

NH₃-DRY EXPANSION

evaporators for low charge NH₃ applications

As alternative to HFC-operated plants, low charge ammonia solutions are getting more and more popular. Running the evaporators with dry expansion of ammonia leads to special requirements for the cooler. In addition to the correct circuiting and distribution the influence of the heat transfer on the inner tube surface is crucial.



A casing

- all designs of standard units available
- connection elements made of stainless steel

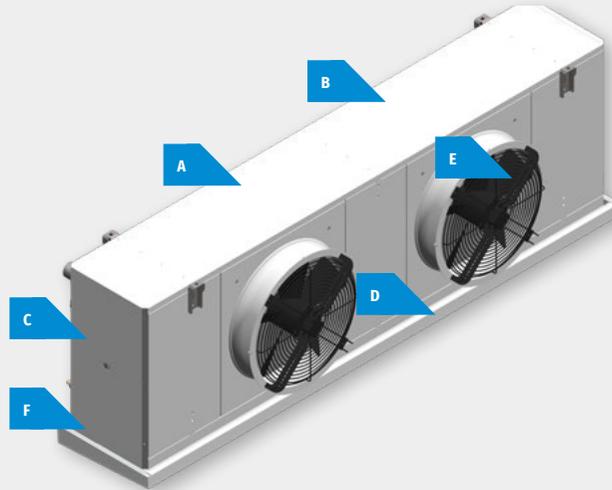
casing materials:

- ALMg or galvanised steel, powder coated (standard colour RAL 9010)
- stainless steel 304 (1.4301)
- stainless steel 316 (1.4404)
- optional: GRP tray



F controls

- connections for pressure, temperature and vapor quality sensor provided



B heat exchanger coil

- high efficiency tubes, aluminium fins
- optimized circuiting for NH₃ (DX)
- turbulators in first parts to increase turbulence



C connection systems

- thermofin® gravity distributor for equal load on all circuits
- all connections to external piping in stainless steel, factory welded



D accessories

- hingeable fan plates and tray for easy cleaning
- motorized multi-leaf defrost dampers for efficient and reliable defrost
- shut-up socks and air hose connections
- fan ring heaters
- insulated drip tray and side chambers
- internal wiring of electrical components



E fans

- Ø 400–910 mm, standard IP54 (optional IP55 for EC)
- draw-through or blow-through design
- AC or optional energy-saving EC fans, directly controllable via 0–10 V, 4–20 mA or Modbus signal
- silent, slowly running fans in case of critical sound requirements
- fan guard with cathodic dip-paint coating or made of stainless steel
- industrial fans with norm motors for a high external pressure drop (e.g. for fast freezing)
- all motors according to ErP 2015 guideline
- extensive options for wiring and control