



Cetetherm Maxi Select



Flexible district heating substation

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

Standard solution with modern control systems and energy efficient pumps placed in supply line. Possible to add one extra heating circuit.

Cetetherm own controller Optimizer, is selectable.

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

Modularized and compact design.

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

APPLICATIONS

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

Many of the modularized functions in Maxi can be chosen and added to fit the needs even better. Possible to have 1 to 2 heat exchangers for heating and 1 for heating tap water. Heating capacity from 20 to 800 kW is available in the modularized range. Almost any function, flow chart and capacity are available as an engineered solution.

Maxi Select can be delivered prepared for connection of heat pump, and with connections for vacuum degasser and connection for bypass filter over the pump.

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

CHARACTERISTICS

Maxi is a heating unit based on brazed heat exchangers. Due to the modularized concept a Maxi Select has a relatively short delivery time. Maxi Select is compact and flexible and can be connected to all types of pipes in buildings and district heating network.

CONSTRUCTION

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

COMPONENTS.

Component sizing is made after input as temperatures, effects, pressure, and other needs. Cetetherm uses only well-known brands and components of highest quality in Maxi Select. All pipes have been designed by Cetetherm to ensure quality and function.

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

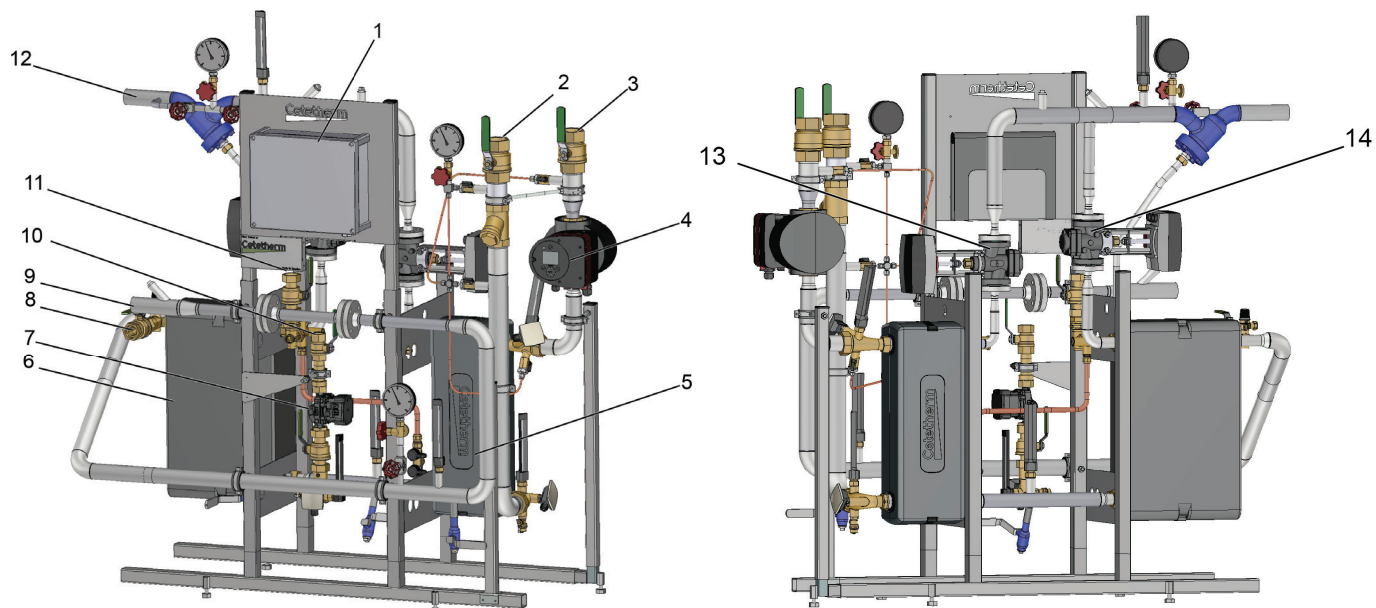
Cetetherm recommends a control unit, with the possibility of communication and optimization at distance, to guarantee the best possible energy use.

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.

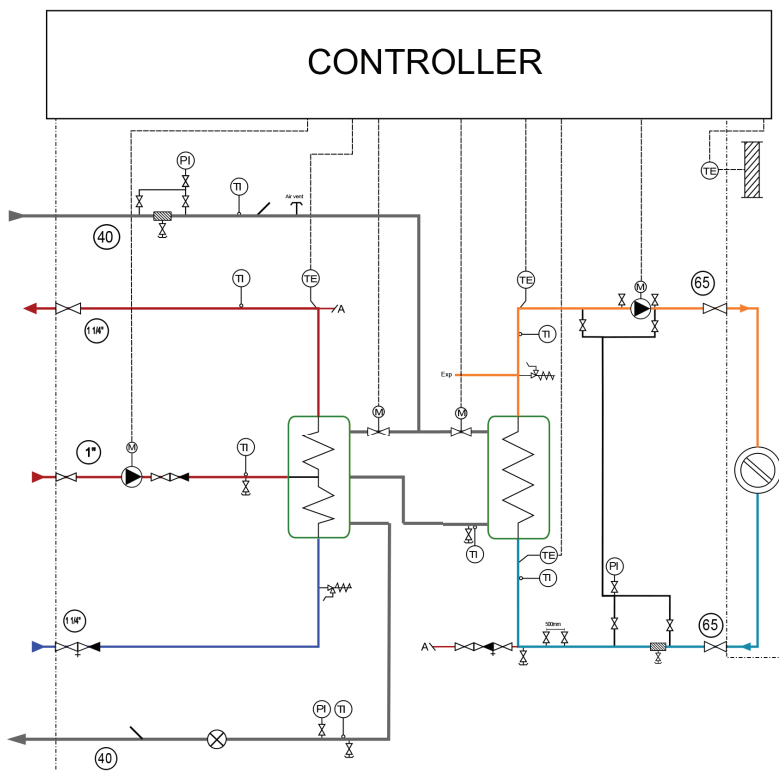
We use thread connections for easy dismantling and service. The heat exchangers are isolated with environmentally friendly polyurethane foam with ABS-surface.



- 1 Control cabinet
- 2 Heating circuit, return
- 3 Heating circuit, supply
- 4 Pump, heating circuit
- 5 Heat exchanger, heating
- 6 Heat exchanger, hot water
- 7 Pump, hot water circuit

- 8 Cold water
- 9 Heating network media, return
- 10 DHWC
- 11 Hot water
- 12 Heating network media, supply
- 13 Control valve, heating
- 14 Control valve hot water

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



OPERATING DATA

	Primary side	DHW	Heating
Design pressure PS, bar	16-25	10	6
Design temperature TS, °C	120	100	100

MAXI CAPACITY AND MEASURE TABLE

Dimensions of Maxi with typical capacities

Hot water (kW)	Heating (kW)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
200	100	1500	660	1550	100
350	200	1650	660	1550	150
400	300	1650	660	1600	170
500	500	1750	700	1650	230

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

Example measure table from a Maxi Select with tap water and space heating, pumps included. Other configuration or layout will influence measures and weight. Electrical panel height is about 1750 mm.

TEST AND CERTIFICATIONS

Maxi Select is certified, up to category 4, according to Pressure Equipment Directive, PED.

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

All circuits are pressure tested with water at min 1,43 x PS. Electrical function and safety tests are performed on wired components.

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

BENEFITS

- 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.