



# AquaMicro

## Domestic hot water unit for apartments

AquaMicro is a complete, installation-ready district heating substation for domestic hot water. It is suitable for apartments with a primary or secondary connection to a district heating network. Alfa Laval has long experience in district heating technology and has developed AquaMicro with a well-considered function and simple operation. All components are readily accessible for maintenance and future servicing needs.

### Good comfort

AquaMicro 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, well-designed pipe routing and self-acting control equipment ensure simple installation.

### Long-term reliability

AquaMicro represents the very latest technology and meets very strict long-term performance specifications. The plates and all the pipes in the unit are made from acid-resistant, stainless steel. All components are mutually tuned and are subjected to detailed functional testing according to Alfa Laval's ISO 9001:2000 quality assurance system.

### District heating - a good form of heating

District heating is an efficient technology which meets the need for heating and hot water in a simple, convenient and reliable manner. The growth of district heating is making a positive contribution to reduced emissions of greenhouse gases. In economic terms, district heating is very competitive compared with other forms of heating.

### Function

The incoming district heating water arrives from the culvert network at high pressure and high temperature. Only the heat from this water is used, therefore, and the district heating water itself does not pass into the domestic hot water system of the apartment.

The transfer of heat from the district heating water to the domestic hot water system of the apartment takes place in the heat exchanger. The transfer of heat takes place via thin



AquaMicro

plates of acid-resistant stainless steel, which keep the district heating water entirely separate from the apartment's own systems.

AquaMicro has self-acting temperature control for the domestic hot water. The hot water temperature is controlled by a self-acting temperature regulator. This senses and regulates the temperature of the outgoing hot water directly in the heat exchanger. The design, which was developed and patented by Alfa Laval, provides a constant hot water temperature regardless of the size and frequency of the quantities drawn off.

### An easily operated, economical and long-lived heating source

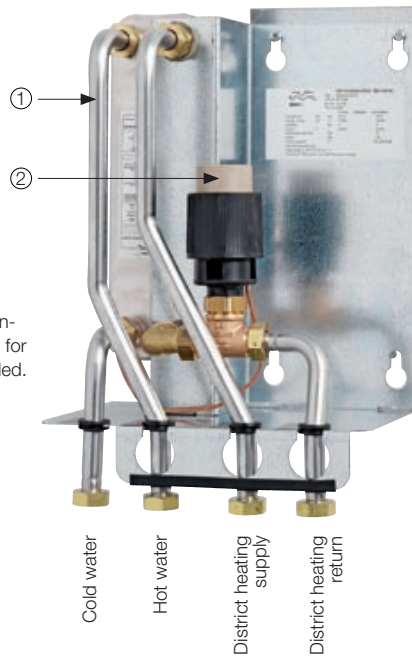
AquaMicro uses hot district heating water to heat domestic hot water (in a never-ending flow).

AquaMicro is mounted on the wall and takes up very little space. Wherever it is positioned, the substation is quiet and discreet, requires no care or maintenance and has a very long service life. In the event of service or replacement of components becoming necessary in the future, all parts are readily accessible and capable of individual replacement.

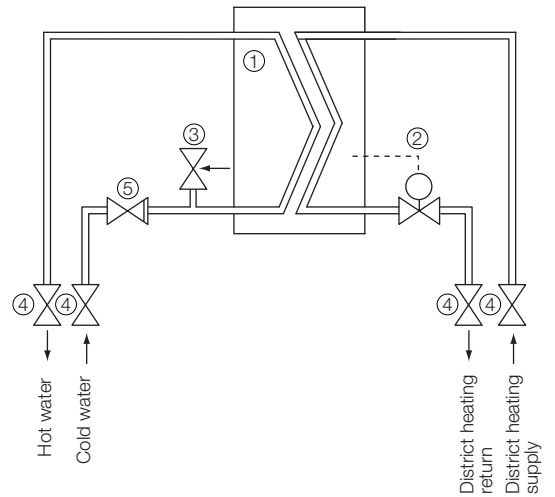
## Components

1. Heat exchanger, hot water
2. Temperature regulator, domestic hot water
3. Safety valve, cold water (accessory)
4. Shut-off valve (accessory)
5. Check valve

Brass components are of desincification-resistant quality. Connection dimension for all connections: DN20, internally threaded.



## Basic circuit diagram, AquaMicro



## Operating data

	District heating	Hot water
Design pressure, MPa	1.6	1.0
Design temperature, °C	120	100
Safety valve opening pressure, MPa		0.9
Volume heat exchanger, l	0.45	0.48

## Other

Electrical data
Noise level
Main dimensions: cover; width 305 x depth 200 x height 460 mm
Weight: 8 kg, cover 2 kg
For transport: weight 12 kg, volume 0.04 m <sup>3</sup>

## Performance at primary operating pressure, 50 kPa

	Output (kW)	Primary flow (l/s)	Actual return temp.(°C)	Secondary flow (l/s)
Design temp. program, °C				
Hot water circuit 65-25/10-50	50	0.28	21.4	0.3

## Accessories



Cover



Safety valve



Shut-off valve (set of four units)

PCT00030EN 0710

Alfa Laval reserves the right to change specifications without prior notification.

## How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at [www.alfalaval.com](http://www.alfalaval.com)