

Cycling (Thermal Mass) Air Dryers

HRC Series

HRC 495 / 623 / 930 / 1200 / 1388 / 1800 / 2500 / 2775 / 3330 / 3915 / 5085 / 5850 / 6975 / 7875 / 9000 / 10500 / 12500

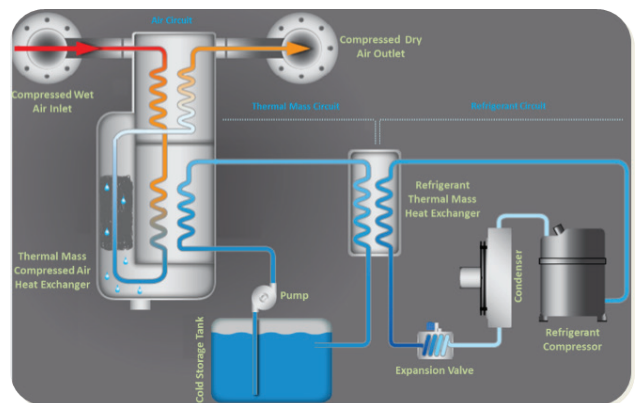
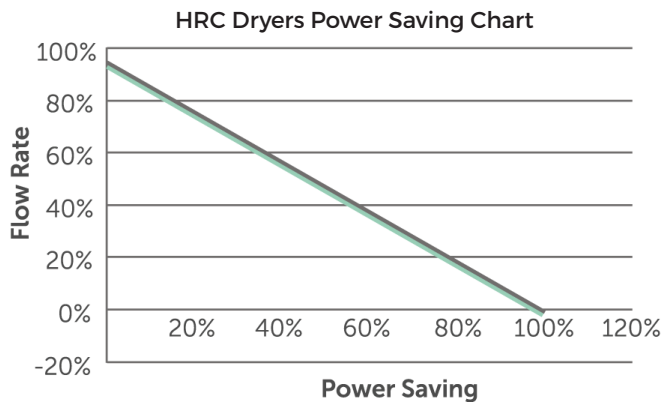


REFRIGERATED TYPE CYCLING (THERMAL MASS) HRC COMPRESSED AIR DRYERS

- Energy Saving (Capacity control)
- 3 °C Pressure dew point
- Very Low Pressure Drop
- Designed for Tropical Conditions
- Dryer easily runs at 60 °C Max. Inlet Temp. and 50 °C Ambient Temp. due to R134a refrigerant (all through the range) and oversized condenser.
- Stainless steel components

SAVE THE ENERGY

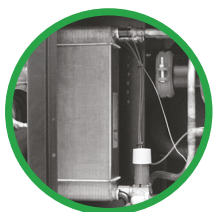
Hertz Cycling Dryers consume energy dependent on the air flow. The refrigeration system of the dryer cools down the water-glycol mixture up to 1 °C and store that mixture in a stainless steel tank. A small pump circulates the water-glycol mixture to cool down the compressed air. The compressor of the refrigeration system shuts down after the desired mixture temperature is reached which results in significant energy savings.



Stainless Steel Heat Exchanger

Stainless Steel Water Tank

Stainless Water Pump



All components that are exposed to water-glycol mixture are either stainless steel (Heat exchanger, Tank, Pump) or Aluminum (Dryer heat exchanger) Therefore there is no risk of rust.

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/ 5085 / 5850 / 6975 / 7875 / 9000 / 10500 / 12500

SPECIFICATIONS



Model	Capacity*		Connection Size	Voltage**	Max. Working Pressure	Max. Ambient Temp.	Max. Inlet Temp.	Refrigerant Gas	Included Filter and Type	Dimensions (mm)			Weight
	m³/min	cfm			bar	°C	°C			Length	Width	Height	Kg
HRC 495	8,25	291	G 2"	230V/1/50 Hz	16	50	65	R-134a	HGKO 851 MX+MY	855	725	1505	178
HRC 623	10,4	366	G 2"	230V/1/50 Hz	16	50	65	R-134a	HGKO 1210 MX+MY	855	725	1505	184
HRC 930	15,5	547	G 2"	230V/1/50 Hz	16	50	65	R-134a	HGKO 1210 MX+MY	830	730	1765	242
HRC 1200	20	706	G 2"	400V/3/50Hz	16	50	65	R-134a	HGKO 1210 MX+MY	830	730	1765	253
HRC 1388	23,1	817	G 3"	400V/3/50Hz	16	50	65	R-134a	HGKO 1820 MX+MY	1150	800	1740	295
HRC 1800	30	1059	G 3"	400V/3/50Hz	16	50	65	R-134a	HGKO 1820 MX+MY	1150	800	1740	310
HRC 2500	41,7	1471	G 3"	400V/3/50Hz	16	50	65	R-134a	HGKO 1820 MX+MY	1315	880	1790	411
HRC 2775	46,3	1633	G 3"	400V/3/50Hz	16	50	65	R-134a	HGKO 2700 MX+MY	1315	880	1790	443
HRC 3330	55,5	1960	DN100	400V/3/50Hz	16	50	65	R-134a	HGKO 2700 MX+MY	1400	850	1840	537
HRC 3915	65,3	2304	DN100	400V/3/50Hz	16	50	65	R-134a	N/A	1400	850	1840	557
HRC 5085	84,8	2993	DN100	400V/3/50Hz	16	50	65	R-134a	N/A	1620	1080	1995	737
HRC 5850	97,5	3443	DN100	400V/3/50Hz	16	50	65	R-134a	N/A	1620	1080	1995	760
HRC 6975	116,3	4105	DN150	400V/3/50Hz	16	50	65	R-134a	N/A	2190	1065	2025	941
HRC 7875	131,3	4634	DN150	400V/3/50Hz	16	50	65	R-134a	N/A	2190	1065	2025	963
HRC 9000	150	5297	DN150	400V/3/50Hz	16	50	65	R-134a	N/A	2900	1200	2120	1025
HRC 10500	175	6179	DN200	400V/3/50Hz	16	50	65	R-134a	N/A	2900	1200	2120	1162
HRC 12500	208,3	7356	DN200	400V/3/50Hz	16	50	65	R-134a	N/A	2550	1550	2170	1480

- HERTZ KOMPRESSOREN 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

CORRECTION FACTORS FOR HRC AIR DRYERS

Pressure (bar)	4	6	7	8	10	12	14	16
F1	0,80	0,94	1	1,04	1,11	1,16	1,22	1,25
Ambient Temperature °C	20	25	30	35	40	50	-	-
F2	1,05	1	0,98	0,93	0,84	0,70	-	-
Inlet Temperature °C	30	35	40	45	50	60	-	-
F3	1,29	1	0,92	0,78	0,65	0,45	-	-

HRC Dryer Sizing Example;

If a compressor delivers 20 m³/min at 10 bar, the dryer inlet temperature is 45°C and the ambient temperature is 35°C, please choose your dryer as follows;

Dryer Capacity = 20 / 1,11 / 0,78 / 0,93 = 24,8 m³/min

The correct dryer model for this application is HRC 1800.