FRIGA-BOHN®

2025 Edition International

Refrigeration Catalogue

Commercial & Industrial
Products and Systems

Cooling solutions, delivered with care.

MAKE YOUR SELECTIONS
INDEPENDENTLY

FRIGA SOFT

COMPLETE AND EASY-TO-USE SOFTWARE

Selection of all models with options.
Thermodynamics calculations.
Printing of data sheets far quotation preparation.

CAFÉS | RESTAURANTS
CONVENIENCE STORES
SUPERMARKETS | HYPERMARKETS
STORAGE & LOGISTICS
FOOD PROCESSING
CENTRAL KITCHENS
ENERGY SECTOR

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CENTRAL KITCHENS
ENERGY SECTOR

Who are we?

With over 55 years of experience in refrigeration solutions, we continue to advance our cooling technology to improve efficiency and sustainability. However, our true strength lies not only in our experience but also in the commitment we offer to our customers. This is what truly sets us apart.

We are your refrigeration experts. We understand your needs, support you through challenges, and stand by you in the long term. When you succeed, we succeed. We take pride in offering not only cutting-edge innovation but also unwavering support you can rely on.

At Friga-Bohn, we ensure the smooth operation of your business with world-class refrigeration solutions, delivered with care.

HK Refrigeration has now fully migrated to the Friga-Bohn brand—one single brand, united in our mission to innovate and support your business for the long term.

Friga-Bohn, refrigeration solutions, delivered with care.

Thierry JOMARD
VP, Managing Director LENNOX EMEA

Key figures

- **900 employees** in Europe
- **3 European production sites:**
  Genas, Longvic and Burgos
- **Certification:**
  ISO 9001 - 14001 - OHSAS 18001
  Ecovadis Silver (2024)
- **1 European training centre**
- **1 European HVAC&R development centre**
- **9 subsidiaries and sales offices**
- Commercial presence **over 46 countries**

A world of applications

CAFÉS | RESTAURANTS

Our systems and associated services will be a real asset for offering optimized solutions, in terms of both comfort and food preservation.

CONVENIENCE STORES

The location of local businesses in urban areas must meet specific acoustic requirements and optimize the available space. Attentive to these needs, we offer a collection of systems and services adapted to these requirements.

SUPERMARKETS | HYPERMARKETS

Our refrigeration systems ensure that your energy costs are optimized, while ensuring preservation of your foodstuffs.

STORAGE & LOGISTICS

Precise control of the humidity and quality of the air generated by our systems allows you to store your different products under the best possible conditions according to your needs.

FOOD PROCESSING

We offer highly reliable, tailor-made solutions, suitable for food processing, in compliance with the regulations in force and the quality requirements of your company.

CENTRAL KITCHENS

Our solutions will ensure the comfort of your employees, while preserving your foodstuffs.

ENERGY SECTOR

In terms of energy and cogeneration, our systems are designed to offer sustainable and optimum performance: your operation will benefit from adapted noise levels, small footprint, low energy consumption and ease of maintenance.

ECODESIGN
Directive 2009/125/EC

The **KYOTO** Agreement (1997), the **COP 21** (Paris 2015) and the **COP 22** (Marrakech 2016) set targets for limiting global warming to 1.5 °C. The **Ecodesign Directive 2009/125/EC** defines a framework for all energy-consuming equipment. Voted on in 2007, and implemented since 2008, it aims to reduce the power consumption of electronic devices through better design (ecodesign). For example, products that use energy must meet minimum energy efficiency criteria to limit negative environmental impacts throughout the product's life cycle.

It is mandatory for all products marketed and used in the European Union (CE marking).

REGULATION EU 2015/1095
for condensing units and industrial chillers

The regulations arising from the Ecodesign of each product family set minimum efficiencies to be achieved in 2 steps:

Step 1 > 1 July 2016
Step 2 > 1 July 2018

The following are not affected:

Condensing units where the condenser part does not use air as the heat transfer medium.
Split systems (combination of a condensing unit and one or more unit coolers, monoblocks or splits).
Compressor racks without condensers.

CE

The **CE marking** was created within the framework of European technical harmonization legislation. It represents a manufacturer's commitment that its product complies with the regulatory requirements for free movement throughout the European Union. This marking is mandatory for all products covered by one or more European regulatory texts that explicitly provide for it. As a manufacturer, and in order to allow the circulation of our products, we rigorously ensure the conformity of our products with regard to the essential requirements defined by European legislation.

Our declaration of conformity specifies the applicable guidelines for the entire catalogue by product range.

It can be found on our website under "downloads > certificates > CE".

PED

Pressure Equipment Directive

In the event of failure, pressure equipment can cause significant physical and material damage. The design, construction, operation and monitoring of this equipment is therefore essential to ensure its safe operation. The PED provides for classification of pressure equipment according to category.

COMPRESSORIZED PRODUCTS

Compressorized products are governed by the Pressure Equipment Directive (PED) 2014/68/EU and have the marking CE0094 indicating their compliance with this Directive. Our declaration of conformity can be downloaded from our website under "downloads > certificates > PED". The operating pressure of our products is indicated in the technical data sheets, which are also available on our website.

HEAT EXCHANGERS

Unit coolers and condensers have the CE mark according to the Low Voltage Directive 2014/35/EU and are therefore excluded from the scope of Directive 2014/68/EU as they fall within category I at most, heat exchangers consisting of pipes, intended for air cooling or the condensation of a refrigerant.

The operating pressure and temperature values of our products are available through our declaration of conformity. This is available for download on our website under "downloads > certificates > CE".

ISO

A guarantee of quality

The ISO family of standards has been developed to address various aspects of quality management. ISO certification enables us to guarantee the circulation of safe and quality products on the market. The various ISO standards also contribute to the fact that companies such as ours optimize their production methods, while guaranteeing our employees' safety.

Our company is ISO-certified and thus meets quality assurance criteria:

ISO 9001 - lays down the criteria applicable to a quality management system.
ISO 14001 - lays down the criteria applicable to an environmental management system.
OHSAS 18001 - establishes the method for setting up an occupational health and safety management system.

The context

The chlorofluorocarbon (CF) and hydrofluorocarbon (HCFC) refrigerant fluids used in cooling systems today are considered to be powerful greenhouse gases.

To prevent climactic changes and global warming, the European Commission has adopted a roadmap for reducing global emissions by 2050.

This directive, which relates to **EU regulation No. 2024/573,** is called **F-Gas**:

- Defines rules regarding containment, use, recovery and destruction of fluorinated greenhouse gases and related measures.
- Defines the conditions for introduce on the market certain products and equipment containing HFCs.
- Imposes conditions on certain specific uses of fluorinated greenhouse gases.
- Sets quantitative limits (quotas) for sell on the market HFCs.

This decree is for all companies that install, maintain and sell equipment containing refrigerant fluids, as well as those that handle and distribute them.

Prevention & restrictions

Prevention of fluorinated greenhouse gas emissions.

All equipment must be designed to prevent accidental discharge of greenhouse gas.
Technical measures are taken upstream to reduce leaks to a minimum.
The equipment must have a leak protection system that alerts the owner or a maintenance provider company in the event of leaks (see (EU) regulation No. 2024/573 specifying the leak monitoring methods).
The F-Gas recommendation on fluorinated fluids imposes:

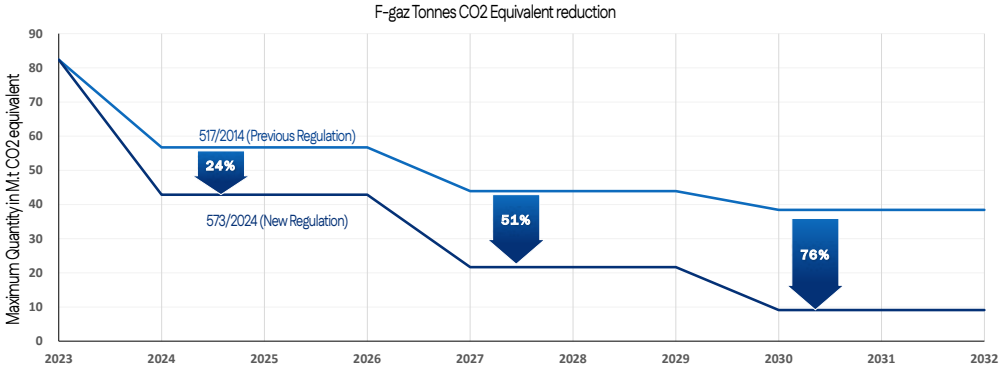
- Frequent inspections
- Qualification of companies and participants.

"Phase Down" quotas

The program calls for gradual reduction of the fluids available on the market from 2025 to 2050.

HFC quantities are reduced to 100% in 2050.

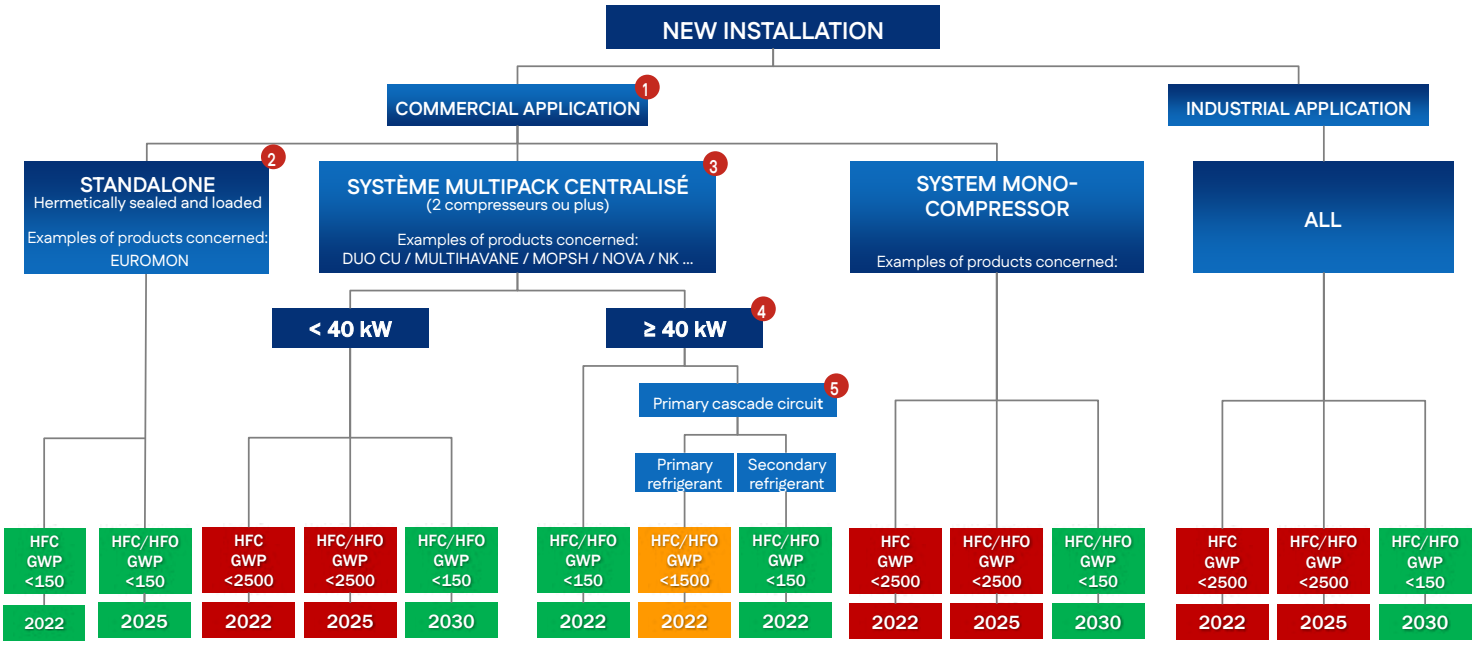
This restriction will require measures, such as regular leak inspection, along with certification and training of operators.

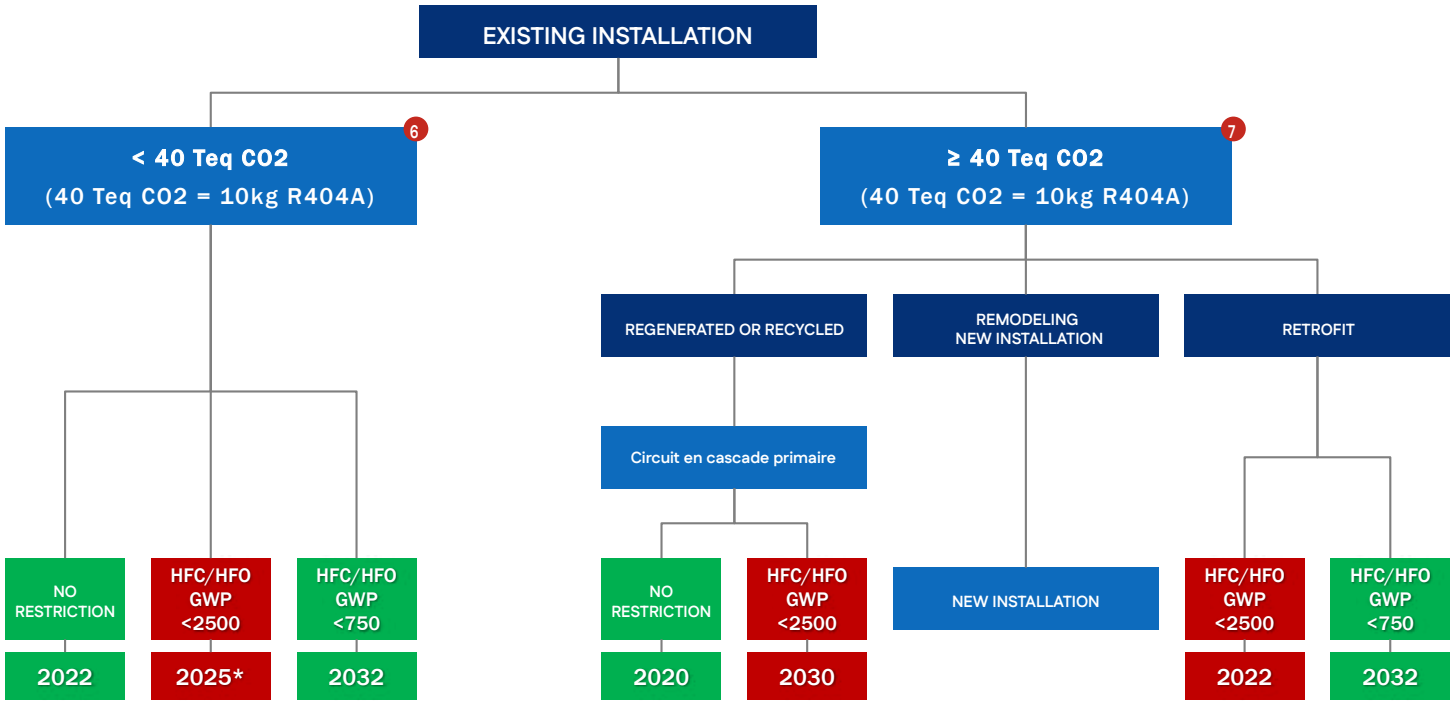


Usage restrictions for new equipment

New equipment is subject to application restrictions and HFC fluids to availability quotas.
All HFC fluids put on the market are classified according to Global Warming Potential (GWP).
The refrigeration and air conditioning products we are selling are affected by the following dates:

Fluids	R507A	R404A	R452A	R407A	R410A	R407F	R407C	R134a	R449A	R448A	R32	R513A	R450A	R454C	R455A	1234ze	1234yf	R290 (Propane)	R744 (CO_2)	R717 (NH_3)
GWP	2,500							1,500						150						
	3985	3922	2139	2107	2088	1825	1774	1430	1396	1385	675	629	601	146	145	1.37	0.5	3	1	0
Glide (K) to 40°C (Eurovent conditions)	0	0.3	3	4.5	0.1	4.5	5.1	0	4.5	4.8	0	0	0.6	6	11.4	0	0	0	0	0
Habitually used in positive refrigeration		X	X	X		X		X	X	X		X	X	X	X	X	X	X	X	X
Usually used in negative refrigeration		X	X	X		X			X	X				X	X		X	X	X	X





*excluding regenerated and recycled fluids < 2500 until 2030

1, 2, 3 cf. texte : Article 3 Définitions règlement F-Gaz (UE) N° 2024/573

1 "Commercial use": The use for the purpose of storage, display, or distribution of products in retail and catering, for sale to end users.

2 "Hermetically sealed equipment": Equipment in which all parts containing fluorinated greenhouse gases are made hermetic during the manufacturing process at the manufacturer's premises by welding, brazing, or similar techniques resulting in a permanent assembly. This equipment can include covered valves or outlets that allow for appropriate repair or disposal, and the sealed system joints have a leak rate tested to be less than 3 grams per year under a pressure of at least one-quarter of the maximum permissible pressure.
Autonomous: A complete factory-manufactured system that is housed in an appropriate frame or enclosure, made and transported as a single unit or in two or more sections, which may include isolation valves, and no part containing gas is connected on-site.

3 "Centralized multi-post refrigeration systems": Systems that include two or more compressors operating in parallel and connected to one or more condensers and various cooling devices such as display cases, cabinets, freezers, or cold rooms.

Centralized systems: Systems where the capacity to cool the entire store is produced centrally in one location, often in a separate machine room. Most of the refrigeration systems currently installed in larger supermarkets and hypermarkets are "centralized multi-post refrigeration systems." Condensing units may be affected if they fall under the definition of centralized multi-post systems.

4 Independent refrigeration circuits: If two completely independent refrigeration circuits separately guarantee medium temperature (MT) and low temperature (LT) in direct expansion systems, the prohibition applies only to either independent circuit if it alone exceeds the capacity threshold. If one of the refrigeration circuits can guarantee both MT and LT simultaneously, the sum of the capacities is relevant for calculating the system's capacity. Otherwise, the highest capacity is used to see if the 40 kW threshold is exceeded. For multifunctional systems, only refrigeration capacities are considered, not air conditioning or heating capacities.

5 Primary and secondary circuits in medium temperature: This definition implies the division of the medium temperature circuit into a primary circuit and a secondary circuit. However, a simple cascade with R134a in the primary circuit, which meets the medium temperature cooling requirements in a direct expansion system (DX system) and absorbs heat from a CO2 circuit for low temperature, is not covered by this definition.

It is important to note that the requirement set for 2022 does not allow for the presence of a simple cascade in the primary circuit, with, for example, HFC R134a (which has a global warming potential 1,430 times higher than CO2), which meets all medium temperature cooling requirements while absorbing heat from a CO2 circuit for low temperature. This requirement imposes that the medium temperature itself be divided into two circuits, where only the primary circuit would be allowed to use HFCs < 1,500, such as R134a.

6 Refer to text: F-Gas Regulation (EU) No 2024/573 Article 13 5.

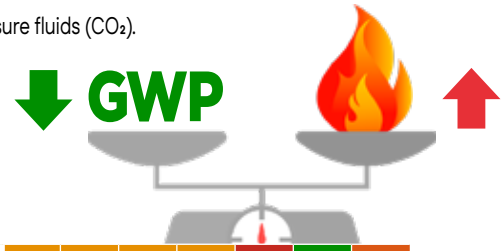
7 Refer to text: F-Gas Regulation (EU) No 2024/573 Article 13 3.

Safety group: Flammability/toxicity of fluids versus GWP

The F-Gas regulation reveals the reduction of strong GWP fluids, which orients us toward flammable or high-pressure fluids (CO_2).

In the future, it will be necessary to prepare for handling flammable or toxic fluids with low GWP.

A distinction is made between four fluid flammability groups and two toxicity groups:



	Nonflammable	Midly flammable	Flammable	Highly flammable
Low toxicity	A1	A2L*	A2	A3
High toxicity	B1	B2L	B2	B3

Refrigerants	R507A	R404A	R452A	R407A	R410A	R407F	R407C	R134a	R449A	R448A	R32	R513A	R450A	R454C	R455A	1234ze	1234yf	R290 (Propane)	R744 (CO_2)	R717 (NH_3)
GWP	3985	3922	2139	2107	2088	1825	1774	1430	1396	1385	675	629	601	146	145	1.37	0.5	3	1	0
Safety group	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A2L*	A1	A1	A2L*	A2L	A2L*	A2L*	A3	A1	B2

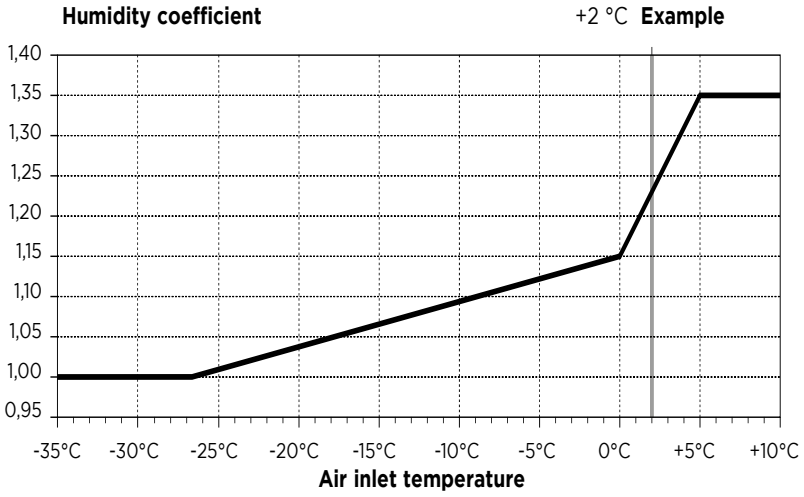
* The profession's trade unions are working with the various ministries concerned, to update the the standard (EN 378-1:2016+A1:2020) with A2L Refrigerants and local governments to take into account regulation for establishments open to the public.

Standard conditions

Standard conditions	t_{A1} Air inlet temp.	t_{em} Evaporating temp.	Standard DTM
SC 1	+10°C	0°C	10K
SC 2	0°C	- 8°C	8K
SC 3	-18°C	-25°C	7K
SC 4	-25°C	-31°C	6K
SC 5	-34°C	-40°C	6K

Humidity coefficient

Standard conditions	Relative humidity	Rated power / Standard power
SC 1	85%	1,35
SC 2	85%	1,15
SC 3	95%	1,05
SC 4	95%	1,01



Example

Or:

Desired power	Q = 6,000 W
Air inlet temperature	t_{A1} = +2 °C
Evaporating temperature	t_{em} = -8 °C
Refrigerant	R 22

hence:
DTM = tA1 - tem = (+2)-(-8) = 10K

To select under standard conditions,
the following correction coefficients should be applied:

- humidity coefficient	1.15/1.23 = 0.935
- correction coefficient of DTM	8/10 = 0.8
- refrigerant coefficient	1/0.95 = 1.05

Expressed under the standard conditions given,
the desired power of 6,000 W becomes:

6000 x 0,935 x 0,8 x 1,05 = 4712 W

Therefore we select a **3C-A 3245 L R448A**

Embedded equipment

Our machines are static. Included in a refrigeration system, they can be excited by motors, compressors, diesel generators, vehicles or other devices and be subjected to vibration.

It is the responsibility of the system's prime contractor to verify that the excitation frequencies cannot, under any circumstances, put the components in resonance, under penalty of inevitable breakage (especially in the case of an embedded system).

DTM correction coefficient

For refrigerants with low glide (less than 1K), or without glide, it is assumed that the power is directly proportional to the difference between the air inlet temperature and the evaporating temperature (DTM), namely:

$$\text{Desired power} = \frac{\text{Rated power x DTM desired}}{\text{Standard DTM}}$$

For more information, consult our software

Refrigerant coefficient

Standard conditions	R449A	R134a	R407A	R407C	R407F	R410A	R448A	R450A	R452A	R507A	R513A	R1234yf	R454C	R455A
SC 1	1	0,90	0,94	0,94	0,94	0,95	0,99	0,89	0,97	0,94	0,96	0,96	0,97	1,08
SC 2	1	0,89	0,95	0,95	0,94	0,96	0,99	0,87	0,99	0,95	0,95	0,96	0,93	1,08
SC 3	1	0,90	1,02	1,03	1,02	1,03	0,97	0,88	1,06	1,03	0,97	0,98	0,91	1,08
SC 4	1	-	1,02	1,04	1,04	1,04	0,95	0,83	1,07	1,04	0,91	0,93	0,88	1,06

C1 : Altitude coefficient

C1 = (1 - 0.000075 x H*) ***H** = Altitude in meters above sea level

C2 : DTM coefficient

DTM	8	9	10	11	12	13	14	15	16	17	18
C2	0,53	0,60	0,67	0,73	0,80	0,87	0,93	1	1,07	1,13	1,20

C3 : Ambient temperature coefficient $t_{A.1}$

$t_{1.1}$	15	20	25	30	35	40	45	50
C3	1,03	1,02	1	0,98	0,96	0,94	0,92	0,91

C4 : Refrigerant coefficient

		R449A	R134a	R407A	R407C	R407F	R410A	R448A	R450A	R452A	R507A	R513A
C4	DTM = 15K	1	0,92	1,01	1,01	1,01	0,98	1,01	0,89	0,97	0,93	0,92

Sound pressure correction according to number of fans

Fan	Nb	1	2	3	4	5	6	8	10	12
Correction	dB(A)	0	3	5	6	7	8	9	10	11

Sound pressure correction according to distance

Distance	m	5	6	8	10	12	16	32	64	128
Correction	dB(A)	+6	+4,5	+2	0	-1,5	-4	-10	-16	-22

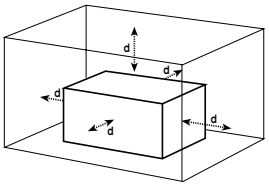
Noise levels

Noise level LpA:
The sound pressure Lp indicated in the specification tables was measured at 10 meters in a free field over a reflecting plane, in accordance with standard EN 13487 (parallelepiped reference surface). The relationship between sound pressure Lp and sound power Lw is given by the following formula:

$$LpA = LwA - 10 \log \frac{Si}{So}$$

Si = parallelepiped surface for d = 10 m
So = reference area 1 m^2

Only the sound power spectrum and the LwA value are contractually binding. For a distance other than 10 m, see the correction factors below. For an accurate calculation of the sound pressure on site, take into account the sound power of each fan and its position as well as the characteristics of the environment (directivity, reflections, etc.).



Selection

"**P**" = power at the condenser.

To determine a model, the application conditions must be brought into line with the selection conditions. To do this, divide the desired power "**P**" by the 5 coefficients below:

C1 altitude coefficient
C2 DTM coefficient
C3 ambient temperature coefficient
C4 refrigerant coefficient

according to the formula : $P1 = \frac{P}{C1 \times C2 \times C3 \times C4}$

Select a model from the table corresponding to the selected rotation speed and check that the noise level meets the required level. Where the selection can lead to an **L** or **P** model being selected, with no dimensional constraints, choose the most economical model. Similarly, to find out the power "**P**" of a module under conditions other than those in the documentation, apply the formula:

$$P = P1 \times (C1 \times C2 \times C3 \times C4)$$

Example

Desired power "**P**"	58 kW
Altitude	200 m
DTM	14 K
Ambient temperature	+30 °C
Refrigerant	R134a
Sound pressure at 5 m (parallelepiped measuring surface)	37 dB(A)

Or: **C1 = 0,99 - C2 = 0,93 - C3 = 0,98 - C4 = 0,92**

hence:

$$\frac{58}{0,99 \times 0,93 \times 0,98 \times 0,92} = 69,9 \text{ kW}$$

Basic noise level - Distance correction: **37 - 6 = 31 dB(A)**
Sound pressure at = 31 dB(A)

Note: if the noise level is very different, look for the appropriate model in the other tables.

FRIGA-BOHN®

EVB

Under-counter unit cooler
Commercial range

HFC

240 - 410 W

Compact design for perfect integration into bar counters.
Hygienic unit, with anti-corrosion components.
Easy maintenance: the EVB is fully accessible by removing the fan panel and the clip-on drain pan.

CASING

Robust, made of white pre-painted galvanized sheet steel and stainless steel fasteners.
ABS drain pan with rounded corners and no retention zone for perfect hygiene.

For easy installation, the casing and drain pan are reversible according to the constraints of the bar.

VENTILATION

Aluminium turbine.

COIL

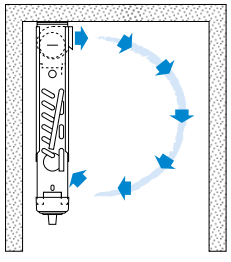
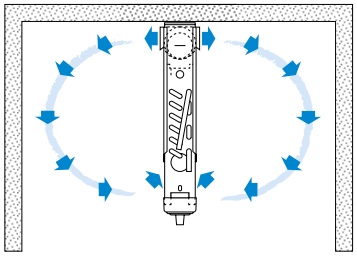
Coils completely covered with polyester protection as standard.
Low refrigerant volume: Ø 5/16" tubes.

DEFROST

OPTION	
E1K	Electric defrost. KIT TO INSTALL

INSTALLATION

For wall mounting, choose models M1, M2 and M3. They have a small footprint and provide excellent air distribution.
For central mounting, choose models C1 and C2. They ensure an optimized airflow as well as partitioning of the space into two parts.

M1 - M2 - M3	C1 - C2
	

EVB M(A) 1(B)

(A) **M** = wall mounting
C = central mounting
(B) Model

The EVB is available with HFCs. For more information, please consult our software.

EVB

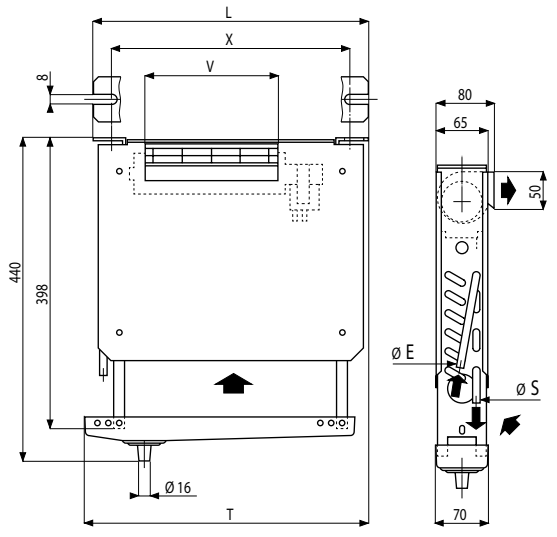
3.63 mm

CONDITIONS	REFRIGERANTS	EVB ...	M1	M2	M3	C1	C2
SC1	R449A	W	240	300	380	240	410
	R404A	W	240	320	380	240	410
Circuit volume		dm^3	0,3	0,3	0,4	0,3	0,4
Fan (1) 230V/1/50Hz 2,200 rpm Ø 45 mm	Airflow	m^3/h	60	100	100	60	110
	Air throw (2)	m	3,5	3,5	3,5	2x 3,5	2x 3,5
		Num.	1	1	1	2	2
		W total	15	22	22	26	30
		A total	0,15	0,22	0,22	0,26	0,30
Electric defrost	230V/1/50Hz	W	210	210	290	210	290
Connections	Inlet	Ø E	5/16"	5/16"	5/16"	5/16"	5/16"
	Outlet	Ø S	5/16"	5/16"	5/16"	5/16"	5/16"
Net weight		kg	4	4	5	5	6

(1) Motor, class B, long life bearings.
(2) When the section of the room allows air circulation.

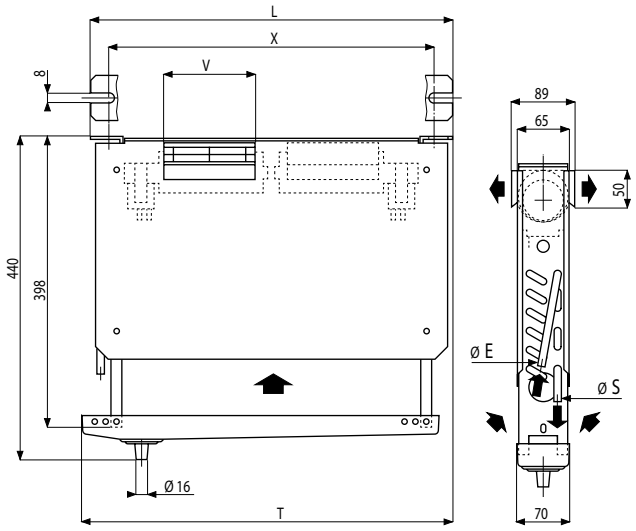
R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

M1 - M2 - M3



		M1	M2	M3
L	mm	370	370	490
X	mm	340	340	460
T	mm	386	386	506
V	mm	120	180	180

C1 - C2



		C1	C2
L	mm	370	490
X	mm	340	460
T	mm	386	506
V	mm	60	120

NOTES

FRIGA-BOHN®

XR

Ceiling or wall-mounted unit cooler
Commercial range

HFC

370 - 1050 kW

Compact design and **ceiling or wall mounting possible** for perfect integration in small spaces and optimization of the storage area.

"Keyhole" fixing and drilling template printed on the cardboard packaging to **save installation time**.

Access to all components from the front for **easy maintenance**.

COILS

Aluminium fins with 4.23 mm spacing and sinusoidal profile.
Combined with copper tubes with a grooved internal structure, the coils are very efficient and compact.
Coils completely covered with polyester protection as standard.

Ceiling mounting

CASING

Galvanized sheet steel and plastic drain pan, white colour.
Intermediate drain pan for ceiling mounting, limiting water condensation.

VENTILATION

Single-phase motor fans, 230 V, 50-60 Hz, Ø 200 mm, protected by an enclosed casing, delivered with cable 3 x 0.75 mm² length 1 m:
  - 4P / 1,500 rpm (low noise level).
  - 2P / 3,000 rpm, motor with built-in thermal protection (high performance).

Wall mounting

ADVANTAGES

"Keyhole" fixing requiring only one operator.
Drilling template printed on the cardboard packaging.
8 pre-cut holes for the tubes and cables.
Factory delivered for ceiling mounting, simple conversion for wall mounting.
4 possible drain tube positions with ceiling mounting (2 with wall mounting) to offer the user the maximum available volume.
Access to all components from the front.

DEFROST

OPTION	
E1K	Electric defrost. KIT TO INSTALL

*(1) **ATTENTION** use SC3 for ceiling mounting only: E1K kit must be mounted.*

XR(A) 60(B)

(A) Ceiling or wall-mounted unit cooler
(B) Model

The XR is available with HFCs. For more information, please consult our software.

XR — **4.23** mm

CONDITIONS	REFRIGERANTS	XR ...	60	72	80	85	90	100	105	122
SC2	R449A	W	470	600	660	680	770	820	900	1050
	R404A	W	500	620	660	720	770	830	900	1030

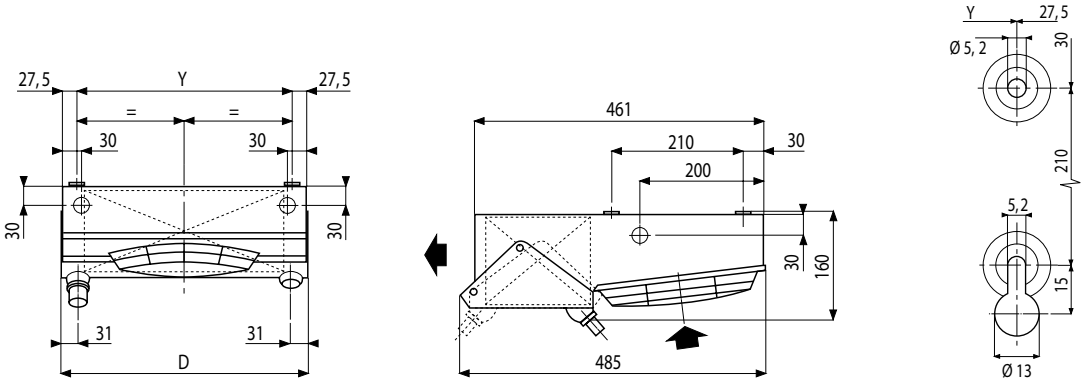
CONDITIONS	REFRIGERANTS	XR ...	60	72	80	85	90	100	105	122
SC3	R449A	W	370	490	560	570	650	670	730	870
	R404A	W	440	550	580	640	680	730	780	900

			60	72	80	85	90	100	105	122
Surface area		m^2	1,5	2,0	2,5	2,0	3,0	2,5	3,0	3,8
Circuit volume		dm^3	0,3	0,3	0,4	0,3	0,5	0,4	0,5	0,7
Fan 230V/1/50-60 Hz Ø 200 mm	Airflow	m^3/h	270	250	230	440	360	410	500	480
	Air throw (2)	m	2,5	2,0	2,0	3,0	2,0	3,0	2,5	2,5
		Nb	1	1	1	1	1	1	1	1
		tr/min	1500	1500	1500	3000	1500	3000	3000	3000
	230V/1/50Hz	W total	43	43	43	80	43	80	80	80
		A total	0,25	0,25	0,25	0,50	0,25	0,50	0,50	0,50
Electric defrost **E1K** (3)		Nb	1	1	1	1	1	1	1	1
	230V/1/50Hz	W total	400	400	400	400	600	400	600	600
		A total	1,8	1,8	1,8	1,8	2,7	1,8	2,7	2,7
Connections	Inlet (4)	Ø ODF	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
			10mm	10mm	10mm	10mm	10mm	10mm	10mm	10mm
	Outlet (4)	Ø ODF	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
			10mm	10mm	10mm	10mm	10mm	10mm	10mm	10mm
Net weight		kg	7	8	8	8	10	8	10	10

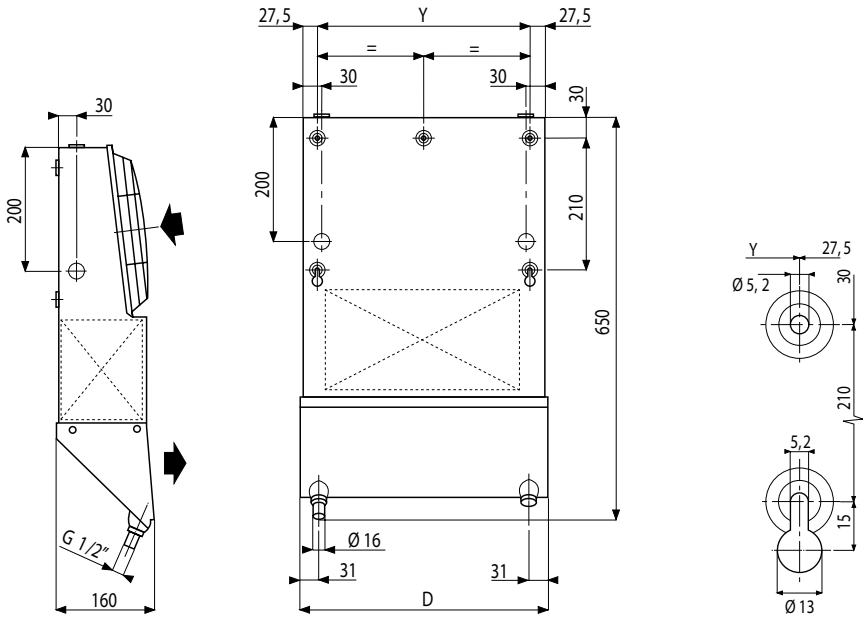
(1) Standard conditions:
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
SC3 / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K
(2) When the section allows air circulation (see CECOMAF GT 6001, DIN8955, ENV328).
(3) ATTENTION use SC3 for ceiling mounting only: E1K kit must be mounted.
(4) ODF: female to receive the tube of the same diameter.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

XR | Ceiling mounting



XR | Wall mounting



XR

XR ...

4.23 mm

		60	72	80	85	90	100	105	122
D	**mm**	399	399	399	399	560	399	560	560
Y	**mm**	330	330	330	330	485	330	485	485

FRIGA-BOHN®

MF | MFE

Ceiling unit cooler
Commercial range

HFC

ABS

140 - 790 W

Certificate of conformity cetim "Hygiene & Security"

Save time during installation with the motor wired onto the terminal block as standard.
Compact and **streamlined** design for perfect integration in small spaces and optimization of the storage area.
Casing can be fully removed for **easy maintenance**.
Direct access to all components on the upper plate **facilitating maintenance operations**.

CASING

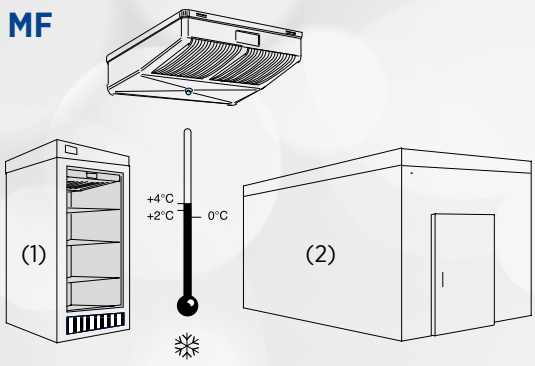
Recyclable ABS casing, guaranteeing:
High resistance to thermal and mechanical shocks.
Perfect hygiene as a result of the rounded corners that eliminate retention zones.
No sharp edges for increased safety.

OPTION

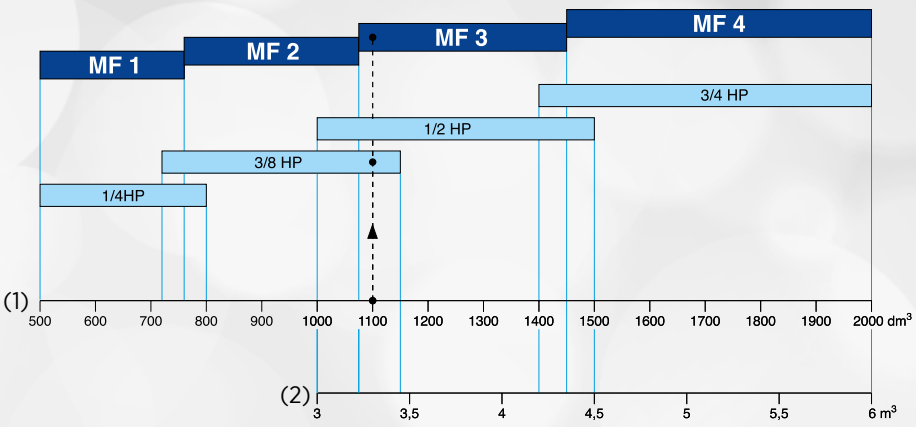
EMA

Wall kit available on MF1 and MF2. KIT TO INSTALL
(Do not use on MFE1 and MFE2)

MF



(1) Heavy duty cabinet.
(2) Standard cold room



Example: Heavy duty cabinet - Volume: 1,100 dm³ - temperature +2 °C
Selection: **MF 3** (and 3/8 HP compressor).

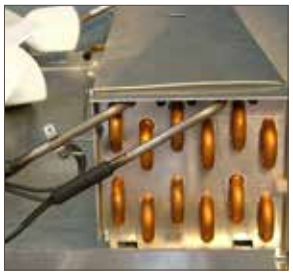
VENTILATION

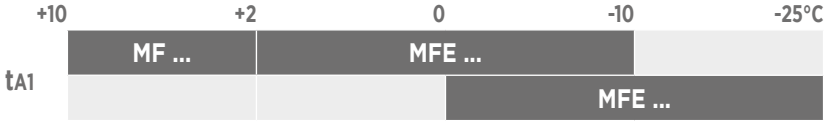
4-pole motor(s), polypropylene blade.
Corrosion resistant blade and grille.

Select your coil treatment to extend your unit cooler's lifespan! Contact us.

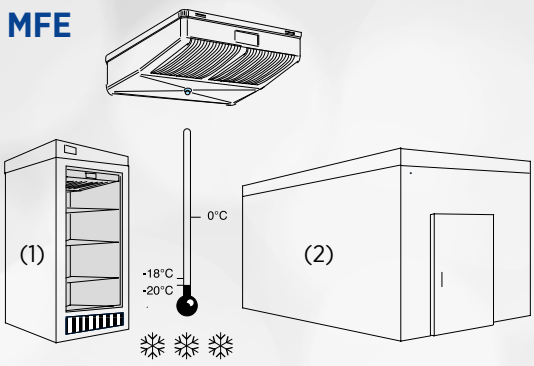
COILS

Aluminium fins with 4.23 mm spacing and sinusoidal profile.
Combined with copper tubes with a grooved internal structure, the coils are very efficient and compact.
Completely covered with polyester protection as standard.
Low refrigerant volume.

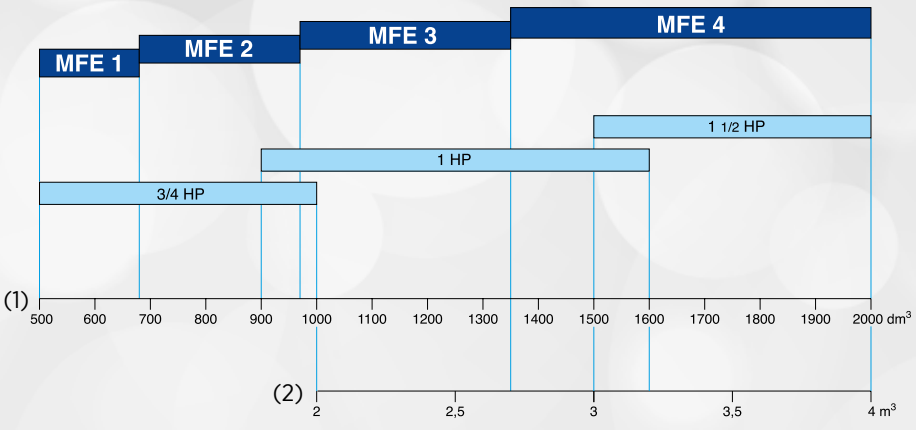




MFE



(1) Heavy duty cabinet.
(2) Standard cold room



Data provided for information purposes only.

MF (A) 1 (B)

(A) **MF** = positive temperature without defrost
MFE = negative temperature with defrost
(B) Number of fans

> **The MF | MFE is available with HFCs. For more information, please consult our software.**

MF | MFE

4.23 mm

CONDITIONS	REFRIGERANTS	MF ...	1	2	3	4
SC2 (1)	**R449A**	**W**	**300**	**380**	**740**	**790**
	R404A	**W**	**350**	**400**	**750**	**790**

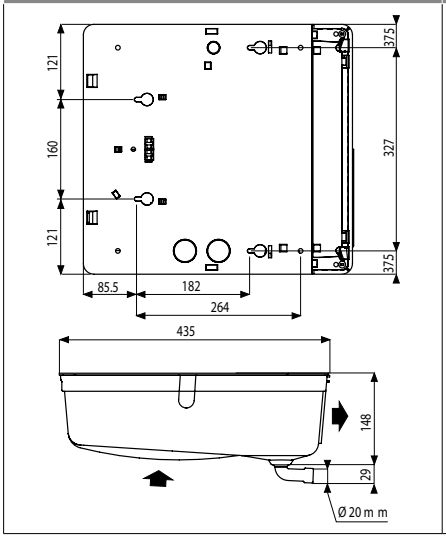
CONDITIONS	REFRIGERANTS	MFE ...	1	2	3	4
SC3 (1)	**R449A**	**W**	**220**	**270**	**520**	**600**
	R404A	**W**	**270**	**320**	**580**	**640**
SC4 (1)	**R449A**	**W**	**140**	**200**	**380**	**400**
	R404A	**W**	**190**	**240**	**430**	**450**
Electric defrost	230V/1/50 Hz	**W**	140	160	330	330
		A	0.64	0.73	1.5	1.5

			1	2	3	4
Surface area		**m^2**	1,1	1,4	2,3	2,8
Circuit volume		**dm^3**	0,2	0,3	0,5	0,6
Fan (3) 230V/1/50-60Hz Ø 200 mm 1,500 rpm	Airflow	**m^3/h**	270	250	460	430
	Air throw (2)	**m**	3,5	3,0	6,0	5,5
	230 V/1/50 Hz	**Num.**	1	1	2	2
		W total	38	38	76	76
		A total	0,33	0,33	0,66	0,66
Connections	Inlet	**Ø ODF**	5/16"	5/16"	5/16"	5/16"
	Outlet	**Ø ODF**	5/16"	5/16"	5/16"	5/16"
Net Weight		**kg**	4	4	8	9

(1) Standard conditions:
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
SC3 / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K
SC4 / -25 °C (air inlet temp.) / -31 °C (evaporating temp.) / DT1 = 6K
(2) When the section of the room allows air circulation.
(3) Closed motor, class B, protected by its impedance, long-lasting lubrication.

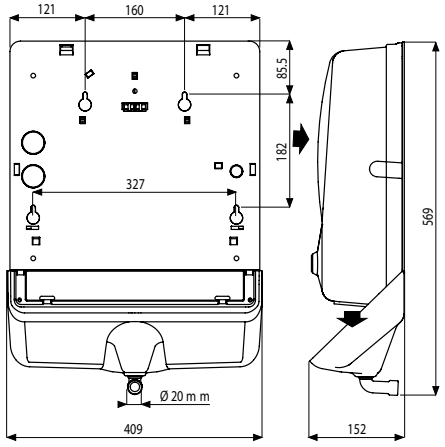
R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

MF 1-2 | MFE 1-2

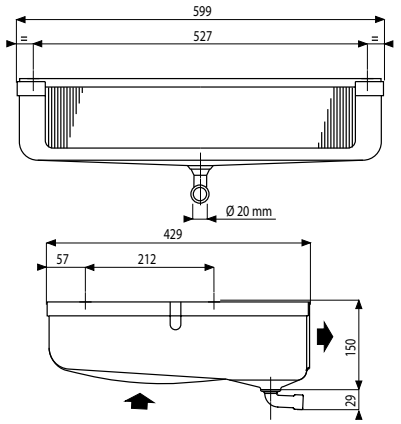


MF 1-2 - EMA kit

Wall mounting with **EMA** kit for **MF 1-2**



MF 3-4 | MFE 3-4



FRIGA-BOHN®

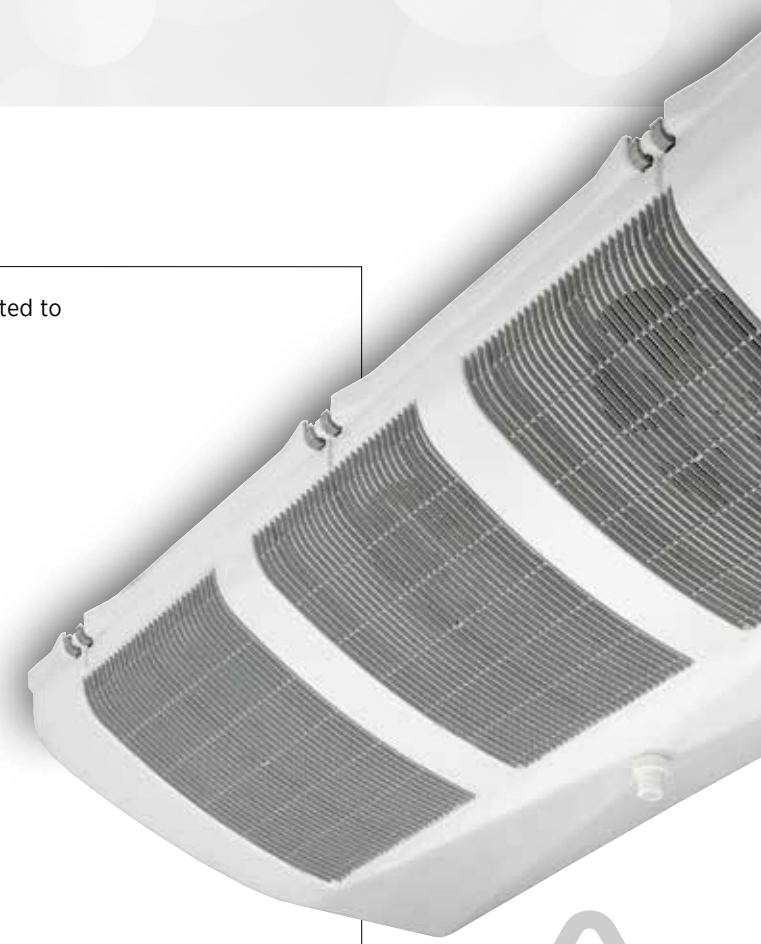
MR | MRE

Ceiling unit cooler
Commercial range

CO2 60bar | CO2 80bar | A2L | WG | HFC

320 - 2760 W

Compact and **streamlined design** for perfect integration in small spaces and optimization of the storage area.
Easy installation and **maintenance** with easy access to all components.
Harmonious integration into the environment thanks to the aesthetic design.
Robust unit with polyester coil protection.



VENTILATION

Motor fan 50-60 Hz, Ø 200 mm, protected by a closed casing, connected to terminal box (except MR 75/65).

CASING

Recyclable ABS casing, guaranteeing:
High resistance to thermal and mechanical shocks.
Perfect hygiene as a result of the rounded corners that eliminate retention zones.
No sharp edges for increased safety.

OPTIONS	
DMP	Expansion valve fitted
EEC	Unit cooler completely assembled in the factory with: - Expansion valve - Solenoid valve - Pipework equipped with a ball valve (role of the siphon performed by the manifold).

Save time during installation by choosing these additional options.

DEFROST

Electric heater in a notch under the coil, helping to dissipate heat evenly.
Recovery of condensate through an intermediate drain pan before evacuation to the large condensate connection (Ø 1" G).

OPTIONS	
THD (MRE)	For cold rooms at negative temperatures, single pole reversing thermostat for defrost end at +12 °C (±3 K) and delayed ventilation restart at +2 °C (±3 K). Supplied with a probe and a fixing bracket.
E1U	Light electric defrost.
E1K	Light electric defrost. KIT TO INSTALL

Select your coil treatment to extend your unit cooler's lifespan! Contact us.

COILS

Aluminium fins with 4.23 or 6.35 mm spacing and sinusoidal profile.
Combined with copper tubes with a grooved internal structure, the coils are very efficient and compact.
Completely covered with polyester protection as standard.
Versions available:
- Multi-refrigerant HFCs/A2L,
- CO2 (60 or 80 bar).
- WCO (glycol water, coolant).

MR(A) 75(B) R(C)

(A) **MR** = positive temperature without defrost
MRE = negative temperature with defrost
(B) Model
(C) Fin spacing: **R** = 4.23 mm (positive) **E** = 4.23 mm (negative)
L = 6.35 mm (positive) **C** = 6.35 mm (negative)

The MR | MRE is available with CO_2, A2Ls, HFCs and glycol water. For more information, please consult our software.

MR | MRE

4.23 mm

CONDITIONS	REFRIGERANTS	MR ... R	75	110	135	160	180	210	270
SC2 (1)	**CO_2 - 60 bar** (2)	**W**	600	930	1240	1440	1740	1970	2630
	R449A	**W**	700	1060	1340	1600	1920	2170	2760
	R455A	**W**	610	890	1210	1300	1660	1970	2530
	R454C	**W**	580	080	1150	1280	1620	1900	2470
	R1234YF	**W**	720	1070	1200	1550	1860	1980	2390
	R404A*	**W**	680	1070	1270	1550	1860	2060	2620
Connections **HFCs**	Inlet (3)	**Ø ODF**	1/2" 12mm	1/2" 12mm	1/2" 12mm	D 1/2" *	D 1/2" *	D 1/2" *	D 1/2" *
	Outlet (3)	**Ø ODF**	3/8" 10mm	3/8" 10mm	3/8" 10mm	1/2" 12mm	1/2" 12mm	1/2" 12mm	1/2" 12mm

CONDITIONS	REFRIGERANTS	MRE ... E	75	110	135	160	180	210	270
SC3 (1)	**CO_2 - 60 bar** (2)	**W**	510	800	1060	1210	1470	1650	2190
	R449A	**W**	520	770	1050	1190	1420	1660	2230
	R455A	**W**	450	660	900	960	1230	1430	1940
	R454C	**W**	420	610	850	930	1170	1360	1850
	R1234YF	**W**	510	720	1060	1090	1300	1610	2220
	R404A*	**W**	530	820	1070	1210	1440	1660	2230
SC4 (1)	**CO_2 - 60 bar** (2)	**W**	410	640	860	990	1200	1350	1790
	R449A	**W**	410	580	830	940	1120	1310	1780
	R455A	**W**	320	460	650	700	900	1060	1430
	R454C	**W**	310	450	620	690	880	1030	1400
	R1234YF	**W**	380	520	780	820	970	1240	1680
	R404A*	**W**	420	640	840	960	1140	1320	1780
Connections **HFCs**	Inlet (3)	**Ø ODF**	1/2" 12mm	1/2" 12mm	D 1/2" *	D 1/2" *	D 1/2" *	D 1/2" *	D 1/2" *
	Outlet (3)	**Ø ODF**	3/8" 10mm	3/8" 10mm	1/2" 12mm	1/2" 12mm	1/2" 12mm	5/8" 16mm	3/4" 18mm

			75	110	135	160	180	210	270
Surface area		**m^2**	3,4	3,7	6,1	6,0	8,0	10,1	13,4
Circuit volume		**dm^3**	0,6	0,6	1,0	1,0	1,4	1,7	2,3
Airflow		**m^3/h**	290	650	580	880	880	870	1160
Fan 230V/1/50-60Hz 1,500 rpm	Air throw (4)	**m**	3,0	3,7	3,5	4,1	4,1	4,0	4,5
	Ø 200 mm	**Nb**	1	2	2	3	3	3	4
	230 V/1/50 Hz	**W max**	38	76	76	114	114	114	152
		A max (5)	0,24	0,48	0,48	0,72	0,72	0,72	0,96
Electric defr. **MR** > option **E1K** **MRE** > standard	230 V/1/50 Hz	**Nb**	1	1	1	1	1	1	1
		W	400	440	730	960	960	1200	1600
		A	1,8	2,0	3,3	4,4	4,4	5,5	7,3
Net weight		**kg**	3	8	10	15	15	15	20

(1) Standard conditions:
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
SC3 / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K
SC4 / -25 °C (air inlet temp.) / -31 °C (evaporating temp.) / DT1 = 6K
(2) Operating pressure - Specific coil - Connection diameters to be defined when ordering.
(3) ODF: female to receive the tube of the same diameter.
(4) Residual air speed: 0.25 m/s.
(5) Adjustment of overload protection. For air temperatures "ti" other than +20 °C, multiply the intensities by the ratio 293/(273 + "ti") to obtain the approximate value of the intensity after the room has been brought up to temperature.

* Distributor: Ø 1/2" male to solder. Connecting piece supplied for solder expansion valve Ø 12 mm.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

MRE(A) 65(B) C(C)

(A) **MR** = positive temperature without defrost
MRE = negative temperature with defrost
(B) Model
(C) Fin spacing: **R** = 4.23 mm (positive) **E** = 4.23 mm (negative)
L = 6.35 mm (positive) **C** = 6.35 mm (negative)

The MR | MRE is available with CO_2, A2Ls, HFCs and glycol water. For more information, please consult our software.

MR | MRE

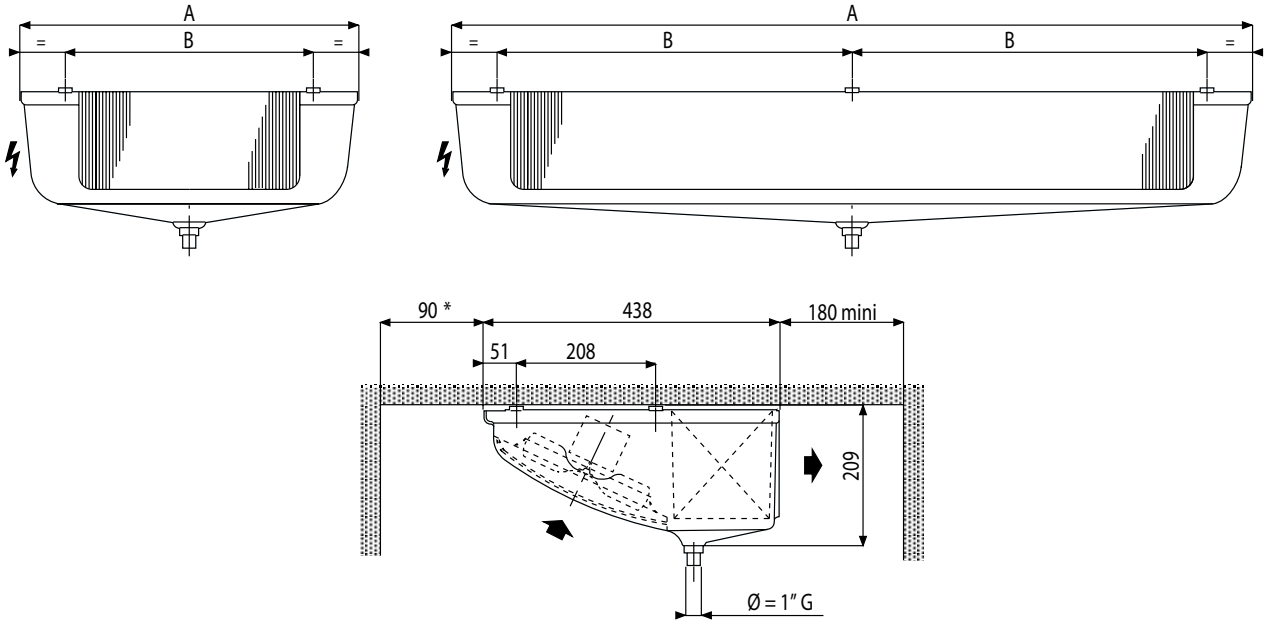
6.35 mm

CONDITIONS	REFRIGERANTS	MR ... L	65	100	120	140	170	190	250
SC2 (1)	CO_2 - **60 bar** (2)	W	540	780	1130	1290	1560	1780	2390
	CO_2 - **80 bar**	W	470	680	1010	-	1430	1640	2220
	R449A	W	620	880	1230	1380	1690	1940	2550
	R455A	W	520	720	1040	1110	1440	1660	2200
	R454C	W	530	740	1070	1120	1460	1700	2270
	R1234YF	W	660	900	1120	1380	1690	1840	2320
	R404A*	W	620	890	1180	1370	1680	1890	2440
Connections HFCs	Inlet (3)	Ø ODF	1/2" 12mm	1/2" 12mm	1/2" 12mm	D 1/2" *	D 1/2" *	D 1/2" *	D 1/2" *
	Outlet (3)	Ø ODF	3/8" 10mm	3/8" 10mm	3/8" 10mm	1/2" 12mm	1/2" 12mm	1/2" 12mm	1/2" 12mm
			65	100	120	140	170	190	250
SC3 (1)	CO_2 - **60 bar** (2)	W	460	670	960	1090	1320	1500	2000
	CO_2 - **80 bar**	W	410	590	870	-	1210	1390	1850
	R449A	W	450	610	900	1040	1260	1460	1950
	R455A	W	380	520	770	850	1080	1250	1690
	R454C	W	370	500	730	820	1040	1230	1630
	R1234YF	W	470	610	960	1020	1230	1510	2030
	R404A*	W	480	670	950	1080	1310	1510	2030
SC4 (1)	CO_2 - **60 bar** (2)	W	370	540	780	890	1080	1230	1640
	CO_2 - **80 bar**	W	320	450	690	-	970	1120	1480
	R449A	W	350	490	720	820	1000	1170	1590
	R455A	W	280	390	560	610	800	940	1280
	R454C	W	270	370	540	590	790	930	1250
	R1234YF	W	340	480	720	750	910	1150	1570
	R404A*	W	380	540	760	850	1040	1210	1630
Connections HFCs	Inlet (3)	Ø ODF	1/2" 12mm	1/2" 12mm	D 1/2" *	D 1/2" *	D 1/2" *	D 1/2" *	D 1/2" *
	Outlet (3)	Ø ODF	3/8" 10mm	3/8" 10mm	1/2" 12mm	1/2" 12mm	1/2" 12mm	5/8" 16mm	3/4" 18mm
			65	100	120	140	170	190	250
Surface area		m^2	2,3	2,5	4,2	4,2	5,6	7,0	9,3
Circuit volume		dm^3	0,6	0,6	1,0	1,0	1,4	1,7	2,3
Airflow		m^3/h	310	660	620	960	960	930	1240
Fan 230 V/1/50-60 Hz 1,500 rpm	Air throw (4)	m	3,0	3,7	3,5	4,1	4,1	4,0	4,5
	Ø 200 mm	Nb	1	2	2	3	3	3	4
	230 V/1/50 Hz	W max	38	76	76	114	114	114	152
		A max (5)	0,24	0,48	0,48	0,72	0,72	0,72	0,96
Electric defr. MR > option **E1K** MRE > standard	230 V/1/50 Hz	Nb	1	1	1	1	1	1	1
		W	400	440	730	960	960	1200	1600
		A	1,8	2,0	3,3	4,4	4,4	5,5	7,3
Net weight (6)		kg	3	8	10	15	15	15	20

(1) Standard conditions:
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
SC3 / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K
SC4 / -25 °C (air inlet temp.) / -31 °C (evaporating temp.) / DT1 = 6K
(2) Operating pressure - Specific coil - Connection diameters to be defined when ordering.
(3) ODF: female to receive the tube of the same diameter.
(4) Residual air speed: 0.25 m/s.
(5) Adjustment of overload protection. For air temperatures "ti" other than +20 °C, multiply the intensities by the ratio 293/(273 + "ti") to obtain the approximate value of the intensity after the room has been brought up to temperature.
(6) Standard net weight - Specific net weight for CO2 80 bar: contact us.

* Distributor: Ø 1/2" male to solder. Connecting piece supplied for solder expansion valve Ø 12 mm.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).



* 90 min.: Casing swivel - 160 min.: Casing removal

MR

MR ... R

4.23 mm

		75	110	135	160	180	210	270
A	**mm**	514	784	784	1174	1174	1174	1504
B	**mm**	326	596	596	493	493	493	658

MR ... L

6.35 mm

		65	100	120	140	170	190	250
A	**mm**	514	784	784	1174	1174	1174	1504
B	**mm**	326	596	596	493	493	493	658

MRE

MRE ... E

4.23 mm

		75	110	135	160	180	210	270
A	**mm**	514	784	784	1174	1174	1174	1504
B	**mm**	326	596	596	493	493	493	658

MRE ... C

6.35 mm

		65	100	120	140	170	190	250
A	**mm**	514	784	784	1174	1174	1174	1504
B	**mm**	326	596	596	493	493	493	658

FRIGA-BOHN®

MH | MHE

Ceiling unit cooler
Commercial range

A2L | CO2 60bar | WG | HFC

1310 - 7390 W

Compact and **streamlined** design for perfect integration in small spaces and optimization of the storage area.
Excellent air distribution.
Easy access to all components **facilitating maintenance operations**.

CASING

Mounted on hinges, allowing easy access to all components (coil, motor fans, defrost heaters, connections, etc.).
Easy to clean: sheet steel, fully pre-painted white.

VENTILATION

Factory-wired axial motor fans (Ø 300 mm).

OPTIONS	
MM6	Motor fan 230V/1/60. CONTACT US
EP	EC motor (electronic commutation) 2 speeds.

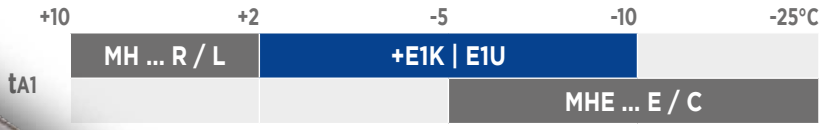
Save time during installation by choosing these additional options.

OPTIONS	
DMP	Expansion valve fitted.
EEC	Unit cooler completely assembled in the factory with: - Expansion valve. - Solenoid valve. - Pipework equipped with a ball valve (role of the siphon performed by the manifold).

DEFROST

Shielded electrical heaters housed in notches on the front and back of the coil.
Homogeneous heat dissipation thanks to an electrical heater under the coil.
Defrost heaters connected in the factory, on the terminal box (MHE range only).
Power supply 230V single phase for models MHE 320E, 380E and 250C, 310C.
400V three-phase power supply for models MHE 460E, 550E, 640E, 770E and 370C, 450C, 510C, 630C.

OPTIONS	
THD (MHE)	For cold rooms at negative temperatures, single pole reversing thermostat for defrost end at +12 °C (±3 K) and delayed ventilation restart at +2 °C (±3 K). Supplied with a probe and a fixing bracket.
E1U	Light electric defrost.
E1K	Light electric defrost (kit to install).



Select your coil treatment to extend your unit cooler's lifespan! Contact us.

COILS

Aluminium fins with 4.23 or 6.35 mm spacing.
Combined with copper tubes with a grooved internal structure, the coils are very efficient and compact.
Versions available:
- Multi-refrigerant HFCs.
- CO_2 (60 bar).
- WCO (glycol water, coolant). CONTACT US

MH(A) 320(B) R(C)

(A) **MH** = positive temperature without defrost
MHE = negative temperature with defrost
(B) Model
(C) Fin spacing: **R** = 4.23 mm (positive) **E** = 4.23 mm (negative)
L = 6.35 mm (positive) **C** = 6.35 mm (negative)

The MH | MHE is available with CO_2, A2Ls, HFCs and glycol water. For more information, please consult our software.

MH | MHE — 4.23 mm

CONDITIONS	REFRIGERANTS	MH ... R	320	380	460	550	640	770
SC2 (1)	CO_2 - **60 bar** (2)	W	3210	3670	4770	5300	6130	7390
	R449A	W	2860	3420	4460	5230	6040	7060
	R455A	W	2380	2910	-	-	-	-
	R454C	W	2340	2840	-	-	-	-
	R1234yf	W	2920	3500	-	-	-	-
	R404A*	W	2880	3400	4370	5050	6020	6940

CONDITIONS	REFRIGERANTS	MHE ... E	320	380	460	550	640	770
SC3 (1)	CO_2 - **60 bar** (2)	W	2670	3000	3840	4160	5370	6070
	R449A	W	2090	2480	2970	3820	4180	5040
	R455A	W	1,74	2,09	-	-	-	-
	R454C	W	1,66	2,00	-	-	-	-
	R1234yf	W	2,07	2,42	-	-	-	-
	R404A*	W	2230	2590	3120	3910	4440	5220
SC4 (1)	CO_2 - **60 bar** (2)	W	2150	2430	3080	3310	4340	4920
	R449A	W	1630	1970	2270	3020	3290	3990
	R455A	W	1240	1530	-	-	-	-
	R454C	W	1200	1490	-	-	-	-
	R1234yf	W	1470	1860	-	-	-	-
	R404A*	W	1760	2070	2430	3130	3510	4160

			320	380	460	550	640	770
Surface area		m^2	9,7	13,0	14,6	19,5	19,6	26,2
Circuit volume		dm^3	1,7	2,2	2,5	3,3	3,4	4,5
airflow		m^3/h	2290	2070	3430	3110	4600	4160
Fan 230 V/1/50-60 Hz 1,500 rpm	Air throw (3)	**m**	16	16	16	16	16	16
	Ø 300 mm	**Nb**	2	2	3	3	4	4
	230 V/1/50 Hz	**W max**	234	234	351	351	468	468
		A max (4)	1,54	1,54	2,31	2,31	3,08	3,08
Electric defrost **MH** > **E1K** optional **MHE** > standard *	Coil	**Nb**	2	2	2	2	2	2
	Drain pan	**Nb**	1	1	1	1	1	1
		W total	1800	1800	2700	2700	3600	3600
	230 V/1/50Hz	**A total**	7,83 *	7,83 *	11,7	11,7	15,7	15,7
	400 V/3/50Hz	**A total**	-	-	3,9 *	3,9 *	5,2 *	5,2 *
Connections **HFCs**	Inlet (5)	**Ø ODF**	D 1/2"	D 1/2"	D 1/2"	D 1/2"	D 5/8"	D 5/8"
	Outlet (5)	**Ø ODF**	5/8"	5/8"	3/4"	3/4"	7/8"	7/8"
Net weight		**kg**	34	35	46	48	54	57

* Factory assembled (MHE)

(1) Standard conditions:
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
SC3 / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K
SC4 / -25 °C (air inlet temp.) / -31 °C (evaporating temp.) / DT1 = 6K
(2) Operating pressure - Specific coil - Connection diameters to be defined when ordering.
(3) Residual air speed: 0.25 m/s.
(4) Adjustment of overload protection. For air temperatures "ti" other than +20 °C, multiply the intensities by the ratio 293/(273 + "ti") to obtain the approximate value of the intensity after the room has been brought up to temperature.
(5) ODF: female to receive the tube of the same diameter.
R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

MHE(A) 250(B) C(C)

(A) **MH** = positive temperature without defrost
MHE = negative temperature with defrost
(B) Model
(C)Fin spacing: **R** = 4.23 mm (positive) **E** = 4.23 mm (negative)
L = 6.35 mm (positive) **C** = 6.35 mm (negative)

The MH | MHE is available with CO_2, A2Ls, HFCs and glycol water. For more information, please consult our software.

MH | MHE

6.35 mm

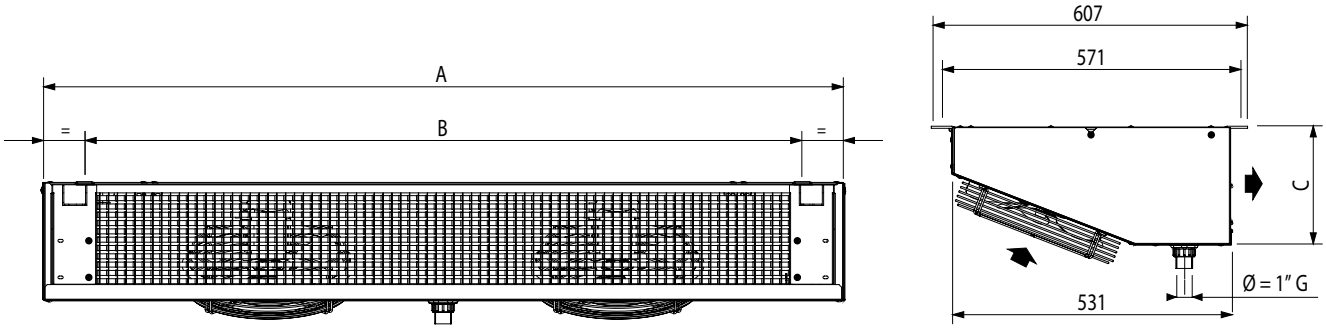
CONDITIONS	REFRIGERANTS	MH ... L	250	310	370	450	510	630
SC2 (1)	CO_2 - 60 bar (2)	W	2780	3320	4190	4860	5440	6690
	R449A	W	2280	2810	3520	4300	4670	5160
	R455A	W	1900	2380	-	-	-	-
	R454C	W	1880	2330	-	-	-	-
	R1234yf	W	2390	2940	-	-	-	-
	R404A*	W	2340	2850	3540	4270	4750	5180

CONDITIONS	REFRIGERANTS	MHE ... C	250	310	370	450	510	630
SC3 (1)	CO_2 - 60 bar (2)	W	2320	2740	3400	3850	4680	5520
	R449A	W	1650	2000	2450	3020	3360	4150
	R455A	W	1370	1690	-	-	-	-
	R454C	W	1340	1650	-	-	-	-
	R1234yf	W	1710	2090	-	-	-	-
	R404A*	W	1790	2140	2610	3180	3610	4400
SC4 (1)	CO_2 - 60 bar (2)	W	1880	2230	2750	3080	3800	4490
	R449A	W	1310	1590	1920	2500	2670	3320
	R455A	W	1020	1230	-	-	-	-
	R454C	W	1000	1210	-	-	-	-
	R1234yf	W	1290	1580	-	-	-	-
	R404A*	W	1440	1700	2060	2640	2890	3530

			250	310	370	450	510	630
Surface area		m^2	6,7	9,0	10,1	13,5	13,6	18,1
Circuit volume		dm^3	1,7	2,2	2,5	3,3	3,4	4,5
airflow		m^3/h	2450	2290	3680	3430	4920	4590
Fan 230 V/1/50-60 Hz 1,500 rpm	Air throw (3)	m	17	17	17	17	17	17
	Ø 300 mm	Nb	2	2	3	3	4	4
	230 V/1/50 Hz	W max	234	234	351	351	468	468
		A max (4)	1,54	1,54	2,31	2,31	3,08	3,08
Electric defrost MH > E1K optional MHE > standard *	Coil	Nb	2	2	2	2	2	2
	Drain pan	Nb	1	1	1	1	1	1
		W total	1800	1800	2700	2700	3600	3600
	230 V/1/50Hz	A total	7,83 *	7,83 *	11,7	11,7	15,7	15,7
	400 V/3/50Hz	A total	-	-	3,9 *	3,9 *	5,2 *	5,2 *
Connections HFCs	Inlet (5)	Ø ODF	D 1/2"	D 1/2"	D 1/2"	D 1/2"	D 5/8"	D 5/8"
	Outlet (5)	Ø ODF	5/8"	5/8"	3/4"	3/4"	7/8"	7/8"
Net weight		kg	34	35	46	48	54	57

(1) Standard conditions:
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
SC3 / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K
SC4 / -25 °C (air inlet temp.) / -31 °C (evaporating temp.) / DT1 = 6K
(2) Operating pressure - Specific coil - Connection diameters to be defined when ordering.
(3) Residual air speed: 0.25 m/s.
(4) Adjustment of overload protection. For air temperatures "ti" other than +20 °C, multiply the intensities by the ratio 293/(273 + "ti") to obtain the approximate value of the intensity after the room has been brought up to temperature.
(5) ODF: female to receive the tube of the same diameter.
R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

* Factory assembled (MHE)



MH

MH ... R

4.23 mm

		320	380	460	550	640	770
A	**mm**	1531	1531	2197	2197	2499	2499
B	**mm**	1372	1372	2038	2038	2340	2340
C	**mm**	228	228	228	228	260	260

MH ... L

6.35 mm

		250	310	370	450	510	630
A	**mm**	1531	1531	2197	2197	2499	2499
B	**mm**	1372	1372	2038	2038	2340	2340
C	**mm**	228	228	228	228	260	260

MHE

MHE ... E

4.23 mm

		320	380	460	550	640	770
A	**mm**	1531	1531	2197	2197	2499	2499
B	**mm**	1372	1372	2038	2038	2340	2340
C	**mm**	228	228	228	228	260	260

MHE ... C

6.35 mm

		250	310	370	450	510	630
A	**mm**	1531	1531	2197	2197	2499	2499
B	**mm**	1372	1372	2038	2038	2340	2340
C	**mm**	228	228	228	228	260	260

FRIGA-BOHN®

KRS | KRS-W

Refrigeration cassette
Commercial range

WG HFC

1.6 - 9.4 kW

Quiet operation ensured by anti-vibration mounts on the motor.
Adjustable airflow to ensure **occupant comfort**.
Access to all components **facilitating maintenance operations**.
Easy cleaning as a result of easy access to the washable filter, clipped on the diffuser.

ROOM

Made from galvanized sheet steel with double insulation: inside by a polystyrene shell, and outside by a thick layer of closed-cell insulating foam.

ABS

VENTILATION

6-speed centrifugal motor fans with high static pressure and high airflow performance.
3 speeds are factory pre-wired on each model. Three other intermediate speeds can be selected depending on the power and noise level requirements (see table on next page).
Single-phase motors, 230V, 50Hz, class B, with internal thermal protection.
The turbine blades, specially designed for this range, ensure high airflow rates while guaranteeing low noise levels.

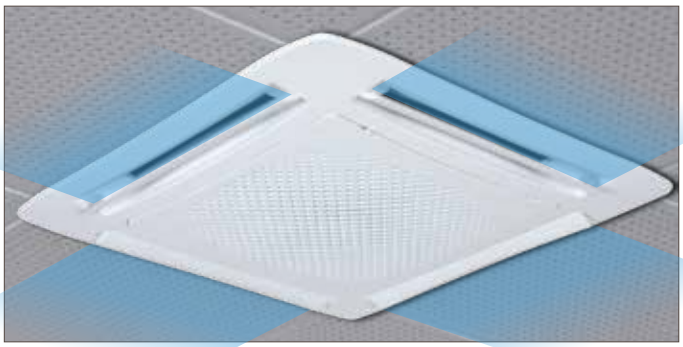
COILS

Aluminium fins crimped on copper tubes:

Aluminium fins	KRS	KRS-W
Spacing	2,81 mm	2.1 mm (KRS-W1) 1.81 mm (KRS-W2)
Epoxy protection	yes	no
Grooved copper tubes	yes	no

DIFFUSER

Aesthetically pleasing, it adapts perfectly to all environments.
Made of smooth white ABS and lined on the inside with insulation to prevent condensation.
Manually adjustable damper system that provides air diffusion in four directions.



CONDENSATE LIFT PUMP

Cassette delivered with a drain pan, a condensate lift pump and a float for starting the pump.
The maximum lift height is 650 mm from the pump level.

INSTALLATION | MAINTENANCE

1.

2.

3.

4.

KRS(A)-W(B) 1(C)

(A) Silent refrigeration cassette
(B) **KRS** = direct expansion **KRS-W** = glycol water
(C) **KRS 1** = room 600 x 600 mm
KRS 2 = room 800 x 800 mm

The KRS | KRS-W is available with HFCs and glycol water. For more information, please consult our software.

KRS | KRS-W

CONDITIONS	REFRIGERANT		KRS 1						KRS 2					
Motor speeds*			V1	-	-	V2	-	V3	V1	-	V2	-	-	V3
			ST	NC	NC	ST	NC	ST	ST	NC	ST	NC	NC	ST
		rpm.	400	540	600	700	820	1120	280	360	470	560	670	750
DT1 = 10K tA1 = 8 °C (1)	R449A	kW	1,7	2,2	2,3	2,6	3,0	3,5	3,7	4,4	5,4	6,0	6,5	7,0
	R404A	kW	1,5	2,0	2,1	2,4	2,7	3,3	3,3	4,0	4,9	5,5	6,1	6,6
DT1 = 12K tA1 = 12 °C (1)	R449A	kW	2,4	2,8	3,1	3,6	3,9	4,6	4,8	5,7	7,1	7,9	8,8	9,4
	R404A	kW	2,1	2,6	2,8	3,2	3,5	4,3	4,3	5,2	6,4	7,2	8,1	8,7
Connections	inlet	Ø OD	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
	outlet	Ø OD	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"

CONDITIONS	REFRIGERANT		KRS-W 1						KRS-W 2					
Motor speeds*			V1	-	-	V2	-	V3	V1	-	V2	-	-	V3
			ST	NC	NC	ST	NC	ST	ST	NC	ST	NC	NC	ST
		rpm.	400	540	600	700	820	1120	280	360	470	560	670	750
DT1 = 10K tA1 = 12 °C (2)	W	kW	1,6	1,9	2,1	2,3	2,5	2,8	3,3	3,9	4,5	4,8	5,1	5,2
Connections	inlet	Ø OD	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
	outlet	Ø OD	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"

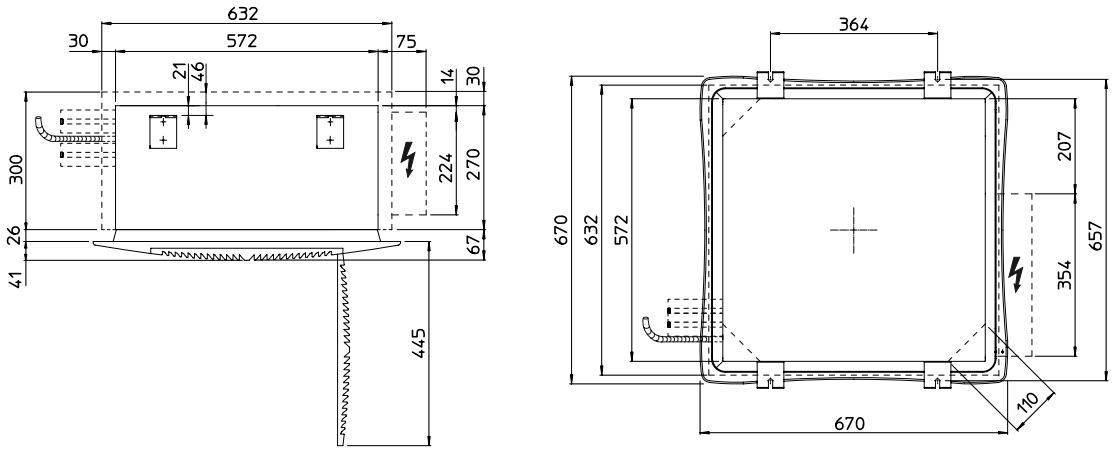
			KRS 1 | KRS-W 1						KRS 2 | KRS-W 2					
Airflow		m^3/h	300	410	450	530	620	850	700	900	1200	1400	1680	1880
Circuit tube vol.		dm^3	2	2	2	2	2	2	4	4	4	4	4	4
Acoustics	Lp (3)	dB(A)	26	33	35	38	42	49	25	31	37	41	44	47
	Lw(A)	dB(A)	40	47	49	52	56	63	39	45	51	55	58	61
Net weight	room + diffuser	kg	28	28	28	28	28	28	46	46	46	46	46	46

* **ST**: Motor speeds pre-wired as standard
NC: Intermediate motor speeds not wired (to choose a speed that is not wired, have the installer make the connection > see installation instructions).
KRS 1 : 1 fan 230V/1/50-60 Hz - 100 W max - 0.45 A max
KRS 2 : 1 fan 230V/1/50-60 Hz - 170 W max - 0.74 A max

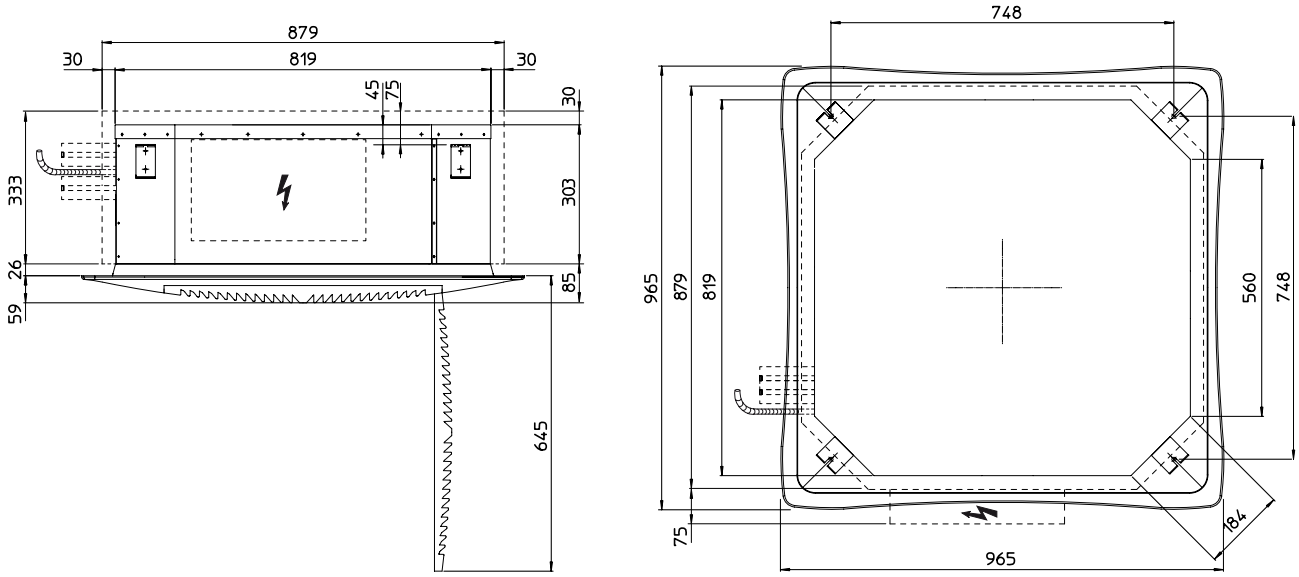
(1) **DX - Q0m - HR = 85%** - Evaporating temperature must not be below -3 °C.
(2) Glycol water regime (ethylene glycol 30%) = 0 / +4 °C.
(3) Sound pressure in dB(A) measured at 2 m, hemispherical measuring surface, in a free field over a reflecting plane, given as an indication only.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

KRS | KRS-W 1



KRS | KRS-W 2



NOTES

FRIGA-BOHN®

NTA

Dual-discharge unit cooler
Commercial range

A2L | CO2 60bar | CO2 80bar | WG | HFC

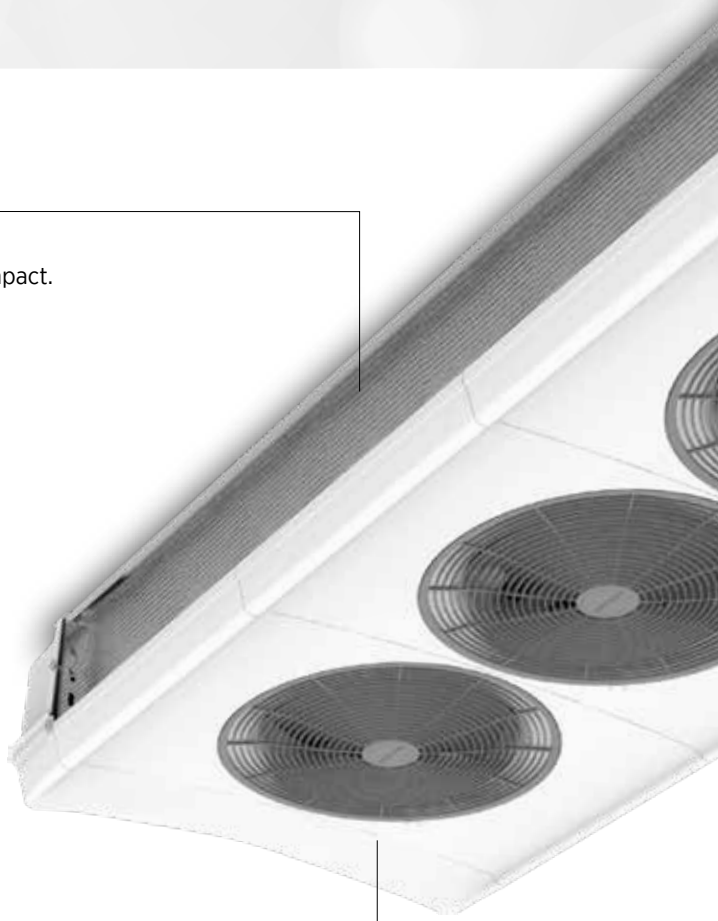
0.9 - 22 kW

Easy to install and use as a result of its compactness, making it perfect for small spaces.
Easy access to all components for **easy cleaning** and **maintenance**.
Comfort: the directional airflow, the low air speed and the low noise level of the NTA help to create a comfortable environment.
Energy efficiency: with optimized performance, new refrigerants and the EC option, the NTA leads to real energy savings.

COILS

Aluminium fins with 3.5 or 6 mm spacing.
Combined with grooved copper tubes, the coils are very efficient and compact.
Multi-refrigerant CO2, A2L and HFCs compatible coils.
Versions available:
- Multi-refrigerant HFCs/A2L,
- CO_2 (60 or 80 bar).
- WCO (glycol water, coolant).

Select your coil treatment to extend your unit cooler's lifespan! Contact us.



VENTILATION

Bell mounted electric fans Ø 350 mm.
The AC motor fans are of the closed, single-phase capacitor type, 230V/1/50-60Hz, IP 55, class F, with internal thermal protection.
Available in version (depending on acceptable noise level):
- HS (high speed) = 1,250 rpm. - 105 W max. / 0.5 A max.
- LS (low speed) = 850 rpm. - 74 W max. / 0.45 A max.

OPTIONS	
EC	EC motor fan - 4 speeds - 230V/1/50-60Hz.
EP	EC motor fan - 2 "boost" speeds (max air flow) - 230V/1/50-60Hz.
RCS	Blower heater. KIT TO INSTALL

CASING

Removable grille and retractable casing made from recyclable ABS.
High resistance to thermal shock.
Horizontal condensate drain plug 1"G with screw thread.
Perfect hygiene as a result of the rounded corners that eliminate retention areas and through the use of protected steel and stainless steel fastening screws.
Internal drain pans avoiding condensation on the casing.
Increased safety due to the absence of sharp edges.

OPTIONS	
AFD	Deflectors to direct the air flow.

ABS

DEFROST

OPTIONS	
E1U	Light electric defrost.
E1K	Light electric defrost. KIT TO INSTALL
2TH	**TH 5709L**: single-pole reversing thermostat for defrost end at +12 °C (±3 °C) and delayed ventilation restart at +2 °C (±3 °C) (kit to install). **THS 5708L**: single-pole safety thermostat for heaters at +24 °C (±3 °C), recommended with electric defrost (kit to install).

OPTIONS	
PRK	Condensate lift pump. KIT TO INSTALL
EXT	Electronic expansion valve fitted. CONTACT US
DMP	Expansion valve fitted.
EEC	Complete factory-assembled unit cooler: - Expansion valve. - Solenoid valve. - Pipework equipped with a fitted ball valve (role of the siphon performed by the manifold).
KVP	Pressostatic valve kit. KIT TO INSTALL

Save time during installation by choosing these additional options.

NTA M(A) OR(B) 1(C)-AC(D)

(A) **M** = multi-refrigerant - **C** = CO2 - **W** = glycol water
(B) Fin spacing: **R** = 3.5 mm - **L** = 6 mm
(C) Number of fans
(D) **AC** = AC motor - **EC** = EC4 motor - **EP** = EC3 motor

The NTA is available with CO_2, A2Ls, HFCs and glycol water. For more information, please consult our software.

NTA M .. R .. -AC / NTA C .. R .. -AC

3.5 mm

CONDITIONS	REFRIGERANTS	NTA ... -AC		0R 1	1R 1	2R 2	3R 2	4R 2	5R 3	6R 3	7R 4	8R 4	9R 5
SC1 (1)	CO_2 - 60 bar (2)	HS*	kW	2,7	4,0	5,3	7,1	8,3	10,7	13,1	15,7	16,3	18,6
		LS*	kW	2,1	3,0	4,2	5,5	6,2	8,3	9,9	12,2	12,6	14,8
	R449A	HS*	kW	2,4	3,8	5,0	6,7	7,9	9,9	12,9	16,1	17,7	21,6
		LS*	kW	2,0	2,9	4,1	5,3	6,1	7,9	9,8	12,3	13,3	16,3
	R404A	HS*	kW	2,4	3,7	5,0	6,7	7,6	9,6	12,1	15,3	16,7	20,3
		LS*	kW	2,0	2,8	4,0	5,2	5,8	7,6	9,2	11,7	12,5	15,3
SC2 (1)	CO_2 - 60 bar (2)	HS*	kW	1,9	2,8	3,7	4,9	5,7	7,4	8,9	10,6	10,9	12,1
		LS*	kW	1,5	2,1	2,9	3,8	4,4	5,8	6,8	8,3	8,5	9,8
	R449A	HS*	kW	1,6	2,5	3,3	4,5	5,3	6,5	8,4	10,7	11,8	14,2
		LS*	kW	1,3	2,0	2,7	3,6	4,1	5,3	6,5	8,3	8,9	10,9
	R404A	HS*	kW	1,6	2,4	3,2	4,4	5,0	6,3	8,0	10,2	11,2	13,4
		LS*	kW	1,3	1,9	2,7	3,5	3,9	5,1	6,2	7,8	8,4	10,4

		NTA ... -AC		0R 1	1R 1	2R 2	3R 2	4R 2	5R 3	6R 3	7R 4	8R 4	9R 5
Sound pressure	Lp 4 m (3)	HS*	dB(A)	38	38	41	41	41	42	42	44	44	44
		LS*	dB(A)	29	29	32	32	32	34	34	35	35	36
Fan Ø 350 mm			Nb	1	1	2	2	2	3	3	4	4	5
	Airflow	HS*	m^3/h	1630	1460	3250	3070	2920	4610	4180	5840	5570	6960
		LS*	m^3/h	1120	980	2230	2090	1970	3130	2810	3940	3740	4680
	Air throw (4)	HS*	m	2 x 14	2 x 12	2 x 14	2 x 13	2 x 12	2 x 13	2 x 12	2 x 12	2 x 12	2 x 12
		LS*	m	2 x 10	2 x 10	2 x 10	2 x 10	2 x 10	2 x 10	2 x 9	2 x 10	2 x 9	2 x 9
	230 V/1 50-60 Hz (5)	HS*	W max	125	125	250	250	250	375	375	500	500	625
		LS*	W max	74	74	148	148	148	222	222	296	296	370
		HS*	A max	0,60	0,60	1,20	1,20	1,20	1,80	1,80	2,40	2,40	3,00
		LS*	A max	0,52	0,52	1,04	1,04	1,04	1,56	1,56	2,08	2,08	2,60
Surface area			m^2	5,8	11,6	11,6	17,4	23,2	26,2	43,6	46,5	58,1	72,7
Circuit volume			dm^3	0,8	1,7	1,7	2,5	3,3	3,8	6,3	6,7	8,4	10,5
Electric defrost E1K (6)	230 V/1/50 Hz		W total	350	800	800	1200	1600	1800	3000	3200	3200	3440
			A total	1,5	3,5	3,5	5,2	7,0	7,8	13,0	13,9	13,9	14,8
Connections HFCs	Inlet (7)		Ø	3/8"	D 1/2"	D 1/2"	D 1/2"	D 1/2"	D 1/2"	D 1/2"	D 1/2"	D 5/8"	D 5/8"
	Outlet (7)		Ø ODF	3/8"	5/8"	5/8"	5/8"	5/8"	5/8"	7/8"	7/8"	1"1/8	1"1/8
Net weight			kg	18	20	27	30	32	42	49	59	63	77

* **HS** = high speed: 1,250 rpm / **LS** = low speed: 850 rpm

(1) Standard conditions:
SC1 : +10 °C (air inlet temp.) / 0 °C (evaporating temp.) / DT1 = 10K
SC2 : 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
(2) Operating pressure - Specific coil - Connection diameters to be defined when ordering.
(3) Average sound pressure level in dB(A) calculated at 4 m, level with the blades, in a free field over a reflecting plane, given as an indication only.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

NTA M(A) 0L(B) 1(C)-AC(D)

(A) **M** = multi-refrigerant - **C** = CO2 - **W** = glycol water
(B) Fin spacing: **R** = 3.5 mm - **L** = 6 mm
(C) Number of fans
(D) **AC** = AC motor - **EC** = EC4 motor - **EP** = EC3 motor

The NTA is available with CO_2, A2Ls, HFCs and glycol water. For more information, please consult our software.

NTA M .. L .. -AC / NTA C .. L .. -AC

6 mm

CONDITIONS	REFRIGERANTS	NTA ... -AC		0L 1	1L 1	2L 2	3L 2	4L 2	5L 3	6L 3	7L 4	9L 5
SC1 (1)	CO_2 - 60 bar (2)	HS*	kW	2,0	3,7	5,6	6,8	7,7	10,2	11,4	14,4	16,9
		LS*	kW	1,6	2,8	4,4	5,2	5,8	7,9	8,7	11,3	13,5
	CO_2 - 80 bar (2)	HS*	kW	1,7	3,3	4,9	6,1	-	-	-	-	-
		LS*	kW	1,4	2,5	3,9	4,7	-	-	-	-	-
	R449A	HS*	kW	1,7	3,3	4,7	5,9	6,8	8,7	10,3	13,3	17,3
		LS*	kW	1,4	2,6	3,8	4,7	5,4	7,0	8,0	10,4	13,4
	R404A	HS*	kW	1,8	3,2	4,5	5,9	6,6	8,4	10,0	12,7	16,8
		LS*	kW	1,4	2,5	3,7	4,6	5,1	6,8	7,8	10,0	13,0
SC2 (1)	CO_2 - 60 bar (2)	HS*	kW	1,4	2,6	3,9	4,7	5,3	7,0	7,8	9,7	11,1
		LS*	kW	1,1	2,0	3,0	3,6	4,1	5,5	6,0	7,7	9,1
	CO_2 - 80 bar (2)	HS*	kW	1,2	2,3	3,4	4,3	-	-	-	-	-
		LS*	kW	1,0	1,8	2,7	3,3	-	-	-	-	-
	R449A	HS*	kW	1,1	2,2	3,1	4,0	4,6	5,8	6,9	8,8	11,7
		LS*	kW	0,9	1,8	2,5	3,2	3,6	4,7	5,5	7,0	9,2
	R404A	HS*	kW	1,2	2,1	3,0	4,0	4,4	5,5	6,7	8,3	11,2
		LS*	kW	0,9	1,7	2,5	3,1	3,5	4,5	5,2	6,7	8,8

		NTA ... -AC		0L 1	1L 1	2L 2	3L 2	4L 2	5L 3	6L 3	7L 4	9L 5
Sound pressure	Lp 4 m (3)	HS*	dB(A)	38	38	41	41	41	42	42	44	44
		LS*	dB(A)	29	29	32	32	32	34	34	35	36
Fan Ø 350 mm			Nb	1	1	2	2	2	3	3	4	5
	Airflow	HS*	m^3/h	1700	1500	3250	3120	3010	4680	4520	6020	7520
		LS*	m^3/h	1170	1020	2230	2130	2040	3190	3060	4080	5100
	Air throw (4)	HS*	m	2 x 15	2 x 13	2 x 14	2 x 13	2 x 13	2 x 13	2 x 13	2 x 13	2 x 13
		LS*	m	2 x 11	2 x 10	2 x 10	2 x 10	2 x 10	2 x 10	2 x 10	2 x 10	2 x 10
	230 V/1 50-60 Hz (5)	HS*	W max	125	125	250	250	250	375	375	500	625
		LS*	W max	74	74	148	148	148	222	222	296	370
		HS*	A max	0,60	0,60	1,20	1,20	1,20	1,80	1,80	2,40	3,00
		LS*	A max	0,52	0,52	1,04	1,04	1,04	1,56	1,56	2,08	2,60
Surface area			m^2	3,5	8,9	10,6	14,2	17,7	21,3	26,6	35,5	44,3
Circuit volume			dm^3	0,8	2,1	2,5	3,3	4,2	5,0	6,3	8,4	10,5
Electric defrost E1K (6)	230 V/1/50 Hz		W total	350	800	800	1200	1600	1800	3000	3200	3440
			A total	1,5	3,5	3,5	5,2	7,0	7,8	13,0	13,9	14,8
Connections HFCs	Inlet (7)		Ø	3/8"	D 1/2"	D 1/2"	D 1/2"	D 1/2"	D 1/2"	D 1/2"	D 1/2"	D 5/8"
	Outlet (7)		Ø ODF	3/8"	5/8"	5/8"	5/8"	5/8"	5/8"	7/8"	7/8"	1"1/8
Net weight (8)			kg	18	20	29	31	33	44	47	60	73

* **HS** = high speed: 1250 rpm / **LS** = low speed: 850 rpm

(4) Residual air speed: 0.25 m/s.
(5) Adjustment of overload protection. For air temperatures "ti" other than +20 °C, multiply the intensities by the ratio 293/(273 + "ti") to obtain the approximate value of the intensity after heating the room.
(6) Electric defrost option.
(7) Distributor: male to solder - ODF: female to receive the tube of the same diameter.
(8) Standard net weight - Specific net weight For CO_2 80 bar: contact us.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

NTA M(A) OR(B) 1(C)EC(D)

(A) **M** = multi-refrigerant - **C** = CO2 - **W** = glycol water
(B) Fin spacing: **R** = 3.5 mm - **L** = 6 mm
(C) Number of fans
(D) **AC** = AC motor - **EC** = EC4 motor - **EP** = EC3 motor

> **The NTA is available with CO_2, A2Ls, HFCs and glycol water. For more information, please consult our software.**

NTA M .. R .. -AC / NTA C .. R .. -AC — 3.5 mm

CONDITIONS	REFRIGERANTS	NTA ... -EC		0L 1	1L 1	2L 2	3L 2	4L 2	5L 3	6L 3	7L 4	8R 4
SC1 (1)	R455A	V1	kW	2,09	3,38	4,36	5,83	6,94	8,79	11,75	14,19	15,83
		V2	kW	1,9	3	3,96	5,2	6,18	7,87	10,25	12,61	14,01
		V3	kW	1,78	2,78	3,69	4,81	5,75	7,36	9,53	11,57	12,69
		V4	kW	1,65	2,49	3,38	4,37	5,12	6,66	8,45	10,44	11,47
	R454C	V1	kW	2,03	3,24	4,25	5,68	6,76	8,49	11,39	13,86	15,42
		V2	kW	1,85	2,92	3,87	5,08	5,97	7,68	9,93	12,16	13,41
		V3	kW	1,73	2,67	3,59	4,68	5,55	7,12	9,25	11,31	12,38
		V4	kW	1,59	2,43	3,31	4,25	5	6,51	8,2	10,05	11,18
	R1234yf	V1	kW	2,23	3,48	4,77	6,61	7,13	9,13	11,05	14,78	15,71
		V2	kW	2,07	3,05	4,31	5,76	6,47	8,11	10,25	12,71	14,09
		V3	kW	1,92	2,86	3,94	5,33	5,76	7,68	9,05	11,89	13,09
		V4	kW	1,78	2,51	3,66	4,82	5,26	6,83	8,44	10,79	11,11
SC2 (1)	R455A	V1	kW	1,29	2,12	2,7	3,66	4,43	5,53	7,52	9,05	10,25
		V2	kW	1,18	1,91	2,46	3,29	3,92	5,00	6,7	8,07	9,12
		V3	kW	1,1	1,78	2,31	3,05	3,66	4,64	6,16	7,51	8,36
		V4	kW	1,02	1,61	2,14	2,79	3,31	4,29	5,63	6,77	7,53
	R454C	V1	kW	1,24	2,05	2,62	3,56	4,28	5,35	7,16	8,76	9,88
		V2	kW	1,15	1,84	2,4	3,21	3,83	4,84	6,39	7,82	8,75
		V3	kW	1,08	1,72	2,25	2,97	3,53	4,49	5,99	7,27	8,06
		V4	kW	1	1,55	2,09	2,72	3,24	4,15	5,37	6,57	7,24
	R1234yf	V1	kW	1,36	2,15	2,91	4,26	4,53	5,52	7,17	9,57	10,43
		V2	kW	1,26	1,92	2,67	3,86	4	5,03	6,53	8,45	9,06
		V3	kW	1,21	1,87	2,55	3,5	3,82	4,85	5,87	7,58	8,5
		V4	kW	1,12	1,66	2,34	3,22	3,38	4,39	5,19	7,05	7,38

		NTA ... -EC		0R 1	1R 1	2R 2	3R 2	4R 2	5R 3	6R 3	7R 4	8R 4
Sound pressure	**Lp 4 m** (3)	V1	dB(A)	32	32	35	35	35	37	37	38	38
		V2	dB(A)	29	29	32	32	32	34	34	35	35
		V3	dB(A)	23	23	26	26	26	28	28	29	29
		V4	dB(A)	22	22	25	25	25	27	27	28	28
Fan Ø 350 mm			Nb	1	1	2	2	2	3	3	4	4
	Airflow	V1	m^3/h	1560	1380	3120	2920	2770	4390	3950	5530	5270
		V2	m^3/h	1280	1140	2570	2410	2270	3610	3230	4540	4310
		V3	m^3/h	1130	1000	2260	2120	2000	3170	2850	4000	3790
		V4	m^3/h	970	850	1930	1810	1710	2720	2430	3420	3240
	Air throw (4)	V1	m	2 x 14	2 x 12	2 x 14	2 x 13	2 x 12	2 x 13	2 x 12	2 x 12	2 x 12
		V2	m	2 x 11	2 x 11	2 x 11	2 x11	2x 11	2 x 11	2 x 10	2 x 11	2 x 10
		V3	m	2 x 10	2 x 10	2 x 10	2 x 10	2 x 10	2 x 10	2 x 9	2 x 10	2 x 9
		V4	m	2 x 9	2 x 9	2 x 9	2 x 9	2 x 9	2 x 9	2 x 8	2 x 9	2 x 8
	230 V/1 50-60 Hz **(5)**	V1	W max	80	80	160	160	160	240	240	320	320
		V2	W max	42	42	84	84	84	126	126	168	168
		V3	W max	30	30	60	60	60	90	90	120	120
		V4	W max	19	19	38	38	38	57	57	76	76
		V1	A max	0,7	0,7	1,4	1,4	1,4	2,1	2,1	2,8	2,8
		V2	A max	0,42	0,42	0,84	0,84	0,84	1,26	1,26	1,68	1,68
		V3	A max	0,28	0,28	0,56	0,56	0,56	0,84	0,84	1,12	1,12
		V4	A max	0,18	0,18	0,36	0,36	0,36	0,54	0,54	0,72	0,72
Surface area			m^2	5,8	11,6	11,6	17,4	23,2	26,2	43,6	46,5	58,1
Circuit volume			dm^3	0,8	1,7	1,7	2,5	3,3	3,8	6,3	6,7	8,4
Electric defrost **E1K** (6)	230 V/1/50 Hz		W total	350	800	800	1200	1600	1800	3000	3200	3200
			A total	1,5	3,5	3,5	5,2	7,0	7,8	13,0	13,9	13,9
Connections **HFCs**	Inlet **(7)**		Ø	D 3/8"	D 1/2"	D 1/2"	D 1/2"	D 1/2"	D 1/2"	D 1/2"	D 1/2"	D 5/8"
	Outlet **(7)**		Ø ODF	3/8"	5/8"	5/8"	5/8"	5/8"	5/8"	7/8"	7/8"	1"1/8
Net weight(8)			kg	18	20	27	30	32	42	49	59	63

(1) Standard conditions:
SC1 : +10 °C (air inlet temp.) / 0 °C (evaporating temp.) / DT1 = 10K
SC2 : 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
(2) Operating pressure - Specific coil - Connection diameters to be defined when ordering.
(3) Average sound pressure level in dB(A) calculated at 4 m, level with the blades, in a free field over a reflecting plane, given as an indication only.

NTA M(A) 0L(B) 1(C)EC(D)

(A) **M** = multi-refrigerant - **C** = CO2 - **W** = glycol water
(B) Fin spacing: **R** = 3.5 mm - **L** = 6 mm
(C) Number of fans
(D) **AC** = AC motor - **EC** = EC4 motor - **EP** = EC3 motor

The NTA is available with CO2, A2Ls, HFCs and glycol water. For more information, please consult our software.

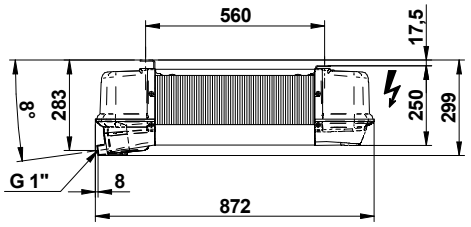
NTA M .. R .. -AC / NTA C .. R .. -AC

3.5 mm

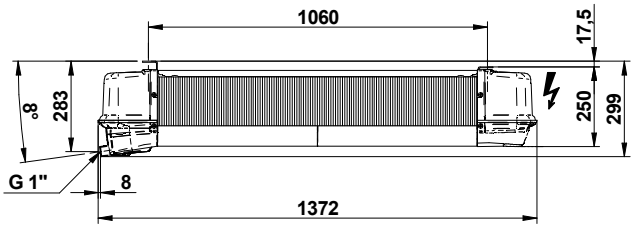
CONDITIONS	REFRIGERANTS		NTA ... -EC	0L 1	1L 1	2L 2	3L 2	4L 2	5L 3	6L 3	7L 4
SC1 (1)	R455A	V1	kW	1,5	2,96	4,14	5,26	6,08	7,8	9,25	12,06
		V2	kW	1,35	2,66	3,75	4,67	5,43	6,98	8,18	10,74
		V3	kW	1,26	2,43	3,51	4,33	5,01	6,51	7,56	10,06
		V4	kW	1,15	2,23	3,2	3,93	4,55	5,95	6,82	9,03
	R454C	V1	kW	1,47	2,86	4,02	5,16	5,91	7,56	9	11,6
		V2	kW	1,32	2,58	3,67	4,6	5,34	6,86	7,97	10,51
		V3	kW	1,24	2,38	3,41	4,25	4,87	6,32	7,36	9,71
		V4	kW	1,13	2,16	3,15	3,85	4,43	5,8	6,71	8,86
	R1234yf	V1	kW	1,69	3,05	4,2	5,76	6,22	7,81	9,54	11,34
		V2	kW	1,54	2,69	3,8	5,16	5,65	6,99	8,33	10,6
		V3	kW	1,42	2,51	3,61	4,68	5,09	6,6	7,74	9,65
		V4	kW	1,31	2,24	3,28	4,24	4,66	5,94	7,09	8,99
SC2 (1)	R455A	V1	kW	0,93	1,87	2,61	3,36	3,89	4,96	5,9	7,61
		V2	kW	0,85	1,69	2,36	3	3,49	4,47	5,26	6,91
		V3	kW	0,79	1,56	2,22	2,79	3,21	4,19	4,89	6,42
		V4	kW	0,74	1,43	2,05	2,54	2,93	3,83	4,46	5,91
	R454C	V1	kW	0,92	1,83	2,53	3,3	3,78	4,83	5,75	7,44
		V2	kW	0,84	1,64	2,29	2,96	3,39	4,35	5,14	6,67
		V3	kW	0,78	1,53	2,16	2,74	3,13	4,08	4,77	6,2
		V4	kW	0,72	1,39	1,99	2,5	2,87	3,74	4,37	5,74
	R1234yf	V1	kW	1,07	1,91	2,55	3,71	3,99	4,9	6,15	6,99
		V2	kW	0,98	1,71	2,36	3,37	3,54	4,48	5,48	6,41
		V3	kW	0,92	1,63	2,21	3,08	3,35	4,14	4,96	6,28
		V4	kW	0,84	1,47	2,04	2,82	2,99	3,78	4,6	5,71

			NTA ... -EC	0L 1	1L 1	2L 2	3L 2	4L 2	5L 3	6L 3	7L 4
Sound pressure	**Lp 4 m** (3)	V1	dB(A)	32	32	35	35	35	37	37	38
		V2	dB(A)	29	29	32	32	32	34	34	35
		V3	dB(A)	23	23	26	26	26	28	281	29
		V4	dB(A)	22	22	25	25	25	27	27	28
Fan Ø 350 mm			Nb	1	1	2	2	3	3	4	5
	Airflow	V1	m^3/h	1650	1430	3120	2980	2860	4470	4290	5720
		V2	m^3/h	1350	1180	2560	2450	2350	3680	3530	4710
		V3	m^3/h	1180	1030	2250	2160	1770	3230	3100	4140
		V4	m^3/h	1010	890	1930	1840	4470	2770	2660	3540
	Air throw (4)	V1	m	2 x 15	2 x 13	2 x 14	2 x 13	2 x 13	2 x 13	2 x 13	2 x 13
		V2	m	2 x 12	2 x 11	2 x 11	2 x 11	2 x 11	2 x 11	2 x 11	2 x 11
		V3	m	2 x 11	2 x 10	2 x 10	2 x 10	2 x 9	2 x 10	2 x 10	2 x 10
		V4	m	2 x 10	2 x 9	2 x 9	2 x 9	2 x 13	2 x 9	2 x 9	2 x 9
	230 V/1 50-60 Hz **(5)**	V1	W max	80	80	160	160	160	240	240	320
		V2	W max	42	42	84	84	84	126	126	168
		V3	W max	30	30	60	60	60	90	90	120
		V4	W max	19	19	38	38	38	57	57	76
		V1	A max	0,7	0,7	1,4	1,4	1,4	2,1	2,1	2,8
		V2	A max	0,42	0,42	0,84	0,84	0,84	1,26	1,26	1,68
		V3	A max	0,28	0,28	0,56	0,56	0,36	0,84	0,84	1,12
		V4	A max	0,18	0,18	0,36	0,36	2,1	0,54	0,54	0,72
Surface area			m^2	3,5	8,9	10,6	14,2	17,7	21,3	26,6	35,5
Circuit volume			dm^3	0,8	2,1	2,5	3,3	4,2	5,0	6,3	8,4
Electric defrost **E1K** (6)	230 V/1/50 Hz		W total	350	800	800	1200	1600	1800	3000	3200
			A total	1,5	3,5	3,5	5,2	7,0	7,8	13,0	13,9
Connections **HFCs**	Inlet **(7)**		Ø	D 3/8"	D1/2"	D 1/2"	D 1/2"	D 1/2"	D 1/2"	D 1/2"	D 1/2"
	Outlet **(7)**		Ø ODF	3/8"	5/8"	5/8"	5/8"	5/8"	5/8"	7/8"	7/8"
Net weight(8)			kg	18	20	29	31	33	44	47	60

(4) Residual air speed: 0.25 m/s.
(5) Adjustment of overload protection. For air temperatures "ti" other than +20 °C, multiply the intensities by the ratio 293/(273 + "ti") to obtain the approximate value of the intensity after heating the room.
(6) Electric defrost option.
(7) Distributor: male to solder - ODF: female to receive the tube of the same diameter.
(8) Standard net weight - Specific net weight For CO2 80 bar: contact us.



NTA ... 1



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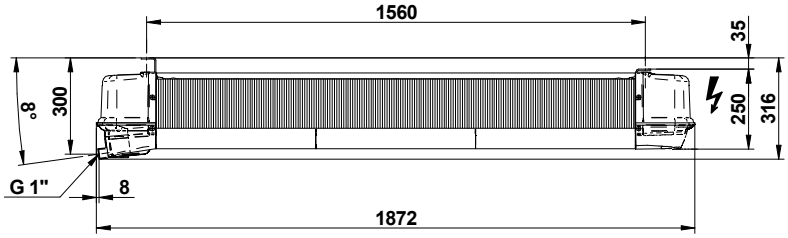
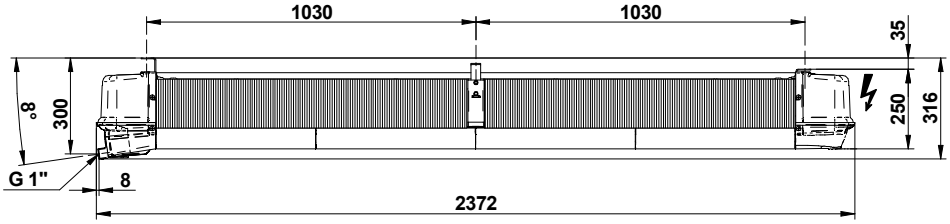
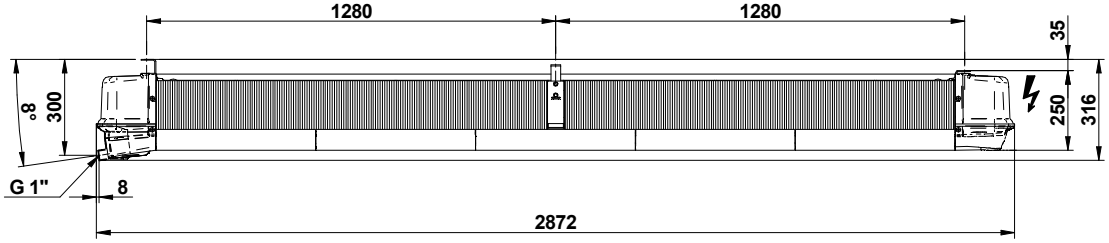


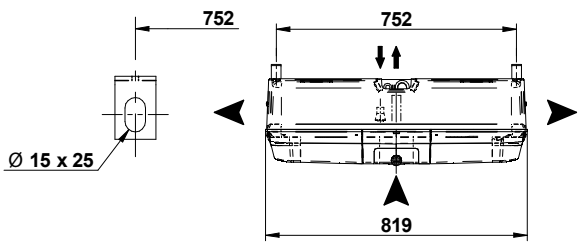
NTA ... 3



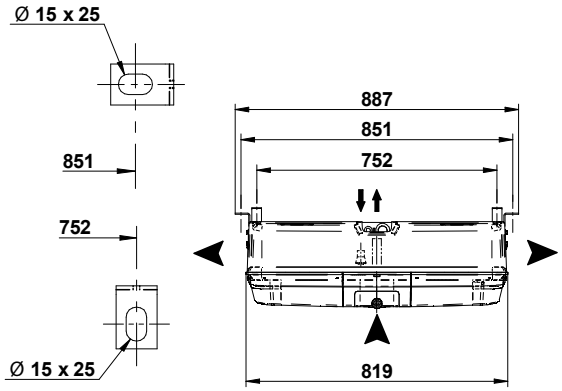
NTA ... 4



NTA ... 5



NTA ... 1 / NTA ... 2 / NTA ... 3



NTA ... 4 / NTA ... 5

FRIGA-BOHN®

NOVA

Cubic unit cooler
Commercial and semi-industrial range

A2L | CO2 60bar | CO2 80bar | WG | HFC

1 - 30 kW

Easy installation/maintenance:
-Quick access to individual components
-Simple, intuitive electrical connection using
-Wago terminals and cable identification.
-Fans with external electrical box, bridged together.

The optimized coil design, high-efficiency motors, and the ability to select an EC motor (optional) allow an improved **energy efficiency**.

The complete redesign of the defrosting system introduces **significant improvements** that not only increase **efficiency and reliability**, simplify maintenance and reduce power consumption by up to 30%.

CASING

Easy to clean: galvanized sheet steel, fully pre-painted white.
Pivoting, hinged drain pan with rounded corners, made from pre-painted aluminium, eliminating retention zones and ensuring complete safety through the absence of sharp corners.

OPTIONS	
CIN	316L stainless steel casing.
EIS	Insulated drain pan.
DPK	Intermediate drain pan (NOVA .. R/L). KIT TO INSTALL

VENTILATION

High-performance, factory-wired motors.
Axial motor fans not requiring systematic maintenance:

	models	fan	voltage	freq.	IP	class
Ø 310 mm 4P - 1,350 rpm	**NOVA 3XXX**	Standard	**230V/1**	**50-60Hz**	**54**	**F**
Ø 450 mm* 4P/6P - 1,320/1,070 rpm	**NOVA 4XXX**	Standard	**400V/3**	**50Hz**	**54**	**F**

* Two-speed motor fans, high-speed wired (Δ) by default.

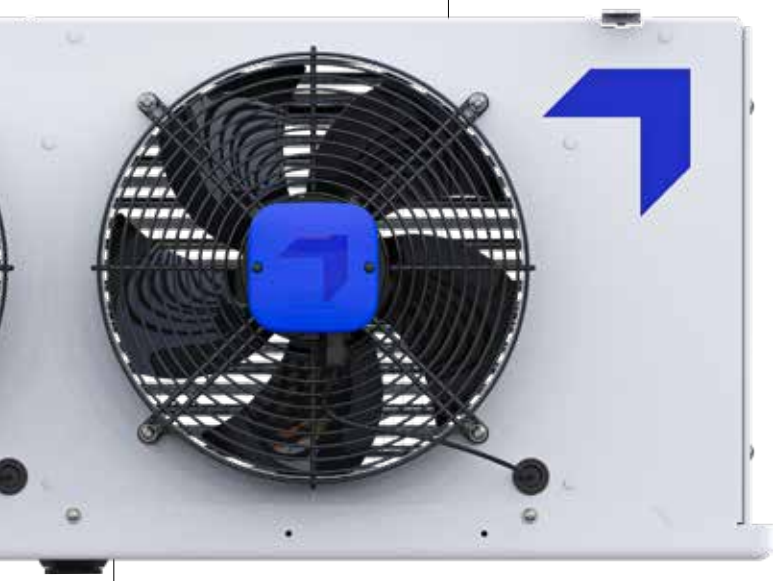
OPTIONS	
MP5	Air pressure motor fan (available pressure 100 Pa - Ø 450 mm).
RFA	Shell / airflow straightener (streamer). KIT TO INSTALL
VGT	RFA + fixing parts for textile duct (Ø 450 mm). KIT TO INSTALL
VPM	VGT + flexible defrost cuff. (Ø 450 mm). KIT TO INSTALL
EC2	EC motor (electronic commutation) 0-10V - Ø 450 mm.
EC3	EC motor (electronic commutation) 2 speeds - Ø 300 mm.

Save time during installation by choosing these additional options.

OPTIONS	
EXT	Electronic expansion valve fitted.
DMP	Expansion valve fitted.
EVL	DMP + Solenoid valve fitted.
EEC	EVL + copper siphon equipped with a ball valve delivered not fitted.

COILS

Aluminium fins with 4, 6 and 8mm spacing.
Combined with grooved copper tubes, the coils are very efficient and compact.
Versions available:
- Multi-refrigerant HFCs and A2L,
- CO_2 (60 bar),
- CO_2 (80 bar),
- WCO (glycol water, coolant).



Select your coil treatment to extend your unit cooler's lifespan! Contact us.

DEFROST

Two defrost modes for the coil: electric (230V/1 or 400V/3), Hot gas.
Quick defrosting of the condensate pan thanks to a heater under the intermediate drain pan.
Use of bent resistors for effective defrosting of expansion valve, distributor and manifold.
Use of fixation points to ensure that electrical heaters return to position, thus limiting the risk of failure.
Color coding for easy identification of electrical heaters connections.

OPTIONS	
HG1	Hot gases (coil: hot gases, drain pan: electric heaters).
HGT	Hot gases (coil and drain pan). CONTACT US
RVU	Shell defrost heaters (Ø 450 mm).
RVK	Shell defrost heaters (Ø 450 mm). KIT TO INSTALL
RCS	Blower heater. KIT TO INSTALL - 1,300 W or 2,300 W (Ø 315 mm). - 2,500 W or 4,500 W (Ø 450 mm).
HDA	Suction defrost hood. KIT TO INSTALL
2TH	Defrost and safety thermostats (5709L + 5708L).
THD	Defrost thermostat (5709L).
E1U	Lightweight electric de-icing, pre-assembled and factory-wired.
E1K	Light electric defrost. KIT TO INSTALL
E3K	Complete electric de-icing for low-temperature applications. KIT TO INSTALL

tA1	+10	+2	-5	-10	-25°C
	NOVA .. R/L	+E1K / E1U	+E3K		
			NOVA .. E/C/S		

ELECTRICAL CONNECTIONS

Large electrical boxes positioned on the battery guard plate to simplify electrical connections.
Use of WAGO terminals with levers or springs to simplify installation and eliminate the risk of disconnection.
Use of ICOTEK cable glands to ensure the IP44 protection of the electrical boxes.

NOVA 3(A)1(B)42(C)-R(D)

(A) Fan diameter: **3** = Ø 315 mm - **4** = Ø 450 mm
(3) Number of fans
(C) Model
(D) Fin spacing: **R** = 4 mm (positive) **E** = 4 mm (negative)
L = 6 mm (positive) **C** = 6 mm (negative) **S** = 8 mm (negative)

The NOVA is available with CO_2, A2Ls, HFCs and glycol water. For more information, please consult our software.

NOVA (1/2)

4 mm

CONDITIONS	REFRIGERANTS	NOVA ... -R	3152	3153	3154	3155	3156	3243	3245	3343	3344	3345
SC2 (1)	CO2 - 60 bar (2)	kW	2,24	2,87	3,23	3,38	3,4	4,66	5,92	7,34	8,14	8,39
	R455A	kW	1,51	2,18	2,66	3,07	3,38	3,81	5,25	5,81	7,08	7,96
	R454C	kW	1,47	2,13	2,55	2,96	3,22	3,7	5,05	5,64	6,87	7,65
	R448A/R449A	kW	1,76	2,49	3	3,39	3,64	4,36	5,78	6,63	7,88	8,79
	R1234yf	kW	2,06	2,52	2,67	3,3	3,25	4,24	5,65	6,19	7,72	7,97
	R513A	kW	1,98	2,54	2,74	3,28	3,26	4,3	5,61	6,31	7,71	8,05
	R134a	kW	1,8	2,36	2,65	3,04	3,15	4,07	5,21	6,05	7,25	7,65
	R404A*	kW	1,98	2,59	2,91	3,34	3,46	4,47	5,73	6,65	7,97	8,41

CONDITIONS	REFRIGERANTS	NOVA ... -E	3152	3153	3154	3155	3156	3243	3245	3343	3344	3345
SC3 (1)	CO2 - 60 bar (2)	kW	1,84	2,38	2,7	2,88	2,82	3,71	4,92	5,96	6,54	7,46
	R455A	kW	1,04	1,48	1,84	2,12	2,37	2,56	3,66	3,95	4,89	5,44
	R454C	kW	0,97	1,39	1,75	2,01	2,24	2,43	3,47	3,8	4,63	5,09
	R448A/R449A	kW	1,21	1,73	2,1	2,38	2,62	3	4,1	4,6	5,59	6,15
	R404A*	kW	1,45	1,87	2,29	2,57	2,7	3,21	4,37	5,16	8,07	6,11

			3152	3153	3154	3155	3156	3243	3245	3343	3344	3345
Surface area		m^2	5,1	7,7	10,3	12,8	15,4	12,3	20,5	18,5	24,6	30,8
Circuit volume		dm^3	0,8	1,3	1,7	2,1	2,5	2	3,3	3	4	5
Airflow		m3/h	2000	1900	1790	1680	1580	3510	2920	5260	4800	4380
Air throw (3)		m	20	19	18	17	16	20	18	24	22	21
Fan 1,350 rpm		nb	1	1	1	1	1	2	2	3	3	3
		Ø	315	315	315	315	315	315	315	315	315	315
	230/1/50hz	W max	90	90	90	90	90	180	180	270	270	270
		A max	0,4	0,4	0,4	0,4	0,4	0,8	0,8	1,2	1,2	1,2
	400/3/50hz	W max	-	-	-	-	-	-	-	-	-	-
		A max	-	-	-	-	-	-	-	-	-	-
NOVA...-R Electric defrost E1K (5)		nb	1 + 1	1 + 1	2 + 1	2 + 1	2 + 1	2 + 1	3 + 1	2 + 1	2 + 1	3 + 1
		W total	860	860	1290	1290	1290	1545	2060	2310	2310	3080
	230/1/50hz	A total	3,74	3,74	5,61	5,61	5,61	6,72	8,96	10,04	10,04	13,39
	400/3/50hz	A total	-	-	-	-	-	-	-	-	-	-
NOVA...-E Standard electric defrost	Coil + drain pan	nb	1 + 1	2 + 1	3 + 1	3 + 1	4 + 1	2 + 1	4 + 1	2 + 1	3 + 1	4 + 1
		W total	860	1290	1720	1720	2150	1545	2575	2310	3080	3850
	230/1/50hz	A total	3,74	5,61	7,48	7,48	9,35	6,72	11,2	10,04	13,39	-
	400/3/50hz	A total	-	-	-	-	-	-	-	-	-	5,56
Connections HFC	Inlet (6)	Ø OD	1/2" -	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
	Outlet (6)	Ø ODF	10mm	5/8"	5/8"	5/8"	5/8"	7/8"	7/8"	7/8"	7/8"	7/8"
Net weight		kg	20	21	23	23	24	30	34	44	46	48

(1) Standard conditions:
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
SC3 / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K
(2) Operating pressure - Specific coil - Connection diameters to be defined when ordering.
(3) Residual air speed: 0.25 m/s.
(4) Adjustment of overload protection. For air temperatures "ti" other than +20 °C, multiply the intensities by the ratio 293/(273 + "ti") to obtain the approximate value of the intensity after the room has been brought up to temperature.
(5) Electric defrost option.
(6) OD: Male connection - ODF: female to receive the tube of the same diameter.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

NOVA 3(A)4(B)44(C)-R(D)

(A) Fan diameter: **3** = Ø 315 mm - **4** = Ø 450 mm
(3) Number of fans
(C) Model
(D) Fin spacing: **R** = 4 mm (positive) **E** = 4 mm (negative)
L = 6 mm (positive) **C** = 6 mm (negative) **S** = 8 mm (negative)

The NOVA is available with CO2, A2Ls, HFCs and glycol water. For more information, please consult our software.

NOVA (2/2)

4 mm

CONDITIONS		NOVA... -R	4165	4166	3444	4263	4264	4265	4266	4364	4366
SC2 (1)	CO2 - 60 bar (2)	kW	8,65	9,41	11,06	12,72	15,4	17,42	18,89	23,14	27,97
	R455A	kW	6,5	6,86	9,53	9,03	11,25	13,07	15,29	17,09	22,81
	R454C	kW	6,28	6,63	9,26	8,84	10,92	12,73	14,72	16,64	22
	R448A/R449A	kW	7,87	8,23	10,59	11,19	13,77	15,89	17,64	20,9	26,12
	R1234yf	kW	7,48	8,14	10,47	11,61	14,22	15,97	15,94	21,26	24,14
	R513A	kW	7,45	8,03	10,44	11,53	13,95	15,79	16,37	21,11	24,67
	R134a	kW	7,03	7,32	9,73	10,51	12,71	14,4	15,25	19,26	22,57
	R404A*	kW	7,73	8,04	10,69	11,55	13,97	15,82	16,76	21,16	24,8

CONDITIONS		NOVA... -E	4165	4166	3444	4263	4264	4265	4266	4364	4366
SC3 (1)	CO2 - 60 bar (2)	kW	7,15	7,73	8,9	10,31	12,56	14,29	15,57	18,9	22,28
	R455A	kW	4,36	5,17	6,63	6,44	7,91	9,51	10,53	12,22	16,33
	R454C	kW	4,14	4,89	6,33	6,16	7,51	9,04	10,01	11,72	15,59
	R448A/R449A	kW	5,48	6,24	7,54	8	9,74	11,57	12,59	15,01	19,49
	R404A*	kW	5,98	6,51	8,07	8,83	10,56	12,31	13,01	16,2	20,03

			4165	4166	3444	4263	4264	4265	4266	4364	4366
Surface area		m^2	23,1	27,7	32,8	27,7	37	46,2	55,4	55,4	83,1
Circuit volume		dm^3	3,8	4,5	5,4	4,5	6	7,5	9	9	13,5
Airflow		m3/h	5160	4130	6400	11740	10990	10310	8270	16480	12400
Air throw (3)		m	25	24	26	32	31	30	29	35	33
Fan 1,350 rpm		nb	1	1	4	2	2	2	2	3	3
		Ø	450	450	315	450	450	450	450	450	450
	230 V/1/50-60 Hz	W max	-	-	360	-	-	-	-	-	-
		A max	-	-	1,6	-	-	-	-	-	-
	400 V/3/50 Hz	W max	500	500	-	1000	1000	1000	1000	1500	1500
		A max	1	1	-	2	2	2	2	3	3
3C-A ... -R Electric defrost **E1K** (5)		nb	4 + 1	4 + 1	2 + 1	2 + 1	3 + 1	4 + 1	4 + 1	3 + 1	4 + 1
		W total	2200	2200	2940	2640	3520	4400	4400	5280	6600
	230 V/1/50 Hz	A total	9,57	9,57	12,78	11,48	15,3	-	-	-	-
	400 V/3/50 Hz	A total	-	-	-	-	-	6,35	6,35	7,62	9,53
3C-A ... -E Electric defrost standard	Coil + drain pan	nb	5 + 1	6 + 1	3 + 1	3 + 1	4 + 1	5 + 1	6 + 1	4 + 1	6 + 1
		W total	2640	3080	3920	3520	4400	5280	6160	6600	9240
	230 V/1/50 Hz	A total	11,48	13,39	-	15,3	-	-	-	-	-
	400 V/3/50 Hz	A total			5,66		6,35	7,62	8,89	9,53	13,34
Connections **HFCs**	Inlet (6)	Ø OD	7/8"	7/8"	5/8"	7/8"	1"1/8	1"1/8	1"1/8	1"1/8	1"3/8
	Outlet (6)	Ø ODF	7/8"	7/8"	7/8"	1"3/8	1"3/8	1"3/8	1"3/8	1"5/8	2"1/8
Net weight		kg	41	43	58	58	62	65	69	84	95

(1) Standard conditions:
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
SC3 / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K
(2) Operating pressure - Specific coil - Connection diameters to be defined when ordering.
(3) Residual air speed: 0.25 m/s.
(4) Adjustment of overload protection. For air temperatures "ti" other than +20 °C, multiply the intensities by the ratio 293/(273 + "ti") to obtain the approximate value of the intensity after the room has been brought up to temperature.
(5) Electric defrost option.
(6) OD: Male connection - ODF: female to receive the tube of the same diameter.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

NOVA 3(A)1(B)43(C)-L(D)

(A) Fan diameter: **3** = Ø 315 mm - **4** = Ø 450 mm
(3) Number of fans
(C) Model
(D) Fin spacing: **R** = 4 mm (positive) **E** = 4 mm (negative)
L = 6 mm (positive) **C** = 6 mm (negative) **S** = 8 mm (negative)

The NOVA is available with CO_2, A2Ls, HFCs and glycol water. For more information, please consult our software.

NOVA (1/2)

6 mm

CONDITIONS	FLUIDES	NOVA ... -L	3152	3153	3154	3155	3156	3243	3244	3245	3343	3344
SC2 (1)	CO2 - 60 bar (2)	kW	1,89	2,44	2,86	3,14	3,26	4,06	4,66	5,51	6,32	7,33
	CO2 - 80 bar (2)	kW	1,76	2,33	2,78	3,07	3,24	3,96	4,57	5,42	6,13	7,21
	R455A	kW	1,41	1,86	2,33	2,73	3,06	3,29	4,18	4,72	5,03	6,22
	R454C	kW	1,38	1,83	2,26	2,66	2,96	3,22	4,08	4,6	4,9	6,09
	R448A/R449A	kW	1,64	2,13	2,64	3,01	3,35	3,74	4,7	5,22	5,7	6,94
	R1234yf	kW	1,52	2,22	2,4	3,01	3,07	3,8	4,8	5,23	5,61	7,02
	R513A	kW	1,56	2,22	2,45	3	3,08	3,81	4,78	5,31	5,65	7,14
	R134a	kW	1,52	2,05	2,38	2,79	2,98	3,56	4,42	4,84	5,33	6,54
	R404A*	kW	1,67	2,25	2,62	3,07	3,28	3,91	4,86	5,32	5,86	7,19

CONDITIONS	FLUIDES	NOVA ... -C	3152	3153	3154	3155	3156	3243	3244	3245	3343	3344
SC3 (1)	CO2 - 60 bar (2)	kW	1,56	1,99	2,34	2,56	2,7	3,24	4,19	4,59	5,18	6
	CO2 - 80 bar (2)	kW	1,37	1,82	2,17	2,38	2,49	3,06	3,89	4,29	4,81	5,62
	R455A	kW	0,92	1,29	1,62	1,9	2,17	2,26	2,91	3,32	3,43	4,35
	R454C	kW	0,87	1,22	1,54	1,8	2,05	2,16	2,78	3,16	3,32	4,17
	R448A/R449A	kW	1,1	1,49	1,84	2,16	2,41	2,62	3,33	3,72	3,97	4,97
	R404A*	kW	1,09	1,64	2,05	2,28	2,55	2,86	3,59	4,06	4,5	5,35

			3152	3153	3154	3155	3156	3243	3244	3245	3343	3344
Surface area		m^2	3,5	5,3	7,1	8,9	10,6	8,5	11,4	14,2	12,8	17
Circuit volume		dm^3	0,8	1,3	1,7	2,1	2,5	2	2,7	3,3	3	4
Airflow		m3/h	2050	1970	1890	1810	1730	3730	3490	3250	5600	5240
Air throw (3)		m	20	20	19	18	17	21	20	19	25	24
Fan 1,350 rpm		nb	1	1	1	1	1	2	2	2	3	3
		Ø	315	315	315	315	315	315	315	315	315	315
	230 V/1/50-60 Hz	W max	90	90	90	90	90	180	180	180	270	270
		A max	0,4	0,4	0,4	0,4	0,4	0,8	0,8	0,8	1,2	1,2
	400 V/3/50 Hz	W max	-	-	-	-	-	-	-	-	-	-
		A max	-	-	-	-	-	-	-	-	-	-
NOVA ... -L Electric defrost E1K (5)		nb	1 + 1	1 + 2	2 + 1	2 + 2	2 + 3	1 + 1	2 + 1	3 + 1	1 + 1	2 + 1
		W total	860	860	1290	1290	1290	1030	1545	2060	1540	2310
	230 V/1/50 Hz	A total	3,74	3,74	5,61	5,61	5,61	4,48	6,72	8,96	6,7	10,04
	400 V/3/50 Hz	A total	-	-	-	-	-	-	-	-	-	-
NOVA ... -C Standard electric defrost	Coil + drain pan	nb	1 + 1	2 + 1	2 + 1	3 + 1	4 + 1	2 + 1	3 + 1	4 + 1	2 + 1	3 + 1
		W total	860	1290	1290	1720	2150	1545	2060	2575	2310	3080
	230 V/1/50 Hz	A total	3,74	5,61	5,61	7,48	9,35	6,72	8,96	11,2	10,04	13,39
	400 V/3/50 Hz	A total	-	-	-	-	-	-	-	-	-	-
Connections HFCs	Inlet (6)	Ø OD	12mm	12mm	12mm	12mm	12mm	12mm	5/8"	5/8"	5/8"	5/8"
	Outlet (6)	Ø ODF	10mm	10mm	10mm	10mm	10mm	10mm	5/8"	5/8"	5/8"	5/8"
Net weight (7)		kg	20	21	22	22	23	30	31	32	42	44

(1) Standard conditions:
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
SC3 / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K
(2) Operating pressure - Specific coil - Connection diameters to be defined when ordering.
(3) Residual air speed: 0.25 m/s.
(4) Adjustment of overload protection. For air temperatures "ti" other than +20 °C, multiply the intensities by the ratio 293/(273 + "ti") to obtain the approximate value of the intensity after the room has been brought up to temperature.
(5) Electric defrost option.
(6) OD: Male connection - ODF: female to receive the tube of the same diameter.
(7) Standard net weight - Specific net weight for CO_2 80 bar: contact us.
R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

NOVA 4(A)1(B)66(C)-L(D)

(A) Fan diameter: **3** = Ø 315 mm - **4** = Ø 450 mm
(3) Number of fans
(C) Model
(D) Fin spacing: **R** = 4 mm (positive) **E** = 4 mm (negative)
L = 6 mm (positive) **C** = 6 mm (negative) **S** = 8 mm (negative)

The NOVA is available with CO_2, A2Ls, HFCs and glycol water. For more information, please consult our software.

NOVA (2/2)

6 mm

CONDITIONS	FLUIDES	NOVA... -L	4165	3345	4166	3444	4263	4264	4266	4364	4366
SC2 (1)	CO2 - 60 bar (2)	kW	7,73	7,89	8,6	9,92	10,91	13,49	17,26	20,26	25,74
	CO2 - 80 bar (2)	kW	-	-	-	-	-	-	-	-	-
	R455A	kW	5,75	7,23	6,63	8,37	7,91	10,13	13,68	15,64	20,82
	R454C	kW	5,59	7,02	6,42	8,2	7,79	9,92	13,31	15,27	20,27
	R448A/R449A	kW	6,92	7,96	7,88	9,33	9,77	12,2	16	18,64	24,31
	R1234yf	kW	6,79	7,47	7,35	9,47	10,33	11,82	15,08	17,45	22,4
	R513A	kW	6,76	7,53	7,25	9,61	10,16	11,97	15,04	17,81	22,83
	R134a	kW	6,32	7,16	6,99	8,76	9,26	11,18	14,25	16,9	21,59
	R404A*	kW	6,95	7,87	7,68	9,63	10,18	12,29	15,66	18,57	23,73
CONDITIONS	FLUIDES	NOVA... -C	4165	3345	4166	3444	4263	4264	4266	4364	4366
SC3 (1)	CO2 - 60 bar (2)	kW	6,4	6,94	7,09	8,11	8,91	11,06	14,27	16,63	20,65
	CO2 - 80 bar (2)	kW	-	-	-	-	-	-	-	-	-
	R455A	kW	3,81	4,99	4,36	5,89	5,55	6,72	9,06	10,2	14,66
	R454C	kW	3,63	4,72	4,14	5,65	5,31	6,46	8,71	9,84	13,93
	R448A/R449A	kW	4,76	5,65	5,3	6,66	6,82	8,24	10,97	12,49	16,72
	R404A*	kW	5,26	5,77	5,7	7,28	7,6	9,04	11,66	13,66	17,71
			4165	3345	4166	3444	4263	4264	4266	4364	4366
Surface area		m^2	16	21,3	19,2	22,7	19,2	25,5	38,3	38,3	57,5
Circuit volume		dm^3	3,8	5	4,5	5,4	4,5	6	9	9	13,5
Airflow		m3/h	5560	4880	5290	6980	12300	11690	10580	17540	15870
Air throw (3)		m	26	22	25	27	33	32	31	36	34
Fan 1,350 rpm		nb	1	3	1	4	2	2	2	3	3
		Ø	450	315	450	315	450	450	450	450	450
	230 V/1/50-60 Hz	W max	-	270	-	360	-	-	-	-	-
		A max	-	1,2	-	1,6	-	-	-	-	-
	400 V/3/50 Hz	W max	500		500		1000	1000	1000	1500	1500
		A max	1		1		2	2	2	3	3
NOVA ... -L Electric defrost 1K (5)		nb	4 + 1	3 + 1	4 + 1	2 + 1	2 + 1	3 + 1	4 + 1	3 + 1	4 + 1
		W total	2200	3080	2200	2940	2640	3520	4400	5280	6600
	230 V/1/50 Hz	A total	9,57	13,39	9,57	12,78	11,48	15,3	-	-	-
	400 V/3/50 Hz	A total	-	-	-	-	-	-	6,35	7,62	9,53
NOVA ... -C Standard electric defrost	Coil + drain pan	nb	5 + 1	4 + 1	6 + 1	3 + 1	3 + 1	4 + 1	6 + 1	4 + 1	6 + 1
		W total	2640	3850	3080	3920	3520	4400	6160	6600	9240
	230 V/1/50 Hz	A total	11,48	-	13,39	-	15,3	-	-	-	-
	400 V/3/50 Hz	A total	-	5,56	-	5,66	-	6,35	8,89	9,53	13,34
Connections HFCs	Inlet (6)	Ø OD	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	7/8"
	Outlet (6)	Ø ODF	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	7/8"
Net weight (7)		kg	39	46	41	56	56	59	65	81	90

(1) Standard conditions:
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
SC3 / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K
(2) Operating pressure - Specific coil - Connection diameters to be defined when ordering.
(3) Residual air speed: 0.25 m/s.
(4) Adjustment of overload protection. For air temperatures "ti" other than +20 °C, multiply the intensities by the ratio 293/(273 + "ti") to obtain the approximate value of the intensity after the room has been brought up to temperature.
(5) Electric defrost option.
(6) OD: Male connection - ODF: female to receive the tube of the same diameter.
(7) Standard net weight - Specific net weight for CO_2 80 bar: contact us.
R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

NOVA 3(A)1(B)43(C)-S(D)

(A) Fan diameter: **3** = Ø 315 mm - **4** = Ø 450 mm
(3) Number of fans
(C) Model
(D) Fin spacing: **R** = 4 mm (positive) **E** = 4 mm (negative)
L = 6 mm (positive) **C** = 6 mm (negative) **S** = 8 mm (negative)

The NOVA is available with CO_2, A2Ls, HFCs and glycol water. For more information, please consult our software.

NOVA (1/2)

8 mm

CONDITIONS	REFRIGERANTS	NOVA ... -S	3152	3153	3154	3155	3156	3243	3244	3245	3343	3344
SC3 (1)	CO2 - 60 bar (2)	kW	1,23	1,67	2,02	2,23	2,38	2,72	3,58	3,92	4,28	5,09
	R455A	kW	0,75	1,1	1,39	1,66	1,9	1,94	2,53	2,88	2,93	3,77
	R454C	kW	0,71	1,06	1,34	1,6	1,81	1,86	2,42	2,76	2,81	3,63
	R448A/R449A	kW	0,89	1,26	1,58	1,88	2,11	2,22	2,86	3,22	3,33	4,27
	R404A*	kW	0,95	1,41	1,77	2,03	2,28	2,46	3,15	3,57	3,81	4,64
SC4 (1)	CO2 - 60 bar (2)	kW	1,02	1,38	1,65	1,84	1,96	2,24	2,96	3,3	3,57	4,23
	R455A	kW	0,52	0,79	0,99	1,2	1,37	1,37	1,81	2,06	2,07	2,7
	R454C	kW	0,51	0,77	0,96	1,17	1,33	1,34	1,76	2,02	2,06	2,65
	R448A/R449A	kW	0,66	0,95	1,2	1,43	1,61	1,68	2,18	2,45	2,53	3,25
	R404A*	kW	0,72	1,1	1,38	1,58	1,79	1,91	2,44	2,81	2,99	3,63

			3152	3153	3154	3155	3156	3243	3244	3245	3343	3344
Surface area		m^2	2,8	4,1	5,5	6,9	8,3	6,6	8,8	11	9,9	13,2
Circuit volume		dm^3	0,8	1,3	1,7	2,1	2,5	2	2,7	3,3	3	4
Airflow		m^3/h	2070	1990	1920	1850	1770	3800	3580	3360	5700	5370
Air throw (3)		m	21	20	19	18	18	21	21	20	25	25
Fan 1,350 rpm		Nb	1	1	1	1	1	2	2	2	3	3
		Ø	315	315	315	315	315	315	315	315	315	315
	230 V/1/50-60 Hz	W max	90	90	90	90	90	180	180	180	270	270
		A max (4)	0,4	0,4	0,4	0,4	0,4	0,8	0,8	0,8	1,2	1,2
	400 V/3/50 Hz	W max	-	-	-	-	-	-	-	-	-	-
		A max (4)	-	-	-	-	-	-	-	-	-	-
NOVA...S Standard electric defrost	Coil + drain pan	Nb	1 + 1	2 + 1	2 + 1	2 + 1	3 + 1	2 + 1	3 + 1	3 + 1	2 + 1	3 + 1
		W Total	860	1290	1290	1290	1720	1545	2060	2060	2310	3080
	230 V/1/50 Hz	A Total	3,74	5,61	5,61	5,61	7,48	6,72	8,96	8,96	10,04	13,39
	400 V/3/50 Hz	A Total	-	-	-	-	-	-	-	-	-	-
Connections	Inlet (6)	Ø OD	12mm	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
HFCs	Outlet (6)	Ø ODF	10mm	5/8"	5/8"	5/8"	5/8"	7/8"	7/8"	7/8"	7/8"	7/8"
Net weight (7)		kg	20	21	21	21	22	29	30	31	40	42

(1) Standard conditions:
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
SC3 / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K
(2) Operating pressure - Specific coil - Connection diameters to be defined when ordering.
(3) Residual air speed: 0.25 m/s.
(4) Adjustment of overload protection. For air temperatures "ti" other than +20 °C, multiply the intensities by the ratio 293/(273 + "ti") to obtain the approximate value of the intensity after the room has been brought up to temperature.
(5) Electric defrost option.
(6) OD: Male connection - ODF: female to receive the tube of the same diameter.
(7) Standard net weight - Specific net weight for CO_2 80 bar: contact us.
R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

NOVA 4(A)1(B)66(C)-S(D)

(A) Fan diameter: **3** = Ø 315 mm - **4** = Ø 450 mm
(3) Number of fans
(C) Model
(D) Fin spacing: **R** = 4 mm (positive) **E** = 4 mm (negative)
L = 6 mm (positive) **C** = 6 mm (negative) **S** = 8 mm (negative)

The NOVA is available with CO_2, A2Ls, HFCs and glycol water. For more information, please consult our software.

NOVA (2/2)

8 mm

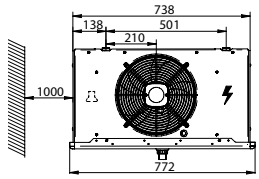
CONDITIONS	REFRIGERANTS	NOVA ... -S	3345	4165	3444	4166	4263	4264	4266	4364	4366
SC3 (1)	CO2 - 60 bar (2)	kW	5,93	5,48	6,98	6,05	7,53	9,31	12,21	14	17,66
	R455A	kW	4,38	3,42	5,08	3,75	4,64	5,72	7,83	8,67	12,77
	R454C	kW	4,19	3,26	4,9	3,61	4,51	5,49	7,52	8,35	12,24
	R448A/R449A	kW	4,97	4,22	5,73	4,54	5,65	6,92	9,37	10,45	14,44
	R404A*	kW	5,18	4,45	6,25	4,95	6,37	7,66	10,09	11,55	15,68
SC4 (1)	CO2 - 60 bar (2)	kW	4,98	4,52	5,71	5,07	6,18	7,74	10,25	11,67	14,74
	R455A	kW	3,18	2,44	3,67	2,68	3,31	4,12	5,67	6,25	9,45
	R454C	kW	3,07	2,39	3,57	2,64	3,28	4,02	5,54	6,12	9,17
	R448A/R449A	kW	3,77	3,33	4,38	3,55	4,41	5,45	7,42	8,29	11,54
	R404A*	kW	4,04	3,49	4,89	3,91	5,01	6,06	8,03	9,15	12,5

			3345	4165	3444	4166	4263	4264	4266	4364	4366
Surface area		m^2	16,5	12,4	17,6	14,9	14,9	19,8	29,7	29,7	44,6
Circuit volume		dm^3	5	3,8	5,4	4,5	4,5	6	9	9	13,5
Airflow		m^3/h	5040	5600	7160	5350	12310	11750	10710	17630	16060
Air throw (3)		m	23	26	28	25	33	32	31	36	34
Fan 1,350 rpm		Nb	3	1	4	1	2	2	2	3	3
		Ø	315	450	315	450	450	450	450	450	450
	230 V/1/50-60 Hz	W max	270	-	360	-	-	-	-	-	-
		A max (4)	1,2	-	1,6	-	-	-	-	-	-
	400 V/3/50 Hz	W max	-	500	-	500	1000	1000	1000	1500	1500
		A max (4)	-	1	-	1	2	2	2	3	3
NOVA...S Standard electric defrost	Coil + drain pan	Nb	3 + 1	5 + 1	3 + 1	6 + 1	3 + 1	4 + 1	6 + 1	4 + 1	6 + 1
		W Total	3080	2640	3920	3080	3520	4400	6160	6600	9240
	230 V/1/50 Hz	A Total	13,39	11,48	-	13,39	15,3	-	-	-	-
	400 V/3/50 Hz	A Total	-	-	5,66	-	-	6,35	8,89	9,53	13,34
Connections **HFCs**	Inlet (6)	Ø OD	5/8"	5/8"	5/8"	7/8"	7/8"	1"1/8	1"1/8	1"1/8	1"1/8
	Outlet (6)	Ø ODF	7/8"	7/8"	7/8"	7/8"	7/8"	1"3/8	1"3/8	1"3/8	1"3/8
Net weight (7)		kg	44	37	54	39	54	56	62	79	86

(1) Standard conditions:
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
SC3 / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K
(2) Operating pressure - Specific coil - Connection diameters to be defined when ordering.
(3) Residual air speed: 0.25 m/s.
(4) Adjustment of overload protection. For air temperatures "ti" other than +20 °C, multiply the intensities by the ratio 293/(273 + "ti") to obtain the approximate value of the intensity after the room has been brought up to temperature.
(5) Electric defrost option.
(6) OD: Male connection - ODF: female to receive the tube of the same diameter.
(7) Standard net weight - Specific net weight for CO_2 80 bar: contact us.
R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

NOVA | Ø 315 mm

NOVA 315 ..



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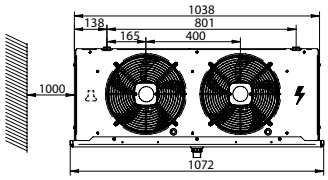

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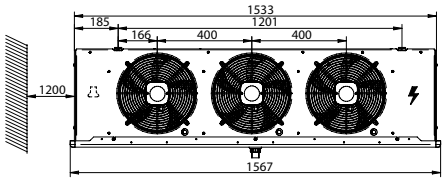

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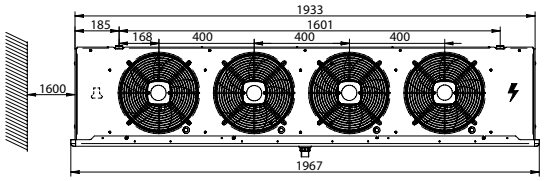
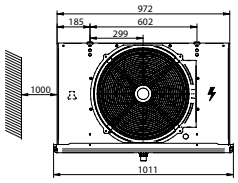


NOVA | Ø 450 mm

NOVA 416 ..



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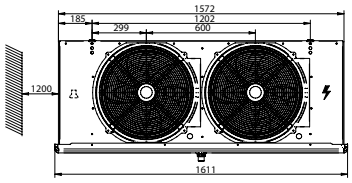

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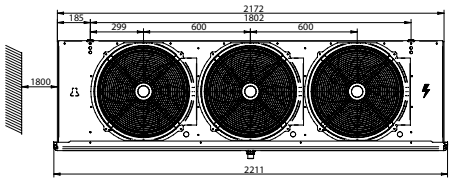
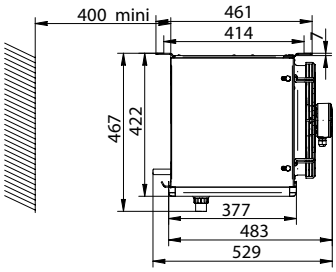
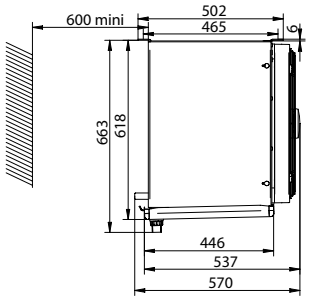






FRIGA-BOHN®

3C-E

Cubic unit cooler
Commercial and semi-industrial range

WG HFC

0.8 - 34 kW

Easy maintenance; the design of the 3C-E allows quick access to all components.

Grilles with airflow straighteners provide **excellent air distribution.**

CASING

Easy to clean: galvanized sheet steel, fully pre-painted white.
Pivoting, hinged drain pan with rounded corners, made from pre-painted aluminium, eliminating retention zones and ensuring complete safety through the absence of sharp corners.

OPTIONS	
DPK	Intermediate drain pan kit (3C-E .. R/L). KIT TO INSTALL

COILS

Made from aluminium fins with 4 or 6 mm spacing, combined with copper tubes with a grooved internal structure, the coils are very efficient and compact.
Versions available:
- Multi-refrigerant HFCs,
- WCO (glycol water, coolant).

Select your coil treatment to extend your unit cooler's lifespan! Contact us.

VENTILATION

Plastic grilles designed with airflow straighteners
Long-lubricated, factory-wired axial motor fans:

	models	temp.	voltage	freq.	IP	class
Ø 300 mm 4P - 1,320 rpm	**3C-E 3XXX R/L**	**+**	**230V/1**	**50Hz**	**IP42**	**B**
	3C-E 3XXX E/C	**-**	**230V/1**	**50Hz**	**IP42**	**B**
Ø 450 mm* 4P/6P - 1,320/1,070 rpm	**3C-E 4XXX R/L**	**+**	**230-400V/3**	**50Hz**	**54**	**F**
	3C-E 4XXX E/C	**-**	**230-400V/3**	**50Hz**	**54**	**F**

* Two-speed motor fans, high-speed wired (Δ) by default.

OPTIONS	
M60	Motor fan 230-400V/3/60Hz (Ø 450 mm).
MM5	Motor fan 230V/1/50Hz (Ø 450 mm).
2V5	2V5 2-speed motor fan 400V/3/50Hz (Ø 450 mm).

DEFROST

Two defrost modes for the coil: electric (230V/1, 230V/3 or 400V/3) or hot gases.
Quick defrosting of the condensate pan thanks to a heater under the intermediate drain pan.

OPTIONS	
HG1	Hot gases (coil: hot gases, drain pan: electric heaters).
2TH	Defrost and safety thermostats (5709L + 5708L). KIT TO INSTALL
THD	Defrost thermostat (5709L). KIT TO INSTALL
THS	Safety thermostat (5708L). KIT TO INSTALL
E1U	Light electric defrost.
E1K	Light electric defrost. KIT TO INSTALL
E3K	Full electric defrost. KIT TO INSTALL

tA1	+10	+2	-5	-10	-25°C
	3C-E .. R/L	+E1K / E1U		+E3K	
				3C-E .. E/C	

			Number of heaters					
			Ø 300 mm			Ø 450 mm		
Electric defrost level	**Models**	**Kit | Option**	**Models**	**Coil**	**Drain pan**	**Models**	**Coil**	**Drain pan**
Light	**3C-E .. R/L**	**E1K | E1U**	**3xxx** *except 3142*	**3** *2*	**-**	**All**	**3**	**-**
Full	**3C-E .. R/L**	**E3K**	**3xxx** *except 3142* *except 3143* *except 3243* *except 3343*	**5** *2* *3* *3* *3*	**1**	**4xxx** *except 4263*	**8** *5*	**1**
	3C-E .. E/C	Standard						

3C-E 3(A)1(B)42(C)-R(D)

(A) Fan diameter: **3** = Ø 300 mm - **4** = Ø 450 mm
(3) Number of fans
(C) Model
(D) Fin spacing: **R** = 4 mm (positive) **E** = 4 mm (negative)
L = 6 mm (positive) **C** = 6 mm (negative)

The 3C-E is available with HFCs and glycol water. For more information, please consult our software.

3C-E (1/2)

4 mm

CONDITIONS	REFRIGERANTS	3C-E ... -R	3142	3143	3145	3155	3165	3243	3244	3245	3343	3344	4165	3354	4166
SC2 (1)	R449A	kW	1,4	1,8	2,4	2,8	3,1	3,9	4,5	4,9	5,9	6,8	7,6	8,0	8,4
	R404A	kW	1,5	1,8	2,2	2,6	3,0	3,8	4,3	4,6	5,7	6,5	7,4	7,6	8,0

CONDITIONS	REFRIGERANTS	3C-E ... -E	3142	3143	3145	3155	3165	3243	3244	3245	3343	3344	4165	3354	4166
SC3 (1)	R449A	kW	1,0	1,3	1,8	2,0	2,4	2,7	3,3	3,7	4,1	5,1	5,4	6,0	6,1
	R404A	kW	1,1	1,4	1,8	2,0	2,3	2,9	3,4	3,7	4,3	5,2	5,6	6,0	6,2
SC4 (1)	R449A	kW	0,8	1,0	1,4	1,6	1,8	2,1	2,6	3,0	3,2	4,0	4,2	4,8	4,7
	R404A	kW	0,8	1,1	1,4	1,6	1,8	2,3	2,7	2,9	3,4	4,1	4,4	4,8	4,9

			3142	3143	3145	3155	3165	3243	3244	3245	3343	3344	4165	3354	4166
Surface area		m^2	4,1	6,1	10,2	12,8	15,3	12,3	16,4	20,4	18,4	24,5	23,0	30,7	27,6
Circuit volume		dm^3	0,7	1,0	1,7	2,1	2,5	2,0	2,7	3,3	3,0	4,0	3,8	5,0	4,5
Airflow		m^3/h	1290	1190	1010	1140	1230	2380	2190	2030	3560	3280	4250	3630	4060
Air throw (2)		m	15	14	12	14	15	17	16	15	20	19	28	21	27
Fan 1,350 rpm		Nb	1	1	1	1	1	2	2	2	3	3	1	3	1
		Ø	300	300	300	300	300	300	300	300	300	300	450	300	450
	230V/1/50Hz	W max	110	110	110	110	110	220	220	220	330	330	-	330	-
		A max (3)	0,85	0,85	0,85	0,85	0,85	1,70	1,70	1,70	2,55	2,55	-	2,55	-
	230-400V/3/50Hz	W max	-	-	-	-	-	-	-	-	-	-	450	-	450
		A max (3)	-	-	-	-	-	-	-	-	-	-	1,60	-	1,60
3C-E ... -R Electric defrost E1K (4)		Nb	2	3	3	3	3	3	3	3	3	3	3	3	3
		W Total	580	870	870	1080	1290	1740	1740	1740	2580	2580	1080	3240	1080
	230V/1/50Hz	A Total	2,5	3,8	3,8	4,7	5,6	7,6	7,6	7,6	11,2	11,2	4,7	14,1	4,7
	400V/3/50Hz	A Total	-	-	-	-	-	-	-	-	-	-	-	-	-
3C-E ... -E Electric defrost standard	Coil + Drain pan	Nb	2 + 1	3 + 1	5 + 1	5 + 1	5 + 1	3 + 1	5 + 1	5 + 1	3 + 1	5 + 1	8 + 1	5 + 1	8 + 1
		W Total	870	1160	1740	2160	2580	2320	3480	3480	3440	5160	3240	6480	3240
	230V/1/50Hz	A Total	3,8	5,1	7,6	9,4	11,2	10,1	15,1	15,1	15,0	-	14,1	-	14,1
	400V/3/50Hz	A Total	-	-	-	-	-	-	-	-	-	7,4	-	9,4	-
Connections HFCs	Inlet (5)	Ø OD	3/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	7/8"	5/8"	7/8"
	Outlet (5)	Ø ODF	3/8"	5/8"	5/8"	5/8"	5/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"
Net weight		kg	14	15	16	18	20	23	24	26	32	35	38	39	40

(1) Standard conditions:
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
SC3 / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K
SC4 / -25 °C (air inlet temp.) / -31 °C (evaporating temp.) / DT1 = 6K
(2) Residual air speed: 0.25 m/s.
(3) Adjustment of overload protection. For air temperatures "ti" other than +20 °C, multiply the intensities by the ratio 293/(273 + "ti") to obtain the approximate value of the intensity after the room has been brought up to temperature.
(4) Electric defrost option.
(5) OD: Male connection - ODF: female to receive the tube of the same diameter

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

3C-E 3(A)4(B)45(C)-E(D)

(A) Fan diameter: **3** = Ø 300 mm - **4** = Ø 450 mm
(3) Number of fans
(C) Model
(D) Fin spacing: **R** = 4 mm (positive) **E** = 4 mm (negative)
L = 6 mm (positive) **C** = 6 mm (negative)

The 3C-E is available with HFCs and glycol water. For more information, please consult our software.

3C-E (2/2)

4 mm

CONDITIONS	REFRIGERANTS	3C-E ... -R	3444	3445	3454	3455	4263	3545	4264	4266	4364	4366	4386	4466
SC2 (1)	**R449A**	**kW**	9,1	9,7	10,7	11,5	11,3	12,1	13,6	17,2	20,9	25,9	31,7	34,2
	R404A	**kW**	8,7	9,2	10,1	10,9	11,5	11,5	13,3	16,3	20,2	24,6	30,1	32,5

CONDITIONS	REFRIGERANTS	3C-E ... -E	-	3445	3454	3455	4263	3545	4264	4266	4364	4366	4386	4466
SC3 (1)	**R449A**	**kW**	-	7,3	7,8	8,7	7,7	8,9	9,7	12,6	15,1	19,1	23,8	24,0
	R404A	**kW**	-	7,2	7,8	8,5	8,4	8,7	10,2	12,7	15,7	19,2	23,0	24,1
SC4 (1)	**R449A**	**kW**	-	5,9	6,1	6,9	5,9	7,1	7,5	9,9	11,8	15,0	18,2	18,7
	R404A	**kW**	-	5,8	6,2	6,8	6,6	6,9	8,0	10,1	12,4	15,3	18,2	18,9

			3444	3445	3454	3455	4263	3545	4264	4266	4364	4366	4386	4466
Surface area		**m^2**	32,7	40,9	40,9	51,1	27,6	51,1	36,8	55,2	55,2	82,8	110,4	110,4
Circuit volume		**dm^3**	5,4	6,7	6,7	8,4	4,5	8,4	6,0	9,0	9,0	13,5	18,1	18,1
Airflow		**m^3/h**	4380	4050	4840	4580	9340	5060	8910	8120	13360	12170	13540	16230
Air throw (2)		**m**	22	21	24	23	35	24	34	33	38	36	38	39
Fan 1,350 rpm		**Nb**	4	4	4	4	2	5	2	2	3	3	3	4
		Ø	300	300	300	300	450	300	450	450	450	450	450	450
	230V/1/50Hz	**W max**	440	440	440	440	-	550	-	-	-	-	-	-
		A max (3)	3,40	3,40	3,40	3,40	-	4,25	-	-	-	-	-	-
	230-400V/3/50Hz	**W max**	-	-	-	-	900	-	900	900	1350	1350	1350	1800
		A max (3)	-	-	-	-	3,20	-	3,20	3,20	4,80	4,80	4,80	6,40
3C-E ... -R Electric defrost **E1K** (4)		**Nb**	3	3	3	3	3	3	3	3	3	3	3	3
		W Total	3450	3450	4320	4320	2160	4320	2160	2160	3240	3240	3960	3960
	230V/1/50Hz	**A Total**	15,0	15,0	-	-	9,4	-	9,4	9,4	14,1	14,1	-	-
	400V/3/50Hz	**A Total**	-	-	6,2	6,2	-	6,2	-	-	-	-	5,7	5,7
3C-E ... -E Electric defrost standard	Coil + Drain pan	**Nb**	-	5 + 1	5 + 1	5 + 1	5 + 1	5 + 1	8 + 1	8 + 1	8 + 1	8 + 1	8 + 1	8 + 1
		W Total	-	6900	8640	8640	4320	8640	6480	6480	9720	9720	11880	11880
	230V/1/50Hz	**A Total**	-	-	-	-	-	-	-	-	-	-	-	-
	400V/3/50Hz	**A Total**	-	10,0	12,5	12,5	6,3	12,5	9,4	9,4	14,0	14,0	17,1	17,1
Connections **HFCs**	Inlet (5)	**Ø OD**	5/8"	7/8"	1"1/8	7/8"	7/8"	7/8"	1"1/8	1"1/8	1"1/8	1"3/8	1"3/8	1"3/8
	Outlet (5)	**Ø ODF**	7/8"	1"1/8	1"1/8	1"3/8	1"3/8	1"3/8	1"3/8	1"3/8	1"5/8	2"1/8	2"1/8	2"1/8
Net weight		**kg**	44	47	50	54	52	57	56	63	76	87	105	113

(1) Standard conditions:
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
SC3 / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K
SC4 / -25 °C (air inlet temp.) / -31 °C (evaporating temp.) / DT1 = 6K
(2) Residual air speed: 0.25 m/s.
(3) Adjustment of overload protection. For air temperatures "ti" other than +20 °C, multiply the intensities by the ratio 293/(273 + "ti") to obtain the approximate value of the intensity after the room has been brought up to temperature.
(4) Electric defrost option.
(5) OD: Male connection - ODF: female to receive the tube of the same diameter

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

3C-E 3(A)1(B)43(C)-L(D)

(A) Fan diameter: **3** = Ø 300 mm - **4** = Ø 450 mm
(3) Number of fans
(C) Model
(D) Fin spacing: **R** = 4 mm (positive) **E** = 4 mm (negative)
L = 6 mm (positive) **C** = 6 mm (negative)

The 3C-E is available with HFCs and glycol water. For more information, please consult our software.

3C-E (1/2)

6 mm

CONDITIONS	REFRIGERANTS	3C-E ... -L	3143	3144	3145	3155	3165	3243	3244	3245	3343	3344	4165	3354
SC2 (1)	R449A	kW	1,6	1,9	2,3	2,7	3,0	3,4	4,0	4,6	5,0	6,2	6,7	7,1
	R404A	kW	1,6	1,9	2,2	2,6	2,8	3,4	3,9	4,4	5,0	6,1	6,7	6,8

CONDITIONS	REFRIGERANTS	3C-E ... -C	3143	3144	3145	3155	3165	3243	3244	3245	3343	3344	4165	3354
SC3 (1)	R449A	kW	1,1	1,3	1,6	1,9	2,2	2,4	3,0	3,4	3,6	4,5	4,6	5,3
	R404A	kW	1,2	1,4	1,7	1,9	2,2	2,6	3,1	3,4	3,9	4,6	4,9	5,4
SC4 (1)	R449A	kW	0,8	1,0	1,3	1,5	1,8	1,9	2,3	2,7	2,9	3,5	3,6	4,2
	R404A	kW	0,9	1,1	1,3	1,6	1,7	2,0	2,4	2,7	3,1	3,7	3,9	4,3

			3143	3144	3145	3155	3165	3243	3244	3245	3343	3344	4165	3354
Surface area		m^2	4,2	5,7	7,1	8,8	10,6	8,5	11,3	14,1	12,7	17,0	15,9	21,2
Circuit volume		dm^3	1,0	1,3	1,7	2,1	2,5	2,0	2,7	3,3	3,0	4,0	3,8	5,0
Airflow		m^3/h	1260	1180	1110	1220	1290	2520	2360	2220	3770	3550	4490	3830
Air throw (2)		m	15	14	13	15	16	18	17	16	21	20	29	22
Fan 1,350 rpm		Nb	1	1	1	1	1	2	2	2	3	3	1	3
		Ø	300	300	300	300	300	300	300	300	300	300	450	300
	230V/1/50Hz	W max	110	110	110	110	110	220	220	220	330	330	-	330
		A max (3)	0,85	0,85	0,85	0,85	0,85	1,70	1,70	1,70	2,55	2,55	-	2,55
	230-400V/3/50Hz	W max	-	-	-	-	-	-	-	-	-	-	450	-
		A max (3)	-	-	-	-	-	-	-	-	-	-	1,60	-
3C-E ... -L Electric defrost E1K (4)		Nb	3	3	3	3	3	3	3	3	3	3	3	3
		W Total	870	870	870	1080	1290	1740	1740	1740	2580	2580	1080	3240
	230V/1/50Hz	A Total	3,8	3,8	3,8	4,7	5,6	7,6	7,6	7,6	11,2	11,2	4,7	14,1
	400V/3/50Hz	A Total	-	-	-	-	-	-	-	-	-	-	-	-
3C-E ... -C Standard electric defrost	Coil + Drain pan	Nb	3 + 1	5 + 1	5 + 1	5 + 1	5 + 1	3 + 1	5 + 1	5 + 1	3 + 1	5 + 1	8 + 1	5 + 1
		W Total	1160	1740	1740	2160	2580	2320	3480	3480	3440	5160	3240	6480
	230V/1/50Hz	A Total	5,1	7,6	7,6	9,4	11,2	10,1	15,1	15,1	15,0	-	14,1	-
	400V/3/50Hz	A Total	-	-	-	-	-	-	-	-	-	7,4	-	9,4
Connections HFCs	Inlet (5)	Ø OD	5/8" *	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
	Outlet (5)	Ø ODF	5/8" *	5/8"	5/8"	5/8"	5/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"
Net weight		kg	14	15	16	17	19	22	23	25	31	33	36	37

(1) Standard conditions:
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
SC3 / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K
SC4 / -25 °C (air inlet temp.) / -31 °C (evaporating temp.) / DT1 = 6K
(2) Residual air speed: 0.25 m/s.
(3) Adjustment of overload protection. For air temperatures "ti" other than +20 °C, multiply the intensities by the ratio 293/(273 + "ti") to obtain the approximate value of the intensity after the room has been brought up to temperature.
(4) Electric defrost option.
(5) OD: Male connection - ODF: female to receive the tube of the same diameter

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

3C-E 3(A)1(B)66(C)-C(D)

(A) Fan diameter: **3** = Ø 300 mm - **4** = Ø 450 mm
(3) Number of fans
(C) Model
(D) Fin spacing: **R** = 4 mm (positive) **E** = 4 mm (negative)
L = 6 mm (positive) **C** = 6 mm (negative)

> **The 3C-E is available with HFCs and glycol water. For more information, please consult our software.**

3C-E (2/2)

6 mm

CONDITIONS	REFRIGERANTS	3C-E ... -L	4166	3444	3445	3454	3545	4264	4266	4364	4366	4386	4466
SC2 (1)	R449A	kW	7,6	8,2	9,2	9,5	11,4	11,6	15,3	17,8	23,2	28,8	31,5
	R404A	kW	7,4	7,9	8,7	9,1	10,8	11,6	14,8	17,6	22,4	27,3	30,6

CONDITIONS	REFRIGERANTS	3C-E ... -C	4166	3444	3445	3454	3545	4264	4266	4364	4366	4386	4466
SC3 (1)	R449A	kW	5,5	6,1	6,6	7,0	8,1	8,3	11,1	12,9	17,1	20,7	21,7
	R404A	kW	5,7	6,2	6,7	7,1	8,2	8,8	11,4	13,6	17,5	20,6	22,2
SC4 (1)	R449A	kW	4,3	4,8	5,3	5,6	6,5	6,5	8,8	10,0	13,5	16,1	16,9
	R404A	kW	4,5	4,9	5,4	5,7	6,5	7,0	9,1	10,8	13,9	16,5	17,6

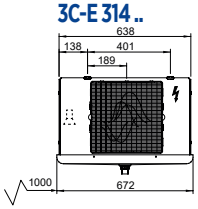
			4166	3444	3445	3454	3545	4264	4266	4364	4366	4386	4466
Surface area		m^2	19,1	22,6	28,3	28,3	35,4	25,5	38,2	38,2	57,3	76,4	76,4
Circuit volume		dm^3	4,5	5,4	6,7	6,7	8,4	6,0	9,0	9,0	13,5	18,1	18,1
Airflow		m^3/h	4330	4730	4440	5100	5560	9310	8660	13970	13000	14110	17330
Air throw (2)		m	28	23	22	25	25	35	34	39	37	39	40
Fan 1,350 rpm		Nb	1	4	4	4	5	2	2	3	3	3	4
		Ø	450	300	300	300	300	450	450	450	450	450	450
	230V/1/50Hz	W max	-	440	440	440	550	-	-	-	-	-	-
		A max (3)	-	3,40	3,40	3,40	4,25	-	-	-	-	-	-
	230-400V/3/50Hz	W max	450	-	-	-	-	900	900	1350	1350	1350	1800
		A max (3)	1,60	-	-	-	-	3,20	3,20	4,80	4,80	4,80	6,40
3C-E ... -L Electric defrost E1K (4)		Nb	3	3	3	3	3	3	3	3	3	3	3
		W Total	1080	3450	3450	4320	4320	2160	2160	3240	3240	3960	3960
	230V/1/50Hz	A Total	4,7	15,0	15,0	-	-	9,4	9,4	14,1	14,1	-	-
	400V/3/50Hz	A Total	-	-	-	6,2	6,2	-	-	-	-	5,7	5,7
3C-E ... -C Standard electric defrost	Coil + Drain pan	Nb	8 + 1	5 + 1	5 + 1	5 + 1	5 + 1	8 + 1	8 + 1	8 + 1	8 + 1	8 + 1	8 + 1
		W Total	3240	6900	6900	8640	8640	6480	6480	9720	9720	11880	11880
	230V/1/50Hz	A Total	14,1	-	-	-	-	-	-	-	-	-	-
	400V/3/50Hz	A Total	-	10,0	10,0	12,5	12,5	9,4	9,4	14,0	14,0	17,1	17,1
Connections HFCs	Inlet (5)	Ø OD	7/8"	5/8"	7/8"	1"1/8	7/8"	1"1/8	1"1/8	1"1/8	1"3/8	1"3/8	1"3/8
	Outlet (5)	Ø ODF	7/8"	7/8"	1"1/8	1"1/8	1"3/8	1"3/8	1"3/8	1"5/8	2"1/8	2"1/8	2"1/8
Net weight		kg	38	42	44	47	54	54	60	73	82	99	106

(1) Standard conditions:
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
SC3 / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K
SC4 / -25 °C (air inlet temp.) / -31 °C (evaporating temp.) / DT1 = 6K
(2) Residual air speed: 0.25 m/s.
(3) Adjustment of overload protection. For air temperatures "ti" other than +20 °C, multiply the intensities by the ratio 293/(273 + "ti") to obtain the approximate value of the intensity after the room has been brought up to temperature.
(4) Electric defrost option.
(5) OD: Male connection - ODF: female to receive the tube of the same diameter

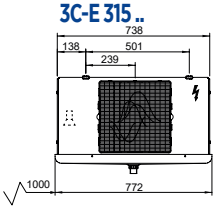
R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

3C-E | Ø 300 mm

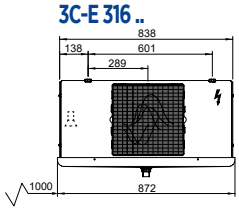
3C-E 314 ..



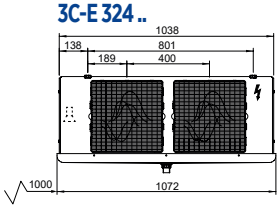
3C-E 315 ..



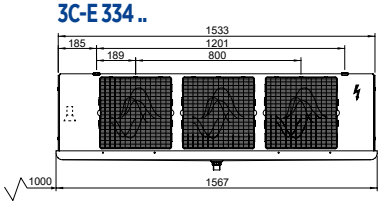
3C-E 316 ..



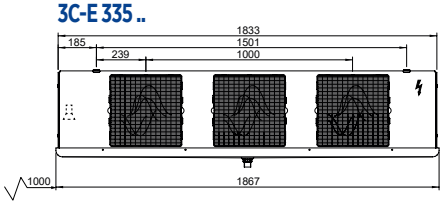
3C-E 324 ..



3C-E 334 ..



3C-E 335 ..



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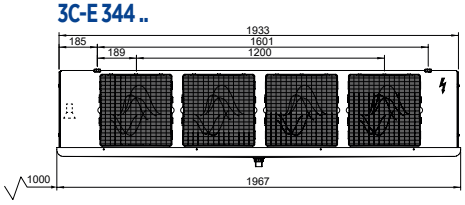

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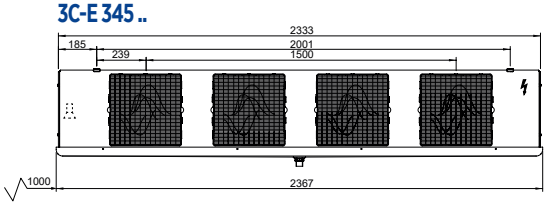

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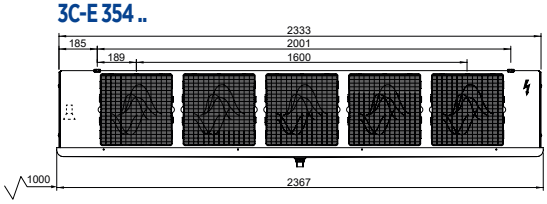
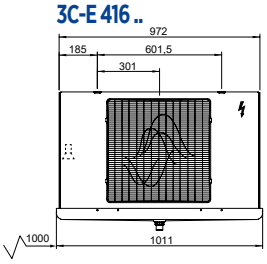


3C-E | Ø 450 mm

3C-E 416 ..



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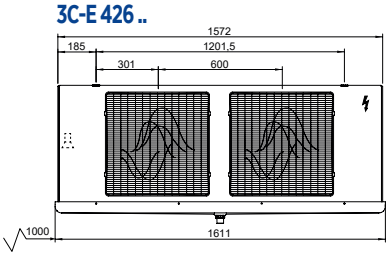

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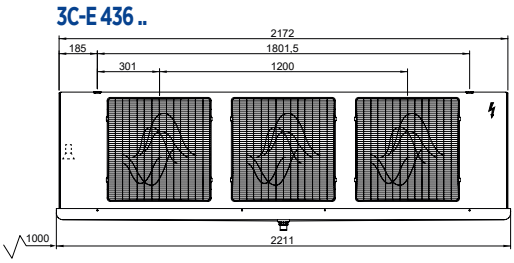

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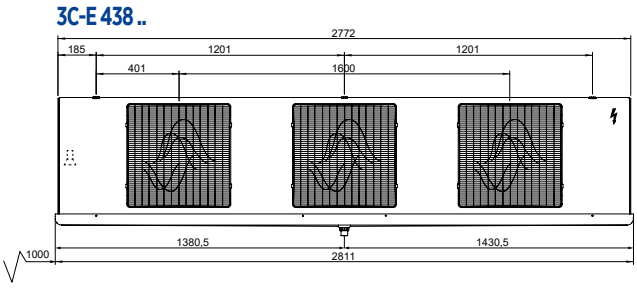

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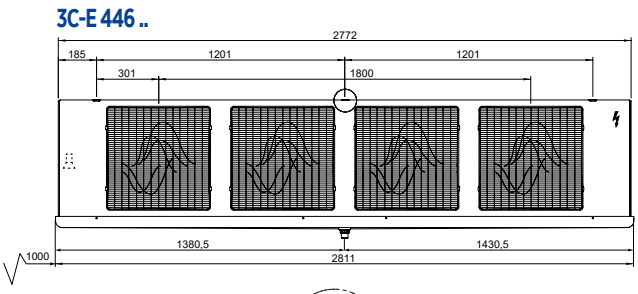
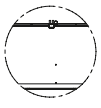
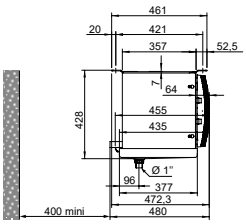
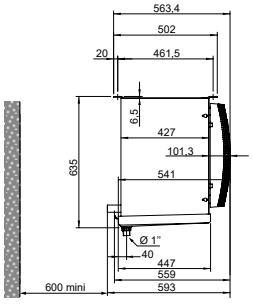








FRIGA-BOHN®

EXTronic

Mounted electronic expansion valve solution for unit coolers

CO2 A2L HFC

Faster - More **efficient** - More **economical**.
Efficient unit cooler.
Mounted directly on the NOVA and NTA unit cooler (for other unit coolers, contact us).
Environmentally friendly.

DESCRIPTION

Superheat regulator for electronic expansion valve.
Superheat setting according to the refrigerant.
Optimizes the refrigeration circuit.
Control and automatic closing of the valve.
Superheat probe to be installed on the pipe.
Safety > alarms in case of overheating or other problems.
Multi-refrigerant > an expansion valve compatible with several refrigerants in a single unit cooler.

WIDE CHOICE OF REFRIGERANTS

R404A, R407A, R407C, R407F, R452A, R449A, R448A, R450A, R513A.
R744 (CO_2) : Driver compatible, but please note that a specific pressure sensor is required. CONTACT US
A2L refrigerants. CONTACT US
Possibility of adding a refrigerant by updating the Driver (via RS485 input and a computer).
LowSH (low superheat) > change of reactivity below 5 °C superheat.

4 START-UP PARAMETERS

Type of refrigerant.
Application mode: cold room / display case.
Super heat setpoint.
MOP for negative applications (CS setting).

OPTIONS

SAFETRONIC

An optional Safetronic kit by EXTronic.
This Safetronic kit guarantees closure of the connected electronic valve in the event of a power failure.

POSSIBILITY OF CONNECTION TO BMS

Possibility of direct connection (RS 485 Modbus).
Possibility of connecting EXTronic to a BMS (all makes possible) > to monitor or modify the parameters.
Easy to install and configure.
Better control of the cold room.
Better unit cooler + EXTronic monitoring.

PRODUCT ADVANTAGES

TECHNIQUES

Mounted directly on the unit cooler.
Multi-refrigerant: several refrigerants in a single controller.
Adapted to the constraints of a cold room:
- Temperature: withstands extreme temperature conditions (-40 °C to +60 °C).
- Humidity: IP 65.
Easy to set up.
Max. power supply: 15W.
Facilitates retrofitting when changing refrigerant.
Safetronic option > no solenoid valve.

EFFICIENT UNIT COOLER

Rapid temperature drop compared to thermostatic expansion > energy savings.
More efficient and faster than the thermostatic expansion valve > economical.
Quality of products preserved.
Safety guaranteed by Safetronic.

ENVIRONMENTALLY FRIENDLY

Use of low GWP refrigerants.
Multi-refrigerant: allows you to have a single expansion valve regardless of the refrigerant used.
Installation retrofit and expansion valve function retained. Port dimensioned and compatible with all selection refrigerants: R404A, R449A, R448A, R407A, R407F, R452A, R450A and R513A.

FRIGA-BOHN®

GTI | GTA

Dual-discharge unit coolers
Industrial range

CO2 60bar | WG | HFC

GTA | GTA-W

GTI | GTI-W

11 - 87 kW

Easy installation: the unit coolers are delivered in the installation position.
Acoustic comfort: a choice of fan speeds.
Easy maintenance: components that are quick to access without disassembly.

CASING

Pre-painted galvanized steel for corrosion and impact resistance.
The exterior drain pans of the GTA-W are removable, and are either fixed or hinge-mounted (optional).
The GTI(-W) and GTA(-W) are equipped with end caps and delivered on a wooden base.

OPTIONS

GTI / GTI-W | GTA / GTA-W

EIS	Insulated drain pan.
BCS	Hinged condensate pan.

GTA / GTA-W

CIN	Stainless steel casing.
ECB	Wooden crate packaging.

VENTILATION

GTI / GTI-W

Motor fans Ø 450 mm, 230-400 V/3/50 Hz:
4P = 1,500 rpm.
6P = 1,000 rpm.
8P = 750 rpm.

GTA / GTA-W

Motor fans Ø 630 mm, 400 V/3/50 Hz, IP 54, class F, with built-in thermal protection
4P = 1,330 rpm.
6/8P = 890 / 690 rpm.

OPTIONS

GTI / GTI-W

M60	Motor fans 230-400V/3/50-60Hz (adapted blades).

GTA / GTA-W

EC1	EC 400V/3/50-60Hz motors. CONTACT US
EC2	EC 230V/1/50-60Hz motors.
C3V	3-speed switch (motors EC1 and EC2).
CMU	Factory motor wiring.
MVI	Stainless steel fan grille.

DEFROST

Three defrost modes for the coil:
electric (230V/1, 230V/3 or 400V/3), hot water, hot gas.
Quick defrosting of the condensate pan thanks to a heater under the intermediate drain pan. .

OPTIONS

GTI / GTI-W

E1U	Light electric defrost.
HGB	Hot gas defrost (coil only).

GTA / GTA-W

E1U	Light electric defrost
E1K	Light electric defrost. KIT TO INSTALL
ELU	Electric defrost (coil+ drain pan)
HG1	Hot gas defrost (coil: hot gases, drain pan: heaters).
EEK	Drain pan electric defrost. KIT TO INSTALL
ECU	Additional electric coil defrost. CONTACT US
ECK	Additional electric coil defrost. KIT TO INSTALL
DEG	Hot glycol water defrost (coil).

Look after your coils to extend their service life! Contact us.

COILS

Aluminium fins with 4.23 or 6.35 mm spacing.
Combined with copper tubes, the coils are very efficient and compact.
Versions available:
- Multi-refrigerant HFCs.
- CO2 (60 bar).
- WCO (glycol water, coolant).

OPTIONS

EGK	Glycol water and heat transfer refrigerant extension. KIT TO INSTALL

INSTALLATION | MAINTENANCE

Easy access to the drain pans and motorized fans facilitating installation and maintenance.
Delivered in assembly position, the GTA(-W) is designed to be installed on the ceiling.
To facilitate installation of the glycol water version, a connection kit is available as an option (option EGK).

GTI(A) 3(B)44(C) 4P(D)

(A) **GTI**: direct expansion unit cooler **GTI-W**: glycol water unit cooler
(B) Number of fans
(C) Fin spacing: **4** = 4,23 mm - **7** = 6,35 mm
(D) **4P** = 1,500 rpm. - **6P** = 1,000 rpm. - **8P** = 750 rpm.

The GTI is available with CO_2, HFCs and glycol water. For more information, please consult our software.

GTI ... 4P/6P/8P - 1,500/1,000/750 rpm. — 4,23 mm

CONDITIONS	REFRIGERANTS		GTI ...	344	364	444	464	484	564	584
SC1 (1)	CO_2 - 60 bar (2)	4P	kW	30,6	39,8	45,3	56,2	61,5	68,3	71,9
		6P	kW	25,0	31,7	36,0	40,0	45,1	50,9	55,7
		8P	kW	20,0	22,9	27,4	30,3	30,8	35,9	37,5
	R449A	4P	kW	34,8	44,6	46,0	60,2	70,5	73,0	77,9
		6P	kW	29,2	36,7	39,1	49,1	55,1	59,4	64,1
		8P	kW	24,8	29,8	33,5	39,9	43,4	48,5	52,9
	R404A	4P	kW	33,7	42,5	45,2	57,7	66,3	68,8	73,2
		6P	kW	27,8	34,5	37,6	46,1	51,8	55,8	60,2
		8P	kW	23,5	28,0	32,1	37,5	40,8	45,6	49,7
SC2 (1)	CO_2 - 60 bar (2)	4P	kW	20,2	28,3	31,7	37,7	39,3	44,4	52,6
		6P	kW	17,0	21,2	24,4	28,4	29,2	33,6	33,7
		8P	kW	14,0	17,5	19,9	22,5	21,0	25,5	25,6
	R449A	4P	kW	21,1	27,0	28,6	36,6	38,0	44,3	49,8
		6P	kW	17,2	20,8	23,3	28,0	29,3	34,4	37,5
		8P	kW	14,0	16,3	18,8	21,9	22,6	27,1	28,7
	R404A	4P	kW	20,4	25,6	27,9	34,8	36,1	42,0	47,3
		6P	kW	16,3	19,8	22,2	26,6	27,9	32,7	35,6
		8P	kW	13,3	15,5	17,9	20,8	21,5	25,7	27,3

				344	364	444	464	484	564	584
Surface area			m^2	98,4	147,5	131,2	196,7	262,3	245,9	327,9
Circuit tube vol.			dm^3	19,0	28,5	25,4	38,1	50,8	47,6	63,4
Airflow		4P	m^3/h	13950	13350	18600	17800	17000	22250	21250
		6P	m^3/h	9360	8960	12480	11950	11410	14930	14260
		8P	m^3/h	6670	6390	8900	8500	8130	10650	10170
Fan * Ø 450 mm 400V/3/50Hz			Nb	3	3	4	4	4	5	5
	Air throw (3)	4P	m	2x7	2x7	2x7	2x7	2x7	2x7	2x7
		6P	m	2x5	2x5	2x6	2x5	2x5	2x5	2x5
		8P	m	2x4	2x4	2x4	2x4	2x4	2x4	2x4
Acoustics **Lw = Lp +30 dB(A)**	**Lp 4m** (4)	4P	dB(A)	50	50	51	51	51	52	52
		6P	dB(A)	40	40	41	41	41	42	42
		8P	dB(A)	33	33	34	34	34	35	35
Electric defrost **E1U**	Coil		Nb	6	6	6	6	6	6	6
	400 V/3/50 Hz		W Total	6000	6000	9240	9240	9240	12000	12000
			A Total	9	9	14	14	14	18	18
Connections	Inlet (5)		Ø	7/8"	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"3/8
HFCs	Outlet (6)		Ø	1"5/8	1"5/8	2"1/8	2"1/8	2"1/8	2"5/8	2"5/8
Net weight (CO2)			kg	197	239	249	295	348	364	430

* **4P** : 360 W max - 1 A max (7). **6P** : 115 W max - 0.6 A max (7). **8P** : 72 W max - 0.4 A max (7).

(1) Standard conditions:
SC1 / +10 °C (air inlet temp.) / 0 °C (evaporating temp.) / DT1 = 10K
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
(2) Operating pressure - Specific coil - Connection diameters to be defined when ordering.
(3) Residual air speed: 0.25 m/s, in accordance with the standard.
(4) Average sound pressure level in dB(A) calculated at 4 m, level with the blades, in a free field over a reflecting plane, given as an indication only.
(5) Distributor: male to solder.
(6) ODF = female, to receive the tube of the same diameter.
(7) Adjustment of overload protection.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

GTI(A) 3(B)44(C) 4P(D)

(A) **GTI**: direct expansion unit cooler **GTI-W**: glycol water unit cooler
(B) Number of fans
(C) Fin spacing: **4** = 4,23 mm - **7** = 6,35 mm
(D) **4P** = 1,500 rpm. - **6P** = 1,000 rpm. - **8P** = 750 rpm.

The GTI is available with CO_2, HFCs and glycol water. For more information, please consult our software.

GTI ... 4P/6P/8P - 1,500/1,000/750 rpm. 6,35 mm

CONDITIONS	REFRIGERANTS		GTI ...	347	367	387	467	487	567	587
SC1 (1)	CO_2 - 60 bar (2)	4P	kW	26,0	35,3	39,2	46,6	52,1	57,4	66,9
		6P	kW	20,9	26,4	29,4	34,2	41,1	45,5	46,8
		8P	kW	16,8	21,0	24,0	28,0	31,1	34,2	38,7
	R449A	4P	kW	28,3	38,8	49,5	55,6	66,4	67,6	77,3
		6P	kW	24,8	31,2	38,6	44,4	51,8	54,5	60,8
		8P	kW	21,7	27,7	31,2	37,1	41,8	48,2	51,9
	R404A	4P	kW	28,3	37,7	46,7	53,0	62,8	65,2	73,6
		6P	kW	24,5	30,1	36,3	42,2	48,7	52,3	57,1
		8P	kW	21,1	26,1	29,3	34,9	39,3	45,3	48,8
SC2 (1)	CO_2 - 60 bar (2)	4P	kW	17,0	23,9	25,6	33,0	37,0	40,2	45,0
		6P	kW	13,9	19,0	19,5	24,1	27,8	30,9	33,7
		8P	kW	11,8	14,4	16,2	18,9	20,0	22,3	25,7
	R449A	4P	kW	17,0	22,7	25,8	29,3	34,6	38,0	44,6
		6P	kW	14,0	18,2	20,2	23,6	27,0	30,2	34,5
		8P	kW	11,6	14,5	15,9	19,1	21,3	24,1	27,0
	R404A	4P	kW	16,8	21,9	24,5	27,9	32,8	36,3	42,4
		6P	kW	13,6	17,2	19,1	22,4	25,7	28,7	32,7
		8P	kW	11,2	13,8	15,1	18,1	20,2	22,9	25,6

				347	367	387	467	487	567	587
Surface area			m^2	67,7	101,5	135,3	135,3	180,4	169,1	225,5
Circuit tube vol.			dm^3	19,0	28,5	38,1	38,1	50,8	47,6	63,4
Airflow		4P	m^3/h	14160	13680	13260	18240	17680	22800	22100
		6P	m^3/h	9500	9180	8900	12240	11860	15300	14830
		8P	m^3/h	6770	6540	6340	8730	8460	10910	10570
Fan * Ø 450 mm 400V/3/50Hz			Nb	3	3	3	4	4	5	5
	Air throw (3)	4P	m	2x7	2x7	2x7	2x7	2x7	2x7	2x7
		6P	m	2x5	2x5	2x5	2x5	2x5	2x5	2x5
		8P	m	2x4	2x4	2x4	2x4	2x4	2x4	2x4
Acoustics **Lw = Lp +30 dB(A)**	**Lp 4m** (4)	4P	dB(A)	50	50	50	51	51	52	52
		6P	dB(A)	40	40	40	41	41	42	42
		8P	dB(A)	33	33	33	34	34	35	35
Defrost defrost **E1U**	Coil		Nb	6	6	6	6	6	6	6
	400 V/3/50 Hz		W Total	6000	6000	6000	9240	9240	12000	12000
			A Total	9	9	9	14	14	18	18
Connections **HFCs**	Inlet (5)		Ø	7/8"	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"3/8
	Outlet (6)		Ø	1"5/8	1"5/8	1"5/8	2"1/8	2"1/8	2"1/8	2"5/8
Net weight (CO2)			kg	181	211	248	271	321	336	398

* **4P** : 360 W max - 1 A max (7). **6P** : 115 W max - 0.6 A max (7). **8P** : 72 W max - 0.4 A max (7).

(1) Standard conditions:
SC1 / +10 °C (air inlet temp.) / 0 °C (evaporating temp.) / DT1 = 10K
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
(2) Operating pressure - Specific coil - Connection diameters to be defined when ordering.
(3) Residual air speed: 0.25 m/s, in accordance with the standard.
(4) Average sound pressure level in dB(A) calculated at 4 m, level with the blades, in a free field over a reflecting plane, given as an indication only.
(5) Distributor: male to solder.
(6) ODF = female, to receive the tube of the same diameter.
(7) Adjustment of overload protection.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

GTI(A) 3(B)44(C) 4P(D)

(A) **GTI**: direct expansion unit cooler **GTI-W**: glycol water unit cooler
(B) Number of fans
(C) Fin spacing: **4** = 4,23 mm - **7** = 6,35 mm
(D) **4P** = 1,500 rpm. - **6P** = 1,000 rpm. - **8P** = 750 rpm.

The GTI is available with CO_2, HFCs and glycol water. For more information, please consult our software.

GTA ... R 4D/6D/6Y - 1,330/890/690 rpm. — 4,23 mm

CONDITIONS		GTA ... R ...		24	26	28	34	36	38	44	46	48
SC2 (1)	CO_2 - **60 bar** (2)	4D	kW	34,7	44,6	47,1	52,5	63,2	72,6	70,2	84,8	-
		6D	kW	30,9	36,5	38,6	46,6	55,9	59,0	62,3	73,7	-
		6Y	kW	25,8	29,0	29,8	38,8	44,1	47,8	50,0	59,3	-
	R449A	4D	kW	31,6	41,2	42,7	47,0	60,8	64,5	63,7	82,8	86,6
		6D	kW	27,9	32,5	36,6	41,7	52,3	55,1	56,3	65,4	73,9
		6Y	kW	24,4	27,5	30,3	36,6	43,8	45,5	49,1	55,6	61,0
	R404A	4D	kW	30,8	39,1	40,6	45,3	57,8	61,2	62,1	78,7	82,3
		6D	kW	27,1	30,8	34,7	40,1	49,7	52,3	54,7	62,1	70,2
		6Y	kW	23,4	26,2	28,8	34,8	41,6	43,2	47,1	52,8	57,9
Surface area			m^2	130	195	260	195	292	390	260	390	520
Circuit tube vol.			dm^3	25,1	37,7	50,3	37,7	56,6	75,4	50,3	75,4	100,5
Airflow		4D	m^3/h	22680	21660	20750	34020	32480	31130	45360	43310	41500
		6D	m^3/h	17770	16780	15920	26650	25180	23880	35540	33570	31840
		6Y	m^3/h	13700	12750	11930	20540	19130	17900	27390	25510	23860
Fan * Ø 630 mm 400V/3/50Hz			Nb	2	2	2	3	3	3	4	4	4
	Air throw (3)	4D	m	2x17	2x15	2x14	2x17	2x15	2x14	2x17	2x15	2x14
		6D	m	2x12	2x11	2x10	2x12	2x11	2x10	2x12	2x11	2x10
		6Y	m	2x10	2x9	2x8	2x10	2x9	2x8	2x10	2x9	2x8
Acoustics **Lw = Lp +30 dB(A)**	**Lp 4m** (4)	4D	dB(A)	57	57	57	59	59	59	60	60	60
		6D	dB(A)	48	48	48	50	50	50	51	51	51
		6Y	dB(A)	41	41	41	43	43	43	44	44	44
Electric defrost **E1U** (5)	Coil		Nb	12	12	12	12	12	12	12	12	12
	400 V/3/50 Hz		W Total	9000	9000	9000	13800	13800	13800	18000	18000	18000
			A Total	13	13	13	20	20	20	26	26	26
Electric defrost **ELU+EEK** (5)	Coil + drain pan		Nb	12+6	12+6	12+6	12+6	12+6	12+6	12+6	12+6	12+6
	400 V/3/50 Hz		W Total	13500	13500	13500	20700	20700	20700	27000	27000	27000
			A Total	19,5	19,5	19,5	30	30	30	39	39	39
Kit **ECK** or Kit **EEK**	Coil		Nb	6	6	6	6	6	6	6	6	6
	400 V/3/50 Hz		W Total	4500	4500	4500	6900	6900	6900	9000	9000	9000
			A Total	6,5	6,5	6,5	10	10	10	13	13	13
	Max. nb kit		ECK	1	1	2	1	1	2	1	1	2
			EEK	1	1	1	1	1	1	1	1	1
Connections **HFCs**	Inlet (6)	4D	Ø	1"1/8	1"3/8	1"3/8	1"3/8	1"5/8	1"5/8	1"5/8	2x1"3/8	2x1"3/8
		6D/Y	Ø	1"1/8	1"1/8	1"3/8	1"3/8	1"5/8	1"5/8	1"5/8	1"5/8	2x1"3/8
	Outlet (7)	4D	Ø	1"5/8	1"5/8	1"5/8	2"1/8	2"1/8	2"1/8	2"1/8	2"5/8	2"5/8
		6D/Y	Ø	1"3/8	1"5/8	1"5/8	2"1/8	2"1/8	2"1/8	2"1/8	2"1/8	2"5/8
Net weight (CO2)			kg	282	325	360	382	444	498	500	571	549*

* **4D** : 1,250 W max - 2.48 A max (8) - **6D** : 600 W max - 1.20 A max (8) - **6Y**: 400 W max - 0.68 A max (8). * HFC weight

(1) Standard conditions:
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
(2) Operating pressure - Specific coil - Connection diameters to be defined when ordering.
(3) Residual air speed: 0.25 m/s, in accordance with the standard.
(4) Average sound pressure level in dB(A) calculated at 4 m, level with the blades, in a free field over a reflecting plane, given as an indication only.
(5) Option and electric defrost kit.
(6) Distributor: male to solder.
(7) ODF = female, to receive the tube of the same diameter.
(8) Adjustment of overload protection.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

GTI(A) 3(B) 44(C) 4P(D)

(A) **GTI**: direct expansion unit cooler **GTI-W**: glycol water unit cooler
(B) Number of fans
(C) Fin spacing: **4** = 4,23 mm - **7** = 6,35 mm
(D) **4P** = 1,500 rpm. - **6P** = 1,000 rpm. - **8P** = 750 rpm.

The GTI is available with CO_2, HFCs and glycol water. For more information, please consult our software.

GTA ... L 4D/6D/6Y - 1,330/890/690 rpm. — 6,35 mm

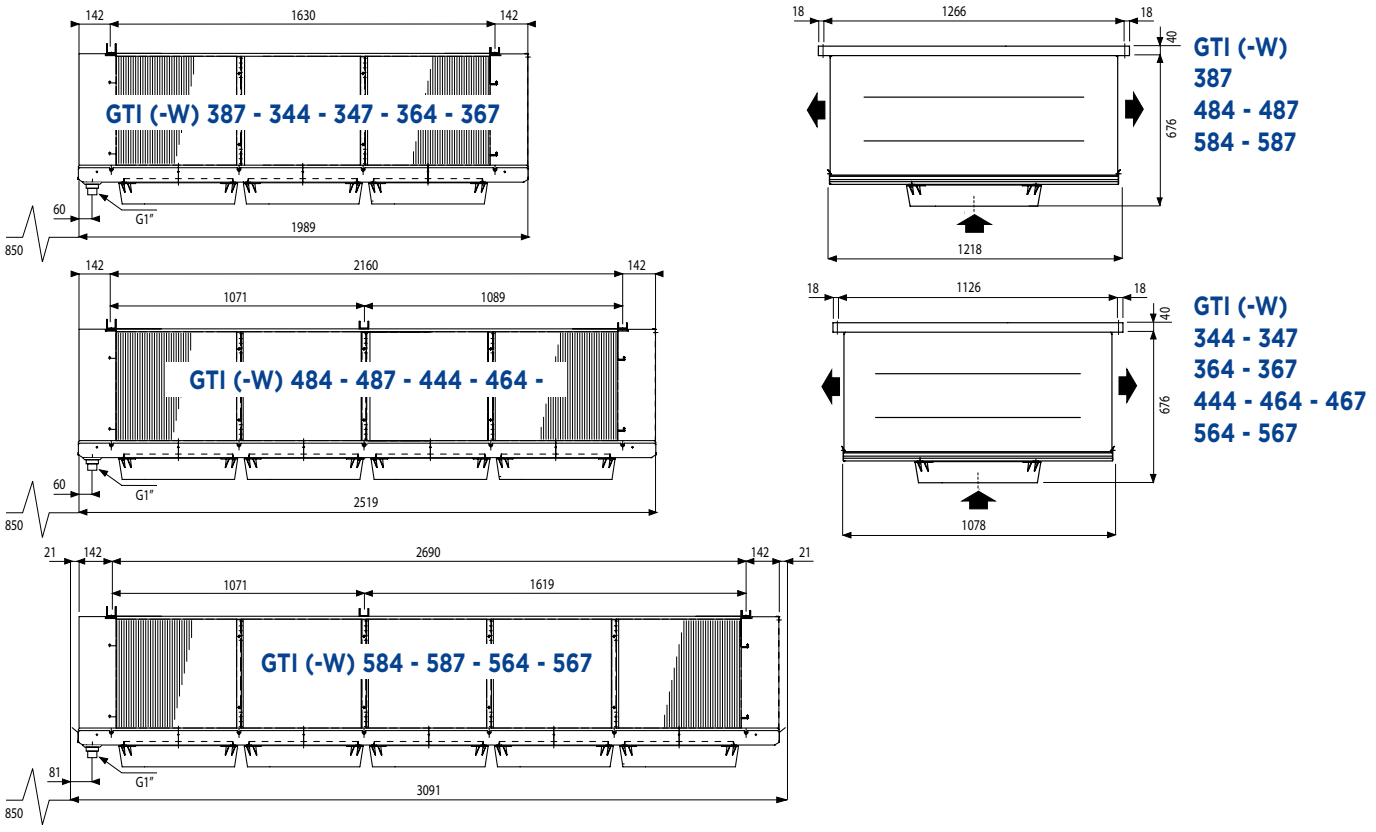
CONDITIONS		GTA ... L ...		24	26	28	34	36	38	44	46	48
SC2 (1)	CO_2 - 60 bar (2)	4D	kW	28,1	36,9	40,9	42,4	53,7	60,9	56,6	74,2	-
		6D	kW	25,0	30,1	36,0	37,6	45,5	51,2	47,2	60,9	-
		6Y	kW	21,9	25,3	29,0	32,9	38,2	41,2	41,9	51,2	-
	R449A	4D	kW	25,0	33,7	38,6	37,5	50,6	58,4	50,3	67,8	77,8
		6D	kW	22,4	28,7	33,5	33,7	43,2	50,4	45,1	57,9	67,5
		6Y	kW	19,7	24,9	28,3	29,6	37,4	42,5	39,7	50,1	56,8
	R404A	4D	kW	25,0	33,1	36,6	37,2	49,2	55,4	50,4	66,5	73,9
		6D	kW	22,3	27,2	31,8	33,2	41,0	47,9	44,8	55,0	64,1
		6Y	kW	16,0	23,6	26,9	23,9	35,5	40,3	32,2	47,5	54,0
Surface area			m^2	89	134	179	134	201	268	179	268	357
Circuit tube vol.			dm^3	25,1	37,7	50,3	37,7	56,6	75,4	50,3	75,4	100,5
Airflow		4D	m^3/h	23260	22410	21650	34890	33610	32480	46520	44810	43310
		6D	m^3/h	18300	17510	16780	27440	26270	25180	36590	35020	33570
		6Y	m^3/h	14210	13450	12750	21320	20180	19130	28420	26900	25510
Fan * Ø 630 mm 400V/3/50Hz			Nb	2	2	2	3	3	3	4	4	4
	Air throw (2)	4D	m	2x18	2x16	2x15	2x18	2x16	2x15	2x18	2x16	2x15
		6D	m	2x13	2x12	2x11	2x13	2x12	2x11	2x13	2x12	2x11
		6Y	m	2x11	2x10	2x9	2x11	2x10	2x9	2x11	2x10	2x9
Acoustics **Lw = Lp +30 dB(A)**	**Lp 4m** (3)	4D	dB(A)	57	57	57	59	59	59	60	60	60
		6D	dB(A)	48	48	48	50	50	50	51	51	51
		6Y	dB(A)	41	41	41	43	43	43	44	44	44
Electric defrost **E1U** (4)	Coil		Nb	12	12	12	12	12	12	12	12	12
	400 V/3/50 Hz		W Total	9000	9000	9000	13800	13800	13800	18000	18000	18000
			A Total	13	13	13	20	20	20	26	26	26
Electric defrost **ELU+EEK** (4)	Coil + drain pan		Nb	12+6	12+6	12+6	12+6	12+6	12+6	12+6	12+6	12+6
	400 V/3/50 Hz		W Total	13500	13500	13500	20700	20700	20700	27000	27000	27000
			A Total	19,5	19,5	19,5	30	30	30	39	39	39
Kit **ECK** or Kit **EEK**	Coil		Nb	6	6	6	6	6	6	6	6	6
	400 V/3/50 Hz		W Total	4500	4500	4500	6900	6900	6900	9000	9000	9000
			A Total	6,5	6,5	6,5	10	10	10	13	13	13
	Max. nb kit		ECK	1	1	2	1	1	2	1	1	2
			EEK	1	1	1	1	1	1	1	1	1
Connections **HFCs**	Inlet (6)	4D	Ø	1"1/8	1"3/8	1"3/8	1"3/8	1"5/8	1"5/8	1"5/8	2x1"3/8	2x1"3/8
		6D/Y	Ø	1"1/8	1"1/8	1"3/8	1"3/8	1"3/8	1"5/8	1"5/8	1"5/8	2x1"3/8
	Outlet (7)	4D	Ø	1"5/8	1"5/8	1"5/8	2"1/8	2"1/8	2"1/8	2"1/8	2"5/8	2"5/8
		6D/Y	Ø	1"3/8	1"3/8	1"3/8	1"5/8	1"5/8	2"1/8	2"1/8	2"1/8	2"5/8
Net weight (CO2)			kg	272	310	339	366	419	464	478	538	549*

* **4D** : 1,250 W max - 2.48 A max (8) - **6D** : 600 W max - 1.20 A max (8) - **6Y**: 400 W max - 0.68 A max (8). * HFC weight

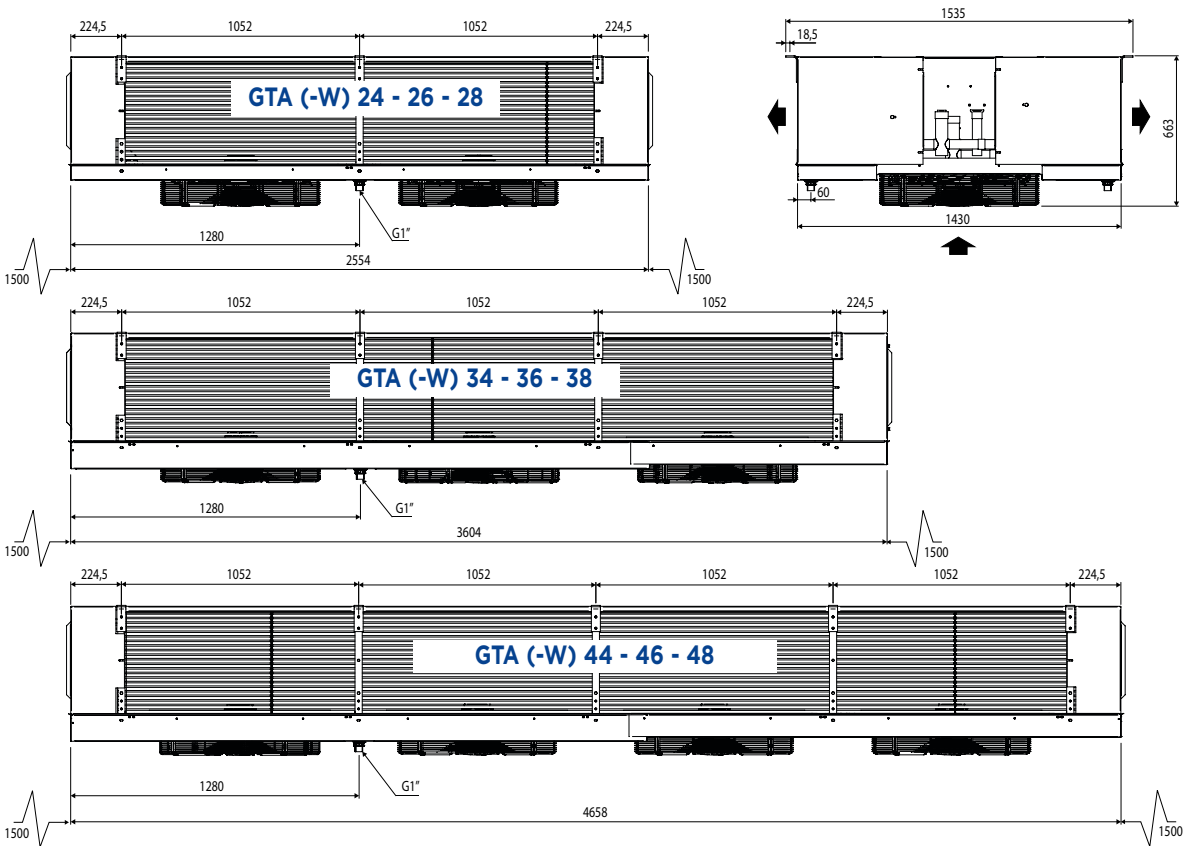
(1) Standard conditions:
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
(2) Operating pressure - Specific coil - Connection diameters to be defined when ordering.
(3) Residual air speed: 0.25 m/s, in accordance with the standard.
(4) Average sound pressure level in dB(A) calculated at 4 m, level with the blades, in a free field over a reflecting plane, given as an indication only.
(5) Option and electric defrost kit.
(6) Distributor: male to solder.
(7) ODF = female, to receive the tube of the same diameter.
(8) Adjustment of overload protection.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

GTI / GTI-W



GTA / GTA-W



FRIGA-BOHN®

NK

NEW!

Cubic unit cooler

Industrial range

CO2 60bar | WG | HFC

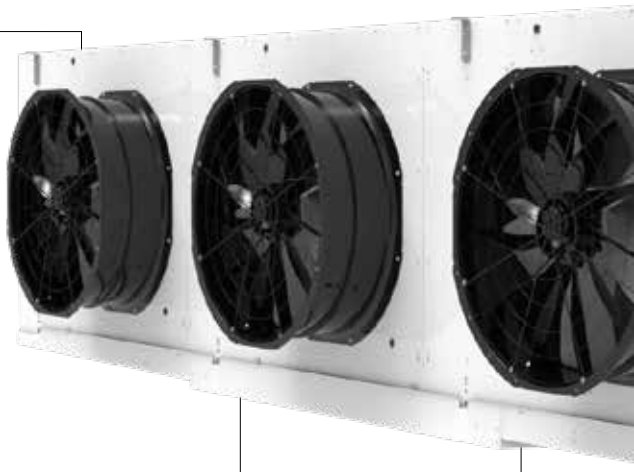
6 - 200 kW

Robustness: Our NK industrial evaporators have been designed to ensure the highest level of quality and durability through :
- A **robust and proven design.**
- **Intense qualification** between laboratory and field tests.
- **Systematic pressure** and leakage resistance tests **performed on 100% of the products.**

Adaptability: The NK range offers hundreds of possible configurations thanks to :
- 2 versions: H for high efficiency and T for a large exchange surface.
- 4 fin pitches: 4.23 - 6.35 - 9 or 12 mm.
- 4 fan diameters: Ø500, Ø630 and Ø800 and Ø1000 mm.

Whatever model you choose, the NK guarantees :
- **Easy installation and maintenance** (quick access to the battery and fans).
- **Low energy consumption** (EC motors as standard).

VENTILATION



The NK range is equipped with 2 types of fans:
- EC fans in standard
- AC fans in options

4 types of motor fans on the NK range:
- Ø 500 mm (from 600 to 1500 rpm) or 4/6 poles (1300/950 rpm)
- Ø 630 mm (from 400 to 1000 rpm) or 4/6 poles (1200/850 rpm)
- Ø 800 mm (from 400 to 950 rpm) or 6/8 poles (850/650 rpm)
- Ø 1000 mm 6/8 poles (830/630 rpm)

#Three-phase motors 400V, IP54, class F.

OPTIONS	
CMU	Factory motor wiring.
C2V	2-speed motor wiring. CONTACT US
M60	Motor fans 230-400V/3/60Hz.
VPA	Air pressure shell also allowing connection of a textile duct. KIT TO INSTALL
VPM	Flexible defrosting sleeve + ferrule air rectifier. KIT TO INSTALL
VSC	Hinged fan panel.
MVI	Stainless steel fan grille.

CASING

Pre-painted galvanized steel for corrosion and impact resistance.
Limited condensation: presence of an aluminium interior drain pan under the main drain pan.

OPTIONS	
CIN	Stainless steel casing.
ECB	Wooden crate packaging.
EIS	Insulated drain pan.
KMS	Feet for floor mounting. KIT TO INSTALL
RAL	Special polyester paint.

Select your coil treatment to extend your unit cooler's lifespan! Contact us.

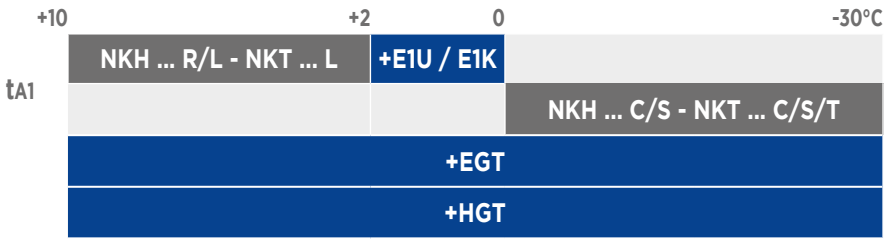
COILS

Aluminium fins with 4.23, 6.35, 9 or 12 mm spacing.
Combined with copper tubes, the coils are very efficient and compact.
Two types of fins available:
- High efficiency H-type fins, particularly suitable for the storage of packaged products, allow fast defrosting.
- T-type fins, for a large exchange surface, allow energy savings by limiting the number of daily defrosts, ideal for limiting product dehydration.

Versions available:
- Multi-refrigerant HFCs.
- WCO (glycol water, coolant).
- CO_2 60 bar

DEFROST

The product design allows even heat dissipation for efficient defrosting.
3 defrost modes and many options available to best suit your application.



OPTIONS	
EGT	Hot water glycol defrost (drain pan and coil in series)
E1U	Light electric defrost (coil + drain pan).
E1K	Light electric defrost (coil + drain pan). KIT TO INSTALL
HDA	Suction defrost hood. KIT TO INSTALL
VPM	Air pressure collar + flexible defrosting handle. KIT TO INSTALL
HGT	Total hot gas defrost (coil and drain pan).
RVU	Shell defrost heaters.
RVK	Shell defrost heaters. KIT TO INSTALL
KIP	Thermal insulation of doors. KIT TO INSTALL

EGT | Hot water glycol defrost

Operating principle :
Hot glycol water is sent in series through the drip tray and then through part of the evaporator coil tubes to ensure total defrosting of the exchanger.

Defrost supplement :
To ensure optimum defrostingIt is necessary to consider the following options:
- KIP: Thermal insulation of doors
- HDA: Extraction defrost hood
- VPM: Flexible defrost sleeve + air pressure collar
- EIS: Insulated Drainer

VPA | Air pressure collar

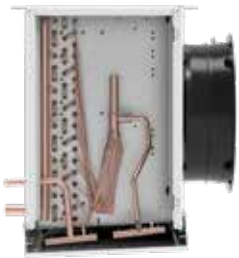
Even airflow distribution :
Increased air reach, optimizes airflow andallows efficient air distribution in the cold room.
-Ø500mm +10m
-Ø630mm +15m
-Ø800mm +15m
-Ø1000mm +15m

Application requiring the installation of a textile duct :
Shell for textile duct with airflow straightening blades (duct not supplied).

HGT | Full hot gas defrost

Operating principle :
The hot gases from the compressors are sent in series to the drip tray and then to the evaporator coil to ensure total defrosting of the exchanger.

Defrost supplement :
To ensure optimum defrostingIt is necessary to consider the following options:
- KIP: Thermal insulation of doors
- HDA: Extraction defrost hood
- VPM: Flexible defrost sleeve + air pressure collar
- EIS: Insulated Drainer



HDA + VPM | Defrosting hood + flexible cuff

Defrost in negative application :
Avoids hot air circulation during defrost cycles. Reduced defrost cycle time for energy savings.

NKH(A) 1x6(B) E(C) B2(D) R(E)

(A) Fin type: **T** = Large heat exchange surface - **H** = High-efficiency fin
(B) Number of fans x Ø : **5**= Ø 500 mm - **6** = Ø 630 mm - **8** = Ø 800 mm - **1** = Ø 1000 mm
(C) Motor connection : **E** = EC - **D** = Triangle - **Y** = Star
(D) Module
(E) Fin spacing: **R** = 4.23 mm (positive) - **L** = 6.35 mm (positive) - **C** = 6.35 mm (negative) - **S** = 9 mm (negative) - **T** = 12 mm (negative)

The NK is available with CO2, HFCs and glycol water. For more information, please consult our software.

NKH ... R | H = High-efficiency fin

4.23 mm

NKH ... R	Power			Coil		Ventilation				Electric Defrost			Connections		Net Weight (CO2)
	DT 8K - SC2(1)									E1U(5) 400V / 3 / 50Hz			HFC		
	CO2 (2) 60 bar	R404A	R449A	Surface area	Circuit volume	Nb x Ø	Airflow	Air Throw(3) Standard	Acoustics Lp 4m(4)	Number	Power	Current	Inlet	Outlet	
	kW	kW	kW	m²	dm³	mm	m³/h	m	dB(A)		W	A	Ø	Ø	kg
1x5Y A1	13.6	9.9	10.3	46	9	1x500	6000	24	43	6	3600	5,2	5/8"	1"1/8	138
1x5Y A2	15.5	11.4	12.0	70	14	1x500	5520	21	43	6	6000	8,7	5/8"	1"1/8	151
1x5D A1	16.2	11.7	12.0	46	9	1x500	8070	32	49	6	3600	5,2	5/8"	1"1/8	138
1x5E A1	16.5	11.9	12.2	46	9	1x500	8340	32	53	6	3600	5,2	5/8"	1"1/8	134
1x5Y A3	16.4	12.5	13.2	93	18	1x500	5140	20	43	9	9000	13,0	1"1/8	1"3/8	180
1x5D A2	18.0	13.8	14.5	70	14	1x500	7540	29	49	6	6000	8,7	5/8"	1"1/8	151
1x5E A2	18.4	14.2	14.9	70	14	1x500	7930	29	53	6	6000	8,7	5/8"	1"1/8	148
1x5D A3	19.7	15.7	16.5	93	18	1x500	7090	27	49	9	9000	13,0	1"1/8	1"3/8	180
1x6Y B1	21.9	15.9	16.7	74	14	1x630	9790	30	51	6	6600	9,5	7/8"	1"3/8	209
1x5E A3	19.8	16.4	17.3	93	18	1x500	7580	27	53	9	9000	13,0	1"1/8	1"3/8	177
1x6E B1	25.6	18.5	19.5	74	14	1x630	12940	42	55	6	6600	9,5	7/8"	1"3/8	209
1x6D B1	26.1	18.9	19.9	74	14	1x630	13460	42	60	6	6600	9,5	7/8"	1"3/8	209
1x6Y B2	25.7	19.0	20.0	111	22	1x630	9040	27	51	9	9900	14,3	1"1/8	1"3/8	234
2x5Y A1	25.6	19.6	20.7	93	18	2x500	12010	26	46	6	8700	12,6	1"1/8	1"3/8	229
1x6Y B3	25.2	20.0	21.1	148	29	1x630	8410	26	51	12	13200	19,1	1"1/8	1"3/8	273
1x6E B2	30.7	23.0	24.2	111	22	1x630	12170	39	55	9	9900	14,3	1"1/8	1"3/8	234
2x5D A1	31.0	23.1	24.3	93	18	2x500	16150	35	52	6	8700	12,6	1"1/8	1"3/8	229
2x5Y A2	31.1	23.3	24.6	139	27	2x500	11040	23	46	6	12000	17,3	1"1/8	1"5/8	254
2x5E A1	31.4	23.4	24.6	93	18	2x500	16680	35	56	6	8700	12,6	1"1/8	1"3/8	222
1x6D B2	31.3	23.5	24.8	111	22	1x630	12600	39	60	9	9900	14,3	1"1/8	1"3/8	234
1x6E B3	32.6	24.8	26.1	148	29	1x630	11510	37	55	12	13200	19,1	1"1/8	1"3/8	273
2x5Y A3	34.6	25.2	26.6	186	36	2x500	10270	22	46	9	18000	26,0	1"3/8	1"5/8	306
1x6D B3	33.0	25.3	26.7	148	29	1x630	11850	37	60	12	13200	19,1	1"1/8	1"3/8	273
1x8Y C1	35.0	25.6	27.0	124	24	1x800	15150	35	47	6	9600	13,9	1"3/8	1"5/8	291
2x5D A2	38.3	28.5	30.0	139	27	2x500	15080	33	52	6	12000	17,3	1"1/8	1"5/8	254
2x5E A2	39.6	29.3	30.8	139	27	2x500	15870	33	56	6	12000	17,3	1"1/8	1"5/8	248
3x5Y A1	39.8	30.0	31.4	139	27	3x500	18010	29	48	6	12000	17,3	1"3/8	1"5/8	317
1x8D C1	41.4	30.3	31.6	124	24	1x800	20270	45	53	6	9600	13,9	1"3/8	1"5/8	291
1x8Y C2	40.0	30.3	31.9	186	36	1x800	14100	33	47	12	19200	27,7	1"3/8	2"1/8	336
1x8E C1	42.5	31.1	32.3	124	24	1x800	21250	45	54	6	9600	13,9	1"3/8	1"5/8	288
2x5D A3	41.8	31.8	33.5	186	36	2x500	14180	30	52	9	18000	26,0	1"3/8	1"5/8	306
2x6Y B1	44.0	32.1	33.8	148	29	2x630	19590	32	54	6	15000	21,7	1"3/8	1"5/8	356
2x5E A3	43.4	33.1	34.9	186	36	2x500	15170	30	56	9	18000	26,0	1"3/8	1"5/8	300
3x5Y A2	44.3	34.8	36.6	209	40	3x500	16560	27	48	6	18600	26,8	1"3/8	2"1/8	355
3x5D A1	46.9	35.6	36.7	139	27	3x500	24220	41	54	6	12000	17,3	1"3/8	1"5/8	317
3x5E A1	47.7	36.2	37.3	139	27	3x500	25020	41	58	6	12000	17,3	1"3/8	1"5/8	307
1x8D C2	47.7	36.9	38.8	186	36	1x800	19120	42	53	12	19200	27,7	1"3/8	2"1/8	336
2x6E B1	51.6	37.5	39.5	148	29	2x630	25880	44	58	6	15000	21,7	1"3/8	1"5/8	356
3x5Y A3	49.8	37.7	39.7	278	54	3x500	15410	24	48	9	27900	40,3	1"5/8	2"1/8	427
1x8E C2	48.9	37.8	39.8	186	36	1x800	20010	42	54	12	19200	27,7	1"3/8	2"1/8	333
2x6D B1	52.7	38.3	40.3	148	29	2x630	26920	44	63	6	15000	21,7	1"3/8	1"5/8	356
2x6Y B2	51.9	38.3	40.4	223	43	2x630	18090	29	54	9	22500	32,5	1"5/8	1"5/8	404
4x5Y A1	53.8	39.5	41.6	186	36	4x500	24020	34	49	6	18000	26,0	1"3/8	2"1/8	403
2x6Y B3	51.6	40.4	42.6	297	58	2x630	16830	28	54	12	30000	43,3	1"5/8	2"1/8	469
3x5D A2	55.9	42.3	44.6	209	40	3x500	22620	38	54	6	18600	26,8	1"3/8	2"1/8	355
3x5E A2	57.3	43.6	45.9	209	40	3x500	23800	38	58	6	18600	26,8	1"3/8	2"1/8	345
4x5D A1	63.6	46.4	48.8	186	36	4x500	32300	47	55	6	18000	26,0	1"3/8	2"1/8	403
2x6E B2	62.1	46.5	48.9	223	43	2x630	24330	42	58	9	22500	32,5	1"5/8	1"5/8	404
4x5Y A2	62.2	47.0	49.5	278	54	4x500	22080	31	49	6	24600	35,5	1"5/8	2"1/8	453
3x5D A3	59.2	47.1	49.6	278	54	3x500	21280	35	54	9	27900	40,3	1"5/8	2"1/8	427
4x5E A1	64.7	47.2	49.7	186	36	4x500	33360	47	59	6	18000	26,0	1"3/8	2"1/8	390
2x6D B2	63.4	47.6	50.1	223	43	2x630	25200	42	63	9	22500	32,5	1"5/8	1"5/8	404
3x6Y B1	64.5	48.4	51.0	223	43	3x630	29380	37	56	6	17400	25,1	1"5/8	2"1/8	496
3x5E A3	67.3	49.2	51.8	278	54	3x500	22750	35	58	9	27900	40,3	1"5/8	2"1/8	418
2x6E B3	67.0	50.3	53.0	297	58	2x630	23020	39	58	12	30000	43,3	1"5/8	2"1/8	469
4x5Y A3	67.8	50.7	53.4	371	72	4x500	20550	28	49	9	36900	53,3	1"5/8	2"5/8	549

NKH(A) 1x6(B) E(C) B2(D) R(E)

(A) Fin type: **T** = Large heat exchange surface - **H** = High-efficiency fin
(B) Number of fans x Ø : **5**= Ø 500 mm - **6** = Ø 630 mm - **8** = Ø 800 mm - **1** = Ø 1000 mm
(C) Motor connection: **E** = EC - **D** = Triangle - **Y** = Star
(D) Module
(E) Fin spacing: **R** = 4.23 mm (positive) - **L** = 6.35 mm (positive) - **C** = 6.35 mm (negative) - **S** = 9 mm (negative) - **T** = 12 mm (negative)

The NK is available with CO2, HFCs and glycol water. For more information, please consult our software.

NKH ... R | H = High-efficiency fin

4.23 mm

NKH ... R	Power			Coil		Ventilation				Electric Defrost			Connections		Net Weight (CO2)
	DT 8K - SC2(1)			Surface area	Circuit volume	Nb x Ø	Airflow	Air Throw(3) Standard	Acoustics Lp 4m(4)	E1U(5) 400V / 3 / 50Hz			HFC		
	CO2 (2) 60 bar	R404A	R449A							Number	Power	Current	Inlet	Outlet	
	kW	kW	kW	m²	dm³	mm	m³/h	m	dB(A)		W	A	Ø	Ø	kg
2x6D B3	67.8	51.1	53.8	297	58	2x630	23700	39	63	12	30000	43,3	1"5/8	2"1/8	469
2x8Y C1	67.7	51.6	54.3	247	48	2x800	30290	36	50	6	19800	28,6	1"5/8	2"1/8	497
3x6E B1	75.2	56.4	59.4	223	43	3x630	38820	50	60	6	17400	25,1	1"5/8	2"1/8	496
4x5D A2	74.6	57.5	60.5	278	54	4x500	30160	44	55	6	24600	35,5	1"5/8	2"1/8	453
3x6D B1	76.8	57.7	60.7	223	43	3x630	40390	50	65	6	17400	25,1	1"5/8	2"1/8	496
3x6Y B2	75.0	57.7	60.8	334	65	3x630	27130	35	56	9	33300	48,1	1"5/8	2"1/8	570
4x5E A2	76.7	59.3	62.5	278	54	4x500	31730	44	59	6	24600	35,5	1"5/8	2"1/8	441
2x8Y C2	79.7	59.7	62.8	371	72	2x800	28190	34	50	12	39600	57,2	1"5/8	2"5/8	585
3x6Y B3	78.0	59.7	62.9	445	86	3x630	25240	32	56	12	44400	64,1	1"5/8	2"5/8	660
2x8D C1	83.3	61.1	63.7	247	48	2x800	40540	46	56	6	19800	28,6	1"5/8	2"1/8	497
4x6Y B1	88.4	62.2	65.4	297	58	4x630	39170	42	57	6	29400	42,4	1"5/8	2"5/8	635
2x8E C1	85.5	62.7	65.3	247	48	2x800	42490	46	57	6	19800	28,6	1"5/8	2"1/8	490
4x5D A3	77.1	63.8	67.2	371	72	4x500	28370	41	55	9	36900	53,3	1"5/8	2"5/8	549
4x5E A3	87.6	66.9	70.4	371	72	4x500	30330	41	59	9	36900	53,3	1"5/8	2"5/8	537
3x6E B2	86.5	70.0	73.7	334	65	3x630	36500	47	60	9	33300	48,1	1"5/8	2"1/8	570
3x6D B2	87.8	71.4	75.2	334	65	3x630	37800	47	65	9	33300	48,1	1"5/8	2"1/8	570
4x6E B1	103.7	71.5	75.2	297	58	4x630	51760	57	61	6	29400	42,4	1"5/8	2"5/8	635
2x8D C2	103.3	72.1	75.9	371	72	2x800	38240	43	56	12	39600	57,2	1"5/8	2"5/8	585
4x6D B1	105.9	72.8	76.7	297	58	4x630	53850	57	66	6	29400	42,4	1"5/8	2"5/8	635
2x8E C2	106.2	74.0	77.9	371	72	2x800	40010	43	57	12	39600	57,2	1"5/8	2"5/8	578
3x6E B3	101.3	74.1	78.1	445	86	3x630	34540	44	60	12	44400	64,1	1"5/8	2"5/8	660
3x8Y C1	101.7	74.7	78.7	371	72	3x800	45440	41	52	6	29400	42,4	1"5/8	2"5/8	700
3x6D B3	102.7	74.9	78.9	445	86	3x630	35550	44	65	12	44400	64,1	1"5/8	2"5/8	660
4x6Y B2	100.4	75.1	79.1	445	86	4x630	36180	39	57	9	44100	63,7	1"5/8	2"5/8	733
2x1Y D1	-	80.5	84.8	371	72	2x1000	49530	44	52	9	36900	53,3	1"5/8	2"5/8	749
4x6Y B3	104.4	81.6	85.9	594	115	4x630	33650	36	57	12	58800	84,9	2x1"5/8	2x2"1/8	852
3x8D C1	125.2	86.8	91.4	371	72	3x800	60820	52	58	6	29400	42,4	1"5/8	2"5/8	700
3x8E C1	128.5	88.8	93.5	371	72	3x800	63740	52	58	6	29400	42,4	1"5/8	2"5/8	690
3x8Y C2	121.4	89.7	94.4	557	108	3x800	42290	38	52	12	58800	84,9	2x1"5/8	2x2"1/8	832
4x6E B2	115.9	89.9	94.7	445	86	4x630	48670	54	61	9	44100	63,7	1"5/8	2"5/8	733
2x1D D1	-	91.5	96.3	371	72	2x1000	62790	52	58	9	36900	53,3	1"5/8	2"5/8	749
4x6D B2	117.7	91.9	96.7	445	86	4x630	50400	54	66	9	44100	63,7	1"5/8	2"5/8	733
2x1Y D2	-	97.0	102.2	557	108	2x1000	46100	42	52	12	49200	71,0	2x1"5/8	2x2"5/8	862
4x6E B3	135.7	101.1	106.4	594	115	4x630	46050	51	61	12	58800	84,9	2x1"5/8	2x2"1/8	852
4x6D B3	137.5	103.3	108.8	594	115	4x630	47390	51	66	12	58800	84,9	2x1"5/8	2x2"1/8	852
4x8Y C1	135.7	103.6	109.0	495	96	4x800	60580	45	53	6	37800	54,6	2x1"5/8	2x2"5/8	904
3x8D C2	145.3	108.1	113.8	557	108	3x800	57360	49	58	12	58800	84,9	2x1"5/8	2x2"1/8	832
3x8E C2	149.1	111.0	116.9	557	108	3x800	60020	49	58	12	58800	84,9	2x1"5/8	2x2"1/8	823
4x8Y C2	157.0	111.4	117.3	742	144	4x800	56390	42	53	12	75600	109,1	2x1"5/8	2x2"5/8	1078
2x1D D2	-	113.4	119.5	557	108	2x1000	58920	49	58	12	49200	71,0	2x1"5/8	2x2"5/8	862
4x8D C1	167.1	122.6	128.1	495	96	4x800	81090	58	59	6	37800	54,6	2x1"5/8	2x2"5/8	904
3x1Y D1	-	122.6	128.3	557	108	3x1000	74300	49	53	9	55800	80,5	2x1"5/8	2x2"5/8	1061
4x8E C1	171.5	125.9	131.2	495	96	4x800	84990	58	60	6	37800	54,6	2x1"5/8	2x2"5/8	892
4x8D C2	198.7	131.4	138.3	742	144	4x800	76480	54	59	12	75600	109,1	2x1"5/8	2x2"5/8	1078
4x8E C2	203.3	134.6	141.7	742	144	4x800	80020	54	60	12	75600	109,1	2x1"5/8	2x2"5/8	1066
3x1Y D2	-	135.4	142.6	835	162	3x1000	69160	46	53	12	74400	107,4	2x1"5/8	2x2"5/8	1230
3x1D D1	-	140.7	145.6	557	108	3x1000	94190	58	59	9	55800	80,5	2x1"5/8	2x2"5/8	1061
3x1D D2	-	155.6	163.9	835	162	3x1000	88380	55	59	12	74400	107,4	2x1"5/8	2x2"5/8	1230

*__Ø 500 mm__ : 400 V/3/50 Hz - Δ = 1330 rpm. - 800 W max - 1.4 A max | Y = 960 rpm. - 540 W max - 0.9 A max (5) | *__Ø 630 mm__ : 400 V/3/50 Hz - Δ = 1210 rpm. - 1450 W max - 2.4 A max | Y = 860 rpm. - 820 W max - 1.4 A max (5)
*__Ø 800 mm__ : 400 V/3/50 Hz - Δ = 870 rpm. - 1850 W max - 3.8 A max | Y = 640 rpm. - 1050 W max - 2.0 A max (5) | *__Ø 1000 mm__ : 400 V/3/50 Hz - Δ = 830 rpm. - 2900 W max - 5.6 A max | Y = 630 rpm. - 1750 W max - 3.0 A max (5)
(1) Standard conditions: **SC2** / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K | **SC3** / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K | **SC4** / -25 °C (air inlet temp.) / -31 °C (evaporating temp.) / DT1 = 6K | **SC5** / -34 °C (air inlet temp.) / -40 °C (evaporating temp.) / DT1 = 6K
(2) Operating pressure: 60 bar - Connection diameters to be defined when ordering.
(3) Residual air speed: 0.25 m/s. - Air throw with VPA option = Standard +15 m
(4) **Lp =** Average sound pressure level in dB(A) calculated at 4 m, level with the blades, in a free field over a reflecting plane, given as an indication only. **Lw = Lp +30 dB(A)**
(5) Electric defrost options.

NKH(A) 1x6(B) E(C) B2(D) L(E)

(A) Fin type: **T** = Large heat exchange surface - **H** = High-efficiency fin
(B) Number of fans x Ø : **5**= Ø 500 mm - **6** = Ø 630 mm - **8** = Ø 800 mm - **1** = Ø 1000 mm
(C) Motor connection: **E** = EC - **D** = Triangle - **Y** = Star
(D) Module
(E) Fin spacing: **R** = 4.23 mm (positive) - **L** = 6.35 mm (positive) - **C** = 6.35 mm (negative) - **S** = 9 mm (negative) - **T** = 12 mm (negative)

The NK is available with CO2, HFCs and glycol water. For more information, please consult our software.

NKH ... L | H = High-efficiency fin

6.35 mm

NKH ... L	Power			Coil		Ventilation				Electric Defrost			Connections		Net Weight (CO2)
	DT 8K - SC2(1)			Surface area	Circuit volume	Nb x Ø	Airflow	Air Throw(3) Standard	Acoustics Lp 4m(4)	E1U(5) 400V / 3 / 50Hz			HFC		
	CO2 (2) 60 bar	R404A	R449A							Number	Power	Current	Inlet	Outlet	
	kW	kW	kW	m²	dm³	mm	m³/h	m	dB(A)		W	A	Ø	Ø	kg
1x5Y A1	10.8	8.1	8.3	32	9	1x500	6160	25	43	6	3600	5,2	5/8"	1"1/8	133
1x5D A1	12.7	9.3	9.6	32	9	1x500	8230	34	49	6	3600	5,2	5/8"	1"1/8	133
1x5E A1	12.9	9.5	9.7	32	9	1x500	8460	34	53	6	3600	5,2	5/8"	1"1/8	130
1x5Y A2	12.9	10.0	10.5	48	14	1x500	5700	22	43	6	3600	5,2	5/8"	1"1/8	145
1x5Y A3	13.9	11.3	11.9	64	18	1x500	5330	21	43	9	5400	7,8	1"1/8	1"1/8	172
1x5D A2	15.3	11.9	12.5	48	14	1x500	7740	31	49	6	3600	5,2	5/8"	1"1/8	145
1x5E A2	16.3	12.1	12.8	48	14	1x500	8090	31	53	6	3600	5,2	5/8"	1"1/8	141
1x6Y B1	17.4	13.1	13.5	51	14	1x630	10020	31	51	6	6600	9,5	7/8"	1"1/8	202
1x5D A3	17.2	13.8	14.6	64	18	1x500	7320	29	49	9	5400	7,8	1"1/8	1"1/8	172
1x5E A3	17.6	14.4	15.1	64	18	1x500	7760	29	53	9	5400	7,8	1"1/8	1"1/8	169
1x6E B1	20.2	15.0	15.4	51	14	1x630	13160	44	55	6	6600	9,5	7/8"	1"1/8	202
1x6D B1	20.7	15.3	15.7	51	14	1x630	13710	44	60	6	6600	9,5	7/8"	1"1/8	202
2x5Y A1	21.4	16.2	17.0	64	18	2x500	12310	27	46	6	8700	12,6	1"1/8	1"3/8	220
1x6Y B2	21.3	16.4	17.3	77	22	1x630	9330	28	51	9	9900	14,3	1"1/8	1"3/8	224
1x6Y B3	23.5	18.2	19.2	102	29	1x630	8740	27	51	12	13200	19,1	1"1/8	1"3/8	259
2x5D A1	24.9	18.8	19.6	64	18	2x500	16470	37	52	6	8700	12,6	1"1/8	1"3/8	220
2x5E A1	25.2	19.0	19.8	64	18	2x500	16920	37	56	6	8700	12,6	1"1/8	1"3/8	214
1x6E B2	26.2	19.4	20.4	77	22	1x630	12460	41	55	9	9900	14,3	1"1/8	1"3/8	224
1x6D B2	26.8	19.8	20.8	77	22	1x630	12930	41	60	9	9900	14,3	1"1/8	1"3/8	224
2x5Y A2	24.5	20.2	21.3	96	27	2x500	11400	26	46	6	8700	12,6	1"1/8	1"3/8	241
1x8Y C1	27.5	20.9	21.8	85	24	1x800	15450	37	47	6	9600	13,9	1"1/8	1"5/8	279
1x6E B3	28.1	22.1	23.2	102	29	1x630	11850	39	55	12	13200	19,1	1"1/8	1"3/8	259
1x6D B3	28.5	22.5	23.6	102	29	1x630	12240	39	60	12	13200	19,1	1"1/8	1"3/8	259
2x5Y A3	28.5	22.7	23.9	128	36	2x500	10660	23	46	9	13050	18,8	1"3/8	1"5/8	289
1x8D C1	32.1	24.2	25.2	85	24	1x800	20590	47	53	6	9600	13,9	1"1/8	1"5/8	279
2x5D A2	29.5	24.2	25.5	96	27	2x500	15490	35	52	6	8700	12,6	1"1/8	1"3/8	241
3x5Y A1	31.4	24.2	25.5	96	27	3x500	18470	31	48	6	12000	17,3	1"1/8	1"5/8	304
1x8E C1	32.8	24.8	25.8	85	24	1x800	21610	47	54	6	9600	13,9	1"1/8	1"5/8	276
2x5E A2	30.0	24.8	26.1	96	27	2x500	16190	35	56	6	8700	12,6	1"1/8	1"3/8	235
1x8Y C2	33.4	26.2	27.6	128	36	1x800	14490	35	47	9	14400	20,8	1"3/8	1"5/8	313
2x6Y B1	33.1	26.3	27.2	102	29	2x630	20040	33	54	6	12600	18,2	1"3/8	1"5/8	342
2x5D A3	33.2	27.9	29.4	128	36	2x500	14650	33	52	9	13050	18,8	1"3/8	1"5/8	289
3x5D A1	37.1	27.9	29.4	96	27	3x500	24700	43	54	6	12000	17,3	1"1/8	1"5/8	304
3x5E A1	37.6	28.3	29.8	96	27	3x500	25380	43	58	6	12000	17,3	1"1/8	1"5/8	294
2x5E A3	36.2	29.0	30.6	128	36	2x500	15520	33	56	9	13050	18,8	1"3/8	1"5/8	283
2x6E B1	38.7	30.3	31.1	102	29	2x630	26330	46	58	6	12600	18,2	1"3/8	1"5/8	342
3x5Y A2	39.4	30.4	32.0	144	40	3x500	17100	28	48	6	12000	17,3	1"3/8	1"5/8	335
2x6D B1	39.4	30.9	31.7	102	29	2x630	27420	46	63	6	12600	18,2	1"3/8	1"5/8	342
1x8D C2	41.5	31.3	33.0	128	36	1x800	19570	45	53	9	14400	20,8	1"3/8	1"5/8	313
1x8E C2	42.5	32.1	33.8	128	36	1x800	20470	45	54	9	14400	20,8	1"3/8	1"5/8	310
2x6Y B2	41.8	32.6	34.4	153	43	2x630	18660	32	54	9	18900	27,3	1"3/8	1"5/8	383
4x5Y A1	43.0	32.6	34.1	128	36	4x500	24630	35	49	6	18000	26,0	1"3/8	2"1/8	386
3x5Y A3	44.8	34.0	35.8	192	54	3x500	15990	27	48	9	18000	26,0	1"5/8	2"1/8	402
3x5D A2	46.9	36.3	38.2	144	40	3x500	23230	40	54	6	12000	17,3	1"3/8	1"5/8	335
2x6Y B3	47.6	36.7	38.7	204	58	2x630	17480	29	54	12	25200	36,4	1"5/8	2"1/8	442
3x5E A2	48.0	37.1	39.0	144	40	3x500	24280	40	58	6	12000	17,3	1"3/8	1"5/8	326
4x5D A1	50.0	37.8	39.4	128	36	4x500	32940	48	55	6	18000	26,0	1"3/8	2"1/8	386
4x5E A1	50.7	38.3	39.9	128	36	4x500	33850	48	59	6	18000	26,0	1"3/8	2"1/8	373
2x6E B2	50.8	38.4	40.5	153	43	2x630	24930	44	58	9	18900	27,3	1"3/8	1"5/8	383
2x6D B2	51.7	39.1	41.2	153	43	2x630	25860	44	63	9	18900	27,3	1"3/8	1"5/8	383
3x6Y B1	51.7	39.6	41.0	153	43	3x630	30060	39	56	6	17400	25,1	1"5/8	2"1/8	475
4x5Y A2	51.9	40.8	42.9	192	54	4x500	22790	33	49	6	18000	26,0	1"5/8	2"1/8	428
2x8Y C1	55.7	41.5	43.7	170	48	2x800	30910	38	50	6	19800	28,6	1"5/8	2"1/8	474
3x5D A3	54.4	41.8	44.0	192	54	3x500	21970	38	54	9	18000	26,0	1"5/8	2"1/8	402
3x5E A3	56.2	43.4	45.7	192	54	3x500	23290	38	58	9	18000	26,0	1"5/8	2"1/8	392
2x6E B3	56.9	44.6	47.0	204	58	2x630	23710	42	58	12	25200	36,4	1"5/8	2"1/8	442

NKH(A) 1x6(B) E(C) B2(D) L(E)

(A) Fin type: **T** = Large heat exchange surface - **H** = High-efficiency fin
(B) Number of fans x Ø : **5**= Ø 500 mm - **6** = Ø 630 mm - **8** = Ø 800 mm - **1** = Ø 1000 mm
(C) Motor connection: **E** = EC - **D** = Triangle - **Y** = Star
(D) Module
(E) Fin spacing: **R** = 4.23 mm (positive) - **L** = 6.35 mm (positive) - **C** = 6.35 mm (negative) - **S** = 9 mm (negative) - **T** = 12 mm (negative)

The NK is available with CO2, HFCs and glycol water. For more information, please consult our software.

NKH ... L | H = High-efficiency fin

6.35 mm

NKH ... L	Power			Coil		Ventilation				Electric Defrost			Connections		Net Weight (CO2)
	DT 8K - SC2(1)			Surface area	Circuit volume	Nb x Ø	Airflow	Air Throw(3) Standard	Acoustics Lp 4m(4)	E1U(5) 400V / 3 / 50Hz			HFC		
	CO2 (2) 60 bar	R404A	R449A							Number	Power	Current	Inlet	Outlet	
	kW	kW	kW	m²	dm³	mm	m³/h	m	dB(A)		W	A	Ø	Ø	kg
2x6D B3	58.0	45.4	47.8	204	58	2x630	24470	42	63	12	25200	36,4	1"5/8	2"1/8	442
3x6E B1	61.2	45.6	46.9	153	43	3x630	39490	52	60	6	17400	25,1	1"5/8	2"1/8	475
4x5Y A3	56.8	45.7	48.1	255	72	4x500	21320	31	49	9	27000	39,0	1"5/8	2"1/8	515
3x6D B1	62.5	46.5	47.8	153	43	3x630	41140	52	65	6	17400	25,1	1"5/8	2"1/8	475
2x8D C1	65.6	47.8	50.3	170	48	2x800	41180	48	56	6	19800	28,6	1"5/8	2"1/8	474
3x6Y B2	62.9	48.4	50.9	230	65	3x630	27990	36	56	9	26100	37,7	1"5/8	2"1/8	537
2x8E C1	67.3	48.9	51.5	170	48	2x800	43210	48	57	6	19800	28,6	1"5/8	2"1/8	468
4x5D A2	64.6	48.9	51.5	192	54	4x500	30970	45	55	6	18000	26,0	1"5/8	2"1/8	428
4x5E A2	66.2	50.1	52.7	192	54	4x500	32370	45	59	6	18000	26,0	1"5/8	2"1/8	415
4x6Y B1	66.5	51.9	54.6	204	58	4x630	40070	43	57	6	24000	34,6	1"5/8	2"1/8	608
2x8Y C2	67.0	52.3	55.0	255	72	2x800	28980	35	50	9	29700	42,9	1"5/8	2"5/8	540
3x6Y B3	71.7	54.5	57.4	306	86	3x630	26230	35	56	12	34800	50,2	1"5/8	2"1/8	619
4x5D A3	71.9	56.3	59.2	255	72	4x500	29290	42	55	9	27000	39,0	1"5/8	2"1/8	515
3x6E B2	73.7	56.6	59.6	230	65	3x630	37390	49	60	9	26100	37,7	1"5/8	2"1/8	537
3x6D B2	77.9	57.7	60.8	230	65	3x630	38790	49	65	9	26100	37,7	1"5/8	2"1/8	537
4x5E A3	74.1	58.3	61.3	255	72	4x500	31050	42	59	9	27000	39,0	1"5/8	2"1/8	502
4x6E B1	77.9	59.2	62.3	204	58	4x630	52660	58	61	6	24000	34,6	1"5/8	2"1/8	608
4x6D B1	79.3	60.3	63.5	204	58	4x630	54850	58	66	6	24000	34,6	1"5/8	2"1/8	608
2x8D C2	79.3	62.0	65.3	255	72	2x800	39130	45	56	9	29700	42,9	1"5/8	2"5/8	540
3x8Y C1	83.1	62.3	65.6	255	72	3x800	46360	43	52	6	24000	34,6	1"5/8	2"5/8	665
2x8E C2	81.2	63.6	67.0	255	72	2x800	40950	45	57	9	29700	42,9	1"5/8	2"5/8	534
4x6Y B2	84.1	65.5	69.0	306	86	4x630	37310	41	57	9	36000	52,0	1"5/8	2"5/8	692
3x6E B3	85.8	65.9	69.4	306	86	3x630	35560	47	60	12	34800	50,2	1"5/8	2"1/8	619
2x1Y D1	-	66.1	69.1	255	72	2x1000	50510	46	52	6	24600	35,5	1"5/8	2"5/8	702
3x6D B3	87.4	67.3	70.8	306	86	3x630	36710	47	65	12	34800	50,2	1"5/8	2"1/8	619
3x8D C1	96.9	71.8	75.6	255	72	3x800	61780	55	58	6	24000	34,6	1"5/8	2"5/8	665
3x8E C1	99.3	73.5	77.4	255	72	3x800	64820	55	58	6	24000	34,6	1"5/8	2"5/8	656
4x6Y B3	95.8	73.9	77.8	408	115	4x630	34970	39	57	12	48000	69,3	2x1"5/8	2x2"1/8	797
2x1D D1	-	74.7	77.7	255	72	2x1000	64040	54	58	6	24600	35,5	1"5/8	2"5/8	702
4x6E B2	98.6	77.2	81.3	306	86	4x630	49860	55	61	9	36000	52,0	1"5/8	2"5/8	692
3x8Y C2	100.8	78.3	82.5	383	108	3x800	43470	41	52	9	36000	52,0	2x1"5/8	2x2"1/8	765
4x6D B2	104.1	78.6	82.8	306	86	4x630	51720	55	66	9	36000	52,0	1"5/8	2"5/8	692
2x1Y D2	-	83.5	87.9	383	108	2x1000	47430	43	52	9	36900	53,3	2x1"5/8	2x2"1/8	798
4x8Y C1	109.6	84.5	86.8	340	96	4x800	61810	47	53	6	37800	54,6	2x1"5/8	2x2"5/8	859
4x6E B3	114.7	89.5	94.3	408	115	4x630	47420	52	61	12	48000	69,3	2x1"5/8	2x2"1/8	797
4x6D B3	116.8	91.5	96.3	408	115	4x630	48940	52	66	12	48000	69,3	2x1"5/8	2x2"1/8	797
3x8D C2	125.4	93.1	98.1	383	108	3x800	58700	52	58	9	36000	52,0	2x1"5/8	2x2"1/8	765
3x8E C2	128.7	95.5	100.6	383	108	3x800	61420	52	58	9	36000	52,0	2x1"5/8	2x2"1/8	756
2x1D D2	-	96.2	101.3	383	108	2x1000	60340	51	58	9	36900	53,3	2x1"5/8	2x2"1/8	798
4x8D C1	127.5	98.6	100.4	340	96	4x800	82370	61	59	6	37800	54,6	2x1"5/8	2x2"5/8	859
3x1Y D1	-	99.5	101.4	383	108	3x1000	75770	51	53	6	37200	53,7	2x1"5/8	2x2"5/8	990
4x8Y C2	137.7	99.6	104.8	511	144	4x800	57960	44	53	9	56700	81,8	2x1"5/8	2x2"1/8	989
4x8E C1	130.6	101.1	102.7	340	96	4x800	86430	61	60	6	37800	54,6	2x1"5/8	2x2"5/8	846
3x1D D1	-	112.9	114.1	383	108	3x1000	96060	61	59	6	37200	53,7	2x1"5/8	2x2"5/8	990
4x8D C2	164.1	116.6	122.7	511	144	4x800	78260	57	59	9	56700	81,8	2x1"5/8	2x2"1/8	989
4x8E C2	168.2	119.0	125.3	511	144	4x800	81890	57	60	9	56700	81,8	2x1"5/8	2x2"1/8	977
3x1Y D2	-	120.1	126.4	574	162	3x1000	71150	49	53	9	55800	80,5	2x1"5/8	2x2"5/8	1133
3x1D D2	-	136.1	143.3	574	162	3x1000	90510	58	59	9	55800	80,5	2x1"5/8	2x2"5/8	1133

*__Ø 500 mm__ : 400 V/3/50 Hz - Δ = 1330 rpm. - 800 W max - 1.4 A max | Y = 960 rpm. - 540 W max - 0.9 A max (5) | *__Ø 630 mm__ : 400 V/3/50 Hz - Δ = 1210 rpm. - 1450 W max - 2.4 A max | Y = 860 rpm. - 820 W max - 1.4 A max (5)
*__Ø 800 mm__ : 400 V/3/50 Hz - Δ = 870 rpm. - 1850 W max - 3.8 A max | Y = 640 rpm. - 1050 W max - 2.0 A max (5) | *__Ø 1000 mm__ : 400 V/3/50 Hz - Δ = 830 rpm. - 2900 W max - 5.6 A max | Y = 630 rpm. - 1750 W max - 3.0 A max (5)
(1) Standard conditions: **SC2** / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K | **SC3** / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K | **SC4** / -25 °C (air inlet temp.) / -31 °C (evaporating temp.) / DT1 = 6K | **SC5** / -34 °C (air inlet temp.) / -40 °C (evaporating temp.) / DT1 = 6K
(2) Operating pressure: 60 bar - Connection diameters to be defined when ordering.
(3) Residual air speed: 0.25 m/s. - Air throw with VPA option = Standard +15 m
(4) **Lp =** Average sound pressure level in dB(A) calculated at 4 m, level with the blades, in a free field over a reflecting plane, given as an indication only. **Lw = Lp +30 dB(A)**
(5) Electric defrost options.

NKH(A) 1x6(B) E(C) B2(D) C(E)

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(B) Number of fans x Ø : **5**= Ø 500 mm - **6** = Ø 630 mm - **8** = Ø 800 mm - **1** = Ø 1000 mm
(C) Motor connection: **E** = EC -**D** = Triangle - **Y** = Star
(D) Module
(E) Fin spacing: **R** = 4.23 mm (positive) - **L** = 6.35 mm (positive) - **C** = 6.35 mm (negative) - **S** = 9 mm (negative) - **T** = 12 mm (negative)

The NK is available with CO2, HFCs and glycol water. For more information, please consult our software.

NKH ... C | H = High-efficiency fin

6.35 mm

NKH ... C	Power						Coil		Ventilation				Electric Defrost			Connections		Net Weight (CO2)
	DT 7K - SC3(1)			DT 6K - SC4(1)			Surface area	Circuit volume	Nb x Ø	Airflow	Air Throw(3) Standard	Acoustics Lp 4m(4)	ELU(5) 400V / 3 / 50Hz			HFC		
	CO2(2) 60 bar	R404A	R449A	CO2(2) 60 bar	R404A	R449A							Number	Power	Current	Inlet	Outlet	
	kW	kW	kW	kW	kW	kW	m²	dm³	mm	m³/h	m	dB(A)		W	A	Ø	Ø	kg
1x5Y A1	9.0	6.1	6.1	7.3	4.8	4.8	32	9	1x500	6160	25	43	6	3600	5.2	5/8"	7/8"	133
1x5D A1	10.4	7.1	6.9	8.5	5.5	5.4	32	9	1x500	8230	34	49	6	3600	5.2	5/8"	7/8"	133
1x5E A1	10.2	7.2	7.0	8.2	5.6	5.4	32	9	1x500	8460	34	53	6	3600	5.2	5/8"	7/8"	130
1x5Y A2	10.9	7.8	7.9	9.3	6.1	6.3	48	14	1x500	5700	22	43	9	5400	7.8	1"1/8	1"1/8	148
1x5Y A3	12.2	8.7	9.1	10.0	6.9	7.1	64	18	1x500	5330	21	43	12	7200	10.4	1"1/8	1"1/8	175
1x5D A2	13.5	9.2	9.3	11.0	7.2	7.3	48	14	1x500	7740	31	49	9	5400	7.8	1"1/8	1"1/8	148
1x5E A2	13.8	9.4	9.5	11.3	7.4	7.4	48	14	1x500	8090	31	53	9	5400	7.8	1"1/8	1"1/8	145
1x6Y B1	14.3	9.9	10.0	11.7	7.7	7.8	51	14	1x630	10020	31	51	6	6600	9.5	7/8"	1"3/8	202
1x5D A3	15.7	10.6	11.0	12.8	8.3	8.5	64	18	1x500	7320	29	49	12	7200	10.4	1"1/8	1"1/8	175
1x5E A3	16.2	10.9	11.4	13.3	8.6	8.8	64	18	1x500	7760	29	53	12	7200	10.4	1"1/8	1"1/8	172
1x6E B1	16.4	11.2	11.2	13.6	8.7	8.7	51	14	1x630	13160	44	55	6	6600	9.5	7/8"	1"3/8	202
1x6D B1	16.8	11.4	11.4	13.9	8.9	8.9	51	14	1x630	13710	44	60	6	6600	9.5	7/8"	1"3/8	202
2x5Y A1	17.6	12.5	12.3	14.8	9.8	9.8	64	18	2x500	12310	27	46	6	8700	12.6	1"1/8	1"3/8	220
1x6Y B2	17.7	12.6	13.1	14.3	9.9	10.2	77	22	1x630	9330	28	51	12	13200	19.1	1"1/8	1"3/8	227
1x6Y B3	19.6	14.3	15.0	17.0	11.4	11.7	102	29	1x630	8740	27	51	15	16500	23.8	1"3/8	1"5/8	263
2x5D A1	21.0	14.3	14.1	17.1	11.2	11.0	64	18	2x500	16470	37	52	6	8700	12.6	1"1/8	1"3/8	220
2x5E A1	21.3	14.5	14.2	17.4	11.4	11.1	64	18	2x500	16920	37	56	6	8700	12.6	1"1/8	1"3/8	214
1x6E B2	20.7	14.7	15.1	17.2	11.5	11.9	77	22	1x630	12460	41	55	12	13200	19.1	1"1/8	1"3/8	227
1x6D B2	21.1	15.0	15.4	17.6	11.8	12.1	77	22	1x630	12930	41	60	12	13200	19.1	1"1/8	1"3/8	227
2x5Y A2	22.0	15.7	16.1	18.7	12.5	12.8	96	27	2x500	11400	26	46	9	13050	18.8	1"3/8	1"5/8	248
1x8Y C1	23.1	16.0	16.0	19.1	12.6	12.7	85	24	1x800	15450	37	47	6	9600	13.9	1"3/8	1"5/8	280
1x6E B3	25.0	17.3	18.0	20.4	13.6	14.0	102	29	1x630	11850	39	55	15	16500	23.8	1"3/8	1"5/8	263
1x6D B3	25.5	17.6	18.3	20.7	13.9	14.2	102	29	1x630	12240	39	60	15	16500	23.8	1"3/8	1"5/8	263
2x5Y A3	24.3	17.7	18.5	19.6	14.1	14.5	128	36	2x500	10660	23	46	12	17400	25.1	1"3/8	1"5/8	295
1x8D C1	27.0	18.5	18.3	22.7	14.4	14.3	85	24	1x800	20590	47	53	6	9600	13.9	1"3/8	1"5/8	280
2x5D A2	27.2	18.7	18.9	22.3	14.7	14.9	96	27	2x500	15490	35	52	9	13050	18.8	1"3/8	1"5/8	248
3x5Y A1	26.5	18.8	18.6	22.3	14.8	14.7	96	27	3x500	18470	31	48	6	12000	17.3	1"3/8	1"5/8	304
1x8E C1	27.7	18.9	18.6	23.2	14.7	14.6	85	24	1x800	21610	47	54	6	9600	13.9	1"3/8	1"5/8	276
2x5E A2	27.9	19.2	19.3	22.8	15.1	15.2	96	27	2x500	16190	35	56	9	13050	18.8	1"3/8	1"5/8	242
2x6Y B1	28.8	20.0	20.2	23.6	15.7	16.0	102	29	2x630	20040	33	54	6	12600	18.2	1"3/8	1"5/8	342
1x8Y C2	28.4	20.1	21.0	24.3	15.9	16.3	128	36	1x800	14490	35	47	12	19200	27.7	1"3/8	1"5/8	319
2x5D A3	29.2	21.4	22.4	24.5	16.9	17.4	128	36	2x500	14650	33	52	12	17400	25.1	1"3/8	1"5/8	295
3x5D A1	31.6	21.6	21.2	25.8	17.0	16.7	96	27	3x500	24700	43	54	6	12000	17.3	1"3/8	1"5/8	304
3x5E A1	32.0	21.9	21.5	26.1	17.2	16.8	96	27	3x500	25380	43	58	6	12000	17.3	1"3/8	1"5/8	295
2x5E A3	30.1	22.1	23.1	25.2	17.4	17.9	128	36	2x500	15520	33	56	12	17400	25.1	1"3/8	1"5/8	289
2x6E B1	33.2	22.7	22.9	27.0	17.7	17.8	102	29	2x630	26330	46	58	6	12600	18.2	1"3/8	1"5/8	342
2x6D B1	33.8	23.1	23.3	27.5	18.0	18.1	102	29	2x630	27420	46	63	6	12600	18.2	1"3/8	1"5/8	342
1x8D C2	35.1	23.7	24.7	28.8	18.5	19.0	128	36	1x800	19570	45	53	12	19200	27.7	1"3/8	1"5/8	319
3x5Y A2	33.0	23.7	24.3	28.2	18.8	19.3	144	40	3x500	17100	28	48	9	18000	26.0	1"5/8	2"1/8	346
1x8E C2	36.0	24.2	25.3	29.5	18.9	19.4	128	36	1x800	20470	45	54	12	19200	27.7	1"3/8	1"5/8	315
4x5Y A1	35.4	24.7	25.4	28.8	19.3	19.9	128	36	4x500	24630	35	49	6	18000	26.0	1"3/8	2"1/8	386
2x6Y B2	35.3	25.5	26.6	30.0	20.2	20.7	153	43	2x630	18660	32	54	12	25200	36.4	1"5/8	2"1/8	392
3x5Y A3	36.6	26.3	27.5	29.6	20.9	21.5	192	54	3x500	15990	27	48	12	24000	34.6	1"5/8	2"1/8	411
4x5D A1	40.9	28.1	28.8	33.9	21.9	22.4	128	36	4x500	32940	48	55	6	18000	26.0	1"3/8	2"1/8	386
3x5D A2	40.9	28.2	28.5	33.6	22.2	22.5	144	40	3x500	23230	40	54	9	18000	26.0	1"5/8	2"1/8	346
4x5E A1	41.5	28.5	29.1	34.4	22.1	22.7	128	36	4x500	33850	48	59	6	18000	26.0	1"3/8	2"1/8	373
3x5E A2	41.9	28.8	29.1	34.4	22.7	23.0	144	40	3x500	24280	40	58	9	18000	26.0	1"5/8	2"1/8	336
2x6Y B3	39.6	29.0	30.3	34.3	23.1	23.7	204	58	2x630	17480	29	54	15	31500	45.5	1"5/8	2"1/8	449
2x6E B2	43.2	29.8	30.8	35.2	23.4	24.1	153	43	2x630	24930	44	58	12	25200	36.4	1"5/8	2"1/8	392
3x6Y B1	42.3	30.1	30.5	35.3	23.7	24.1	153	43	3x630	30060	39	56	6	17400	25.1	1"5/8	2"1/8	475
2x6D B2	44.1	30.4	31.3	35.9	23.9	24.5	153	43	2x630	25860	44	63	12	25200	36.4	1"5/8	2"1/8	392

NKH(A) 1x6(B) E(C) B2(D) C(E)

(A) Fin type: **T** = Large heat exchange surface - **H** = High-efficiency fin
(B) Number of fans x Ø : **5**= Ø 500 mm - **6** = Ø 630 mm - **8** = Ø 800 mm - **1** = Ø 1000 mm
(C) Motor connection: **E** = EC -**D** = Triangle - **Y** = Star
(D) Module
(E) Fin spacing: **R** = 4.23 mm (positive) - **L** = 6.35 mm (positive) - **C** = 6.35 mm (negative) - **S** = 9 mm (negative) - **T** = 12 mm (negative)

The NK is available with CO2, HFCs and glycol water. For more information, please consult our software.

NKH ... C | H = High-efficiency fin

6.35 mm

NKH ... C	Power						Coil		Ventilation				Electric Defrost			Connections		Net Weight (CO2)
	DT 7K - SC3(1)			DT 6K - SC4(1)									ELU(5) 400V / 3 / 50Hz			HFC		
	CO2(2) 60 bar	R404A	R449A	CO2(2) 60 bar	R404A	R449A	Surface area	Circuit volume	Nb x Ø	Airflow	Air Throw(3) Standard	Acoustics Lp 4m(4)	Number	Power	Current	Inlet	Outlet	
	kW	kW	kW	kW	kW	kW	m²	dm³	mm	m³/h	m	dB(A)		W	A	Ø	Ø	kg
3x5D A3	44.0	31.7	33.1	37.1	25.0	25.7	192	54	3x500	21970	38	54	12	24000	34.6	1"5/8	2"1/8	411
2x8Y C1	46.2	32.4	32.4	37.9	25.5	25.7	170	48	2x800	30910	38	50	6	19800	28.6	1"5/8	2"1/8	474
3x5E A3	45.4	32.7	34.2	38.1	25.7	26.4	192	54	3x500	23290	38	58	12	24000	34.6	1"5/8	2"1/8	402
3x6E B1	48.4	34.3	34.5	40.0	26.8	27.0	153	43	3x630	39490	52	60	6	17400	25.1	1"5/8	2"1/8	475
3x6D B1	49.3	34.9	35.1	40.7	27.2	27.4	153	43	3x630	41140	52	65	6	17400	25.1	1"5/8	2"1/8	475
2x6E B3	50.4	34.9	36.5	41.2	27.6	28.4	204	58	2x630	23710	42	58	15	31500	45.5	1"5/8	2"1/8	449
2x6D B3	51.3	35.5	37.1	41.9	28.1	28.9	204	58	2x630	24470	42	63	15	31500	45.5	1"5/8	2"1/8	449
4x5Y A3	49.0	35.6	37.2	39.5	28.4	29.2	255	72	4x500	21320	31	49	12	36000	52.0	1"5/8	2"5/8	528
2x8D C1	53.7	37.3	37.0	43.8	29.2	29.0	170	48	2x800	41180	48	56	6	19800	28.6	1"5/8	2"1/8	474
2x8E C1	55.0	38.1	37.8	44.8	29.9	29.6	170	48	2x800	43210	48	57	6	19800	28.6	1"5/8	2"1/8	468
3x6Y B2	53.7	38.4	40.1	43.7	30.4	31.3	230	65	3x630	27990	36	56	12	34800	50.2	1"5/8	2"5/8	551
4x6Y B1	57.9	38.5	40.1	47.4	29.9	30.7	204	58	4x630	40070	43	57	6	29400	42.4	1"5/8	2"1/8	608
2x8Y C2	56.3	41.0	42.5	48.1	32.6	33.5	255	72	2x800	28980	35	50	12	39600	57.2	2x1"5/8	2x2"1/8	552
4x6E B1	66.6	43.0	44.9	54.3	33.1	34.0	204	58	4x630	52660	58	61	6	29400	42.4	1"5/8	2"1/8	608
4x5D A3	58.8	43.2	45.1	49.6	34.2	35.1	255	72	4x500	29290	42	55	12	36000	52.0	1"5/8	2"5/8	528
3x6Y B3	61.4	43.6	45.5	50.1	34.8	35.8	306	86	3x630	26230	35	56	15	43500	62.8	2x1"5/8	2x2"1/8	632
4x6D B1	67.9	43.7	45.6	55.3	33.6	34.6	204	58	4x630	54850	58	66	6	29400	42.4	1"5/8	2"1/8	608
4x5E A3	60.8	44.6	46.6	51.0	35.2	36.2	255	72	4x500	31050	42	59	12	36000	52.0	1"5/8	2"5/8	515
3x6E B2	63.1	45.0	46.4	52.8	35.4	36.4	230	65	3x630	37390	49	60	12	34800	50.2	1"5/8	2"5/8	551
3x6D B2	64.3	45.8	47.2	53.7	36.0	37.0	230	65	3x630	38790	49	65	12	34800	50.2	1"5/8	2"5/8	551
3x8Y C1	69.4	46.4	48.4	56.9	36.1	37.1	255	72	3x800	46360	43	52	6	29400	42.4	1"5/8	2"5/8	665
2x8D C2	69.8	48.6	49.7	57.0	38.4	39.4	255	72	2x800	39130	45	56	12	39600	57.2	2x1"5/8	2x2"1/8	552
2x8E C2	71.5	49.9	50.8	58.4	39.3	40.2	255	72	2x800	40950	45	57	12	39600	57.2	2x1"5/8	2x2"1/8	546
2x1Y D1	-	49.9	51.3	-	39.1	40.2	255	72	2x1000	50510	46	52	9	36900	53.3	1"5/8	2"5/8	715
3x8D C1	80.7	52.5	54.9	65.8	40.5	41.6	255	72	3x800	61780	55	58	6	29400	42.4	1"5/8	2"5/8	665
3x6E B3	73.6	52.7	55.0	59.5	41.7	42.8	306	86	3x630	35560	47	60	15	43500	62.8	2x1"5/8	2x2"1/8	632
3x8E C1	82.6	53.5	55.9	67.4	41.2	42.3	255	72	3x800	64820	55	58	6	29400	42.4	1"5/8	2"5/8	656
3x6D B3	75.0	53.6	56.0	60.6	42.4	43.5	306	86	3x630	36710	47	65	15	43500	62.8	2x1"5/8	2x2"1/8	632
2x1D D1	-	55.6	56.9	-	43.3	44.4	255	72	2x1000	64040	54	58	9	36900	53.3	1"5/8	2"5/8	715
4x6Y B3	79.4	56.7	59.2	64.0	44.9	46.2	408	115	4x630	34970	39	57	15	60000	86.6	2x1"5/8	2x2"1/8	813
3x8Y C2	84.3	59.4	62.0	72.0	46.7	48.0	383	108	3x800	43470	41	52	12	48000	69.3	2x1"5/8	2x2"1/8	781
2x1Y D2	-	64.1	66.9	-	50.7	52.1	383	108	2x1000	47430	43	52	12	49200	71.0	2x1"5/8	2x2"1/8	811
4x8Y C1	92.5	65.0	65.2	76.0	51.3	51.7	340	96	4x800	61810	47	53	6	37800	54.6	2x1"5/8	2x2"1/8	859
4x6E B3	94.5	67.6	70.6	79.6	52.9	54.4	408	115	4x630	47420	52	61	15	60000	86.6	2x1"5/8	2x2"1/8	813
4x6D B3	96.1	68.8	71.9	80.8	53.8	55.3	408	115	4x630	48940	52	66	15	60000	86.6	2x1"5/8	2x2"1/8	813
3x8D C2	104.4	69.1	72.2	85.2	53.7	55.2	383	108	3x800	58700	52	58	12	48000	69.3	2x1"5/8	2x2"1/8	781
3x8E C2	107.0	70.6	73.7	87.3	54.7	56.2	383	108	3x800	61420	52	58	12	48000	69.3	2x1"5/8	2x2"1/8	772
2x1D D2	-	72.9	76.2	-	57.2	58.8	383	108	2x1000	60340	51	58	12	49200	71.0	2x1"5/8	2x2"1/8	811
4x8D C1	107.7	74.9	74.4	87.9	58.8	58.5	340	96	4x800	82370	61	59	6	37800	54.6	2x1"5/8	2x2"1/8	859
3x1Y D1	-	76.4	75.9	-	60.3	60.1	383	108	3x1000	75770	51	53	9	55800	80.5	2x1"5/8	2x2"1/8	1010
4x8E C1	110.3	76.7	76.0	89.9	60.1	59.7	340	96	4x800	86430	61	60	6	37800	54.6	2x1"5/8	2x2"1/8	846
3x1D D1	-	85.9	84.4	-	67.4	66.4	383	108	3x1000	96060	61	59	9	55800	80.5	2x1"5/8	2x2"1/8	1010
3x1Y D2	-	87.7	91.5	-	67.9	69.8	574	162	3x1000	71150	49	53	12	74400	107.4	2x1"5/8	2x2"5/8	1153
3x1D D2	-	97.8	102.1	-	74.8	76.9	574	162	3x1000	90510	58	59	12	74400	107.4	2x1"5/8	2x2"5/8	1153

*__Ø 500 mm__ : 400 V/3/50 Hz - Δ = 1330 rpm. - 800 W max - 1.4 A max | Y = 960 rpm. - 540 W max - 0.9 A max (5) | *__Ø 630 mm__ : 400 V/3/50 Hz - Δ = 1210 rpm. - 1450 W max - 2.4 A max | Y = 860 rpm. - 820 W max - 1.4 A max (5)
*__Ø 800 mm__ : 400 V/3/50 Hz - Δ = 870 rpm. - 1850 W max - 3.8 A max | Y = 640 rpm. - 1050 W max - 2.0 A max (5) | *__Ø 1000 mm__ : 400 V/3/50 Hz - Δ = 830 rpm. - 2900 W max - 5.6 A max | Y = 630 rpm. - 1750 W max - 3.0 A max (5)
(1) Standard conditions: **SC2** / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K | **SC3** / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K | **SC4** / -25 °C (air inlet temp.) / -31 °C (evaporating temp.) / DT1 = 6K | **SC5** / -34 °C (air inlet temp.) / -40 °C (evaporating temp.) / DT1 = 6K
(2) Operating pressure: 60 bar - Connection diameters to be defined when ordering.
(3) Residual air speed: 0.25 m/s. - Air throw with VPA option = Standard +15 m
(4) **Lp =** Average sound pressure level in dB(A) calculated at 4 m, level with the blades, in a free field over a reflecting plane, given as an indication only. **Lw = Lp +30 dB(A)**
(5) Electric defrost options.

NKH(A) 1x6(B) E(C) B2(D) S(E)

(A) Fin type: **T** = Large heat exchange surface - **H** = High-efficiency fin
(B) Number of fans x Ø : **5**= Ø 500 mm - **6** = Ø 630 mm - **8** = Ø 800 mm - **1** = Ø 1000 mm
(C) Motor connection: : **E** = EC
(D) Module
(E) Fin spacing: **R** = 4.23 mm (positive) - **L** = 6.35 mm (positive) - **C** = 6.35 mm (negative) - **S** = 9 mm (negative) - **T** = 12 mm (negative)

The NK is available with CO2, HFCs and glycol water. For more information, please consult our software.

NKH ... S | H = High-efficiency fin

9 mm

NKH ... S	Power									Coil		Ventilation				Electric Defrost			Connections		Net Weight (CO2)
	DT 7K - SC3(1)			DT 6K - SC4(1)			DT 6K - SC5(1)									ELU(5) 400V / 3 / 50Hz			HFC		
	CO2(2) 60 bar	R404A	R449A	CO2(2) 60 bar	R404A	R449A	CO2(2) 60 bar	R404A	R449A	Surface area	Circuit volume	Nb x Ø	Airflow	Air Throw(3) Standard	Acoustics Lp 4m(4)	Number	Power	Current	Inlet	Outlet	
	kW	kW	kW	kW	kW	kW	kW	kW	kW	m²	dm³	mm	m³/h	m	dB(A)		W	A	Ø	Ø	kg
1x5Y A1	7.9	5.4	5.2	6.6	4.2	4.1	6.6	4.1	3.9	23	9	1x500	6250	26	43	6	3600	5.2	5/8"	7/8"	135
1x5D A1	9.4	6.2	6.0	7.7	4.9	4.7	7.5	4.7	4.5	23	9	1x500	8330	35	49	6	3600	5.2	5/8"	7/8"	135
1x5E A1	9.6	6.3	6.1	7.8	5.0	4.8	7.6	4.7	4.5	23	9	1x500	8530	35	53	6	3600	5.2	5/8"	7/8"	131
1x5Y A2	10.1	6.9	6.9	8.3	5.5	5.5	8.3	5.3	5.3	35	14	1x500	5810	24	43	6	3600	5.2	1"1/8	1"1/8	146
1x5Y A3	11.5	8.0	8.4	9.5	6.4	6.5	9.6	6.1	6.2	47	18	1x500	5460	23	43	9	5400	7.8	1"1/8	1"1/8	174
1x5D A2	12.1	8.3	8.2	10.2	6.5	6.5	10.1	6.3	6.1	35	14	1x500	7870	32	49	6	3600	5.2	1"1/8	1"1/8	146
1x5E A2	12.7	8.5	8.4	10.4	6.7	6.6	10.2	6.4	6.3	35	14	1x500	8190	32	53	6	3600	5.2	1"1/8	1"1/8	143
1x6Y B1	12.9	8.7	8.6	10.6	6.8	6.8	10.4	6.5	6.4	37	14	1x630	10160	32	51	6	6600	9.5	7/8"	1"1/8	204
1x5D A3	14.1	9.7	10.1	12.0	7.7	7.9	12.0	7.2	7.4	47	18	1x500	7470	30	49	9	5400	7.8	1"1/8	1"1/8	174
1x6E B1	14.9	10.0	9.9	12.2	7.8	7.8	12.0	7.3	7.1	37	14	1x630	13300	45	55	6	6600	9.5	7/8"	1"1/8	204
1x5E A3	14.6	10.0	10.4	12.4	7.9	8.1	12.3	7.4	7.6	47	18	1x500	7880	30	53	9	5400	7.8	1"1/8	1"1/8	171
1x6D B1	15.3	10.2	10.1	12.5	7.9	7.9	12.3	7.4	7.2	37	14	1x630	13860	45	60	6	6600	9.5	7/8"	1"1/8	204
2x5Y A1	15.9	10.9	10.7	13.4	8.6	8.5	13.0	8.3	8.1	47	18	2x500	12500	28	46	6	8700	12.6	1"1/8	1"3/8	222
1x6Y B2	16.3	11.3	11.5	13.3	9.0	9.2	13.0	8.6	8.7	56	22	1x630	9500	30	51	9	9900	14.3	1"1/8	1"3/8	226
2x5D A1	19.0	12.7	12.3	15.6	10.0	9.7	15.3	9.5	9.1	47	18	2x500	16660	38	52	6	8700	12.6	1"1/8	1"3/8	222
2x5E A1	19.2	12.8	12.4	15.8	10.1	9.8	15.5	9.6	9.2	47	18	2x500	17060	38	56	6	8700	12.6	1"1/8	1"3/8	216
1x6Y B3	18.5	13.1	13.7	15.2	10.4	10.7	15.3	10.1	10.4	75	29	1x630	8940	29	51	12	13200	19.1	1"3/8	1"5/8	262
1x6E B2	19.2	13.3	13.4	16.1	10.5	10.6	15.3	9.8	9.9	56	22	1x630	12640	42	55	9	9900	14.3	1"1/8	1"3/8	226
1x6D B2	19.6	13.6	13.7	16.4	10.7	10.8	15.6	10.0	10.0	56	22	1x630	13130	42	60	9	9900	14.3	1"1/8	1"3/8	226
1x8Y C1	20.2	14.0	13.8	17.0	11.0	11.0	16.8	10.6	10.4	62	24	1x800	15650	38	47	6	9600	13.9	1"3/8	1"5/8	283
2x5Y A2	20.2	14.0	14.5	16.7	11.0	11.4	16.8	10.4	10.7	70	27	2x500	11630	27	46	6	8700	12.6	1"1/8	1"5/8	244
1x6E B3	22.5	15.8	16.3	19.1	12.5	12.8	18.9	11.9	12.2	75	29	1x630	12060	40	55	12	13200	19.1	1"3/8	1"5/8	262
1x6D B3	23.8	16.1	16.6	19.5	12.7	13.1	19.2	12.1	12.3	75	29	1x630	12480	40	60	12	13200	19.1	1"3/8	1"5/8	262
2x5Y A3	22.9	16.2	16.9	18.7	12.9	13.3	18.2	12.4	12.7	94	36	2x500	10920	24	46	9	13050	18.8	1"3/8	1"5/8	293
1x8D C1	24.1	16.3	15.9	19.8	12.8	12.5	19.2	12.2	11.8	62	24	1x800	20800	49	53	6	9600	13.9	1"3/8	1"5/8	283
3x5Y A1	23.9	16.4	16.1	20.1	13.0	12.8	19.6	12.5	12.2	70	27	3x500	18760	32	48	6	12000	17.3	1"3/8	1"5/8	308
2x5D A2	24.4	16.5	17.0	20.6	13.0	13.3	20.4	12.0	12.3	70	27	2x500	15740	36	52	6	8700	12.6	1"1/8	1"5/8	244
1x8E C1	24.8	16.7	16.3	20.3	13.1	12.8	19.6	12.4	12.0	62	24	1x800	21820	49	54	6	9600	13.9	1"3/8	1"5/8	280
2x5E A2	25.0	16.9	17.4	21.1	13.2	13.6	20.8	12.2	12.5	70	27	2x500	16380	36	56	6	8700	12.6	1"1/8	1"5/8	238
2x6Y B1	25.5	17.6	17.5	21.4	13.9	13.9	21.1	13.2	13.0	75	29	2x630	20320	34	54	6	12600	18.2	1"3/8	1"5/8	346
1x8Y C2	25.5	18.1	18.4	20.8	14.4	14.7	20.8	14.0	14.1	94	36	1x800	14740	36	47	9	14400	20.8	1"5/8	1"5/8	318
3x5D A1	28.1	19.1	18.5	23.5	15.0	14.6	23.1	14.4	13.9	70	27	3x500	24990	45	54	6	12000	17.3	1"3/8	1"5/8	308
3x5E A1	28.9	19.3	18.8	23.8	15.2	14.8	23.3	14.5	14.1	70	27	3x500	25580	45	58	6	12000	17.3	1"3/8	1"5/8	298
2x5D A3	27.7	19.7	20.5	23.3	15.6	16.0	22.0	14.7	15.1	94	36	2x500	14940	35	52	9	13050	18.8	1"3/8	1"5/8	293
2x6E B1	30.1	20.2	20.0	24.7	15.8	15.8	23.9	14.8	14.6	75	29	2x630	26600	47	58	6	12600	18.2	1"3/8	1"5/8	346
2x5E A3	28.5	20.3	21.2	23.9	16.0	16.5	22.5	15.0	15.5	94	36	2x500	15750	35	56	9	13050	18.8	1"3/8	1"5/8	286
2x6D B1	30.7	20.6	20.4	25.2	16.1	16.1	24.3	15.1	14.8	75	29	2x630	27710	47	63	6	12600	18.2	1"3/8	1"5/8	346
3x5Y A2	28.8	20.9	21.8	24.1	16.5	17.0	23.5	15.4	15.9	105	40	3x500	17440	30	48	6	12000	17.3	1"3/8	2"1/8	340
1x8D C2	30.3	21.6	21.7	25.2	17.1	17.2	24.5	16.3	16.3	94	36	1x800	19840	46	53	9	14400	20.8	1"5/8	1"5/8	318
4x5Y A1	31.9	21.7	22.0	26.2	17.2	17.4	25.6	16.1	16.1	94	36	4x500	25010	37	49	6	18000	26.0	1"3/8	2"1/8	390
1x8E C2	31.0	22.1	22.2	25.8	17.5	17.6	24.9	16.7	16.6	94	36	1x800	20760	46	54	9	14400	20.8	1"5/8	1"5/8	315
2x6Y B2	32.9	22.8	23.4	27.0	18.1	18.6	26.4	17.4	17.7	112	43	2x630	19010	33	54	9	18900	27.3	1"5/8	2"1/8	389
3x5Y A3	34.5	24.2	25.2	28.1	19.3	19.8	27.5	18.2	18.8	140	54	3x500	16380	28	48	9	18000	26.0	1"5/8	2"1/8	408
3x5D A2	35.0	24.6	25.7	28.8	19.3	19.8	27.2	17.6	18.1	105	40	3x500	23610	42	54	6	12000	17.3	1"3/8	2"1/8	340
3x5E A2	35.7	25.1	26.2	29.3	19.7	20.2	27.5	17.9	18.4	105	40	3x500	24560	42	58	6	12000	17.3	1"3/8	2"1/8	330
4x5D A1	37.3	25.1	25.3	30.4	19.7	19.9	29.9	18.2	18.1	94	36	4x500	33320	49	55	6	18000	26.0	1"3/8	2"1/8	390
4x5E A1	37.7	25.4	25.6	30.8	19.9	20.1	30.2	18.3	18.3	94	36	4x500	34110	49	59	6	18000	26.0	1"3/8	2"1/8	378
2x6Y B3	37.2	26.4	27.6	30.7	21.1	21.7	31.1	20.5	21.0	150	58	2x630	17880	30	54	12	25200	36.4	1"5/8	2"1/8	448
3x6Y B1	38.3	26.5	26.5	31.3	20.9	21.0	30.3	19.9	19.7	112	43	3x630	30480	40	56	6	17400	25.1	1"5/8	2"1/8	481
2x6E B2	38.8	26.9	27.3	31.6	21.2	21.6	31.3	20.1	20.2	112	43	2x630	25290	45	58	9	18900	27.3	1"5/8	2"1/8	389
2x6D B2	39.6	27.5	27.8	32.2	21.6	22.0	31.8	20.4	20.5	112	43	2x630	26260	45	63	9	18900	27.3	1"5/8	2"1/8	389
2x8Y C1	40.6	28.1	27.9	34.1	22.3	22.2	33.8	21.5	21.1	125	48	2x800	31290	39	50	6	19800	28.6	1"5/8	2"1/8	480
4x5Y A2	39.8	28.2	29.2	32.4	22.4	23.0	32.5	21.2	21.8	140	54	4x500	23260	35	49	6	18000	26.0	1"5/8	2"1/8	433
3x5D A3	41.7	29.2	30.5	35.1	23.1	23.7	33.4	21.4	22.0	140	54	3x500	22410	40	54	9	18000	26.0	1"5/8	2"1/8	408
3x5E A3	43.0	30.1	31.5	36.1	23.7	24.4	34.1	22.0	22.6	140	54	3x500	23630	40	58	9	18000	26.0	1"5/8	2"1/8	398
3x6E B1	44.2	30.4	30.2	36.6	23.9	23.8	35.0	22.4	22.1	112	43	3x630	39890	54	60	6	17400	25.1	1"5/8	2"1/8	481

NKH(A) 1x6(B) E(C) B2(D) S(E)

(A) Fin type: **T** = Large heat exchange surface - **H** = High-efficiency fin
(B) Number of fans x Ø : **5**= Ø 500 mm - **6** = Ø 630 mm - **8** = Ø 800 mm - **1** = Ø 1000 mm
(C) Motor connection: : **E** = EC - **D** = Triangle - **Y** = Star
(D) Module
(E) Fin spacing: **R** = 4.23 mm (positive) - **L** = 6.35 mm (positive) - **C** = 6.35 mm (negative) - **S** = 9 mm (negative) - **T** = 12 mm (negative)

The NK is available with CO2, HFCs and glycol water. For more information, please consult our software.

NKH ... S | H = High-efficiency fin

9 mm

NKH ... S	Power									Coil		Ventilation				Electric Defrost			Connections		Net Weight (CO2)
	DT 7K - SC3(1)			DT 6K - SC4(1)			DT 6K - SC5(1)									ELU(5) 400V / 3 / 50Hz			HFC		
	CO2(2) 60 bar	R404A	R449A	CO2(2) 60 bar	R404A	R449A	CO2(2) 60 bar	R404A	R449A	Surface area	Circuit volume	Nb x Ø	Airflow	Air Throw(3) Standard	Acoustics Lp 4m(4)	Number	Power	Current	Inlet	Outlet	
	kW	kW	kW	kW	kW	kW	kW	kW	kW	m²	dm³	mm	m³/h	m	dB(A)		W	A	Ø	Ø	kg
3x6D B1	45.1	31.0	30.8	37.4	24.3	24.3	35.5	22.8	22.4	112	43	3x630	41570	54	65	6	17400	25.1	1"5/8	2"1/8	481
2x6E B3	45.3	31.9	33.1	38.6	25.3	26.0	38.4	24.1	24.8	150	58	2x630	24130	44	58	12	25200	36.4	1"5/8	2"1/8	448
2x6D B3	46.3	32.6	33.7	39.4	25.8	26.5	39.1	24.6	25.3	150	58	2x630	24960	44	63	12	25200	36.4	1"5/8	2"1/8	448
4x5Y A3	46.0	32.6	34.0	37.6	26.0	26.7	36.8	25.0	25.7	187	72	4x500	21830	33	49	9	27000	39.0	1"5/8	2"1/8	523
2x8D C1	48.5	32.8	32.2	39.8	25.9	25.4	38.9	24.7	24.0	125	48	2x800	41590	50	56	6	19800	28.6	1"5/8	2"1/8	480
4x5D A2	47.3	33.5	34.4	39.4	26.4	27.1	36.9	24.6	25.1	140	54	4x500	31480	47	55	6	18000	26.0	1"5/8	2"1/8	433
2x8E C1	49.8	33.6	33.0	40.8	26.5	26.0	39.7	25.2	24.5	125	48	2x800	43650	50	57	6	19800	28.6	1"5/8	2"1/8	474
4x5E A2	48.3	34.2	35.1	40.1	26.9	27.6	39.0	25.0	25.5	140	54	4x500	32750	47	59	6	18000	26.0	1"5/8	2"1/8	421
4x6Y B1	51.1	34.2	35.4	42.9	26.8	27.6	42.4	24.3	25.0	150	58	4x630	40640	45	57	6	24000	34.6	1"5/8	2"1/8	616
3x6Y B2	49.4	34.3	35.2	40.6	27.3	28.1	39.9	26.2	26.8	169	65	3x630	28510	38	56	9	26100	37.7	1"5/8	2"5/8	546
2x8Y C2	51.9	36.5	37.2	42.9	29.1	29.8	42.9	28.2	28.7	187	72	2x800	29480	37	50	9	29700	42.9	2x1"5/8	2x2"1/8	550
4x6E B1	60.3	38.9	40.2	49.5	30.2	31.0	48.2	26.9	27.5	150	58	4x630	53190	59	61	6	24000	34.6	1"5/8	2"1/8	616
4x6D B1	61.6	39.6	41.0	50.5	30.7	31.5	49.1	27.3	28.0	150	58	4x630	55430	59	66	6	24000	34.6	1"5/8	2"1/8	616
4x5D A3	55.7	39.6	41.3	45.0	31.4	32.3	44.8	29.6	30.4	187	72	4x500	29880	45	55	9	27000	39.0	1"5/8	2"1/8	523
3x6Y B3	54.8	39.7	41.4	47.0	31.8	32.6	47.0	30.8	31.7	225	86	3x630	26820	36	56	12	34800	50.2	2x1"5/8	2x2"1/8	630
3x6E B2	58.4	40.5	41.1	47.6	32.0	32.7	47.3	30.3	30.5	169	65	3x630	37930	51	60	9	26100	37.7	1"5/8	2"5/8	546
4x5E A3	57.4	40.9	42.7	48.3	32.4	33.3	45.8	30.5	31.3	187	72	4x500	31500	45	59	9	27000	39.0	1"5/8	2"1/8	510
3x8Y C1	61.0	41.1	42.6	51.3	32.3	33.2	50.9	29.5	30.3	187	72	3x800	46940	44	52	6	24000	34.6	1"5/8	2"5/8	675
3x6D B2	59.6	41.3	42.0	48.6	32.6	33.3	48.1	30.8	31.1	169	65	3x630	39390	51	65	9	26100	37.7	1"5/8	2"5/8	546
2x8D C2	62.4	43.5	43.9	52.7	34.5	34.9	52.0	33.1	33.1	187	72	2x800	39680	47	56	9	29700	42.9	2x1"5/8	2x2"1/8	550
2x1Y D1	-	44.0	44.4	-	34.7	35.2	-	32.5	32.6	187	72	2x1000	51110	47	52	6	24600	35.5	1"5/8	2"5/8	712
2x8E C2	64.1	44.7	45.0	54.0	35.4	35.7	53.2	33.9	33.8	187	72	2x800	41520	47	57	9	29700	42.9	2x1"5/8	2x2"1/8	543
4x6Y B2	65.3	44.8	46.8	55.5	35.4	36.4	53.8	32.6	33.5	225	86	4x630	38010	43	57	9	36000	52.0	1"5/8	2"5/8	701
3x8D C1	72.9	47.1	48.8	59.9	36.7	37.7	58.5	32.9	33.6	187	72	3x800	62390	57	58	6	24000	34.6	1"5/8	2"5/8	675
3x6E B3	69.0	48.0	49.9	56.3	38.2	39.2	54.8	36.5	37.5	225	86	3x630	36190	49	60	12	34800	50.2	2x1"5/8	2x2"1/8	630
3x8E C1	74.8	48.2	49.9	61.4	37.4	38.5	59.8	33.4	34.2	187	72	3x800	65470	57	58	6	24000	34.6	1"5/8	2"5/8	665
3x6D B3	70.4	49.1	50.9	57.4	38.9	40.0	55.7	37.2	38.2	225	86	3x630	37430	49	65	12	34800	50.2	2x1"5/8	2x2"1/8	630
2x1D D1	-	49.6	50.0	-	38.9	39.3	-	35.9	35.8	187	72	2x1000	64870	56	58	6	24600	35.5	1"5/8	2"5/8	712
4x6E B2	77.7	52.2	54.5	65.5	40.8	42.0	64.5	37.0	38.0	225	86	4x630	50570	57	61	9	36000	52.0	1"5/8	2"5/8	701
4x6Y B3	74.6	52.3	54.6	60.9	41.6	42.7	59.4	38.9	40.0	300	115	4x630	35770	41	57	12	48000	69.3	2x1"5/8	2x2"1/8	810
4x6D B2	81.4	53.2	55.6	66.9	41.6	42.7	65.8	37.5	38.5	225	86	4x630	52520	57	66	9	36000	52.0	1"5/8	2"5/8	701
3x8Y C2	77.3	53.6	56.0	63.1	42.3	43.5	61.0	39.2	40.3	281	108	3x800	44220	42	52	9	36000	52.0	2x1"5/8	2x2"1/8	777
4x8Y C1	81.4	56.5	56.0	68.5	44.8	44.6	66.5	43.3	42.6	250	96	4x800	62580	49	53	6	37800	54.6	2x1"5/8	2x2"1/8	871
2x1Y D2	-	57.6	59.6	-	45.6	46.9	-	43.3	44.5	281	108	2x1000	48240	45	52	12	49200	71.0	2x1"5/8	2x2"1/8	822
4x6E B3	89.4	62.3	65.1	75.3	49.0	50.4	71.6	45.1	46.4	300	115	4x630	48250	55	61	12	48000	69.3	2x1"5/8	2x2"1/8	810
3x8D C2	91.8	63.0	65.8	76.6	49.3	50.7	72.4	44.6	45.9	281	108	3x800	59520	54	58	9	36000	52.0	2x1"5/8	2x2"1/8	777
4x6D B3	91.2	63.6	66.3	76.7	49.9	51.3	72.6	45.7	47.0	300	115	4x630	49910	55	66	12	48000	69.3	2x1"5/8	2x2"1/8	810
3x8E C2	94.1	64.4	67.3	78.4	50.3	51.7	73.8	45.5	46.8	281	108	3x800	62280	54	58	9	36000	52.0	2x1"5/8	2x2"1/8	768
2x1D D2	-	65.9	67.8	-	51.9	53.4	-	48.6	49.6	281	108	2x1000	61250	53	58	12	49200	71.0	2x1"5/8	2x2"1/8	822
4x8D C1	97.3	65.9	64.7	79.9	52.0	51.2	78.2	49.7	48.6	250	96	4x800	83190	63	59	6	37800	54.6	2x1"5/8	2x2"1/8	871
3x1Y D1	-	66.6	65.4	-	52.7	52.0	-	51.1	49.7	281	108	3x1000	76660	52	53	6	37200	53.7	2x1"5/8	2x2"5/8	1005
4x8Y C2	104.0	66.6	69.6	85.9	51.7	53.2	86.3	45.2	46.4	374	144	4x800	58960	46	53	9	56700	81.8	2x1"5/8	2x2"1/8	1005
4x8E C1	99.8	67.6	66.3	81.9	53.3	52.4	79.9	50.8	49.4	250	96	4x800	87290	63	60	6	37800	54.6	2x1"5/8	2x2"1/8	859
3x1D D1	-	75.7	73.6	-	59.7	58.2	-	57.3	55.5	281	108	3x1000	97310	63	59	6	37200	53.7	2x1"5/8	2x2"5/8	1005
4x8D C2	125.1	76.6	79.9	105.7	58.7	60.4	104.5	50.1	51.5	374	144	4x800	79360	60	59	9	56700	81.8	2x1"5/8	2x2"1/8	1005
4x8E C2	128.6	77.8	81.2	108.4	59.7	61.4	107.0	50.9	52.3	374	144	4x800	83050	60	60	9	56700	81.8	2x1"5/8	2x2"1/8	992
3x1Y D2	-	80.5	84.0	-	62.6	64.4	-	55.4	56.9	421	162	3x1000	72360	50	53	12	74400	107.4	2x1"5/8	2x2"5/8	1170
3x1D D2	-	90.3	94.3	-	69.5	71.5	-	60.4	62.1	421	162	3x1000	91880	60	59	12	74400	107.4	2x1"5/8	2x2"5/8	1170

*__Ø 500 mm__ : 400 V/3/50 Hz - Δ = 1330 rpm. - 800 W max - 1.4 A max | Y = 960 rpm. - 540 W max - 0.9 A max (5) | *__Ø 630 mm__ : 400 V/3/50 Hz - Δ = 1210 rpm. - 1450 W max - 2.4 A max | Y = 860 rpm. - 820 W max - 1.4 A max (5)
*__Ø 800 mm__ : 400 V/3/50 Hz - Δ = 870 rpm. - 1850 W max - 3.8 A max | Y = 640 rpm. - 1050 W max - 2.0 A max (5) | *__Ø 1000 mm__ : 400 V/3/50 Hz - Δ = 830 rpm. - 2900 W max - 5.6 A max | Y = 630 rpm. - 1750 W max - 3.0 A max (5)
(1) Standard conditions: **SC2** / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K | **SC3** / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K | **SC4** / -25 °C (air inlet temp.) / -31 °C (evaporating temp.) / DT1 = 6K | **SC5** / -34 °C (air inlet temp.) / -40 °C (evaporating temp.) / DT1 = 6K
(2) Operating pressure: 60 bar - Connection diameters to be defined when ordering.
(3) Residual air speed: 0.25 m/s. - Air throw with VPA option = Standard +15 m
(4) **Lp =** Average sound pressure level in dB(A) calculated at 4 m, level with the blades, in a free field over a reflecting plane, given as an indication only. **Lw = Lp +30 dB(A)**
(5) Electric defrost options.

NKT (A) 1x6 (B) E (C) B2 (D) L (E)

(A) Fin type: **T** = Large heat exchange surface - **H** = High-efficiency fin
(B) Number of fans x Ø : **5**= Ø 500 mm - **6** = Ø 630 mm - **8** = Ø 800 mm - **1** = Ø 1000 mm
(C) Motor connection: **E** = EC - **D** = Triangle - **Y** = Star
(D) Module
(E) Fin spacing: **R** = 4.23 mm (positive) - **L** = 6.35 mm (positive) - **C** = 6.35 mm (negative) - **S** = 9 mm (negative) - **T** = 12 mm (negative)

> **The NK is available with CO2, HFCs and glycol water. For more information, please consult our software.**

NKT ... L | T = Large heat exchange surface

6.35 mm

NKT ... L	Power			Coil		Ventilation				Electric Defrost			Connections		Net Weight (CO2)
	DT 8K - SC2(1)			Surface area	Circuit volume	Nb x Ø	Airflow	Air Throw(3) Standard	Acoustics Lp 4m(4)	ELU(5) 400V / 3 / 50Hz			HFC		
	CO2 (2) 60 bar	R404A	R449A							Number	Power	Current	Inlet	Outlet	
	kW	kW	kW	m²	dm³	mm	m³/h	m	dB(A)		W	A	Ø	Ø	kg
1x5Y A2	11.4	8.2	8.3	56	16	1x500	5840	25	43	6	6000	8,7	5/8"	7/8"	150
1x5Y A3	12.5	9.5	9.8	75	22	1x500	5490	24	43	9	9000	13,0	5/8"	1"1/8	178
1x5D A2	13.6	9.5	9.5	56	16	1x500	7900	34	49	6	6000	8,7	5/8"	7/8"	150
1x5E A2	13.8	9.7	9.7	56	16	1x500	8210	34	53	6	6000	8,7	5/8"	7/8"	146
1x5Y A4	14.3	10.4	10.9	93	27	1x500	5190	23	43	9	9000	13,0	5/8"	1"1/8	191
1x5D A3	15.0	11.3	11.5	75	22	1x500	7510	32	49	9	9000	13,0	5/8"	1"1/8	178
1x5E A3	15.3	11.6	11.8	75	22	1x500	7910	32	53	9	9000	13,0	5/8"	1"1/8	175
1x5D A4	17.6	12.6	13.1	93	27	1x500	7160	31	49	9	9000	13,0	5/8"	1"1/8	191
1x5E A4	18.9	13.1	13.6	93	27	1x500	7640	31	53	9	9000	13,0	5/8"	1"1/8	188
1x6Y B2	19.9	13.9	13.8	96	28	1x630	9760	31	51	9	9900	14,3	5/8"	1"1/8	235
1x6E B2	23.1	16.1	15.7	96	28	1x630	12910	44	55	9	9900	14,3	5/8"	1"1/8	235
1x6Y B3	21.8	16.1	16.3	128	37	1x630	9240	30	51	12	13200	19,1	7/8"	1"3/8	275
1x6D B2	23.6	16.4	16.0	96	28	1x630	13430	44	60	9	9900	14,3	5/8"	1"1/8	235
2x5Y A2	23.2	16.6	16.9	112	33	2x500	11680	27	46	6	12000	17,3	5/8"	1"3/8	250
1x6Y B4	23.0	17.5	18.5	160	47	1x630	8770	29	51	12	13200	19,1	7/8"	1"3/8	296
1x6E B3	26.4	19.1	19.0	128	37	1x630	12380	42	55	12	13200	19,1	7/8"	1"3/8	275
2x5Y A3	25.6	19.3	19.9	149	43	2x500	10980	26	46	9	13050	18,8	7/8"	1"3/8	300
2x5D A2	27.0	19.4	19.5	112	33	2x500	15810	37	52	6	12000	17,3	5/8"	1"3/8	250
1x6D B3	26.8	19.5	19.4	128	37	1x630	12830	42	60	12	13200	19,1	7/8"	1"3/8	275
2x5E A2	27.5	19.7	19.8	112	33	2x500	16410	37	56	6	12000	17,3	5/8"	1"3/8	243
2x5Y A4	28.7	20.9	22.1	187	54	2x500	10370	25	46	9	18000	26,0	1"1/8	1"5/8	324
1x6E B4	28.0	21.0	22.1	160	47	1x630	11900	41	55	12	13200	19,1	7/8"	1"3/8	296
1x6D B4	28.4	21.3	22.5	160	47	1x630	12280	41	60	12	13200	19,1	7/8"	1"3/8	296
1x8Y C2	30.9	21.9	21.9	154	45	1x800	14910	37	47	9	14400	20,8	1"1/8	1"5/8	328
2x5D A3	30.8	23.0	23.5	149	43	2x500	15020	36	52	9	13050	18,8	7/8"	1"3/8	300
2x5E A3	31.5	23.6	24.1	149	43	2x500	15830	36	56	9	13050	18,8	7/8"	1"3/8	294
3x5Y A2	34.9	25.1	25.1	168	49	3x500	17520	31	48	6	18600	26,8	1"1/8	1"5/8	348
1x8Y C3	34.6	25.3	26.0	205	60	1x800	14150	35	47	12	19200	27,7	1"1/8	1"5/8	367
1x8D C2	36.2	25.5	25.3	154	45	1x800	20040	47	53	9	14400	20,8	1"1/8	1"5/8	328
2x5D A4	34.7	25.6	26.7	187	54	2x500	14320	34	52	9	18000	26,0	1"1/8	1"5/8	324
1x8E C2	37.1	26.1	25.9	154	45	1x800	21000	47	54	9	14400	20,8	1"1/8	1"5/8	325
2x5E A4	35.9	26.6	27.6	187	54	2x500	15280	34	56	9	18000	26,0	1"1/8	1"5/8	318
2x6Y B2	39.2	28.2	28.7	192	56	2x630	19520	33	54	9	18900	27,3	1"1/8	1"5/8	405
3x5Y A3	40.4	28.9	30.4	224	65	3x500	16460	30	48	9	18000	26,0	1"1/8	1"5/8	418
3x5D A2	40.8	29.3	29.0	168	49	3x500	23710	43	54	6	18600	26,8	1"1/8	1"5/8	348
3x5E A2	41.5	29.8	29.5	168	49	3x500	24620	43	58	6	18600	26,8	1"1/8	1"5/8	338
1x8D C3	42.9	30.3	30.6	205	60	1x800	19210	45	53	12	19200	27,7	1"1/8	1"5/8	367
1x8E C3	44.0	31.0	31.3	205	60	1x800	20100	45	54	12	19200	27,7	1"1/8	1"5/8	364
3x5Y A4	44.3	31.5	33.2	280	81	3x500	15560	28	48	9	27900	40,3	1"1/8	2"1/8	453
2x6E B2	46.7	32.4	32.9	192	56	2x630	25820	46	58	9	18900	27,3	1"1/8	1"5/8	405
2x6Y B3	44.7	32.6	33.2	256	74	2x630	18480	32	54	12	30000	43,3	1"3/8	1"5/8	471
2x6D B2	47.6	33.0	33.5	192	56	2x630	26860	46	63	9	18900	27,3	1"1/8	1"5/8	405
4x5Y A2	44.0	33.5	33.3	224	65	4x500	23360	35	49	6	18000	26,0	1"1/8	2"1/8	443
3x5D A3	48.3	34.4	35.8	224	65	3x500	22520	42	54	9	18000	26,0	1"1/8	1"5/8	418
3x5E A3	49.6	35.4	36.8	224	65	3x500	23740	42	58	9	18000	26,0	1"1/8	1"5/8	408
2x6Y B4	48.7	35.5	37.3	320	93	2x630	17550	31	54	12	30000	43,3	1"1/8	2"1/8	511
3x5D A4	53.9	38.5	40.5	280	81	3x500	21470	40	54	9	27900	40,3	1"1/8	2"1/8	453
4x5Y A3	51.7	38.5	40.5	299	87	4x500	21950	34	49	9	27000	39,0	1"1/8	2"1/8	534
2x6E B3	54.8	38.7	38.7	256	74	2x630	24750	45	58	12	30000	43,3	1"3/8	1"5/8	471
4x5D A2	51.6	39.2	38.5	224	65	4x500	31620	48	55	6	18000	26,0	1"1/8	2"1/8	443
2x6D B3	55.9	39.5	39.4	256	74	2x630	25670	45	63	12	30000	43,3	1"3/8	1"5/8	471
4x5E A2	52.4	39.9	39.2	224	65	4x500	32830	48	59	6	18000	26,0	1"1/8	2"1/8	431
3x5E A4	55.9	40.0	42.0	280	81	3x500	22920	40	58	9	27900	40,3	1"1/8	2"1/8	444
4x5Y A4	57.6	42.0	44.2	373	108	4x500	20740	32	49	9	36900	53,3	1"3/8	2"1/8	582
3x6Y B2	59.0	42.5	43.3	288	84	3x630	29280	39	56	9	26100	37,7	1"3/8	2"1/8	569
2x6E B4	58.1	42.5	44.8	320	93	2x630	23800	43	58	12	30000	43,3	1"1/8	2"1/8	511

NKT (A) 1x6 (B) E (C) B2 (D) L (E)

(A) Fin type: **T** = Large heat exchange surface - **H** = High-efficiency fin
(B) Number of fans x Ø : **5**= Ø 500 mm - **6** = Ø 630 mm - **8** = Ø 800 mm - **1** = Ø 1000 mm
(C) Motor connection: **E** = EC - **D** = Triangle - **Y** = Star
(D) Module
(E) Fin spacing: **R** = 4.23 mm (positive) - **L** = 6.35 mm (positive) - **C** = 6.35 mm (negative) - **S** = 9 mm (negative) - **T** = 12 mm (negative)

The NK is available with CO2, HFCs and glycol water. For more information, please consult our software.

NKT ... L | T = Large heat exchange surface

6.35 mm

NKT ... L	Power			Coil		Ventilation				Electric Defrost			Connections		Net Weight (CO2)
	DT 8K - SC2(1)			Surface area	Circuit volume	Nb x Ø	Airflow	Air Throw(3) Standard	Acoustics Lp 4m(4)	ELU(5) 400V / 3 / 50Hz			HFC		
	CO2 (2) 60 bar	R404A	R449A							Number	Power	Current	Inlet	Outlet	
	kW	kW	kW	m²	dm³	mm	m³/h	m	dB(A)		W	A	Ø	Ø	kg
2x6D B4	59.1	43.4	45.7	320	93	2x630	24570	43	63	12	30000	43,3	1"1/8	2"1/8	511
2x8Y C2	62.2	44.2	44.3	307	89	2x800	29830	38	50	9	29700	42,9	1"3/8	2"1/8	567
4x5D A3	62.4	45.8	48.1	299	87	4x500	30030	46	55	9	27000	39,0	1"1/8	2"1/8	534
4x5E A3	63.8	47.1	49.4	299	87	4x500	31650	46	59	9	27000	39,0	1"1/8	2"1/8	522
3x6E B2	70.2	48.9	49.6	288	84	3x630	38730	52	60	9	26100	37,7	1"3/8	2"1/8	569
3x6Y B3	67.8	49.2	51.4	384	112	3x630	27710	38	56	12	44400	64,1	1"5/8	2"1/8	662
3x6D B2	71.7	49.8	50.5	288	84	3x630	40290	52	65	9	26100	37,7	1"3/8	2"1/8	569
2x8Y C3	69.7	50.8	53.5	410	119	2x800	28310	36	50	12	39600	57,2	1"5/8	2"5/8	643
4x5D A4	67.9	51.0	53.7	373	108	4x500	28630	44	55	9	36900	53,3	1"3/8	2"1/8	582
2x8D C2	73.0	51.6	51.3	307	89	2x800	40090	48	56	9	29700	42,9	1"3/8	2"1/8	567
2x8E C2	74.8	52.8	52.4	307	89	2x800	41990	48	57	9	29700	42,9	1"3/8	2"1/8	561
4x5E A4	70.0	52.9	55.7	373	108	4x500	30560	44	59	9	36900	53,3	1"3/8	2"1/8	569
3x6Y B4	71.8	53.7	56.5	480	139	3x630	26320	36	56	12	44400	64,1	1"5/8	2"5/8	722
4x6Y B2	76.5	56.7	57.9	384	112	4x630	39040	43	57	9	36000	52,0	1"5/8	2"5/8	732
3x6E B3	83.2	58.1	60.0	384	112	3x630	37130	51	60	12	44400	64,1	1"5/8	2"1/8	662
3x6D B3	85.0	59.3	61.1	384	112	3x630	38500	51	65	12	44400	64,1	1"5/8	2"1/8	662
2x8D C3	86.4	60.5	63.7	410	119	2x800	38420	46	56	12	39600	57,2	1"5/8	2"5/8	643
2x8E C3	88.7	61.8	65.1	410	119	2x800	40190	46	57	12	39600	57,2	1"5/8	2"5/8	637
3x6E B4	89.3	65.0	68.2	480	139	3x630	35700	49	60	12	44400	64,1	1"5/8	2"5/8	722
4x6E B2	90.2	65.3	66.3	384	112	4x630	51640	57.5	61	9	36000	52,0	1"5/8	2"5/8	732
4x6Y B3	89.8	65.7	68.9	512	149	4x630	36950	42	57	12	58800	84,9	1"5/8	2"5/8	852
3x6D B4	90.7	66.2	69.4	480	139	3x630	36850	49	65	12	44400	64,1	1"5/8	2"5/8	722
3x8Y C2	93.5	66.4	67.9	461	134	3x800	44740	43	52	9	44100	63,7	1"5/8	2"5/8	804
4x6D B2	91.8	66.6	67.5	384	112	4x630	53720	57.5	66	9	36000	52,0	1"5/8	2"5/8	732
2x1Y D2	-	71.3	70.8	480	139	2x1000	49390	46	52	12	49200	71,0	1"5/8	2"5/8	862
4x6Y B4	98.0	71.7	75.5	640	186	4x630	35100	40	57	12	58800	84,9	1"5/8	2"5/8	932
3x8Y C3	104.8	76.8	80.4	614	178	3x800	42460	41	52	12	58800	84,9	1"5/8	3"1/8	916
3x8D C2	109.8	77.3	78.5	461	134	3x800	60130	55	58	9	44100	63,7	1"5/8	2"5/8	804
4x6E B3	110.2	77.6	80.5	512	149	4x630	49500	55.5	61	12	58800	84,9	1"5/8	2"5/8	852
3x8E C2	112.4	79.0	80.2	461	134	3x800	62990	55	58	9	44100	63,7	1"5/8	2"5/8	795
4x6D B3	112.4	79.1	81.9	512	149	4x630	51330	55.5	66	12	58800	84,9	1"5/8	2"5/8	852
2x1D D2	-	80.8	79.5	480	139	2x1000	62630	54	58	12	49200	71,0	1"5/8	2"5/8	862
2x1Y D3	-	82.5	86.8	640	186	2x1000	47010	44	52	15	61500	88,8	1"5/8	3"1/8	976
4x6E B4	117.1	86.7	91.3	640	186	4x630	47600	53.5	61	12	58800	84,9	1"5/8	2"5/8	932
4x6D B4	119.1	88.5	92.9	640	186	4x630	49140	53.5	66	12	58800	84,9	1"5/8	2"5/8	932
4x8Y C2	124.8	88.8	89.2	614	178	4x800	59660	47	53	9	56700	81,8	1"5/8	3"1/8	1043
3x8D C3	130.0	91.8	94.8	614	178	3x800	57630	52	58	12	58800	84,9	1"5/8	3"1/8	916
3x8E C3	133.3	94.0	97.0	614	178	3x800	60290	52	58	12	58800	84,9	1"5/8	3"1/8	906
2x1D D3	-	94.6	99.6	640	186	2x1000	59920	52	58	15	61500	88,8	1"5/8	3"1/8	976
4x8Y C3	139.9	102.4	105.7	819	238	4x800	56620	45	53	12	75600	109,1	2x1"5/8	2x2"5/8	1190
4x8D C2	146.6	103.7	103.3	614	178	4x800	80180	61	59	9	56700	81,8	1"5/8	3"1/8	1043
4x8E C2	150.1	106.2	105.5	614	178	4x800	83980	61	60	9	56700	81,8	1"5/8	3"1/8	1030
3x1Y D2	-	107.2	106.9	720	209	3x1000	74090	51	53	12	74400	107,4	2x1"5/8	2x2"5/8	1231
3x1D D2	-	121.5	120.2	720	209	3x1000	93940	61	59	12	74400	107,4	2x1"5/8	2x2"5/8	1231
3x1Y D3	-	122.8	129.3	960	279	3x1000	70520	49	53	15	93000	134,2	2x1"5/8	2x2"5/8	1400
4x8D C3	173.5	122.9	124.6	819	238	4x800	76850	58	59	12	75600	109,1	2x1"5/8	2x2"5/8	1190
4x8E C3	178.0	125.9	127.5	819	238	4x800	80380	58	60	12	75600	109,1	2x1"5/8	2x2"5/8	1178
3x1D D3	-	139.9	147.3	960	279	3x1000	89880	58	59	15	93000	134,2	2x1"5/8	2x2"5/8	1400

*__Ø 500 mm__ : 400 V/3/50 Hz - Δ = 1330 rpm. - 800 W max - 1.4 A max | Y = 960 rpm. - 540 W max - 0.9 A max (5) | *__Ø 630 mm__ : 400 V/3/50 Hz - Δ = 1210 rpm. - 1450 W max - 2.4 A max | Y = 860 rpm. - 820 W max - 1.4 A max (5)
*__Ø 800 mm__ : 400 V/3/50 Hz - Δ = 870 rpm. - 1850 W max - 3.8 A max | Y = 640 rpm. - 1050 W max - 2.0 A max (5) | *__Ø 1000 mm__ : 400 V/3/50 Hz - Δ = 830 rpm. - 2900 W max - 5.6 A max | Y = 630 rpm. - 1750 W max - 3.0 A max (5)
(1) Standard conditions: **SC2** / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K | **SC3** / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K | **SC4** / -25 °C (air inlet temp.) / -31 °C (evaporating temp.) / DT1 = 6K | **SC5** / -34 °C (air inlet temp.) / -40 °C (evaporating temp.) / DT1 = 6K
(2) Operating pressure: 60 bar - Connection diameters to be defined when ordering.
(3) Residual air speed: 0.25 m/s. - Air throw with VPA option = Standard +15 m
(4) **Lp =** Average sound pressure level in dB(A) calculated at 4 m, level with the blades, in a free field over a reflecting plane, given as an indication only. **Lw = Lp +30 dB(A)**
(5) Electric defrost options.

NKT(A) 1x6(B) E(C) B2(D) T(E)

(A) Fin type: **T** = Large heat exchange surface - **H** = High-efficiency fin
(B) Number of fans x Ø : **5**= Ø 500 mm - **6** = Ø 630 mm - **8** = Ø 800 mm - **1** = Ø 1000 mm
(C) Motor connection: **E** = EC - **D** = Triangle - **Y** = Star
(D) Module
(E) Fin spacing: **R** = 4.23 mm (positive) - **L** = 6.35 mm (positive) - **C** = 6.35 mm (negative) - **S** = 9 mm (negative) - **T** = 12 mm (negative)

The NK is available with CO2, HFCs and glycol water. For more information, please consult our software.

NKT ... T | T = Large exchange surface

12 mm

NKT ... T	Power									Coil		Ventilation				Electric Defrost			Connections		Net Weight (CO2)
	DT 7K - SC3(1)			DT 6K - SC4(1)			DT 6K - SC5(1)			Surface area	Circuit volume	Nb x Ø	Airflow	Air Throw(3) Standard	Acoustics Lp 4m(4)	ELU(5) 400V / 3 / 50Hz			HFC		
	CO2(2) 60 bar	R404A	R449A	CO2(2) 60 bar	R404A	R449A	CO2(2) 60 bar	R404A	R449A							Number	Power	Current	Inlet	Outlet	
	kW	kW	kW	kW	kW	kW	kW	kW	kW	m²	dm³	mm	m³/h	m	dB(A)		W	A	Ø	Ø	kg
1x5Y A2	7.2	4.8	4.5	5.8	3.7	3.5	5.5	3.4	3.2	32	16	1x500	6190	26	43	6	3600	5.2	5/8"	7/8"	148
1x5D A2	8.3	5.5	5.2	6.6	4.2	3.9	6.2	3.8	3.5	32	16	1x500	8270	35	49	6	3600	5.2	5/8"	7/8"	148
1x5E A2	8.4	5.6	5.2	6.7	4.2	3.9	6.3	3.9	3.5	32	16	1x500	8480	35	53	6	3600	5.2	5/8"	7/8"	145
1x5Y A3	8.3	5.8	5.6	6.6	4.5	4.3	6.0	4.2	4.0	42	22	1x500	5870	25	43	9	5400	7.8	5/8"	7/8"	176
1x5Y A4	9.8	6.7	6.5	8.1	5.2	5.0	7.8	4.9	4.7	53	27	1x500	5600	24	43	9	9000	13.0	5/8"	1"1/8	188
1x5D A3	9.4	6.8	6.5	7.7	5.2	4.9	6.8	4.8	4.5	42	22	1x500	7940	34	49	9	5400	7.8	5/8"	7/8"	176
1x5E A3	9.8	6.9	6.6	7.7	5.3	5.0	6.9	4.9	4.5	42	22	1x500	8230	34	53	9	5400	7.8	5/8"	7/8"	173
1x5D A4	12.0	7.9	7.6	9.7	6.1	5.8	9.4	5.6	5.3	53	27	1x500	7640	32	49	9	9000	13.0	5/8"	1"1/8	188
1x5E A4	12.3	8.1	7.8	9.9	6.2	5.9	9.6	5.8	5.4	53	27	1x500	8010	32	53	9	9000	13.0	5/8"	1"1/8	185
1x6Y B2	12.3	8.1	7.5	10.0	6.3	5.7	9.7	6.0	5.4	54	28	1x630	10240	32	51	9	9900	14.3	5/8"	1"1/8	232
1x6E B2	14.1	9.3	8.5	11.4	7.1	6.4	11.0	6.7	6.0	54	28	1x630	13390	45	55	9	9900	14.3	5/8"	1"1/8	232
1x6D B2	14.4	9.4	8.6	11.6	7.2	6.6	11.2	6.8	6.1	54	28	1x630	13950	45	60	9	9900	14.3	5/8"	1"1/8	232
2x5Y A2	14.5	9.8	9.1	11.8	7.6	6.9	11.2	7.2	6.5	63	33	2x500	12370	28	46	6	8700	12.6	7/8"	1"1/8	247
1x6Y B3	14.5	9.9	9.3	11.6	7.7	7.2	11.0	7.3	6.7	72	37	1x630	9810	31	51	12	13200	19.1	7/8"	1"1/8	271
1x6Y B4	15.9	11.2	10.8	12.8	8.8	8.4	11.6	8.4	7.9	91	47	1x630	9410	30	51	12	13200	19.1	1"1/8	1"3/8	292
2x5D A2	16.7	11.3	10.3	13.5	8.6	7.9	12.8	8.1	7.3	63	33	2x500	16540	39	52	6	8700	12.6	7/8"	1"1/8	247
2x5E A2	17.1	11.4	10.4	13.6	8.7	7.9	12.9	8.2	7.3	63	33	2x500	16960	39	56	6	8700	12.6	7/8"	1"1/8	240
1x6E B3	16.7	11.4	10.7	13.4	8.8	8.1	12.5	8.3	7.6	72	37	1x630	12960	44	55	12	13200	19.1	7/8"	1"1/8	271
1x6D B3	17.0	11.7	10.9	13.6	9.0	8.2	12.6	8.5	7.6	72	37	1x630	13480	44	60	12	13200	19.1	7/8"	1"1/8	271
2x5Y A3	16.5	11.9	11.5	13.3	9.2	8.9	12.6	8.7	8.3	85	43	2x500	11740	28	46	9	13050	18.8	7/8"	1"3/8	296
1x8Y C2	19.2	12.8	12.1	15.5	9.9	9.3	15.0	9.4	8.7	87	45	1x800	15620	38	47	9	14400	20.8	1"1/8	1"5/8	324
1x6E B4	18.0	13.2	12.5	14.7	10.2	9.6	13.3	9.7	9.0	91	47	1x630	12550	42	55	12	13200	19.1	1"1/8	1"3/8	292
1x6D B4	18.9	13.5	12.7	14.9	10.4	9.8	13.5	9.9	9.1	91	47	1x630	13030	42	60	12	13200	19.1	1"1/8	1"3/8	292
2x5Y A4	19.5	13.5	13.3	16.0	10.5	10.3	15.1	10.0	9.7	106	54	2x500	11210	26	46	9	13050	18.8	1"1/8	1"5/8	319
2x5D A3	19.4	13.8	13.3	15.4	10.7	10.1	13.8	9.9	9.3	85	43	2x500	15880	38	52	9	13050	18.8	7/8"	1"3/8	296
2x5E A3	19.7	14.1	13.5	15.6	10.8	10.3	14.0	10.0	9.4	85	43	2x500	16470	38	56	9	13050	18.8	7/8"	1"3/8	290
1x8D C2	22.2	14.7	13.7	17.8	11.3	10.5	17.2	10.6	9.6	87	45	1x800	20760	49	53	9	14400	20.8	1"1/8	1"5/8	324
3x5Y A2	21.8	14.8	13.9	17.5	11.4	10.7	16.9	10.8	10.0	95	49	3x500	18560	32	48	6	12000	17.3	1"1/8	1"5/8	343
1x8E C2	22.7	15.1	14.0	18.4	11.6	10.7	17.5	10.8	9.8	87	45	1x800	21790	49	54	9	14400	20.8	1"1/8	1"5/8	321
1x8Y C3	23.2	15.6	14.8	18.8	12.1	11.5	18.3	11.5	10.8	116	60	1x800	14980	37	47	12	19200	27.7	1"1/8	1"5/8	361
2x5D A4	23.5	16.0	15.6	18.7	12.4	12.0	17.7	11.6	11.0	106	54	2x500	15280	36	52	9	13050	18.8	1"1/8	1"5/8	319
2x5E A4	24.1	16.4	15.9	19.1	12.7	12.3	18.0	11.8	11.2	106	54	2x500	16020	36	56	9	13050	18.8	1"1/8	1"5/8	313
2x6Y B2	24.6	16.5	15.4	20.1	12.8	11.8	19.6	12.2	11.1	109	56	2x630	20490	34	54	9	18900	27.3	1"1/8	1"5/8	400
3x5D A2	25.2	17.0	15.7	20.3	13.1	12.0	19.3	12.2	11.1	95	49	3x500	24800	45	54	6	12000	17.3	1"1/8	1"5/8	343
3x5E A2	25.5	17.2	15.9	20.6	13.2	12.2	19.5	12.3	11.2	95	49	3x500	25440	45	58	6	12000	17.3	1"1/8	1"5/8	334
3x5Y A3	26.3	17.8	16.9	21.2	13.9	13.0	20.8	13.3	12.4	127	65	3x500	17620	31	48	9	18000	26.0	1"1/8	1"5/8	411
1x8D C3	27.3	18.2	17.2	21.9	14.0	13.1	21.4	13.2	12.1	116	60	1x800	20110	47	53	12	19200	27.7	1"1/8	1"5/8	361
1x8E C3	28.0	18.6	17.6	22.5	14.4	13.4	21.8	13.5	12.4	116	60	1x800	21070	47	54	12	19200	27.7	1"1/8	1"5/8	358
2x6E B2	28.6	18.8	17.5	23.0	14.5	13.2	22.1	13.7	12.3	109	56	2x630	26770	48	58	9	18900	27.3	1"1/8	1"5/8	400
2x6D B2	29.2	19.2	17.6	23.5	14.8	13.5	22.5	13.9	12.5	109	56	2x630	27910	48	63	9	18900	27.3	1"1/8	1"5/8	400
4x5Y A2	28.0	19.7	18.4	22.0	15.3	14.2	20.5	14.6	13.3	127	65	4x500	24750	37	49	6	18000	26.0	1"1/8	1"5/8	437
2x6Y B3	29.9	20.0	18.9	24.2	15.6	14.6	23.6	14.9	13.9	145	74	2x630	19610	34	54	12	25200	36.4	1"3/8	1"5/8	463
3x5Y A4	29.9	20.3	19.7	24.1	15.8	15.3	23.4	15.2	14.5	158	81	3x500	16810	30	48	9	18000	26.0	1"3/8	1"5/8	446
3x5D A3	30.9	20.9	19.6	25.1	16.1	15.1	23.7	15.3	14.0	127	65	3x500	23830	44	54	9	18000	26.0	1"1/8	1"5/8	411
3x5E A3	31.5	21.3	19.9	25.5	16.4	15.1	24.0	15.5	14.2	127	65	3x500	24700	44	58	9	18000	26.0	1"1/8	1"5/8	402
4x5D A2	31.6	22.7	20.9	25.0	17.5	16.0	22.6	16.5	14.8	127	65	4x500	33070	50	55	6	18000	26.0	1"1/8	1"5/8	437
2x6Y B4	32.8	22.8	23.1	27.0	17.7	18.0	25.5	16.4	16.4	181	93	2x630	18820	32	54	12	25200	36.4	1"1/8	2"1/8	502
4x5E A2	31.9	23.0	21.1	25.2	17.7	16.1	22.7	16.6	15.0	127	65	4x500	33920	50	59	6	18000	26.0	1"1/8	1"5/8	424
2x6E B3	34.8	23.2	21.8	28.0	17.9	16.7	27.4	17.0	15.6	145	74	2x630	25910	47	58	12	25200	36.4	1"3/8	1"5/8	463
2x6D B3	35.6	23.7	22.2	28.6	18.3	17.0	27.8	17.3	15.9	145	74	2x630	26960	47	63	12	25200	36.4	1"3/8	1"5/8	463
4x5Y A3	35.4	23.9	22.8	28.8	18.6	17.6	28.7	17.8	16.7	169	87	4x500	23490	35	49	9	27000	39.0	1"3/8	2"1/8	526
3x5D A4	35.6	24.2	23.0	29.1	18.7	17.8	27.7	17.8	16.6	158	81	3x500	22920	42	54	9	18000	26.0	1"3/8	1"5/8	446
3x5E A4	36.5	24.8	23.6	29.8	19.2	18.2	28.2	18.2	17.0	158	81	3x500	24020	42	58	9	18000	26.0	1"3/8	1"5/8	436
3x6Y B2	37.0	25.0	24.0	30.3	19.3	18.4	29.6	18.1	17.0	163	84	3x630	30730	40	56	9	26100	37.7	1"3/8	2"1/8	560
2x8Y C2	38.6	26.0	24.5	31.2	20.1	18.9	30.3	19.1	17.7	174	89	2x800	31230	39	50	9	29700	42.9	1"3/8	2"1/8	559
2x6E B4	39.3	26.5	26.7	31.2	20.4	20.6	29.5	18.6	18.3	181	93	2x630	25110	45	58	12	25200	36.4	1"1/8	2"1/8	502

NKT(A) 1x6(B) E(C) B2(D) T(E)

(A) Fin type: **T** = Large heat exchange surface - **H** = High-efficiency fin
(B) Number of fans x Ø : **5**= Ø 500 mm - **6** = Ø 630 mm - **8** = Ø 800 mm - **1** = Ø 1000 mm
(C) Motor connection: **E** = EC - **D** = Triangle - **Y** = Star
(D) Module
(E) Fin spacing: **R** = 4.23 mm (positive) - **L** = 6.35 mm (positive) - **C** = 6.35 mm (negative) - **S** = 9 mm (negative) - **T** = 12 mm (negative)

The NK is available with CO2, HFCs and glycol water. For more information, please consult our software.

NKT ... T | T = Large exchange surface

12 mm

NKT ... T	Power									Coil		Ventilation				Electric Defrost			Connections		Net Weight (CO2)
	DT 7K - SC3(1)			DT 6K - SC4(1)			DT 6K - SC5(1)									ELU(5) 400V / 3 / 50Hz			HFC		
	CO2(2) 60 bar	R404A	R449A	CO2(2) 60 bar	R404A	R449A	CO2(2) 60 bar	R404A	R449A	Surface area	Circuit volume	Nb x Ø	Airflow	Air Throw(3) Standard	Acoustics Lp 4m(4)	Number	Power	Current	Inlet	Outlet	
	kW	kW	kW	kW	kW	kW	kW	kW	kW	m²	dm³	mm	m³/h	m	dB(A)		W	A	Ø	Ø	kg
2x6D B4	40.1	27.0	27.2	31.7	20.8	20.9	29.9	18.8	18.6	181	93	2x630	26070	45	63	12	25200	36.4	1"1/8	2"1/8	502
4x5Y A4	40.1	27.1	26.3	32.5	21.2	20.5	31.8	20.4	19.4	211	108	4x500	22410	34	49	9	27000	39.0	1"5/8	2"1/8	572
4x5D A3	42.1	28.0	26.5	34.5	21.6	20.3	33.5	20.4	18.9	169	87	4x500	31770	48	55	9	27000	39.0	1"3/8	2"1/8	526
3x6E B2	43.0	28.3	27.0	34.6	21.8	20.7	33.4	20.1	18.7	163	84	3x630	40160	54	60	9	26100	37.7	1"3/8	2"1/8	560
4x5E A3	42.9	28.5	26.9	35.1	22.0	20.5	34.5	20.8	19.2	169	87	4x500	32940	48	59	9	27000	39.0	1"3/8	2"1/8	514
3x6D B2	43.9	28.9	27.5	35.3	22.2	21.1	34.0	20.4	19.0	163	84	3x630	41860	54	65	9	26100	37.7	1"3/8	2"1/8	560
2x8D C2	44.8	29.9	27.8	36.0	23.0	21.3	34.9	21.6	19.7	174	89	2x800	41530	50	56	9	29700	42.9	1"3/8	2"1/8	559
3x6Y B3	44.5	30.3	29.6	36.7	23.6	23.0	36.1	22.2	21.3	217	112	3x630	29420	39	56	12	34800	50.2	1"5/8	2"1/8	651
2x8E C2	45.9	30.5	28.4	36.8	23.5	21.8	35.6	22.0	20.1	174	89	2x800	43570	50	57	9	29700	42.9	1"3/8	2"1/8	552
2x8Y C3	45.9	31.5	30.1	37.8	24.5	23.4	37.0	23.4	22.1	232	119	2x800	29960	38	50	12	39600	57.2	1"5/8	2"1/8	631
4x5D A4	48.0	32.3	30.8	38.6	25.1	23.7	37.8	23.9	22.2	211	108	4x500	30560	47	55	9	27000	39.0	1"5/8	2"1/8	572
4x5E A4	49.2	33.1	31.5	39.5	25.7	24.3	38.6	24.4	22.7	211	108	4x500	32030	47	59	9	27000	39.0	1"5/8	2"1/8	559
4x6Y B2	48.6	33.4	32.1	38.8	25.9	24.6	36.8	24.2	22.8	217	112	4x630	40980	45	57	9	36000	52.0	1"5/8	2"1/8	721
3x6Y B4	50.4	34.6	34.4	41.0	27.1	26.9	40.6	25.7	25.1	272	139	3x630	28240	38	56	12	34800	50.2	1"5/8	2"1/8	709
3x6E B3	52.8	35.0	33.9	42.6	27.1	26.0	41.4	25.1	23.8	217	112	3x630	38870	53	60	12	34800	50.2	1"5/8	2"1/8	651
3x6D B3	53.9	35.7	34.6	43.5	27.6	26.4	42.2	25.5	24.2	217	112	3x630	40430	53	65	12	34800	50.2	1"5/8	2"1/8	651
2x8D C3	55.0	36.8	35.0	44.3	28.5	26.9	42.6	26.9	25.0	232	119	2x800	40230	48	56	12	39600	57.2	1"5/8	2"1/8	631
2x8E C3	56.4	37.7	35.8	45.3	29.1	27.5	44.3	27.4	25.5	232	119	2x800	42130	48	57	12	39600	57.2	1"5/8	2"1/8	625
4x6E B2	55.2	37.9	36.1	44.4	29.2	27.7	41.4	26.9	25.1	217	112	4x630	53550	59.5	61	9	36000	52.0	1"5/8	2"1/8	721
4x6D B2	56.2	38.6	36.8	45.1	29.7	28.2	41.9	27.3	25.5	217	112	4x630	55820	59.5	66	9	36000	52.0	1"5/8	2"1/8	721
3x8Y C2	58.1	39.1	37.6	47.0	30.3	28.9	45.6	28.4	26.8	261	134	3x800	46850	44	52	9	36000	52.0	1"5/8	2"5/8	791
4x6Y B3	59.1	40.5	39.7	48.6	31.6	30.8	47.6	29.6	28.6	290	149	4x630	39220	43	57	12	48000	69.3	1"5/8	2"5/8	838
3x6E B4	59.9	40.6	39.8	49.3	31.5	30.8	48.2	29.4	28.4	272	139	3x630	37660	51	60	12	34800	50.2	1"5/8	2"1/8	709
3x6D B4	62.2	41.4	40.6	50.3	32.1	31.4	49.1	29.9	28.7	272	139	3x630	39100	51	65	12	34800	50.2	1"5/8	2"1/8	709
2x1Y D2	-	41.6	38.9	-	32.2	30.0	-	30.8	28.1	272	139	2x1000	51420	47	52	9	36900	53.3	1"5/8	2"5/8	835
3x8D C2	67.3	44.8	42.7	54.2	34.5	32.8	52.6	31.9	29.8	261	134	3x800	62290	58	58	9	36000	52.0	1"5/8	2"5/8	791
3x8E C2	69.0	45.8	43.7	55.4	35.2	33.5	53.6	32.5	30.3	261	134	3x800	65360	58	58	9	36000	52.0	1"5/8	2"5/8	782
4x6Y B4	66.1	46.2	46.0	54.4	36.2	36.0	51.6	34.3	33.6	362	186	4x630	37650	42	57	12	48000	69.3	1"5/8	2"5/8	914
4x6E B3	70.0	46.8	45.5	56.4	36.1	34.9	54.3	33.4	31.9	290	149	4x630	51820	57.5	61	12	48000	69.3	1"5/8	2"5/8	838
2x1D D2	-	46.9	43.5	-	36.1	33.0	-	34.1	30.7	272	139	2x1000	65370	56	58	9	36900	53.3	1"5/8	2"5/8	835
3x8Y C3	69.0	47.5	46.3	56.9	37.0	36.0	55.7	35.0	33.6	348	178	3x800	44940	43	52	12	48000	69.3	1"5/8	2"5/8	898
4x6D B3	71.5	47.7	46.4	57.5	36.8	35.5	56.2	34.0	32.4	290	149	4x630	53910	57.5	66	12	48000	69.3	1"5/8	2"5/8	838
2x1Y D3	-	50.6	48.0	-	39.4	37.1	-	37.8	35.3	362	186	2x1000	49570	46	52	12	49200	71.0	2x1"5/8	2x2"1/8	946
4x8Y C2	77.5	52.2	49.3	62.7	40.5	38.2	61.0	38.5	35.7	348	178	4x800	62460	49	53	9	56700	81.8	1"5/8	3"1/8	1025
4x6E B4	79.2	54.2	53.3	62.9	42.1	41.3	59.8	39.4	38.1	362	186	4x630	50220	56.5	61	12	48000	69.3	1"5/8	2"5/8	914
4x6D B4	80.7	55.4	54.3	64.1	42.9	42.0	60.7	40.0	38.5	362	186	4x630	52140	56.5	66	12	48000	69.3	1"5/8	2"5/8	914
3x8D C3	82.7	55.4	53.7	66.7	42.8	41.2	64.3	39.8	37.9	348	178	3x800	60340	55	58	12	48000	69.3	1"5/8	2"5/8	898
3x8E C3	84.8	56.7	54.9	68.3	43.8	42.0	65.6	40.6	38.6	348	178	3x800	63200	55	58	12	48000	69.3	1"5/8	2"5/8	889
2x1D D3	-	57.5	54.1	-	44.5	41.7	-	42.4	39.0	362	186	2x1000	62880	54	58	12	49200	71.0	2x1"5/8	2x2"1/8	946
4x8D C2	89.9	60.1	56.5	72.3	46.4	43.0	70.3	43.5	39.9	348	178	4x800	83050	63	59	9	56700	81.8	1"5/8	3"1/8	1025
4x8E C2	92.1	61.5	57.3	74.0	47.4	43.9	71.7	44.4	40.6	348	178	4x800	87150	63	60	9	56700	81.8	1"5/8	3"1/8	1013
3x1Y D2	-	62.7	58.8	-	48.6	45.4	-	46.3	42.5	407	209	3x1000	77140	52	53	9	55800	80.5	2x1"5/8	2x2"1/8	1192
4x8Y C3	92.1	63.2	60.7	76.0	49.3	47.1	74.5	47.2	44.7	463	238	4x800	59930	47	53	12	75600	109.1	2x1"5/8	2x2"1/8	1167
3x1D D2	-	70.6	65.9	-	54.5	50.1	-	51.4	46.6	407	209	3x1000	98060	63	59	9	55800	80.5	2x1"5/8	2x2"1/8	1192
4x8D C3	110.4	74.1	70.5	89.0	57.4	54.4	85.9	54.3	50.6	463	238	4x800	80450	61	59	12	75600	109.1	2x1"5/8	2x2"1/8	1167
4x8E C3	113.2	75.8	72.1	91.2	58.7	55.6	87.7	55.4	51.6	463	238	4x800	84270	61	60	12	75600	109.1	2x1"5/8	2x2"1/8	1155
3x1Y D3	-	76.2	72.3	-	59.3	56.0	-	57.0	53.3	543	279	3x1000	74350	51	53	12	74400	107.4	2x1"5/8	2x2"5/8	1353
3x1D D3	-	86.6	81.5	-	67.1	62.8	-	63.8	58.8	543	279	3x1000	94310	61	59	12	74400	107.4	2x1"5/8	2x2"5/8	1353

*__Ø 500 mm__ : 400 V/3/50 Hz - Δ = 1330 rpm. - 800 W max - 1.4 A max | Y = 960 rpm. - 540 W max - 0.9 A max (5) | *__Ø 630 mm__ : 400 V/3/50 Hz - Δ = 1210 rpm. - 1450 W max - 2.4 A max | Y = 860 rpm. - 820 W max - 1.4 A max (5)
*__Ø 800 mm__ : 400 V/3/50 Hz - Δ = 870 rpm. - 1850 W max - 3.8 A max | Y = 640 rpm. - 1050 W max - 2.0 A max (5) | *__Ø 1000 mm__ : 400 V/3/50 Hz - Δ = 830 rpm. - 2900 W max - 5.6 A max | Y = 630 rpm. - 1750 W max - 3.0 A max (5)
(1) Standard conditions: **SC2** / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K | **SC3** / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K | **SC4** / -25 °C (air inlet temp.) / -31 °C (evaporating temp.) / DT1 = 6K | **SC5** / -34 °C (air inlet temp.) / -40 °C (evaporating temp.) / DT1 = 6K
(2) Operating pressure: 60 bar - Connection diameters to be defined when ordering.
(3) Residual air speed: 0.25 m/s. - Air throw with VPA option = Standard +15 m
(4) **Lp =** Average sound pressure level in dB(A) calculated at 4 m, level with the blades, in a free field over a reflecting plane, given as an indication only. **Lw = Lp +30 dB(A)**
(5) Electric defrost options.

NKT (A) 1x6 (B) E (C) B2 (D) C (E)

(A) Fin type: **T** = Large heat exchange surface - **H** = High-efficiency fin
(B) Number of fans x Ø : **5**= Ø 500 mm - **6** = Ø 630 mm - **8** = Ø 800 mm - **1** = Ø 1000 mm
(C) Motor connection : **E** = EC - **D** = Triangle - **Y** = Star
(D) Module
(E) Fin spacing: **R** = 4.23 mm (positive) - **L** = 6.35 mm (positive) - **C** = 6.35 mm (negative) - **S** = 9 mm (negative) - **T** = 12 mm (negative)

The NK is available with CO2, HFCs and glycol water. For more information, please consult our software.

NKH ... C | T = Large exchange surface

6.35 mm

NKT ... C	Power						Coil		Ventilation				Electric Defrost			Connections		Net Weight (CO2)
	DT 7K - SC3(1)			DT 6K - SC4(1)			Surface area	Circuit volume	Nb x Ø	Airflow	Air Throw(3) Standard	Acoustics Lp 4m(4)	ELU(5) 400V / 3 / 50Hz			HFC		
	CO2(2) 60 bar	R404A	R449A	CO2(2) 60 bar	R404A	R449A							Number	Power	Current	Inlet	Outlet	
	kW	kW	kW	kW	kW	kW	m²	dm³	mm	m³/h	m	dB(A)		W	A	Ø	Ø	kg
1x5Y A2	8.9	5.9	5.8	7.1	4.5	4.3	56	16	1x500	5840	25	43	6	6000	8.7	5/8"	7/8"	150
1x5D A2	10.4	6.8	6.5	8.2	5.1	4.9	56	16	1x500	7900	34	49	6	6000	8.7	5/8"	7/8"	150
1x5E A2	10.5	6.9	6.6	8.3	5.2	4.9	56	16	1x500	8210	34	53	6	6000	8.7	5/8"	7/8"	146
1x5Y A3	10.7	7.0	7.0	8.8	5.4	5.3	75	22	1x500	5490	24	43	12	12000	17.3	5/8"	1"1/8	181
1x5Y A4	11.7	7.8	7.9	9.4	6.0	6.1	93	27	1x500	5190	23	43	12	12000	17.3	5/8"	1"1/8	194
1x5D A3	13.1	8.2	8.0	10.5	6.2	6.0	75	22	1x500	7510	32	49	12	12000	17.3	5/8"	1"1/8	181
1x5E A3	13.5	8.4	8.2	10.8	6.3	6.2	75	22	1x500	7910	32	53	12	12000	17.3	5/8"	1"1/8	178
1x5D A4	14.1	9.3	9.3	11.6	7.1	7.0	93	27	1x500	7160	31	49	12	12000	17.3	5/8"	1"1/8	194
1x5E A4	14.7	9.6	9.6	12.0	7.3	7.2	93	27	1x500	7640	31	53	12	12000	17.3	5/8"	1"1/8	191
1x6Y B2	15.4	10.2	9.7	12.6	7.8	7.3	96	28	1x630	9760	31	51	12	13200	19.1	5/8"	1"1/8	239
1x6E B2	18.0	11.7	10.9	14.3	8.8	8.1	96	28	1x630	12910	44	55	12	13200	19.1	5/8"	1"1/8	239
1x6D B2	18.4	11.9	11.1	14.5	9.0	8.2	96	28	1x630	13430	44	60	12	13200	19.1	5/8"	1"1/8	239
1x6Y B3	17.6	12.0	11.6	13.6	9.3	8.9	128	37	1x630	9240	30	51	15	16500	23.8	7/8"	1"3/8	278
2x5Y A2	18.7	12.3	11.7	15.3	9.4	8.8	112	33	2x500	11680	27	46	6	12000	17.3	7/8"	1"3/8	250
1x6Y B4	19.7	13.3	13.2	15.9	10.3	10.2	160	47	1x630	8770	29	51	15	16500	23.8	1"1/8	1"3/8	300
1x6E B3	19.9	14.0	13.4	15.8	10.7	10.1	128	37	1x630	12380	42	55	15	16500	23.8	7/8"	1"3/8	278
2x5D A2	22.3	14.1	13.2	17.9	10.7	9.9	112	33	2x500	15810	37	52	6	12000	17.3	7/8"	1"3/8	250
1x6D B3	20.2	14.3	13.6	15.9	10.9	10.2	128	37	1x630	12830	42	60	15	16500	23.8	7/8"	1"3/8	278
2x5Y A3	21.5	14.3	14.3	17.5	11.0	11.0	149	43	2x500	10980	26	46	12	24000	34.6	7/8"	1"5/8	307
2x5E A2	22.7	14.3	13.4	18.2	10.9	10.0	112	33	2x500	16410	37	56	6	12000	17.3	7/8"	1"3/8	243
2x5Y A4	22.9	15.8	16.2	17.9	12.3	12.5	187	54	2x500	10370	25	46	12	24000	34.6	1"1/8	1"5/8	331
1x6E B4	24.6	15.8	15.4	19.8	12.2	11.7	160	47	1x630	11900	41	55	15	16500	23.8	1"1/8	1"3/8	300
1x6D B4	25.0	16.1	15.7	20.1	12.4	11.9	160	47	1x630	12280	41	60	15	16500	23.8	1"1/8	1"3/8	300
1x8Y C2	24.5	16.1	15.6	20.1	12.4	11.8	154	45	1x800	14910	37	47	12	19200	27.7	1"1/8	1"5/8	333
2x5D A3	25.9	16.7	16.5	21.3	12.8	12.5	149	43	2x500	15020	36	52	12	24000	34.6	7/8"	1"5/8	307
2x5E A3	26.7	17.1	16.9	21.9	13.1	12.8	149	43	2x500	15830	36	56	12	24000	34.6	7/8"	1"5/8	300
1x8D C2	29.2	18.5	17.6	23.4	14.1	13.2	154	45	1x800	20040	47	53	12	19200	27.7	1"1/8	1"5/8	333
3x5Y A2	27.3	18.5	17.8	22.1	14.2	13.5	168	49	3x500	17520	31	48	6	18600	26.8	1"1/8	1"5/8	348
1x8E C2	29.9	18.9	18.0	24.0	14.3	13.4	154	45	1x800	21000	47	54	12	19200	27.7	1"1/8	1"5/8	330
2x5D A4	28.0	18.9	19.0	21.6	14.5	14.5	187	54	2x500	14320	34	52	12	24000	34.6	1"1/8	1"5/8	331
1x8Y C3	27.9	18.9	18.7	23.0	14.6	14.3	205	60	1x800	14150	35	47	15	24000	34.6	1"1/8	1"5/8	372
2x5E A4	28.8	19.5	19.6	23.1	15.0	14.9	187	54	2x500	15280	34	56	12	24000	34.6	1"1/8	1"5/8	325
2x6Y B2	31.6	20.8	19.9	25.9	16.0	15.0	192	56	2x630	19520	33	54	12	30000	43.3	1"1/8	1"5/8	413
3x5D A2	31.3	21.3	20.2	25.0	16.2	15.1	168	49	3x500	23710	43	54	6	18600	26.8	1"1/8	1"5/8	348
3x5E A2	32.5	21.6	20.5	25.4	16.4	15.4	168	49	3x500	24620	43	58	6	18600	26.8	1"1/8	1"5/8	338
3x5Y A3	32.2	21.7	21.2	25.5	16.8	16.2	224	65	3x500	16460	30	48	12	37200	53.7	1"1/8	1"5/8	427
1x8D C3	33.8	22.3	21.7	26.8	17.0	16.3	205	60	1x800	19210	45	53	15	24000	34.6	1"1/8	1"5/8	372
1x8E C3	34.6	22.7	22.1	27.3	17.4	16.7	205	60	1x800	20100	45	54	15	24000	34.6	1"1/8	1"5/8	369
3x5Y A4	34.3	23.7	24.6	28.5	18.4	19.0	280	81	3x500	15560	28	48	12	37200	53.7	1"1/8	2"1/8	463
2x6E B2	37.2	23.8	22.3	29.9	18.1	16.9	192	56	2x630	25820	46	58	12	30000	43.3	1"1/8	1"5/8	413
2x6D B2	38.0	24.2	22.7	30.5	18.4	17.1	192	56	2x630	26860	46	63	12	30000	43.3	1"1/8	1"5/8	413
2x6Y B3	36.0	24.4	23.9	29.6	18.9	18.2	256	74	2x630	18480	32	54	15	37500	54.1	1"3/8	2"1/8	478
4x5Y A2	37.6	24.8	23.7	30.9	19.0	17.9	224	65	4x500	23360	35	49	6	24600	35.5	1"1/8	2"1/8	443
3x5D A3	37.6	25.6	24.6	30.4	19.6	18.5	224	65	3x500	22520	42	54	12	37200	53.7	1"1/8	1"5/8	427
3x5E A3	38.6	26.2	25.2	31.0	20.1	19.0	224	65	3x500	23740	42	58	12	37200	53.7	1"1/8	1"5/8	418
2x6Y B4	40.5	26.9	27.0	32.7	21.0	20.8	320	93	2x630	17550	31	54	15	37500	54.1	1"5/8	2"1/8	520
3x5D A4	42.6	28.3	29.0	33.4	21.7	22.1	280	81	3x500	21470	40	54	12	37200	53.7	1"1/8	2"1/8	463
4x5Y A3	42.8	28.4	29.3	35.5	21.9	22.4	299	87	4x500	21950	34	49	12	36000	52.0	1"1/8	2"1/8	547
2x6E B3	43.3	28.5	27.5	34.3	21.9	20.7	256	74	2x630	24750	45	58	15	37500	54.1	1"3/8	2"1/8	478
4x5D A2	44.8	28.5	26.8	36.0	21.7	20.3	224	65	4x500	31620	48	55	6	24600	35.5	1"1/8	2"1/8	443
4x5E A2	45.6	29.0	27.3	36.7	22.1	20.6	224	65	4x500	32830	48	59	6	24600	35.5	1"1/8	2"1/8	431
2x6D B3	44.1	29.1	27.9	34.8	22.3	21.0	256	74	2x630	25670	45	63	15	37500	54.1	1"3/8	2"1/8	478
3x5E A4	44.0	29.3	29.9	35.8	22.4	22.7	280	81	3x500	22920	40	58	12	37200	53.7	1"1/8	2"1/8	454
3x6Y B2	47.1	31.3	29.4	38.4	24.1	22.3	288	84	3x630	29280	39	56	12	44400	64.1	1"5/8	2"1/8	581
4x5Y A4	46.5	31.9	32.1	37.1	24.8	24.8	373	108	4x500	20740	32	49	12	49200	71.0	1"5/8	2"1/8	595
2x6E B4	48.7	32.2	31.7	39.0	24.9	24.1	320	93	2x630	23800	43	58	15	37500	54.1	1"5/8	2"1/8	520

NKT (A) 1x6 (B) E (C) B2 (D) C (E)

(A) Fin type: **T** = Large heat exchange surface - **H** = High-efficiency fin
(B) Number of fans x Ø : **5**= Ø 500 mm - **6** = Ø 630 mm - **8** = Ø 800 mm - **1** = Ø 1000 mm
(C) Motor connection : **E** = EC - **D** = Triangle - **Y** = Star
(D) Module
(E) Fin spacing: **R** = 4.23 mm (positive) - **L** = 6.35 mm (positive) - **C** = 6.35 mm (negative) - **S** = 9 mm (negative) - **T** = 12 mm (negative)

The NK is available with CO2, HFCs and glycol water. For more information, please consult our software.

NKH ... C | T = Large exchange surface

6.35 mm

NKT ... C	Power						Coil		Ventilation				Electric Defrost			Connections		Net Weight (CO2)
	DT 7K - SC3(1)			DT 6K - SC4(1)			Surface area	Circuit volume	Nb x Ø	Airflow	Air Throw(3) Standard	Acoustics Lp 4m(4)	ELU(5) 400V / 3 / 50Hz			HFC		
	CO2(2) 60 bar	R404A	R449A	CO2(2) 60 bar	R404A	R449A							Number	Power	Current	Inlet	Outlet	
	kW	kW	kW	kW	kW	kW	m²	dm³	mm	m³/h	m	dB(A)		W	A	Ø	Ø	kg
2x8Y C2	49.3	32.7	31.7	40.5	25.1	24.0	307	89	2x800	29830	38	50	12	39600	57.2	1"3/8	2"1/8	578
2x6D B4	49.6	32.8	32.2	39.7	25.3	24.5	320	93	2x630	24570	43	63	15	37500	54.1	1"5/8	2"1/8	520
4x5D A3	52.5	33.1	33.8	42.1	25.1	25.5	299	87	4x500	30030	46	55	12	36000	52.0	1"1/8	2"1/8	547
4x5E A3	54.0	33.8	34.5	43.2	25.7	26.1	299	87	4x500	31650	46	59	12	36000	52.0	1"1/8	2"1/8	535
3x6E B2	54.2	35.9	33.3	43.8	27.4	24.9	288	84	3x630	38730	52	60	12	44400	64.1	1"5/8	2"1/8	581
3x6D B2	55.2	36.5	33.6	44.6	27.8	25.3	288	84	3x630	40290	52	65	12	44400	64.1	1"5/8	2"1/8	581
3x6Y B3	55.0	36.6	37.0	44.1	28.3	28.5	384	112	3x630	27710	38	56	15	55500	80.1	1"5/8	2"1/8	673
2x8D C2	58.8	37.5	35.9	47.3	28.6	27.2	307	89	2x800	40090	48	56	12	39600	57.2	1"3/8	2"1/8	578
2x8Y C3	56.4	38.3	38.1	45.0	29.7	29.2	410	119	2x800	28310	36	50	15	49500	71.4	1"5/8	2"5/8	653
2x8E C2	60.2	38.3	36.6	48.4	29.2	27.4	307	89	2x800	41990	48	57	12	39600	57.2	1"3/8	2"1/8	571
4x5D A4	55.8	38.5	38.0	45.8	29.7	28.9	373	108	4x500	28630	44	55	12	49200	71.0	1"5/8	2"1/8	595
4x5E A4	59.9	39.9	39.0	47.2	30.7	29.8	373	108	4x500	30560	44	59	12	49200	71.0	1"5/8	2"1/8	582
3x6Y B4	60.6	40.6	41.9	48.7	31.5	32.4	480	139	3x630	26320	36	56	15	55500	80.1	1"5/8	2"5/8	734
4x6Y B2	63.4	41.6	41.1	52.1	31.9	31.3	384	112	4x630	39040	43	57	12	58800	84.9	1"5/8	2"5/8	747
3x6E B3	64.6	42.5	42.4	52.8	32.5	32.3	384	112	3x630	37130	51	60	15	55500	80.1	1"5/8	2"1/8	673
3x6D B3	65.8	43.2	43.1	53.7	33.0	32.7	384	112	3x630	38500	51	65	15	55500	80.1	1"5/8	2"1/8	673
2x8D C3	66.6	45.1	44.1	54.3	34.6	33.4	410	119	2x800	38420	46	56	15	49500	71.4	1"5/8	2"5/8	653
2x8E C3	70.0	46.1	45.0	55.5	35.3	34.0	410	119	2x800	40190	46	57	15	49500	71.4	1"5/8	2"5/8	647
4x6E B2	74.9	47.1	46.3	60.2	35.8	34.9	384	112	4x630	51640	57.5	61	12	58800	84.9	1"5/8	2"5/8	747
4x6D B2	76.4	47.9	47.1	61.4	36.3	35.4	384	112	4x630	53720	57.5	66	12	58800	84.9	1"5/8	2"5/8	747
3x6E B4	72.6	48.1	48.9	58.0	37.1	37.5	480	139	3x630	35700	49	60	15	55500	80.1	1"5/8	2"5/8	734
3x8Y C2	74.1	48.8	48.4	61.0	37.5	36.9	461	134	3x800	44740	43	52	12	58800	84.9	1"5/8	2"5/8	820
4x6Y B3	72.5	48.9	49.7	57.9	37.7	38.2	512	149	4x630	36950	42	57	15	73500	106.1	1"5/8	2"5/8	867
3x6D B4	73.9	49.0	49.7	59.0	37.7	38.1	480	139	3x630	36850	49	65	15	55500	80.1	1"5/8	2"5/8	734
2x1Y D2	-	52.8	50.4	-	40.5	38.1	480	139	2x1000	49390	46	52	15	61500	88.8	1"5/8	2"5/8	875
4x6Y B4	78.3	54.2	56.1	65.8	42.1	43.3	640	186	4x630	35100	40	57	15	73500	106.1	1"5/8	3"1/8	947
3x8D C2	88.5	55.8	54.9	71.2	42.4	41.4	461	134	3x800	60130	55	58	12	58800	84.9	1"5/8	2"5/8	820
4x6E B3	84.9	56.7	56.9	69.2	43.3	43.3	512	149	4x630	49500	55.5	61	15	73500	106.1	1"5/8	2"5/8	867
3x8E C2	90.6	56.9	56.0	72.8	43.2	42.1	461	134	3x800	62990	55	58	12	58800	84.9	1"5/8	2"5/8	810
3x8Y C3	84.8	57.4	58.2	67.8	44.5	44.8	614	178	3x800	42460	41	52	15	73500	106.1	1"5/8	3"1/8	931
4x6D B3	88.8	57.5	57.8	70.4	44.0	43.9	512	149	4x630	51330	55.5	66	15	73500	106.1	1"5/8	2"5/8	867
2x1D D2	-	59.1	55.6	-	45.1	42.2	480	139	2x1000	62630	54	58	15	61500	88.8	1"5/8	2"5/8	875
2x1Y D3	-	62.1	60.9	-	48.0	46.5	640	186	2x1000	47010	44	52	18	73800	106.5	2x1"5/8	2x2"1/8	990
4x6E B4	98.0	64.3	65.6	78.5	49.6	50.3	640	186	4x630	47600	53.5	61	15	73500	106.1	1"5/8	3"1/8	947
4x6D B4	99.8	65.4	66.6	79.9	50.4	51.0	640	186	4x630	49140	53.5	66	15	73500	106.1	1"5/8	3"1/8	947
4x8Y C2	97.1	65.8	63.8	79.2	50.6	48.9	614	178	4x800	59660	47	53	12	75600	109.1	1"5/8	3"1/8	1063
3x8D C3	100.3	67.2	67.3	81.8	51.5	51.2	614	178	3x800	57630	52	58	15	73500	106.1	1"5/8	3"1/8	931
3x8E C3	102.7	68.6	68.5	83.6	52.5	52.2	614	178	3x800	60290	52	58	15	73500	106.1	1"5/8	3"1/8	922
2x1D D3	-	70.7	68.3	-	54.4	52.1	640	186	2x1000	59920	52	58	18	73800	106.5	2x1"5/8	2x2"1/8	990
4x8D C2	114.8	75.7	72.5	90.9	57.7	55.0	614	178	4x800	80180	61	59	12	75600	109.1	1"5/8	3"1/8	1063
4x8Y C3	113.0	77.1	76.7	94.0	59.8	58.9	819	238	4x800	56620	45	53	15	94500	136.4	2x1"5/8	2x2"5/8	1211
4x8E C2	117.3	77.3	73.9	92.7	58.9	56.0	614	178	4x800	83980	61	60	12	75600	109.1	1"5/8	3"1/8	1051
3x1Y D2	-	79.4	76.3	-	61.0	57.8	720	209	3x1000	74090	51	53	15	93000	134.2	2x1"5/8	2x2"5/8	1251
3x1D D2	-	88.9	84.3	-	67.9	63.9	720	209	3x1000	93940	61	59	15	93000	134.2	2x1"5/8	2x2"5/8	1251
4x8D C3	138.8	90.8	88.9	111.5	69.8	67.9	819	238	4x800	76850	58	59	15	94500	136.4	2x1"5/8	2x2"5/8	1211
4x8E C3	142.2	92.9	90.8	114.1	71.3	68.8	819	238	4x800	80380	58	60	15	94500	136.4	2x1"5/8	2x2"5/8	1199
3x1Y D3	-	93.5	91.7	-	72.4	70.1	960	279	3x1000	70520	49	53	18	111600	161.1	2x1"5/8	2x2"5/8	1419
3x1D D3	-	106.4	102.9	-	81.8	78.6	960	279	3x1000	89880	58	59	18	111600	161.1	2x1"5/8	2x2"5/8	1419

*__Ø 500 mm__ : 400 V/3/50 Hz - Δ = 1330 rpm. - 800 W max - 1.4 A max | Y = 960 rpm. - 540 W max - 0.9 A max (5) | *__Ø 630 mm__ : 400 V/3/50 Hz - Δ = 1210 rpm. - 1450 W max - 2.4 A max | Y = 860 rpm. - 820 W max - 1.4 A max (5)
*__Ø 800 mm__ : 400 V/3/50 Hz - Δ = 870 rpm. - 1850 W max - 3.8 A max | Y = 640 rpm. - 1050 W max - 2.0 A max (5) | *__Ø 1000 mm__ : 400 V/3/50 Hz - Δ = 830 rpm. - 2900 W max - 5.6 A max | Y = 630 rpm. - 1750 W max - 3.0 A max (5)
(1) Standard conditions: **SC2** / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K | **SC3** / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K | **SC4** / -25 °C (air inlet temp.) / -31 °C (evaporating temp.) / DT1 = 6K | **SC5** / -34 °C (air inlet temp.) / -40 °C (evaporating temp.) / DT1 = 6K
(2) Operating pressure: 60 bar - Connection diameters to be defined when ordering.
(3) Residual air speed: 0.25 m/s. - Air throw with VPA option = Standard +15 m
(4) **Lp =** Average sound pressure level in dB(A) calculated at 4 m, level with the blades, in a free field over a reflecting plane, given as an indication only. **Lw = Lp +30 dB(A)**
(5) Electric defrost options.

NKT (A) 1x6 (B) E (C) B2 (D) S (E)

(A) Fin type: **T** = Large heat exchange surface - **H** = High-efficiency fin
(B) Number of fans x Ø : **5**= Ø 500 mm - **6** = Ø 630 mm - **8** = Ø 800 mm - **1** = Ø 1000 mm
(C) Motor connection : **E** = EC - **D** = Triangle - **Y** = Star
(D) Module
(E) Fin spacing: **R** = 4.23 mm (positive) - **L** = 6.35 mm (positive) - **C** = 6.35 mm (negative) - **S** = 9 mm (negative) - **T** = 12 mm (negative)

The NK is available with CO2, HFCs and glycol water. For more information, please consult our software.

NKT ... S | T = Large exchange surface

9 mm

NKT ... S	Power									Coil		Ventilation				Electric Defrost			Connections		Net Weight (CO2)
	DT 7K - SC3(1)			DT 6K - SC4(1)			DT 6K - SC5(1)									ELU(5) 400V / 3 / 50Hz			HFC		
	CO2(2) 60 bar	R404A	R449A	CO2(2) 60 bar	R404A	R449A	CO2(2) 60 bar	R404A	R449A	Surface area	Circuit volume	Nb x Ø	Airflow	Air Throw(3) Standard	Acoustics Lp 4m(4)	Number	Power	Current	Inlet	Outlet	
	kW	kW	kW	kW	kW	kW	kW	kW	kW	m²	dm³	mm	m³/h	m	dB(A)		W	A	Ø	Ø	kg
1x5Y A2	8.3	5.5	5.3	6.6	4.2	4.0	6.3	3.8	3.6	41	16	1x500	6050	26	43	6	6000	8.7	5/8"	7/8"	153
1x5D A2	9.5	6.3	6.0	7.6	4.8	4.5	7.1	4.3	4.0	41	16	1x500	8130	35	49	6	6000	8.7	5/8"	7/8"	153
1x5E A2	9.7	6.4	6.1	7.7	4.8	4.6	7.2	4.3	4.0	41	16	1x500	8380	35	53	6	6000	8.7	5/8"	7/8"	149
1x5Y A3	10.0	6.6	6.4	8.1	5.1	4.9	8.1	4.7	4.5	54	22	1x500	5720	24	43	9	9000	13.0	5/8"	1"1/8	182
1x5Y A4	11.2	7.4	7.4	9.0	5.7	5.7	8.8	5.3	5.2	68	27	1x500	5440	23	43	12	12000	17.3	5/8"	1"1/8	199
1x5D A3	12.0	7.7	7.5	9.9	5.9	5.6	9.7	5.3	5.0	54	22	1x500	7770	33	49	9	9000	13.0	5/8"	1"1/8	182
1x5E A3	12.3	7.9	7.6	10.1	6.0	5.7	9.9	5.4	5.1	54	22	1x500	8110	33	53	9	9000	13.0	5/8"	1"1/8	179
1x5D A4	13.5	8.8	8.7	10.8	6.8	6.6	10.6	6.2	5.9	68	27	1x500	7450	31	49	12	12000	17.3	5/8"	1"1/8	199
1x5E A4	13.9	9.1	8.9	11.1	6.9	6.8	10.9	6.3	6.1	68	27	1x500	7870	31	53	12	12000	17.3	5/8"	1"1/8	196
1x6Y B2	14.3	9.4	8.8	11.5	7.2	6.7	11.1	6.8	6.1	70	28	1x630	10050	32	51	12	13200	19.1	5/8"	1"1/8	244
1x6E B2	16.5	10.8	10.0	13.3	8.2	7.5	12.7	7.6	6.8	70	28	1x630	13190	45	55	12	13200	19.1	5/8"	1"1/8	244
1x6D B2	16.8	11.0	10.1	13.6	8.3	7.6	12.9	7.7	6.9	70	28	1x630	13750	45	60	12	13200	19.1	5/8"	1"1/8	244
1x6Y B3	16.2	11.2	10.7	13.1	8.7	8.2	12.1	8.2	7.6	93	37	1x630	9580	30	51	15	16500	23.8	7/8"	1"3/8	285
2x5Y A2	17.2	11.3	10.6	14.0	8.7	8.0	13.8	8.2	7.4	82	33	2x500	12100	28	46	6	8700	12.6	7/8"	1"3/8	256
1x6Y B4	18.8	12.5	12.3	15.2	9.7	9.5	15.2	9.3	8.9	117	47	1x630	9160	29	51	15	16500	23.8	1"1/8	1"3/8	309
2x5D A2	20.3	13.1	12.1	16.5	10.0	9.2	16.2	9.2	8.3	82	33	2x500	16250	38	52	6	8700	12.6	7/8"	1"3/8	256
1x6E B3	19.1	13.1	12.4	15.2	10.0	9.3	14.0	9.4	8.6	93	37	1x630	12730	43	55	15	16500	23.8	7/8"	1"3/8	285
2x5E A2	20.6	13.2	12.3	16.8	10.1	9.3	16.4	9.3	8.4	82	33	2x500	16750	38	56	6	8700	12.6	7/8"	1"3/8	249
1x6D B3	19.4	13.4	12.6	15.4	10.2	9.5	14.2	9.5	8.7	93	37	1x630	13230	43	60	15	16500	23.8	7/8"	1"3/8	285
2x5Y A3	18.6	13.4	13.2	14.8	10.4	10.2	13.9	9.6	9.3	109	43	2x500	11440	27	46	9	13050	18.8	7/8"	1"3/8	308
1x8Y C2	22.5	14.8	14.1	18.2	11.4	10.7	18.0	10.6	9.9	112	45	1x800	15340	38	47	12	19200	27.7	1"1/8	1"5/8	341
1x6E B4	22.6	14.9	14.3	18.7	11.5	11.0	18.4	10.8	10.1	117	47	1x630	12300	41	55	15	16500	23.8	1"1/8	1"3/8	309
2x5Y A4	22.0	15.0	15.1	17.4	11.7	11.7	16.7	11.0	10.8	136	54	2x500	10880	26	46	12	17400	25.1	1"1/8	1"5/8	341
1x6D B4	23.1	15.2	14.6	19.1	11.7	11.2	18.8	11.0	10.3	117	47	1x630	12740	41	60	15	16500	23.8	1"1/8	1"3/8	309
2x5D A3	21.8	15.7	15.3	17.0	12.1	11.7	15.2	11.0	10.5	109	43	2x500	15540	37	52	9	13050	18.8	7/8"	1"3/8	308
2x5E A3	22.1	16.1	15.6	17.9	12.3	11.9	15.4	11.2	10.6	109	43	2x500	16220	37	56	9	13050	18.8	7/8"	1"3/8	302
3x5Y A2	25.5	17.0	16.2	20.3	13.1	12.3	19.3	12.3	11.4	122	49	3x500	18150	32	48	6	12000	17.3	1"1/8	1"5/8	357
1x8D C2	26.5	17.1	16.1	21.6	13.0	12.2	21.1	12.0	11.0	112	45	1x800	20490	48	53	12	19200	27.7	1"1/8	1"5/8	341
1x8E C2	27.2	17.5	16.4	22.1	13.3	12.3	21.6	12.2	11.2	112	45	1x800	21480	48	54	12	19200	27.7	1"1/8	1"5/8	338
1x8Y C3	26.3	17.6	17.1	21.1	13.7	13.2	20.8	12.9	12.2	149	60	1x800	14660	36	47	15	24000	34.6	1"1/8	1"5/8	383
2x5D A4	26.0	17.9	17.8	21.0	13.8	13.7	19.4	12.8	12.3	136	54	2x500	14900	36	52	12	17400	25.1	1"1/8	1"5/8	341
2x5E A4	26.7	18.5	18.3	21.5	14.2	13.9	19.8	13.1	12.6	136	54	2x500	15730	36	56	12	17400	25.1	1"1/8	1"5/8	335
2x6Y B2	28.9	19.1	18.0	23.2	14.7	13.6	22.7	13.8	12.8	140	56	2x630	20100	34	54	12	25200	36.4	1"1/8	1"5/8	423
3x5D A2	29.4	19.7	18.5	23.6	15.1	14.1	21.9	13.9	12.7	122	49	3x500	24380	45	54	6	12000	17.3	1"1/8	1"5/8	357
3x5E A2	29.8	20.0	18.8	23.9	15.3	14.3	22.1	14.0	12.9	122	49	3x500	25130	45	58	6	12000	17.3	1"1/8	1"5/8	347
3x5Y A3	29.6	20.2	19.4	24.2	15.7	14.9	22.8	14.9	14.0	163	65	3x500	17160	31	48	9	18000	26.0	1"1/8	1"5/8	430
1x8D C3	31.1	20.8	19.9	25.3	15.9	15.1	24.4	14.8	13.8	149	60	1x800	19760	46	53	15	24000	34.6	1"1/8	1"5/8	383
1x8E C3	31.9	21.3	20.4	25.9	16.3	15.4	24.8	15.1	14.1	149	60	1x800	20690	46	54	15	24000	34.6	1"1/8	1"5/8	380
2x6E B2	33.3	21.9	20.4	27.0	16.8	15.5	25.5	15.6	14.2	140	56	2x630	26390	47	58	12	25200	36.4	1"1/8	1"5/8	423
2x6D B2	34.0	22.3	20.8	27.6	17.1	15.8	25.9	15.8	14.3	140	56	2x630	27500	47	63	12	25200	36.4	1"1/8	1"5/8	423
3x5Y A4	33.0	22.6	22.3	26.4	17.6	17.3	26.1	16.8	16.3	204	81	3x500	16310	30	48	12	24000	34.6	1"3/8	2"1/8	478
2x6Y B3	33.9	22.7	21.9	27.2	17.6	16.8	26.8	16.7	15.7	186	74	2x630	19160	33	54	15	31500	45.5	1"3/8	2"1/8	492
4x5Y A2	34.7	22.8	21.5	28.1	17.6	16.3	27.8	16.5	15.3	163	65	4x500	24200	36	49	6	18000	26.0	1"1/8	2"1/8	455
3x5D A3	35.7	23.9	22.7	28.2	18.4	17.2	26.5	17.2	15.9	163	65	3x500	23320	43	54	9	18000	26.0	1"1/8	1"5/8	430
3x5E A3	36.5	24.5	23.2	29.5	18.8	17.6	27.7	17.5	16.2	163	65	3x500	24340	43	58	9	18000	26.0	1"1/8	1"5/8	420
2x6Y B4	37.4	25.5	25.0	31.2	19.8	19.4	30.8	19.0	18.2	233	93	2x630	18320	32	54	15	31500	45.5	1"5/8	2"1/8	537
4x5D A2	40.8	26.4	24.6	33.3	20.2	18.7	32.6	18.8	17.1	163	65	4x500	32500	49	55	6	18000	26.0	1"1/8	2"1/8	455
2x6E B3	39.8	26.6	25.3	32.4	20.5	19.1	30.4	19.2	17.7	186	74	2x630	25460	46	58	15	31500	45.5	1"3/8	2"1/8	492
4x5E A2	41.5	26.8	24.9	33.8	20.5	18.9	33.1	19.0	17.2	163	65	4x500	33510	49	59	6	18000	26.0	1"1/8	2"1/8	442
4x5Y A3	40.3	27.1	26.2	33.3	21.0	20.2	32.2	19.9	18.8	218	87	4x500	22880	34	49	9	27000	39.0	1"3/8	2"1/8	550
2x6D B3	40.6	27.1	25.8	33.0	20.9	19.5	31.7	19.5	18.0	186	74	2x630	26460	46	63	15	31500	45.5	1"3/8	2"1/8	492
3x5D A4	40.8	27.2	26.4	32.3	21.0	20.3	30.9	19.8	18.8	204	81	3x500	22350	42	54	12	24000	34.6	1"3/8	2"1/8	478
3x5E A4	42.0	28.1	27.2	33.2	21.6	20.8	31.5	20.3	19.2	204	81	3x500	23600	42	58	12	24000	34.6	1"3/8	2"1/8	469
3x6Y B2	43.5	28.6	26.5	35.0	22.1	20.3	33.6	21.0	19.0	210	84	3x630	30150	40	56	12	34800	50.2	1"5/8	2"1/8	596
2x8Y C2	44.7	29.9	28.6	35.8	23.1	21.8	34.8	21.7	20.1	224	89	2x800	30670	38	50	12	39600	57.2	1"3/8	2"1/8	594
4x5Y A4	44.6	30.2	29.8	35.9	23.6	23.1	34.5	22.6	21.8	272	108	4x500	21750	34	49	12	36000	52.0	1"5/8	2"1/8	615

NKT (A) 1x6 (B) E (C) B2 (D) S (E)

(A) Fin type: **T** = Large heat exchange surface - **H** = High-efficiency fin
(B) Number of fans x Ø : **5**= Ø 500 mm - **6** = Ø 630 mm - **8** = Ø 800 mm - **1** = Ø 1000 mm
(C) Motor connection : **E** = EC - **D** = Triangle - **Y** = Star
(D) Module
(E) Fin spacing: **R** = 4.23 mm (positive) - **L** = 6.35 mm (positive) - **C** = 6.35 mm (negative) - **S** = 9 mm (negative) - **T** = 12 mm (negative)

The NK is available with CO2, HFCs and glycol water. For more information, please consult our software.

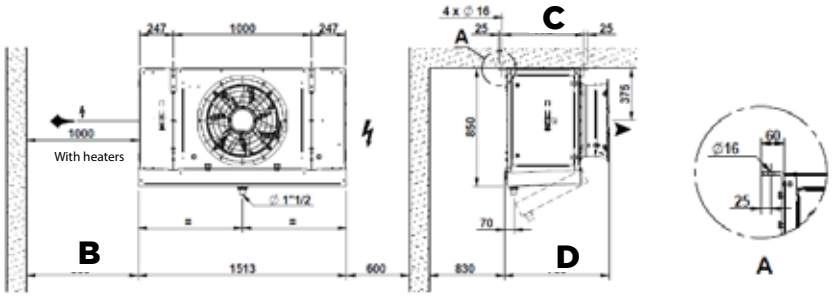
NKT ... S | T = Large exchange surface

9 mm

NKT ... S	Power									Coil		Ventilation				Electric Defrost				Connections		Net Weight (CO2)
	DT 7K - SC3(1)			DT 6K - SC4(1)			DT 6K - SC5(1)									ELU(5) 400V / 3 / 50Hz				HFC		
	CO2(2) 60 bar	R404A	R449A	CO2(2) 60 bar	R404A	R449A	CO2(2) 60 bar	R404A	R449A	Surface area	Circuit volume	Nb x Ø	Airflow	Air Throw(3) Standard	Acoustics Lp 4m(4)	Number	Power	Current	Inlet	Outlet	
	kW	kW	kW	kW	kW	kW	kW	kW	kW	m²	dm³	mm	m³/h	m	dB(A)		W	A	Ø	Ø	kg
2x6E B4	46.1	30.4	29.3	37.1	23.5	22.5	36.0	22.2	20.9	233	93	2x630	24600	45	58	15	31500	45.5	1"5/8	2"1/8	537
2x6D B4	47.1	31.0	29.8	37.9	23.9	22.9	36.6	22.6	21.2	233	93	2x630	25490	45	63	15	31500	45.5	1"5/8	2"1/8	537
4x5D A3	49.2	32.0	30.7	39.6	24.6	23.3	38.5	22.9	21.4	218	87	4x500	31090	47	55	9	27000	39.0	1"3/8	2"1/8	550
4x5E A3	50.4	32.7	31.3	40.6	25.1	23.7	39.3	23.4	21.8	218	87	4x500	32450	47	59	9	27000	39.0	1"3/8	2"1/8	538
3x6E B2	50.2	33.0	30.3	40.7	25.2	22.8	38.6	23.8	21.1	210	84	3x630	39580	54	60	12	34800	50.2	1"5/8	2"1/8	596
3x6D B2	51.3	33.6	30.6	41.5	25.7	23.2	39.2	24.2	21.5	210	84	3x630	41260	54	65	12	34800	50.2	1"5/8	2"1/8	596
3x6Y B3	51.5	34.1	32.6	41.6	26.4	24.9	40.4	25.4	23.6	280	112	3x630	28740	39	56	15	43500	62.8	1"5/8	2"1/8	693
2x8D C2	52.0	34.6	32.7	42.1	26.5	24.9	40.2	24.5	22.5	224	89	2x800	40980	49	56	12	39600	57.2	1"3/8	2"1/8	594
2x8E C2	53.3	35.4	33.4	43.0	27.1	25.4	40.9	24.9	23.0	224	89	2x800	42960	49	57	12	39600	57.2	1"3/8	2"1/8	588
2x8Y C3	53.0	35.6	34.9	42.7	27.7	26.8	41.0	26.2	25.0	298	119	2x800	29330	37	50	15	49500	71.4	1"5/8	2"5/8	675
4x5D A4	53.7	36.4	35.3	44.0	28.2	27.1	41.2	26.6	25.1	272	108	4x500	29800	46	55	12	36000	52.0	1"5/8	2"1/8	615
4x5E A4	55.3	37.6	36.3	45.2	29.0	27.8	43.6	27.3	25.8	272	108	4x500	31470	46	59	12	36000	52.0	1"5/8	2"1/8	602
4x6Y B2	58.3	38.3	37.4	47.3	29.5	28.6	46.8	27.1	25.9	280	112	4x630	40200	44	57	12	48000	69.3	1"5/8	2"5/8	768
3x6Y B4	55.9	38.4	38.9	46.6	30.0	30.3	45.8	28.2	27.9	350	139	3x630	27480	38	56	15	43500	62.8	1"5/8	2"5/8	759
3x6E B3	60.7	40.0	37.6	48.6	30.8	28.7	47.4	29.2	26.7	280	112	3x630	38200	52	60	15	43500	62.8	1"5/8	2"1/8	693
3x6D B3	61.9	40.9	38.3	49.6	31.4	29.2	48.2	29.7	27.2	280	112	3x630	39680	52	65	15	43500	62.8	1"5/8	2"1/8	693
2x8D C3	62.8	42.1	40.6	51.2	32.4	30.8	48.3	30.2	28.3	298	119	2x800	39520	47	56	15	49500	71.4	1"5/8	2"5/8	675
2x8E C3	64.4	43.1	41.5	52.4	33.1	31.5	49.3	30.8	28.9	298	119	2x800	41380	47	57	15	49500	71.4	1"5/8	2"5/8	669
4x6E B2	67.9	43.6	42.4	55.4	33.4	32.0	54.3	30.2	28.6	280	112	4x630	52770	58.5	61	12	48000	69.3	1"5/8	2"5/8	768
4x6D B2	69.5	44.5	43.2	56.7	33.9	32.6	55.4	30.6	29.0	280	112	4x630	55010	58.5	66	12	48000	69.3	1"5/8	2"5/8	768
3x8Y C2	67.2	44.9	43.9	54.0	34.6	33.5	52.6	32.0	30.6	336	134	3x800	46010	43	52	12	48000	69.3	1"5/8	2"5/8	844
3x6E B4	68.9	45.5	45.6	55.4	35.2	35.1	53.2	32.5	31.8	350	139	3x630	36900	51	60	15	43500	62.8	1"5/8	2"5/8	759
4x6Y B3	68.2	45.7	45.6	54.9	35.4	35.3	54.2	32.9	32.1	373	149	4x630	38320	42	57	15	60000	86.6	1"5/8	2"5/8	895
3x6D B4	70.4	46.4	46.4	56.5	35.8	35.7	55.8	33.0	32.2	350	139	3x630	38230	51	65	15	43500	62.8	1"5/8	2"5/8	759
2x1Y D2	-	48.2	45.5	-	37.2	34.9	-	35.1	32.4	350	139	2x1000	50650	46	52	12	49200	71.0	1"5/8	2"5/8	887
4x6Y B4	75.1	51.4	52.2	62.7	40.1	40.6	60.2	37.6	37.4	466	186	4x630	36640	42	57	15	60000	86.6	1"5/8	3"1/8	981
3x8D C2	78.3	51.7	50.2	63.4	39.5	38.0	60.6	35.8	33.9	336	134	3x800	61470	57	58	12	48000	69.3	1"5/8	2"5/8	844
3x8E C2	80.2	52.8	51.2	64.9	40.3	38.7	61.7	36.4	34.5	336	134	3x800	64440	57	58	12	48000	69.3	1"5/8	2"5/8	835
4x6E B3	80.1	53.1	52.5	65.3	40.8	40.2	61.6	37.1	36.0	373	149	4x630	50930	56.5	61	15	60000	86.6	1"5/8	2"5/8	895
3x8Y C3	79.7	53.6	53.3	64.2	41.6	41.3	61.9	38.8	37.9	448	178	3x800	43990	42	52	15	60000	86.6	1"5/8	3"1/8	964
4x6D B3	81.7	54.1	53.4	66.6	41.5	40.9	62.6	37.7	36.5	373	149	4x630	52910	56.5	66	15	60000	86.6	1"5/8	2"5/8	895
2x1D D2	-	54.4	50.7	-	41.7	38.6	-	38.9	35.5	350	139	2x1000	64250	55	58	12	49200	71.0	1"5/8	2"5/8	887
2x1Y D3	-	57.7	55.8	-	44.7	42.7	-	42.5	40.0	466	186	2x1000	48590	45	52	15	61500	88.8	2x1"5/8	2x2"1/8	1011
4x8Y C2	89.8	60.2	57.7	72.1	46.6	44.4	70.3	43.7	41.1	448	178	4x800	61350	48	53	12	75600	109.1	1"5/8	3"1/8	1096
4x6E B4	92.7	60.9	61.0	74.7	47.1	47.0	72.7	43.4	42.6	466	186	4x630	49200	55.5	61	15	60000	86.6	1"5/8	3"1/8	981
4x6D B4	94.7	62.0	62.2	76.3	47.9	47.8	74.0	44.1	43.2	466	186	4x630	50980	55.5	66	15	60000	86.6	1"5/8	3"1/8	981
3x8D C3	94.5	62.9	62.1	77.2	48.4	47.4	73.0	44.4	42.7	448	178	3x800	59280	54	58	15	60000	86.6	1"5/8	3"1/8	964
3x8E C3	96.9	64.4	63.5	79.0	49.5	48.4	74.4	45.2	43.5	448	178	3x800	62070	54	58	15	60000	86.6	1"5/8	3"1/8	955
2x1D D3	-	65.9	62.8	-	50.8	48.1	-	47.7	44.5	466	186	2x1000	61710	53	58	15	61500	88.8	2x1"5/8	2x2"1/8	1011
4x8D C2	104.6	69.8	66.0	84.8	53.5	50.3	81.1	49.5	46.0	448	178	4x800	81960	62	59	12	75600	109.1	1"5/8	3"1/8	1096
4x8E C2	107.1	71.3	67.5	86.7	54.6	51.4	82.6	50.4	46.5	448	178	4x800	85920	62	60	12	75600	109.1	1"5/8	3"1/8	1084
4x8Y C3	106.5	71.7	70.3	85.8	55.8	54.1	82.7	52.9	50.5	597	238	4x800	58660	46	53	15	94500	136.4	2x1"5/8	2x2"5/8	1255
3x1Y D2	-	72.6	69.0	-	56.1	52.9	-	52.8	49.1	524	209	3x1000	75980	51	53	12	74400	107.4	2x1"5/8	2x2"5/8	1270
3x1D D2	-	81.9	76.8	-	62.8	58.5	-	58.5	53.8	524	209	3x1000	96370	62	59	12	74400	107.4	2x1"5/8	2x2"5/8	1270
4x8D C3	126.2	84.7	81.8	103.1	65.3	62.8	97.6	60.9	57.4	597	238	4x800	79040	60	59	15	94500	136.4	2x1"5/8	2x2"5/8	1255
4x8E C3	129.4	86.7	83.7	105.5	66.8	63.6	99.5	62.2	58.5	597	238	4x800	82760	60	60	15	94500	136.4	2x1"5/8	2x2"5/8	1242
3x1Y D3	-	86.8	84.0	-	67.4	64.4	-	64.1	60.8	699	279	3x1000	72880	50	53	15	93000	134.2	2x1"5/8	2x2"5/8	1451
3x1D D3	-	99.1	94.6	-	76.5	72.6	-	72.0	67.3	699	279	3x1000	92570	60	59	15	93000	134.2	2x1"5/8	2x2"5/8	1451

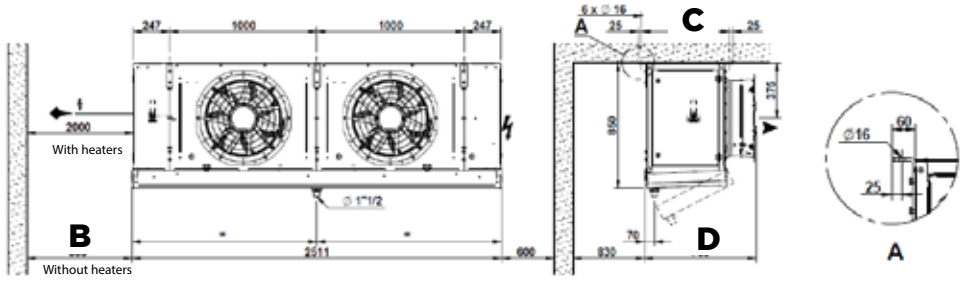
*__Ø 500 mm__ : 400 V/3/50 Hz - Δ = 1330 rpm. - 800 W max - 1.4 A max | Y = 960 rpm. - 540 W max - 0.9 A max (5) | *__Ø 630 mm__ : 400 V/3/50 Hz - Δ = 1210 rpm. - 1450 W max - 2.4 A max | Y = 860 rpm. - 820 W max - 1.4 A max (5)
*__Ø 800 mm__ : 400 V/3/50 Hz - Δ = 870 rpm. - 1850 W max - 3.8 A max | Y = 640 rpm. - 1050 W max - 2.0 A max (5) | *__Ø 1000 mm__ : 400 V/3/50 Hz - Δ = 830 rpm. - 2900 W max - 5.6 A max | Y = 630 rpm. - 1750 W max - 3.0 A max (5)
(1) Standard conditions: **SC2** / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K | **SC3** / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K | **SC4** / -25 °C (air inlet temp.) / -31 °C (evaporating temp.) / DT1 = 6K | **SC5** / -34 °C (air inlet temp.) / -40 °C (evaporating temp.) / DT1 = 6K
(2) Operating pressure: 60 bar - Connection diameters to be defined when ordering.
(3) Residual air speed: 0.25 m/s. - Air throw with VPA option = Standard +15 m
(4) **Lp =** Average sound pressure level in dB(A) calculated at 4 m, level with the blades, in a free field over a reflecting plane, given as an indication only. **Lw = Lp +30 dB(A)**
(5) Electric defrost options.

NK | 1 x Ø 500 mm



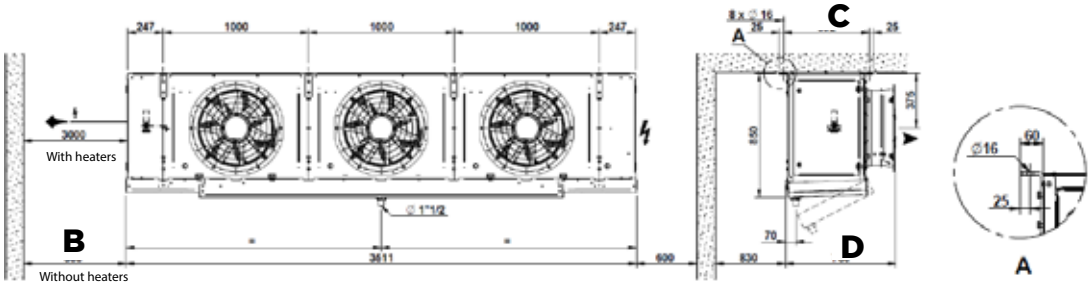
	A1/A2	A3/A4
B	600	800
C	592	766
D	760	930

NK | 2 x Ø 500 mm



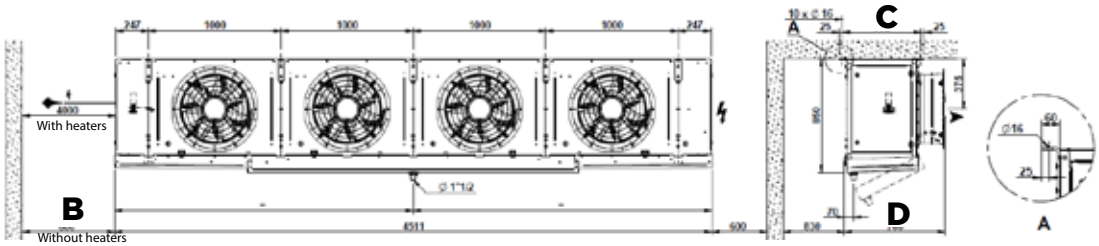
	A1/A2	A3/A4
B	600	800
C	592	766
D	760	930

NK | 3 x Ø 500 mm



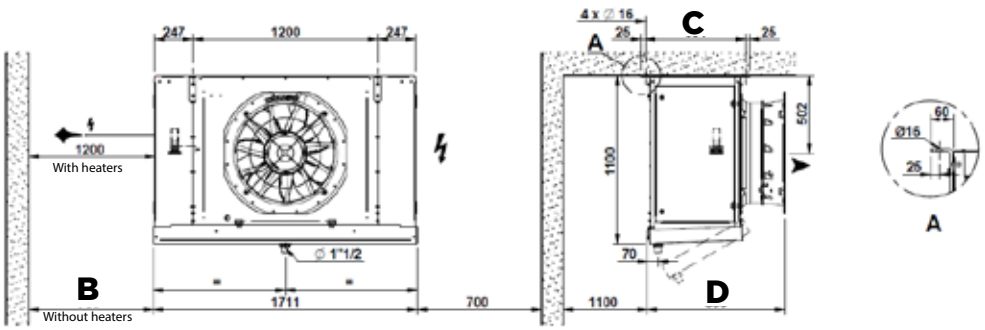
	A1/A2	A3/A4
B	600	800
C	592	766
D	760	930

NK | 4 x Ø 500 mm



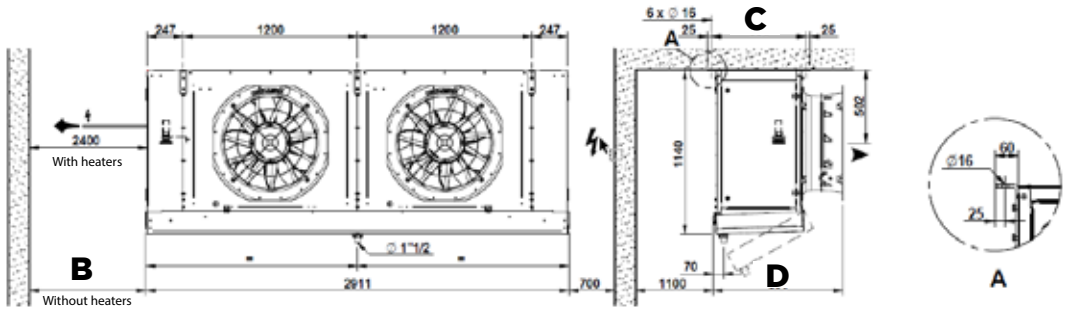
	A1/A2	A3/A4
B	600	800
C	592	766
D	760	930

NK | 1 x Ø 630 mm



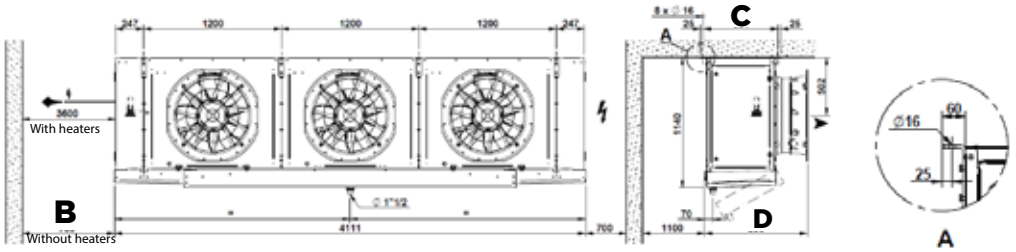
	A1/A2	A3/A4
B	700	900
C	651	825
D	890	1070

NK | 2x Ø 630 mm



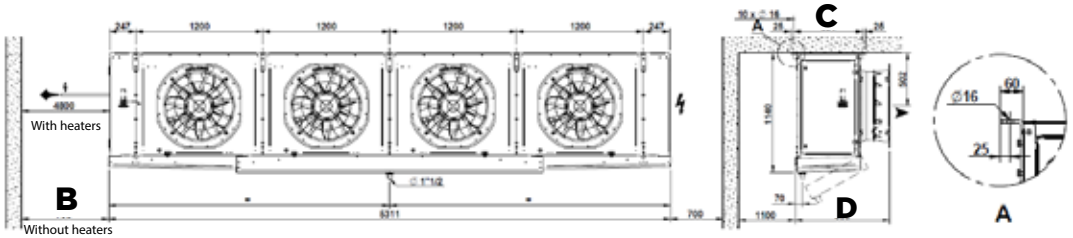
	B1/B2	B3/B4
B	700	900
C	651	825
D	890	1070

NK | 3 x Ø 630 mm



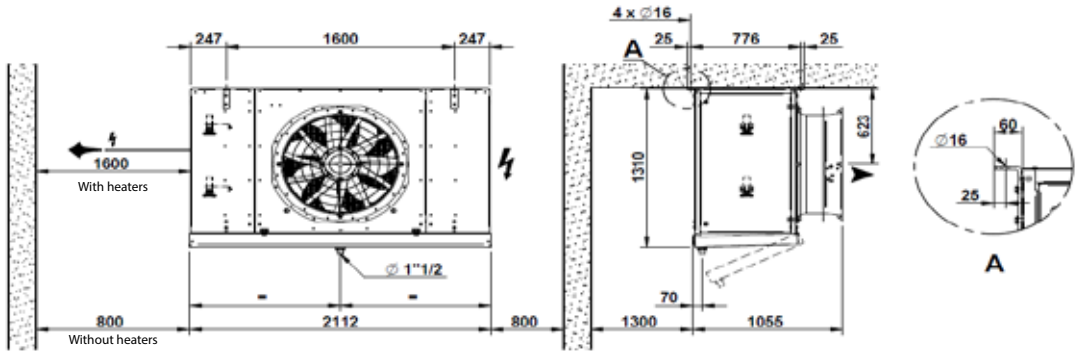
	B1/B2	B3/B4
B	700	900
C	651	825
D	890	1070

NK | 4 x Ø 630 mm

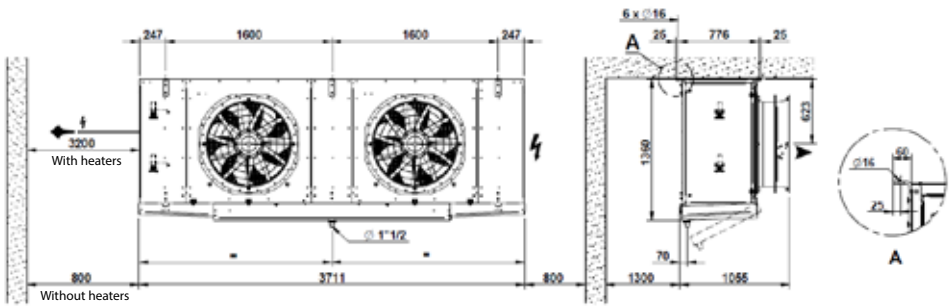


	B1/B2	B3/B4
B	700	900
C	651	825
D	890	1070

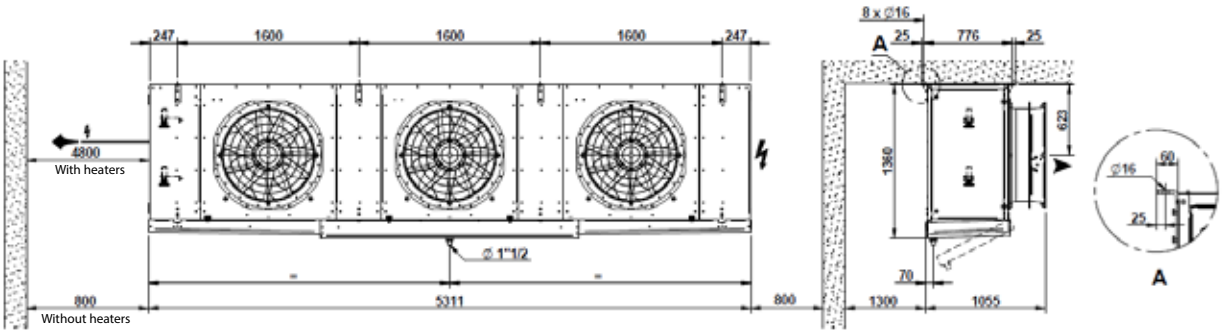
NK | 1 x Ø 800 mm



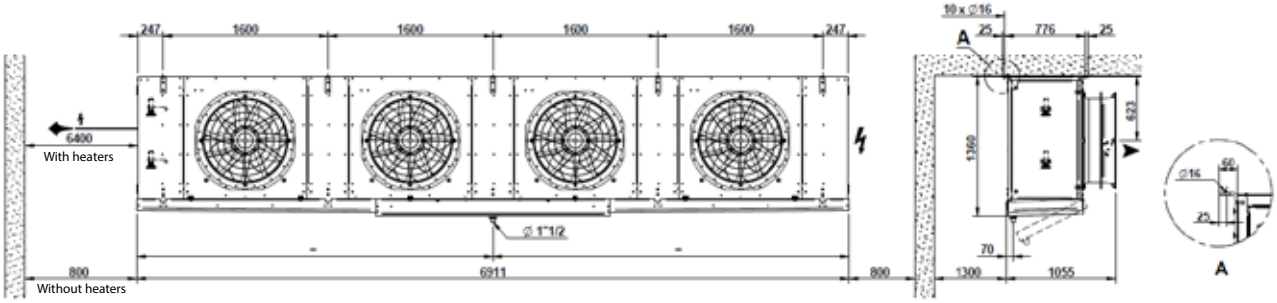
NK | 2 x Ø 800 mm



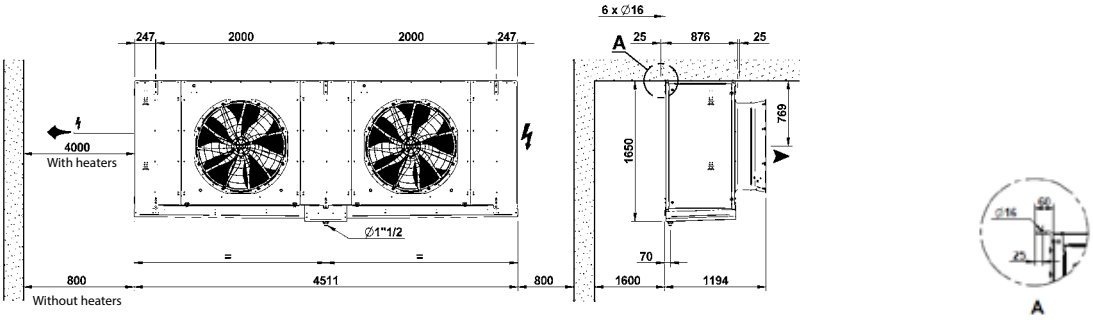
NK | 3 x Ø 800 mm



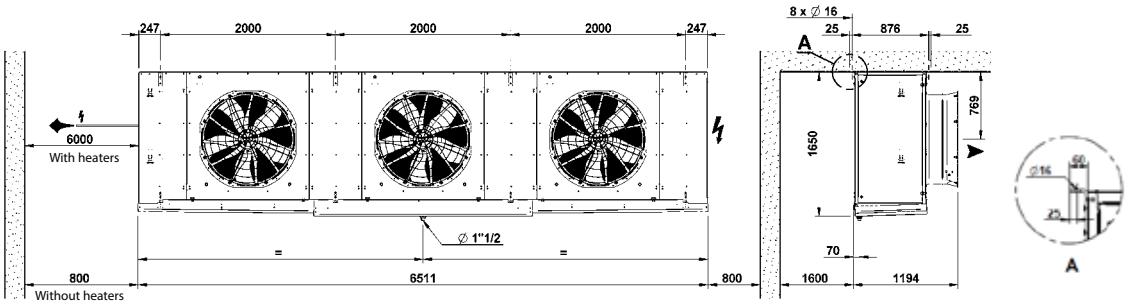
NK | 4 x Ø 800 mm



NK | 2x Ø 1000 mm



NK | 3x Ø 1000 mm



FRIGA-BOHN®

NW

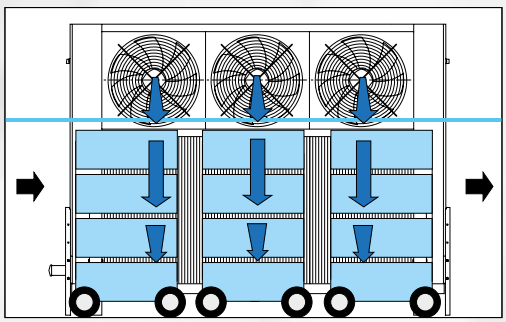
Unit cooler for blast freezing and rapid cooling tunnel
Industrial range

CO2 40bar | CO2 50bar | WG | HFC

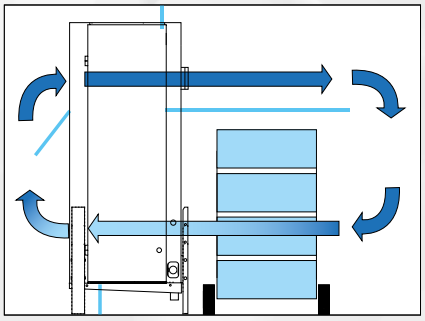
3.5 - 66 kW

The NW is an asset for ensuring **fast**, **even freezing** of foodstuffs.

The design of the product and the selection of its components allow for **easy installation** and **maintenance**.



THE PRINCIPLE OF A BLAST FREEZING AND RAPID COOLING TUNNEL



1 CASING

Pre-painted galvanized steel for corrosion and impact resistance.
Limited condensation: presence of an aluminium interior drain pan under the main drain pan.

OPTIONS	
ECB	Wooden crate packaging.

2 VENTILATION

There are two types of motor fans on the NW range:

Axial fans

A models, externally mounted, equipped with protective grilles.
Three-phase external rotor motors, 400 V, 50 Hz, IP54, class F, 4P (1,500 rpm), internal thermal protection.
Air pressure available up to 100 Pa.

Centrifugal motor fans

C models, double inlet direct drive.
Three-phase motors protected by an enclosed casing, 230/400 V, 50 Hz, IP54, class F, 4P (1,000 rpm), internal thermal protection.
Air pressure available up to 200 Pa.

OPTIONS	
CMU	Factory motor wiring.

3 COILS

Aluminium fins with 6.35, 9 or 12 mm spacing.
Combined with copper tubes, the coils are very efficient and compact.
Versions available:
- Multi-refrigerant HFCs.
- CO2 (40 and 50 bar).
- WCO (glycol water, coolant). CONTACT US

4 DEFROST

OPTIONS	
DAE	Water defrost (spraying).
E1U	Light electric defrost.
ECU	Additional electric coil defrost.
ECK	Additional electric coil defrost. KIT TO INSTALL
HGT	Hot gases (coil and drain pan).
RVU	Shell defrost heaters.
RVK	Shell defrost heaters. KIT TO INSTALL

Accessibility

INSTALLATION | MAINTENANCE

Installed against a wall, it allows maximum charging of the cold room.
Height-adjustable support feet promote even air distribution over the products.
Floor mounting for easy installation and maintenance.
Two possible blowing positions: horizontal (H2) and vertical (H4) for centrifugal pressure only.
Easy maintenance: easily removable aluminium main drain pan, hinged side panels for quick access to electrical and refrigeration connections.

NW 12(A) A1(B) R(C) 100Pa(D)

(A) Model
(B) **A** = Axial fan - **C** = Centrifugal fan / **1** = Number
(D) Fin spacing: **R** = 6.35 mm (positive) **C** = 6.35 mm (negative)
L = 9 mm (positive) **S** = 9 mm (negative)
M = 12 mm (positive) **T** = 12 mm (negative)
(D) Available pressure

The NW is available with CO_2, HFCs and glycol water. For more information, please consult our software.

NW ... R - Axial fans — 6.35 mm

	CONDITIONS	REFRIGERANTS	NW ... R	12 A1	14 A1	25 A2	30 A2	45 A3	60 A4
0 Pa (1)	SC2 (2)	CO_2 - **50 bar** (3)	kW	**12,8**	**14,7**	**25,2**	**29,6**	**44,6**	**59,5**
		R449A	kW	**13,4**	**16,1**	**27,4**	**32,7**	**49,5**	**66,2**
		R404A	kW	**13,2**	**15,5**	**26,8**	**31,5**	**47,4**	**63,4**
	Airflow		m^3/h	7920	7590	15840	15190	22780	30380
	Air throw (4)		m	19	18	22	21	26	30
100 Pa (1)	SC2 (2)	CO_2 - **50 bar** (3)	kW	**11,0**	**12,3**	**21,7**	**24,7**	**37,2**	**49,7**
		R449A	kW	**11,7**	**13,8**	**23,9**	**28,0**	**42,2**	**56,3**
		R404A	kW	**11,4**	**13,1**	**23,2**	**26,6**	**40,1**	**53,4**
	Airflow		m^3/h	6000	5640	12000	11290	16940	22580
	Air throw (4)		m	15	14	17	16	20	23

			12 A1	14 A1	25 A2	30 A2	45 A3	60 A4
Surface area		m^2	44,7	59,6	89,4	119,1	178,7	238,3
Circuit volume		dm^3	12,6	16,8	25,1	33,5	50,3	67,0
Fan 1,500 rpm	**Ø 560 mm**	Nb	1	1	2	2	3	4
	400 V/3/50 Hz	W max	1200	1200	2400	2400	3600	4800
		A max	2,4	2,4	4,8	4,8	7,2	9,6
Acoustics	**Lp 4m** (5)	dB(A)	52	52	55	55	57	58
	Lw	dB(A)	82	82	85	85	87	88
Electric defrost standard	Coil + drain pan	Nb	4+2	7+2	4+2	7+2	7+2	7+2
	230-400 V/3/50 Hz	W Total	3900	5850	6600	9900	14400	22500
		A Total	9.8/5.6	14.7/8.4	16.6/9.5	24.9/14.3	36.1/20.8	56.5/32.5
Connections **HFCs**	Inlet	Ø	5/8"	5/8"	7/8"	7/8"	1"1/8	1"3/8
	Outlet	Ø	1"3/8	1"3/8	1"5/8	1"5/8	2"1/8	2"1/8
Net weight		kg	180	195	280	305	420	530

NW ... R - Centrifugal — 6.35 mm

	CONDITIONS	REFRIGERANTS	NW ... R	12 C1	14 C1	24 C2	28 C2	43 C3	58 C4
200 Pa (1)	SC2 (2)	CO_2 - **50 bar** (3)	kW	**10,7**	**12,3**	**21,3**	**24,8**	**33,8**	**47,1**
		R449A	kW	**12,0**	**14,6**	**24,8**	**29,5**	**44,4**	**59,4**
		R404A	kW	**11,6**	**13,8**	**23,9**	**28,0**	**42,2**	**56,4**
	Airflow		m^3/h	5770	5770	11880	11540	17300	23070
	Air throw (4)		m	18	18	22	21	25	28

			12 C1	14 C1	24 C2	28 C2	43 C3	58 C4
Surface area		m^2	44,7	59,6	89,4	119,1	178,7	238,3
Circuit volume		dm^3	12,6	16,8	25,1	33,5	50,3	67,0
Turbine 1,000 rpm	**12/12**	Nb	1	1	2	2	3	4
	230-400 V/3/50 Hz	W max	1300	1300	2600	2600	3900	5200
		A max	3,4	3,4	3,4	3,4	3,4	3,4
Acoustics	**Lp 4m** (5)	dB(A)	51	52	55	55	56	58
	Lw	dB(A)	81	82	85	85	86	88
Electric defrost **E1U** (6)	Coil + drain pan	Nb	4+2	7+2	4+2	7+2	7+2	7+2
	230-400 V/3/50 Hz	W Total	3900	5850	6600	9900	14400	22500
		A Total	9.8/5.6	14.7/8.4	16.6/9.5	24.9/14.3	36.1/20.8	56.5/32.5
Connections **HFCs**	Inlet	Ø	5/8"	5/8"	7/8"	7/8"	1"1/8	1"3/8
	Outlet	Ø	1"1/8	1"3/8	1"5/8	1"5/8	2"1/8	2"1/8
Net weight		kg	180	195	280	305	420	530

NW 12(A) A1(B) C(C) 100Pa(D)

(A) Model
(B) **A** = Axial fan - **C** = Centrifugal fan / **1** = Number
(D) Fin spacing: **R** = 6.35 mm (positive) **C** = 6.35 mm (negative)
L = 9 mm (positive) **S** = 9 mm (negative)
M = 12 mm (positive) **T** = 12 mm (negative)
(D) Available pressure

The NW is available with CO_2, HFCs and glycol water. For more information, please consult our software.

NW ... C - Axial fans

6.35 mm

	CONDITIONS	REFRIGERANTS	NW ... C	12 A1	14 A1	25 A2	29 A2	45 A3	60 A4
0 Pa (1)	SC3 (2)	CO_2 - 50 bar (3)	kW	10,4	12,4	21,0	24,9	37,2	47,7
		R449A	kW	9,5	11,5	19,5	23,6	35,3	47,4
		R404A	kW	10,2	12,0	20,8	24,5	35,8	48,0
	SC4 (2)	CO_2 - 50 bar (3)	kW	8,4	10,0	16,9	20,3	30,2	38,4
		R449A	kW	7,4	9,0	15,3	18,6	27,5	37,1
		R404A	kW	7,9	9,5	16,3	19,4	28,0	37,6
	Airflow		m^3/h	7920	7590	15840	15190	22780	30380
	Air throw (4)		m	19	18	22	21	26	30

	CONDITIONS	REFRIGERANTS	NW ... C	12 A1	14 A1	25 A2	29 A2	45 A3	60 A4
100 Pa (1)	SC3 (2)	CO_2 - 50 bar (3)	kW	9,0	9,9	18,1	20,0	31,1	40,3
		R449A	kW	8,4	9,9	17,2	20,4	30,9	41,6
		R404A	kW	8,8	10,2	18,0	20,7	30,7	41,2
	SC4 (2)	CO_2 - 50 bar (3)	kW	7,3	8,4	14,7	16,2	25,4	32,7
		R449A	kW	6,6	7,9	13,5	16,2	24,3	32,7
		R404A	kW	6,9	8,1	14,2	16,5	24,3	32,5
	Airflow		m^3/h	6000	5640	12000	11290	16940	22580
	Air throw (4)		m	15	14	17	16	20	23

			12 A1	14 A1	25 A2	29 A2	45 A3	60 A4
Surface area		m^2	44,7	59,6	89,4	119,1	178,7	238,3
Circuit volume		dm^3	12,6	16,8	25,1	33,5	50,3	67,0
Fan 1,500 rpm	Ø 560 mm	Nb	1	1	2	2	3	4
	400 V/3/50 Hz	W max	1200	1200	2400	2400	3600	4800
		A max	2,4	2,4	4,8	4,8	7,2	9,6
Acoustics	Lp 4m (5)	dB(A)	52	52	55	55	57	58
	Lw	dB(A)	82	82	85	85	87	88
Electric defrost E1U (6)	Coil + drain pan	Nb	7+2	10+2	7+2	10+2	10+2	10+2
	230-400 V/3/50 Hz	W Total	5850	7800	9900	13200	19200	30000
		A Total	8.4	11.3	14.3	19.1	27.7	43.3
Connections HFCs	Inlet	Ø	5/8"	7/8"	1"1/8	1"1/8	1"1/8	1"3/8
	Outlet	Ø	1"3/8	1"5/8	2"1/8	2"1/8	2"1/8	2"5/8
Net weight		kg	180	195	280	305	420	530

(1) Additional available air pressure in pascals.
(2) Standard conditions:
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
SC3 / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K
SC4 / -25 °C (air inlet temp.) / -31 °C (evaporating temp.) / DT1 = 6K
(3) Operating pressure - Specific coil - Connection diameters to be defined when ordering.
(4) Residual air speed: 0.25 m/s.
(5) Average sound pressure level in dB(A) calculated at 4 m, level with the blades, in a free field over a reflecting plane, given as an indication only.
(6) Electric defrost option.
(5) Average sound pressure level in dB(A) calculated at 4 m, level with the blades, in a free field over a reflecting plane, given as an indication only.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

NW 12(A) A1(B) R(C) 100Pa(D)

(A) Model
(B) **A** = Axial fan - **C** = Centrifugal fan / **1** = Number
(D) Fin spacing: **R** = 6.35 mm (positive) **C** = 6.35 mm (negative)
L = 9 mm (positive) **S** = 9 mm (negative)
M = 12 mm (positive) **T** = 12 mm (negative)
(D) Available pressure

The NW is available with CO_2, HFCs and glycol water. For more information, please consult our software.

NW ... L - Axial fans — 9 mm

	CONDITIONS	REFRIGERANTS	NW ... L	9 A1	11 A1	20 A2	24 A2	36 A3	49 A4
0 Pa (1)	SC2 (2)	CO_2 - **40 bar** (3)	kW	**10,6**	**12,5**	**21,3**	**25,2**	**38,2**	**50,7**
		R449A	kW	**9,3**	**11,9**	**19,6**	**24,4**	**36,7**	**49,4**
		R404A	kW	**10,0**	**12,1**	**20,3**	**24,8**	**37,6**	**50,2**
	Airflow		m^3/h	8070	7770	16130	15530	23300	31070
	Air throw (4)		m	21	21	25	24	29	34

	CONDITIONS	REFRIGERANTS	NW ... L	9 A1	11 A1	20 A2	24 A2	36 A3	49 A4
100 Pa (1)	SC2 (2)	CO_2 - **40 bar** (3)	kW	**9,2**	**10,6**	**18,5**	**21,5**	**32,2**	**43,1**
		R449A	kW	**8,3**	**10,5**	**17,6**	**21,6**	**32,4**	**43,7**
		R404A	kW	**8,8**	**10,6**	**18,1**	**21,7**	**32,8**	**43,9**
	Airflow		m^3/h	6230	5870	12460	11740	17610	23480
	Air throw (4)		m	17	16	20	19	23	27

			9 A1	11 A1	20 A2	24 A2	36 A3	49 A4
Surface area		m^2	40,8	54,4	81,7	108,9	163,3	217,7
Circuit volume		dm^3	15,9	21,1	31,7	42,3	63,4	84,5
Fan 1,500 rpm	**Ø 560 mm**	Nb	1	1	2	2	3	4
	400 V/3/50 Hz	W max	1200	1200	2400	2400	3600	4800
		A max	2,4	2,4	4,8	4,8	7,2	9,6
Acoustics	**Lp 4m** (5)	dB(A)	52	52	55	55	57	58
	Lw	dB(A)	82	82	85	85	87	88
Standard electric defrost	Coil + drain pan	Nb	4+2	7+2	4+2	7+2	7+2	7+2
	230-400 V/3/50 Hz	W Total	3900	5850	6600	9900	14400	22500
		A Total	9.8/5.6	14.7/8.4	16.6/9.5	24.9/14.3	36.1/20.8	56.5/32.5
Connections **HFCs**	Inlet	Ø	5/8"	5/8"	5/8"	7/8"	7/8"	1"1/8
	Outlet	Ø	1"1/8	1"1/8	1"3/8	1"5/8	2"1/8	2"1/8
Net weight		kg	185	205	295	325	445	565

NW ... L - Centrifugal — 9 mm

	CONDITIONS	REFRIGERANTS	NW ... L	9 C1	10 C1	18 C2	22 C2	33 C3	44 C4
200 Pa (1)	SC2 (2)	CO_2 - **40 bar** (3)	kW	**9,0**	**10,3**	**18,0**	**20,9**	**28,5**	**42,2**
		R449A	kW	**8,1**	**10,1**	**16,7**	**20,6**	**31,7**	**42,5**
		R404A	kW	**8,4**	**10,2**	**17,1**	**20,7**	**31,0**	**41,5**
	Airflow		m^3/h	5850	5700	11700	11400	17110	22810
	Air throw (4)		m	19	18	23	22	26	29

			9 C1	10 C1	18 C2	22 C2	33 C3	44 C4
Surface area		m^2	40,8	54,4	81,7	108,9	163,3	217,7
Circuit volume		dm^3	15,9	21,1	31,7	42,3	63,4	84,5
Turbine 1,000 rpm	**12/12**	Nb	1	1	2	2	3	4
	230-400 V/3/50 Hz	W max	1300	1300	2600	2600	3900	5200
		A max	3,4	3,4	3,4	3,4	3,4	3,4
Acoustics	**Lp 4m** (5)	dB(A)	52	51	55	54	56	57
	Lw	dB(A)	82	81	85	84	86	87
Electric defrost **E1U** (6)	Coil + drain pan	Nb	4+2	7+2	4+2	7+2	7+2	7+2
	230-400 V/3/50 Hz	W Total	3900	5850	6600	9900	14400	22500
		A Total	9.8/5.6	14.7/8.4	16.6/9.5	24.9/14.3	36.1/20.8	56.5/32.5
Connections **HFCs**	Inlet	Ø	5/8"	5/8"	5/8"	7/8"	7/8"	7/8"
	Outlet	Ø	1"1/8	1"1/8	1"3/8	1"5/8	1"5/8	2"1/8
Net weight		kg	185	205	295	325	445	565

NW 12(A) A1(B) C(C) 100Pa(D)

(A) Model
(B) **A** = Axial fan - **C** = Centrifugal fan / **1** = Number
(D) Fin spacing: **R** = 6.35 mm (positive) **C** = 6.35 mm (negative)
L = 9 mm (positive) **S** = 9 mm (negative)
M = 12 mm (positive) **T** = 12 mm (negative)
(D) Available pressure

> **The NW is available with CO_2, HFCs and glycol water. For more information, please consult our software.**

NW ... S - Axial fans — 9 mm

0 Pa (1)

CONDITIONS	REFRIGERANTS	NW ... S	9 A1	11 A1	19 A2	24 A2	36 A3	48 A4
SC3 (2)	CO_2 - **40 bar** (3)	kW	8,6	9,9	17,5	20,1	31,6	42,1
	R449A	kW	6,2	7,8	12,2	16,3	24,6	33,2
	R404A	kW	7,2	8,9	14,6	18,3	27,7	37,1
SC4 (2)	CO_2 - **40 bar** (3)	kW	6,8	7,7	13,8	15,8	25,0	33,3
	R449A	kW	4,6	5,8	9,0	12,3	18,5	25,2
	R404A	kW	5,5	6,8	11,1	14,0	21,2	28,5
Airflow		m^3/h	8070	7770	16130	15530	23300	31070
Air throw (4)		m	21	21	25	24	29	34

100 Pa (1)

CONDITIONS	REFRIGERANTS	NW ... S	9 A1	11 A1	19 A2	24 A2	36 A3	48 A4
SC3 (2)	CO_2 - **40 bar** (3)	kW	7,6	8,6	15,3	17,4	26,9	35,8
	R449A	kW	5,6	7,1	11,1	14,6	22,0	29,8
	R404A	kW	6,5	7,9	13,0	16,1	24,3	32,7
SC4 (2)	CO_2 - **40 bar** (3)	kW	6,0	6,8	12,1	13,8	21,4	28,6
	R449A	kW	4,2	5,3	8,2	11,0	16,7	22,8
	R404A	kW	4,9	6,0	9,9	12,4	18,8	25,3
Airflow		m^3/h	6230	5870	12460	11740	17610	23480
Air throw (4)		m	17	16	20	19	23	27

			9 A1	11 A1	19 A2	24 A2	36 A3	48 A4
Surface area		m^2	40,8	54,4	81,7	108,9	163,3	217,7
Circuit volume		dm^3	15,9	21,1	31,7	42,3	63,4	84,5
Fan 1,500 rpm	**Ø 560 mm**	Nb	1	1	2	2	3	4
	400 V/3/50 Hz	W max	1200	1200	2400	2400	3600	4800
		A max	2,4	2,4	4,8	4,8	7,2	9,6
Acoustics	**Lp 4m** (5)	dB(A)	52	52	55	55	57	58
	Lw	dB(A)	82	82	85	85	87	88
Electric defrost **E1U** (6)	Coil + drain pan	Nb	7+2	10+2	7+2	10+2	10+2	10+2
	230-400 V/3/50 Hz	W Total	5850	7800	9900	13200	19200	30000
		A Total	8.4	11.3	14.3	19.1	27.7	43.3
Connections **HFCs**	Inlet	Ø	5/8"	5/8"	7/8"	7/8"	1"1/8	1"1/8
	Outlet	Ø	1"3/8	1"3/8	1"5/8	2"1/8	2"1/8	2"5/8
Net weight		kg	185	205	295	325	445	565

(1) Additional available air pressure in pascals.
(2) Standard conditions:
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
SC3 / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K
SC4 / -25 °C (air inlet temp.) / -31 °C (evaporating temp.) / DT1 = 6K
(3) Operating pressure - Specific coil - Connection diameters to be defined when ordering.
(4) Residual air speed: 0.25 m/s.
(5) Average sound pressure level in dB(A) calculated at 4 m, level with the blades, in a free field over a reflecting plane, given as an indication only.
(6) Electric defrost option.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

NW 12(A) A1(B) R(C) 100Pa(D)

(A) Model
(B) **A** = Axial fan - **C** = Centrifugal fan / **1** = Number
(D) Fin spacing: **R** = 6.35 mm (positive) **C** = 6.35 mm (negative)
L = 9 mm (positive) **S** = 9 mm (negative)
M = 12 mm (positive) **T** = 12 mm (negative)
(D) Available pressure

The NW is available with CO_2, HFCs and glycol water. For more information, please consult our software.

NW ... M - Axial fans — 12 mm

0 Pa (1)

CONDITIONS	REFRIGERANTS	NW ... M	9 A1	11 A1	19 A2	23 A2	34 A3	47 A4
SC2 (2)	CO_2 - 40 bar (3)	kW	8,5	10,4	17,0	20,9	29,8	41,9
	R449A	kW	8,4	10,5	17,2	21,5	32,3	43,7
	R404A	kW	8,8	10,9	18,0	22,3	33,6	45,0
Airflow		m^3/h	8230	7950	16460	15900	23840	31790
Air throw (4)		m	22	21	26	25	30	34

100 Pa (1)

CONDITIONS	REFRIGERANTS	NW ... M	9 A1	11 A1	19 A2	23 A2	34 A3	47 A4
SC2 (2)	CO_2 - 40 bar (3)	kW	7,5	9,0	15,0	18,1	26,2	36,3
	R449A	kW	7,5	9,3	15,4	19,1	28,6	38,6
	R404A	kW	7,9	9,6	16,0	19,5	29,4	39,4
Airflow		m^3/h	6420	6080	12850	12170	18250	24340
Air throw (4)		m	17	17	21	20	24	27

			9 A1	11 A1	19 A2	23 A2	34 A3	47 A4
Surface area		m^2	31,7	42,3	63,4	84,5	126,8	169,0
Circuit volume		dm^3	15,9	21,1	31,7	42,3	63,4	84,5
Fan 1,500 rpm	Ø 560 mm	Nb	1	1	2	2	3	4
	400 V/3/50 Hz	W max	1200	1200	2400	2400	3600	4800
		A max	2,4	2,4	4,8	4,8	7,2	9,6
Acoustics	Lp 4m (5)	dB(A)	52	52	55	55	57	58
	Lw	dB(A)	82	82	85	85	87	88
Standard electric defrost	Coil + drain pan	Nb	4+2	7+2	4+2	7+2	7+2	7+2
	230-400 V/3/50 Hz	W Total	3900	5850	6600	9900	14400	22500
		A Total	9.8/5.6	14.7/8.4	16.6/9.5	24.9/14.3	36.1/20.8	56.5/32.5
Connections HFCs	Inlet	Ø	5/8"	5/8"	5/8"	7/8"	7/8"	1"1/8
	Outlet	Ø	1"1/8	1"1/8	1"3/8	1"5/8	1"5/8	2"1/8
Net weight		kg	185	200	290	320	435	555

NW ... M - Centrifugal — 12 mm

200 Pa (1)

CONDITIONS	REFRIGERANTS	NW ... M	8 C1	10 C1	17 C2	21 C2	31 C3	42 C4
SC2 (2)	CO_2 - 40 bar (3)	kW	7,2	8,7	13,3	17,6	24,8	35,3
	R449A	kW	7,0	8,7	14,3	17,8	27,5	36,9
	R404A	kW	7,3	9,0	14,9	18,3	27,5	36,8
Airflow		m^3/h	5900	5770	11800	11530	17300	23070
Air throw (4)		m	19	19	23	23	26	30

			8 C1	10 C1	17 C2	21 C2	31 C3	42 C4
Surface area		m^2	31,7	42,3	63,4	84,5	126,8	169,0
Circuit volume		dm^3	15,9	21,1	31,7	42,3	63,4	84,5
Turbine 1,000 rpm	12/12	Nb	1	1	2	2	3	4
	230-400 V/3/50 Hz	W max	1300	1300	2600	2600	3900	5200
		A max	3,4	3,4	3,4	3,4	3,4	3,4
Acoustics	Lp 4m (5)	dB(A)	52	52	55	55	56	57
	Lw	dB(A)	82	82	85	85	86	87
Electric defrost E1U (6)	Coil + drain pan	Nb	4+2	7+2	4+2	7+2	7+2	7+2
	230-400 V/3/50 Hz	W Total	3900	5850	6600	9900	14400	22500
		A Total	9.8/5.6	14.7/8.4	16.6/9.5	24.9/14.3	36.1/20.8	56.5/32.5
Connections HFCs	Inlet	Ø	5/8"	5/8"	5/8"	7/8"	7/8"	7/8"
	Outlet	Ø	1"1/8	1"1/8	1"3/8	1"3/8	1"5/8	2"1/8
Net weight		kg	185	200	290	320	435	555

NW 12(A) A1(B) C(C) 100Pa(D)

(A) Model
(B) **A** = Axial fan - **C** = Centrifugal fan / **1** = Number
(D) Fin spacing: **R** = 6.35 mm (positive) **C** = 6.35 mm (negative)
L = 9 mm (positive) **S** = 9 mm (negative)
M = 12 mm (positive) **T** = 12 mm (negative)
(D) Available pressure

The NW is available with CO_2, HFCs and glycol water. For more information, please consult our software.

NW ... T - Axial fans — 12 mm

	CONDITIONS	REFRIGERANTS	NW ... T	9 A1	11 A1	18 A2	22 A2	34 A3	46 A4
0 Pa (1)	SC3 (2)	CO_2 - 40 bar (3)	kW	7,0	8,4	14,1	16,9	26,0	34,7
		R449A	kW	5,2	7,0	10,8	14,5	21,9	29,7
		R404A	kW	6,3	8,0	12,9	16,5	24,8	33,4
	SC4 (2)	CO_2 - 40 bar (3)	kW	5,5	6,6	11,1	13,4	20,7	27,6
		R449A	kW	3,8	5,2	8,1	11,0	16,5	22,5
		R404A	kW	4,8	6,1	9,8	12,6	19,1	25,7
	Airflow		m^3/h	8230	7950	16460	15900	23840	31790
	Air throw (4)		m	22	21	26	25	30	34

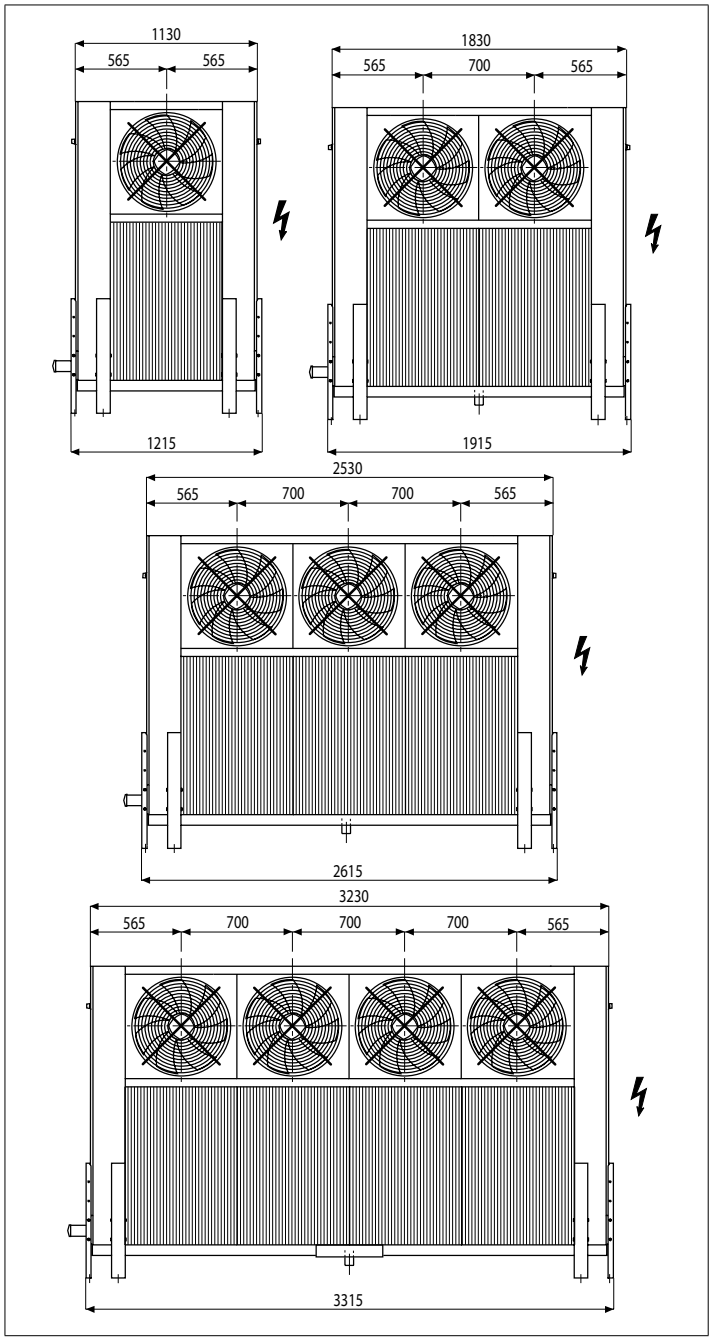
	CONDITIONS	REFRIGERANTS	NW ... T	9 A1	11 A1	18 A2	22 A2	34 A3	46 A4
100 Pa (1)	SC3 (2)	CO_2 - 40 bar (3)	kW	6,2	7,3	12,5	14,8	22,5	30,1
		R449A	kW	4,7	6,3	9,8	13,0	19,5	26,5
		R404A	kW	5,6	7,1	11,5	14,5	21,9	29,4
	SC4 (2)	CO_2 - 40 bar (3)	kW	4,9	5,8	9,9	11,8	18,0	24,0
		R449A	kW	3,5	4,7	7,3	10,0	14,9	20,3
		R404A	kW	4,2	5,4	8,8	11,2	16,9	22,8
	Airflow		m^3/h	6420	6080	12850	12170	18250	24340
	Air throw (4)		m	17	17	21	20	24	27

			9 A1	11 A1	18 A2	22 A2	34 A3	46 A4
Surface area		m^2	31,7	42,3	63,4	84,5	126,8	169,0
Circuit volume		dm^3	15,9	21,1	31,7	42,3	63,4	84,5
Fan 1,500 rpm	Ø 560 mm	Nb	1	1	2	2	3	4
	400 V/3/50 Hz	W max	1200	1200	2400	2400	3600	4800
		A max	2,4	2,4	4,8	4,8	7,2	9,6
Acoustics	Lp 4m (5)	dB(A)	52	52	55	55	57	58
	Lw	dB(A)	82	82	85	85	87	88
Electric defrost E1U (6)	Coil + drain pan	Nb	7+2	10+2	7+2	10+2	10+2	10+2
	230-400 V/3/50 Hz	W Total	5850	7800	9900	13200	19200	30000
		A Total	8.4	11.3	14.3	19.1	27.7	43.3
Connections HFCs	Inlet	Ø	5/8"	5/8"	7/8"	7/8"	1"1/8	1"1/8
	Outlet	Ø	1"3/8	1"3/8	1"5/8	1"5/8	2"1/8	2"1/8
Net weight		kg	185	200	290	320	435	555

(1) Additional available air pressure in pascals.
(2) Standard conditions:
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
SC3 / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K
SC4 / -25 °C (air inlet temp.) / -31 °C (evaporating temp.) / DT1 = 6K
(3) Operating pressure - Specific coil - Connection diameters to be defined when ordering.
(4) Residual air speed: 0.25 m/s.
(5) Average sound pressure level in dB(A) calculated at 4 m, level with the blades, in a free field over a reflecting plane, given as an indication only.
(6) Electric defrost option.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

NW .. A ..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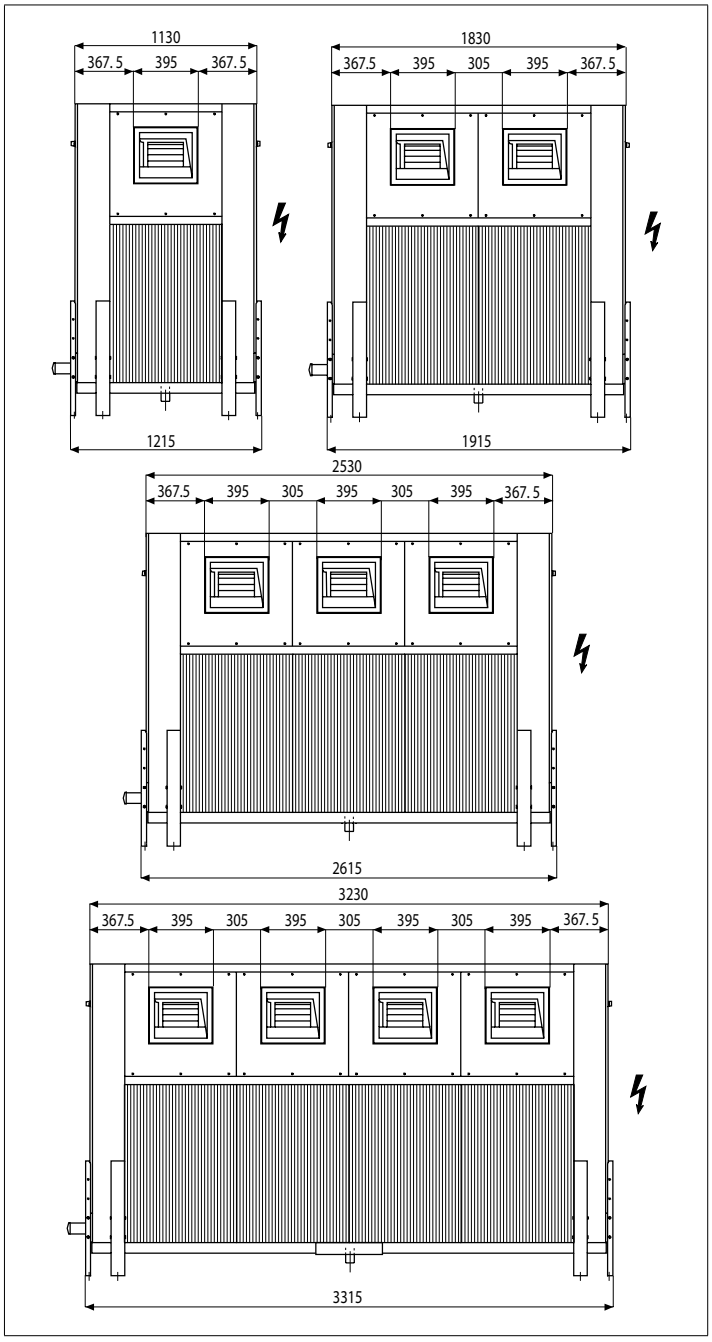
NW .. C ..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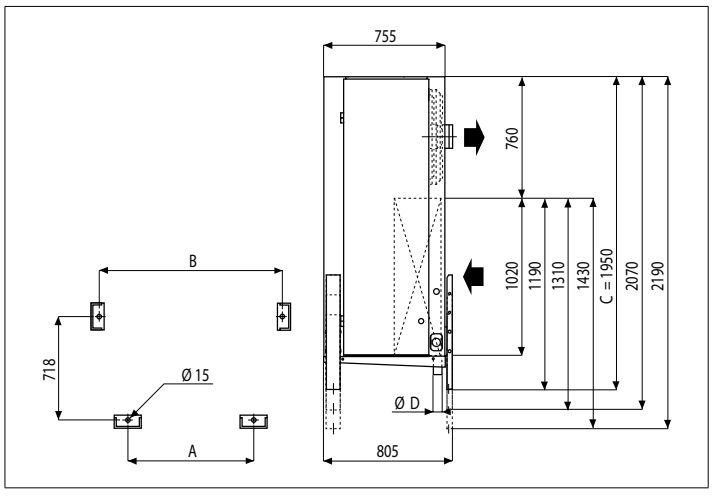
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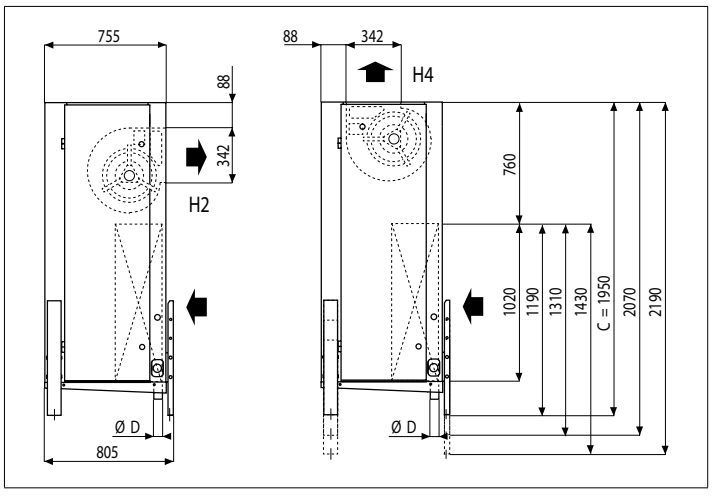
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C = 1950
2070
2190
Ø D

FRIGA-BOHN®

NF

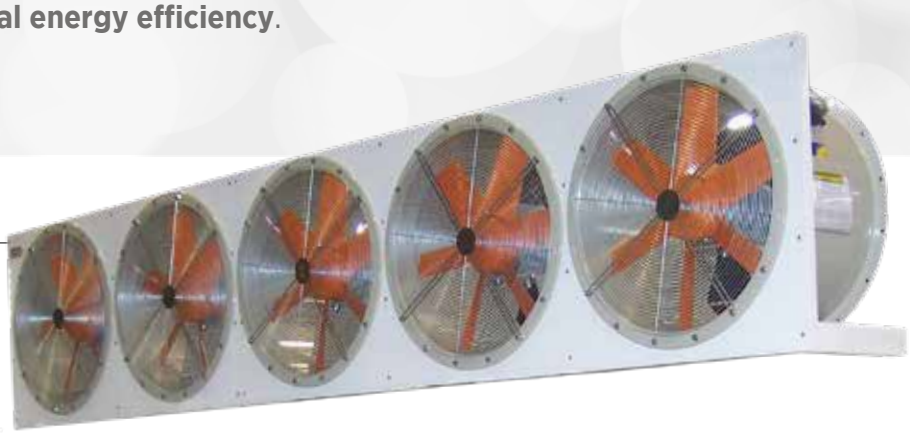
Unit cooler for blast freezing and rapid cooling tunnel
Industrial range

CO2 40bar HFC

35 - 130 kW

High speed air circulation ensures **very rapid cooling** of foodstuffs.

Large exchange surface for **optimal energy efficiency**.



VENTILATION

Ventilation assembly delivered separately, to be positioned above the coil.

Motor fans Ø 710 mm, 230-400V/3/50Hz, IP 55, class F.

OPTIONS	
ECB	Wooden crate packaging.

COILS

Embossed aluminium fins with 9 mm spacing.

Combined with staggered copper tubes, the coils are very efficient and compact.

Versions available:
- Multi refrigerants HFCs
- CO2 (40 bar)
- WCO (glycol water, coolant)

DEFROST

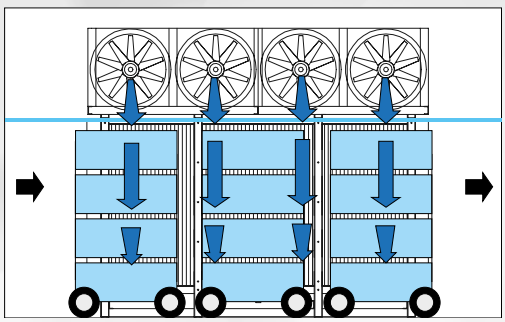
Drain pan under the exchanger assembly.
Electric defrost.

OPTIONS	
DAE	Water defrost (spraying).

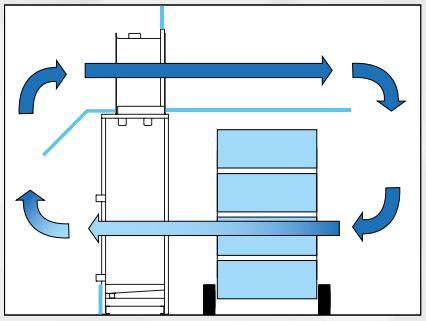
INSTALLATION | MAINTENANCE

Because of the height, the NF is delivered in 2 parts:
- an assembly comprising coil, frame, drain pan and heaters,
- a motor fan assembly.

Drain pan tilted towards the large drain pipe (Ø 1 1/2" G) to avoid dirt accumulation and facilitate cleaning.



THE PRINCIPLE OF A BLAST FREEZING AND RAPID COOLING TUNNEL



NFT (A) 280 (B)

(A) Fin spacing: **NFT** = 9 mm
(B) Model

> **The NF is available with CO2 HFCs and Glycol Water. For more information, please consult our software.**

NFT - 100 Pa (1)

9 mm

CONDITIONS	REFRIGERANTS	NFT ...	280	401	507	676	802
SC3 (2)	CO_2 - **40 bar** (3)	kW	53,5	77,9	100,2	130,3	151,8
	R449A	kW	39,3	59,7	76,9	101,7	122,8
	R404A	kW	43,5	64,3	82,9	109,3	129,6
SC4 (2)	CO_2 - **40 bar** (3)	kW	42,6	62,0	79,7	103,7	120,3
	R449A	kW	29,9	45,3	58,5	77,5	93,3
	R404A	kW	33,6	49,7	64,1	84,7	100,1

			280	401	507	676	802
Surface area		m^2	308,0	442,3	559,9	746,6	884,7
Circuit volume		dm^3	119,6	171,7	217,4	289,8	343,4
Fan*		Nb	2	3	4	5	6
Airflow		m^3/h	31800	46500	60400	78500	94200
Air throw (4)		m	41	49	56	64	71
Electric defrost	Coil + drain pan	Nb	19+2	19+2	19+2	19+2	19+2
	400 V/3/50 Hz	W total	27300	47250	59850	79800	92400
		A total	39.6	68.5	86.7	115.7	133.9
Connections HFCs	Inlet	Ø (5)	1"3/8	2x1"1/8	2x1"3/8	2x1"3/8	2x1"3/8
	Outlet	Ø (6)	2"5/8	2x2"1/8	2x2"5/8	2x2"5/8	2x3"1/8
Net weight		kg	600	830	1060	1330	1560

* Ø 710 mm - 1,420 rpm - 2.2 kW max - 230 V/3/50 Hz: 8.5 A max - 400V/3/50Hz: 4.9 A max. (7).

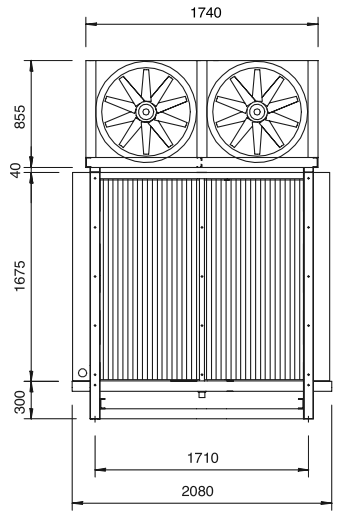
(1) Additional available air pressure in pascals.
(2) Standard conditions:
SC3 / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K
SC4 / -25 °C (air inlet temp.) / -31 °C (evaporating temp.) / DT1 = 6K
(3) Operating pressure - Specific coil - Connection diameters to be defined when ordering.
(4) Residual air speed: 0.25 m/s.
(5) Distributor: male to solder.
(6) Ø: male to solder.
(7) Adjustment of overload protection.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

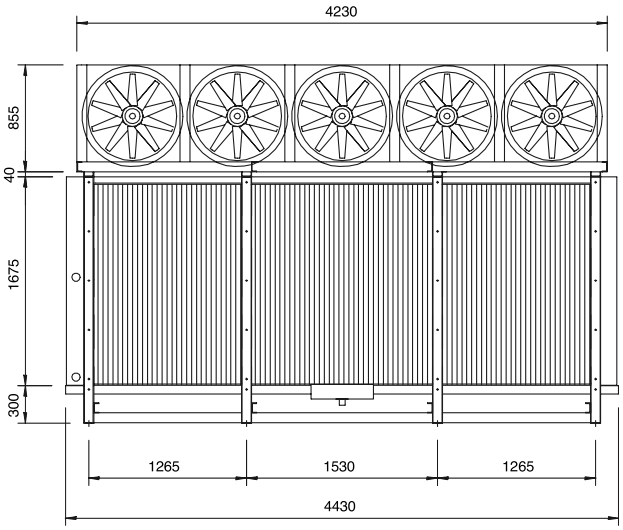
Sound power per fan Lw

	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Lw - dB(A)	**58**	**78**	**86**	**91**	**93**	**90**	**83**	**72**

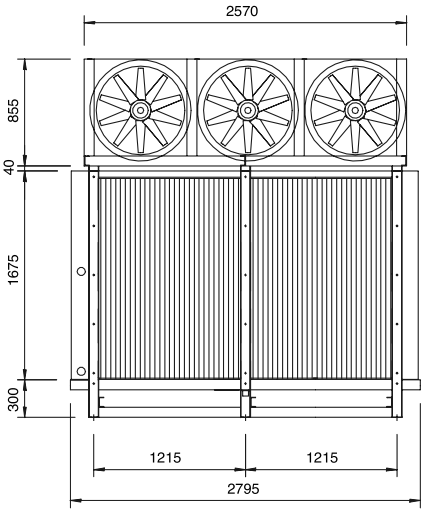
NFT 280



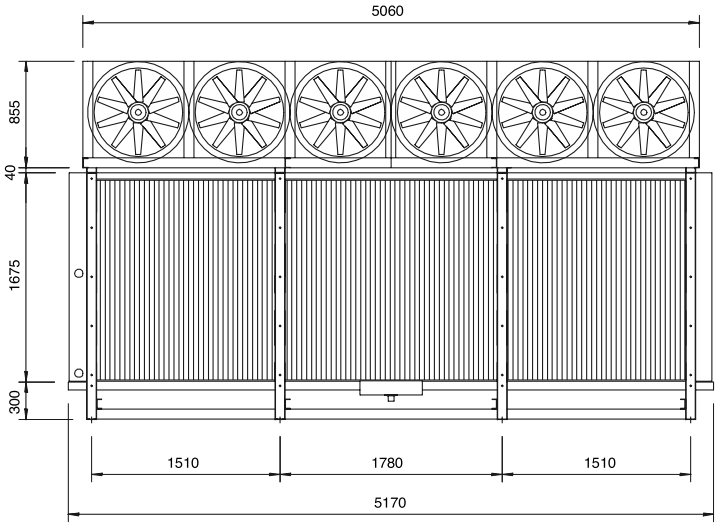
NFT 676



NFT 401



NFT 802



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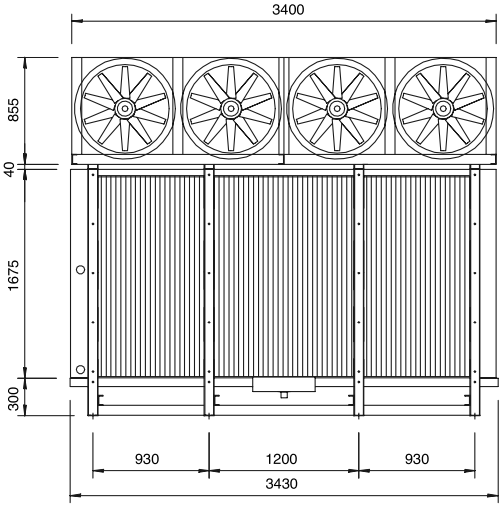
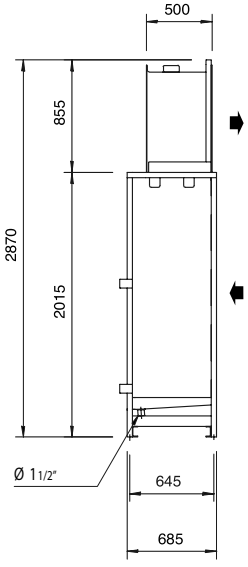


NFT



FRIGA-BOHN®

NC

Centrifugal unit cooler
Industrial range

CO2 50bar | WG | HFC

5 - 95 kW

With many options available, t**he NC adapts to the needs of your application as closely as possible.**

Adaptable, you can choose to install the NC on the floor or ceiling, depending on the requirements of the environment, thanks to its 4 modular blowing positions.

Easy maintenance with easy access to all components.

CASING

Robust, made of white pre-painted galvanized sheet steel.
Limited condensation: presence of an exterior drain pan and an aluminium intermediate drain pan.

OPTIONS	
IPH	Noise insulation (M1*).
FLA	Suction filters (M1*).
CFA	Suction filter box (M1*).
ECB	Wooden crate packaging.

* M1: Non-flammable.

COILS

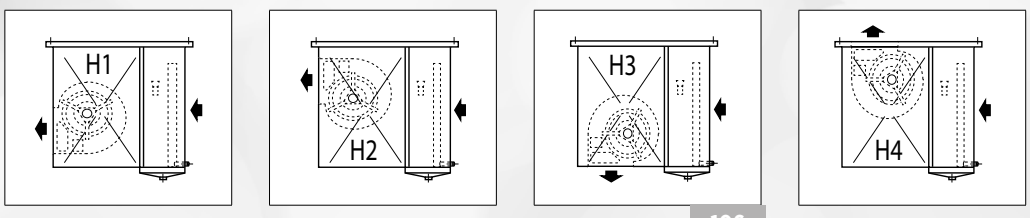
Aluminium fins with 4.23 or 6.35 mm spacing.
Combined with copper tubes, the coils are very efficient and compact.
Versions available:
- Multi-refrigerant HFCs.
- CO2 (50 bar).
- WCO (glycol water, coolant).

OPTIONS	
HGT	Hot gases (coil and drain pan).

Select your coil treatment to extend your unit cooler's lifespan! Contact us.

PRODUCT ADVANTAGES

Can be installed on the floor or ceiling.
4 blowing positions (H1 to H4) can be selected; can be easily changed at a later date.



VENTILATION

Double inlet direct drive centrifugal motor fans.
"Power/noise level" pair can be optimized by adding an optional variable speed drive, available factory-fitted or as a kit (VVU/VVK).
Enclosed motors with built-in thermal protection, IP 54 class F, designed for environments from -40 °C to +70 °C.
Pressure available up to 200 pascal.
Speed of rotation 1,000 rpm.

OPTIONS	
CMU	Factory motor wiring.
VGT	Textile duct shell. KIT TO INSTALL
VPS	Blower louvred shutters. KIT TO INSTALL CONTACT US
VVU	Variable speed drive. CONTACT US
VVK	Variable speed drive. KIT TO INSTALL CONTACT US

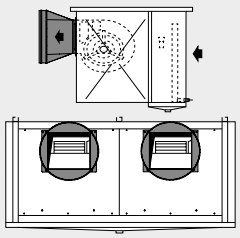
DEFROST

OPTIONS	
E1U	Light electric defrost.
HGB	Hot gas defrost (coil only). CONTACT US

OPTION APPLICATIONS

Application requiring the installation of a textile duct

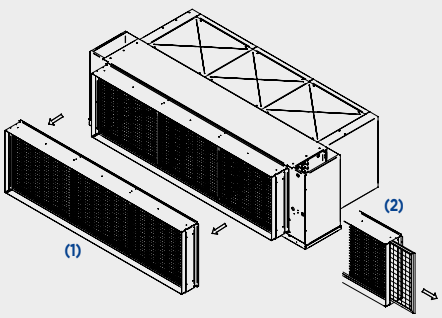
VGT
Circular shell for connection of a textile duct (duct not supplied).
- diameter 400 mm
(models 831 | 1622 | 2393)
- diameter 550 mm
(models 1591 | 3162 | 4693 | 6294)



Air filtration and duct on suction

FLA
Gravimetric air filter on suction.

CFA (1)
Box for connecting a suction duct; the filter can be removed from the side of the box for easy maintenance (2).



Power, adapted noise level and thermal insulation

VVU / VVK
Voltage variation variable speed drive.
Provides acoustic comfort at low and medium speeds when staff are present.

IPH
10 mm thick insulation to attenuate vibrations and provide thermal insulation of the device limiting the effects of condensation.

NCP(A) 831(B) H3(C)

(A) Fin spacing: **NCP** = 4.23 mm (positive)
NCN = 6.35 mm (negative)

(B) Model

(C) Air direction

The NC is available with CO_2, HFCs and glycol water. For more information, please consult our software.

NCP — 4,23 mm

	CONDITIONS	REFRIGERANTS	NCP ...	831	1622	1591	2393	3162	4693	6294
100 Pa (1)	SC1 (2)	CO_2 - **50 bar** (3)	kW	12,1	23,6	23,4	35,2	44,1	68,9	88,1
		R449A	kW	11,6	22,3	22,3	32,8	45,0	66,9	87,7
		R404A	kW	10,9	21,1	21,8	31,0	42,3	62,9	84,3
	SC2 (2)	CO_2 - **50 bar** (3)	kW	8,2	16,2	16,0	24,2	29,7	47,3	59,6
		R449A	kW	7,5	14,6	15,1	21,5	29,7	43,9	59,2
		R404A	kW	7,1	13,9	14,5	20,4	28,2	41,7	56,2
	Airflow		m^3/h	3200	6310	6680	9420	13270	19870	26460
	Acoustics	**Lp 4 m** (4)	dB(A)	44	47	55	49	58	59	61
		Lw	dB(A)	74	77	85	79	88	89	91

	CONDITIONS	REFRIGERANTS	NCP ...	831	1622	1591	2393	3162	4693	6294
150 Pa (1)	SC1 (2)	CO_2 - **50 bar** (3)	kW	10,8	21,2	22,5	31,5	42,5	66,1	84,8
		R449A	kW	10,2	19,8	21,5	29,1	42,6	64,1	84,4
		R404A	kW	9,6	18,6	20,8	27,3	40,5	60,3	80,7
	SC2 (2)	CO_2 - **50 bar** (3)	kW	7,4	14,6	15,4	21,8	28,7	45,5	57,4
		R449A	kW	6,7	12,9	14,6	19,0	28,5	42,3	57,0
		R404A	kW	6,3	12,3	14,0	18,1	27,1	40,1	54,1
	Airflow		m^3/h	2740	5400	6280	8060	12460	18640	24820
	Acoustics	**Lp 4 m** (4)	dB(A)	42	45	53	46	56	58	59
		Lw	dB(A)	72	75	83	76	86	88	89

	CONDITIONS	REFRIGERANTS	NCP ...	831	1622	1591	2393	3162	4693	6294
200 Pa (1)	SC1 (2)	CO_2 - **50 bar** (3)	kW	-	-	21,2	-	40,2	62,2	80,1
		R449A	kW	-	-	20,3	-	40,3	60,2	79,8
		R404A	kW	-	-	19,6	-	38,1	56,7	76,0
	SC2 (2)	CO_2 - **50 bar** (3)	kW	-	-	14,5	-	27,2	42,8	54,4
		R449A	kW	-	-	13,8	-	26,9	39,9	53,7
		R404A	kW	-	-	13,1	-	25,6	37,9	51,0
	Airflow		m^3/h	-	-	5740	-	11380	17000	22630
	Acoustics	**Lp 4 m** (4)	dB(A)	-	-	51	-	54	56	57
		Lw	dB(A)	-	-	81	-	84	86	87

		NCP ...	831	1622	1591	2393	3162	4693	6294
Surface area		m^2	47,0	86,6	75,2	126,2	142,0	208,8	275,6
Circuit volume		dm^3	9,1	16,8	14,5	24,4	27,5	40,4	53,3
Turbine		Nb	1	2	1	3	2	3	4
	230V/1/50 Hz	W	670	1340	-	2010	-	-	-
		A max (5)	2,9	5,8	-	8,7	-	-	-
	230-400V/3/50 Hz	W	-	-	1300	-	2600	3900	5200
		A max (5)	-	-	3,4	-	6,8	10,2	13,6
Connections	Inlet	Ø	5/8"	5/8"	7/8"	7/8"	7/8"	1"1/8	1"1/8
R404A	Outlet	Ø	7/8"	1"1/8	1"1/8	1"3/8	1"3/8	1"5/8	2"1/8
Net weight		kg	88	151	118	200	241	305	463

(1) Additional available air pressure in pascals.
(2) Standard conditions:
SC1 / +10 °C (air inlet temp.) / 0 °C (evaporating temp.) / DT1 = 10K
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
(3) Operating pressure - Specific coil - Connection diameters to be defined when ordering.
(4) Average sound pressure level in dB(A) calculated at 4 m, level with the turbines, in a free field over a reflecting plane, given as an indication only.
(5) Adjustment of overload protection. For air temperatures "ti" other than +20 °C, multiply the intensities by the ratio 293/(273 + "ti")
to obtain the approximate value of the intensity after the room has been brought up to temperature.

R404A is a refrigerant only available for non-EU markets. Not compatible with F-Gas.

NCP(A) 831(B) H3(C)

(A) Fin spacing: **NCP** = 4.23 mm (positive)
NCN = 6.35 mm (negative)

(B) Model
(C) Air direction

The NC is available with CO_2, HFCs and glycol water. For more information, please consult our software.

NCN — 6,35 mm

	CONDITIONS	REFRIGERANTS	NCN ...	831	1622	1591	2393	3162	4693	6294
100 Pa (1)	SC2 (2)	CO_2 - 50 bar (3)	kW	7,2	14,1	13,6	20,9	25,8	40,0	51,3
		R449A	kW	6,5	12,5	12,6	18,4	24,7	36,9	48,5
		R404A	kW	6,2	12,0	12,0	17,7	23,8	35,4	47,4
	Airflow		m^3/h	3270	6470	6770	9680	13490	20200	26910
	Acoustics	Lp 4 m (4)	dB(A)	44	47	55	49	58	60	61
		Lw	dB(A)	74	77	85	79	88	90	91

	CONDITIONS	REFRIGERANTS	NCN ...	831	1622	1591	2393	3162	4693	6294
150 Pa (1)	SC2 (2)	CO_2 - 50 bar (3)	kW	6,6	12,8	13,2	19,0	25,0	38,7	49,7
		R449A	kW	5,8	11,2	12,2	16,5	23,9	35,8	47,2
		R404A	kW	5,5	10,7	11,6	15,7	23,0	34,2	45,7
	Airflow		m^3/h	2810	5560	6390	8310	12720	19040	25360
	Acoustics	Lp 4 m (4)	dB(A)	42	45	54	47	57	58	59
		Lw	dB(A)	72	75	84	77	87	88	89

	CONDITIONS	REFRIGERANTS	NCN ...	831	1622	1591	2393	3162	4693	6294
200 Pa (1)	SC2 (2)	CO_2 - 50 bar (3)	kW	-	-	12,6	-	23,8	36,8	47,4
		R449A	kW	-	-	11,6	-	22,8	34,1	44,7
		R404A	kW	-	-	11,0	-	21,9	32,5	43,5
	Airflow		m^3/h	-	-	5880	-	11680	17470	23260
	Acoustics	Lp 4 m (4)	dB(A)	-	-	52	-	55	56	58
		Lw	dB(A)	-	-	82	-	85	86	88

		NCN ...	831	1622	1591	2393	3162	4693	6294
Surface area		m^2	32,3	59,6	51,7	86,8	97,7	143,6	189,6
Circuit volume		dm^3	9,1	16,8	14,5	24,4	27,5	40,4	53,3
Turbine		Nb	1	2	1	3	2	3	4
	230V/1/50 Hz	W	670	1340	-	2010	-	-	-
		A max (5)	2,9	5,8	-	8,7	-	-	-
	230-400V/3/50 Hz	W	-	-	1300	-	2600	3900	5200
		A max (5)	-	-	3,4	-	6,8	10,2	13,6
Electric defrost E1U (6)	Coil + drain pan	Nb	5+1	5+1	5+1	5+1	5+1	5+1	5+1
	230-400V/3/50 Hz	W total	3900	6600	5400	9600	9600	17100	22800
		A total	9.8/5.6	16.6/9.5	13.6/7.8	24.1/13.9	24.1/13.9	42.9/24.7	57.2/32.9
Connections	Inlet	Ø	5/8"	5/8"	5/8"	7/8"	7/8"	1"1/8	1"1/8
R404A	Outlet	Ø	7/8"	1"1/8	1"1/8	1"3/8	1"3/8	1"5/8	2"1/8
Net weight		kg	88	151	118	200	241	305	463

(1) Additional available air pressure in pascals.
(2) Standard conditions:
SC1 / +10 °C (air inlet temp.) / 0 °C (evaporating temp.) / DT1 = 10K
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
(3) Operating pressure - Specific coil - Connection diameters to be defined when ordering.
(4) Average sound pressure level in dB(A) calculated at 4 m, level with the turbines, in a free field over a reflecting plane, given as an indication only.
(5) Adjustment of overload protection. For air temperatures "ti" other than +20 °C, multiply the intensities by the ratio 293/(273 + "ti")
to obtain the approximate value of the intensity after the room has been brought up to temperature.
(6) Electric defrost option.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

Technical specifications obtained with the VVU or VVK speed variation option:

VVU and VVK: 831 - 1622 - 2393

VVU Factory-assembled variable speed drive.
VVK Variable speed drive kit sent with the selected unit cooler.

- IP54 enclosure.
- Single-phase electronic voltage regulator.
- Potentiometer control.
- One variable voltage regulator per motorized fan.
- Adjustment of minimum voltage.
- Wiring diagram.

VVK: 1591 - 3162 - 4693 - 6294

This option is a kit sent with the selected unit cooler.

- Electromechanical voltage regulator.
- Manual rotary switch.
- Five staggered rotation speeds.
- Wiring diagram.

NCP — 4,23 mm

100 Pa (1)

CONDITIONS	SPEEDS	NCP ...	831	1622	1591	2393	3162	4693	6294
SC1 (2) R404A	high speed	kW	10,9	21,1	24,9	31,0	47,9	70,7	95,0
	medium speed	kW	10,2	19,7	23,6	29,0	45,4	67,2	90,2
	low speed	kW	8,6	17,3	20,7	26,0	40,0	59,0	79,6
SC2 (2) R404A	high speed	kW	7,1	13,9	16,5	20,4	31,7	46,8	63,2
	medium speed	kW	6,7	13,0	15,7	19,1	30,1	44,5	60,0
	low speed	kW	5,7	11,4	13,7	17,1	26,5	39,1	53,0
Airflow	high speed	m^3/h	3200	6310	8190	9420	16150	24100	32040
	medium speed	m^3/h	2890	5680	7460	8450	14710	21940	29170
	low speed	m^3/h	2270	4630	6020	7150	11810	17630	23670
Acoustics **Lp** 4 m (3)	high speed	dB(A)	44	47	59	49	61	63	64
	medium speed	dB(A)	40	43	55	45	57	59	60
	low speed	dB(A)	32	35	50	37	53	55	56

150 Pa (1)

CONDITIONS	SPEEDS	NCP ...	831	1622	1591	2393	3162	4693	6294
SC1 (2) R404A	high speed	kW	9,6	18,6	23,7	27,3	45,7	67,6	90,9
	medium speed	kW	9,3	18,0	22,4	26,5	43,6	64,5	86,5
	low speed	kW	8,0	16,01	20,3	24,1	39,2	58,2	78,0
SC2 (2) R404A	high speed	kW	6,3	12,3	15,8	18,1	30,3	44,7	60,5
	medium speed	kW	6,2	11,9	15,0	17,6	28,9	42,6	57,6
	low speed	kW	5,3	10,6	13,5	16,0	26,0	38,5	51,9
Airflow	high speed	m^3/h	2740	5400	7610	8060	14990	22350	29720
	medium speed	m^3/h	2640	5180	6990	7720	13770	20550	27330
	low speed	m^3/h	2110	4320	5890	6720	11580	17300	23010
Acoustics **Lp** 4 m (3)	high speed	dB(A)	42	45	57	46	60	62	62
	medium speed	dB(A)	36	38	51	39	54	56	56
	low speed	dB(A)	29	32	46	33	49	51	52

200 Pa (1)

CONDITIONS	SPEEDS	NCP ...	831	1622	1591	2393	3162	4693	6294
SC1 (2) R404A	high speed	kW	-	-	22,4	-	43,1	63,9	85,6
	medium speed	kW	-	-	21,3	-	41,2	61,1	82,8
	low speed	kW	-	-	19,7	-	37,7	55,7	75,5
SC2 (2) R404A	high speed	kW	-	-	14,9	-	28,7	42,4	57,2
	medium speed	kW	-	-	14,2	-	27,4	40,5	55,3
	low speed	kW	-	-	13,1	-	25,1	37,0	50,4
Airflow	high speed	m^3/h	-	-	6950	-	13670	20390	27100
	medium speed	m^3/h	-	-	6470	-	12690	18910	25590
	low speed	m^3/h	-	-	5610	-	10980	16310	22080
Acoustics **Lp** 4 m (3)	high speed	dB(A)	-	-	55	-	58	60	61
	medium speed	dB(A)	-	-	47	-	50	52	53
	low speed	dB(A)	-	-	45	-	48	50	51

R404A is a refrigerant only available for non-EU markets. Not compatible with F-Gas.

Technical specifications obtained with the VVU or VVK speed variation option:

VVU and VVK: 831 - 1622 - 2393

VVU Factory-assembled variable speed drive.
VVK Variable speed drive kit sent with the selected unit cooler.

- IP54 enclosure.
- Single-phase electronic voltage regulator.
- Potentiometer control.
- One variable voltage regulator per motorized fan.
- Adjustment of minimum voltage.
- Wiring diagram.

VVK: 1591 - 3162 - 4693 - 6294

This option is a kit sent with the selected unit cooler.

- Electromechanical voltage regulator.
- Manual rotary switch.
- Five staggered rotation speeds.
- Wiring diagram.

NCN — 6,35 mm

	CONDITIONS	SPEEDS	NCN ...	831	1622	1591	2393	3162	4693	6294
100 Pa (1)	SC2 (2) R404A	high speed	kW	6,2	12,0	13,5	17,7	26,8	39,8	53,3
		medium speed	kW	5,8	11,3	12,8	16,7	25,4	38,0	50,8
		low speed	kW	5,0	9,7	11,5	14,6	22,7	33,2	45,4
	Airflow	high speed	m^3/h	3270	6470	8450	9680	16740	25020	33290
		medium speed	m^3/h	2960	5860	7630	8740	15110	22910	30480
		low speed	m^3/h	2300	4550	6220	7030	12320	17970	24850
	Acoustics **Lp** 4 m (3)	high speed	dB(A)	44	47	59	49	62	64	65
		medium speed	dB(A)	40	43	55	45	58	60	61
		low speed	dB(A)	32	35	50	37	53	56	57

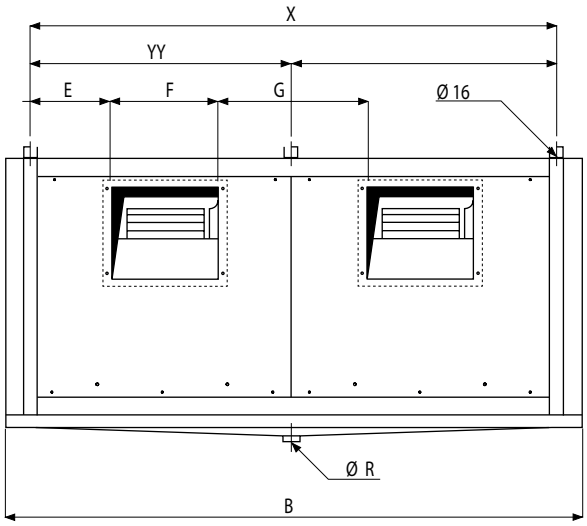
	CONDITIONS	SPEEDS	NCN ...	831	1622	1591	2393	3162	4693	6294
150 Pa (1)	SC2 (2) R404A	high speed	kW	5,5	10,7	13,1	15,7	25,8	38,3	51,3
		medium speed	kW	5,3	10,1	12,01	15,1	23,5	35,4	47,3
		low speed	kW	4,3	8,5	10,2	12,7	19,6	29,5	39,5
	Airflow	high speed	m^3/h	2810	5560	7910	8310	15630	23340	31050
		medium speed	m^3/h	2430	4630	7080	6980	14100	21130	28180
		low speed	m^3/h	1930	3940	6430	5980	12880	19380	25880
	Acoustics **Lp** 4 m (3)	high speed	dB(A)	42	45	58	47	61	63	63
		medium speed	dB(A)	36	38	52	39	55	57	57
		low speed	dB(A)	29	32	47	34	50	52	53

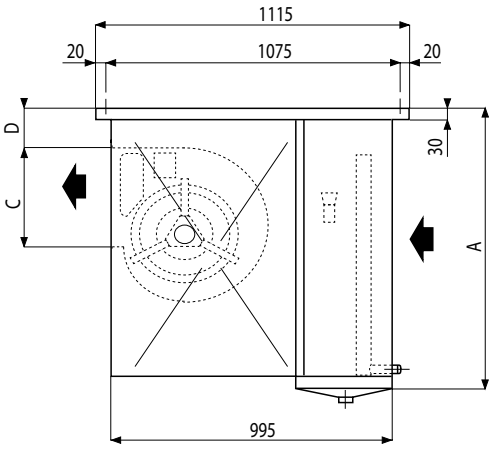
	CONDITIONS	SPEEDS	NCN ...	831	1622	1591	2393	3162	4693	6294
200 Pa (1)	SC2 (2) R404A	high speed	kW	-	-	12,4	-	24,6	36,5	48,8
		medium speed	kW	-	-	11,9	-	23,3	34,8	47,3
		low speed	kW	-	-	11,0	-	21,6	32,2	43,0
	Airflow	high speed	m^3/h	-	-	7240	-	14290	21330	28380
		medium speed	m^3/h	-	-	6710	-	13110	19560	26730
		low speed	m^3/h	-	-	5820	-	11430	17060	22700
	Acoustics **Lp** 4 m (3)	high speed	dB(A)	-	-	56	-	59	61	62
		medium speed	dB(A)	-	-	48	-	51	53	54
		low speed	dB(A)	-	-	46	-	49	51	52

(1) Additional available air pressure in pascals.
(2) Standard conditions:
SC1 / +10 °C (air inlet temp.) / 0 °C (evaporating temp.) / DT1 = 10K
SC2 / 0 °C (air inlet temp.) / -8 °C (evaporating temp.) / DT1 = 8K
(3) Average sound pressure level in dB(A) calculated at 4 m, level with the turbines, in a free field over a reflecting plane, given as an indication only.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

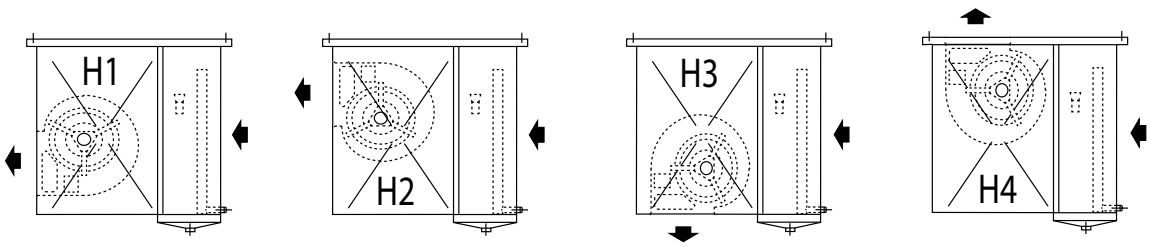
NC





		831	1622	1591	2393	3162	4693	6294
A	**mm**	760	760	870	765	875	880	880
B	**mm**	1170	1810	1490	2450	2450	3410	4370
C	**mm**	290	290	342	290	342	342	342
D	**mm**	152	152	197	152	197	197	197
E	**mm**	234	234	363	234	363	363	363
F	**mm**	331	331	395	331	395	395	395
G	**mm**	-	306	-	306	564	564	564
X	**mm**	790	1430	1110	2070	2070	3030	3990
Y	**mm**	-	-	-	-	-	-	1995
Ø R	**mm**	1"	1"	1"	1"1/2	1"1/2	1"1/2	1"1/2

NC | Blower positions



FRIGA-BOHN®

MA

Axial fan condenser
Commercial range

HFC

2.8 - 12.4 kW

Modular concept (coil + separate motors) where blowing is possible both vertically and horizontally.

The quick connection of the motor fan enables **easy installation**.

"Plug & play" motor fan for **easy maintenance**.

VENTILATION

2 single-fan models and 1 dual-fan model, Ø 355 mm.

Available in 04P, 06P and 08P ensuring an optimal noise level.

Motor fan(s) delivered unmounted, cable gland to be positioned at the bottom.

COILS

Aluminium fins with 3.17 mm spacing.

Combined with staggered copper tubes, the coils are very efficient and compact.

Completely covered with polyester protection as standard.

CASING

Galvanized sheet steel covered with white polyester paint.

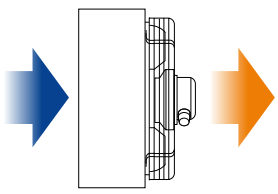
OPTIONS

PIE Feet for floor mounting allowing vertical air discharge.

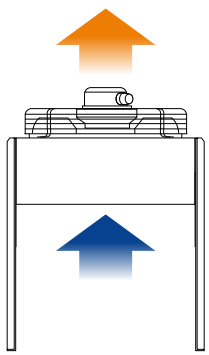
KIT TO INSTALL

Both horizontal and vertical installation are possible with the standard feet!

In case of installation with horizontal air direction, remember to take into account the direction of the prevailing winds to avoid any risk of recirculation of hot air!



Horizontal air position



Vertical air position

MA 1(A) 04P(B)

(A) Model
(B) **04P** = 1,300 rpm
06P = 910 rpm
08P = 650 rpm

The MA is available with HFCs. For more information, please consult our software.

MA ... 04P - (1,300 rpm)

3.17 mm

CONDITIONS	REFRIGERANTS	MA ...	1 04P	2 04P	3 04P
DT = 15K	**R449A**	**kW**	**4,1**	**8,0**	**12,4**
	R404A	**kW**	**4,1**	**7,9**	**12,3**
Surface area		**m^2**	5,7	13,0	20,9
Circuit volume		**dm^3**	0,9	1,9	3,4
Fan 230V/1/50Hz (1)	Airflow	**m^3/h**	1970	2300	4200
	Nb x Ø	**mm**	1 x 355	1 x 355	2 x 355
Energy class			E	D	E
Acoustics	**Lw** (2)	**dB(A)**	77	77	80
	Lp (3)	**dB(A)**	46	46	49
Inlet	Ø **E**	**ODF* / ODM****	8 mm-3/8"ODM	1/2"	5/8"
Outlet	Ø **S**	**ODF* / ODM****	8 mm-3/8"ODM	1/2"	5/8"
Net weight with fan(s)		**kg**	7	12	15

MA ... 06P - (910 rpm)

3.17 mm

CONDITIONS	REFRIGERANTS	MA ...	1 06P	2 06P	3 06P
DT = 15K	**R449A**	**kW**	**3,2**	**6,0**	**9,4**
	R404A	**kW**	**3,2**	**5,8**	**9,2**
Surface area		**m^2**	5,7	13,0	20,9
Circuit volume		**dm^3**	0,9	1,9	3,4
Fan 230V/1/50Hz (1)	Airflow	**m^3/h**	1220	1450	2650
	Nb x Ø	**mm**	1 x 355	1 x 355	2 x 355
Energy class			E	D	D
Acoustics	**Lw** (2)	**dB(A)**	68	68	71
	Lp (3)	**dB(A)**	37	37	40
Inlet	Ø **E**	**ODF* / ODM****	8 mm-3/8"ODM	1/2"	5/8"
Outlet	Ø **S**	**ODF* / ODM****	8 mm-3/8"ODM	1/2"	5/8"
Net weight with fan(s)		**kg**	7	12	15

MA ... 08P - (650 rpm)

3.17 mm

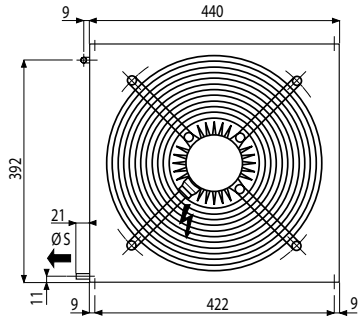
CONDITIONS	REFRIGERANTS	MA ...	1 08P	2 08P	3 08P
DT = 15K	**R449A**	**kW**	**2,9**	**5,0**	**8,0**
	R404A	**kW**	**2,8**	**4,7**	**7,8**
Surface area		**m^2**	5,7	13,0	20,9
Circuit volume		**dm^3**	0,9	1,9	3,4
Fan 230V/1/50Hz (1)	Airflow	**m^3/h**	950	1110	2060
	Nb x Ø	**mm**	1 x 355	1 x 355	2 x 355
Energy class			E	D	D
Acoustics	**Lw** (2)	**dB(A)**	57	57	60
	Lp (3)	**dB(A)**	26	26	29
Inlet	Ø **E**	**ODF* / ODM****	8 mm-3/8"ODM	1/2"	5/8"
Outlet	Ø **S**	**ODF* / ODM****	8 mm-3/8"ODM	1/2"	5/8"
Net weight with fan(s)		**kg**	7	12	15

(1) 04P : 205 W max - 0.90 A max (4) - 06P: 95 W max - 0.45 A max (4) - 08P: 74 W max - 0.35 A max (4)
(2) Sound power level in dB(A), obtained in accordance with standard NF EN 13487 (parallelepiped reference surface).
(3) Sound pressure in dB(A) measured at 10 m, parallelepiped measuring surface, in a free field over a reflecting plane, given as an indication only. Values measured under nominal operating conditions, with clean coil, at rated voltage.
(4) Adjustment of overload protection.

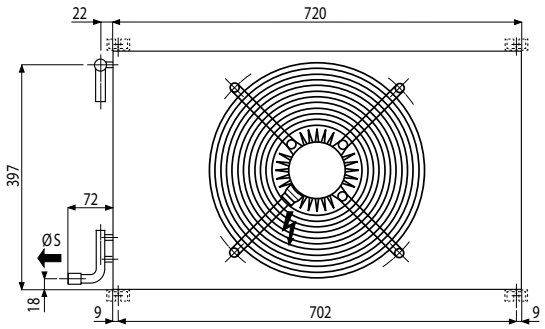
* ODF: female to receive the tube of the same diameter.
** ODM: male to receive the tube of the same diameter.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

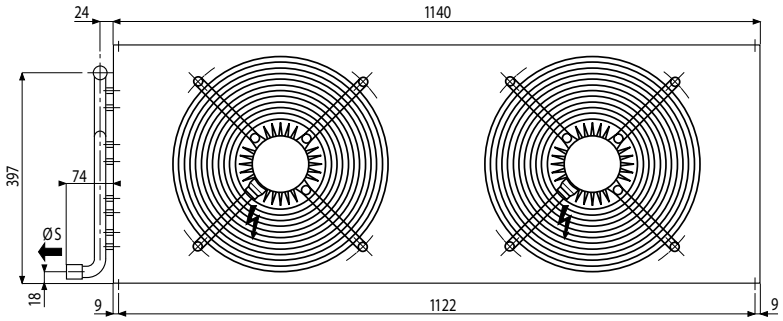
MA 1



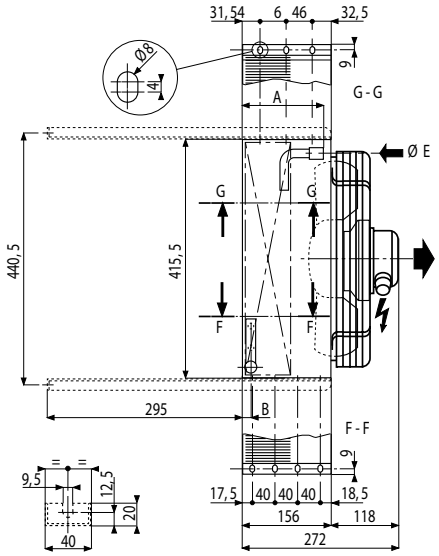
MA 2



MA 3



MA 1 - 2 - 3



		MA 1 ...	MA 2 ...	MA 3 ...
A	**mm**	125	122	122
B	**mm**	34	15	15
Packing	**mm**	570 x 430 x 185	880 x 430 x 185	1280 x 460 x 185
Fan package	**mm**	460 x 460 x 185 (x1)	460 x 460 x 185 (x1)	460 x 460 x 185 (x2)

FRIGA-BOHN®

WA

Axial fan condenser
Commercial range

HFC

7.8 - 95 kW

Modular product that adapts to the needs of the application with a wide choice of coils and motor fans.

The design of the WA allows **installation flexibility** (horizontal or vertical) for two air delivery directions.

"Plug & play" motor fan for **easy maintenance**.

CASING

Robust, made of white pre-painted galvanized sheet steel.

The use of stainless steel fasteners gives it excellent corrosion resistance and long-lasting aesthetics.

Select your coil treatment to extend your unit cooler's lifespan! Contact us.

COILS

Aluminium fins with 2.12 mm spacing.

Combined with staggered copper tubes, the coils are very efficient and compact.

Covered with polyester protection as standard.

VENTILATION

Axial motor fans with external rotor requiring no specific maintenance:
Ø 500 mm, 2 speeds:
- 04/06P = 1,500/1,000 rpm
- 08/12P = 750/500 rpm

Ø 630 mm, 2 speeds:
- 04/06P = 1,500/1,000 rpm
- 06/08P = 1,000/750 rpm
- 16P = 375 rpm

400V, three-phase, 50Hz, monoblock, with external rotor, with built-in thermal protector, IP 54, class F.

High efficiency, low noise profiled blades.

2-speed motor connection:
Δ = high speed,
Y = low speed.

"Plug & play" motor fans for easy maintenance.

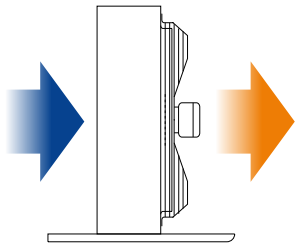
OPTIONS	
IRP	Rotary proximity switch(es).
M60	Motor fan 400V/3/60Hz (Ø 630 mm).
MM5	Motor fan 230V/1/50Hz - 04P - 06P - 08P.
M24*	Motor fan 230V/3/50-60Hz - 08/12P.

* Motor fans not held in stock.

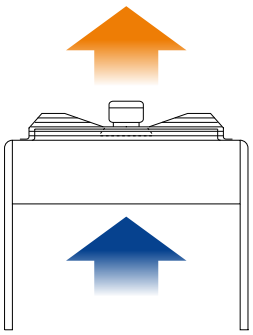
Both horizontal and vertical installation are possible with the standard feet!

In case of installation with horizontal air direction, remember to take into account the direction of the prevailing winds to avoid any risk of hot air recirculation!

Coils and motor fans can be supplied separately.



Horizontal air position



Vertical air position

WA 15(A) 04/06P(B)

(A) Model
(B) **04/06P** = 1,500/1,000 rpm
06/08P = 1,000/750 rpm
08/12P = 750/500 rpm
16P = 375 rpm

The WA is available with HFCs. For more information, please consult our software.

WA ... 04P/06P - (1,500/1,000 rpm)

2.12 mm

CONDITIONS	REFRIGERANTS		WA ...	15	19	22	30	39	44	48	58	67	54	59	81	95
DT = 15K	R449A	04P (Δ)	kW	14,0	18,8	21,6	28,5	37,4	43,5	43,6	55,6	62,5	54,5	61,3	82,0	95,1
		06P (Y)	kW	12,7	16,4	18,6	25,7	32,8	37,3	38,9	49,1	54,6	49,0	54,9	73,4	84,2
	R404A	04P (Δ)	kW	14,1	18,6	21,1	28,6	37,0	42,5	43,6	55,1	61,6	54,2	60,2	81,4	93,0
		06P (Y)	kW	12,7	16,2	18,0	25,6	32,3	36,2	38,9	48,4	53,1	48,4	53,4	72,7	81,7
Surface area			m^2	18	26	35	35	53	70	53	79	105	72	95	107	143
Circuit tube vol.			dm^3	3	4	6	6	9	12	9	13	18	12	16	18	24
Fan *	Airflow	04P (Δ)	m^3/h	7500	6940	6450	15010	13870	12910	22520	20810	19360	21350	19480	32030	29230
		06P (Y)	m^3/h	6050	5510	5070	12100	11020	10130	18140	16540	15200	17510	16010	26260	24010
			Nb x mm	1 x 500	1 x 500	1 x 500	2 x 500	2 x 500	2 x 500	3 x 500	3 x 500	3 x 500	2 x 630	2 x 630	3 x 630	3 x 630
Energy class		04P/06P		E/E	E/E	E/D	E/E	E/E	E/D	E/E	E/E	E/D	E/E	E/E	E/E	E/E
Acoustics	Lw (1)	04P (Δ)	dB(A)	74	73	73	77	76	76	79	78	78	93	93	95	95
		06P (Y)	dB(A)	69	68	68	72	71	71	74	72	72	85	85	87	87
	Lp (2)	04P (Δ)	dB(A)	43	42	42	46	45	45	48	47	47	62	62	63	63
		06P (Y)	dB(A)	38	37	37	41	40	40	43	41	41	54	54	55	55
Inlet			ODF (4)	1/2"	5/8"	5/8"	3/4"	7/8"	7/8"	7/8"	1"1/8	1"1/8	1"1/8	1"1/8	1"3/8	1"3/8
Outlet			ODF (4)	1/2"	5/8"	5/8"	5/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	1"1/8	1"1/8	1"1/8
Net weight			kg	36	40	44	63	72	80	92	104	116	93	103	137	152

* Ø 500 mm - 400 V/3/50 Hz - Δ: 710 W max - 1.4 A max (3) - Y: 480 W max - 0.8 A max (3)
Ø 630 mm - 400 V/3/50 Hz - Δ: 1,900 W max - 3.2 A max (3) - Y: 1,350 W max - 2.2 A max (3)

WA ... 06P/08P - (1,000/750 rpm)

2.12 mm

CONDITIONS	REFRIGERANTS		WA ...	41	42	57	65
DT = 15K	R449A	06P (Δ)	kW	40,6	45,0	61,1	68,2
		08P (Y)	kW	35,4	38,5	53,3	58,1
	R404A	06P (Δ)	kW	39,7	43,3	59,7	65,3
		08P (Y)	kW	34,5	36,7	51,9	55,4
Surface area			m^2	72	95	107	143
Circuit tube vol.			dm^3	12	16	18	24
Fan *	Airflow	06P (Δ)	m^3/h	12800	11630	19200	17440
		08P (Y)	m^3/h	10300	9270	15440	13910
			Nb x mm	2 x 630	2 x 630	3 x 630	3 x 630
Energy class		06P/08P		D/D	D/C	D/D	D/D
Acoustics	Lw (1)	06P (Δ)	dB(A)	83	83	85	85
		08P (Y)	dB(A)	77	77	79	79
	Lp (2)	06P (Δ)	dB(A)	52	52	53	53
		08P (Y)	dB(A)	46	46	47	47
Inlet			ODF (4)	1"1/8	1"1/8	1"3/8	1"3/8
Outlet			ODF (4)	7/8"	1"1/8	1"1/8	1"1/8
Net weight			kg	89	99	131	146

* Ø 630 mm - 400 V/3/50 Hz - Δ: 420 W max - 0.78 A max (3) - Y: 300 W max - 0.5 A max (3)

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

WA 15(A) 04/06P(B)

(A) Model
(B) **04/06P** = 1,500/1,000 rpm
06/08P = 1,000/750 rpm
08/12P = 750/500 rpm
16P = 375 rpm

> **The WA is available with HFCs. For more information, please consult our software.**

WA ... 08P/12P - (750/500 rpm)

2.12 mm

CONDITIONS	REFRIGERANTS		WA ...	10	13	14	21	26	27	32	37	40	34	36	47	51
DT = 15K	R449A	08P (Δ)	kW	8,9	10,9	11,9	18,1	22,0	24,1	27,1	32,9	35,9	35,1	38,8	52,9	58,7
		12P (Y)	kW	7,9	9,4	10,2	15,9	19,0	20,3	23,8	28,6	30,5	28,8	30,7	43,3	46,0
	R404A	08P (Δ)	kW	8,8	10,6	11,3	17,8	21,2	22,8	26,7	31,9	34,0	34,3	37,1	51,5	56,1
		12P (Y)	kW	7,8	9,0	9,6	15,6	18,3	19,0	23,4	27,4	28,5	27,8	28,9	41,6	43,5
Surface area			m^2	18	26	35	35	53	70	53	79	105	72	95	107	143
Circuit tube vol.			dm^3	3	4	6	6	9	12	9	13	18	12	16	18	24
Fan *	Airflow	08P (Δ)	m^3/h	3230	2940	2710	6460	5880	5420	9690	8820	8130	10170	9400	15250	14100
		12P (Y)	m^3/h	2620	2390	2180	5250	4780	4360	7880	7170	6550	7540	6800	11300	10200
			Nb x mm	1 x 500	1 x 500	1 x 500	2 x 500	2 x 500	2 x 500	3 x 500	3 x 500	3 x 500	2 x 630	2 x 630	3 x 630	3 x 630
Energy class		08P/12P		C/C	C/B	C/B	C/C	C/B	C/B	C/C	C/B	C/B	C/C	C/C	C/C	C/C
		12P (Y)		C	B	B	C	B	B	C	B	B	C	C	C	C
Acoustics	Lw (1)	08P (Δ)	dB(A)	66	66	66	69	69	69	71	71	71	67	67	69	69
		12P (Y)	dB(A)	58	58	58	61	61	61	63	63	63	60	60	62	62
	Lp (2)	08P (Δ)	dB(A)	35	35	35	38	38	38	40	40	40	36	36	37	37
		12P (Y)	dB(A)	27	27	27	30	30	30	32	32	32	29	29	30	30
Inlet			ODF (4)	1/2"	5/8"	5/8"	3/4"	7/8"	7/8"	7/8"	1"1/8	1"1/8	1"1/8	1"1/8	1"3/8	1"3/8
Outlet			ODF (4)	1/2"	5/8"	5/8"	5/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	1"1/8	1"1/8	1"1/8
Net weight			kg	36	40	44	63	72	80	92	104	116	89	99	131	146

* Ø 500 mm - 400 V/3/ 50-60 Hz - Δ: 120 W max - 0.35 A max (3) - Y: 80 W max - 0.16 A max (3)
Ø 630 mm - 400 V/3/50-60 Hz - Δ: 235 W max - 0.55 A max (3) - Y: 140 W max - 0.27 A max (3)

WA ... 16P - (375 rpm)

2.12 mm

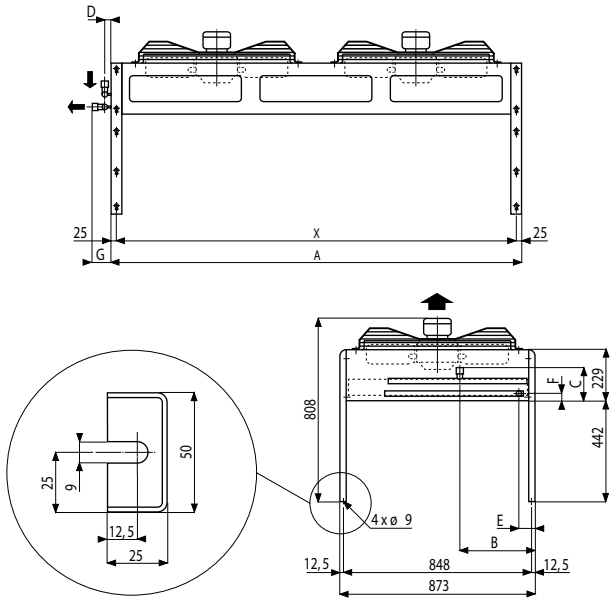
CONDITIONS	REFRIGERANTS		WA ...	23	24	28	29
DT = 15K	R449A	16P (Y)	kW	21,5	22,6	32,4	33,8
	R404A	16P (Y)	kW	20,4	20,8	30,6	31,2
Surface area			m^2	72	95	107	143
Circuit tube vol.			dm^3	12	16	18	24
Fan *	Airflow	16P (Y)	m^3/h	5000	4560	7500	6840
			Nb x mm	2 x 630	2 x 630	3 x 630	3 x 630
Energy class		16P		B	B	B	B
Acoustics	Lw (1)	16P (Y)	dB(A)	57	57	59	59
	Lp (2)	16P (Y)	dB(A)	26	26	27	27
Inlet			ODF (4)	1"1/8	1"1/8	1"3/8	1"3/8
Outlet			ODF (4)	7/8"	1"1/8	1"1/8	1"1/8
Net weight			kg	89	99	131	146

* Ø 630 mm - 400 V/3/50-60 Hz - Y: 90 W max - 0.2 A max (3)

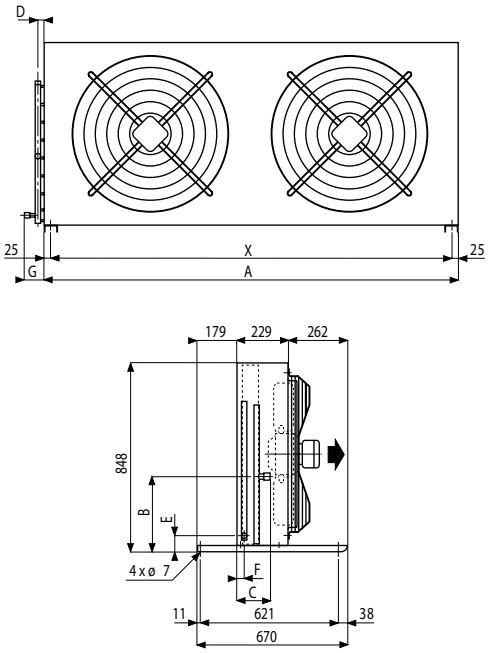
(1) Sound power level in dB(A), obtained in accordance with standard NF EN 13487 (parallelepiped reference surface).
(2) Sound pressure in dB(A) measured at 10 m, parallelepiped measuring surface, in a free field over a reflecting plane, given as an indication only.
Values measured under nominal operating conditions, with clean coil, at rated voltage.
(3) Adjustment of overload protection.
(4) ODF = Female to receive the tube of the same diameter

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

WA | Vertical air position



WA | Horizontal air position



WA ... 04P/06P		15	19	22	30	39	44	48	58	67	54	59	81	95
A	mm	730	730	730	1390	1390	1390	2050	2050	2050	1870	1870	2770	2770
B	mm	240	520	340	340	495	390	390	470	390	470	390	455	455
C	mm	150	150	150	150	155	155	155	155	155	150	150	160	160
D	mm	20	25	25	25	30	30	30	30	30	25	25	50	50
E	mm	55	40	55	55	45	55	55	45	55	45	55	45	60
F	mm	73	53	34	73	53	34	73	53	34	53	34	53	34
G	mm	78	81	81	81	88	88	92	88	88	85	85	115	115
X	mm	680	680	680	1340	1340	1340	2000	2000	2000	1820	1820	2720	2720

WA ... 06P/08P		41	42	57	65
A	mm	1870	1870	2770	2770
B	mm	470	390	455	455
C	mm	150	150	160	160
D	mm	25	25	50	50
E	mm	45	55	45	60
F	mm	53	34	53	34
G	mm	85	85	115	115
X	mm	1820	1820	2720	2720

WA ... 08P/12P		10	13	14	21	26	27	32	37	40	34	36	47	51
A	mm	730	730	730	1390	1390	1390	2050	2050	2050	1870	1870	2770	2770
B	mm	240	520	340	340	495	390	390	470	390	470	390	455	455
C	mm	150	150	150	150	155	155	155	155	155	150	150	160	160
D	mm	20	25	25	25	30	30	30	30	30	25	25	50	50
E	mm	55	40	55	55	45	55	55	45	55	45	55	45	60
F	mm	73	53	34	73	53	34	73	53	34	53	34	53	34
G	mm	78	81	81	81	88	88	92	88	88	85	85	115	115
X	mm	680	680	680	1340	1340	1340	2000	2000	2000	1820	1820	2720	2720

WA ... 16P		23	24	28	29
A	mm	1870	1870	2770	2770
B	mm	470	390	455	455
C	mm	150	150	160	160
D	mm	25	25	50	50
E	mm	45	55	45	60
F	mm	53	34	53	34
G	mm	85	85	115	115
X	mm	1820	1820	2720	2720

FRIGA-BOHN®

NEOSTAR

Axial fan condenser
Commercial and industrial range

HFC

18 - 1280 kW

To best meet the needs of your application, two versions of NEOSTAR are available:

- **NEOSTAR "Power":** available up to 1,250 kW, it guarantees **optimized heat exchange** and **reduced size**!

- **NEOSTAR "Silence":** the selection of its components optimizes its power consumption and makes it an **efficient** product with a **low noise level**.

Adaptability: more than 870 possible models to suit your project.

Whatever the model chosen, the NEOSTAR guarantees:
- **Easy installation** (the motors are wired and connected in the factory).
- **Easy maintenance** (quick access to the coil).

CASING

Robust, made of white pre-painted galvanized sheet steel.
The use of stainless steel fasteners gives it excellent corrosion resistance and long-lasting aesthetics.
The Neostar is delivered screwed on a wooden base.
The raised support feet available up to 1,840 mm to best meet installation constraints.

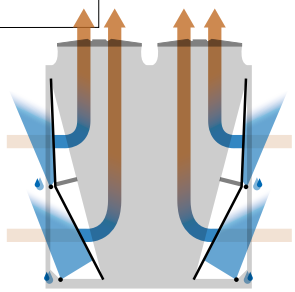
OPTIONS	
RAL	Special colour polyester paint.
REH	Feet raised by 240 mm KIT TO INSTALL (ground clearance 800 mm)
RE2	Feet raised by 840 mm KIT TO INSTALL (ground clearance 1,400 mm).
RE3	Feet raised by 1,340 mm KIT TO INSTALL (ground clearance 1,900 mm).
RE4	Feet raised by 1,840 mm KIT TO INSTALL (ground clearance 2,400 mm).
ECB	Wooden crate packaging.

Select your coil treatment to extend your unit cooler's lifespan! Contact us.

COILS

Aluminium fins with 1.9 mm spacing.
Combined with staggered, grooved copper tubes, the coils are very efficient and compact.

OPTIONS	
MCI	Multi-circuit.
WAS	Adiabatic water spray system.
AAS	Advanced Adiabatic System: adiabatic sprinkler system. CONTACT US



AAS

VENTILATION

The NEOSTAR range of air-cooled condensers is equipped as standard with two-speed external rotor motor fans (triangle and star coupling).

NEOSTAR POWER

The Neostar Power range of motor fans is equipped with motors:
- Ø 800 mm (PN): 06P (D/Y) = 885/685 rpm
- Ø 910 mm (PU): 06P (D/Y) = 880/670 rpm,

NEOSTAR SILENCE

The Neostar Silence range of motor fans is equipped with motors:
- Ø 800 mm : 08P (D/Y) = 680/540 rpm,
- Ø 800 mm : 12P (D/Y) = 440/330 rpm (special motor fan),
- Ø 800 mm : 16P (Y) = 255 rpm.

These motors are 400V/3/50Hz, protected by an enclosed casing, IP54, class F. When the heated air temperature exceeds 60 °C, contact us.

The motor fans are wired as standard and connected in the factory, as follows:
- 1 to 3 electrical boxes for L models (in-line motors),
- 2 to 8 electrical boxes for P models (parallel motors).

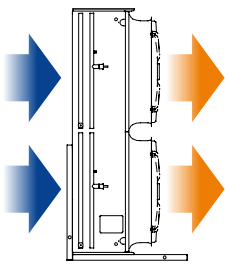
Special voltage ventilation:
- M60 : Motor fans 400 V/3/60Hz, IP54, class F, version 06P Ø 910 mm
- M26 : Motor fans 230 V/3/60Hz, IP54, class F, version 06P Ø 910 mm

OPTIONS	
M26	Motor fans 230V/3/60Hz. CONTACT US
IRP	Rotary proximity switch(es).
	AC MOTORS
M60	Motor fans 400V/3/60Hz. CONTACT US
MTH	Motors equipped with protection thermostat. Option necessary with high starting frequency (more than 30 starts per hour) or use of variable speed drives.

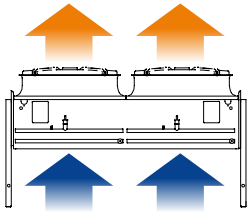
Opt for an EC motor in order to optimize the operation of your installation. Do you need an energy balance to make your decision? Contact us.

Both horizontal and vertical installation are possible with the standard feet!

In case of installation with horizontal air direction, remember to take into account the direction of the prevailing winds to avoid any risk of recirculation of hot air!



Horizontal air position



Horizontal air position

TECHNICAL DETAILS OF OPTIONS ON AC MOTORS

AC MOTOR possible options			
WIRING AND BOX	Power	**Standard (BAB) :**	**Power wiring on terminals** (no protection option integrated into this option).
		SCU	**Without motor wiring** (note that no regulation is possible with this option).
	Protection	**CMP**	**Motor protection box IP54**, including one circuit breaker per motor, a fault summary and a main switch. Possibility of floor mounting support kit (MSK).
		MSK	Floor support for cabinets above H = 800 x W = 1,000
REGULATION	**Advanced control** by variation	**RP3** (including CMP) Variable frequency drive	**An IP54 ventilated control cabinet** with a variable frequency drive including its circuit breaker protection. A pressure sensor to manage a circuit (wired but not mounted on the unit).

TECHNICAL DETAILS OF OPTIONS ON EC MOTORS

EC MOTOR possible options			
WIRING AND BOX	Power	**Standard (CSB) :**	**Power wiring on terminals.** The power, fault, bus and control wiring is carried out.
		SCM	**Without motor wiring.**
		CCE	**Power wiring in IP54 box and protection by stage included (in L for each fan and in P for 2 fans).** The bus wiring is done.
REGULATION	**Simple**	**SE1** (1)	**Direct control of the motors by customer 0-10 V signal:** one or two circuits possible.
	Advanced control	**CE4** (2)	**Automatic speed control by pressure (setpoint to be adjusted via PLC by customer) / 1 circuit:** one pressure sensor and only one circuit possible.
		CE5 (2)	**Automatic speed control by pressure (setpoint to be adjusted via PLC by customer) / 2 circuits:** 2 pressure sensors and 2 separate circuits possible (contact us in case of multiple circuits).
		CE6 (2)	**Automatic speed control by pressure (setpoint to be adjusted via PLC by customer) / signal comparison:** 2 pressure sensors and signal comparison (contact us in case of multiple circuits).
ADDITIONAL FUNCTIONS		**VMA**	**Maximum speed setting** (configuration done on each fan, via a computer). Only with standard or **CCE**.
		MJN	**Possibility of setting a maximum night speed** (clock by signal 0/10). Only with **CE4 / CE5 / CE6**

(1) *Default option if no customer choice.*

(2) *CCE mandatory option*

PN(A) 06(B) D(C) P(D) 08(E) A2(F)

(A) **PN** (Power Normal) - **PE** (Power Extra) - **PU** (Power Ultra)
SN (Silence Normal) - **SE** (Silence Extra) - **SU** (Silence Ultra)
(B) Number of poles
(C) **D** = triangle coupling
Y = star coupling
(D) Fan arrangement:
L = in-line fans
P = fans in parallel
(E) Number of fans
(F) Module type: **A** - **B** - **D**

The NEOSTAR range offers hundreds of possible configurations with:

- **2 versions**: Power or Silence,
- **2 designs**: In-Line or Parallel,
- **3 module sizes**: 1,200 mm; 1,500 mm and 2,000 mm,
- **numerous** ventilation options, etc.

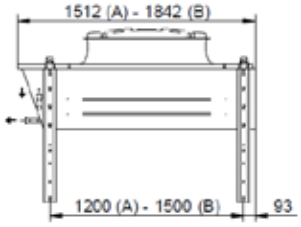
Contact your sales representative to select the right model for your application.

1.9 mm

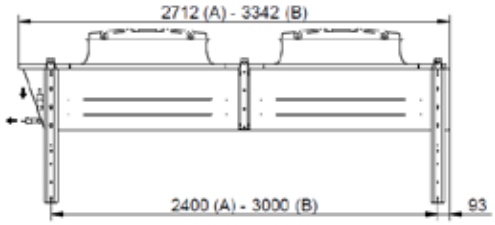
CONDITIONS	REFRIGERANTS		NEOSTAR		
DT = 15K (1)	**R449A**	**kW**	**18,3**	**>**	**1281,6**
	R404A	**kW**	**17,8**	**>**	**1237,1**
Surface area		**m²**	68	>	3399
Circuit tube volume		**dm³**	9	>	424
Fan	Airflow	**m³/h**	4980	>	365530
		Nb x mm	1 x 800 mm	>	16 x 910 mm
Acoustics	**Lp** (2)	**dB(A)**	16	>	67
	Lw (3)	**dB(A)**	48	>	100
Actual power consumption (4)		**W total**	105	>	39680
Energy class			A+	>	E
Net weight		**kg**	150	>	2390

(1) DT = difference between the ambient temperature and the condensing temperature considered to be equal to the pressure equivalent at the condenser inlet.
(2) Sound pressure in dB(A) measured at 10 m, parallelepiped measuring surface, in a free field over a reflecting plane, given as an indication only.
Values measured under nominal operating conditions, with clean coil, at rated voltage.
(3) Sound power level in dB(A), obtained in accordance with standard NF EN 13487 (parallelepiped reference surface).
(4) Power consumption of all motors.

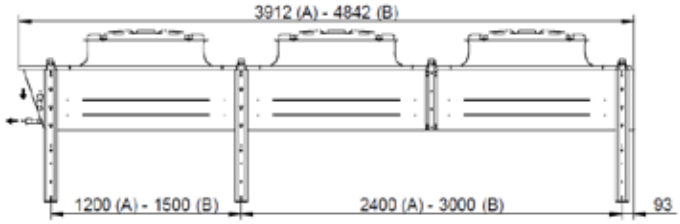
R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).



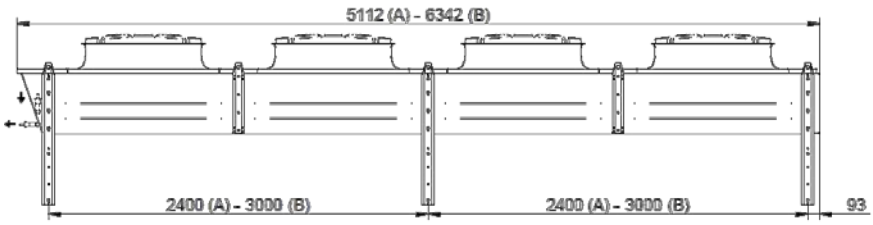
(A) ... L01 A... / P02 A...
(B) ... L01 B... / ... P02 B...



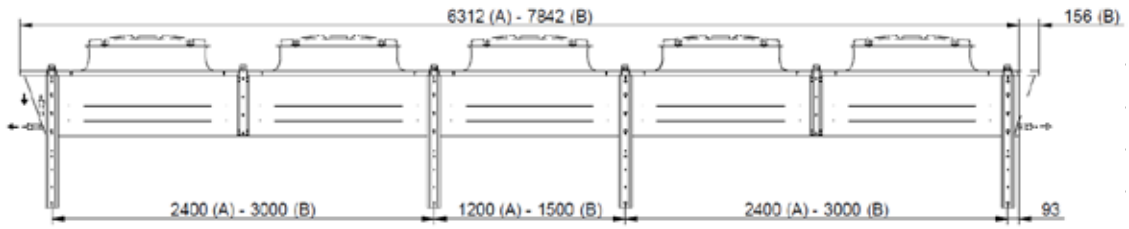
(A) ... L02 A... / P04 A...
(B) ... L02 B... / ... P04 B...



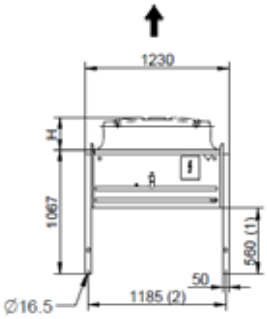
(A) ... L03 A... / P06 A...
(B) ... L03 B... / ... P06 B...

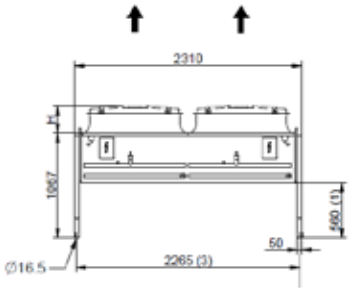


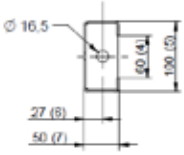
(A) ... L04 A... / P08 A...
(B) ... L04 B... / ... P08 B...



(A) ... L05 A... / P10 A...
(B) ... L05 B... / ... P10 B...

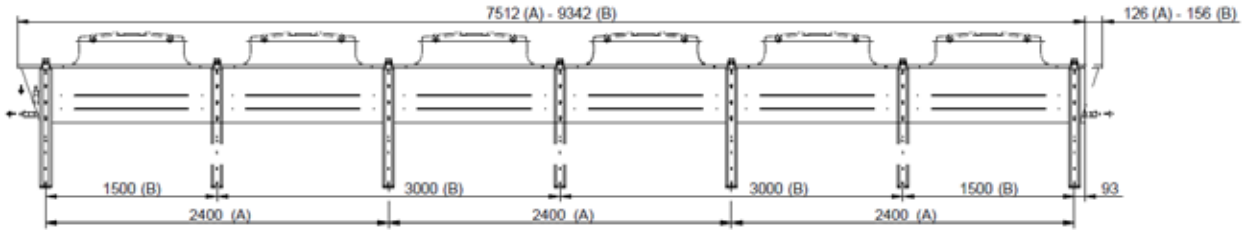




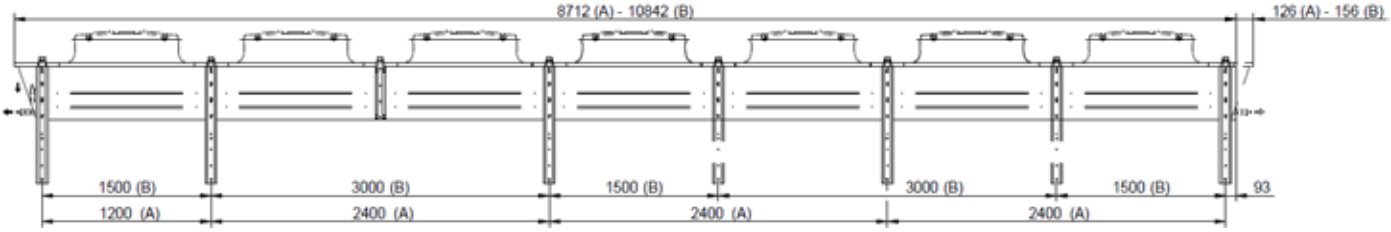


Options	(1)	(2)	(3)	(4)	(5)	(6)	(7)
REH	800	1185	2265	60	1000	27	50
RE2	1400	1205	2285	90	130	37	70
RE3	1900	1205	2285	90	130	37	70
RE4	2400	1205	2285	90	130	37	80

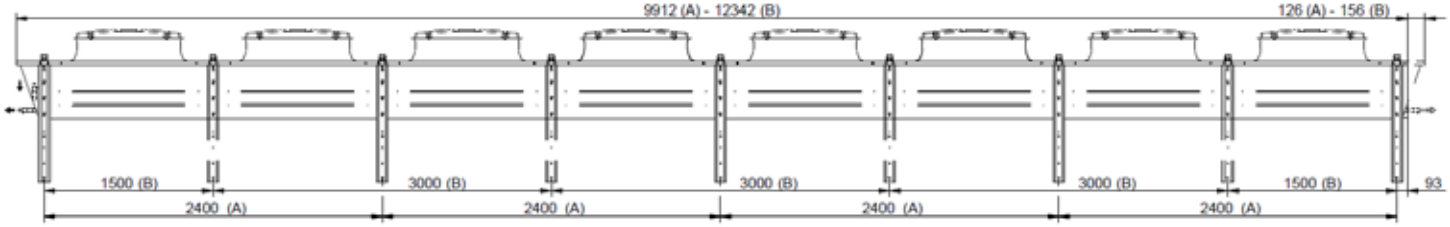
Type	(1)
PM04D/04Y	380
PU06D/06Y	350
PN06D/06Y	340
SN08D/08Y	330
SE12D/SU12Y	330
HPU06D/06Y	380
HSN08D/08Y	380
SAEC	330
SUEC	240
PE EC	370



(A)... L06 A... / P12 A...
(B)... P12 B...

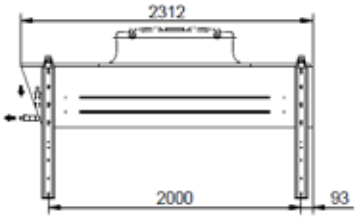


(A)... P14 A...
(B)... P14 B...

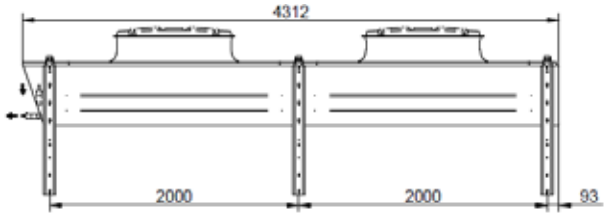


(A)... P16 A...
(B)... P16 B...

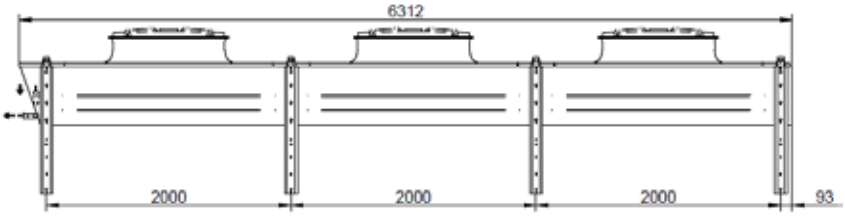
Type	H
PM04D/04Y	380
PU06D/06Y	350
PN06D/06Y	340
SN08D/08Y	330
SE12D/SU12Y	330
HPU06D/06Y	380
HSN08D/08Y	380
SAEC	330
SUEC	240
PE EC	370



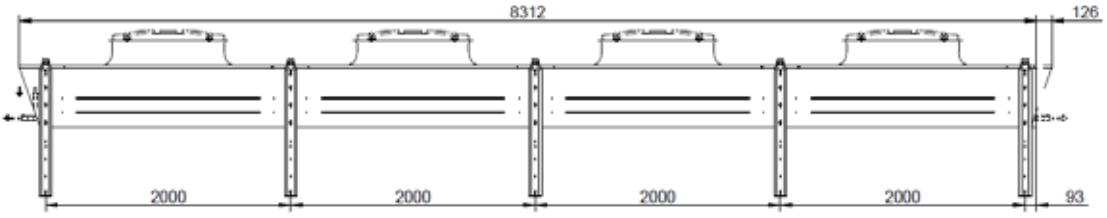
... L01 D... / ... P02 D...



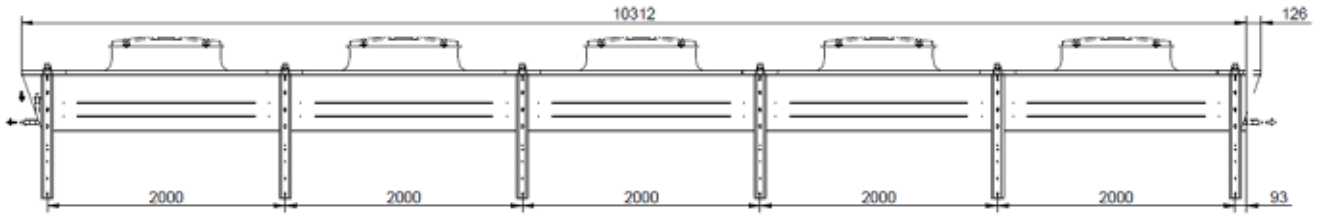
... L02 D... / ... P04 D...



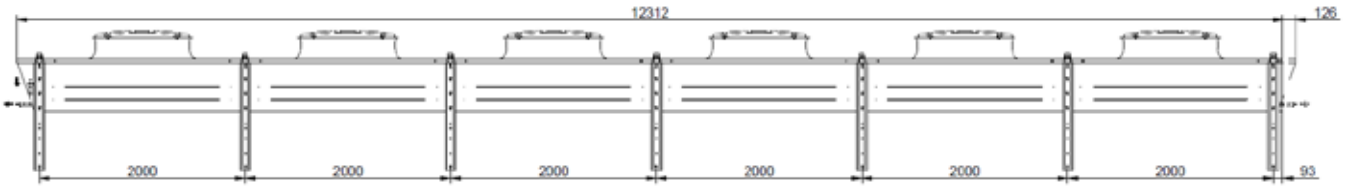
... L03 D... / ... P06 D...



... L04 D.... / ... P08 D...



... P10 D...



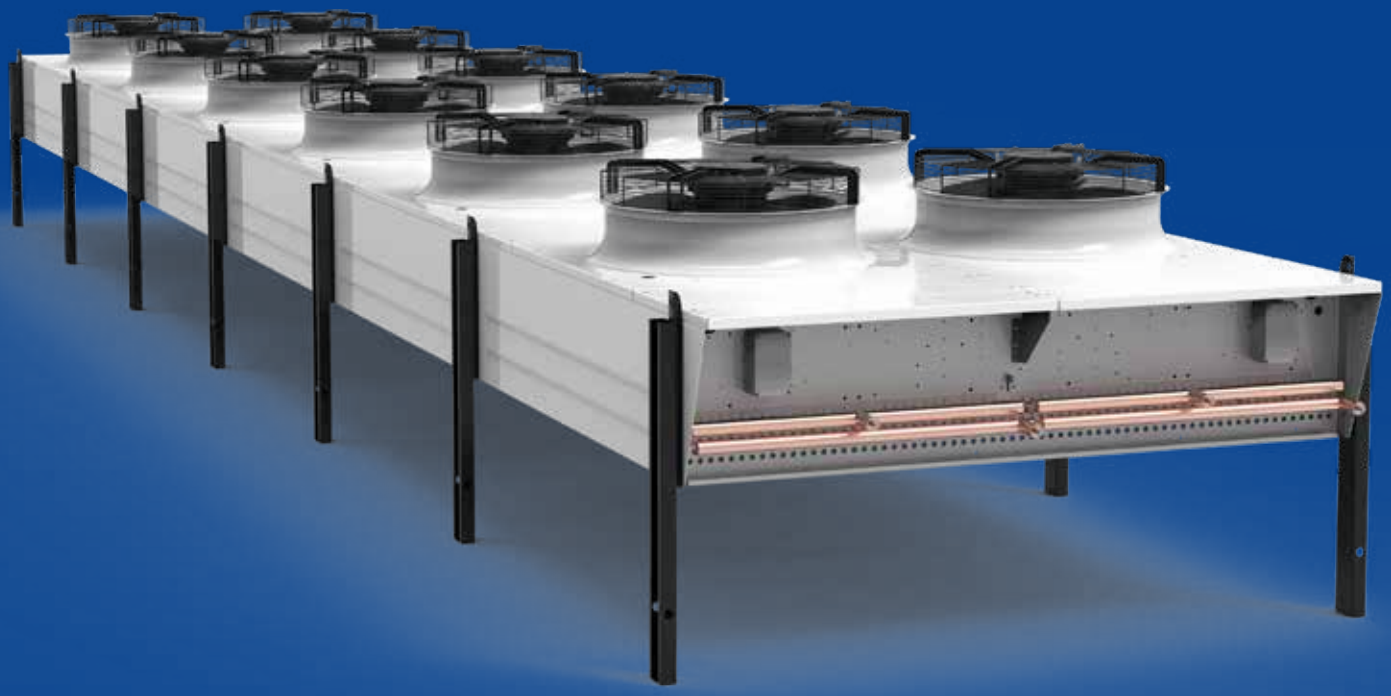
... P12 D...

FRIGA-BOHN®

GC NEOSTAR

Axial fan gas cooler
Commercial and industrial range

CO2 130bar



30 - 800 kW

Robustness: Our GC NEOSTAR gas coolers have been designed to ensure the highest level of quality and durability thanks to :
- A **floating coil design** that uses support tubes which help removing mechanical stress on the refrigerant tubes.
- A standard **operating pressure of 130 bar**.
- Pressure and **leakage resistance tests performed on 100%** of the products.

Adaptability: more than 500 possible models to perfectly suit your project.

Whatever the model chosen, the GC NEOSTAR guarantees:
- **Easy installation** (the motors are wired and connected in the factory).
- **Easy maintenance** (quick access to the coil).
- **Low energy consumption** (EC motors as standard).

CASING

Robust, made of white pre-painted galvanized sheet steel.
The use of stainless steel fasteners gives it excellent corrosion resistance and long-lasting aesthetics.
The Neostar is delivered screwed on a wooden base.
The raised support feet available up to 1,840 mm to best meet installation constraints.

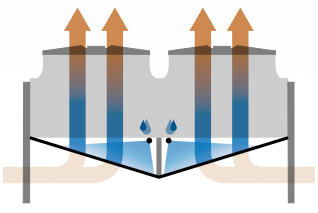
OPTIONS	
RAL	Special colour polyester paint.
REH	Feet raised by 240 mm KIT TO INSTALL (ground clearance 800 mm)
RE2	Feet raised by 840 mm KIT TO INSTALL (ground clearance 1,400 mm).
RE3	Feet raised by 1,340 mm KIT TO INSTALL (ground clearance 1,900 mm).
RE4	Feet raised by 1,840 mm KIT TO INSTALL (ground clearance 2,400 mm).
ECB	Wooden crate packaging.
PAV	Silent blocks.
LIV	Vertical delivery.

Select your coil treatment to extend your unit cooler's lifespan! Contact us.

COILS

Corrugated aluminium fins with 2.12mm spacing, limiting clogging and allowing efficient cleaning.
Combined with staggered, copper tubes, the coils are very efficient and compact.
Standard operating pressure of 130 bar.
The battery is mechanically isolated from the bodywork thanks to support tubes, removing the mechanical stress on the refrigerant tubes and thus increasing the product's lifespan (photo).

OPTIONS	
INH	Stainless steel connection.
WAS	Adiabatic water spray system
AAS	Advanced adiabatic water spray system CONTACT US



AAS

VENTILATION

The GC NEOSTAR gas cooler range is equipped as standard with EC technology fans.

GC NEOSTAR POWER

The GC NEOSTAR POWER range of motor fans is equipped with motors:
- Ø 960 mm (PE EC) 380/960 rpm

GC NEOSTAR SILENCE

The GC NEOSTAR SILENCE range of motor fans is equipped with motors:
- Ø 800 mm (SA EC) : 250/1000 rpm
- Ø 800 mm (SU EC) : 250/730 rpm
- Ø 960 mm (PU) : 06P (D/Y) = 380/960 rpm,

These motors are 400V/3/50-60Hz, protected by an enclosed casing, IP54, class F.
The motor fans are wired as standard and connected in the factory, as follows:
- 1 to 3 electrical boxes for L models (in-line motors),
- 2 to 6 electrical boxes for P models (parallel motors).

OPTIONS	
IRP	Rotary proximity switch(es).
ATT	Noise level attenuator.

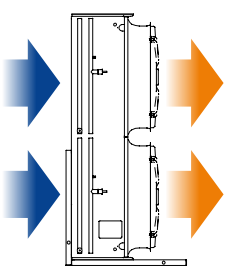
ATT

NOISE LEVEL ATTENUATOR

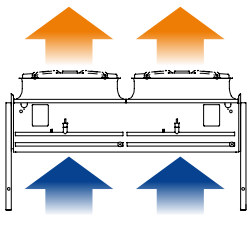
as an accessory or **integral part of the motor**

Both horizontal and vertical installation are possible with the standard feet!

In case of installation with horizontal air direction, remember to take into account the direction of the prevailing winds to avoid any risk of recirculation of hot air!



Horizontal air position



Horizontal air position

GC(A)FS(B)SA EC(C)L(D)02(E)A2(F)

(A) **GC** = Gas Cooler
(B) Type : **FS** = Flat design - **VS** = V Shape design
(C) **SU EC** = Silence Ultra
SA EC = Silence Advanced
PE EC = Power Extra
(D) Fan arrangement:
L = in-line fans
P = parallel fans
(E) Number of fans
(F) Type de module : **A** - **B** - **D**

The GC NEOSTAR range offers hundreds of possible configurations with:

- **2 versions**: Power or Silence,
- **2 designs**: In-Line or Parallel,
- **3 module sizes**: 1200, 1500 and 2000 mm,
- **numerous** ventilation options, etc.

Contact your sales representative to select the right model for your application.

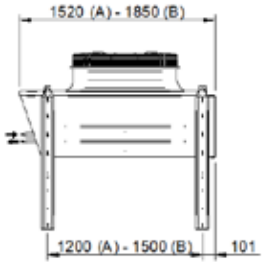
2.12 mm

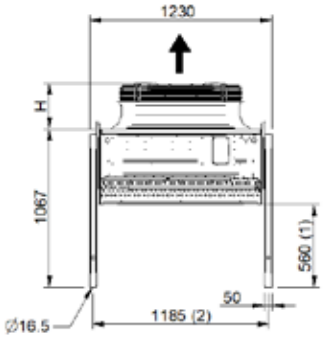
CONDITIONS	REFRIGERANTS		GC NEOSTAR		
SC20 (1)	CO_2	**kW**	**30**	>	**800**
Surface area		**m^2**	65	>	3246
Circuit tube volume		**dm^3**	3	>	151
Fan	Airflow	**m^3/h**	3585	>	551310
		Nb x mm	1 x 800 mm	>	20 x 860 mm
Acoustics	**Lp** (2)	**dB(A)**	20	>	71
	Lw (3)	**dB(A)**	52	>	103
Actual power consumption (4)		**W** total	44	>	60540
Net weight		**kg**	160	>	3640

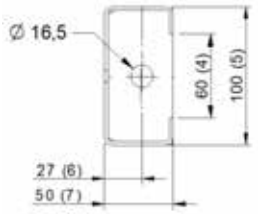
(1) Standard conditions : SC20 / 30°C (air inlet temp) / 90 bar (gas cooler inlet pressure) / 110°C (gas cooler inlet temp) / 35°C (gas cooler outlet temp) / DTM = 5K
(2) Sound pressure in dB(A) measured at 10 m, parallelepiped measuring surface, in a free field over a reflecting plane, given as an indication only.
Values measured under nominal operating conditions, with clean coil, at rated voltage.
(3) Sound power level in dB(A), obtained in accordance with standard NF EN 13487 (parallelepiped reference surface).
(4) Power consumption of all motors.

TECHNICAL DETAILS OF OPTIONS ON EC MOTORS

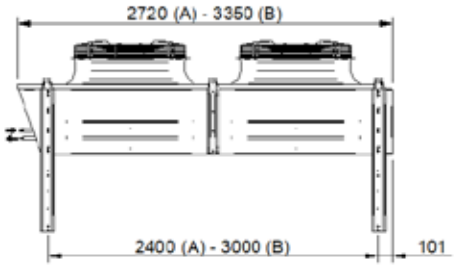
EC MOTOR possible options			
WIRING AND BOX	**Power**	**Standard:**	**Power wiring on terminals.** The power, fault, bus and control wiring is carried out.
		SCM	**Without motor wiring.**
		CCE	**Power wiring in IP54 box and protection by stage included (in L for each fan and in P for 2 fans).** The power, fault, bus and control wiring is carried out.
SIMPLE REGULATION		**SE1**	**Direct control of the motors by customer 0-10 V signal:** only one circuit possible (contact us in case of multiple circuits, or 4-20 mA control signal).
ADDITIONAL FUNCTIONS		**VMA**	**Maximum speed setting** (configuration done on each fan, via a computer). Only with standard or **CCE**.

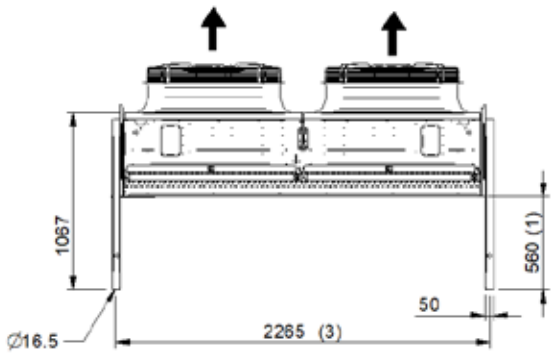




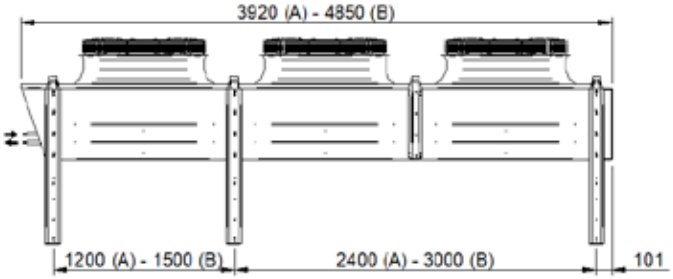


(A) … L01 A… / P02 A…
(B) … L01 B… / … P02 B…

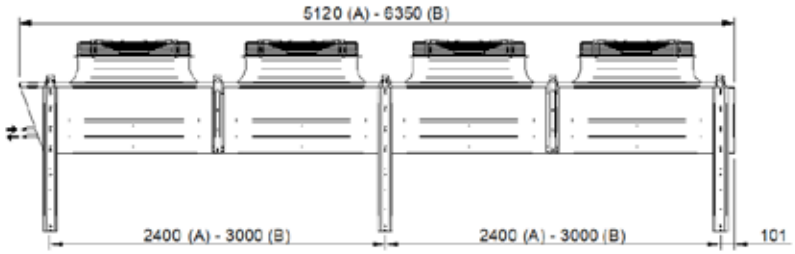




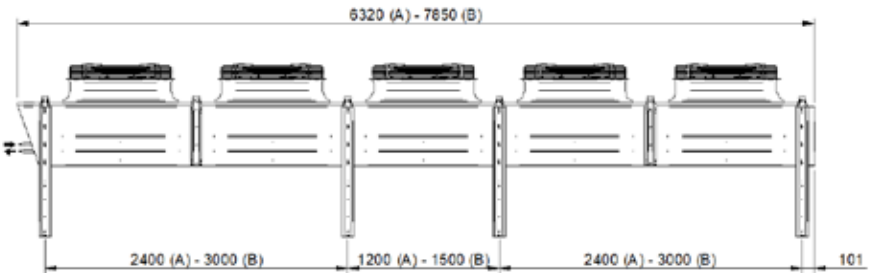
(A) … L02 A… / P04 A…
(B) … L02 B… / … P04 B…



(A) … L03 A… / P06 A…
(B) … L03 B… / … P06 B…



(A) … L04 A… / P08 A…
(B) … L04 B… / … P08 B…

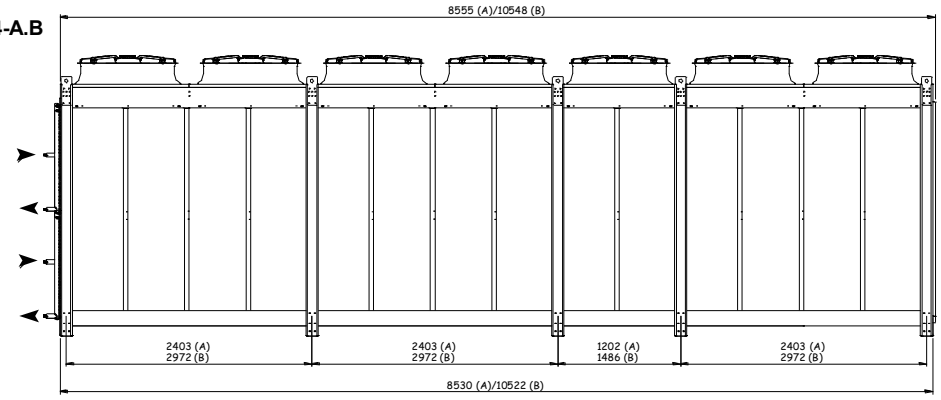


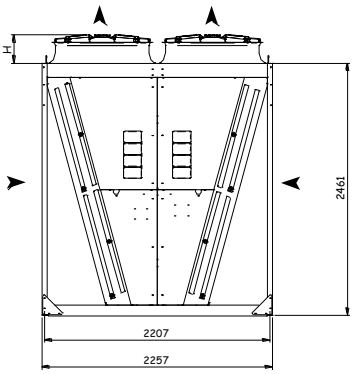
(A) … L05 A… / P10 A…
(B) … L05 B… / … P10 B…

OPTIONS OPTIONEN OPCIONES Дополнительные	(1)	(2)	(3)	(4)	(5)	(6)	(7)
REH	800	1185	2265	60	100	27	50
RE2	1400	1205	2285	90	130	37	70
RE3	1900	1205	2285	90	130	37	70
RE4	2400	1205	2285	90	130	37	80

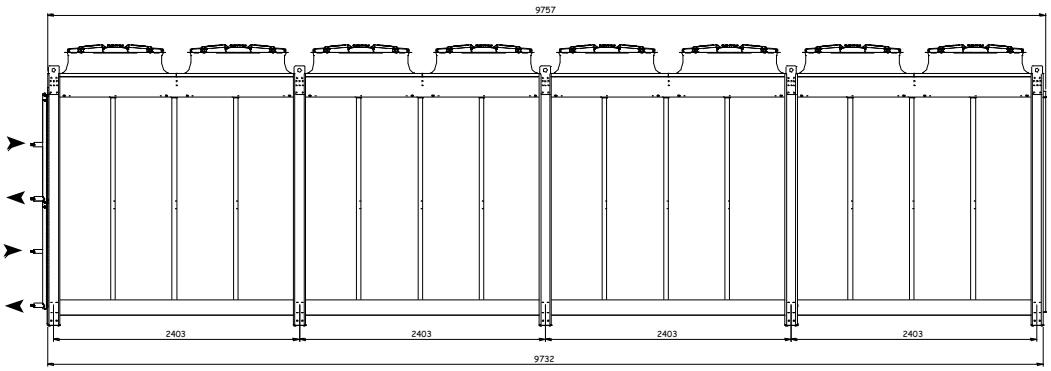
TYPE	H
SUEC	240
SAEC	330
PE EC	370

P14-A.B



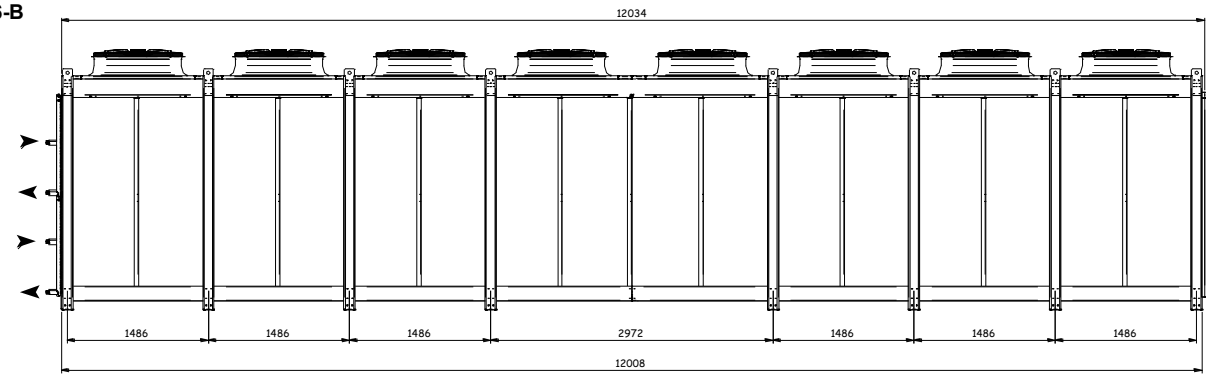


P16-A

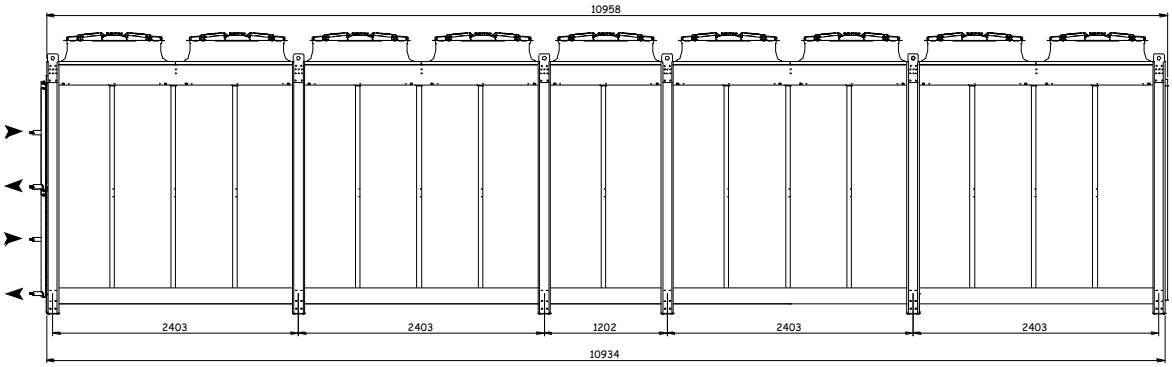


Type	H
SUEC	240
SAEC	330
PE EC	370

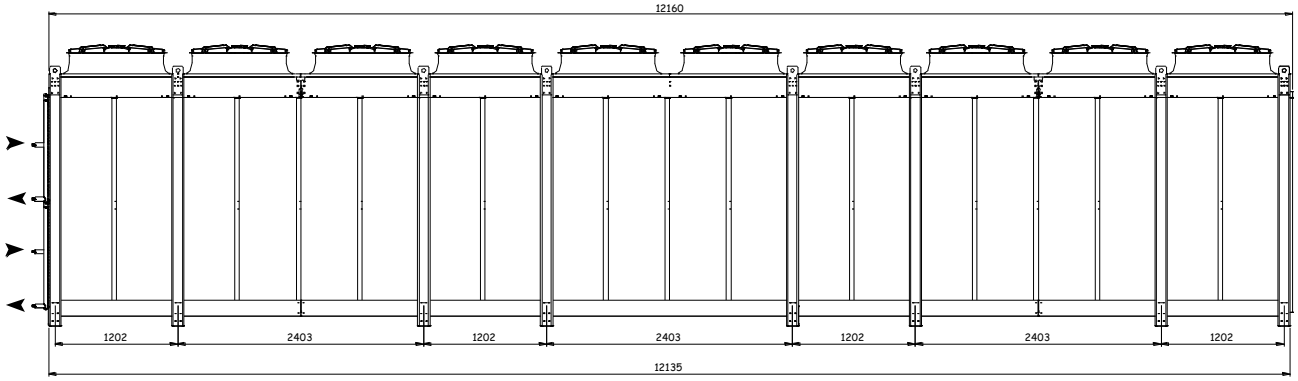
P16-B

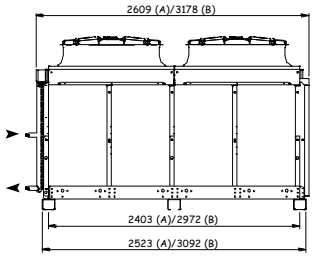


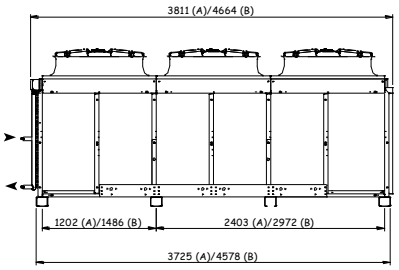
P18-A

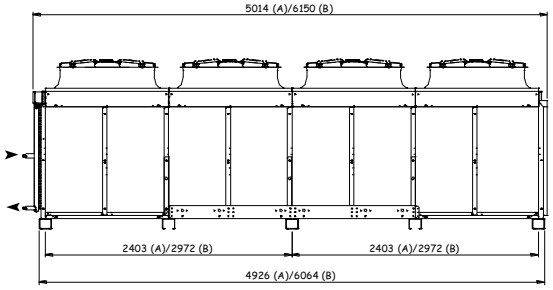


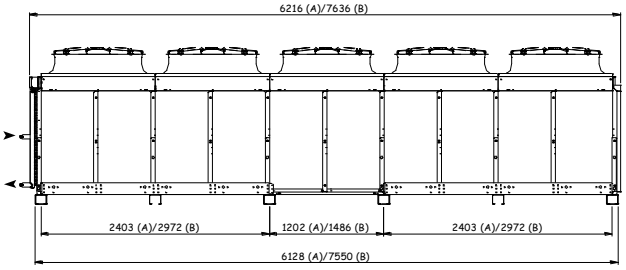
P20-A

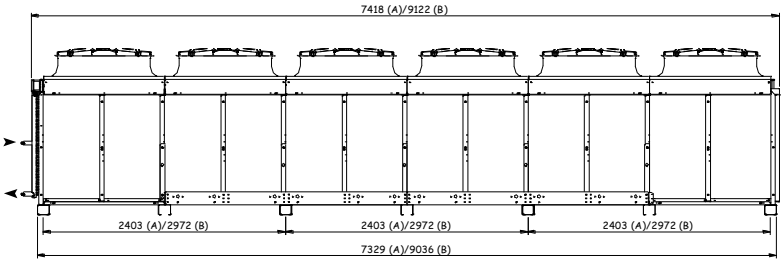


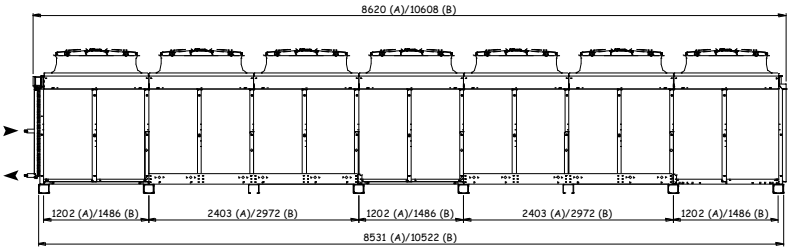


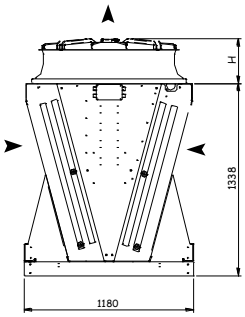




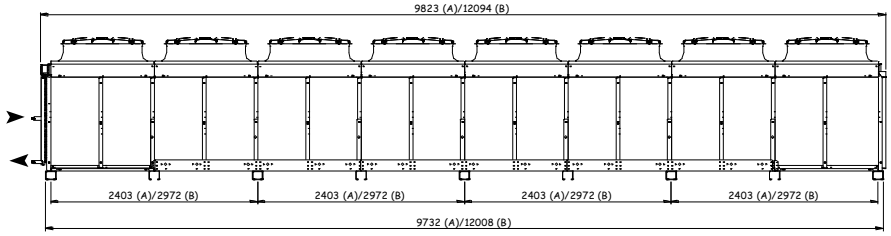


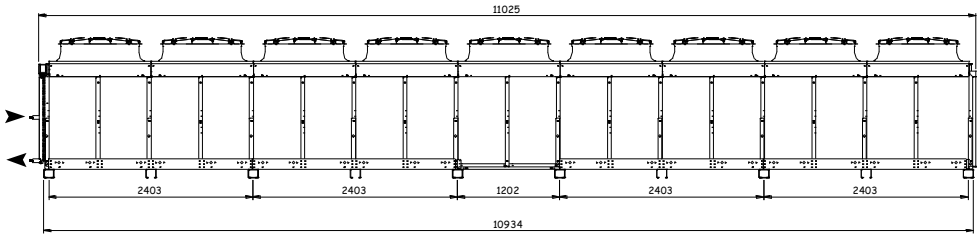


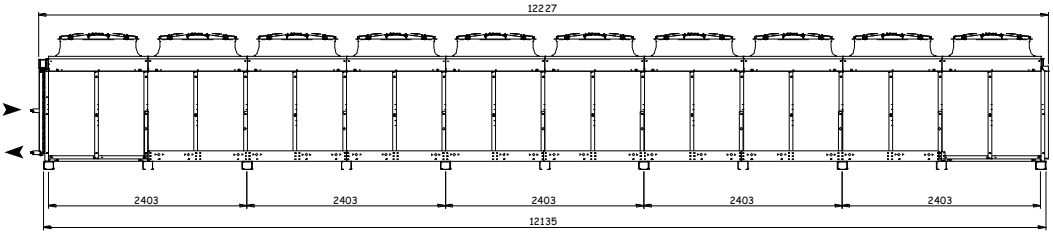




Type	H
SUEC	240
SAEC	330
PE EC	370







NOTES

FRIGA-BOHN®

GC V-KING

V-shaped coil axial fan gas cooler
Industrial range

CO2 130bar

50 - 1300 kW

Robustness: Our GC V-KING gas coolers have been designed to ensure the highest level of quality and durability thanks to :
- A **floating coil design** that uses support tubes which help removing mechanical stress on the refrigerant tubes.
- A standard **operating pressure of 130 bar**.
- Pressure and **leakage resistance tests performed on 100%** of the products.

Adaptability: more than 500 possible models to perfectly suit your project.

Reduced footprint to **save space**.

Optimization of noise levels depending on the fan chosen.

CASING

Epoxy painted metal structure (RAL 9003) for maximum corrosion resistance.

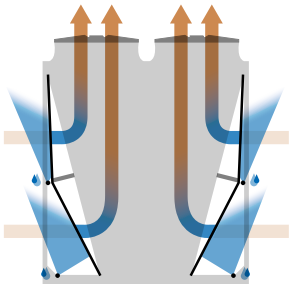
OPTIONS	
PAV	Anti-vibration pads.
RAL	Special colour polyester paint.

Select your coil treatment to extend your unit cooler's lifespan! Contact us.

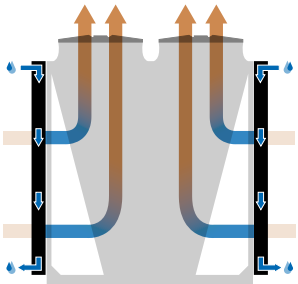
COILS

Corrugated aluminium fins with 2.12mm spacing, limiting clogging and allowing efficient cleaning.
Combined with staggered copper tubes, the coils are very efficient and compact.
Standard operating pressure of 130 bar.
The battery is mechanically isolated from the bodywork thanks to support tubes, removing the mechanical stress on the refrigerant tubes and thus increasing the product's lifespan (photo).

OPTIONS		
INH	Stainless steel connection.	
WAS	Adiabatic Water Spray System	
AAS	Advanced Adiabatic Water Spray System	CONTACT US
AAP	Adiabatic PAD System	CONTACT US



AAS



AAP

VENTILATION

The GC V-KING gas cooler range is equipped as standard with EC technology fans.

GC V-KING POWER

The GC V-KING POWER range of motor fans is equipped with motors:
- Ø 960 mm (PE EC) 380/960 rpm

GC V-KING SILENCE

The GC V-KING range of motor fans is equipped with motors:
- Ø 800 mm (SA EC) : 250/1000 rpm
- Ø 800 mm (SU EC) : 250/730 rpm

These motors are 400V/3/50-60Hz, protected by an enclosed casing, IP54, class F.
The motor fans are wired as standard and connected in the factory, as follows:
- 1 to 3 electrical boxes for L models (in-line motors),
- 2 to 6 electrical boxes for P models (parallel motors).

OPTIONS	
IRP	Rotary proximity switch by motor.
ATT	Noise level attenuator.
CLV	Longitudinal partitioning (only on Parallel models).
CTV	Transverse partitioning.
CUV	Unitary partitioning: a partition separating all the modules.

ATT

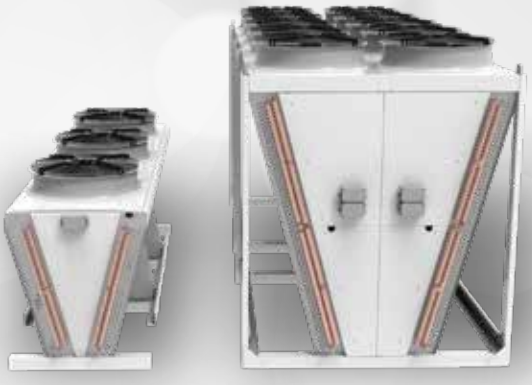
NOISE LEVEL ATTENUATOR

as an accessory or **integral part of the motor**

PRODUCT ADVANTAGES

Long-lasting power and easy and efficient maintenance, thanks to a non-louvred fin profile limiting clogging.
A standard operating pressure of 130 bar.
Wide range of products and combinations (5,500 models):
- 2 designs: In-Line or Parallel.
- 2 module sizes: 1,200 mm or 1,500 mm,
- numerous ventilation options,
- devices up to 12 m long,

High power for a small footprint.
Noise level reduction (EC motors, attenuator, etc.).
Reduced electricity consumption (EC motors).



In-Line V-KING *Parallel V-KING*

GC(A) VS(B) SA EC(C) L(D) 02(E) A2(F)

(A) **GC** = Gas Cooler
(B) Type : **FS** = Flat design - **VS** = V Shape design
(C) **SU EC** = Silence Ultra
SA EC = Silence Advanced
PE EC = Power Extra
(D) Fan arrangement:
L = in-line fans
P = parallel fans
(E) Number of fans
(F) Type de module : **A** - **B**

The GC V-KING range offers hundreds of possible configurations with:

- **2 versions**: Power or Silence,
- **2 designs**: In-Line or Parallel,
- **3 module sizes**: 1,200 mm and 1,500 mm,
- **numerous** ventilation options, etc.

Contact your sales representative to select the right model for your application.

2.12 mm

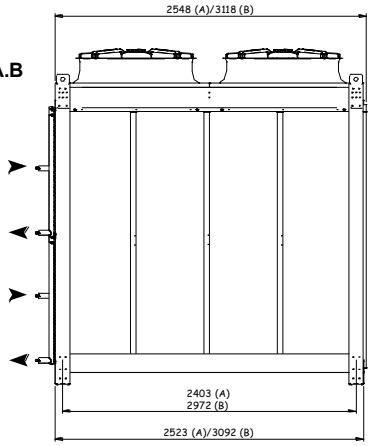
CONDITIONS	REFRIGERANTS		GC V-KING
SC20 (1)	CO_2	**kW**	**60 > 1500**
Surface area		**m²**	260 > 7791
Circuit tube volume		**dm³**	12 > 363
Fan	Airflow	**m³/h**	8702 > 560416
		Nb x mm	1 x 800 > 20 x 860 mm
Acoustics	**Lp** (2)	**dB(A)**	20 > 75
	Lw (3)	**dB(A)**	52 > 105
Actual power consumption (4)		**W** total	112 > 58386
Net weight		**kg**	540 > 6000

(1) Standard conditions : SC20 / 30°C (air inlet temp) / 90 bar (gas cooler inlet pressure) / 110°C (gas cooler inlet temp) / 35°C (gas cooler outlet temp) / DTM = 5K
(2) Sound pressure in dB(A) measured at 10 m, parallelepiped measuring surface, in a free field over a reflecting plane, given as an indication only.
Values measured under nominal operating conditions, with clean coil, at rated voltage.
(3) Sound power level in dB(A), obtained in accordance with standard NF EN 13487 (parallelepiped reference surface).
(4) Power consumption of all motors.

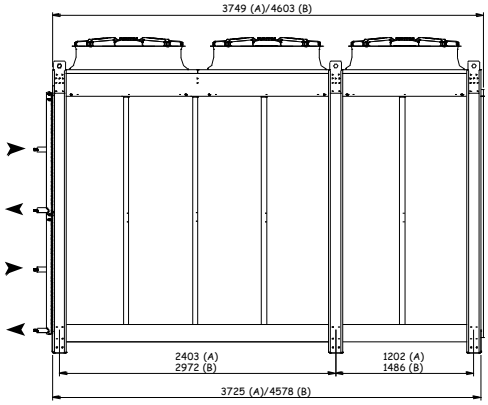
TECHNICAL DETAILS OF OPTIONS ON EC MOTORS

EC MOTOR possible options			
WIRING AND BOX	Power	**Standard:**	**Power wiring on terminals.** The power, fault, bus and control wiring is carried out.
		SCM	**Without motor wiring.**
		CCE	**Power wiring in IP54 box and protection by stage included (in L for each fan and in P for 2 fans).** The bus wiring is done.
SIMPLE REGULATION		**SE1**	**Direct control of the motors by customer 0-10 V signal:** only one circuit possible (contact us in case of multiple circuits, or 4-20 mA control signal).
ADDITIONAL FUNCTIONS		**VMA**	**Maximum speed setting** (configuration done on each fan, via a computer). Only with standard or **CCE**.

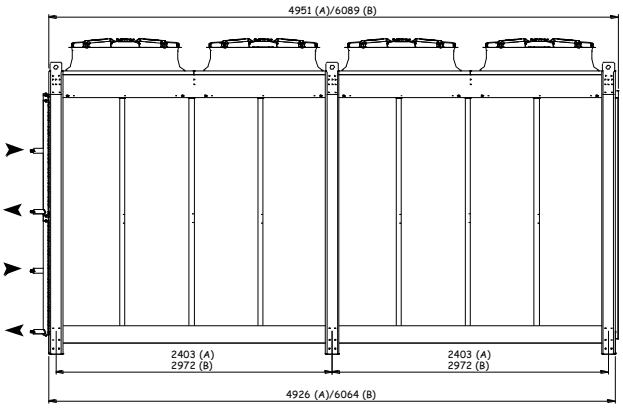
P04-A.B



P06-A.B

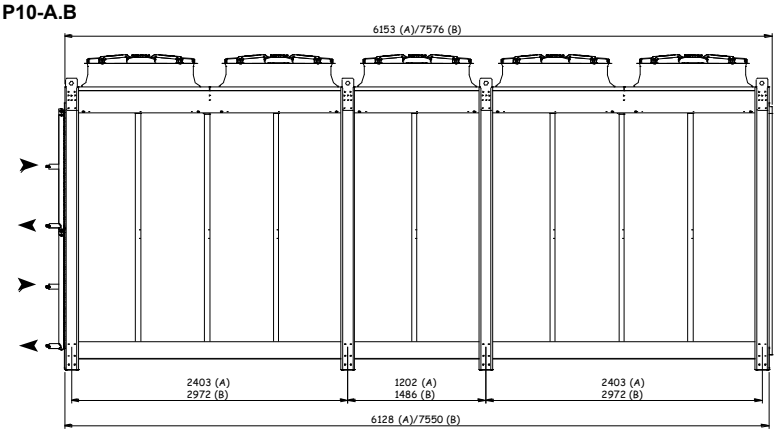


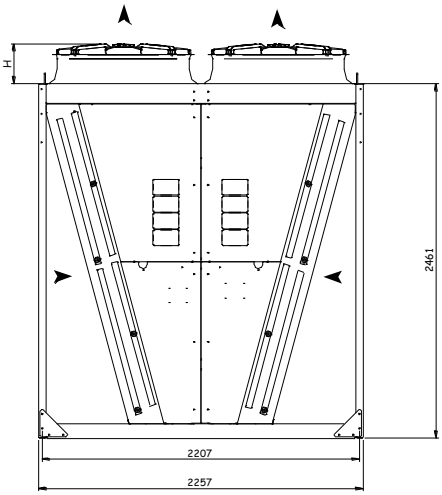
P08-A.B



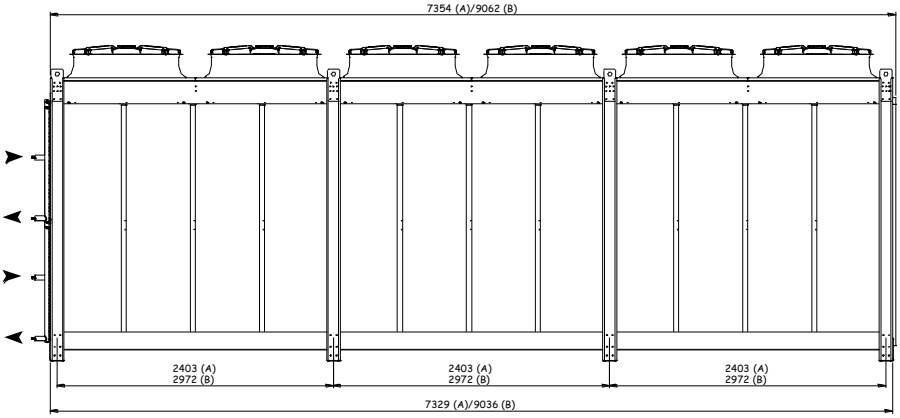
Type	H
SUEC	240
SAEC	330
PE EC	370

P10-A.B

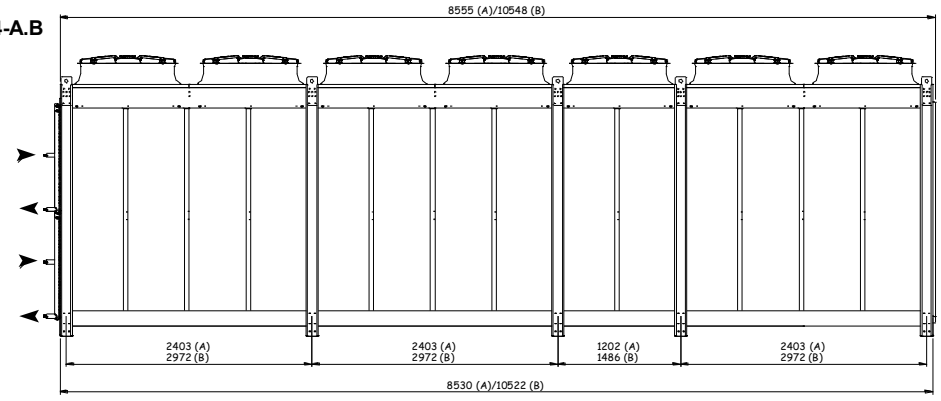


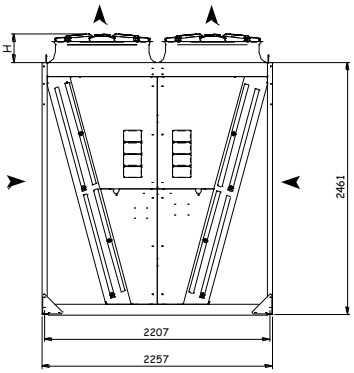


P12-A.B

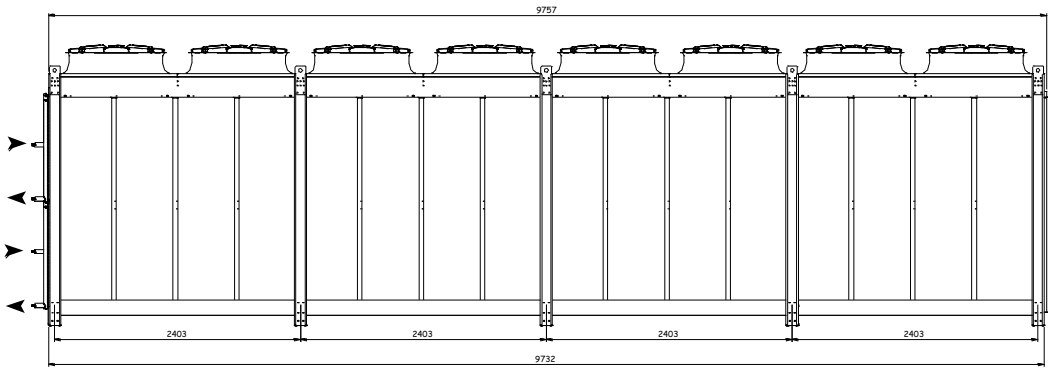


P14-A.B



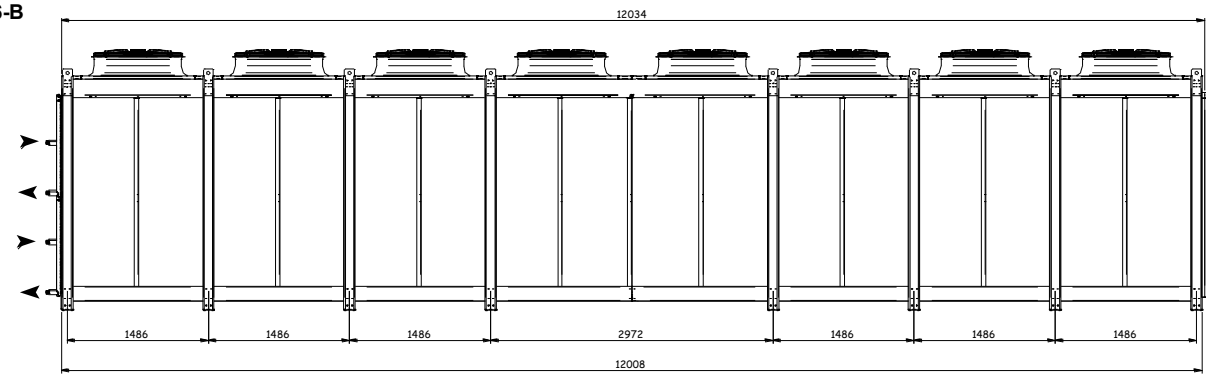


P16-A

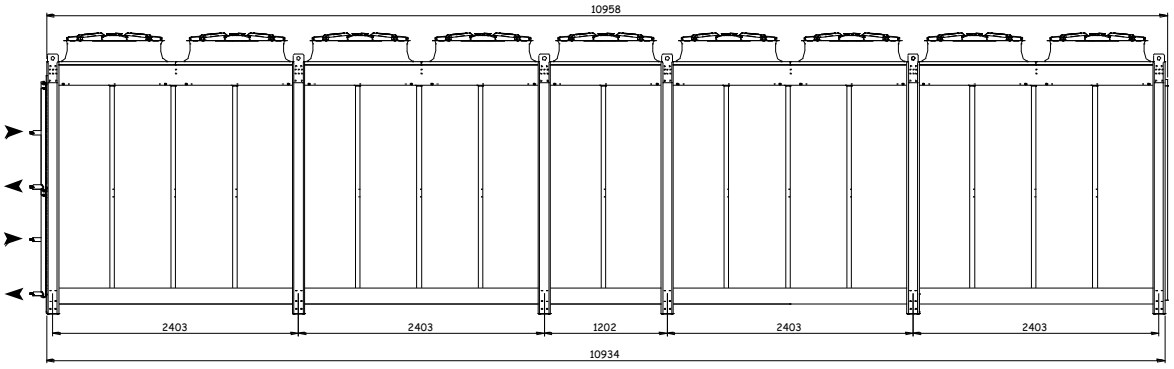


Type	H
SUEC	240
SAEC	330
PE EC	370

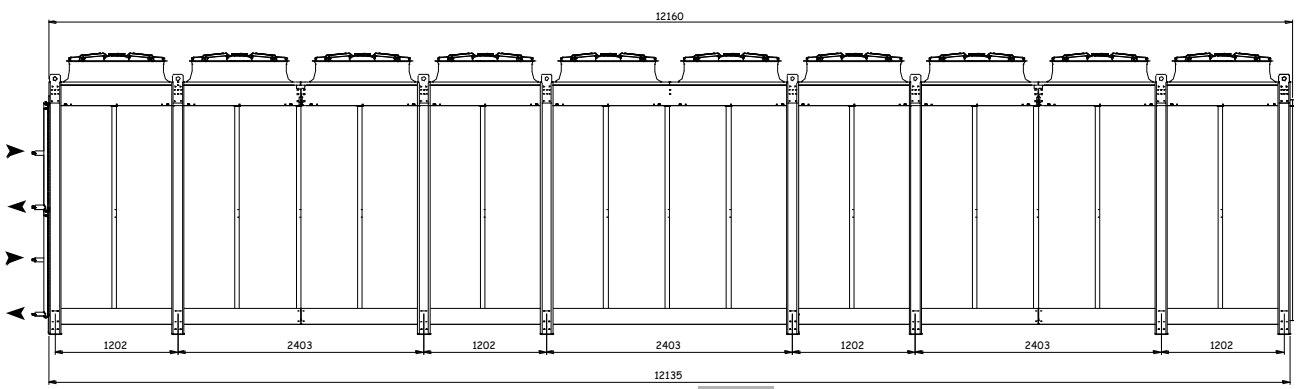
P16-B

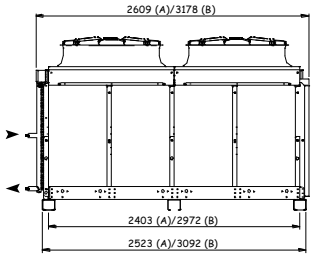


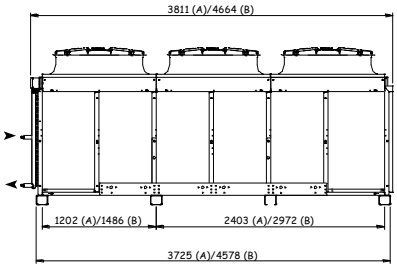
P18-A

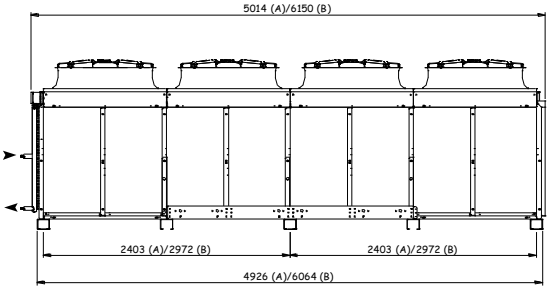


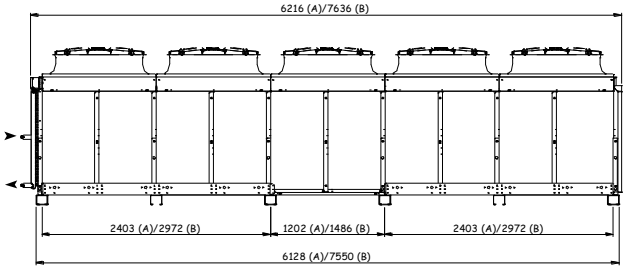
P20-A

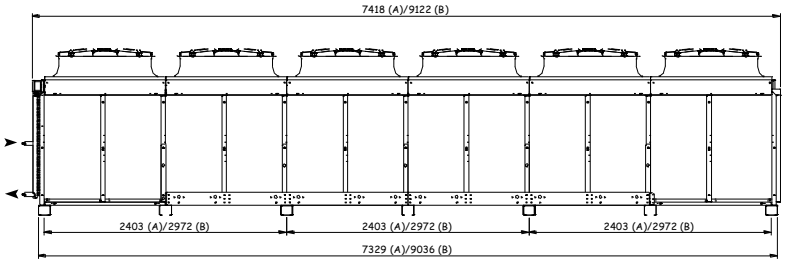


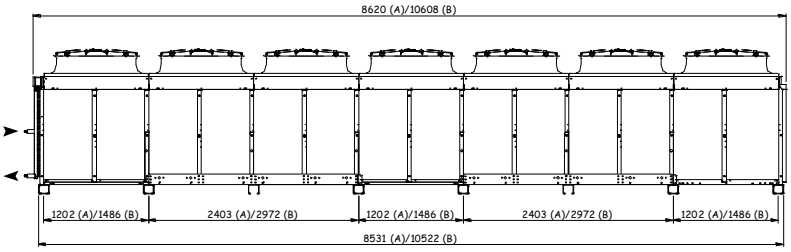


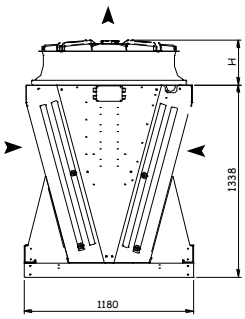


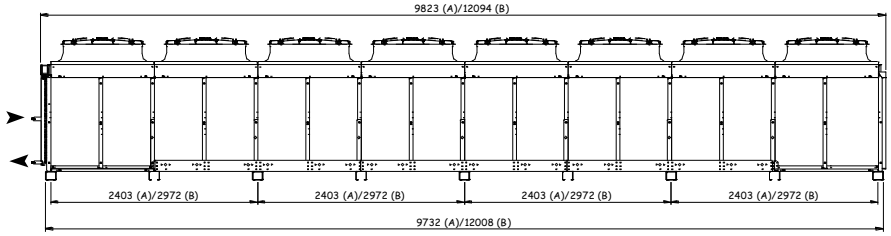




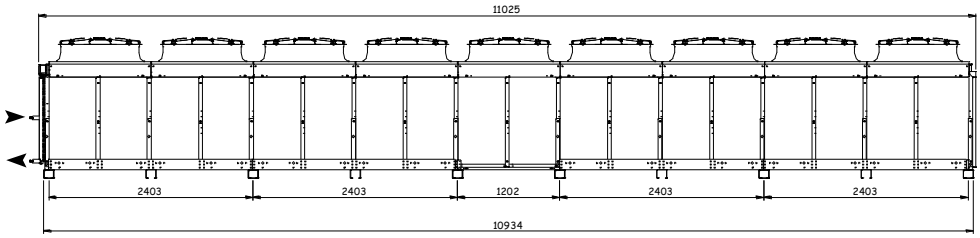


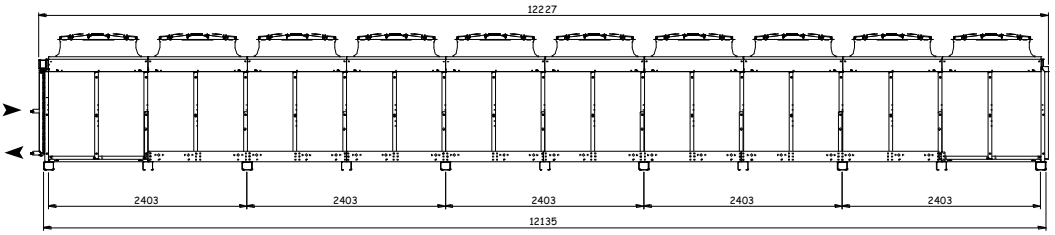






Type	H
SUEC	240
SAEC	330
PE EC	370





NOTES

FRIGA-BOHN®

FC NEOSTAR

Axial fan dry cooler
Industrial range

WG

FCR NEOSTAR
FIR NEOSTAR

FC NEOSTAR
FI NEOSTAR

20 - 1200 kW

To best meet the needs of your application, **4 versions** are available:

- **FC Neostar**: combines **compactness** and **high efficiency**.
- **FI Neostar**: guarantees **low pressure drop** and an **extended power range** up to 1,200 kW.
- **FCR** and **FIR Neostar** ("forced draft" versions): offer an installation with a **low noise level** and allow the use of **EC motor(s) in high temperature applications**.

Coil reduces clogging and allows for efficient maintenance to ensure **long-lasting performance**.

Adaptability: more than 5,300 possible models to suit your project.

VENTILATION

The FC/FI NEOSTAR range is equipped with motor fans:

Standard motor: 400V/3/50Hz with external rotor, two-speed (triangle and star connection).

"High Temperature" motor: 400V/3/50Hz, two-speed (triangle and star connection).

EC motor: electronically commutated motor fans enabling speed variation and reducing your installation's energy consumption.

The motor fans are wired as standard and connected in the factory, as follows:
- 1 to 3 electrical boxes for L models (in-line motors),
- 2 to 8 electrical boxes for P models (parallel motors).

We can deliver them unwired on request.

Special voltage ventilation (FC/FI NEOSTAR):
- **M60** : Motor fans Ø 910 mm, 400V/3/60Hz, IP54, version 06P
- **M26** : Motor fans Ø 910 mm, 230V/3/60Hz, IP54, version 06P

OPTIONS	
M26	Motor fans 230 V/3/60 Hz. CONTACT US
IRP	Rotary proximity switch(es).
SCU	Without factory wiring (specify when ordering).

AC MOTORS

M60	Motor fans 400 V/3/60 Hz. CONTACT US
MTH	Wiring on front terminal block of protection thermostats. Recommended for high starting frequencies (more than 30 starts per hour) or use of variable speed drives.

NEW!

FCR Neostar and FIR Neostar

To best meet your needs, the FC and FI Neostar are now available in "forced draft" versions.

The **FCR Neostar** and **FIR Neostar** versions enable:

A reduced noise level.

The use of EC motors in high temperature applications, allowing speed variation and reducing your installation's energy consumption.

All FC / FI Neostar models and options are available for the "forced draft" **FCR** and **FIR** versions.

Options specific to the **FCR** and **FIR** versions:

OPTIONS	
RAB	Feet lowered by 300 mm KIT TO INSTALL (ground clearance 700 mm).
RE3	Feet raised by 1,340 mm KIT TO INSTALL (ground clearance 1,500 mm).
RE4	Feet raised by 1,840 mm KIT TO INSTALL (ground clearance 2,000 mm).
GPB	Coil protection grille.

CASING

Robust, made of white pre-painted galvanized sheet steel.

The units are delivered flat, screwed onto a wooden base with feet to be installed.

OPTIONS	
RAL	Special colour polyester paint.
REH	Feet raised by 240 mm KIT TO INSTALL (ground clearance 800 mm).
RE2	Feet raised by 840 mm KIT TO INSTALL (ground clearance 1,400 mm).
RE3	Feet raised by 1,340 mm KIT TO INSTALL (ground clearance 1,900 mm).
RE4	Feet raised by 1,840 mm KIT TO INSTALL (ground clearance 2,400 mm).
ECB	Wooden crate packaging.

Select your coil treatment to extend your unit cooler's lifespan! Contact us.

COILS

Aluminium fins with 1.9 mm (FC Neostar) or 2.12 mm (FI Neostar) spacing.
Combined with staggered copper tubes, the coils are very efficient and compact.
Manifolds with air vent and drain plug
Flange connection PN16.

AAS

OPTIONS	
VEX	Expansion tank.
VID	Fully drainable special circuits.
HT / BT	HV / LV superimposed circuits.
WAS	Adiabatic water spray system
AAS	Advanced adiabatic water spray system. CONTACT US

PRODUCT ADVANTAGES

The long-lasting performance of the FC/FI Neostar is ensured by coils with:
- louvreless fins, limiting clogging and allowing efficient cleaning,
- double HV/LV circuits in the same block, which avoids the usual fouling between 2 blocks and also makes cleaning easier.
Easy and inexpensive installation.
Maintenance is reduced as a result of the direct-coupled motor fans.
Low maintenance costs.
An optimized selection of different models to choose from (noise level, energy consumption, size, type of regulation, etc.).
Louvreless fins, limiting clogging and allowing efficient cleaning to ensure long-lasting performance.

TECHNICAL DETAILS OF OPTIONS ON AC MOTORS

AC MOTOR possible options			
WIRING AND BOX	Power	Standard (BAB) :	**Power wiring on terminals** (no protection option integrated into this option).
		SCU	**Without motor wiring** (note that no regulation is possible with this option).
	Protection	CMP	**Motor protection box IP54**, including one circuit breaker per motor, a fault summary and a main switch. Possibility of floor mounting support kit (MSK).
		MSK	Floor support for cabinets above H = 800 x W = 1,000
REGULATION	**Advanced control** by variation	RT3 (including CMP) Variable frequency drive	**An IP54 ventilated control cabinet** with a variable frequency drive including its circuit breaker protection. A temperature sensor to manage a circuit (wired but not mounted on the unit).

TECHNICAL DETAILS OF OPTIONS ON EC MOTORS

EC MOTOR possible options			
WIRING AND BOX	Power	Standard (CSB) :	**Power wiring on terminals.** The power, fault, bus and control wiring is carried out.
		SCM	**Without motor wiring.**
		CCE	**Power wiring in IP54 box and protection by stage included (in L for each fan and in P for 2 fans).** The bus wiring is done.
REGULATION	Simple	SE1 (1)	**Direct control of the motors by customer 0-10 V signal:** one or two circuits possible.
	Advanced control	CE1 (2)	**Automatic speed control by temperature (setpoint to be adjusted via PLC by customer) / 1 circuit:** one temperature sensor and only one circuit possible.
		CE2 (2)	**Automatic speed control by temperature (setpoint to be adjusted via PLC by customer) / 2 circuits:** 2 temperature sensors and 2 separate circuits possible (contact us in case of multiple circuits).
		CE3 (2)	**Automatic speed control by temperature (setpoint to be adjusted via PLC by customer) / signal comparison:** 2 temperature sensors and signal comparison (contact us in case of multiple circuits).
ADDITIONAL FUNCTIONS		VMA	**Maximum speed setting** (configuration done on each fan, via a computer). Only with standard or **CCE**.
		MJN	**Possibility of setting a maximum night speed** (clock by signal 0/10). Only with **CE1 / CE2 / CE3**

(1) *Default option if no customer choice.*
(2) *CCE mandatory option*

FI(A)H(B) PU(C) 06(D)D(E) L(F)04(G) D5(H)

(A) **FC** = Fin spacing 1.9 mm - **FI** = Fin spacing 2.12 mm
(B) **H** = "High Temperature" motor (only for **PU** and **SN** version)
R = "Reverse" motor (forced draft)
(C) **PN** = Power Normal - **PE** = Power Extra - **PU** = Power Ultra
SN = Silence Normal - **SE** = Silence Extra - **SU** = Silence Ultra
(D) Number of poles
(E) **D** = triangle coupling - **Y** = star coupling
(F) Fan arrangement: **L** = in-line fans - **P** = parallel fans
(G) Number of fans
(H) Type of module

Since the performance of FC NEOSTAR varies considerably depending on the operating conditions, it is therefore not possible for us to present a selection method in this document. For more information, please consult our software.

		FC / FI NEOSTAR **POWER**					FC / FI NEOSTAR **SILENCE**						
		PN	**PU**	**H PU**	**PE** EC **motor**	**PA** EC **motor**	**SN**	**SE**	**SU**	**H SN**	**SE** EC **motor**	**SU** EC **motor**	**SA** EC **motor**
Diameter		Ø 800	Ø 950	Ø 910	Ø 960	Ø 860	Ø 800	Ø 800	Ø 800	Ø 910	Ø 800	Ø 800	Ø 800
Poles		06P	06P	06P	EC	EC	08P	12P	12P	08P	EC	EC	EC
400V/3/50Hz		3	3	3	3	3	3	3	3	3	3	3	3
Triangle (**D**)	**rpm**	830	870	890	380/960	250/1200	640	440	-	650	250/1020	250/730	250/950
	W max.	1600	1920	1950	2990	3500	820	330	-	880	2400	790	1850
	A max.	3,50	3,80	4,20	4,90	5,30	2,00	0,86	-	2,00	3,80	1,40	3
	dB(A)	80	87	82	57/90	57/90	71	68	-	75	49/88	49/78	48/84
Star (**Y**)	**rpm**	800	640	730	-	-	460	-	330	480	-	-	-
	W max.	1210	1170	1300	-	-	440	-	190	500	-	-	-
	A max.	1,55	2,20	2,30	-	-	0,90	-	0,39	1,05	-	-	-
	dB(A)	70	81	78	-	-	64	-	61	68	-	-	-

GENERAL

The freezing point of the refrigerant must always be at least 5K below the minimum winter ambient temperature of the installation site.

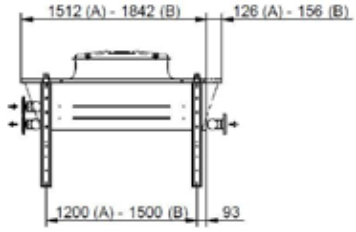
RISK OF FROST

A standard dry cooler cannot be completely drained by simply opening the bleed holes.
Always perform leak tests with the final refrigerant.
For application with water (without antifreeze), and if the ambient temperature can drop below 0 °C, the dry cooler must be properly designed to allow complete draining of the unit (VID option).

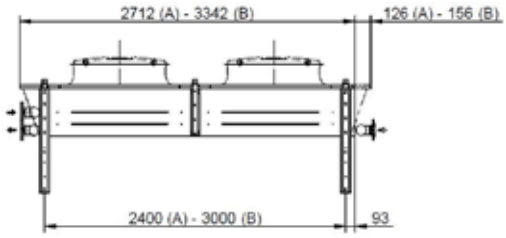
RECOMMENDATIONS

Installation according to best industry practice without forgetting:
- Bleeds and drains
- Expansion tank(s) (VEX option)
- Flexible sleeves
- Protection against vibrations
- Percentage of antifreeze sufficient
- Electrical protection of motors

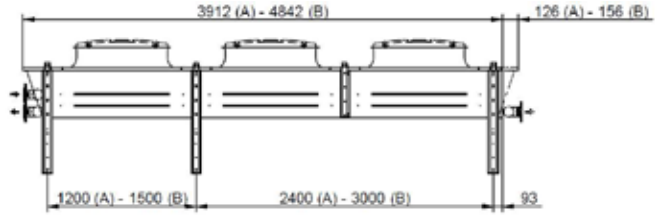
Connection to a totally closed water loop, eliminating any risk of corrosion by oxygenation.
If used with non-ferrous metal water supply lines, protect against corrosion.



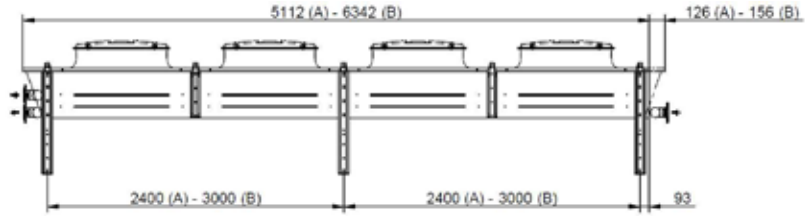
(A) ... L01 A... / P02 A...
(B) ... L01 B... / ... P02 B...



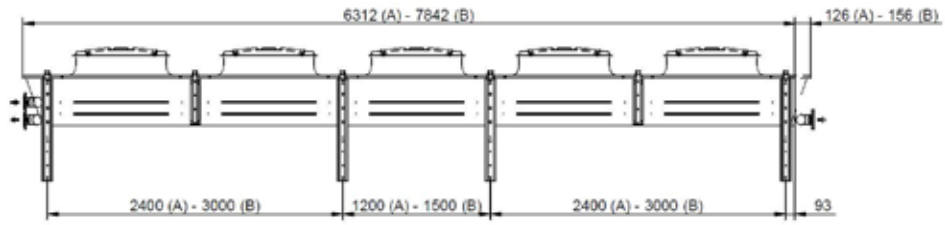
(A) ... L02 A... / P04 A...
(B) ... L02 B... / ... P04 B...



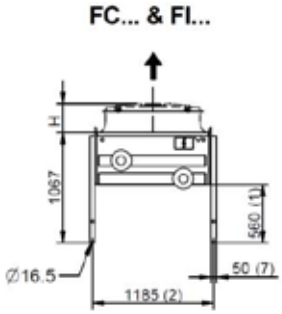
(A) ... L03 A... / P06 A...
(B) ... L03 B... / ... P06 B...

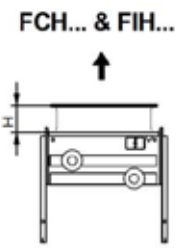


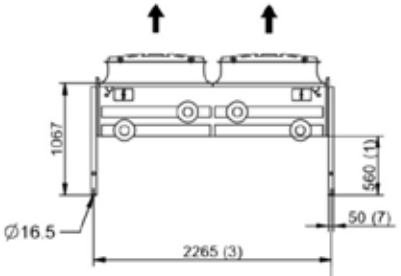
(A) ... L04 A... / P08 A...
(B) ... L04 B... / ... P08 B...

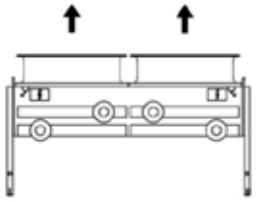


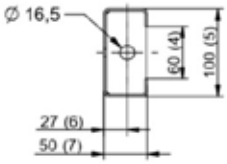
(A) ... L05 A... / P10 A...
(B) ... L05 B... / ... P10 B...





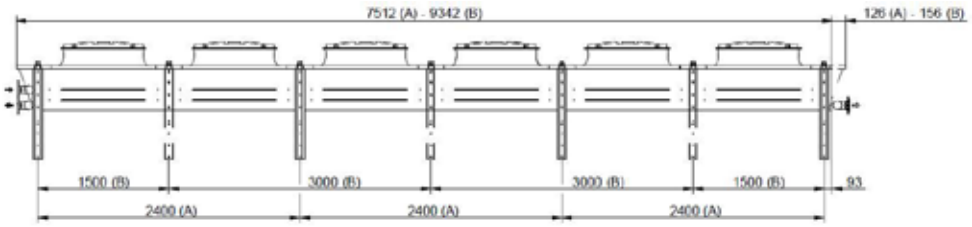




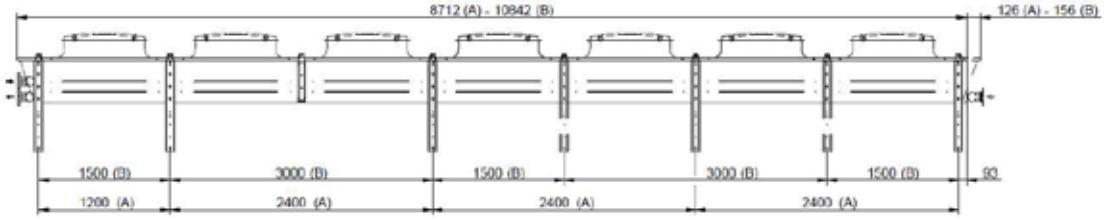


OPTIONS OPTIONEN OPCIONES Дополнительные	(1)	(2)	(3)	(4)	(5)	(6)	(7)
REH	800	1185	2265	60	100	27	50
RE2	1400	1205	2285	90	130	37	70
RE3	1900	1205	2285	90	130	37	70
RE4	2400	1205	2285	90	130	37	80

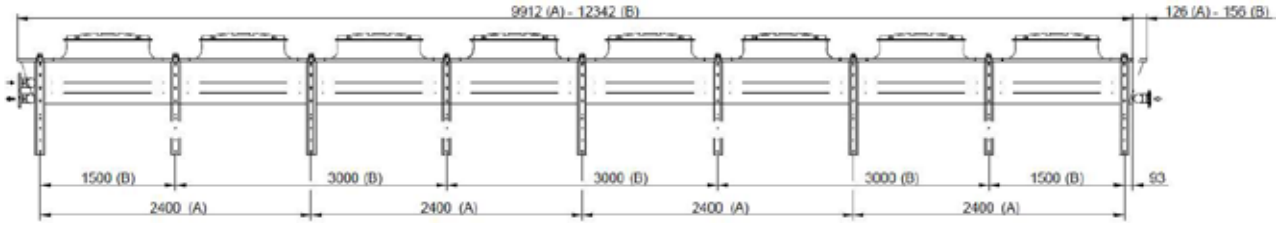
Type	H
PM04D/04Y	380
PU06D/06Y	350
PN06D/06Y	340
SN08D/08Y	330
SE12D/SU12Y	330
HPU06D/06Y	380
HSN08D/08Y	380
SAEC	330
SUEC	240
PE EC	370



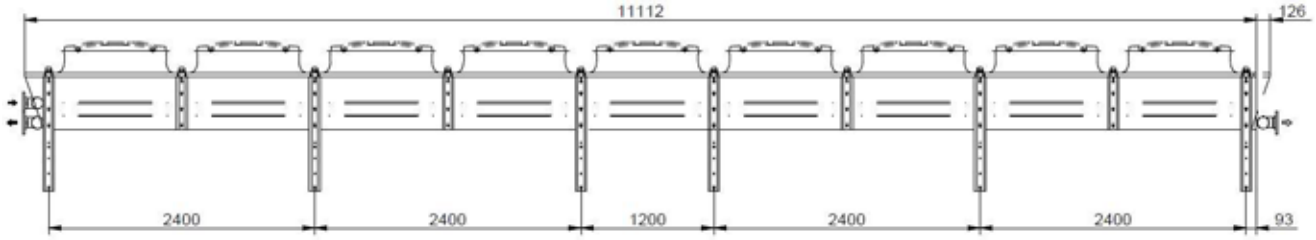
(A) … L06 A… / P12 A…
(B) … P12 B…



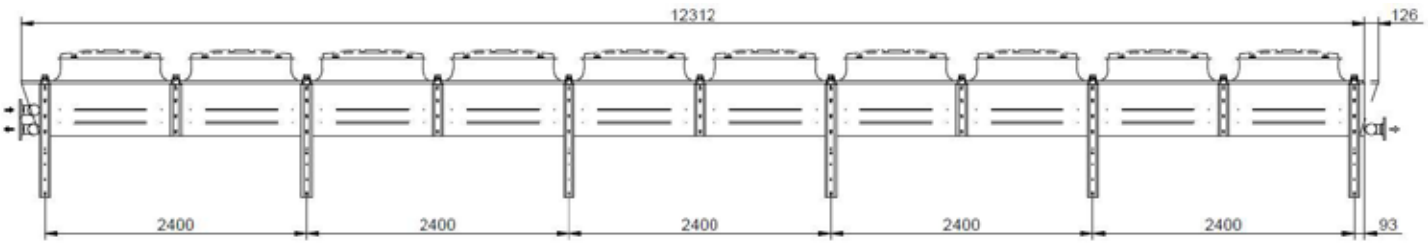
(A) … P14 A…
(B) … P14 B…



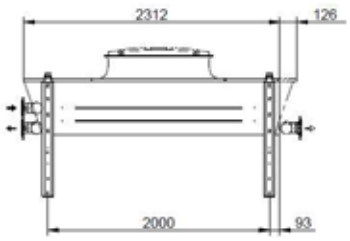
(A) … P16 A…
(B) … P16 B…



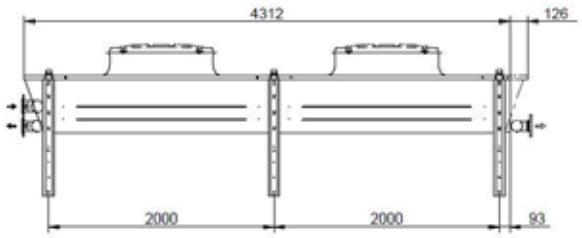
(A) … P18 A…



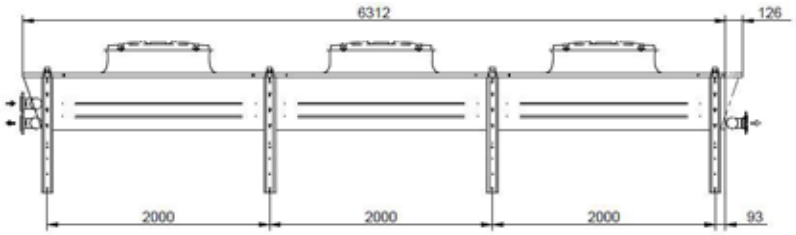
(A) … P20 A…



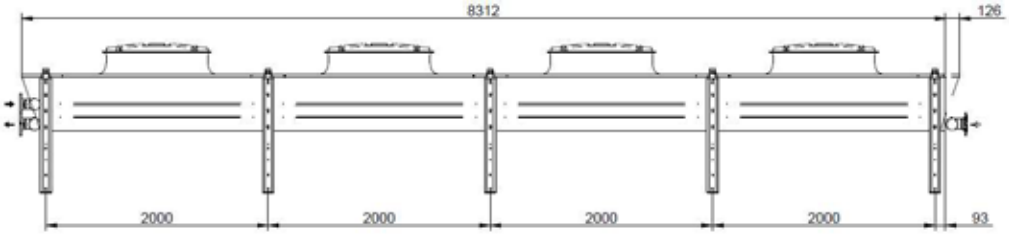
… L01 D… / … P02 D…



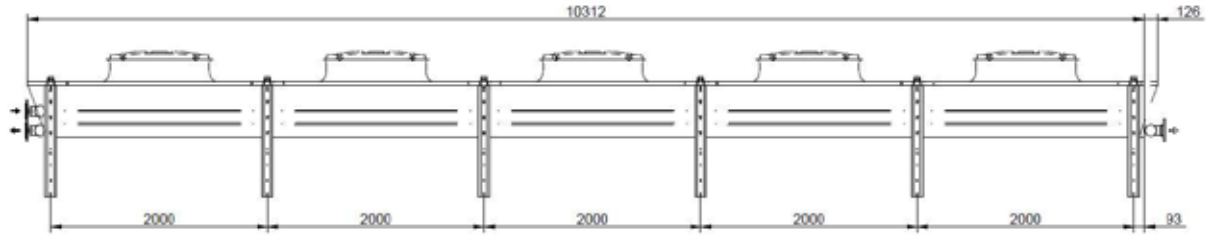
… L02 D… / … P04 D…



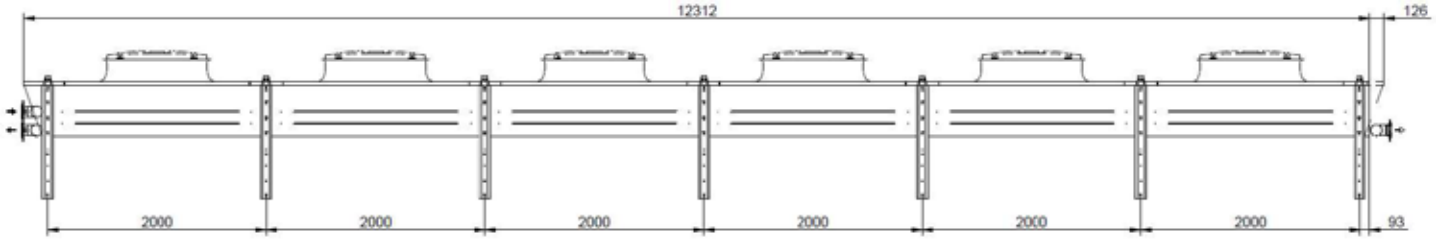
… L03 D… / … P06 D…



… L04 D…. / … P08 D…



… P10 D…



… P12 D…

FRIGA-BOHN®

V-KING

V-shaped coil axial fan dry cooler
Industrial range

WG

50 - 2200 kW

To best meet the needs of your application, two versions of V-KING are available:
- **V-KING VC**: combines **compactness** and **high efficiency**!
- **V-KING VI**: guarantees **low pressure drop** and **high power**!

Adaptability: more than 4600 possible models to suit your project.

Reduced footprint to **save space**.

Optimization of noise levels depending on the fan chosen.

CASING

Epoxy painted metal structure (RAL 9003) for maximum corrosion resistance.

OPTIONS	
PAV	Anti-vibration pads.
RAL	RAL other than 9003 for the structure.
CC4	Corrosion-protected casing (C4).
CC5	Corrosion-protected casing (C5).

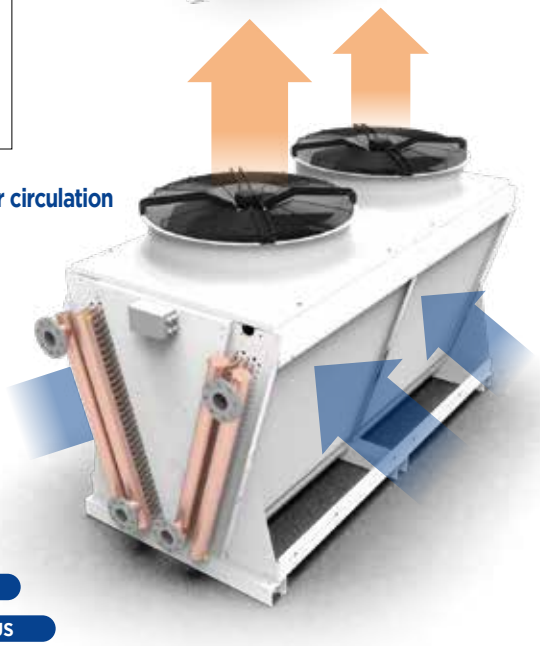
Select your coil treatment to extend your unit cooler's lifespan! Contact us.

COILS

Aluminium fins with 1.9 mm (VC) or 2.12 mm (VI) spacing.

Combined with staggered copper tubes, the coils are very efficient and compact.

High-performance and long-lasting:
- Non-louvred fins.
- Superimposed HV/LV circuit (can be selected on request).



OPTIONS	
MCI	Multi-circuits (to be defined according to the project).
VID	Special circuit with gravity drain. CONTACT US
BCB	Flange to flange
VEX	Expansion tank.
WAS	Adiabatic water spray system
AAS	Advanced Adiabatic System: adiabatic spray system. CONTACT US
AAP	Advanced Adiabatic Pad System: adiabatic PAD system. CONTACT US

VENTILATION

OPTIONS	
IRP	Rotary proximity switch by motor.
ATT	Noise level attenuator.
CLV	Longitudinal partitioning (only on Parallel models).
CTV	Transverse partitioning.
CUV	Unitary partitioning: a partition separating all the modules.
	AC MOTORS
M60	Motor fan 400V/3/60Hz.
MTH	Thermal protection wiring.

ATT

Noise level attenuator!

<< **as an accessory** or **integral part of the motor** >>

CLV | CTV | CUV

Fan separations

Option to avoid air intakes when a fan is stopped, in case of multi-circuits and depending on the regulation chosen:

Standard	CLV	CTV	CUV
			
Partitioning every 2 modules	**Longitudinal partitioning**	**Transverse partitioning**	**Unitary partitioning**

- CTV option recommended with RT1 regulation.
- CLV option recommended with CE2 regulation.

PRODUCT ADVANTAGES

Long-lasting power and easy and efficient maintenance, thanks to a non-louvred fin profile limiting clogging.

Wide range of products and combinations (5,500 models):
- 2 different fin geometries,
- 2 designs: In-Line or Parallel.
- 2 module sizes: 1,200 mm or 1,500 mm,
- numerous ventilation options,
- devices up to 12 m long,

High power for a small footprint.

Noise level reduction (EC motors, attenuator, etc.).

Reduced electricity consumption (low speed motors or EC motors).

Possibility of combined HV/LV circuits:
- a single product for 2 applications (one low temperature water circuit and one high temperature),
- a single coil pack to avoid intermediate clogging.

Non-louvred fins for easy maintenance (limited clogging).

In-Line V-KING

Parallel V-KING

TECHNICAL DETAILS OF OPTIONS ON AC MOTORS

AC MOTOR possible options			
WIRING AND BOX	**Power**	**Standard:**	**Power wiring on terminals** (no protection option integrated into this option).
		SCU	**Without motor wiring** (note that no regulation is possible with this option).
	Protection	**CMP**	**Motor protection box IP54**, including one circuit breaker per motor, a fault summary and a main switch. Possibility of floor mounting support kit (MSK).
		MSK	Floor support for cabinets above H = 800 x W = 1,000
REGULATION	**Simple** cascade on/off	**RT1** (including CMP)	**Thermostatic regulation** in cascade in an IP54 enclosure allowing different regulation stages to be managed: **From 1 to 4 regulation stages** > possibility of managing 2 circuits. **From 4 to 10 regulation stages** • Configuration of day/night operation possible. • Integrated clock. 1 or 2 temperature sensors depending on the number of separate circuits present.
	Advanced control by variation	**RT3** (including CMP) Variable frequency drive	**An IP54 ventilated control cabinet** with a variable frequency drive including its fuse protection. A temperature sensor to manage a circuit.

TECHNICAL DETAILS OF OPTIONS ON EC MOTORS

EC MOTOR possible options			
WIRING AND BOX	**Power**	**Standard:**	**Power wiring on terminals.** The power, fault, bus and control wiring is carried out.
		SCM	**Without motor wiring.**
		CCE	**Power wiring in IP54 box and protection by stage included (in L for each fan and in P for 2 fans).** The bus wiring is done.
REGULATION	**Simple**	**SE1** (1)	**Direct control of the motors by customer 0-10 V signal:** one or two circuits possible.
	Advanced control	**CE1** (2)	**Automatic speed control by temperature (setpoint to be adjusted via PLC by customer) / 1 circuit:** one temperature sensor and only one circuit possible.
		CE2 (2)	**Automatic speed control by temperature (setpoint to be adjusted via PLC by customer) / 2 circuits:** 2 temperature sensors and 2 separate circuits possible (contact us in case of multiple circuits).
		CE3 (2)	**Automatic speed control by temperature (setpoint to be adjusted via PLC by customer) / signal comparison:** 2 temperature sensors and signal comparison (contact us in case of multiple circuits).
ADDITIONAL FUNCTIONS		**VMA**	**Maximum speed setting** (configuration done on each fan, via a computer). Only with standard or **CCE**.
		MJN	**Possibility of setting a maximum night speed** (clock by signal 0/10). Only with **CE1 / CE2 / CE3**

(1) *Default option if no customer choice.*

(2) *CEE mandatory option*

VC(A) H(B) PU(C) 06(D) D(E) P(F) 10(G) A3(H)

(A) **VC** = Fin spacing 1.9 mm - **VI** = Fin spacing 2.12 mm
(B) **H** = Class H motor (only for version **PU** and **SN**).
(C) **PN** = Power Normal - **PE** = Power Extra - **PU** = Power Ultra
SN = Silence Normal - **SE** = Silence Extra - **SU** = Silence Ultra
(D) Number of poles
(E) **D** = triangle coupling - **Y** = star coupling
(F) Fan arrangement: **L** = in-line fans - **P** = parallel fans
(G) Number of fans
(H) Type of module

Since the performance of V-KING varies considerably depending on the operating conditions, it is therefore not possible for us to present a selection method in this document. For more information, please consult our software.

		V-KING - VC / VI **POWER**				V-KING - VC / VI **SILENCE**						
		PN	**PU**	**H PU**	**PE** EC **motor**	**SN**	**SE**	**SU**	**H SN**	**SE** EC **motor**	**SU** EC **motor**	**SA** EC **motor**
Diameter		Ø 800	Ø 950	Ø 910	Ø 960	Ø 800	Ø 800	Ø 800	Ø 910	Ø 800	Ø 800	Ø 800
Poles		06P	06P	06P	EC	08P	12P	12P	08P	EC	EC	EC
400V/3/50Hz		3	3	3	3	3	3	3	3	3	3	3
Triangle (**D**)	**rpm**	830	870	890	380/960	640	440	-	650	250/1020	250/730	250/950
	W max.	1600	1920	1950	2990	820	330	-	880	2400	790	1850
	A max.	3,50	3,80	4,20	4,60	2,00	0,86	-	2,00	3,80	1,40	3
	dB(A)	80	87	82	57/90	71	68	-	75	49/88	49/78	48/84
Star (**Y**)	**rpm**	800	640	730	-	460	-	330	480	-	-	-
	W max.	1210	1170	1300	-	440	-	190	500	-	-	-
	A max.	1,55	2,20	2,30	-	0,90	-	0,39	1,05	-	-	-
	dB(A)	70	81	78	-	64	-	61	68	-	-	-

GENERAL

The freezing point of the refrigerant must always be at least 5K below the minimum winter ambient temperature of the installation site.

RISK OF FROST

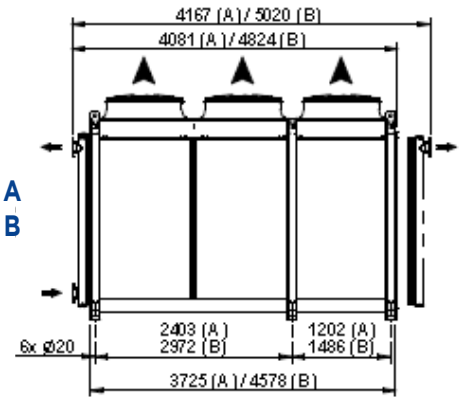
A standard dry cooler cannot be completely drained by simply opening the bleed holes.
Always perform leak tests with the final refrigerant.
For application with water (without antifreeze), and if the ambient temperature can drop below 0 °C, the dry cooler must be properly designed to allow complete draining of the unit (VID option).

RECOMMENDATIONS

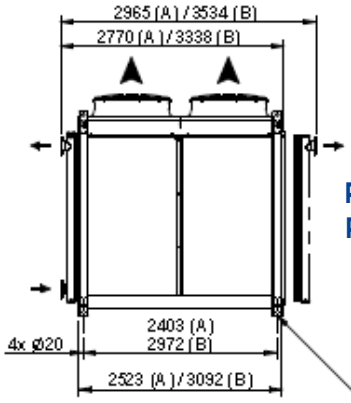
Installation according to best industry practice without forgetting:
- Bleeds and drains
- Expansion tank(s) (VEX option)
- Flexible sleeves
- Protection against vibrations
- Percentage of antifreeze sufficient
- Electrical protection of motors

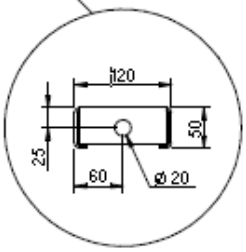
Connection to a totally closed water loop, eliminating any risk of corrosion by oxygenation.
If used with non-ferrous metal water supply lines, protect against corrosion.

P06 A
P06 B



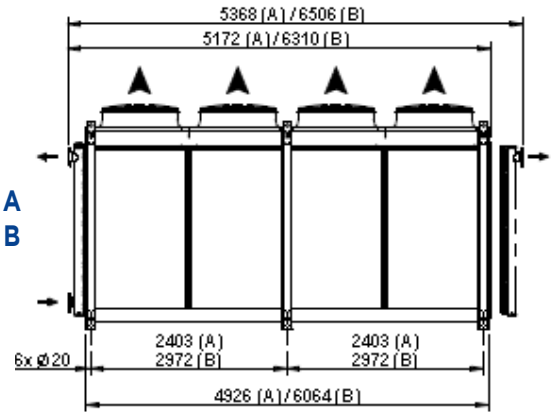
P04 A
P04 B





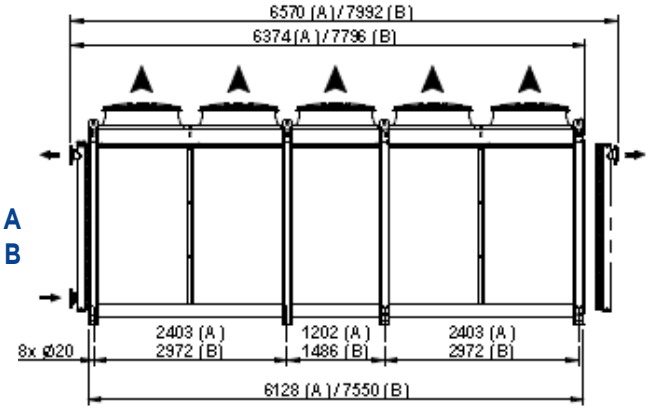
POINTS DE FIXATION
FIXING POINTS
BEFESTIGUNGSPUNKTE
PUNTOS DE FIJACIÓN
КРЕПЛЕНИЕ

P08 A
P08 B

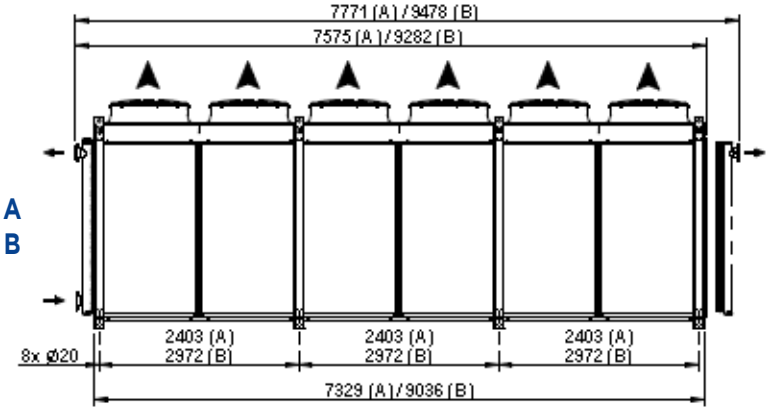


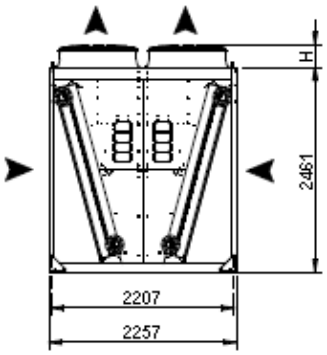
Type	H
PM04D/04Y	380
PU06D/06Y	350
PN06D/06Y	340
SN08D/08Y	330
SE12D/SU12Y	330
HPU06D/06Y	380
HSN08D/08Y	380
SAEC	330
SUEC	240
PEEC	370

P10 A
P10 B

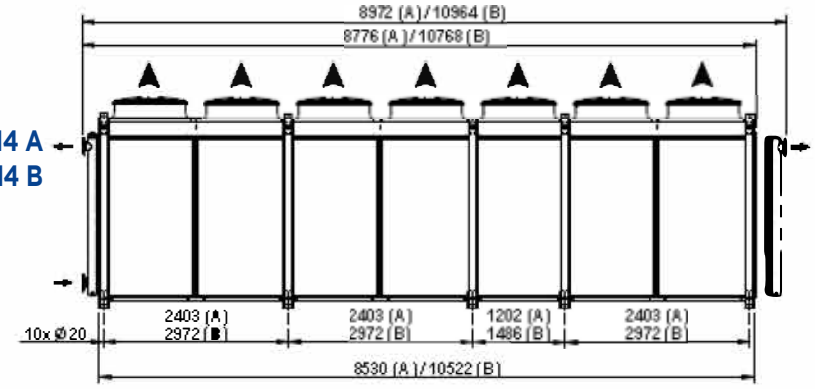


P12 A
P12 B



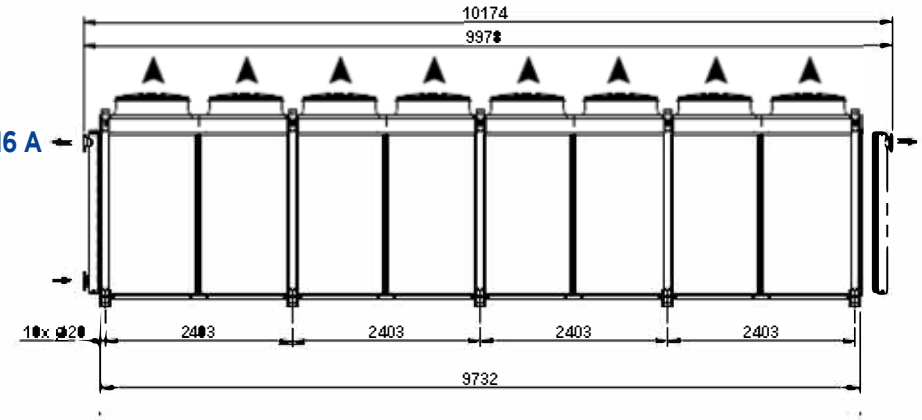


P14 A
P14 B

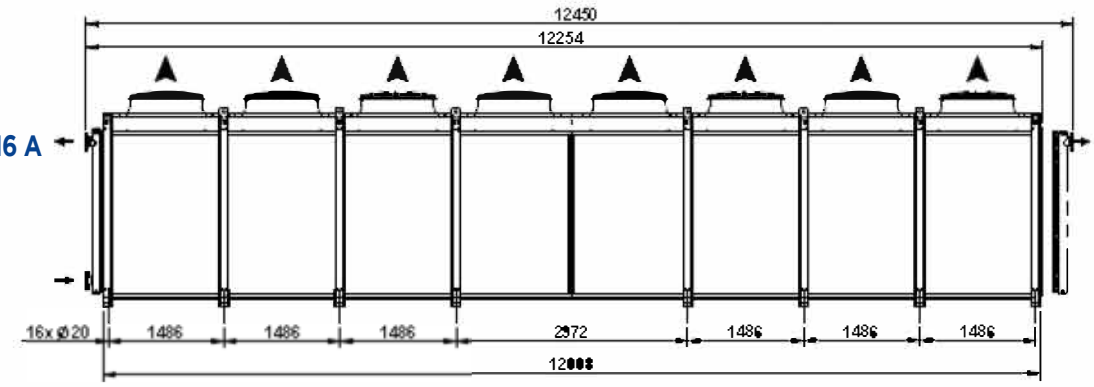


Type	H
PM04D/04Y	380
PU06D/06Y	350
PN06D/06Y	340
SN08D/08Y	330
SE12D/SU12Y	330
HPU06D/06Y	380
HSN08D/08Y	380
SAEC	330
SUEC	240
PEEC	370

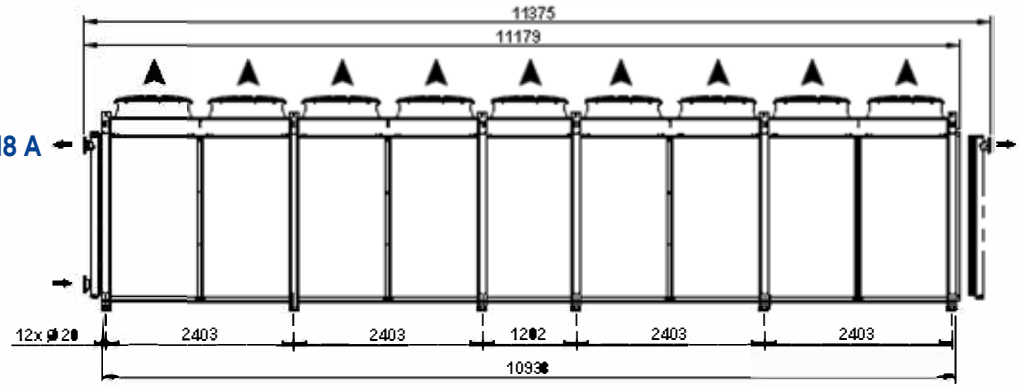
P16 A



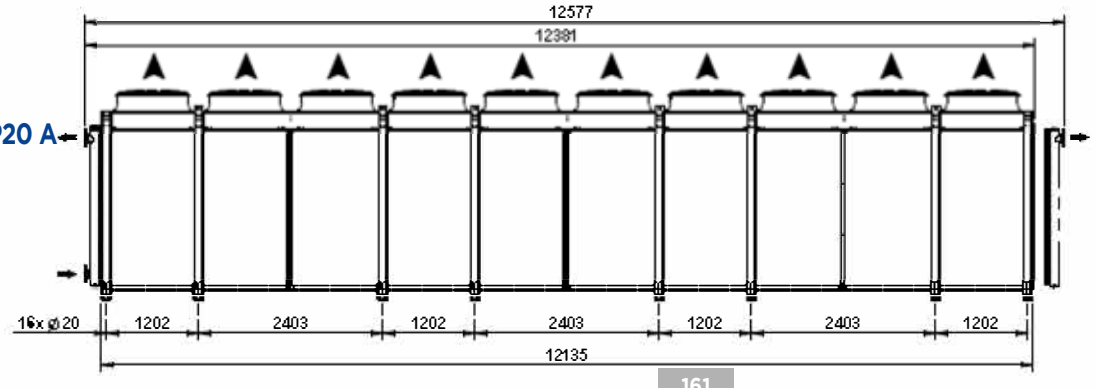
P16 A

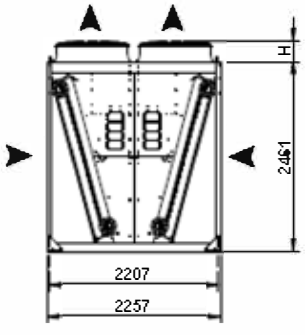


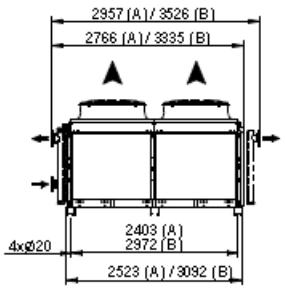
P18 A



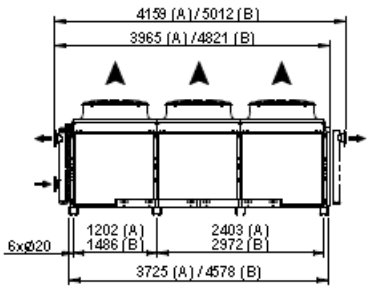
P20 A



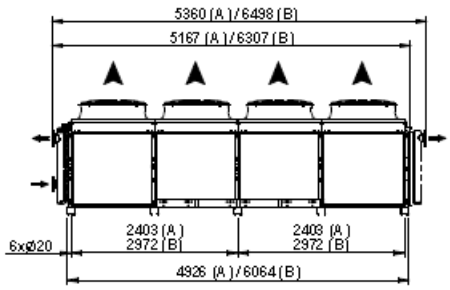




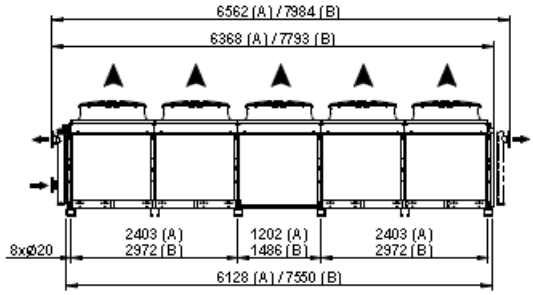
L02 A.B



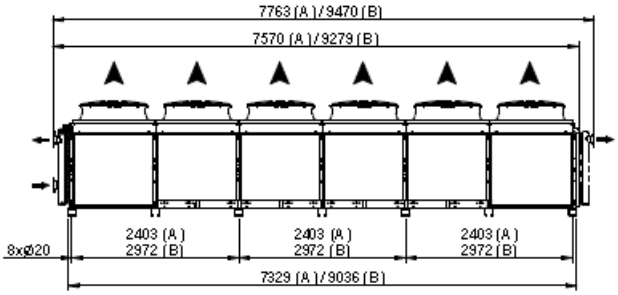
L03 A.B



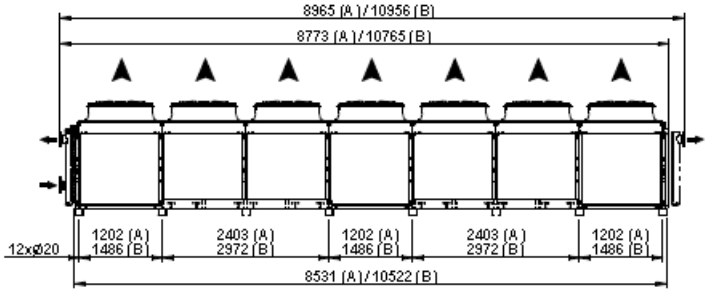
L04 A.B



L05 A.B

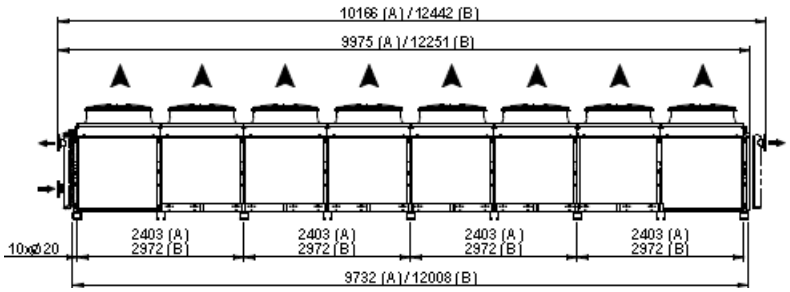


L06 A.B

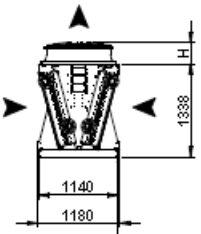


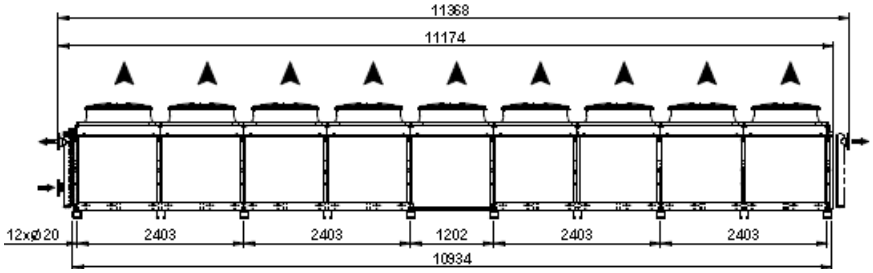
L07 A.B

Type	H
PM04D/04Y	380
PU06D/06Y	350
PN06D/06Y	340
SN08D/08Y	330
SE12D/SU12Y	330
HPU06D/06Y	380
HSN08D/08Y	380
SAEC	330
SUEC	240
PEEC	370

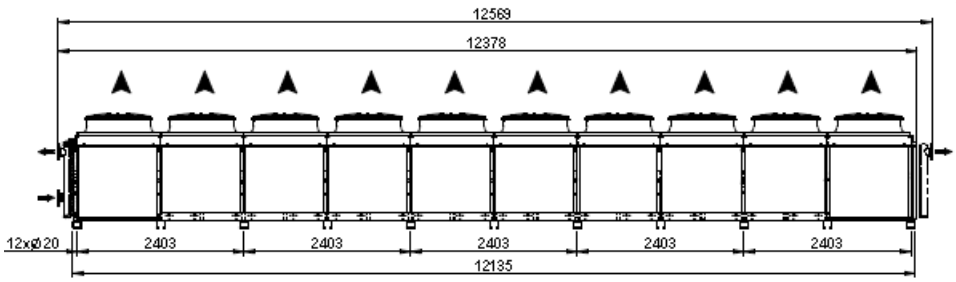


L08 A.B

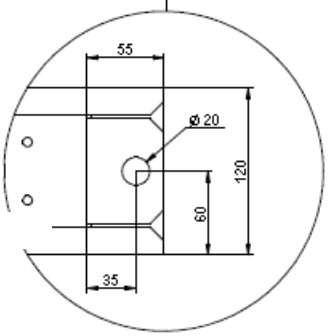




L09 A.B



L10 A.B



POINTS DE FIXATION
FIXING POINTS
BEFESTIGUNGSPUNKTE
PUNTOS DE FIJACIÓN
КРЕПЛЕНИЕ

FRIGA-BOHN®

EUROMON

Compact wall-mounted refrigeration monoblock

HFC

MT **1160** - **3580** W
LT **950** - **2220** W

"Plug & Play" unit, refrigerant pre-charged and factory pre-set for **easy installation**.
Easy maintenance; accessibility to all components.
"Wall" type design that allows for **optimal air distribution** and **storage area optimization**.
The integration of a thermostatic expansion valve and hot gas defrosting of the coil and the condensate pan helps to **save energy**.

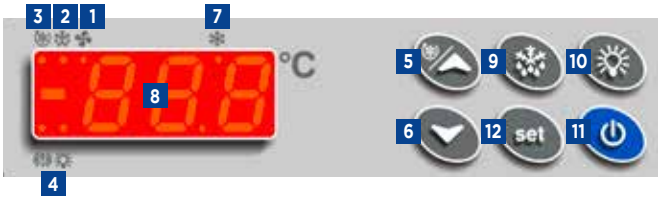
COMPRESSOR

Hermetic compressor.
Available with R449A refrigerants (positive range) and R452A (negative range).

REFRIGERATION CIRCUIT

Thermostatic expansion valve.
LP and HP pressure switches.
Filter dryer.
Condensation control by pressure switch.
Condenser clogged alert sensor.

ELECTRONIC CONTROLLER



1. Fan indicator light.
2. Defrost indicator light.
3. Rapid cooling mode indicator light.
4. Alarm indicator light.
5. Max. temp. and rapid cooling key.
6. Min. temp. key.
7. Compressor indicator light.
8. Digital screen.
9. Defrost key.
10. Room lighting key.
11. On/off button.
12. Setpoint temp. and parameter confirmation key.

DEFROST

Hot gas defrosting of coil and drain pan.
Evaporation of defrost water.

OTHER COMPONENTS

Voltage protector.
Cable with plug (2.5 m), light and door microswitch.
Waterproof ceiling light.
Buffer panels included.
Hour counter. OPTIONAL

EUMO(A)P(B) 05.2(C)

(A) **EUMO** = Compact wall-mounted refrigeration monoblock
(A) **P** = positive range with **R449A**
N = negative range with **R452A**
(B) Model

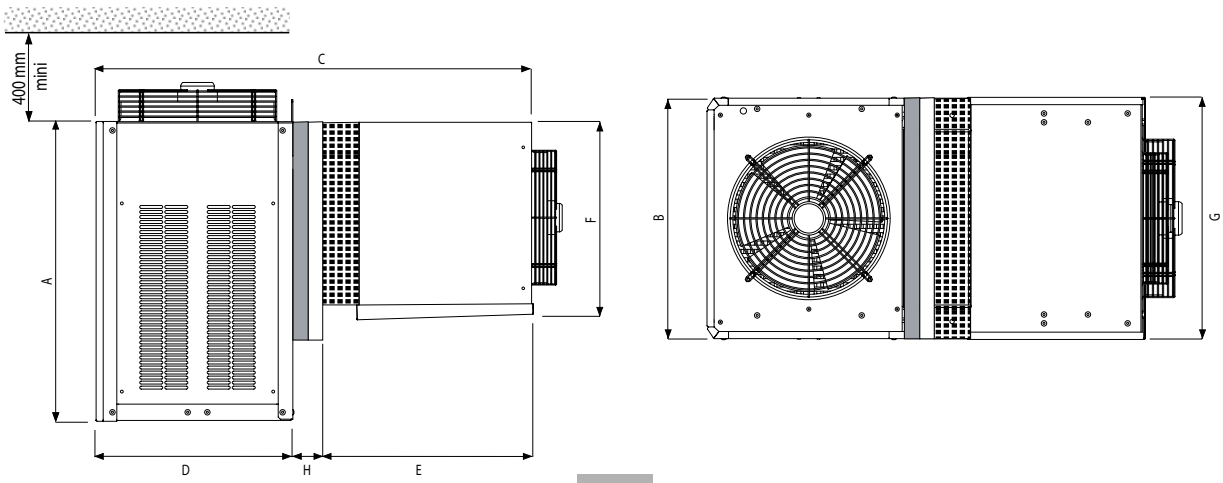
			EUMOP (R449A)						**EUMON** (R452A)		
			05.2	**07.2**	**10.2**	**13.2**	**19.2**	**21.2**	**14.2**	**20.2**	**26.2**
Cooling capacity (1)		**W**	**1160**	**1340**	**1980**	**2100**	**2900**	**3580**	**950**	**1340**	**2220**
Hermetic compressor		**CV**	1/2	3/4	1 1/4	1 1/2	1 3/4	2	1	1 3/4	2 1/2
	Power consumption	**kW**	**0,4**	**0,5**	**0,9**	**1,1**	**1,3**	**1,5**	**0,7**	**1,3**	**1,8**
Standard room volume (2)		**m³**	9	12	20	29	37	45	6	15	27
Room volume without precise data (3)		**m³**	7	9	17	21	30	37	4	10	19
Airflow	Condenser	**m³/h**	1100	1100	1920	1920	1920	1920	1100	1920	1920
	Unit cooler	**m³/h**	880	880	1760	1760	1920	1920	880	1760	1920
Max. current drawn	230V/1/50Hz	**A**	6,1	6,8	8,7	-	-	-	6,3	-	-
	400V/3/50Hz	**A**	-	-	-	4,8	4,9	6,2	-	4,5	6,0
Noise level		**dBA**	34	34	40	42	43	45	34	42	48
Dimensions	**A**	**mm**	730	730	800	800	800	800	730	800	800
	B	**mm**	445	445	685	685	735	735	445	685	735
	C	**mm**	910	910	1000	1000	1050	1050	910	1000	1050
	D	**mm**	360	360	410	410	410	410	360	410	410
	E	**mm**	455	455	470	470	515	515	455	470	515
	F	**mm**	345	345	345	345	410	410	345	345	410
	G	**mm**	390	390	620	620	670	670	390	620	670
	H	**mm**	100	100	120	120	120	120	100	120	120
Panel cut-out	**Height**	**mm**	415	415	640	640	690	690	415	640	690
	Width	**mm**	400	400	410	410	475	475	400	410	475
Net weight		**kg**	65	65	95	95	100	100	70	100	105

(1) Cooling capacity: 10K superheating - 3K subcooling
EUMOP: room temperature 0 °C / outside temperature +32 °C - **EUMON**: room temperature -20 °C / outside temperature +32 °C

(2) Standard: Insulation 100 mm for refrigerated and 120 mm for frozen (including floor); load density 250 kg/m ; movement of goods 10%; ambient temperature 32 °C; maximum temperature of incoming goods 25 °C for refrigerated and -15 °C for frozen; specific heat of the goods 3.2 kJ/kg-K frozen; compressor operating hours 18 h/day.

(3) Recommended volume for cases where there is no starting data for the calculation, when for example conditions are more extreme than standard: low thermal insulation capacity of the room, uninsulated floor, high outside temperature, destination and use of the room in non-standard conditions, etc.

Outside temperature limit: 43 °C. If the temperature is higher, contact us. With fruit and vegetables, multiply the power of the unit by 0.65; or contact us.



FRIGA-BOHN®

MONOTOP

Compact ceiling refrigeration monoblock

HFC

MT **1340** - **3580** W
LT **950** - **2220** W

"Plug & Play" unit, refrigerant pre-charged and factory pre-set for **easy installation**.
Easy maintenance; accessibility to all components.
"Ceiling" type design that allows for **optimal air distribution** and **storage area optimization**.
The integration of a thermostatic expansion valve and hot gas defrosting of the coil and the condensate pan helps to **save energy**.

COMPRESSOR

Hermetic compressor.
Available with R449A refrigerants (positive range) and R452A (negative range).

REFRIGERATION CIRCUIT

Thermostatic expansion valve.
LP and HP pressure switches.
Filter dryer.
Condensation control by pressure switch.
Condenser clogged alert sensor.

REMOTE ELECTRONIC CONTROLLER

1. Fan indicator light.
2. Defrost indicator light.
3. Rapid cooling mode indicator light.
4. Alarm indicator light.
5. Max. temp. and rapid cooling key.
6. Min. temp. key.
7. Compressor indicator light.
8. Digital screen.
9. Defrost key.
10. Room lighting key.
11. On/off button.
12. Setpoint temp. and parameter confirmation key.

DEFROST

Hot gas defrosting of coil and drain pan.
Evaporation of defrost water.

OTHER COMPONENTS

Voltage protector.
Cable with plug (2.5 m), light and door microswitch.
Waterproof ceiling light.
Multifunction electronic control with remote control (5 m).
Evaporation room injected with foam, fully hermetic.

MONOTO(A)P(B) 07(C)

(A) **MONOTO** = Compact ceiling refrigeration monoblock

(B) **P** = positive range with **R449A**
N = negative range with **R452A**

(C) Model

			MONOTOP (R449A)				**MONOTON** (R452A)			
			07	**08**	**13**	**21**	**14**	**18**	**20**	**26**
Cooling capacity (1)		**W**	**1339**	**1785**	**2101**	**3579**	**950**	**1200**	**1341**	**2218**
Hermetic compressor		**CV**	3/4	1	1 1/2	2	1	1 1/4	1 3/4	2 1/2
	Power consumption	**kW**	**0,5**	**0,7**	**1,1**	**1,5**	**0,7**	**0,9**	**1,3**	**1,8**
Standard room volume (2)		**m^3**	12	18	29	45	6	11	15	27
Room volume without precise data (3)		**m^3**	9	14	21	37	4	8	10	19
Airflow	Condenser	**m^3/h**	1100	1920	1920	2270	1100	1920	1920	2270
	Unit cooler	**m^3/h**	1100	2200	2200	3300	1100	2200	2200	3300
Max. input current	230V/1/50Hz (4)	**A**	6,9	7,9	-	-	6,4	8,4	-	-
	400V/3/50Hz (4)	**A**	-	-	4,9	7,5	-	-	4,6	7,3
Dimensions	**A**	**mm**	400	500	500	500	400	500	500	500
	B	**mm**	695	950	950	950	695	950	950	950
	C	**mm**	975	1180	1180	1180	975	1180	1180	1180
Panel cut-out	**Height**	**mm**	615	865	865	865	615	865	865	865
	Width	**mm**	405	405	405	405	405	405	405	405
Net weight		**kg**	90	110	115	140	90	115	120	140

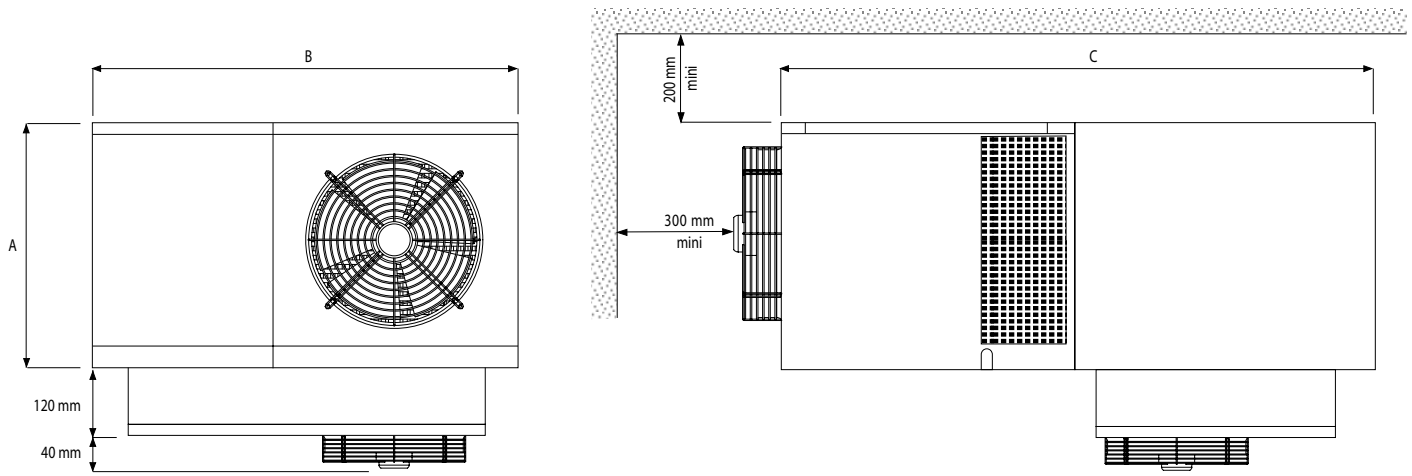
(1) Cooling capacity: 10K superheating - 3K subcooling
MONOTOP: room temperature 0 °C / outside temperature +32 °C - **MONOTON**: room temperature -20 °C / outside temperature +32 °C

(2) Standard: Insulation 100 mm for refrigerated and 120 mm for frozen (including floor); load density 250 kg/m ; movement of goods 10%; ambient temperature 32 °C; maximum temperature of incoming goods 25 °C for refrigerated and -15 °C for frozen;
specific heat of the goods 3.2 kJ/kg-K frozen; compressor operating hours 18 h/day.

(3) Recommended volume for cases where there is no starting data for the calculation, when for example conditions are more extreme than standard: low thermal insulation capacity of the room, uninsulated floor, high outside temperature, destination and use of the room in non-standard conditions, etc.

(4) Also available in 60 Hz version. Contact us for more information.

Outside temperature limit: 43 °C. If the temperature is higher, contact us. With fruit and vegetables, multiply the power of the unit by 0.65; or contact us.



FRIGA-BOHN®

MAXI

Condensing unit

HFC

MT **3** - **16.6** kW
LT **1.5** - **5.7** kW

Easy installation: complete electrical supply pre-wired in the factory.

Easy maintenance: accessibility to all components.

Versatility: several versions are available to meet your requirements, SH (semi-hermetic) or SC (scroll) compressor; ALN condenser (low noise level) or AS (oversized condenser).

COMPRESSOR

Two technologies to choose from: semi-hermetic or Scroll compressor.
Multi-refrigerant compressor.

OPTION	
CAC	Additional housing belt (Scroll version).
VFA	Valve + filter on suction.

CASING

Robust, made of white pre-painted sheet metal.

The MAXI condensing unit can be coupled to a unit cooler, according to your needs, to form a split system called the MAXIBOREAL

UNIT COOLER

The MAXI condensing unit can, depending on the needs of your application, be coupled with a dual-discharge unit cooler (NTA) or a cubic unit cooler (NOVA).

Factory-assembled with expansion valve and solenoid valve.

For more details on our unit coolers, please refer to the NTA and NOVA documentation.

CONDENSER

1 to 4 fans.
Variable speed of rotation.

OPTION	
RPC	Condensing pressure regulation.
GPC	Condenser protection grille.

ELECTRICAL BOX

Fully integrated electrical cabinet.
General disconnector switch.

OPTION	
SPE	Wiring on terminal block (without electric board).

OTHER COMPONENTS

Receiver supplied with valve.
The liquid line consists as standard of a filter dryer, a liquid indicator and a service valve.
LP control by adjustable pressure switch.
HP safety by cartridge pressure switch with automatic reset.

OPTION	
PRG	Precharging of MAXI unit with R404A*. *Only for marketing outside Europe.

The MAXIBOREAL split system consists of the MAXI condensing unit, a unit cooler and a control system.

Please contact us to choose the right combination of unit/cooler for the refrigerant and the application.

REGULATION

Piloting by electronic regulation.
Air or electric defrost management.
Lighting management.
Display and referral of alarms.
Additional programmable contact (door opening, entrapment safety, etc.).
Integrated forced operation for rapid cooling or blast freezing.

MAXI(A) SH(B) P(C) 32(D) A(E)

(A) **MAXI** = Condensing unit **MAXIBOREAL** = Split system
(B) **SH** = Semi-hermetic compressor **SC** = Scroll compressor
(C) **P** = positive range **N** = negative range
(D) Model
(E) **A** = Standard **AS** = Oversized **ALN** = Low noise level

The MAXI is available with HFCs. For more information, please consult our software.

MAX | Standard — Positive range

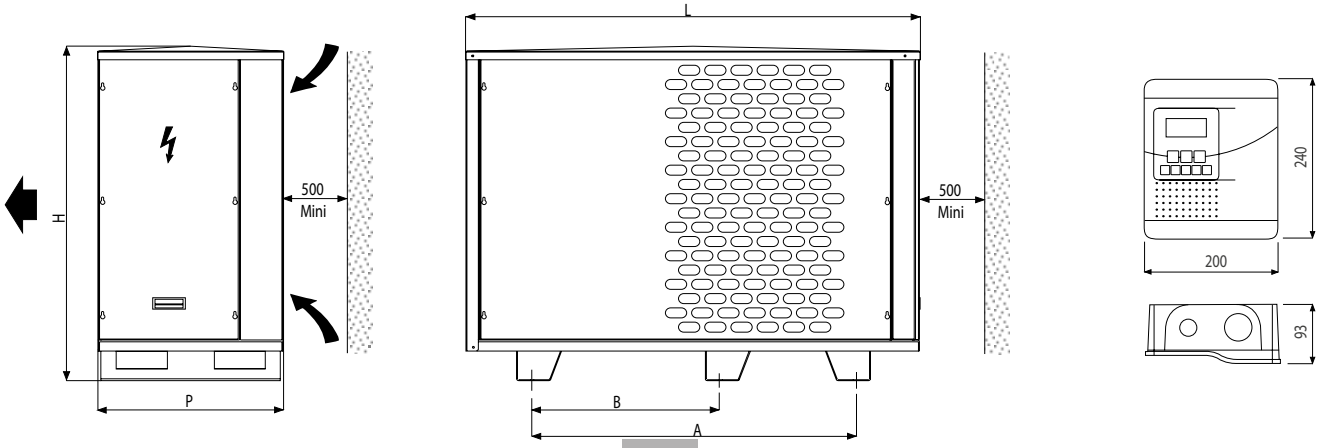
MAXI SH ...			P23A	P26A	P33A	P41A	P53A	P66A	P83A	-
Power (1)	R449A	kW	3,1	4,1	5,3	6,5	8,3	10,6	12,2 (2)	-
Power consumption (1)	R449A	kW	1,7	2,3	2,5	3,2	4,2	5,7	7,4	-
Power (1)	R404A	kW	3,3	4,2	5,5	6,9	8,5	11,0	12,9	-
Power consumption (1)	R404A	kW	1,9	2,4	2,7	3,4	4,5	6,1	8,0	-
Current drawn - 400V/3/50Hz		A max	5,15	7,00	7,80	10,20	13,20	15,20	19,86	-

MAXI SC ...			P23A	P26A	P33A	P41A	P53A	P66A	P83A	P104A
Power (1)	R449A	kW	3,0	3,8	4,9	6,8	8,1	9,8	11,1 (2)	16,6
Power consumption (1)	R449A	kW	1,9	2,1	2,5	3,4	4,5	5,3	7,7	9,8
Power (1)	R404A	kW	3,1	3,9	5,1	6,9	8,2	10	11,4	17,1
Power consumption (1)	R404A	kW	2,0	2,3	2,6	3,6	4,7	5,7	8,1	10,3
Current drawn - 400V/3/50Hz		A max	6,45	6,20	7,90	11,40	13,40	14,00	18,00	26,00

MAXI ...			P23A	P26A	P33A	P41A	P53A	P66A	P83A	P104A
Fan	Nb x Ø	mm	1 x 355	1 x 355	2 x 355	2 x 355	2 x 355	2 x 500	2 x 500	2 x 500
		50 Hz	230V/1	230V/1	230V/1	230V/1	230V/1	400V/3	400V/3	400V/3
Airflow		m^3/h	1380	2200	2640	4200	4200	9600	11540	10314
Speed of rotation		rpm	1000	1500	1000	1500	1500	1000	1500	1500
Liquid capacity		l.	3	3	5	5	5	11	11	11
Dimensions	L	mm	1190	1190	1350	1350	1350	1450	1450	1450
	D	mm	475	475	550	550	550	600	600	600
	H	mm	810	810	1060	1060	1060	1470	1470	1470
	A	mm	805	805	955	955	955	1049	1049	1049
	B	mm	-	-	-	-	-	617	617	617
Connections	Suction	Ø	5/8"	7/8"	7/8"	7/8"	1 1/8"	1 1/8"	1 3/8"	1 3/8"
	Liquid	Ø	3/8"	3/8"	1/2"	1/2"	1/2"	1/2"	5/8"	5/8"
Net weight		kg	140	140	160	175	175	220	230	230

(1) **A**: Evaporating temperature **-10 °C** / Ambient temperature **+32 °C** - Superheat: 10K - Subcool: 3K.
(2) Product only available in split system.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).



MAXI(A) SH(B) P(C) 32(D) A(E)

(A) **MAXI** = Condensing unit **MAXIBOREAL** = Split system
(B) **SH** = Semi-hermetic compressor **SC** = Scroll compressor
(C) **P** = positive range **N** = negative range
(D) Model
(E) **A** = Standard **AS** = Oversized **ALN** = Low noise level

> **The MAXI is available with HFCs. For more information, please consult our software.**

MAX | Standard — Negative range

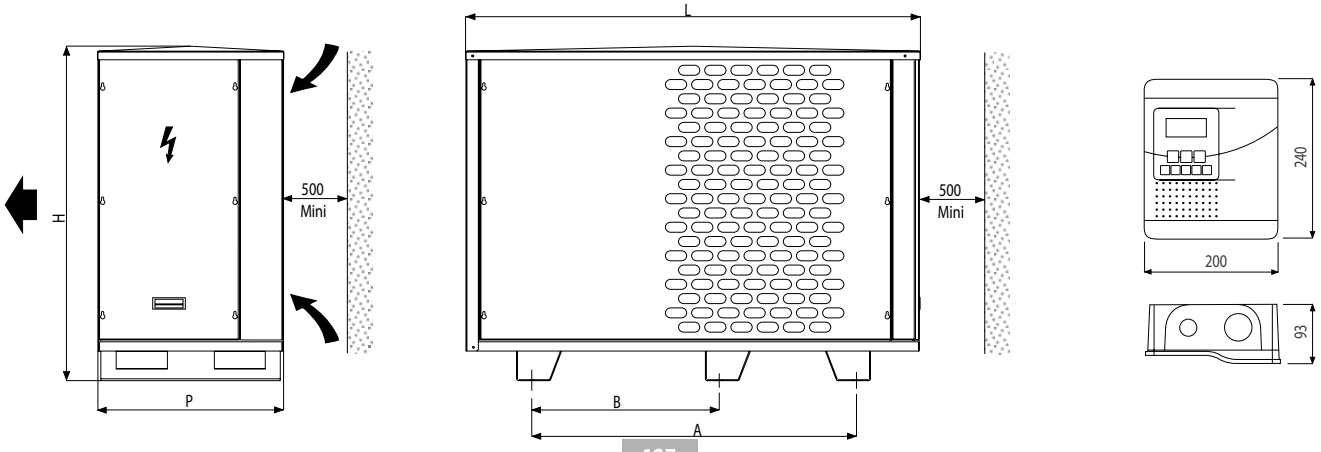
MAXI SH ...			N24A	N34A	N42A	N73A	-
Power (1)	R449A	kW	1,5	2,2 (2)	2,7	4,1	-
Power consumption (1)	R449A	kW	1,4	2,0	2,3	3,7	-
Power (1)	R404A	kW	1,8	2,5	3,2	4,5	-
Power consumption (1)	R404A	kW	1,7	2,5	3,0	4,3	-
Current drawn		A max	7,35	10,40	11,60	18,30	-

MAXI SC ...			-	N34A	N42A	N73A	N84A
Power (1)	R449A	kW	-	1,7 (2)	2,9 (2)	4,3	5,7 (2)
Power consumption (1)	R449A	kW	-	2,0	3,4	4,4	6,3
Power (1)	R404A	kW	-	1,77	3,0	4,5	5,9
Power consumption (1)	R404A	kW	-	1,97	3,3	4,3	6,2
Current drawn - 400V/3/50Hz		A max	-	8,20	11,90	19,40	25,00

MAXI ...			N24A	N34A	N42A	N73A	N84A
Fan	Nb x Ø	mm	1 x 355	1 x 355	2 x 355	2 x 355	2 x 500
		50 Hz	230V/1	230V/1	230V/1	230V/1	400V/3
Airflow		m³/h	1380	2200	2640	4200	9600
Speed of rotation		rpm	1000	1500	1000	1500	1000
Liquid capacity		l.	5	5	5	5	5
Dimensions	L	mm	1190	1190	1350	1350	1450
	D	mm	475	475	550	550	600
	H	mm	810	810	1060	1060	1470
	A	mm	805	805	955	955	1049
	B	mm	-	-	-	-	617
Connections	Suction	Ø	7/8"	7/8"	1 1/8"	1 1/8"	1 3/8"
	Liquid	Ø	3/8"	3/8"	3/8"	1/2"	1/2"
Net weight		kg	140	140	175	175	230

(1) **A**: Evaporating temperature **-35 °C** / Ambient temperature **+32 °C** - Superheat: 10K - Subcool: 3K.
(2) Product only available in split system.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).



MAXIBOREAL(A) SH(B) P(C) 23(D) A(E) T2R6P(F)

(A) **MAXI** = Condensing unit **MAXIBOREAL** = Split system
(B) **SH** = Semi-hermetic compressor **SC** = Scroll compressor
(C) **P** = positive range **N** = negative range
(D) Model
(E) **A** = Standard **AS** = Oversized **ALN** = Low noise level
(F) Split system **MAXIBOREAL** > unit coolers: **NTA** = dual-discharge (NTA) **NOVA** = cubic (NOVA)

The MAXIBOREAL is available with HFCs. Please contact us to choose the right combination of unit/cooler for the refrigerant and the application.

MAXIBOREAL — ti = +8 °C - DT1 = 10K

MAXIBOREAL SH ...

			P23A NTA M 3R 2-AC GV	P26A NTA M 3R 2-AC GV	P33A NTA M 4R 2-AC GV	P41A NTA M 6R 3-AC GV	P53A NTA M 7R 4-AC GV	P66A NTA M 8R 4-AC GV	P83A NTA M 8R 4-AC GV	-
Power (1)	R404A	kW	**4,24**	**5,45**	**7,27**	**9,09**	**11,16**	**14,46**	**16,88**	-
Power consumption (1)	R404A	kW	**2,45**	**3,02**	**3,31**	**4,22**	**5,49**	**7,43**	**9,65**	-
Current drawn	400V/3/50Hz	**A** max	5,15	7,00	7,80	10,20	13,20	15,20	19,86	-
Room volume (indicative)		m^3	45	55	75	110	130	200	230	-

MAXIBOREAL Sc ...

			P23A NTA M 3R 2-AC GV	P26A NTA M 3R 2-AC GV	P33A NTA M 4R 2-AC GV	P41A NTA M 6R 3-AC GV	P53A NTA M 7R 4-AC GV	P66A NTA M 8R 4-AC GV	P83A NTA M 8R 4-AC GV	P104A 2xNTA M 6R 3-AC GV
Power (1)	R404A	kW	**4,06**	**5,33**	**6,63**	**9,15**	**10,69**	**13,12**	**14,75**	**21,07**
Power consumption (1)	R404A	kW	**2,26**	**2,62**	**2,94**	**4,11**	**5,30**	**6,39**	**9,07**	**11,54**
Current drawn	400V/3/50Hz	**A** max	5,20	6,20	7,90	11,40	13,40	14,00	19,96	25,96
Room volume (indicative)		m^3	45	55	75	110	130	200	230	300

MAXIBOREAL — ti = +6 °C - DT1 = 6K

MAXIBOREAL SH ...

			P23A NOVA 3245R	P26A NOVA 3343R	P33A NOVA 3344R	P41A NOVA 4263R	P53A NOVA 4264R	P66A NOVA 4265R	P83A NOVA 4364R	-
Power (1)	R404A	kW	**4,51**	**5,81**	**7,74**	**9,70**	**11,88**	**15,40**	**17,98**	-
Power consumption (1)	R404A	kW	**2,63**	**3,37**	**3,66**	**4,78**	**6,23**	**8,34**	**11,15**	-
Current drawn	400V/3/50Hz	**A** max	5,15	7,00	7,80	10,20	13,20	15,20	19,86	-
Room volume (indicative)		m^3	45	75	100	130	170	210	270	-

MAXIBOREAL Sc ...

			P23A NOVA 3245R	P26A NOVA 3343R	P33A NOVA 3344R	P41A NOVA 4263R	P53A NOVA 4264R	P66A NOVA 4265R	P83A NOVA 4364R	P104A NOVA 4366R
Power (1)	R404A	kW	**4,32**	**5,67**	**7,06**	**9,76**	**11,39**	**13,99**	**15,69**	**22,36**
Power consumption (1)	R404A	kW	**2,38**	**2,90**	**3,22**	**4,59**	**5,96**	**7,16**	**10,43**	**12,80**
Current drawn	400V/3/50Hz	**A** max	5,20	6,20	7,90	11,40	13,40	14,00	19,96	25,96
Room volume (indicative)		m^3	45	75	100	130	170	210	270	360

(1) +32 °C - Superheat 10K - Subcool 3K.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

All the information on the unit coolers can be found in the **NTA** and **NOVA** documentation

MAXIBOREAL(A) SH(B) P(C) 23(D) A(E) NOVA 3156L(F)

(A) **MAXI** = Condensing unit **MAXIBOREAL** = Split system
(B) **SH** = Semi-hermetic compressor **SC** = Scroll compressor
(C) **P** = positive range **N** = negative range
(D) Model
(E) **A** = Standard **AS** = Oversized **ALN** = Low noise level
(F) Split system **MAXIBOREAL** > unit coolers: **NTA** = dual-discharge (NTA) **NOVA** = cubic (NOVA)

The MAXIBOREAL is available with HFCs. Please contact us to choose the right combination of unit/cooler for the refrigerant and the application.

MAXIBOREAL ti = +2 °C - DT1 = 8K

MAXIBOREAL SH ...			P23A NOVA 3156L	P26A NOVA 3244L	P33A NOVA 3343L	P41A NOVA 3344L	P53A NOVA 4263L	P66A NOVA 4263L	P83A NOVA 4264L	-
Power (1)	R404A	kW	3,73	4,79	6,36	7,91	9,81	12,63	14,82	-
Power consumption (1)	R404A	kW	2,38	2,93	3,35	4,13	5,61	7,36	9,62	-
Current drawn	400V/3/50Hz	A max	5,15	7,00	7,80	10,20	13,20	15,20	19,86	-
Room volume (indicative)		m^3	35	40	55	70	85	120	140	-

MAXIBOREAL Sc ...			P23A NOVA 3156L	P26A NOVA 3244L	P33A NOVA 3343L	P41A NOVA 3344L	P53A NOVA 4263L	P66A NOVA 4263L	P83A NOVA 4264L	P104A NOVA 4266L
Power (1)	R404A	kW	3,56	4,67	5,8	7,98	9,4	11,51	12,99	18,61
Power consumption (1)	R404A	kW	2,32	2,66	3,12	4,18	5,58	6,60	9,33	12,20
Current drawn	400V/3/50Hz	A max	5,20	6,20	7,90	11,40	13,40	14,00	19,96	25,96
Room volume (indicative)		m^3	35	40	55	70	85	120	140	180

MAXIBOREAL ti = 0 °C - DT1 = 8K

MAXIBOREAL SH ...			P23A NOVA 3155R	P26A NOVA 3243R	P33A NOVA 3343R	P41A NOVA 3344R	P53A NOVA 4263R	P66A NOVA 4263R	P83A NOVA 4264R	-
Power (1)	R404A	kW	3,49	4,47	5,93	7,37	9,16	11,77	13,82	-
Power consumption (1)	R404A	kW	2,3	2,83	3,25	4,01	5,45	7,15	9,37	-
Current drawn	400V/3/50Hz	A max	5,15	7,00	7,80	10,20	13,20	15,20	19,86	-
Room volume (indicative)		m^3	25	35	50	65	75	110	130	-

MAXIBOREAL Sc ...			P23A NOVA 3155R	P26A NOVA 3243R	P33A NOVA 3343R	P41A NOVA 3344R	P53A NOVA 4263R	P66A NOVA 4263R	P83A NOVA 4264R	P104A NOVA 4265R
Power (1)	R404A	kW	3,32	4,37	5,41	7,44	8,78	10,72	12,17	17,46
Power consumption (1)	R404A	kW	2,31	2,63	3,09	4,15	5,51	6,55	9,22	11,47
Current drawn	400V/3/50Hz	A max	5,20	6,20	7,90	11,40	13,40	14,00	19,96	25,96
Room volume (indicative)		m^3	25	35	50	65	75	110	130	170

(1) +32 °C - Superheat 10K - Subcool 3K.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

All the information on the unit coolers can be found in the **NTA** and **NOVA** documentation

MAXIBOREAL(A) SH(B) N(C) 24(D) A(E) NOVA 3155C(F)

(A) **MAXI** = Condensing unit **MAXIBOREAL** = Split system
(B) **SH** = Semi-hermetic compressor **SC** = Scroll compressor
(C) **P** = positive range **N** = negative range
(D) Model
(E) **A** = Standard **AS** = Oversized **ALN** = Low noise level
(F) Split system **MAXIBOREAL** > unit coolers: **NTA** = dual-discharge (NTA) **NOVA** = cubic (NOVA)

The MAXIBOREAL is available with HFCs. Please contact us to choose the right combination of unit/cooler for the refrigerant and the application.

MAXIBOREAL — ti = -20 °C - DT1 = 7K

MAXIBOREAL SH ...			N24A NOVA 3155C	N34A NOVA 3156C	N42A NOVA 3245C	N73A NOVA 4263C	-
Power (1)	R404A	kW	**2,63**	**3,62**	**4,67**	**6,63**	**-**
Power consumption (1)	R404A	kW	**2,45**	**3,42**	**4,26**	**6,24**	**-**
Current drawn	400V/3/50Hz	**A** max	7,35	10,40	11,60	18,30	-
Room volume (indicative)		m^3	25	40	65	120	-

MAXIBOREAL Sc ...			-	N34A NOVA 3156C	N42A NOVA 3245C	N73A NOVA 4263C	N84A NOVA 4263C
Power (1)	R404A	kW	**-**	**2,49**	**4,19**	**6,2**	**8,53**
Power consumption (1)	R404A	kW	**-**	**2,4**	**3,88**	**6,42**	**8,66**
Current drawn	400V/3/50Hz	**A** max	-	8,20	11,90	19,40	25,00
Room volume (indicative)		m^3	-	40	65	120	200

(1) +32 °C - Superheat 10K - Subcool 3K.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

All the information on the unit coolers can be found in the **NTA** and **NOVA** documentation

FRIGA-BOHN®

DUO CU

Encased outdoor condensing unit

A2L HFC

MT **7** - **48** kW
LT **6** - **15** kW

Compact design for perfect integration in small spaces.
Suitable for residential areas thanks to its **low noise level**.
A2L Ready: Factory pre-equipped unit with complete A2L validated refrigeration and electrical supply.
Easy maintenance: accessibility to all components.

CASING

Galvanized sheet steel covered with white polyester paint.
Easy removal of front and side panels.
Display screen on front panel (A2L models).

LIQUID RECEIVER

Vertical receiver with a capacity of 18 or 45 l. with safety valve.
Two inlet/outlet shut-off valves.
Liquid outlet equipped with a filter dryer, an indicator and a liquid outlet valve.

OIL LINE

HP oil separator with integrated oil reserve with high and low indicator.
HP oil return line with filter.
Electronic oil controller per compressor.

MANIFOLDS

Copper suction and delivery.
Filter on the suction.

The integration of a Digital™ compressor ensures power modulation from 10 to 100% and makes the DUO CU unit perfectly suited to multi-station applications.

COMPRESSORS

Multi-refrigerant A2L compressors : R1234yf, R454C, R455A.
Multi-refrigerant compressors: R404A, R134a, R407F, R407A, R448A, R449A, R450A and R513A.
Two Scroll compressors including one Digital™.
Suction and discharge shut-off valves, crankcase heater and rigid suspension elements.
Compressors equipped with noise insulation casings.

CONDENSER

> **75% reduction of the refrigerant charge thanks to the microchannel technology.**

Microchannel technology coil (13-18-25-29-45-57).
Microchannel technology coil with treatment:
- Epoxy (A1 models).
- Thermoguard (A2L models)
Aluminum finned coil and copper tubes (76-114).
Axial or centrifugal condenser fan(s) with speed variation or EC motors depending on model.
Heat recovery (only on DUO CU MT):
- Tapping points with valves on standby upstream of the condenser.
- Integrated control.

OPTIONS

- Epoxy fins or Thermoguard coil treatment available. CONTACT US
- Heat recovery module for hot water production at 55 °C or heating. CONTACT US

REGULATION AND SAFETY

Complete integrated electrical cabinet IP54.
Electronic regulation by PLC with pressostatic back-up mode.
"Floating" HP control with external probe.
Icc 15 kA.
General disconnect switch.
Switchover to back-up mode:
- Automatic by LPE/HPE support pressure switches.
- Manual by switch on cabinet door.
2 condenser fan protection outlets.
4 cooling station outputs 2x10A. (standard models).
Controller with smartphone connection (A2L models).

CONTROL DEVICES

1 LP general safety pressure switch.
1 LPE support pressure switch (switchover to back-up mode).
1 LP regulator pressure switch per compressor.
1 HP cartridge pressure switch with automatic reset per compressor.
1 HPE support pressure switch (switchover to back-up mode).
1 HP and LP sensor.

In order to best meet your needs, the **DUO CU** is available in 6 models:

DUO CU(A) MT(B) 29(C) D(D)

(A) Condensing unit
(B) **MT** = positive range - **LT** = negative range
(C) Model (compressor)
(D) **A** = fans without available pressure - **C** = fans with available pressure -
D = A2L model fans without available pressure - **E** = A2L model fans with available pressure

For a precise selection, please consult our software.

Fans without available pressure — Positive range

CONDITIONS	REFRIGERANTS	DUO CU MT ... A A2L	29	45	57
Power (1)	R1234yf	kW	8,1	12,1	15,2
	R454C	kW	13,6	20	24,7
	R455A	kW	14,5	21,4	26,4
	R448A	kW	14,8	22,2	27,2
	R449A	kW	14,8	22,2	27,2
	R450A	kW	7,2	10,9	13,6
	R513A	kW	8,8	13,3	16,7
	R134a	kW	8,4	12,6	15,7
	R404A	kW	14,8	21,8	26,6
Power consumption (1)	R1234yf	kW	3,5	5,0	6,3
	R454C	kW	5,3	8,1	10,1
	R455A	kW	6,1	9,1	11,4
	R448A	kW	5,8	9,0	11,3
	R449A	kW	5,8	9,0	11,3
	R450A	kW	2,9	4,2	5,3
	R513A	kW	3,7	5,3	6,8
	R134a	kW	3,3	4,9	6,2
	R404A	kW	6,1	9..1	11,5

			29	45	57
Compressor		Nb	2	2	2
Input Current (1)		A max.	**15,3**	**20,3**	**23,6**
Fan	Type		EC	EC	EC
	Nb x Ø	mm	2 x 450	2 x 450	2 x 450
Noise level	**Lp 10m** (2)	dB(A)	38	45	46
Max. airflow		m^3/h	11000	12700	13400
Liquid capacity		l.	18	18	18
Connections	Suction	Ø	1"3/8	1"3/8	1"5/8
	Liquid	Ø	5/8"	5/8"	7/8"
Casing	Size		**T1D**	**T1D**	**T2D**
Dimensions	**L**	mm	1320	1320	1320
	D	mm	1128	1128	1128
	H	mm	1615	1615	1615
Net weight		kg	325	335	340
Unit switch-off temperature: -10 °C (R454C)			+47°C	+46°C	+45°C
Coil (4)			(▥)	(▥)	(▥)

(1) Evaporating temperature: **-10 °C** / Ambient temperature: **+32 °C -** Total superheat 10K and subcool 3K.
(2) Sound pressure in dB(A) measured at 10 m, parallelepiped measuring surface, in a free field over a reflecting plane, given as an indication only.
(3) Additional available pressure in pascals.
(4) ▥ Aluminum finned coil and copper tubes (optional epoxy fins or Ozkem coil treatment available)
▥ Coil with microchannel technology (▥) Coil with Epoxy(model A1) / Thermoguard (models A2L) treated microchannel technology.
(5) This model can be used in Europe, for all industrial applications whatever the nominal power developed, but in commercial applications only if the nominal power is less than 40 kW.
(6) Product only available in split system.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

DUO CU(A) MT(B) 29(C) A(D)

(A) Condensing unit
(B) **MT** = positive range - **LT** = negative range
(C) Model (compressor)
(D) **A** = fans without available pressure - **C** = fans with available pressure -
D = A2L model fans without available pressure - **E** = A2L model fans with available pressure

For a precise selection, please consult our software.

Fans without available pressure — Positive range

CONDITIONS	REFRIGERANTS	DUO CU MT ... A	29	45	57	76	114(5)
Power (1)	R448A	kW	14,9	21,4	26,8	38,3	50,7
	R449A	kW	13,6	21,4	24,8	38,3	50,6
	R450A	kW	7,7	11,4 (6)	13,8	19,5 (6)	-
	R513A	kW	9,0	13,6	16,8	23,2	31,7
	R134a	kW	8,4	13	16,1	22,1	31,6
	R404A	kW	14,6	20,6	25,3	36,9	48,1
Power consumption (1)	R448A	kW	6,3	9,4	12,2	16,8	28
	R449A	kW	6,3	9,4	12,2	16,8	28
	R450A	kW	3,2	4,9	6,2	9,4	-
	R513A	kW	3,7	5,8	7,5	10,7	16,3
	R134a	kW	3,5	5,5	7,7	9,9	14,9
	R404A	kW	6,4	9,8	12,7	17,4	28,0

			29	45	57	76	114
Compressor		Nb	2	2	2	2	2
Input Current (1)		A max.	17,2	24,1	26,6	37	58
Fan	Type		EC	EC	EC	EC	EC
	Nb x Ø	mm	2x 450	2x 450	2x 450	2x 710	2x 710
Noise level	**Lp 10m** (2)	dB(A)	41	42	45	44	46
Max. airflow		m^3/h	12800	12800	12800	30000	30000
Liquid capacity		l.	18	18	18	45	45
Connections	Suction	Ø	1"3/8	1"3/8	1"5/8	2"1/8	2"1/8
	Liquid	Ø	5/8"	5/8"	7/8"	7/8"	1"1/8
Casing	Size		T1A	T1A	T1A	T2A	T2A
Dimensions	L	mm	1195	1195	1195	1960	1960
	D	mm	660	660	660	1195	1195
	H	mm	1504	1504	1504	1635	1635
Net weight		kg	290	300	310	530	540
Unit switch-off temperature: -10 °C (R449A)			+43°C	+40°C	+36°C	+41°C	+37°C
Coil (4)			(▥)	(▥)	(▥)	▤	▤

(1) Evaporating temperature: **-10 °C** / Ambient temperature: **+32 °C -** Total superheat 10K and subcool 3K.
(2) Sound pressure in dB(A) measured at 10 m, parallelepiped measuring surface, in a free field over a reflecting plane, given as an indication only.
(3) Additional available pressure in pascals.
(4) ▤ Aluminum finned coil and copper tubes (optional epoxy fins or Ozkem coil treatment available)
▥ Coil with microchannel technology (▥) Coil with Epoxy(model A1) / Thermoguard (models A2L) treated microchannel technology.
(5) This model can be used in Europe, for all industrial applications whatever the nominal power developed, but in commercial applications only if the nominal power is less than 40 kW.
(6) Product only available in split system.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

DUO CU(A) MT(B) 29(C) E(D)

(A) Condensing unit
(B) **MT** = positive range - **LT** = negative range
(C) Model (compressor)
(D) **A** = fans without available pressure - **C** = fans with available pressure -
D = A2L model fans without available pressure - **E** = A2L model fans with available pressure

For a precise selection, please consult our software.

Fans with available pressure — Positive range

CONDITIONS	REFRIGERANTS	DUO CU MT ... C A2L	29	45	57
Power (1) 150 Pa (3)	R1234yf	kW	8,1	12,1	15,2
	R454C	kW	13,6	20,2	24,9
	R455A	kW	14,7	21,7	26,6
	R448A	kW	14,8	22,5	27,5
	R449A	kW	14,8	22,5	28,6
	R450A	kW	7,3	10,9	13,6
	R513A	kW	8,8	13,3	16,7
	R134a	kW	8,4	12,6	15,7
	R404A	kW	13,9	21,1	26,3
Power consumption (1)	R1234yf	kW	3,5	5,0	6,4
	R454C	kW	5,5	9,2	11,3
	R455A	kW	7,4	10,1	12,5
	R448A	kW	5,9	9,8	12,4
	R449A	kW	5,9	9,8	12,4
	R450A	kW	2,8	4,2	5,4
	R513A	kW	3,7	5,3	6,9
	R134a	kW	3,3	4,9	6,3
	R404A	kW	6,1	9,0	11,9

			29	45	57
Compressor		Nb	2	2	2
Input Current (1)		A max.	**14,3**	**19,3**	**22,6**
Fan	Type		EC	EC	EC
	Nb x Ø	mm	1 x 800	1 x 800	1 x 800
Noise level	**Lp 10m** (2)	dB(A)	40	45	46
Max. airflow		m^3/h	16 000	16 000	16 000
Liquid capacity		l.	18	18	18
Connections	Suction	Ø	1"3/8	1"3/8	1"5/8
	Liquid	Ø	5/8"	5/8"	7/8"
Casing	Size		T1E	T1E	T1E
Dimensions	L	mm	1 320	1 320	1 320
	D	mm	1 128	1 128	1 128
	H	mm	1 825	1 825	1 825
Net weight		kg	335	345	350
Unit switch-off temperature: -10 °C (R454C)			+47°C	+46°C	+45°C
Coil (4)			(▥)	(▥)	(▥)

(1) Evaporating temperature: **-10 °C** / Ambient temperature: **+32 °C -** Total superheat 10K and subcool 3K.
(2) Sound pressure in dB(A) measured at 10 m, parallelepiped measuring surface, in a free field over a reflecting plane, given as an indication only.
(3) Additional available pressure in pascals.
(4) ▥ Aluminum finned coil and copper tubes (optional epoxy fins or Ozkem coil treatment available)
▥ Coil with microchannel technology (▥) Coil with Epoxy(model A1) / Thermoguard (models A2L) treated microchannel technology.
(5) This model can be used in Europe, for all industrial applications whatever the nominal power developed, but in commercial applications only if the nominal power is less than 40 kW.
(6) Product only available in split system.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

DUO CU(A) MT(B) 29(C) C(D)

(A) Condensing unit
(B) **MT** = positive range - **LT** = negative range
(C) Model (compressor)
(D) **A** = fans without available pressure - **C** = fans with available pressure -
D = A2L model fans without available pressure - **E** = A2L model fans with available pressure

For a precise selection, please consult our software.

Fans with available pressure — Positive range

CONDITIONS	REFRIGERANTS	DUO CU MT ... C	29	45	57	76	114 (5)
Power (1) **150 Pa** (3)	**R448A**	**kW**	**14,8**	**21,2**	**26,4**	**38,2**	**50,3**
	R449A	**kW**	**14,8**	**21,2**	**26,4**	**38,2**	**50,3**
	R450A	**kW**	**7,5**	**11,4**	**13,8**	**19,5**	**26,3**
	R513A	**kW**	**9,0**	**13,6**	**16,8**	**23,2**	**31,7**
	R134a	**kW**	**8,4**	**12,9**	**16,1**	**22,1**	**31,6**
	R404A	**kW**	**14,6**	**20,6**	**25,3**	**36,9**	**48,4**
Power consumption (1)	**R407F**	**kW**	**8**	**11,4**	**-**	**21,4**	**-**
	R407A	**kW**	**7,5**	**10,7**	**-**	**20,4**	**29,7**
	R448A	**kW**	**7,5**	**10,6**	**13,5**	**20,2**	**31,6**
	R449A	**kW**	**7,7**	**10,7**	**12,9**	**20**	**31,0**
	R450A	**kW**	**4,4**	**6,3**	**7,7**	**12,5**	**17,0**
	R513A	**kW**	**4,8**	**7,1**	**8,7**	**14,0**	**19,7**
	R134a	**kW**	**4,6**	**6,7**	**9,1**	**13,2**	**18,2**
	R404A	**kW**	**7,8**	**11,0**	**13,9**	**20,6**	**31,2**

			29	45	57	76	114
Compressor		**Nb**	2	2	2	2	2
Input current (1)		**A max.**	20,1	27	29,5	43,9	64,9
Fan	Type		AC	AC	AC	AC	AC
	Nb x Ø	**mm**	2x 346x314	2x 346x314	2x 346x314	2x 630	2x 630
Noise level	**Lp 10m** (2)	**dB(A)**	54	54	54	57	57
Max. airflow		**m^3/h**	10500	10500	10500	28400	28400
Liquid capacity		**l.**	18	18	18	45	45
Connections	Suction	**Ø**	1"3/8	1"3/8	1"5/8	2"1/8	2"1/8
	Liquid	**Ø**	5/8"	5/8"	7/8"	7/8"	1"1/8
Casing	Size		**T1C**	**T1C**	**T1C**	**T2C**	**T2C**
Dimensions	**L**	**mm**	1195	1195	1195	1960	1960
	D	**mm**	660	660	660	1195	1195
	H	**mm**	1407	1407	1407	1622	1622
Net weight		**kg**	330	340	350	540	550
Unit switch-off temperature: -10 °C (R449A)			+43°C	+40°C	+37°C	+42°C	+37°C
Coil (4)			(▥)	(▥)	(▥)	▤	▤

(1) Evaporating temperature: **-10 °C** / Ambient temperature: **+32 °C -** Total superheat 10K and subcool 3K.
(2) Sound pressure in dB(A) measured at 10 m, parallelepiped measuring surface, in a free field over a reflecting plane, given as an indication only.
(3) Additional available pressure in pascals.
(4) ▤ Aluminum finned coil and copper tubes (optional epoxy fins or Ozkem coil treatment available)
▥ Coil with microchannel technology (▥) Coil with Epoxy(model A1) / Thermoguard (models A2L) treated microchannel technology.
(5) This model can be used in Europe, for all industrial applications whatever the nominal power developed, but in commercial applications only if the nominal power is less than 40 kW.
(6) Product only available in split system.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

DUO CU(A) LT(B) 13(C) 1F(D) A(E)

(A) Condensing unit
(B) **MT** = positive range - **LT** = negative range
(C) Model (compressor)
(D) **1F** = 1 fan - **2F** = 2 fans
(E) **A** = fans without available pressure - **C** = fans with available pressure -
D = A2L model fans without available pressure - **E** = A2L model fans with available pressure

The DUO CU is available with HFCs. For a precise selection, please consult our software.

Fans without available pressure — Negative range

CONDITIONS	REFRIGERANTS	DUO CU LT ... A	13 2F	18 2F	25 2F
Power (1)	R448A	kW	7,1	10,7	13,4
	R449A	kW	7,1	10,7	13,4
	R404A	kW	-	-	-
Power consumption (1)	R448A	kW	6	8,1	9
	R449A	kW	6	8,1	9,1
	R404A	kW	-	-	-

			13 2F	18 2F	25 2F
Compressor		Nb	2	2	2
Input current (1)		A max.	19,6	26,6	27,4
Fan	Type		EC	EC	EC
	Nb x Ø	mm	2 x 450	2 x 500	2 x 500
Noise level	Lp 10m (2)	dB(A)	44	57	54
Max. airflow		m^3/h	12800	19000	19000
Liquid capacity		l.	18	18	18
Connections	Suction	Ø	1"1/8	1"3/8	1"3/8
	Liquid	Ø	1/2"	5/8"	5/8"
Casing	Size		T1A	T4A	T4A
Dimensions	L	mm	1195	1325	1325
	D	mm	660	1125	1125
	H	mm	1504	1783	1783
Net weight		kg	320	325	325
Unit switch-off temperature: -35 °C (R449A)			+37°C	+40°C	+38°C
Coil (4)			(▥)	▥	▥

(1) Evaporating temperature: **-10 °C** / Ambient temperature: **+32 °C -** Total superheat 10K and subcool 3K.
(2) Sound pressure in dB(A) measured at 10 m, parallelepiped measuring surface, in a free field over a reflecting plane, given as an indication only.
(3) Additional available pressure in pascals.
(4) ▥ Aluminum finned coil and copper tubes (optional epoxy fins or Ozkem coil treatment available)
▥ Coil with microchannel technology (▥) Coil with Epoxy(model A1) / Thermoguard (models A2L) treated microchannel technology.
(5) This model can be used in Europe, for all industrial applications whatever the nominal power developed, but in commercial applications only if the nominal power is less than 40 kW.
(6) Product only available in split system.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

DUO CU(A) LT(B) 13(C) 1F(D) C(E)

(A) Condensing unit
(B) **MT** = positive range - **LT** = negative range
(C) Model (compressor)
(D) **1F** = 1 fan - **2F** = 2 fans
(E) **A** = fans without available pressure - **C** = fans with available pressure -
D = A2L model fans without available pressure - **E** = A2L model fans with available pressure

The DUO CU is available with HFCs. For a precise selection, please consult our software.

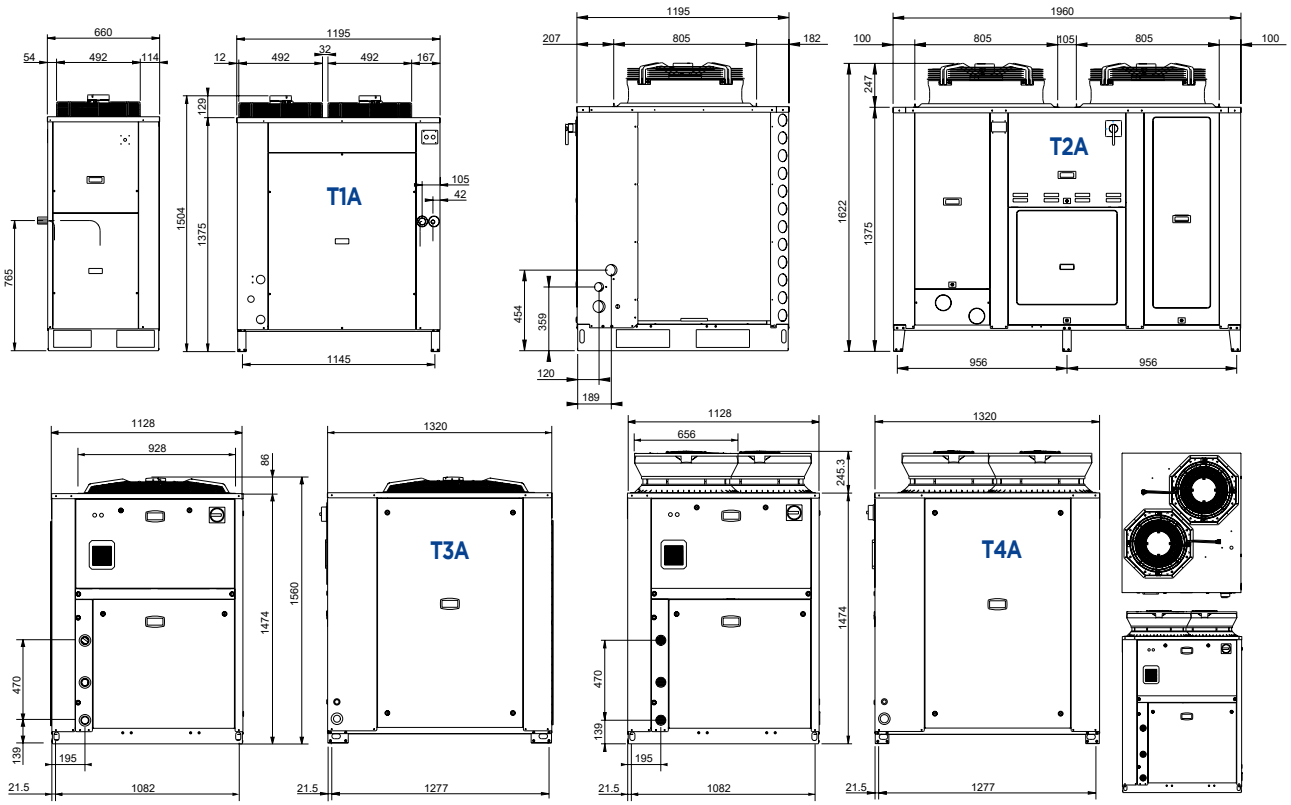
			Fans with available pressure		Negative range
CONDITIONS	REFRIGERANTS	DUO CU LT ... C	13 1F	18 1F	25 1F
Power (1) **150 Pa** (3)	**R448A**	**kW**	**6,5**	**9,9**	**12,3**
	R449A	**kW**	**6,5**	**9,8**	**12,3**
Power consumption (1)	**R448A**	**kW**	**7,3**	**8,8**	**9,6**
	R449A	**kW**	**7,3**	**8,8**	**9,7**

			13 1F	18 1F	25 1F
Compressor		**Nb**	2	2	2
Input current (1)		**A max.**	**20.2**	**26,9**	**27,7**
Fan	Type		EC	EC	EC
	Nb x Ø	**mm**	1 x 800	1 x 800	1 x 800
Noise level	**Lp 10m** (2)	**dB(A)**	49	47	47
Max. airflow		**m^3/h**	17000	19000	19000
Liquid capacity		**l.**	18	18	18
Connections	Suction	**Ø**	1"1/8	1"3/8	1"3/8
	Liquid	**Ø**	1/2"	5/8"	5/8"
Casing	Size		**T3C**	**T3C**	**T3C**
Dimensions	**L**	**mm**	1325	1325	1325
	D	**mm**	1125	1125	1125
	H	**mm**	1783	1783	1783
Net weight		**kg**	320	325	325
Unit switch-off temperature: -35 °C (R449A)			+40°C	+40°C	+38°C
Coil (4)					

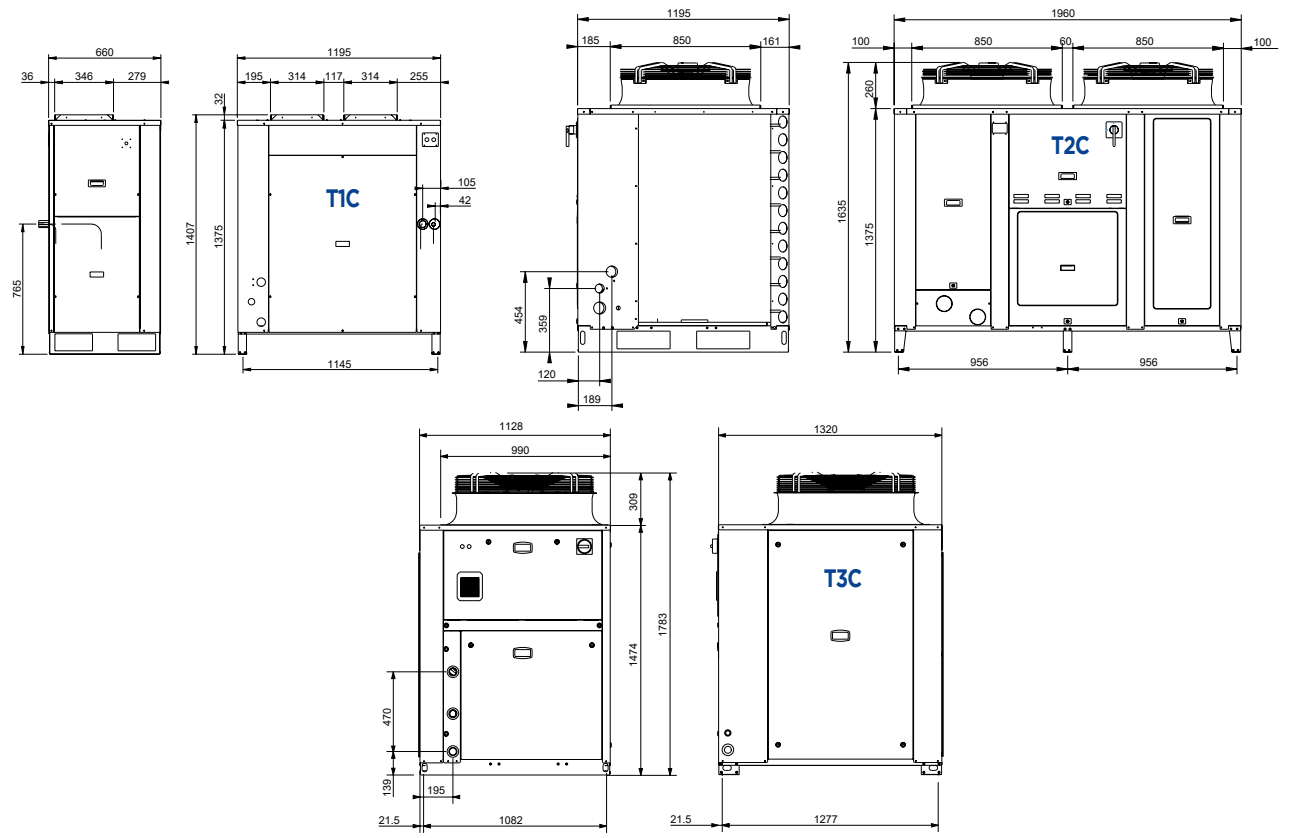
(1) Evaporating temperature: **-10 °C** / Ambient temperature: **+32 °C -** Total superheat 10K and subcool 3K.
(2) Sound pressure in dB(A) measured at 10 m, parallelepiped measuring surface, in a free field over a reflecting plane, given as an indication only.
(3) Additional available pressure in pascals.
(4) Aluminum finned coil and copper tubes (optional epoxy fins or Ozkem coil treatment available)
Coil with microchannel technology ( ) Coil with Epoxy(model A1) / Thermoguard (models A2L) treated microchannel technology.
(5) This model can be used in Europe, for all industrial applications whatever the nominal power developed, but in commercial applications only if the nominal power is less than 40 kW.
(6) Product only available in split system.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

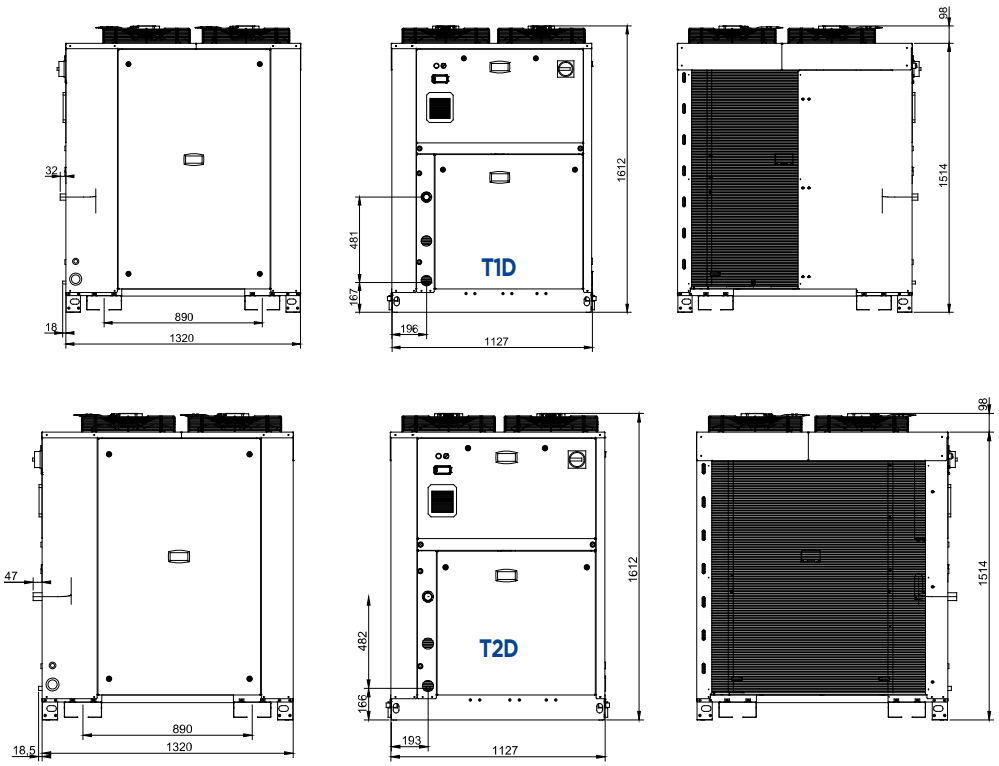
DUO CU .. A | Fans without available pressure



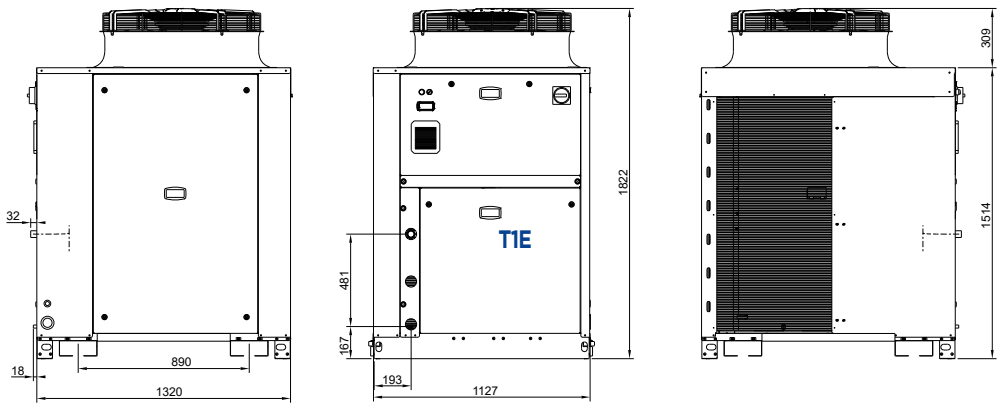
DUO CU .. C | Fans with available pressure



DUO CU .. A A2L | Fans without available pressure



DUO CU .. C A2L | Fans with available pressure



NOTES

FRIGA-BOHN®

MEGA

Condensing unit

HFC

MT **11** - **72** kW
LT **3.3** - **22.5** kW

Easy access to components to **facilitate service** and **maintenance operations**.

Versatility; several versions are available to match your requirements:
- **SH** (semi-hermetic) or **Sc** (scroll) compressor,
- **ALN** (low noise level) condenser or **AS** (oversized condenser).

CASING

Rigid frame, made of heavy gage sheet metal, which limits the transmission of vibrations.

OPTION	
CAC	Additional housing belt (Scroll).
GPC	Condenser protection grille.
CAR	Casing made from white pre-painted galvanized sheet metal.
ECC	Crate packing.

COMPRESSOR

Two technologies to choose from: semi-hermetic reciprocating or Scroll compressor.
In all cases, the following are supplied: delivery and suction valves, crankcase heater and oil indicator.

RECEIVER

The receiver is supplied with an outlet valve and a safety valve (receiver ≥ 11 l.).

OPTION	
BAC	Liquid separator.
LIQ	Liquid line with filter dryer, hygroscopic indicator and service valve.
RLS	Oversized receiver.

ELECTRICAL BOX

Wiring secured in a junction box.

OPTION	
ARM	Electrical cabinet with main disconnect switch (compressor and condenser protection).

CONDENSER

Option: standard or oversized condenser for ambient temperatures up to +43 °C.
1 to 4 fans.

REGULATION AND SAFETY

Semi-hermetic compressor models equipped with an oil differential pressure switch (except SH P100 - P170 - N85 - N105 with oil presence sensor).
LP control by adjustable pressure switch.
HP safety by 1 or 2 cartridge pressure switches with automatic reset. (according to standard EN 378-2: 2009).

OPTION	
MAN	HP and LP pressure gages.
EVL	Solenoid valve (not fitted).
SHU	Oil separator.
RPC	Condensing pressure regulation.
VFA	Valve + filter on suction.

PRODUCT ADVANTAGES

Casing option (CAR) allowing the unit to be installed outside.
Large liquid receiver: distance between the unit and the unit coolers up to 25 meters.
Oversized condenser for applications under high ambient temperatures.
A wide range of options can be supplied pre-assembled in the factory to reduce installation time on site.

MEGA SH(A) P(B)80(C)A(D)

(A) **SH** = Semi-hermetic compressor **Sc** = Scroll compressor
(B) **P** = positive range **N** = negative range
(C) Model
(D) **A** = Standard **AS** = Oversized

> **The MEGA is available with HFCs. For more information, please consult our software.**

MEGA | Standard — Positive range

		MEGA ... A	SH P 80	SH P 85	SH P 100	Sc P 100	SH P 170	Sc P 170	SH P 200	SH P 250	SH P 300	SH P 350	SH P 400	SH P 500
Power (1)	R449A	kW	**12,3**	**15,6**	**19,7**	**20,3**	**22,3**	**23,8**	**27,8**	**35,0**	**43,9**	**51,8**	**60,3**	**71,9**
Power consumption	R449A	kW	**6,2**	**8,1**	**9,4**	**11,4**	**10,4**	**13,4**	**14,0**	**18,2**	**23,1**	**26,7**	**32,1**	**37,5**
Power (1)	R404A	kW	**13,0**	**16,2**	**20,5**	**21,2**	**23,3**	**24,8**	**29,1**	**36,3**	**45,9**	**53,5**	**62,4**	**74,1**
Power consumption	R404A	kW	**6,8**	**8,8**	**10,2**	**11,8**	**11,4**	**14,0**	**15,3**	**19,6**	**24,9**	**29,6**	**34,6**	**41,6**
Current drawn		A max.	15,9	19,8	23,5	25,3	26,9	31,0	35,7	44,7	57,9	67,8	79,6	99,7
Fan	1,500 rpm	mm	1x500	2x500	2x500	2x500	2x500	2x500	2x630	2x630	4x630	4x630	4x630	4x630
Airflow		m^3/h	5315	11950	11270	11268	10630	10630	21300	21300	46400	46400	46400	42600
Liquid capacity		l.	11	11	15	15	24	24	30	30	40	40	40	40
Connections	Suction	Ø	1"3/8	1"3/8	1"3/8	1"3/8	1"5/8	1"5/8	1"5/8	2"1/8	2"1/8	2"1/8	2"1/8	2"1/8
	Liquid	Ø	5/8"	5/8"	5/8"	5/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	1"1/8	1"1/8
Weight without **CAR** option		kg	264	313	337	272	362	277	418	470	558	597	600	623
Weight with **CAR** option		kg	339	398	422	357	447	362	538	590	718	757	760	783

MEGA | Oversized condenser — Positive range

		MEGA ... AS	SH P 80	SH P 85	SH P 100	Sc P 100	SH P 170	SH P 200	SH P 250	SH P 300	SH P 350	SH P 400
Power (1)	R449A	kW	**11,0**	**13,7**	**16,8**	**16,7**	**19,4**	**24,7** (2)	**32,3** (2)	**37,0**	**44,0**	**51,1**
Power consumption	R449A	kW	**7,0**	**8,5**	**9,9**	**13,4**	**12,9**	**18,0**	**22,2**	**24,5**	**28,3**	**33,8**
Power (1)	R404A	kW	**11,2**	**13,8**	**17,0**	**17,4**	**20,0**	**25,9**	**33,3**	**37,9**	**44,2**	**51,3**
Power consumption	R404A	kW	**7,8**	**9,2**	**10,8**	**13,9**	**13,9**	**19,3**	**23,5**	**26,2**	**31,3**	**36,5**
Current drawn		A max.	16,9	19,8	23,5	25,3	31,6	42,5	51,5	57,9	67,8	79,6
Fan	1,500 rpm	mm	2x500	2x500	2x500	2x500	2x630	4x630	4x630	4x630	4x630	4x630
Airflow		m^3/h	11950	11270	10630	10630	21300	46400	46400	42600	42600	42600
Liquid capacity		l.	11	11	15	15	24	40	40	40	40	40
Connections	Suction	Ø	1"3/8	1"3/8	1"3/8	1"3/8	1"5/8	1"5/8	2"1/8	2"1/8	2"1/8	2"1/8
	Liquid	Ø	5/8"	5/8"	5/8"	5/8"	7/8"	7/8"	7/8"	7/8"	7/8"	1"1/8
Weight without **CAR** option		kg	294	322	419	280	415	501	553	578	617	620
Weight with **CAR** option		kg	379	407	504	365	535	661	713	738	777	780

(1) **A**: Evaporating temperature **-10 °C** / Ambient temperature **+32 °C** - Superheat: 10K - Subcool: 3K.
AS: Evaporating temperature **-10 °C** / Ambient temperature **+42 °C** - Superheat: 10K - Subcool: 3K.
(2) Product only available in split system.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

MEGA SH(A) N(B)55(C)A(D)

(A) **SH** = Semi-hermetic compressor **Sc** = Scroll compressor
(B) **P** = positive range **N** = negative range
(C) Model
(D) **A** = Standard **AS** = Oversized

> **The MEGA is available with HFCs. For more information, please consult our software.**

MEGA | Standard — Negative range

		MEGA ... A	SH N 55	SH N 85	SH N 105	Sc N 105	Sc N 155	SH N 155	SH N 205	SH N 255	SH N 305	SH N 405
Power (1)	R449A	kW	4,2	4,9	6,8 (2)	7,1 (2)	8,8 (2)	9,9 (2)	11,9	13,8	18,2	20,5
Power consumption	R449A	kW	3,9	4,2	6,0	7,1	9,0	8,5	10,0	11,7	16,0	19,4
Power (1)	R404A	kW	4,8	5,5	7,7	7,6	9,2	11,0	13,1	15,1	19,7	22,2
Power consumption	R404A	kW	4,5	5,1	7,3	7,6	8,8	10,0	11,6	13,7	19,4	22,7
Current drawn		A max.	13,8	14,5	19,6	21,1	26,5	26,6	30,9	38,5	52,0	63,0
Fan	1,500 rpm	mm	1x500	1x500	2x500	2x500	2x500	2x500	2x500	2x500	2x630	2x630
Airflow		m^3/h	5635	5635	11950	11948	11268	11270	10630	10630	21300	21300
Liquid capacity		l.	11	11	15	15	15	15	24	24	30	30
Connections	Suction	Ø	1"1/8	1"3/8	1"3/8	1"3/8	1"5/8	1"5/8	2"1/8	2"1/8	2"1/8	2"1/8
	Liquid	Ø	1/2"	1/2"	5/8"	5/8"	5/8"	5/8"	7/8"	7/8"	7/8"	7/8"
Weight without **CAR** option		kg	269	277	326	253	293	359	385	417	497	508
Weight with **CAR** option		kg	332	340	400	327	367	433	459	491	727	738

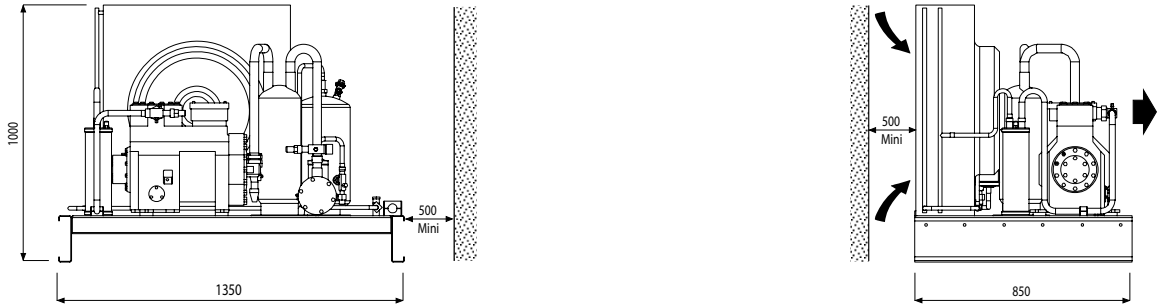
MEGA | Oversized condenser — Negative range

		MEGA ... AS	SH N 55	SH N 85	SH N 105	Sc N 105	Sc N 155	SH N 155	SH N 205	SH N 255	SH N 305	SH N 405
Power (1)	R449A	kW	3,3	3,4 (2)	4,6	6,2 (2)	7,5 (2)	6,6	7,8	9,5 (2)	11,8	14,7
Power consumption	R449A	kW	3,9	4,8	5,9	8,4	11,1	8,1	9,5	13,2	16,2	22
Power (1)	R404A	kW	3,7	4,4	5,9	6,5	7,7	8,5	10	12,3	15	19,1
Power consumption	R404A	kW	4,5	5,7	7,2	8,5	10,1	10,0	11,8	15,9	19,8	26,2
Current drawn		A max.	13,8	15,5	19,6	21,1	26,5	26,6	30,9	43,2	52,0	69,8
Fan	1,500 rpm	mm	1x500	2x500	2x500	2x500	2x500	2x500	2x500	2x630	2x630	4x630
Airflow		m^3/h	5315	11950	11270	11270	10630	10630	10630	21300	21300	46400
Liquid capacity		l.	11	11	15	15	15	15	24	24	30	40
Connections	Suction	Ø	1"1/8	1"3/8	1"3/8	1"3/8	1"5/8	1"5/8	2"1/8	2"1/8	2"1/8	2"1/8
	Liquid	Ø	1/2"	1/2"	5/8"	5/8"	5/8"	5/8"	7/8"	7/8"	7/8"	7/8"
Weight without **CAR** option		kg	273	311	355	272	303	367	385	489	497	591
Weight with **CAR** option		kg	368	369	370	346	377	441	459	719	727	881

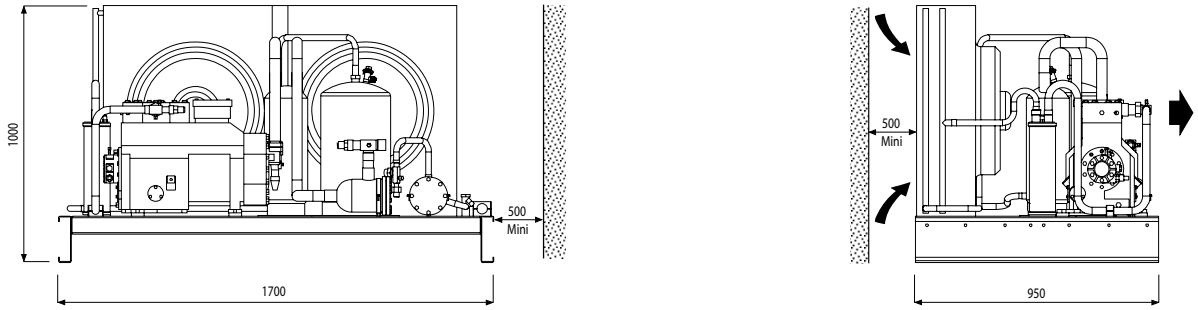
(1) **A**: Evaporating temperature **-35 °C** / Ambient temperature **+32 °C** - Superheat: 10K - Subcool: 3K.
AS: Evaporating temperature **-35 °C** / Ambient temperature **+42 °C** - Superheat: 10K - Subcool: 3K.
(2) Product only available in split system.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

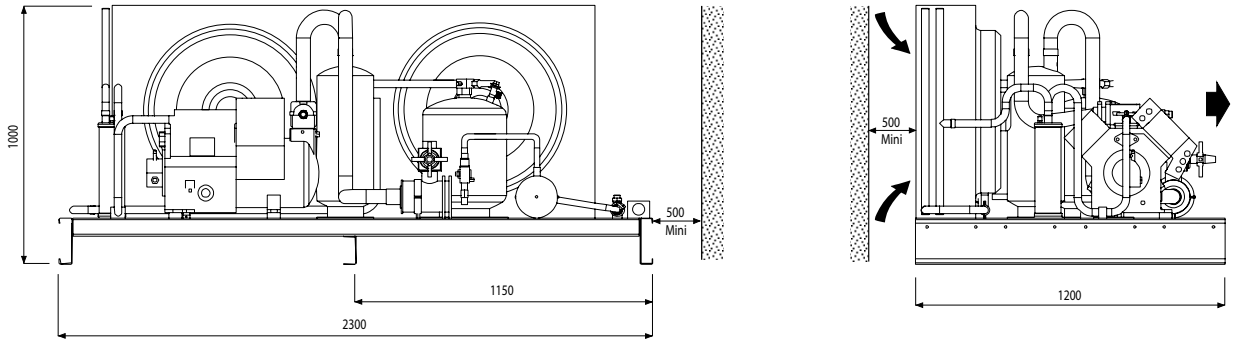
MEGA | 1 x Ø 500 mm



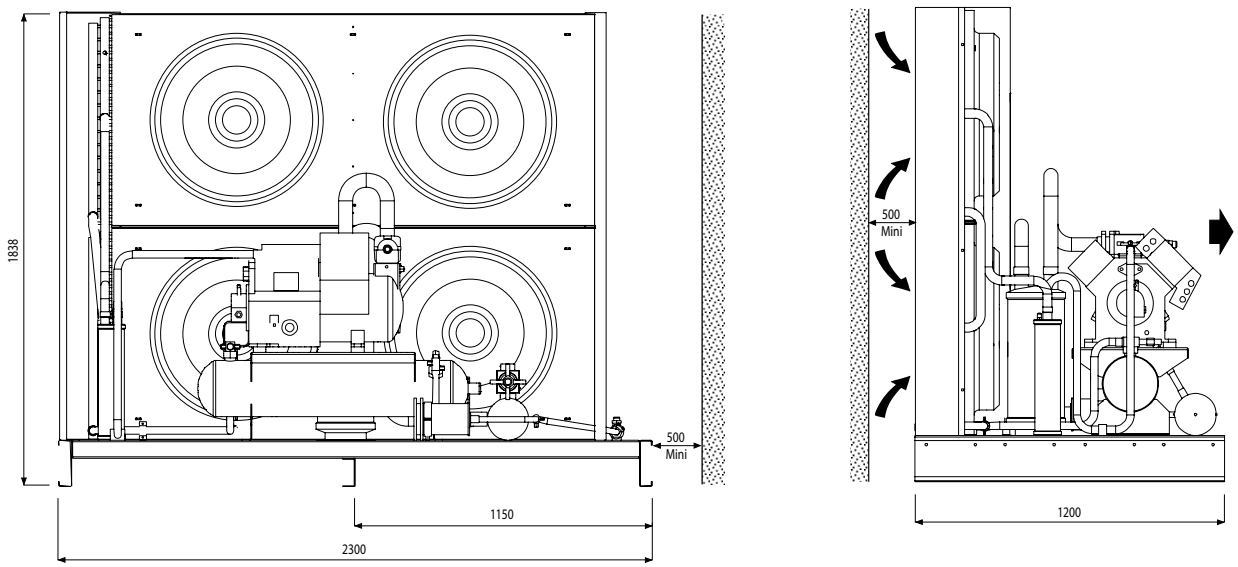
MEGA | 2 x Ø 500 mm



MEGA | 2 x Ø 630 mm



MEGA | 4 x Ø 630 mm



FRIGA-BOHN®

MONOHAVANE

Condensing unit

HFC

MT **13** - **72** kW
LT **4** - **22** kW

Easy installation: the Monohavane condensing unit is ready to install and is supplied with a factory pre-wired control cabinet.

Modular version: to best meet the needs of your application, you can upgrade the standard version and choose a low noise level (LN) or also opt for an S+ (oversized) condenser for high ambient temperatures.

CASING

Sheet metal frame and white pre-painted casing.
Optimized for outdoor installation on the ground or on a roof.

OPTION	
GPC	Condenser protection grille.
ANM	Handling rings (kit to install).

ELECTRICAL BOX

Waterproof with disconnect switch on the side and "power" indicator.
Unit outputs and protection designed to receive as many cooling station outputs as necessary.
Closure of the box by 1/4 turn screw.

REGULATION AND SAFETY

LP control provided by an adjustable LP pressure switch.
HP control provided by adjustable HP pressure switches.
HP safety provided by 1 or 2 HP cartridge pressure switches with automatic reset. (according to standard EN 378-2: 2009).
Oil differential pressure switch.

OPTION	
BAC	Liquid separator.
BPS	LP safety pressure switch
MAN	HP and LP pressure gages.

COMPRESSOR

Noise insulation of the compressor compartment in low noise level version.
Semi-hermetic reciprocating compressor from 7.5 to 50 hp with suction and delivery valves, crankcase heater and cylinder head blower in negative application.

CONDENSER

Choice of condenser: A (standard) or AS and AS+ (oversized).
The oversized condenser of the AS version allows installation in high ambient temperatures, up to +42 °C, and up to +45 °C on consultation.
The ALN low noise level version is ideal for urban areas.
From 2 to 4 fans with elbow protection by housing.

LIQUID RECEIVER AND LINE

Receiver equipped with valves and a safety valve.
Liquid line consisting of a cartridge filter dryer, a hygroscopic indicator and a service valve.

OPTION	
RLS	Oversized receiver.
SHU	Oil separator.
VFA	Valve + filter on suction.
EVL	Solenoid valve (kit to install).

MAINTENANCE

Easily removable side maintenance panels for easy access to all components.
The door can be placed in hood position to facilitate work on the electrical cabinet.

MONOHV P(A)75(B)AS(C)

(A) **P** = positive range **N** = negative range
(B) Model
(C) **A** = Standard **AS** = Oversized **AS+** = Oversized plus
ALN = Low noise level

> **The MONOHAVANE is available with HFCs. For precise selection, please consult our software.**

MONOHAVANE — Positive range

MONOHV P...			A	AS	AS+	ALN
Power (1)	R449A	kW	**15,6 > 69,8**	**14,0 > 63,2**	**13,4 > 44,1**	**15,6 > 48,5**
Power consumption*	R449A	kW	**8,1 > 35,5**	**8,5 > 36,7**	**8,6 > 26,0**	**7,1 > 21,6**
Power (1)	R404A	kW	**16,2 > 71,5**	**14,3 > 63,2**	**14,3 > 46,2**	**16,2 > 49,7**
Power consumption*	R404A	kW	**8,8 > 39,6**	**9,1 > 40,8**	**9,1 > 28,6**	**7,7 > 24,6**
Current drawn		A max.	19,8 > 99,8	19,8 > 99,8	19,8 > 70,0	18,3 > 60,4
Acoustics (2)		dB(A)	-	-	-	39 > 50
Fan	Nb x Ø	mm	2x 500 > 2x 910	2x 500 > 2x 910	2x 500 > 2x 910	2x 630 > 2x 800
Airflow		m3/h	15000 > 45000	10630 > 42620	10630 > 42620	6060 > 21776
Liquid capacity		l.	21 > 50	21 > 50	21 > 50	21 > 50
Net weight		kg	480 > 980	500 > 1100	500 > 1090	530 > 1030

(1) **A**: Evaporating temperature **-10 °C** / Ambient temperature **+32 °C** - Superheat: 10K - Subcool: 3K.
AS: Evaporating temperature **-10 °C** / Ambient temperature **+42 °C** - Superheat: 10K - Subcool: 3K.
AS+: Evaporating temperature **-10 °C** / Ambient temperature **+44 °C** - Superheat: 10K - Subcool: 3K.
ALN: Evaporating temperature **-10 °C** / Ambient temperature **+32 °C** - Superheat: 10K - Subcool: 3K.
(2) Lp at 10 m: Sound pressure in dB(A) measured at 10 m, in a free field over a reflecting plane, in accordance with standard EN 13487 (parallelepiped reference surface).

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

MONOHAVANE — Negative range

MONOHV N...			A	AS	AS+	ALN
Power (1)	R449A	kW	**5,2 > 20,5**	**3,4 > 14,3**	**3,2 > 13,9**	**4,8 > 20,7**
Power consumption*	R449A	kW	**4,9 > 19,4**	**4,8 > 20,3**	**4,8 > 19,6**	**3,7 > 16,5**
Power (1)	R404A	kW	**6,0 > 22,2**	**4,4 > 18,5**	**4,7 > 19,0**	**5,3 > 22,5**
Power consumption*	R404A	kW	**5,7 > 22,7**	**5,7 > 24,5**	**5,7 > 23,8**	**4,6 > 22,7**
Current drawn		A max.	15,5 > 63,0	15,5 > 66,4	15,5 > 68,2	17,8 > 80,3
Acoustics (2)		dB(A)	-	-	-	42 > 51
Fan	Nb x Ø	mm	2x 500 > 2x 630	2x 500 > 3x 630	2x 500 > 2x 910	2x 500 > 2x 800
Airflow		m3/h	11948 > 21300	11948 > 31950	10630 > 42620	4066 > 16247
Liquid capacity		l.	21 > 40	21 > 50	21 > 50	21 > 50
Net weight		kg	520 > 700	520 > 840	540 > 980	550 > 980

(1) **A**: Evaporating temperature **-35 °C** / Ambient temperature **+32 °C** - Superheat: 10K - Subcool: 3K.
AS: Evaporating temperature **-35 °C** / Ambient temperature **+42 °C** - Superheat: 10K - Subcool: 3K.
AS+: Evaporating temperature **-35 °C** / Ambient temperature **+44 °C** - Superheat: 10K - Subcool: 3K.
ALN: Evaporating temperature **-35 °C** / Ambient temperature **+32 °C** - Superheat: 10K - Subcool: 3K.
(2) Lp at 10 m: Sound pressure in dB(A) measured at 10 m, in a free field over a reflecting plane, in accordance with standard EN 13487 (parallelepiped reference surface).

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

FRIGA-BOHN®

MULTIHAVANE

Condensing unit

HFC

HT **100** - **275** kW
MT **15** - **225** kW
LT **5** - **65** kW

Unit ready to use and pre-wired in the factory to **save time on installation**.

Versatile unit that be adapted to the needs of your application:
- Outdoor installation, on the ground or a roof.
- Two compressor technologies available: Scroll or semi-hermetic.
- Possibility of adjusting the noise level with the low noise level (LN) option.
- Optional oversized condenser for high ambient temperatures.

Easy access to all components for **easy maintenance**.

CONDENSER

NEOSTAR (L or P) and WA type condensers, regulated by cascade stop.
Low noise level: silent condenser.
Oversized condenser: for operation in high ambient temperatures, up to 43 °C.

OPTION	
GPC	Condenser protection grille.

CASING

Base of frame in high-strength folded galvanized sheet metal.
White sheet metal casing.
Removable panels with 1/4 turn latches.
Designed for easy handling by crane (lifting rings as standard).
Low noise level: noise insulation of the compressor compartment.

COMPRESSOR

The compressors are charged with ester oil and are equipped as shown in the table below:

	SH Octagon	Scroll	SH
Number of compressors	2-3-4	2-3-4	2-3
Crankcase heater	Yes	Yes	Yes
Suction and delivery valves	Yes	Yes	Yes
HP safety pressure switch	Yes	Yes	Yes
Oil pump	From 4VC	No	Yes
Cylinder head fan	Negative	No	Negative

OPTION	
COQ	Noise insulation casing on Scroll (except ZF15, ZB38 and ZB45).

REGULATION AND SAFETY

For Scroll or Octagon 2-compressor racks: Pressure regulation with 1 LP regulator pressure switch per compressor and 1 HP regulator pressure switch per condenser fan.
For other racks: Electronic regulation by controller with LP/HP sensors signal 4/20 mA.
A LP general safety pressure switch.
One oil differential pressure switch per compressor for semi-hermetic compressors and from the 4VC compressor for OCT).
1 or 2 HP cartridge pressure switches with automatic reset per compressor.
Two pressure gages (LP+HP).
Connection of each element in 1/4" flexible tube.

OPTION	
BP1	Additional LP pressure switch.
BPS	LP safety pressure switch per compressor (automatic reset).
CDP	LP/HP pressure sensor signal 4/20 mA.
HPG	HP general pressure switch.
HPS	Additional HP pressure switch.

ELECTRICAL BOX

Electrical cabinet with latch-locked double door.
Front panel disconnect switch and power indicator.
All the electrical equipment is connected to the circuit board, which includes protection and control of the condensing unit.

OIL LINE

LP oil return with a removable oil separator and a receiver equipped with a high and low indicator, shut-off valves and a calibrated degassing valve in the LP manifold with a shut-off valve.
Float oil level regulators and shut-off valve per compressor for SH and electronic for Scroll.

LIQUID LINE

Liquid line with filter dryer(s) with removable cartridge(s), 3/8" SAE charging valve(s) and a hygroscopic indicator and shut-off valve(s).

RECEIVER

Horizontal liquid receiver with 2 inlet/outlet shut-off valves.
Single or double safety valve with 3-way valve if the capacity is > or = 100 l.

MANIFOLDS

Suction and delivery manifolds in 304L stainless steel for SH and copper for Sc and OCT, fixed with polypropylene collars on the suction side and high temperature resistant polyamide on the delivery side.
General filter unit on the suction or per compressor depending on model with removable cartridge(s).

CONNECTION VALVES

Suction valve and liquid outlet valve depending on the model.

OPTION	
SIL	Delivery muffler (only for SH version).
TXL	Electronic oil level controllers.
ALR	Optoelectronic refrigerant level alarm.
SSD	Double safety valve with 3-way valve only for receivers with a capacity of less than 100 L (standard for the others).
PR2	2 return suction valves and 2 liquid outlet valves (only for SH version).
BAC	Liquid separator (except SC), with oil return system by suction or gravity depending on model.
RLS	Oversized liquid receiver.

MHV SH(A) 2(B)PHT(C) 4HE-25Y(D) A(E) C3(F) L(G)2(H)-D(I)

(A) Compressor technology: **SC** = Scroll **OCT** = Octagon **SH** = Semi-hermetic
(B) Number of compressors
(C) **N** = Negative / te = - 35 °C **P** = Positive / te = - 10 °C **PHT** = Positive High Temp. / te = 0 °C
(D) Compressor type
(E) Condenser version: **A** = Standard **AS** = Oversized **ALN** = Low noise level
(F) Box type: **C1 - C2 - C3 - C4 - C5**
(G) Fan arrangement: **L** = in-line **P** = parallel
(H) Number of fans
(I) Module type or fan Ø: **A** = 1,200 **B** = 1,500 **D** = 2,000 **5** = 500 mm **6** = 630 mm

The MULTIHAVANE is available with HFCs. For precise selection, please consult our software.

MULTIHAVANE — High temperature positive range

		MHV SH ...	A			AS		
Power (1)	R449A	kW	**109,1**		**273,8**	**98,6**		**202,2**
Power consumption (1)		kW	**39,6**		**102,6**	**45,0**		**95,7**
	R404A	kW	**117,3**	>	**293,3**	**102,8**	>	**167,3**
Power consumption (1)		kW	**40,5**	>	**105,2**	**46,6**	>	**79,1**
Current drawn		A max.	88,8	>	237,9	94,0	>	210,8
Compressors		Nb	2	>	3	2	>	3
Liquid capacity		l.	145	>	200	145	>	200
Net weight		kg	1860	>	3142	2140	>	2822

(1) **A**: Evaporating temperature **0 °C** / Ambient temperature **+32 °C** - Superheat: 10K - Subcool: 3K.
AS: Evaporating temperature **0 °C** / Ambient temperature **+42 °C** - Superheat: 10K - Subcool: 3K.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

MHV SH(A) 2(B)P(C) 4MF-13X(D) A(E) C3(F) L(G) 2(H)-A(I)

> The MULTIHAVANE is available with HFCs. For precise selection, please consult our software.

(A) Compressor technology: **SC** = Scroll **OCT** = Octagon **SH** = Semi-hermetic
(B) Number of compressors
(C) **N** = Negative / te = - 35 °C **P** = Positive / te = - 10 °C **PHT** = Positive High Temp. / te = 0 °C
(D) Compressor type
(E) Condenser version: **A** = Standard **AS** = Oversized **ALN** = Low noise level
(F) Box type: **C1 - C2 - C3 - C4 - C5**
(G) Fan arrangement: **L** = in-line **P** = parallel
(H) Number of fans
(I) Module type or fan Ø: **A** = 1,200 **B** = 1,500 **D** = 2,000 **5** = 500 mm **6** = 630 mm

MULTIHAVANE — Positive range

MHV SH ...			A	AS	ALN
Power (1)	R449A	kW			
Power consumption (1)		kW	**31,0 > 120,7**	**34,8 > 128,7**	**29,1 > 64,0**
	R404A	kW	**63,6 > 234,6**	**54,2 > 200,1**	**64,3 > 136,5**
Power consumption (1)		kW	**31,0 > 120,7**	**34,8 > 128,7**	**29,1 > 64,0**
Current drawn		A max.	59,1 > 255,4	62,5 > 255,4	55,4 > 139,7
Compressors		Nb	2 > 3	2 > 3	2 > 3
Acoustics (2)		dB(A)	-	-	46 > 54
Liquid capacity		l.	68 > 200	68 > 200	68 > 145
Net weight		kg	1598 > 3114	1618 > 3254	1828 > 3067

MHV OCT ...			A	AS	ALN
Power (1)	R449A	kW		**77,4**	
Power consumption (1)		kW	**11,4 > 55,9**	**14,0 > 45,2**	**10,6 > 53,8**
	R404A	kW	**21,9 > 114,7**	**19,6 > 94,7**	**24,3 > 114,9**
Power consumption (1)		kW	**11,4 > 55,9**	**14,0 > 59,1**	**10,6 > 53,8**
Current drawn		A max.	21,9 > 120,2	25,1 > 120,2	21,8 > 117,7
Compressors		Nb	2 > 4	2 > 4	2 > 4
Acoustics (2)		dB(A)	-	-	33 > 49
Liquid capacity		l.	40 > 98	40 > 98	40 > 98
Net weight		kg	789 > 2414	822 > 2457	1160 > 2912

MHV SC ...			A	AS	ALN
Power (1)	R449A	kW			
Power consumption (1)		kW	**8,8 > 54,2**	**10,2 > 64,6**	**8,1 > 52,2**
	R404A	kW	**17,1 > 106,4**	**15,1 > 87,5**	**18,1 > 106,6**
Power consumption (1)		kW	**8,8 > 54,2**	**10,2 > 64,6**	**8,1 > 52,2**
Current drawn		A max.	23,4 > 132,7	24,2 > 132,7	23,0 > 130,2
Compressors		Nb	2 > 4	2 > 4	2 > 4
Acoustics (2)		dB(A)	-	-	38 > 50
Liquid capacity		l.	40 > 98	40 > 98	40 > 98
Net weight		kg	701 > 2134	728 > 2177	875 > 2632

(1) **A**: Evaporating temperature **-10 °C** / Ambient temperature **+32 °C** - Superheat: 10K - Subcool: 3K.
AS: Evaporating temperature **-10 °C** / Ambient temperature **+42 °C** - Superheat: 10K - Subcool: 3K.
ALN: Evaporating temperature **-10 °C** / Ambient temperature **+32 °C** - Superheat: 10K - Subcool: 3K.
(2) Lp at 10 m: Sound pressure in dB(A) measured at 10 m, in a free field over a reflecting plane, in accordance with standard EN 13487 (parallelepiped reference surface).
R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

MHV SH(A) 2(B)N(C) 4HE-18Y(D) A(E) C3(F) L(G)2(H)-A(I)

(A) Compressor technology: **SC** = Scroll **OCT** = Octagon **SH** = Semi-hermetic
(B) Number of compressors
(C) **N** = Negative / te = - 35 °C **P** = Positive / te = - 10 °C **PHT** = Positive High Temp. / te = 0 °C
(D) Compressor type
(E) Condenser version: **A** = Standard **AS** = Oversized **ALN** = Low noise level
(F) Box type: **C1 - C2 - C3 - C4 - C5**
(G) Fan arrangement: **L** = in-line **P** = parallel
(H) Number of fans
(I) Module type or fan Ø: **A** = 1,200 **B** = 1,500 **D** = 2,000 **5** = 500 mm **6** = 630 mm

> **The MULTIHAVANE is available with HFCs. For precise selection, please consult our software.**

MULTIHAVANE — Negative range

MHV SH ...			A			AS			ALN		
Power (1)	R449A	kW									
	R404A	kW	**22,9**	>	**71,0**	**17,2**	>	**54,2**	**22,2**	>	**71,1**
Power consumption (1)		kW	**20,6**	>	**66,2**	**20,7**	>	**68,4**	**19,0**	>	**64,2**
Current drawn		A max.	57,7	>	185,8	57,7	>	185,8	54,0	>	183,3
Compressors		Nb	2	>	3	2	>	3	2	>	3
Acoustics (2)		dB(A)		-			-		43	>	54
Liquid capacity		l.	68	>	200	68	>	200	68	>	145
Net weight		kg	1594	>	2788	1594	>	2788	1770	>	3286

MHV OCT ...			A			AS			ALN		
Power (1)	R449A	kW									
	R404A	kW	**6,8**	>	**30,5**	**5,1**	>	**22,2**	**6,9**	>	**30,5**
Power consumption (1)		kW	**6,4**	>	**24,9**	**6,5**	>	**24,2**	**5,8**	>	**24,9**
Current drawn		A max.	16,6	>	72,4	16,6	>	72,4	15,9	>	72,4
Compressors		Nb	2	>	4	2	>	4	2	>	4
Acoustics (2)		dB(A)		-			-		33	>	47
Liquid capacity		l.	40	>	68	40	>	68	40	>	68
Net weight		kg	792	>	2368	792	>	2368	913	>	2658

MHV SC ...			A			AS			ALN		
Power (1)	R449A	kW									
	R404A	kW	**6,3**	>	**38,3**	**5,1**	>	**31,1**	**6,4**	>	**38,3**
Power consumption (1)		kW	**6,4**	>	**41,8**	**7,6**	>	**48,7**	**5,8**	>	**41,8**
Current drawn		A max.	17,6	>	107,4	17,6	>	107,4	16,8	>	107,4
Compressors		Nb	2	>	4	2	>	4	2	>	4
Acoustics (2)		dB(A)		-			-		38	>	49
Liquid capacity		l.	40	>	98	40	>	98	40	>	98
Net weight		kg	692	>	2292	692	>	2292	813	>	2582

(1) **A**: Evaporating temperature **-35 °C** / Ambient temperature **+32 °C** - Superheat: 10K - Subcool: 3K.
AS: Evaporating temperature **35 °C** / Ambient temperature **+42 °C** - Superheat: 10K - Subcool: 3K.
ALN: Evaporating temperature **-35 °C** / Ambient temperature **+32 °C** - Superheat: 10K - Subcool: 3K.
(2) Lp at 10 m: Sound pressure in dB(A) measured at 10 m, in a free field over a reflecting plane, in accordance with standard EN 13487 (parallelepiped reference surface).

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

FRIGA-BOHN®

CO2LD SubLine

CO2 compressor rack
Cascade installation on glycol water loop

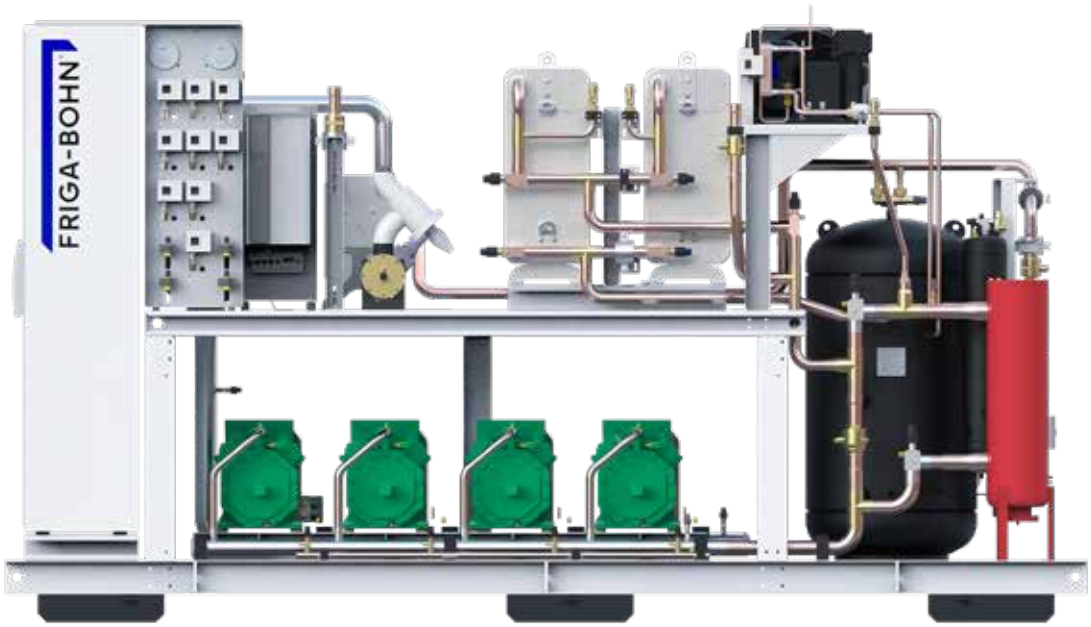
CO2

LT **4** - **340** kW

Modular unit to best meet the needs of your application, available in two versions:
- encased outdoor **CO**,
- machine room **MR**.

Compact to save space.

Use of CO2, a natural refrigerant, for **more environmentally friendly** refrigeration.



OIL LINE (2 compressors or more)

Oil receiver with high and low indicator, shut-off valves and relief valve from 2 compressors.
Return with filter and oil indicator from 2 compressors.
Electronic level controller with shut-off valve per compressor from 2 compressors.
Non-adjustable differential valve for degassing the receiver connected to the LP manifold from 2 compressors.
Flexible connection for each compressor (copper oil collector starting from 3 compressors)

Size	Liquid Shock Absorber	Liquid-Vapor Heat Exchanger	Oil Separator	Oil Separator Bypass
XS	With internal heat exchanger	Not assigned	TURBOIL	Not available
S	With internal heat exchanger	Not assigned	TURBOIL	Not available
M	Standard	External heat exchanger	COALESCENT	Yes
L	With internal heat exchanger	Not assigned	TURBOIL	Not available
XL	Standard	External heat exchanger	COALESCENT	Yes

COMPRESSORS

Semi-hermetic reciprocating technology compressors equipped with:
- Crankcase heater.
- Suction and delivery shut-off valves.
- HP and LP pressure ports with Schrader connector.
- 4 cylinders with integrated IQ module

MANIFOLDS

A general filter unit or per compressor.
Aspiration:
- Compressors 1 and 2, in copper
- Compressors 3 and 4, stainless steel collector

Discharge:
- Compressors 1 and 2, in copper
- Compressors 3 and 4, copper collector

CONNECTION

1 connecting valve on the suction side and the liquid outlet.

ELECTRICAL BOX

Factory-assembled with anti-vibration mounts
CAREL or DANFOSS control system
Emergency operation via pressure switch

CONTROL AND SAFETY DEVICES

Per compressor:
- 1 HP cartridge pressure switch(s) with automatic reset per compressor.
- INT safety thermistor box.

Per rack:
- LP general safety pressure switch.
- HP general safety pressure switch.
- LP support pressure switches.
- HP and LP pressure gage set diameter 100 mm class 1.
- LP and HP sensors for normal operation regulator.
- LP and HP sensors for back-up mode regulator.

Tank pressure maintenance unit (optional):
Condensing unit charged with R134a and connected to the CO2 liquid receiver via a plate unit exchanger.

OPTIONS	
GMP	Safety unit (delivered installed and connected)

LIQUID LINE

Vertical liquid receiver with shut-off valves.
Double safety shut-off valve with inverter switch.
Removable cartridge drier with valve for maintenance (1/4" SAE).
Optoelectronic level alarm mounted on liquid receiver (high and low level).
Plate liquid/steam exchanger.
Liquid indicator.
Suction valve and filter
Liquid separator tank
Drier bypass

OPTIONS	
DES	Braze plate desuperheater
RLS	Oversized receiver
BSH	Oil separator bypass (on coalescent)

HP circuit	45 bars
Liquid receiver	45 bars
Liquid line	45 bars
LT suction	30 bars

Do you have a specific request?

Contact us to design the unit that meets your needs.

CONDENSER

Soldered plate heat exchanger.
Delivery in kit form of a flow controller and a glycol water thermostat.
Air superheater option (delivered separately) placed upstream of the plate condenser, including a mounted bypass valve.

OPTIONS	
2CD	75/75% condensers

INSULATION

Thermal insulation of suction line and liquid line.

FRAME

Robust welded mechanical chassis
Structural validation carried out in static and dynamic conditions.

CO2LD MR(A) 1N(B) 2HSL(C)

(A) **CO2LD CO** = encased outdoor rack - **CO2LD MR** = machine room rack
(B) Number of compressors
(C) Model of compressors

CO2LD Subline — Negative range

			1N / 2KSL	1N / 2JSL	1N / 3HSL	1N / 2GSL	2N / 2KSL	1N / 2FSL	2N / 2JSL	3N / 2KSL	1N / 2ESL	2N / 2HSL	1N / 2DSL	3N / 2JSL	2N / 2GSL	1N / 2CSL	1N / 2FSL
Power CO2*		kW	**4,2**	**5,4**	**7**	**8,4**	**8,4**	**10,8**	**10,8**	**12,6**	**13,4**	**14**	**15,9**	**16,2**	**16,7**	**19,3**	**20,8**
Power consumption*		kW	**1,2**	**1,6**	**2**	**2,3**	**2,4**	**3**	**3,3**	**3,7**	**3,6**	**4**	**4,2**	**4,9**	**4,7**	**5,1**	**5,5**
Compressor		Nb	1	1	1	1	2	1	2	3	1	2	1	3	2	1	1
Size			XS	XS	XS	XS	S	XS	S	L	XS	S	XS	L	S	XS	XS
Max. Input current		A	3,5	4,6	6	6,8	7	8,6	9,2	10,5	9,7	12	11,3	13,8	13,6	13,9	15,7
Receiver volume		l.	45	45	45	45	60	45	60	60	60	60	60	60	60	60	94
Connection	Suction	Ø	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	7/8"	7/8"	5/8"	7/8"	7/8"	7/8"	7/8"	1"1/8
	Delivery	Ø	1/2"	1/2"	1/2"	1/2"	5/8"	1/2"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
	Liquid	Ø	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	1/2"	3/8"	1/2"	1/2"	1/2"	1/2"	5/8"
Dimensions	L | D | H	mm	Contact us														
Weight		kg															

* Evaporating temperature: -35 °C / Condensing temperature: -3 °C - Total superheat 20K, useful 10K and subcool 3K, with a 60 Hz head compressor
Glycol water: Percentage of glycol = 40% - Regime -8/-4 °C

CO2LD Subline — Negative range

			3N / 2HSL	2N / 2FSL	3N / 2GSL	1N / 4ESL	2N / 2ESL	1N / 4DSL	2N / 2DSL	3N / 2FSL	1N / 4CSL	2N / 2CSL	3N / 2ESL	2N / 4FSL	3N / 2DSL	1N / 4VSL	2N / 4ESL
Power CO2*		kW	**21**	**21,6**	**25,1**	**26,4**	**26,9**	**31,4**	**31,8**	**32,4**	**38,2**	**38,7**	**40,3**	**41,7**	**47,7**	**49,1**	**52,8**
Power consumption*		kW	**6**	**6**	**7**	**6,9**	**7,2**	**8,2**	**8,4**	**9**	**10**	**10,2**	**10,7**	**11**	**12,6**	**12,8**	**13,9**
Compressor		Nb	3	2	3	1	2	1	2	3	1	2	3	2	3	1	2
Size			L	S	L	XS	S	XS	S	L	XS	S	L	S	L	XS	S
Max. Input current		A	18	17,2	20,4	18,9	19,4	22	22,6	25,8	26,7	27,8	29,1	31,4	33,9	33,5	37,8
Receiver volume		l.	60	60	60	94	94	94	94	60	94	94	94	94	94	158	94
Connection	Suction	Ø	7/8"	7/8"	7/8"	1"1/8	1"1/8	1"1/8	1"1/8	7/8"	1"1/8	1"1/8	1"1/8	1"3/8	1"1/8	1"3/8	1"3/8
	Delivery	Ø	5/8"	7/8"	5/8"	5/8"	7/8"	7/8"	7/8"	5/8"	7/8"	7/8"	7/8"	7/8"	7/8"	1"1/8	7/8"
	Liquid	Ø	1/2"	1/2"	1/2"	5/8"	5/8"	5/8"	5/8"	1/2"	5/8"	5/8"	5/8"	7/8"	5/8"	7/8"	7/8"
Dimensions	L | D | H	mm	Contact us														
Weight		kg															

* Evaporating temperature: -35 °C / Condensing temperature: -3 °C - Total superheat 20K, useful 10K and subcool 3K, with a 60 Hz head compressor
Glycol water: Percentage of glycol = 40% - Regime -8/-4 °C

CO2LD MR(A) 1N(B) 2HSL(C)

(A) **CO2LD CO** = encased outdoor rack - **CO2LD MR** = machine room rack
(B) Number of compressors
(C) Model of compressors

CO2LD Subline — Negative range

			4N / 2ESL	3N / 2CSL	1N / 2TSL	3N / 4FSL	2N / 4DSL	4N / 2DSL	1N / 4PSL	2N / 4CSL	4N / 2CSL	3N / 4ESL	1N / 4NSL	4N / 4FSL	3N / 4DSL	2N / 4VSL	4N / 4ESL
Power CO2*		kW	**53,7**	**58**	**58,8**	**62,5**	**62,7**	**63,6**	**69,5**	**76,4**	**77,3**	**79,2**	**81,2**	**83,3**	**94,1**	**98,2**	**105,6**
Power consumption*		kW	**14,3**	**15,3**	**15,3**	**16,4**	**16,5**	**16,9**	**18**	**20**	**20,4**	**20,8**	**21**	**21,9**	**24,7**	**25,5**	**27,7**
Compressor		Nb	4	3	1	3	2	4	1	2	4	3	1	4	3	2	4
Size			L	L	XS	XL	S	L	XS	S	L	XL	XS	XL	XL	M	XL
Max. Input current		A	38,8	41,7	40	47,1	44	45,2	48,3	53,4	55,6	56,7	55,5	62,8	66	67	75,6
Receiver volume		l.	94	94	158	158	94	94	158	94	94	158	158	158	158	158	158
Connection	Suction	Ø	1"3/8	1"1/8	1"3/8	1"5/8	1"3/8	1"3/8	1"3/8	1"3/8	1"3/8	1"5/8	1"3/8	1"5/8	1"5/8	1"5/8	1"5/8
	Delivery	Ø	1"1/8	7/8"	1"1/8	1"1/8	7/8"	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"3/8	1"3/8	1"3/8	1"3/8
	Liquid	Ø	7/8"	5/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	1"1/8	1"1/8	1"1/8	1"1/8
Dimensions	L | D | H	mm	Contact us														
Weight		kg															

* Evaporating temperature: -35 °C / Condensing temperature: -3 °C - Total superheat 20K, useful 10K and subcool 3K, with a 60 Hz head compressor
Glycol water: Percentage of glycol = 40% - Regime -8/-4 °C

CO2LD Subline — Negative range

			3N / 4CSL	2N / 2CSL	4N / 4DSL	2N / 4PSL	3N / 4VSL	4N / 4CSL	2N / 4NSL	3N / 3TSL	4N / 4VSL	3N / 4PSL	4N / 4TSL	3N / 4NSL	4N / 4PSL	4N / 4NSL
Power CO2*		kW	**114,6**	**117,7**	**125,4**	**139**	**147,3**	**152,8**	**162,5**	**176,5**	**196,5**	**208,5**	**235,4**	**243,7**	**278**	**325**
Power consumption*		kW	**30**	**30,6**	**32,9**	**36,1**	**38,3**	**40,1**	**42,1**	**45,8**	**51**	**54,1**	**61,1**	**63,1**	**72,1**	**84,2**
Compressor		Nb	3	2	4	2	3	4	2	3	4	3	4	3	4	4
Size			XL	M	XL	M	XL	XL	M	XL	XL	XL	XL	XL	XL	XL
Max. Input current		A	80,1	80	88	96,6	100,5	106,8	111	120	134	144,9	160	166,5	193,2	222
Receiver volume		l.	158	158	158	158	300	158	158	300	300	300	300	300	300	300
Connection	Suction	Ø	1"5/8	1"5/8	1"5/8	2"1/8	2"1/8	1"5/8	2"1/8	2"1/8	2"1/8	2"1/8	2"1/8	2"1/8	76,1	76,1
	Delivery	Ø	1"3/8	1"3/8	1"3/8	1"3/8	1"5/8	1"3/8	1"3/8	1"5/8	1"5/8	1"5/8	1"5/8	1"5/8	2"1/8	2"1/8
	Liquid	Ø	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"3/8	1"3/8	1"3/8	1"3/8	1"3/8	1"3/8
Dimensions	L | D | H	mm	Contact us														
Weight		kg															

* Evaporating temperature: -35 °C / Condensing temperature: -3 °C - Total superheat 20K, useful 10K and subcool 3K, with a 60 Hz head compressor
Glycol water: Percentage of glycol = 40% - Regime -8/-4 °C

NOTES

FRIGA-BOHN®

CO2LD

CO2 Transcritical Racks

CO2

MT **12** kW - **1** MW
LT **7** - **120** kW

PED 2014/68/UE

SAFETY UNIT

R290 unit directly triggered by CO2 pressure via an auto-reset pressure switch and must be connected to the store's back-up power supply.

OPTIONS

- R134a refrigerant.
- Auto check-up : Unit tested periodically to check its operation.

LIQUID STATION

Vertical liquid receiver with shut-off valves. **CUSTOMIZABLE**
Double safety shut-off valve with inverter switch.
Removable cartridge dryer with bypass valves.
Gas cooler pressure control valve connected upstream of the liquid receiver.
Liquid receiver pressure controlled by a flash-gas valve connected between the receiver and the HT rack suction line.
Fully insulated on liquid receiver, including a nylon platform on the base to avoid thermic transfer to the frame (condensation).
BPHE between LT and Liquid lines to ensure proper superheating of LT line, avoid liquid hammering on the compressor, and improve subcooling on liquid line.

OPTIONS

- Gas cooler pressure valve doubling.
- Liquid receiver pressure control doubling.

CONNECTION PACK

Connecting valve on the suction of each rack and the general liquid outlet. **CUSTOMIZABLE**

LIQUID STATION

Removable coalescing oil separator with oil level controller and oil return solenoid valve.
Oil receiver with high and low indicator and shut-off valves.
Return with filter and oil indicator.
Copper oil collector with flexible connection for each compressor.
Control system optimizes the oil receiver pressure and its deferential to the compressors.
Monitors the pressure in the oil receiver with low level alarm
Teklab or Emerson controller.

OPTIONS

- Oil separator bypass.

SENSORS, SAFETY COMPONENTS & MANIFOLD

All components assembled on the same board
Structure with antivibration pads
Easy to access and visualise

MANIFOLD | PIPING

Stainless steel piping as standard.
Thermal insulation of the entire refrigeration circuit (except for the discharge and oil lines).
Fully insulated valves (body and cap with Velcro).
A general filter unit on low temperature and high temperature rack suction.
Specific labels identifying the main lines.
Safety valve on:
  - low temperature rack suction headers.
  - high temperature rack suction headers.
  - high temperature rack delivery headers.

OPTIONS

- Double safety valve
- Discharge manifold collected to safety valves (copper or stainless steel connection)

ELECTRICAL CABINET

Factory mounted on antivibration pads.
Phase-voltage controller as standard (secure components during electrical oscillations / disturbances).
All the controllers (normal/back up) are connected to UPS system in case of electrical failure.
Available controllers: Carel, Danfoss & Dixel (Emerson).

CONTROL AND SAFETY DEVICES

Per compressor:
  - 1 HP pressure switch connected to the cylinder head with automatic reset.
  - INT safety thermistor box.
For a low temperature rack:
  - LP general safety pressure switch.
  - LP ratiometric pressure sensor (-1/34 B) for normal operation.
  - Variable frequency drive for the 1st compressor of - the low temperature rack.
For a high temperature rack:
  - HP general safety pressure switch.
  - LP general safety pressure switch.
  - HP ratiometric pressure sensor (-1/159 B) for normal operation.
  - LP ratiometric pressure sensor (-1/59 B) for normal operation.
  - Variable frequency drive for the 1st compressor of the high temperature rack, or CRII (Bitzer) allows a 10-100% capacity reduction.

PED FILE

Printed version (folder) delivered with the rack
Also available online (cloud)
All documents in the same folder (operating guide, user manual, spare parts list, certificates, etc.).

FRAME

Robust welded frame.
Validated by static and dynamic FEA studies.
Painted frame.
Designed for easy handling by forklift or crane (lifting rings as standard).

COMPRESSORS

Bitzer or Dorin semi-hermetic reciprocating compressors.
Multiple configurations available:
  - From 2 to 10 in MT.
  - Up to 16 compressors on one single rack.

OPTIONS

- LSPM compressors.

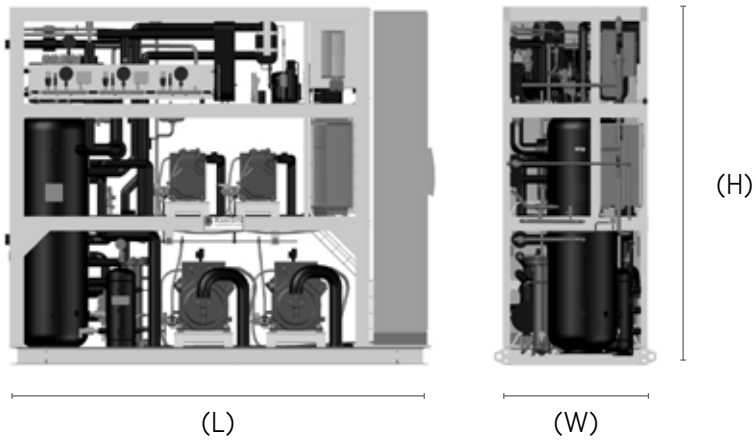
OPERATING PRESSURES

HP circuit	130 bar
Liquid receiver	60 bar
Liquid line	60 bar
MT rack suction	52 bar
LT rack suction	30 bar

Main applications: Small Supermarkets / Gas Stations
Application area: 100 to 500m2
Refrigeration capacity: 12-60 kW (Medium Temperature) / 7-20 kW (Low Temperature)
Compressors: 1 to 4 compressors

Compressors (Qty)					Dimensions			
LT	MT	IT	MT+IT	Total	L (mm)	W (mm)	H (mm)	Weight (kg)
0	2	0	2	2	1000	800	2000	1464
1	1	1	2	3	1000	800	2000	1517
1	2	0	2	3	1000	800	2000	1517
2	1	1	2	4	2500	800	2000	1720
2	2	0	2	4	2500	800	2000	1720

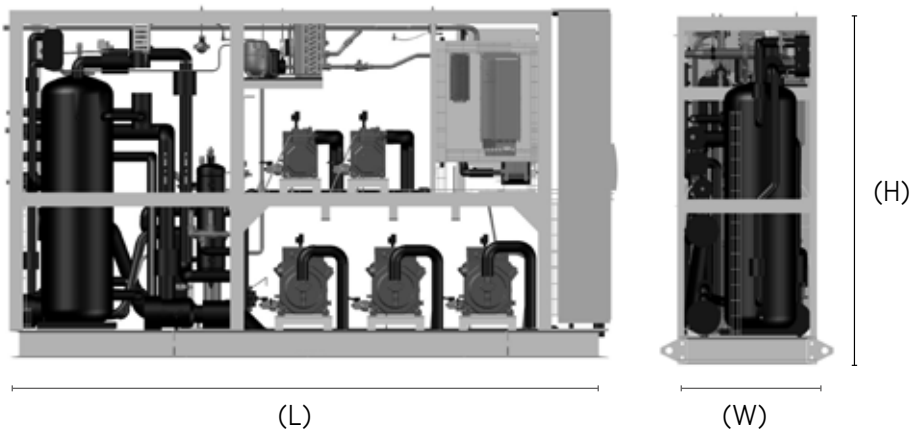
Dimensions



- **Main applications:** Supermarkets
- **Application area:** 800 to 1200m2
- **Refrigeration capacity:** 60-140 kW (Medium Temperature) / 15-40 kW (Low Temperature)
- **Compressors:** 5 to 7 compressors

Compressors (Qty)					Dimensions			
LT	MT	IT	MT+IT	Total	L (mm)	W (mm)	H (mm)	Weight (kg)
0	3	0	3	3	4400	800	2000	2229
1	2	1	3	4	4400	800	2000	2306
1	3	0	3	4	4400	800	2000	2306
2	2	1	3	5	4400	800	2000	2384
2	3	0	3	5	4400	800	2000	2384
3	3	0	3	6	4400	800	2000	2461
2	2	2	4	6	4900	800	2000	2648
2	4	0	4	6	4900	800	2000	2648
3	3	1	4	7	4900	800	2000	2725
3	4	0	4	7	4900	800	2000	2725
3	2	0	0	5	3000	800	2000	2197
3	2	1	1	6	3000	800	2000	2461
3	3	0	0	6	3000	800	2000	2461
3	3	1	1	7	3500	800	2000	2725
3	4	0	0	7	3500	800	2000	2725

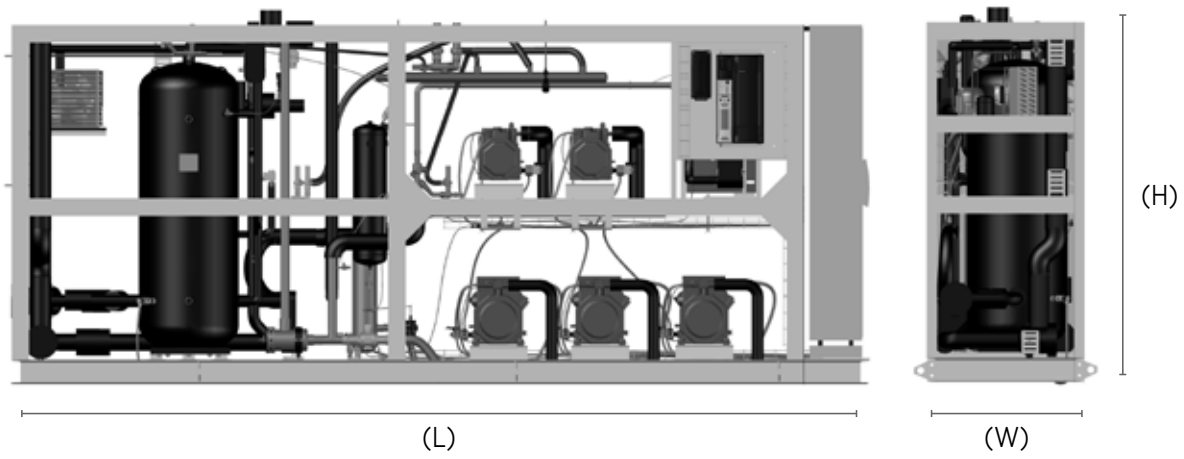
Dimensions



Main applications: Supermarkets / Industry
Application area: 1500 to 2000m2
Refrigeration capacity: 120-185 kW (Medium Temperature) / 15-80 kW (Low Temperature)
Compressors: 6 to 9 compressors

Compressors (Qty)					Dimensions			
LT	MT	IT	MT+IT	Total	L (mm)	W (mm)	H (mm)	Weight (kg)
0	3	2	5	5	5700	900	2000	4918
0	4	1	5	5	5700	900	2000	4918
0	5	0	5	5	5700	900	2000	4918
1	3	2	5	6	5700	900	2000	5023
1	4	1	5	6	5700	900	2000	5023
1	5	0	5	6	5700	900	2000	5023
2	4	1	5	7	5700	900	2000	5129
2	3	3	6	8	6300	900	2000	5390
2	4	2	6	8	6300	900	2000	5390
3	3	3	6	9	6300	900	2000	5496
3	4	2	6	9	6300	900	2000	5496

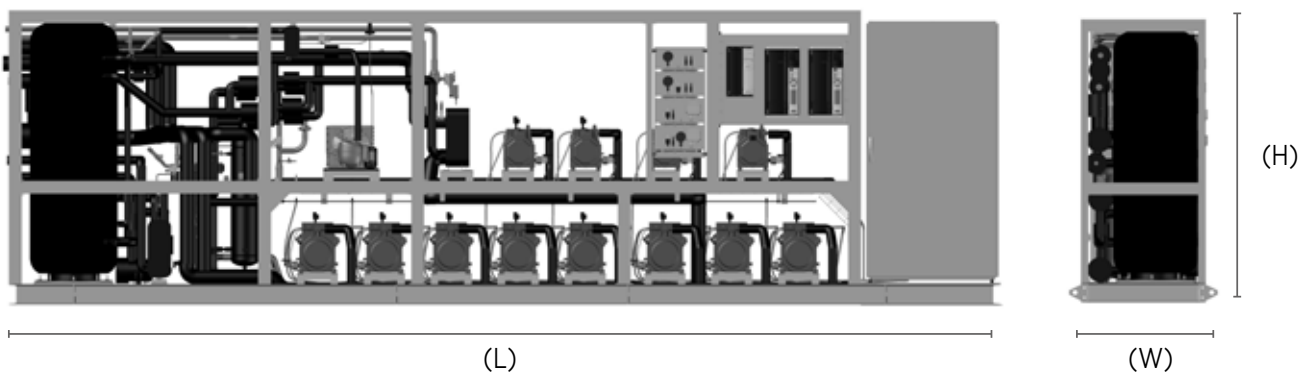
Dimensions

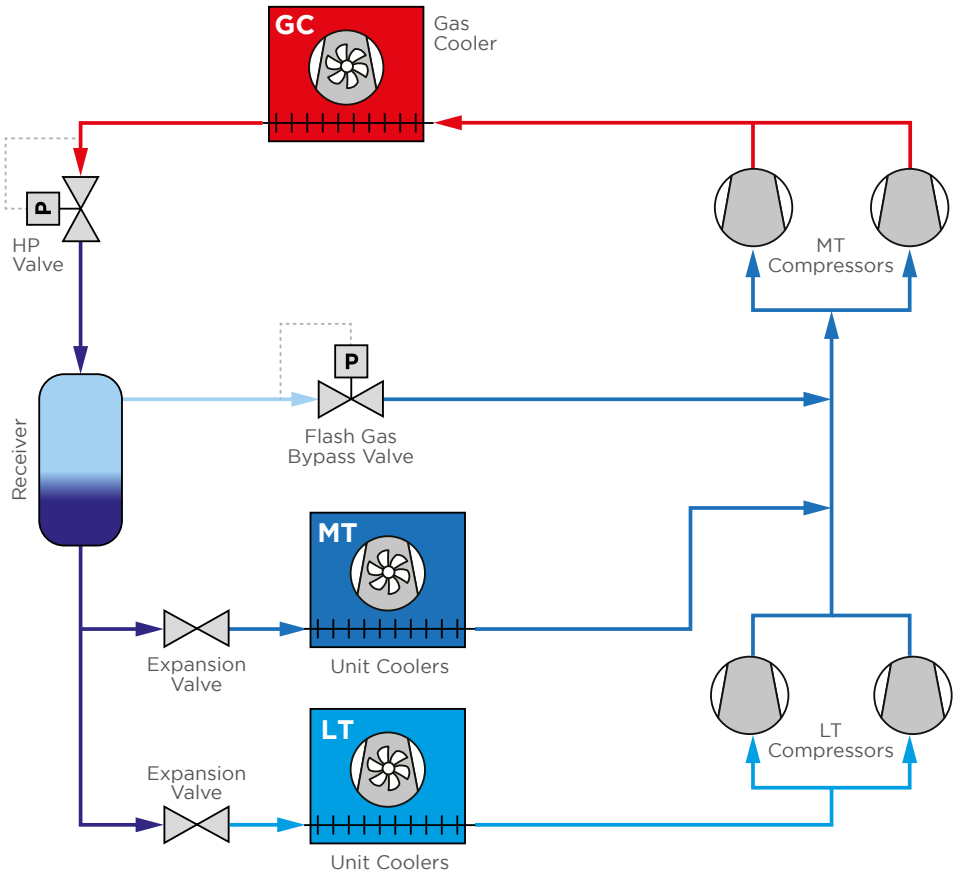


Main applications: Hypermarkets / Industry
Application area: 3000m2
Refrigeration capacity: 185 kW-1 MW (Medium Temperature) / 15-120 kW (Low Temperature)
Compressors: 8 to 16 compressors

Compressors (Qty)					Dimensions			
LT	MT	IT	MT+IT	Total	L (mm)	W (mm)	H (mm)	Weight (kg)
0	4	3	7	7	7200	1000	2400	5439
0	5	2	7	7	7300	1000	2400	5439
0	5	3	8	8	7600	1000	2400	5699
1	4	3	7	8	7300	1000	2400	5545
1	5	2	7	8	7300	1000	2400	5545
1	5	3	8	9	7600	1000	2400	5805
1	5	4	9	10	8000	1000	2400	6066
2	4	3	7	9	7300	1000	2400	5650
2	4	4	8	10	7600	1000	2400	5911
2	5	1	6	8	6800	1000	2400	5390
2	5	2	7	9	7300	1000	2400	5650
2	5	3	8	10	7600	1000	2400	5911
2	5	4	9	11	8000	1000	2400	6172
3	4	3	7	10	7300	1000	2400	5756
3	4	4	8	11	7600	1000	2400	6017
3	5	1	6	9	6800	1000	2400	5496
3	5	2	7	10	7300	1000	2400	5756
3	5	3	8	11	7600	1000	2400	6017
3	5	4	9	12	8000	1000	2400	6277

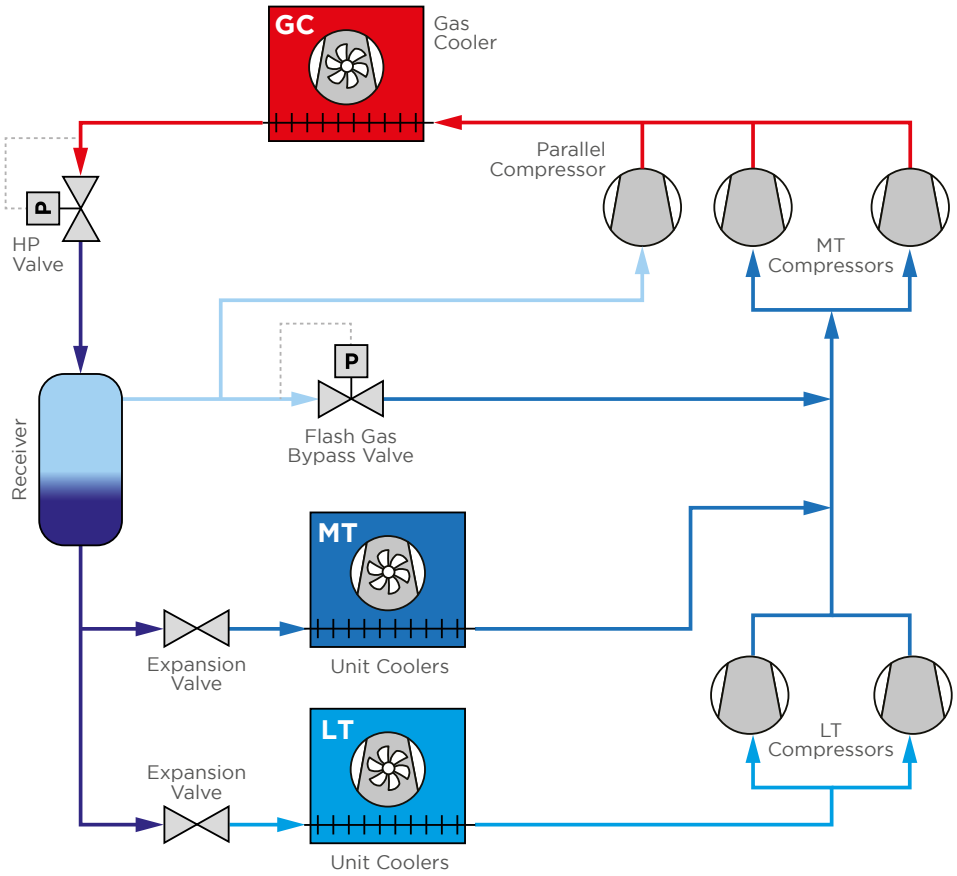
Dimensions





BOOSTER SYSTEM

Standard CO2 Transcritical system, with two stages of compression.

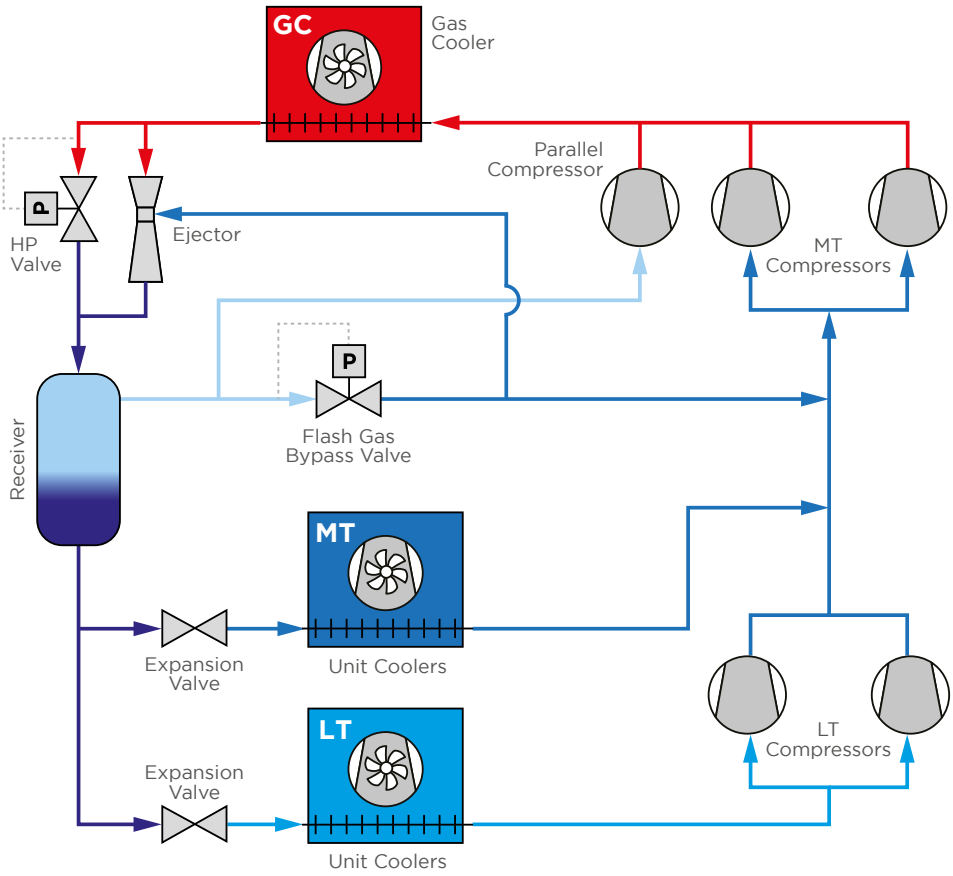


PARALLEL COMPRESSION

Optional compressor at the flash gas suction line, reduces MT overall compression work.
Recommended in warmer climates for better system performance.

Parallel Compression System can save 5 to 8% more energy*

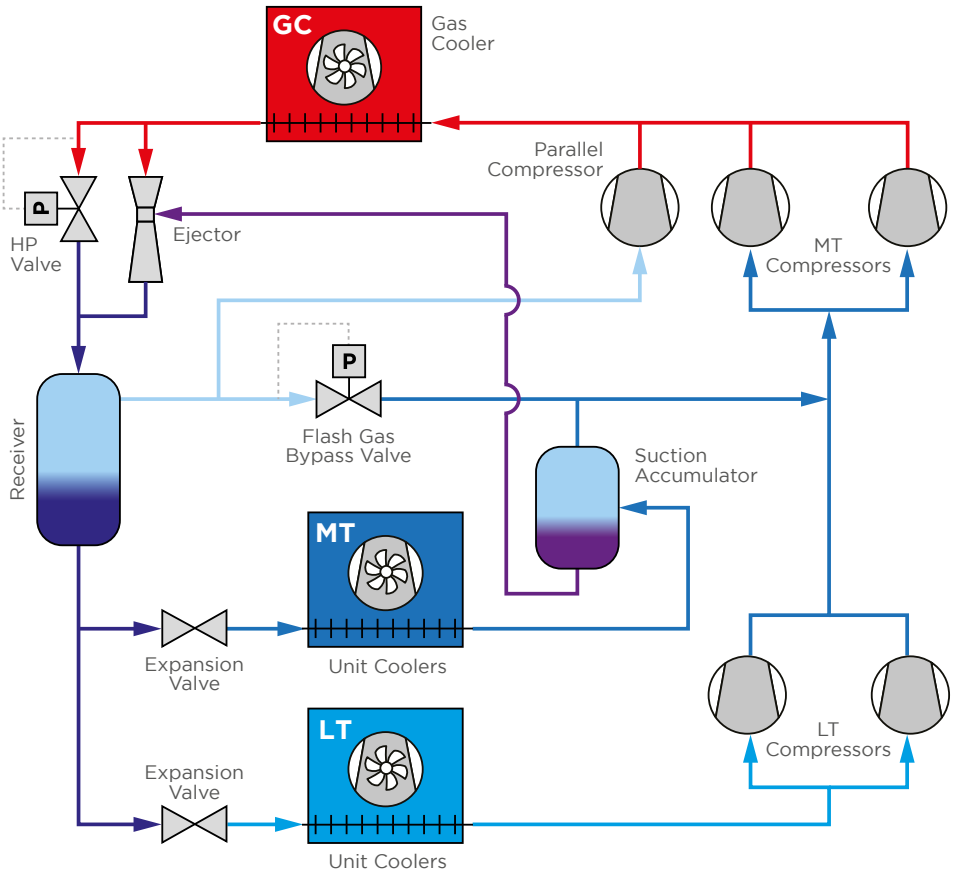
* When compared to standard CO2 booster system (savings related to different external conditions).



PARALLEL COMPRESSION WITH EJECTOR

Medium temperature CO2 from LT compressor discharge line is lifted by ejector to receiver pressure, further reducing overall MT compression work.
Recommended in warmer climates for better system performance.

 # Parallel Compression with Ejector can save 6 to 17% more energy*



LIQUID EJECTOR

Designed for both booster and parallel compression systems, It is recommended for all climate types and stores with a cooling capacity between 40 and 300kW.
Similar to Gas Ejector, the Liquid Ejector is optimized to lift liquid from the suction accumulator, returning it to the receiver.
The evaporators operate with a very low superheat and a fraction of liquid is returned to the suction accumulator.
With the support of a specific controller, the evaporator operates more efficiently at a higher suction pressure. This enables the suction pressure to be raised, thereby reducing the energy consumption on the compressors.

 # Booster System with Liquid Ejector can save 10% more energy*

 # Parallel Compression with Liquid Ejector can save 15 to 18% more energy*

 # HP Ejector with Liquid Ejector can save 17 to 29% more energy*

WALK-IN HOUSING

Compact design (fits in a container)
Reduced noise level

3 YEARS WARRANTY

Applied on the rack sold on a packaged sales configuration (rack, electrical panel, gas cooler & unit coolers)

FULL PACKAGE

FRIGA-BOHN®

DUO MR

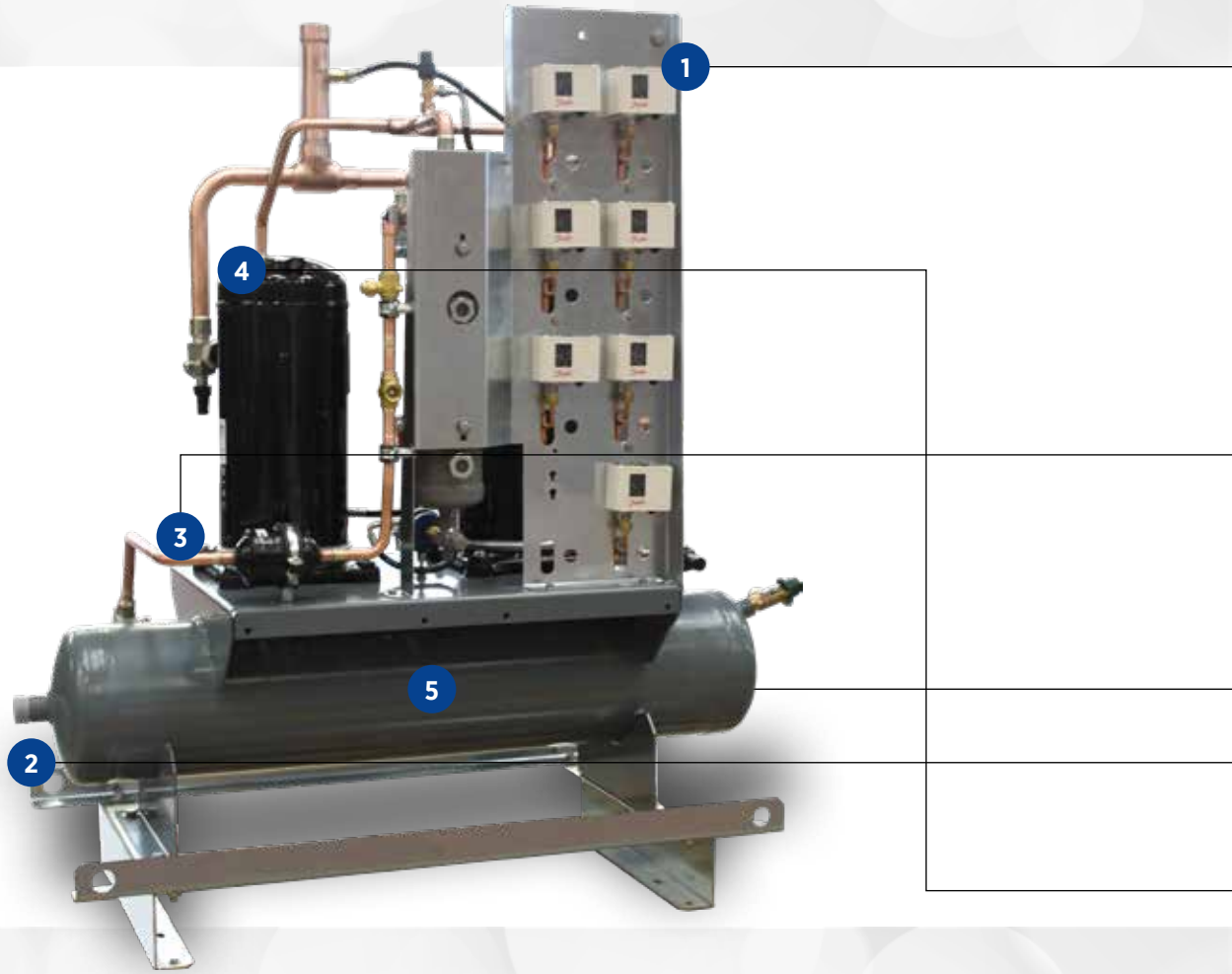
Scroll compressor receiver rack

HFC

MT **8** - **55** kW

Ready-to-install unit (factory pre-assembled components and complete electrical supply) for **quick installation**.

Compact and **silent** for perfect integration into its environment.



ELECTRICAL BOX OPTION (ARM)

Icc 15 kA.
General disconnect switch.
Electronic regulation by PLC EC2-552.
Pressure control in back-up mode with anti-run cycle timer.
Switchover to back-up mode:
- Automatic by LPE/HPE support pressure switches.
- Manual by switch on cabinet door.

5 Cooling station outputs 2x10A
1 or 2 condenser fan outlets:

Type	Model	Operation	LP control	HP control
AC	Three-phase: **NEOSTAR SU 16Y L02 B2 CCT 2x12T B2**	**Normal**	EC2-552	Pressostatic
		Back-up	Pressostatic	-
	Single-phase: **CCT 2x10M B5**	**Normal**	EC2-552	Pressostatic or voltage variation
		Back-up	Pressostatic	-
EC	**CCV 1**	**Normal**	EC2-552	EC2-552 (+ 1 CDP)
		Back-up	Pressostatic	IR33

OPTIONS	
ARM	Complete electrical box. KIT TO INSTALL
DPS	3 additional cooling station outputs 2x10A.

1 CONTROL DEVICES

1 LP general safety pressure switch.
1 LP regulator pressure switch per compressor.
1 HP cartridge pressure switch with automatic reset per compressor.
2 HP regulator pressure switches.
1 LPE and HPE support pressure switch (switchover to back-up mode).
1 LP sensor.

OPTIONS	
CDP	HP pressure sensors 4-20 mA signal (EC condenser – CCV 1). KIT TO INSTALL
RPC	Condensing pressure control by voltage variation (condenser CCT 2x10M B5). KIT TO INSTALL

2 MANIFOLDS

Copper suction and delivery.

3 OIL LINE

HP oil separator with integrated oil reserve with high and low indicator.
HP oil return line with filter.
Electronic oil level controller.

4 COMPRESSORS

2 Scroll technology compressors, one of which has DIGITAL™ power variation.
Equipped with suction and delivery shut-off valves, crankcase heater and rigid suspension elements.
Rack pre-wired in the factory with 3 m of cable available.

OPTIONS	
COQ	Noise insulation casings. KIT TO INSTALL

5 LIQUID RECEIVER

Horizontal receiver with a capacity of 40 L.
2 inlet/outlet shut-off valves.
Liquid outlet equipped with a filter dryer, an indicator and a liquid outlet valve.
Simple safety valve.

PRODUCT ADVANTAGES

Integrated pressostatic back-up operation.
Supports for easy handling of the unit.

DUO MR(A) 30(B)

(A) Compressor unit on bottle
(B) Compressor model

The DUO MR is available with HFCs. For more information, please consult our software.

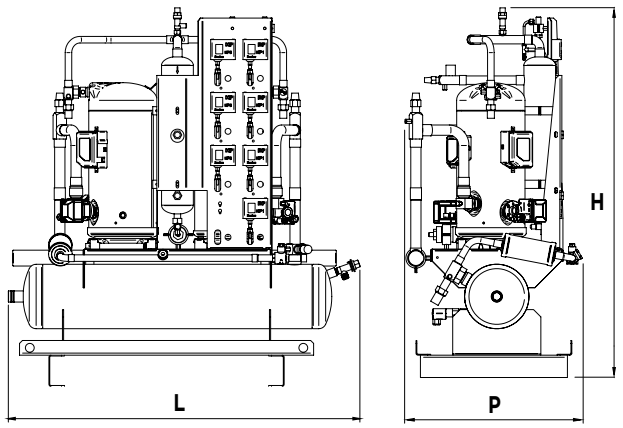
DUO MR — Positive range

		DUO MR ...	30	45	57	76	114
Compressor type			ZB30+ZBD30	ZB45+ZBD45	ZB57+ZBD57	ZB76+ZBD76	ZB114+ZBD114
Power (1)	R407F	kW	14,2	20,8	27,0	38,2	54,7
	R407A	kW	13,9	19,8	27,0	35,6	50,0
	R448A	kW	14,1	20,7	26,7	36,6	52,9
	R449A	kW	14,1	20,6	26,7	36,6	52,8
	R134a	kW	8,6	12,5	15,7	21,3	31,6
	R404A	kW	14,3	20,9	27,2	37,6	53,9
Power consumption*	R407F	kW	6,0	8,7	11,0	15,2	22,8
	R407A	kW	5,8	8,2	11,0	14,5	21,7
	R448A	kW	5,7	8,0	9,9	14,2	22,2
	R449A	kW	5,7	8,0	9,9	14,2	22,2
	R134a	kW	3,7	5,2	7,2	9,6	13,9
	R404A	kW	6,1	8,8	11,1	15,8	23,6
Compressor		Nb	2	2	2	2	2
Input current*	R404A	A max.	15,8	24,2	28,0	40,8	66,6
Receiver volume		l.	40	40	40	40	40
Noise level	Lp 10m (2)	dB(A)	41	43	50	48	53
Connections	Suction	Ø	1"5/8	1"5/8	1"5/8	2"1/8	2"1/8
	Delivery	Ø	7/8"	7/8"	7/8"	1"1/8	1"1/8
	Liquid inlet	Ø	7/8"	7/8"	7/8"	7/8"	1"1/8
	Liquid outlet	Ø	5/8"	5/8"	5/8"	1"1/8	1"1/8
Weight		kg	196	200	210	260	275

(1) Evaporating temperature **-10 °C** / Ambient temperature **+42 °C** - Superheat: 10K - Subcool: 3K.
(2) Sound pressure level at 10 m given as an indication only.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

DUO MR | Dimensions



DUO MR ...		30	45	57	76	114
L	mm	1200	1200	1200	1200	1260
P	mm	530	530	610	600	600
H	mm	1330	1330	1330	1286	1296

FRIGA-BOHN®

COMPACT

Octagon and Scroll compressor rack

HFC

MT **16** - **110** kW
LT **6** - **38** kW

Modular rack to best meet the needs of your application, available with Scroll or Semi-Hermetic Octagon compressors.

Compact to save space.

CONTROL DEVICES

1 LP general safety pressure switch
1 or 2 HP cartridge pressure switch(es) with automatic reset per compressor (according to standard EN 378-2: 2009).
2 pressure gages (LP+HP)
1 oil differential pressure switch per compressor for semi-hermetic reciprocating models of compressor 4TC to 4NC.

OPTIONS	
	Safety pack
BPS	LP safety pressure switch per compressor.
HPG	HP general safety pressure switch.
	Regulation pack
BP1	LP pressure switch (automatic reset).
HPS	Additional HP pressure switches.
CDP	HP/LP pressure sensors signal 4-20 mA.
ALF	Height-adjustable float coolant level alarm.
ALR	Optoelectronic refrigerant level alarm.

FRAME

One-piece frame designed to avoid vibration problems.

OPTIONS	
PAV	Anti-vibration pads. KIT TO INSTALL
ARM	Electrical cabinet. CONTACT US

CONNECTION PACK

1 connecting valve on the suction, the delivery and the liquid outlet.

COMPRESSORS

Scroll technology (Copeland) or Octagon semi-hermetic reciprocating technology (Bitzer).
Equipped with suction and delivery shut-off valves, crankcase heater and rigid suspension elements.
Cylinder head fan for semi-hermetic reciprocating models in negative application.

MANIFOLDS

Copper suction and delivery.
Polypropylene collar on the suction side and high temperature resistant polyamide on the delivery side.
A general filter unit on the suction side.

OPTIONS	
BDR	Condensate drain pan under suction manifolds.

Do you have a specific request?

Contact us to design the unit that meets your needs.

OIL LINE

Oil separator and receiver with high and low indicator.
Oil manifold with flexible connection at the ends.
LP oil return line with filter and indicator.
Float oil level regulator with shut-off valve per compressor for SH and electronic for Scroll.
Degassing valve.

OPTIONS	
TXL	Electronic oil level controllers (Compact Octagon).

LIQUID STATION

Liquid station delivered separately.
2 inlet/outlet shut-off valves.
Liquid outlet equipped with a removable filter dryer box and an indicator.
Single or double safety valve (according to PED).

OPTIONS	
BAC	Liquid separator (only for semi-hermetic compressor)**.**
RLS	Oversized liquid receiver.
SSD	Double safety valve with 3-way valve (for receivers < 120 litres).

COM 2(A)P(B) 4EES-4Y(C)

(A) Number of compressors
(B) **P** = Positive range - **N** = Negative range
(C) Compressor type

The COMPACT is available with HFCs. For more information, please consult our software.

COMPACT | Octagon — Positive range

			COM ...	2P 4EES-4Y	2P 4DES-5Y	2P 4CES-6Y	3P 4EES-4Y	3P 4DES-5Y	2P 4TES-9Y	4P 4EES-4Y	2P 4PES-12Y	3P 4CES-6Y
Power (1)	R449A	kW		**21,6**	**25,4**	**31,4**	**32,4**	**38,0**	**39,3**	**43,2**	**44,4**	**47,1**
Power consumption (1)		kW		**9,5**	**11,1**	**13,6**	**14,3**	**16,7**	**16,6**	**19,1**	**18,4**	**20,5**
Power (1)	R404A	kW		**22,2**	**26,5**	**32,0**	**33,3**	**39,7**	**40,2**	**44,4**	**45,7**	**48,1**
Power consumption (1)		kW		**10,7**	**12,6**	**15,0**	**16,0**	**18,9**	**18,6**	**21,3**	**20,5**	**22,5**
Compressor		Nb		2	2	2	3	3	2	4	2	3
Max. current drawn		A		20	25	32	31	38	39	41	43	48
Receiver volume		l.		45	45	60	60	60	60	60	60	60
Connection pack standard option	Delivery	Ø		1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8
	Suction	Ø		1"5/8	1"5/8	1"5/8	1"5/8	2"1/8	2"1/8	2"1/8	2"1/8	2"1/8
	Liquid	Ø		7/8"	7/8"	7/8"	7/8"	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8
Rack weight		kg		374	383	390	472	482	481	573	491	498
Receiver size	L	mm		666	666	666	666	666	666	666	666	666
	D	mm		402	402	402	402	402	402	402	402	402
	H	mm		1137	1137	1338	1338	1338	1338	1338	1338	1338
Receiver weight		kg		60	60	80	80	80	80	80	80	80

			COM ...	4P 4DES-5Y	2P 4NES-14Y	3P 4TES-9Y	4P 4CES-6Y	3P 4PES-12Y	4P 4TES-9Y	3P 4NES-14Y	4P 4PES-12Y	4P 4NES-14Y
Power (1)	R449A	kW		**50,7**	**53,4**	**58,9**	**62,8**	**66,7**	**78,6**	**80,2**	**88,9**	**106,9**
Power consumption (1)		kW		**22,2**	**22,3**	**24,9**	**27,3**	**27,5**	**33,2**	**33,4**	**36,7**	**44,5**
Power (1)	R404A	kW		**53,0**	**54,8**	**60,4**	**64,1**	**68,6**	**80,5**	**82,1**	**91,4**	**109,5**
Power consumption (1)		kW		**25,2**	**25,0**	**27,8**	**30,0**	**30,8**	**37,1**	**37,4**	**41,1**	**49,9**
Compressor		Nb		4	2	3	4	3	4	3	4	4
Max. current drawn		A		50	52	59	64	65	78	77	86	103
Receiver volume		l.		60	60	60	60	120	120	120	120	120
Connection pack standard option	Delivery	Ø		1"3/8	1"3/8	1"3/8	1"3/8	1"3/8	1"5/8	1"5/8	1"5/8	1"5/8
	Suction	Ø		2"1/8	2"1/8	2"1/8	2"1/8	2"5/8	2"5/8	2"5/8	2"5/8	2"5/8
	Liquid	Ø		1"1/8	1"1/8	1"1/8	1"1/8	1"3/8	1"3/8	1"3/8	1"3/8	1"3/8
Rack weight		kg		589	504	637	608	656	794	670	815	823
Receiver size	L	mm		666	666	666	666	714	714	714	714	714
	D	mm		402	402	402	402	455	455	455	455	455
	H	mm		1338	1338	1338	1338	1834	1834	1834	1834	1834
Receiver weight		kg		80	80	80	80	120	120	120	120	120

(1) Evaporating temperature **-10 °C** / Ambient temperature **+45 °C** - Superheat: 10K - Subcool: 3K.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

COM 2(A)P(B) 4EES-4Y(C)

(A) Number of compressors
(B) **P** = Positive range - **N** = Negative range
(C) Compressor type

> **The COMPACT is available with HFCs. For more information, please consult our software.**

COMPACT | Octagon — Negative range

			COM ...	2N 4EES-4Y	2N 4DES-5Y	2N 4CES-6Y	3N 4EES-4Y	2N 4TES-9Y	3N 4DES-5Y	2N 4PES-12Y	4N 4EES-4Y	3N 4CES-6Y
Power (1)	R449A	kW		**5,6**	**6,5**	**8,4**	**8,4**	**9,9**	**9,8**	**10,5**	**11,2**	**12,6**
Power consumption (1)		kW		**4,3**	**5,0**	**6,5**	**6,4**	**7,2**	**7,5**	**7,5**	**8,5**	**9,7**
Power (1)	R404A	kW		**6,6**	**7,9**	**9,3**	**9,9**	**11,2**	**11,8**	**12,0**	**13,2**	**13,9**
Power consumption (1)		kW		**5,5**	**6,6**	**7,7**	**8,3**	**8,9**	**9,9**	**9,5**	**11,1**	**11,6**
Compressor		Nb		2	2	2	3	2	3	2	4	3
Max. current drawn		A		15	19	25	23	27	29	29	30	38
Receiver volume		l.		45	45	45	45	45	45	45	45	45
Connection pack standard option	Delivery	Ø		1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8
	Suction	Ø		1"3/8	1"3/8	1"5/8	1"5/8	1"5/8	1"5/8	1"5/8	1"5/8	1"5/8
	Liquid	Ø		5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
Rack weight		kg		371	376	388	470	474	476	484	566	492
Receiver dimensions	L	mm		666	666	666	666	666	666	666	666	666
	D	mm		402	402	402	402	402	402	402	402	402
	H	mm		1137	1137	1137	1137	1137	1137	1137	1137	1137
Receiver weight		kg		60	60	60	60	60	60	60	60	60

			COM ...	2N 4NES-14Y	4N 4DES-5Y	3N 4TES-9Y	3N 4PES-12Y	4N 4CES-6Y	4N 4TES-9Y	3N 4NES-14Y	4N 4PES-12Y	4N 4NES-14Y
Power (1)	R449A	kW		**13,6**	**13,1**	**14,9**	**15,8**	**16,9**	**19,9**	**20,3**	**21,0**	**27,1**
Power consumption (1)		kW		**9,4**	**10,1**	**10,8**	**11,2**	**13,0**	**14,4**	**14,2**	**14,9**	**18,9**
Power (1)	R404A	kW		**15,2**	**15,8**	**16,7**	**18,0**	**18,6**	**22,3**	**22,8**	**24,0**	**30,4**
Power consumption (1)		kW		**12,1**	**13,2**	**13,3**	**14,2**	**15,4**	**17,7**	**18,1**	**18,9**	**24,1**
Compressor		Nb		2	4	3	3	4	4	3	4	4
Max. current drawn		A		35	39	40	44	51	54	52	58	70
Receiver volume		l.		60	60	60	60	60	60	60	60	60
Connection pack standard option	Delivery	Ø		1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8
	Suction	Ø		2"1/8	2"1/8	2"1/8	2"1/8	2"1/8	2"1/8	2"1/8	2"5/8	2"5/8
	Liquid	Ø		7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	1"1/8	1"1/8
Rack weight		kg		490	577	624	634	597	769	646	796	805
Receiver size	L	mm		666	666	666	666	666	666	666	666	666
	D	mm		402	402	402	402	402	402	402	402	402
	H	mm		1338	1338	1338	1338	1338	1338	1338	1338	1338
Receiver weight		kg		80	80	80	80	80	80	80	80	80

(1) Evaporating temperature **-35 °C** / Ambient temperature **+40 °C** - Superheat: 10K - Subcool: 3K.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

COM 2(A)P(B) ZB38(C)

(A) Number of compressors
(B) **P** = Positive range - **N** = Negative range
(C) Compressor type

The COMPACT is available with HFCs. For more information, please consult our software.

COMPACT | Scroll — Positive range

			COM ...	2P ZB38	2P ZB45	2P ZB50	3P ZB38	2P ZB66	3P ZB45	3P ZB50	2P ZB76	2P ZB95	3P ZB66
Power (1)	R449A	kW		**16,7**	**19,6**	**23,0**	**25,1**	**28,7**	**29,4**	**34,5**	**34,0**	**41,4**	**43,0**
Power consumption (1)		kW		**7,7**	**8,8**	**10,5**	**11,6**	**13,2**	**13,1**	**15,7**	**15,1**	**19,7**	**19,7**
Power (1)	R404A	kW		**16,6**	**19,6**	**23,2**	**24,9**	**29,4**	**29,4**	**34,7**	**34,8**	**42,3**	**44,1**
Power consumption (1)		kW		**8,4**	**9,6**	**11,4**	**12,6**	**14,2**	**14,4**	**17,2**	**16,3**	**21,0**	**21,2**
Compressor		Nb		2	2	2	3	2	3	3	2	2	3
Max. current drawn		A		22	22	25	33	31	34	38	36	46	47
Receiver volume		l.		45	45	45	45	45	45	60	60	60	60
Connection pack standard option	Delivery	Ø		1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8
	Suction	Ø		1"5/8	1"5/8	1"5/8	1"5/8	1"5/8	1"5/8	2"1/8	2"1/8	2"1/8	2"1/8
	Liquid	Ø		7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	1"1/8	7/8"	1"1/8	1"1/8
Rack weight		kg		287	292	328	340	334	346	403	338	348	408
Receiver size	L	mm		666	666	666	666	666	666	666	666	666	666
	D	mm		402	402	402	402	402	402	402	402	402	402
	H	mm		1137	1137	1137	1137	1137	1137	1338	1338	1338	1338
Receiver weight		kg		60	60	60	60	60	60	80	80	80	80

			COM ...	4P ZB50	2P ZB114	3P ZB76	4P ZB66	3P ZB95	4P ZB76	3P ZB114	4P ZB95	4P ZB114
Power (1)	R449A	kW		**46,0**	**49,0**	**50,9**	**57,4**	**62,1**	**67,9**	**73,4**	**82,8**	**97,9**
Power consumption (1)		kW		**21,0**	**23,4**	**22,7**	**26,3**	**29,6**	**30,3**	**35,1**	**39,5**	**46,9**
Power (1)	R404A	kW		**46,3**	**50,2**	**52,2**	**58,8**	**63,5**	**69,6**	**75,3**	**84,7**	**100,4**
Power consumption (1)		kW		**22,9**	**25,2**	**24,4**	**28,3**	**31,5**	**32,6**	**37,8**	**42,0**	**50,4**
Compressor		Nb		4	2	3	4	3	4	3	4	4
Max. current drawn		A		50	58	53	62	70	71	87	93	115
Receiver volume		l.		60	60	60	60	60	60	120	120	120
Connection pack standard option	Delivery	Ø		1"1/8	1"3/8	1"3/8	1"3/8	1"3/8	1"3/8	1"3/8	1"5/8	1"5/8
	Suction	Ø		2"1/8	2"1/8	2"1/8	2"1/8	2"5/8	2"5/8	2"5/8	2"5/8	2"5/8
	Liquid	Ø		1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"3/8	1"3/8	1"3/8
Rack weight		kg		474	361	425	491	438	506	448	526	533
Receiver size	L	mm		666	666	666	666	666	666	714	714	714
	D	mm		402	402	402	402	402	402	455	455	455
	H	mm		1338	1338	1338	1338	1338	1338	1834	1834	1834
Receiver weight		kg		80	80	80	80	80	80	120	120	120

(1) Evaporating temperature **-10 °C** / Ambient temperature **+45 °C** - Superheat: 10K - Subcool: 3K.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

COM 2(A)N(B) ZF15(C)

(A) Number of compressors
(B) **P** = Positive range - **N** = Negative range
(C) Compressor type

> **The COMPACT is available with HFCs. For more information, please consult our software.**

COMPACT | Scroll — Negative range

			COM ...	2N ZF15	3N ZF15	2N ZF25	2N ZF34	3N ZF25	2N ZF41	4N ZF25
Power (1)	R449A	kW		5,5	8,2	9,0	11,7	13,4	14,3	17,9
Power consumption (1)		kW		5,5	8,3	7,5	10,2	11,3	11,6	15,1
Power (1)	R404A	kW		6,1	9,2	9,2	12,1	13,8	15,4	18,4
Power consumption (1)		kW		6,0	9,1	7,6	10,3	11,3	12,7	15,1
Compressor		Nb		2	3	2	2	3	2	4
Max. current drawn		A		16	24	25	32	38	38	50
Receiver volume		l.		45	45	45	45	45	60	60
Connection pack standard option	Delivery	Ø		1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8
	Suction	Ø		1"3/8	1"5/8	1"5/8	2"1/8	2"1/8	2"1/8	2"1/8
	Liquid	Ø		5/8"	5/8"	5/8"	5/8"	5/8"	7/8"	7/8"
Rack weight		kg		289	344	414	402	530	424	641
Receiver size	L	mm		666	666	666	666	666	666	666
	D	mm		402	402	402	402	402	402	402
	H	mm		1137	1137	1137	1137	1137	1338	1338
Receiver weight		kg		60	60	60	60	60	80	80

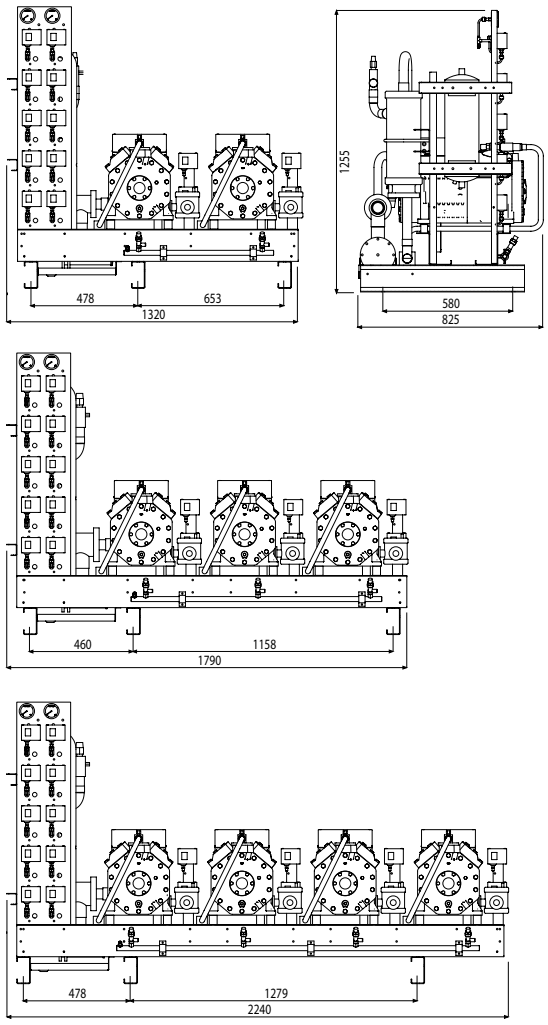
			COM ...	2N ZF49	3N ZF34	3N ZF41	4N ZF34	3N ZF49	4N ZF41	4N ZF49
Power (1)	R449A	kW		17,6	17,6	21,5	23,5	26,5	28,6	35,3
Power consumption (1)		kW		15,3	15,4	17,4	20,5	23,0	23,2	30,6
Power (1)	R404A	kW		18,2	18,1	23,1	24,2	27,2	30,8	36,3
Power consumption (1)		kW		15,3	15,4	19,0	20,6	23,0	25,3	30,7
Compressor		Nb		2	3	3	4	3	4	4
Max. current drawn		A		49	48	57	64	73	76	98
Receiver volume		l.		60	60	60	60	60	60	120
Connection pack standard option	Delivery	Ø		1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"3/8
	Suction	Ø		2"1/8	2"1/8	2"5/8	2"5/8	2"5/8	2"5/8	2"5/8
	Liquid	Ø		7/8"	7/8"	7/8"	7/8"	7/8"	1"1/8	1"1/8
Rack weight		kg		443	510	542	617	575	661	702
Receiver size	L	mm		666	666	666	666	666	666	714
	D	mm		402	402	402	402	402	402	455
	H	mm		1338	1338	1338	1338	1338	1338	1834
Receiver weight		kg		80	80	80	80	80	80	120

(1) Evaporating temperature **-35 °C** / Ambient temperature **+40 °C** - Superheat: 10K - Subcool: 3K.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

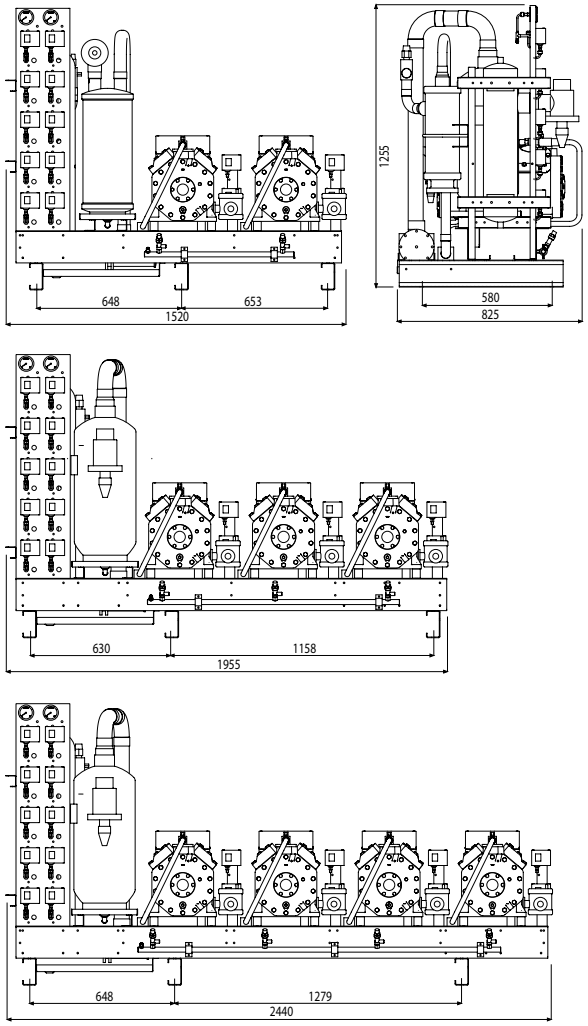
COMPACT | Octagon

without BAC option

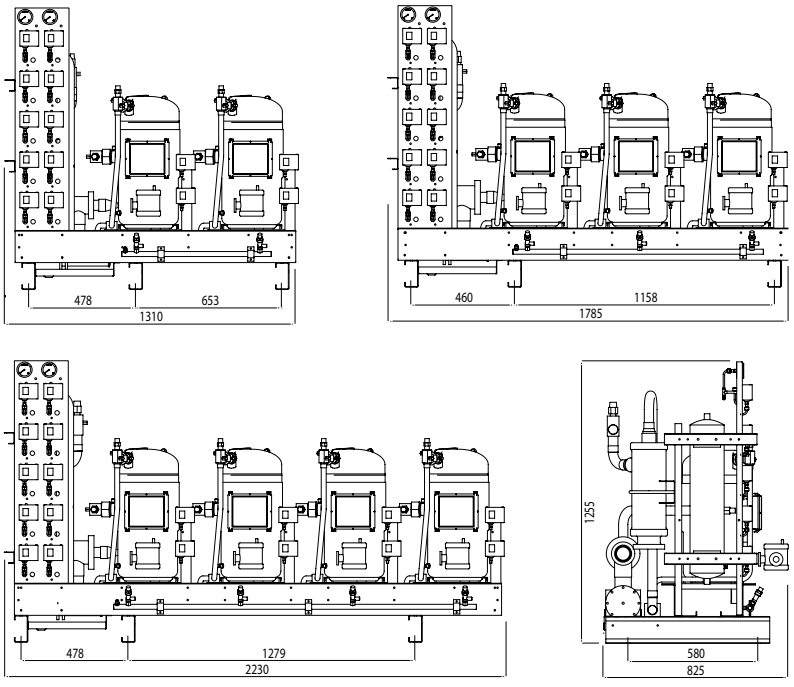


COMPACT | Octagon

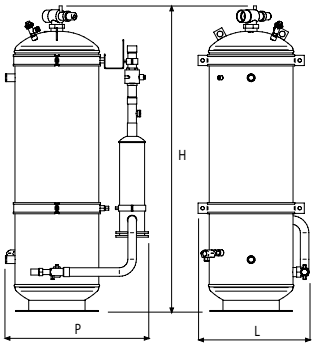
with BAC option



COMPACT | Scroll



Liquid station



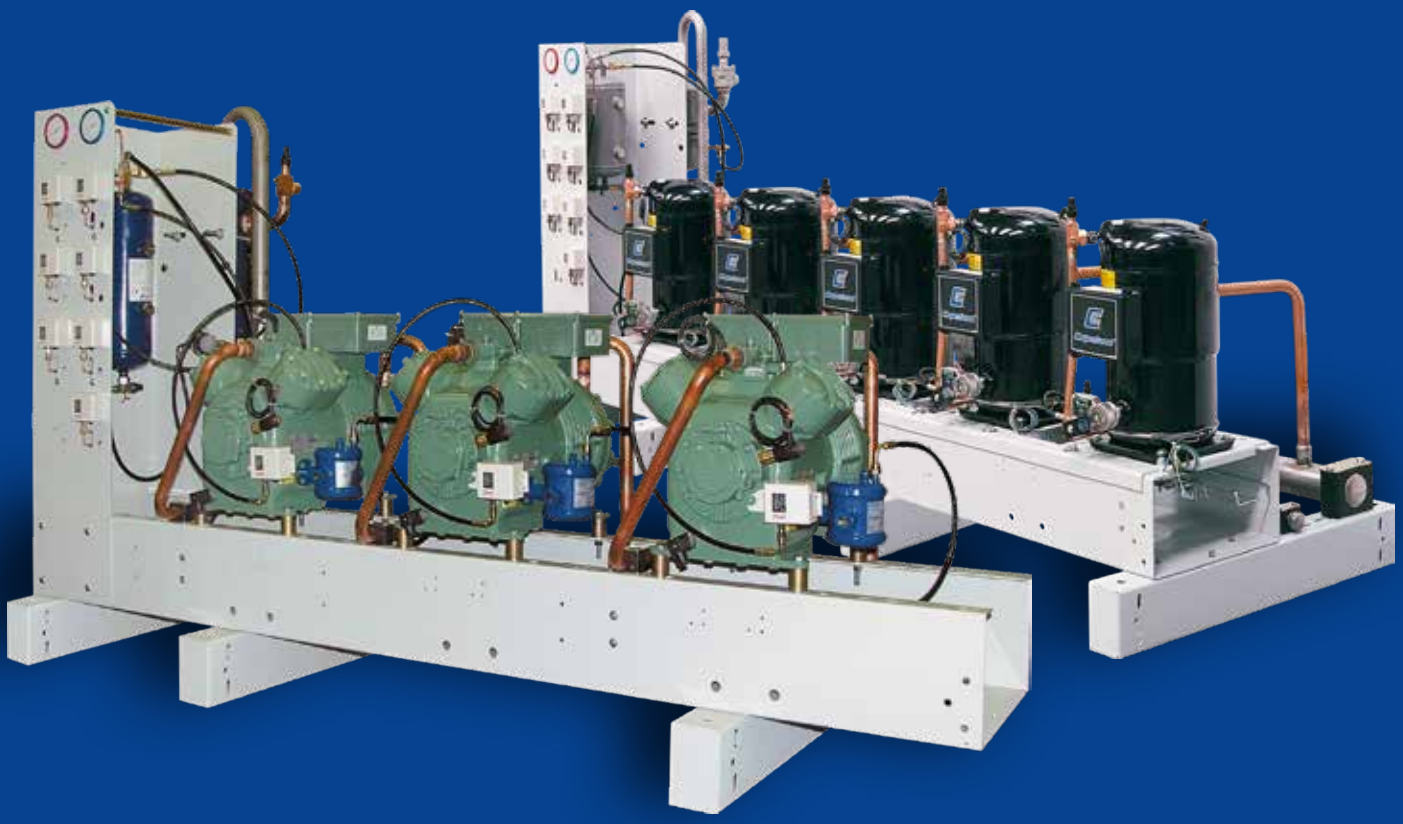
		45 l.	60 l.	120 l.
L	**mm**	666	666	714
D	**mm**	402	402	455
H	**mm**	1137	1338	1834
Weight	**kg**	60	80	120

FRIGA-BOHN®

MOPSH | MOSC

Semi-hermetic and Scroll compressor rack

HFC

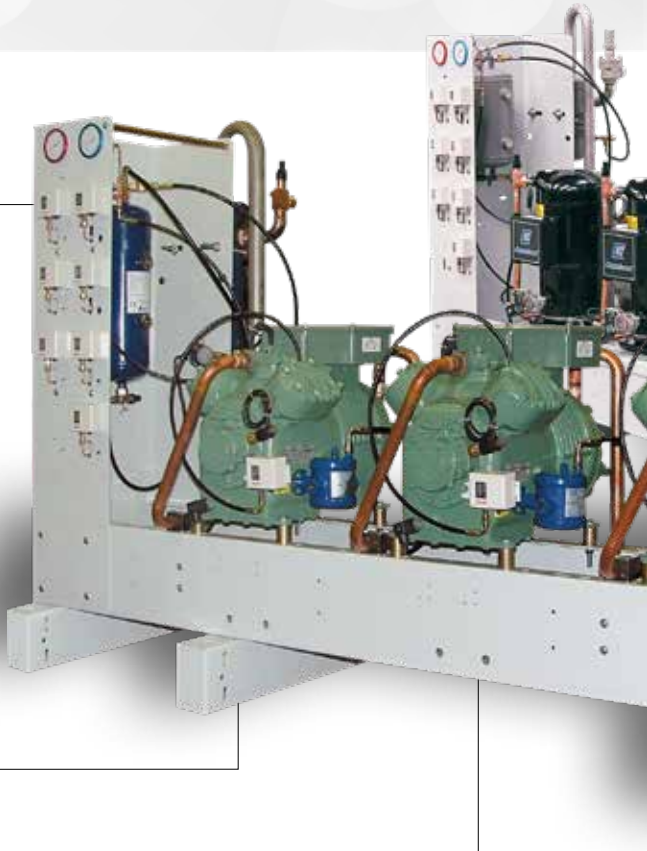


MT **57 - 385** kW

LT **23 - 120** kW

Modular rack to best meet the needs of your application, available with Scroll (Copeland), Semi-Hermetic (Copeland or Bitzer) compressors.

Compact design (width from 800 to 1,000 mm) that fits perfectly in restricted and hard-to-access areas.



CONTROL AND SAFETY DEVICES

1 LP general safety pressure switch
1 or 2 HP cartridge pressure switch(s) with automatic reset per compressor.
2 pressure gages (LP + HP).
Differential oil pressure switch per compressor. MOPSH

OPTIONS	
ALF	Height-adjustable float coolant level alarm.
ALR	Optoelectronic refrigerant level alarm.
BAC	Liquid separator. MOPSH
VFA	Suction valve and filter on each compressor. MOPSH
SIL	Delivery muffler (1 per compressor). MOPSH

LIQUID STATION

Liquid station delivered separately.
Inlet/outlet shut-off valves.
Liquid outlet equipped with a removable filter dryer unit ≤ 150 l. and 2 parallel units with shut-off valves > 150 l.
Indicator and general shut-off valve on outlet.
Single or double safety valve (according to PED).

OPTIONS	
RLS	Oversized liquid receiver.
SSD	Double safety valve with 3-way valve (for receivers < 120 litres).
BD1	Single liquid drier bypass (1 filter unit) in operation.

MANIFOLDS

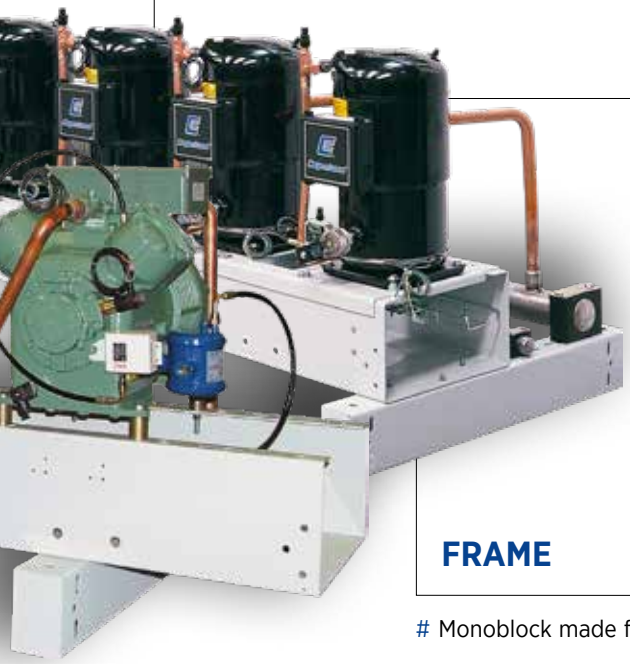
Suction and delivery all stainless steel 304 L.
One Schrader pressure port with shut-off valve per manifold (mano pressure switch connection, etc.).
Polypropylene collars on the suction and high temperature resistant polyamide on the delivery.
A general suction filter unit with removable cartridge up to 186 kW cooling capacity in positive and 47 kW in negative. One unit per compressor on top. MOPSH
A removable cartridge filter unit mounted on the suction manifold. MOSC

OPTION	
BDR	Condensate drain pan under suction manifolds.

COMPRESSORS

With Rotalock valves on suction and delivery + cylinder head fan in negative, crankcase heater and oil pump. MOPSH
Equipped with Rotalock suction and delivery valves, crankcase heaters HP cartridge safety pressure switches and rigid suspension elements. MOSC
Negative models also include an injection system with different configurations depending on the compressors: shut-off valve, filter, solenoid valve and capillary. MOSC

OPTION	
VAR	Power variation. CONTACT US



OIL LINE

Removable oil separator and oil receiver with high/low indicators and shut-off valves.
Oil manifold with flexible connections at the ends.
LP oil return line with filter, indicator and shut-off valve per compressor.
Degassing valve.
Float level controllers. MOPSH

OPTIONS	
TXL	Electronic oil level controllers. MOPSH
EVH	Oil return solenoid valve.

FRAME

Monoblock made from painted folded U-profile sheet steel, thickness 4 mm.

OPTIONS	
CCB	Terminal block control wiring.
ARM	Electrical cabinet. CONTACT US
CAR	Casing (with integrated electrical cabinet). CONTACT US
PAV	Anti-vibration pads. KIT TO INSTALL
ANM	Rack handling rings (delivered not assembled with the rack). KIT TO INSTALL

PACK

OPTIONS	
	Connection pack
PR1	Customer connection valves (1 delivery, 1 suction, 1 liquid).
PR2	Customer connection valves (1 delivery, 2 suction, 2 liquid).
PR3	Customer connection valves (1 delivery, 3 suction, 3 liquid).
	Safety pack
BPS	LP safety pressure switch per compressor.
HPG	HP general pressure switch (automatic).
	Regulation pack
BP1	LP pressure switch (automatic) per compressor.
HPS	Additional HP pressure switches.
CDP	HP/LP pressure sensors signal 4-20 mA.

Do you have a specific request?

Contact us to design the unit that meets your needs.

MOPSH(A) 2(B)P(C) 4JE-15Y(D)

(A) **MOPSH** = Semi-hermetic compressor - **MOSC** = Scroll compressor
(B) Number of compressors
(C) **P** = Positive range - **N** = Negative range
(D) Compressor type

The MOPSH is available with HFCs. For more information, please consult our software.

MOPSH | Semi-Hermetic — Positive range

			MOPSH ...	2P 4JE-15Y	2P 4HE-18Y	2P 4GE-23Y	3P 4JE-15Y	3P 4HE-18Y	4P 4JE-15Y	3P 4GE-23Y	4P 4HE-18Y	3P 4FE-28Y
Power (1)	R449A	kW		62,3	73,1	84,9	93,4	109,6	124,5	127,3	146,2	151,2
Power consumption (1)		kW		25,0	30,0	35,6	37,4	45,0	49,9	53,4	59,9	62,4
Power (1)	R404A	kW		63,5	74,4	86,2	95,3	111,6	127,0	129,4	148,8	153,2
Power consumption (1)		kW		28,2	33,8	40,3	42,3	50,7	56,5	60,4	67,6	71,7
Compressor		Nb		2	2	2	3	3	4	3	4	3
Max. current drawn		A		58,6	69,8	83,3	87,9	104,7	117,2	125,0	139,6	149,5
Receiver volume		l.		60	60	120	150	150	150	150	150	250
Connection pack standard option	Delivery	Ø		1"3/8	1"5/8	1"5/8	1"5/8	1"5/8	2"1/8	2"1/8	2"1/8	2"1/8
	Suction	Ø		2"5/8	2"5/8	3"1/8	3"1/8	3"1/8	2x2"5/8	2x2"5/8	2x2"5/8	2x2"5/8
	Liquid	Ø		1"1/8	1"1/8	1"3/8	1"3/8	1"3/8	2x1"3/8	2x1"3/8	2x1"3/8	2x1"3/8
Rack dimensions	L	mm		1915	1915	1915	2515	2515	3115	2515	3115	2515
	D	mm		800	800	800	800	1000	1000	1000	1000	1000
	H	mm		1500	1500	1500	1500	1500	1450	1450	1450	1450
	A	mm		655	655	655	755	755	755	755	755	755
Weight		kg		610	620	630	850	860	1100	900	1140	960

			MOPSH ...	4P 4GE-23Y	3P 6GE-34Y	4P 4FE-28Y	3P 6FE-44Y	5P 4FE-28Y	4P 6GE-34Y	4P 6FE-44Y	5P 6GE-34Y	5P 6FE-44Y
Power (1)	R449A	kW		169,8	189,3	201,6	226,8	252,0	252,5	302,4	315,6	378,1
Power consumption (1)		kW		71,2	78,8	83,2	94,2	103,9	105,1	125,6	131,3	157,1
Power (1)	R404A	kW		172,5	191,6	204,2	229,8	255,3	255,5	306,4	319,4	383,0
Power consumption (1)		kW		80,5	90,4	95,6	107,9	119,5	120,5	143,9	150,6	179,9
Compressor		Nb		4	3	4	3	5	4	4	5	5
Max. current drawn		A		166,7	186,9	199,3	222,9	249,1	249,2	297,2	311,5	371,6
Receiver volume		l.		250	250	250	250	350	250	350	350	350
Connection pack standard option	Delivery	Ø		2"1/8	2"5/8	2"5/8	2"5/8	3"1/8	3"1/8	3"1/8	3"1/8	3"1/8
	Suction	Ø		2x2"5/8	2x3"1/8	2x3"1/8	2x3"1/8	3x3"1/8	3x3"1/8	3x3"1/8	3x3"1/8	3x3"1/8
	Liquid	Ø		2x1"3/8	2x1"3/8	2x1"5/8	2x1"5/8	3x1"3/8	3x1"3/8	3x1"3/8	3x1"3/8	3x1"5/8
Rack dimensions	L	mm		3115	2515	3115	2515	3715	3115	3115	3715	3715
	D	mm		1000	1000	1000	1000	1000	1000	1000	1000	1000
	H	mm		1450	1450	1580	1580	1580	1580	1580	1580	1780
	A	mm		755	755	755	755	755	755	755	755	755
Weight		kg		1160	1020	1240	1080	1540	1380	1430	1650	1720

(1) Evaporating temperature **-10 °C** / Ambient temperature **+45 °C** - Superheat: 10K - Subcool: 3K.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

MOPSH(A) 2(B)N(C) / 4HE-18Y(D)

(A) **MOPSH** = Semi-hermetic compressor - **MOSC** = Scroll compressor
(B) Number of compressors
(C) **P** = Positive range - **N** = Negative range
(D) Compressor type

The MOPSH is available with HFCs. For more information, please consult our software.

MOPSH | Semi-Hermetic — Negative range

MOPSH ...			2N 4HE-18Y	2N 4GE-23Y	2N 4FE-28Y	3N 4HE-18Y	3N 4GE-23Y	2N 6GE-34Y	4N 4HE-18Y	2N 6FE-44Y	3N 4FE-28Y
Power (1)	R449A	kW	20,0	24,2	29,0	30,1	36,4	37,4	40,1	43,4	43,4
Power consumption (1)		kW	14,4	17,4	20,7	21,6	26,1	25,1	28,8	31,7	31,0
Power (1)	R404A	kW	22,2	26,6	31,8	33,3	39,8	40,6	44,4	47,7	47,7
Power consumption (1)		kW	17,4	20,7	24,8	26,1	31,0	31,8	34,8	38,5	37,2
Compressor		Nb	2	2	2	3	3	2	4	2	3
Max. current drawn		A	49,1	57,7	72,8	73,6	86,5	90,4	98,2	112,4	109,2
Receiver volume		l.	60	60	120	120	150	120	150	150	150
Connection pack standard option	Delivery	Ø	1"3/8	1"3/8	1"3/8	1"3/8	1"3/8	1"3/8	1"3/8	1"3/8	1"5/8
	Suction	Ø	2"5/8	2"5/8	2"5/8	2"5/8	2x2"5/8	2x2"1/8	2x2"5/8	2x2"5/8	2x2"5/8
	Liquid	Ø	7/8"	1"1/8	1"3/8	1"3/8	2x7/8"	2x7/8"	2x7/8"	2x7/8"	2x7/8"
Rack dimensions	L	mm	1915	1915	1915	2515	2515	1915	3115	1915	2515
	D	mm	800	800	800	800	800	800	800	800	1000
	H	mm	1500	1500	1500	1500	1450	1450	1450	1450	1450
	A	mm	655	655	655	655	755	755	755	755	755
Weight		kg	600	610	640	820	840	690	1060	720	930

MOPSH ...			3N 6GE-34Y	4N 4FE-28Y	3N 6FE-44Y	5N 4FE-28Y	4N 6GE-34Y	4N 6FE-44Y	5N 6GE-34Y	5N 6FE-44Y
Power (1)	R449A	kW	56,0	57,9	65,2	72,4	74,7	86,9	93,4	108,6
Power consumption (1)		kW	37,7	41,4	47,6	51,7	50,3	63,4	62,9	79,3
Power (1)	R404A	kW	60,9	63,6	71,5	79,5	81,2	95,3	101,5	119,2
Power consumption (1)		kW	47,7	49,6	57,8	62,0	63,7	77,0	79,6	96,3
Compressor		Nb	3	4	3	5	4	4	5	5
Max. current drawn		A	135,6	145,6	168,6	182,0	180,8	224,8	226,0	281,0
Receiver volume		l.	150	250	250	250	250	250	350	350
Connection pack standard option	Delivery	Ø	1"5/8	1"5/8	1"5/8	1"5/8	1"5/8	2"1/8	2"1/8	2"1/8
	Suction	Ø	2x2"5/8	2x3"1/8	2x3"1/8	3x2"5/8	2x3"1/8	3x2"5/8	3x3"1/8	3x3"1/8
	Liquid	Ø	2x1"1/8	2x1"1/8	2x1"1/8	3x1"1/8	2x1"3/8	3x1"1/8	3x1"1/8	3x1"1/8
Rack dimensions	L	mm	2515	3115	2515	3715	3115	3115	3715	3715
	D	mm	1000	1000	1000	1000	1000	1000	1000	1000
	H	mm	1580	1580	1580	1580	1580	1580	1580	1780
	A	mm	755	755	755	755	755	755	755	755
Weight		kg	1000	1200	1050	1470	1290	1370	1610	1680

(1) Evaporating temperature **-35 °C** / Ambient temperature **+40 °C** - Superheat: 10K - Subcool: 3K.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

MOSC(A) 5(B)P(C) ZB50(D)

(A) **MOPSH** = Semi-hermetic compressor - **MOSC** = Scroll compressor
(B) Number of compressors
(C) **P** = Positive range - **N** = Negative range
(D) Compressor type

The MOSC is available with HFCs. For more information, please consult our software.

MOSC | Scroll — Positive range

			MOSC ...	5P ZB50	5P ZB76	6P ZB76	5P ZB95	5P ZB114	6P ZB95	6P ZB114
Power (1)	R449A	kW		57,5	84,9	101,9	103,5	122,4	124,2	146,9
Power consumption (1)		kW		26,2	37,9	45,4	49,4	58,6	59,2	70,3
Power (1)	R404A	kW		57,9	87,0	104,4	105,8	125,5	127,0	150,6
Power consumption (1)		kW		28,6	40,7	48,9	52,5	63,0	63,0	75,6
Compressor		Nb		5	5	6	5	5	6	6
Max. current drawn		A		73	102	122	141	167	169	200
Receiver volume		l.		60	120	120	120	150	150	150
Connection pack standard option	Delivery	Ø		1"5/8	1"5/8	2"1/8	2"1/8	2"1/8	2"1/8	2"5/8
	Suction	Ø		2"5/8	3"1/8	3"1/8	3"1/8	3"1/8	4"1/8	4"1/8
	Liquid	Ø		1"1/8	1"3/8	1"3/8	1"3/8	1"5/8	1"5/8	1"5/8
Rack weight		kg		3115	3115	3715	3115	3115	3715	3715
Receiver size	L	mm		800	800	800	1000	1000	1000	1000
	D	mm		1500	1500	1500	1500	1500	1500	1500
	H	mm		655	655	755	755	755	755	755
Receiver weight		kg		820	820	980	890	930	1040	1100

(1) Evaporating temperature **-10 °C** / Ambient temperature **+45 °C** - Superheat: 10K - Subcool: 3K.

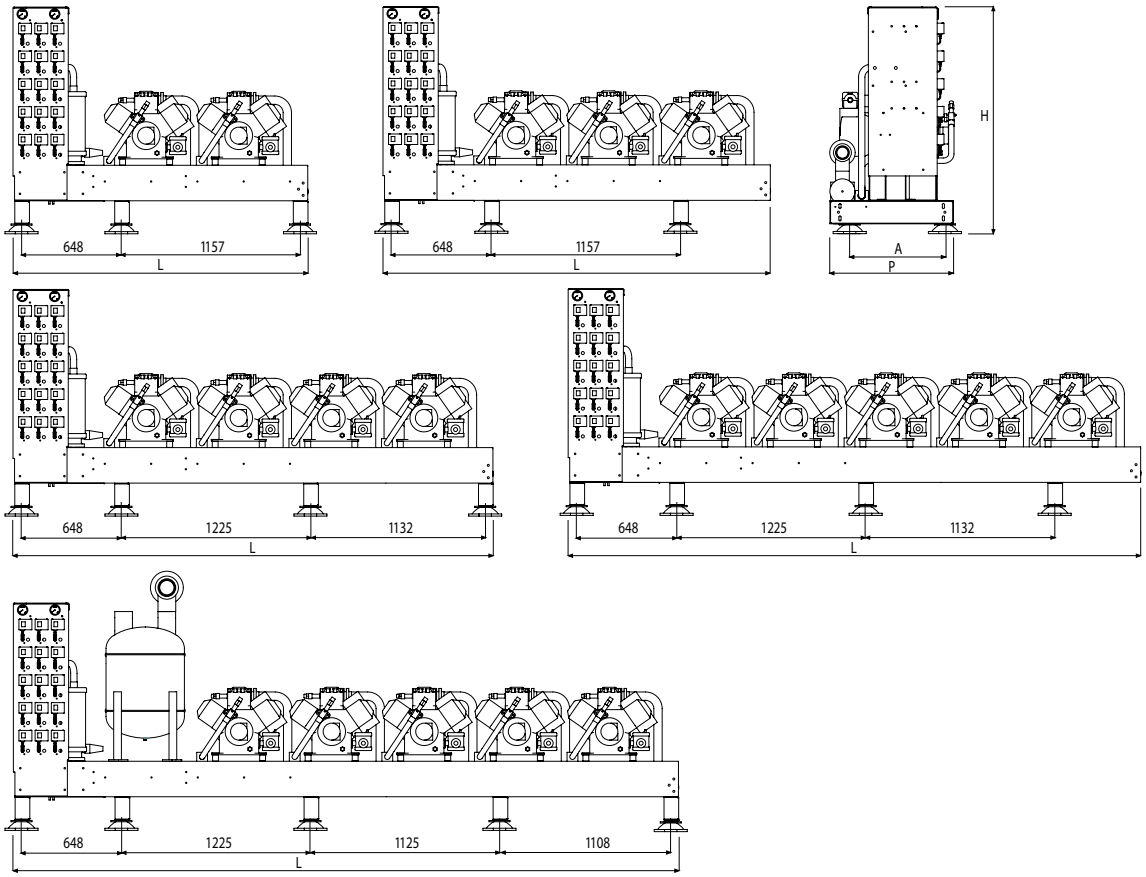
MOSC | Scroll — Negative range

			MOSC ...	5N ZF25	5N ZF34	6N ZF34	5N ZF41	6N ZF41	5N ZF49	6N ZF49
Power (1)	R449A	kW		22,4	29,4	35,2	35,8	42,9	44,1	52,9
Power consumption (1)		kW		18,9	25,6	30,7	29,1	34,9	38,3	45,9
Power (1)	R404A	kW		23,1	30,2	36,2	37,8	45,4	45,4	54,5
Power consumption (1)		kW		18,9	25,7	30,8	31,9	38,2	38,4	46,0
Compressor		Nb		5	5	6	5	6	5	6
Max. current drawn		A		81	112	134	126	151	153	184
Receiver volume		l.		60	60	120	150	150	150	150
Connection pack standard option	Delivery	Ø		1"3/8	1"3/8	1"3/8	1"3/8	1"5/8	1"3/8	1"5/8
	Suction	Ø		2"5/8	2"5/8	3"1/8	3"1/8	3"1/8	3"1/8	4"1/8
	Liquid	Ø		1"1/8	1"1/8	1"3/8	1"3/8	1"3/8	1"3/8	1"5/8
Rack weight		kg		3115	3115	3715	3115	3715	3115	3715
Receiver size	L	mm		800	800	800	800	800	800	1000
	D	mm		1500	1500	1500	1500	1500	1500	1500
	H	mm		655	655	755	755	755	755	755
Receiver weight		kg		820	820	980	890	1040	930	1100

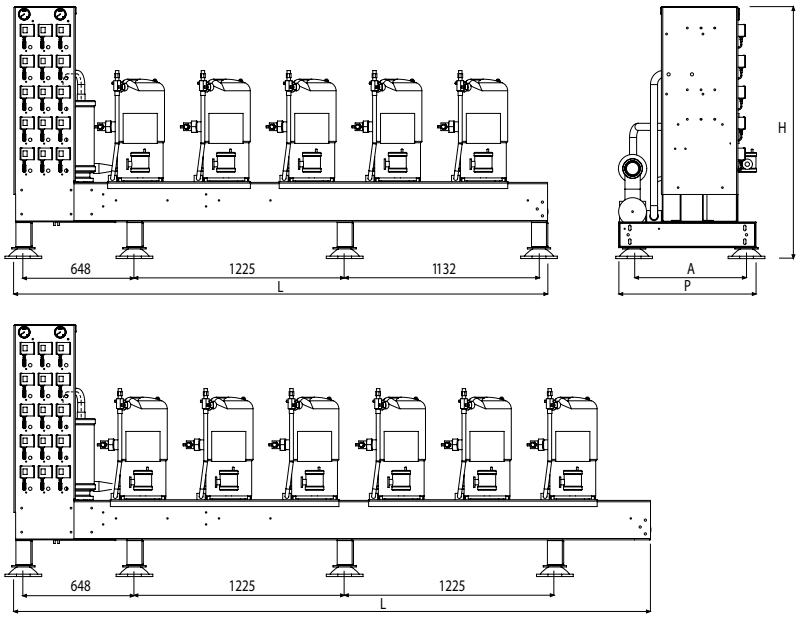
(1) Evaporating temperature **-35 °C** / Ambient temperature **+40 °C** - Superheat: 10K - Subcool: 3K.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

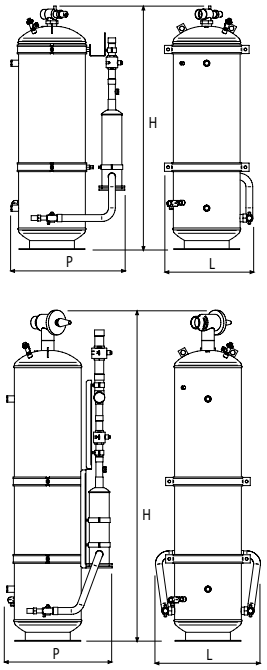
MOPSH | Semi-Hermetic



MOSC | Scroll



Liquid station



		60 l.	120 l.	150 l.	250 l.	350 l.
L'	**mm**	666	714	790	739	993
P'	**mm**	402	455	538	638	856
H'	**mm**	1366	1834	1605	2010	1942
Poids	**kg**	90	130	150	250	290

NOTES

FRIGA-BOHN®

MOVSH

Semi-hermetic screw compressor rack

HFC

70 - 700 kW

Modular: to best meet the needs of your application, the rack is available in models with between 1 and 6 screw compressors.

Compact design to save space.

CONTROL DEVICES

HP and LP pressure gage.
1 or 2 HP cartridge pressure switch(s) with automatic reset per compressor.
HP pressure switch and LP safety pressure switch with automatic reset.
Oil temperature safety and temperature control thermostat.
Thermometers for oil temperature reading.
Delivery temperature, flow rate and oil level protection relays.

COMPRESSORS

Screw compressors with part-winding start integral protection motor.
Suction and delivery valves, check valve and capacity reduction.

FRAME

Monoblock made from painted U-profile hot galvanized folded sheet steel 4 mm thick.

MANIFOLDS

Stainless steel 304L suction manifolds; low speed.
Stainless steel or copper delivery manifolds depending on diameter.
One suction filter per compressor with stainless steel sieve.
Suction valve(s) optional.

LIQUID RECEIVER

Vertical separate from the rack.
Inlet and outlet valves.
Liquid indicator.
Safety valve (double from 100 litres).

OIL CIRCUIT

Three-way mixing valve for uniform thermostatic oil control.
Minimum-maximum oil temperature safety thermostats.
Oil indicator per compressor.
Oil flow controller.
Solenoid valve.
Manual shut-off valve.
High efficiency filter.

OIL SEPARATOR

Heaters.
Regulation thermostat.
Oil minimum level detector.
Indicator, safety valve, stop valve, check valve and fill valve.

LIQUID LINE

Removable filter dryer.
Service valve.
Liquid indicator.

OPTIONS

Oil cooling by air or water.
Economizer system for high temperature racks.
Oversized receiver.
Water condensation fitted.
Heat recovery system.
Hot gas defrost and all its variants.
Electrical cabinet.
Liquid valve(s).
Frame and compressor painted.

Do you have a specific request?

Contact us to design the unit that meets your needs.

NOTES

FRIGA-BOHN®

Compressor racks

Other configurations

HFC

DUPLEX "BOOSTER" RACK

Description

Semi-hermetic or Scroll compressors.
LP stage in the upper part and MP stage in the lower part on superimposed or separate frame.
Injection valves, solenoid valves and desuperheat liquid separator.
Liquid station elivered separately with liquid subcooler exchanger (on request).
Heat recovery exchanger (on request).
Complete electrical cabinet (not assembled).

Advantages

Reduced footprint for space saving in the machine room.
1 delivery and a single condenser for the LP and MP stages.
Improved coefficient of performance (COP).
Reduced compressor size.
For cramped and difficult to access locations, possibility of providing a removable frame (contact us).

DUPLEX INDEPENDENT HIGH TEMPERATURE AND LOW TEMPERATURE RACK

Description

Semi-hermetic or Scroll compressors.
Superimposed frame with handling rings.
High temperature and low temperature racks with common delivery (on request).
Liquid station elivered separately with liquid subcooler exchanger (on request).
Heat recovery exchanger (on request).
Complete electrical cabinet (not assembled).

Advantages

Reduced footprint for space saving in the machine room.
Choosing a common delivery saves space on the roof with the installation of a single condenser.
For cramped and difficult to access locations, possibility of providing a removable frame (contact us).

ENCASED RACK

Description

Semi-hermetic, Scroll or semi-hermetic screw compressors.
Casing made from pre-painted sheet metal with panels that can be removed by turn latches, 6-sided noise insulation with cooling system connected to the rack available on request.
Frame with handling rings.
Integrated electrical cabinet.

Advantages

Designed for outdoor installation on the ground or on a roof.
Lifting rings attached to the base of the frame make handling easier.
These encased racks and their noise insulation casing are easy to integrate into an urban environment (on request).
Alternative to cramped machine rooms.

MONOSH - COMPRESSOR UNIT ON LIQUID RECEIVER

Description

Semi-hermetic compressor with crankcase heaters and delivery and suction valves.
Horizontal liquid receiver 21 or 40 litres. depending on the model with valves and safety valve.

Options

Outgoing line (filter dryer, indicator, and VEM and shut-off valve).
Suction line (liquid separator and vibration eliminators).
Delivery line (vibration eliminator, muffler, oil separator).
Oil line (hand valve, indicator and solenoid valve).
Electrical cabinet (not assembled).
Pre-painted sheet metal casing ideal for

Advantages

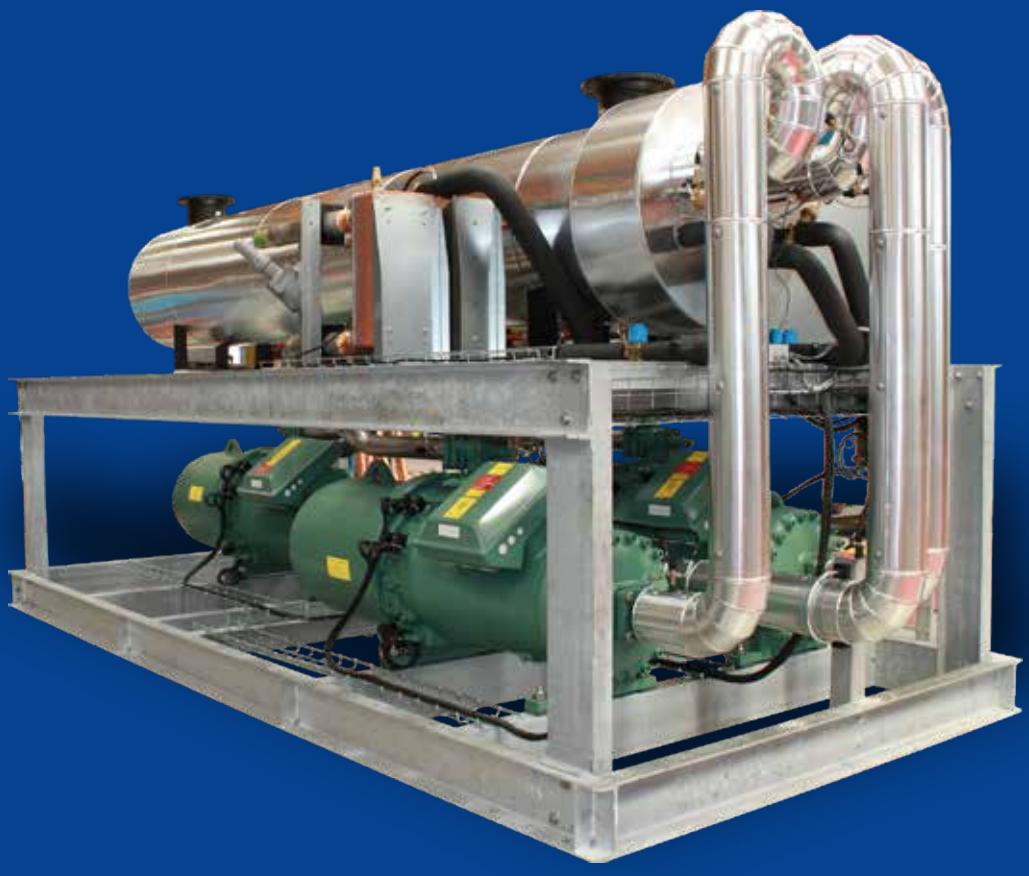
The MONOSH liquid receiver-mounted units have a small footprint.
A wide range of options to obtain a unit adapted to each need.
The equipment is delivered as standard with HP/LP and oil differential pressure switches, receiver shut-off valves, safety valve, etc.
With or without casing, the components are easy to access. The compressor is placed longitudinally on the receiver, making it easy to remove and access the oil pump.

FRIGA-BOHN®

PEG

Chilled water production

HFC



DESP 2014/68/UE

Chilled water production range for **installation in machine rooms**.

PEG 300 ... 760

290 - **780** kW
Glycol water -4 °C/-8 °C - Condensing temperature: +45°C

280 - **690** kW
Glycol water -5 °C/-9 ºC - Condensing temperature: +45°C

Description

Hot dip galvanized UPN monoblock.
1, 2 or 3 separate refrigerating circuits.
Power regulation up to three stages: 100%/75%/50%.
Delivery valve per circuit.
Vertical liquid receiver per circuit:
liquid stations delivered on separate frame.
Multitube heat exchanger (copper bundle tube and steel grille).
Electronic expansion valves with controller, probes, sensors and solenoid valve.
Screw compressors (HSK or CSH).
Screw compressors with plate heat exchanger-economizer
Stainless steel condensate tank under compressor
Full insulation, heat exchanger and manifold on suction side
Electronic expansion valve with complete regulation
Pre-wiring box
Multitube or plate desuperheater per circuit

Advantages

The design of the rack is optimized to facilitate access to the components: compressors, plate heat exchanger, desuperheater, bypass valves, etc.
The bypass valves are mounted to isolate the circuit and simplify operations during maintenance work on the receiver, the heat exchanger, etc.
A condensate drain pan is available under each compressor as standard to keep the machine room clean.

PEG 170 ... 320

170 - **320** kW
Glycol water -4 °C/-8 °C - Condensing temperature: +45°C

180 - **330** kW
Glycol water -5 °C/-9 ºC - Condensing temperature: +45°C

Description

Hot dip galvanized UPN monoblock.
1 or 2 separate refrigerating circuits.
Delivery valve per circuit.
Vertical liquid receiver per circuit:
liquid stations delivered on separate frame or fitted.
Multitube heat exchanger (copper bundle tube and steel grille).
2 electronic expansion valves with controller, probes, sensors and solenoid valve.
Semi-hermetic reciprocating: 3, 4 or 5 compressors.
Screw compressors with plate heat exchanger-economizer
Full insulation, heat exchanger and manifold on suction side (optional)
Electronic expansion valve with complete regulation
Liquid receiver fitted
Power + control pre-wiring (on request)
Complete hydraulic equipment

Advantages

The design of the rack is optimized to facilitate access to the components: compressors, plate heat exchanger, desuperheater, bypass valves, etc.
The bypass valves are mounted to isolate the circuit and simplify operations during maintenance work on the receiver, the heat exchanger, etc.
A condensate drain pan is available under each compressor as standard to keep the machine room clean.

Encased chiller ranges for **outdoor installation**.

PEG ENCASED OUTDOOR

Water system
Glycol water (MEG/MPG) -4 °C/-8 ºC and -5 °C/-9 °C

Description
Casing made from pre-painted sheet metal with panels that can be removed by turn latches, 6-sided noise insulation with cooling system connected to the rack available on request
Galvanized UPN frame with handling rings
Multitube heat exchanger with 2 refrigeration circuits
Full insulation, heat exchanger and manifold on suction side
Liquid subcooler heat exchanger for screw compressor
Electronic expansion valve with complete regulation
Electrical cabinet fitted
Complete hydraulic circuit and equipment (optional)

Advantages
Designed for outdoor installation on the ground or on a roof
Easy installation, the lifting rings attached to the base of the frame make handling easier
These encased units and their noise insulation casing are easy to integrate into an urban environment (on request)
Alternative to cramped machine rooms.

NOTES

FRIGA-BOHN®

Cooling solutions, delivered with care.

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Un solo número de teléfono para todos los servicios

Servicio al cliente
Selecciones técnicas
Servicio postventa y soporte técnico

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friga-bohn.lennoxemea.com

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