



AlfaBlue BXM/BXD

Air-cooled gas coolers

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.

The AlfaBlue series is a wide range of heavy-duty gas coolers for air conditioning and refrigeration applications. AlfaBlue gas coolers are available for both horizontal and vertical air direction, either in single (M) or dual (D) coil execution.

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*
AlfaBlue	20-450 kW
AlfaBlue Junior	15-180 kW
Alfa-V	50-750 kW
Alfa-V Single Row	42-370 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 minimal 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.

Available in different fin thicknesses and fin spacings. Separate connections in the D series 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 and framework of corrosion resistant pre-galvanized sheet steel (corrosion resistance class C4), epoxy coated white RAL 9002 on both sides. Separated fan sections.

Fan motors

Available in four fan diameters (630, 800, 910 & 1000 mm) and five noise levels, power supply 400/50/3. Motors with external rotor, protection class IP 54 according to DIN 40050. Integrated thermo contacts provide reliable protection against thermal overload. EC fan motors available.

Options

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



AlfaBlue gas coolers

- Spray water device (version D only)
- Vibration dampers
- Special fan motors
 - EC fan motors
 - 480/3/60 (IP54)
 - Protection class IP55
 - High-temperature motors
- Electrical options
 - Isolating switch
 - Motors wired to a common terminal box
 - Switchboard (IP55)
 - EMC approved components
 - 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.

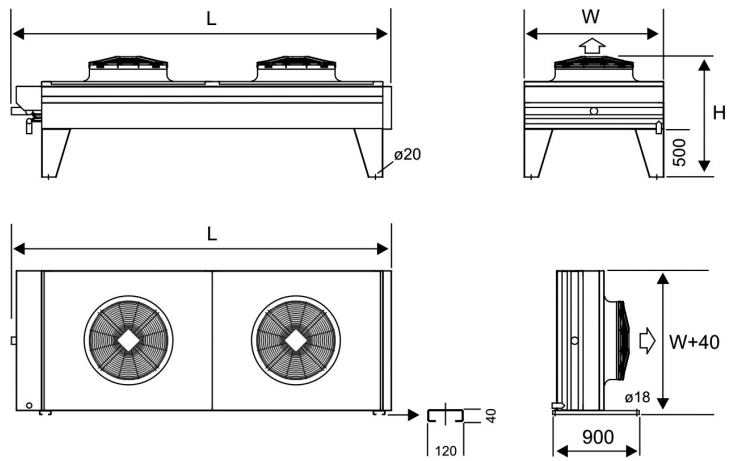
Selection

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

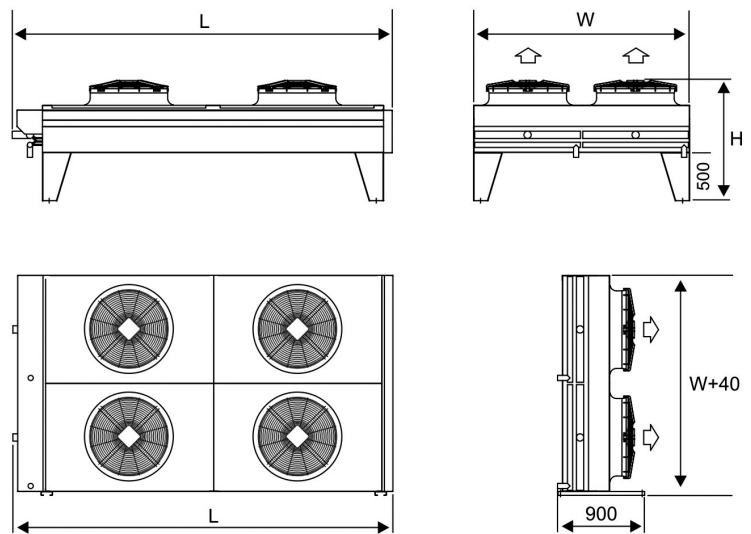
Dimensions mm

type	L	W	H
BXM 631	1545	1214	1221
BXM 632	2635	1214	1221
BXM 633	3725	1214	1221
BXM 634	4815	1214	1221
BXML 631	1855	1214	1221
BXML 632	3255	1214	1221
BXML 633	4655	1214	1221
BXM 801	2205	1454	1252
BXM 802	3955	1454	1252
BXM 803	5705	1454	1252
BXM 901	2555	1454	1289
BXM 902	4655	1454	1289
BXM 903	6755	1454	1289
BXM 1001	2555	1454	1295
BXM 1002	4655	1454	1295
BXM 1003	6755	1454	1295
BXD 802	3955	2249	1252
BXD 803	5705	2249	1252
BXD 902	4655	2249	1289
BXD 903	6755	2249	1289
BXD 1002	4655	2249	1278
BXD 1003	6755	2249	1278

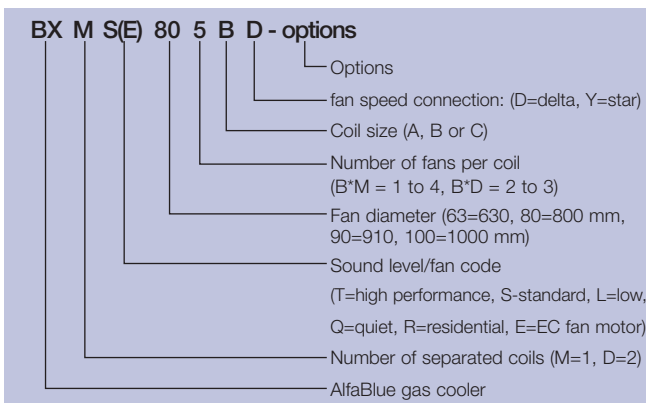
Dimensions BXM



Dimensions BXD



Code description



Benefits

- Heavy duty design with high corrosion resistance
- Reduced refrigerant charge
- Stainless steel headers for on-site welding connections
- Nitrogen pre-charge to prevent corrosion.
- Excellent sound characteristics, suitable for residential applications
- Energy efficient - low total cost of ownership
- Reliable performance
- Easy installation & maintenance.
- Two-year product guarantee.
- Easy access to additional on-line product information (QR code)



How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com

