



Alfa-V Single Row VXM

Air-cooled CO₂ gas coolers - commercial V-range

General information & application

CO₂ gas coolers replace traditional air cooled condensers in refrigerating systems that have been designed for the use of CO₂ as a single refrigerant. Such installations are getting more and more widely used in f.i. commercial supermarket applications.

Alfa-V Single Row has been specifically designed for commercial refrigeration and air conditioning. The V-angle with its exceptional guiding optimizes airflow and low coil resistance reduces energy consumption of the fan motors. Its main purpose is to reject small to medium heat loads in a modest footprint. Alfa Laval offers a wide range of CO₂ gas coolers with capacities ranging from 15 up to 750 kW.

Alfa Laval CO ₂ gas coolers	Capacity range*
Alfa-V Single Row	42-370 kW
AlfaBlue Junior	15-180 kW
AlfaBlue	20-450 kW
Alfa-V	50-750 kW

* air temperature = 35°C, CO₂ at 90 bar, gas temperature in/out = 120/38°C

Coil

An innovative coil design based on small diameter copper tubes and corrugated aluminium turbo fins provides excellent heat transfer at a minimized refrigerant charge. Standard fin spacing is 2.1 mm. Circuiting design is fully optimized to the thermodynamic properties of CO₂. Stainless steel header tubes for on-site welding connections.

Casing

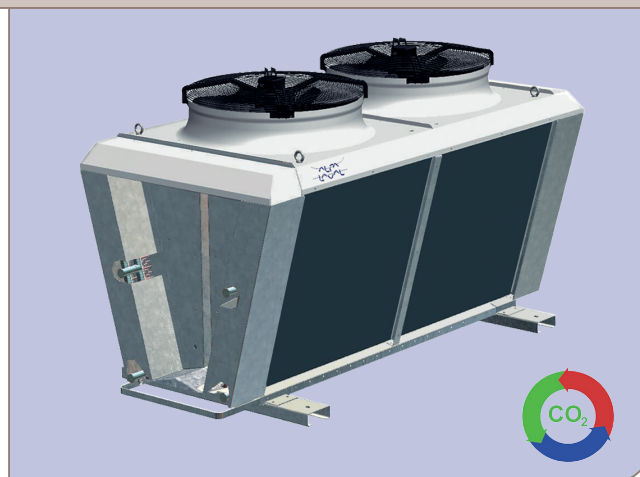
Casing material is galvanized steel sheet, pre-painted with an epoxy finish (RAL9002). Separated fan sections.

Fan motors

Fan motors 400/50/3 available in two fan diameters (800 & 910 mm) and five noise levels. The motors are with external rotor, protection class IP54 according to DIN 40050. Integrated thermal protection by thermo contacts provides reliable protection against thermal overload. Motors are wired to one or more common terminal boxes.

Options

- Multi-circuiting
- Non-standard fin spacing
- Coil corrosion protection
 - Coil coating
 - Fins seawater resistant aluminium alloy 57S/5052



Alfa-V Single Row gas cooler

- Spray water device
- Vibration dampers
- Special fan motors
 - 480/3/60 (IP54)
 - EC fan motors
 - Protection class IP55
 - High-temperature motors
- Electrical options
 - Isolating switch
 - Motors wired to a common terminal box
 - Switchboard (IP56)
 - EMC approval
 - Fan step control
 - Fan speed control
 - Frequency control

Certifications

The Alfa Laval quality system is in accordance with ISO 9001. All products are manufactured according to CE and PED rules.

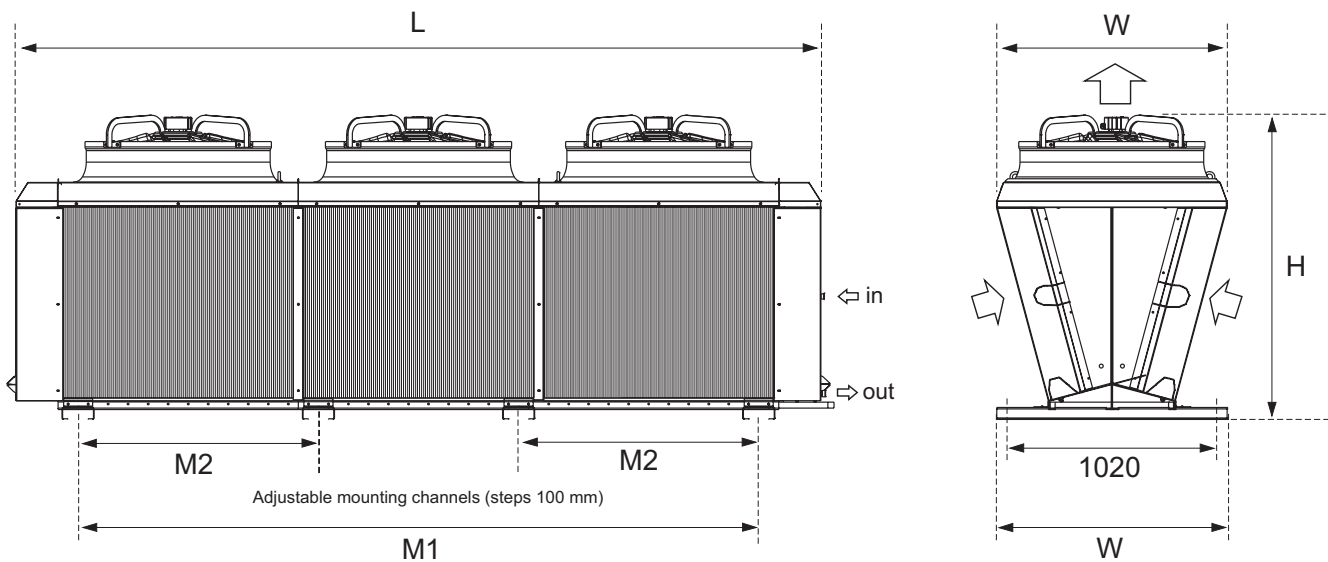
Design pressure

Design pressure 120 bar. Each heat exchanger is leak tested with dry air and finally supplied with a nitrogen pre-charge.

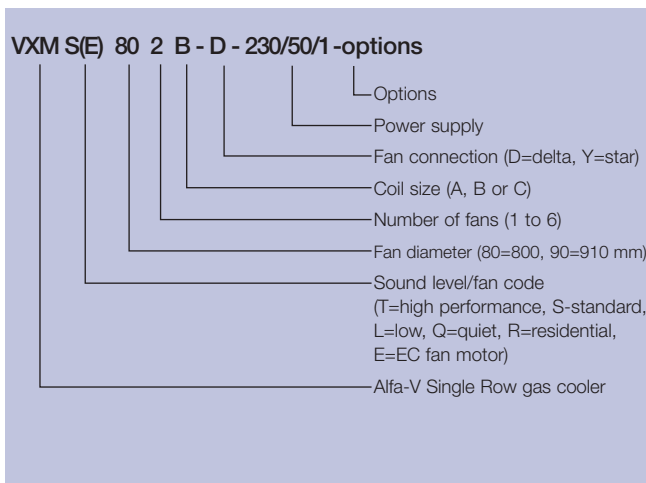
Selection

For gas cooler selection and support please contact your local Alfa Laval representative.

Model	Transport dimensions					Mounting channels		
	Fans no.	Length L mm	Height H mm	Width W mm	Weight kg	no.	M1 mm	M2 mm
VXM 801	1	1635	1451	1150	230	2	800	-
VXM 802	2	2635	1451	1150	393	2	1800	-
VXM 803	3	3635	1451	1150	557	4	2800	800
VXM 804	4	4635	1451	1150	721	4	3800	1000
VXM 805	5	5635	1451	1150	885	4	4800	1800
VXM 806	6	6635	1451	1150	1049	4	5800	1800
VXM 901	1	1836	1520	1150	260	2	1000	-
VXM 902	2	3036	1520	1150	480	2	2200	-
VXM 903	3	4236	1520	1150	700	4	3400	1200
VXM 904	4	5436	1520	1150	920	4	4600	1300
VXM 905	5	6636	1520	1150	1140	4	5800	2200



Code description



Benefits

- Reduced refrigerant charge
- Stainless steel headers for on-site welding connections
- Excellent sound characteristics, suitable for residential applications
- Reliable performance
- Easy installation & maintenance.
- Energy efficient - low total cost of ownership.
- Adjustable mounting feet
- Modern design
- Heavy duty materials for a long product life
- Two-year product guarantee.
- Easy access to additional on-line product information (QR code)

