



Alfa Laval Abatigo ABT

Adiabatic liquid coolers

General information

Alfa Laval Abatigo adiabatic liquid coolers provide clean water at the right temperature and year round. The modular Alfa Laval units, positioned outside a customer's facility, is the closed-loop system's central process liquid cooler. Adiabatic liquid coolers combine well proven heat exchanger coils with an internationally patented adiabatic pre-cooling section.

Capacities 102 up to 7,165 Kbtu/hr (8-600 ton)

Construction

Heavy duty heat exchanger coil and casing, manufactured from corrosion resistant materials. An acrylic coating is applied to the cooler coil for added protection against harsh environments. All ABT units are fitted with an adiabatic booster section that can be used to pre-cool incoming air on hotter days. A wide range of heat exchanger configurations is available to maintain precise cooling conditions, no matter the climate.

Fans

Up to 20 fans in 1 or 2 fan rows. ErP compliant EC fan motors with external rotor, protection class IP 54 according to DIN 40050.

EC power supply 380-480/50-60/3 with integrated thermo contacts to provide reliable protection against thermal overload.

Applications

- Ceramics
- Data center cooling
- Food and beverages
- HVAC
- Machine tooling
- Metal processing
- Power generation
- Pharmaceutical
- Paper printing
- Textiles
- Utility cooling
- Wineries and distilleries



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Design pressure

Design pressure 131 psi. Each heat exchanger is leak tested with dry air.

Benefits

- Low total cost of ownership.
- Heavy duty design with high corrosion resistance.
- Favorable capacity/footprint ratio.
- Reduced water consumption.
- Precise water temperature control.
- Easy installation & maintenance.
- Maximum uptime.
- Energy efficient.
- Two-year product guarantee.
- Easy access to additional on-line product information (QR code).



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Optional features

- Polyurethane heat exchanger coil coating**
 To provide an even higher level of protection in adverse climate conditions.
- Fan exhaust diffusers**
 Located on top of the unit prevent exhaust air from being drawn back into the adiabatic chamber at the bottom of the unit. With exhaust air diffusers, multiple ABT units can be positioned closely together.
- Roof panels**
 The panels allow multiple ABT units to be positioned closely together because they keep exhaust air from flowing down and into the adiabatic chamber.
- Extended legs**
 Extended legs can also facilitate airflow in tight spaces.
- Self-draining configuration**
 Optimize performance involving non-glycol applications in freezing climates.
- Seamlessly integrated pump station**
 With stainless steel reservoirs and stainless steel filters. Easy to expand to meet growing needs.
- Control center**
 For managing the entire system from a single location.
- Remote connection**
 Allows service technicians to monitor and troubleshoot from locations worldwide.

Code description

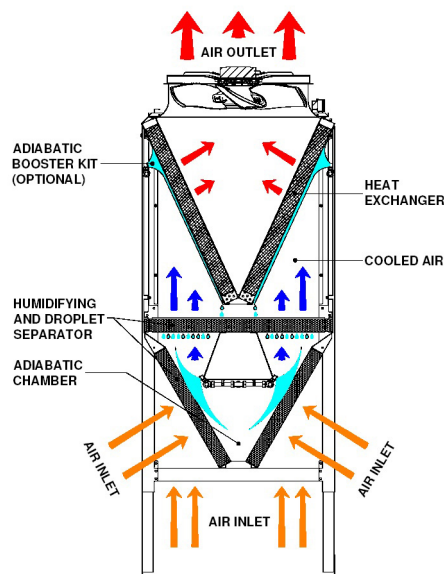
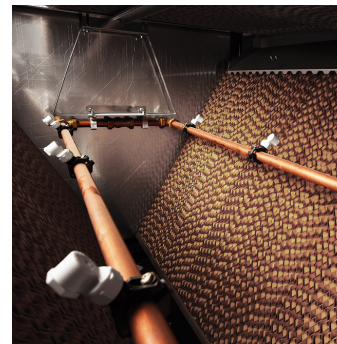
ABT	10	1	P	C	0	0	B	0
1	2	3	4	5	6	7	8	9

- Alfa Laval Abatigo liquid cooler
- Fan per fan row (1 to 10)
- Number of fan rows (1, 2)
- Finned coils connection and configuration (P=parallel, S=series, D=parallel self drain, V=series drainable (DS), W=parallel drainable (DP))
- Fan type (EC=variable speed EC motor, EZ=EC motor with diffuser)
- Leg height (0=standard, H=standard + 15.7 in, T=standard + 34.1 in, F=units bolted side by side, height + 74 in)
- Fin corrosion protection (0=hydrophilic protection, T=polyurethane based protection for highly aggressive environments)
- Adiabatic booster (0=no, B=yes)
- UL electrical panel (0=no U=yes)

Adiabatic chamber

Abatigo adiabatic liquid coolers are fitted with an internationally patented adiabatic pre-cooling section. This so-called 'adiabatic chamber' functions as follows:

- High-temperature ambient air passes through the lower adiabatic chamber.
- In the chamber, nozzles create a fine mist of water from a separate source.
- Humidification of the air reduces the temperature prior to contact with the heat exchangers.
- Patented design prevents water drift outside the chamber, eliminating heat exchanger scaling and dangerous waterborne diseases such as Legionella.
- To ensure consistent cooling, the control system continuously adjusts the amount of water sprayed. The heat exchangers meanwhile, remain completely dry.



Selection

Alfa Laval Abatigo liquid coolers can be configured to match manufacturers' specific requirements, delivering higher energy and water savings, environmental benefits and other advantages. Selection software is available on request. Please contact Alfa Laval for support.

Certifications

The Alfa Laval quality system is in accordance with ISO 9001 and ISO 14001. All products are manufactured according to CE and PED regulations.



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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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