

# TYR-A

## Industrial airsock air cooler

## General information & application

Helpman TYR-A industrial air coolers have been designed for airsock application. All models are fitted with an airsock ring and fan motors capable of supplying the additional external pressure that is required for the proper functioning of an airsock system. Suitable for applications like processing rooms, working production area's and greenhouse cooling.

Evaporating temp.	+5 to -15 °C
Refrigerants	ammonia (R-717), all H(C)FC, brine, CO <sub>2</sub>
Capacities (SC2)	4 up to 41 kW*
Airsock diameter	450 up to 730 mm

<sup>\*</sup> Higher capacities on request

## Standard configuration

- Finned coil
  - 4 coil block modules
  - 4 or 6 tube rows deep
  - Stainless steel tubing ø 16 mm
  - Tube pitch 50 x 50 mm square
  - Corrugated Alu-fins
  - Fin spacings 4, 6 and 7 mm.
- 1-3 Fans, available in a range of different executions.
  Airsock diameters Ø 450 up to Ø 730 mm. 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.
  High and low fan speed execution.
  - 1500 rpm (H design)
  - 1000 rpm (L design)
- Corrosion resistant casing material: Aluminium/Sendzimir, white epoxy coated (RAL 9003).
- Hinged, enclosed end covers.
- Hinged driptray, drain(s) 32 mm
  PVC connection, freely adjustable into either horizontal or vertical position.



TYR-A

- · Refrigerant distribution optimised to refrigerant applied.
- Refrigerant connections on right hand side (fan side view).
- 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.

- Driptray insulation
  - Armaflex (or alike) 10 mm (11)
  - Styropore 10 mm + cladding (12)
  - Foamglass 25 mm + cladding (13)
  - Purane + polyesther cladding (14)
  - I1, I2 & I4 driptray insulation not in combination with electric defrost. Foamglass (I3) possible for use with electric defrost.
- Refrigerant connections left/right (L / R) (fan side view)



• Isolating switch (mounted) (ISM)

- Secondary refrigerant All models available for brine application. Standard stainless steel welding connections, other connections (thread/flange) on request.
- Special fan motors Fan motors with alternative electrical supplies
- Built in heater coil sections
- Stainless steel 304/316 casing

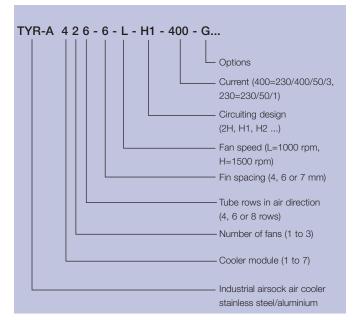
#### Air cooler selection & dimensions

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.



Please contact our sales organisation for full technical documentation.

### Code description



#### **Benefits**

- Application based air cooler design to secure working conditions and product quality.
- Exclusively designed for airsock application. External pressure up to 120 Pa.
- 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 total cost of ownership.
- Two-year product guarantee.

ERC00165EN 0802

Alfa Laval reserves the right to change specification without prior notification.







