Gardner Denver

Premium compressor design & industry leading warranty

ESM 30 - 45 Fixed Speed ESM 30^e - 45^e Fixed Speed VS 30 - 45 Fixed Speed





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.



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 6% energy savings compared to the standard size airend.



GD Pilot TS innovative touch screen compressor controller

The GD Pilot TS with its high resolution 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 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 & 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

On-Load 2880rpm

2h Remote Start Enabled Timer Control Enabled

- 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





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 (Variable Speed)
- On Load Hours / Total Hours Run & Average Volume Flow
- Weekly Average Volume Flow

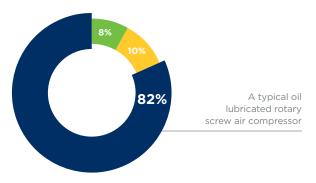
Where efficiency matters

An investment that pays off

The e-models of the ESM Series feature an extra large airend with optimised rotor tip speed achieving up to 6% energy savings.



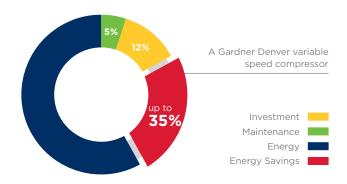
The largest cost component of a compressor is the energy to run it. The reduction of energy costs significantly impacts on the total costs of ownership.



The additional investment costs for 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.

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 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

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 Industry 4.0 solution

The ESM and VS Series are equipped with iConn as a standard. iConn is the smart, proactive real-time monitoring service that delivers in-depth and real-time knowledge on the system to our compressed air users. It enables accurate production planning and total peace-of-mind protection, generating insight and statistics that keep users informed on performance, at the same time highlighting potential issues before they become a problem.

- Condition based monitoring
- Predictive maintenance required
- Full Air Manufacturing Control Optimisation
- External data pattern integration

The synthetic efficiency advantage with Gardner Denver AEON™ 9000 SP lubricant as a standard.

A unique synthetic lubricant designed specifically to maximise compressor efficiency and provide optimum lubricity.

Extended life time

Maximum protection for internal components.

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

Designed for efficient removal of bulk liquid contamination from compressed air.

Compressed Air Filter

Efficient design for water, dust and particle removal.

Condensate Drain Bekomat System

To drain compressed air condensate without loss of compressed air.

Compressed Air Refrigerant Dryer

Gardner Denver offer a full range of energy efficient and environmentally friendly stand alone refrigerant dryers.

Heatless Desiccant Dryers

Heat Regenerative Desiccant Dryer.

Nitrogen Generator

Designed to achieve maximum efficiency and gas quality.

GD Connect 12 Multi Compressor Controller

Sequencers for up to 12 units.







The best investment protection you can get



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.

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



^{2]} subject to Terms & Conditions



ESM 30 - 45 Fixed Speed Screw Compressors

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
	7.5		5.75			
ESM30	10	30	5.01	67	887	1722 x 920 x 1659
	13		4.27			
	7.5		7.00			
ESM37	10	37	6.17	68	912	1722 x 920 x 1659
	13		5.30			
	7.5		8.00			
ESM45	10	45	7.00	69	953	1722 x 920 x 1659
	13		6.11			

ESM 30^e - 45^e Fixed Speed Screw Compressors

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	30	6.00	67	954	1722 x 920 x 1659
	10		5.17			
ESM37°	7.5	37	7.12	67	979	1722 x 920 x 1659
	10		6.31			
ESM45°	7.5	45	8.67	67	1020	1722 x 920 x 1659
	10		7.54			

VS 30 - 45 Variable Speed Screw Compressors

Gardner Denver model	Nominal 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	1.41 - 6.90	67	952	1722 x 920 x 1659
VS45	5 - 13	45	1.41 - 8.02	70	974	1722 x 920 x 1659

All models are also available as WATER COOLED versions, for technical specifications please refer to the water cooled technical information sheets.

^{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 \pm 3dB (A).



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.

Specifications subject to change without notice.

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