



Airmax II DX

Unit cooler

Application

This new range of industrial unit coolers has been designed using the well-known Airmax technology, which has become a standard for all installers and end users.

Airmax II is available as a direct expansion evaporator (DX) for all HFCs as well as water/glycol unit coolers.

This new industrial line is designed to keep fresh and frozen goods refrigerated from +30 to -40°C, with a high or low humidity content.

Thanks to a wide capacity range (from 5 to 180 kW), which can be achieved using several coil combinations, fan diameters (up to 800mm), different fin spacing and a long list of options, Alfa Laval can fulfil every requirement with more than 200 standard models.

Standard design

Coil

The heat exchanger is designed to achieve optimal capacity thanks to the staggered pitch rows that give a high secondary fin surface. The large fin surface ensures longer intervals between defrost cycles, therefore reducing the amount of daily energy used.

The coils are manufactured with a special aluminium fin array and have a high efficiency internal copper tube with a grooved inner wall with 12 mm nominal bore. All this allows for a minimal internal volume with the advantage of using less refrigerant.

Frame and Casing

All units are manufactured using galvanised steel, zinc-coated and finished in corrosive-resistant RAL, except the drip tray which is aluminium coated.

The frame has been designed to ensure easy installation and maintenance. A large, deep drip tray allows fast discharge of defrost water and the hinge fastening allows for easy maintenance. The supports have two different positions (ceiling or space) to enable installation of the water defrost cassette. Structural parts are fastened with stainless steel bolts and screws. Structures are made in galvanised steel with optimised length to enable uniform air suction in the coil.

All panels such as the drip tray end covers are hinged for easier accessibility, making installation, servicing and maintenance easier than for other standard unit coolers.



Airmax II

Fans

Air suction fans are available in four different fan diameters: 500, 560, 630 and 800 mm, with a 2-speed, three-phase motor (Δ/Y) 400V 50Hz. The motors have a dynamically and statically balanced external rotor and are manufactured in accordance with VDE 0530/12.84 IP54 class F.

Integrated thermo contacts (Clikson), provide reliable protection against thermal overload.

All standard motors can work at temperatures down to -40°C. Special lubrication is available on request.

R&D has developed the air flow distribution in order to give a uniform air velocity in the coil with:

- High efficiency sickle blade
- Better distribution in cold rooms
- Reduced noise levels
- Increased air throw

Water/glycol

For water/glycol applications, the coil is designed with same fin pattern and smooth 5/8" copper tube. All connections are thread connections with vent and drain plug as standard.

All other characteristics are the same as for the Airmax II DX.

Test

Each DX heat exchanger undergoes a pressure and leak test with dry air at 31 bar, and is finally supplied with a nitrogen pre-charge, while the water/glycol is tested at 11 bar.

Benefits

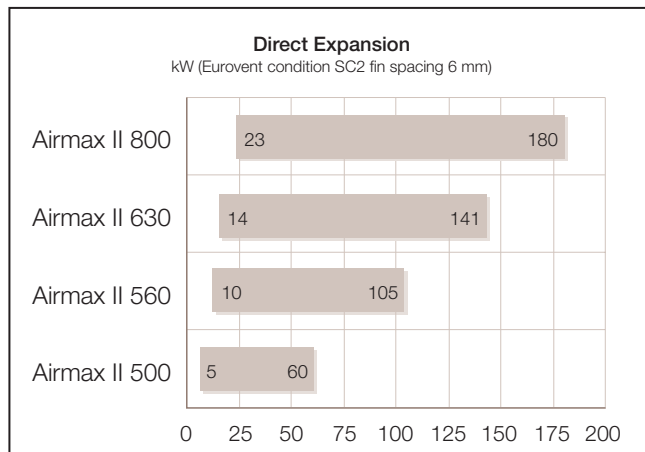
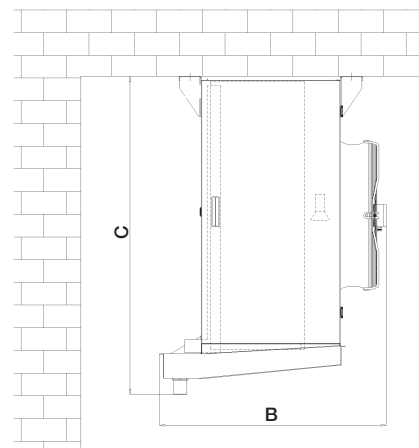
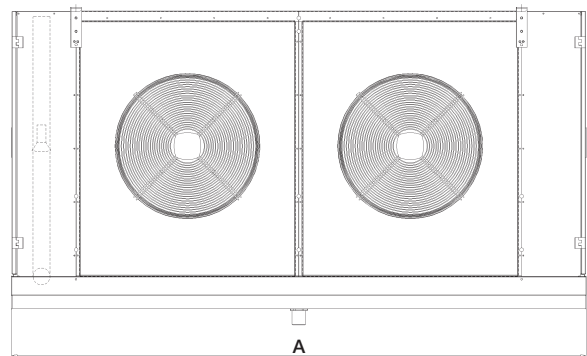
- Low installation costs
- Reliable performance
- Long air throw
- Designed for all working conditions
- Uniform distribution throughout the cold room
- Corrosion resistance by powder coating
- Plug-in installation
- Easy to clean, long service life
- Eurovent certified

Options

- Electric defrost
- Light electric defrost
- Hot Gas defrost, coil and drip tray (DX only)
- Water defrost (suggested for TC above -5°C)
- Combined defrost systems
- Drip tray insulation (not combined with electric defrost)
- Alfastreamer (only for 500/630/800mm fans)
- Air sock adapter ring
- Fan ring heater
- Supply voltage 230V-1ph-50Hz (500mm only)
- 50 or 60 Hz for all models
- Wired fan motors
- Switch on/off single fan motor
- Stainless steel 304 casing including drip tray
- Stainless steel 304 drip tray only
- Floor mounting supports
- Epoxy pre-coated fins
- Cataphoresis coil treatment

Dimensions

Model	n°x Ø mm	A	B	C
Airmax II 500	1x500	1430	804	946
	2x500	2280	804	946
	3x500	3130	804	946
	4x500	3980	804	946
	5x500	4830	804	946
Airmax II 560	1x560	1580	1186	959
	2x560	2580	1186	959
	3x560	3580	1186	959
	4x560	4580	1186	959
	5x560	5580	1186	959
Airmax II 630	1x630	1580	1426	1018
	2x630	2580	1426	1018
	3x630	3580	1426 <td 1018	
	4x630	4580	1426	1018
	5x630	5580	1426	1018
Airmax II 800	1x800	1780	1666	1136
	2x800	2980	1666	1136
	3x800	4180	1666	1136
	4x800	5380	1666	1136



ILR E 63 3 C

- Coil size DX: A, B, C, D
- Coil size Water/glycol: K, X, Y, Z
- Number of fans: 1, 2, 3, 4, 5
- Fan diameter: 50 = 500, 56 = 560, 63 = 630, 80 = 800 mm
- E = direct expansion, W = water/glycol
- Airmax Industrial Line Green, Red, Blue Line

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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

