

# ENERGOEKONOM

spol. s r.o.

## AlfaBlue BD

### Dry coolers

#### General information & application

The AlfaBlue series is a wide range of heavy-duty dry coolers. Dry coolers are often used for cooling down condenser water in air conditioning and refrigeration installations. In the processing industry, dry coolers are suitable for closed circuit cooling of various process liquids. With a wide range of sound pressure level alternatives, these units are particularly suited to demanding, noise sensitive environments. AlfaBlue dry coolers are available for both horizontal and vertical air direction. Available both in single (M) or dual (D) fan row: separate connections in the dual fan row (D) models provide the opportunity for independent operation of both dry cooler coils. Dedicated series for compressor oil coolers (BDO).

Capacities \* 16 up to 1028 kW

\*water EN1048

#### Finned coil

An innovative coil design provides excellent heat transfer. In standard execution dry coolers are fitted with smooth copper tubing (BD) or stainless steel tubing (BDY). Available with two Alu-fin types:

Turbo fins	maximized capacity
Industrial power fins (IF)	long lasting performance

Available in different fin thicknesses and fin spacings.

Coil configuration optimized according to liquid flow.

#### Construction

Frame construction provides high rigidity for protection against vibration and thermal expansion. Casing and frame made of corrosion resistant pre-galvanized sheet steel, epoxy coated white RAL 9002 on both sides. Separated fan sections.

#### Fan motors

High efficiency AC or EC fan motors, available in different fan diameters (800, 910 & 1000 mm) and noise levels, power supply 400/50/3. Motors with external rotor, protection class IP54 according to DIN 40050. Integrated thermo contacts provide reliable protection against thermal overload.

#### Options

- Mounting feet for vertical airflow available in 3 heights: 500, 850 or 1200 mm



AlfaBlue dry cooler

- Spray water kit (KW)
- Vibration dampers (VD)
- Hinged fan panels (HF)
- Upon request fan motor options
  - 400V/3ph/60Hz
  - 480V/3ph/60Hz (IP54)
  - Protection class IP55
  - High-temperature motors
- Coil corrosion protection
  - Fins epoxy coated (EP)
  - Fins seawater resistant (SWR)
  - F-coat treatment (FC)
  - Copper fins (CU)
- Packing options
  - Pallet (P)
  - Protection pallet (PP) for dual fan row models
  - Crate (CR) for single fan row models
  - Container skid (SK)

#### Benefits

- Heavy duty design with high corrosion resistance
- Reduced liquid charge
- Available with easily cleanable industrial power fins
- Excellent sound characteristics
- Reliable performance, Eurovent certified (only for models included in Eurovent scope)
- Easy installation & maintenance
- Energy efficient: low total cost of ownership
- Two-year product guarantee
- Easy access to additional on-line product information (QR code)



AlfaBlue BD

## Dimensions mm (indicative)

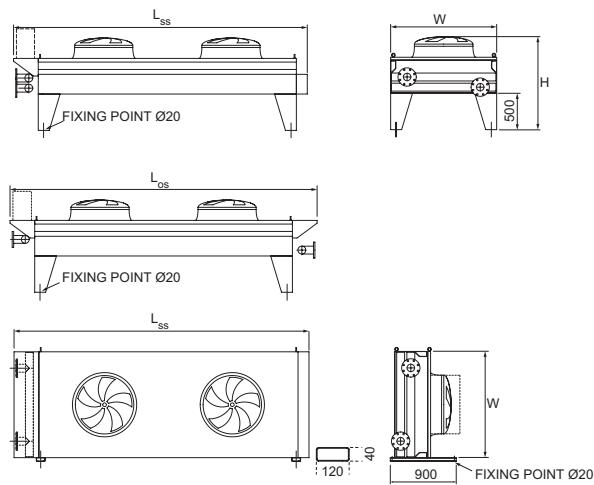
Model	L <sub>ss</sub> *	L <sub>os</sub>	W	H
BDM 801s	1880	2130	1450	1270
BDM 802s	3280	3530	1450	1270
BDM 803s	4680	4930	1450	1270
BDM 804s	6080	6330	1450	1270
BDM 805s	7480	7730	1450	1270
BDM 801	2230	2480	1450	1270
BDM 802	3980	4230	1450	1270
BDM 803	5730	5980	1450	1270
BDM 804	7480	7730	1450	1270
BDM 805	9230	9480	1450	1270
BDM 901-1001	2580	2830	1450	1320
BDM 902-1002	4680	4930	1450	1320
BDM 903-1003	6780	7030	1450	1320
BDM 904-1004	8880	9130	1450	1320
BDM 905-1005	10980	11230	1450	1320
BDM 906-1006	13080	13330	1450	1320
BDD 802	3980	2830	2250	1270
BDD 803	5730	4930	2250	1270
BDD 804	7480	7030	2250	1270
BDD 805	9230	9130	2250	1270
BDD 806	10980	11230	2250	1270
BDD 902-1002	4680	4930	2250	1320
BDD 903-1003	6780	7030	2250	1320
BDD 904-1004	8880	9130	2250	1320
BDD 905-1005	10980	11230	2250	1320
BDD 906-1006	13080	13330	2250	1320

\* + 60 mm for BDDY models

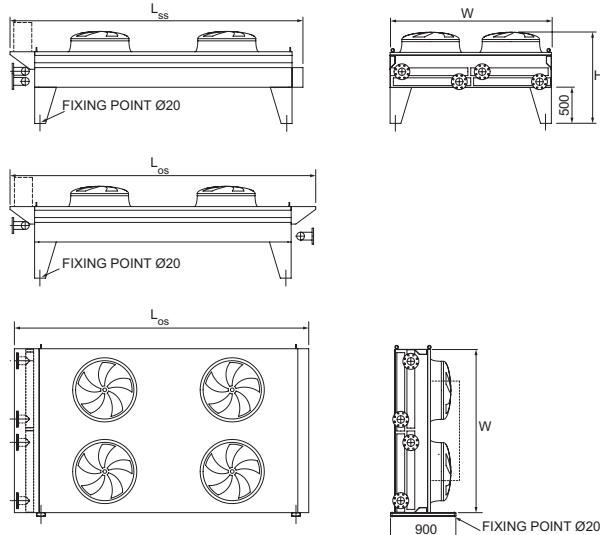
L<sub>ss</sub>\* for coolers with same-side connections

L<sub>os</sub>\* for coolers with opposite-side connections.

## Dimensions BDM



## Dimensions BDD



## Code description

BDM	Y	S	E	80	2	s.	2	A	D	6	CR	Feet	*	AL	2.1	SS	*	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

- 1 AlfaBlue dry cooler
- 2 Number of fan rows (M=1, D=2)
- 3 Dedicated series (blank=default, Y=SS tubes, 6=5/8" Cu tubes, O=compressor oil cooler)
- 4 Sound level (T=turbo S=standard, L=low, Q=quiet, R=residential)
- 5 EC fan (blank=AC fan, E=EC fan motor)
- 6 Fan diameter (80=800 mm, 90=910 mm, 100=1000 mm)
- 7 Number of fans per row (1 to 6)
- 8 Short coil module (blank=default, s=short coil module)
- 9 Version number
- 10 Tube rows code (A, B, C, D)
- 11 Fan motor connection (D=delta, Y=star)
- 12 Number of circuits
- 13 Packing (P=pallet, PP=pallet with protection for headers and coil, CR=crate, SK=container skid)
- 14 Feet=Mounting feet supplied mounted (type of feet according to airflow selected); blank=Mounting feet supplied loose
- 15 Electrical accessories
- 16 Fin material/coating (AL=aluminium, IF=industrial fins, SWR=seawater resistant fins, EP=epoxy coated alu, FC=F-coat)
- 17 Fin spacing (2.1, 2.3, 2.5, 3.0)
- 18 Tube material (CU=copper, SS=stainless steel)
- 19 Options

### • Electrical accessories

- Switch on/off (SW)
- Connection box: for AC fans (CB), for EC fans (CBP), for EC fans including master controller and temperature probe (CBMT)
- Basic switchboard for AC fans (BS)
- Basic switchboard for AC fans and step controller (BST)
- Basic switchboard for EC fans (ECCB)
- Basic switchboard for EC fans and master controller (ECCBM)
- EC fans full management system (ICM)

## Certifications

The Alfa LU-VE quality system is in accordance with ISO 9001. All products are manufactured according to PED. Eurovent certified performance for models included in the scope of the programme.

## Design pressure

Design pressure 10 bar. Each heat exchanger is leak tested with dry air.

## 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.