



Desiccant dryer DDN590

Rev 02_1224

Technical data sheet

Nominal capacity (based on ambient conditions 14.5 psi, 68°F)	Unit	Design data
Volume flow inlet	scfm	590
Volume flow outlet	scfm	507
Average purge air	scfm	82
Compressed air inlet temperature	°F	95
Working pressure	psig	102
Pressure dew point	°F	-40
Residual oil content	mg/m ³	x

General data	Unit	Design data
Maximum operating pressure	psig	232
Minimum operating pressure	psig	58
Maximum inlet temperature	°F	122
Ambient temperature minimum	°F	35.6

Norms and key figures	Unit	Design data
Pressure vessel standard		ASME sect. VIII Div.1 2021
Code certification		ASME mark with U designator
NB registration		included
Pneumatic testing pressure	psig	348
Sound insulation level		ISO 85

Scope of supply	Unit	Design data
Ready-to-operate desiccant dryer	Type	DDN590
Control unit	Type	ECOMATIC
Pre filter	Type	APF765SMA
Final filter	Type	APF765DMF
Desiccant filling	Type	Alumina

Options	Unit
Controls	Dew point device ET-C
	Dew point device ET-P (incl. inlet air control)
	ECOMATIC24 (24 V DC version)

Cycles	Unit	Design data
Total	min	10
Adsorption	min	4.5
Regeneration	min	4.5
Pressure build-up time	min	1

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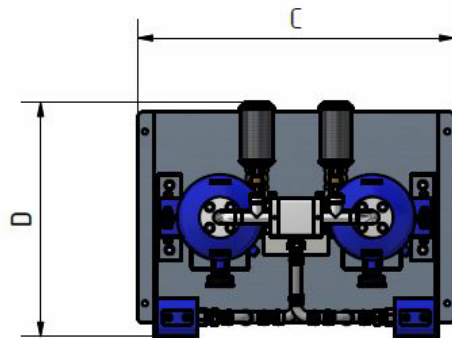
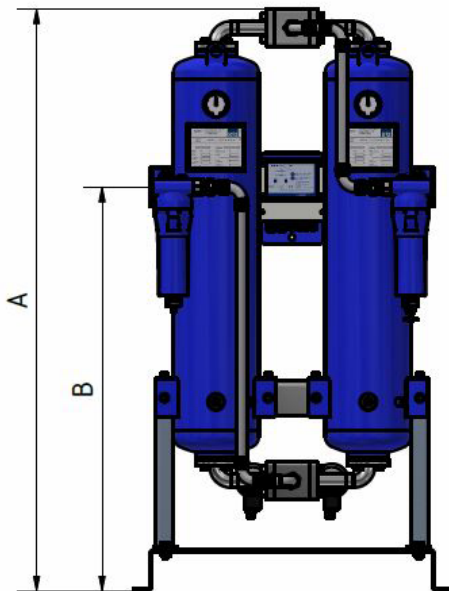
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Dimensions and weights	Unit	Design data
A	inch	83.29
B	inch	59.45
C	inch	52.80
D	inch	33.69
Nominal size inside the adsorber		2"
Connection inlet		2" NPT
Connection outlet		2" NPT
Total weight	lbs	2,004.2
Vessel volume	gallon	56

Electrical data	Unit	Design data
Installed capacity	HP	0.043
Power Supply	V	115
Control voltage	V	115
Frequency	Hz	50 / 60
Protection class housing	IP	54

Dimensional drawings



Correction factors	
Inlet temperature	
°F	< 77 77 86 95 100 104 113 118 122
F(t)	1.2 1.1 1.09 1 0.84 0.78 0.72 0.65 0.58

Correction factors working pressure																									
psig	58	65	72.5	80	87	94	102	109	116	123	130	138	145	152	160	167	174	181	189	196	203	210	218	225	232
F(p)	0.6	0.7	0.74	0.82	0.89	0.97	1	1.08	1.11	1.16	1.22	1.29	1.36	1.42	1.5	1.57	1.63	1.69	1.75	1.83	1.9	1.96	2.03	2.1	2.14

Please multiply the capacity with the correction factors in the above table