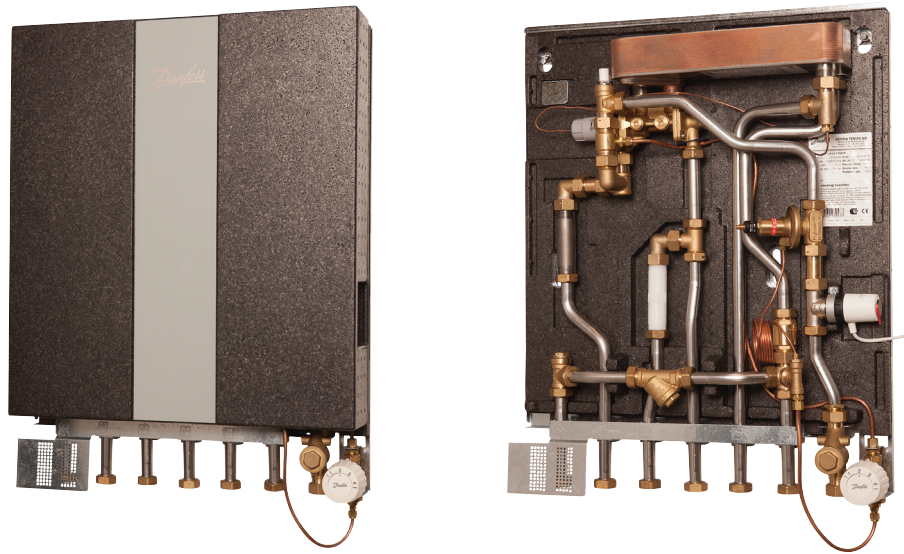


## Fact sheet

# Termix VMTD-F-I PTCII+P with complete insulation

Direct substation for flats and single family houses



## Application

The Termix VMTD-F-I PTCII+P is a complete solution with a built-in water heater and a differential pressure controlled heating system. Termix VMTD-F-I PTCII+P 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 a sensor pocket for insertion of a heat meter as well as strainer and ball valves. The display of the heat meter is to be mounted next to the station.

## Heating (HE)

The heating circuit is designed for direct generation of heat. The differential pressure controller sets the optimum operation conditions for radiator thermostatic valves enabling 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 flow-compensated temperature controller with integrated differential pressure controller.

The DH water is cooled very efficiently by the heat exchanger, thereby creating an excellent operating economy. The Danfoss PTCII+P valve ensures a stable domestic hot water temperature by varying loads, varying 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. A separate thermostatic bypass enables tapping of hot water without any delay, – ensuring the best possible efficiency and economy.

## Options

The Termix VMTD-F-I PTCII+P can be supplied with a connection for DHW circulation. DHW circulation pump can be ordered separately. (to be mounted underneath the station).

## Construction

All pipes are made of stainless steel. The connections are made by nuts and gaskets.

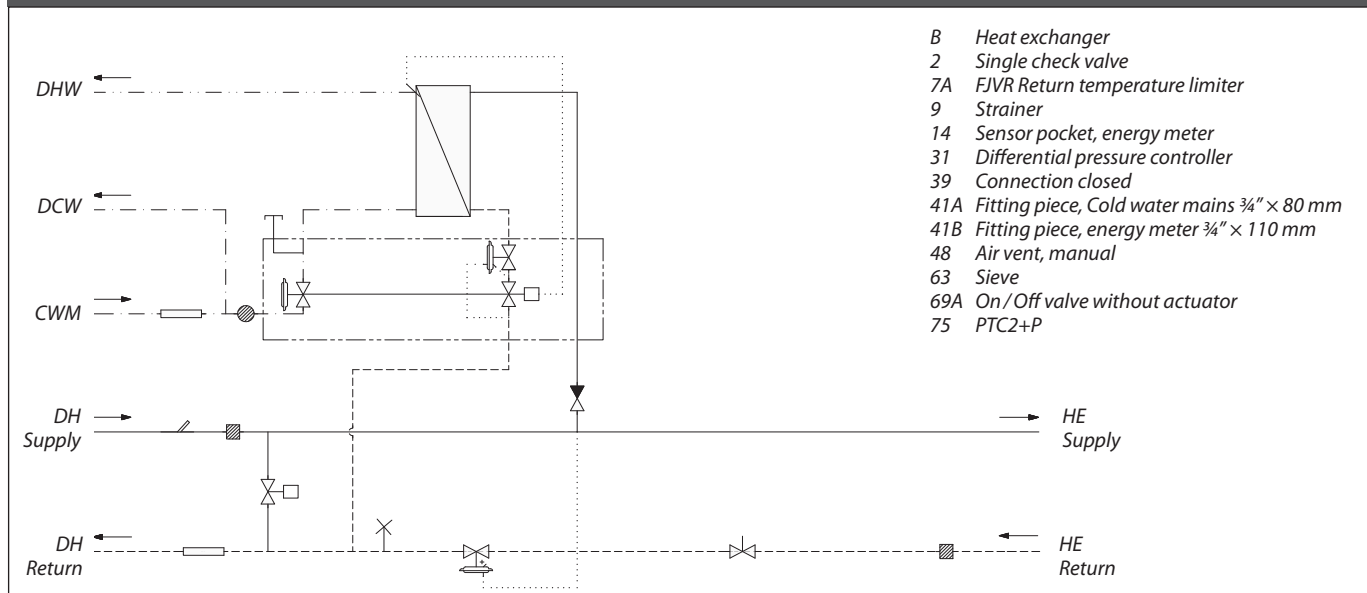
## Insulation

The Termix VMTD-F-I PTCII+P comes complete with a fully insulated cover thus minimizing the heat loss both during tapping of domestic hot water but also when only space heating is required.

## FEATURES AND BENEFITS

- Substation for DH and decentralized systems
- Direct heating with differential pressure controller
- DHW flow-compensated temperature controller
- Capacity: 33 – 61 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
- Low heat loss

## CIRCUIT DIAGRAM



### Technical parameters:

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

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

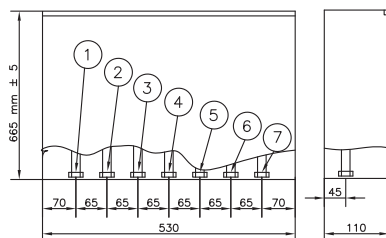
**Insulation cover:** Anthracite grey  
 EPP

### Dimensions (mm):

Without cover (including ball valves):  
 H 745 × W 528 × D 110 mm  
 With cover (mount on wall variant):  
 H 800 × W 540 × D 242 mm  
 With cover (built-in wall variant):  
 H 915–980 × W 610 × D 150 (110) mm

### Connections:

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



### Connections sizes:

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

### Options:

- Mounting rail with ball valves
- Room thermostat
- Actuator for zone valve
- Connection for hot water circulation
- Hot water circulation pump (mounted outside the unit)
- Ball valve set

## DHW: 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/min]
VMTD-F-I-1	32,3	60	19	10/45	22	13,3
	40,3	60	20	10/45	32	16,6
	36,5	70	18	10/50	20	13,2
	55	70	21	10/50	39	19,8
VMTD-F-I-2	32,3	55	19	10/45	22	13,3
	38	55	20	10/45	30	15,7
	32,3	60	16	10/45	18	13,3
	47	60	18	10/45	32	19,4
	39,5	70	16	10/50	20	14,3
	59	70	19	10/50	33	21,3

\* Heat meter not incl.

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