



# Cetetherm Maxi Compact



## Compact and flexible district heating substation for larger premises

The Cetetherm Maxi Compact is a complete flexible and compact range of district heating substations.

Maxi Compact has one of the most energy efficient and unique control system on the market - Cetetherm IQHeat.

Cetetherm has many years of experience in district heating and has developed Maxi Compact with practical function and easy to use. All components are easily accessible for inspection and future service when required.

To get the most optimized low primary return temperature, the Maxi Compact is two-step connected. In the long term this will give the best combination of low cost and high performance.

## APPLICATIONS

Maxi Compact supply Domestic Hot Water (DHW) and space heating - or space heating only - in large premises like:

- apartment blocks
- commercial centers
- hotels
- office building
- public buildings
- factories.

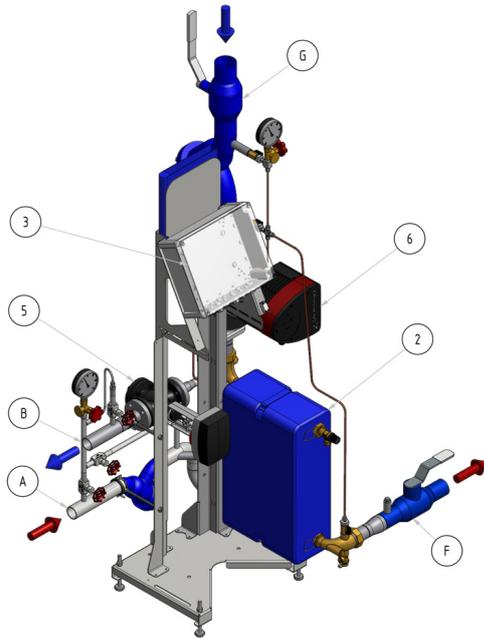
## KEY BENEFITS

- Most **energy-efficient** solution reducing lifetime operating costs with two-step connected and Cetetherm IQHeat.
- **Small footprint** with good accessibility for maintenance and service.
- **Remote communication**- supervision by computer, smartphone or control panel with the Cetetherm IQHeat controller.
- **Short lead time.**
- **Robust and reliable** - made in Sweden.
- All components in **low led.**
- Possible to get in a **fully insulated** version.

## CAPACITY

20-300 kW heating and 1,75 l/s DHW, possible to get in several meter sections, controllers and options

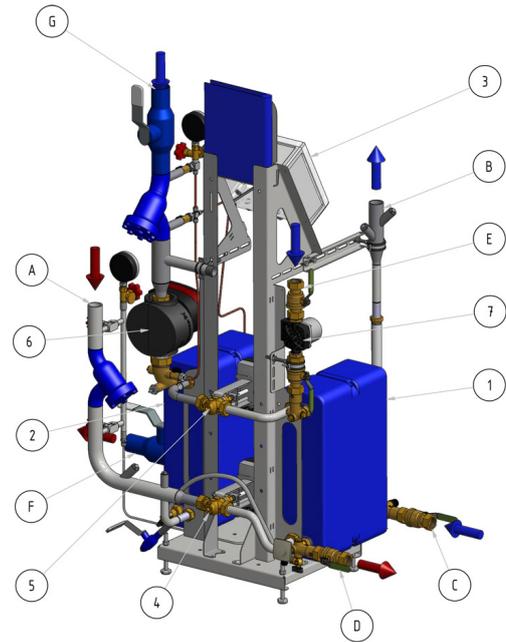
## MODEL F1 WITH HEATING



### COMPONENTS

1. Heat exchanger, hotwater
2. Heat exchanger, heating
3. Control cabinet
4. Control valve, hot water
5. Control valve, heating
6. Pump, heating circuit
7. Pump, hot water circuit

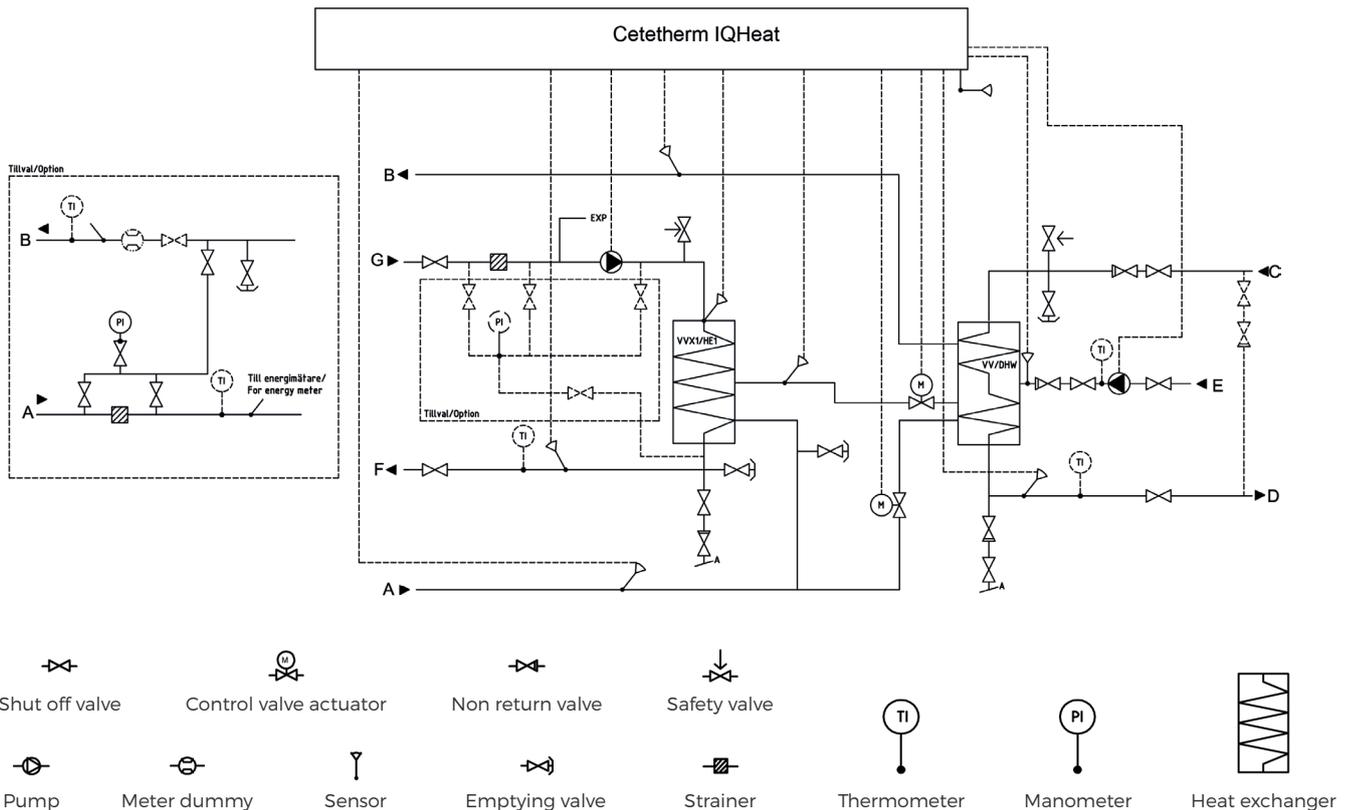
## MODEL F2 WITH HEATING AND HOT WATER



### COMPONENTS

- A Heating network media, supply
- B Heating network media, return
- C Cold water
- D Hot water
- E DHWC
- F Heating circuit, supply
- G Heating circuit, return

## EXAMPLE FLOW CHART FOR MAXI COMPACT WITH HEATING AND HOT WATER, TWO-STEP CONNECTED



## CONTROLLER CETETHERM IQHEAT

Maxi Compact can be equipped with the Cetetherm IQHeat control system, an integrated Direct Digital Control (DDC) unit for reading and steering of data. The IQHeat is ready for operation and can be fit to the customer requirements.

Communication is via internet, ModBus or BacNet without any extra cost per month. Maxi Compact with IQHeat can be controlled and monitored using a standard PC/mobile with internet connection or by the built in display.

The main benefits with a Cetetherm IQHeat:

- Reduced heating costs for the property owner.
- Lower return temperatures to the network.
- Possible to remote troubleshoot and optimize the unit on distance.
- Quick and easy installation as all equipment are preprogrammed and tested from the factory.
- Easy to add communication modules or to do updates on distance.

Maxi Compact is also available with controllers from Schneider, Siemens and Regin or without controller. Primary filter with 3-point measuring and meter sections in different design, other types of filling up, fully insulated, service bypass, thermometers and other options are available.

## STANDARD VERSION MAXI COMPACT

Heat exchanger
Corrosion resistant stainless steel "316"

Pumps
Circulation Pump heating: on return pipe before heat exchanger with frequency controlled Magna 3 pump
DHWC pump: three different models, one simple or two frequency controlled

Valves
Welded shut of valves on the heating circuit and threaded on the tap water side

Control valve
Dimensioned to manage differential pressure up to 8 bar, available in both threaded and flanged design

Controller
Cetetherm IQHeat with integrated web communication, other controllers also available

Temperature sensors (depending on controller)		
Ni1000si	PT1000	NTC1,8k

Pressure sensors (option)
0-10 V/0-10 bar

Water meter (option)
Mbus, pulse

## CONNECTIONS

	Weld	Thread
District heating supply & return	DN40	
Heating, supply & return	DN40-DN65 <sup>1)</sup>	G2" <sup>2)</sup>
Cold water, hot water and DHWC		G1½"
Expansion vessel		G1" <sup>1)</sup> eller G½" <sup>2)</sup>

1) With heating circuit, size depending on flow and chosen pump.

2) No heating circuit.

## OTHER INFORMATION

Electrical data: 230 V 50Hz, 1-phase, max 550 W
Sound level <70 dB(A), 1,6 meter above the floor and 1 meter from the source

## MAXI COMPACT CAPACITY AND MEASURE TABLE

Max size and max weight, Maxi Compact with heating and hot water, including pumps and meter section. Control cabinet height is approximate 1550 mm.

Model	Heating (kW)	Hot water (kW)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
H1T1	40	130	1275	576	1715	115
H3T2	90	170	1275	576	1715	125
H4T3	120	200	1275	633	1715	135
H5T4	140	250	1275	670	1715	150
H6T5	200	300	1282	716	2012	165
H7T6	250	340	1282	797	2012	180
H8T6	300	340	1282	797	2045	195

## OPERATING DATA

	Primary side	Heating	DHW
Dimensioned pressure, PS	16-25 bar	10 bar	10 bar
Dimensioned temperature TS, °C	120	100	100
Safety valve opening pressure	-	4-6 bar	9-10 bar