

Go To ESM/VS Series 55-75kW

Go To ESM/VS Series 90-132kW

# **Gardner Denver**

## Premium compressor design & industry leading warranty

ESM 30 - 45 Fixed Speed

ESM 30<sup>e</sup> - 45<sup>e</sup> Fixed Speed

VS 30 - 45 Fixed Speed



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.

**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 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.



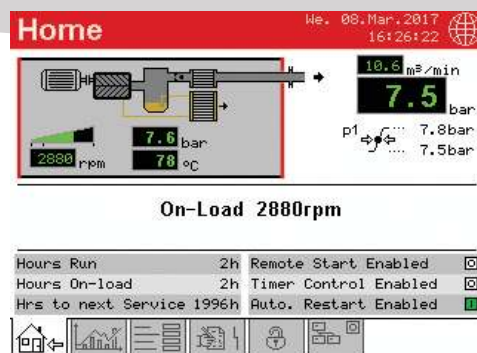




# GD Pilot TS innovative touch screen compressor controller

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

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 a premium efficiency electric motor.

### Thermostatically controlled motor driven fan

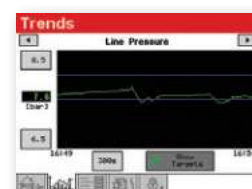
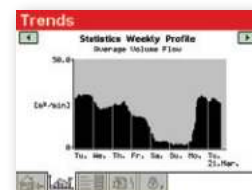
Highly efficient and extremely quiet fan allows compressor operation in the work place, plus the use of maximum duct length without further assistance.

### 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



## Trend diagrams

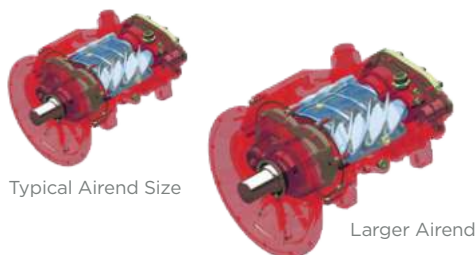
With the ability to display detailed system analysis in the form of trend diagrams and graphs, operating parameters can be precisely set to maximise efficiency.

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

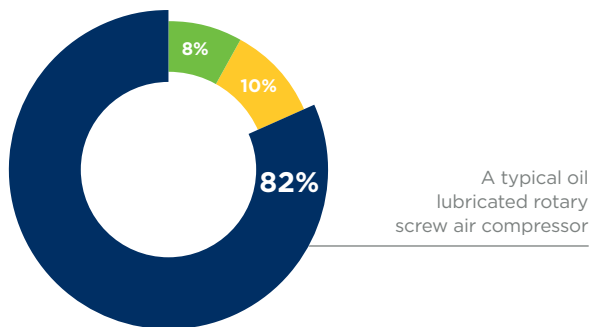
## Where efficiency matters

### 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.



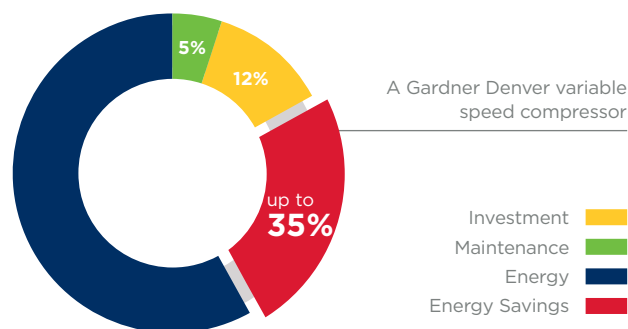
The largest cost component of a compressor is the energy to run it. The reduction of energy costs significantly impacts on the total costs of ownership.



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.



Hot Water



Heating



Industrial Process



Hot Air Blast



“Efficiency comes as standard with these compressors.

Maximum levels of efficiency can be attained with the new “e” and variable speed models.”



## 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



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<sup>1</sup>. 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<sup>2</sup>
- 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

<sup>1</sup> 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.

<sup>2</sup> 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.

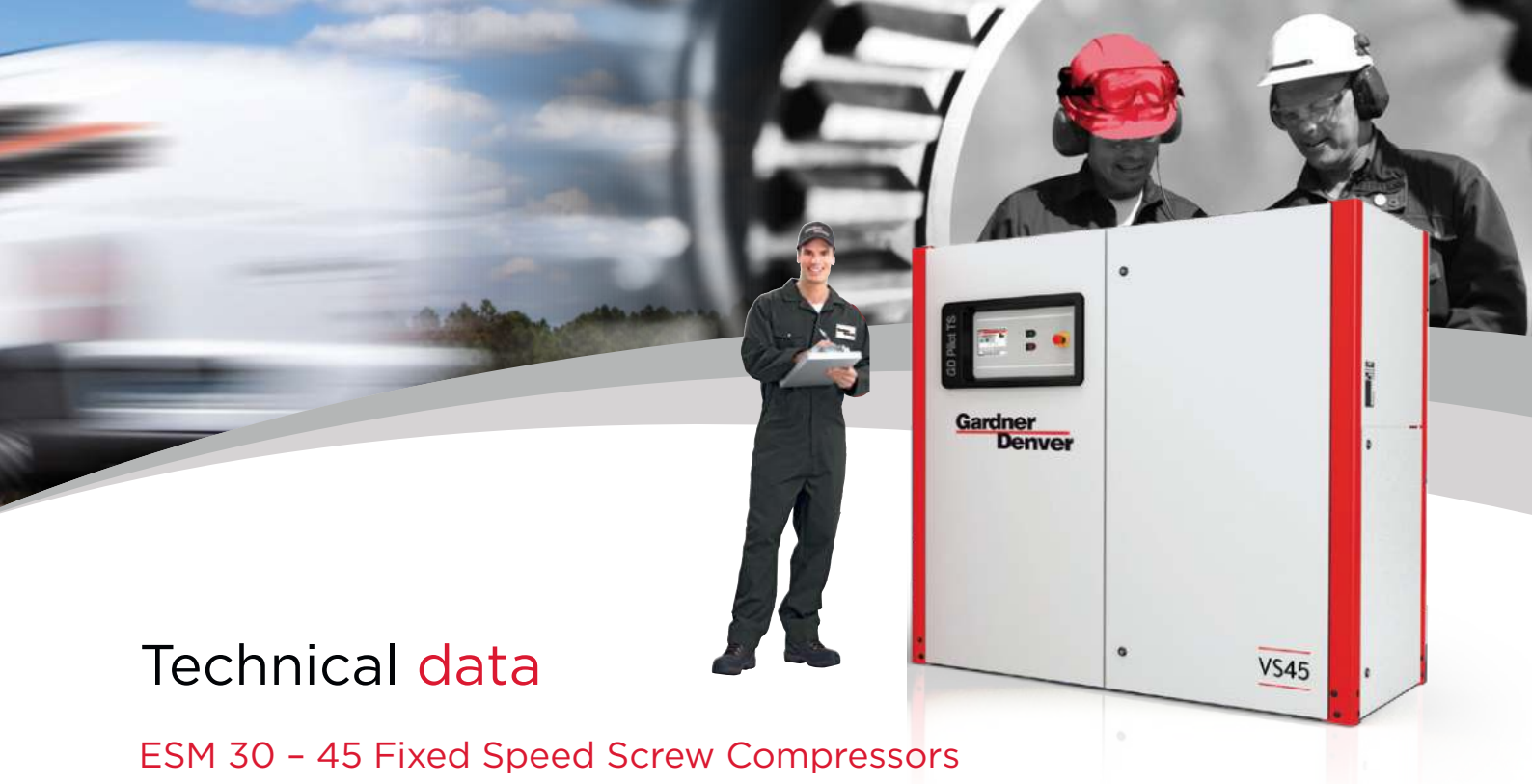
### Gardner Denver genuine spare parts

#### 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 Screw Compressors

Gardner Denver model	Nominal Pressure	Drive Motor	FAD <sup>1)</sup>	Noise Level <sup>2)</sup>	Weight	Dimensions L x W x H
	bar g	kW	m <sup>3</sup> /min	dB(A)	kg	mm
ESM30	7.5	30	5.75	67	887	1722 x 920 x 1659
	10		5.01			
	13		4.27			
ESM37	7.5	37	7.00	68	912	1722 x 920 x 1659
	10		6.17			
	13		5.30			
ESM45	7.5	45	8.00	69	953	1722 x 920 x 1659
	10		7.00			
	13		6.11			

### ESM 30<sup>e</sup> - 45<sup>e</sup> Fixed Speed Screw Compressors

Gardner Denver model	Nominal Pressure	Drive Motor	FAD <sup>1)</sup>	Noise Level <sup>2)</sup>	Weight	Dimensions L x W x H
	bar g	kW	m <sup>3</sup> /min	dB(A)	kg	mm
ESM30 <sup>e</sup>	7.5	30	6.00	67	954	1722 x 920 x 1659
	10		5.17			
ESM37 <sup>e</sup>	7.5	37	7.12	67	979	1722 x 920 x 1659
	10		6.31			
ESM45 <sup>e</sup>	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 <sup>1)</sup>	Noise Level <sup>2)</sup>	Weight	Dimensions L x W x H
	bar g	kW	Min - Max m <sup>3</sup> /min	at 70% Load 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.

<sup>1)</sup> 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).

<sup>2)</sup> Measured in free field conditions in accordance with ISO 2151, tolerance ± 3dB (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.



[gdcompressors.eu@gardnerdenver.com](mailto:gdcompressors.eu@gardnerdenver.com)  
[www.gardnerdenver.com/gdproducts](http://www.gardnerdenver.com/gdproducts)

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

Specifications subject to change without notice.



# **Gardner Denver**

## Premium compressor design & industry leading warranty

ESM/VS Series 55 - 75 kW  
Fixed & Variable Speed

**iConn**

**PROTECT** **10**  
years  
Extended Warranty for GD Compressors



Reliability & efficiency  
without compromise

“Lowest operational costs thanks to a 7% efficiency increase.”

## Quality pays off

### 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 lubricated screw compressor range from 55 to 75 kW comprises of fixed, as well as E models providing best-in-class efficiency. All models are optionally available with integrated heat recovery.

► **Pressure range**  
5 to 13 bar

► **Volume flow**  
2.1 - 14.9 m<sup>3</sup>/min

► **Motor power**  
55 to 75 kW

### 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

The new GD6 airend ensures higher efficiency levels, by up to 5% compared to the previous one, providing fewer pressure drops, in an optimised compact design. Gardner Denver's unique design, with integrated oil filter and oil regulation valve, ensures external hoses are reduced to a minimum. The integrated airend design assures the reliability of the compressor, continuous hassle-free operation and easy servicing. Under the free Protect 10 warranty the airends are covered up to 44,000 hours or 10 years\*.

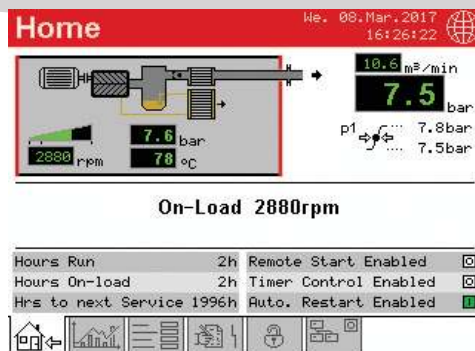
\* Whichever is soonest

**GERMAN**   
**ENGINEERING**  
**DESIGN&MANUFACTURE**

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

## 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.



### Outstanding Benefits

#### Re-designed GD6 and GD8 semi integrated airends

Optimised airends provides better performance, higher efficiency levels and lower pressure drop.

#### Highest efficiency levels

Up to 8% improvement.

#### Lowest floor space requirement

In average 8% less than comparable products in the market.

#### Implementation of new automatic oil regulation valve for variable speed models

Adding to the efficiency improvement.

#### The automatic motor lubrication is standard

It increases the bearing life and is maintenance free.

#### The new fine separator with just one integrated sealing

Makes maintenance easy as no o-ring replacement is required.

#### All doors are hinged and can be removed

Reducing the space requirements and optimising accessibility.

#### Premium electric motor

Standard asynchronous version IE3 or optional IE4 for even greater efficiency.

### 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

### 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



## Energy Efficiency Booster

### Innovative oil regulation valve

Specially designed by Gardner Denver's engineering team, this integrated valve:

- Eliminates the risk of condensate to avoid corrosion and extends oil's life time
- Depending on the working conditions improves efficiency by up to 5% for the variable speed models
- Improves low running speeds

### The perfect response to individual air demands

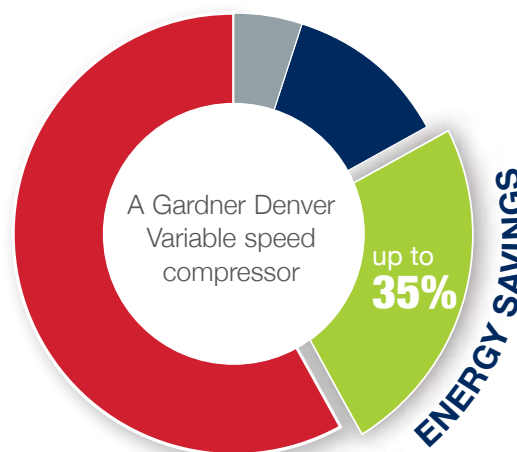
Variable speed compressors from Gardner Denver can efficiently and reliably handle the varying air demand found in most plant air systems.

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



### e-models market leading energy efficiency

The e-models feature a class leading efficiency of up to **6.8%** compared to the standard models. With new technology including an IE4 electric motor and an automatic oil regulation valve these models can save up to **€ 4,500 in energy costs a year**.



## 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.



Hot Water



Heating



Industrial Process



Hot Air Blast

### Motor Efficiency

As a standard, all compressors of this range are equipped with an energy efficient IE3 electric motor. To achieve even higher levels of efficiency they are optionally available with an IE4 motor.



# iConn



## iConn Industry 4.0 solution

The ESM and VS series is 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.

## iConn benefits at a glance

Proactive real-time monitoring with iConn for your compressed air installation, delivers many benefits:

- ✓ Real-time operating data available around the clock
- ✓ On-demand maintenance extends compressor life cycle and optimises costs
- ✓ Maximum compressor performance reduces energy consumption
- ✓ Predictive and preventative monitoring and warnings avoid expensive downtime
- ✓ Wear of compressed air components is identified early
- ✓ Reduce operating costs caused by increased pressure drop in filters and separators through late maintenance
- ✓ Identify potential savings by measuring costs and efficiency
- ✓ Optimised maintenance planning

## Compressed air purification

A modern production system and process demands increasing levels of air quality, and compressed air operators need to ensure that the downstream equipment also delivers on it 100%.

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 Multi Compressor Controller



## 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<sup>1</sup>. 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<sup>2</sup>
- 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

<sup>1</sup> 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.

<sup>2</sup> 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 55 - 75 Fixed Speed Screw Compressors

Gardner Denver model	Nominal Pressure	Drive Motor	FAD <sup>1]</sup>	Noise Level <sup>2]</sup>	Weight	Dimensions L x W x H
	bar g	kW	m <sup>3</sup> /min	dB(A)	kg	mm
ESM55	7.5	55	10.71	69	1405	1958 x 1138 x 1857
	10		9.50			
	13		8.25			
ESM75	7.5	75	13.98	72	1495	1958 x 1138 x 1857
	10		12.54			
	13		10.50			
ESM55 <sup>e</sup>	7.5	55	10.71	69	1406	1958 x 1138 x 1857
	10		9.57			
ESM75 <sup>e</sup>	7.5	75	14.80	71	1785	1959 x 1138 x 1857
	10		12.70			

### VS 55 - 75 Variable Speed Screw Compressors

Gardner Denver model	Nominal Pressure	Drive Motor	FAD <sup>1]</sup> Min - Max	Noise Level <sup>2]</sup> at 70% Load	Weight	Dimensions L x W x H
	bar g	kW	m <sup>3</sup> /min	dB(A)	kg	mm
VS55	5 - 10	55	2.50 - 10.99	69 - 72	1430	1958 x 1138 x 1857
VS75	5 - 13	75	2.10 - 14.03	72 - 74	1520	1958 x 1138 x 1857

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).

All models are available in water cooled versions.

## 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.



[gdcompressors.eu@gardnerdenver.com](mailto:gdcompressors.eu@gardnerdenver.com)  
[www.gardnerdenver.com/gdproducts](http://www.gardnerdenver.com/gdproducts)

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

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**Gardner  
Denver**

# Premium compressor design & industry leading warranty

ESM 90 - 132 Fixed Speed  
VS 90 - 132 Variable Speed  
ESM 90<sup>e</sup> - 132<sup>e</sup> Fixed Speed



Reliability & efficiency  
without compromise

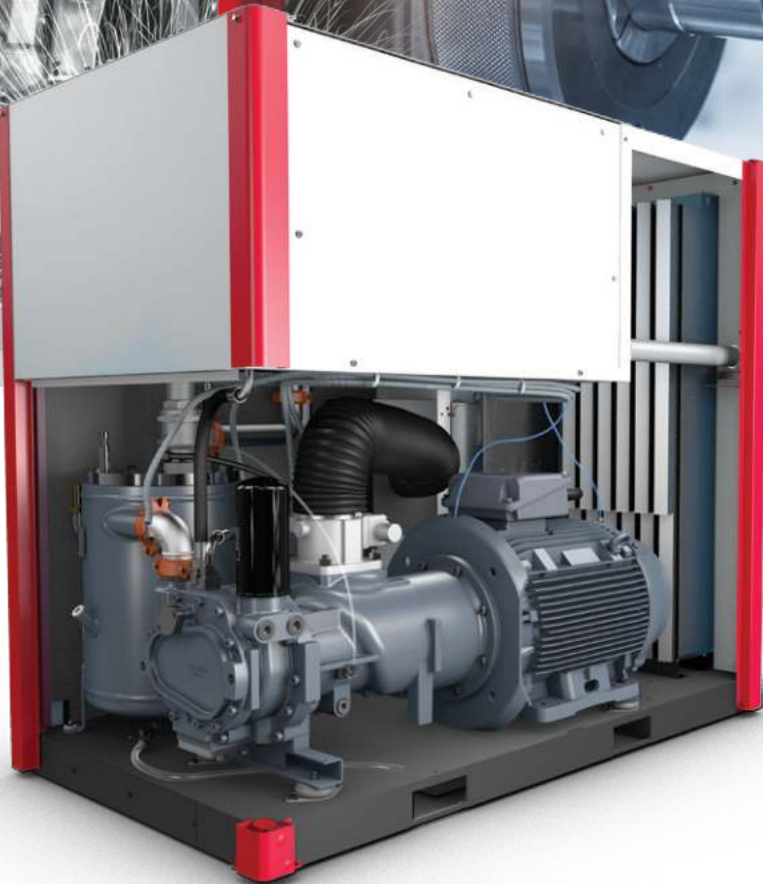




## Quality pays off

### The ESM, VS and E Series from Gardner Denver

Well known in the industry for quality and reliability, Gardner Denver continuously develops the ESM, VS and E Series achieving cutting edge performance and efficiency. All models are optionally available with integrated heat recovery.



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

### Premium efficiency airend

The **new highly efficient airend** delivers the highest quality compressed air at a low rotational speed, to help minimise the unit's energy consumption and achieve **excellent performance**.

The **semi integrated airend** design with integrated oil filter and oil regulation valve means fewer external components and pipework, taking less physical space, eliminating the risk of leakage and ease the maintenance.

The innovative design of the fail safe shaft seal, ensures highest levels of quality and reliability are achieved minimising the down time of the compressor.

Our top quality airends are covered by the **new 10 years warranty** and up to 44,000 hours.



“Lowest operational costs thanks to a 6% efficiency increase.”

## 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

#### Innovative Oil regulation valve

Special designed by Gardner Denver's engineering team this integrated valve:

- Eliminates the risk of condensate to avoid corrosion and extends oil's life time
- Depending on the working conditions improves efficiency up to **5% for the variable speed models** and **premium efficiency (e) models**
- Improves low running speeds

#### Large surface after cooler

Optimum cooling to ensure low operating and discharge temperatures.

#### High performance separator filter

Two stage filtration ensures highest quality air is delivered to your system (< 3ppm oil carryover). The vessel has a hinged cover for easy maintenance.

#### High efficiency electric motor

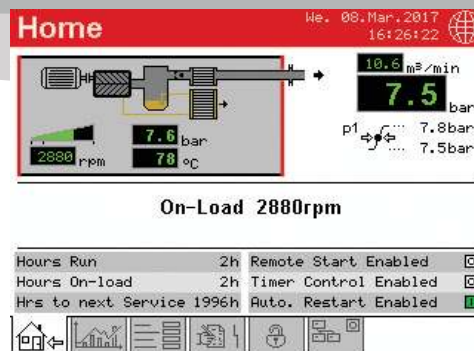
The compressors are equipped with a premium high-efficiency electric motor.

#### Automatic motor lubrication

Increases bearing life and is maintenance free.

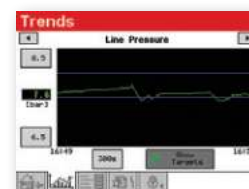
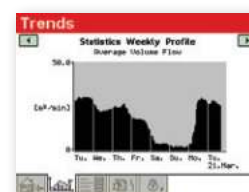
#### Highest quality connections

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
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- Integrated Cooling and Dryer Control
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### 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
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- Weekly Average Volume Flow

## Energy Efficiency Boosters

### Upgrades for maximum efficiency

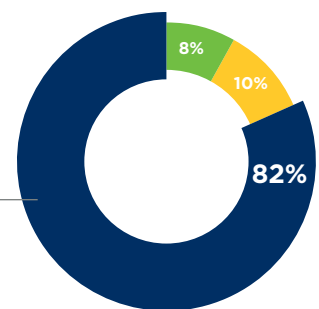
Gardner Denver's portfolio of oil lubricated compressors from 90 to 132 kW includes fixed and regulated speed models, and additionally e-models featuring an even higher efficiency. The maximum efficiency can be achieved by adding the integrated heat recovery.

### Variable speed compressors

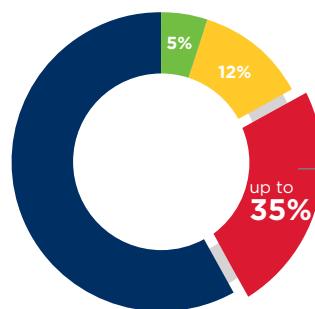
Variable speed compressors from Gardner Denver can efficiently and reliably handle the varying air demand found in most plant air systems.

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

A typical oil lubricated rotary screw air compressor



A Gardner Denver regulated speed compressor



### 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

### e-models - Market leading energy efficiency

The e-models feature a class leading efficiency of up to **2.5 %** compared to the standard models. With a new technology including an IE4 electric motor and an automatic oil regulation valve these models can save up to **€ 2,500 energy costs a year**.

## 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.



Hot Water



Heating



Industrial Process



Hot Air Blast



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



### iConn Industry 4.0 solution

The ESM, VS and E 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**
- **Compressed Air Filter**
- **Condensate Drain Bekomat System**
- **Compressed Air Refrigerant Dryer**
- **Heatless Desiccant Dryers**
- **Heat Regenerative Desiccant Dryer**
- **Nitrogen Generator**
- **GD Connect 12 Multi Compressor Controller**



## 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 years<sup>1</sup>. 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<sup>2</sup>
- 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

<sup>1</sup> 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.

<sup>2</sup> 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 90 - 132 Fixed Speed Screw Compressors

Gardner Denver model	Nominal Pressure	Drive Motor	FAD <sup>1)</sup>	Noise Level <sup>2)</sup>	Weight	Dimensions L x W x H
	bar g	kW	m <sup>3</sup> /min	dB(A)	kg	mm
ESM90	7.5	90	18.16	73	2513	2337 x 1368 x 2039
	10		15.51			
	13		13.52			
ESM110	7.5	110	21.60	75	2614	2337 x 1368 x 2039
	10		18.85			
	13		16.47			
ESM132	7.5	132	24.79	76	2778	2337 x 1368 x 2039
	10		21.51			
	13		18.70			

### VS 90 - 132 Variable Speed Screw Compressors

Gardner Denver model	Nominal Pressure	Drive Motor	FAD <sup>1)</sup> Min - Max	Noise Level <sup>2)</sup> at 70% Load	Weight	Dimensions L x W x H
	bar g	kW	m <sup>3</sup> /min	dB(A)	kg	mm
VS90	5 - 13	90	5.26 - 18.16	72	2768	2337 x 1368 x 2039
VS110	5 - 13	110	5.26 - 21.51	72	2770	2337 x 1368 x 2039
VS132	5 - 13	132	5.26 - 24.76	74	2786	2337 x 1368 x 2039

### ESM 90<sup>e</sup> - 132<sup>e</sup> Fixed Speed Screw Compressors

Gardner Denver model	Nominal Pressure	Drive Motor	FAD <sup>1)</sup>	Noise Level <sup>2)</sup>	Weight	Dimensions L x W x H
	bar g	kW	m <sup>3</sup> /min	dB(A)	kg	mm
ESM90 <sup>e</sup>	7.5 10	90	18.16 15.51	73	2513	2337 x 1368 x 2039
ESM110 <sup>e</sup>	7.5 10	110	21.60 18.85	75	2614	2337 x 1368 x 2039
ESM132 <sup>e</sup>	7.5 10	132	24.79 21.51	76	2778	2337 x 1368 x 2039

NOT AVAILABLE IN 60HZ

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

<sup>1)</sup> 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).

<sup>2)</sup> Measured in free field conditions in accordance with ISO 2151, tolerance ± 3dB (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.



[gdcompressors.eu@gardnerdenver.com](mailto:gdcompressors.eu@gardnerdenver.com)  
[www.gardnerdenver.com/gdproducts](http://www.gardnerdenver.com/gdproducts)

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

Specifications subject to change without notice.