BOGE AIR. THE AIR TO WORK.

BOGE
COMPRESSED AIR SYSTEMS

REFRIGERATED AIR DRYERS

Full Range of Refrigerant Drying
DRYPOINT® RA

THE RIGHT SOLUTION WHATEVER THE TASK

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

INTEGRATED BEKOMAT DRAIN

Reliable condensate discharge and maximum energy savings.

RELIABLE PRESSURE DEW POINT

Thanks to their generously designed components, refrigerant dryers in the BOGE RA series maintain a constant pressure dew point. This ensures consistently high compressed air quality with a low pressure differential. All RA dryers are equipped with a pressure dew point indicator.

MINIMAL PRESSURE LOSS

All RA dryers are characterized by their extremely low pressure loss. This allows the upstream compressor to deliver less pressure, thus avoiding overcompensation. Energy savings of six percent are achieved for every bar of pressure saved – far higher than with other dryer systems.

MAINTENANCE FRIENDLY

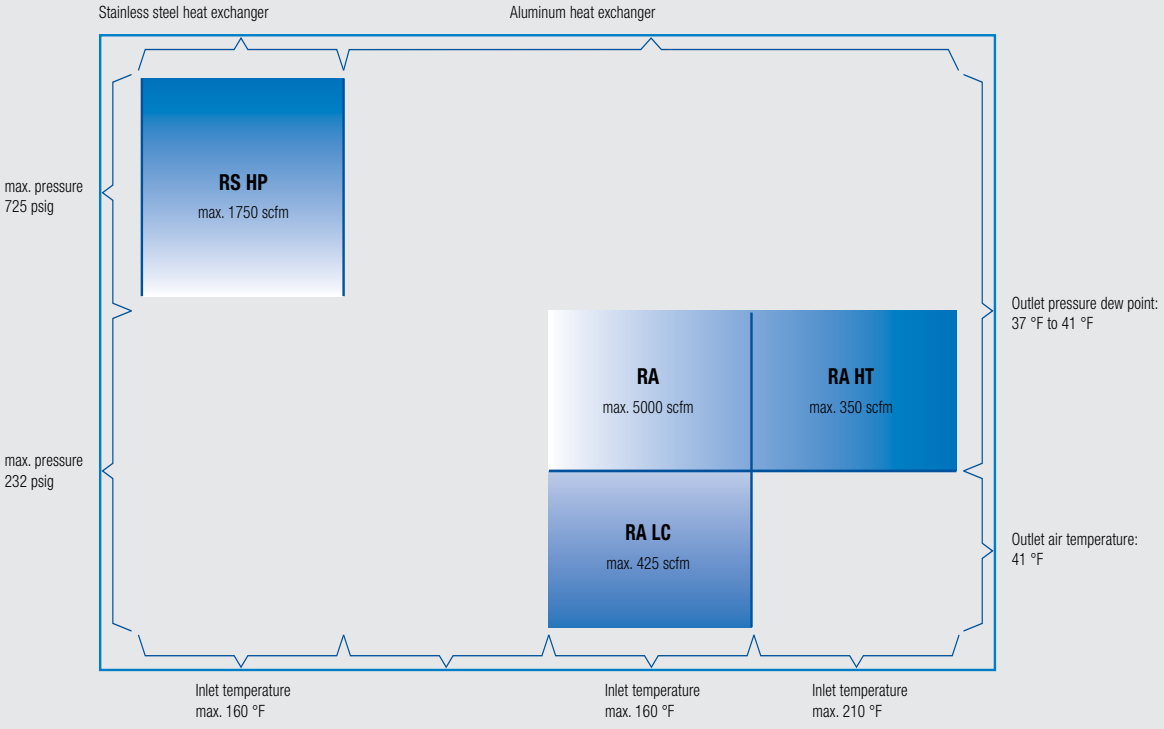
The compact design and open frame provides easy access to all components.

The most efficient method of drying compressed air: Compressed air is cooled to just above freezing point which means that water and oil aerosols contained in the air will condense. The two major cost factors involved are energy use and compensating for any pressure loss.

Standard refrigerant air dryers
RA

High pressure air dryers
RS HP

High temperature air dryers
RA HT

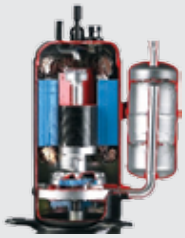


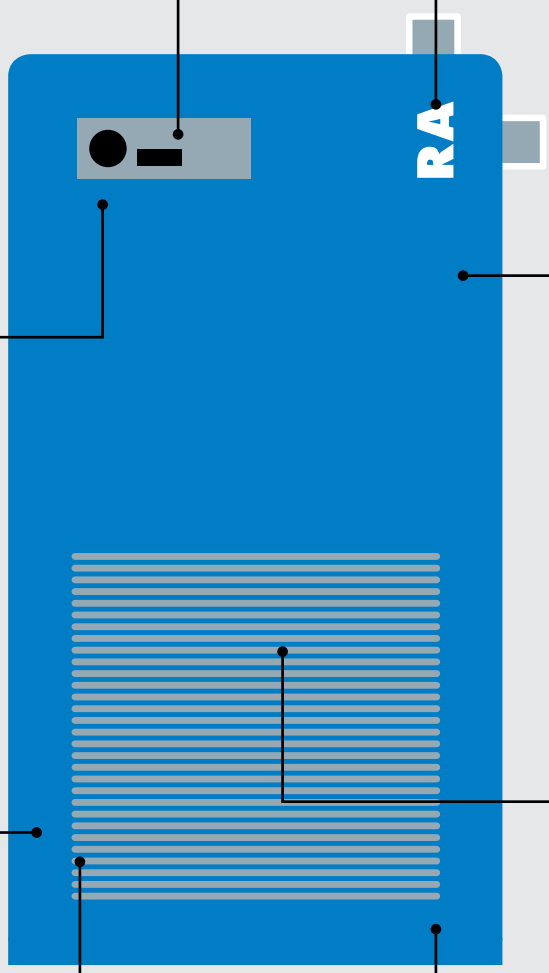
Highest Quality Compressed Air

An investment with more protection devices as standard including, internal fan overload protection, internal compressor overload protection, fully sealed high and low pressure switches, reverse phase and phase loss protection and more.

Patented, Vario Flow hot gas by-pass valve that is independent from the electronic control board maintains a stable dew point without freeze ups, and no adjustments are necessary.

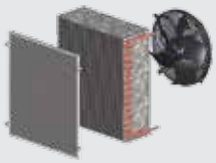
Only high end compressors are used across the entire range ensuring longer service life, higher efficiency and reduced power demand.





The entire framework, including the electronics, was thoughtfully crafted for each model size to provide maximum performance, easy maintenance, extended service life cycle and a small footprint.

The condenser and fan combination was designed to be synergistic in function: Through proper dimensioning a higher acceptable inlet temperature with maximum performance is achieved.



The inclusion of the BEKOMAT® zero air loss drain provides the fastest economic payback on the market, and is standard on all RA models.

Two controller types:

1. DMC 18 (RA 20 to 500)

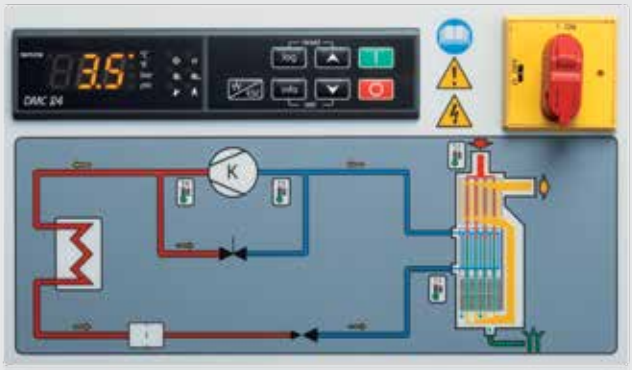
- Dewpoint temperature display and LCD display panel
- Condenser fan temperature control
- Adjustable high and low dewpoint alarm
- Potential free alarm contacts
- Displays services and alarms

DMC 18

2. DMC 24 (RA 600 to 5000)

- Includes all of the above plus:
- Fully programmable from the front panel
- Complete LED status indication
- Working hours metering
- Advanced service warning function
- Advanced alarm management function
- PC or control system connectivity

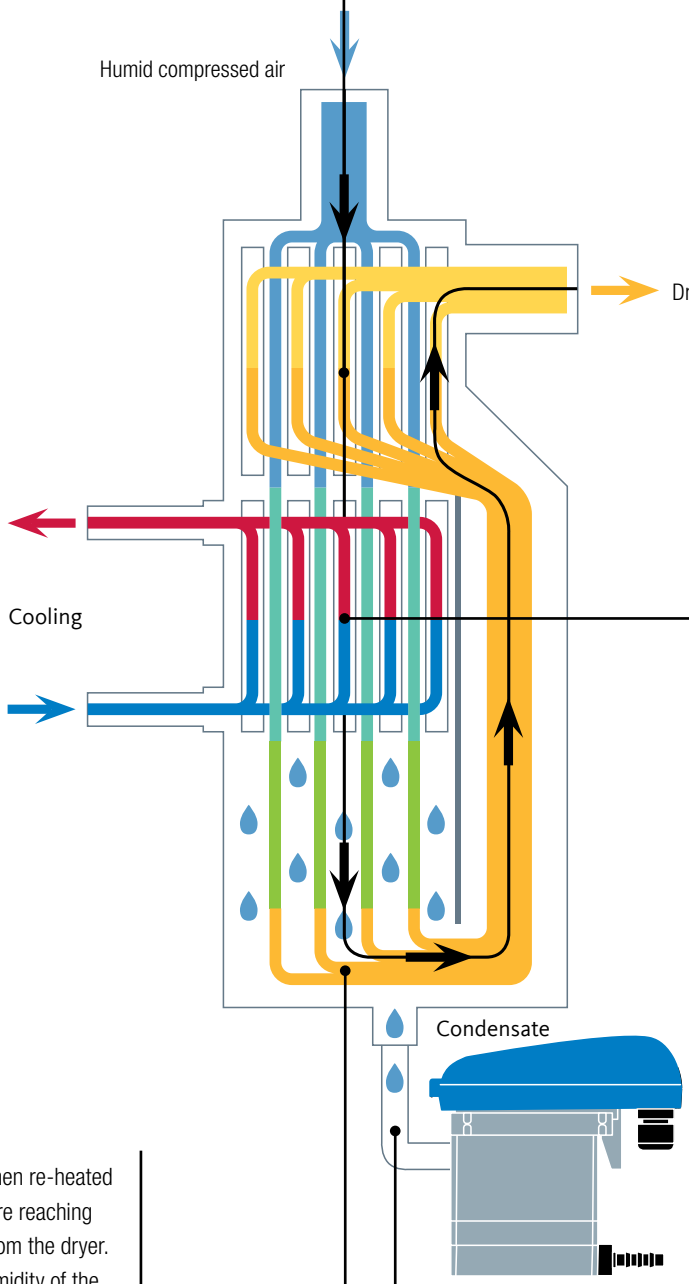
DMC 24



ENVIRONMENTALLY FRIENDLY COOLANT

The R134a and the R407C coolant used is ozone neutral and, in conjunction with the recyclable materials and the high energy efficiency, ensures maximum conservation of resources and modern and environmentally compatible refrigerant dryer operation.

Warm, moisture saturated compressed air enters the dryer and is cooled down to a temperature of +38 °F. The generous dimensions of the heat exchanger promote especially effective cooling, while flow resistance is reduced to an absolute minimum.



Contrary to conventional refrigerant drying 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 collection area, the flow velocity is greatly reduced, so the carryover of previously separated droplets is reliably prevented.

The dried, cold compressed air is then re-heated in an air-to-air heat exchanger before reaching the outlet and going 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.

Any resulting condensate from the cooling process is discharged from the RA unit through the electronic level controlled BEKOMAT® condensate drain in order to maximize energy savings.

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

Model	Flow Rate scfm	Pressure Drop psid	Connection Size	Standard Voltage	Required Pre-Filter	Dimensions			Weight lbs
						W in	D in	H in	
RA 20	20	0.44	½" NPT-F	115V / 1Ph	FF30	14	17	29	62
RA 30	30	1.16	½" NPT-F	115V / 1Ph	FF30	14	17	29	64
RA 50	50	1.60	½" NPT-F	115V / 1Ph	FF50	14	17	29	75
RA 75	75	1.89	1" NPT-F	115V / 1Ph	FF80	14	17	29	79
RA 100	100	2.47	1 ¼" NPT-F	115V / 1Ph	FF100	19	18	32	82
RA 125	125	2.18	1 ¼" NPT-F	115V / 1Ph	FF125	19	18	32	101
RA 150	150	2.90	1 ¼" NPT-F	115V / 1Ph	FF160	19	18	32	110
RA 200	200	2.18	1 ½" NPT-F	115V / 1Ph	FF200	22	23	35	121
RA 250	250	2.61	1 ½" NPT-F	230V / 1Ph	FF250	22	23	35	139
RA 300	300	1.31	2" NPT-F	230V / 1Ph	FF500	22	25	38	203
RA 350	350	1.89	2" NPT-F	230V / 1Ph	FF500	22	25	38	207
RA 400	400	1.02	2 ½" NPT-F	230V / 1Ph	FF500	26	29	44	331
RA 500	500	1.89	2 ½" NPT-F	460V / 3Ph	FF500	26	29	44	355
RA 600	600	2.47	3" Flange	460V / 3Ph	FF600	31	39	58	529
RA 800	800	3.05	3" Flange	460V / 3Ph	FF800	31	39	58	534
RA 1000	1000	2.76	3" Flange	460V / 3Ph	FF1150	31	39	58	608
RA 1250	1250	3.77	3" Flange	460V / 3Ph	FF1450	31	39	58	686
RA 1500	1500	3.05	4" Flange	460V / 3Ph	FF1750	45	47	69	1021
RA 1750	1750	2.03	4" Flange	460V / 3Ph	FF1750	45	47	69	1186
RA 2000	2000	2.90	4" Flange	460V / 3Ph	FF2100	45	47	69	1190
RA 2500	2500	3.77	4" Flange	460V / 3Ph	L102	45	47	69	1349
RA 3000	3000	2.90	6" Flange	460V / 3Ph	L150	51	69	71	1830
RA 4000	4000	2.90	6" Flange	460V / 3Ph	L156	55	87	74	2330
RA 5000	5000	3.77	8" Flange	460V / 3Ph	L156	55	87	74	2650

Correction Factors

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 Temperature °F	90	100	110	120	130	140	150	160
Correction Factor	1.16	1.00	0.82	0.68	0.61	0.52	0.45	0.40

Standard outlet pressure dew point	38 °F
Max. inlet air temperature	160 °F
Min./max. ambient temperature	34 °F / 120 °F
Max. inlet pressure	
RA 20 - 50	232 psig
RA 75 - 5000	200 psig
Required Pre-filtration	1.0 µm
Recommended Post-filtration	0.01 µm

Available Dryer Options	Model Sizes
230V / 1 Ph	RA 200
460V / 3 Ph	RA 200 - RA 400
Water Cooled	RA 600 - 2500
Sea Water Cooled	RA 600 - 2500
Anti-Corrosion Treatment	All model sizes
Dryer By-Pass	All model sizes

BOGE COMPRESSED AIR SYSTEMS

BOGE AIR. THE AIR TO WORK.

For four generations, customers from mechanical engineering, industry and trade have relied on BOGE know-how when it comes to planning, developing and manufacturing compressed air systems. They are fully aware of the fact that BOGE AIR is more than just ordinary compressed air: utmost safety, outstanding efficiency, excellent quality, maximized flexibility along with dependable service are the ingredients to transform BOGE AIR into air to work with – in Germany, in Europe and in more than 80 countries around the world.

Our ranges of services include the following:

- Energy efficient systems development
- Plant design and engineering
- System control and visualization
- Oil injected screw compressors
- Compressed air treatment
- Compressed air distribution and storage
- Compressed air accessories
- Compressed air service

MEMBER OF CAGI Compressed Air & Gas Institute

Performance Tested and Rated in Accordance with ISO 1217 25-200 HP CAGI Rotary Compressor Performance Verification Program CAGI Compressed Air & Gas Institute Program administered by Intertek Testing Services

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