



## Termix VMTD-B

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

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

#### 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 decentralized 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-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 over heating and lime scale formation. The heat exchanger cools out 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 built-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

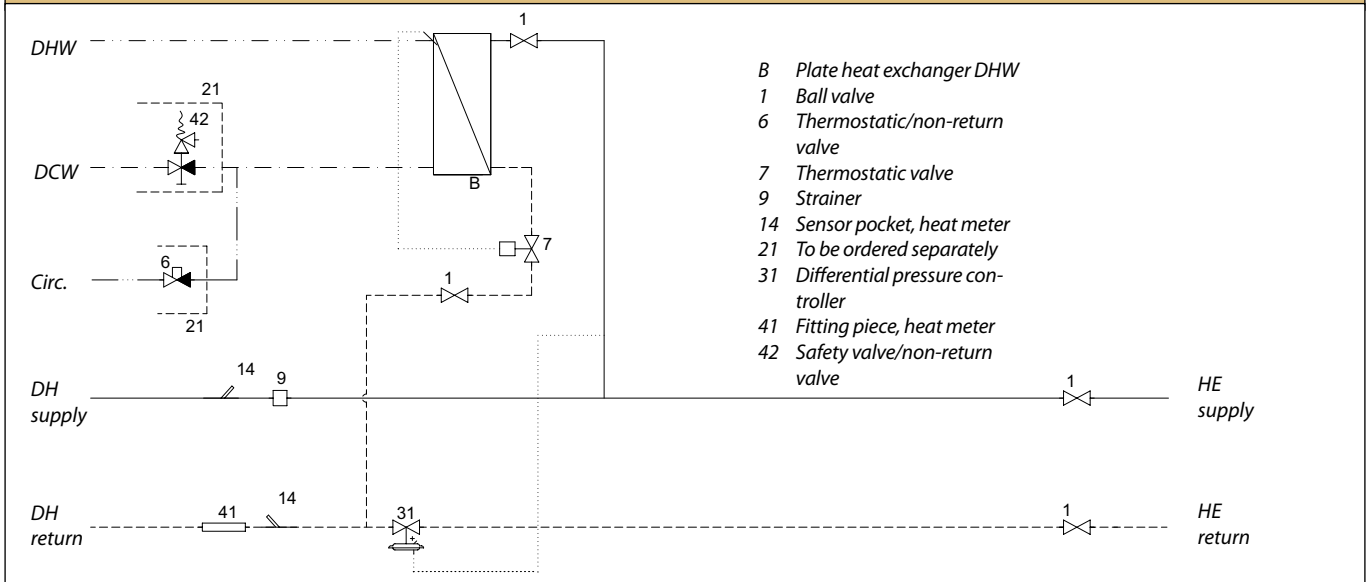
All pipes are made of stainless steel. The connections are made by nuts and gaskets. The Termix VMTD-B can be delivered with white-lacquered steel cover in modern design.

### FEATURES AND BENEFITS

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

# Termix VMTD-B

## Circuit diagram - example



### 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:** 20 kg  
 (incl. packing)

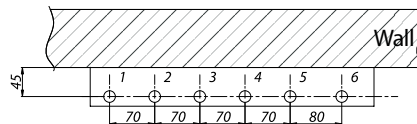
**Cover:** White-lacquered steel sheet

### Dimensions (mm):

Without cover:  
 H 520 x W 505 x D 230  
 With cover:  
 H 550 x W 540 x 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)



Seen from above

### Connections sizes:

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

### Options:

- Booster pump (increases DH flow)
- Mixing circuit
- Extra charge for connections for radiator or mixing circuit
- 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 equalizer (GTU)
- Room thermostat
- Zone valve with actuator
- Air screw (DH supply)

## 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-B-1	33	60	20	10/45	25	810
	40	70	20	10/50	25	903
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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