

FRIGA-BOHN

GC V-KING

V-shaped coil axial fan gas cooler
Industrial range



CO₂
130 bar



50 - 1300 kW



GC V-KING | V-shaped coil axial fan gas cooler

- # **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.
”

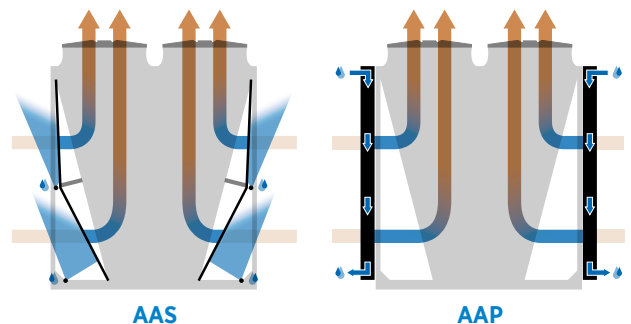
COILS

- # 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.
- AAS** Advanced Adiabatic System [CONTACT US](#)
- AAP** Advanced Adiabatic Pad system [CONTACT US](#)



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 860 mm (PA EC) 250/1200 rpm.

GC V-KING SILENCE

- # The GC V-KING 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
- # 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)



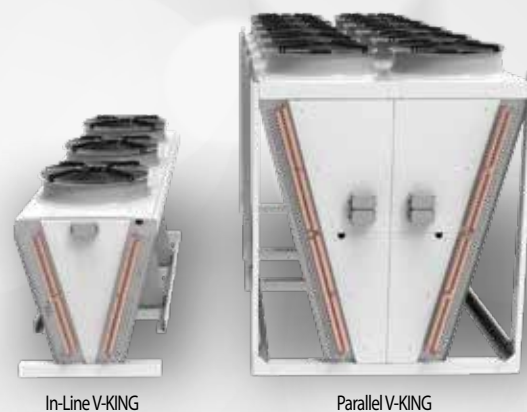
OPTIONS

- | | |
|------------|---------------------------------------------------------------|
| 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. |



PRODUCT ADVANTAGES

- # Long-lasting power and easy and efficient maintenance, thanks to a non-louvered 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
PA EC = Power Advanced
- (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,
- **2 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)		CO₂	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 .