



**DRYPOINT® AC**  
**THE COMPLETE RANGE**  
**OF HIGHLY EFFICIENT**  
**DESICCANT DRYERS**

# 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.

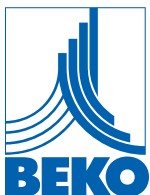
## EXPERIENCE

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.  
The complete program. Worldwide.*



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# ON DEMAND DRYING FOR EVERY APPLICATION

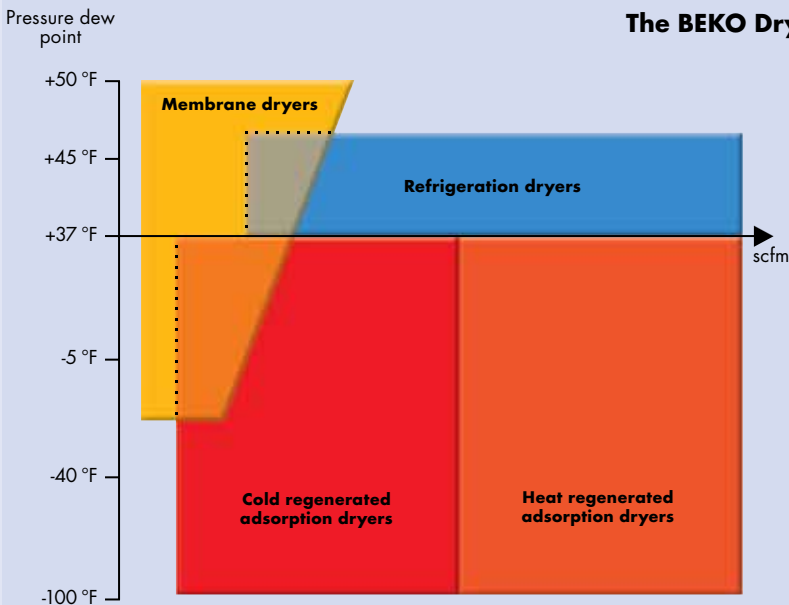


True Innovation in Desiccant Drying - The Complete Range, Only from **BEKO**.

## 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 dryers – BEKO offers highly efficient, environmentally friendly and cost effective compressed air dryers to suit any task.

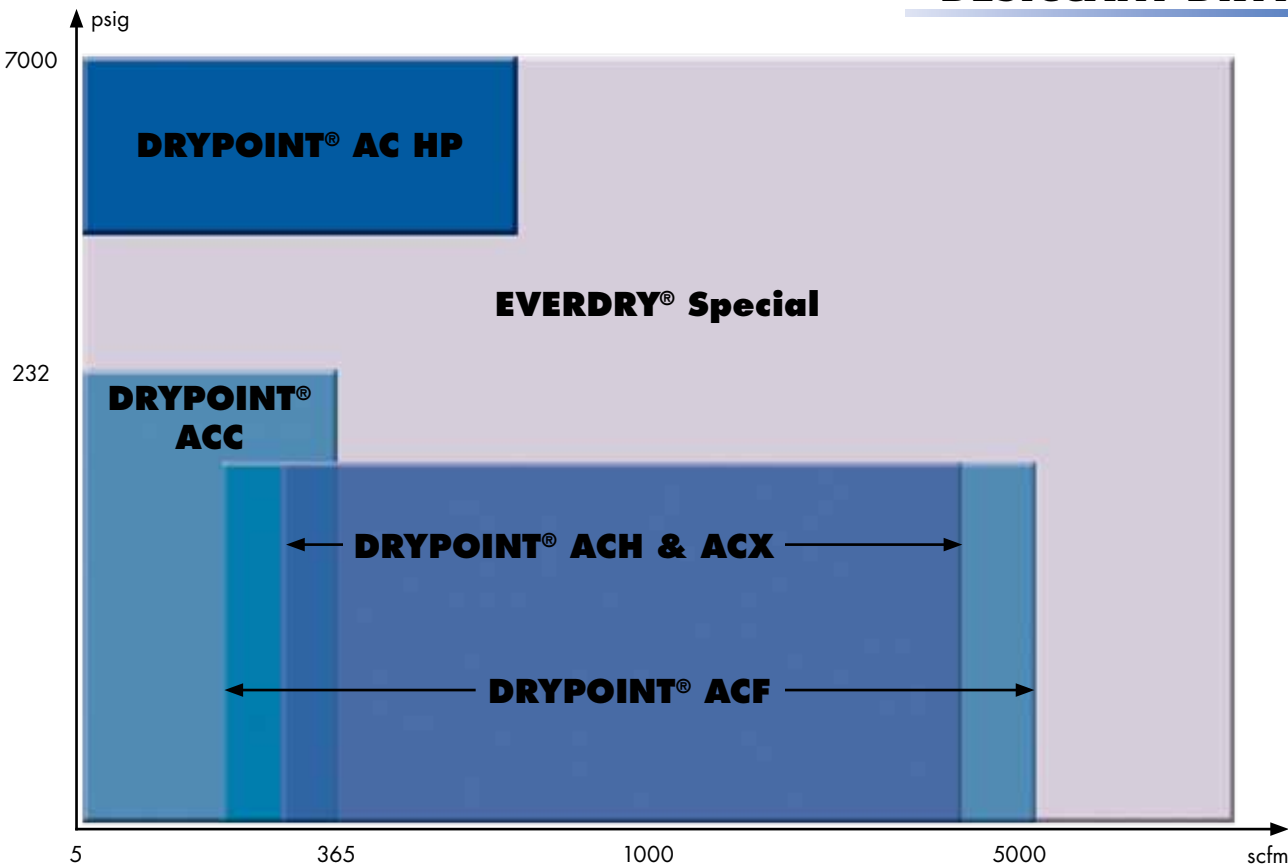


Within BEKO's product portfolio, we are able to offer our customers a complete range of compressed air drying solutions for every application.

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.

# A FULL RANGE OF DESICCANT DRYING



### DRYPOINT® ACC

DRYPOINT® ACC compressed air desiccant dryers were designed specifically as an ultra-compact alternative to traditional designs. They include a pre-filter and integrated dust filter as standard equipment, use a convenient cartridge based system and are capable of producing a -100 °F pressure dew point when sized accordingly.



### DRYPOINT® ACF, ACH and ACX

The full-size line of DRYPOINT® AC compressed air desiccant dryers are available in either heatless, heated, or blower operated heated purge designs. All model sizes feature NEMA 4 electronic controls and cycle failure alarm as standard. A purge flow meter is also included on larger models.



### DRYPOINT® AC HP

DRYPOINT® AC HP compressed air desiccant dryers are designed for systems with operating pressures in excess of 1,000 psig. Each dryer is carefully sized and crafted to the specific application, and is constructed of the highest quality, stainless steel. These dryers are full-featured and ready for immediate operation in the most restrictive and stringent environments.



## DESICCANT DRYING WITH THE BEKO ADVANTAGE

### A SYNERGY OF ENGINEERING

The operation of compressed air systems with conventional adsorption dryers can suffer from high, system-related pressure drop. This deficiency needs to be compensated via an increase in compressor performance, thus requiring a higher energy input.

DRYPOINT® AC adsorption dryers offer a convincing, economic solution to the problem: BEKO has developed an adsorption dryer design that limits the pressure drop to an average of only 5.0 psig, including pre and post filtration. Compared with conventional dryer designs, this represents an improvement of over 50%. The energy savings alone offer a complete economic payback after an average of only three years.

### YOUR ADVANTAGE:

DRYPOINT® AC adsorption dryers are equipped with CLEARPOINT® compressed air filters and BEKOMAT® condensate drains creating the best, most complete compressed air processing solution; only from BEKO. This not only adds to the stability and reliability of this dryer range, but transforms what once was one of the most inefficient pieces of compressed air treatment equipment into an energy saving one.



**Note:** This image *does not* depict technical data. Shown dryer model will be available late 2011.

**+1:**

### INNOVATIVE, RELIABLE DESIGN

*Slanted seat valve with stainless steel core, mounted individually into a stress relieving frame*

**+2:**

### ENERGY SAVING TECHNOLOGY

*An advanced controller, high-end desiccant and zero air loss drain technology with an optional demand system*

**+3:**

### ULTRA COMPACT

*Up to 30% reduction in overall height with a unique fit frame design and easy connectivity resulting in maximum portability*

**+4:**

### EASE OF MAINTENANCE

*Innovative, open frame design where all features are front-mounted, simplifies maintenance and reduces PM costs*

**+5:**

### WIDE STANDARD RANGE

*From 4 to 5,000 scfm and 60 to 5,000 psig with fully customized engineered solutions available*

# THE BEST CHOICE IN FUNCTIONAL RELIABILITY

## THE FUNCTIONAL PRINCIPLE

DRYPOINT® AC devices are cold-regenerated desiccant dryers that function according to the alternating pressure method principle (pressure swing). Two vessels, filled with strongly hygroscopic drying agent, are placed in parallel with each other. While compressed air is dried in one vessel, regeneration of the drying agent takes place in the other. Time dependent controls switch the two.

Highly efficient adsorbents guarantee that a reliable pressure dew point is maintained at all times as humidity is adsorbed.

Regeneration air nozzle expands separated partial stream to atmospheric pressure.

Special and uniquely designed frame guarantees stress reduction on mounted pipe, valves and vessels.

The equally efficient CLEARPOINT® dust filter ensures the quality of air downstream.

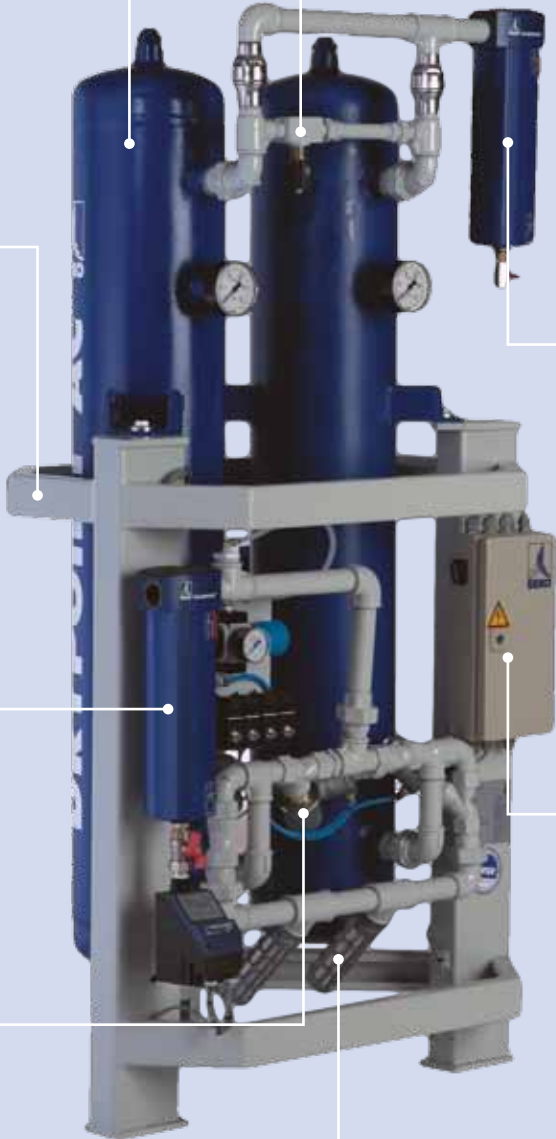
The highly efficient CLEARPOINT® filters are standard and reliably remove contamination, such as solid particles, oil particles and bulk water. Any upstream contamination is discharged reliably and with maximum energy efficiency by the BEKOMAT® drain.

The controller features compressor synchronization controls as standard, which dramatically reduces energy costs.

Highest quality slanted seat valve with a stainless steel core that supports maximum reliability.

Saturated regeneration air is released back into the environment via generously dimensioned silencers, lowering the overall noise output of the dryer.

**Note: This image does not depict technical data. Shown dryer model will be available late 2011.**



# TECHNICAL DATA

## DRYPOINT® AC

### DRYPOINT® ACC Compact Series Heatless Desiccant Air Dryers

Model	Flow Rate scfm	Connection Size	Tower Configuration	Dimensions in			Weight lbs
				Height	Width	Depth	
ACC 4-NA	4	3/8" NPT-F	Simplex	18	11	4	29
ACC 6-NA	6	3/8" NPT-F	Simplex	20	11	4	31
ACC 8-NA	8	3/8" NPT-F	Simplex	22	11	4	33
ACC 10-NA	10	3/8" NPT-F	Simplex	25	11	4	36
ACC 15-NA	15	3/8" NPT-F	Simplex	32	11	4	43
ACC 25-NA	25	3/8" NPT-F	Simplex	42	11	4	53
ACC 35-NA	35	3/8" NPT-F	Simplex	58	11	4	68
ACC 45-NA	45	3/4" NPT-F	Simplex	28	21	7	117
ACC 55-NA	55	3/4" NPT-F	Simplex	32	21	7	130
ACC 65-NA	65	3/4" NPT-F	Simplex	36	21	7	141
ACC 85-NA	85	1" NPT-F	Simplex	44	21	7	165
ACC 105-NA	105	1" NPT-F	Simplex	56	21	7	200
ACC 135-NA	135	1 1/4" NPT-F	Simplex	64	21	7	225
ACC 175-NA	175	1 1/4" NPT-F	Simplex	80	21	7	271
ACC 215-NA	215	1 1/4" NPT-F	Duplex	56	21	14	379
ACC 275-NA	275	1 1/4" NPT-F	Duplex	64	21	14	423
ACC 365-NA	365	1 1/4" NPT-F	Duplex	80	21	14	511

### Correction Factors

Operating Pressure psig	60	70	80	90	100	110	120	130	140	150
Correction Factor	0.65	0.73	0.82	0.91	1.00	1.09	1.18	1.27	1.35	1.44

Inlet Temperature °F	80	85	90	95	100	105	110	115	120
Correction Factor	1.07	1.06	1.05	1.03	1.00	0.94	0.88	0.78	0.67

Standard outlet pressure dew point	-40 °F
Optional outlet pressure dew point	-100 °F
Min./max. operating pressure	58 psig / 232 psig
Min./max. air inlet temperature	35 °F / 120 °F
Min./max. ambient air temperature	41 °F / 120 °F
Intelligent Power Supply	12-24 VDC or 100-240 VAC; 50-60 Hz
Inlet filter	0.01 µm coalescing filter
Outlet filter	1.0 µm dust filter

## TECHNICAL DATA

### DRYPOINT® AC

#### DRYPOINT® ACF Full Size Heatless Desiccant Air Dryers

Model	Flow Rate scfm	Connection Size	Filter Model Size	Dimensions in			Weight lbs
				Height	Width	Depth	
ACF 80-NA	80	1" NPT-F	M010	70	31	20	475
ACF 120-NA	120	1" NPT-F	M010	70	36	20	490
ACF 160-NA	160	1" NPT-F	M012	70	36	20	560
ACF 220-NA	220	1 1/2" NPT-F	M015	90	40	20	650
ACF 320-NA	320	1 1/2" NPT-F	M020	90	52	20	780
ACF 440-NA	440	1 1/2" NPT-F	M022	90	54	20	950
ACF 580-NA	580	2" NPT-F	M023	96	56	22	1150
ACF 740-NA	740	2" NPT-F	M025	96	56	30	1500
ACF 900-NA	900	2 1/2" NPT-F	M027	96	65	38	1800
ACF 1300-NA	1300	3" Flange	L100	96	76	42	2200
ACF 1600-NA	1600	3" Flange	L100	92	88	48	3700
ACF 2050-NA	2050	4" Flange	L102	108	88	48	4500
ACF 2980-NA	2980	4" Flange	L150	116	100	58	6000
ACF 4000-NA	4000	6" Flange	L156	118	134	52	7600
ACF 5100-NA	5100	6" Flange	L156	118	140	60	9500

#### Correction Factors

Operating Pressure psig	60	70	80	90	100	110	120	130	140	150
Correction Factor	0.65	0.73	0.82	0.91	1.00	1.09	1.18	1.27	1.35	1.44

Inlet Temperature °F	80	85	90	95	100	105	110	115	120
Correction Factor	1.07	1.06	1.05	1.03	1.00	0.94	0.88	0.78	0.67

Standard outlet pressure dew point	-40 °F
Optional outlet pressure dew point	-100 °F
Min./max. operating pressure	60 psig / 150 psig
Min./max. air inlet temperature	40 °F / 130 °F
Min./max. ambient air temperature	40 °F / 120 °F
Intelligent Power Supply	115 VAC / 1 Phase / 60 Hz
Inlet filter	0.01 µm coalescing filter
Outlet filter	1.0 µm dust filter

# TECHNICAL DATA

## DRYPOINT® AC

### DRYPOINT® ACH Heated Purge Desiccant Air Dryers

Model	Flow Rate scfm	Connection Size	Purge Flow Meter	Height	Dimensions in		Weight lbs
					Width	Depth	
ACH 260-NA	260	1" NPT-F	Optional	72	50	22	475
ACH 355-NA	355	1" NPT-F	Optional	72	54	24	600
ACH 460-NA	460	1 1/2" NPT-F	Optional	90	54	24	700
ACH 575-NA	575	1 1/2" NPT-F	Optional	92	58	24	850
ACH 720-NA	720	2" NPT-F	Standard	92	62	26	1000
ACH 1010-NA	1010	3" NPT-F	Standard	96	66	30	1250
ACH 1300-NA	1300	3" NPT-F	Standard	96	72	30	1600
ACH 1725-NA	1725	3" NPT-F	Standard	96	68	38	1800
ACH 2350-NA	2350	4" Flange	Standard	96	80	42	2300
ACH 3250-NA	3250	4" Flange	Standard	96	92	48	3800
ACH 4050-NA	4050	6" Flange	Standard	108	92	48	4600

### DRYPOINT® ACX Blower Operated Heated Purge Desiccant Air Dryers

Model	Flow Rate scfm	Connection Size	Purge Flow Meter	Height	Dimensions in		Weight lbs
					Width	Depth	
ACX 260-NA	260	1" NPT-F	Optional	79	55	24	523
ACX 355-NA	355	1" NPT-F	Optional	79	59	26	660
ACX 460-NA	460	1" NPT-F	Optional	99	59	26	770
ACX 575-NA	575	1 1/2" NPT-F	Optional	101	64	26	935
ACX 720-NA	720	2" NPT-F	Standard	101	68	29	1100
ACX 1010-NA	1010	3" NPT-F	Standard	106	73	33	1375
ACX 1300-NA	1300	3" NPT-F	Standard	106	79	33	1760
ACX 1725-NA	1725	3" NPT-F	Standard	106	75	42	1980
ACX 2350-NA	2350	4" NPT-F	Standard	106	88	46	2530
ACX 3250-NA	3250	4" Flange	Standard	106	101	53	4180
ACX 4050-NA	4050	6" Flange	Standard	119	101	53	5060

### Correction Factors

Operating Pressure psig	60	70	80	90	100	110	120	130	140	150
Correction Factor	0.65	0.73	0.82	0.91	1.00	1.09	1.18	1.27	1.35	1.44

Inlet Temperature °F	80	85	90	95	100	105	110	115	120
Correction Factor	1.07	1.06	1.05	1.03	1.00	0.94	0.88	0.78	0.67

Standard outlet pressure dew point	-40 °F
Optional outlet pressure dew point	-100 °F
Min./max. operating pressure	58 psig / 150 psig
Min./max. air inlet temperature	35 °F / 120 °F
Min./max. ambient air temperature	41 °F / 120 °F
Intelligent Power Supply	12-24 VDC or 100-240 VAC; 50-60 Hz
Inlet filter	0.01 µm coalescing filter
Outlet filter	1.0 µm dust filter

## OUTSTANDING SOLUTIONS FOR EXCEPTIONAL REQUIREMENTS

### A SYNERGY OF ENGINEERING

Many solid particles, high oil fractions, aggressive condensates under high pressure: Safe and reliable compressed-air drying under such conditions requires experience and competence.

The BEKO DRYPOINT® AC HP convinces by its conception, performance and structural details with a high surplus value. DRYPOINT® AC HP high-pressure dryers are uncompromisingly designed to meet special requirements. All pressure-bearing components are manufactured out of stainless steel. Therefore, aggressive condensates on the interior walls of the tubes, which accumulate during operation, will not damage the desiccant container and the filter.

On the following pages, you will find further examples which demonstrate the exemplary nature of the DRYPOINT® AC HP as an efficient and economical high-pressure dryer.



**+1:**

#### STAINLESS STEEL STANDARD

*Corrosion resistant guaranteeing operational reliability in any environment*

**+2:**

#### SHOCK TESTED AND APPROVED

*Shock tested to withstand up to 30 G and TÜV approved*

**+3:**

#### STRESS RELIEVING DESIGN

*Components are mounted individually and are independent from the frame, including all valves*

**+4:**

#### ENERGY SAVING TECHNOLOGY

*Standard purge air saving (PAS) system with optional low pressure purge air connection and optional freeze protection*

**+5:**

#### NON-WELDED VESSELS

*Stainless steel tube design, no welded parts are employed in construction ensuring maximum pressure tolerances*

# MAXIMUM PERFORMANCE DEMANDS FUNCTIONALITY

## THE FUNCTIONAL PRINCIPLE

DRYPOINT® AC HP devices are cold-regenerated desiccant dryers that function according to the alternating pressure method principle (pressure swing). Stainless steel construction and only premium components allow these dryers to function reliably in excess of 7,000 psig and continue operation even under high levels of shock and vibration.

Highly efficient adsorbents guarantee the reliable under running of the required pressure dew point.

As standard, the adsorption beds consist of stainless steel profiles with large cross sectional apertures and a screw top. This does not only reduce the maintenance efforts, but also facilitates the internal inspection of the containers.

The highly efficient filters, as standard in a stainless steel, reliably remove contamination, such as solid particles and oil fractions.

Free condensate which, for example, enters the container through post condensation, is retained by a highly efficient settling chamber which, in this form, is unique, with its separator and storage function. It is then discharged with the regeneration air.

The optimized introduction of air ensures even perfusion of the desiccant bed and thus aids in the drying process.

The DRYPOINT® AC HP is equipped with individual valve units. The separate fixings relieve the tubes. Therefore, the dryer is resistant to vibration. Operational reliability is enhanced, and the cost for spare parts reduced.

Stressed components are, as standard, supplied in stainless steel.

The compact design enhances the flexibility of the set-up.

Two separate pressure reducers for the control and regeneration air guarantee reliable operation at all times.

The low-pressure area is protected by a safety valve.

The control and regeneration air is taken downstream of the final filter. This results in a more reliable function and control.

The base plate enables simple transport and serves to additionally stabilize the dryer. A stable frame protects against external influences.



# TECHNICAL DATA

## DRYPOINT® AC HP

Model	Flow Rate scfm	Pipe Size Ø in	Max. Pressure psig	Dimensions in			Weight lbs
				Height	Width	Depth	
AC 60 HP 100	35	1/2"	1450	57	31	18	350
AC 90 HP 100	50	1/2"	1450	59	31	18	350
AC 160 HP 100	95	1/2"	1450	59	31	18	400
AC 250 HP 100	145	1/2"	1450	70	31	18	550
AC 390 HP 100	230	1/2"	1450	70	33	20	570
AC 110 HP 250	65	1/2"	3600	53	31	18	460
AC 145 HP 250	85	1/2"	3600	53	31	18	485
AC 210 HP 250	125	1/2"	3600	66	31	18	540
AC 440 HP 250	260	1/2"	3600	66	31	18	620
AC 655 HP 250	385	1/2"	3600	70	33	20	680
AC 110 HP 350	85	1/2"	5000	53	31	18	460
AC 190 HP 350	110	1/2"	5000	53	31	18	485
AC 265 HP 350	155	1/2"	5000	66	31	18	540
AC 540 HP 350	315	1/2"	5000	66	31	18	620
AC 620 HP 350	480	1/2"	5000	70	33	20	680

### Correction Factors

Operating Temperature	85 °F	95 °F	100 °F	110 °F	120 °F	130 °F
1,085 psig (AC HP 100)	0.78	0.76	0.59	0.46	0.36	0.29
1,450 psig (AC HP 100)	1.03	1.00	0.78	0.61	0.48	0.38
2,900 psig (AC HP 250)	0.86	0.83	0.65	0.51	0.40	0.32
3,600 psig (AC HP 250)	1.03	1.00	0.78	0.61	0.48	0.38
4,350 psig (AC HP 350)	0.90	0.90	0.70	0.54	0.43	0.34
5,000 psig (AC HP 350)	1.03	1.00	0.78	0.61	0.48	0.39

Regeneration air requirements: 3 % at -40 °F PDP

Standard outlet pressure dew point	-40 °F
Optional outlet pressure dew point	-100 °F
Min./max. operating pressure	available on request
Min./max. air inlet temperature	40 °F / 130 °F
Min./max. ambient air temperature	40 °F / 120 °F
Intelligent Power Supply	85-264 VAC / 50-60 Hz or 24 VDC
Inlet filter	0.01 µm coalescing filter
Outlet filter	1.0 µm dust filter

Each DRYPOINT® AC HP is individually adjusted to the application conditions and to the customer's requirements. The device thus achieves the highest level of cost-effectiveness.

We would be happy to give you further information regarding processing and drying of technical gases, such as nitrogen, as well.

Higher pressures and performances are available upon request. Performance data is in accordance with DIN ISO 7183 and are based on the maximum pressure rating and an inlet temperature of 95 °F. At deviating inlet conditions, the nominal value should be multiplied by the relevant correction factor.