

# Modular Adsorption Dryers

Innovative Compressed Air Treatment GDX Series





## Compressed air dryers - The heart of the compressed air treatment solution

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.

Heatless adsorption dryers (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 GDX 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.

#### Benefits of heatless adsorption dryers

- Industry proven design
- Suitable for all industries and applications - some adsorption dryer regeneration methods prevent their use in certain industries / applications
- Lower capital investment compared to other adsorption dryer regeneration methods
- Reduced complexity compared to other adsorption dryer regeneration methods
- Robust & reliable
- Uses clean, dry compressed air for regeneration making them suitable for all industries and applications
- Lower maintenance costs compared to other adsorption dryer regeneration methods
- No heat / heaters / heat related issues

## Gardner Denver GDX series of modular compressed air dryers - a dedicated solution for every application

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

The Gardner Denver GDX series of heatless regenerative dryers are the ideal solution for many thousands of compressed air users worldwide in a wide variety of industries.

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

#### **Benefits**

#### **Highest quality air**

 Clean, oil-free and dry compressed air in accordance with all editions of ISO8573-1, the international standard for compressed air quality

#### **Energy efficient**

Maximising savings

## Dry air eliminates microbiological growth

 Preventing product spoilage, recall and litigation

#### Dry air means zero corrosion

 Preventing product spoilage and damage

## Smaller, more compact and lightweight

 Modular construction means less than half the size of conventional dryers

#### Modular design

- 100% standby at a fraction of the cost of twin tower designs
- 10 year guarantee on pressure envelope
- Corrosion resistance due to alochroming and epoxy painting
- Constant dewpoint performance thanks to snowstorm filling

## Approvals to international standards

• PED, CE, CSA (US+Canada), CRN

#### Easy and flexible installation

• Minimal space required

#### Simple maintenance

Giving reduced downtime

#### **Reduced noise pollution**

• Super quiet operation



GDX1L - GDX7L Flowrates from 0.09 m³/min



Flowrates from 0.68 m³/min



Flowrates from 6.8 m³/min



GDX068LE - GDX340LE Flowrates from 6.8 m³/min

Clean, dry air improves production efficiency and reduces maintenance costs and downtime. Only an adsorption dryer can provide the highest levels of dry compressed air.



Gardner Denver air treatment - four key features guarantee air quality

#### Gardner Denver 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 Gardner Denver pre and after filtration can the removal of these 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.

#### Adsorbent desiccant material

Specially selected desiccant materials provide:

- 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





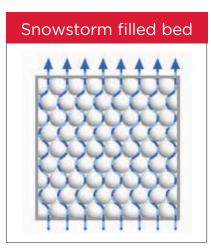


Maximum Packing Density

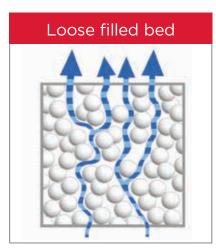
'Snowstorm' filling ensures consistent dewpoint performance

#### 'Snowstorm' filling method

Gardner Denver modular dryers utilise snowstorm filling techniques to charge the drying chambers with adsorbent desiccant material.



Consistent drying with no desiccant attrition



Inconsistent drying and desiccant attrition

#### The benefits are:

- 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.



The Gardner Denver GDXLE compressed air dryer has been specifically designed to provide all of the benefits of the GDX-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.



Robust and effficient Elmo Rietschle rotary vane vacuum pump



XLE controller

#### Introducing GDXLE

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

The GDXLE has been specifically designed to provide all of the benefits of a traditional GDX-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 and 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 preventative maintenance periods and shorter maintenance times
- Lower maintenance costs compared to other types of low energy dryers

## Heatless fall back mode for extra security

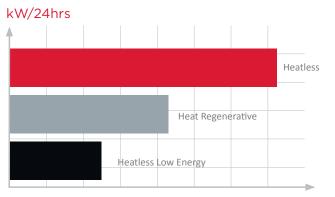
 Should a fault occur with the vacuum pump, the dryer can be operated in full heatless mode to keep the plant operational

#### Modular design

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

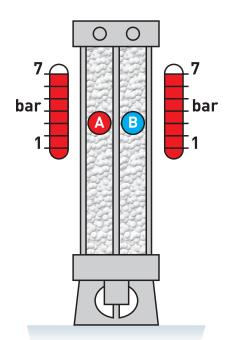
#### Efficiency comparison







## Dewpoint Dependent Switching (DDS) Energy Management System



The energy required to regenerate the off-line desiccant bed in an absorption 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 Cycle									
Time (minutes)	0	2.5	3	changeover time dictated by outlet dewpoint		0	2.5	3	changeover time dictated by outlet dewpoint	chang	
Side A	Regeneration	Re-pressurisation		Energy Saving			Drying			geove	
Side B		Drying	Drying		Ψ.	Regeneration	Re-pressurisation		Energy Saving	- Y	

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

Air Demand %	Francis Casting 9/	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

 $System\ pressure\ 6\ bar\ g.\ Max\ Temp\ 35^{\circ}C.\ System\ flow\ 1700\ m^{3}/hr\ (1000\ cfm).\ Average\ pressure\ 6.5\ bar\ g.\ Average\ Temp\ 30^{\circ}C.$ 

## Technical data

#### GDX Series GDX1L - GDX7L

#### **Product Selection**

Model	Pipe Size	Inlet Flowrates				
		m³/min	m³/hr	cfm		
GDX1L	3/11	0.09	5.1	3		
GDX2L	¾"	0.14	8.5	5		
GDX3L	¾"	0.23	13.6	8		
GDX4L	¾"	0.28	17.0	10		
GDX5L	¾"	0.37	22.1	13		
GDX6L	¾"	0.43	25.5	15		
GDX7L	3/11	0.57	34.0	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			ISO8573-1:2010 Classification (standard)	*Dewpoint (Option 1)			
	°C	°F	m³/min	m³/hr	cfm		
GDX_L	-40	-40	Class 2	-70	-100		

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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
GDX_L	4	58	12	175	2	35	50	122	55	131

Dryer Models	Electrical Supply (Standard)	Electrical Supply (Optional)	Thread Connection	Noise Level (average)
	Tolerance ± 10%	Tolerance ± 10%		dB(A)
GDX_L	230 / 1ph / 50Hz	115 / 1ph / 60Hz	BSPP or NPT	<75

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

ISO8573-1:2010

Classification (Option 1)

Class 1

For fully pneumatic applications, a GDX Series MINI range is available. Please contact Gardner Denver for further information.

#### **Correction Factors**

Temperature Correction Factor CFT									
Maximum -	°C	25	30	35	40	45	50		
	°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											
Maximum Inlet	bar g	4	5	6	7	8	9	10	11	12	
	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	

rrection Factor CFD	Standard	Option 1	
bar g	-40	-70	
psi g	-40	-100	
CFD	1.00	1.43	
	bar g psi g	bar g -40 psi g -40	

#### Weights and Dimensions

			Dimensions							
Model	Pipe Size	Heigh	Height (H)		Width (W)		Depth (D)		Weight	
		mm	ins	mm	ins	mm	ins	Kg	lbs	
GDX1L		422	16.6	16.6 19.7			149 5.9	11	24.2	
GDX2L		500	19.7		11.4	149		13	28.7	
GDX3L		616	24.2					16	35.3	
GDX4L	%″	692	27.2	289				18	39.7	
GDX5L		847	33.3					20	44.1	
GDX6L		906	906 35.7					23	50.7	
GDX7L		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	
GDX1L					
GDX2L	<u>%</u> "				
GDX3L				Built into dryer	
GDX4L		GDF0006G3/8"G	Built into dryer		
GDX5L					
GDX6L					
GDX7L					

<sup>\*</sup>GDX\_L dryers include integral high efficiency pre and general purpose dust filters.

#### GDX 7 - GDX50

#### **Product Selection**

Model	Pipe Size		Inlet Flo	wrates	
Model		m³/min	m³/hr	L/S	cfm
GDX7	<b>3</b> /111	0.68	41	11	24
GDX9		0.91	55	15	32
GDX12		1.19	71	20	42
GDX15	74	1.50	90	25	53
GDX18		1.84	110	31	65
GDX25		2.49	149	42	88
GDX30		3.01	180	50	106
GDX37	1"	3.69	221	61	130
GDX50		4.99	299	83	176



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

#### **Dryer Performance**

	Duran Mandala	Dewpoint	(Standard)	ISO8573-1:2010	Dewpoint	(Option 1)	ISO8573-1:2010		
	Dryer Models	°C	°F	Classification (standard)	°C	°F	Classification (Option 1)		
	GDX7 - 50	-40	-40	Class 2	-70	-100	Class 1		

#### **Technical Data**

	Dryer Models	Min Operating Pressure				Min Operating Max Operating Temperature Temperature			Max Ambient Temperature		Electrical Supply	Electrical Supply	Thread	Noise Level	
		bar g	psi g	bar g	psi g	°C	°F	°C	°F	°C	°F	(Standard)	(Optional)	Connection	dB(A)
	GDX7 - GDX25	4	58	16	232	_	5 41	FO	0 122	ee.	55 131	230V 1ph	110V 1ph	BSPP or	<75
	GDX30 - GDX50	4		13	190			50	50 122		131	50/60Hz	50/60Hz	NPT	<b>\75</b>

### **Controller Options**

		vFunction										
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			
GDX7 - 50 (Electronic control)												
GDX7DS - 50DS	•	•					•		·			

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

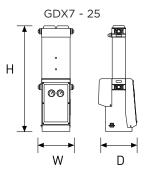
#### **Correction Factors**

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

					Pres	sure Corre	ction Facto	or CFP						
	bar g	4	5	6	7	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
	CFP	1.60	1.33	1.14	1.00	0.89	0.80	0.73	0.67	0.62	0.57	0.54	0.5	0.47

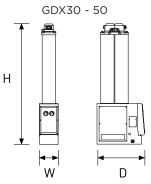
Dewpoint Corre	ction Factor CFD	Standard	Option 1
Required Dewpoint	PDP °C	-40	-70
	PDP °F	-40	-100
	CFD	1.00	1.43

Models 7 - 25 only



#### Weights and Dimensions

	Pipe			Dimer	nsions			Weight	
Model	Size Inlet /	Heig	ht (H)	it (H) Width (W)		Dept	h (D)	vve	igiit
	Outlet	mm	ins	mm	ins	mm	ins	kg	lbs
GDX7		837	33.0					32	70
GDX9		1003	39.5	284	11.2	302		37	81
GDX12	3/1111	1168	46.0				11.0	42	92
GDX15	74	1333	52.5				11.9	47	103
GDX18		1499	59.0					52	114
GDX25		1747	68.8					60	132
GDX30		1433	56.4					80	176
GDX37	1"	1599	63.0	220	8.7	566	22.3	90	198
GDX50		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	
GDX7					
GDX9	¾"				
GDX12		GDF0018G3/4"G	GDF0018G3/4"H	GDF0018G3/4"G	
GDX15					
GDX18					
GDX25		GDF0036G3/4"G	GDF0036G3/4"H	GDF0036G3/4"G	
GDX30		GDF0036G1"G	GDF0036G1"H	GDF0036G1"G	
GDX37	1"	CDF000001110	CDE00CCC1//LI	CDE000001110	
GDX50		GDF0066G1"G	GDF0066G1"H	GDF0066G1"G	

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

#### GDX Series GDX068 - GDX340

#### **Product Selection**

	Maralal	Din a Cina		Flowr	ates	
	Model	Pipe Size	m³/min	m³/hr	L/S	cfm
	GDX068		6.81	408	113	240
*	GDX102	2"	10.22	612	170	360
Bank	GDX127	2	12.78	765	213	450
Single	GDX170		17.03	1020	283	600
S	GDX212		21	1275	354	750
	GDX255		26	1530	425	900
	GDX297		30	1785	496	1050
	GDX340		34	2040	567	1200
	2 x GDX212	2½"	43	2550	708	1500
	2 x GDX255	22	51	3060	850	1800
¥	2 x GDX297		60	3570	992	2100
Multi-Bank	2 x GDX340		68	4080	1133	2400
Σ	3 x GDX255		77	4590	1275	2700
	3 x GDX297		89	5355	1488	3150
	3 x GDX340	G 2½"	102	6120	1700	3600



Stated flows are for operation at 7 bar g (100 psi g) with reference to  $20^{\circ}$ 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	Dewpoint (Option 1)		ISO8573-1:2010	Dewpoint (Option 2)		ISO8573-1:2010	
	-	°C	°F	Classification (standard)	°C	°F	Classification (Option 1)	°C	°F	Classification (Option 2)	
	GDX068 - GDX340	-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	Thread Connections	Noise Level
	bar g	psi g	bar g	psi g	°C	°F	°C	°F	°C	°F	(3337337)	(optional)		dB(A)
GDX_S		58	13	190	_	41	50	122	55	131	85 - 265 V	N/A	BSPP	<75
GDX _E	4	58	15	190	5	41	50	122	55	151	1ph 50/60Hz	IN/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
GDX_S									
GDX_SDS	•	•		•			•		_
GDX_E			•		•	•		•	•

<sup>\*</sup>ATEX compliant option available.

For hazardous environments, a fully pneumatic ATEX compliant version of GDX Series is available.

ATEX Directive 94/9/EC, Group II, Category 2GD, T6.

#### **Correction Factors**

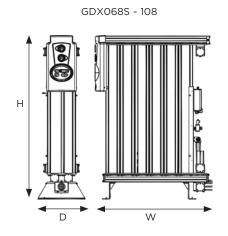
Temperature Correction Factor CFT														
	°C 25 30 35 40 45													
Maximum Inlet Temperature	°F	77	86	95	104	113	122							
	CFT	1.00	1.00	1.00	1.04	1.14	1.37							

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	
	CFP	1.60	1.33	1.14	1.00	0.89	0.80	0.73	0.67	0.62	0.57	

Dewpoint Correc	tion 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

	Pino			Dimer	nsions			\\/o	iaht
Model	Pipe Size	Heigh	nt (H)	Width	n (W)	Dept	h (D)	vve	ight
		mm	ins	mm	ins	mm	ins	kg	lbs
GDX068		1647	64.8	687	27.0			235	518
GDX102	2"	1647	04.0	856	33.7			316	696
GDX127				856	33.7			355	782
GDX170				1025	40.3	550	01.7	450	992
GDX212		1892		1194	47.0	550	21.7	543	1197
GDX255	21///	1892	74.5	1363	53.6			637	1404
GDX297	2½"			1532	60.3			731	1611
GDX340				1701	67.0			825	1818



#### Recommended Filtration

For Dryer Model	Filter Pipe Size BSPT or NPT	Inlet General Purpose Pre-filter	Inlet High Efficiency Filter	Outlet Dust Filter	
GDX068		GDF0132G2"G	GDF0132G2"H	GDF0132G2"G	
GDX102	2"	GDF0132G2 G	GDF0132G2 H	GDF0132G2°G	
GDX127	2½"	GDF0198G2"G	GDF0198G2"H	GDF0198G2"G	
GDX170		GDF0198G2*G	GDF0198G2 H	GDF0198G2*G	
GDX212		GDF0258G2 1/2"G	GDF0258G2 1/2"H	GDF0258G2 1/2"G	
GDX255					
GDX297		GDF0372G2 1/2"G	GDF0372G2 1/2"H	GDF0372G2 1/2"G	
GDX340					

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

#### GDX068LE - GDX340LE

#### **Product Selection**

	Model	Pipe Size		Inlet Flo	owrates	
	Model	Pipe Size	m³/min	m³/hr	L/S	cfm
	GDX068LE	2"	6.81	408	113	240
V	GDX102LE	2"	10.22	612	170	360
Bank	GDX127LE	2"	12.78	765	213	450
Single	GDX170LE	2"	17.03	1020	283	600
iS	GDX212LE	2½"	21	1275	354	750
	GDX255LE	2½"	26	1530	425	900
	GDX297LE	2½"	30	1785	496	1050
	GDX340LE	2½"	34	2040	567	1200



#### **Dryer Performance**

Dryer Models		point dard)	ISO8573-1:2010 Classification (standard)	Dewpoint (Option 1)		ISO8573-1:2010	Dewpoint (Option 2)		ISO8573-1:2010 Classification (Option 2)	
	°C	°F		°C	°F	Classification (Option 1)	°C	°F	Classification (Option 2)	
GDXLE	GDXLE -40 -40		Class 2	-70	-100	Class 1	-20	-4	Class 3	

<sup>\*</sup> ISO8573-1 Classifications when used with included Gardner Denver pre / post filtration.

#### **Technical Data**

Drye	er Models	Min Op Pres	-	Max Op Pres	-	1	in ng Temp		erating mp	M Ambier	ax nt Temp	Electrical supply (Standard)	Electrical supply	Thread Connections	Noise Level
		bar g	bar g	bar g	bar g	°C	°F	°C	°F	°C	°F	(Standard)	(Optional)	Connections	dB(A)
G	GDXLE	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	GDXLE 102C	GDXLE 103C	GDXLE 103	GDXLE 104	GDXLE 105	GDXLE 106	GDXLE 107	GDXLE 108
Vacuum Pump	50Hz	3	3	4	5.5	5.5	8	9.5	9.5
kW	60Hz	4.8	4.8	6.5	9	9	13	15.5	15.5

#### **Correction Factors**

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

Pressure Correction Factor CFP										
	bar g	5	6	7	8	9	10	11	12	13
Minimum Inlet Pressure	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 Correcti	on 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	

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

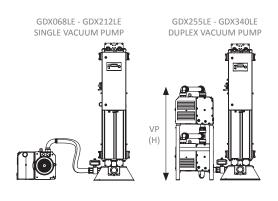
#### Part Numbers

Dryer Part Numbers	Vacuum Pump Part Numbers 50Hz	Vacuum Pump Part Numbers 60Hz	Dryer Upgrade Kits Part Numbers
GDX068LE	GDX068LEP-50	GDX068LEP-60	GDX068LEK
GDX102LE	GDX102LEP-50	GDX102LEP-60	GDX102LEK
GDX127LE	GDX127LEP-50	GDX127LEP-60	GDX127LEK
GDX170LE	GDX170LEP-50	GDX170LEP-60	GDX170LEK
GDX212LE	GDX212LEP-50	GDX212LEP-60	GDX212LEK
GDX255LE	GDX255LEP-50	GDX255LEP-60	GDX255LEK
GDX297LE	GDX297LEP-50	GDX297LEP-60	GDX297LEK
GDX340LE	GDX340LEP-50	GDX340LEP-60	GDX340LEK

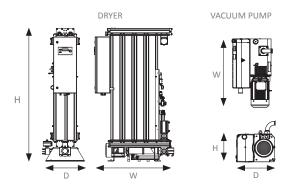
NB: for -70°C PDP please mention when ordering

## Weights and Dimensions

	Pipe Size	Dryer Dimensions						VA/-:				
Model		Height (H)		Width (W)		Depth (D)		Weight				
		mm	ins	mm	ins	mm	ins	kg	lbs			
GDX068LE	2"	1647	64.8	793.5	31.5			265	583			
GDX102LE		2"	1047	04.8	962.5	37.9			346	761		
GDX127LE						902.5	37.9	550	21.7	385	847	
GDX170LE						1131.5	44.6			480	1056	
GDX212LE				21/#		1002 745	1300.5	51.2	330	21.7	573	1261
GDX255LE						74.5	1469.5	57.9			667	1467
GDX297LE				1641.5	64.6			761	1674			
GDX340LE				1807.5	71.2			855	1881			



	Vacuum Pump Dimensions						Weight	
Model	Height (H)		Width (W)		Depth (D)		vveignt	
	mm	ins	mm	ins	mm	ins	kg	lbs
GDX068LE							89	196
GDX102LE							89	196
GDX127LE	400	00 15.75	933	36.73	523	20.59	194	428
GDX170LE							10.4	400
GDX212LE							184	406
GDX255LE							420	926
GDX297LE	1304	51.34	1100	43.31	560	22.05	700	000
GDX340LE							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	
GDX068LE		GDF0132G2"G	GDF0132G2"H	GDF0132G2"G	
GDX102LE	2"	GDF0132G2 G	GDF0132G2 H		
GDX127LE	∠	GDF0198G2"G	GDF0198G2"H	GDF0198G2"G	
GDX170LE		GDF019602 G	GDF019602 H		
GDX212LE		GDF0198G2"G	GDF0258G21/2"H	GDF0258G21/2"G	
GDX255LE	2½"			GDF0372G21/2"G	
GDX297LE	∠/2	GDF0372G21/2"G	GDF0372G21/2"H		
GDX340LE					



## **Global Expertise**

The GD rotary screw compressor range from  $2.2-500\,\mathrm{kW}$ , available in both variable and fixed speed compression technologies, are designed to meet the highest requirements which the modern work environment and machine operators place on them.



The oil-free EnviroAire range from 15-315 kW provides high quality and energy efficient compressed air for use in a wide range of applications. The totally oil-free design eliminates the issue of contaminated air, reducing the risk and associated cost of product spoilage and rework.



A modern production system and process demands increasing levels of air quality. Our complete **Air Treatment Range** ensures the highest product quality and efficient operation.



Compressor systems are typically comprised of multiple compressors delivering air to a common header. The combined capacity of these machines is generally greater than the maximum site demand. To ensure the system is operated to the highest levels of efficiency, the **GD Connect** air management system is essential.



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For additional information please contact Gardner Denver or your local representative.

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