

VS25-250 (34-335 HP)
VARIABLE SPEED ROTARY SCREW COMPRESSORS

## VS Series<sup>™</sup>





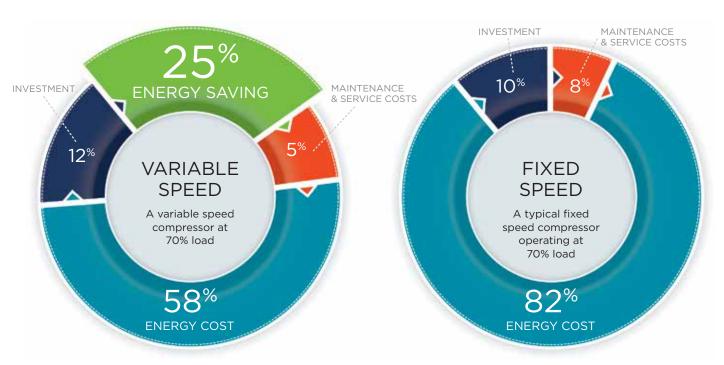
With the widest range of efficient compressors on the market,
Gardner Denver has been focused on energy savings for decades.
The flexibility of VS Series exceeds that of any other compressor. Our philosophy is to develop compressors that maximize efficiency and reduce energy.

## Designed for Variable Air Demand

Variable speed compressors from Gardner Denver can efficiently and reliably handle varying air demand. The right variable speed compressor in the right application delivers significant energy savings and a stable air supply at constant pressure.

Efficient at full load, part load and no load conditions, the VS Series features expertly designed airends and rotor profiles that offer industry leading turndown and performance. We partnered with an industry leader to develop a motor/drive/airend combination that ensures optimum energy efficiency and turndown capability. With several models to choose from, you can better match your needs to a specific compressor and get the best value for your application.

### Variable Speed vs. Fixed Speed



Using a variable speed compressor can easily save 25% energy by using just the right amount of energy required to do the job and no more.

## Reduce Energy. Maximize Efficiency. Save Money.

#### Savings at Part Load

The VS Series provides tremendous power savings at part load points, which save you thousands of dollars in energy costs each year. The compressor matches the supply of compressed air, at the specified target pressure, to your system's specific demand while minimizing the power required to compress the air. Every area on these compressors were designed so that air flows with the least possible restriction, eliminating every possible kW. In other words, the VS Series provides efficiency everywhere—full load, part load, no load.

#### Savings When Air is Not Needed

When air is not needed, the VS Series compressors stop running and do not vent to atmosphere; eliminating any waste of compressed air in the reservoir. The "soft" starting capability of the AirSmart™ controller allows the motor to start against a pressurized system at any time and will do so as often as required by the system. Our attention to this energy saving detail is just another example of the energy savings delivered by Gardner Denver.

The smarter solution—VS Series variable speed compressors





### **Smarter** Design

Our VS Series design utilizes superior technologies so each package is loaded with the critical product benefits you want.

- Smart Injection Technology allows the AirSmart<sup>™</sup> controller to maintain the discharge temperature of the compressor above the dew point to prevent condensate from forming in the lubricant.
- Computational Fluid Dynamics (CFD) is employed to minimize pressure drop from the air inlet all the way to the air discharge of the compressor. This maximizes efficiency and minimizes your electrical cost of operation.
- Finite Element Analysis (FEA) allows the strength and rigidity of a component to be completely understood. If a weak area is identified, design changes are made before the product is produced.
- Solid Modeling in the design phase allows these technologies to be applied successfully. In addition, product quality and serviceability are greatly enhanced when viewed and analyzed from a solid model.
- Thermography was utilized to maximize heat transfer and ensure that cool, clean compressed air is delivered to the plant.

The benefit of going
the extra mile is a
line of variable speed
compressors that are
efficient and flexible,
providing reliable
and stable plant air
pressure for maximum
productivity.

# Information at Your Fingertips

#### Simplicity

The AirSmart™ controller was designed to make the operator's interface with the variable speed drive transparent. You don't need to be an expert on variable speed drives to operate our compressor. The controller takes care of the details.

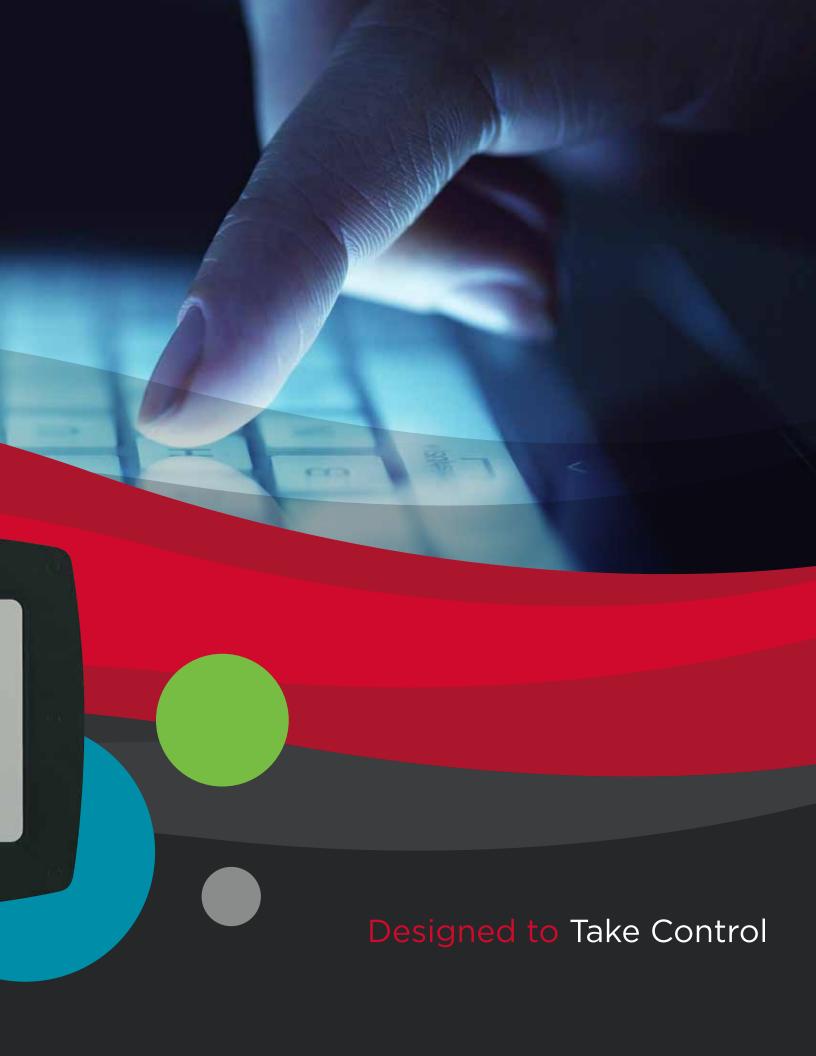
The controller automatically adjusts the compressor's performance to meet your changing air system demands—saving you energy dollars.

Changing the discharge pressure is as easy as pressing a button. No longer is there a need for a new machine when your pressure demands change.

#### Communication & Sequencing

The optional communication module allows VS Series compressors to talk to each other and other Gardner Denver compressors to optimize system efficiency. This isn't just an hour balancing, on/off sequencing scheme. Our controller allows the system to truly optimize efficiency because it knows the capabilities of other machines and orchestrates their operation.







#### **Total System Protection**

Since 1859, Gardner Denver has been supporting the compressed air industry with high quality, long-lasting compressor and air treatment solutions. Carrying on that legacy, our robust line of parts, lubricant and downstream accessories ensure your system stays healthy.

The focus on total system protection by Gardner Denver not only includes OEM parts and fluid solutions, but a commitment to the longevity of your equipment through our industry leading warranty programs.

Protect your investment.



## Best Warranty in the Industry

#### **Experience Peace of Mind**

The engineering philosophy of Gardner Denver ensures long-lasting, reliable equipment. Our simple, but bold warranty programs demonstrate our belief in the quality found in Gardner Denver compressors.

Our standard warranty ensures that you have peace of mind when it comes to your system's operation. For added protection, take advantage of our 10-year extended airend warranty program. Simply stated, it's the best in the industry.



## Sales & Service Distributors Across America

#### An Extensive Network

By leveraging the extensive network of Gardner Denver factory-trained authorized local distributors, your sales, service and technical support needs can be handled quickly and easily.



## Specifications

#### VS25-250 ROTARY SCREW COMPRESSOR, 60 HZ

MODEL	DRIVE MOTOR		NOMINAL PRESSURE		FAD¹		NOISE LEVEL <sup>2</sup>	WEIGHT		DIMENSIONS L × W × H
	HP	KW	PSIG	BAR	ACFM	M³/MIN	DB(A)	LBS	KG	IN. (MM)
VS25	34	25	100 125 175	6.9 8.6 12.0	155 141 110	4.39 3.99 3.12	66	2011	912	- 65 × 35 × 69 (1651 × 889 × 1753) -
VS30	40	30	100 125 175	6.9 8.6 12.0	213 203 162	6.03 5.75 4.59	68	2082	944	
VS40	54	40	100 125 175	6.9 8.6 12.0	242 232 177	6.86 6.57 5.01	69	2192	994	
VS45	60	45	100 125 175	6.9 8.6 12.0	308 269 206	8.73 7.62 5.84	68	3180		85 × 44 × 75 (2159 × 1118 × 1905)
VS50	67	50	100 125 175	6.9 8.6 12.0	348 322 245	9.86 9.12 6.94	69		1442	
VS70	94	70	100 125 175	6.9 8.6 12.0	436 395 318	12.35 11.19 9.01	71			
VS80	100	80	100 125 175	6.9 8.6 12.0	556 481 364	15.75 13.63 10.31	72	6100	2767	_ 114 × 58 × 87 (2896 × 1473 × 2210)
VS110	150	110	100 125 175	6.9 8.6 12.0	719 663 560	20.37 18.78 15.86	76	6200	2812	
VS135	180	135	100 125 175	6.9 8.6 12.0	862 802 625	24.42 22.72 17.71	76	8512	3861	_ 126 × 58 × 87 (3200 × 1473 × 2210)
VS170	225	170	100 125 175	6.9 8.6 12.0	1056 951 693	29.92 26.94 19.63	77	8612	3906	
VS200	268	200	100 125 175	6.9 8.6 12.0	1307 1177 986	37.03 33.34 27.93	79	12530 568:	5007	152 × 84 × 87 (3861 × 2134 × 2210)
VS250	335	250	100 125 175	6.9 8.6 12.0	1553 1433 1138	43.99 40.59 32.24	79		5683	

<sup>1)</sup> Data measured and stated in accordance with ISO1217, Ed. 4, Annex C & Annex E at 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 +/- 3 dB

The leader in every market we serve by continuously improving all business processes with a focus on innovation and velocity



#### Gardner Denver, Inc.

1800 Gardner Expressway Quincy, IL 62305 866-440-6241

www. gardner denver products. com









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