



# TYR-F

## Agricultural storage cooler

### General information & application

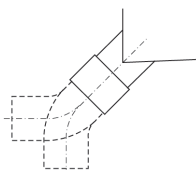
The Helpman TYR-F air cooler series has been specifically designed for the refrigerated storage of agricultural produce. These coolers are characterised by an optimised capacity/air volume ratio and a relatively low profile. All models have been optimised for air temperatures around 0 °C and a small temperature difference to avoid product dehydration.

Evaporating temp.	+5 to -10 °C
Refrigerants	ammonia (R-717), all H(C)FC, brine, CO <sub>2</sub>
Capacities (SC2)	18 up to 52 kW*
Air volume	12,800 up to 36,000 m <sup>3</sup> /h

\* Higher capacities on request

### Standard configuration

- Finned coil
  - 2 coil block modules
  - 6 tube rows deep
  - Stainless steel tubing ø 16 mm
  - Tube pitch 50 x 50 mm square
  - Corrugated Alu-fins
  - Fin spacings 7 mm.
- 3-7 Fans, blowing through the coil. Diameters Ø 406 mm or Ø 457 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.
- Fans with elevated external pressure to ensure optimised air distribution.
- Corrosion resistant casing material: Aluminium/Senzimir, 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. (please use illustration)



TYR-F

- Refrigerant distribution optimised to refrigerant applied.
- Refrigerant connections on right hand side (fan side view).
- Fitted with schröder 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 (I 1)
  - Styropore 10 mm + cladding (I 2)
  - Foamglass 25 mm + cladding (I 3)
  - Purane + polyester cladding (I 4)

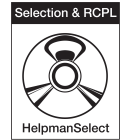
I1, I2 & I4 driptray insulation not in combination with electric defrost. Foamglass (I3) possible for use with electric defrost.

- Refrigerant connections (L / R) (fan side view) 
- Isolating switch, mounted (ISM)
- Secondary refrigerant
  - All models available for brine application.
  - Standard stainless steel welding, other connections (thread/flange) on request.

- Special fan motors
  - Alternative electrical supplies
- Built in heater coil sections
- Stainless steel 304/316 casing

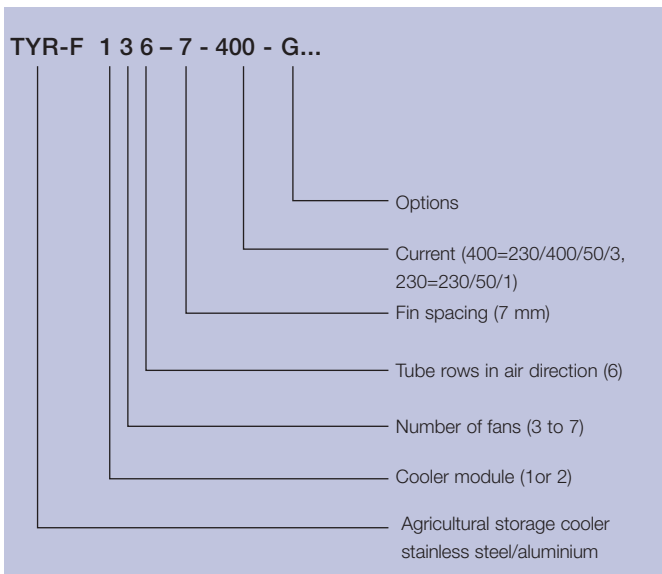
## Air cooler selection & dimensions

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.



*Please contact our sales organisation for full technical documentation.*

## Code description



## Benefits

- Application based air cooler design to secure product quality.
- Elevated external fan pressure to ensure optimised air distribution.
- All models optimised for air temperatures around 0 °C and a small temperature difference to avoid product dehydration.
- 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.

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

## 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](http://www.alfalaval.com)

