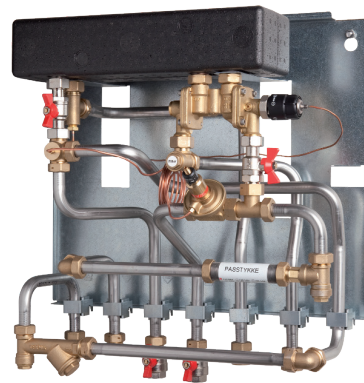


Fact sheet

# Termix VMTD-I

District heating substation for direct heating and instantaneous domestic hot water with flow-compensated temperature controller.



## Application

The Termix VMTD-I is a complete solution with built-in water heater and a differential pressure controlled heating system. Termix VMTD-I is applicable for single 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-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 flowcompensated temperature controller with integrated differential pressure controller. The heat exchanger – which is insulated – cools the DH water very efficiently, thereby creating an excellent operating economy. The Danfoss IHPT valve ensures a stable hot water temperature by varying loads, supply temperatures and by high and varying differential pressure without the need for readjusting the valve. This protects the heat exchanger against overheating and lime scale formation. Furthermore the IHPT valve has an integrated idle temperature controller, which keeps the house supply line warm. This shortens the waiting periods during summer when the heating system is in reduced operation, which is ideal where high comfort is requested.

## Options

The Termix VMTD-I 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.

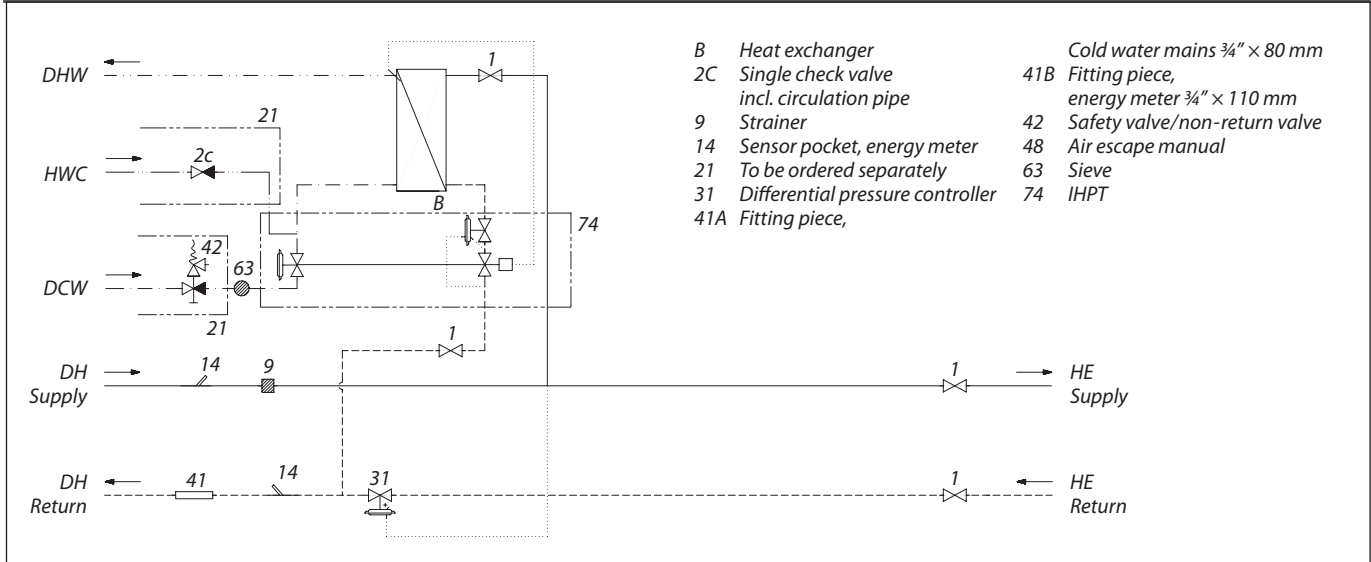
## Construction

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

### FEATURES AND BENEFITS

- Substation for DH and decentralized systems
- Direct heating with differential pressure controller
- DHW flow-compensated temperature controller
- Capacity: 33 – 59 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
- Optimum temperature regulation up to DH supply temperature 100 °C

CIRCUIT DIAGRAM



**Technical parameters:**

Nominal pressure: PN 10  
 DH supply temperature:  $T_{max} = 120\text{ }^{\circ}\text{C}$   
 DCW static pressure:  $P_{min} = 1\text{ bar}$   
 Brazing material (HEX): Copper

**Weight incl. cover:** 20 kg (incl. packing)

**Cover:** White-lacquered steel sheet

**Dimensions (mm):**

Without cover (including ball valves):  
 H 550 x W 528 x D 260  
 With cover (mounted on wall variant):  
 H 550 x W 540 x D 360

**Connections:**

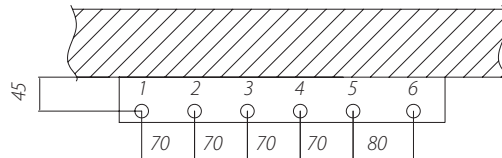
1. District heating (DH) supply
2. District heating (DH) return
3. Heating (HE) supply
4. Heating (HE) return
5. Domestic hot water (DHW)
6. Domestic cold water (DCW)

**Connections sizes:**

DH + HE:  $G\frac{3}{4}$ " (int. thread)  
 DCW + DHW:  $G\frac{3}{4}$ " (int. thread)

**Options:**

- Mounting rail with ball valves
- White-lacquered steel cover (on the wall)
- Safety valve and non-return valve (10 bar)
- Pressure compensation valve (GTU)
- Room thermostat
- Zone valve with actuator
- Thermometer
- Ball valves



HEATING: CAPACITY EXAMPLES

Substation type	DHW capacity [kW]	Supply flow primary [°C]	Return flow primary [°C]	DHW [°C]	Pressure loss primary [kPa*]	DHW tap load [l/h]
VMTD-I-1	32,3	60	19,8	10/45	23	798
	40,3	60	20,7	10/45	33	996
	36,5	70	19,1	10/50	20	792
	55	70	21,5	10/50	39	1190
VMTD-I-2	32,3	55	21,9	10/45	26	798
	38	55	20,0	10/45	30	939
	32,3	60	16,0	10/45	18	798
	47	60	18,0	10/45	32	1161
	39,5	70	16,0	10/50	20	858
	59	70	19,2	10/50	34	1276

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