

Gardner
Denver

Screw Compressors

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

LifeCycle
SOLUTIONS



“The **perfect fit** to maximise productivity”



From good to great

“The perfect fit” is not just a tagline, more proof of how meeting quality standards, functionality and environmental responsibilities can deliver increased productivity and profitability.

Well known in the industry for quality and reliability, Gardner Denver continuously develops the ESM/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 variable speed models save energy by matching the output to the plant air demand.

All fixed speed models are available with integrated dryer option.

Gardner Denver airends – built to stand the test of time

The design of the Gardner Denver airends makes operation reliable and maintenance easy ensuring minimal downtime.

The high-output compression element with slow rotational speed reduces energy costs. In addition, the innovative design of the fail safe shaft seal, integrated oil filter and oil regulation valve, ensures external hoses are reduced to a minimum to guarantee the highest levels of quality and reliability are achieved.



German Engineering & Design

Perfectly matched design of motor, direct drive & air-end

The efficient motor/drive/air-end combination is designed to reduce specific power, which provides a benefit in the form of energy cost savings. In addition, these compressors utilise the IE4, high efficiency motors.

Exceptional reliability and performance

Large surface after cooler

Optimum cooling to ensure low operating and discharge temperatures.

Next generation separator filter

Amplly 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 an energy saving IE4 electric motor as standard.

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.





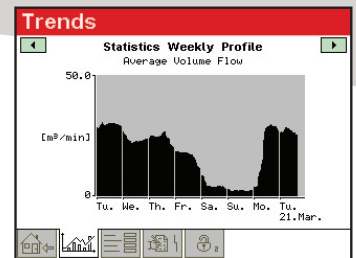
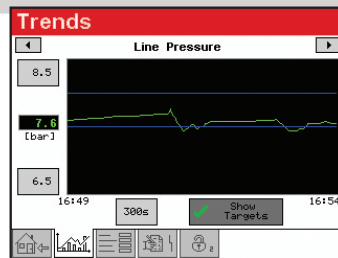
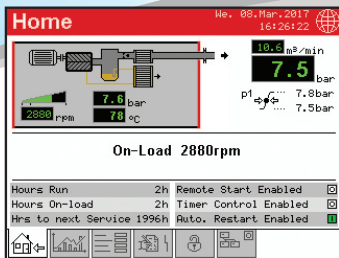
iConn – supporting Industry 4.0 initiatives

Proactive real-time monitoring and insight for your compressed air installation

Not only does iConn keep you one step ahead by predicting potential issues before they happen, saving you precious time and expense, but the easy-to-use and install system also shows you how to optimise production and increase energy efficiency.

iConn gives you the peace of mind and knowledge that ensures smarter and more efficient production, at the same time providing tangible benefits to your bottom line.





Everything under control - “GD Pilot TS” touch screen 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 visually intuitive.

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.

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

Base load sequencing

Compressed air systems typically comprise of multiple compressors delivering air to a common distribution system. The addition of the optional base load sequencing module will allow to control centrally up to four compressors matching the delivery to the plant demand.

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
- Optional SD Card
 - stores several run characteristics



The Gardner Denver variable speed drive/motor/compressor combination and the controller, are designed to meet the varying demands of your system at the lowest possible specific power, which benefits you in the form of energy cost savings.

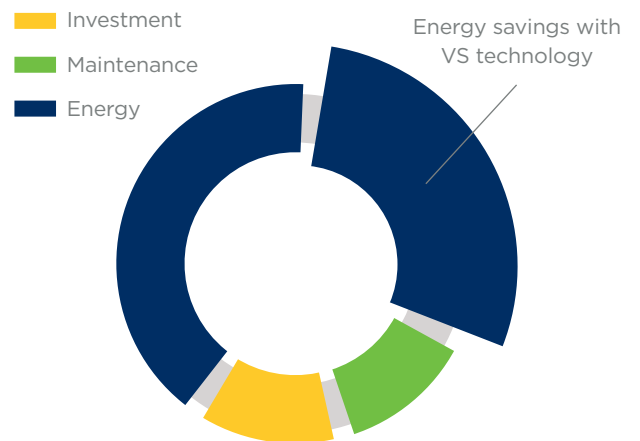
Direct energy savings of up to 35%

- The precise pressure control of the VS compressor allows for a tighter pressure band and a lower average working pressure, resulting in reduced energy consumption

Indirect energy savings

The lower system pressure obtained by VS results in up to 10% additional yearly savings:

- Lower energy consumption of (other) base load machines
- Leakage loss is significantly reduced: e.g. leakage at 6 bar is 13% lower than at 7 bar
- Most compressed air applications consume less air at a reduced pressure

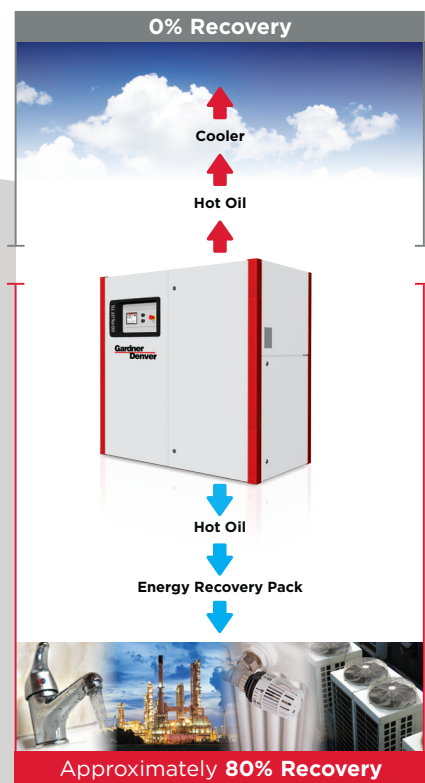


Optimise your energy usage with energy recovery systems

Reduce your carbon footprint

There are plenty of ways to save energy within your compressed air system – and almost as many alternative ways to waste energy! Gardner Denver Compressors offer you reliable auditing tools allowing you to identify opportunities within your installation where energy savings can be made.

The heat generated during compression is paid for as part of the process, then paid for again during removal by way of cooling fans. Instead of simply removing the heat, it can be used to generate hot water, heating systems and application processes in other areas of the installation.



Extended Warranty Protect 5 - our total commitment **quality** and **worry free ownership**

GD 5 Years Warranty - a simple and free of charge extended warranty scheme from Gardner Denver.

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

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	Integrated Dryer Option	Pressure dew point ³⁾	Weight
	bar g	kW	m ³ /min	dB(A)	kg	mm		°C	
ESM30	7.5	30	5.75	67	905	1722 x 920 x 1659	F30E	3	110
	10		5.01						
	13		4.27						
ESM37	7.5	37	7.00	68	948	1722 x 920 x 1659	F45E	3	120
	10		6.17						
	13		5.30						
ESM45	7.5	45	8.00	69	970	1722 x 920 x 1659	F45E	4	120
	10		7.00					3	
	13		6.11					3	

ESM 30^e - 45^e High Efficiency Version - Fixed Speed Screw Compressors

Gardner Denver model	Nominal Pressure	Drive Motor	FAD ¹⁾	Noise Level ²⁾	Weight	Dimensions L x W x H	Integrated Dryer Option	Pressure dew point ³⁾	Weight
	bar g	kW	m ³ /min	dB(A)	kg	mm		°C	
ESM30 ^e	7.5	30	6.00	67	990	1722 x 920 x 1659	F30E	3	110
	10		5.17						
ESM37 ^e	7.5	37	7.12	67	1033	1722 x 920 x 1659	F45E	3	120
	10		6.31						
ESM45 ^e	7.5	45	8.67	67	1055	1722 x 920 x 1659	F45E	4	120
	10		7.54					3	

VS 30 - 45 - Variable 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	Min - Max	at 70% load	kg	mm
			m ³ /min	dB(A)		
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

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).

³⁾ Data refer to ISO 7183, working pressure of 7 bar, inlet temperature 35°C and ambient temperature 25°C.



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.

