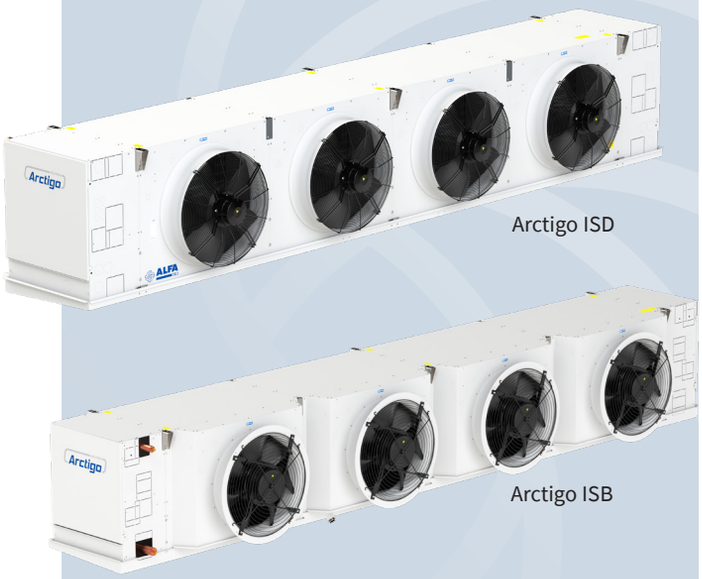
Arctigo IS

Industrial air coolers single discharge



General information and application

Arctigo IS is a wide and flexible range of single discharge industrial air coolers for both cooling and freezing applications in medium to large cold rooms. This industrial air cooler line has been designed using the Helpman® heritage, to keep fresh and frozen goods refrigerated from +10 to -40 °C, with either high or low humidity content. The Arctigo range offers a wide variety of cooler configurations and a long list of options, always allowing to select the best model to suit all applications in industrial refrigeration installations. Arctigo air cooler models are available for dedicated applications such as agricultural storage, airsock application or shock cooling.

Refrigerants: HFC, NH_3, CO_2, Brine

Capacity range ISD (SC2)	3 up to 240 kW
Air volume ISD	3,000 up to 120,000 m³/h
Capacity range ISB (SC2)	4 up to 130 kW
Air volume ISB	3,000 up to 78,000 m³/h

Standard configuration

- Finned coil:
  - 10 coil block modules
  - 3, 4, 6, 8 or 10 tube rows deep
  - Tubing ø 5/8” ripple Cu or smooth Cu tubing for brine or smooth stainless steel; ø 3/8” Cu for CO_2
  - Tube pitch 50 mm square
  - Corrugated Alu-fins
  - Fin spacings 4, 5, 6, 7, 8, 10 and 12 mm
- 1 to 6 fans, ø 400 mm up to ø 910 mm, drawing or blowing trough the coil. Power supply 400/50-60/3 or 230/50-60/1 (for ø 400 and 450 mm), two noise levels (Δ/Y connections). AC/EC fan motors with dynamically and statically balanced external rotors, manufactured in accordance with VDE 0530/12.84 IP54 class F. Integrated thermo contacts (Clickson) provide reliable protection against thermal overload.
- Corrosion resistant materials: coil frame and casing pre-galvanized steel, epoxy powder-coated RAL 9003. All fixing materials made in stainless steel.
- Hinged side panels and driptray, drain(s) 1½" BSP ext.
- Fitted with schräder valve on the suction connection for testing purposes.
- Refrigerant connections right or left (L=default). Closed connections; threaded connections for brine models.
- Sufficient room for fitting the expansion valve inside.

Benefits

- Application based air cooler design
- Heavy duty coil & casing materials, resulting in a long operational product life
- Exceptionally wide & versatile cooler range
- Eurovent certified performance
- Easy installation
- High energy efficiency design
- Low defrost frequency thanks to square tube pitch configuration
- Low total cost of ownership
- Two-year product guarantee
- Advanced product selection software available

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Options

- Connection box (CB)
- Connection box with single switch for all fans (CB1)
  Shut up sock (S) - *for ISD*
- Sock Ring (SR) - *for ISD*
- Electric defrost systems:
  - Electric defrost in driptray + hot gas in coil (E1)
  - Electric defrost heavy (E2)
  - Electric defrost light (E4)
- Hotgas defrost systems:
  - Hotgas defrost (HG)
  - Hotgas defrost, connected (HGC)
- Hot glycol ciruit defrost (HW) - *copper tubes*
- Stainless steel casing and coil frame (SSC)
  Standard materials for underplate (aluminium) and fan grid (black painted steel)
- Alternative fin materials (SWR / EP)
- Dual fin spacing (DF) - *on request*
- On/off switch (SW)
- Motorized defrost damper - *on request for ISD*
- Top connections (AVA) - *for brine models*
- Flanges PN16 in AISI 304 for copper or stainless steel tubes models (F) - *for brine models. Supplied loose.*
- Fan casing 90° / 45° (FC1 / FC2) - *for ISD*
- Suction hood 90° / 45° (H1 / H2) - *for ISD*
- Insulated suction hood 90° / 45° (IH1 / IH2) - *for ISD*

- Hinged fan (HF)
- Insulated drip tray (I2)
- Mounting feet (MF)
- Fan ring heater (FRH)
- Streamer (ST) - *for ISD*

Design pressure

Refrigerant	Design pressure
HFC	33 bar
Ammonia	30 bar
CO_2	33-40-60-80 bar
Brine	10 bar

Each heat exchanger is leak tested with dry air. Units are supplied with a nitrogen pre-charge (excluding brine).

Selection

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

Certifications

The Alfa LU-VE quality system is in accordance with ISO 9001. All products are manufactured according to PED regulations. LU-VE Group participates in the ECP program for HE. Check ongoing validity of certificate*:
www.eurovent-certification.com

Code description

IS	D	71	1	-	20	*	S	A	C	E	A	33	AL	7	-	AB	5	4	-	AB	D	-	L	FRH
1	2	3	4		5	6	7	8	9	10	11	12	13	14		15	16	17		18	19		20	21

1 Arctigo industrial air cooler single discharge
2 Air direction (D=draw-through, B=blow-through)
3 Fan diameter (40=400, 45=450, 50=500, 63=630, 71=710, 80=800, 91=910 mm)
4 Number of fans (1 to 6)
5 Tubes per row
6 Geometry (blank=default, -2=ø 3/8" tube for CO_2 application)
7 Coil module (blank=standard coil module, S=short coil module)
8 Tube rows code (A=3, B=4, C=6, D=8, E=10)
9 Tube material (C=copper, S=stainless steel)
10 Application (E=direct expansion, PB=pumped bottom feed, PT=pumped top feed, blank for brine units)
11 Refrigerant system (H=HFC, A=ammonia, W=brine, X=CO_2)
12 Maximum working pressure
13 Fin material (AL=aluminium, EP=precoated aluminium, SWR=sea water resistant aluminium)
14 Fin spacing (4=4.0, 5=5.0, 6=6.0, 7=7.0, 8=8.0, 0=10, 2=12 mm)
15 Number of circuits (2 digits)
16 Capillary diameter (1 digit: for brine and pump there is X, for DX there is 4, 5 or 6)
17 Orifice diameter (mm)
18 Fan motor code (2 digits)
19 Fan digit (D or Y for AC 3ph, S for AC 1ph, E for EC)
20 Refrigerant connection side (L=left, R=right - fan side view)
21 Options

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*Brine and NH_3 refrigerants are not covered by Eurovent certification