CUBIC Vario

Air cooler GACV

Variable air cooler in a cubic design
Optimal for industrial refrigeration

HFC, CO_2, propane, NH_3, water/glycol
1 – 335 kW

One air cooler for any application

Variable air coolers for manifold applications

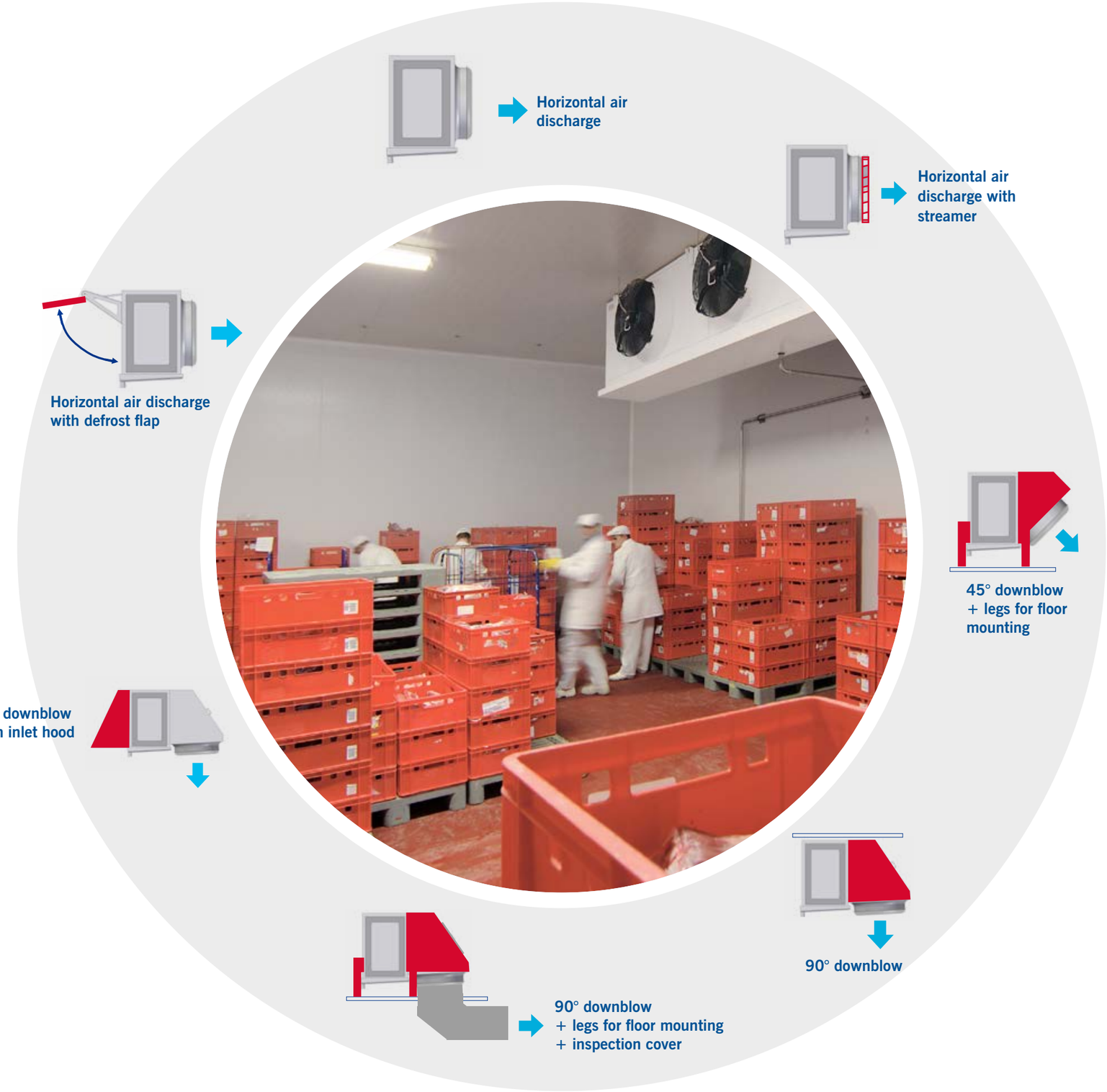
Güntner's Vario is an air cooler with variable equipment for numerous applications. Its wide range of casing designs, corresponding fan concepts and material combinations enable it to meet any requirements. Depending on your application you can choose between an aligned tube pattern and large surface or a staggered tube pattern with highly efficient heat exchangers.

The wide power range from 1 to 335 kW with versions for all refrigerants guarantee maximum flexibility.

– Tried-and-tested Güntner quality
– Wide capacity range
– All refrigerants
  (HFCs, NH_3, CO_2, propane, fluids)
– All types of defrosting
– Manifold combinations of materials
– Variety of fan designs
– Variety of casings

Vario

The Vario product line comprises series that can be customised for individual projects as required. Customers can select the configuration that best suits their individual requirements from a wide range of different materials, variants and accessories.



The advantages of the CUBIC Vario

Easy inspection and cleaning
– Side of casing hinged and with a spring lock
– Side cover can be hung out
– Inner and outer trays hinged

Easy mounting
– Ceiling suspension for easy installation
– Empty conduit for defrost sensor
– Schrader valve at outlet
– Delivered in assembly position on pallet
– On request with legs for floor mounting

High operational reliability and leak containment
– Güntner's proven floating coil principle increases the heat exchanger's service life (because the refrigerant tubes do
– not make contact with the casing)

Proven fans
– Two speeds as standard feature (from 500 mm)
– Motor protection with thermocontacts
– Special fans with external pressure

High quality tray design
– Corrosion resistant aluminium alloy AlMg
– Powder coating in RAL 9003
– Inner and outer trays hinged
– Big condensation water drain with 45° tilt
– Outer tray is thermally decoupled to prevent water condensation

HACCP hygiene certificate
– All materials used are certified for use with foodstuffs
– Edges of drip tray angled at 45°
– Easy to clean
– Visual inspection of the entire casing possible

Modified heat-exchangers for every application
– Aligned or staggered tube pattern
– Different fin spacing
– Staggered fin spacing
– Special copper tubes for HFC, coolants and CO_2
– Stainless steel pipes for NH_3
– Surface-corrugated aluminium fins for high heat exchange

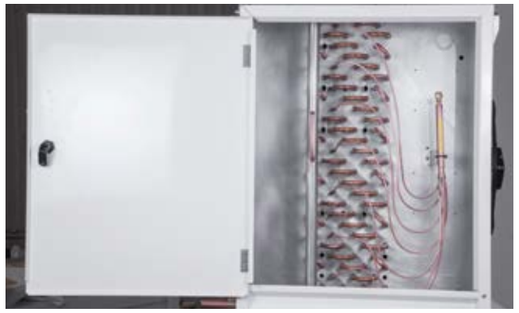
Well thought-out versatile casing design
– Corrosion resistant aluminium alloy AlMg
– Fans larger than 710 mm diameter are galvanised steel
– Powder coating in RAL 9003
– Hinged side cover for opening
– Fans positioned at an angle (from 630 mm) improve the air throw and defrosting behaviour
– Variety of casings

High demand – reliable products

Güntner only uses the high-grade materials of certified manufacturers in producing its heat exchangers. These are processed on modern machinery into high-quality and optically appealing products.

In addition to cost-effectiveness, safety of staff and environmental protection are also high priority Güntner corporate goals.

Incline Design
For sizes 063, 071, 080, 090:
fans inclined at 3°
– Angled fan nozzles improve run-off of condensation and defrost water
– Prevents ice forming in the annular gap
– Better air guidance due to an increased Coanda effect



Hinged side cover
– Easy access to connections and fittings
– All units have a toggle closure that can be opened without tools

DIN ISO 9001

GOST

Eurovent

UL

ASME

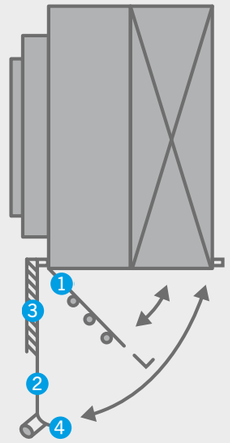
Tests
Güntner heat exchangers are continuously tested and certified by independent institutions:

Sophisticated design prevents drips of water

In the CUBIC Vario unit, melt water or condensation from the heat exchanger lands in the inner tray and passes from there to the drain. The outer tray remains essentially dry, and is insulated by an air gap and special components to ensure that no water droplets are formed underneath the radiator where they might fall onto food products.

Other Güntner air coolers are also standardly equipped with such double thermally decoupled drip trays.

1. Inner tray
2. Outer tray
3. Optionally with 20 mm insulation and sheet metal cover
4. Condensation water drain 45°



Hot gas defrosting
For warm brine defrosting and use under exceptional conditions there is an insulated sandwich-construction outer drip tray available.

Air cooler with hygiene certificate

HACCP certificated

Under EU regulations in force since January 2006, all companies dealing with foodstuffs are required to set up a HACCP (hazard analysis and critical control point). This regulation applies to all commercial operations that produce, handle or distribute food and drinks. In order to offer our customers the maximum possible safety, even in the sensitive area of foodstuffs, we have subjected our air coolers to appropriate HACCP certification by the safety standards authority (TÜV). The units that now carry these certificates satisfy the stringent stipulations for all areas.

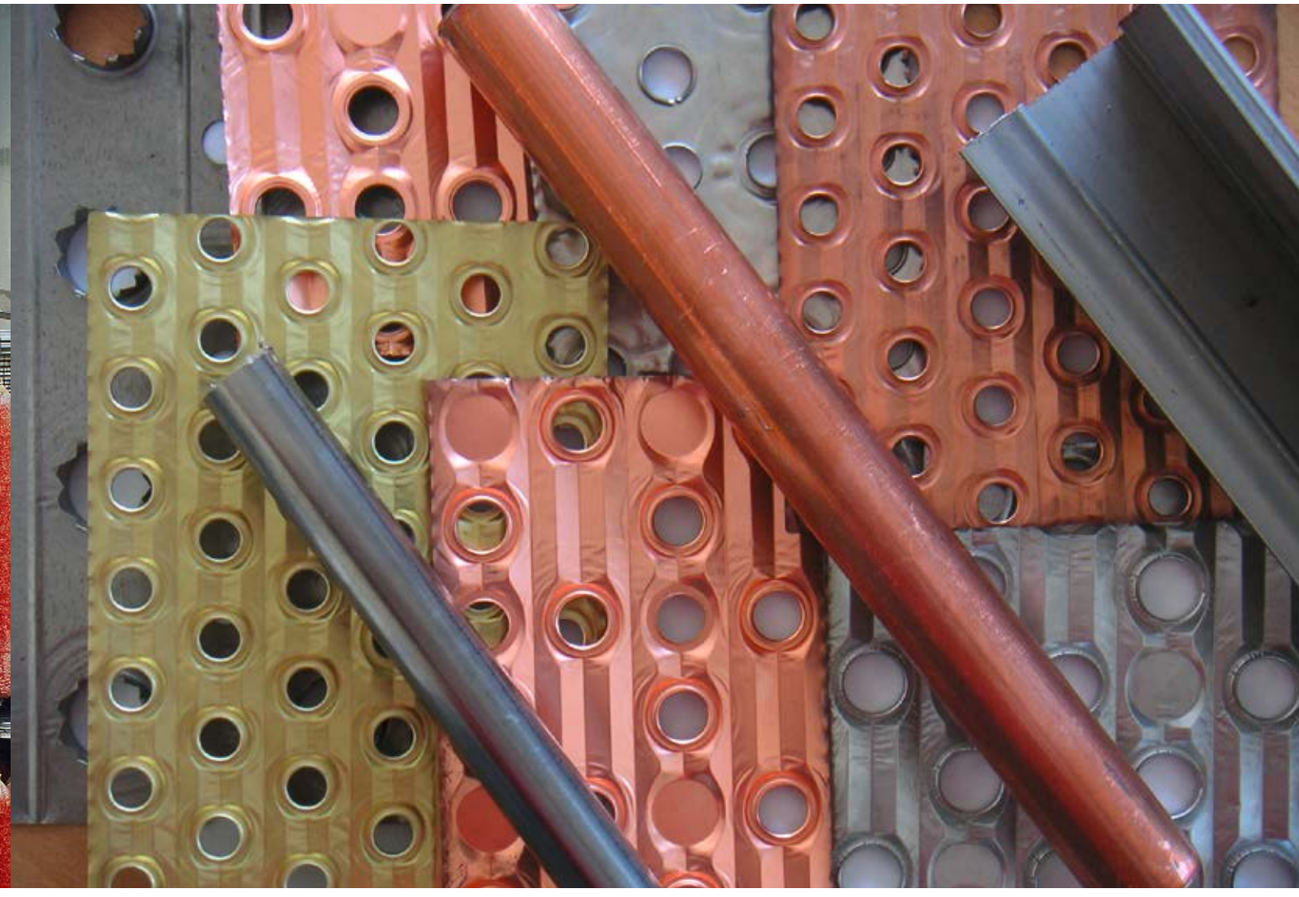
... for all applications

Material combinations for all applications

Corrosion and corrosion protection are highly relevant topics for refrigeration engineering. To prevent corrosion damage to your air coolers it is important to know the operating conditions in advance and then use appropriate materials.

It is necessary to consider not only aggressive atmospheres, but also the use of cleaning agents. We have summarised our suggestions for suitable materials for you in a separate brochure and in our Güntner app.

www.guentner.eu/know-how/application-tips
www.guentner.eu/know-how/guentner-app

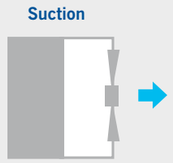


Technical details

GACV series

Refrigerant	t_0	Air inlet	Fin spacing 4 mm	7 mm	10 mm	12 mm
HFC	- 8 °C - 25 °C	0 °C - 18 °C	2 – 335 kW	1 – 275 kW 1 – 200 kW	1 – 240 kW 1 – 180 kW	1 – 225 kW 1 – 165 kW
NH_3	- 8 °C - 25 °C	0 °C - 18 °C	1 – 275 kW	1 – 280 kW 1 – 210 kW	1 – 230 kW 1 – 180 kW	1 – 210 kW 1 – 165 kW
Water/glycol	- 3/+2 °C	10 °C	1 – 190 kW	1 – 190 kW	1 – 180 kW	1 – 165 kW
CO_2 DX	- 31 °C	- 25 °C		2 – 215 kW	2 – 190 kW	2 – 175 kW
CO_2 Pump	- 31 °C	- 25 °C		2 – 195 kW	2 – 175 kW	2 – 160 kW

Air-flow direction



Available defrosting types

Circulation air	Electric	Hot gas	Brine	Water
✓	✓ Coil ✓ Tray ✓ Fan nozzle	✓ Coil ✓ Tray	✓ Coil ✓ Tray	–

Fans

1 – 4

400 mm
450 mm
500 mm
630 mm
710 mm
800 mm
900 mm

Heat exchangers

Pipe arrangement:
aligned or staggered
Fin spacing:
4/6/7/10/12/
16-8/20-10 mm

Available Material

	Tube	Fin	Casing	Tray
AlMg			☑	☑
Aluminium		☑		
Copper	☑	✓		
Aluminium, coated with epoxy resin		✓		
Sheet steel, galvanised			☑	
Stainless steel V2A (AISI/304)	✓1	✓	✓	✓
Stainless steel V4A (AISI/316)	✓	✓	✓	✓

☑ Standard version 1 Standard for NH_3

Quickly and reliable

thermodynamic calculation and proposal submission

The **Güntner Product Calculator GPC** configuration software allows you to quickly and easily design the right unit for your individual application.

Simply enter the required parameters in the convenient entry screen of the GPC. The calculator will consider your specified operating conditions and selected accessories, perform the thermodynamic configuration and provide a selection of suitable units. Capacity specifications are stated in compliance with EUROVENT.

Use our software to select evaporators, condensers, air coolers, dry coolers, control units and switch cabinets!

YOUR BENEFITS AT A GLANCE:

- Thermodynamic calculation
- Quick and safe configuration
- Automatic coordination of individual unit components
- Various units of measurement possible
- Choice of 15 languages
- Current prices and delivery times can be called up
- Display of quickly deliverable units in stock

Download your **Güntner Product Calculator** (GPC) for free.

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