



AlfaBlue - Power Dry Cooler

Dry cooler BDP



AlfaBlue Power Dry Cooler

Application

The AlfaBlue Power Dry Cooler is designed for Industrial Cooling (water or other fluids cooling) in many applications:

- Diesel/Gas engines in Power plants
- Gas turbine cooling system
- Direct process cooling and Indirect cooling (using an intermediate Plate Heat Exchanger) of process liquid (hydraulic oil, air compressor, etc)

Heat exchanger

The innovative heat exchanger gives excellent heat transfer thanks to the new fins corrugation, developed by Alfa Laval, combined with smooth tubes, not sensitive to dirt and with a long stability of the performance values.

In the standard execution, the heat exchanger finned coil block is manufactured from copper tubes and aluminum fins with spacing is 2.5mm. A new floating system, used in all AL air products, protects perfectly the heat exchanger tubes during transportation and operation against vibration and thermal expansion.

The design is modular to fit the required cooling capacity.

The combined model (two coils in sandwich), designed for Power Industry, permits to cool two different circuits (i.e. LT and HT engine circuit) in a unique, compact liquid cooler.

Each heat exchanger undergoes a pressure and leaking test with dry air at 10bar (Design pressure is 9bar).

Fan Motor

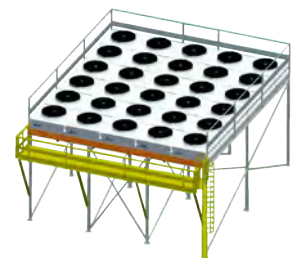
The fan propellers are direct driven to reduce the maintenance and the fan blade available materials are: aluminum, galvanized steel or fiber glass to match every ambient conditions.

The motors are squirrel-cage type, particularly designed for: outside installation, vertical position shaft, protection class IP 55, protection/working class is F/B or H/F. Each motor is completely wired by the factory to an isolating safety switch on-off, fixed with a top protection cover.

Frame and Casework

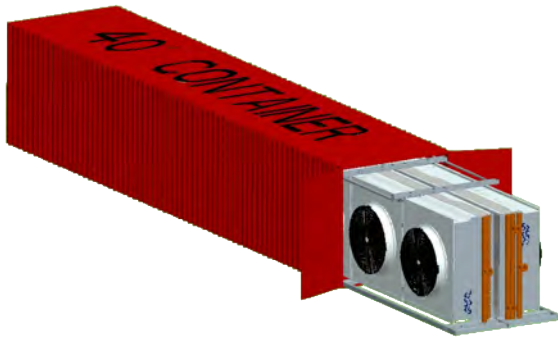
Casework is made with galvanized steel sheets to guarantee higher rigidity in heavy industrial application. All the casing parts are double painted in high quality level or, in alternative, top horizontal casing parts could be in hot dip galvanized steel.

The AlfaBlue frame design permits: the installation on a steel frame (a platform) avoiding the warm air recirculation risk, installation time and cost saving and the Alfa Laval handrails kit fast installation.



Transport

The main characteristic is the possibility to transport 2 drycoolers together inside the container. This reduces at 40% the packing cost and at 50% the transport cost.



Features and Benefit:

- Thanks to the flexible/customized design, customer finds the required capacity,
- New Geometry guarantees: Good efficiency and reduced fouling risk,
- Galvanized steel casing where all parts undergoes to a double surface painting treatment (RAL 9002 or 9006) for an higher corrosion resistance
- Casing designed for C4 corrosion class
- Long Life components and High quality finishing,
- No cutting edge
- No water consumption
- Useful for high temperature fluids
- Customized and high energy saving fan motors
- Local safety switch wired to each electric motor
- Easy Spare Part service
- Transport costs reduced thanks to the Container
- Product protected during the transportation because the Metal Skid kit in the container
- Plug-and-play solution
- Low maintenance required
- Fast installation thanks to: optional feet, fixing points, flanged connections, isolating switches, cable conduit fixing points.

Options:

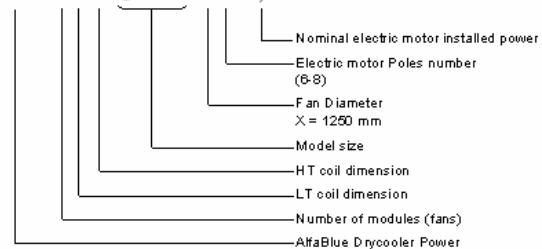
- Combined model (LT and HT circuits can be included in the same casing Side by Side or in Sandwich type)
- Large fin spacing available in case of heavy dirty dusty
- Coil treatment (useful for aggressive environments), fins in Aluminium pre-painted or complete coil block final protection painting
- Special fans
- Special electric motors 480/3ph-60Hz IP55 or different
- F or H Temperature Class motors depending to the working temperature
- Electrical cabling including the cable protection conduit fixed to the top cover panel and all fan motors to a technical box

Model	N° fans	Capacity*	Air Flow m3/h	L mm	W mm	H mm	Weight kg
BDP 2 /8-159/ / /	2	1100	89000	3860	2330	1060	1100
BDP 3 /8-159/ / /	3	1780	132850	5450	2330	1060	1500
BDP 4 /8-159/ / /	4	2380	178870	7040	2330	1060	2100
BDP 5 /8-159/ / /	5	2965	220500	8630	2330	1060	2600
BDP 6 /8-159/ / /	6	3570	284320	10220	2330	1060	3200
BDP 7 /8-159/ / /	7	4090	308130	11810	2330	1060	3700
BDP 8 /8-159/ / /	8	4700	351960	13400	2330	1060	4200
BDP 2 /8-185/ / /	2	1380	103850	4390	2330	1060	1300
BDP 3 /8-185/ / /	3	2080	154760	6245	2330	1060	1900
BDP 4 /8-185/ / /	4	2760	205885	8100	2330	1060	2400
BDP 5 /8-185/ / /	5	3470	257000	9955	2330	1060	3000
BDP 6 /8-185/ / /	6	4090	308130	11810	2330	1060	3600
BDP 7 /8-185/ / /	7	4800	359260	13885	2330	1060	4300
BDP 2 /8-222/ / /	2	1660	124080	5132	2330	1060	1450
BDP 3 /8-222/ / /	3	2480	185430	7358	2330	1060	2100
BDP 4 /8-222/ / /	4	3330	246785	9584	2330	1060	2900
BDP 5 /8-222/ / /	5	4090	308130	11810	2330	1060	3500
BDP 6 /8-222/ / /	6	4940	389490	14038	2330	1060	4400

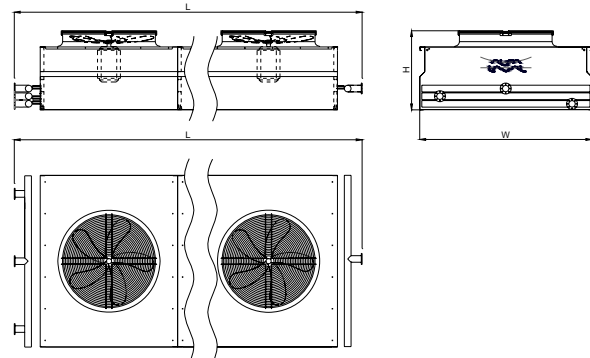
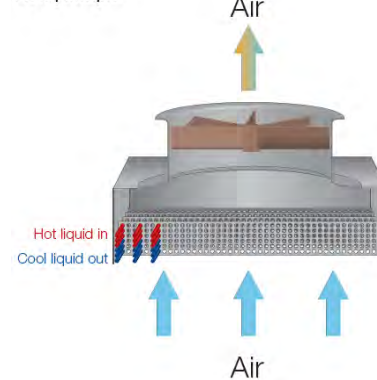
* Maximum capacity for the model in default condition

Tair	35°C
Tfluid inlet	90°C
Tfluid outlet	70°C

BDP 6BC/8-185/X6/7,5



Flow principle



ERC000ALEN 2410

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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

