



**DRYPOINT® RA**  
**THE COMPLETE RANGE**  
**OF HIGHLY EFFICIENT**  
**REFRIGERATION DRYERS**

# ON DEMAND DRYING FOR EVERY APPLICATION



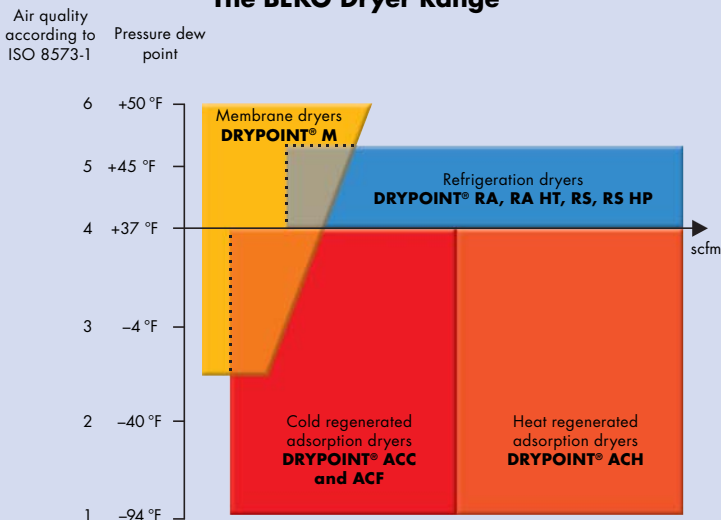
## THE RIGHT SOLUTION WHATEVER THE TASK

BEKO is world renowned for its innovative, solution oriented compressed air technology. Geared to the customers' needs, BEKO presents a comprehensive product portfolio, covering air treatment, condensate technology and process engineering.

The compressed air dryer range meets the highest requirements. Membrane dryers, refrigeration dryers, adsorption – BEKO offers highly efficient, environmentally friendly and cost effective compressed air dryers to suit any task.

This brochure describes BEKO's refrigeration dryer range and focuses on an important member of the BEKO product family: the DRYPOINT® RA compressed air refrigeration dryer.

### The BEKO Dryer Range



Within BEKO's product portfolio we are able to offer our customers a complete range of compressed air drying solutions for every application.

By supplying application specific solutions we can ensure that our customers receive personalized attention to their compressed air drying needs. The result is a system that will provide the most reliable, energy efficient solution possible.

All BEKO dryers are designed and tested to meet the strict quality guidelines of our company. There are no compromises to the quality and reliability of any of our dryers across the entire range.



## REFRIGERATION DRYING WITH THE BEKO ADVANTAGE

### A SYNERGY OF ENGINEERING

The BEKO product family of compressed air refrigeration dryers provides users with several advanced features creating a balanced and efficient drying system.

The unique VarioFlow technology of the hot gas by-pass valve, utilizes a special, gas charged capsule that operates independently of power or electronic support. Thus providing users with a 100% stable dew point, no maintenance, and zero freeze-up.

The synergistic effect when combined with the standard BEKOMAT® results in a dryer that has a direct effect on reducing energy consumption and displays maximum respect for the environment because nearly every component can be recycled.

This not only adds to the stability and reliability of the dryer, but transforms one of the most inefficient pieces of compressed air treatment equipment into an energy saving one.

# +1:

### ALUMINUM HEAT EXCHANGER

*Vertical profile allows for minimum pressure drop and self cleans using gravitational force*

# +2:

### STANDARD BEKOMAT® DRAIN

*Reliable condensate discharge and maximum energy savings*

# +3:

### VARIOFLOW HOT GAS BY-PASS

*Stable dew point regardless of varying operating conditions - patented design*

# +4:

### LARGE CROSS SECTION OF FLOW CHANNELS

*Low velocities, reduced power input*

# +5:

### MAINTENANCE FRIENDLY

*The compact design and open frame provides easy access to all components*

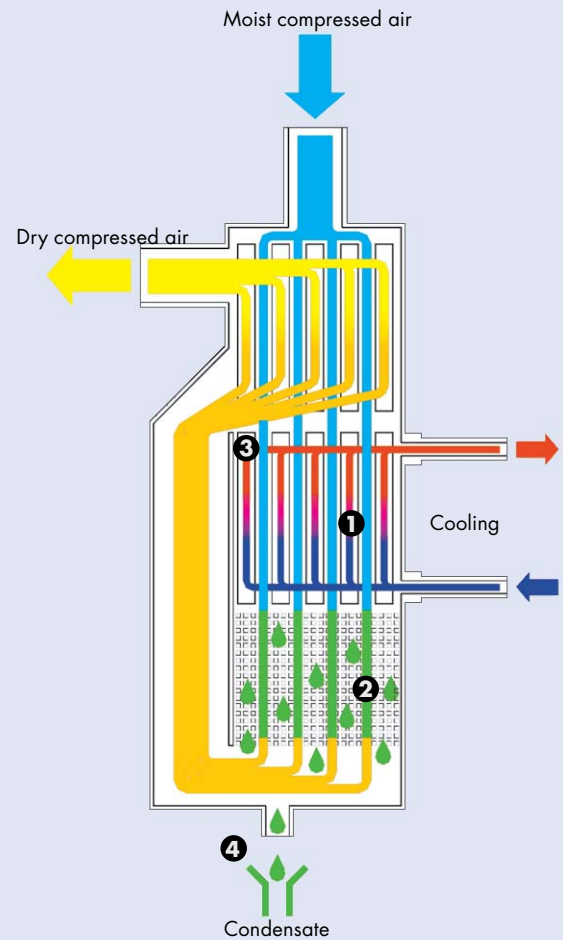


## ENERGY EFFICIENCY AND A STABLE DEW POINT

### FUNCTION

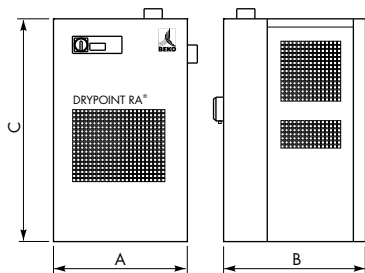
- ❶ Warm, moisture saturated compressed air is cooled down to a temperature of +37 °F. The generous dimensions of the heat exchanger promote especially effective cooling, while flow resistance is reduced to an absolute minimum.
- ❷ Contrary to conventional systems the air follows a downward path through the heat exchanger. The force of gravity results in a particularly high droplet separation of almost 99%. Within the oversized condensate collection area, the flow velocity is greatly reduced, so the carryover of previously separated droplets is reliably prevented.
- ❸ The dried, cold compressed air is re-heated in an air-to-air heat exchanger before being expelled downstream from the dryer. During this process, the relative humidity of the air is lowered considerably and up to 60% of the cooling energy is recovered.
- ❹ Any resulting condensate from the cooling process is discharged from the DRYPOINT® RA unit through the electronic level-controlled BEKOMAT® condensate drain in order to maximize energy savings. The condensate can then be safely treated with an appropriate treatment system, such as the QWIK-PURE® oil/water separation system or the BEKOSPLIT® emulsion splitting plant.

The comprehensive DRYPOINT® RA range makes it possible to select a treatment system that is ideally suited to the actual operating conditions.



# TECHNICAL DATA

## DRYPOINT® RA



Model	Capacity scfm	Maximum Ambient Temperature	Pressure Drop psid	Connection Size	Dryer Dimensions			Weight lbs
					A in	B in	C in	
RA 10	10	115 °F	1.5	3/8" NPT-F	12	14	17	52
RA 15	15	115 °F	2.0	1/2" NPT-F	15	22	19	58
RA 20	20	115 °F	0.6	1/2" NPT-F	15	22	19	62
RA 35	35	115 °F	1.3	1/2" NPT-F	15	22	19	66
RA 50	50	115 °F	2.2	1" NPT-F	15	22	19	70
RA 75	75	115 °F	2.6	1" NPT-F	14	17	29	90
RA 100	100	115 °F	2.2	1 1/4" NPT-F	14	17	29	98
RA 125	125	122 °F	2.9	1 1/4" NPT-F	19	17	33	105
RA 150	150	122 °F	3.4	1 1/4" NPT-F	19	17	33	110
RA 200	200	122 °F	2.3	1 1/2" NPT-F	20	21	35	125
RA 250	250	122 °F	3.5	2" NPT-F	20	21	35	140
RA 300	300	122 °F	1.8	2" NPT-F	21	22	36	240
RA 350	350	122 °F	2.1	2 1/2" NPT-F	21	22	36	250
RA 400	400	122 °F	1.5	2 1/2" NPT-F	22	24	37	265
RA 500	500	122 °F	2.6	2 1/2" NPT-F	22	24	37	300
RA 600	600	122 °F	2.2	3" Flange	31	38	59	405
RA 800	800	122 °F	3.4	3" Flange	31	38	59	420
RA 1000	1000	122 °F	2.7	3" Flange	31	38	59	600
RA 1250	1250	122 °F	2.8	3" Flange	31	41	59	620
RA 1500	1500	122 °F	3.2	4" Flange	53	61	73	1200
RA 1750	1750	122 °F	2.2	4" Flange	53	61	73	1300
RA 2000	2000	122 °F	2.7	4" Flange	53	61	73	1350
RA 2500	2500	122 °F	2.8	4" Flange	53	61	73	1450
RA 3000	3000	122 °F	2.2	6" Flange	55	89	73	1750
RA 4000	4000	122 °F	2.5	6" Flange	55	89	73	1850
RA 5000	5000	122 °F	4.1	8" Flange	104	61	68	2040

**REFERENCE CONDITIONS IN ACCORDANCE WITH CAGI STANDARD N° ADF100**

Refrigerated Compressed Air Dryers - Method for Testing and Rating: Pressure dew point at 100 psig inlet air pressure, 100 °F inlet air temperature, 100 °F ambient air temperature with a 5 psig maximum pressure drop.

**ELECTRICAL POWER SUPPLIES**

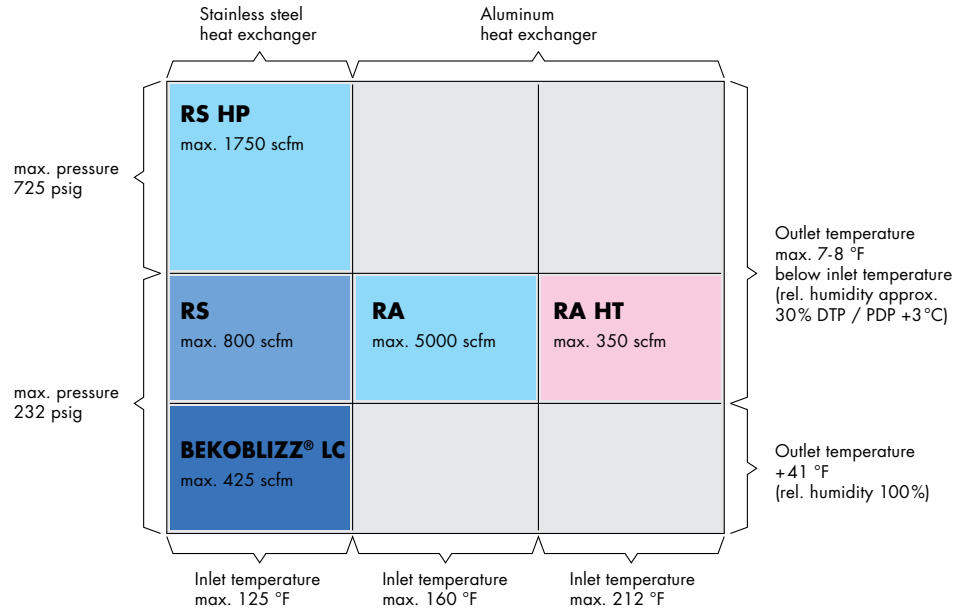
RA 10-200: 115V or 230V | RA 200-400: 230V or 460V | RA 500-5000: 460V

**CORRECTION FACTORS FOR RA SERIES DRYERS**

Please use the factors below: RA 10-100 (RA 125-5000)

Operating Pressure	psig	60	80	100	120	140	160	180	200
Correction Factor		0.79	0.91	1.00	1.07	1.13	1.18	1.23	1.27
Inlet Air Temperature	°F	90	100	110	120	130	140	150	160
Correction Factor		1.18 (1.16)	1.00	0.84 (0.85)	0.69 (0.73)	0.55 (0.63)	(0.54)	(0.47)	(0.40)
Ambient Air Temperature	°F	80	90	100	105	110	115	122	
Correction Factor		1.12 (1.22)	1.09 (1.11)	1.00	0.93 (0.94)	0.85 (0.89)	0.75 (0.83)	0.78	
Pressure Dew Point	°F	37		41		45		50	
Correction Factor		0.90 (1.00)		1.00 (1.09)		1.10 (1.22)		1.25 (1.40)	

# A FULL RANGE OF REFRIGERANT DRYING



## DRYPOINT® RS

DRYPOINT® RS compressed air refrigeration dryers are designed specifically for corrosive environments. The smooth surfaces and durability of the stainless steel plates do not need any maintenance, and are well suited to the most strenuous operating conditions.



## DRYPOINT® RS HP

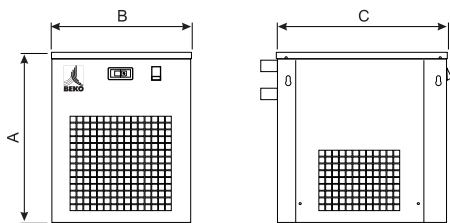
DRYPOINT® RS HP compressed air refrigeration dryers are designed specifically for high pressure applications. They are certified for operating pressures up to 725 psig. Among the technical highlights of this series are the specially developed plate heat exchangers made of stainless steel and a condensate separation system based on the demister principle.



## DRYPOINT® RA HT

DRYPOINT® RA HT compressed air refrigeration dryers are designed for application in environments with high ambient temperatures and for inlet temperatures up to 212 °F. Included in the package are two additional components: an aftercooler equipped with copper tubing and aluminum fins, and a pre-filter with a BEKOMAT® condensate drain.

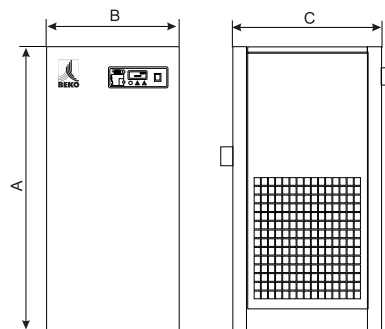




## TECHNICAL DATA

### DRYPOINT® RS HP AND RA HT

Model	Capacity scfm	Electrical Power Supply	Max. Pressure psig	Connection Size	Dryer Dimensions			Weight lbs
					A in	B in	C in	
RS HP 15	15	115V or 230V	725	3/8" NPT-F	18	15	18	62
RS HP 30	30	115V or 230V	725	1/2" NPT-F	18	15	18	64
RS HP 40	40	115V or 230V	725	1/2" NPT-F	18	15	18	71
RS HP 50	50	115V or 230V	725	1/2" NPT-F	24	14	19	79
RS HP 80	80	115V or 230V	725	1/2" NPT-F	24	14	19	82
RS HP 100	100	115V or 230V	725	1" NPT-F	33	20	25	119
RS HP 140	140	115V or 230V	725	1 1/4" NPT-F	33	20	25	130
RS HP 180	180	115V or 230V	725	1 1/4" NPT-F	33	20	25	135
RS HP 260	260	115V or 230V	725	1 1/4" NPT-F	34	22	29	192
RS HP 350	350	115V or 230V	725	1 1/2" NPT-F	34	22	29	240
RS HP 450	450	115V or 230V	725	1 1/2" NPT-F	49	23	26	262
RS HP 550	550	460V	725	2" NPT-F	49	23	26	291
RS HP 700	700	460V	725	2" NPT-F	67	24	46	512
RS HP 800	800	460V	725	2 1/2" NPT-F	67	24	46	525
RS HP 1100	1100	460V	725	2 1/2" NPT-F	67	24	46	573
RS HP 1400	1400	460V	725	3" Flange	63	54	55	948
RS HP 1750	1750	460V	725	3" Flange	63	54	55	992



Model	Capacity scfm	Electrical Power Supply	Max. Inlet Temp. °F	Connection Size	Dryer Dimensions			Weight lbs
					A in	B in	C in	
RA HT 20	20	115V or 230V	212	1/2" NPT-F	25	17	16	82
RA HT 30	30	115V or 230V	212	1/2" NPT-F	25	17	16	88
RA HT 50	50	115V or 230V	212	1/2" NPT-F	25	17	16	93
RA HT 75	75	115V or 230V	212	1" NPT-F	45	16	18	112
RA HT 100	100	115V or 230V	212	1" NPT-F	52	20	20	134
RA HT 150	150	115V or 230V	212	1 1/4" NPT-F	52	20	20	146
RA HT 200	200	230V	212	1 1/4" NPT-F	55	22	23	165
RA HT 250	250	230V	212	1 1/2" NPT-F	55	22	23	185
RA HT 300	300	230V	212	1 1/2" NPT-F	59	28	31	291
RA HT 350	350	230V	212	2" NPT-F	59	28	31	304

# HIGH QUALITY COMPRESSED AIR FROM BEKO

*The quality of your compressed air.*

## RELIABLE

The highest level of operational reliability is guaranteed with every product that BEKO manufactures.

## EFFICIENT

Maximum energy efficiency and conservation are guiding principles of every product design.

## ECONOMIC

Products that provide the quickest return on investment in the industry with the least amount of risk.

## EFFECTIVE

German engineered with no compromises on quality.

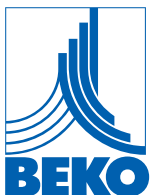
## EXPERIENCE

More than 25 years of industry leading experience stands behind our entire product offering.

## SOLUTIONS

Your single source for a range of performance compressed air products designed to work in synergy.

*Compressed air treatment and condensate technology.*



### BEKO TECHNOLOGIES CORP

900 Great SW Parkway Phone +1 (800) 235-6797  
Atlanta, GA 30336 [beko@bekousa.com](mailto:beko@bekousa.com)  
USA [www.bekousa.com](http://www.bekousa.com)

