

Gardner
Denver

Oil Free Screw Compressors

EnviroAire S 4 - 15D Series
Scroll Technology

PureAir
ISO CLASS: ZERO PLUS SILICONE FREE





Why oil-free? Don't compromise on quality...

The EnviroAire S series from Gardner Denver sets the standards for air purity. These oil-free scroll compressors are ISO 8573-1 CLASS O compliant.

Offering not only 100% oil-free air but also improved energy efficiency, these compressors are made to meet the precise needs of a diverse range of industries.

Such industries that are already utilising oil-free compressors are:

- Medical
- Lab/Research
- Biotechnology
- Pharmaceutical
- Food & Beverage
- Semi-conductor
- Electronics

Oil contamination is extremely detrimental to these processes.

Pure air quality demands are rapidly growing with new regulations and laws regarding oil contamination throughout multiple industries and applications.

Gardner Denver has designed the EnviroAire Scroll compressor specifically for these applications that require **100% OIL-FREE AIR**.

- Extremely Quiet Operation
- Less Moving Parts, Low Maintenance and High Reliability
- Environmentally Friendly Contaminate Free Air

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EnviroAire S: Superior Compressor Package

Gardner Denver designed the EnviroAire scroll compressor package to meet the strict requirements for contaminant free, oil-free, clean air applications.

The scroll compressor range starts with Simplex units at 4, 6 and 8 kW and the Duplex units with 7, 11 and 15 kW. The compressor design features a very clean, simple and serviceable layout.

Class	Concentration total oil (aerosol, liquid, vapour) mg/m ³
0	As specified by the equipment user or supplier and more stringent than class 1
1	≤ 0.01
2	≤ 0.1
3	≤ 1
4	≤ 5

Scroll Compressor Features & Benefits

- 100% Oil-Free Design
- Oil-Free/Contaminant Free Air
- Motor Power from 4 to 15 kW
- Volume Flow from 21.2 to 106.0 m³/hr
- Continuous Operation, 100% Duty Cycle
- 8 or 10 bar Options
- Low Sound Levels
- Low Vibration
- Compact Footprint
- Less Moving Parts which require less maintenance with increased reliability



User Friendly

Oil-Free

Clean Air

Saving

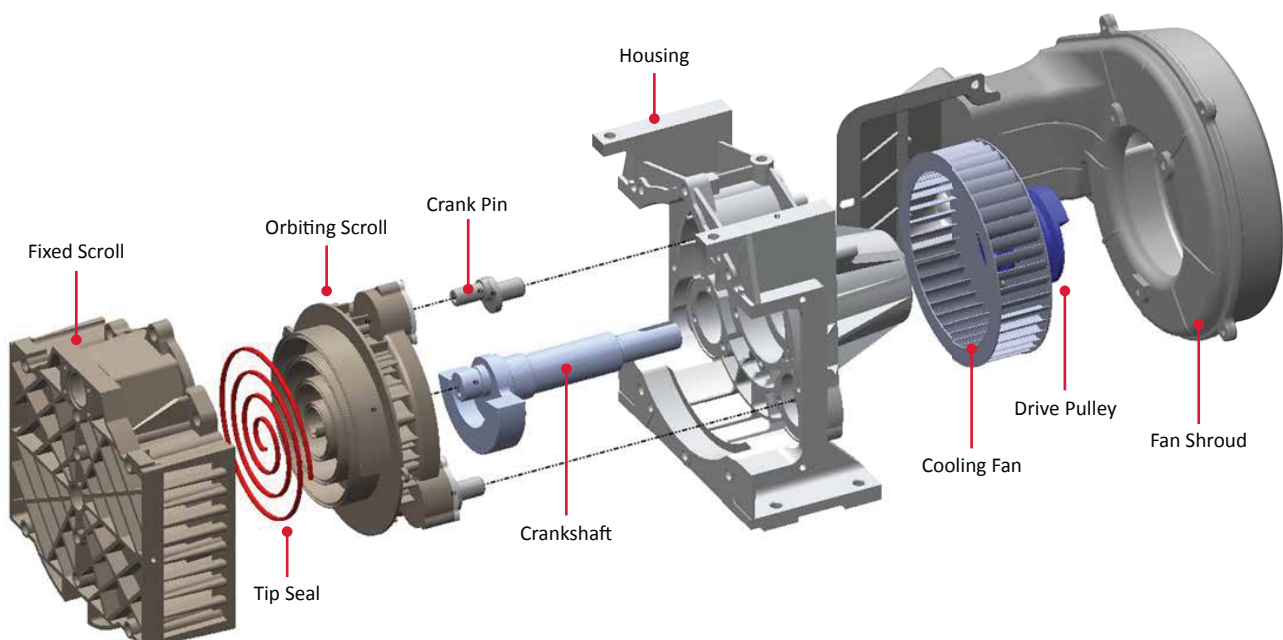
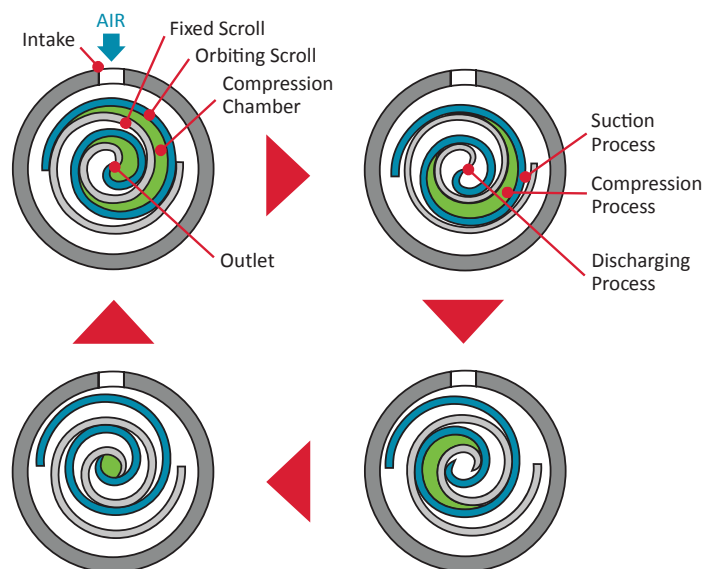
Premium Technology

Contaminant

Innovative Design

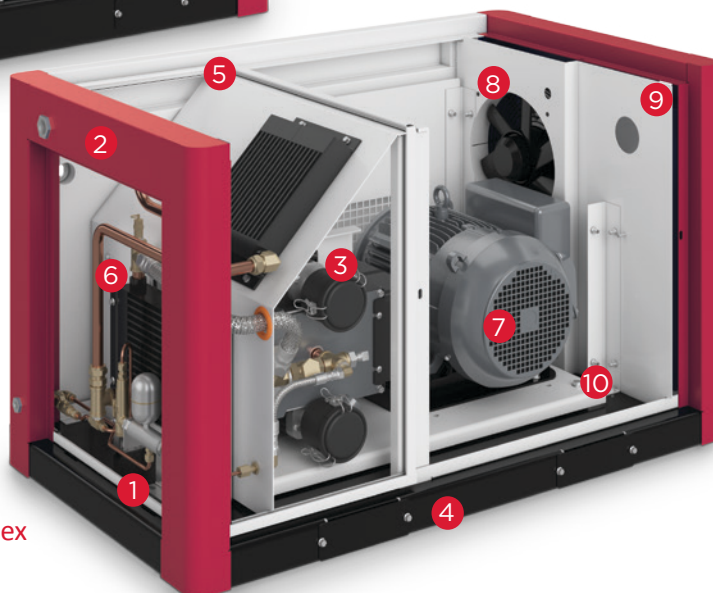
Scroll Compression Explained

- An orbiting (rotating) scroll and fixed scroll housing are mated to create the compression chambers
- The continual movement of the orbiting scroll moves atmospheric air from the intake toward the center, compressing the air into progressively smaller areas
- The compressed air is directed to the centre discharge port of the compressor
- Discharge pressure is accomplished during multiple stages of compression, resulting in a continuous intake suction and discharge





Duplex



Simplex

EnviroAire S

- 1 Automatic Condensate Drain
- 2 Rigid Framework
- 3 5 Micron Inlet Filter
- 4 Fork Slots for Easy Handling
- 5 Unique Chambered Design - Maximised Cooling and Serviceability
- 6 Large Industrial Aftercoolers
- 7 Premium Efficient TEFC Motor
- 8 High Volume Cooling Fan
- 9 Low Noise Sound Enclosure
- 10 Internal Vibration Isolators

Everything under control

The S-Series is available with different controller options. The Simplex versions can be either equipped with the basic relay panel or optionally with the Deluxe HMI electronic controller.

The optional Deluxe HMI control from CompAir has easy to use navigation and friendly graphics that deliver interactive and intuitive information at your fingertips.

With a built in integral webserver, via ModBus TCP Ethernet connection, these controllers provide visibility to the EnviroAire Scroll compressor system from any computer or mobile device with internet connection.



Deluxe HMI

- 3.5" Full Color Touch Screen
- PLC Controlled
- Lead/Lag Control with Forced Alternation
- System Capacity and Operation Trending
- 26 Language Options
- 24VDC Power Supply with Fusing
- System Run Time Meter
- Alarm/Fault Log
- System Discharge Pressure
- Pump Discharge Temperature
- System Maintenance Timers
- Integral Webserver
- Modbus TCP Interface over Ethernet



Simplex Basic Relay Panel

- NEMA 1, UL508A Labeled Panel
- Magnetic Contactor with Overload Protection
- 115V Control Circuit Transformer with Fusing
- Door Mounted TOA Switch
- Green Power On Light
- Emergency Stop
- Reset Button
- Run Time Meter
- Pressure Gauge

Genuine GD Parts – The perfect fit for maximum performance and efficiency

The vast experience and knowledge of GD's highly qualified air specialists, coupled with the use of genuine GD parts and quality consumables that are guaranteed to perform, ensures the best possible efficiency from your GD air system.

Service Kits – all the parts you need in a single box!

Using Service Kits allows you to plan compressor maintenance in advance, avoiding surprises and missing parts for a specific service or breakdown. No more wasted time searching for and ordering separate spare parts, service kits are a cost effective maintenance solution.



Technical data

Simplex

Model	Nominal Pressure	Drive Motor	FAD at 8 bar g*	FAD at 10 bar g*	Noise level	Dimensions	Weight
	[bar g]	[kW]	[m³/hr]	[m³/hr]	[dB(A)]	L x W x H [mm]	[kg]
EnviroAire S4	8 / 10	4	23.6	21.2	65	1168 x 686 x 711	315
EnviroAire S6	8 / 10	5.5	34.5	26.0	70	1168 x 762 x 711	352
EnviroAire S8	8 / 10	7.5	53.0	41.3	73	1168 x 762 x 711	367

Duplex

Model	Nominal Pressure	Drive Motor	FAD at 8 bar g*	FAD at 10 bar g*	Noise level	Dimensions	Weight
	[bar g]	[kW]	[m³/hr]	[m³/hr]	[dB(A)]	L x W x H [mm]	[kg]
EnviroAire S7D	8 / 10	7	47.2	42.5	64	1420 x 864 x 1404	562
EnviroAire S11D	8 / 10	11	69.0	52.0	68	1422 x 864 x 1397	599
EnviroAire S15D	8 / 10	15	106.0	82.6	71	1422 x 864 x 1397	615

* Data measured and stated in accordance with ISO 1217 Edition 4, Annex C & E at the following conditions:
Air Intake Pressure 1 bar a / 14.5 psi; Air Intake Temperature 20° C / 68° F ; Humidity 0 % (dry)

** Measured in free field conditions in accordance with ISO 2151, tolerance ± 3 dB (A)

Global Expertise

The GD rotary screw compressor range from 2.2 – 500 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.

Specifications subject to change without notice.