

Flat HIU station BE-T

The flat HIU station offers an energy-efficient solution for heating and hot water supply, equipped with *step a valve* technology and a microprocessor-controlled controller. The hard foam insulation box ensures optimum insulation and is environmentally friendly and recyclable.

The station guarantees precise control of hot water preparation and high operating efficiency by adapting flexibly to the respective requirements.

- **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.
- **Hard foam insulated box:** With excellent thermal insulation for energy-saving operation and reliable protection.
- **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.
- **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.

Suitable for:



ORDER NO.

3000002	Flush-mounted, copper plate heat exchanger, hot water capacity M
3000004	Flush-mounted, copper plate heat exchanger, hot water capacity XL
3000102	Flush-mounted, stainless steel plate heat exchanger, hot water capacity M
3000104	Flush-mounted, stainless steel plate heat exchanger, hot water capacity XL
3000012	Surface-mounted, copper plate heat exchanger, hot water capacity M
3000014	Surface-mounted, copper plate heat exchanger, hot water capacity XL
3000112	Surface-mounted, stainless steel plate heat exchanger, hot water capacity M
3000114	Surface-mounted, stainless steel plate heat exchanger, hot water capacity XL

HEATING PRIMARY		BUFFER STORAGE	DRINKING WATER
Pressure rating:		PN 6	PN 10
Max. temperature:	90 °C		75 °C
Connection dimensions:	DN 25		DN 20
Thread:	G1" internal thread		G3/4" internal thread
Dimensions (WxHxD):	Flush-mounted: 463 x 850 x 130-175 mm / Surface-mounted: 485 x 930 x 140 mm		
Niche size (WxHxD):	Flush-mounted: min. 483 x 860 x 135-180 mm		

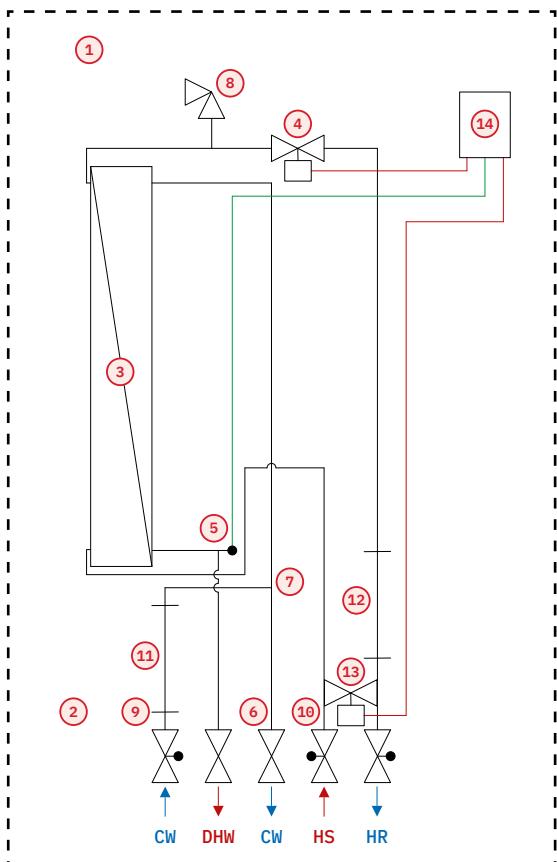
PERFORMANCE EXAMPLE: HEAT EXCHANGER					
HOT WATER CAPACITY:		M (36 kW)		XL (51 kW)	
PERFORMANCE INDICATOR		PI2**	PI1*	PI2**	PI1*
Hot water output:		48,1 kW	45,3 kW	63,4 kW	59,7 kW
Supply / Return temperature primary:		70 / 28 °C	60 / 20,7 °C	70 / 27,6 °C	60 / 20,2 °C
CW inlet / HW outlet temperature:		10 / 60 °C	10 / 45 °C	10 / 60 °C	10 / 45 °C
DHW tap capacity max.:		13,7 l/min	18,5 l/min	18,1 l/min	24,4 l/min
Pressure loss secondary DHW ***:		131 mbar	237 mbar	227 mbar	411 mbar
Pressure loss primary Heating ***:		356 mbar	355 mbar	601 mbar	601 mbar
Heating flow rate primary:		1000 l/h	1000 l/h	1300 l/h	1300 l/h
38 °C DHW tap quantity after CW admixture:		24,6 l/min	23,2 l/min	32,5 l/min	30,6 l/min
40 °C DHW tap quantity after CW admixture:		23,0 l/min	21,7 l/min	30,3 l/min	28,5 l/min

*** without cold water meter or heat meter

**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	<ul style="list-style-type: none"> Time & date Daylight saving time Night setback time for standby 	<ul style="list-style-type: none"> Hot water temperature Maintenance temperature station Commissioning assistant Circulation mode (optional)

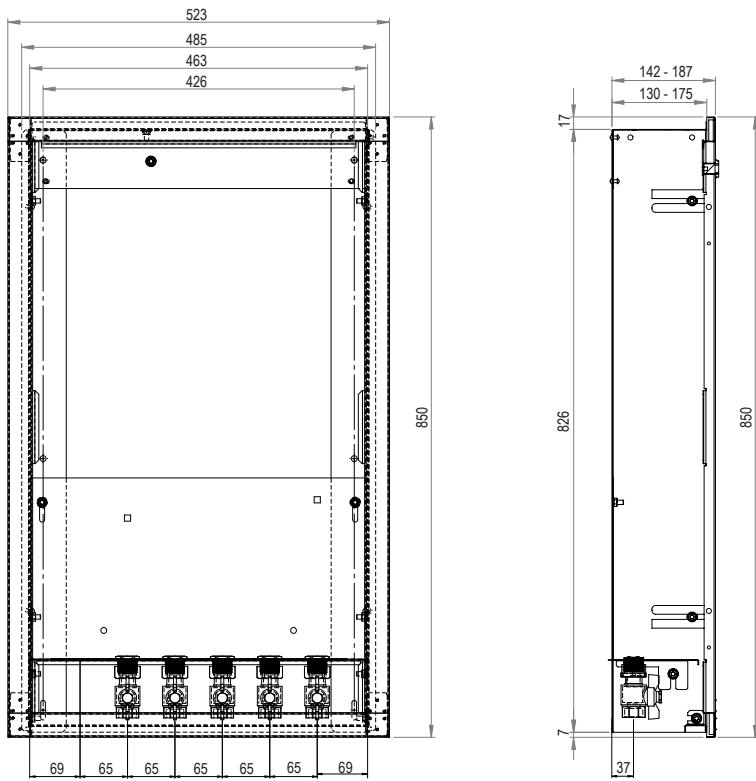


SCHEMATIC

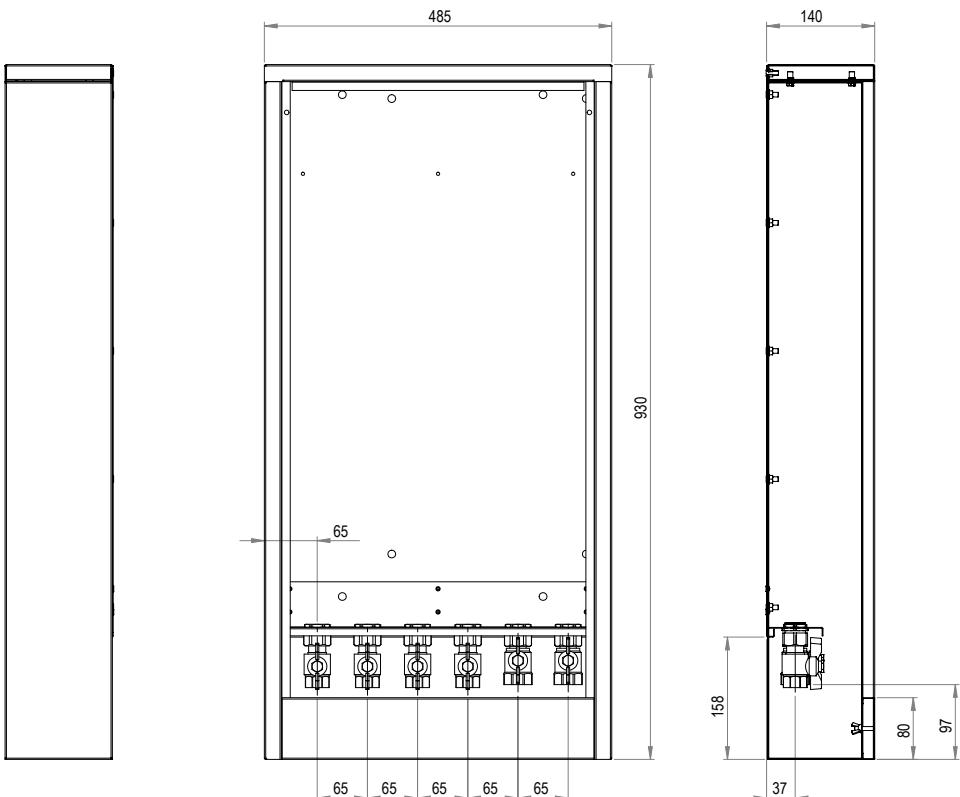
- 1 Built-in cabinet
- 2 Connection rail with ball valves
- 3 Plate heat exchanger
- 4 step a valve stepper motor valve
- 5 Temperature and flow sensor based on the vortex principle
- 6 Cold water outlet
- 7 Cold water maximum limiter (optional)
- 8 Ventilation and drainage
- 9 Strainer insert CW (optional)
- 10 Strainer insert HS (optional)
- 11 Cold water meter fitting piece G3/4" - 110 mm
- 12 Heat meter fitting piece G3/4" - 110 mm
- 13 Temperature maintenance valve (bypass) with actuator
- 14 Controller

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.

⚠ 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.

1000105 Module VR

Volume flow controller

Dynamic volume flow controller for hydraulic balancing. Externally adjustable, DIN 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 –



ORDER NO.

1000109 Module D1

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.

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 –