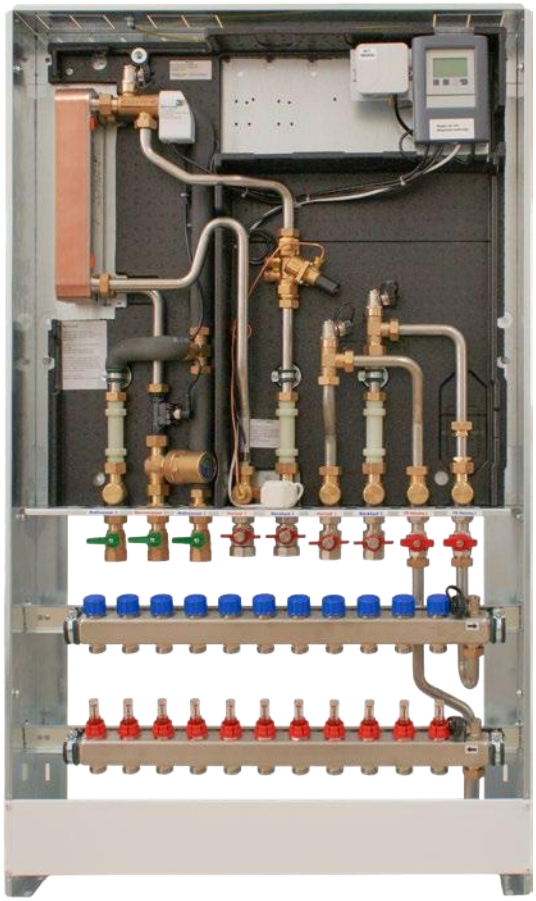
Flat HIU station BE-WP 4

The flat HIU station offers a modern solution for heating and hot water supply. Equipped with *step a valve* technology and a microprocessor-controlled controller, it ensures precise control and high efficiency. The EPP insulation box offers excellent insulation and is environmentally friendly and recyclable.

An additional heating circuit with a heat meter installation section for underfloor heating and radiators offers additional flexibility.

Suitable for:



- ***step a valve* stepper motor valve:** Precise control of hot water preparation using the flow principle. Minimizes energy losses and prevents the formation of Legionella bacteria.
- **Microprocessor controller:** Controls heating and hot water systems, adapts to weather conditions.
- **EPP insulated box:** With excellent thermal insulation for energy-saving operation and reliable protection.
- **Differential pressure regulator:** Stabilizes differential pressure in primary circuit and ensures constant flow control.
- **Temperature maintenance valve:** Ensures constant water temperatures through an integrated actuator.
- **Protection and comfort:** Includes drinking water priority circuit and water hammer damper for a secure water supply.
- **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. A sensor based on the vortex principle monitors the temperature and flow. A controller uses a *step a valve* step motor valve to regulate the necessary heating energy in order to minimize circulation losses and legionella formation. The plate exchanger is not kept warm.

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.	
3220004	Flush-mounted, Copper plate heat exchanger, Hot water capacity XL
3220104	Flush-mounted, Stainless steel plate heat exchanger, Hot water capacity XL
3220014	Surface-mounted, Copper plate heat exchanger, Hot water capacity XL
3220114	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: 747 x 1298-1470 x 130-175 mm / Surface-mounted: 880 x 1400 x 140 mm		
Niche size (WxHxD):	Flush-mounted: min. 757 x 1308-1480 x 135 mm		

PERFORMANCE EXAMPLE: HEAT EXCHANGER				
HEAT EXCHANGER SIZE:	XL			
PERFORMANCE INDICATOR	PI2**	PI1*	PI2**	PI1*
Hot water output:	33,0 kW	44,4 kW	49,2 kW	59,7 kW
Supply / Return temperature primary:	45 / 23 °C	50 / 20,5 °C	55 / 22,3 °C	60 / 20,2 °C
CW inlet/ HW outlet temperature:	10 / 40 °C	10 / 40 °C	10 / 45 °C	10 / 45 °C
DHW tap capacity max.:	15,8 l/min	21,2 l/min	20,1 l/min	24,4 l/min
Pressure loss secondary DHW ***:	172 mbar	310 mbar	280 mbar	411 mbar
Pressure loss primary Heating ***:	601 mbar	601 mbar	601 mbar	601 mbar
Heating flow rate primary:	1300 l/h	1300 l/h	1300 l/h	1300 l/h
38 °C DHW tap quantity after CW admixture:	16,9 l/min	22,7 l/min	25,2 l/min	30,6 l/min

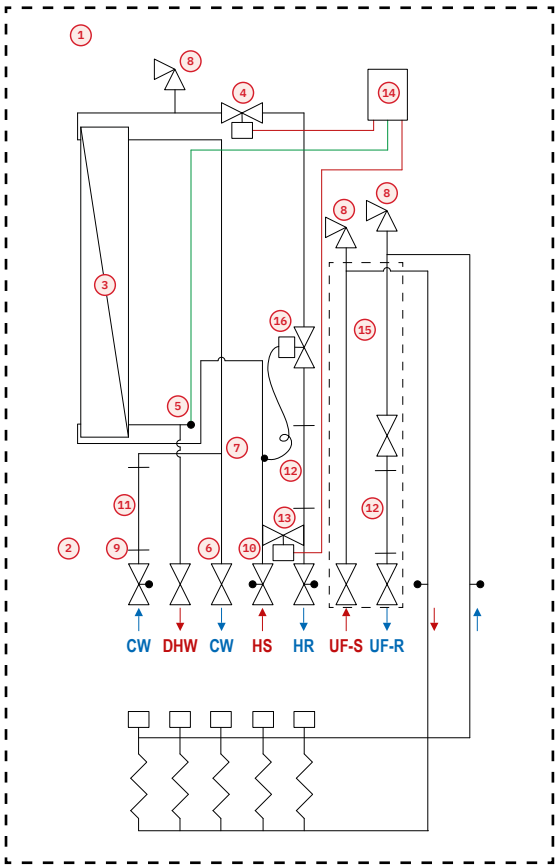
*** without cold water meter or heat meter

(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

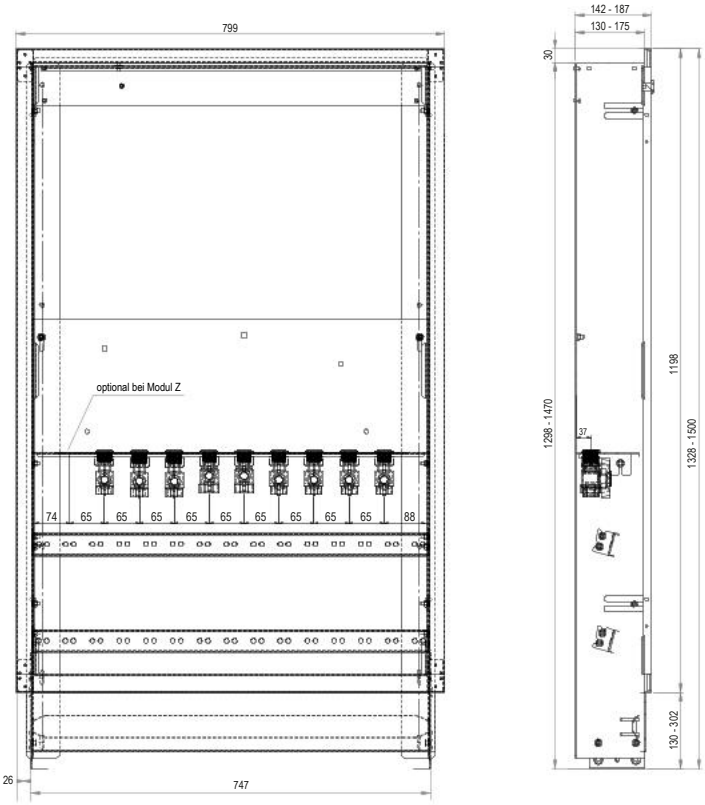
CONTROLLER	END CUSTOMER MENU (SIMPLE)	TECHNICIAN MENU (EXPERT)
DISPLAY	Time & date	Measured values or hydraulic diagram
SETTINGS	• Time & date • Daylight saving time • Night setback time for standby	• Hot water temperature • Maintenance temperature station • Commissioning assistant • Circulation mode (optional)



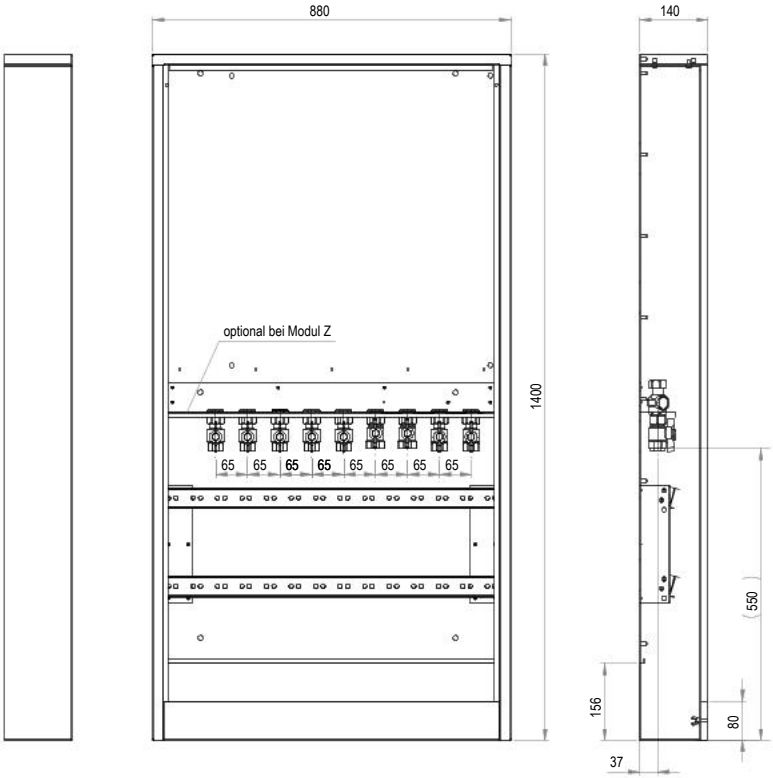
SCHEMATIC	
1	Built-in cabinet
2	Connection rail with ball valves
3	Plate heat exchanger
4	*step a valve* stepper motor valve
5	Temperature and flow sensor based on the vortex principle
6	Cold water outlet
7	Cold water maximum limiter (optional)
8	Ventilation and drainage
9	Strainer insert CW (optional)
10	Strainer insert HS (optional)
11	Cold water meter fitting piece G¾" - 110 mm
12	Heat meter fitting piece G¾" - 110 mm
13	Temperature maintenance valve (bypass) with actuator
14	Controller
15	Underfloor or radiator heating
16	Differential pressure regulator

DIMENSIONS FOR INSTALLATION

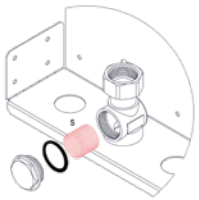
FLUSH-MOUNTED



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 TWWM-E –

⚠ 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.

1000117 Module D2

Differential pressure regulator

Differential pressure regulator primary (station outlet) 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.

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.

1000111E Module TWWM-E

DHW mixer

Thermostatic mixer for drinking water, which ensures a constant hot water temperature. Regulates in the range of 35-60 °C and provides a reliable hot water supply.

– Not possible with module Z –

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.