

Drying



Peak performance under high pressure

DRYPOINT® RS HP compressed-air refrigeration dryers were developed in particular for applications where compressed air in the pressure range of 45 bar/50 bar must be dried efficiently, for example during the manufacturing of PET bottles. The dryer series convinces with a high surplus, as far as conception and performance are concerned: it offers maximum safety at minimum energy consumption. The integrated BEKOMAT® reliably drains the accumulated compressed-air

condensate without any unnecessary compressed air losses. The well thought out, flow-optimised design of the heat exchanger allows compressed air flow with minimum pressure loss. The optimised refrigeration compressor technology ensures low energy consumption at a very stable pressure dew point. DRYPOINT® RS HP devices meet the requirements of the 97/23/CE-PED directive.

The DRYPOINT® RS HP advantages at a glance

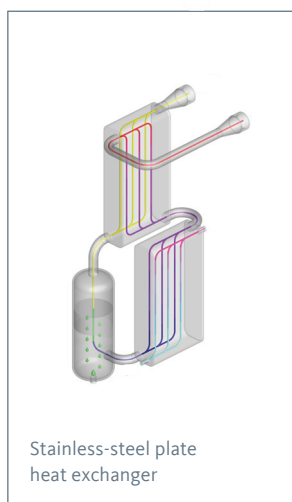
Very stable pressure dew point

Lowest pressure loss

BEKOMAT® condensate drain:
No compressed air loss and reliable operation

Long service life through stainless-steel plate heat exchangers

Certified up to 50 bar/45 bar



Stainless-steel plate heat exchanger



BEKOMAT® condensate drain



DRYPOINT® RS HP

Reference conditions in accordance with DIN/ISO 7183

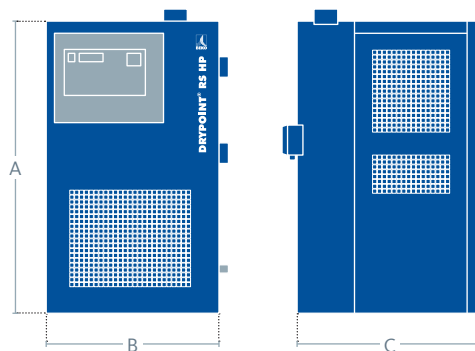
Volume flow in m ³ /h related to 20°C	1 bar [a]
Operating pressure	40 bar [g]
Pressure dew point	3 °C

Operating conditions

Max. pressure RS25HP50 – RS1010HP50	50 bar [g]
Max. pressure RS1300HP45 – RS5000HP45	45 bar [g]
Max. compressed-air inlet temperature	65 °C
Max. cooling media temperature	50 °C

Electrical connection (ph/V/Hz, other voltages upon request)

RS 25 HP50 – RS 90 HP50	230 V, 50-60 Hz, 1 Ph.
RS 135 HP50 – RS 1010 HP50	230 V, 50 Hz, 1 Ph.
RS 1300 HP45 – RS 5000 HP45	400 V, 50 Hz, 3 Ph.



DRYPOINT®	RS 25 HP50	RS 45 HP50	RS 70 HP50	RS 90 HP50	RS 135 HP50	RS 180 HP50	RS 240 HP50	RS 320 HP50	RS 450 HP50	RS 620 HP50	RS 810 HP50	RS 1010 HP50
Air volume flow (m ³ /h)	25	45	72	90	135	180	240	315	450	615	810	1008
Power input (kW)	0,16	0,18	0,22	0,23	0,46	0,69	0,75	0,70	0,84	1,10	1,45	1,73
Pressure loss (Δp bar [g])	0,25	0,24	0,25	0,23	0,23	0,24	0,24	0,20	0,22	0,22	0,23	0,22
Air connection (ø)	G ³ / ₄ " BSP-F	G ³ / ₄ " BSP-F	G ³ / ₄ " BSP-F	G ³ / ₄ " BSP-F	G ³ / ₄ " BSP-F	G ³ / ₄ " BSP-F	G ³ / ₄ " BSP-F	G1" BSP-F	G1" BSP-F	G1" BSP-F	G1½" BSP-F	G1½" BSP-F

Dimensions

A (mm)	475	475	475	740	740	825	825	885	885	885	1105	1105
B (mm)	370	370	370	345	345	485	485	555	555	555	725	665
C (mm)	515	515	515	420	420	455	455	580	580	580	665	665
Weight (kg)	28	29	32	38	39	50	53	89	101	115	156	190

DRYPOINT®	RS 1300 HP45	RS 1600 HP45	RS 2300 HP45	RS 2400 HP45	RS 3000 HP45	RS 4000 HP45	RS 5000 HP45
Air volume flow (m ³ /h)	1260	1620	2280	2430	3030	4020	5010
Power input (kW)	2,55	2,85	3,50	4,30	4,80	5,60	6,40
Pressure loss (Δp bar [g])	0,22	0,23	0,20	0,25	0,25	0,25	0,26
Air connection (ø)	G2" BSP-F*	G2" BSP-F*	G2" BSP-F*	FLANSI 3"	FLANSI 3"	FLANSI 3"	FLANSI 3"

Dimensions

A (mm)	1465	1465	1465	1745	1745	1745	1745
B (mm)	790	790	790	1135	1135	1135	1135
C (mm)	1000	1000	1000	1205	1205	1205	1205
Weight (kg)	252	265	391	444	461	486	552

* Optional: FLANSI 2* upon request

Conversion factors

Please adjust the performance indications by multiplying by the respective correction factor.

Oper. pressure (bar [g])	15	20	25	30	35	40	45	50	Cooling media temp. (°C)	25	30	35	40	45	50
Correction factor	0,57	0,70	0,80	0,88	0,94	1,00	1,05	1,10	Correction factor	1,00	0,96	0,90	0,82	0,72	0,60
Inlet temperature (°C)	30	35	40	45	50	55	60	65	Pressure dew point (°C)	3	5	7	10		
Correction factor	1,20	1,00	0,83	0,69	0,59	0,50	0,44	0,39	Correction factor	1,00	1,09	1,19	1,37		



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Partner of the Engineering Industry Sustainability Initiative

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