



Cetetherm AquaStar

Domestic hot water unit for apartments

The Cetetherm AquaStar is a complete, installation-ready tap water unit. It is suitable for apartments and single family houses that are connected to a heating network.

Cetetherm has long experience in district heating technology and has developed AquaStar with a well-considered function and simple operation. All components are readily accessible for maintenance and future servicing needs.

HIGH COMFORT

AquaStar offers fully automatic temperature control for hot water. The hot water is heated by direct exchange with high capacity. This means that the hot water is always as fresh as the incoming cold water.

SIMPLE INSTALLATION

Small dimensions, low weight, and self-acting control equipment ensure simple installation.

AquaStar includes insulation to save energy.

LONG-TERM SECURITY

AquaStar represents the very latest technology and meets very strict long-term performance specifications. The plates are made from acid-resistant, stainless steel. All components are closely matched and carefully tested to function in accordance with quality assurance system ISO9001:2008

HEATING NETWORK - A GOOD SOURCE OF HEAT

A heating network is an efficient technology that meets the need for hot water in a simple, convenient and secure way.

OPERATION

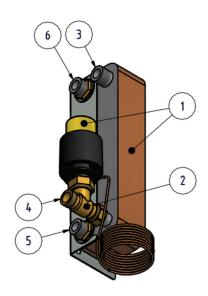
AquaStar is used for the indirect connection of apartments and single family houses to the heating network.

A heat exchanger is used to transfer heat from the heating network medium to the hot water system. Heat is transferred through a package of thin, acid-resistant, stainless steel plates, which keeps the heating network medium separate from the domestic hot water system.

A self-sensing temperature regulator controls the hot water temperature. This measures the temperature of the hot water in the heat exchanger and automatically adjusts the outgoing flow. This patented, in-house Cetetherm design gives a constant hot water temperature irrespective of volume and pressure flow.

AquaStar includes insulation for better energy efficiency.

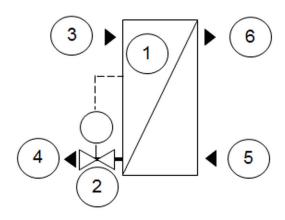




COMPONENTS

- 1. Heat exchanger and temperature controller for hot water
- 2. Control valve for hot water
- 3. Heating network media, supply
- 4. Heating network media, return
- 5. Cold water (CW)
- 6. Hot water (HW)

DIAGRAMMATIC FLOW CHART FOR AQUASTAR



AN EASILY MANAGEABLE, ECONOMICAL AND DURABLE SOURCE OF HEAT

The AquaStar uses the heating network medium for heating the domestic hot water.

The AquaStar is a wall-mounted unit and is very compact. The unit is discreet and to minimize transmission of operational sounds, we recommend installing it on well insulated walls or on walls of concrete.

AquaStar requires no attendance or maintenance and has a very long operational life. In the event of requiring service or component exchange at some future date, all parts are easily accessible and individually replaceable.

STANDARD DATA FOR CB20IS-27H

OPERATING DATA

| | Heating medium | Hot water circuit |
|------------------------|----------------|-------------------|
| Design pressure, MPa | 1.6 | 1.0 |
| Design temperature, °C | 120 | 100 |
| Volume, I | 0.34 | 0.36 |

PERFORMANCE AT DIFFERENTIAL PRESSURE MIN 50 KPA AND MAX 600 KPA

| Designed temperature programme (°C) | Capacity (kW) | Primary flow (I/s) | Actual return temp. (°C) | Secondary flow (I/s) |
|---|------------------|--------------------------|-----------------------------------|----------------------------|
| Hot water circuit | | | | |
| 80-25/10-55 | 67 | 0.28 | 25 | 0.36 |
| 70-25/10-58 | 40 | 0.21 | 25 | 0.20 |
| 65-25/10-50 | 50 | 0.29 | 25 | 0.30 |

STANDARD DATA FOR CB20IS-35H

OPERATING DATA

| | Heating medium | Hot water circuit |
|------------------------|----------------|-------------------|
| Design pressure, MPa | 1.6 | 1.0 |
| Design temperature, °C | 120 | 100 |
| Volume, l | 0.45 | 0.48 |

PERFORMANCE AT DIFFERENTIAL PRESSURE MIN 50 KPA AND MAX 600 KPA

| Designed temperature programme (°C) | Capacity (kW) | Primary flow (I/s) | Actual return temp. (°C) | Secondary flow (I/s) |
|---|------------------|--------------------------|-----------------------------------|----------------------------|
| Hot water circuit | | | | |
| 80-25/10-55 | 78 | 0.32 | 21 | 0.41 |
| 70-25/10-58 | 54 | 0.29 | 25 | 0.27 |
| 65-25/10-50 | 60 | 0.33 | 22 | 0.36 |

OTHER INFORMATION

| Electrical data: |
|---|
| Dimensions (with out cover): 200 mm width x 120 mm depth, 350 mm height |
| Weight: 5 kg |
| Transport particulars: Total weight 8 kg, 0,01 m³ |

CONNECTIONS

| | External thread |
|------------------------------|-----------------|
| Heating network media supply | G ¾ |
| Heating network media return | G ¾ |
| Cold water | G ¾ |
| Hot water | G ¾ |

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Cetetherm reserves the right to change specifications without prior notification