THOR-D

Dual discharge industrial air cooler

General information & application

The Helpman THOR-D series is a wide and flexible range of heavy-duty dual discharge industrial air coolers for both cooling and freezing applications in medium to large cold rooms. Suitable for a wide range of applications with a special focus on meat storage, agricultural produce and processing rooms.

Evaporating temp.	+5 to -40 °C
Refrigerants	all H(C)FC, brine, CO_2
Capacities (SC2)	4,5 up to 123 kW*
Air volume	3,000 up to 60,000 m^3/h.

* Higher capacities on request

THOR-D

Standard configuration

- Finned coil
  - 3 coil block modules
  - 4, 6 or 8 tube rows deep
  - Cu tubing ø 5/8”
  - Tube pitch 50 x 50 mm square
  - Corrugated Alu-fins
  - Fin spacings 4 and 7 mm.
- 1-5 Fans, available in a range of different executions. Diameters Ø 457, 508 and 560 mm. Cables are led to the outside of the casing. Enclosed design spray-tight fan motors, protection class IP55. Motors are equipped with a thermal safety device in the windings, connected to separate terminals in the box.
- All models available in both high and low fan speed execution.
  - 1000 rpm (= L design)
  - 1500 rpm (= H design)
- Corrosion resistant casing material: Aluminium/Sendzimir, white epoxy coated (RAL 9003).
- Hinged, enclosed end covers.
- Hinged driptray with vertical drains 1 ¼” BSP male.
- Refrigerant distribution optimised to refrigerant applied.
- Fitted with schräder valve on the suction connection for testing purposes.
- Sufficient room for fitting the expansion valve inside.
- Suitable for dry expansion or pumped system.
- Stickers indicate fan direction and refrigerant in/out.
- Delivery in mounting position. Coolers are mounted on wooden beams. Installation can take place with use of a forklift.

Test

Design pressure 33 bar, higher design pressures on request. Each heat exchanger is leak tested with dry air and finally supplied with a nitrogen pre-charge. Brine coolers are tested at 6 bar.

Options

- Defrost systems
  - Hot gas coil in driptray (G1)
  - Electric defrost (E1, E4)

  Electric defrost for air coolers with pumped refrigerant circulation or in glycol execution on special request only.
- Fan ring heater (FRH)
- Driptray insulation
  - Armaflex (or alike) 10 mm (I 1)
  - Styropore 10 mm + cladding (I 2)
  - Foamglass 25 mm + cladding (I 3)
  - Purane + polyesther cladding (I 4)

  I1, I2 & I4 driptray insulation not in combination with electric defrost. Foamglass (I3) possible for use with electric defrost.
- Horizontal drain
  Hinged drip tray with horizontal drain at the short side. Available for THOR-D up to 3 fans, but not in combination with driptray insulation I2/3/4).
- Isolating switch, mounted (ISM)
- Secondary refrigerant
  All models available for brine application.
  Standard connections Cu soldering, other connections (thread/flange) on request.
- Special fan motors
  - Variable fan speed motors
  - Alternative electrical supplies
- Built in heater coil sections
- Stainless steel 304/316 casing

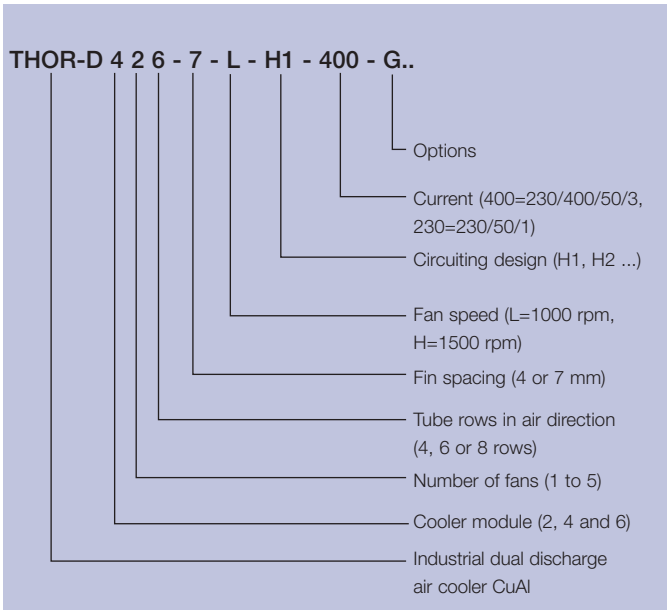
Air cooler selection & dimensions

Air cooler selection and RCPL pricing is to be performed with “HelpmanSelect” Air Heat Exchanger selection software. Selection output includes all relevant technical data and dimensional drawings..

Selection & RCPL
HelpmanSelect

Please contact our sales organisation for full technical documentation.

Code description



Benefits

- Application based air cooler design to secure product quality and working conditions.
- Low air velocities for use in processing rooms.
- Low silhouette.
- Advanced product selection software available.
- Heavy duty coil & casing materials, resulting in a long operational product life.
- Reliable performance, Eurovent certified.
- Easy-install.
- Energy efficient.
- Low defrost frequency thanks to square tube pitch configuration.
- Low total cost of ownership.
- Two-year product guarantee.

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