Gardner Denver

Premium compressor design & industry leading warranty

30 to 45 kW Fixed & Regulated Speed

iConn

PROTECT 10 years

Extended Warranty for GD Compressors

SUSTAINABLE MANUFACTURING

Reliability & efficiency without compromise

The next generation of efficiency

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 Series achieving cutting edge performance and efficiency. The new versatile range from 30 to 45 kW can be configured to meet the customers' efficiency requirements. The e-models feature a larger airend delivering highest efficiency levels. The regulated speed models save energy by matching the output to the plant air demand.

Pressure range
5 to 13 bar

Volume flow
1.33 to 8.90 m³/min

Motor power
30 to 45 kW

IE3 MOTOR*

*Optional IE 4

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 ensures that operating costs will remain low throughout the compressor's life.

Premium efficiency airend

Our premium efficiency airends are designed and manufactured in house on the latest CNC grinding machines and using accurate 3D monitoring technology for the inspection. Gardner Denver's airends are designed to match the exact requirements of the machines and achieve the max performance and reliability. The unique integrated design with oil filter and oil regulation valve included in the airend housing **eliminates the risk of leakage** and simplifies maintenance. Using the 3 O-rings unique design of the fail safe seal system we **minimise the down time** of the compressor by indicating the need of replacement before breakdown. Depending on the required efficiency level this range is available with standard and premium size airend. The larger airend achieves up to **9% energy savings** compared to the standard size airend.

GD Pilot TS SE7 innovative touch screen compressor controller

The GD Pilot TS SE7 with its high resolution 7" touch screen display is extremely user-friendly and self-explanatory. All functions are clearly structured in five main menus and are intuitively visual. The multilingual GD Pilot TS SE7 control system ensures reliable operation and protects your investment by continuously monitoring the operational parameters, which is essential for reducing your running costs.

Exceptional reliability and performance

Large surface after cooler

Optimum cooling to ensure low operating and discharge temperatures.

Next generation separator filter

Amply dimensioned filtration for constant performance throughout the lifetime delivering an oil carryover of less than 3ppm.

High efficiency electric motor

The compressors are equipped with a premium efficiency electric motor.

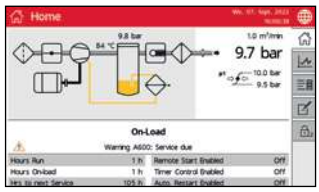
Thermostatically controlled motor driven fan

Highly efficient and extremely quiet fan allows compressor operation in the work place, plus the use of maximum duct length without further assistance.

Highest quality connections

Solid hoses and pipe connections with viton victaulic couplings increase reliability and are easy to maintain.

Features & functions



- Home Page – instant overview of the compressor status
- Real Time Clock – allows pre-setting of compressor starting/stopping
- Second Pressure Setting
- Integrated Cooling and Dryer Control
- Fault History Log – for in-depth analysis
- Remote Control via Programmable Inputs
- Auto Restart after Power Failure
- Optional Base Load Sequencing
- SD Card – stores several run characteristics
- iConn enabled
- Integrated Web-Server

iConn

Trend diagrams

With the ability to display detailed system analysis in the form of trend diagrams and graphs, operating parameters can be precisely set to maximise efficiency.

- Line / Network Pressure
- Motor Speed (Regulated Speed)
- On Load Hours / Total Hours Run & Average Volume Flow
- Weekly Average Volume Flow

Web-Server

Where efficiency & sustainability matter

An investment that pays off

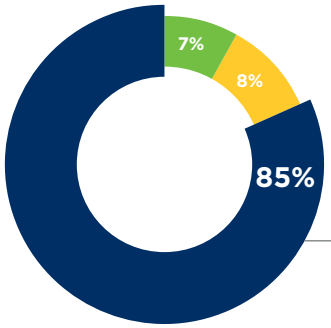
The e-models of the ESM/VS feature an extra large airend with optimised rotor tip speed achieving up to 9% energy savings.

With energy prices having doubled recently, there has never been a better time to invest in Gardner Denver. Significant savings can be made with these new energy-saving airends.

Typical Airend Size

Larger Airend

The largest cost component of a compressor is the energy to run it. The reduction of energy costs significantly impacts on the total costs of ownership.



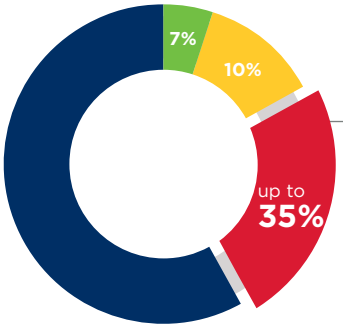
A typical oil lubricated rotary screw air compressor operating at 70% load

This range of super efficient compressors will **pay back in many cases in less than 12 months**. The extra large airend also has a longer life expectancy.

Furthermore, the new premium efficiency Frame 3e models can save up to 15 tons of CO_2 pa – equal to 33,000 miles driven by an average petrol powered car.

Variable speed compressors

The variable speed models 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.



Gardner Denver variable speed VS compressor operating at 70% load

Investment
Maintenance
Energy
Energy Savings

effiDRIVE IES2 COMPLIANT

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.

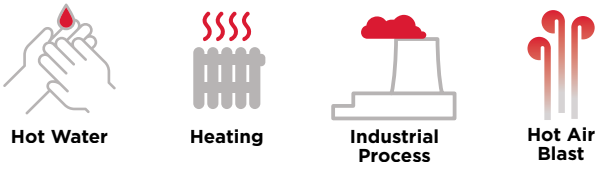
Perfect motor - drive - airend design
VS Series features a high efficient Power Drive System that exceeds the class **IES2 EN61800-9** requirements and assures high energy savings across broad flow range.

"Efficiency comes as standard with these compressors. Maximum levels of efficiency can be attained with the new "e" and variable speed models."

Add further value

Integrated heat recovery

Significant energy and costs savings can be achieved with Gardner Denver's efficient integrated heat recovery system. It can be either factory fitted or supplied as retrofit kit including all necessary pipe-work and fittings.



iConn inside

iConn Industry 4.0 solution

The compressor range ESM/VS 30 to 45, can be upgraded with iConn. iConn is the smart, proactive real-time monitoring service that delivers in-depth and real-time knowledge on the system to compressed air users.

- ✓ Advanced remote analysis
- ✓ Predictive – evaluates historic data
- ✓ Maximises energy efficiency
- ✓ Optimises compressor performance
- ✓ Reduces downtime
- ✓ Works as an open standard
- ✓ Free on new compressors – can be retrofitted
- ✓ Proactive maintenance

...that is why you cannot ignore iConn!

Compressed air purification

Modern production systems and processes demand increasing levels of air quality. Air treatment products **manufactured by Gardner Denver**, utilise the latest technology and provide an energy-efficient solution at the lowest life cycle costs.

The new downstream portfolio manufactured by Gardner Denver utilising the latest technology, provides an energy efficient solution at lowest life cycle costs. The same quality, performance and efficiency standards delivered by the compressors can now be enjoyed from the air treatment range.

Investment in a manufacturing site in addition to the support teams, ensures that compressed air operators don't need to worry about the quality of their compressed air – quality that is key to ensuring maximum production efficiency and investment protection.

- Water Cyclone Separators
- Compressed Air Filters
- Condensate Drain System
- Compressed Air Refrigerant Dryer
- Heatless Desiccant Dryers
- Heat Regenerative Desiccant Dryers
- Nitrogen Generator
- GD Connect 12 Plus Multi Compressor Controllers

The best investment protection you can get

PROTECT 10 years

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 years [1]. 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 owner [2]
- 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 30 – 45 Fixed Speed

Gardner Denver model	Nominal Pressure	Drive Motor	FAD [1]	Noise Level [2]	Weight	Dimensions L x W x H
	bar g	kW	m³/min	dB(A)	kg	mm
ESM30	7.5 10 13	30	5.75 5.01 4.27	67	887	1722 x 920 x 1659
ESM37	7.5 10 13	37	7.00 6.17 5.30	68	912	1722 x 920 x 1659
ESM45	7.5 10 13	45	8.00 7.00 6.11	69	953	1722 x 920 x 1659

ESM 30^{e} – 45^{e} Efficiency Version, Fixed Speed

Gardner Denver model	Nominal Pressure	Drive Motor	FAD [1]	Noise Level [2]	Weight	Dimensions L x W x H
	bar g	kW	m³/min	dB(A)	kg	mm
ESM30^{e}	7.5 10	30	6.00 5.01	67	964	1722 x 920 x 1659
ESM37^{e}	7.5 10	37	7.35 6.28	67	989	1722 x 920 x 1659
ESM45^{e}	7.5 10	45	8.87 7.71	68	1030	1722 x 920 x 1659

VS 30 – 45 Variable Speed

Gardner Denver model	Min-Max Pressure	Drive Motor	FAD [1] Min - Max	Noise Level [2] at 70% Load	Weight	Dimensions L x W x H
	bar g	kW	m³/min	dB(A)	kg	mm
VS30	5 - 10	30	1.33 – 5.53	66	925	1722 x 920 x 1659
VS37	5 - 13	37	1.44 – 6.90	67	952	1722 x 920 x 1659
VS45	5 - 13	45	1.41 – 8.02	70	974	1722 x 920 x 1659

VS 37^{e} – 45^{e} Efficiency Version, Variable Speed

Gardner Denver model	Min-Max Pressure	Drive Motor	FAD [1] Min - Max	Noise Level [2] at 70% Load	Weight	Dimensions L x W x H
	bar g	kW	m³/min	dB(A)	kg	mm
VS37^{e}	5 - 8	37	2.44 – 7.15	67	1029	1722 x 920 x 1659
VS45^{e}	5 - 10	45	2.37 – 8.68	70	1051	1722 x 920 x 1659

[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, tolerance ± 3dB (A).

Gardner Denver

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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www.gardnerdenver.com/gdproducts

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

Specifications subject to change without notice.

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