

Fact sheet

Termix VMTD-F MIX-I

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

**Application**

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

District heating (DH)

The substation is prefabricated with a differential pressure controller, fitting piece and sensor pocket for insertion of a heat meter as well as strainer 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 control valve. The patented sensor accelerator accelerates the closing of the thermostatic control valve which protects the heat exchanger against over heating and lime scale formation. The sensor accelerator and the control valve also work 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 DHW temperature by varying loads, flow temperatures and differential pressure without the need for readjusting the valve.

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.

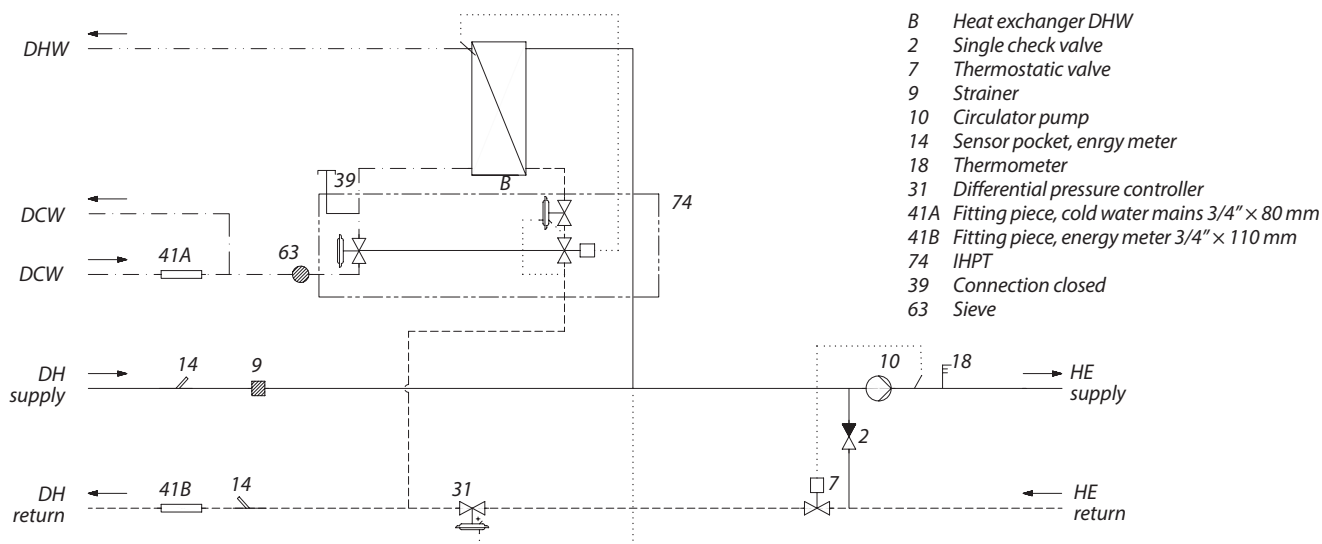
Construction

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

FEATURES AND BENEFITS

- Substation for district heating and decentralized systems
- Direct heating and DHW temperature regulation with a flow-compensated temperature controller
- Capacity: 33-55 kW DHW, 15-20 kW HE
- 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: $T_{\max} = 110\text{ }^{\circ}\text{C}$
 DCW static pressure: $p_{\min} = 1,0\text{ bar}$
 Brazing material (HEX): Copper

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

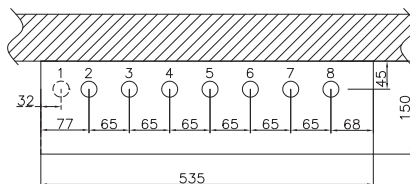
Cover: White-lacquered steel sheet

Dimensions (mm):

Without cover: H 770 × W 535 × D 150
 With cover: H 800 × W 540 × D 242
 With cover (in wall): H 1030 × W 610 × D 150

Connections:

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



Connections sizes:

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

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
- Air screw (DH supply)
- Return temperature limiter
- Connection for hot water circulation
- Hot water circulation pump
- Thermometer
- Ball valves

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 MIX-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 MIX-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

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