

# Gardner Denver

## Premium compressor design & industry leading warranty

22 to 30 kW  
Fixed Speed & Variable Speed



Reliability & efficiency  
without compromise

# Reliability. Performance. Value.

## 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 ESM23-29 range of lubricated screw compressors comprises of fixed speed and regulated speed (VS) models.

- ▶ **Pressure range**  
5 to 13 bar
- ▶ **Volume flow**  
0.92 to 5.52 m<sup>3</sup>/min
- ▶ **Motor power**  
22 to 30 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 ensure that operating costs will remain low throughout the compressors life.



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

### Premium efficiency airend

The high output airend with slow rotational speed reduces energy costs. In addition to this, 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. With the new extended Protect 10 warranty, the airends are covered up to 10 years or 44,000 hours.\*



\*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 quality**

**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 an energy saving IE3 electric motor with reduced CO<sub>2</sub> emissions.

**Thermostatically controlled motor driven fan**

High efficient and extremely quiet fan, allows compressor operation in the work place, and the use of the 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.

## 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

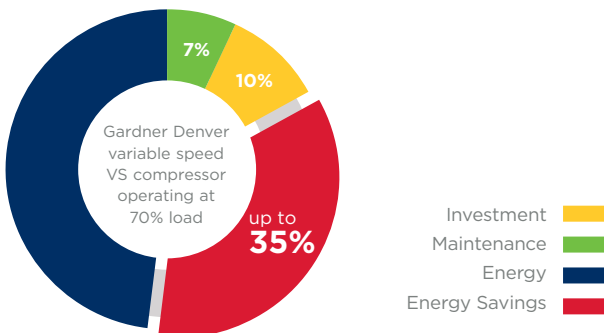


## Variable speed Compressors

### 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.



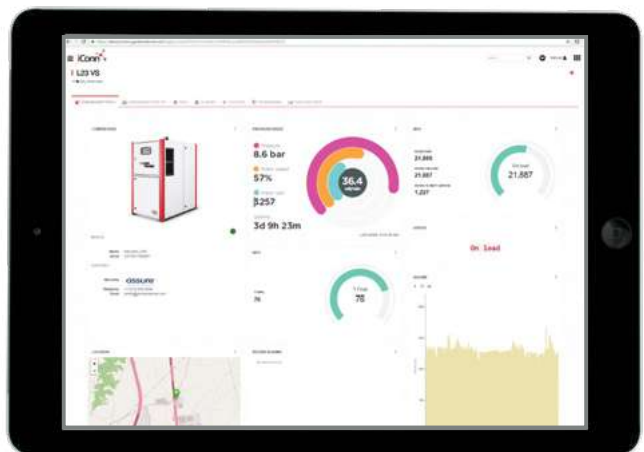
### Gardner Denver VS features are your benefits

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.

### Tried and tested inverter concept

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



### iConn Industry 4.0 solution

The compressor range VS23 to VS29 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!**



## Gardner Denver efficiency upgrades

### 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.

### 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<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

### ESM23 - 29 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                   |
| ESM23                | 7.5              | 22          | 4.16                | 67                        | 650    | 1345 x 880 x 1612    |
|                      | 10               |             | 3.45                |                           |        |                      |
|                      | 13               |             | 2.98                |                           |        |                      |
| ESM26                | 7.5              | 26          | 4.84                | 68                        | 677    | 1345 x 880 x 1612    |
|                      | 10               |             | 4.13                |                           |        |                      |
|                      | 13               |             | 3.44                |                           |        |                      |
| ESM29                | 7.5              | 30          | 5.52                | 69                        | 681    | 1345 x 880 x 1612    |
|                      | 10               |             | 4.81                |                           |        |                      |
|                      | 13               |             | 4.12                |                           |        |                      |

### VS23 - 29 Variable Speed Screw Compressors

| Gardner Denver model | Nominal Pressure | Drive Motor | FAD <sup>1)</sup> at 7.5 bar g | FAD <sup>1)</sup> at 10 bar g | FAD <sup>1)</sup> at 13 bar g | Noise Level <sup>2)</sup> at 70% Load | Weight | Dimensions L x W x H |
|----------------------|------------------|-------------|--------------------------------|-------------------------------|-------------------------------|---------------------------------------|--------|----------------------|
|                      | bar g            | kW          | m <sup>3</sup> /min            | m <sup>3</sup> /min           | m <sup>3</sup> /min           | dB(A)                                 | kg     | mm                   |
| VS23                 | 5 - 10           | 22          | 1.11 - 4.12                    | 1.03 - 3.70                   | 1.35 - 2.89                   | 68                                    | 681    | 1345 x 880 x 1612    |
| VS26                 | 5 - 13           | 26          | 1.11 - 4.78                    | 1.03 - 4.10                   | 0.92 - 3.56                   | 69                                    | 708    | 1345 x 880 x 1612    |
| VS29                 | 5 - 13           | 30          | 1.11 - 5.41                    | 1.03 - 4.50                   | 0.92 - 3.82                   | 69                                    | 712    | 1345 x 880 x 1612    |

<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 – 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.