

Fact sheet

Termix VMTD-F-B

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



Application

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

District heating (DH)

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

Heating (HE)

The heating circuit is designed for direct generation of heat. The differential pressure control sets the optimum operation conditions for radiator thermostatic valves in order to enable individual temperature control in each room. 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 Danfoss AVTB valve and protects the heat exchanger against overheating and lime scale formation. The heat exchanger cools the DH water very efficiently, thereby creating a very good operating economy. The sensor accelerator and AVTB valve also works 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 hot water temperature regardless of varying loads, flow temperatures and differential pressure without the need for readjusting the valve.

Options

The Termix VMTD-F-B can be supplied with built-in non-return valve and safety valve mounted in the cold

water supply. It can also be supplied with a thermostatic circulation valve.

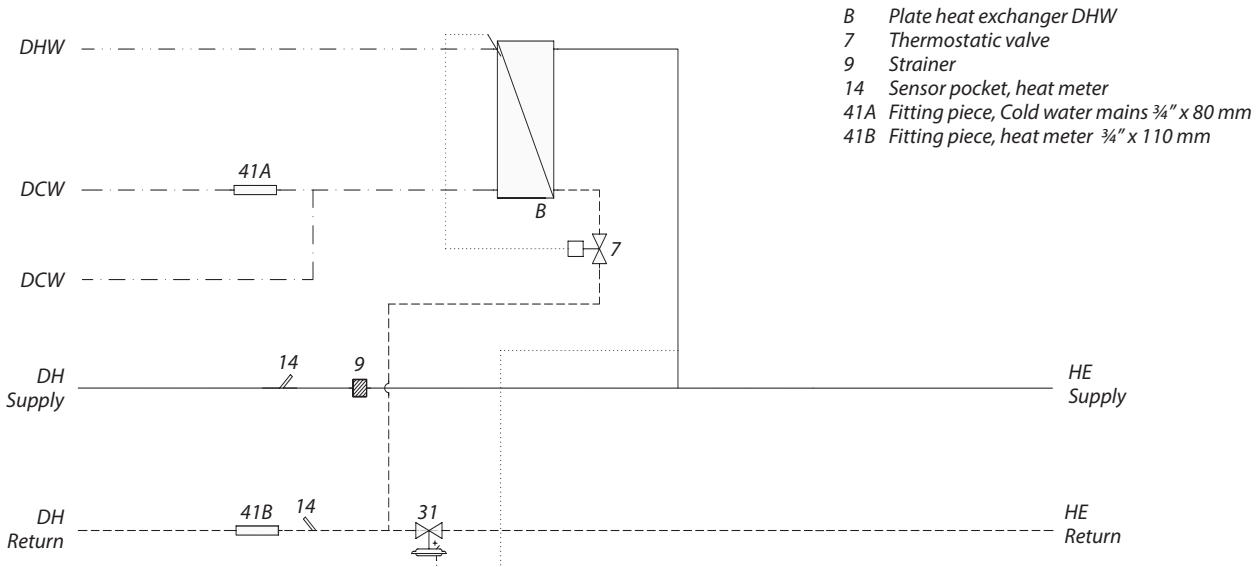
Construction

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

FEATURES AND BENEFITS

- Substation for DH and decentralized systems
- Direct heating and DHW temperature regulation with a thermostatic control valve
- Capacity: 33 – 85 kW for DHW
- DHW in sufficient quantity
- Operates independently 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

CIRCUIT DIAGRAM - EXAMPLES



Technical parameters:

Nominal pressure: PN 10
 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: 20 kg (incl. packing)

Cover: White-lacquered steel sheet

Dimensions (mm):

Without cover: H640 x W505 x D110 (150 mm)
 With cover (mount on wall variant): H800 x W540 x D190 mm
 With cover (built-in wall variant): H915-980 x W610 x D110 mm
 H915-980 x W610 x D150 mm

Connections:

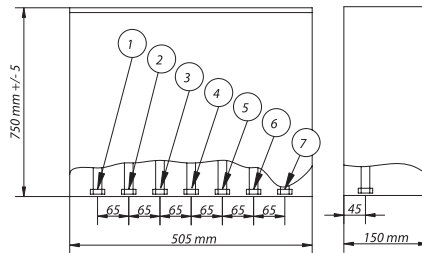
1. District heating (DH) supply
2. District heating (DH) return
3. Domestic cold water (DCW)
4. Domestic cold water (DCW)
5. Domestic hot water (DHW)
6. Heating (HE) supply
7. Heating (HE) return

Connections sizes:

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

Options:

- Mounting rail with ball valves
- White-lacquered steel cover (built-in)
- White-lacquered steel cover (on the wall)
- Safety valve and non-return valve (10 bar)
- Safety valve with thermostatic circulation set
- Thermostatic circulation set
- Pressure equalizer (GTU)
- Room thermostat
- Zone valve with actuator
- Air screw (DH supply)
- Return temperature limiter
- Connection for hot water circulation
- Hot water circulation pump
- Thermometer
- Ball valves



CAPACITY, WEIGHT AND DIMENSIONS

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-F-1	33	60	20	10/45	25	810
	40	70	20	10/50	25	903
VMTD-F-2	50	60	20	10/45	40	1228
	58	70	20	10/50	40	1247
VMTD-F-3	65	60	20	10/45	35	1597
	75	70	20	10/50	35	1612
VMTD-F-4	68	60	20	10/45	30	1653
	85	70	20	10/50	30	1722

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