

0,83-100
m³/min

29-3531
cfm

45
bar



REFRIGERATED TYPE HIGH PRESSURE COMPRESSED AIR DRYERS



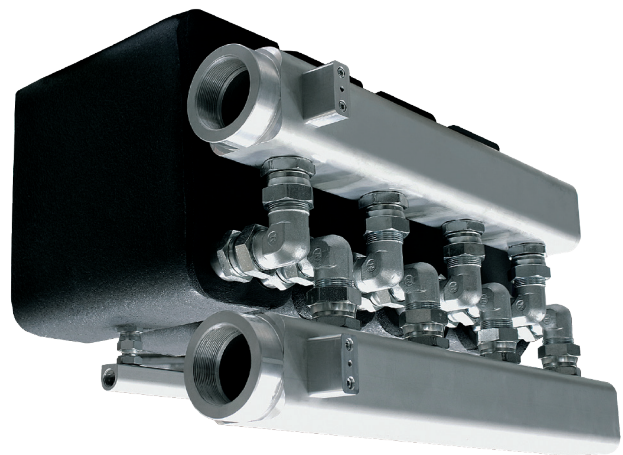
What are high-pressure compressed air dryers?

They ensure 100% contact between the air and refrigerant circuits. They offer excellent cooling by combining high efficiency with advanced performance.



Key Features

- Latest technology 3-in-1 design
- Low pressure difference
- Compact design with 3-in-1 heat exchanger
- Meets every capacity and power requirement
- Stainless steel, brazed, plated heat exchanger
- Size reduction and excellent heat transfer
- Corrosion prevention
- Safety test against leakages



Size Reduced
by 50%



Dewpoint 3°C



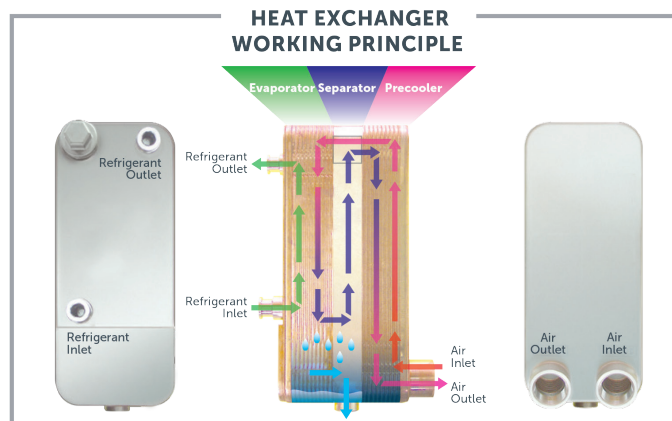
Stainless Steel,
Anti-corrosion



Working Pressure
Up to 45 bar



Inlet/Outlet
Temp. Difference
<10°C



Model	Max. Pressure		Capacity*		Connection Size	Voltage (V/ph/hz)	Maximum Ambient Temperature	Maximum Inlet Temperature	Dimensions (mm)			Weight (kg)	Controller	Refrigerant
	bar	psi	m³/min	cfm			°C	°C	Length	Width	Height			
HRD 50 HPN	45	652	0,83	29	3/4"	230/1/50	45	50	454	361	553	36	DigiPro	R134a
HRD 90 HPN	45	652	1,50	53	3/4"	230/1/50	45	50	454	361	553	38	DigiPro	R134a
HRD 150 HPN	45	652	2,50	88	3/4"	230/1/50	45	50	453	401	623	45	DigiPro	R134a
HRD 220 HPN	45	652	3,67	130	3/4"	230/1/50	45	50	453	401	623	45	DigiPro	R134a
HRD 300 HPN	45	652	5,00	177	1 1/4"	230/1/50	45	50	505	451	761	70	DigiPro	R134a
HRD 400 HPN	45	652	6,67	236	1 1/4"	230/1/50	45	50	505	451	761	72	DigiPro	R134a
HRD 500 HPN	45	652	8,33	294	1 1/4"	230/1/50	45	50	505	451	812	78	DigiPro	R134a
HRD 575 HPN	45	652	9,58	338	1 1/4"	230/1/50	45	50	505	451	812	80	DigiPro	R134a
HRD 775 HPN	45	652	12,9	456	1 1/4"	230/1/50	45	50	675	501	984	115	DigiPro	R134a
HRD 910 HPN	45	652	15,2	537	1 1/4"	230/1/50	45	50	675	501	984	120	DigiPro	R134a
HRD 1000 HPN	45	652	16,7	590	DN50 P63	230/1/50	45	50	947	727	1170	218	DigiPro	R134a
HRD 1160 HPN	45	652	19,4	685	DN50 P63	230/1/50	45	50	947	727	1170	220	DigiPro	R134a
HRD 1500 HPN	45	652	25,0	883	DN50 P63	230/1/50	45	50	947	727	1170	225	DigiPro	R134a
HRD 1600 HPN	45	652	26,7	943	DN50 P63	400/3/50	45	50	947	797	1460	263	DigiPro	R134a
HRD 1800 HPN	45	652	30,0	1059	DN50 P63	400/3/50	45	50	947	797	1460	265	DigiPro	R134a
HRD 2200 HPN	45	652	36,7	1296	DN65 PN63	400/3/50	45	50	1162	797	1495	352	DigiPro	R134a
HRD 2500 HPN	45	652	41,7	1473	DN65 PN63	400/3/50	45	50	1162	797	1495	353	DigiPro	R134a
HRD 2700 HPN	45	652	45	1589	DN65 PN63	400/3/50	45	50	1162	797	1495	355	DigiPro	R134a
HRD 3000 HPN	45	652	50	1766	DN65 PN63	400/3/50	45	50	1162	797	1495	422	DigiPro	R134a
HRD 3300 HPN	45	652	55	1942	DN65 PN63	400/3/50	45	50	1162	797	1495	423	DigiPro	R134a
HRD 3600 HPN	45	652	60	2119	DN65 PN63	400/3/50	45	50	1162	797	1495	425	DigiPro	R134a
HRD 5000 HPN	45	652	83,3	2941	DN80 PN63	400/3/50	45	50	1697	997	1493	600	DigiPro	R134a
HRD 6000 HPN	45	652	100	3531	DN100 PN63	400/3/50	45	50	1645	1076	1645	620	DigiPro	R134a

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

* Nominal flow is calculated at the following conditions: Inlet Pressure: 40 bar, Inlet Temperature: 35°C Ambient Temperature 25°C for other conditions please refer to the correction factor table.

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 HPN Dryer Sizing Example;

If a compressor delivers 20 m³/min at 35 bar, the dryer inlet temperature is 40°C and the ambient temperature is 30°C, please choose your dryer as follows;

$$\text{Dryer Capacity} = 20 / 0,96 / 0,82 / 0,63 = 40,3 \text{ m}^3/\text{min}$$

The correct dryer model for this application is HRD 2500 HPN.

CORRECTION FACTORS FOR HRD HPN SERIES									
Pressure (bar)	20	25	30	35	40	45	-	-	-
F1	0,84	0,91	0,93	0,96	1	1,02	-	-	-
Ambient Temperature [°C]	-	-	-	-	25	30	35	40	45
F2	-	-	-	-	1	0,93	0,87	0,82	0,79
Inlet Temperature [°C]	-	-	-	-	35	40	45	50	-
F3	-	-	-	-	1	0,85	0,72	0,63	-