

# **Gardner Denver**

SAVG2-75, SAVG2-100 (75-100 HP)  
FIXED SPEED ROTARY SCREW COMPRESSORS

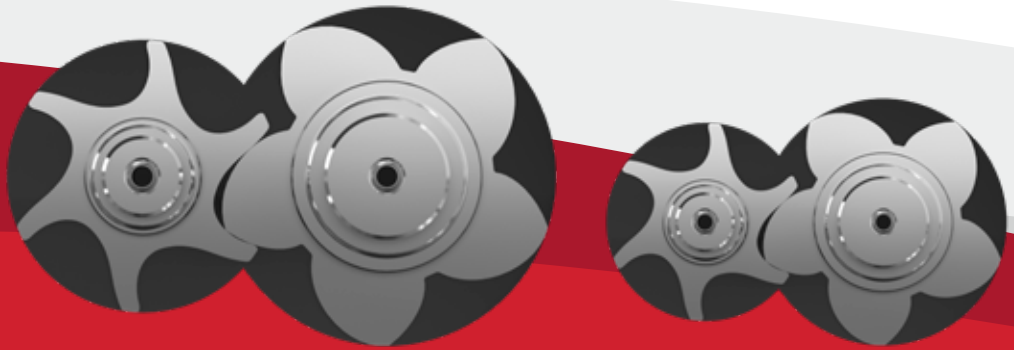
## **Electra Saver<sup>®</sup> G2**



# Slow Speed **Success**

## A Serious Legend

The engineering ingenuity of Gardner Denver began in 1859. For over 150 years, our compressed air products have been a dependable resource for meeting the world's most demanding and ever-changing industrial needs. A legend in its own right, the Electra Saver was founded on slow-speed, 1800 rpm design principles and has been providing decades of dependability.



Larger airends, running at slower speeds, maximize efficiency and increase reliability.

Gardner Denver, 230 mm

Competition, 165 mm

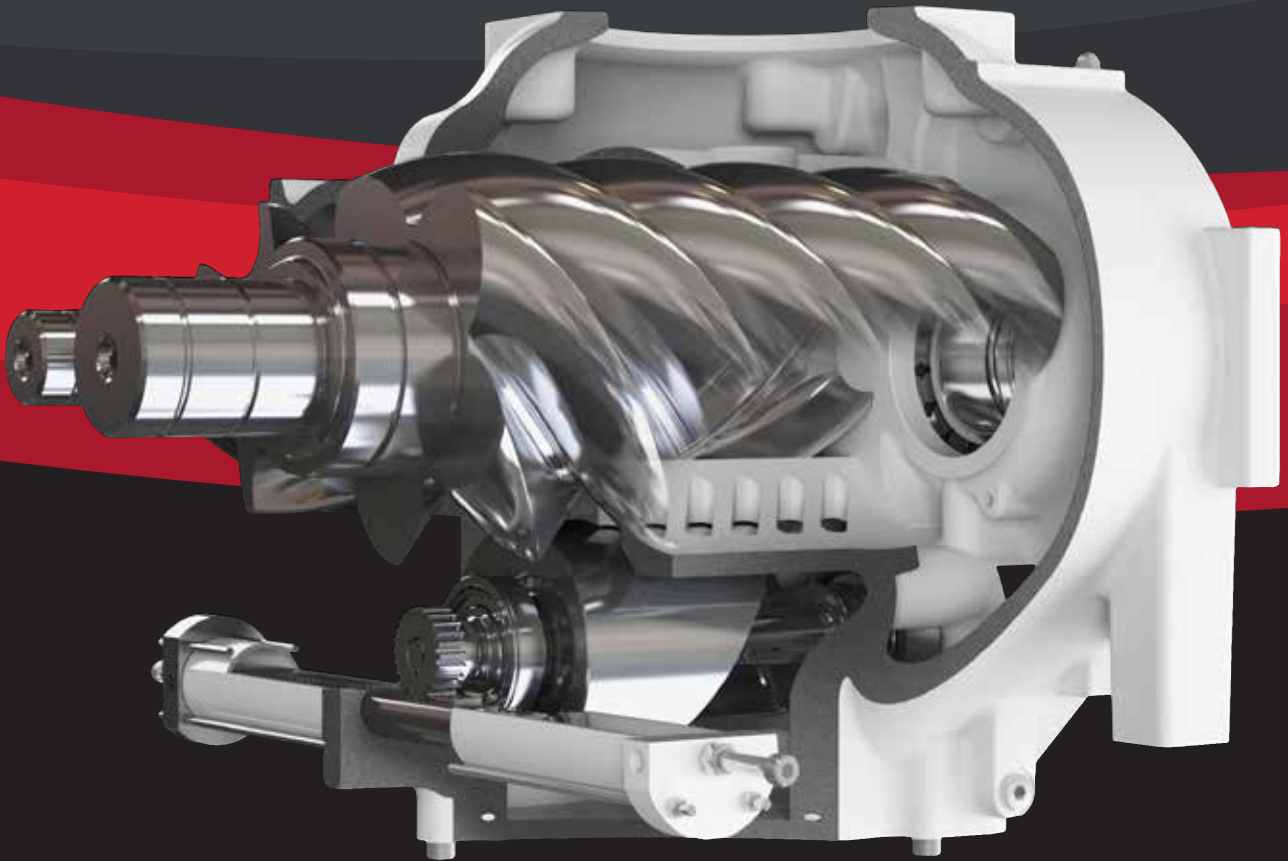
Rotor size shown for 100 hp compressors

Featuring super-sized bearings and up to **40% larger airends** than the competition, Electra Saver compressors not only outperform competition, but outlast them.

## A Serious Technological Advancement

Even with careful planning, most systems experience varying air demand. As a result, compressors operate below their full-load rated capacity at what is most commonly referred to as “partial load.” The horsepower consumed at partial load operation can be significant. Gardner Denver recognized this fact and developed a variable displacement technology designed to match compressor output to compressed air demand.

The patented TurnValve™ was introduced over 30 years ago to maximize compressor efficiency. The TurnValve displaced inlet throttling technology which was the most efficient means of compressor capacity control and eliminated wide pressure fluctuations and massive storage requirements.





# The TurnValve Defined

## Basic Operating Principle

Air is drawn in through the fully opened inlet valve. Volumes of air are encapsulated between the male and female rotors and airend housing. The volumes are reduced through further rotation of the rotors to a fixed compression ratio and discharged out of the airend at operating pressure.

## Design Features

The cylindrical TurnValve has a helix-shaped relief on its outside diameter which mates to a precisely machined bore within the body of the airend housing. The TurnValve is supported axially by oversized tapered roller bearings to permit rotation through a hydraulically operated rack and pinion arrangement.

Openings, or windows, conjoin the compression chamber of the airend with the TurnValve bore where the circumference is sealed by tight clearances and lubricant to prevent air leakage during operation.



## Full Load Operation

When full capacity is required, the TurnValve is positioned such that the windows are closed, resulting in maximum volume output of the air end.



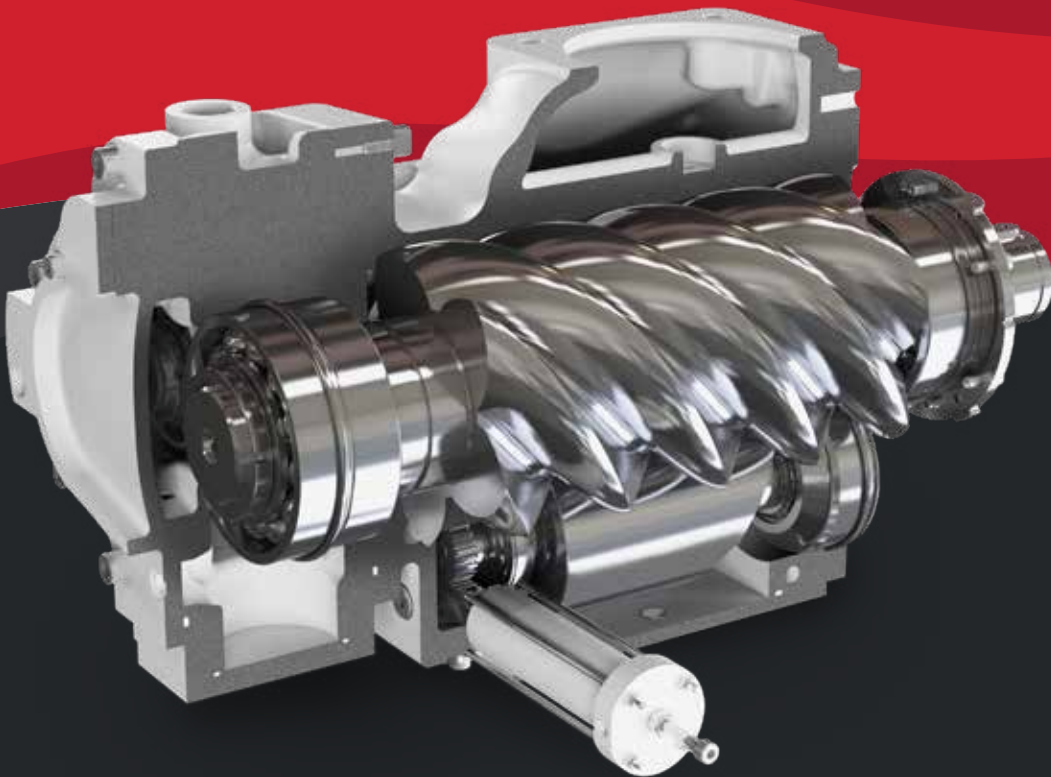
## Part Load Conditions

Upon detection of decreasing system air demand (rising pressure), the TurnValve is rotated into a position where the helix relief progressively opens the succession of windows until system air pressure has stabilized.

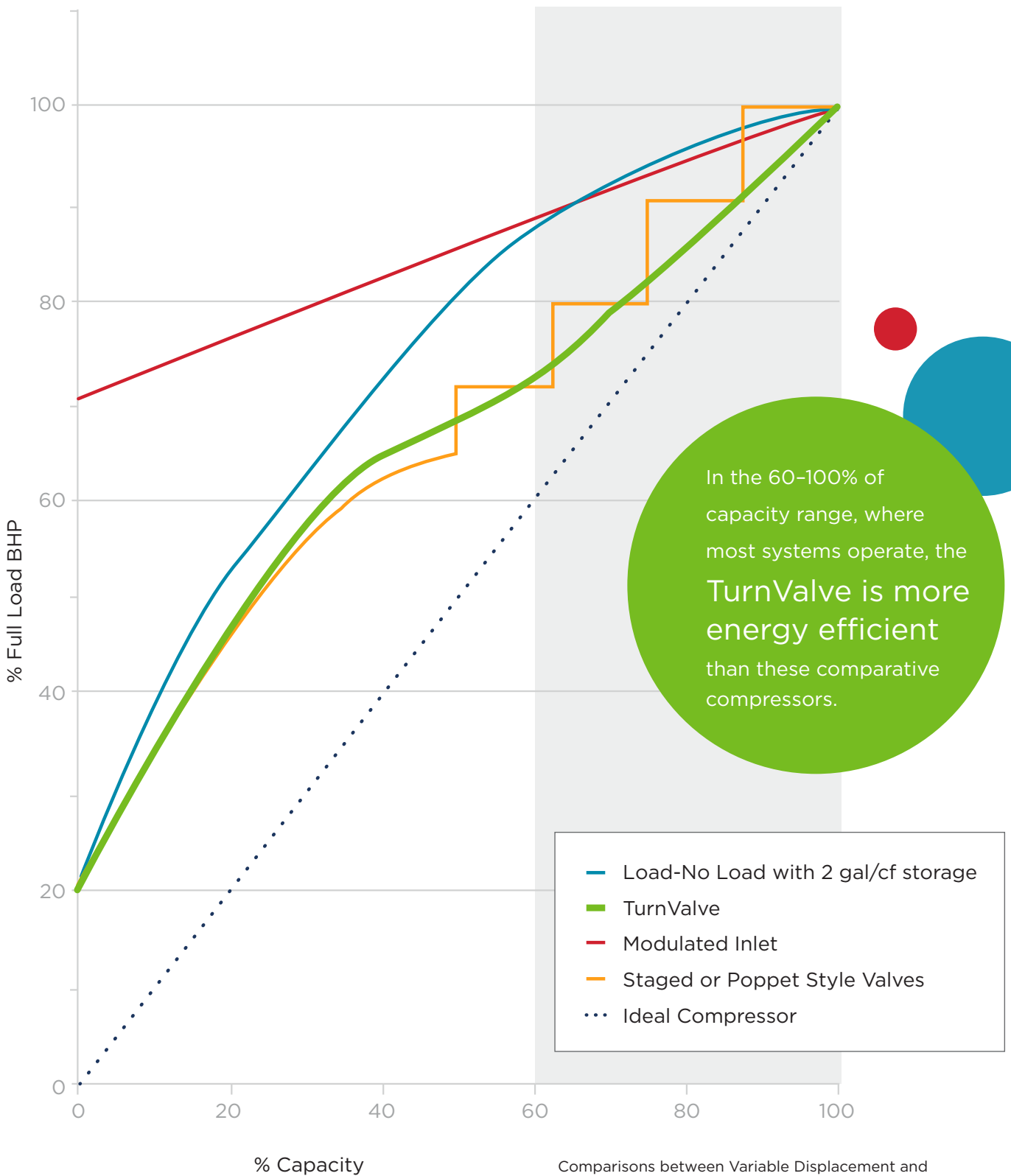
# The TurnValve Advantage

Trapped volumes of air are allowed to circulate back to the inlet without being compressed, resulting in only the required amount of air being compressed to meet system demands. The effective length of the rotor is shortened resulting in variable displacement operation allowing power use to drop, thus saving energy.

The TurnValve provides the exact amount of compressed air to maintain system pressure for maximum efficiency—no more, no less. In fact, in the 60-100% of capacity range, where most systems operate, the TurnValve is more energy efficient than comparative units.



# PARTIAL LOAD CAPACITY POWER CURVES



Comparisons between Variable Displacement and Variable Speed Compressors should be done with specific performance curves at required air flow.

# Best of the Best

## The Compressor to Exceed Your Demands

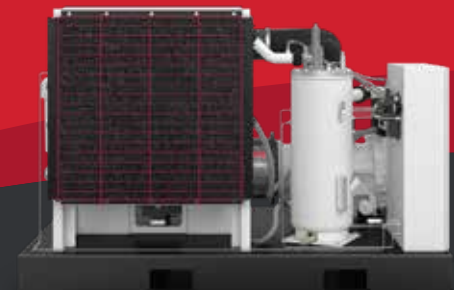
Whether it's the NEMA 4 control enclosure, intuitive microprocessor controller, patented TurnValve technology or quiet enclosure, the Electra Saver™ G2 is packed with high value standard and optional features that exceed your demands.

## Serviceability Redefined

The Electra Saver™ G2 redefines serviceability. Available in a standard unenclosed configuration, all filters are easily accessible and no piping needs to be disconnected to service the separator.

## Unsurpassed Quality Components

Featuring a high performance airend, standard stainless steel control lines, seamless tubing for lubricant circulation, and 1800 rpm high efficiency motors, Gardner Denver thought of everything with the design of the Electra Saver™ G2.







## Information at Your Fingertips

The AirSmart G2™ from Gardner Denver is more than just a controller—it's the lifeline to understanding your system's operation. With built-in digital gauges, a maintenance dashboard and real-time and historical trending, the AirSmart G2™ gives you the information you need at your fingertips.





- Digital Gauges
- Full-Color LCD Screens
- Maintenance Dashboard
- Real-Time & Historical Trending
- Home Screen with Hot Keys



# 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.

Gardner Denver's focus on total system protection 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

Gardner Denver's engineering philosophy 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

## ELECTRA SAVER G2 75-100 HP ROTARY SCREW COMPRESSOR, 60 HZ

MODEL	DRIVE MOTOR		NOMINAL PRESSURE		FAD		NOISE LEVEL <sup>1</sup> DB(A)	WEIGHT		DIMENSIONS L x W x H IN. (MM)
	HP	KW	PSIG	BAR	ACFM	M <sup>3</sup> /MIN		LBS	KG	
SAVG2-75	75	55	100	6.9	385	10.90	81	4521	2051	90 x 61 x 59 (2286 x 1549 x 1499)
			110	7.5	344	9.74				
			150	10.3	342	9.68				
SAVG2-100	100	75	100	6.9	518	14.67	81	4660	2114	(2286 x 1549 x 1499)
			125	8.6	468	13.25				
			150	10.3	411	11.64				

1) Noise level, weights and dimensions are for unenclosed models.



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

**Gardner  
Denver**<sup>®</sup>

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