Air coolers
### COMPACT

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

<table>
<thead>
<tr>
<th>Name</th>
<th>Capacity</th>
<th>HFC</th>
<th>NH₃</th>
<th>CO₂</th>
<th>Coolant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slim</td>
<td>0.6 – 14 kW</td>
<td>GASC</td>
<td>GASC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dual</td>
<td>2 – 15 kW</td>
<td>DHF</td>
<td>DHF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cubic</td>
<td>1 – 68 kW</td>
<td>GACC</td>
<td>GACC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 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.

<table>
<thead>
<tr>
<th>Name</th>
<th>Capacity</th>
<th>HFC</th>
<th>NH₃</th>
<th>CO₂</th>
<th>Coolant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dual</td>
<td>4 – 90 kW</td>
<td>DHN</td>
<td>ADHN</td>
<td>DGN</td>
<td></td>
</tr>
<tr>
<td>Cubic</td>
<td>4 – 240 kW</td>
<td>GHN</td>
<td>AGHN</td>
<td>GGHN</td>
<td>GGHF</td>
</tr>
</tbody>
</table>

### 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.

<table>
<thead>
<tr>
<th>Name</th>
<th>Capacity</th>
<th>HFC</th>
<th>NH₃</th>
<th>CO₂</th>
<th>Coolant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process</td>
<td>8 – 50 kW</td>
<td>GBK</td>
<td>AGBK</td>
<td></td>
<td>GGBK</td>
</tr>
<tr>
<td>Agri</td>
<td>4 – 115 kW</td>
<td>GACA</td>
<td>GACA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blast</td>
<td>9 – 72 kW</td>
<td>GFN</td>
<td>GFN</td>
<td>GFN</td>
<td></td>
</tr>
<tr>
<td>Floor</td>
<td>50 – 200 kW</td>
<td>GSN</td>
<td>GSSA</td>
<td>GSN</td>
<td>GSN</td>
</tr>
<tr>
<td>Penthouse</td>
<td>50 – 200 kW</td>
<td>GHN</td>
<td>AGHN</td>
<td>GHN</td>
<td>GHN</td>
</tr>
<tr>
<td>HighStore</td>
<td>15 – 150 kW</td>
<td>GHN</td>
<td>AGHN</td>
<td>GHN</td>
<td>GHN</td>
</tr>
<tr>
<td>ThermoStore</td>
<td>50 – 200 kW</td>
<td>GAIL</td>
<td>GAIL</td>
<td>GAIL</td>
<td></td>
</tr>
</tbody>
</table>

---

Competent. Reliable. Personal.
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.
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.

The Ideal Product for Each Customer-Specific Application

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

**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)
- CO₂ up to 80 bar
- HACCP certification by TÜV SÜD

**GACC**
High efficiency air cooler in compact design
Ideal for commercial refrigeration
- CO₂ up to 80 bar
- Tube volume reduced by up to 37%
- EC fans as accessory

**GACV**
Variable air cooler in cubic design
Ideal for industrial refrigeration
- Hinged inner tray for easy access
- CO₂ up to 80 bar
- HACCP certification by TÜV SÜD

**GCHC**
Compact design
Ideal for commercial refrigeration
- CO₂ up to 120 bar
- TÜV approval for propane
- Optimised for all „new“ refrigerants

**GCVV**
Robust and variable
Ideal for industrial refrigeration
- CO₂ up to 120 bar
- Greatest variability (heat exchanger, casing, fan)
- EC fans 0 – 10 V

**GCHV**
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.
Empfehlungen zur Materialauswahl

Güntner Wissen für verschiedene Einsatzfälle und Umgebungsbedingungen

Korrosion vermeiden durch optimale Materialauswahl

Vario CUBIC Luftkühler GACV

Variabler Luftkühler in kubischer Bauart

Optimal für Industriekälte

HFKW, CO₂, Propan, NH₃, Wasser/Glykol – 335 kW

Ein Luftkühler - alle Anwendungen

The Most Important Information at www.guentner.eu
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
Cleaning agent
Vinegar
Fluorine, chlorine, sulphur
Smoke
NH₃ / CO₂ / nitrogen oxide
Fermentation
Proximity to the coast
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 equipped 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 operation at reduced speed

Options / Accessories
- Epoxy resin-coated fins
- EI. defrost heating for coil and tray
- EC fans
- AC fans
- Heating kit for retrofitting
- E-valves mounted (RX)

Heat Exchanger Available Material

Energy-efficient heat exchanger in well-proven Güntner quality

Fin spacing: 4 / 7 mm

Cooling / capacity

<table>
<thead>
<tr>
<th>Refrigerant</th>
<th>$t_c$</th>
<th>Air inlet</th>
<th>Fin spacing 4 mm</th>
<th>Fin spacing 7 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>HFC</td>
<td>- 8 °C - 25 °C</td>
<td>0 °C - 18 °C</td>
<td>0.8 – 13 kW</td>
<td>0.6 – 10 kW</td>
</tr>
<tr>
<td>CO2 DX</td>
<td>- 8 °C - 25 °C</td>
<td>0 °C - 18 °C</td>
<td>0.8 – 14 kW</td>
<td>0.6 – 12 kW</td>
</tr>
</tbody>
</table>

Available Defrosting Types

<table>
<thead>
<tr>
<th>Circulation air</th>
<th>Electric</th>
<th>Hot gas</th>
<th>Brine</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑</td>
<td>Coll</td>
<td>Trays</td>
<td>Trays</td>
<td>Trays</td>
</tr>
</tbody>
</table>

Suitable Applications

<table>
<thead>
<tr>
<th>Cold storage cells</th>
<th>Small cold storage room</th>
<th>Sales rooms</th>
<th>Commercial, Gastronomy</th>
</tr>
</thead>
</table>
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
- 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

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

Product Types / Refrigerant / Capacity

<table>
<thead>
<tr>
<th>Refrigerant</th>
<th>Operating Condition</th>
<th>Nominal Capacity with Fin Spacing of 4 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>DHF N</td>
<td>HFC</td>
<td>2.86 – 15.32 kW</td>
</tr>
<tr>
<td>DHF L1</td>
<td>HFC</td>
<td>2.29 – 11.89 kW</td>
</tr>
<tr>
<td>DHF L2</td>
<td>HFC</td>
<td>1.95 – 9.62 kW</td>
</tr>
</tbody>
</table>

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

Available Defrosting Types
- Circulation air
- Electric Brine
- Water

Available Material
- Material: AlMg, Aluminium, Copper, Stainless steel
- Tube: ✔
- Fin: ✔
- Casing: ✔
- Tray: ✔

Suitable Applications
- Picking areas
- Corridors
- Sales rooms
High efficiency air cooler in compact design – ideal for commercial refrigeration

1.5 – 68 kW

**Advantages**
- Compact design
- 80 bar for CO2
- Optimised casing dimensions for transport and storage
- Easy to clean
- Units kept in stock 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 prevent formation of condensation water

**Heat Exchanger**
The air coolers are equipped 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 aluminum 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
- EI defrost heating for coil and tray
- EC fans
- AC fans
- Heating kit for retrofitting

**Refrigerant / capacity**

<table>
<thead>
<tr>
<th>Refrigerant</th>
<th>$t_1$</th>
<th>Air inlet</th>
<th>Fin spacing 4 mm</th>
<th>Fin spacing 7 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>HFC</td>
<td>-8 °C</td>
<td>0 °C</td>
<td>1.5 – 61 kW</td>
<td>1.5 – 55 kW</td>
</tr>
<tr>
<td>CO2 DX</td>
<td>-8 °C</td>
<td>0 °C</td>
<td>1.5 – 68 kW</td>
<td>1.5 – 65 kW</td>
</tr>
</tbody>
</table>

**Available Defrosting Types**

<table>
<thead>
<tr>
<th>Circulation air</th>
<th>Electric</th>
<th>Hot gas</th>
<th>Brine</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Heat Exchanger**

**Available Material**

<table>
<thead>
<tr>
<th>Material</th>
<th>Tube</th>
<th>Fin</th>
<th>Casing</th>
<th>Tray</th>
</tr>
</thead>
<tbody>
<tr>
<td>AlMg</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aluminium</td>
<td>✔</td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Copper</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aluminium, epoxy-resin coated</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steel, hot-dip galvanised</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stainless steel</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Suitable Applications**

<table>
<thead>
<tr>
<th>Commercial refrigeration / industrial refrigeration</th>
<th>Storage rooms and many types of cold storage rooms with low and medium humidity</th>
<th>Room temperatures +20 to -28 °C</th>
</tr>
</thead>
</table>
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 CO₂
- Stainless steel tubes for NH₃ (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

<table>
<thead>
<tr>
<th>Refrigerant</th>
<th>Operating Condition t₀ / TLE</th>
<th>Nominal Capacity with Fin Spacing of 4 mm</th>
<th>5 mm</th>
<th>7 mm</th>
<th>10 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>DHN HFC</td>
<td>-8 / 0 °C</td>
<td>5.5 – 61.0 kW</td>
<td>5.4 – 54.1 kW</td>
<td>4.6 – 47.9 kW</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-25 / -18 °C</td>
<td>4.1 – 45.9 kW</td>
<td>4.1 – 39.9 kW</td>
<td>3.5 – 35.7 kW</td>
<td></td>
</tr>
<tr>
<td>ADHN NH₃</td>
<td>-8 / 0 °C</td>
<td>5.4 – 59.8 kW</td>
<td>5.1 – 53.4 kW</td>
<td>4.3 – 46.6 kW</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-25 / -18 °C</td>
<td>4.0 – 44.8 kW</td>
<td>3.9 – 41.4 kW</td>
<td>3.3 – 36.4 kW</td>
<td></td>
</tr>
<tr>
<td>DGN Coolant</td>
<td>-3 / 10 °C</td>
<td>6.9 – 88.2 kW</td>
<td>7.4 – 79.6 kW</td>
<td>6.1 – 68.0 kW</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Refrigerant</th>
<th>Operating Condition t₀ / TLE</th>
<th>Nominal Capacity with Fin Spacing of 5 mm</th>
<th>8 mm</th>
<th>10 mm</th>
<th>12 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDS NH₃</td>
<td>-8 / 0 °C</td>
<td>2.7 – 41.2 kW</td>
<td>4.9 – 32.6 kW</td>
<td>4.2 – 28.8 kW</td>
<td>3.7 – 26.4 kW</td>
</tr>
<tr>
<td></td>
<td>-25 / -18 °C</td>
<td>1.8 – 30.1 kW</td>
<td>3.4 – 24.4 kW</td>
<td>2.8 – 21.8 kW</td>
<td>2.6 – 20.1 kW</td>
</tr>
</tbody>
</table>

Air Configuration

Available Defrosting Types

<table>
<thead>
<tr>
<th>Circulation air</th>
<th>Electric</th>
<th>Hot gas</th>
<th>Brine</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑</td>
<td>☑ Coil</td>
<td>☑ Coil</td>
<td>☑ Coil</td>
<td>☑ Coil</td>
</tr>
<tr>
<td>☑ Tray</td>
<td>☑ Tray</td>
<td>☑ Tray</td>
<td>☑ Tray</td>
<td>☑ Tray</td>
</tr>
</tbody>
</table>

Available Material

<table>
<thead>
<tr>
<th>Material</th>
<th>Tube</th>
<th>Fin</th>
<th>Casing</th>
<th>Tray</th>
</tr>
</thead>
<tbody>
<tr>
<td>AlMg</td>
<td>☑</td>
<td>☑</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aluminium</td>
<td>☑</td>
<td>☑</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copper</td>
<td>☑</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aluminium, epoxy-resin coated</td>
<td>☑</td>
<td></td>
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<tr>
<td>Steel, hot-dip galvanised</td>
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<td>Steel, galvanized</td>
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<tr>
<td>Stainless steel</td>
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</tr>
</tbody>
</table>

Suitable Applications

<table>
<thead>
<tr>
<th>Picking areas</th>
<th>Loading ramps</th>
<th>Cold storage rooms with low air speed</th>
</tr>
</thead>
</table>

Heat Exchanger

Type: N 50 x 50 mm or S 60 x 60 mm
Aligned tube pattern
Fin spacing: 4 / 7 / 10 mm
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 defined 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 foodstuff
- 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 CO2
- Stainless steel tubes for NH3, 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 thermostats
- 230 V, 1–50 Hz or 60 Hz
- 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 (GHF)

Product Types / Refrigerant / Capacity

<table>
<thead>
<tr>
<th>Refrigerant</th>
<th>Operating Condition</th>
<th>Nominal Capacity with Fin Spacing 4 mm</th>
<th>7 mm</th>
<th>10 mm</th>
<th>12 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHN / GHF HFC</td>
<td>-8 / 0 °C</td>
<td>0.8 – 210 kW</td>
<td>0.8 – 226 kW</td>
<td>4.6 – 198 kW</td>
<td>4.2 – 185 kW</td>
</tr>
<tr>
<td>AGHN</td>
<td>NH3</td>
<td>-8 / 0 °C</td>
<td>4.7 – 237 kW</td>
<td>5.3 – 230 kW</td>
<td>4.4 – 193 kW</td>
</tr>
<tr>
<td>GGNH / GGHF Coolant</td>
<td>-8 / 0 °C</td>
<td>3.5 – 168 kW</td>
<td>3.9 – 171 kW</td>
<td>3.3 – 147 kW</td>
<td>22.0 – 136 kW</td>
</tr>
<tr>
<td>CXGHN / CXGHF CO2</td>
<td>-45 °C / -35 °C</td>
<td>1.4 – 41 kW</td>
<td>1.4 – 141 kW</td>
<td>9.2 – 122 kW</td>
<td>8.3 – 112 kW</td>
</tr>
<tr>
<td>CPGHN CO2</td>
<td>-45 °C / -35 °C</td>
<td>6.1 – 127 kW</td>
<td>5.1 – 109 kW</td>
<td>4.7 – 101 kW</td>
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</table>

<table>
<thead>
<tr>
<th>Refrigerant</th>
<th>Operating Condition</th>
<th>Nominal Capacity with Fin Spacing 6 mm</th>
<th>8 mm</th>
<th>10 mm</th>
<th>12 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHN / GHF HFC</td>
<td>-8 / 0 °C</td>
<td>5.7 – 197 kW</td>
<td>6.9 – 203 kW</td>
<td>5.5 – 187 kW</td>
<td>4.9 – 173 kW</td>
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<tr>
<td>AGHN</td>
<td>NH3</td>
<td>-25 °C</td>
<td>4.4 – 149 kW</td>
<td>4.7 – 155 kW</td>
<td>4.3 – 145 kW</td>
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Air Configuration

Available Defrosting Types

<table>
<thead>
<tr>
<th>Draw through fans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circulation air</td>
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<tr>
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<table>
<thead>
<tr>
<th>Material</th>
<th>Tube</th>
<th>Fin</th>
<th>Casing</th>
<th>Tray</th>
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<tbody>
<tr>
<td>AlMg</td>
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<td>✓</td>
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<tr>
<td>Aluminium</td>
<td>✓</td>
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<tr>
<td>Copper</td>
<td>✓</td>
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<tr>
<td>Aluminium, epoxy-resin coated</td>
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<td></td>
</tr>
<tr>
<td>Steel, hot-dip galvanised</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stainless steel</td>
<td>✓</td>
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</tr>
</tbody>
</table>

Suitable Applications

- Room temperature: -28 to +20 °C
- Medium and high humidity
- Process Cooling

Casing
- Corrosion-resistant aluminium alloy AlMg from 710 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 thermostats
- 230 V, 1–50 Hz or 60 Hz
- 400 V, 3–50 Hz or 60 Hz
- Wired on connection socket in factory (GHF)
GBK

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

8 – 50 kW

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 NH₃
- 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

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

| Fans |
| 1 – 4 |
| 450 / 500 mm |

Product Types / Refrigerant / Capacity

<table>
<thead>
<tr>
<th>Refrigerant</th>
<th>Operating Condition t₀ / TLE</th>
<th>Nominal Capacity with Fin Spacing of 4 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>HFC</td>
<td>0 / 10 °C</td>
<td>8.7 – 55.2 kW</td>
</tr>
<tr>
<td>GGBK</td>
<td>-3 / 10 °C</td>
<td>6.3 – 49.4 kW</td>
</tr>
<tr>
<td>AGBK</td>
<td>on request</td>
<td>5.3 – 34.9 kW</td>
</tr>
</tbody>
</table>

Available Defrosting Types

- Circulation air
- Electric
- Hot gas
- Water

Available Material

<table>
<thead>
<tr>
<th>Material</th>
<th>Tube</th>
<th>Fin</th>
<th>Casing</th>
</tr>
</thead>
<tbody>
<tr>
<td>AlMg</td>
<td>☑️</td>
<td>☑️</td>
<td></td>
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<tr>
<td>Aluminium</td>
<td>☑️</td>
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<td>☑️</td>
</tr>
<tr>
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<td>☑️</td>
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<td>Aluminium, epoxy-resin coated</td>
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<tr>
<td>Steel, hot-dip galvanized</td>
<td>☑️</td>
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<td></td>
</tr>
<tr>
<td>Sheet steel, galvanized</td>
<td>☑️</td>
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</tr>
</tbody>
</table>

Geighente Anwendungen

- Room temperatures above 0 °C
- Low noise emissions
- Draught-free air distribution
- Packing and sales rooms
**GACA**

**Application**

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 D1
- 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 thermocouples
- 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 |
```

---

### Product Types / Refrigerant / Capacity

<table>
<thead>
<tr>
<th>Refrigerant</th>
<th>Operating Condition t0 / TLE</th>
<th>Nominal capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>GACA</td>
<td>-8 / 0 °C</td>
<td>4 – 115 kW</td>
</tr>
<tr>
<td>HFC</td>
<td>-3 / 10 °C</td>
<td>4 – 115 kW</td>
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</tbody>
</table>

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### Available Defrosting Types

<table>
<thead>
<tr>
<th>Circulation air</th>
<th>Electric</th>
<th>Brine</th>
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<tbody>
<tr>
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### Available Material

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<tr>
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</tbody>
</table>

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**Suitable Applications**

- Fruit and vegetable storage
- Maximum room height
- Low moisture loss
- Easy cleaning
Air cooler for blast cooling rooms and blast freezing rooms

9 – 72 kW

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 CO₂
- Stainless steel tubes for NH₃
- 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

<table>
<thead>
<tr>
<th>Refrigerant</th>
<th>Operating Condition</th>
<th>Nominal Capacity with Fin Spacing of</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t₀ / TLE</td>
<td>7 mm</td>
</tr>
<tr>
<td>GFN HFC</td>
<td>-25 / -18 °C</td>
<td>12.0 – 59.0 kW</td>
</tr>
<tr>
<td></td>
<td>-31 / -25 °C</td>
<td>9.5 – 47.0 kW</td>
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</table>

Available Defrosting Types

<table>
<thead>
<tr>
<th>Circulation air</th>
<th>Electric</th>
<th>Hot gas</th>
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<tr>
<td>✔</td>
<td>✔ Coil</td>
<td>✔ Coil</td>
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<td>✔ Tray</td>
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<td>Copper</td>
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<tr>
<td>Sheet steel, galvanized</td>
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<td>Stainless steel</td>
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</table>

Suitable Applications

<table>
<thead>
<tr>
<th>Goods in storage trolley cars</th>
<th>Freezing rooms</th>
<th>Fast-cooling rooms</th>
<th>Process engineering</th>
</tr>
</thead>
</table>
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 defrost 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 CO₂
- Stainless steel tubes for NH₃ 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

**Suitable Applications**

- **Cold storage room**
- **Deep-freeze storage**
- **Air distribution via ducts**

**Air Configuration**

| Draw through, air discharge top |

**Available Defrosting Types**

<table>
<thead>
<tr>
<th>Circulation air</th>
<th>Electric</th>
<th>Hot gas</th>
</tr>
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**Available Material**

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</table>

**Product Types / Refrigerant / Capacity**

<table>
<thead>
<tr>
<th>Fans</th>
<th>HFC</th>
<th>on request</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSSA</td>
<td>NH₃</td>
<td>50 – 200 kW</td>
</tr>
<tr>
<td>GSN</td>
<td>CO₂</td>
<td>on request</td>
</tr>
<tr>
<td>GSN</td>
<td>Coolant</td>
<td>on request</td>
</tr>
</tbody>
</table>
**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 CO₂
- Stainless steel tubes for NH₃
- Surface-corrugated aluminum 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° downward blow 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**

<table>
<thead>
<tr>
<th>Draw through</th>
</tr>
</thead>
</table>

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**Product Types / Refrigerant / Capacity**

<table>
<thead>
<tr>
<th>Type</th>
<th>Refrigerant</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHN</td>
<td>HFC</td>
<td>Direct expansion 50 – 200 kW</td>
</tr>
<tr>
<td>AGHN</td>
<td>NH₃</td>
<td>Pump operation 50 – 200 kW</td>
</tr>
<tr>
<td>CXGHN</td>
<td>CO₂</td>
<td>Pump operation 50 – 200 kW</td>
</tr>
<tr>
<td>CPGHN</td>
<td>CO₂</td>
<td>Direct expansion 50 – 200 kW</td>
</tr>
<tr>
<td>GGHN</td>
<td>Coolant</td>
<td>Pump operation 50 – 200 kW</td>
</tr>
</tbody>
</table>

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**Available Defrosting Types**

- Circulation Air
- Electric
- Hot gas

<table>
<thead>
<tr>
<th>Circulation Air</th>
<th>Electric</th>
<th>Hot gas</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

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**Quality Assurance**

- All materials and components are selected and tested to meet the highest quality standards.

---

**Suitable Applications**

- Logistics storage rooms over 50 m in length
- Good air distribution
- Maximum use of storage room
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 CO2
- Stainless steel tubes for NH3
- Surface-conjugated aluminium fins for high heat transfer
- Aligned tube pattern 50 x 50 mm

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
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<td></td>
<td></td>
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</tbody>
</table>

Available Defrosting Types
- Circulation air
- Electric
- Hot gas
- Brine
- Water

<table>
<thead>
<tr>
<th>Circulation air</th>
<th>Electric</th>
<th>Hot gas</th>
<th>Brine</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>✔</td>
<td>✔</td>
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</tbody>
</table>

Availabe Material

<table>
<thead>
<tr>
<th>Material Type</th>
<th>Tube</th>
<th>Fin</th>
<th>Casing</th>
<th>Tray</th>
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</thead>
<tbody>
<tr>
<td>AlMg</td>
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<td>✔</td>
<td></td>
</tr>
<tr>
<td>Aluminium</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Copper</td>
<td>✔</td>
<td></td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Aluminium, epoxy-resin coated</td>
<td>✔</td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Stainless steel</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
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</tbody>
</table>

Suitable Applications
- Cold storage rooms with high-bay storage
- Cold storage rooms with sliding bays
- Deep-freeze storage rooms
- Height exceeding 20 m
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 Günther floating coil principle

Heat Exchanger N 50 x 50 mm
- Special copper tubes for HFC, coolant and CO2
- Stainless steel tubes for NH3
- Surface-corroded aluminium fins for high heat transfer
- Proven Günther floating coil principle

Casing
- Insulated casing consisting of PU sandwich elements with 170 mm wall thicknesses
- 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

Radial Fans
- Available Material
  - Quantity: 2 – 5
  - AIMg
  - Aluminium, epoxy-resin coated
  - Stainless steel

Heat Exchanger
- Suitable Applications
  - Large cold storage rooms
  - Large deep-freeze storage rooms
  - Maximum use of storage room

Potential Components
- Heat Exchanger S 60 x 60 mm
- Heat Exchanger N 50 x 50 mm
- Radial Fans
- Axial Fans
- Heat Exchanger
- Casing
- Tray
- Options / Accessories
  - Stepped fin spacing
  - Second maintenance door
  - Switch cabinet with speed controller
  - Casing insulation: wall thicknesses 100, 140, 200 mm

Applications
- Draw through with centrifugal fans
- Air distribution with ducts
- Blow through with axial fans
- Air distribution without ducts

Air Configuration

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- 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

Radial Fans
- Available Material
  - Quantity: 2 – 5
  - AIMg
  - Aluminium, epoxy-resin coated
  - 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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