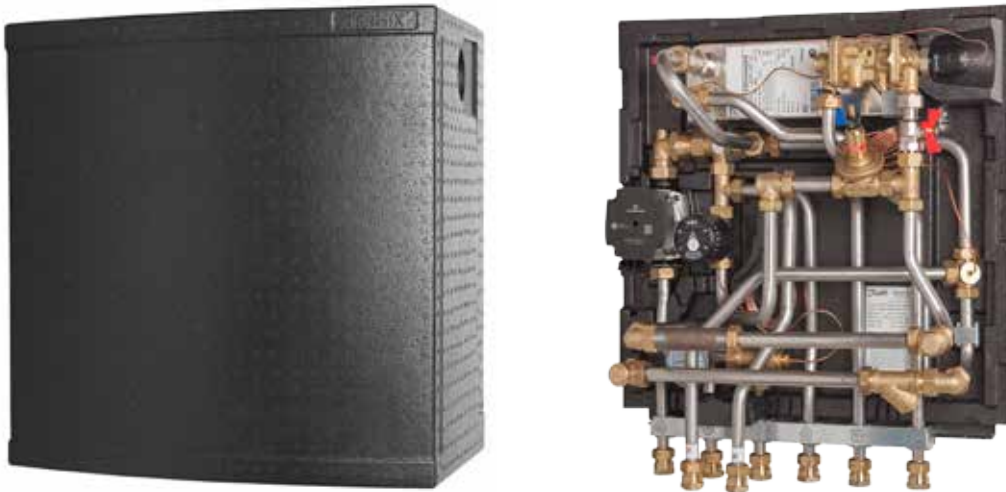


Fact sheet

Termix VMTD-MIX-I with complete insulation

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



Application

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

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 strainers and ball valves. Furthermore the substation is delivered with a mixing loop including pump, controls and non - return valve.

Heating (HE)

The heating circuit is designed for direct connection. The differential pressure controller sets the optimum operation conditions for radiator thermostats in order to enable individual temperature control in each room. The mixing loop creates a suitable temperature level e.g. for floor heating. 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 and flow compensated controller with integrated differential pressure controller. The heat exchanger 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 substation can be supplied with a built-in non - return valve and safety valve mounted in the cold water supply. The substation 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 MIX - I can be delivered with white - lacquered steel cover in modern design

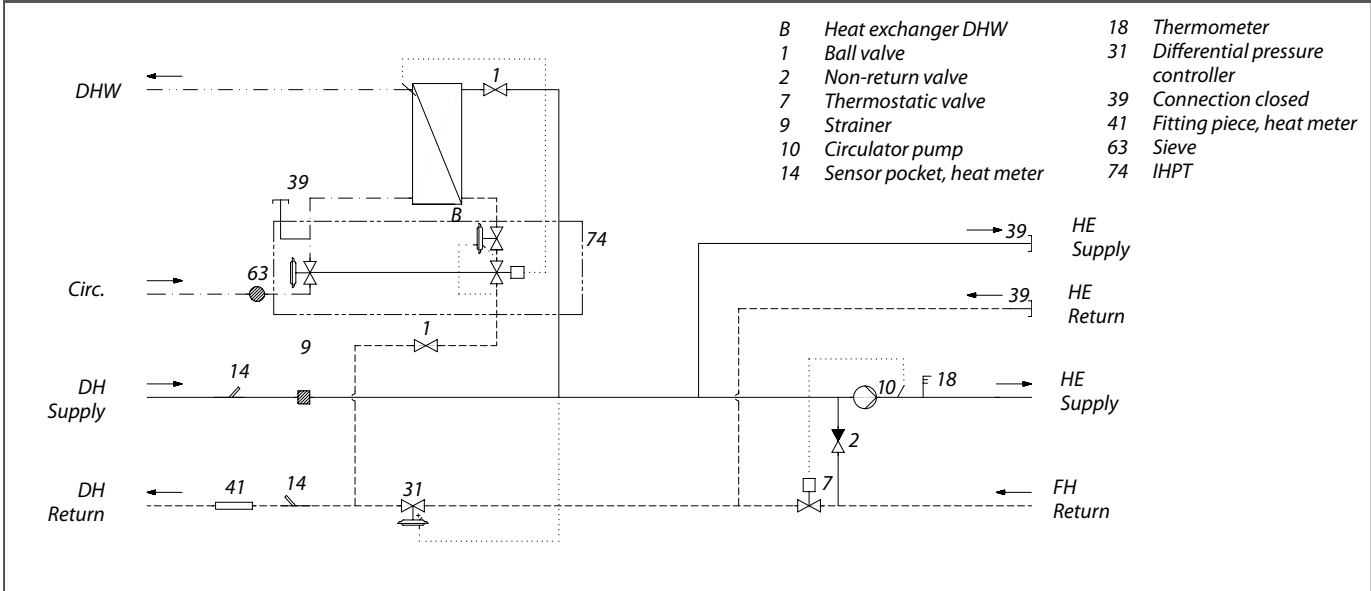
Insulation

The Termix VMTD-F-I 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 thermostatic and 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
- Low heat loss
- Minimised risk of lime scale and bacteria formation

CIRCUIT DIAGRAM - EXAMPLE



Technical parameters:

Nominal pressure: PN 10
 DH supply temperature: $T_{max} = 120\text{ }^{\circ}\text{C}$
 DCW static pressure: $P_{min} = 1,0\text{ bar}$
 Brazing material (HEX): Copper

Weight incl. cover: 25 kg (incl. packing)

Cover: White-lacquered steel sheet

Insulation: EPP $\lambda 0,039$
Insulation cover: Anthracite grey EPP

Dimensions (mm):
 With insulation: H 610 x W 540 x D 360

Connections:

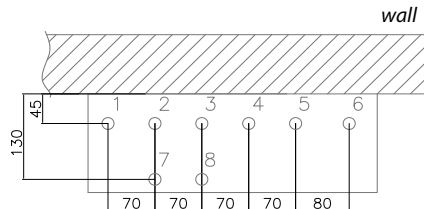
1. District heating (DH) supply
2. District heating (DH) return
3. Heating (HE) supply
4. Heating (HE) return
5. Domestic hot water (DHW)
6. Domestic cold water (DCW)
7. Heating (HE) return
8. Heating (HE) supply

Connections sizes:

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

Options:

- Booster pump (increases DH flow)
- White - lacquered steel cover
- Safety valve and non - return valve (10 bar)
- 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] | DHW [°C] | Pressure loss primary [kPa] | DHW tap load [l/h] |
|-----------------|-------------------|--------------------------|--------------------------|----------|-----------------------------|--------------------|
| VMTD MIX-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 MIX-I-2 | 32,3 | 55 | 21,9 | 10/45 | 26 | 798 |
| | 38 | 55 | 20,0 | 10/45 | 30 | 939 |
| | 39 | 60 | 19,6 | 10/45 | 20 | 798 |
| | 47 | 60 | 19,6 | 10/45 | 34 | 1161 |
| | 39,5 | 70 | 16,0 | 10/50 | 20 | 858 |
| | 59 | 70 | 19,2 | 10/50 | 34 | 1276 |

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