



Your benefits with Deltech® Euro-dry dryers

Operational reliability: high quality components

Energy saving: low pressure drop

Standard models of the Deltech® ED desiccant compressed air dryers		ED 54 - ED 315	ED 399 - ED 1335
Medium	: Compressed air	•	•
Drying system	: Twin tower adsorption	•	•
Regeneration system	: Heatless	•	•
Vessel code	: CE/Directive 87/404/CEE	•	•
	All European pressure vessel codings	○	○
	Safety relief valves	○	○
Piping	: Threaded	•	○
	: Welded with DIN flanges	○	•
Coating	: RAL 9001 (white)	•	•
	Special surface treatment	○	○
Inlet	: Bottom section on back side	•	•
Outlet	: Top section on back side	•	•
Desiccant	: Delsorb HQ-A4	•	•
Power supply	: 230V 50Hz	•	•
	Alternative electrical power supplies	○	○
	Pneumatic control (explosion proof)	○	○
Timer	: Electronic with memory	•	•
	PLC controlled energy management system	○	○
Noise level	: < 78 dB(A)	•	•
Standard silencers provided			
IP rating	: IP 65	•	•
Location	: Indoors	•	•
Mounting	: Floor standing; anchor holes provided	•	•
Filters	: Deltech® pre- and afterfilters mounted to the dryer	○	○

• standard
○ optional
- not applicable

For optimum performance, Deltech® pre- and afterfilters should be used.

Options may vary per country.

Design data	minimum	design	maximum	ED 54 - ED 315	ED 399 - ED 1335
Inlet pressure	4 bar(g)*	7 bar(g)*	10 bar(g)*	•	•
	10 bar(g)*	14 bar(g)*	16 bar(g)*	○	○
Inlet temperature	+5°C*	+35°C*	+50°C*	•	•
Pressure dew point	-60°C*	-40°C*	-20°C*	•	•
	-70°C*	-70°C*		○	○
Ambient temperature	+5°C	-	+50°C	•	•
Relative humidity inlet air		100%		•	•
Purge air consumption % of nominal inlet capacity at 7 bar(g)		15%*		•	•

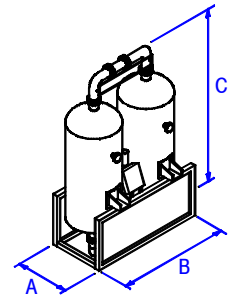
* Use the multipliers when the conditions are different from standard. Refer to the table on the other side of this page.

Flair also issues a computer program capable of making the selection for you.

Model	Capacity	Dimensions			Weight	Connection		Power cons.
	m ³ /h	mm	mm	mm	kg	"BSP	mm DIN	kW
	*	A	B	C		Flanges		
ED 54	180	300	700	1600	125	1	-	0.06
ED 89	295	350	900	1750	165	1 1/2	-	0.06
ED 141	470	500	940	1770	240	1 1/2	-	0.06
ED 201	670	500	940	1850	320	1 1/2	-	0.06
ED 252	840	600	1120	1990	420	2	-	0.06
ED 315	1050	600	1120	2020	500	2	-	0.06
ED 399	1330	750	1500	2195	690	-	80	0.06
ED 51'3	1710	750	1500	2205	780	-	80	0.06
ED 606	2020	750	1500	2225	920	-	80	0.06
ED 750	2500	830	1680	2360	1200	-	100	0.06
ED 858	2860	830	1680	2380	1370	-	100	0.06
ED 1125	3750	1000	1980	2420	1650	-	100	0.06
ED 1335	4450	1000	1980	2450	1975	-	100	0.06

* Nominal dryer capacity according to DIN ISO 7183, pressure dew point -40°C

The capacity of the dryer is based on the intake volume of the compressor at 20°C, 1 bar(a)



The following data can be used to convert the inlet air conditions to the required dryer capacities.

Capacity correction for different inlet pressures in bar(g)

bar(g)		4	5	6	7	8	9	10	11	12	13	14	15	16
Multiplier capacity	IP1	0.61	0.75	0.89	1.00	1.12	1.25	1.37	For selection, consult your distributor					
Multiplier purge air consumption	IP2	1.53	1.30	1.13	1.00	0.90	0.82	0.77						

Capacity correction for different inlet temperatures in °C

°C		+5	+30	+35	+40	+45	+50
Multiplier capacity	IT1	1.00	1.00	1.00	0.92	0.77	0.60
Multiplier purge air consumption	IT2	1.00	1.00	1.00	1.13	1.47	1.67

Example

Air volume (V1) at dryer inlet : 900 m³/h

Inlet pressure (IP1) : 10 bar(g)

Inlet temperature (IT1) : +40°C

V2 : Required dryer capacity, corrected for 35°C, 7 bar(g)

Calculation:

$$V2 = \frac{V1}{IP1 * IT1} = \frac{900}{1.37 * 0.92} = 714 \text{ m}^3/\text{h}$$

Dryer model ED 252 is suitable.

Average purge air consumption:
 $0.15 * V1 * IP2 * IT2 = 0.15 * 900 * 0.77 * 1.13 = 117 \text{ m}^3/\text{h}$

Average dry air quantity available at dryer outlet:
 $900 - 117 = 783 \text{ m}^3/\text{h}$

Your Flair distributor is:



Subject to alteration without prior notice

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