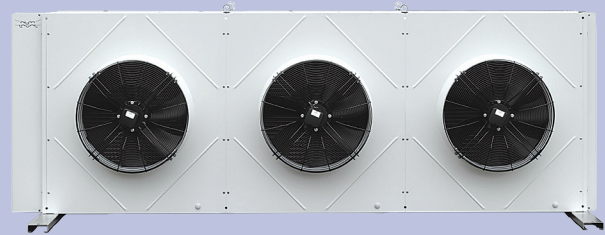




AlfaBlue BDM / BDD

Dry coolers



AlfaBlue, BDM and BDD

Application

The Alfa Laval dry coolers can be used in refrigeration, air conditioning equipment and in Industrial Cooling (cooling of water or other different fluids, food, power, process and general Industry).

Heat exchanger

Innovative heat exchanger gives excellent heat transfer with minimized refrigerant charge, thanks to the new fins corrugation, developed by Alfa Laval.

In the standard execution, heat exchanger manufactured from copper tubes and aluminium fins with spacing is 2.1 mm. In the BDD, double connection provides opportunity for two completely independent heat exchangers, BDM is a Single coil model; each manifold provided with draining and venting nozzles. Each heat exchanger undergoes a pressure and leaking test with dry air at 10 bar (design pressure is 9 bar).

Fan Motor

On the BDM, four different fan diameters are available: 630, 800, 910, 1000 mm; on the BDD, 800, 910, 1000 mm with three-phase motor 400V-50Hz. 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.

These Dry Coolers BDM and BDD are available in five noise levels fan motor, (S) standard, (L) low, (Q) quiet, (R) residential and the new (T) high performance fan.

Frame and Casework

Casework made with galvanized steel sheets painted (corrosion resistance class C4). New design frame provides high rigidity also for heavy applications. New system protects perfectly the heat exchanger tubes during transportation and operation against vibration and thermal expansion.

Support manufactured in galvanized steel, with optimised length to permit uniform air suction in the coil.

FEATURES AND BENEFITS

Footprint

- Optimised footprint with higher capacity

630, 800, 910 and 1000 mm fan

- More performance available
- Low power consumption fan motor
- More choice on noise level
- Flexible design

RAL 9002 all parts painted

- No cutting edge
- Higher corrosion resistance, double surface treatment

Coil design

- Increased heat transfer thanks to innovative fins corrugation

Flanges UNI EN 1092-1 (on BDD) in stainless steel

- Easy and accurate piping connection

Casing

- Strong casing with new design

High energy efficiency

- Best performance with low energy consumption

OPTIONS

Non standard fin spacing

- For heavy dusty environments

Coil treatment

- Useful for aggressive environments

Spray water device (only BDD)

- Possibility to select smaller units
- Keep the performance during the hot season

Vibration dumpers

- Useful to reduce vibrations

SPECIAL FANS

480/3 ph-60 Hz IP54

- High adaptability on every market

IP55

- High protection fan to be used in tropical or desert areas

High temperature electric motors

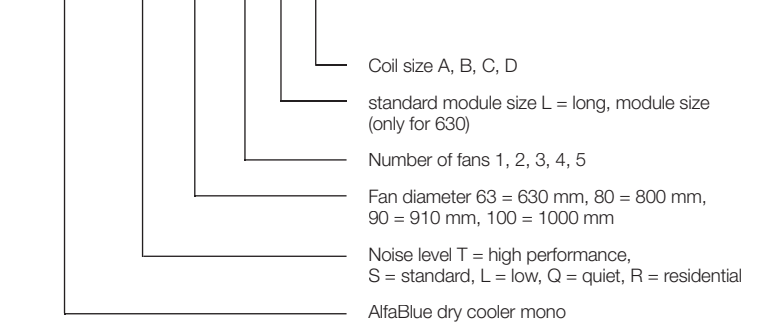
- Useful for high temperature fluids when the outlet air is too hot for the standard fan motors

Explosion proof fan motor

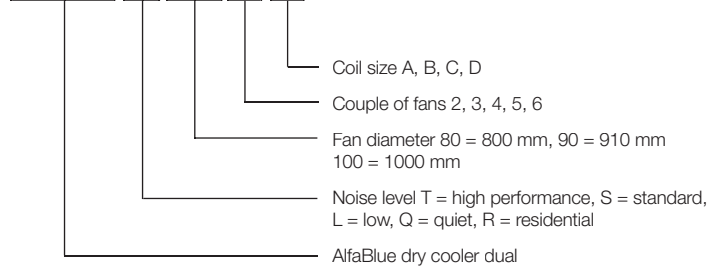
- Useful on hazardous environments (max. zone II)

Code description

BDM S 80 5 - B



BDD L 90 4 B



ELECTRICAL PARTS

Switch on/off

- Local safety switch wired to isolate the fan
- Local safety switch EMC wired to isolate the fan

Terminal box

- All fans are wired for an easy electrical connection

Switchboard

- Corrosion/Shock/Condensation/UV resistance
- Wide range of solutions
- Switchboard IP 55
- Vertical/horizontal installation

Cabling

- Ready for installation

EMC approval

- Units can run under frequency control

Fan step control

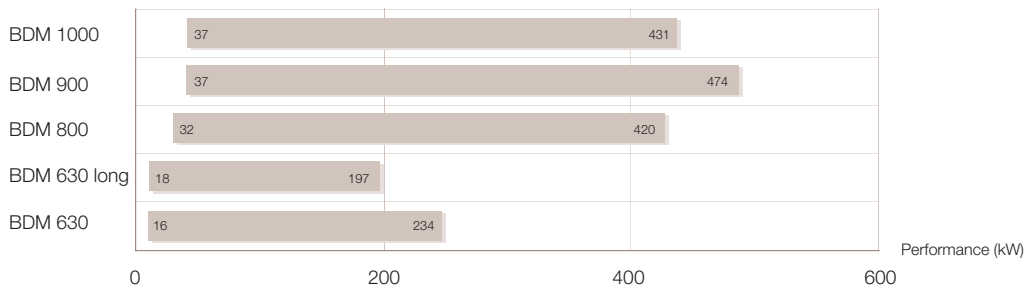
- Energy saving

Fan speed control

- Better control of performance
- Energy saving
- Noise reduction when air temperature is below design temperature
- Variable and fine control of velocity according to heat reject

BDM performance range (kW) and dimensions (mm)

(according to standard ENV 327)



Model	Dimensions (mm)	BDM 631	BDM 632	BDM 633	BDM 634
	W	1215	1215	1215	1215
BDM 630	L	1525	2615	3705	4795
	D	720	720	720	720

Model	Dimensions (mm)	BDM 631	BDM 632	BDM 633
	W	1215	1215	1215
BDM 630L	L	1835	3235	4635
	D	720	720	720

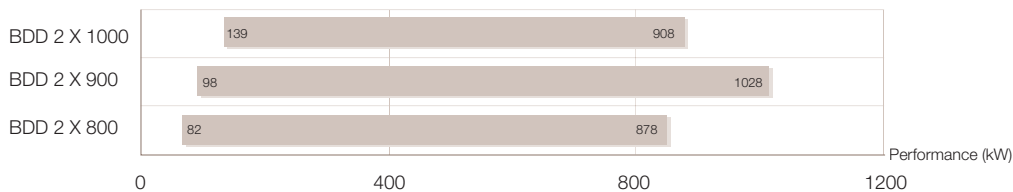
Model	Dimensions (mm)	BDM 801	BDM 802	BDM 803	BDM 804	BDM 805
	W	1455	1455	1455	1455	1455
BDM 800	L	2185	3935	5685	7435	9185
	D	750	750	750	750	750

Model	Dimensions (mm)	BDM 901	BDM 902	BDM 903	BDM 904
	W	1455	1455	1455	1455
BDM 910	L	2535	4635	6735	8835
	D	790	790	790	790

Model	Dimensions (mm)	BDM 1001	BDM 1002	BDM 1003	BDM 1004
	W	1455	1455	1455	1455
BDM 1000	L	2535	4635	6735	8835
	D	790	790	790	790

BDD performance range (kW) and dimensions (mm)

(according to standard ENV 327)

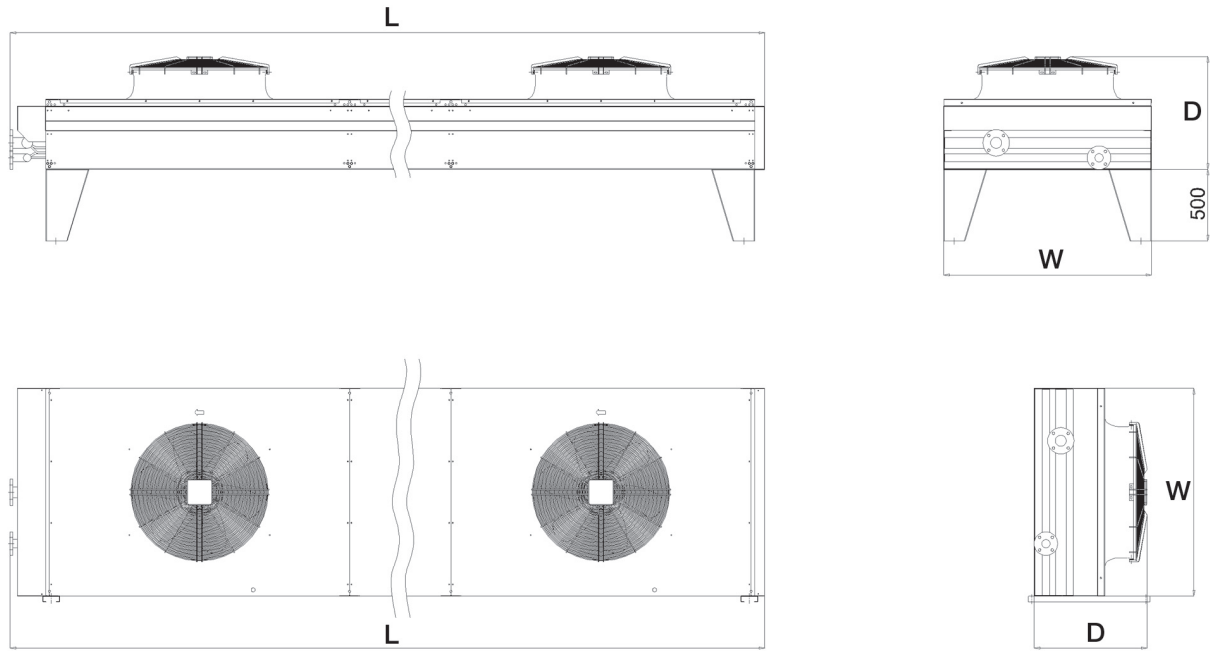


Model	Dimensions (mm)	BDD 802	BDD 803	BDD 804	BDD 805	BDD 806
	W	2290	2290	2290	2290	2290
BDD 800	L	3935	5685	7435	9185	10935
	D	750	750	750	750	750

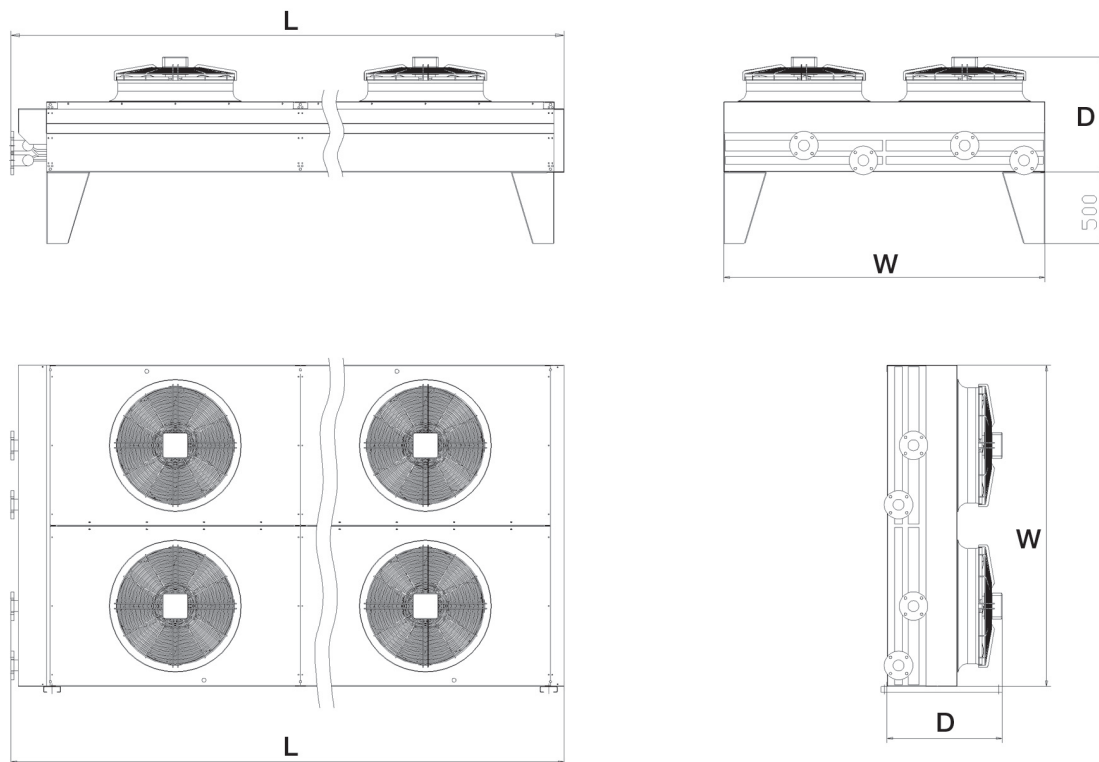
Model	Dimensions (mm)	BDD 902	BDD 903	BDD 904	BDD 905
	W	2290	2290	2290	2290
BDD 910	L	4635	6735	8835	10935
	D	790	790	790	790

Model	Dimensions (mm)	BDD 1002	BDD 1003	BDD 1004	BDD 1005
	W	2290	2290	2290	2290
BDD 1000	L	4635	6735	8835	10935
	D	790	790	790	790

Dimensions BDM



Dimensions BDD



ERC00032EN 0601

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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

