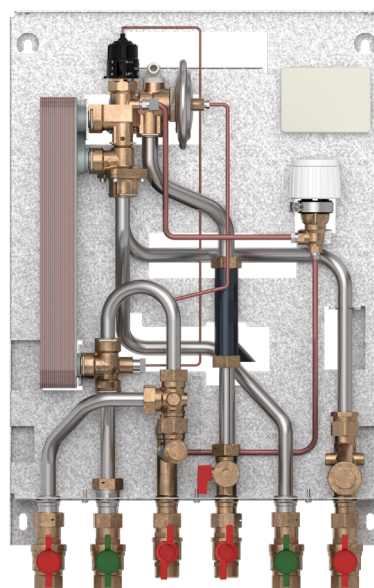
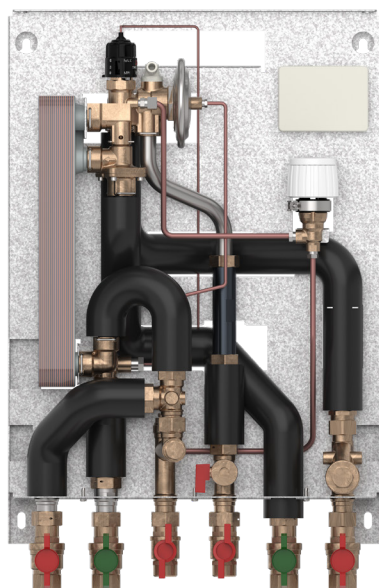


Data sheet

EvoFlat Reno flat station

For replacement of gas boilers in apartment buildings and multi-family houses. Direct heating and instantaneous domestic hot water.



Application

The EvoFlat Reno is a flat station for direct heating and a pressure and temperature controlled instantaneous domestic hot water heater for two-pipe systems, designed for decentralized heat distribution and is especially suitable for apartment buildings, where existing gas boilers should be replaced. The existing connections for DHW and DCW as well as supply and return of secondary heating circuits can be used without major changes, but it is recommended that the connections for the primary hot water flow and return are to lead through the chimney. Optionally the heating supply and return pipe can also be established in top of the unit.

Primary side

The station is supplied with heating water from a energy source and it is prefabricated with interconnecting components such as a differential pressure controller (integrated in main temperature controller TPC -M), strainer, thermostatic bypass FJVR, sensor pockets and fitting piece for insertion of a heat meter.

Heating (HE)

The self-acting temperature controller TPC-M with integrated differential pressure controller sets the optimum operating conditions for heating and DHW. In order to enable a time dependent temperature control program, a zone valve with actuator and a room thermostat* can be included as an option.

* National laws and guidelines must be observed.

Domestic hot water (DHW)

The domestic hot water is prepared in the heat exchanger based on the flow principle and the temperature is regulated by the self-acting controller with integrated differential pressure controller - the TPC-M. Supreme ease of operation is obtained via the combined hydraulic and thermostatic regulation of the TPC - M controller. The flow - controlled part allows primary and secondary side flow through the heat exchanger, only when hot water is tapped and blocks the flow immediately after completion of the tapping process. The thermostatic part controls the domestic hot water temperature. Thanks to the quick-acting hydraulic control of the heat exchanger, it is largely protected from the formation of lime scale and growth of bacteria. The TPC-M controller with integrated differential pressure controller compensates for variations in supply temperature and varying differential pressure and thereby ensures a constant domestic hot water temperature at all times.

Summer bypass

The station is equipped with a summer bypass.

Construction

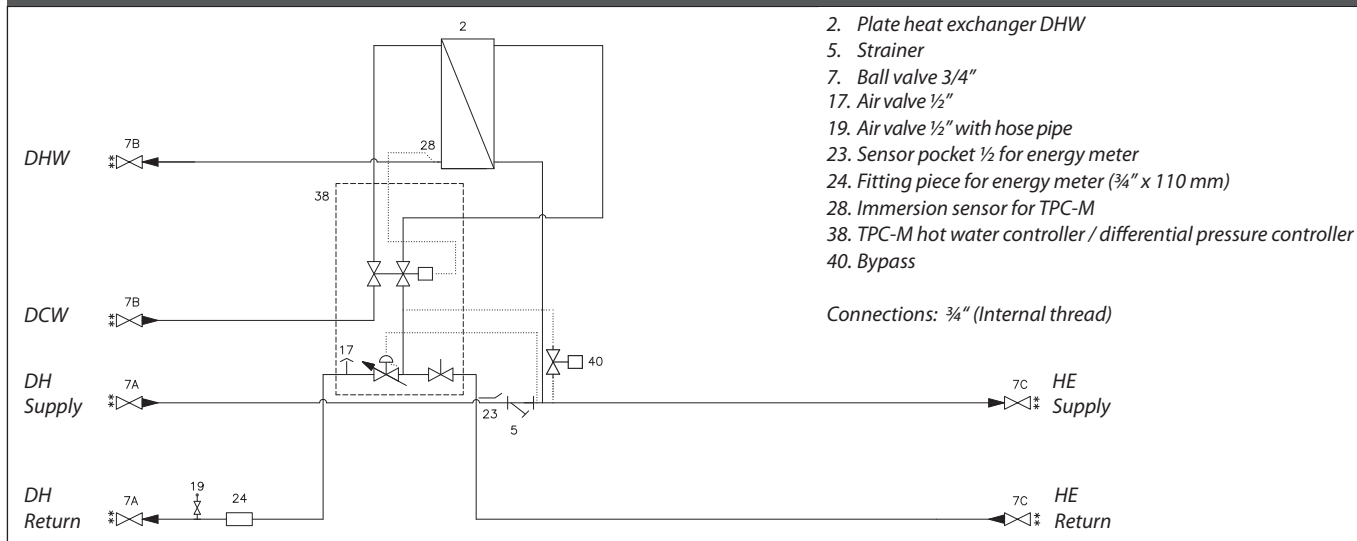
All pipes are made of stainless steel and insulated.

FEATURES AND BENEFITS

- Flat station for exchange of existing gas boilers
- Direct heating, DHW heating based on flow principle with thermostatic temperature controller
- Innovative, energy-saving controller TCP - M in combination with high performance heat exchanger for on-demand water heating without no-load losses
- Capacity: 15 HE / 55 kW DHW
- Compact, space-saving design
- Wall-mounted station
- Pipes and plate heat exchanger made of stainless steel
- Minimized risk of lime scale and bacteria formation
- Copper or stainless steel brazed plate heat exchanger

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CIRCUIT DIAGRAM - EXAMPLE



Design specifications:

Nominal pressure: PN10
Max. supply temperature: 95 °C
Min. ΔP: See capacity examples
Braze material (HEX): Copper / StS

Weight : 18 kg
incl. cover

Electrical connection: 230V AC / 24V AC/DC

Cover: White painted steel

Dimensions (mm):

W/O cover connect. down: H 637 x W 410 x D 204
W/O cover, connect. up: H 674 x W 410 x D 204
With cover: H 760 x W 435 x D 220

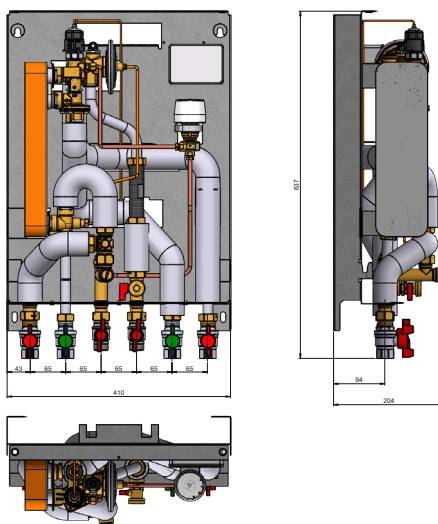
Connections sizes:

DH, DCW, DHW, HE: IT 3/4"

Connections:

1. Heating (HE) supply
2. Domestic hot water (DHW)
3. District heating (DH) supply
4. District heating (DH) Return
5. Domestic cold water (DCW)
6. Heating (HE) return

Dimensional sketch:



The EvoFlat Reno are available in 12 variants:

EvoFlat Reno	Code No.
Type 1 230V	145B4102
Type 2 230V	145B4103
Type 3 230V	145B4104
Type 1 StS 230V	145B4105
Type 2 StS 230V	145B4106
Type 3 StS 230V	145B4107
Type 1 24V	145B4108
Type 2 24V	145B4109
Type 3 24V	145B4110
Type 1 StS 24V	145B4111
Type 2 StS 24V	145B4112
Type 3 StS 24V	145B4113

Pipe set for connection upwards	145H4920
Cover, white painted	145H4927
Actuator TWA-Q NC 230 V	082F1600
Actuator TWA-Q NC 24 V	082F1602

DHW: Capacity examples, 10 °C/50 °C

Type	DHW Capacity kW	Primary Supply/Return [°C]	Pressure loss *primary [kPa]	Flow rate primary [l/h]	Flow rate secondary [l/min]
XB 06H-1 26	37	65/21	23	730	13.3
Cu/StS (Type 1)	43	65/22	40	850	15.3
XB 06H-1 40	45	65/20	22	867	16.1
Cu/StS (Type 2)	49	65/21	30	950	17.5
XB06H+ 60	55	65/16	27	950	19.4
Cu (Type 3)	38	55/21	27	950	13.6
XB06H+ 56	51	65/19	28	950	18.3
StS (Type 3)	34	55/24	28	950	12.5

* w/o heat meter

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Heating: Capacity examples

Heating Capacity kW	Heating circuit Δt [°C]	Flow rate primary [l/h]	Pressure loss *primary [kPa]
10	20	430	3
10	30	287	1
10	40	215	1
15	20	645	8
15	30	430	3
15	40	323	2

* w/o heat meter