

Gardner Denver

Premium compressor design & industry leading warranty

15 to 22 kW
Fixed Speed & Variable Speed

PROTECT **10**
years

Extended Warranty for GD Compressors



Reliability & efficiency
without compromise



Excellence in every detail

The ESM and VS Series from Gardner Denver

Well known in the industry for quality and reliability, Gardner Denver continuously develops the ESM and VS to achieve cutting edge performance and efficiency. The ESM/VS 15 - 22 range of lubricated screw compressors comprise of fixed speed and variable speed (VS) models and is available as a complete package including air receiver and refrigerant dryer.

- ▶ **Pressure range**
7.5 to 13 bar
- ▶ **Volume flow**
0.83 to 3.65 m³/min
- ▶ **Motor power**
15 to 22 kW



GERMAN 
ENGINEERING 
DESIGN & MANUFACTURE

Engineering excellence

Compressors are more than just a financial investment, they are a key component in ensuring that manufacturers, processors and operators receive consistent, high quality low cost air.

The screw compression element is the heart of the compressor and therefore Gardner Denver keeps the design and manufacture in-house, using the latest CNC rotor grinding machinery, coupled with online laser technology.

The resulting reliability and performance ensure that operating costs will remain low throughout the compressor's life.

Under the free Protect 10 warranty the airends are covered up to 44,000 hours or 10 years*.

* Whichever is soonest

“Gardner Denver lubricated rotary screw compressors incorporate the very latest technological advances and guarantee a continuous supply of high quality compressed air.”



A design concept based on **reliability and flexibility**

▶ Fully integrated airend

The advanced design of the high efficiency airend allows operation at low rotational speeds, and consequently lowers the energy costs. The innovative integrated design, including oil separation, oil filter and thermostatic valve, reduces the number of external hoses and components offering excellent reliability.

▶ Combined air/oil cooler

Equipped with a bypass for rapid warm-up and control of the oil temperature, reducing wear, eliminating condensate in the compressor system and providing low air discharge temperature.

▶ High efficiency electric motor

The compressors are equipped with an energy saving IE3 electric motor.

▶ Automatic belt tensioning system

The maintenance-free system provides automatic and accurate belt tension and extends the belt life.

▶ Factory-filled lubricant

Reduces service costs by extending the oil change period to up to 4,000 hours.

▶ Low noise levels

Allows the compressor to be placed at the point of use.

▶ Up to 45°C ambient temperature

Reliable operation, even in challenging environments.

High modern control system

GD Pilot SE control system for **reliability and simplicity of operation.**

The advanced control system ensures reliable operation and protects your investment by continuously monitoring the operational parameters. The “GD PILOT SE” controller also has the capability to have programmable inputs and outputs, control additional equipment as well as providing the following features with a clear readable text from a 2.8“ Graphic Display with modern user interface:

- Discharge/line pressure display
- Oil temperature display
- Total hours run and loaded hours
- Service due indicator
- Enhanced fault log monitor
- Real time clock
- Timer controlled Stop/Start
- Remote Stop Start
- Auto restart on power failure
- Second pressure setting
- Status indication
- RS485 - Modbus RTU
- Micro-SD-Card for alarm - & data logging
- Integrated BLS-Functionality & Integrated Web-Server Light
- Via or with Optional module for RS485 interface & Ethernet connection

Ergonomic controller positioning

Controller can be positioned on top or front of the compressor.



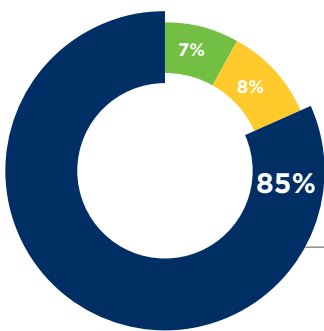


Variable speed Compressors

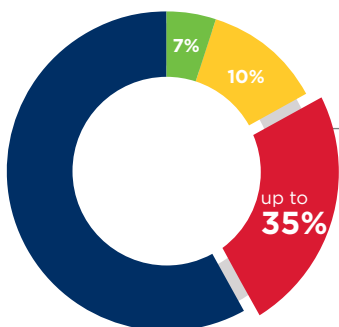
The perfect response to individual air demand

Variable speed compressors from Gardner Denver can efficiently and reliably handle the varying air demand found in most plant air systems.

The annual cost of ownership can be significantly reduced using variable speed technology.



A typical oil lubricated rotary screw air compressor operating at 70% load



Gardner Denver variable speed VS compressor operating at 70% load

Investment
Maintenance
Energy
Energy Savings

Tried and tested inverter concept

- Integrated in the electric cabinet
- Protected from dust by replaceable inlet filters
- Maximum reliability from optimised cooling system
- Ensures high availability and long-life

Gardner Denver VS features are your benefits

The VS Series products are designed to obtain the greatest efficiency across the entire operating range

- **Wide regulation range**
No cycles means substantial energy savings
- **Perfect motor - drive - airend design**
High efficiency across broad flow range



The **complete** packaged solution

Gardner Denver offers complete Airstations from 15 to 22 kW including compressor, refrigerant dryer and air receiver.

Save energy with refrigerant dryers and their high quality heat exchanger with low pressure loss and Energy Saving mode that shuts dryer off during low loads.

Easy to install, easy to use

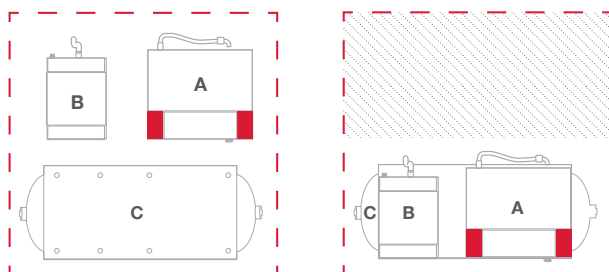
All components are perfectly matched and ready for "Plug and Play".

High quality air receiver

Built to the highest standards and are inspection-free for up to five years.

Minimum Footprint

By mounting the components on the receiver, the required floor space is reduced by 55%.



Minimum floor space required

Integrated heat recovery

All compressors are available with highly efficient heat recovery systems, which can be factory fitted or are available as retrofit kits comprising all the necessary pipe-work and fittings.



Compressed **air purification**

A modern production system and process demands increasing levels of air quality. A Gardner Denver compressed air system utilising the latest technology provides an energy efficient solution at lowest life cycle costs.

- **Water Cyclone Separator**
- **Compressed Air Filter**
- **Condensate Drain System**
- **Compressed Air Refrigerant Dryer**
- **Heatless Desiccant Dryers**
- **Heat Regenerative Desiccant Dryers**
- **Nitrogen Generator**
- **GD Connect 12 Multi Compressor Controllers**



The **best investment protection** you can get



Extended Warranty for GD Compressors

10 Years Warranty!

The Gardner Denver Protect 10 Warranty and Service programmes will protect you up to 44,000 hours/10 years¹. It is one of the most generous warranties available in the industry affording you total piece of mind.

Your benefits:

- The Protect 10 warranty is totally free to the compressor owner²
- The Gardner Denver authorised service provider will deliver a guaranteed quality of service
- The Protect 10 service agreement underpinning the warranty will enable accurate maintenance, budgeting and cost of ownership
- The use of genuine Gardner Denver parts and lubricants will maximise compressor life and efficiency

¹ Warranty duration is limited to 6 years/44,000 hours on the whole package, 10 years/44,000 hours on the air end. Whichever is the soonest.

² subject to Terms & Conditions

Compact design – easy installation

The small footprint reduces the space required for installation.

Easy servicing

The design of these packages ensures that the service points are readily accessible. The enclosure side doors are hinged and removable to allow complete access to all service points. The reduced number of moving parts further lowers the maintenance costs.

Gardner Denver genuine spare parts

Enjoy complete peace of mind.

Genuine Gardner Denver parts and lubricants ensure that compressed air plant reliability and efficiency is maintained at the highest standards. Gardner Denver spare parts and lubricants are distinguished by:

- Long service life, even under harshest conditions
- Minimum losses contributing to energy savings
- High reliability improves plant up-time
- Products manufactured with the strictest Quality Assurance Systems



Technical data

ESM 15 - 22 Fixed Speed

Gardner Denver model	Nominal Pressure	Drive Motor	FAD ¹⁾		Noise Level ²⁾	Weight	Dimensions L x W x H
	bar g		m ³ /min	m ³ /min			
ESM15	7.5	15	2.70		70	335	787 x 698 x 1202
	10		2.26				
	13		1.80				
ESM18	7.5	18.5	3.25		71	361	787 x 698 x 1202
	10		2.74				
	13		2.34				
ESM22	7.5	22	3.65		71	367	787 x 698 x 1202
	10		3.21				
	13		2.61				

VS 15 - 22 Variable Speed

Gardner Denver model	Nominal Pressure	Drive Motor	FAD ¹⁾		Noise Level ²⁾ at 70% Load	Weight	Dimensions L x W x H
	bar g		min.	max.			
VS15	7.5	15	0.92	2.60	67	365	787 x 698 x 1202
	10		0.86	2.18			
	13		0.83	1.67			
VS18	7.5	18.5	1.33	3.05	68	381	787 x 698 x 1202
	10		1.28	2.62			
	13		1.22	2.20			
VS22	7.5	22	1.04	3.54	69	386	787 x 698 x 1202
	10		0.93	3.15			
	13		0.90	2.66			

ESM / VS 15 - 22 Tank Mounted

Gardner Denver model	Nominal Pressure	Drive Motor	Air Receiver	Air Outlet	Weight	Dimensions L x W x H
	bar g		Volume			
ESM15 / VS15	7.5	15	500 litres	RP 1"	509 / 539	1883 x 815 x 1825
	10					
	13					
ESM18 / VS18	7.5	18	500 litres	RP 1"	577 / 597	1883 x 815 x 1825
	10					
	13					
ESM22 / VS22	7.5	22	500 litres	RP 1"	582 / 601	1883 x 815 x 1825
	10					
	13					

ESM / VS 15 - 22 Airstation

Gardner Denver model	Nominal Pressure	Refrigeration Dryer ³⁾	Air Receiver	Air Outlet	Weight	Dimensions L x W x H
	bar g		Volume			
ESM15 / VS15	7.5	✓	500 litres	RP 1"	553 / 583	1883 x 815 x 1825
	10					
	13					
ESM18 / VS18	7.5	✓	500 litres	RP 1"	625 / 645	1883 x 815 x 1825
	10					
	13					
ESM22 / VS22	7.5	✓	500 litres	RP 1"	630 / 649	1883 x 815 x 1825
	10					
	13					

¹⁾ Data measured and stated in accordance with ISO 1217, Edition 4, Annex C and Annex E and the following conditions: Air Intake Pressure 1 bar A, Air Intake Temperature 20°C, Humidity 0 % (Dry).

²⁾ Measured in free field conditions in accordance with ISO 2151 and ISO 9614-2, tolerance ± 3 dB(A).

³⁾ The refrigerant dryer requires a separate electric supply. Data refer to DIN ISO 7183, 8573-1:2010 (class 4, pressure dew point 3° C). For further specifications please refer to refrigerant dryer documentation.

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 – 355 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.