

**Performance**

- Fully automatic and continuous operation
- Skid provided with foundation holes
- Two pressure vessels with filling and removal parts
- Blower with electric motor
- Sheet steel control box manufactured to IP-54
- Two temperature indicators on top of the adsorbers
- Two pressure indicators with block valves
- Pressurizing system to be used before switching over
- Compressor start/stop contact for extension of the drying period
- PLC operation, with the following features:
  - locking of the status of the program at control voltage switch off or power failure
  - fast run of the program to check the sequence
  - reset possibility of the program
- Electrical heater with control thermostat
- Heat insulation of heater, vessels and hot piping, 50 mm glasswool covered with aluminium sheet, 1 mm thick
- Terminals for remote general alarm
- Painting           Epoxy enamel 70 µm, colour RAL 9001 white
- Piping             Carbon steel
- Pilot airlines     Copper

**Options**

- Pressure dewpoint -70°C (see DB-LD leaflet)
- Various power supplies
- Pre and after filters
- Energy savings
  - \* Dewpoint change-over
  - \* Steam regeneration
- Operation safety features
  - \* Limit switches
  - \* Pressure control device
- Maintenance features
  - \* By-passes
  - \* Outdoor location adaptations
  - \* Instrumentation

**Standard working conditions**

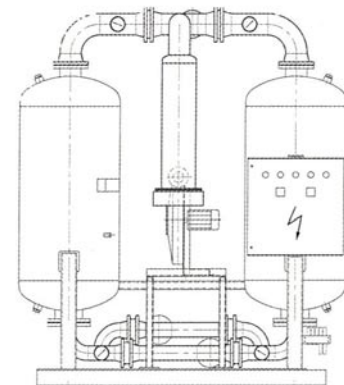
- Pressure dewpoint           : -40°C
- Nominal inlet pressure       : 7 bar g\*
- Inlet temperature            : +35°C
- Relative humidity            : 100%
- Power supply                 : 400V-3-50Hz

\* Use the multipliers when the conditions are different from these. Refer to the tables on the other side of this page.

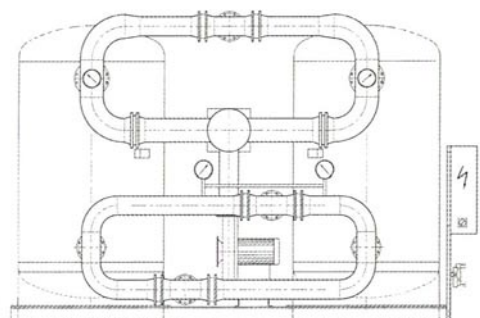
**Design data**

- Inlet pressure                : minimum 5 bar g  
                                      : maximum 10 bar g
- Inlet temperature            : minimum +5°C  
                                      : maximum +45°C
- Ambient temperature         : minimum 0°C  
                                      : maximum +40°C

# Desiccant Dryers DB



Delair® DB 22-30



Delair® DB 31-35

**delair® DB Compressed Air Dryers**

Model	Capacity	Dimensions (mm)			Weight	Connection*	Rating, kW		Max. kWh***
	m <sup>3</sup> /min**	Length	Width	Height	kg	mm	Reg. fan	Heater	per hour
DB-22	10.8	1900	1480	2870	1300	DN 50	3	8.1	5.9
DB-23	16.3	1950	1540	2905	1600	DN 50	3	12.0	8.9
DB-24	25.3	2300	1590	2985	1950	DN 80	3	18.3	13.1
DB-25	32.8	2400	1640	2864	2150	DN 80	3	23.4	16.5
DB-26	43.0	2700	1730	2972	2700	DN 80	5.5	30.6	21.3
DB-27	54.8	2800	1840	2972	3250	DN 100	5.5	38.7	26.7
DB-28	72.2	3350	1695	3136	4200	DN 150	5.5	51.0	35.7
DB-29	93.5	3550	2180	3220	5400	DN 150	7.5	66.3	46.5
DB-30	115.8	3800	2280	3327	6900	DN 150	7.5	81.6	57.5
DB-31	140.2	5070	2190	2800	8200	DN 150	11	100.8	70.3
DB-32	158.2	5270	2360	3050	9800	DN 200	11	113.4	78.7
DB-33	183.7	5370	2445	3050	11000	DN 200	11	132.3	92.8
DB-34	201.5	5470	2550	3050	12000	DN 200	11	144.9	101.2
DB-35	228.7	5670	2643	3100	13500	DN 200	15	163.8	113.8

\* Connections available in ANSI and DIN

\*\* at 1 bar a and +20 C

\*\*\* Average power consumption at full load at design conditions and cycle 2 x 6 hours

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

#### Multiplier for various inlet temperatures (°C) and inlet pressure (bar g)

Inlet temperature (°C)	Inlet pressure (bar g)					
	5	6	7	8	9	10
30	0.97	1.13	1.30	1.49	1.62	1.78
35	0.69	0.85	1.00	1.12	1.25	1.37
40	0.43*	0.60	0.74	0.85	0.95	1.02

\* pressure dewpoint of -30 C

Lower and higher inlet pressure, higher inlet temperature, higher capacity and lower dewpoints on request.

#### Example:

Capacity : 55 m<sup>3</sup>/min  
 Inlet pressure : 8 bar g  
 Inlet temperature : +40°C  
 Pressure dewpoint : -40°C  
 V1 : Actual capacity at revised conditions  
 V2 : Actual capacity (at 1 bar a/20°C)

#### Calculation:

$$V1 \frac{V2}{\text{multiplier}} = \frac{55}{0.85} = 64.7 \text{ m}^3/\text{min}$$

Dryer model delair® DB-28 is suitable.

- Techn cal details to change w thout notice -