



HIGH PRESSURE REFRIGERATED AIR DRYERS 15 - 1750 CFM



Low pressure drop

Energy efficient

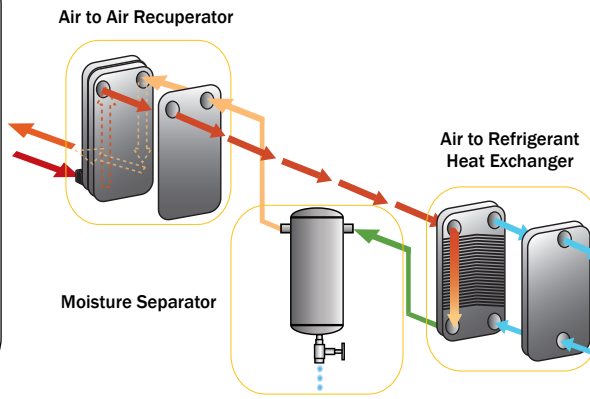
Precision controlled dewpoint

Environmentally friendly

Stainless steel plate heat exchanger

High Pressure Refrigerated Compressed Air Dryers - RHP Series (15 to 1750 CFM)

- ➔ Warm gas enters the RECUPERATION SECTION and exchanges heat with the cooler leaving gas
- ➔ The gas then proceeds to the DRYER SECTION and is cooled using either mechanical refrigeration or liquid to a designed dew point
- ➔ The gas then proceeds through a specially designed MOISTURE SEPARATOR, where condensate drops out into the bottom of the separator
- ➔ The gas then proceeds back through the RECUPERATOR SECTION where it is heated up by the incoming warm gas.



Nortek Belair is the industry leader in the design and manufacture of High Pressure Refrigerated Air Dryers. With the use of the best available components, these dryers are designed specifically to meet the stringent standards of high pressure applications. To achieve very high heat transfer efficiency, the stainless steel heat exchanger that employs the brazed plate construction is used. This also ensures consistent dewpoint and very low pressure drop. With their integrated controls and completely enclosed frame, these dryers will provide years of trouble free service with very little maintenance.

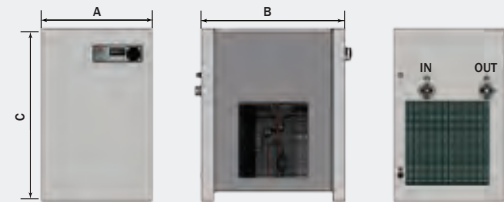
RHP Specifications

Dryer model	Flow-Rate (SCFM)	Connections IN-OUT	Power Supply V/Ph/Hz	Dimensions (inches)			Weight (lbs)
				A	B	C	
15-RHP	15	3/8" NPT	115/1/60, 230/1/60	15	18	19	62
30-RHP	30	3/8" NPT	115/1/60, 230/1/60	15	18	19	64
40-RHP	40	3/8" NPT	115/1/60, 230/1/60	15	18	19	71
50-RHP	50	1/2" NPT	115/1/60, 230/1/60	14	19	24	79
80-RHP	80	1/2" NPT	115/1/60, 230/1/60	14	19	24	82
100-RHP	100	3/4" NPT	115/1/60, 230/1/60	20	25	33	119
140-RHP	140	3/4" NPT	115/1/60, 230/1/60	20	25	33	130
180-RHP	180	1" NPT	115/1/60, 230/1/60	22	29	34	185
260-RHP	260	1" NPT	230/1/60	22	29	34	192
350-RHP	350	1" NPT	230/1/60	22	29	34	240
450-RHP	450	1 1/2" NPT	230/1/60	23	26	49	293
550-RHP	550	1 1/2" NPT	460/3/60	23	26	49	309
700-RHP	700	2" NPT	460/3/60	24	46	63	511
900-RHP	900	2" NPT	460/3/60	24	46	63	525
1100-RHP	1100	2" NPT	460/3/60	24	46	63	573
1400-RHP	1400	FL. ANSI. 2 1/2"	460/3/60	40	60	70	1213
1750-RHP	1750	FL. ANSI. 2 1/2"	460/3/60	40	60	70	1279

Data refers to the following nominal conditions:

Ambient temperature: 100 °F
 Inlet air temperature: 100 °F
 Inlet air pressure: 580 psig
 Pressure dewpoint: 39 °F

Max. working conditions:
 Ambient temperature: 122 °F
 Inlet air temperature: 150 °F
 Inlet air pressure: 725 psig



Nortek Belair reserves the right to modify technical details, design and components at any time.

CORRECTION FACTOR FOR OPERATING PRESSURE CHANGES:									
Inlet air pressure	PSIG	200	300	400	500	550	580	650	725
Factor		0.71	0.81	0.89	0.95	0.97	1.00	1.02	1.05

CORRECTION FACTOR FOR AMBIENT TEMPERATURE CHANGES:									
Ambient temperature	°F	80	90	100	105	110	115	122	
Factor		1.22	1.11	1.00	0.94	0.89	0.83	0.78	

CORRECTION FACTOR FOR INLET AIR TEMPERATURE CHANGES:									
Air temperature	°F	90	100	110	120	130	140	150	
Factor		1.16	1.00	0.85	0.73	0.63	0.54	0.47	

CORRECTION FACTOR FOR DEWPOINT CHANGES:					
Dewpoint	°F	33-39	40-44	45-49	50-54
Factor		1.00	1.09	1.22	1.40

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