

COMPRESSED AIR TREATMENT



REFRIGERATION DRYER

ALM-RD

The use of clean, dry air is extremely important for all types of compressed air-powered applications. Moisture or contaminants in the compressed air can lead to system failures. These complications reduce productivity and can affect the product quality of the end products. So don't compromise and choose the ALM-RD refrigeration dryer series.

Advantages:

- The ALM-RD refrigeration dryers already contain a pre-filter and an after-filter (up to ALM-RD 6220), so that the complete treatment can be covered in the smallest possible space. The required filter change is indicated directly on the display.
- Minimised pressure drop leads to immediate energy savings.
- Fast start-up and response times ensure that the required air quality is achieved quickly.
- Each dryer is specially designed according to its flow with the right

components to ensure the lowest energy consumption.

- High-efficiency R134a refrigerant is standard on all models.
- A state-of-the-art heat exchanger design offers the highest cost savings in the industry.

The refrigerant circuit and insulation of the ALM-RD series

ALMiG uses only the environmentally friendly refrigerant gas R134a in the dryers. R134a has excellent thermodynamic properties and can be operated at very low pressure compared to other refrigerants. This in turn increases the service life of the refrigerant compressor.

ALMiG refrigeration dryers provide a constant pressure dew point of +3°C within their operating range. This is made possible by the use of state-of-the-art refrigeration technology in the manufacture of the dryers.

Refrigeration dryer ALM-RD

Type	Max. Volume flow*	Cooling air requirement	Compressed air connection	Power consumption**	Length	Wide	Height	Weight
	m ³ /h	m ³ /h		kW	mm	mm	mm	kg
25	23	180	1/2"	0,34	372	369	707	32
40	38	180	1/2"	0,34	372	369	707	32
56	53	180	1/2"	0,37	372	369	707	32
75	70	180	1/2"	0,38	372	369	707	32
110	100	180	3/4"	0,39	473	454	832	51
165	155	700	3/4"	0,59	473	453	832	53
200	190	700	3/4"	0,68	473	453	832	55
225	210	700	1 1/2"	0,82	556	506	874	78
325	305	700	1 1/2"	1,07	556	506	874	83
400	375	700	1 1/2"	1,19	556	506	874	86
525	495	1100	2"	1,23	678	648	1157	160
660	623	1100	2"	1,32	678	648	1157	165
990	930	1350	2"	2,01	948	728	1370	220
1280	1200	1350	2"	2,59	948	728	1370	230
1480	1388	2800	3"	2,80	948	798	1460	270
1920	1800	2800	3"	3,21	948	798	1460	285
2660	2500	5000	3"	4,10	1163	778	1725	392
2950	2775	5000	3"	4,74	1163	778	1725	410
3540	3300	7000	DN100 Flange	5,74	1577	993	1906	690
4160	3915	7000	DN100 Flange	6,50	1577	993	1906	710
5400	5085	8500	DN100 Flange	8,25	1647	1077	2005	825
6220	5850	8500	DN100 Flange	9,55	1647	993	1959	835
7420	6975	8500	DN150 Flange	11,95	2188	1062	2024	900
8380	7875	12750	DN150 Flange	12,88	2188	1062	2024	925
9580	9000	12750	DN150 Flange	15,40	2247	1200	2043	975
11200	10500	12750	DN200 Flange	15,53	2247	1200	2043	1100
13300	12500	25500	DN200 Flange	20,70	2550	1550	2100	1400

*with 35°C inlet temperature, 7 bar(g), 25°C ambient temperature, pressure dew point +3°C (m³/h); refrigerant: R 134 a; ** average power and current consumption based on 3°C evaporating and 45°C condensing temperature.

Digital control with embedded functions

- Digital dew point monitoring
- Display in energy saving mode
- Display of periodic maintenance intervals
- Status report
- Operating hours counter

- + All-inclusive solution due to integrated pre-filter and after-filter (up to ALM-RD 6220)
- + Pre-filter: particles up to 1µm + residual oil content up to min. 0.5 mg/m³
- + Post-filter: particles up to 0.01 µm + residual oil content up to min. 0.01 mg/m³
- + Low pressure drop
- + Fast start-up and response time
- + Lowest energy consumption
- + State-of-the-art heat exchanger design

Compact design

Integrated pre- and post-filter

Electrical lines are separated from the refrigerant side



Aluminium plate heat exchanger is standard

Easily accessible



ALM-RD 155



ALM-RD 623



ALM-RD 3330

Correction factors for refrigeration dryer ALM-RD

Inlet temperature (°C)	30	35	40	45	50	60	-	-
F1	1,29	1	0,92	0,78	0,65	0,45	-	-
Ambient temperature t_v (°C)	20	25	30	35	40	50	-	-
F2	1,05	1	0,98	0,93	0,84	0,7	-	-
Operating pressure (bar)	4	6	7	8	10	12	14	16
F3	0,80	0,94	1	1,04	1,11	1,16	1,22	1,25

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Subject to errors and modifications

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