Application
The Termix VMTD-F-I is a complete solution with built-in water heater and a differential pressure controlled heating system. Termix VMTD-F-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 flow-compensated temperature controller with integrated differential pressure controller. The heat exchanger cools out 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-F-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 and built in circulation pump.

Construction
All pipes are made of stainless steel. The connections are made by nuts and gaskets. The Termix VMTD-F-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 - 55 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

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CIRCUIT DIAGRAM - EXAMPLE

DHW

DCW

DCW

DH supply

DH return

HE supply

HE return

Technical parameters:
- Nominal pressure: PN 16
- DH supply temperature: \( T_{\text{max}} = 120 °C \)
- DCW static pressure: \( p_{\text{min}} = 1 \) bar
- Brazing material (HEX): Copper
- Weight incl. cover: 20 kg (incl. packing)

Options:
- Mounting rail with ball valves
- White-lacquered stainless steel cover (built in)
- White-lacquered stainless steel cover (on the wall)
- Safety valve and non-return valve (10 bar)
- Safety valve with thermostatic circulation set
- Thermostatic circulation set
- Pressure compensation valve (GTU)
- Room thermostat
- Zone valve with actuator
- Return temperature limiter
- Connection for circulation
- Circulation pump
- Thermometer
- Ball valves

Connections:
- DHW
- DCW
- DH supply
- DH return
- HE supply
- HE return

Dimensions (mm):
- Without cover (including ball valves)
  - H 620 x W 440 x D 150
- With cover (built-in wall variant)
  - H 810 x W 610 x D 150
- With cover (mounted on wall variant)
  - H 650 x W 540 x D 190

DH: CAPACITY EXAMPLES, 10 °C / 50 °C

<table>
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<tr>
<th>Substation type</th>
<th>DHW Capacity kW</th>
<th>Supply flow Primary °C</th>
<th>Return flow Primary °C</th>
<th>DHW °C</th>
<th>Pressure loss Primary kPa*</th>
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