

# **Gardner Denver**

VST55-260 (75-350 HP)  
TWO-STAGE VARIABLE SPEED ROTARY SCREW COMPRESSORS

## **VST Series™**





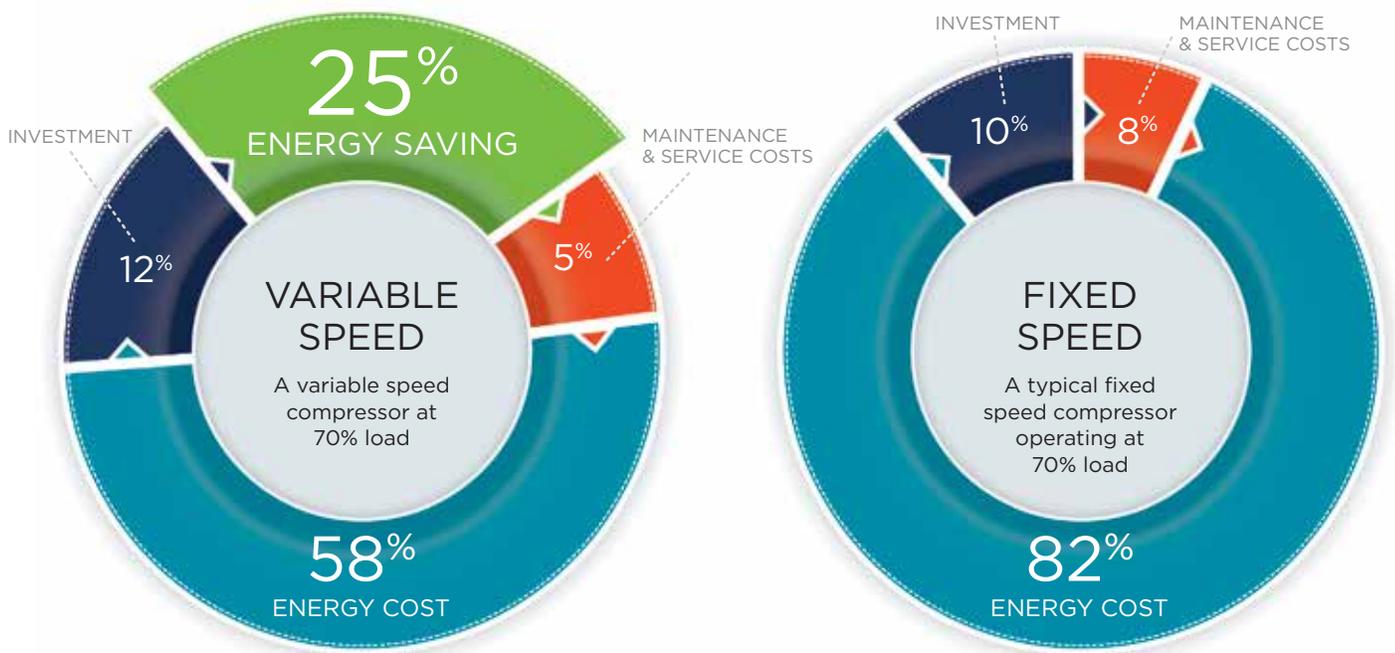
With the widest range of efficient compressors on the market, Gardner Denver has been focused on energy savings for decades. Our philosophy of developing a compressor that maximizes efficiency and reduces energy has led us to produce **the most efficient compressor in the world—the VST Series.**

# 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 Gardner Denver two-stage VST out-performs competitive single and two-stage compressors because the efficiency limitations typically found in single and two-stage compressors have been eliminated. The technology employed in the air end rotor profiles allows us to synchronize the speeds and performance of the first and second stage air ends, to optimize the performance and energy efficiency throughout the operating range of the package.

## 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 VST 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. Typical compressors either modulate the inlet valve and/or vary the displacement of the first stage to control the capacity of the package. These methods do not offer the power savings of a variable speed control matched to the most efficient compressors nor are they able to achieve the wide operating range of the VST Series products.

## Savings When Air is Not Needed

When air is not needed, the VST 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.

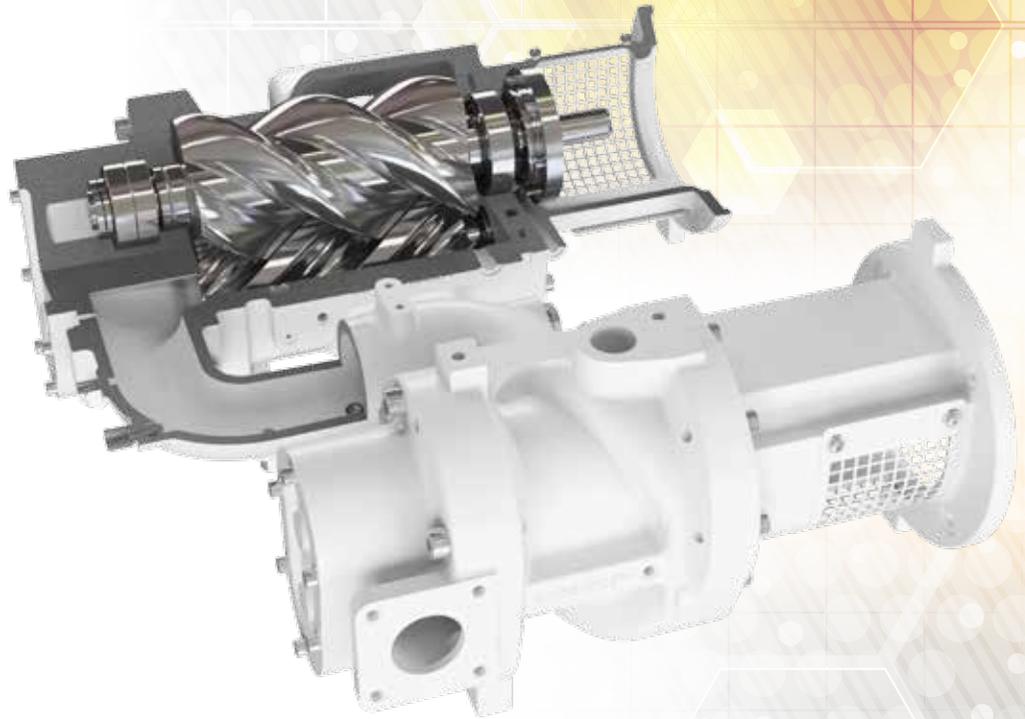
The smarter solution—VST Series  
variable speed compressors



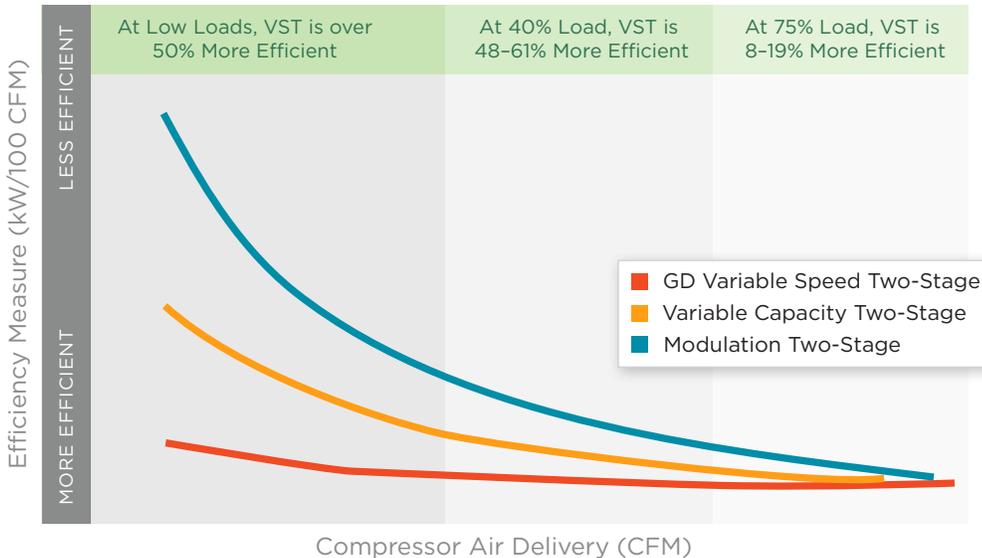
# Smarter Design

The two-stage VST Series design incorporates stepped-injection technology. This allows the AirSmart™ controller to maintain the discharge temperature of the compressor above the dew point to prevent condensate from forming in the lubricant.

Gardner Denver designed the first and second stage compressors as independent compressors and drives. This choice allows the AirSmart™ controller to synchronize the second stage compressor speed to the exact needs of the first stage—optimizing the input power of the package. The result is the most efficient supply of compressed air to your system demand at the lowest possible energy cost. Reliability and efficiency have been designed into each component in this system to ensure you maximum performance and dependability.



Typical Two-Stage Efficiency Ratings



# 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 VST 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.





Designed to Take Control

# Keeping the System Healthy

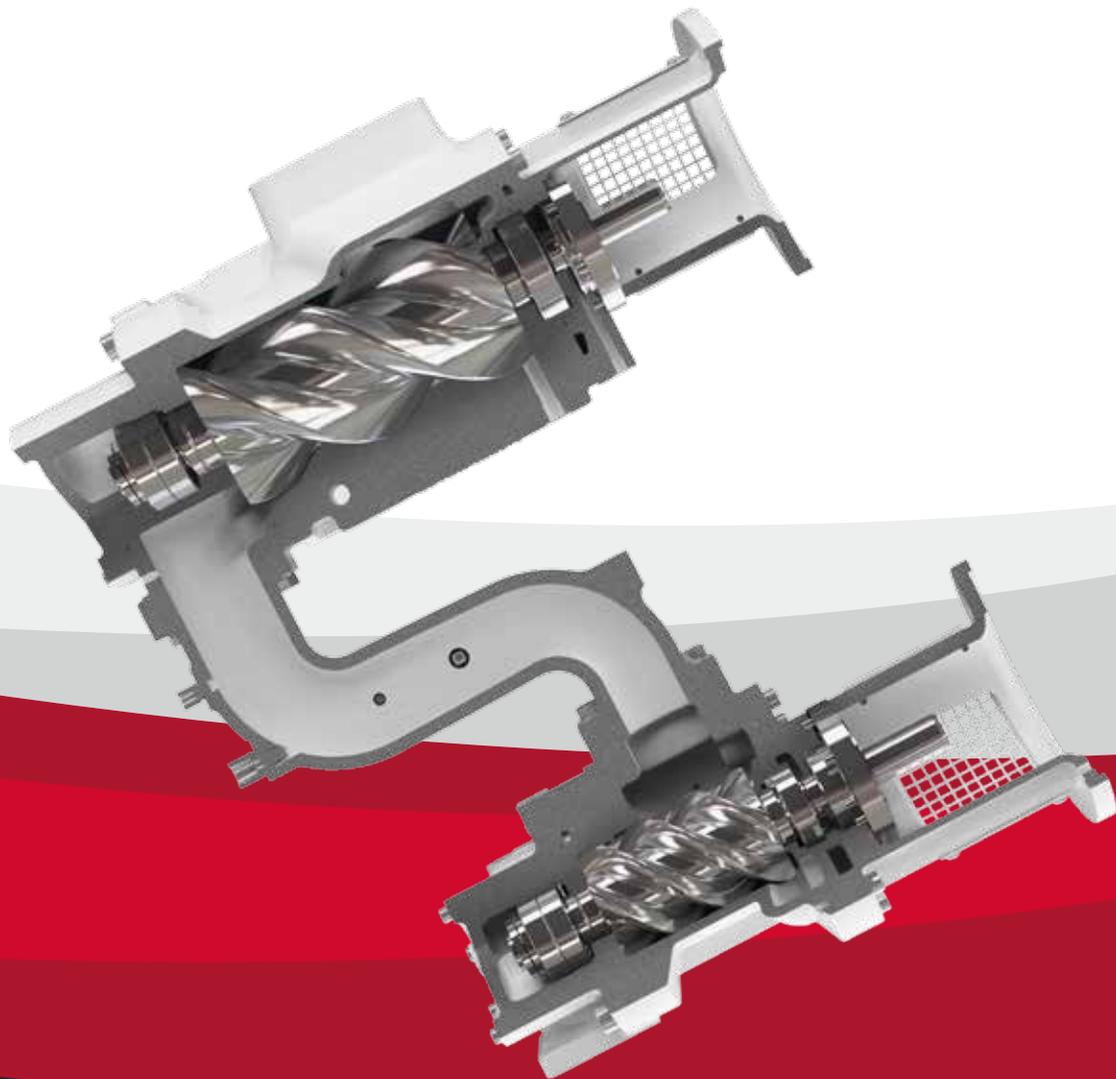
Ensure your  
compressed air  
system remains a  
**total package**

## 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.



To find a distributor visit:  
[gardnerdenverproducts.com](http://gardnerdenverproducts.com)

# Specifications

## VST55-260 TWO-STAGE ROTARY SCREW COMPRESSOR, 60 HZ

MODEL	DRIVE MOTOR		NOMINAL PRESSURE		FAD <sup>1</sup>		NOISE LEVEL <sup>2</sup>	WEIGHT		DIMENSIONS L x W x H IN. (MM)	
	HP	KW	PSIG	BAR	ACFM	M <sup>3</sup> /MIN	DB(A)	LBS	KG		
VST55	75	55	100	6.9	436	12.35	68	7150	3243	130 x 80 x 78 (3302 x 2032 x 1981)	
			125	8.6	389	11.02					
			175	12.0	336	9.52					
VST75	100	75	100	6.9	564	15.98	71	7300	3311		
			125	8.6	513	14.53					
			175	12.0	446	12.63					
VST90	125	90	100	6.9	677	19.18	75	7475	3391		
			125	8.6	622	17.62					
			175	12.0	546	15.47					
VST110	150	110	100	6.9	816	23.12	75				
			125	8.6	751	21.27					
			175	12.0	663	18.78					
VST150	200	150	100	6.9	1050	29.75	78	11000	4990	158 x 92 x 84 (4013 x 2337 x 2134)	
			125	8.6	986	27.93					
			175	12.0	877	24.84					
VST180	250	180	100	6.9	1382	39.15	81				
			125	8.6	1285	36.40					
			175	12.0	1082	30.65					
VST225	300	225	100	6.9	1728	48.95	Water-Cooled Package 76	Water-Cooled Package 14572 (6610)			Water-Cooled Package 158 x 92 x 84 (4013 x 2337 x 2134)
			125	8.6	1607	45.52					
			175	12.0	1369	38.78					
VST260	350	260	100	6.9	2032	57.56	Air-Cooled Cooling Module 80	Air-Cooled Module 4108 (1863)			
			125	8.6	1885	53.40					
			175	12.0	1627	46.09					

1) 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 +/- 3dB

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by continuously improving all business processes  
with a focus on innovation and velocity

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Denver**<sup>®</sup>

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