

W3 for Alfa Laval Airmax II

Water defrost system - industrial air coolers

General information & application

Alfa Laval Airmax II has been specifically redesigned in order to provide the best solution for water defrost applications. An efficient defrosting is crucial for air coolers: ice can damage the coil, icreases the electrical power consumption and causes loss of performance.

Airmax II is a flexible range of industrial air coolers for both cooling and freezing applications in medium to large cold rooms. This industrial line is designed to keep fresh and frozen goods refrigerated down to -40 °C, with either high or low humidity content.

The Airmax II range offers a wide variety of coil configurations, fan diameters, fin spacings and a long list of options, always allowing to select the best model to suit all applications in industrial cooling installations.

Refrigerants	all H(C)FC, brine
Capacities (SC2)	5 up to 180 kW
Air volume	7300 up to 126100 m ³ /h

Special features of Airmax II W3 units

- Increased plenum
 - No risk of splashes on the fan
 - No risk of droplet directed from the tray to the fan
- Larger drip tray
 - No risk of water on the cold room's floor
 - Increased flexibility of the system in facing water inlet fluctuations
- Coil frame without holes for electrical resistors
- Silicon curtains on top of the coil's backside, on connections and on headers side
- Internal surface of side panels covered with heat insulation iacket.
- Metal sheets bent to inner side to avoid water leakages
- Removable side panels, with knobs
- Casing painted and without holes for options not included in the customer's package
- 1 to 4 fans, Ø 500 mm up to Ø 630 mm, drawing through the coil. Fan motors 200/400/50-60/3, two noise levels (H/L).
- Delivery in mounting position. Coolers are mounted on wooden beams. Installation can take place with use of a forklift.



Alfa Laval Airmax II with W3 water defrost

Benefits

- · Saving of huge amount of electric energy.
- Quickness of defrosting process, compared to other defrost systems.
- Full defrosting, with water evenly distributed on the finned coil including header.
- No heat generated by electric heaters, avoiding extra cost to cool down again after defrost.
- Drip tray flooded: no need for electrical heaters to keep drip tray warm during operation.
- No vapour generation in the cold room.
- Constant cleaning of the heat exchanger by the water flowing through it
- Advanced product selection software available.
- · Heavy duty coil & casing materials.
- Eurovent certified performance (HFC DX models only).
- Low total cost of ownership.
- 18 months product guarantee.
- Easy access to additional on-line product information (QR code)





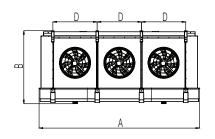


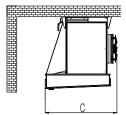
Airmax I

Options available

- AlfaStreamer (ST, only for 500/630 fans)
- Air sock adapter ring (SR)
- Fan ring heater (FH)
- Fan motors wired to a terminal box (CB)
- Safety switch (SW)
- Stainless steel 304 casing & coil frame (SS)
 Standard available for fan diameters up to 500 mm, stainless steel casing for larger models on request.
- Epoxy coated fins (EP)
- Special drip tray connection for JIS standard available on request

Model	Fans		Water conn.				
	no.	Α	В	С	D	Ø in.	\emptyset out.
501	1	1450	1130	1260	850	1" 1/4	3"
502	2	2300	1130	1260	850	2"	3"
503	3	3150	1130	1260	850	2"	4"
504	4	4000	1130	1260	850	2"	4"
561	1	1625	1410	1620	1000	1" 1/4	3"
562	2	2625	1410	1620	1000	2"	4"
563	3	3625	1410	1620	1000	2"	4"
564	4	4625	1410	1620	1000	2"	4"
631	1	1625	1650	1620	1000	1" 1/4	3"
632	2	2625	1650	1620	1000	2"	4"
633	3	3625	1650	1620	1000	2"	4"
634	4	4625	1650	1620	1000	2"	4"





Design pressure

Design pressures H(C)FC DX 33 bar or brine 6 bar. Each heat exchanger is leak tested with dry air and finally supplied with a nitrogen pre-charge.

Code description

ILB	Ε	L	50	2	С	D	400V	CR	GP	Е	-	AL	10.0	Cu	W3	L
1	2	3	4	5	6	7	8	9	10	11		12	13	14	15	16

- 1 Airmax II series (ILB/ILG/ILR, depending on fin spacing)
- 2 Refrigerant system (E = dry expansion, W=water/glycol)
- 3 Noise level (H=high, L=low)
- 4 Fan diameter (50=500, 56=560, 63=630 mm)
- 5 Number of fans (1 to 4)
- 6 No. of tube rows (A=4, B=5, C=6, D=7)
- 7 Phases (S= single phase, D= 3 phases Δ connection)
- 8 Motor voltage (230V, 400V)
- 9 Packing (CR=crate)
- 10 Casing material (GP= powder coated, SS= stainless steel)
- 11 Defrost system (A= air, E= electric, HG= hotgas, W= water)
- 12 Fin material/coating (AL=aluminium, EP= epoxy coated aluminium)
- 13 Fin spacing (4, 5, 6, 7, 8, 10 and 11 mm)
- 14 Tube material (Cu=copper)
- 15 Extra options
- 16 Connection side (L=left, R=right)

Selection

Selection and pricing is to be performed with our Alfa Laval air heat exchanger selection software. Selection output includes all relevant technical data and dimensional drawings.

Certifications

All DX cooler models are "Eurovent Certify All" certified. The Alfa Laval quality system is in accordance with ISO 9001. All products are manufactured according to CE and PED regulations.



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