

## Rotary Screw Compressors

# VST Series™



### 55–90 kW, VST 55/75/90 Two Stage, Variable Speed Control

#### Efficiency

Gardner Denver designed and built this product using the latest technology for optimizing the energy efficiency of the entire package. Computational Fluid Dynamics (CFD) was used to minimize pressure drop and optimize volumetric efficiency. Finite Element Analysis (FEA) allowed critical components to be reviewed for strength and durability. Thermography allowed us to design the most effective cooling system for the package. *The result: Least operational power cost resulting in bottom line profit to your company.*

#### Flexibility

The combination of the new AirSmart™ controller with Variable Frequency Drives provides you with a compressor that will meet all of your variable pressure and flow requirements with

no interruptions. The controller allows the operator to change the target pressure of the unit with the touch of a button. The variable speed control matches the output of the compressor package to the exact requirements of your system demand. *The result: Maximum flexibility with minimum energy costs resulting in bottom line profit to your company.*

#### Serviceability

Gardner Denver designed this product with maximum “up time” in mind. The layout of the enclosure, the electronics and the mechanical components minimizes the time required for “normal” maintenance items as well as major mechanical components. *The result: Minimum labor required for maintenance resulting in bottom line profit to your company.*

## Technical Data—VST Series™

VST 55/75/90 (75/100/125 HP), 60 Hz



Gardner Denver Model	Rated Pressure		Capacity at Rated Pressure*		Motor power		Net weight		Air Outlet Size	Noise level**
	psig	bar	acfm	m <sup>3</sup> /min	hp	kW	lbs	kg	NPT	dBA
VST 55	100	6.9	438	12.4	75	55	7,150	3,243	2"	68
	125	8.6	402	11.4						
	150	10.3	371	10.5						
	175	12.1	339	9.6						
VST 75	100	6.9	564	16.0	100	75	7,300	3,311	2"	71
	125	8.6	513	114.5						
	150	10.3	472	13.4						
	175	12.1	446	12.6						
VST 90	100	6.9	677	19.2	125	90	7,475	3,390	2"	75
	125	8.6	622	17.6						
	150	10.3	580	16.4						
	175	12.1	546	15.5						

\* Capacity measured in accordance with CAGI/PNEUROP acceptance test code PN2CPTC2. \*\* Noise level measured in accordance with ISO 2151.

### Standard Equipment

- Direct Drive, Non-Geared energy efficient airend design.
- Optimized drive/motor/airend combinations for maximum efficiency of both compression stages.
- Innovative AirSmart controller monitors and controls the unit to obtain Optimum efficiency.
- Multi-language capability in controller interface.
- IP54 rated control enclosure with filters.
- TEFC inverter duty 460 volt motor design, Class F insulation, rated at 45°C ambient operation.
- Air/oil separation to < 2 ppm per ISO 8573-2.
- Unlimited motor “Starts” due to drive design.
- Pressure relief valve.
- Centrifugal cooling fan driven by variable speed drive/motor combination.
- After-cooler designed for 15°F CTD.
- Efficient moisture separator with “Float” drain.
- Enclosure designed to minimize noise emissions.
- Factory fill of AEON™ 9000TH synthetic lubricant.

### AirSmart controller features:

- Extremely user friendly programming.
- Operation modes: Automatic or Start/Stop operation.
- 4 x 20 character LCD display with LED back lighting.
- Adjustable Maintenance advisories.
- Programmable “Distributor Contact Information” for maintenance.
- Maintenance advisories include part number.
- Easy to navigate to additional screens.

- Indicates capacity level at a glance.

### Optional Equipment

- 575 volt applications
- Line reactors
- EMC filter
- Watercooled
- Communications/Sequence Module
- AEON 6000FG-68 High Temp Food Grade Lubricant
- Auto water temperature regulator

# Gardner Denver®

For additional information contact your local representative or Gardner Denver Compressor Division, 1800 Gardner Expressway, Quincy, IL 62305 Customer Service Department Telephone: (800) 682-9868 FAX: (217) 224-7814 Sales and Service in all major cities. [www.GardnerDenverProducts.com](http://www.GardnerDenverProducts.com) [maggie@gardnerdenver.com](mailto:maggie@gardnerdenver.com)

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