

## ▶ MK HP HIGH PRESSURE SERIES

COMPRESSED AIR DRYERS ◀

This design achieves a hyper-efficient 100% contact between the air and refrigerant circuits, delivering state-of-the-art performance and great cooling efficiency.

The state-of-the-art 3-in-1 design features very low differential pressure delivering significant energy savings. The 3-in-1 Heat-Exchanger is compact and allows the dryer to be smaller and reduces the space required for the dryer. Mikropor offers a variety of 3-in-1 dryers equipped with the 3-in-1 Heat-Exchanger to meet a full range of capacity and power requirements.



**40 bar**




Mikropor High Pressure Dryers have stainless steel brazed plate heat exchangers.

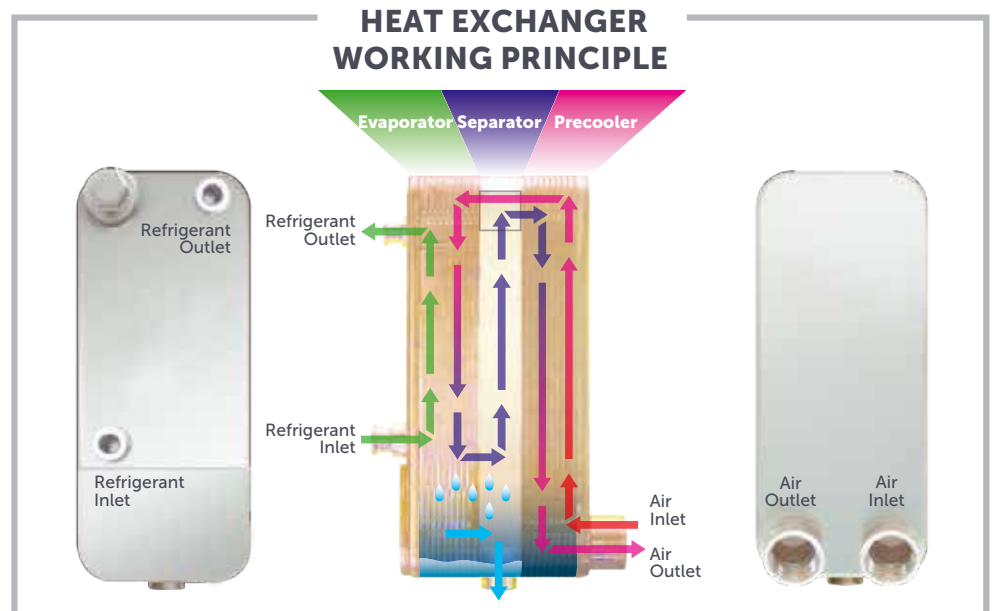
  
Size Reduced  
by 50%

  
Dewpoint 3°C

  
Stainless Steel,  
Anti-corrosion

  
Working Pressure  
Up to 45 bar

  
Inlet/Outlet  
Temp. Difference  
<10°C



Mikropor MK-HP range High Pressure Air Dryer Series have state of the art stainless steel brazed plate heat exchanger. It is designed for high pressure air dryers. The heat exchanger has the following sections in one module;

- Air/Air heat exchanger (Economizer)
- Air/Refrigerant heat exchanger (Evaporator)
- Water separator

With reliable stainless steel and optimized efficiency design, Mikropor MK-HP heat exchangers supply size reduction, anti corrosion and great heat transfer.

## The Separator Efficiency

- Double centrifugation due to the bottom fin
- Reserved direction for the compressed air
- Gravity effect to the condensed water
- Special anti-return system
- Separator integrated to the system

## Frigorific Circuit

- Two valve regulation system (thermal and by-pass), allowing to fill properly the exchanger and giving a max. temperature to the exchanger
- High quality security test of potential leakage
- Use of hermetic compressor as standard
- High quality, long lasting components
- Quick start and reaction time

## Scroll Compressor

- Better coefficient of power
- Less energy consumption
- Higher resistance to liquid shocks



### Technical Specifications

Model	Flow* (m <sup>3</sup> /h)	Voltage	Inlet - Outlet Connection Size	Max. Working Pressure (bar)	Max. Ambient Temp. (°C)	Max. Inlet Temp. (°C)	Width (mm)	Length (mm)	Height (mm)	Weight (kg)
MK HP 50	50	230V / 1 / 50 Hz	3/4"	45	45	50	361	454	553	36
MK HP 90	90	230V / 1 / 50 Hz	3/4"	45	45	50	361	454	553	38
MK HP 150	150	230V / 1 / 50 Hz	3/4"	45	45	50	401	453	623	45
MK HP 220	220	230V / 1 / 50 Hz	3/4"	45	45	50	401	453	623	45
MK HP 300	300	230V / 1 / 50 Hz	1 1/4"	45	45	50	451	505	761	70
MK HP 400	400	230V / 1 / 50 Hz	1 1/4"	45	45	50	451	505	761	72
MK HP 500	500	230V / 1 / 50 Hz	1 1/4"	45	45	50	451	505	812	78
MK HP 575	575	230V / 1 / 50 Hz	1 1/4"	45	45	50	451	505	812	80
MK HP 775	775	230V / 1 / 50 Hz	1 1/4"	45	45	50	501	675	984	115
MK HP 910	910	230V / 1 / 50 Hz	1 1/4"	45	45	50	501	675	984	120
MK HP 1000	1000	230V / 1 / 50 Hz	2"	45	45	50	727	947	1170	218
MK HP 1160	1160	230V / 1 / 50 Hz	2"	45	45	50	727	947	1170	220
MK HP 1500	1500	230V / 1 / 50 Hz	2"	45	45	50	727	947	1170	225
MK HP 1600	1600	400V / 3 / 50 Hz	2"	45	45	50	797	947	1460	263
MK HP 1800	1800	400V / 3 / 50 Hz	2"	45	45	50	797	947	1460	265
MK HP 2200	2200	400V / 3 / 50 Hz	2 1/2"	45	45	50	797	1162	1495	352
MK HP 2500	2500	400V / 3 / 50 Hz	2 1/2"	45	45	50	797	1162	1495	353
MK HP 2700	2700	400V / 3 / 50 Hz	2 1/2"	45	45	50	797	1162	1495	355
MK HP 3000	3000	400V / 3 / 50 Hz	2 1/2"	45	45	50	797	1162	1495	422
MK HP 3300	3300	400V / 3 / 50 Hz	2 1/2"	45	45	50	797	1162	1495	423
MK HP 3600	3600	400V / 3 / 50 Hz	2 1/2"	45	45	50	797	1162	1495	425

\* 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.

### Correction Factor for MK HP High Pressure Series

Pressure (bar)	F1	Inlet Temp. (°C)	F2	Ambient Temp. (°C)	F3
20	0.84	-	-	-	-
25	0.91	-	-	-	-
30	0.93	-	-	-	-
35	0.96	-	-	-	-
40	1	35	1	25	1
45	1.02	40	0.85	30	0.93
-	-	45	0.72	35	0.87
-	-	50	0.63	40	0.82
-	-	-	-	45	0.79

For maximum flow rate, multiply model flow rate show in the table below by the correction factor corresponding to the working pressure.

Maximum Pressure (45 bar)
Nominal Working Pressure (40 bar)
Refrigerant: R134a