



Termix VVX Compact 20

Indirect substation for multi-family houses and apartment buildings with up to 14 apartments

District heating substation for indirect heating and instantaneous domestic hot water with thermostatic or electronic controls. Designed for wall-mounting.

Application

The Termix VVX Compact 20 substation is a the complete solution for hot water and space heating with optimal safety, efficient energy transfer, service-friendly construction and a compact design. The substation is applicable, 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 district heating circuit is prefabricated with a differential pressure controller as well as thermometers and ball valves.

Heating (HE)

The heating circuit consists of a plate heat exchanger, safety valve, manometer, thermometers, ball valves, drain valve, air valve, expansion vessel and circulation pump. The heating temperature can be controlled thermostatically or by an electronic controller with an outdoor temperature sensor. Depending on the application, different heat exchangers can be dimensioned.

Domestic hot water (DHW)

The domestic hot water is prepared in the heat exchanger and the temperature is regulated with thermostatic or electronic controls. The efficient plate heat exchanger for DHW offers exceptionally good heat extraction with high output. No readjustment of the DHW temperature is required after installation and initial setting of the controls. The thermostatic control valve automatically retains the comfort temperature of the hot water, even when the heating system is in reduced operation during summer or if the district heating plant changes operating parameters between summer and winter. This either by lowering or increasing the flow temperature of the district heating water and/or the operating pressure in the network.

Options

Termix VVX Compact 20 can be supplied with fitting piece and sensor pockets for insertion of a heat meter.

Construction

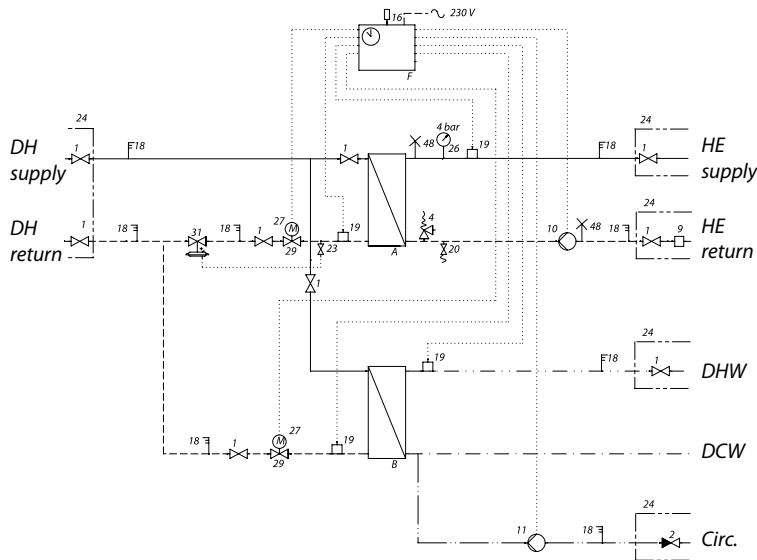
All pipes are made of stainless steel. The connections are made by nuts and gaskets. The Termix VVX Compact 20 can be delivered by a white-lacquered steel cover in modern and attractive design.

FEATURES AND BENEFITS

- Substation for multi-family houses and apartment buildings
- Thermostatic or electronic control of heating and DHW temperature
- Capacity: 80 kW heating, 95 kW DHW
- DHW in sufficient quantity
- Operates independent of differential pressure and flow temperature
- Minimum space required for installation
- Pipes and plate heat exchanger made of stainless steel
- Minimized risk of lime scale and bacteria formation

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Circuit diagram - example



- A Heat exchanger HE
- B Heat exchanger DHW
- 1 Ball valve
- 2 Non-return valve
- 4 Safety valve
- 9 Strainer
- 10 Circulation pump
- 11 DHW pump
- 16 Outdoor sensor
- 18 Thermometer
- 19 Surface sensor
- 20 Filling/drain valve
- 23 Ball valve
- 24 Delivered loose with unit
- 26 Manometer
- 27 Actuator
- 28 2-way motorized valve
- 31 Differential pressure controller
- 48 Air escape, manual

Technical parameters:

Nominal pressure: PN 16
 DH supply temperature: $T_{max} = 120\text{ °C}$
 DCW static pressure: $p_{min} = 0,5\text{ bar}$
 Brazing material (HEX): Copper

Weight incl. cover: 30-40 kg
 (incl. packing)

Cover: White-lacquered steel sheet

Dimensions (mm):

Without cover: H 815 x W 505 x D 400
 With cover: H 815 x W 540 x D 430

Connections:

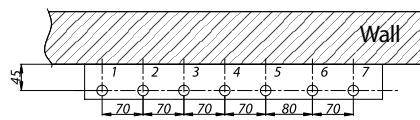
- 1 District heating (DH) supply
- 2 District heating (DH) return
- 3 Heating (HE) return
- 4 Heating (HE) supply
- 5 Domestic hot water (DHW)
- 6 Domestic cold water (DCW)
- 7 Circulation

Connections sizes:

DH + HE + DCW + DHW: G 1" (int. thread)
 Circulation: G 3/4" (int. thread)

Options:

- White-lacquered stainless steel cover
- Fitting piece and sensor pockets for insertion of a heat meter



Seen from above

DHW: Capacity examples, 10 °C/50 °C

DHW Capacity kW	Supply flow Primary °C	Return flow Primary °C	Pressure loss Primary kPa	Flow rate Secondary l/h
69	60	23	35	1548
95	70	19	35	2124

Heating: Capacity examples

Heating Capacity kW	Heating circuit Primary °C	Heating circuit Secondary °C	Pressure loss Primary kPa	Flow rate Secondary l/h
50	70/40	35/60	35	1720
60	70/40	35/60	45	2064
60	80/45	40/70	35	1720
70	80/45	40/70	45	2007
70	90/45	40/70	35	2007
80	90/45	40/70	45	2293

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