

Fact sheet

Termix BVX FI RO T/E

Indirect substation for single-family houses or apartments



Application

The Termix BVX FI RO T/E substation is a complete solution for hot water and space heating with optimal safety, efficient energy transfer, servicefriendly construction and a compact design. The substation is used if a heat exchanger is required or on a conversion to district heating where the existing equipment is unsuitable for direct connection.

District heating (DH)

The substation is prefabricated with a differential pressure controller, fitting piece and sensor pockets for insertion of a heat meter as well as strainers and ball valves.

Heating (HE)

The heating circuit consists of a plate heat exchanger, safety valves, pressure gauge, ball valves, drain valve, air valves, expansion vessel and circulation pump. The temperature of the heating is controlled by an electronic controller with an outdoor temperature sensor.

Domestic hot water (DHW)

The domestic hot water circuit consists of a hot water tank with coil and selfacting thermostatic control valve. The DHW tank and coil are enamelled and the tank contains a magnesium anode.

Options

The Termix BVX FI RO T/E can be supplied with a thermostatic circulation valve or a built-in non-return valve. Option delivered loose with the unit.

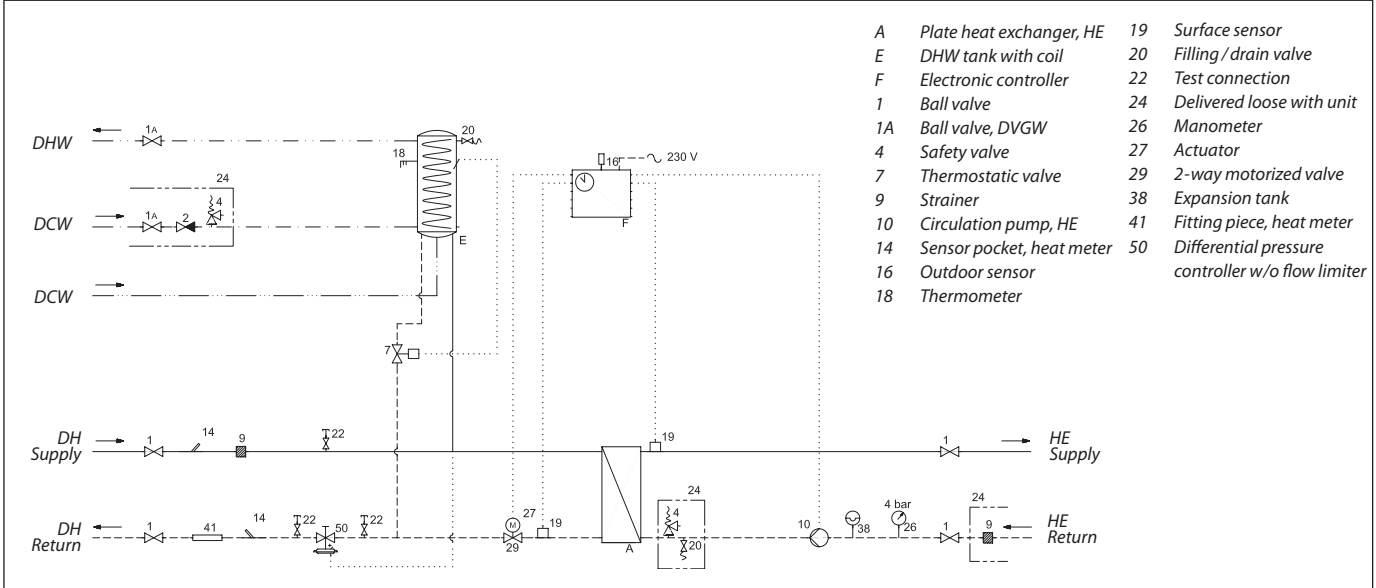
Construction

All pipes are made of stainless steel. The connections are made with nuts and gaskets. The Termix BVX FI RO T/E is completed by a white steel cover in modern design with door. The 105 ltr. tank can replace the older 150 ltr. tank thanks to the unit being fully insulated. This will save space as well. Non-return valve and safety valve for the cold water supply is delivered loose with the unit.

FEATURES AND BENEFITS

- Substation for single-family houses or apartments
- DHW regulation
- Indirect heating with electronic control
- 105 ltr. tank for DHW
- Capacity: 11-30 kW heating
- Suitable in cases of low district heating capacity
- Operates independently of differential pressure and flow temperature
- Pipes and plate heat exchanger made of stainless steel
- Minimum space required for installation
- Fully insulated

CIRCUIT DIAGRAM - EXAMPLE



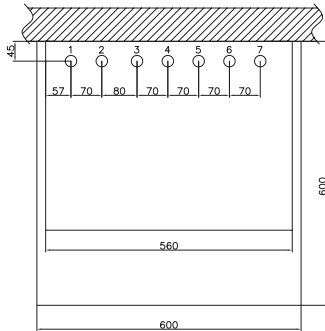
- A Plate heat exchanger, HE
- E DHW tank with coil
- F Electronic controller
- 1 Ball valve
- 1A Ball valve, DVGW
- 4 Safety valve
- 7 Thermostatic valve
- 9 Strainer
- 10 Circulation pump, HE
- 14 Sensor pocket, heat meter
- 16 Outdoor sensor
- 18 Thermometer
- 19 Surface sensor
- 20 Filling / drain valve
- 22 Test connection
- 24 Delivered loose with unit
- 26 Manometer
- 27 Actuator
- 29 2-way motorized valve
- 38 Expansion tank
- 41 Fitting piece, heat meter
- 50 Differential pressure controller w/o flow limiter

Technical parameters:

Nominal pressure: PN 10 (PN16 on request)
 Max. supply temperature: $T_{max} = 120\text{ °C}$
 Brazing material (HEX): Copper
Weight incl. cover: 120 – 150 kg
Cover: White-lacquered steel sheet

Dimensions (mm):

With cover:
 H 1910 x W 600 x D 600



The connections are at the top of the station

Connections:

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

Connections sizes:

All connection: $\frac{3}{4}$ " G (int. thread)

Options:

- Thermostatic circulation set

DHW: CAPACITY EXAMPLES, 10°C / 50°C

Substation type	Tank volume [l]	Coil supply/return temp. [°C]	DHW constant capacity [l/h]	DHW capacity first hour* [l/h]	DHW constant capacity [kW]
BVX 2-x	105	70/30	272	335	12,7
		60/30	199	262	9,3

* Output first hour = constant output + 60% of tank volume

HEATING: CAPACITY EXAMPLES

Sub-station type	Heating capacity [kW]	Supply flow primary [°C]	Heating circuit [°C]	Pressure loss primary* [kPa]	Residual pump head [kPa]	Flow rate Primary [l/h]	Flow rate secondary [l/h]
BVX 2-1	15	75/45	40/65	35	50	455	543
	15	80/50	45/70	35	50	452	544
	11	90/51	50/70	35	50	257	499
BVX 2-2	25	75/45	40/65	45	45	746	904
	25	80/50	45/70	45	40	742	908
	19	90/51	50/70	45	30	445	868
BVX 2-3	30	75/45	40/65	50	40	880	1088
	30	80/45	45/70	50	40	871	1087
	30	90/50	50/70	50	20	699	1363

* Heat meter not included

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