

# Flat HIU station BE-TNE

The flat HIU station offers an efficient solution for decentralized drinking water preparation combined with electronic reheating. It brings together *step a valve* technology with an electronically controlled instantaneous water heater to ensure a hot water temperature that is accurate to the degree.

The compact design and high-quality hard foam insulation provide a good level of insulation and enable a space-saving, sustainable solution.

- **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.
- **Electronic instantaneous water heater:** Reheating with precise temperature control from 20–60 °C.
- **Energy efficient:** Operation with low heating flow temperatures (35 - 40°C), optimized for heat pumps with a high COP value for maximum efficiency.
- **Hard foam insulated box:** With excellent thermal insulation for energy-saving operation and reliable protection.
- **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.

## Suitable for:



## 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.

In addition, a universal installation fitting of 110 mm for the cold water meter and another universal installation fitting of 110 mm for heat meters up to 1,5 Qn are integrated into the insulation box.

ORDER NO.	
3010004	Flush-mounted, copper plate heat exchanger, instantaneous water heater 13 kW
3011004	Flush-mounted, copper plate heat exchanger, instantaneous water heater 21 kW
3010104	Flush-mounted, stainless steel plate heat exchanger, instantaneous water heater 13 kW
3011104	Flush-mounted, stainless steel plate heat exchanger, instantaneous water heater 21 kW
3010014	Surface-mounted, copper plate heat exchanger, instantaneous water heater 13 kW
3011014	Surface-mounted, copper plate heat exchanger, instantaneous water heater 21 kW
3010114	Surface-mounted, stainless steel plate heat exchanger, instantaneous water heater 13 kW
3011114	Surface-mounted, stainless steel plate heat exchanger, instantaneous water heater 21 kW

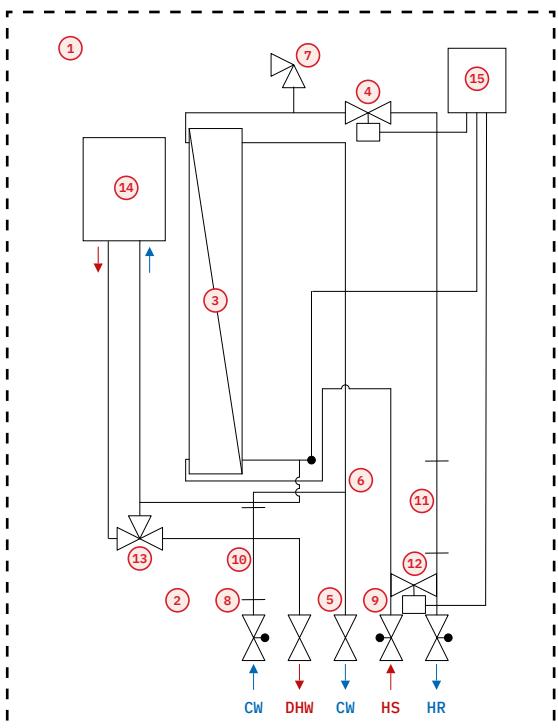
## TECHNICAL DATA - FLAT HIU STATION

	HEATING PRIMARY	HEATING SECONDARY	DRINKING WATER
	BUFFER STORAGE	UNDERFLOOR HEATING	
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	

## TECHNICAL DATA - INSTANTANEOUS WATER HEATER

	PREHEATING	E-REHEATING	MIXING TEMPERATURE			
Supply primary:	38 °C	-	-	-		
Heating volume flow:	1250 l/h	-	-	-		
Power:	24,1 kW	13,5 kW	-	-		
DHW:	15,0 l/min	10,0 l/min	15,0 l/min	18,7 l/min		
DHW temperature:	33 °C	52 °C	45 °C	38 °C		
DW temperature:	10 °C	33 °C	-	-		
Total power:	-	-	37,6 kW			
Pressure level heating/sanitary:	PN 6 / PN 10					
Max. heating temperature:	90 °C					
Electrical connection for electric IWH:	3 ~/ PE 400 V AC 20 A, 13,5 kW					
Minimum cable cross-section:	2,5 mm <sup>2</sup> at 13,5 kW					

CONTROLLER	END CUSTOMER MENU (SIMPLE)	TECHNICIAN MENU (EXPERT)
DISPLAY	Time & date	Measured values or hydraulic diagram
SETTINGS	<ul style="list-style-type: none"> <li>Time &amp; date</li> <li>Daylight saving time</li> <li>Night setback time for standby</li> </ul>	<ul style="list-style-type: none"> <li>Hot water temperature</li> <li>Maintenance temperature station</li> <li>Commissioning assistant</li> </ul>

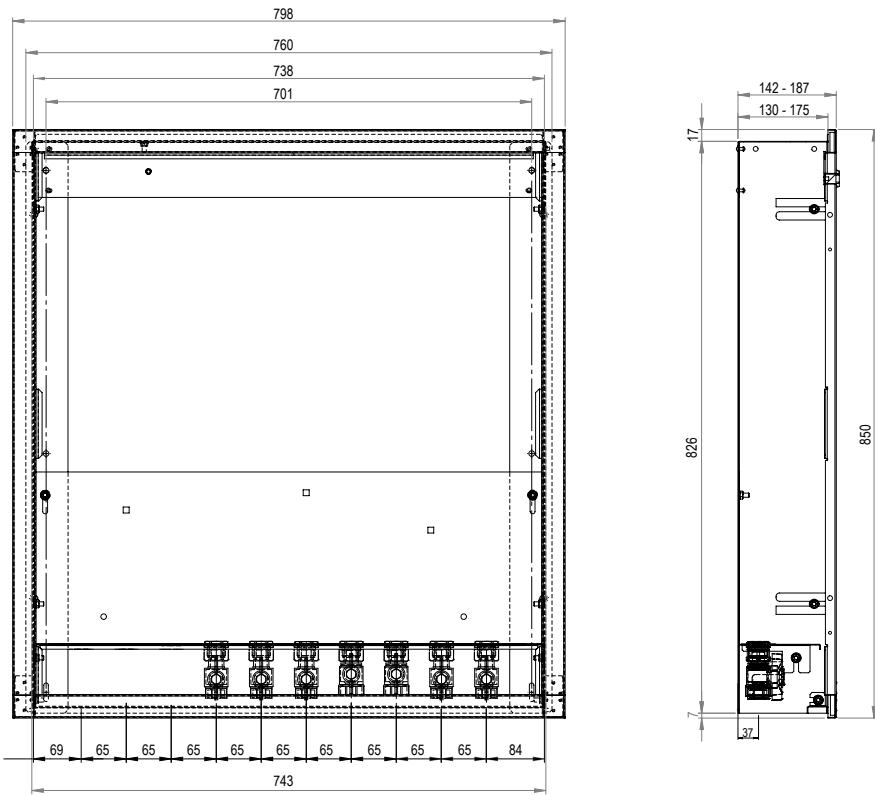


## SCHEMATIC

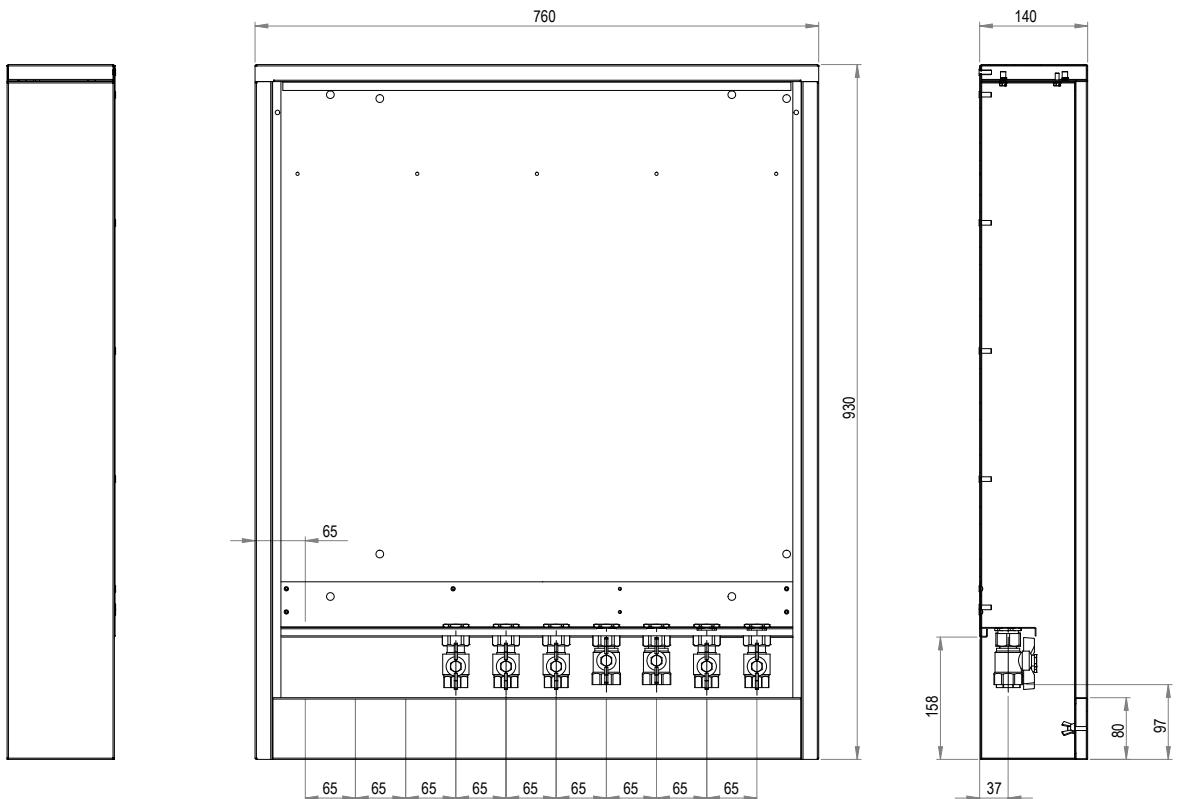
- 1 Built-in cabinet
- 2 Connection rail with ball valves
- 3 Plate heat exchanger
- 4 step a valve stepper motor valve (drinking water)
- 5 Cold water outlet
- 6 Cold water maximum limiter (optional)
- 7 Ventilation and drainage
- 8 Strainer insert CW (optional)
- 9 Strainer insert HS (optional)
- 10 Cold water meter fitting piece G¾" - 110 mm
- 11 Heat meter fitting piece G¾" - 110 mm
- 12 Temperature maintenance valve (bypass) with actuator
- 13 Hot water mixing valve
- 14 Reheater
- 15 Controller

## 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,  $K_v$  2,7. Ensures stable flow rates under changing load conditions.