

0,83-60
m³/min

29-2119
cfm

45
bar



JOURNEY
OF
AIR

REFRIGERATED TYPE HIGH PRESSURE COMPRESSED AIR DRYERS



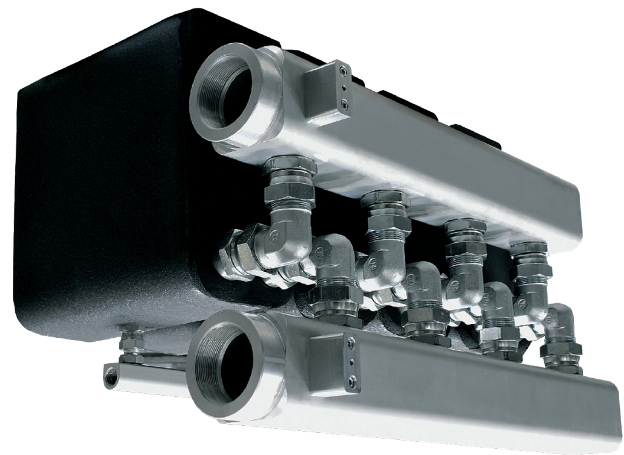
What is a high-pressure compressed air dryer?

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



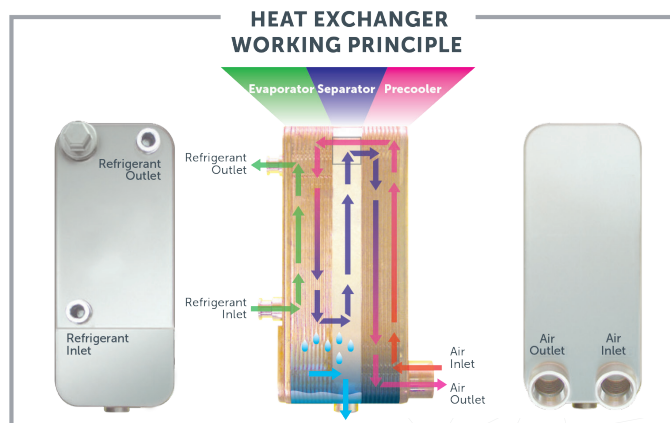
Stainless Steel
Anti-corrosion



Working Pressure
Up to 45 bar



Inlet/Outlet
Temp. Difference
<10°C



Model	Capacity*		Connection Size	Voltage	Maximum Working Pressure	Maximum Ambient Temperature	Maximum Inlet Temperature	Dimensions (mm)			Weight
	m ³ /min	cfm			bar	°C	°C	Length	Width	Height	Kg
DK 50 HPN	0,83	29	G ¾"	230V/1/50 Hz	45	45	50	454	361	553	36
DK 90 HPN	1,50	53	G ¾"	230V/1/50 Hz	45	45	50	454	361	553	38
DK 150 HPN	2,50	88	G ¾"	230V/1/50 Hz	45	45	50	453	401	623	45
DK 220 HPN	3,67	130	G ¾"	230V/1/50 Hz	45	45	50	453	401	623	45
DK 300 HPN	5,00	177	G 1 ¼"	230V/1/50 Hz	45	45	50	505	451	761	70
DK 400 HPN	6,67	236	G 1 ¼"	230V/1/50 Hz	45	45	50	505	451	761	72
DK 500 HPN	8,33	294	G 1 ¼"	230V/1/50 Hz	45	45	50	505	451	812	78
DK 575 HPN	9,58	338	G 1 ¼"	230V/1/50 Hz	45	45	50	505	451	812	80
DK 775 HPN	12,9	456	G 1 ¼"	230V/1/50 Hz	45	45	50	675	501	984	115
DK 910 HPN	15,2	537	G 1 ¼"	230V/1/50 Hz	45	45	50	675	501	984	120
DK 1000 HPN	16,7	590	G 2"	230V/1/50 Hz	45	45	50	947	727	1170	218
DK 1160 HPN	19,4	685	G 2"	230V/1/50 Hz	45	45	50	947	727	1170	220
DK 1500 HPN	25,0	883	G 2"	230V/1/50 Hz	45	45	50	947	727	1170	225
DK 1600 HPN	26,7	943	G 2"	400V/3/50Hz	45	45	50	947	797	1460	263
DK 1800 HPN	30,0	1059	G 2"	400V/3/50Hz	45	45	50	947	797	1460	265
DK 2200 HPN	36,7	1296	G 2 ½"	400V/3/50Hz	45	45	50	1162	797	1495	352
DK 2500 HPN	41,7	1473	G 2 ½"	400V/3/50Hz	45	45	50	1162	797	1495	353
DK 2700 HPN	45,0	1589	G 2 ½"	400V/3/50Hz	45	45	50	1162	797	1495	355
DK 3000 HPN	50,0	1766	G 2 ½"	400V/3/50Hz	45	45	50	1162	797	1495	422
DK 3300 HPN	55,0	1942	G 2 ½"	400V/3/50Hz	45	45	50	1162	797	1495	423
DK 3600 HPN	60,0	2119	G 2 ½"	400V/3/50Hz	45	45	50	1162	797	1495	425

- DALGAKIRAN 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

DK 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;

Dryer Capacity = 20 / 0,96 / 0,82 / 0,63 = 40,3 m³/min

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

CORRECTION FACTORS FOR DK-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	-