

**ADSORPTION DRYERS** 

EFFICIENT, COMPACT,

POWERFUL







# COMPACT, POWERFUL, EFFICIENT

Stable, defined compressed air quality is an important precondition for trouble-free, economic production process.

BEKO offers efficient components and systems for compressed air processing and transport for all kinds of requirements. This includes an extensive adsorption dryer program under the trade name DRYPOINT® AC.

DRYPOINT® AC is used where quality compressed air with a constant degree of dryness is consistently required. DRYPOINT® AC represents a real system solution: The inline integration of CLEARPOINT® compressed air filters, combined with BEKOMAT® condensate drains represent a major safety asset.

DRYPOINT<sup>®</sup> AC compressed air adsorption dryers are available in two different production series. For the performance class up to 112 m<sup>3</sup>/h (at 7 bar), you will find information to facilitate a decision and technical data in this brochure. The BEKO technical adviser will be happy to answer any further questions regarding both production series and compressed air processing using BEKO products.



# + T • REDUCTION OF OPERATING COSTS

+2:

HIGH OPERATIONAL SAFETY



+4: EASY TO INSTALLATION

+5: CUSTOM-MADE CONCEPT

+10 °C 6 Membrane dryers DRYPOINT® M 5 +7 °C on dryers **DRYPOINT® R** ▶ m³/h +3 °C 4 3 -20 °C DRYPOINT® AC **DRYPOINT® AC HP** -40 °C 2 1 -70°C -

#### THE COMPLETE DRYPOINT®-PROGRAM

Quality class according to ISO 8573-1 Pressure dew point

# FIVE WEIGHTY ARGUMENTS FOR THE PROPER DECISION

#### SIGNIFICANT REDUCTION OF OPERATING COSTS

 Flow-optimized CLEARPOINT<sup>®</sup> compressed air filters and an energy-saving compressor synchronisation control, which can be energized via optional software, reduce the costs. No regeneration air escapes from the system during the compressor downtime.

#### **HIGH OPERATIONAL SAFETY**

- An adsorption dryer which is installed behind a receiver usually has larger dimensions in order to exclude overload in the compressor synchronization. DRYPOINT® AC – installed behind the receiver – is far more economical and safe as a result of our control system. The optional energy management automatically determines the delay time using the data acquired from the station. During this period, the dryer remains active. There is no risk of overload and the oversizing of components is unnecessary.
- At the prefilter, a BEKOMAT<sup>®</sup> 20 FM drains off the condensate. Alternatively, the integrated solenoid valve may be used.
- The drying agent is contained in cartridges, immediately ready for use. Hence, the replacement of the drying agent is speedily and safely done.
- The drying agent is pre-stressed in the cartridge by means of a spring. This construction means:
  - No function impairment as a result of bypass formation
  - No early wear and tear as a result of drying agent abrasion, particularly at pulsating volume flows (piston compressor)
- The cartridges are equipped with an integrated dust filter.

Easy replacement of the adsorbent cartridges

Clear displays provide information about the operating states of the dryer and of the condensate drain.



- Function monitoring and control via an intelligent processor. Integrated features:
  - power supply
  - regeneration on the left-hand side/right-hand side
  - solenoid valves and electronics
  - potential-free contact with the fault-signalling indication in a control room
- Fault signal on the display
- Memory function: operating data will be saved during the breakdown of the supply voltage.
   Subsequent to re-activation, the drying cycle will be terminated in the operationally reliable mode.





#### **EXTREMELY EASY TO MAINTAIN**

- The electronic control contains an integrated service module with an automatic service interval indicator and a PC interface for remote monitoring and troubleshooting.
- Thanks to the cartridges, the replacement of the drying agent is effected easily and speedily – without disconnecting the compressed air line.

Using BEKO's DRYPOINT® AC reduces service requirements by up to 75%, compared with conventional dryers.

#### EASY INSTALLATION

DRYPOINT® AC dryers are prepared for the most diverse range of installation and integration conditions (standard fittings).

- Broadband power supply for 100 240 VAC, 12 – 24 VDC, 50 – 60 Hz.
- Symmetrical multiport distributor for a left-hand or right-hand side compressed air input.
- Installation of the input filter at the side, in front of or behind the dryer.
- The dryer may be mounted horizontally or vertically.

Optional software for the setting and control of the dryer.

#### **CUSTOM-MADE CONCEPT**

DRYPOINT® AC dryers may be adjusted to altered operating conditions quickly and easily.

- PC program for the monitoring and adjustment of the operating mode, including integrated energy management and an external alarm function.
- Extensive CLEARPOINT® filter program.
- Easy adjustment to modified pressures as a result of an easily accessible regeneration air jet.
- Optional starting device.

The compressed air inlet may be installed flexibly. Horizontal or vertical operation is possible.





#### **TECHNICAL DATA**

## **BEKO DRYPOINT® AC**

	Connection	Volum		mensio	Weight		
		m³/h	scfm	A	В	С	kg
AC 119	G 3/8	10.2	6	504	281	92	14
AC 122	G 3⁄8	13.6	8	565	281	92	15
AC 126	G <sup>3</sup> /8	17.0	10	635	281	92	16.5
AC 136	G <sup>3</sup> /8	25.5	15	815	281	92	19.5
AC 148	G 3⁄8	37.4	22	1065	281	92	24
AC 171	G 3⁄8	56.1	33	1460	281	92	31
AC 191	G 1/2	74.8	44	1065	281	184	47
AC 196	G 1/2	112.2	66	1460	281	184	61

#### Correction factors pressure/temperature

bar	4	5	6	7	8	9	10	11	12	13	14	15	16
35 °C	0.63	0.75	0.88	1.00	1.13	1.25	1.38	1.50	1.63	1.75	1.88	2	2.12
40 °C	0.55	0.66	0.77	0.88	0.99	1.10	1.21	1.32	1.43	1.54	1.65	1.76	1.87
45 °C	0.42	0.50	0.59	0.67	0.76	0.84	0.92	1.01	1.09	1.17	1.26	1.34	1.42
50 °C	0.35	0.41	0.48	0.55	0.62	0.69	0.76	0.83	0.90	0.96	1.03	1.10	1.17

Performance data in accordance with DIN ISO 7185 relates to an input pressure of 7 bar (0) and an inlet temperature of 35 °C. Please multiply by the appropriate corrective factors where the input conditions deviate. The regeneration air portion depends on the actual operating conditions. At a system pressure of 7 bar, the average demand for regeneration air amounts to approximately 15%.

#### **TECHNICAL DATA**

Maximum operating overpressure Pressure dew point default setting Optional pressure dew points Inlet temperature air Ambient temperature Electric power supply (other voltages on request) Input filter Integrated dust filter 16 bar -40 °C at 70% of the nominal capacity: -70 °C 2 °C / 50 °C min./max. 5 °C / 50 °C min./max. 100–240 VAC, 50–60 Hz; 12–24 VDC 0.01 μm, 0.01 mg/m<sup>3</sup> 1.0 μm

#### DIMENSIONS



We are also pleased to inform you about our DRYPOINT® AC program for volume flows of 135–1.550 m³/h. Please ask for the brochure.



### **BEKOMAT®**

The convincing concept for condensate discharge

# ÖWAMAT<sup>®</sup>

Clean and safe oil/water separation. Particularly efficient with OEKOSORB® replacement filters

#### **BEKOSPLIT®**

Splitting plants for the reliable, economic and environmentally friendly processing of emulsions

### **DRYPOINT®**

The complete program for compressed air drying: Refrigeration dryers, adsorption dryers, membrane dryers

#### **CLEARPOINT®**

Process-safe and flow-optimised filters and water separators for compressed air and technical gases

### **BEKOFLOW®**

The innovative, cost-saving compressed air pipework

### **BEKOBLIZZ®**

Optimised cooling processes with deep-cooled, dry compressed air

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