

Alfa-V VXD

Air-cooled CO₂ gas coolers - Industrial V-type

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. The Alfa-V series is a wide range of heavy duty double fan row V-type gas coolers for air conditioning and refrigeration applications. Alfa-V air-cooled gas coolers provide high capacities at low power consumption and a compact footprint.

Capacity range 160 - 1000 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 K65 copper tubes and corrugated aluminium fins provides excellent heat transfer. Circuiting design is fully optimized to the thermodynamic properties of CO₂. Stainless steel header tubes for on-site welding connections optional. Separate connections provide the opportunity for independent operation of both gas cooler coils.

Casing

Frame construction provides high rigidity for protection against vibration and thermal expansion. Casing, supports and frame made of corrosion resistant galvanized steel (class C4-H). Separated fan sections and removable fan rings.

Fan motors

ErP compliant fan AC & EC motors, available in three fan diameters (800, 910 & 1000 mm) and different noise levels. Motors with external rotor, protection class IP54 according to DIN 40050.

AC power supplies 400/50/3, 400/60/3 and 460/60/3 with integrated thermo contacts to provide reliable protection against thermal overload. EC power supply 380-480/50-60/3.



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Design pressure

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

Benefits

- Stainless steel headers for on-site welding connections optional.
- Heavy duty design with high corrosion resistance.
- Favorable capacity/footprint ratio.
- Available with easily cleanable industrial fins.
- Excellent sound characteristics.
- Easy installation & maintenance.
- Energy efficient - low total cost of ownership.
- Two-year product guarantee.
- Easy access to additional on-line product information (QR code).

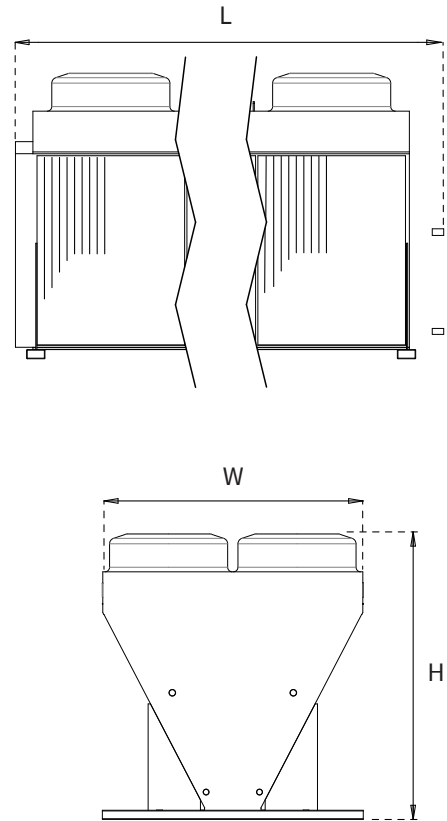


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Options

- Stainless steel header tubes for on-site welding connections.
- Fin spacing up to 3.0 mm
- Coil corrosion protection
 - Epoxy coated aluminium fins (EP)
 - F-coat (FC)
 - Seawater resistant aluminium AlMg (SWR)
- Coil protection grid (GR)
- Spray Water kit (KW)
- Water Spray System including pumping station (SWS)
- Casing coated RAL 9002
- Container skid (SK)
- Vibration dampers (VD)
- Special fan motors
 - Protection class IP55
 - High-temperature motors
- Electrical accessories
 - Isolating switch (SW)
 - Motors wired to a common terminal box (CBP)
 - Switchboard IP54 (BS)
 - AC Fan step control cabinet (BSP)
 - EC fan speed control cabinet (ICM)
 - EC switchboard panel (ECCB/ECCB4-20)

Nr. of fan pairs	Dimensions mm		
	L	H	W
2	2940	2500	2230
3	4250	2500	2230
4	5560	2500	2230
5	6870	2500	2230
6	8190	2500	2230



Code description

VXD	SE	90	4	.1	B	D	38	SK	C4	*	-	AL	2.1	K65	*	*
1	2	3	4	5	6	7	8	9	10	11		12	13	14	15	16

- Alfa-V gas cooler
- Sound level/fan code (T=turbo, S-standard, L=low, Q=quiet, R=residential, E=EC fan motor)
- Fan diameter (80=800 mm, 90=910, 100=1000 mm)
- Number of fan pairs (2 to 6)
- Alfa-V series II
- Tube rows code (B, C, D, E)
- Fan motor connection (D=delta, Y=star)
- Number of circuits
- Packing (SK=container skid)
- Case material
- Electrical accessories
- Fin material/coating (AL=aluminium, IF=industrial fin, SWR=AlMg 2.5, EP=epoxy coated aluminium, FC=F-coat, CU=copper)
- Fin spacing (2.1, 2.5, 3.0 mm)
- Tube material (K65=K65 copper)
- Connection dimensions
- Options

Selection

Selection and pricing is to be performed with our Alfa LU-VE air heat exchanger selection software. Selection output includes all relevant technical data and dimensional drawings.

Certifications

The Alfa LU-VE quality system is in accordance with ISO 9001 and ISO 14001. All products are manufactured according to PED regulations.



How to contact Alfa LU-VE

Up-to-date Alfa LU-VE contact details for all countries are always available on our website at alfa.luvegroup.com