CompAir
by Gardner Denver

Modular Adsorption Dryers

Highly efficient air treatment

Innovative compressed air treatment

A-Series

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 m³/min

A7XS to A50XS Series
Flowrates from 0.68 m³/min

A68XS to A340XS Series
Flowrates from 6.8 m³/min

A068XLE – A340XLE
Flowrates from 6.8 m³/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:

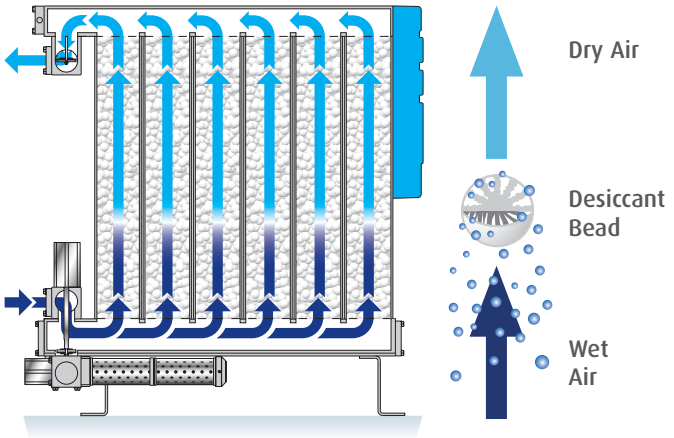
- Robust and reliable industry proven design
- Suitable for all industries and applications. Some adsorption dryer regeneration methods prevent their use in certain industries/applications.
- Lower capital investment and reduced complexity compared to other adsorption dryer regeneration methods
- Lower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

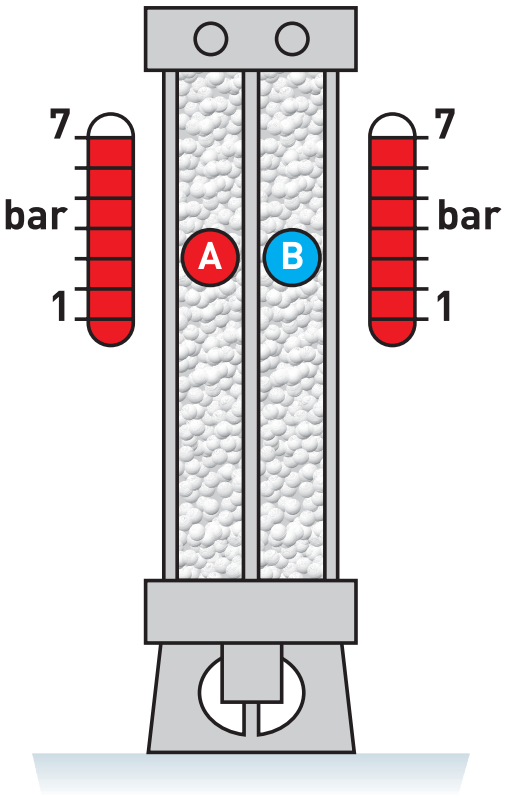
Improving manufacturing efficiency

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

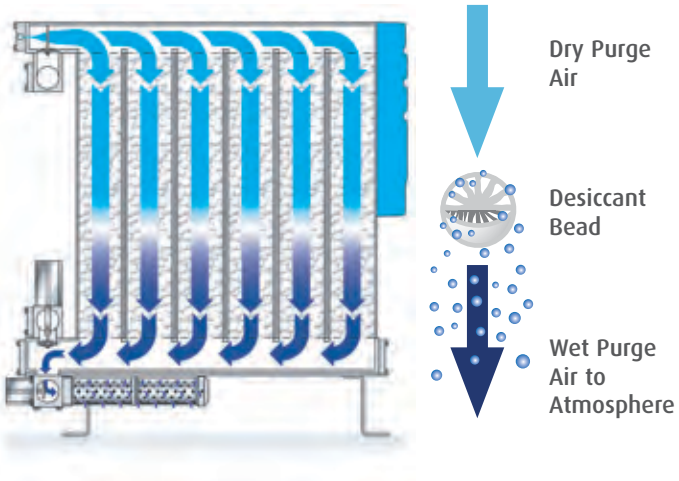
Before the on-line (drying) and off-line (regenerating) columns change over, the dryer exhaust valve, is closed, allowing the purge air to re-pressurise the off-line columns. This ensures a consistent system pressure and dewpoint when the drying chambers change over.

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.



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

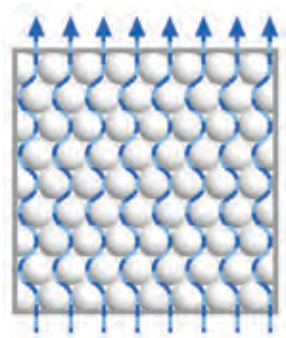
Utilised accross the CompAir modular dryers is the snowstorm filling technique used to charge the drying chambers with adsorbent desiccant material.

- 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

Snowstorm filling

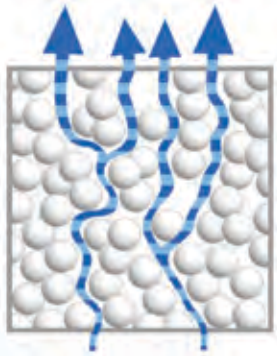
The 'Snowstorm' filling technique ensures consistent dewpoint performance

Snowstorm filled bed



Consistent drying with no desiccant attrition

Loose filled bed



Inconsistent drying and desiccant attrition

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)

Time [Minutes]	DDS Drying / Regeneration Cycle							
	0	2.5	3 Changeover time dictated by outlet dewpoint	Changeover	0	2.5	3 Changeover time dictated by outlet dewpoint	Changeover
Side A	Regeneration	Re-pressurisation	Energy Saving		Drying			
Side B	Drying				Regeneration	Re-pressurisation	Energy Saving	

DDS Energy Saving (Heatless Dryer example shown)

Air Demand %	Energy Saving %	Energy Saving	Environmental Saving
		P/A kW	P/A Kg CO_2
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

System pressure 6 bar g. Max Temp 35°C. System flow 1700 m³/hr (1000 cfm). Average pressure 6.5 bar g. Average Temp 30°C.

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.

DESIGNED FOR AIR QUALITY & ENERGY EFFICIENCY

REDUCED CO_2

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

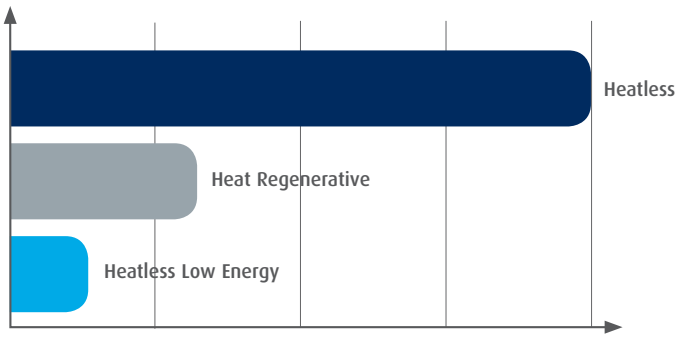
- Should a fault occur with the vacuum pump, the dryer can be operated in full heatless mode to keep the plant operational

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

Airloss



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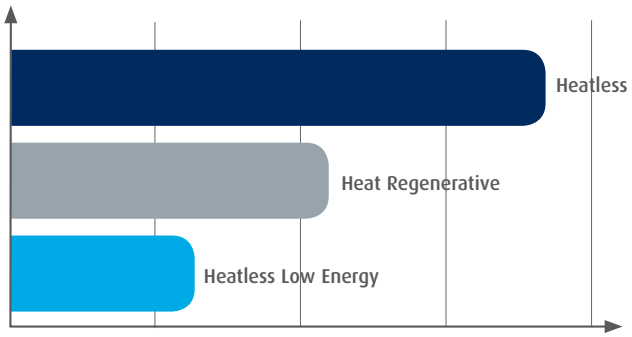


Technical data
A Series A1LX - A7LX

Product Selection

Model	Pipe Size	Inlet Flowrates			
		[m³/min]	[m³/hr]	[L/S]	[cfm]
A1LX	⅜"	0.09	5.1	1	3
A2LX	⅜"	0.14	8.5	2	5
A3LX	⅜"	0.23	13.6	4	8
A4LX	⅜"	0.28	17.0	5	10
A5LX	⅜"	0.37	22.1	6	13
A6LX	⅜"	0.43	25.5	7	15
A7LX	⅜"	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.

Dryer Performance

Dryer Models	*Dewpoint [Standard]		ISO8573-1:2010 Classification [Standard]	*Dewpoint [Option 1]		ISO8573-1:2010 Classification [Option 1]
	[°C]	[°F]		[°C]	[°F]	
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

Dryer Models	Electrical Supply [Standard] Tolerance ± 10%	Electrical Supply [Optional] Tolerance ± 10%	Thread Connection	Noise Level [Average]
				dB[A]
A_LX	230 / 1ph / 50Hz	115 / 1ph / 60Hz	BSPP or NPT	<75

Electronic Controller Options	Function	
	Power On Indication	Service Interval Indication
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 Inlet Temperature	[°C]	25	30	35	40	45	50
	[°F]	77	86	95	104	113	122
	CFT	1.00	1.00	1.00	1.04	1.14	1.37

Pressure Correction Factor CFP										
Minimum Inlet Pressure	[bar g]	4	5	6	7	8	9	10	11	12
	[psi g]	58	73	87	102	116	131	145	160	174
	CFP	1.60	1.33	1.14	1.00	1.03	0.93	0.85	0.78	0.71

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

Weights and Dimensions

Model	Pipe Size	Dimensions						Weight	
		Height [H]		Width [W]		Depth [D]			
		[mm]	[ins]	[mm]	[ins]	[mm]	[ins]	[Kg]	[lbs]
A1LX	⅜"	422	16.6	289	11.4	149	5.9	11	24.2
A2LX		500	19.7					13	28.7
A3LX		616	24.2					16	35.3
A4LX		692	27.2					18	39.7
A5LX		847	33.3					20	44.1
A6LX		906	35.7					23	50.7
A7LX		1098	43.2					28	61.7

Recommended Filtration

Model	Filter Pipe Size BSPT or NPT	Inlet General Purpose Pre-filter	Inlet High Efficiency Filter	Outlet Dust Filter
A1LX	⅜"	CF0006G3/8"G	Built into dryer	Built into dryer
A2LX				
A3LX				
A4LX				
A5LX				
A6LX				
A7LX				

*A_LX dryers include integral high efficiency pre and general purpose dust filters.

A7XS - A50XS

Product Selection

Model	Pipe Size	Inlet Flowrates			
		[m³/min]	[m³/hr]	[L/S]	[cfm]
A7XS	¾"	0.68	41	11	24
A9XS		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°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]	
A7XS - A50XS	-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 [Standard]	Electrical Supply [Optional]	Thread Connection	Noise Level
	[bar g]	[psi g]	[bar g]	[psi g]	[°C]	[°F]	[°C]	[°F]	[°C]	[°F]				[dB(A)]
A7XS - A50XS	4	58	16	232	5	41	50	122	55	131	230V 1ph 50/60Hz	110V 1ph 50/60Hz	BSPP or NPT	<75
A30XS - A50XSDS			13	190										

Controller Options

Controller Options	Function								
	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									

*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

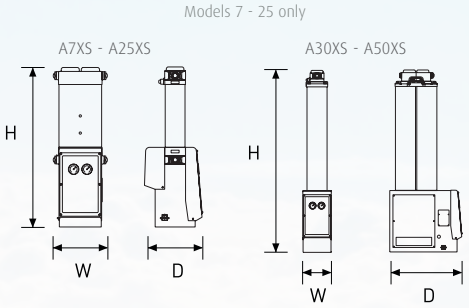
Temperature Correction Factor CFT							
Maximum Inlet Temperature	[°C]	25	30	35	40	45	50
	[°F]	77	86	95	104	113	122
	CFT	1.00	1.00	1.00	1.04	1.14	1.37

Pressure Correction Factor CFP														
Minimum Inlet Pressure	[bar g]	4	5	6	7	8	9	10	11	12	13	14	15	16
	[psi g]	58	73	87	100	116	131	145	160	174	189	203	218	232
	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 Correction Factor CFD		Standard	Option 1
Required Dewpoint	PDP °C	-40	-70
	PDP °F	-40	-100
	CFD	1.00	1.43

Weights and Dimensions

Model	Pipe Size Inlet / Outlet	Dimensions						Weight	
		Height [H]		Width [W]		Depth [D]			
		[mm]	[ins]	[mm]	[ins]	[mm]	[ins]	[kg]	[lbs]
A7XS	¾"	837	33.0	284	11.2	302	11.9	32	70
A9XS		1003	39.5					37	81
A12XS		1168	46.0					42	92
A15XS		1333	52.5					47	103
A18XS		1499	59.0					52	114
A25XS		1747	68.8					60	132
A30XS	1"	1433	56.4	220	8.7	566	22.3	80	176
A37XS		1599	63.0					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	¾"	CF0018G¾"G	CF0018G¾"H	CF0018G¾"G
A9XS				
A12XS				
A15XS				
A18XS				
A25XS		CF0036G¾"G	CF0036G¾"H	CF0036G¾"G
A30XS	1"	CF0036G1"G	CF0036G1"H	CF0036G1"G
A37XS		CF0066G1"G	CF0066G1"H	CF0066G1"G
A50XS				

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

A068XS - A340XS

Product Selection

	Model	Pipe Size	Flowrates			
			[m³/min]	[m³/hr]	[L/S]	[cfm]
Single Bank	A068XS	2"	6.81	408	113	240
	A102XS		10.22	612	170	360
	A127XS		12.78	765	213	450
	A170XS		17.03	1020	283	600
	A212XS	2½"	21	1275	354	750
	A255XS		26	1530	425	900
	A297XS		30	1785	496	1050
	A340XS		34	2040	567	1200
Multi-Bank	2 x A212XS		43	2550	708	1500
	2 x A255XS		51	3060	850	1800
	2 x A297XS		60	3570	992	2100
	2 x A340XS		68	4080	1133	2400
	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

Dryer Models	Dewpoint [Standard]		ISO8573-1:2010 Classification [Standard]	Dewpoint [Option 1]		ISO8573-1:2010 Classification [Option 1]	Dewpoint [Option 2]		ISO8573-1:2010 Classification [Option 2]
	[°C]	[°F]		[°C]	[°F]		[°C]	[°F]	
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		Max Ambient Temp		Electrical supply [Standard]	Electrical supply [Optional]	Thread Connections	Noise Level
	[bar g]	[psi g]	[bar g]	[psi g]	[°C]	[°F]	[°C]	[°F]	[°C]	[°F]				[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

Controller Options	Function								
	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			•		•	•		•	

*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

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

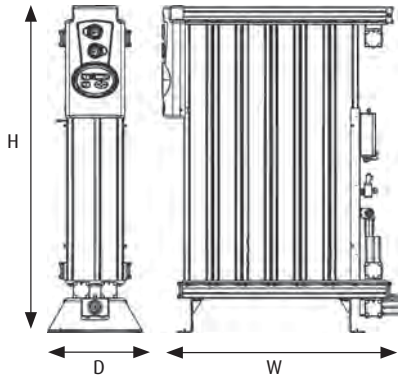
Minimum Inlet Pressure	Pressure Correction Factor CFP									
[bar g]	4	5	6	7	8	9	10	11	12	13
[psi g]	58	73	87	100	116	131	145	160	174	189
CFP	1.60	1.33	1.14	1.00	0.89	0.80	0.73	0.67	0.62	0.57

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

Weights and Dimensions

Model	Pipe Size	Dimensions						Weight	
		Height [H]		Width [W]		Depth [D]			
		[mm]	[ins]	[mm]	[ins]	[mm]	[ins]	[kg]	[lbs]
A068XS	2"	1647	64.8	687	27.0	550	21.7	235	518
A102XS				856	33.7			316	696
A127XS		1892	74.5					355	782
A170XS				1025	40.3			450	992
A212XS	2½"			1194	47.0			543	1197
A255XS				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	2"	CF0132G 2"G	CF0132G 2"H	CF0132G 2"G
A102XS				
A127XS		CF0198G 2"G	CF0198G 2"H	CF0198G 2"G
A170XS				
A212XS	2½"	CF0258G2 ½"G	CF0258G2 ½"H	CF0258G2 ½"G
A255XS		CF0372G2 ½"G	CF0372G2 ½"H	CF0372G2 ½"G
A297XS				
A340XS				

Technical data
A068XLE – A340XLE

Product Selection

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

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]	Dewpoint [Option 2]		ISO8573-1:2010 Classification [Option 2]
	[°C]	[°F]		[°C]	[°F]		[°C]	[°F]	
AXLE	-40	-40	Class 2	-70	-100	Class 1	-20	-4	Class 3

* ISO8573-1 Classifications when used with included CompAir CF range pre / post filtration.

Technical Data

Dryer Models	Min Operating Pressure		Max Operating Pressure		Min Operating Temp		Max Operating Temp		Max Ambient Temp		Electrical supply [Standard]	Electrical supply [Optional]	Thread Connections	Noise Level
	[bar g]	[psi g]	[bar g]	[psi g]	[°C]	[°F]	[°C]	[°F]	[°C]	[°F]				[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

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

Correction Factors

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

Pressure Correction Factor CFP										
Minimum Inlet Pressure	[bar g]	5	6	7	8	9	10	11	12	13
	[psi g]	73	87	100	116	131	145	160	174	189
	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 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

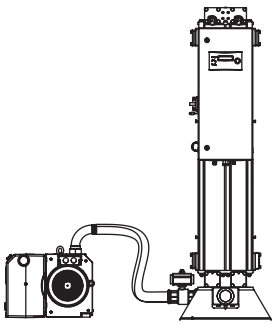
Part Numbers

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

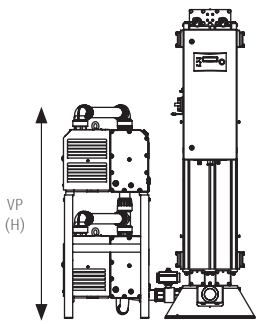
Weights and Dimensions

Model	Pipe Size	Dryer Dimensions						Weight	
		Height [H]		Width [W]		Depth [D]			
		[mm]	[ins]	[mm]	[ins]	[mm]	[ins]	[kg]	[lbs]
A068XLE	2"	1647	64.8	793.5	31.5	550	21.7	265	583
A102XLE				962.5	37.9			346	761
A127XLE		1892	74.5					385	847
A170XLE				1131.5	44.6			480	1056
A212XLE	2½"			1300.5	51.2			573	1261
A255XLE				1469.5	57.9			667	1467
A297XLE				1641.5	64.6			761	1674
A340XLE				1807.5	71.2			855	1881

A068XLE – A212XLE
SINGLE VACUUM PUMP



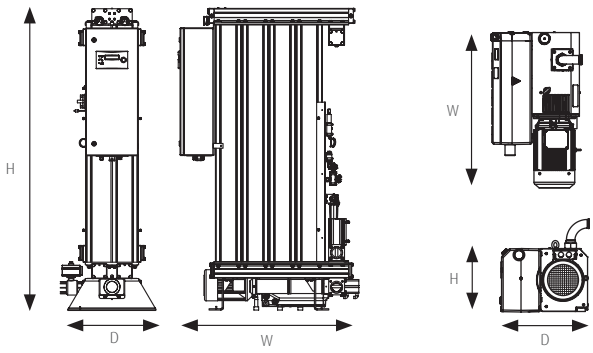
A255xle – A340XLE
DUPLEX VACUUM PUMP



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

DRYER

VACUUM PUMP



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"	CF0132G2"B	CF0132G2"C	CF0132G2"B
A102XLE				
A127XLE		CF0198G2"B	CF0198G2"C	CF0198G2"B
A170XLE				
A212XLE	2½"	CF0198G2"B	CF0258G21/2"C	CF0258G21/2"B
A255XLE		CF0372G21/2"B	CF0372G21/2"C	CF0372G21/2"B
A297XLE				
A340XLE				