



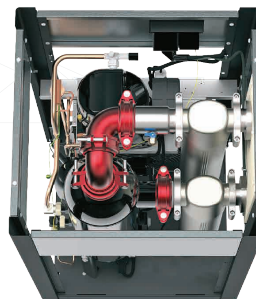
## What are refrigerated air dryers?

They cool the compressed air passing through them and keep that air dry down to the dew point of +3°C. Inlet and outlet filters integrated into the dryer (up to the HRD 210 model) reduce the particle level by 0.01 microns and the oil particle level by 0.01 mg/m<sup>3</sup>.



## Key Features

- Very low pressure losses
- Design suitable for tropical climates
- R-134a Refrigerant
- Operates at 60°C inlet temperature and 50°C ambient temperature
- Compact design
- Minimum footprint
- Digital controller for energy savings
- High efficiency
- Ease of access
- Separate electrical and cooling sections



MODEL	Capacity*		Connection Size	Voltage**	Refrigerant	Maximum Working Pressure	Maximum Ambient Temperature	Maximum Inlet Temperature	Included Filter and Type	Dimensions (mm)			Weight
	m³/min	cfm				bar	°C	°C		Length	Width	Height	Kg
HRD 10	0,35	12	G ½"	230V/1/50 Hz	R-134a	16	50	60	HGKON 55 MX+MY	423	393	567	32
HRD 20	0,58	20	G ½"	230V/1/50 Hz	R-134a	16	50	60	HGKON 55 MX+MY	423	393	567	32
HRD 30	0,83	29	G ½"	230V/1/50 Hz	R-134a	16	50	60	HGKON 55 MX+MY	423	393	567	32
HRD 35	1,05	37	G ½"	230V/1/50 Hz	R-134a	16	50	60	HGKON 75 MX+MY	423	393	567	35
HRD 40	1,45	51	G ¾"	230V/1/50 Hz	R-134a	16	50	60	HGKON 155 MX+MY	473	453	832	51
HRD 50	2,17	77	G ¾"	230V/1/50 Hz	R-134a	16	50	60	HGKON 155 MX+MY	473	453	832	53
HRD 60	2,83	100	G ¾"	230V/1/50 Hz	R-134a	16	50	60	HGKON 155 MX+MY	473	453	832	55
HRD 70	3,30	117	G 1 ½"	230V/1/50 Hz	R-134a	16	50	60	HGKON 405 MX+MY	553	503	874	78
HRD 80	4,7	166	G 1 ½"	230V/1/50 Hz	R-134a	16	50	60	HGKON 405 MX+MY	553	503	874	83
HRD 90	5,9	208	G 1 ½"	230V/1/50 Hz	R-134a	16	50	60	HGKON 405 MX+MY	553	503	874	86
HRD 100	7,8	275	G 2"	230V/1/50 Hz	R-134a	16	50	60	HGKON 805 MX+MY	678	648	1157	160
HRD 110	9,8	346	G 2"	230V/1/50 Hz	R-134a	16	50	60	HGKON 805 MX+MY	678	648	1157	165
HRD 120	13,8	487	G 2"	230V/1/50 Hz	R-134a	16	50	60	HGKON 1205 MX+MY	948	728	1370	220
HRD 130	18,3	646	G 2"	230V/1/50 Hz	R-134a	16	50	60	HGKON 1205 MX+MY	948	728	1370	230
HRD 140	21,8	770	G 3"	400V/3/50Hz	R-134a	16	50	60	HGKON-HC-1805 MX+MY	948	798	1460	270
HRD 150	27,1	957	G 3"	400V/3/50Hz	R-134a	16	50	60	HGKON-HC-1805 MX+MY	948	798	1460	285
HRD 160	36,7	1296	G 3"	400V/3/50Hz	R-134a	16	50	60	HGKON-HC-2775 MX+MY	1163	778	1725	392
HRD 170	43,7	1543	G 3"	400V/3/50Hz	R-134a	16	50	60	HGKON-HC-2775 MX+MY	1163	778	1725	410
HRD 180	52,4	1850	DN100	400V/3/50Hz	R-134a	16	50	60	HGKO 5850 MX+MY	1397	847	1770	492
HRD 190	61,6	2175	DN100	400V/3/50Hz	R-134a	16	50	60	HGKO 5850 MX+MY	1397	847	1770	520
HRD 200	80,0	2825	DN100	400V/3/50Hz	R-134a	16	50	60	HGKO 5850 MX+MY	1467	1077	1930	696
HRD 210	92,0	3249	DN100	400V/3/50Hz	R-134a	16	50	60	HGKO 5850 MX+MY	1467	1077	1930	718
HRD 220	109,7	3874	DN150	400V/3/50Hz	R-134a	16	50	60	Not Included	2188	1062	1925	900
HRD 230	123,9	4375	DN150	400V/3/50Hz	R-134a	16	50	60	Not Included	2188	1062	1925	925
HRD 240	141,6	5001	DN150	400V/3/50Hz	R-134a	16	50	60	Not Included	2247	1200	2044	975
HRD 250	165,2	5834	DN200	400V/3/50Hz	R-134a	16	50	60	Not Included	2247	1200	2044	1100
HRD 260	196,7	6946	DN200	400V/3/50Hz	R-134a	16	50	60	Not Included	2550	1550	2100	1400

- Hertz reserves its rights to change the specifications without any prior notice.

\* Capacity is given at atmospheric Pressure at 20 °C (ISO 1217) in accordance with norms ISO 7183-8573-1 and Pneurop 6611- Class 4-7 bar -35 °C inlet - 25 °C ambient.

\*\* Consult sales representative for optional voltages

**PRE FILTER (X)**

Efficiency rating:  
1 Micron particle removal & 0.5mg/m³ oil removal

**FINE FILTER (Y)**

Efficiency rating:  
0.01 Micron particle removal & 0.01mg/m³ oil removal

**PARTICLE FILTER (P)**

Efficiency rating:  
5 Micron particle removal  
(removes desiccant particles after the dryer)

**ACTIVATED CARBON FILTER (A)**

Efficiency rating:  
0.01 Micron particle removal & 0.003 mg/m³ oil removal

HRD Dryer Sizing Example;

If a compressor delivers 20 m³/min at 6 bar, the dryer inlet temperature is 40°C and the ambient temperature is 30°C, please choose your dryer as follows;

$$\text{Dryer Capacity} = 20 / 0.94 / 0.92 / 0.98 = 23,6 \text{ m}^3/\text{min}$$

The correct dryer model for this application is HRD 150.

CORRECTION FACTORS FOR HRD AIR DRYERS:								
Inlet Temperature °C	30	35	40	45	50	60	-	-
F1	1,29	1	0,92	0,78	0,65	0,45	-	-
Ambient Temperature °C	20	25	30	35	40	50	-	-
F2	1,05	1	0,98	0,93	0,84	0,7	-	-
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