



Cetetherm Midi Select



Standardized flexible district heating substation

Cetetherm Midi Select is a modern, complete district heating substation for maximum comfort and energy efficiency.

Standard solution are a modern control system and energy efficient pumps placed on supply line.

Cetetherm own controller Optimizer, is selectable.

Always stable, hygienic, and sufficient access to hot water.

Modularized and compact design.

Midi Select is available in two models, to be hanged on wall or floor standing.

Hot water circuit is selectable.

Every heat exchanger in Midi Select are dimensioned and tested according to the SS-EN 1148 standard, and according to current requirements in F101.

APPLICATIONS

Midi Select heating unit fits many requirements, from multifamily houses to factories, and for both new installations and replacing old. Midi is designed from type of building and needs, temperatures and capacities in the heated building.

Midi Selects many modularized functions such as meter sections, controllers and other options can be chosen and added to fit the most needs.

Midi Select has always one heat exchanger for heating and can be equipped with one for tap water too. Capacity is between 20-300 kW for heating and up to 1,75 l/s DHW.

Midi Select can be delivered prepared for connection of heat pump, and with connections for vacuum degasser.

We can ensure full integration with Nibe's heat pumps.

CHARACTERISTICS

All components are standard stock components, which provides fast delivery time.

Midi Select is compact and flexible and can be connected to all types of pipes in buildings and district heating network.

Midi Select is wall mounted, W-model or floor standing, F-model.

It can be two-step or parallel connected.

CONSTRUCTION

Our program WebSelect is used to calculate and configure a Midi Select. Chosen basic functions together with engineering data and operating data are important information for the calculation.

COMPONENTS.

All components and sizes are made after input as temperatures, effects, pressure, and other needs. Cetetherm uses only well-known brands and components of highest quality in Midi Select. All pipes has been designed by Cetetherm to ensure quality and function.

Midi Select is equipped with electronic controlled pumps to be able to optimise the energy use. Midi Select can have control units and pump controllers of different brands and complexity.

Cetetherm recommends a control unit, with the possibility of communication and optimization at distance, to guarantee the best possible energy use.

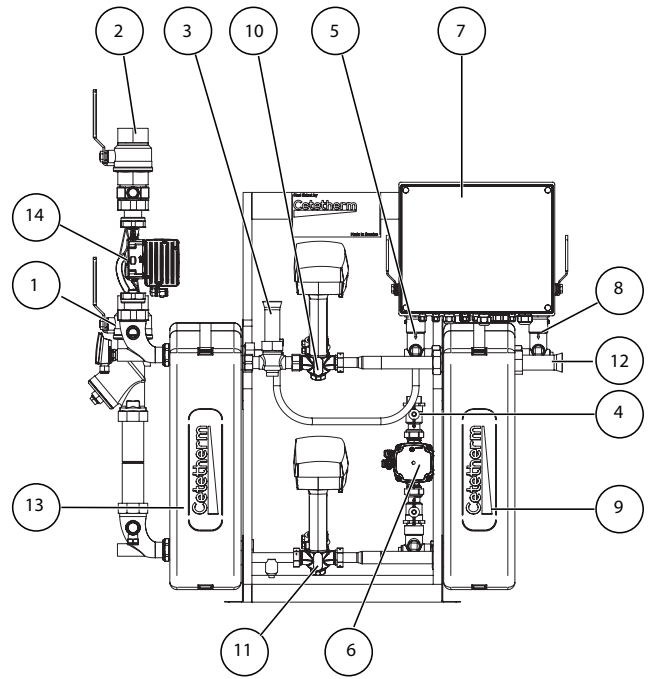
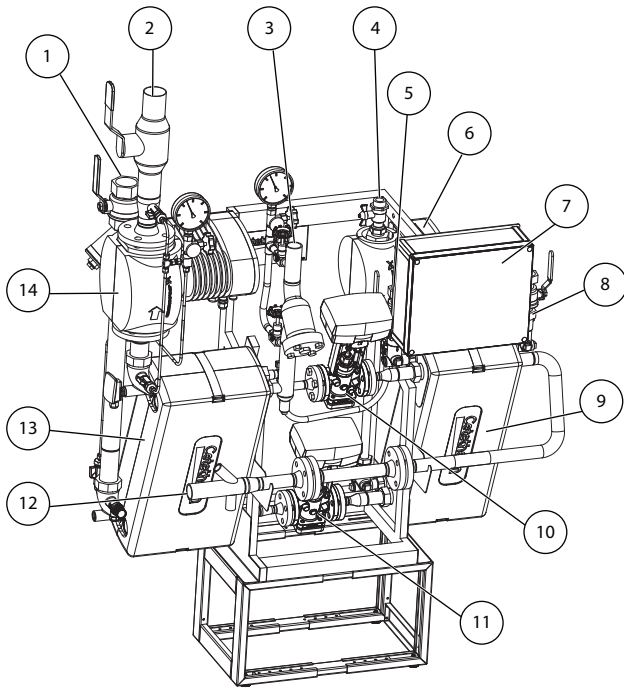
Complete meters sections of different models are available as an option.

HEAT EXCHANGERS

To ensure the best energy efficiency and controllability, two-step connected brazed heat exchangers are always used for tap water.

We use thread connections for easy dismantling and service. The heat exchangers are isolated with environmentally friendly polyurethane foam with ABS-surface.

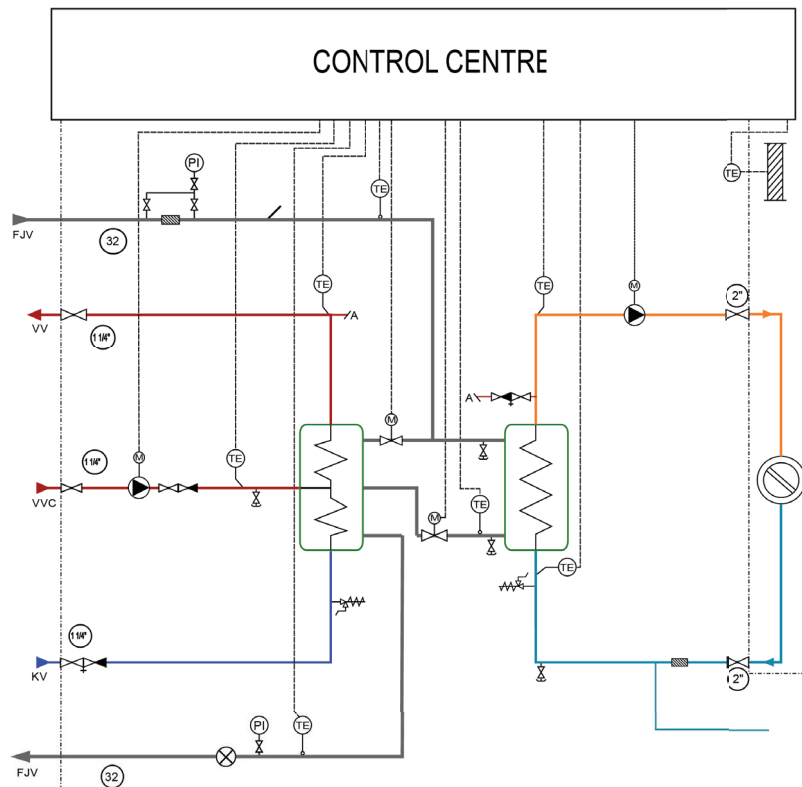
Example of two different models of Midi Select.



- 1 Heating circuit, return
- 2 Heating circuit, supply
- 3 Heating network media, supply
- 4 DHWC
- 5 Hot water
- 6 Pump, hot water circuit
- 7 Control cabinet

- 8 Cold water
- 9 Heat exchanger, hot water
- 10 Control valve hot water
- 11 Control valve, heating
- 12 Heating network media, return
- 13 Heat exchanger, heating
- 14 Pump, heating circuit

Example flowchart Midi Select with one heating circuit and one hot water circuit, two-step connected



OPERATING DATA

	Primary side	DHW	Heating
Design pressure tryck PS, bar	16-25	10	6-10
Design temperature TS, °C	120	90	90
Opening pressure, safety valve, bar	120	10	3-6

PERFORMANCE AT AVAILABLE PRIMARY DIFFERENTIAL PRESSURE 150-800 KPA

Type	Designed temperature programme (°C)	Capacity (kW)	Primary flow (l/s)	Actual return temp. (°C)	Secondary flow (l/s)
Heating circuit					
Midi Select W-model	100-43/40-60	208	0,87	42,9	2,49
	95-48/45-60	156	0,79	46,8	2,49
	100-33/30-45	156	0,56	31,4	2,49
Midi Select F-model	100-43/40-60	281	1,15	41,7	3,37
	95-48/45-60	211	1,07	46	3,37
	100-33/30-45	211	0,75	30,7	3,37
Hot water circuit					
Midi Select W-model	65-22/10-55	179	0,98	21,3	0,95
	60-22/10-55	129	0,81	21,9	0,68
Midi Select F-model	65-22/10-55	254	1,41	18,9	1,35
	60-22/10-55	220	1,36	21,3	1,17

These are typical operating data, others are available on request.

The configuration and layout will affect the measure and height of the Midi Selcet. Maximum measure of a floor standing is 1800x1500x500 (HxWxD) and wall hung 1100x1100x500 (HxWxD).

The control panel is adjustable in angel.

SECONDARY CONNECTIONS

	Wall modell	Floor modell
Heating, supply	G 2"	G 2"/W50
Heating, return	G 2"	G 2"/W50
Cold water	G 1 1/4"	G 1 1/4"
Hot water	G 1 1/4"	G 1 1/4"
DHWC	G 1 1/4"	G 1 1/4"

PRIMARY CONNECTIONS

District heating, supply	DN32
District heating, return	DN32

TEST AND CERTIFICATIONS

Midi Select is certified according to Pressure Equipment Directive, PED.

Every heat exchanger in Midi Select are dimensioned and tested according to the SS-EN 1148 standard, and according to current requirements in F101.

All circuits are leak tested. Electrical function and safety tests are performed on wired components.

Cetetherm are certified according to SO 9001, ISO 14001 and ISO 45001.

BENEFITS

- Modularized and compact design.
- Floor standing or wall hung
- Open layout with a design that gives good overview over its different components and circuits. This makes service and maintenance easier.
- Prefabricated optimized system with all components tested makes the installation and start up easy, and better performance over many years of service.
- Easy to transport to installation room due to its compact design.