



# Water comfort

A complete range of hot water solutions



The Agua range of equipment for domestic hot water (DHW) applications combines the know-how of two technological fields: A well-established tradition of high-tech innovation and a profound system experience developed over

nany years and in many countries. It offers a complete range from component kits to plug-and-play systems.		
AquaMicro	AquaFlow	AquaStore
Capacity: up to 58 kW	Capacities: from 27 up to 1220 kW	Capacities: from 27 up to 1220 kW
AquaMicro is a complete, ready to install district heating substation for domestic hot water. It is suitable for flats with a primary or secondary connection to a district heating network. AquaMicro is simple to operate and has a carefully planned function.  All components are readily accessible for main-	Connected to the hot water distribution pipework, AquaFlow provides instantaneous and controllable domestic hot water where and when it is required. The primary side (heating fluid) operates at constant flow and variable temperatures. The piping arrange- ment of the control valve provides close control of	AquaStore is the semi-instantaneous counterpart of AquaFlow. Connected to a buffer vessel, it provides semi-instantaneous and controllable domestic hot water where and when it is required. The AquaStore range also offers three different heat exchanger technologies. AlfaNova is unique to Alfa Laval. Being a

tenance and future servicing needs.

AquaMicro offers fully automatic temperature control for hot water. The hot water is heated instantaneously when a tap is opened, ensuring that the hot water is always as fresh as the incoming cold water.

the primary temperature at the exchanger inlet. The operating principle eliminates thermal shock in the exchanger and limits limescale build up in the tap water side. Three type of Heat Exchanger are offered. AlfaNova is unique to Alfa Laval. Being a plate heat exchanger made of 100% stainless steel it provides high heat transfer capacity, resistance to corrosion and maximum cleanliness. Morevover, being 100% copper-free, it's suitable for all DHW pipeworks. Where the use of copper is not at stake, we offer a copper-brazed heat exchanger version which provides optimum comfort. Increased turbulence reduces the risk of fouling and improve heat transfer.

These two heat exchangers can easily be cleaned with a chemical solution thanks to specific connections on the heat exchanger. Another heat exchanger is offered with plates and EPDM clip-on gaskets. It is thus adaptable to needs and is easily cleaned. Maximum operating pressure is 10 barg and maximum operating temperature is 110°C. The primary side is connected to a heating source (boiler, district heating, ...), the secondary side to DHW pipework.

### **Benefits**

- · Excellent tap water comfort
- Fasy installation
- · Long-term reliability
- · Easy to operate

# Applications

Domestic hot water for single-family apartments or houses

# **Benefits**

- 3 different types of HE available
- Easy and guick installation
- Temperature controller and monitoring system easy to set up
- · Many useful functions available in the PID controller
- · Eliminates thermal shocks
- · Limits limescale build-up
- An Alfa Laval exclusive: Scaling control
- Fully assembled, electrically wired, pressure tested and calibrated at the factory prior to dispatch.
- Built in compliance with CE 73/23 electrical and PED CE 97/23 art.3.3.

#### Applications

Domestic hot water for:

- Apartment blocks Hospitals
- · Retirement homes
- Hotels
- Schools
- Sport centres
- Suitable for installations with relative even DHW consumption

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These 2 heat exchangers can easily be cleaned with a chemical solution thanks to specific connections on the heat exchanger. Another heat exchanger is offered with plates and EPDM clip-on gaskets. It's thus adaptable to needs and is easily cleaned. Maximum operating pressure is 10 barg and maximum operating temperature is 110°C. As the principle of semi-instantaneous system is to offer a large volume of water at required temperature, we also offer a large range of storage vessels to combine with AguaStore: in stainless steel or enamelled carbon steel, with a volume from 300 L to 3000 L. Different insulation is available. Maximum operating pressure of the vessel is 7 barg and maximum operating temperature is 90°C. Primary side is connected to a heating source (boiler, district heating, ...), the secondary side to DHW pipework.

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#### AquaProtect T AquaPool AquaCompact Anti Legionella System Capacities: From 19 to 240 kW Capacities: up to 756 kW, Capacities: from 14 up to 246 kW instantaneous and semi-instantaneous AquaCompact is a all-in-one solution for semi-AguaProtect T is a patent-pending heat exchanger AquaPool is a compact swimming pool heating instantaneous applications. The charging kit including system specifically developed for thermal disinfection system which is highly efficient. It can be fed by the heat exchanger is plugged on the storage vessel of hot water. It heats the water to 70°C and keeps it different heating sources such as a boiler, district heating or solar energy. Water from the pool is byto reduce the space needed for the production of at this level, which kills the bacteria effectively. Since the system includes heat recovery, the disdomestic hot water, where and when it is required. passed to be heated through the heat exchanger. A temperature sensor at the secondary entry drives Three different types of heat exchanger are offered: infection process consumes no extra energy. AlfaNova the 100% Stainless Steel Alfa Laval exclu-Instead of being diluted with cold water to the system the heating process and allows it to heat and sive, a copper-brazed version for efficiency in environtemperature, the 70°C water is used to preheat the maintain the temperature of pools of different sizes. ments where copper is not at stake and a plate and incoming cold water. All of the heat used for disinfection AguaPool uses the plate and clip-on EPDM gasket clip-on EPDM gasket heat exchanger. AlfaNova and will thus be recovered, which means high cost-efficiency. technology. Plates can be in Stainless Steel or in Titanium depending on content of chlorides in the the copper-brazed version can easily be cleaned with For the adaptation to specific demands, Agua Protect T a chemical treatment thanks to specific extra conneccan be delivered with a number of optional features. tions on the heat exchanger. The plates and gaskets heat exchanger can be upgrated to future needs and allow s easy access to clean the plates. As standard, AquaCompact comes with ready-made charging kits including the heat exchanger, charging pump, valves and piping and is design to easily meet different project designs and installation requirements up to 240 kW. Several ready-made primary kits are proposed as option to choose between 2-Port Self Actuated to 3-Port electronic regulation to provide a close control of the primary temperature at the heat exchanger inlet. AquaCompact comes with storage vessels from 300 L to 1500 L in Stainless Steel or enameled carbon steel. The primary side is connected to a heating source (boiler, district heating, ...), the secondary side to DHW pipework. Maximum operating pressure is 16 Bar and temperature is 110°C on primary side. **Benefits Benefits Benefits** Compact size Safe eradication of all Legionella Compact size Different heating source possible (Boiler, District Space saving Temperature safety function Large range of charging kits Heating, Solar, ...) Continuos disinfection of all circulating water 2-port or 3-port valve Net disinfection, periodically or on demand · Easy and quick installation Self Actuated or Electronic Control Heat exchangers for soft and hard waters · Stainless Steel or Titanium plates • An Alfa Laval exclusive: scaling control (electronic Standardized systems for different tap flow rates Fully assembled, electrically wired, pressure tested Supplied as fully assembled system and calibrated at the factory prior to dispatch. version) Cleaning-in-Place extra connections Electronic controller Built in compliance with CE 73/23 electrical and Built in compliance with CE 73/23 electrical and Over-tapping protection PED CE 97/23 art.3.3. PED 97/23 art 3.3. Protection against discharging **Applications** Applications Applications Domestic hot water for: Domestic hot water for: For heating: Apartment blocks Hospitals Public pools Nursing Homes · Private pools Hospitals Retirement homes Hotels All sizes Military barracks Hotels Schools Apartment buildings Sport Centres Gyms, sport clubs, fitness/wellness centers

Industrial facilities

Public swimming pools Camping facilities

Suitable for installations with relative even DHW

consumption

# Alfa Laval in brief

Alfa Laval is a leading global provider of specialized products and engineered solutions.

Our equipment, systems and services are dedicated to helping customers to optimize the performance of their processes. Time and time again.

We help our customers to heat, cool, separate and transport products such as oil, water, chemicals, beverages, foodstuffs, starch and pharmaceuticals.

Our worldwide organization works closely with customers in almost 100 countries to help them stay ahead.

# 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



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