Air coolers

GÜNTNER

COMPACT

The COMPACT product line offers readily available standard units for standard applications at a fair price-performance ratio.

VARIO

The VARIO product line comprises series which can be customised quickly and accurately for individual projects by means of the Güntner Product Calculator. Customers are able to choose specific equipment to meet their individual requirements from a variety of different material combinations, variants and accessories.

APPLICATION

The APPLICATION product line consists of series configured for special applications, e. g. for the cooling of agricultural products or storage centers. Customised adaptations and customer series are available for special applications.

Competent. Reliable. Personal.

Name	Product	Capacity	HFC	NH_3	CO_2	Coolant
Slim		0,6 – 14 kW	GASC		GASC	
Dual		2 – 15 kW	DHF		DHF	DHF
Cubic		1 – 68 kW	GACC		GACC	
Dual		4 – 90 kW	DHN	ADHN GDS	DHN	DGN
Cubic		4 – 240 kW	GHN GHF	AGHN GHK	CPGHN CXGHN CXGHF	GGHN GGHF
Process		8 – 50 kW	GBK	AGBK		GGBK
Agri		4 – 115 kW	GACA			GACA
Blast		9 – 72 kW	GFN	GFN	GFN	
Floor		50 – 200 kW	GSN	GSSA	GSN	GSN
Penthouse		50 – 200 kW	GHN	AGHN	GHN	GHN
HighStore		15 – 150 kW	GHN	AGHN	GHN	GHN
ThermoStore		50 – 200 kW	GAIL	GAIL	GAIL	

xxx Product available in Güntner Product Calculator (GPC)

xxx Product available on request

A Strong Partner

Güntner is a leading specialist for heat exchanger systems in refrigeration and air-conditioning equipment on the international market.

Founded over 80 years ago in Germany, the company developed its market and sector-oriented solutions in close personal cooperation with its customers, right from the start. Today the Güntner Group, a modern, globally-active company, combines its unique specialist expertise with top-class technical innovations to serve you and your partners in the industry, trade and service sectors.

Robert Gerle, Managing Director

Worldwide Network

An ultra-modern communication network enables the Group to utilise synergy effects in the fields of manufacturing, development and design, as well as practical competency gained from international large-scale projects, for the benefit of its customers and partners. Highly qualified, dynamic Güntner employees, consistent training programmes and a team spirit which spans the globe, all contribute toward providing you with the best results on all levels of cooperation.

The Güntner Group combines the best development, manufacturing and consultancy standards with an excellent local presence and outstanding Time-to-Market. The company maintains its worldwide presence with its own distribution companies and sales agencies.

An additional convenience: Your contacts at Güntner offer consultancy services for your local and international projects in your national language. Trade fairs, training and information events ensure that you are kept up-to-date with the latest developments. The result: Excellent planning reliability, punctual project execution and optimal performance due to well-engineered, quality products.

Güntner maintains long-term, successful relationships with its partners. The focus is on lively, solution-oriented dialogue, outstanding development competency and first-rate product availability.

The Ideal Product for Each Customer-Specific Application

Based on extensive experience in the field, the Group has established an especially diverse range of products, providing you with a variety of options for all application areas.

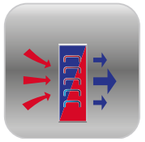
Industrial refrigeration

Commercial refrigeration

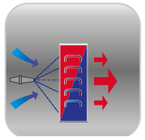
Air-conditioning

Energy and process cooling

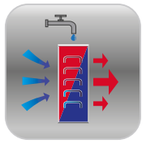
The technologies of the Güntner Group at a glance



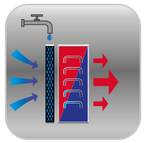
Dry coolers
in different designs



Sprayed dry coolers with Güntner HydroSpray
Intelligent control and section-wise spraying



Hybrid dry cooler HTK
Hybrid condenser HTV



Advanced Dry Cooler ADC
Adiabatic system with humidification pads
for pre-cooling

Plate heat exchangers, gasketed or module-welded
for operating pressures up to 63 bar

New Products

SLIM / **Compact**

GASC

Air cooler in flat design with blow-through fans
Ideal for commercial refrigeration

– Tube volume reduced by up to 37 % (compared to previous model)
– CO_2 up to 80 bar
– HACCP certification by TÜV SÜD

CUBIC / **Compact**

GACC

High efficiency air cooler in compact design
Ideal for commercial refrigeration

– CO_2 up tp 80 bar
– Tube volume reduced by up to 37 %
– EC fans as accessory

CUBIC / **Vario**

GACV

Variable air cooler in cubic design
Ideal for industrial refrigeration

– Hinged inner tray for easy access
– CO_2 up to 80 bar
– HACCP certification by TÜV SÜD

FLAT / **Compact**
VERTICAL / **Compact**

GCHC GCVC

Compact design
Ideal for commercial refrigeration

– CO_2 up to 120 bar
– TÜV approval for propane
– Optimised for all „new“ refrigerants

FLAT / **Vario**
VERTICAL / **Vario**

GCHV GCVV

Robust and variable
Ideal for industrial refrigeration

– CO_2 up to 120 bar
– Greatest variability (heat exchanger, casing, fan)
– EC fans 0 – 10 V

THERMOSTORE / **Application**

GAIL

Insulated unit cooler
Optimised for logistics applications

– Best defrosting performance
– EC centrifugal fans
– Energy-efficient

Ideally Tailored Components for Each Application Ensure Efficient Operation.

On a technical level, this combination flexibility facilitates solutions which achieve high efficiency: Güntner's electronic control components offer reliability and save time.

A comprehensive range of accessories allow for optimal adjustment to local operating conditions. Specialised Güntner solutions are tailored to individual markets on all continents on the basis of systematic needs analyses and consistent product management. The Güntner Group implements quality management across the globe, thereby fulfilling the high quality and performance requirements specified in the best and most recent relevant standards, such as: DIN EN ISO 9001; DIN EN ISO 14001; EUROVENT CERTIFY ALL; ASME B31.5; ARI; ASHRAE and UL.

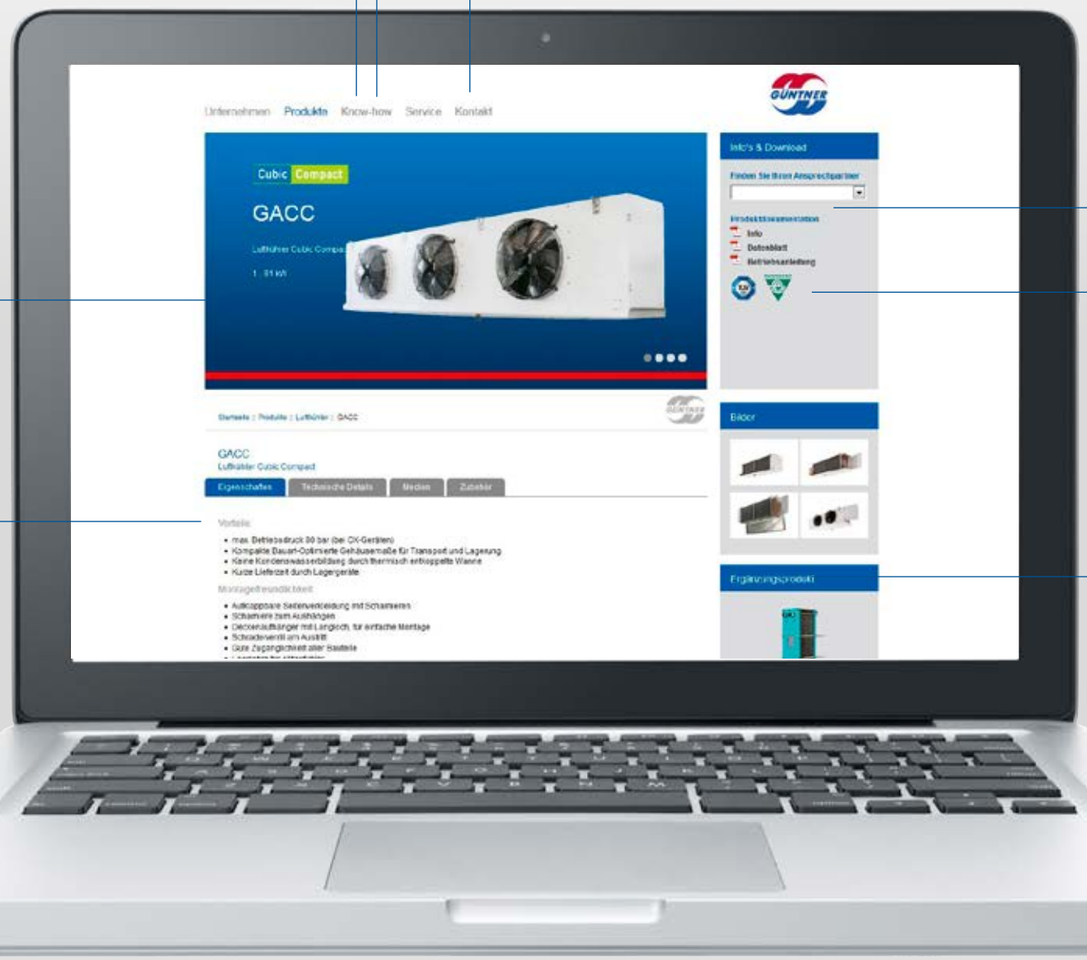
Regular audits are conducted in the Group's seven production sites worldwide to ensure optimal material quality and manufacturing processes.

The Most Important Information
at www.guentner.eu

GPC download
Free configuration software

Specialist information/
Application tips

Your worldwide contact partners



Information brochures
Data sheets
Operating instructions

Product photos

Zertifikate
zum jeweiligen Produkt

Product properties
All product benefits at a glance

Complementary Products

Perform Thermodynamic Configurations and Generate Quotes Quickly and Safely

The Güntner Product Calculator GPC configuration software allows you to quickly and easily configure the right unit for your individual application. Simply enter the required parameters in the convenient entry screen on the GPC.

An exact thermodynamic configuration is performed and a selection of suitable units is provided, while taking into account the operating conditions and accessories you have selected. After selecting the optimum unit, the GPC generates a data sheet with technical data, dimensions, weights and prices for you.

Use our GPC for swift and precise selection of heat exchangers, control units and switch cabinets!

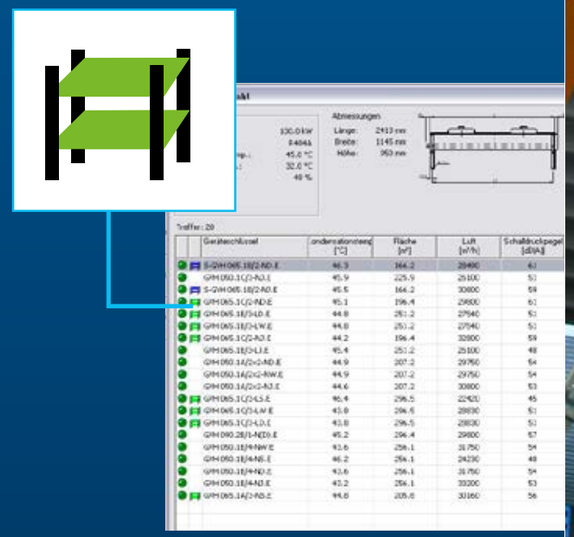
Your benefits at a glance:

- Precise thermodynamic calculation, even with uncommon usage areas
- Quick and reliable design work
- Individual setting of different units possible for each entry field
- 15 languages
- Current prices and delivery times can be called up
- Shows units in stock with short delivery times
- Night limit, fans in accordance with intended use and energy efficiency

Your free Güntner Product Calculator (GPC) to download: www.guentner.eu

Short Delivery Times for Units Kept in Stock

When performing a search, the GPC configuration software indicates which items are in stock and can be delivered in just 4 days. The storage symbol appears on these units.



Readily Available Units kept in Stock
Evaporators: GASC, DHF, GACC
Condensers: GVM, GVH, GVV, GVVX, GVHX

Rapid availability and reliable delivery are the be-all and end-all of customer satisfaction. Our in-house logistics department enables us to amply fulfil our customers' expectations in this respect.

Material Diversity for Each and Every Application

The resistance of a material in a heat exchanger is put to the test both internally and externally. From the inside, the chemical properties, pressure and temperature of the refrigerant exert an influence on the tubes or profiles, while the more or less aggressive ambient air (ammonia, sulphuric acid, salt, vinegar, etc.) exerts an influence from the outside.

The versatile material combination options are based on experience and comprehensive tests and analyses. Güntner heat exchangers can be configured for customised applications by selecting the appropriate materials.

Just ask us – we'll be happy to advise you!

Different applications with aggressive atmosphere require targeted material selection. We have compiled a brochure with recommendations for material selection (sorted according to applications).

Salt

Vinegar

Smoke

Fermentation

Cleaning agent

Fluorine, chlorine, sulphur

NH_3 / CO_2 / nitrogen oxide

Proximity to the coast

SLIM / Compact

GASC

Air cooler in flat design with blow-through fans – ideal for commercial refrigeration

0.6 – 14 kW

Advantages

- Flat casing
- 80 bar for CO2
- Space-saving installation
- Easy to clean
- Units kept in stock ensure short delivery times
- Heating kit for retrofitting

Easy to Install

- Ceiling mounting brackets with slotted hole for easy installation
- Fans wired to terminal box
- Empty tube for defrost sensor
- Easy-to-remove side cover
- Schrader valve at outlet

Easy and quick to clean

- Hinged tray with quick release fastener
- Good access to all components
- Heat exchanger can be cleaned from three sides
- Hinged outer and inner tray

HACCP Hygiene Certificate

- All materials used are approved for contact with foodstuffs
- All components are easy to clean
- Visual inspection of the entire unit possible
- Support bracket flush with upper surface of casing

Heat Exchanger

The air coolers are equiped with staggered tube pattern, internally grooved tubes and special fins. Optimised fin systems and adjusted circuitings offer safe operation and high efficiency.

Casing

- Corrosion-resistant AlMg aluminium alloy
- RAL 9003 powder coating
- Ceiling mounting brackets made of stainless steel

High-quality tray construction

- Corrosion-resistant AlMg aluminium alloy
- RAL 9003 powder coating
- Hinged outer and inner tray
- Outer tray thermally decoupled to prevent formation of condensation water

Energy-efficient EC fans

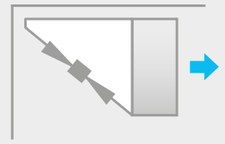
- Up to 60 % less power consumption
- Two fan speeds as standard
- Integrated motor protection
- Can be operated at 50 + 60 Hz
- IP 54 acc. to DIN 40050
- Low-noise operartion at reduced speed

Options / Accessories

- Epoy resin-coated fins
- El. defrost heating for coil and tray
- EC fans
- AC fans
- Heating kit for retrofitting
- E-valves mounted (RX)

Air flow direction

Blow through



Refrigerant / capacity

Refrigerant	t_0	Air inlet	Fin spacing 4 mm	Fin spacing 7 mm
HFC	- 8 °C - 25 °C	0 °C -18 °C	0,8 – 13 kW	0,6 – 10 kW 0,6 – 9 kW
CO_2 DX	- 8 °C - 25 °C	0 °C -18 °C	0,8 – 14 kW	0,6 – 12 kW 0,6 – 9 kW

Fans

1 – 5

200 / 300 mm

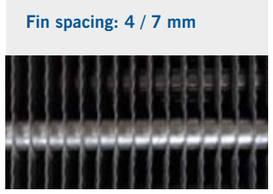
Available Defrosting Types

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

Heat Exchanger

High efficiency heat exchanger in well-proven Güntner quality

Fin spacing: 4 / 7 mm



Available Material

Material	Tube	Fin	Casing	Tray
AlMg			✓	✓
Aluminium		✓		
Copper	✓			
Aluminium, epoxy-resin coated		✓		
Steel, hot-dip galvanised				
Sheet steel, galvanized				
Stainless steel				

✓ Standard version

Suitable Applications

Cold storage cells

Small cold storage room

Sales rooms

Commercial, Gastronomy

DUAL / Compact

DHF

Highly efficient air cooler
for commercial refrigeration
in slimline design
with dual air discharge

2 – 15 kW

Advantages

- Flat design
- Even air distribution
- Low draught air level
- Units kept in stock ensure short delivery times

Easy to Install

- Ceiling mounting brackets with slotted hole for easy installation
- Fans wired on connection socket
- Empty tube for defrost sensor
- Easy-to-remove side cover
- Only one condensation drain per unit
- Schrader valve on outlet

Inspection and Cleaning

- Hinged tray and heating sheet, drain line does not have to be dismantled

Heat Exchanger

- Staggered tube pattern 50 x 25 mm
- Internally-ribbed special copper tubes for HFC
- Surface-corrugated aluminium fins for high heat transfer

Casing

- Corrosion-resistant aluminium alloy AlMg
- Powder-coated with RAL 9003

Tray

- Corrosion-resistant aluminium alloy AlMg
- Powder-coated with RAL 9003
- Separate drip plate
- Thermally-decoupled tray (condensation free)
- Collection tray for condensation with only one drain

Fans

- Proven quality fans
- 3 fan types for different sound levels
- Internal motor protection with thermocontacts
- Wired on connection socket in factory
- 230 V, 1~, 50 Hz or 60 Hz

Options / Accessories

- Epoxy-resin coated fins
- Electric defrost heater for coil, wired on connection socket
- Factory-fitted thermostatic expansion valve

Air Configuration

Blow through fans

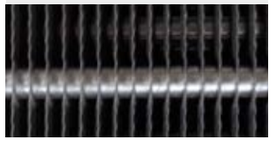
Fans

1 – 4

IP 44: 350 mm

Heat Exchanger

Type: F 50 x 25 mm
Staggered tube pattern
Fin spacing: 4 mm



Product Types / Refrigerant / Capacity

	Refrigerant	Operating Condition t_0 / T_{LE}	Nominal Capacity with Fin Spacing of 4 mm
DHF N	HFC	-8 / 0 °C	2.86 – 15.32 kW
DHF L1	HFC	-8 / 0 °C	2.29 – 11.89 kW
DHF L2	HFC	-8 / 0 °C	1.95 – 9.62 kW

N = Normal L1 = Reduced-noise design L2 = Quiet design

Available Defrosting Types

Circulation air	Electric	Hot gas	Brine	Water
✓	✓ Coil	–	–	–

Available Material

Material	Tube	Fin	Casing	Tray
AlMg			☑	☑
Aluminium		☑		
Copper	☑			
Aluminium, epoxy-resin coated		✓		
Steel, hot-dip galvanised				
Sheet steel, galvanized				
Stainless steel				

☑ Standard version

Suitable Applications

Room temperatures above 0 °C

Picking areas

Corridors

Sales rooms

CUBIC / Compact

GACC

High efficiency air cooler in compact design – ideal for commercial refrigeration

1.5 – 68 kW

Advantages

- Compact design
- 80 bar for CO_2
- Optimised casing dimensions for transport and storage
- Easy to clean
- Units kept ins tock for short delivery times
- Defrosting kit can be retrofitted at any time

Easy to Install

- Hinged side cover with hinges
- Hinges allow hang-out
- Ceiling mounting brackets with slotted hole
- Schrader valve at outlet
- Easy access to all components

Inspection and Cleaning

- Easy access to all components
- Hinged outer and inner tray
- Outer tray thermally decoupled to prevenet formation of condensation water

Heat Exchanger

The air coolers are equiped with staggered tube pattern and special internally grooved fins. Optimised fin systems and adjusted circuitings offer safe operation and high efficiency.

Casing

- Corrosion-resistant aluminium alloy AlMg
- Powder-coated with RAL9003
- Stainless steel ceiling mounting

High-quality casing construction

- Corrosion-resistant AlMg aluminium alloy
- RAL 9003 powder coating
- Hinged outer and inner tray
- Outer tray thermally decoupled to prevent formation of condensation water

High-efficiency fans

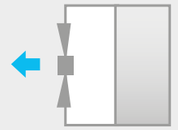
- EC and AC fans available as standard
- ErP-compliant
- Motor protection with thermocontacts
- 50 or 60 Hz
- Adjustable speed

Options / Accessories

- Epoxy-resin coated fins
- El. defrost heating for coil and tray
- EC fans
- AC fans
- Heating kit for retrofitting

Air Configuration

Draw through fans



Fans

1 – 4

315 / 400 / 500 mm

Heat Exchanger

High efficiency heat ex-changer in well-proven Güntner quality

Fin spacing: 4 / 7 mm

Refrigerant / capacity

Refrigerant	t_0	Air inlet	Fin spacing 4 mm	Fin spacing 7 mm
HFC	- 8 °C - 25 °C	0 °C -18 °C	1,5 – 61 kW	1,5 – 55 kW 1,5 – 39 kW
CO_2 DX	- 8 °C - 25 °C	0 °C -18 °C	1,5 – 68 kW	1,5 – 65 kW 1,5 – 52 kW

Available Defrosting Types

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

Available Material

Material	Tube	Fin	Casing	Tray
AlMg			☑	☑
Aluminium		☑		
Copper	☑			
Aluminium, epoxy-resin coated		✓		
Steel, hot-dip galvanised				
Sheet steel, galvanized				
Stainless steel				

☑ Standard version

Suitable Applications

Commercial refrigeration / industrial refrigeration

Storage rooms and many types of cold storage rooms with low and medium humidity

Room temperatures +20 to -28 °C

DUAL / **Vario**

DHN

Air cooler for industrial refrigeration
with slimline design
and dual air discharge

4 – 90 kW

Advantages

- Slimline design
- Even air distribution
- Low draught air level
- Aligned tube pattern, large heat-exchanging surface
- Many design types

Easy to Install

- Mounted on pallet in installation position
- Ceiling mounting brackets for easy installation
- Empty tube for defrost sensor
- Easy-to-remove side cover
- Schrader valve on outlet
- Fans wired on connection socket (optional)

Inspection and Cleaning

- Hinged tray

High Operational Reliability and Leak-Safety

- Proven Güntner floating coil principle (refrigerant carrying tubes do not make contact with the casing, increases the heat exchanger's service life)

Heat Exchanger

- Aligned tube pattern 50 x 50 mm (or 60 x 60 mm)
- Special copper tubes for HFC, coolant and CO_2
- Stainless steel tubes for NH_3 (or hot-dip galvanised steel)
- Surface-corrugated aluminium fins for high heat transfer

Casing

- Corrosion-resistant aluminium alloy AlMg
- From fan diameter 650 mm, galvanized steel
- Powder-coated with RAL 9003

Tray

- Corrosion-resistant aluminium alloy AlMg
- Separate drip plate
- Thermally-decoupled tray (condensation free)
- Powder-coated with RAL 9003

Fans

- Proven quality fans
- Internal motor protection with thermocontacts
- Fan diameter 400 mm:
  230 V, 1~, 50 Hz or 60 Hz
- Fan diameter from 450 mm:
  400 V, 3~, 50 Hz or 60 Hz

Options / Accessories

- Epoxy-resin coated fins
- Fans wired on connection socket
- Factory-fitted thermostatic expansion valve
- Double tray, insulated
- Insulated fan plates
- Core tubes made of stainless steel
- Fins made of stainless steel
- Casing and tray made of stainless steel

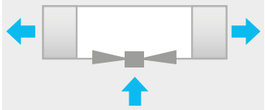
Product Types / Refrigerant / Capacity

	Refrigerant	Operating Condition t_0 / T_{LE}	Nominal Capacity with Fin Spacing of 4 mm	7 mm	10 mm
DHN	HFC	-8 / 0 °C	5.5 – 61.0 kW	5.4 – 54.1 kW	4.6 – 47.9 kW
		-25 / -18 °C	4.1 – 45.9 kW	4.1 – 39.9 kW	3.5 – 35.7 kW
ADHN	NH_3	-8 / 0 °C	5.4 – 59.8 kW	5.1 – 53.4 kW	4.3 – 46.6 kW
		-25 / -18 °C	4.0 – 44.8 kW	3.9 – 41.4 kW	3.3 – 36.4 kW
DGN	Coolant	-3 / 10 °C	6.9 – 88.2 kW	7.4 – 79.6 kW	6.1 – 68.0 kW

	Refrigerant	Operating Condition	Nominal Capacity with Fin Spacing of 5 mm	8 mm	10 mm	12 mm
GDS	NH_3	-8 / 0 °C	2.7 – 41.2 kW	4.9 – 32.6 kW	4.2 – 28.8 kW	3.7 – 26.4 kW
Coil hot-dip galvanized steel		-25 / -18 °C	1.8 – 30.1 kW	3.4 – 24.4 kW	2.8 – 21.8 kW	6.4 – 20.1 kW

Air Configuration

Dual discharge / Blow through



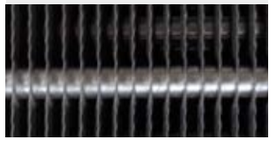
Dual discharge / Draw through

Fans

Quantity: 1 – 3
400 / 450 / 500 / 650 mm

Heat Exchanger

Type: N 50 x 50 mm
or S 60 x 60 mm
Aligned tube pattern
Fin spacing: 4 / 7 / 10 mm



Available Defrosting Types

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

Available Material

Material	Tube	Fin	Casing	Tray
AlMg			☑	☑
Aluminium		☑		
Copper	☑			
Aluminium, epoxy-resin coated		✓		
Steel, hot-dip galvanised	✓	✓		
Sheet steel, galvanized			✓ 2	
Stainless steel	✓ 1	✓	✓	✓

☑ Standard version 1 Standard with NH_3 2 Standard from 650 mm fan diameter

Suitable Applications

Picking areas

Loading ramps

Cold storage rooms with low air speed

CUBIC / **Vario**

GHN / GHF

Air cooler for industrial refrigeration
with cubic design
for a wide range of applications

4 – 240 kW

Advantages

- Robust design
- Suction fans, wide air throw
- Large variety of types
- Many design types

Easy to Install

- Ceiling mounting brackets for easy installation
- Empty tube for defrost sensor
- Side cover with hinges and quick-release fastener
- Schrader valve on outlet

HACCP Hygiene Certificate

- Suitable for rooms used for food processing
- All materials used approved for foodstuffs
- Drip tray with edges inclined at 45° angle
- Easy to clean

High Operational Reliability and Leak-Safety

- Proven Güntner floating coil principle (refrigerant carrying tubes do not make contact with the casing; increases the heat exchanger's service life)

Inspection and Cleaning

- Hinged tray

Heat Exchanger

- Aligned or staggered tube pattern
- Special copper tubes for HFC, coolant and CO_2
- Stainless steel tubes for NH_3 or steel, hot-dip galvanised
- Surface-corrugated aluminium fins for high heat transfer

Casing

- Corrosion-resistant aluminium alloy AlMg up to 500 mm fan diameter
- Galvanized steel, from 710 mm fan diameter
- Powder-coated with RAL 9003
- Hinged side cover with hinges
- Fans positioned at an angle (from 710 mm) improve the air throw and defrosting behaviour

Tray

- Hinged and thermally-decoupled (condensation free)
- Separate drip plate
- Corrosion-resistant aluminium alloy AlMg
- Powder-coated with RAL 9003
- Large condensation drain with 45° incline

Fans

- Proven quality fans
- Standard with two speeds (for fan diameter of 500 mm)
- Motor protection with thermocontacts
- 230 V, 1~, 50 Hz or 60 Hz (up to construction size 450)
- 400 V, 3~, 50 Hz or 60 Hz
- Wired on connection socket in factory (GHF)

Options / Accessories

- Epoxy-resin coated fins
- Double, insulated tray
- Core tubes made of stainless steel
- Casing and tray made of stainless steel
- Factory-fitted thermostatic expansion valve
- Güntner Streamer for increased air throw
- Defrost flap for quick, efficient defrosting
- Air sock connection
- Fan casing for 45° / 90° downblow
- Legs
- Wired on connection socket in factory (GHN)

Product Types / Refrigerant / Capacity

	Refrigerant	Operating Condition t_0 / T_{LE}	Nominal Capacity with Fin Spacing of 4 mm	7 mm	10 mm	12 mm
GHN / GHF	HFC	-8 / 0 °C	0.8 – 210 kW	0.8 – 226 kW	4.6 – 198 kW	4.2 – 185 kW
		-25 / -18 °C	0.7 – 142 kW	0.6 – 162 kW	3.6 – 145 kW	3.3 – 137 kW
AGHN	NH_3	-8 / 0 °C	4.7 – 237 kW	5.3 – 230 kW	4.4 – 193 kW	4.0 – 177 kW
		-25 / -18 °C	3.5 – 168 kW	3.9 – 171 kW	3.3 – 147 kW	22.0 – 136 kW
GGHN / GGHF	Coolant	-3 / 10 °C	1.3 – 155 kW	1.3 – 155 kW	7.4 – 148 kW	6.8 – 136 kW
CXGHN / CXGHF	CO_2	-45 °C / -35 °C	1.4 – 41 kW	1.4 – 141 kW	9.2 – 122 kW	8.3 – 112 kW
CPGHN	CO_2	-45 °C / -35 °C		6.1 – 127 kW	5.1 – 109 kW	4.7 – 101 kW

	Refrigerant	Operating Condition t_0 / T_{LE}	Nominal Capacity with Fin Spacing of 6 mm	8 mm	10 mm	12 mm
GHK Coil hot-dip galvanized steel	NH_3	-8°C	5.7 – 197 kW	6.9 – 203 kW	5.5 – 187 kW	4.9 – 173 kW
		-25°C	4.4 – 149 kW	4.7 – 155 kW	4.3 – 145 kW	3.8 – 132 kW

Air Configuration

Draw through fans

Available Defrosting Types

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

Fans

1 – 4

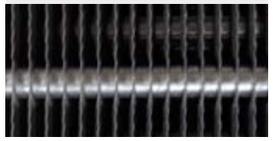
400 / 450 / 500 / 710 / 800 mm

Heat Exchanger

Aligned tube pattern
Fin geometry:
N 50 x 50 mm

Staggered tube pattern
Fin geometry:
F 50 x 25 mm / K 60 x 52 mm

Fin spacing:
4, 7, 10, 12 mm



Material	Tube	Fin	Casing	Tray
AlMg			✓	✓
Aluminium		✓		
Copper	✓			
Aluminium, epoxy-resin coated		✓		
Steel, hot-dip galvanised	✓	✓		
Sheet steel, galvanized			✓ 2	
Stainless steel	✓ 1	✓	✓	✓

✓ Standard version 1 Standard version with NH_3 2 Standard from 710 mm fan diameter

Suitable Applications

Room temperature
-28 to +20 °C

Medium and high humidity

Process Cooling

PROCESS / **Application**

GBK

Air cooler for processing rooms
with room temperatures above 0 °C
for draught-free air distribution

8 – 50 kW

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

TÜV SÜD HACCP

Advantages

- Special design for draught-free air distribution
- Air suction from above
- Dual air discharge
- Low noise emissions due to low-speed fans

Easy to Install

- Adjustable ceiling mounting brackets for easy installation
- Fans wired on connection socket
- Empty tube for defrost sensor
- Schrader valve on outlet

Inspection and Cleaning

- Large, hinged drip trays with quick-release fasteners allow for easy access to all components
- Easy inspection and cleaning

Heat Exchanger

- Staggered tube pattern 50 x 25 mm
- Special copper tubes for HFC and coolant
- Stainless steel tubes for NH_3
- Surface-corrugated aluminium fins for high heat transfer

Casing

- Corrosion-resistant aluminium alloy AlMg
- Powder-coated with RAL 9003

Tray

- Double tray, thermally-decoupled (condensation free)
- Corrosion-resistant aluminium alloy AlMg
- Powder-coated with RAL 9003
- Hinged for easy cleaning

Fans

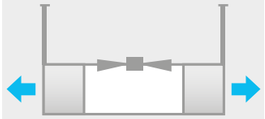
- Proven quality fans
- Low noise emission due to low speed
- Internal motor protection with thermocontacts
- 230 V, 1~, 50 Hz or 60 Hz

Options / Accessories

- Casing and tray made of stainless steel
- Epoxy-resin coated fins
- Core tubes and fins made of stainless steel
- Electric defrost heater for coil, wired on connection socket
- Heating / climatization element
- Manual speed controller

Air Configuration

Blow through fans



Product Types / Refrigerant / Capacity

	Refrigerant	Operating Condition t_0 / T_{LE}	Nominal Capacity with Fin Spacing of 4 mm	7 mm
GBK	HFC	0 / 10 °C	8.7 – 55.2 kW	6.5 – 45.3 kW
GGBK	Coolant	-3 / 10 °C	6.3 – 49.4 kW	5.3 – 34.9 kW
AGBK	NH_3	on request		

Fans

1 – 4
450 / 500 mm

Available Defrosting Types

Circulation air	Electric	Hot gas	Water
✓	✓ Coil	✓ Coil	✓

Heat Exchanger

Type: F 50 x 25 mm
Staggered tube pattern
Fin spacing: 4 / 7 mm

Available Material

Material	Tube	Fin	Casing
AlMg			☑
Aluminium		☑	
Copper	☑		
Aluminium, epoxy-resin coated		✓	
Steel, hot-dip galvanised			
Sheet steel, galvanized			
Stainless steel	✓	✓	✓

☑ Standard version

Geeignete Anwendungen

Room temperatures above 0 °C

Low noise emissions

Draught-free air distribution

Packing and sales rooms

AGRI / **Application**

GACA

Air cooler for fruit and vegetables with blow through fans

4 – 115 kW

Advantages

- Blow through fans
- Large heat exchanger surfaces
- Design for HFC or glycol

Maximum Use of Room Height

- Flat casing design
- Air-guiding sheet for raising the airflow
- Unit length up to 6 m

Low Moisture Loss

- Through optimised tube circuiting
- Large heat exchanger surfaces
- Calculation with small Dt1
- High airflow volumes

Even Air Distribution

- Blow through fans
- High air circulation rates
- No temperature stratification in storage room

Easy Inspection and Cleaning

- With hinged tray
- And hinged heating sheet

High Operational Reliability and Leak-Safety

- Proven Güntner floating coil principle (refrigerant carrying tubes do not make contact with the casing; Increases the heat exchanger's service life)

Heat Exchanger

- Special copper tubes for HFC
- Surface-corrugated aluminium fins for high heat transfer

Casing

- Sheet steel, galvanized
- Powder-coated with RAL 9003
- Hinged side cover with hinges
- Air-guiding sheet

Tray

- Hinged and thermally-decoupled (condensation free)
- Separate drip plate (hinged)
- Corrosion-resistant aluminium alloy AlMg
- Powder-coated with RAL 9003

Fans

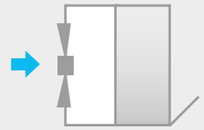
- Proven quality fans
- Standard with two speeds (from fan diameter 500 mm)
- Motor protection with thermocontacts
- 230 V, 1~, 50 Hz or 60 Hz (up to construction size 450)
- 400 V, 3~, 50 Hz or 60 Hz

Options / Accessories

- Epoxy-resin coated fins
- Heating element for drying and heating

Air Configuration

Blow through fans



Fans

1 – 6 400 / 450 / 500 mm
1 – 5 630 mm
1 – 4 710 mm

Heat Exchanger

Large surface for HFC
Aligned tube pattern
50 x 50 mm

High Efficiency for glycol
Staggered tube pattern
50 x 25 mm

Product Types / Refrigerant / Capacity

	Refrigerant	Operating Condition t_o / T_{LE}	Nominal capacity
GACA	HFC	-8 / 0 °C	4 – 115 kW
	Coolant	-3 / 10 °C	4 – 115 kW

Available Defrosting Types

Circulation air	Electric	Brine
✓	✓ Coil ✓ Tray	✓ Coil

Available Material

Material	Tube	Fin	Casing
AlMg			
Aluminium		☑	
Copper	☑		
Aluminium, epoxy-resin coated		✓	
Steel, hot-dip galvanised			
Sheet steel, galvanized			☑
Stainless steel	✓		

☑ Standard version

Suitable Applications

Fruit and vegetable storage

Maximum room height

Low moisture loss

Easy cleaning

BLAST / **Application**

GFN

Air cooler for
blast cooling rooms
and blast freezing rooms

9 – 72 kW

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

Advantages

- Casing for floor mounting
- Fans with high air output and external pressure
- Blow through fans ensure uniform air distribution over the cooled or frozen goods

Easy to Install

- 8 different unit sizes available
- Easy floor installation
- Empty tube for defrost sensor
- Schrader valve on outlet

Inspection and Cleaning

- Hinged fan doors on request

High operational reliability and leak-safety

- Proven Güntner floating coil principle (refrigerant carrying tubes do not make contact with the casing, increases the heat exchanger's service life)

Efficient, Easy Operation

- High efficiency due to optimal airflow routing
- Excellent reliability due to simple construction

Heat Exchanger

- Aligned tube pattern 50 x 50 mm
- Special copper tubes for HFC and CO_2
- Stainless steel tubes for NH_3
- Surface-corrugated aluminium fins for high heat transfer

Casing

- Galvanized steel, unpainted
- Legs for floor mounting

Tray

- Hinged
- Separate drip plate
- Corrosion-resistant aluminium alloy AlMg
- Powder-coated with RAL 9003
- Large condensation drain

Fans

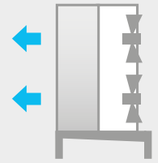
- Fans with external pressure 50 or 100 Pa
- Standard with two speeds
- Motor protection with thermocontacts
- 400 V, 3~, 50 Hz or 60 Hz

Options / Accessories

- Epoxy-resin coated fins
- Stepped fin spacing
- Core tubes made of stainless steel
- Casing and tray made of stainless steel
- Factory-wired thermostatic expansion valve
- Reinforced fans with higher external pressure on request

Air Configuration

Blow through fans



Product Types / Refrigerant / Capacity

	Refrigerant	Operating Condition t_0 / T_{LE}	Nominal Capacity with Fin Spacing of 7 mm	10 mm	12 mm
GFN	HFC	-25 / -18 °C	12.0 – 59.0 kW	15.0 – 71.0 kW	13.0 – 65.0 kW
		-31 / -25 °C	9.5 – 47.0 kW	12.0 – 56.0 kW	10.5 – 52.0 kW

Fans

Quantity: 2 – 8

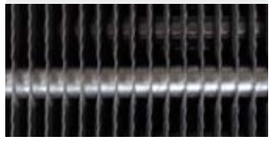
500 mm / 650 mm
More powerful fans on request

Available Defrosting Types

Circulation air	Electric	Hot gas
✓	✓ Coil	✓ Coil
	✓ Tray	✓ Tray
	Fan	

Heat Exchanger

Aligned tube pattern
Fin spacing:
4, 7, 10, 12 mm



Available Material

Material	Tube	Fin	Casing
AlMg			
Aluminium		✓	
Copper	✓		
Aluminium, epoxy-resin coated		✓	
Steel, hot-dip galvanised			
Sheet steel, galvanized			✓
Stainless steel	✓	✓	✓

✓ Standard version

Suitable Applications

Goods in storage trolley cars

Freezing rooms

Fast-cooling rooms

Process engineering

FLOOR / **Application**

GSN

Floor mounted air coolers
for cold storage and deep-freeze storage rooms with horizontal coil and defrost flaps
(connection for air ducts)

50 – 200 kW

Advantages

- Particularly suitable for deep-freeze storage rooms and process engineering
- Connecting frame for air ducts
- Fans with external pressure

Installation – Inspection – Maintenance

- High capacity in one unit
- Easy access to all components
- Large maintenance flaps

Good Defrosting Behaviour

- Standard with defrost flaps
- No steam discharge
- The defrosting heat remains in the casing

Good Air Distribution

- Air distribution with ducts
- Fans for external pressure

High Operational Reliability and Leak-Safety

- Proven Güntner floating coil principle (refrigerant
- carrying tubes do not make contact with the casing, increases the heat exchanger's service life)

Heat Exchanger

- Aligned or staggered tube pattern
- Special copper tubes for HFC, coolant and CO_2
- Stainless steel tubes for NH_3 or steel, hot-dip galvanised
- Surface-corrugated aluminium fins for high heat transfer

Casing

- Galvanized steel, with legs (uncoated)
- Connecting frame for air ducts
- Defrost flaps with mechanical open/closed indicator
- Window for checking frosting in coil
- Fan chamber with large maintenance doors
- Defrost flap chamber with large maintenance doors

Tray

- Large drip tray, double with insulation
- Large condensation drain

Fans

- Axial fans with external pressure
- Motor protection with thermocontacts
- Wired on connection socket in factory
- 400 V, 3~, 50 Hz or 60 Hz

Options / Accessories

- Stepped fin spacing
- Fans with two speeds
- Defrost heater for tray, defrost flap, coil edge and tray edge

Air Configuration

Draw through, air discharge top

Product Types / Refrigerant / Capacity

GSN	HFC	on request
GSSA	NH_3	50 – 200 kW
GSN	CO_2	on request
GSN	Coolant	on request

Fans

Quantity: 2 – 8
800 / 900 / 1000 mm

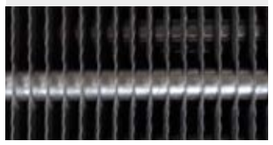
Available Defrosting Types

Circulation air	Electric	Hot gas
✓	✓ Coil ✓ Tray ✓ Fan ✓ Defrost flaps ✓ Coil edge ✓ Tray edge	✓ Coil ✓ Tray

Heat Exchanger

Fin geometry: N, S, K
Tube pattern staggered
Tube pattern aligned

Fin spacing:
7, 10, 12 mm, or stepped fin spacing



Available Material

Tube	Tube	Fin	Casing
AlMg			
Aluminium		✓	
Copper	✓		
Aluminium, epoxy-resin coated		✓	
Steel, hot-dip galvanised	✓	✓	
Sheet steel, galvanized			✓
Stainless steel	✓		

Suitable Applications

Cold storage room

Deep-freeze storage

Air distribution via ducts

PENTHOUSE / **Application**

S-GHN

Penthouse cooler
for large cooling and
deep-freeze storage rooms
with connection for air ducts
and downward air discharge

50 – 200 kW

Advantages

- Special design for set-up in a penthouse, above storage room
- Optimal use of storage room
- No air cooler in transport equipment area
- Fans with external pressure
- Connecting frame for air duct

Easy to Install

- Installation via roof
- Pipe-laying and installation of valves on roof
- Fans wired on connection socket

Inspection and Cleaning

- Easy access for inspection and service
- Fans can be replaced without dismantling the duct system
- Service work does not influence stock turnover

No Set-Up Space Required in Storage Room

- Maximum use of storage room
- Does not restrict automatic conveyance systems
- No damage caused by forklifts

Good Air Distribution

- Variable air-discharge direction due to short air ducts
- Good air distribution to accommodate varying room conditions

Heat Exchanger

- Aligned tube pattern 50 x 50 mm
- Special copper tubes for HFC, coolant and CO_2
- Stainless steel tubes for NH_3
- Surface-corrugated aluminium fins for high heat transfer
- Proven Güntner floating coil principle

Casing

- Sheet steel, galvanized
- Powder-coated with RAL 9003
- Hinged side cover with hinges
- Legs for floor mounting, galvanized steel

Tray

- Thermally-decoupled (condensation free)
- Separate drip plate
- Corrosion-resistant aluminium alloy AlMg
- Powder-coated with RAL 9003
- Large condensation drain with 45° incline

Fans

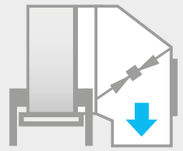
- 90 ° downblow with connecting frame for air duct
- External pressure 65 Pa
- Motor protection with thermocontacts
- 400 V, 3~, 50 Hz or 60 Hz

Options / Accessories

- Epoxy-resin coated fins
- Double, insulated tray
- Defrost flap for quick, efficient defrosting

Air Configuration

Draw through



Fans

Quantity: 1 – 4
710 mm / 800 / 900 mm

Heat Exchanger

Fin geometry: N
Aligned tube pattern

Fin spacing
4, 7, 10, 12 mm

Product Types / Refrigerant / Capacity

GHN	HFC	Direct expansion	50 – 200 kW
AGHN	NH_3	Pump operation	50 – 200 kW
CXGHN	CO_2	Pump operation	50 – 200 kW
CPGHN	CO_2	Direct expansion	50 – 200 kW
GGHN	Coolant	Pump operation	50 – 200 kW

Available Defrosting Types

Circulation Air	Electric	Hot gas
✓	✓ Coil	✓
	✓ Tray	✓
	✓ Defrost flap	

Available Material

Material	Tube	Fin	Casing	Tray
AlMg				✓
Aluminium		⊘		
Copper	✓			
Aluminium, epoxy-resin coated		✓		
Steel, hot-dip galvanised				
Sheet steel, galvanized			⊘	
Stainless steel	✓	✓	✓	

⊘ Standard version

Suitable Applications

Large cooling and deep-freeze storage rooms

Logistics storage rooms over 50 m in length

Good air distribution

Maximum use of storage room

HIGHSTORE / **Application**

S-GHN

Air cooler with 90° downblow
for cold storage
and deep-freeze storage rooms
with high-bay storage

15 – 150 kW

Advantages
- Particularly suitable for high-bay storage exceeding 20 m in height
- Air distribution via “pool of cold air”, without ducts
- Air circulation supported by thermal effect

Easy to Install
- Hinged side cover with quick-release fastener
- Fans wired on connection socket
- Empty tube for defrost sensor
- Schrader valve on outlet

Inspection and Cleaning
- Hinged tray

High Operational Reliability and Leak-Safety
- Proven Güntner floating coil principle (refrigerant-carrying tubes do not make contact with the casing; increases the heat exchanger’s service life)

Low Investment Costs
- No air ducts required

Low Operating Costs
- Low air circulation rate possible
- Fans can be operated at low speed
- Efficient defrost due to Güntner defrost flap

Heat Exchanger
- Aligned tube pattern 50 x 50 mm
- Special copper tubes for HFC, coolant and CO_2
- Stainless steel tubes for NH_3
- Surface-corrugated aluminium fins for high heat transfer
- Proven Güntner floating coil principle

Casing
- Galvanized steel
- Powder-coated with RAL 9003
- Hinged side cover with hinges

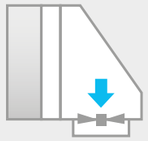
Tray
- Thermally-decoupled (condensation free)
- Separate drip plate
- Corrosion-resistant aluminium alloy AlMg
- Powder-coated with RAL 9003
- Large condensation drain with 45° incline

Fans
- Proven quality fans
- Standard with two speeds
- Motor protection with thermocontacts
- 400 V, 3~, 50 Hz or 60 Hz
- Factory-wired on connection socket

Options / Accessories
- Epoxy-resin coated fins
- Core tubes made of stainless steel
- Double, insulated tray
- Defrost flap for quick, efficient defrosting
- Fan casing with insulation for protection against condensation

Air Configuration

Draw through, 90° downblow



Product Types / Refrigerant / Capacity

GHN	HFC	Direct expansion	15 – 150 kW
AGHN	NH_3	Pump operation	15 – 150 kW
CXGHN	CO_2	Direct expansion	15 – 150 kW
CPGHN	CO_2	Pump operation	15 – 150 kW
GGHN	Coolant	Pump operation	15 – 150 kW

Fans

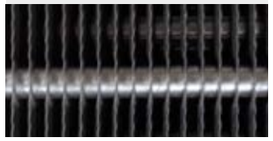
Quantity: 1 – 4
710 / 800 / 900 mm

Available Defrosting Types

Circulation air	Electric	Hot gas	Brine	Water
✓	✓ Coil ✓ Tray ✓ Fan ✓ Defrost flap	✓ Coil ✓ Tray	✓ Coil ✓ Tray	✓ Coil ✓ Tray

Heat Exchanger

Fin geometry: N
Aligned tube pattern
Fin spacing:
4, 7, 10, 12 mm



Available Material

Material	Tube	Fin	Casing	Tray
AlMg				✓
Aluminium		☑		
Copper	✓			
Aluminium, epoxy-resin coated		✓		
Steel, hot-dip galvanised				
Sheet steel, galvanized			☑	
Stainless steel	✓	✓	✓	

☑ Standard version

Suitable Applications

Cold storage rooms with high-bay storage

Cold storage rooms with sliding bays

Deep-freeze storage rooms

Height exceeding 20 m

THERMOSTORE / Application

GAIL

Air cooler with insulated casing
for large cold storage
and deep-freeze rooms

50 – 200 kW

Advantages

- All components are installed in an insulated casing at the factory
- Set-up either inside or outside the storage facility
- Optimal defrost results due to closable defrost flap
- Design for storage with and without air ducts

Easy to Install

- Refrigerating unit completely factory-fitted
- Reduces installation costs

Inspection and Maintenance

- Can be accessed or heated for service work
- Easy access when installed outside the storage facility
- Logistics operations are not hindered during inspection and maintenance work

Heat Exchanger S 60 x 60 mm

- Tubes and fins made of steel, hot-dip galvanised
- Proven Güntner floating coil principle

Heat Exchanger N 50 x 50 mm

- Special copper tubes for HFC, coolant and CO_2
- Stainless steel tubes for NH_3
- Surface-corrugated aluminium fins for high heat transfer
- Proven Güntner floating coil principle

Casing

- Insulated casing consisting of PU sandwich elements with 170 mm wall thickness
- Large defrost flap with electric motor
- Flap-edge heating
- Large maintenance door

Tray

- Made of aluminium, integrated in casing floor (with slope toward drain / insulated by casing)

Axial Fans for Operation without Air Ducts

- Proven quality fans
- Standard with two speeds
- Motor protection with thermocontacts
- Wired on connection socket in factory
- 400 V, 3~, 50 Hz or 60 Hz

Centrifugal Fans for Operation with Air Ducts

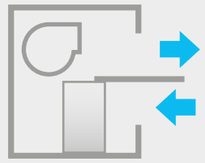
- Centrifugal fans driven via v-belt
- External pressure as specified
- Factory-wired on connection socket
- 400 V, 3~, 50 Hz or 60 Hz

Options / Accessories

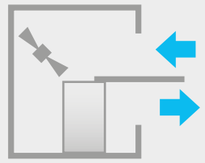
- Stepped fin spacing
- Second maintenance door
- Switch cabinet with speed controller
- Casing insulation: wall thicknesses 100, 140, 200 mm

Air Configuration

Draw through
with centrifugal fans
Air distribution with ducts



Blow through with axial fans
Air distribution without ducts



Radial Fans

Quantity: 2 – 5

Axial Fans

Quantity: 2 – 5
650 / 710 / 800 / 900 mm

Heat Exchanger

Fin geometry N, S
Staggered or aligned

Fin spacing:
7, 10, 12 mm or stepped fin spacing

Product Types / Refrigerant / Capacity

GAIL	HFC	Direct expansion	50 – 200 kW
GAIL	NH_3	Pump operation	50 – 200 kW
GAIL	CO_2	Pump operation	50 – 200 kW

Available Defrosting Types

Circulation Air	Electric	Hot gas	Brine	Water
✓	✓ Coil ✓ Tray ✓ Flap edge	✓ Coil ✓ Tray	–	–

- The casing is closed with the defrost flap during the defrosting phase
- All components are defrosted completely
- No heat introduced into the room
- No steam discharge and no snow under the roof

Available Material

Material	Tube	Fin	Casing
AlMg			
Aluminium		✓	
Copper	✓		
Aluminium, epoxy-resin coated		✓	
Steel, hot-dip galvanised	✓	✓	
Sheet steel, galvanized			✓
Stainless steel	✓		

Suitable Applications

Large cold storage rooms

Large deep-freeze storage rooms

Maximum use of storage room

Our experts provide competent consulting services for your particular application!

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