



Termix VMTD MIX-B

Direct substation for flats, single and multi-family houses with up to 7 apartments

District heating substation for direct heating and instantaneous domestic hot water with thermostatic control. Designed for wall-mounting.

Application

The Termix VMTD MIX-B is a complete solution with built-in water heater and heating system with differential pressure control and mixing loop. The Termix VMTD MIX-B is applicable for single-family houses and for decentralized systems in multi-family houses.

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. Furthermore the substation is delivered with a mixing loop including pump, controls and non-return valve.

Heating (HE)

The heating circuit is designed for direct connection. The differential pressure controller sets the optimum operation conditions for radiator thermostats in order to enable individual temperature control in each room. The mixing loop creates a suitable temperature level e.g. for floor heating. 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.

Domestic hot water (DHW)

The domestic hot water is prepared in the heat exchanger and the temperature is regulated with a thermostatic control valve. The patented sensor accelerator accelerates the closing of the thermostatic control valve and protects the heat exchanger against over heating and lime scale formation. The sensor accelerator and the control valve also work as a bypass keeping the house supply line warm. This shortens the waiting periods during summer when the heating system is in reduced operation. The sensor accelerator helps to ensure a stable DHW temperature by varying loads, flow temperatures and differential pressure without the need for readjusting the valve.

Options

The substation can be supplied with built in non-return valve and safety valve mounted in the cold water supply. The substation can also be supplied with a thermostatic circulation valve.

Construction

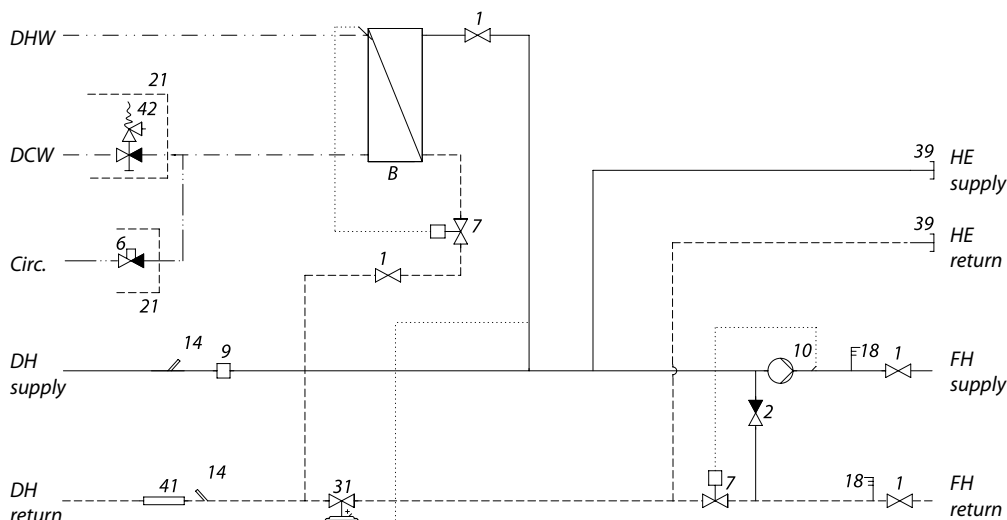
All pipes are made of stainless steel. The connections are made by nuts and gaskets. The Termix VMTD MIX-B can be delivered with white-lacquered steel cover in modern design.

FEATURES AND BENEFITS

- Substation for district heating and decentralized systems
- Direct heating and DHW temperature regulation with a thermostatic control valve
- Capacity: 33 - 85 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



- B Heat exchanger DHW
- 1 Ball valve
- 2 Non-return valve
- 6 Thermostatic/non-return valve
- 7 Thermostatic valve
- 9 Strainer
- 10 Circulator pump
- 14 Sensor pocket, heat meter
- 18 Thermometer
- 21 To be ordered separately
- 31 Differential pressure controller
- 39 Connection closed
- 41 Fitting piece, heat meter
- 42 Safety/non-return valve

Technical parameters:

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

Weight incl. cover: 25 kg
 (incl. packing)

Cover: White-lacquered
 steel sheet

Dimensions (mm):

Without cover: H 520 x W 505 x D 250
 With cover: H 550 x W 540 x D 360

Connections:

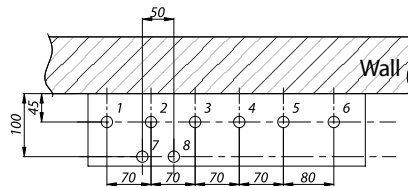
- 1 District heating (DH) supply
- 2 District heating (DH) return
- 3 Floor heating (FH) supply
- 4 Floor heating (FH) return
- 5 Domestic hot water (DHW)
- 6 Domestic cold water (DCW)
- 7 Heating (HE) return
- 8 Heating (HE) supply

Connections sizes:

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

Options:

- Booster pump (increases DH flow)
- White-lacquered stainless steel cover
- Safety valve and non-return valve (10 bar)
- Safety valve with thermostatic circulation set
- Thermostatic circulation set
- Non-return and pressure compensation valve (Combiluk 20 L)
- Room thermostat
- Zone valve with actuator
- Air screw (DH supply)



Seen from above

DHW: Capacity examples

Substation type	DHW Capacity kW	Supply flow Primary °C	Return flow Primary °C	DCW / DHW °C	Pressure loss Primary kPa	Flow rate Secondary l/h
VMTD-1	33	60	20	10/45	25	810
	42	70	20	10/50	25	903
VMTD-2	50	60	20	10/45	40	1228
	58	70	20	10/50	40	1247
VMTD-3	65	60	20	10/45	35	1597
	85	70	20	10/50	35	1612

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