





by Gardner Denver

## Modular Adsorption Dryers

Highly efficient air treatment





## Totally dry and clean air

## The A-Series modular compressed air dryers - a dedicated solution for every application

By combining the proven benefits of desiccant drying with modern design, CompAir provides an extremely compact and reliable system to totally dry and clean compressed air.

At the heart of any compressed air treatment solution is the dryer, it's purpose, to remove water vapour, stop condensation, corrosion and in the case of adsorption dryers, inhibit the growth of micro-organisms.

The CompAir A-Series of heatless regenerative adsorption dryers have proven to be the ideal solution for many thousands of compressed air users worldwide in a wide variety of industries.

## Why chose adsorption dryer technology?

Compressed air purification must deliver uncompromising performance and reliability whilst providing the right balance of air quality with lowest cost of operation.

Heatless adsorption dryers, which are also known as PSA dryers, are the simplest type of adsorption dryer available and have long been the dryer of choice for many industries and applications. They are simple, reliable and cost effective and for small to medium flow systems, often the only viable technology available. Additionally, modular heatless dryers such as the A-Series provide an even more reliable, smaller, more compact & lightweight dryer which can be installed in both, the compressor room or at the point of use.



Clean, dry air improves production efficiency and reduces maintenance costs and downtime. Adsorption dryers provide the highest levels of dry compressed air.

#### **A-Series Product Overview**

#### **A1LX to A7LX Series**

Flowrates from 0.09 m<sup>3</sup>/min



#### **A7XS to A50XS Series**

Flowrates from 0.68 m<sup>3</sup>/min



#### A68XS to A340XS Series

Flowrates from 6.8 m³/min



#### A068XLE - A340XLE

Flowrates from 6.8 m<sup>3</sup>/min



#### How it works

Adorption dryers work on the principle of moisture always migrating to the driest medium possible. Therefore, water vapour is removed from compressed air by passing it over an adsorbent desiccant material.

As the air contacts the adsorbent material, water vapour transfers from the wet air to the dry desiccant, however, adsorbent materials have a fixed adsorption capacity and once this capacity is reached, they must be regenerated or replaced. Therefore, to provide a continuous supply of clean, dry compressed air, adsorbent dryers utilise two chambers of desiccant material and at any one time, whilst one chamber is on-line, drying the incoming compressed air, the other is either off-line, being regenerated or is re-pressurised, ready to come on-line. All adsorption dryers remove water in this manner.

The energy consumed by an adsorption dryer can be directly attributed to the method used to regenerate the adsorbent material. The CompAir A-Series dryers utilise the Heatless PSA method to regenerate the adsorbent material.

## The benefits of heatless adsorption dryers:

- Robust and reliable industry proven design
- Suitable for all industries and applications. Some adsorption dryer regeneration methods prevent their use in certain industries/applications.
- Lower capital investment and reduced complexity compared to other adsorption dryer regeneration methods
- Lower maintenance costs in comparison to other adsorption dryer regeneration methods
- No heat, heaters or heat related issues

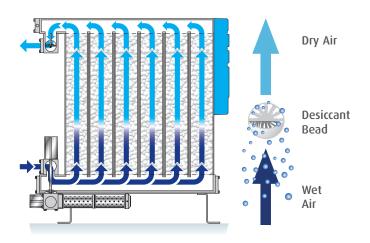


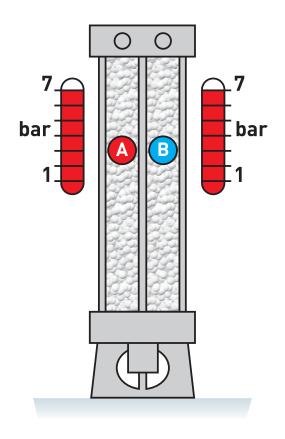


#### Drying cycle

The process air enters the dryer through the inlet and is directed into the on-line drying chamber via the inlet valves and lower manifold.

The air is evenly distributed through the drying columns and passes over the desiccant material, reducing the water vapour content. The dried process air then combines in the upper manifold and exits the dryer via the outlet check valves.





#### Column changeover

Before the on-line (drying) and off-line (regenerating) columns change over, the dryer exhaust valve, is closed, allowing the purge air to re-pressurise the off-line columns. This ensures a consistent system pressure and dewpoint when the drying chambers change over.



#### Regeneration cycle (Heatless PSA)

At the start of the regeneration cycle, the exhaust valve of the dryer is closed and the off-line chamber is at full line pressure. The air in the off-line chamber has dewpoint equal to the air leaving the dryer.

The exhaust valve is then opened and the dry air within the chamber expands rapidly as it leaves the dryer via the exhaust silencer, forcing water to be removed from the desiccant material.

Once the off-line chamber has de-pressurised, a continuous bleed of dried process air is directed into the off-line upper manifold. This air is known as purge air. With the exhaust valve open, the purge air expands from line pressure to atmospheric pressure and flows downwards through the columns, over the off-line desiccant material. As the purge air at line pressure contains a fixed amount of water vapour, allowing it to expand means the purge air becomes even drier, increasing its capacity to remove water from the saturated desiccant bed.

## Dry Purge Air Desiccant Bead Wet Purge Air to Atmosphere

## Four key features guarantee air quality

#### CompAir filtration

Adsorption dryers are designed for the removal of water vapour and not liquid water, water aerosols, oil, particulates or micro-organisms. Only by using CompAir pre and after filtration can the removal of theses contaminants be assured and air quality in accordance with all editions of ISO8573-1 be guaranteed.

#### Modular aluminium design

Aluminium extrusions are used throughout for drying chambers and distribution manifolds. This design allows the desiccant material to be retained within the drying chambers. 'Snowstorm' filling, prevents movement of the desiccant material

ninates desiccant attrition and

during operation and also eliminates desiccant attrition and breakdown which could lead to a loss of pressure dewpoint.

#### Adsorption desiccant material

- Optimum adsorption and regeneration capacity
- > to ensure consistent dewpoint
- Low dusting
  - > to prevent blockage of downstream filtration
- High crush strength
  - > to prevent breakdown of the desiccant during operation
- High resistance to aggressive and oil-free condensate
  - for compatibility with all types of air compressor, their lubricants and condensate

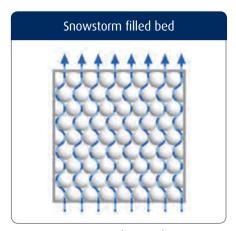


## CompAir air treatment

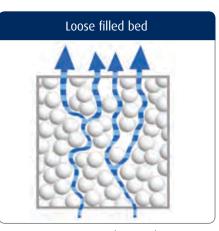
#### The 'Snowstorm" filling method

Utilised accross the CompAir modular dryers is the snowstorm filling technique used to charge the drying chambers with adsorbent desiccant material.

- Achieves maximum packing density for the desiccant material, fully utilising all of the available space envelope
- Prevents air channelling through the desiccant as experienced with twin tower designs. Due to channelling, twin tower designs require more desiccant to achieve an identical dewpoint increasing physical size, operational and maintenance costs
- Prevents desiccant attrition which can lead to dusting, blocked filters and loss of dewpoint
- Allows 100% of the available desiccant material to be used for drying, therefore reducing the amount of desiccant required and maintenance costs
- 100% of the desiccant is regenerated ensuring consistent dewpoint
- Provides a low, equal resistance to air flow allowing multiple drying chambers and multiple dryer banks to be used, a feature available with the A-Series from CompAir



Consistent drying with no desiccant attrition



Inconsistent drying and desiccant attrition



The 'Snowstorm' filling technique ensures consistent dewpoint performance



## Energy savings with dewpoint dependent switching (DDS) energy management system

The energy required to regenerate the off-line desiccant bed in an adsorption dryer is constant, and based upon the assumption that the dryer is operating at its full capacity and the desiccant bed requiring regeneration has been fully saturated. In reality, a dryer is rarely operating at full capacity all of the time, for example during shift work and periods of low demand. Daily and seasonal fluctuations in ambient temperature and humidity also change the moisture loading placed upon the dryer.

Under such conditions, at the point in the drying cycle where the air flow is switched from one drying chamber to the other, there is the potential for drying capacity to remain in the desiccant material about to undergo regeneration. As the energy used to regenerate this partially saturated bed is based upon the assumption that the bed is fully saturated, more energy (purge air) is consumed than is actually necessary.

#### DDS Operation - Energy Saving Cycle (Heatless Dryer example shown)

	DDS Drying / Regeneration Cyc									
Time [Minutes]	0	2.5	3	Changeover time dictated by outlet dewpoint	Change	0	2.5	3	Changeover time dictated by outlet dewpoint	Chang
Side A	Regeneration	Re-pressurisation		Energy Saving	еочег		Drying			9408
Side B		Drying			<u> </u>	Regeneration	Re-pressurisation		Energy Saving	<b>"</b>

#### DDS Energy Saving (Heatless Dryer example shown)

	• • •		
Air Demand %	Factor Caving 0/4	Energy Saving	Environmental Saving
All Dellialia %	Energy Saving %	P/A kW	P/A Kg CO₂
100	33.00	95,040	50,371
90	40.00	115,200	61,056
80	47.00	135,360	71,741
70	53.00	152,640	80,899
60	60.00	172,800	91,584
50	66.00	190,080	100,742



## Maximising efficiency

#### Highest quality air at lowest costs

The CompAir AXLE compressed air dryer has been specifically designed to provide all of the benefits of the A-Series heatless adsorption dryer with the additional benefits of lower energy costs and lower environmental impact via its vacuum regeneration method, allowing around 17% more of the generated clean, dry compressed air to be used across the plant.

This is achieved by adding a vacuum assisted system.



Elmo Rietschle rotary vane vacuum pump with IE3 motors according to UL 1004



XLE controller



#### **Introducing AXLE**

#### **Low Energy Heatless Adsorption Dryers**

The AXLE has been specifically designed to provide all of the benefits of a traditional A-Series heatless adsorption dryer with the additional benefits of increased compressed air available for plant use, lower energy costs and lower environmental impact.





#### **Dryer Selection**

Dryers should not be selected upon energy costs alone, but on delivered air quality, their suitability for the industry & application in which they are to operate, reliability and total cost of ownership.



#### What is special about this technology?

### Complete clean dry air solution with guaranteed air quality

- Includes Pre and Post Filtration
- Delivered air quality in accordance with ISO08573-1
- Suitable for all industrial applications

#### Low energy heatless technology

- 17% more air available for use than a comparative heatless dryer
- On average, 60% lower energy consumption against comparable heatless dryers and 39% lower energy consumption against heat regenerative dryers
- Energy Management System fitted as standard for additional savings

### Ideally suited for food, beverage and pharmaceutical applications

- Uses clean dry process air for regeneration (no contamination of the adsorption bed)
- Materials of Construction FDA Title 21 Compliant and EC1935-2004 exempt

#### Lower total cost of ownership

- Low running costs
- Extended prevented maintenance periods and shorter maintenance times
- Lower maintenance costs compared to other types of low energy dryers

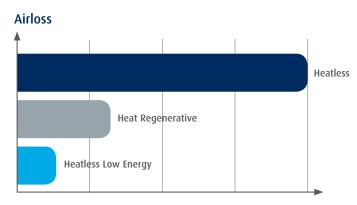
#### Heatless fall back mode for extra security

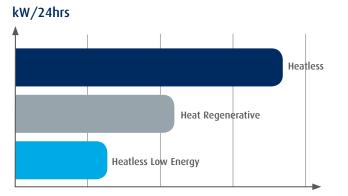
 Should a fault occur with the vacuum pump, the dryer can be operated in full heatless mode to keep the plant operational

#### Modular design

- Smaller, more compact and lightweight than traditional Twin Tower dryers
- Fully expandable as your system grows
- Existing A-XS dryers can be upgraded to extend life of existing capital equipment and lower capital expenditure

#### Efficiency comparison





## Technical data A Series A1LX - A7LX

#### **Product Selection**

	Model	Pipe Size		Inlet Flowrates							
	Model	ripe size	[m³/min]	[m³/hr]	[L/S]	[cfm]					
	A1LX	3/8"	0.09	5.1	1	3					
	A2LX	3/8"	0.14	8.5	2	5					
	A3LX	3/8"	0.23	13.6	4	8					
ſ	A4LX	3/8"	0.28	17.0	5	10					
	A5LX	3/8"	0.37	22.1	6	13					
	A6LX	3/8"	0.43	25.5	7	15					
	A7LX	3/8"	0.57	34.0	9	20					



Stated flows are for operation at 7 bar g (100 psi g) with reference to 20°C, 1 bar a, 0% relative water vapour pressure. For flows at other pressures, apply the correction factors shown.

Service Interval

#### **Dryer Performance**

Dryer Models	•		IS08573-1:2010 Classification [Standard]	*Dewpoint	[Option 1]	IS08573-1:2010 Classification [Option 1]	
Models	[°C]	[°F]		[°C]	[°F]	Classification [option 1]	
A_LX	-40	-40	Class 2	-70	-100	Class 1	

#### **Technical Data**

Dryer Models	Min Operating Pressure		Max Operating Pressure		Min Inlet Temperature		Max Inlet Temperature		Max Ambient Temperature	
	[bar g]	[psi g]	[bar g]	[psi g]	[°C]	[°F]	[°C]	[°F]	[°C]	[°F]
A_LX	4	58	12	175	2	35	50	122	55	131

1	Dryer		Electrical Supply	Thread	Noise Level	Electronic	Function	
	Models	[Standard]	[Optional]	Connection	[Average]	Controller	Power On	Service
	Models	Tolerance ± 10%	Tolerance ± 10%	Connection	dB[A]	Options	Indication	Indi
	A_LX	230 / 1ph / 50Hz	115 / 1ph / 60Hz	BSPP or NPT	<75	A_LX	•	

For fully pneumatic applications, a  $A_LX$  Series MINI range is available. Please contact CompAir for further information.

#### **Correction Factors**

Temperature Correction Factor CFT								
Maximum	[°C]	25	30	35	40	45	50	
Inlet	[°F]	77	86	95	104	113	122	
Temperature	CFT	1.00	1.00	1.00	1.04	1.14	1.37	

Dewpoint Corr	ection Factor CFD	Standard	Option 1
Oi.a.d	PDP °C	-40	-70
Required Dewpoint	PDP °F	-40	-100
Dewpoint	CFD	1.00	1.43

	Pressure Correction Factor CFP									
Minimum	[bar g]			6	7	8	9	10	11	12
Inlet	[psi g]	58	73	87	102	116	131	145	160	174
Pressure	CFP	1.60	1.33	1.14	1.00	1.03	0.93	0.85	0.78	0.71

#### **Weights and Dimensions**

	Dies			Dime	rsions			Weight	
Model	Pipe Size	Height [H]		Width [W]		Depth [D]		Weight	
	JIZE	[mm]	[ins]	[mm]	[ins]	[mm]	[ins]	[Kg]	[lbs]
A1LX		422	16.6					11	24.2
A2LX		500	19.7					13	28.7
A3LX		616	24.2					16	35.3
A4LX		692	27.2	289	11.4	149		18	39.7
A5LX		847	33.3					20	44.1
A6LX		906	35.7					23	50.7
A7LX		1098	43.2					28	61.7

#### ${}^*A\_LX \;\; \text{dryers include integral high efficiency pre and general purpose dust filters}.$

#### **Recommended Filtration**

	choco inc	1011011		
Model	Filter Pipe Size BSPT or NPT	Inlet General Purpose Pre-filter	Inlet High Efficiency Filter	Outlet Dust Filter
A1LX				
A2LX				
A3LX			0	Duille inte
A4LX	3/8"	CF0006G3/8"G	Built into dryer	Built into dryer
A5LX			diyei	diyei
A6LX				
A7LX				,

#### **A7XS - A50XS**

#### **Product Selection**

Model	Dies Cire		Inlet Flo	owrates	
Model	Pipe Size	[m³/min]	[m³/hr]	[L/S]	[cfm]
A7XS		0.68	41	11	24
A9XS	3/4"	0.91	55	15	32
A12XS		1.19	71	20	42
A15XS		1.50	90	25	53
A18XS		1.84	110	31	65
A25XS		2.49	149	42	88
A30XS	1"	3.01	180	50	106
A37XS		3.69	221	61	130
A50XS		4.99	299	83	176



Stated flows are for operation at 7 bar g (100 psi g) with reference to  $20^{\circ}\text{C}$ , 1 bar a, 0% relative water vapour pressure. For flows at other pressures, apply the correction factors shown.

#### **Dryer Performance**

Dryer Models	Dewpoint	[Standard]	IS08573-1:2010	•	[Option 1]	IS08573-1:2010
,	[°C] [°F] Cl	Classification [Standard]	[°C]	[°F]	Classification [Option 1]	
A7XS - A50XS	-40	-40	Class 2	-70	-100	Class 1

#### **Technical Data**

	Dryer Models	Pressure		Pressure		Min Operating Temperature		Temperature		Temperature		Electrical Supply	Supply	Connection	Noise Level
	<u> </u>	[bar g]	[psi g]	[bar g]	[psi g]	[°C]	[°F]	[°C]	[°F]	[°C]	[°F]	[Standard]	[Optional]	Connection	[dB(A)]
	A7XS - A50XS		Γ0	16	232		41	F0	122	r.	121	230V 1ph	110V 1ph	BSPP or	-75
A	30XS - A50XSDS		58	13	190		41	50	122	22	151			NPT	<75

#### **Controller Options**

					Function				
Controller Options	Power On Indication	Fault Indication	Display Fault Condition Values	Service Interval Indication	Service Contdown Timers	Configurable Alarm Settings	Remote Volt Free Alarm contacts	Filter Service Timer	DDS Energy Management System
A7XS - A50XS (Electronic Control]									
A7XSDS - A50XSDS									

<sup>\*</sup>ATEX compliant option available. For hazardous environments, a fully pneumatic ATEX compliant version of A\_XS Series is available. ATEX Directive 94/9/EC, Group II, Category 2GD, T6.

#### **Correction Factors**

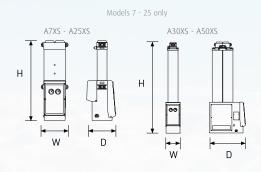
			Temperature Corre	ection Factor CFT			
	[°C]	25	30	35	40	45	50
Maximum Inlet Temperature	[°F]	77	86	95	104	113	122
Temperature	CFT	1.00	1.00	1.00	1.04	1.14	1.37

				1	Pressure	Correctio	n Factor	CFP						
	[bar g]		5			8	9	10	11	12	13	14	15	16
Minimum Inlet Pressure	[psi g]	58	73	87	100	116	131	145	160	174	189	203	218	232
illiet i ressere	CFP	1.60	1.33	1.14	1.00	0.89	0.80	0.73	0.67	0.62	0.57	0.54	0.50	0.47

Dewpoint Corre	ection Factor CFD	Standard	Option 1
	PDP °C	-40	-70
Required Dewpoint	PDP °F	-40	-100
Dewpoint	CFD	1.00	1.43

#### **Weights and Dimensions**

	Pipe			Dime	nsions			Wo	abt
Model	Size	Heigl	nt [H]	Widt	h [W]	Dept	h [D]	we	ight ———
	Inlet / Outlet	[mm]	[ins]	[mm]	[ins]	[mm]	[ins]	[kg]	[lbs]
A7XS		837	33.0					32	70
A9XS		1003	39.5					37	81
A12XS	3/4"	1168	46.0	284	11.2	302	11.0	42	92
A15XS	7/4	1333	52.5				11.9	47	103
A18XS		1499	59.0					52	114
A25XS		1747	68.8					60	132
A30XS		1433	56.4					80	176
A37XS	1"	1599	63.0	220	8.7	566	22.3	90	198
A50XS		1847	72.7					104	229



#### **Recommended Filtration**

For Dryer Model	Filter Pipe Size BSPT or NPT	Inlet General Purpose Pre-filter	Inlet High Efficiency Filter	Outlet Dust Filter
A7XS				
A9XS				
A12XS		CF0018G¾"G	CF0018G¾"H	CF0018G¾"G
A15XS				
A18XS				
A25XS		CF0036G¾"G	CF0036G¾"H	CF0036G3/4"G
A30XS		CF0036G1"G	CF0036G1"H	CF0036G1"G
A37XS		CF0066G1"G	CF0066G1"H	CF0066G1"G
A50XS		Croobd1 d	CLOOODD H	נרטטסטטו ט

Inlet High Efficiency Filter and Outlet Dust Filter are included with these dryers as standard.

#### A068XS - A340XS

#### **Product Selection**

	Model	Diag Cias		Flow	rates		
	Model	Pipe Size	[m³/min]	[m³/hr]	[L/S]	[cfm]	
	A068XS		6.81	408	113	240	
¥	A102XS		10.22	612	170	360	
Bank	A127XS		12.78	765	213	450	
Single	A170XS		17.03	1020	283	600	
Ξ	A212XS		21	1275	354	750	
	A255XS		26	1530	425	900	
	A297XS			30	1785	496	1050
	A340XS		34	2040	567	1200	
	2 x A212XS	2½"	43	2550	708	1500	
	2 x A255XS	Z 72	51	3060	850	1800	
ank	2 x A297XS		60	3570	992	2100	
Multi-Bank	2 x A340XS		68	4080	1133	2400	
Mu	3 x A255XS		77	4590	1275	2700	
	3 x A297XS		89	5355	1488	3150	
	3 x A340XS	G 2½"	102	6120	1700	3600	



Stated flows are for operation at 7 bar g (100 psi g) with reference to 20°C, 1 bar a, 0% relative water vapour pressure.

vapour pressure.

For flows at other pressures apply the correction factors shown.

#### **Dryer Performance**

Dryer Models		point dard]	IS08573-1:2010 Classification		point on 1]	ISO8573-1:2010 Classification	Dewr [Option		ISO8573-1:2010 Classification	
	[°C]	[°F]	[Standard]	[°C]	[°F]	[Option 1]	[°C]	[°F]	[Option 2]	
A068XS - A340XS	-40	-40	Class 2	-70	-100	Class 1	-20	-4	Class 3	

#### **Technical Data**

Dryer Models		Min Operating Pressure		Max Operating Pressure		Min Operating Temp		Max Operating Temp		ax pient mp	Electrical supply [Standard]	Electrical supply [Optional]	Thread Connections	Noise Level
	[bar g]	[psi g]	[bar g]	[psi g]	[°C]	[°F]	[°C]	[°F]	[°C]	[°F]	[Stalldald]	[Optional]		[dB(A)]
AX_S	A	58	13	190		11	FO	122	55	131	85 - 265 V	N/A	BSPP	<75
AX _E	4	30	13	190		41	50	122	22	151	1ph 50/60Hz	N/A	or NPT	<u> </u>

#### **Controller Options**

					Function				
Controller Options	Power on Indication	Fault Indication	Display Fault Condition Values	Service Interval Indication	Service Countdown Timers	Configurable Alarm Settings	Remote Volt Free Alarm Contacts	Filter Service Timer	DDS Energy Management System
AX_S									
AX_SDS		•					•		
AX_E			•		•	•		•	

<sup>&</sup>quot;ATEX compliant option available. For hazardous environments, a fully pneumatic ATEX compliant version of AX Series is available. ATEX Directive 94/9/EC, Group II, Category 2GD, T6.

#### **Correction Factors**

	Temperature Correction Factor CFT										
Maniana Ialat	[°C]	25	30	35	40	45	50				
Maximum Inlet Temperature	[°F]	77	86	95	104	113	122				
remperature	CFT	1.00	1.00	1.00	1.04	1.14	1.37				

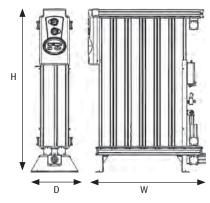
	Pressure Correction Factor CFP										
	[bar g]	4	5	6	7	8	9	10	11	12	13
Minimum Inlet Pressure	[psi g]	58	73	87	100	116	131	145	160	174	189
illiet Flessule	CFP	1.60	1.33	1.14	1.00	0.89	0.80	0.73	0.67	0.62	0.57

Dewpoint Correct	ion Factor CFD	Option 2	Standard	Option 1
	PDP °C	-20	-40	-70
Required Dewpoint	PDP °F	-4	-40	-100
	CFD	0.91	1.00	1.43

#### **Weights and Dimensions**

					Weight						
Model	Pipe Size	Heigl	nt [H]	Width [W]		Depth [D]		weight			
	3.20	[mm]	[mm] [ins] [mm]		[ins]	[mm]	[ins]	[kg]	[lbs]		
A068XS		1647	64.8	687	27.0			235	518		
A102XS		2"	1647	04.8	856	33.7			316	696	
A127XS					830	33./			355	782	
A170XS		1000	745	1025	40.3	550	21.7	450	992		
A212XS				1194	47.0			543	1197		
A255XS	21/ !!	1892	74.5	1363	53.6			637	1404		
A297XS	21/2"	2½"	2½"			1532	60.3			731	1611
A340XS				1701	67.0			825	1818		

A068XS - A340XS



Inlet High Efficiency Filter and Outlet Dust Filter are included with these dryers as standard.

#### **Recommended Filtration**

For Dryer Model	Filter Pipe Size BSPT or NPT	Inlet General Purpose Pre-filter	Inlet High Efficiency Filter	Outlet Dust Filter	
A068XS		CF0132G 2"G	CF0132G 2"H	CF0132G 2"G	
A102XS	יור	CF01320 2 0	CF01320 Z П	CF01320 Z U	
A127XS	Δ	CF0198G 2"G	CF0198G 2"H	CF0198G 2"G	
A170XS		CF01980 Z G	CFU198G Z H	CF01980 Z G	
A212XS		CF0258G2 ½"G	CF0258G2 ½"H	CF0258G2 ½"G	
A255XS	2½"				
A297XS	Z-72	CF0372G2 ½"G	CF0372G2 ½"H	CF0372G2 ½"G	
A340XS					

#### Technical data **A068XLE - A340XLE**

#### **Product Selection**

	Model	Pipe Size		Inlet Flo	owrates	
	Model	ripe size	[m³/min]	[m³/hr]	[L/S]	[cfm]
	A068XLE	2"	6.81	408	113	240
ᆂ	A102XLE	2"	10.22	612	170	360
Bank	A127XLE	2"	12.78	765	213	450
Single	A170XLE	2"	17.03	1020	283	600
. <u>≅</u>	A212XLE	2½"	21	1275	354	750
	A255XLE	2½"	26	1530	425	900
	A297XLE	2½"	30	1785	496	1050
	A340XLE	2½"	34	2040	567	1200



#### **Dryer Performance**

Dryer Models		point dard]	IS08573-1:2010 Classification	Fo at all		ISO8573-1:2010 Classification	Dew <sub>l</sub> [Opti		ISO8573-1:2010 Classification	
	[°C]	[°F]	[Standard]	[°C]	[°F]	[Option 1]	[°C]	[°F]	[Option 2]	
AXLE	-40	-40	Class 2	-70	-100	Class 1	-20	-4	Class 3	

 $<sup>^{\</sup>ast}$  ISO8573-1 Classifications when used with included CompAir CF range pre / post filtration.

#### **Technical Data**

Dryer Models		erating sure		erating sure	0per	in ating mp	Max Operating Temp		Operating Ambient Temp Temp		Electrical supply [Standard]	Electrical supply [Optional]	Thread	Noise Level
	[bar g]	[psi g]	[bar g]	[psi g]	[°C]	[°F]	[°C]	[°F]	[°C]	[°F]		[Uptional]		[dB(A)]
AXLE	5	58	13	190	5	41	50	122	55	131	230V - 460V 3PH 50Hz 230V - 460V 3PH 60Hz	N/A	BSPP or NPT	<75

Мо	del	A102CXLE	A103CXLE	A103XLE	A104XLE	A105XLE	A106XLE	A107XLE	A108XLE
Vacuum	50Hz	3	3	4	5.5	5.5	8	9.5	9.5
Pump kW	60Hz	4.8	4.8	6.5	9	9	13	15.5	15.5

#### **Correction Factors**

	Temperature Correction Factor CFT											
	[°C]	25	30	35	40	45	50					
Maximum Inlet Temperature	[°F]	77	86	95	104	113	122					
remperature	CFT	1.00	1.00	1.00	1.04	1.14	1.37					

	Pressure Correction Factor CFP											
Minimum	[bar g]	5	6	7	8	9	10	11	12	13		
Inlet	[psi g]	73	87	100	116	131	145	160	174	189		
Pressure	CFP	1.33	1.14	1.00	0.89	0.80	0.73	0.67	0.62	0.57		

Dewpoint Correct	ion Factor CFD	Option 2	Option 2 Standard			
	PDP °C	-20	-40	-70		
Required Dewpoint	PDP °F	-4	-40	-100		
o curpomic	CFD	0.91	1.00	1.43		

For correct operation, compressed air dryers must be sized for the minimum inlet pressure, maximum inlet temperature and maximum flow rate at the point of installation. To select a dryer, first calculate the MDC (Minimum Drying Capacity) using the formula below then select a dryer from the flow rate table above, with a flow rate equal to or greater than the MDC.

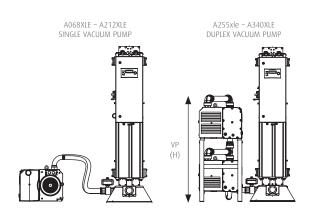
Minimum Drying Capacity = System Flow x CFT x CFP x CFD

#### **Part Numbers**

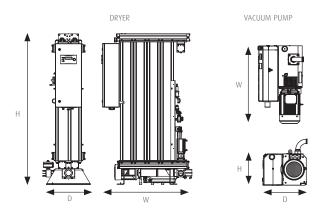
Dryer Part Numbers	Vacuum Pump Part Numbers 50Hz	Vacuum Pump Part Numbers 60Hz	Dryer Upgrade Kits Part Numbers
A068XLE	A068XLEP-50	A068XLEP-60	A068XLEK
A102XLE	A102XLEP-50	A102XLEP-60	A102XLEK
A127XLE	A127XLEP-50	A127XLEP-60	A127XLEK
A170XLE	A170XLEP-50	A170XLEP-60	A170XLEK
A212XLE	A212XLEP-50	A212XLEP-60	A212XLEK
A255XLE	A255XLEP-50	A255XLEP-60	A255XLEK
A297XLE	A297XLEP-50	A297XLEP-60	A297XLEK
A340XLE	A340XLEP-50	A340XLEP-60	A340XLEK

#### **Weights and Dimensions**

		Dryer Dimensions						Woight			
Model Pipe Size		Height [H]		Width [W]		Depth [D]		Weight			
	5120	[mm]	[ins]	[mm]	[ins]	[mm]	[ins]	[kg]	[lbs]		
A068XLE	2"	2"		1647	64.8	793.5	31.5			265	583
A102XLE			1047	04.0	962.5	37.9			346	761	
A127XLE			Ζ"	Ζ"			902.5	37.9			385
A170XLE				1131.5	44.6	550	21.7	480	1056		
A212XLE	2½"	21/ !!	1892	1000	74.5	1300.5	51.2	550	21.7	573	1261
A255XLE				1892	74.5	1469.5	57.9			667	1467
A297XLE				1641.5	64.6			761	1674		
A340XLE				1807.5	71.2			855	1881		



	Vacuum Pump Dimensions							Weight	
Model	Height [H]		Width [W]		Depth [D]		weight		
	[mm]	[ins]	[mm]	[ins]	[mm]	[ins]	[kg]	[lbs]	
A068XLE	400		5.75 933	36.73	523	20.59	89	196	
A102XLE							07	190	
A127XLE		15.75					194	428	
A170XLE								184	406
A212XLE							164	406	
A255XLE	1304		1100	43.31	560	22.05	420	926	
A297XLE		304 51.34					200	060	
A340XLE							390	860	



#### **Included Filtration**

For Dryer Model	Filter Pipe Size BSPT or NPT	Inlet General Purpose Pre-filter	Inlet High Efficiency Filter	Outlet Dust Filter	
A068XLE	2"	CE0122C2#D	CE0122C2#C	CF0132G2"B	
A102XLE		CF0132G2"B	CF0132G2"C		
A127XLE		CE0100C3#D	CE0100C3#C	CF0198G2"B	
A170XLE		CF0198G2"B	CF0198G2"C		
A212XLE	2½"	CF0198G2"B	CF0258G21/2"C	CF0258G21/2"B	
A255XLE					
A297XLE		CF0372G21/2"B	CF0372G21/2"C	CF0372G21/2"B	
A340XLE					



by Gardner Denver

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  - > Fixed and Regulated Speed
- Piston
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#### Oil-Free

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  - > Fixed and Regulated Speed
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  - > Fixed and Regulated Speed
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