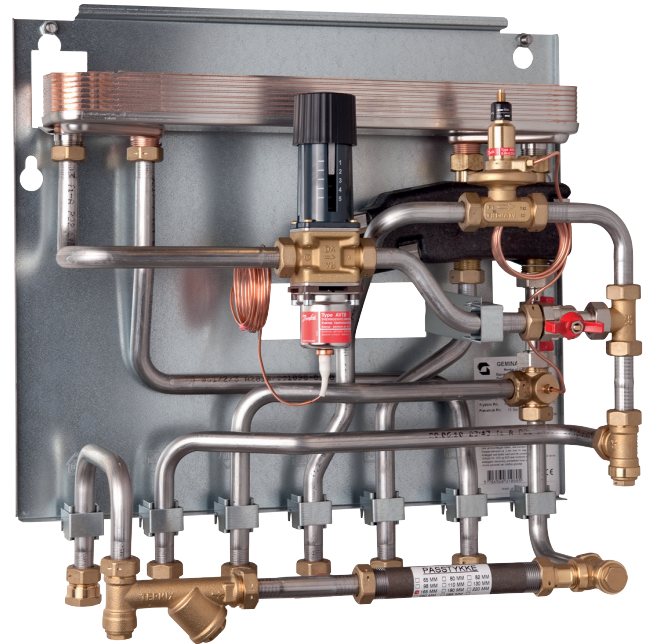


Fact sheet

VMTD - B

District heating substation for direct heating and instantaneous domestic hot water with thermostatic control.



Application

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

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 strainer and ball valves.

Heating (HE)

The heating side 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-depending 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 over heating 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 by varying loads, flow temperatures and differential pressure without the need for readjusting the valve.

Options

The water heater can be supplied with a (built-in) in non-return valve and safety valve mounted in the cold water supply.

The water heater can also be supplied with a thermostatic circulation valve.

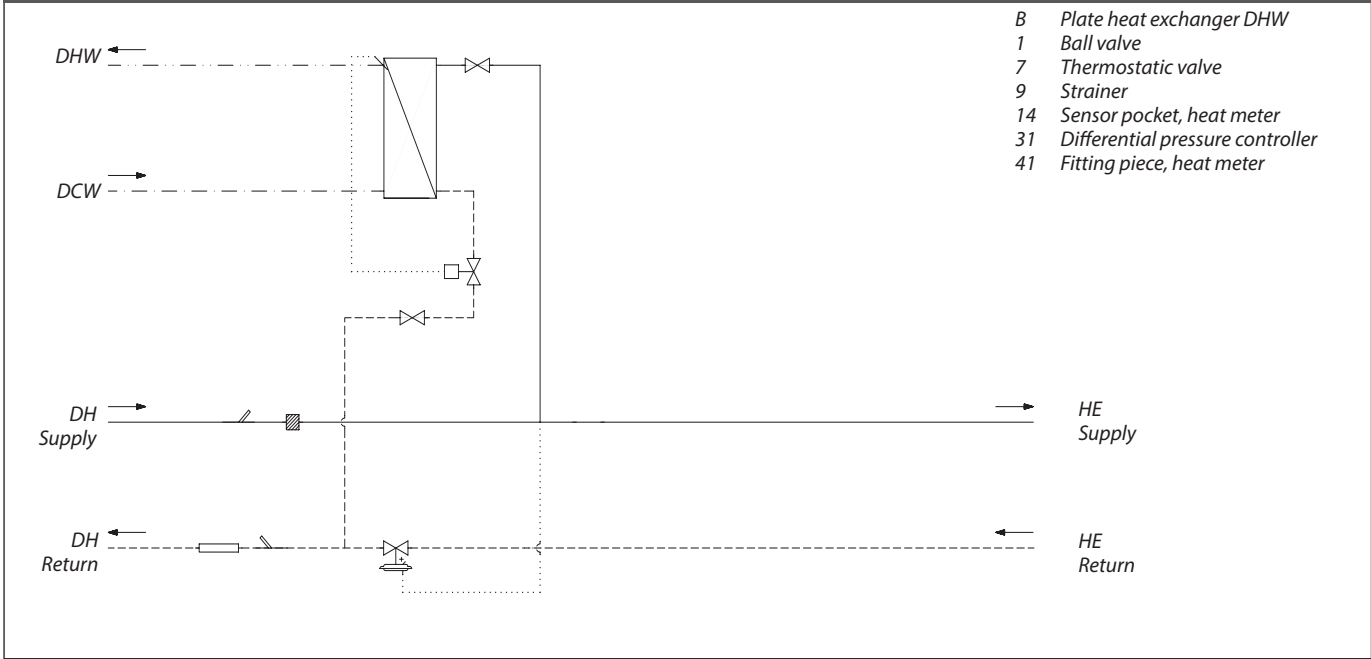
Construction

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

FEATURES AND BENEFITS

- Substation for DH and decentralised systems
- Direct heating and DHW temperature regulation with a thermostatic control valve
- Capacity: 33 – 75 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

CIRCUIT DIAGRAM - EXAMPLE



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: H 520 × W 505 × D 220
 With cover: H 550 × W 540 × D 360

Connections:

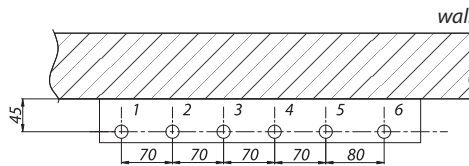
1. District heating (DH) supply
2. District heating (DH) return
3. Heating (HE) supply
4. Heating (HE) return
5. Domestic hot water (DHW)
6. Domestic cold water (DCW)

Connections sizes:

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

Options:

- Booster pump (increases DH flow)
- Mixing circuit
- Connections for radiator or mixing circuit
- White-lacquered steel cover
- 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)



seen from above

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-B-1	33	60	20	10/45	25	810
	40	70	20	10/50	25	858
VMTD-B-2	50	60	20	10/45	40	1228
	58	70	20	10/50	40	1247
VMTD-B-3	65	60	20	10/45	40	1597
	75	70	20	10/50	40	1612

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