



Alfa Laval Arctigo LSV

Data center air cooler

General information & application

Alfa Laval Arctigo LSV air coolers are heavy duty industrial air coolers specifically designed for cooling down server heat production in data centers that have been built according to the "Low Speed Ventilation" concept.

LSV air coolers operate with low fan speed, low air velocities and minimal pressure differences along the route of the air flow, achieved by the building itself being part of the system. For this reason all Arctigo LSV air coolers have been designed with a very low air-sided pressure drop and a sensible heat factor of 1.0.


Refrigerant	Water
Nom. capacities	7.5 - 322 kW*
Air volume	1865 - 77750 m³/h.
Cooler height	900 - 2700 mm
Cooler length	1100 - 6650 mm

* Models with higher/lower capacities available on request.




Arctigo LSV

Standard configuration

- Finned coil
 - 4 coil block modules
 - 4 or 6 tube rows deep
 - Corrugated aluminium fins, fin spacing 4 or 4.5 mm.
- Design pressure 10 bar. Each heat exchanger is leak tested with dry air and finally supplied with a nitrogen pre-charge.
- 1 to 10 energy efficient EC fans, Ø 400 up to 710 mm; blowing through the coil. Fans with elevated external pressure. Fan current 230/50/1 or 400/50/3.
- Corrosion-resistant casing: aluminium/sendzimir, white epoxy coated (RAL 9002)
- Flanged liquid connections on left or right side, fan/filter view (L/R) *Connections left = default.* 
- Delivery in mounting position on a wooden pallet. Lifting and positioning can take place with a forklift using the integrated lifting fork slots.

Options

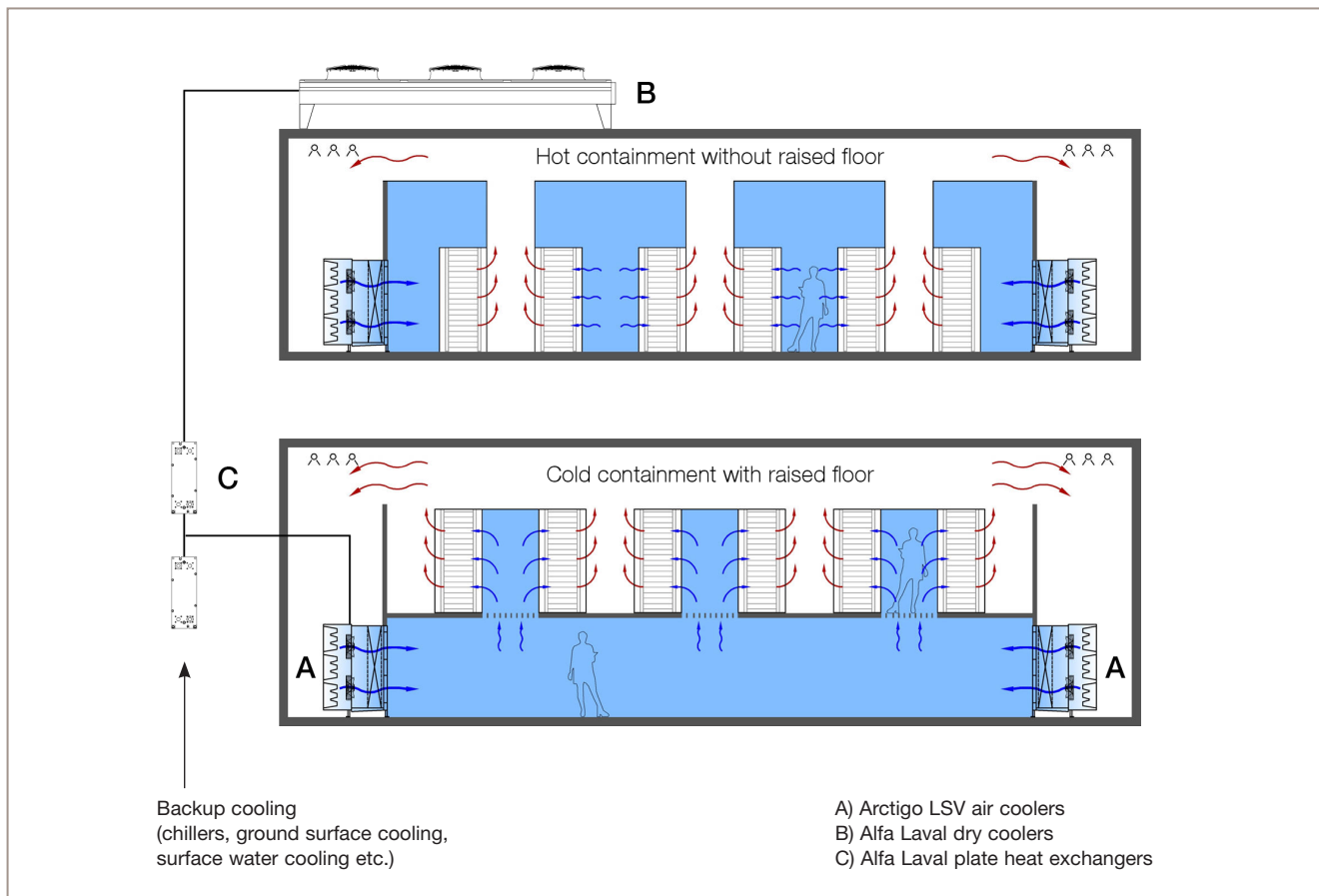
- Filter frame for mounting of compact air filters. Filter classification F7/F9. 
- Flanged connections on top (FT)
- Modbus communication for precise fan control.
- Fin-sided safety grid for hot containment applications

Benefits

- Application-based air cooler design to ensure optimized operation in LSV cooling systems.
- Heavy duty coil and casing materials, resulting in a long operational product life.
- Operational fine tuning thanks to EC fans.
- Low total cost of ownership.
- Two-year product guarantee.
- On-line product information (QR code)



Arctigo LSV



Hot & cold containment

Arctigo LSV air coolers are applicable for both hot and cold containment systems, with or without raised floor and the optional use of outside air.

Low Speed Ventilation

The Low Speed Ventilation LSV system offers the lowest PUE compared to all other data center cooling solutions. Furthermore LSV provides a significantly higher overall system reliability, maintenance reduction in the white space and prevention of nuisances like 'hot spots'. For more information please visit the LSV website at www.lowspeedventilation.com

Air cooler selection & customization

The Arctigo LSV range offers 48 standard models. Quick selection tables for these standard models, including all relevant technical data, is available in the selection brochure AHE00063. Capacity data in the selection brochure are based on the following conditions:

- $T_{\text{air in}} = 36.5 \text{ }^{\circ}\text{C}$, $T_{\text{air out}} = 24 \text{ }^{\circ}\text{C}$
- $T_{\text{water in}} = 17 \text{ }^{\circ}\text{C}$, $T_{\text{water out}} = 23 \text{ }^{\circ}\text{C}$ and
 $T_{\text{water in}} = 20.5 \text{ }^{\circ}\text{C}$, $T_{\text{water out}} = 26.5 \text{ }^{\circ}\text{C}$

In addition to the standard range, Arctigo LSV air coolers can be fully customized to meet any client specifications. Please contact our sales organization for selection assistance and full technical details.

Code description

Arctigo	LSV	3	4	4	-	5	-	230
1	2	3	4	5		6		7

- 1 Alfa Laval industrial air cooler
- 2 Low Speed Ventilation range
- 3 Number of coil modules in height (1, 2, 3 or 4)
- 4 Number of coil modules in length (1 to 10)
- 5 Tube rows in air direction (4 or 6)
- 6 Fin spacing (4 = 4 mm, 5 = 4.5 mm)
- 7 Current (230=230/50/1, 400=400/50/3)

Certifications

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



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