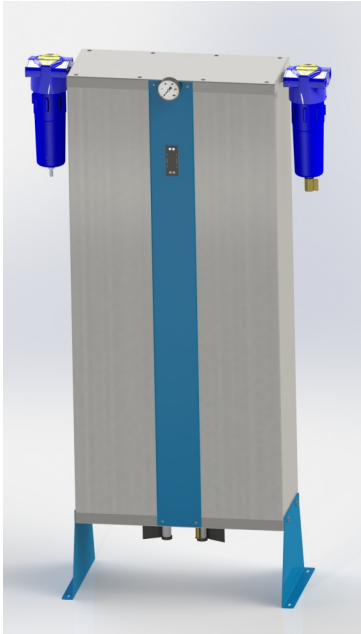
DRY PLUS EVO
Adsorption Dryers



Dry Plus heatless adsorption dryers are designed to remove water vapor held in the compressed air up to a dew point of - 40 ° C at operating pressure of 7 bar.

The adsorbent material used in the Dry Plus Evo series is constituted of ACTIVATED ALUMINA (Al_2O_3) .

This material is very porous and chemically inert towards air to be dried, it adsorbs the water vapor contained in the compressed air, preventing corrosion, formation of polluting particles, damages to pneumatic components and production interruptions.

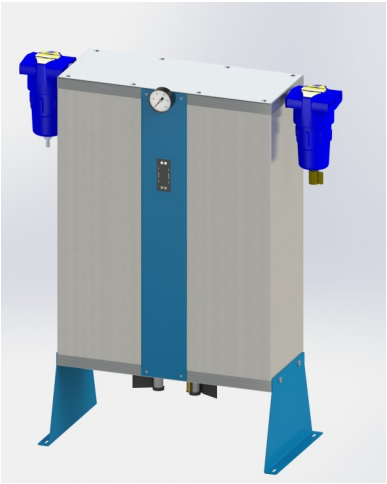
The operation is automatic, simple, reliable and managed by microprocessor.

The dryer is made of the columns filled with alumina; one column is in operation while other is in regeneration.

The water vapor contained in the compressed air is captured by the adsorbent substance present in the column in operation, while in the second column the activated alumina saturated from the previous cycle is regenerated by 12 / 15% of dry air drawn from the column in operation. The water molecules contained into the alumina are stripped and conveyed to the atmosphere through a silenced exhaust valve.

Inlet air not properly treated to minimize the oil aerosol content reduces the performance of the dryer ; it is recommended to install upstream the dryer one or more Air Vip Evo filters equipped with RB or RA coalescing elements.

Grade RF particle filter element must be installed downstream the dryer to remove the dust generated from the adsorbent material.



Dry Plus Evo dryers equipped with upstream and downstream filters, provide clean and dry compressed air in accordance with ISO-8573-1: 2010 Class 1. 2. 1.

Dry Plus Evo series is suitable for many industrial applications, such as electronics, food, textile and pharmaceutical industries.

The control panel allows to monitor the running cycles and adjust the purging time.

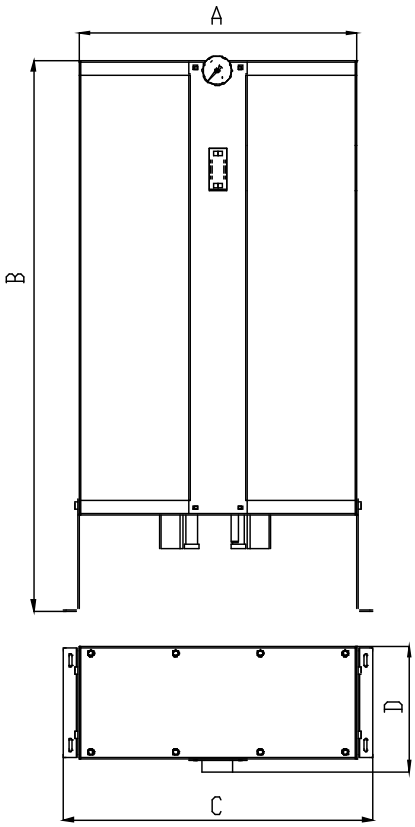
DRY PLUS EVO

Adsorption dryers

Selection table

MODEL	FLOW RATE (1)		CONNECTION BSP-F	DIMENSIONS mm.				WEIGHT Kg
	m3/h	l/min		A	B	C	D	
DVA-006-A	40	660	3/4	400	630	470	190	37
DVA-013-A	80	1333	3/4	400	1030	470	190	59
DVA-020-A	120	2000	3/4	400	1430	470	190	80
DVA-026-A	160	2666	3/4	400	1730	470	190	94
DVA-040-A	240	4000	1"	400	1430	470	350	160
DVA-053-A	320	5333	1"	400	1730	470	350	188
DVA-080-A	480	8000	1 - 1/2"	500	1840	560	640	279
DVA-100-A	640	10666	1 - 1/2"	500	1840	560	800	374

(1) Flow rates are referred to air at compressor intake conditions (25°C , 1 bar a) and compressed at 7 barg



Operating conditions

-Operating pressure: 7 bar (100 psi g)
-Air temperature at inlet : 35°C
-Power requirements: 230V/ 1 Ph/50Hz; IP55 Protection class
-Max. dew point in pressurized conditions: - 40°C
-ISO8573-1:2010 Classification (standard) : class 2
-Regenerated air equivalent to 12%-15% of the flow rate

Operating limits

-Min. pressure: 4 barg (58 psi g)
-Max. pressure : 16 barg (232 psi g)
-Max. inlet air temperature: 50°C (122 °F)
-Max Ambient temperature: 45°C (113°F)

To determine the flow rate at different operating conditions from those indicated, multiply the flow rate of the selection table for related coefficients K1 and K2

Temperature Inlet (C°)	25	30	35	40	45	50
K1	1	1	1	0,86	0,73	0,59

Pressure Inlet (bar)	4	5	6	7	8	9	10
K2	0,63	0,75	0,88	1	1,13	1,25	1,38

DS-DVA-691-UK-17-A

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The data are informative and subject to change without notice. User is responsible for determining whether the product is fit for particular purpose and suitable for User's method of application.