



DFCV

Adiabatic cooling



Key benefits

- Easy shipment and installation
- Easy maintenance
- Guaranteed thermal performance

DFCV characteristics

Counter flow, axial fan, induced draft

Capacity range

220- 1500 kW

Maximum entering fluid temperature

60°C

Typical applications

- Small to medium HVAC and industrial applications
- Locations with limited water and space availability
- High temperature industrial applications



Easy shipment and installation

- **Compact shipment**
- **Installation** in a handful of minutes.

Easy maintenance

- Complete dry operation: **no water usage or treatment, no legionella risk**
- **Easy access** to dry finned coil.

Guaranteed thermal performance

- Thermal and acoustical performance according to **Eurovent** standards
- **Option:** boost thermal capacity with **pre-cooler evaporative pads** (for more information [DFCV-AD](#))

Interested in the DFCV cooler for cooling your process fluid? Contact your local [BAC representative](#) for more information.

Downloads

- [DFCV cooler](#)
- [Operating and Maintenance DFCV - DFCV-AD](#)
- [Rigging and Installation DFCV - DFCV-AD](#)



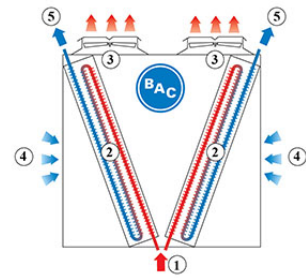
Principle of operation

Adiabatic cooling

Principle of operation

The DFCV is a V-shaped dry cooler that cools the warm process **fluid (1)** that circulates inside a **finned coil (2)**. **Axial (3) fans** draw **air (4)** over the coil and cools the process **fluid** inside the coil **(5)**.

Want to use the DFCV cooler to cool your process fluid? Contact your local [BAC representative](#) for more information.



Construction details

Adiabatic cooling

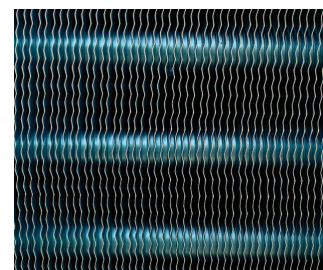
Construction details

1. Material options

- Heavy-gauge hot-dip **galvanized steel** is used for unit steel panels and structural elements featuring a **zinc aluminium coating**.

2. Heat transfer media

- The V-shaped finned coil is constructed of **staggered and seamless copper tubes** (15,9 or 12,7 diameter) with aluminium, rippled and corrugated fins (0,14 or 0,17 thickness).
- **2,5 mm fin spacing** for optimal air turbulence
- Thick and seamless copper headers and threaded steel connections
- Pressure tested at 15 bar
- **Try our options for aggressive environments:** special pre-coated anti-corrosion aluminium fins or copper fins (0,2 mm thickness).



3. Air movement system

- **Axial fan** with exceptionally **compact** direct drive short integrated **motor** and fan guard.
- The fan features an **impeller and motor** and is balanced as a complete unit using dynamic single plane balancing. Balance grade is G6.3.
- Fan and motor totally **maintenance free**.
- **Bearings seals and motor encapsulation** for long service life.



Like to know more about the DFCV dry cooler construction details?

Contact your [local BAC representative](#).

DFCV L80XX

Adiabatic cooling

Engineering data

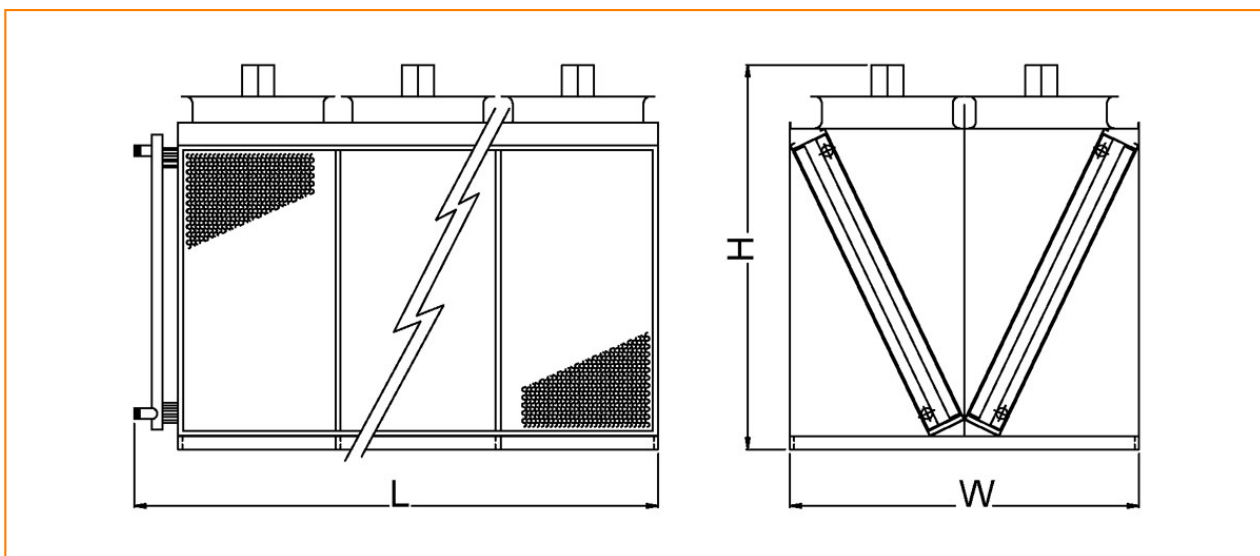
REMARK: Do not use for construction. Refer to factory certified dimensions & weights. This page includes data current at time of publication, which should be reconfirmed at the time of purchase. In the interest of product improvement, specifications, weights and dimensions are subject to change without notice.

General notes

1. Dry Cooler capacities are tested according to EN 1048.
2. Ratings shown are for clean tubes with 34% ethylene glycol solution by volume, 40°C in and 35°C out, 25°C ambient air temperature.
3. Sound Pressure Levels (L_{pA}) are measured in the horizontal plane at a distance of 10 m from the connection end of the unit, under free field conditions.

Last update: 01/07/2021

DFCV L80XX



Model	Nr. of Fans	Nominal Capacity (kW)	Air Flow (m³/s)	Cooling Agent l/s	Δp kPa	Tube Internal Volume (dm³)	Surface (m²)	Connections	Ship. Weight(kg)	Lp _A dB(A)	Dimensions (mm)		
		Δ/Y	Δ/Y	Δ/Y	Δ/Y					Δ/Y	L	W	H
L802 2-H41 3B	4 (2+2)	236/202	18,0/ 14,7	12,4/ 10,7	74/56	121	992	4 x ND80	916	60/57	2517	2400	2664
L802 2-H41 6B	4 (2+2)	240/207	18,8/ 15,4	12,6/ 21,2	27/21	191	890	4 x ND80	1046	60/57	2517	2400	2664
L802 3-L41 3B	6 (3+3)	353/302	27,0/ 22,1	18,6/ 15,9	74/56	182	1487	4 x ND80	1283	61/58	3617	2400	2664
L802 3-L41 6B	6 (3+3)	357/310	28,2/ 23,1	18,9/ 16,4	28/22	287	1335	4 x ND80	1462	61/58	3617	2400	2664
L802 4-S41 3B	8 (4+4)	472/405	36,0/ 29,5	24,9/ 21,4	80/60	243	1983	4 x ND80	1677	62/59	4717	2400	2664
L802 4-S41 6B	8 (4+4)	480/415	37,6/ 30,8	25,3/ 21,9	33/25	382	1779	4 x ND80	1924	62/59	4717	2400	2664
L802 5-S41 3B	10 (5+5)	601/513	45,0/ 36,9	31,7/ 27,1	124/94	303	2479	8 x ND80	2070	63/60	5817	2400	2664
L802 5-S41 6B	10 (5+5)	615/523	47,0/ 38,5	32,5/ 27,6	46/34	478	2224	8 x ND80	2387	63/60	5817	2400	2664
L802 6-D41 3B	12 (6+6)	686/587	54,0/ 44,2	36,3/ 31,0	35/26	364	2975	8 x ND80	2464	63/60	6917	2400	2664
L802 6-D41 6B	12 (6+6)	706/608	56,4/ 46,2	37,3/ 32,1	15- Nov	574	2669	8 x ND80	2822	63/60	6917	2400	2664

DFCV S91XX

Adiabatic cooling

Engineering data

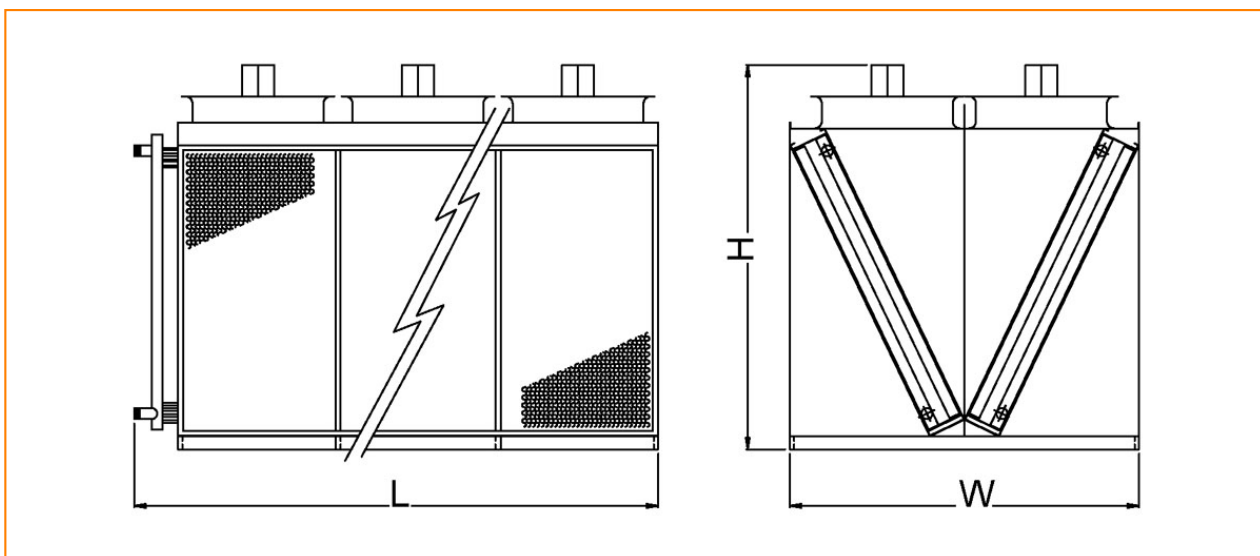
REMARK: Do not use for construction. Refer to factory certified dimensions & weights. This page includes data current at time of publication, which should be reconfirmed at the time of purchase. In the interest of product improvement, specifications, weights and dimensions are subject to change without notice.

General notes

1. Dry Cooler capacities are tested according to EN 1048.
2. Ratings shown are for clean tubes with 34% ethylene glycol solution by volume, 40°C in and 35°C out, 25°C ambient air temperature.
3. Sound Pressure Levels (L_{pA}) are measured in the horizontal plane at a distance of 10 m from the connection end of the unit, under free field conditions.

Last update: 01/07/2021

DFCV S91XX





Model	Nr. of Fans	Nominal Capacity (kW)	Air Flow (m³/s)	Cooling Agent l/s	Δp kPa	Tube Internal Volume (dm³)	Surface (m²)	Connections	Ship. Weight(kg)	Lp _A dB(A)	Dimensions (mm)		
		Δ / γ	Δ / γ	Δ / γ	Δ / γ					Δ / γ	L	W	H
S912 2-L61 6D	4 (2+2)	366/291	26,4/ 19,7	19,3/ 15,3	31/21	287	1335	4 x ND80	1606	58/52	2517	2400	2810
S912 3-S61 6D	6 (3+3)	555/436	39,6/ 29,6	29,3/ 23,0	36/23	430	2002	8 x ND80	2120	60/54	3617	2400	2810
S912 4-M6 16D	8 (4+4)	732/582	52,8/ 39,5	38,6/ 30,7	29/19	574	2669	8 x ND80	3015	61/55	4717	2400	2810
S912 5-M6 16D	10 (5+5)	937/733	66,0/ 49,4	49,5/ 38,7	50/32	717	3336	8 x ND100	3699	62/56	5817	2400	2810
S912 6-D61 6D	12 (6+6)	1110/873	79,2/ 59,3	58,6/ 46,1	41/26	860	4004	8 x ND100	4262	63/57	6917	2400	2810