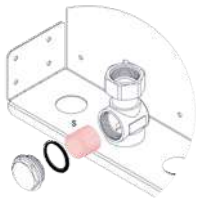
FLUSH-MOUNTED



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.

Example image

ORDER NO.

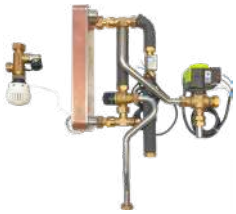
1000107 Module Z

Circulation ⚠

Drinking water circulation pump Z15 with backflow preventer for internal apartment circulation. Fully assembled with 18x1 mm stainless steel pipe.

– Not possible with module Hygiene Plus –

⚠ Note: Observe the applicable standards and regulations for circulation, in particular the hygiene regulations according to DVGW worksheet W 551. If necessary, a safety valve or expansion tank must be used.



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)

– Not possible with module Z –

ORDER NO.

1000124 Module HT

Special high-temp. connection G¾" ext. thr.

Option to connect an additional heating element, including control and shut-off valves

ORDER NO.

3702B - 3712B Floor manifold VA-FBif

For 2-12 circuits

Set consisting of supply and return bars, each with a G½" fill and drain valve. Soundproofed installation, with labeling stickers and adjustment instructions.

ORDER NO.

1003L eco-STA-L

Electrothermal actuator

For controlling the floor heating circuits at the manifold.

⚠ Note: Have us complete the wiring for the station to avoid self-assembly and missing components. Custom designs available on request.

ORDER NO.

1011/1015 TT-KL6 / TT-KL10

Base station

Base station for regulating the temperature for 6 or 10 zones. Connection for up to 15 or 18 actuators and 6 or 10 room control units. Ideal for the central control of complex heating systems.