



# DRYPOINT® RA HT

## High Inlet Temperature Refrigeration Dryers

### + Features and Benefits

#### UNIQUE HEAT EXCHANGER:

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

#### VARIOFLOW HOT GAS BY-PASS:

stable dew point regardless of varying operating conditions - patented design

#### INTEGRATED AFTERCOOLER:

with an integrated aftercooler, complete filtration and condensate drainage make it a true high temperature design



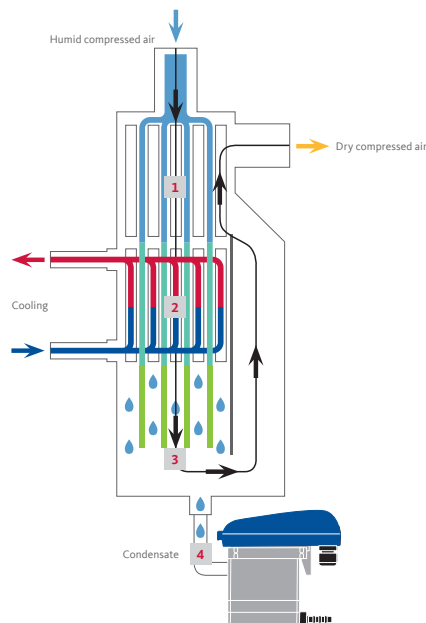
#### ENERGY SAVING TECHNOLOGY:

oversized condensers and smaller high performance compressors maximizes energy savings

#### MAINTENANCE FRIENDLY:

the entire range features an open frame that provides easy access to all components

### + Operating Principle



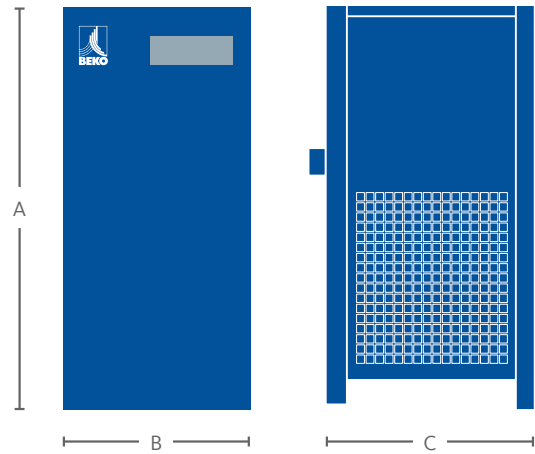
Warm compressed air, saturated with water vapor, is pre-cooled in the air/air heat exchanger (1) when entering the refrigeration dryer. The required cooling capacity of the refrigerant in the downstream air/refrigerant heat exchanger (2) is reduced by this action and the system becomes more energy-efficient. The gravitational force sustains a particularly high droplet separation of nearly 99%. In the very large condensate collection chamber with subsequent recirculation, the flow velocity is significantly reduced. Re-entrainment of already separated droplets is reliably prevented in

this manner (3). The accumulated condensate is discharged from the DRYPOINT® RA via the level-controlled BEKOMAT® condensate drain avoiding any compressed air losses, and can be processed reliably using processing systems such as the QWIK-PURE® oil-water separation system or the BEKOSPLIT® emulsion-splitting plant (4). Prior to leaving the DRYPOINT®, the dried and cold compressed air is reheated in the air/air heat exchanger. Through this process, the relative air humidity is significantly reduced and the cooling capacity employed is recovered by up to 60%.

# DRYPOINT® RA HT High Inlet Temperature Refrigeration Dryers

with integrated aftercooler and BEKOMAT® or timer drain

Standard outlet pressure dew point	45 °F
Max. inlet air temperature	210 °F
Min. / Max. ambient temperature	35/122 °F
Max. inlet pressure	200 psig
Required Pre-filtration	included
Recommended Post-filtration	.01 µm



Model	+ 45° F Outlet Flow Rate (scfm)	Connection Size	Standard Voltage	Power Input (kW)	A (in)	B (in)	C (in)	Weight (lbs)
RA HT 20	20	½" NPT-F	115V/1Ph	.21	25	17	16	82
RA HT 30	30	½" NPT-F	115V/1Ph	.28	25	17	16	88
RA HT 40	40	½" NPT-F	115V/1Ph	.31	25	17	16	90
RA HT 50	50	½" NPT-F	115V/1Ph	.46	25	17	16	93
RA HT 75	75	1" NPT-F	115V/1Ph	.77	45	16	18	112
RA HT 100	100	1" NPT-F	115V/1Ph	.88	52	20	20	134
RA HT 150	150	1 ¼" NPT-F	115V/1Ph	1.10	52	20	20	146
RA HT 200	200	1 ¼" NPT-F	230V/1Ph	1.55	55	22	23	165
RA HT 250	250	1 ½" NPT-F	230V/1Ph	1.82	55	22	23	185
RA HT 300	300	1 ½" NPT-F	230V/1Ph	2.60	59	28	31	291
RA HT 350	350	2" NPT-F	230V/1Ph	2.70	59	28	31	304

## Correction Factors

Operating Pressure psig	60	80	100	120	140	160	180	200
Correction Factor	.79	.91	1.00	1.07	1.13	1.18	1.23	1.27

Ambient Air Temperature °F	80	90	100	105	110	115	120
Correction Factor	1.22	1.11	1.00	.94	.89	.83	.78

Inlet Air Temperature °F	140	160	170	180	195	210
Correction Factor	1.26	1.13	1.07	1.00	.90	.81

Pressure Dew Point °F	37	41	45	50
Correction Factor	.78	.90	1.00	1.12

Subject to technical errors, changes, omissions and/or corrections without prior notice.