Boiler replacement station BE-HTA

Suitable for:

A compact boiler replacement station for decentralized drinking water heating using the flow principle featuring *step a valve* technology and a microprocessor-controlled controller for precise and energy-efficient hot water preparation. The station regulates the required heating energy precisely according to demand, thus minimizing heat loss and the risk of Legionella bacteria. It is ideal for connection to buffer storage tanks, district heating or central heating systems and ensures a highly efficient hot water supply.

- ***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
- **Flexible variant:** Available with drinking water inlet either at the top or bottom, depending on the structural conditions.
- **Unregulated heating connection:** Offers simple and flexible connection options.
- **Temperature maintenance valve with actuator:** Optimal temperature control without unnecessary heat loss.
- **Protection and comfort:** Includes water hammer damper for a secure water supply.
- **Surface mounting with cover:** White covering in RAL 9016.
- **Stainless steel piping:** Robust, corrosion-resistant pipes (18x1 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. Another *step a valve* step motor valve in the secondary outlet can be operated via the controller as a heating circuit control in accordance with EnEV, fixed value control (setpoint) and domestic hot water priority circuit.

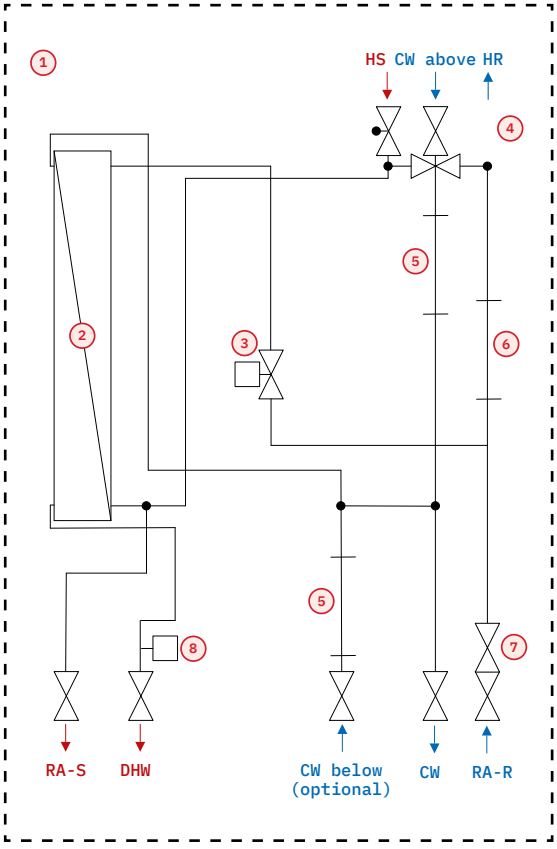
TECHNICAL DATA	
Device dimensions (WxHxD):	422 x 724 x 140 mm
Dimensions with ball valves (WxHxD):	422 x 630 x 140 mm
Pressure rating:	PN 6
Heating water supply temperature:	max. 90 °C
Drinking water setpoint temperature:	30 - 60 °C
Cold water pressure:	2,0 bar
Connection dimensions:	Heating DN 20, ¾" intern. thr. / Drinking water DN 20, ¾" intern. thr.

PERFORMANCE EXAMPLE: HEAT EXCHANGER				
HOT WATER CAPACITY:	M (36 KW)		XL (51 KW)	
Supply / Return temperature primary:	60 / 21 °C	60 / 17 °C	60 / 21 °C	60 / 17 °C
CW inlet/ HW outlet temperature:	10 / 50 °C	10 / 45 °C	10 / 50 °C	10 / 45 °C
DHW tap capacity max.:	13 l/min	15 l/min	18 l/min	21 l/min
Pressure loss DHW:	155 mbar	200 mbar	210 mbar	280 mbar
Pressure loss Heating *:	345 mbar	265 mbar	345 mbar	310 mbar
Heating flow rate primary:	840 l/h	720 l/h	1020 l/h	960 l/h

* without cold water meter or heat meter

(at 2 bar cold water pressure and 350 mbar heating)

ORDER NO.	
3250011	Cold water connection at the bottom, surface-mounted, copper plate heat exchanger, hot water capacity M
3250013	Cold water connection at the bottom, surface-mounted, copper plate heat exchanger, hot water capacity XL
3250111	Cold water connection at the bottom, surface-mounted, stainless steel plate heat exchanger, hot water capacity M
3250113	Cold water connection at the bottom, surface-mounted, stainless steel plate heat exchanger, hot water capacity XL
3250012	Cold water connection at top, surface-mounted, copper plate heat exchanger, hot water capacity M
3250014	Cold water connection at top, surface-mounted, copper plate heat exchanger, hot water capacity XL
3250112	Cold water connection at top, surface-mounted, stainless steel plate heat exchanger, hot water capacity M
3250114	Cold water connection at top, surface-mounted, stainless steel plate heat exchanger, hot water capacity XL



SCHEMATIC	
1	Base plate
2	Plate heat exchanger
3	Thermostatic temperature controller for drinking water
4	Temperature maintenance valve (bypass) with actuator
5	Cold water meter fitting piece G¾" - 110 mm
6	Heat meter fitting piece G¾" - 110 mm
7	Strainer insert DN 20 Heating circuit return
8	Water hammer damper