Your benefits with MWE desiccant dryers

- **Economical operation**
- **Long life time of the heater elements and dessicant**
- **Energy Management System EMS with dew point control and indication (optional)**
- **Mechanical stable, low dusting Alumina dessicant**

MWE series desiccant dryers use electrical heaters inside of the desiccant bed for regeneration of the saturated desiccant. The direct contact of the finned heater tubes with the desiccant bed makes most efficient use of the regeneration energy. A small part of the compressed air flow of only 2.2% removes the moisture and cools down the desiccant. No ambient pollution or moisture affects the regeneration process. A parallel drying phase during cycle change-over eliminates any temperature or dew point fluctuation. With the optional Energy Management System device EMS, the standard drying time per receiver of 4 hours can be prolonged to a maximum of 20 hours, resulting in energy savings of up to 80%.

Standardmodels of the MWE dessicant dryers		74 - 308	385 - 1284
Medium	Compressed air	●	●
Drying system	Twin tower adsorption	●	●
Regeneration system	Internal heat regenerated, with control thermostats	●	●
Vessel code	PED 97/23/EC with conformity assessment Module H approved by Lloyds' Register (Notified body no. 0343)	●	●
	Safety relief valves	■	■
Piping	Threaded	●	■
	Welded with DIN flanges	■	●
Coating	RAL 9001 (white)	●	●
	Special surface treatment	■	■
Inlet	Bottom section on the back	●	●
Outlet	Top section on the back	●	●
Desiccant	Alumina	●	●
Power supply	main power 400V 50 Hz 3 phases	●	●
	control voltage 230V 50 Hz 1 phase	●	●
	main switch lockable	●	●
	Alternative electrical power supplies	■	■
Timer	PLC	●	●
	Energy Management System	■	■
Noise level Standard silencers provided	< 70 dS(A) LEQ	●	●
IP rating	IP43	●	●
	IP 54 for control box	■	■
Location	Indoors	●	●
Mounting	Floor standing; anchor holes provided	●	●
Filters	pre- and after filters fitted to the dryer	■	■

For optimum performance, PPR® pre- and after filters should be used

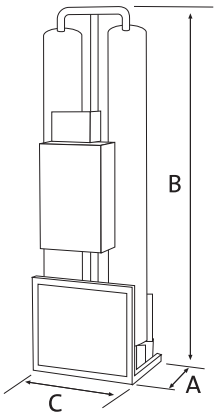
Design data	minimum	design*	maximum		74 - 308	385 - 1284
inlet pressure		4 bar (g)	7 bar (g)	10 bar (g)*	●	●
				16 bar (g)*	■	■
Inlet temperature		+5°C	+35°C	+50°C	●	●
Pressure dew point			-40°C		●	●
Ambient temperature		+5°C	-	+50°C	●	●
Relative humidity inlet air			100%		●	●
Purge air consumption of nominal inlet capacity at 7 bar(g)			2,2%		●	●

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

● Standard | ■ optional |

Model	Capacity	Dimensions (mm)			Weight	Connection		Power consumption (kW)	
	m³/h *	A	B	C	kg	"BSP	DIN flages	average	installed
MWE 74	245	450	760	2170	300	1	-	1.7	3.6
MWE 120	400	500	1000	2280	450	1 1/2	-	2.7	5.4
MWE 196	653	550	1050	2620	670	1 1/2	-	3.6	7.2
MWE 236	785	600	1200	2750	800	2	-	4.5	9.0
MWE 308	1026	650	1250	2750	950	2	-	5.4	10.8
MWE 385	1282	700	1400	3050	1300	-	80	7.2	14.4
MWE 575	1916	800	1550	3050	1900	-	80	10.8	21.6
MWE 675	2250	900	1650	3050	2110	-	80	12.6	25.2
MWE 801	2670	950	1850	3175	2400	-	100	14.4	28.8
MWE 1077	3590	1050	1950	3175	3100	-	100	18.9	37.8
MWE 1284	4280	1100	2000	3175	3400	-	100	22.5	45.0

* 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 conditions to the required dryer capacities:

Muliplier for different inlet pressures in bar (g) (F1)													
bar (g)	4	5	6	**7**	8	9	10	11	12	13	14	15	16
Multiplier (F1)	0.63	0.75	0.88	**1.00**	1.12	1.15	1.37	For a selection consult your distributor					

Muliplier for different inlet temperatures in °C (F2)						
°C	+5	+30	**+35**	+40	+45	+50
Multiplier (F2)	1.00	1.00	**1.00**	0.60	0.38	0.25

Example		Calculation
Compressor capacity (V1)	: 900 m³/h	
Operating pressure (F1)	: 10 bar (g)	
Inlet temperature (F2)	: +40°C	
V2	: Necessary dryer capacity corrected for 35°C, 7 bar (g)	**V2**= V1 / F1* F2* = 900 / 1,37* 0,60 = 1095m³/h
		Dryer model MWE 385 is suitable.

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