

by Gardner Denver





# 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**

#### **AX08N to AX68N Series**

Flowrates from 0.08 m<sup>3</sup>/min



#### **AX97N to AX502N Series**

Flowrates from 0.86 m<sup>3</sup>/min



#### A68XS to A340XS Series

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

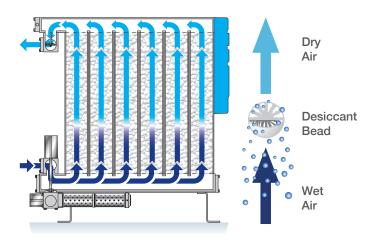


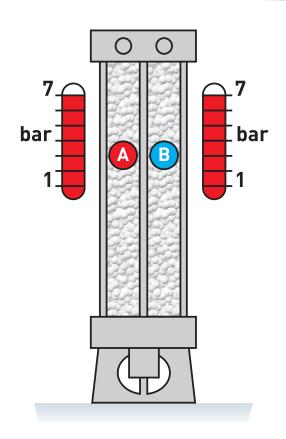


#### **Drying cycle**

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.





Desiccant

Wet Purge

Air to

#### 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 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

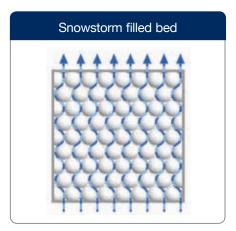


# CompAir air treatment

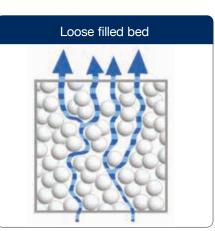
#### The 'Snowstorm" filling method

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



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	/ Re	generation Cyc	le			
Time [Minutes]	0	2.5	Changeover time 3 dictated by outlet dewpoint	Change	0	2.5	3	Changeover time dictated by outlet dewpoint	
Side A	Regeneration	Re-pressurisation	Energy Saving	eov		Drying			8
Side B		Drying		er	Regeneration	Re-pressurisation		Energy Saving	er

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

Al- Daniel Of	5 O. in. 0/	Energy Saving	Environmental Saving
Air Demand %	Energy Saving %	P/A kW	P/A Kg CO <sub>2</sub>
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

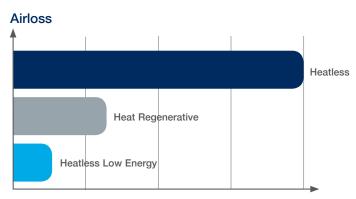
#### Heatless fall back mode for extra security

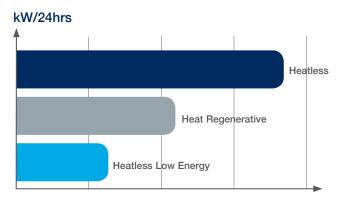
 Should a fault occur with the vacuum pump, the dryer can be operated in full heatless mode to keep the plant operational

#### 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 AX08N - AX68N

#### **Product Selection**

Model	Dina Cina	Inlet Flowrates								
Model	Pipe Size	[m³/min]	[m³/hr]	[L/S]	[cfm]					
AX08N	(PTC)*	0.08	5.1	1.4	3					
AX14N	(PTC)*	0.14	8.5	2.4	5					
AX28N	(PTC)*	0.28	17	4.7	10					
AX43N	(PTC)*	0.43	26	7.2	15					
AX68N	(PTC)**	0.68	41	11.4	24					

<sup>\* 8</sup>mm push to connect RHings in inlet and outlet \*\*8mm push to connect RHings in inlet and outlet



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.

#### **Dryer Performance**

Dryer Models	*Dewpoint	[Standard]	ISO8573-1:2010 Classification [Standard]	*Dewpoint	[Option 1]	ISO8573-1:2010 Classification [Option 1]
	[°C]	[°F]		[°C]	[°F]	
AX_N	-40	-40	Class 2	-70	-100	Class 1

#### **Technical Data**

Dryer Models	_	erating sure	_	erating sure		Inlet erature		Inlet erature	Max Ambient Temperature	
Models	[bar g]	[psi g]	[bar g]	[psi g]	[°C]	[°F]	[°C]	[°F]	[°C]	[°F]
AX_N	4	58	16	232	1.5	35	50	122	50	122

Dryer Models	Electrical Supply [Standard] Tolerance ± 10%	Thread Connection	Noise Level [Average]
Wodels	Tolerance ± 10%	Connection	dB[A]
AX_N	100 - 240 VAC / 50 OF 60 Hz	BSPP or NPT	<75

Electronic	Function					
Controller Options	Power On Indication	Service Interval Indication				
AX_N	•					

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

#### **Correction Factors**

Temperature Correction Factor CFT								
Maximum	[°C]	25	30	35	40	45	50	
Inlet				95				
Temperature	CFT	1.00	1.00	1.04	1.04	1.14	1.37	

Pressure Correction Factor CFP													
Minimum	[bar g]	4	5	6		8		10	11	12	13	14	16
	[psi g]												
Pressure	CFP	1.60	1.33	1.14	1.00	0.88	0.8	0.72	0.67	0.61	0.61	0.53	0.47

Dewpoi	nt Correction Factor CFD	Standard	Option 1
	PDP °C	-40	-70
Required Dewpoint	PDP °F	-40	-100
Dewpoint	CFD	1.00	1.43

#### Weights and Dimensions

				W. C. L.					
Model	Pipe Size	Height [H]		Width [W]		Depth [D]		Weight	
	Size	[mm]	[ins]	[mm]	[ins]	[mm]	[ins]	[Kg]	
AX08N		439	17.3	263	10.3	220	8.7	9	
AX14N		436	17.3					9	
AX28N		649	25.6					14	
AX43N		893	35.2					19	
AX68N		1193	47.0					26	

#### **Recommended Filtration**

Model	Filter Pipe Size BSPT or NPT	Inlet General Purpose Pre-filter	Outlet Dust Filter	
AX08N				
AX14N				
AX28N	3/8"	CF0006G3/8"G	Built into dryer	
AX43N				
AX68N			ر	

#### AX97N to AX502N

#### **Product Selection**

Madal	Pipe Size		Inlet Flowrates								
Model	Fipe Size	[m³/min]	[m³/hr]	[L/S]	[cfm]						
AX97N		0.96	58	16	34						
AX117N		1.17		19	41						
AX150N	34 1"	1.50	90	25	53						
AX187N	94 I	1.87	112	31	66						
AX250N		2.50	150	42	88						
AX300N		3.00	180	50	106						
AX373N	1"	3.73	224	62	132						
AX502N	, ,	5.02	301	84	177						



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.

#### **Dryer Performance**

Dryer Models	Dewpoint	[Standard]	ISO8573-1:2010 Classification	Dewpoint	[Option 1]	ISO8573-1:2010
Dryer Models	[°C]	[°F]	[Standard]	[°C]	[°F]	Classification [Option 1]
AX97N - AX502N	-40	-40	Class 2	-70	-100	Class 1

#### **Technical Data**

Dryer Models	Min Operating Pressure		Max Operating Pressure		Min Operating Temperature		Max Operating Temperature		Max Ambient Temperature		Electrical Supply	Thread	Noise Level
	[bar g]	[psi g]	[bar g]	[psi g]	[°C]	[°F]	[°C]	[°F]	[°C]	[°F]	[Standard]	Connection	[dB(A)]
AX97NS - AX502NS	4	58	16	232	1.5	35	50	122	50	122	110-240 VAC 50/60 Hz	BSPP or NPT	<85

#### **Controller Options**

		Function											
Controller Options	Power On Indication	Fault Indication	Fault Indication Service Interval		Configurable Alarm Settings Remote Volt Free Alarm contacts		Dew Point Display						
A7XS - A50XS (Electronic Control]			•										
A7XSDS - A50XSDS	·	·											

#### **Correction Factors**

	Temperature Correction 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	1.04	1.04	1.14	1.37						

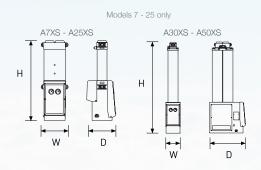
Pressure Correction Factor CFP													
	[bar g]		5	6	7	8	9	10	11	12	13	14	16
Minimum Inlet Pressure	[psi g]	58	73	87	100	116	131	145	160	174	189	203	232
	CFP	1.60	1.33	1.14	1.00	0.88	0.80	0.72	0.67	0.61	0.57	0.53	0.47

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

Outlet dust filter built into dryer.

#### Weights and Dimensions

	Pipe			Dimer	nsions			Weight		
Model	Size Inlet /	Height [H]		Widt	h [W]	Dept	h [D]	weight		
	Outlet	[mm]	[ins]	[mm] [ins]		[mm]	[ins]	[kg]	[lbs]	
A7XS		837	33.0					32	70	
A9XS		1003 39	39.5	284	11.2	302		37	81	
A12XS	3/4"	1168	46.0				11.9	42	92	
A15XS	9/4	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	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	CF0036G¾"G
A30XS		CF0036G1"G	CF0036G1"H	CF0036G1"G
A37XS		000000110	OF000001111	05000001110
A50XS		CF0066G1"G	CF0066G1"H	CF0066G1"G

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

#### A068XS - A340XS

#### **Product Selection**

	B. 1.1.1	B' 0' -		Flow	rates	
	Model	Pipe Size	[m³/min]	[m³/hr]	[L/S]	[cfm]
	A068XS		6.81	408	113	240
녿	A102XS	2"	10.22	612	170	360
Bank	A127XS		12.78	765	213	450
Single	A170XS		17.03	1020	283	600
S	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 1/2	51	3060	850	1800
Multi-Bank	2 x A297XS		60	3570	992	2100
Ę.B	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.

For flows at other pressures apply the correction factors shown.

#### **Dryer Performance**

Dewpoint Dryer Models  [Standard]		-	ISO8573-1:2010 Classification		point ion 1]	ISO8573-1:2010 Classification	Dew <sub>l</sub> [Opti		ISO8573-1:2010 Classification	
Diyer medele	[°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		erating sure		perating sure	Oper	lin ating mp	Max Operating Temp		Operating		Max Ambient Temp		Electrical supply	Electrical supply	Thread Connections	Noise Level
	[bar g]	[psi g]	[bar g]	[psi g]	[°C]	[°F]	[°C]	[°F]	[°C]	[°F]	[Standard]	[Optional]		[dB(A)]		
AX_S AX _E	4	58	13	190	5	41	50	122	55	131	85 - 265 V 1ph 50/60Hz	N/A	BSPP or NPT	<75		

#### **Controller Options**

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

<sup>\*</sup>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												
	[°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					

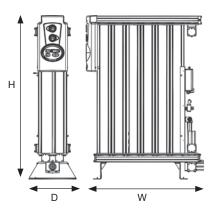
Pressure Correction Factor CFP												
	[bar g]	4	5	6	7	8	9	10	11	12	13	
Minimum Inlet Pressure	[psi g]	58	73	87	100	116	131	145	160	174	189	
iniet Pressure	CFP	1.60	1.33	1.14	1.00	0.89	0.80	0.73	0.67	0.62	0.57	

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

#### Weights and Dimensions

					Weight					
Model	Pipe Size	Heigl	nt [H]	Widtl	h [W]	Dept	h [D]	weight		
	0.20	[mm]	[ins]	[mm]	[ins]	[mm]	[ins]	[kg]	[lbs]	
A068XS		1047	04.0	687	27.0			235	518	
A102XS	2"	1647	64.8	050	20.7			316	696	
A127XS			74.5	856	33.7			355	782	
A170XS				1025	40.3	550	01.7	450	992	
A212XS		1000		1194	47.0	550	21.7	543	1197	
A255XS	2½"	1892		/4.5	1363	53.6			637	1404
A297XS				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	2"	0F0132G 2 G	OF0132G 2 FI	GF0132G 2 G	
A127XS		CF0198G 2"G	CF0198G 2"H	CF0198G 2"G	
A170XS		GF0196G 2 G	GF0196G 2 FI	010196G 2 G	
A212XS		CF0258G2 ½"G	CF0258G2 ½"H	CF0258G2 ½"G	
A255XS					
A297XS		CF0372G2 ½"G	CF0372G2 ½"H	CF0372G2 ½"G	
A340XS					

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

#### **Product Selection**

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



#### **Dryer Performance**

Dryer Models		point dard]	ISO8573-1:2010 Classification		point on 1]	ISO8573-1:2010 Classification	Dewp [Option		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		

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

#### **Technical Data**

Dryer Models	Min Operating Pressure		Operating Operating		Min Max Operating Operating Temp Temp		ating	Max Ambient Temp		Electrical supply [Standard]	Electrical supply [Optional]	Thread	Noise Level	
	[bar g]	[psi g]	[bar g]	[psi g]	[°C]	[°F]	[°C]	[°F]	[°C]	[°F]		[Optional]		[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	Model		A103CXLE	A103XLE	A104XLE	A105XLE	A106XLE	A107XLE	A108XLE
Vacuum	50Hz	3	3		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							
Temperature	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 Correction Factor CFD		Option 2	Standard	Option 1	
Required Dewpoint	PDP °C	-20	-40	-70	
	PDP °F	-4	-40	-100	
	CFD	0.91	1.00	1.43	

For correct operation, compressed air dryers must be sized 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.

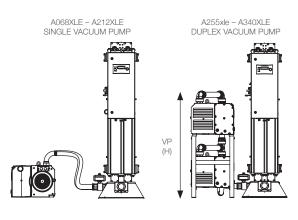
Minimum Drying Capacity = System Flow x CFT x CFP x CFD

#### **Part Numbers**

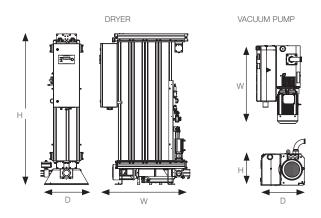
Dryer Part Numbers	Vacuum Pump Part Numbers 50Hz	Vacuum Pump Part Numbers 60Hz	Dryer Upgrade Kits Part Numbers
A068XLE	A068XLEP-50	A068XLEP-60	A068XLEK
A102XLE	A102XLEP-50	A102XLEP-60	A102XLEK
A127XLE	A127XLEP-50	A127XLEP-60	A127XLEK
A170XLE	A170XLEP-50	A170XLEP-60	A170XLEK
A212XLE	A212XLEP-50	A212XLEP-60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

#### Weights and Dimensions

		Dryer Dimensions							Weight.	
Model	Model Pipe Size		Height [H]		Width [W]		Depth [D]		Weight	
	O.LO	[mm]	[ins]	[mm]	[ins]	[mm]	[ins]	[kg]	[lbs]	
A068XLE	0.11	1647	04.0	793.5	31.5			265	583	
A102XLE			64.8	000.5	07.0			346	761	
A127XLE				962.5	37.9			385	847	
A170XLE				1131.5	44.6	FFO	04.7	480	1056	
A212XLE	2½"		1000	745	1300.5	51.2	550	21.7	573	1261
A255XLE		1892	74.5	1469.5	57.9			667	1467	
A297XLE		21/2"	2 1/2"			1641.5	64.6			761
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							00	100		
A102XLE								89	196	
A127XLE	400	15.75	933	36.73	523	20.59	194	428		
A170XLE									101	400
A212XLE							184	406		
A255XLE	1304	XLE					420	926		
A297XLE		1304 51.34 1100	43.31	560	22.05	000	000			
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		OF040000#B	0504000000	CF0132G2"B	
A102XLE	2"	CF0132G2"B	CF0132G2"C		
A127XLE		OF040000#D	05040000  0	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

# Global experience truly local service

With over 200 years of engineering excellence, the CompAir brand offers an extensive range of highly reliable, energy efficient compressors and accessories to suit all applications.

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As part of the worldwide Gardner Denver operation, CompAir has consistently been at the forefront of compressed air systems development, culminating in some of the most energy efficient and low environmental impact compressors on the market today, helping customers achieve or surpass their sustainability targets.

#### CompAir compressed air product range

#### Advanced Compressor Technology Lubricated

- Rotary Screw
  - > Fixed and Regulated Speed
- Piston
- Portable

#### Oil-Free

- · Water Injected Screw
  - > Fixed and Regulated Speed
- Two Stage Screw
  - > Fixed and Regulated Speed
- Pistor
- · High Speed Centrifugal Quantima®
- Rotary Scroll

#### **Complete Air Treatment Range**

- Filte
- · Refrigerant and Desiccant Dryer
- · Condensate Management
- · Heat of Compression Dryer
- Nitrogen Generator

#### **Modern Control Systems**

- CompAir DELCOS Controllers
- · SmartAir Master Sequencer
- iConn Smart Flow Management

#### Value Added Services

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- · Performance Reporting
- · Leak Detection

#### Leading Customer Support

- Custom Engineered Solutions
- · Local Service Centres
- Genuine CompAir Parts and Lubricants

