



TWO-STAGE ROTARY SCREW AIR COMPRESSORS

# K2-K2V Series

Premium, Efficient, Two-Stage Compressors

Fixed or Variable Speed ■ Lubricant-Injected ■ Two-Stage  
100-600 HP ■ Air or Water-Cooled ■ 80-210 PSIG



# ROGERS® K2-K2V Series, Two-Stage

## Inside the K2/K2V Series



ROGERS® delivers an ecologically friendly and energy-efficient compressor design.

### Inlet Control Valve

Rugged design for reliable capacity control. The valve doubles as a check valve, eliminating oil loss out of the inlet on power failure.

### Oversized Heat Exchangers, Moisture Separator and Auto Drain

Cools lubricant and air while removing up to 80% of moisture from the airstream. VSD fan control is standard and reduces power consumption while increasing cooler life.

### Inlet Filter/Silencer

Multi-stage, low-pressure drop elements.

### Lubricant Filter

Spin-on, full-flow, 12-micron, high-efficiency elements. (Not visible)

### Compressor Control

Status indicators with easy-to-read interface including Percent Capacity display. MODBUS remote communication is standard.

### Air/Lubricant Separator

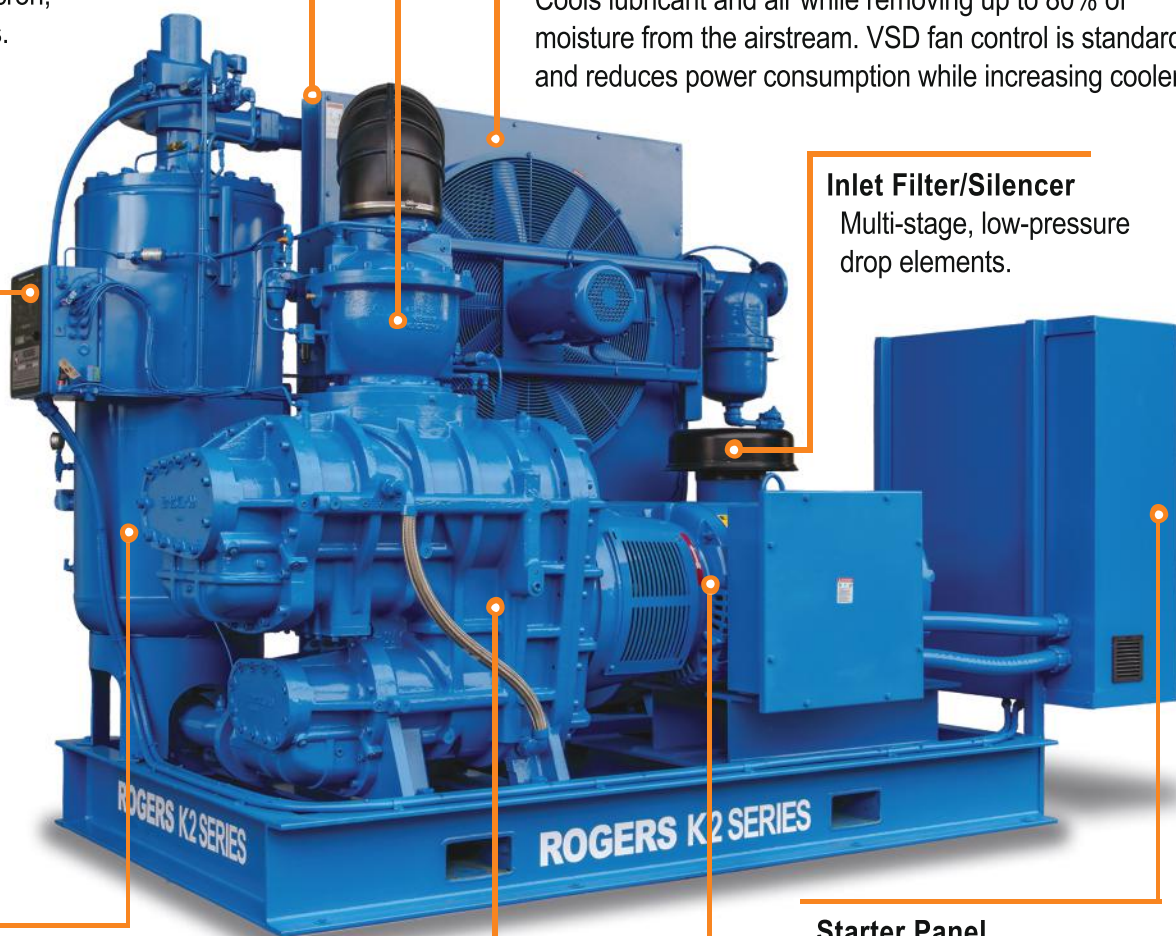
High efficiency, reliable, multi-stage separation.

### Two-Stage Airednd

Driven through helical gears, designed and built for performance, premium efficiency, and longevity.

### Drive Motor

Standard, high efficiency, C-flange, ODP, NEMA frame induction motors. TEFC motors are available.



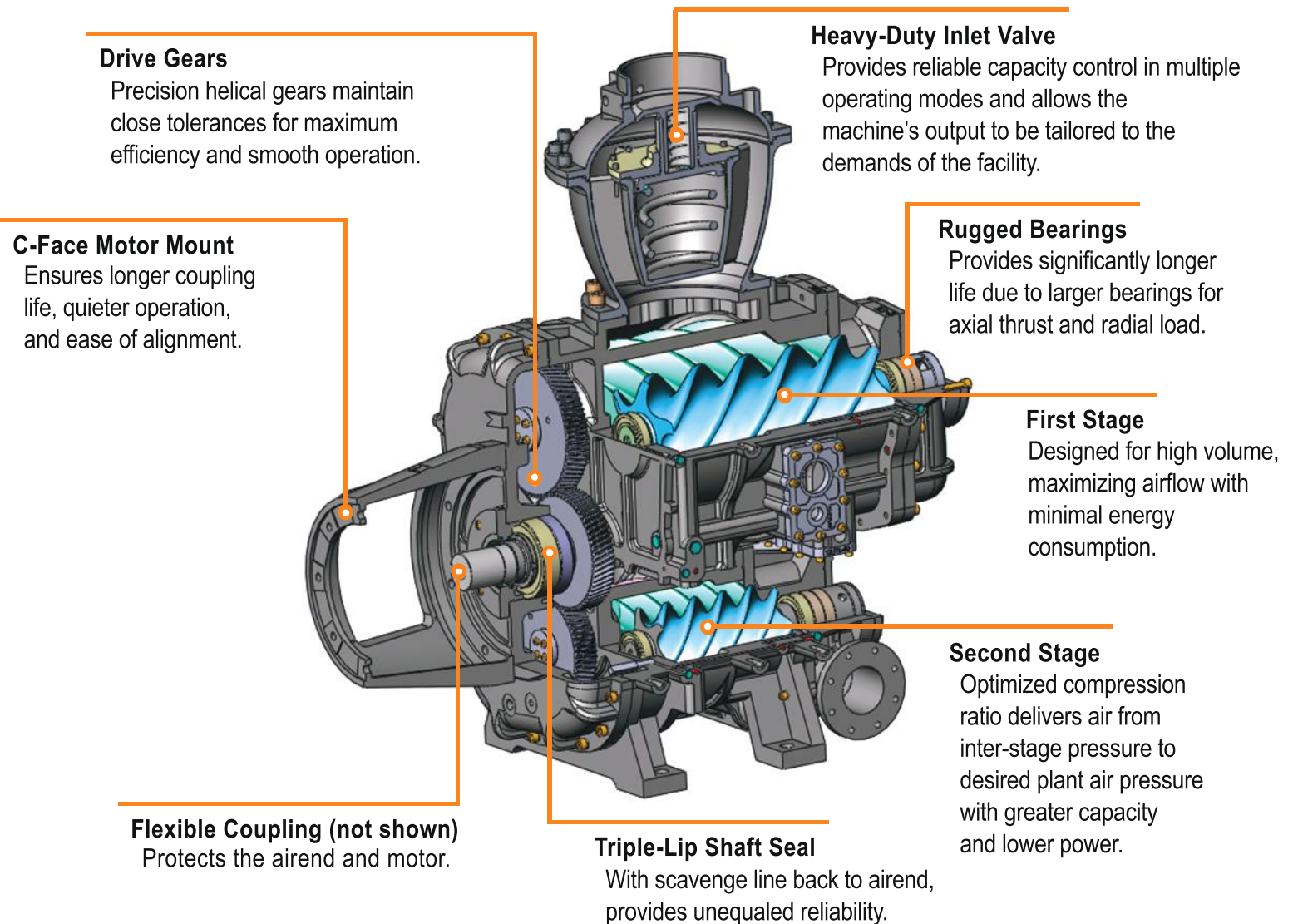
### Starter Panel

Solid-state, reduced voltage starting standard on fixed speed with variable speed drives available as well.

ROGERS® model K2-300-100 shown with Solid-State starter.

# ROGERS® K2-K2V Series, Two-Stage Airend

## The Heart of the Compressor's Reliability and Performance



## The Airend Provides . . .

### Long-Lasting Bearings

SKF bearings combined with slower rotational speeds consistently outlast competitive designs.

### Triple-Lip Shaft Seal

The **K2-K2V Series** triple-lip shaft seal is more reliable than a mechanical seal.

### ROGERS® CLS-46 Lubricant

Specifically formulated to provide long life in Rogers' rotary screw air compressors. Option for food grade and other alternative lubricants available.

### Premium Efficiency

With two-stage compression and controlled lubricant injection, this design provides premium efficiency approaching isothermal compression.

### Precisely Ground Rotors

Rotors matched to take full advantage of available high precision airend and casing machining to limit slip and maximize performance.

### Warranty

Our standard 5-year airend and motor and extended 10-year airend warranties are the best supported warranties in the industry.

# K2-K2V Series, Two-Stage Components

## Compressor Control



STANDARD GOAT CONTROL PANEL

The eGOAT controller offers optimum performance with efficient pressure and flow control. The microprocessor controls, monitors, regulates, protects, and communicates up-to-the-second operating performance, and service status via its high-resolution display and LED indicators. The eGOAT also features Ethernet monitoring, MODBUS communication for remote control operations, and onboard sequencing for controlling other on-site compressors. The optional GOAT3 PLC processor enhances user interface with a 7-inch color touchscreen and also provides at-a-glance status conditions with high-visibility, color-coded lights.



OPTIONAL GOAT3 CONTROL PANEL



## Air/Lubricant Separator

The five-stage separation system produces less than 2 PPM (w) lubricant carry-over. Complete with sight glasses for lubricant level and scavenging lines.



## ROGERS® Machinery Co., Inc.

### THE COMPANY

From our founding in 1949, **ROGERS®** Machinery Co. has designed, built, and serviced compressed air systems and other plant utility equipment. **ROGERS®** builds the **K Series**, oil-lubricated compressors, in Centralia, WA and our KNW, oil-free compressors, in Portland, OR. In addition, we provide 24/7 sales, parts, and service support to our branch offices and distributor partners while maintaining an extensive inventory of parts for service and repair.

### INNOVATION

The **ROGERS® K2-K2V** Series compressors represent a complement of features designed to provide “best in class” performance, with features such as advanced inlet filtration and low pressure loss inlet valves, efficient 5:6 rotor

## Two-Stage Airend

Optimized compression ratios maximize efficiency and longevity. The 5:6 rotor design minimizes losses while the housing optimizes lubricant injection and discharge porting to maximize volumetric efficiency. A NEMA C-face motor mounting flange is standard throughout the entire range.

## ... the Right Choice

profiles, low lubricant carry-over separation, high-capacity coolers, and highly effective moisture removal all adds up to give you the most effective and efficient air compressor you can install today.

### SYSTEMS

The **ROGERS® K2-K2V Series** design allows for easy access to monitor, maintain and repair the assembly. Periodic maintenance such as filter and lubricant changes are made easy. Energy saving, high reliability, and low total cost of ownership are fundamental design features of the machines. Our representative will help you select the right compressed air treatment and storage equipment with a systems approach that ensures you have the correct air quality, pressure and airflow to your plant.

Compressed air systems are dynamic in nature. By controlling compressor output to match system demand, substantial energy savings can be achieved.



ROGERS® delivers an ecologically friendly and energy-efficient compressor design.

### Inlet Filter/Silencer

The first stage of air treatment is designed to protect lubricant, compressor, and system. The dry-type element and housing are selected for minimum pressure drop and maximum dirt-carrying capacity.



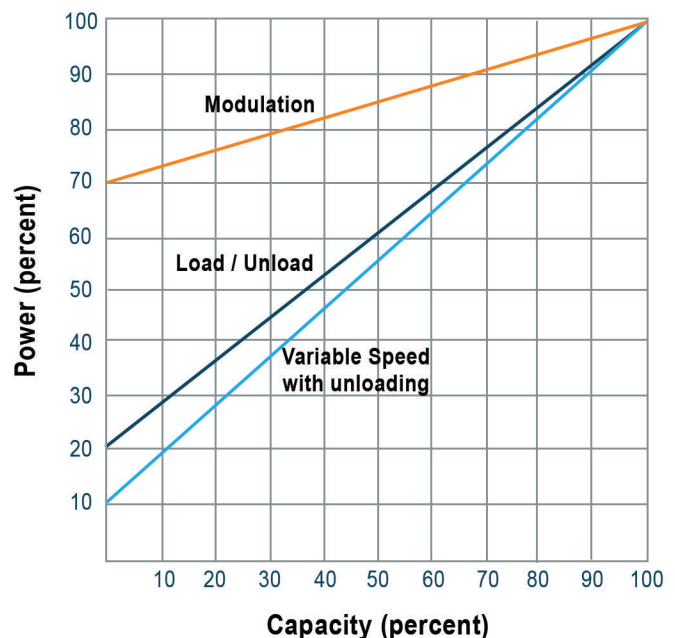
### Variable Speed Drive

The K2V Series includes a heavy-duty control system designed to match demand with flow. By oversizing the VSD, we deliver maximum power savings with incredible longevity.



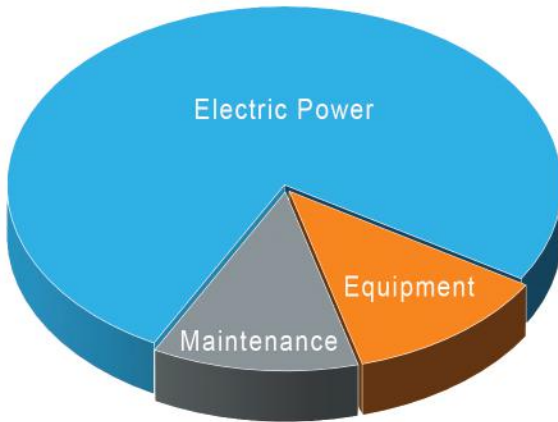
*\*Multiple brand options available.*

### Typical Energy Savings with Variable Speed Control



# ROGERS® K2-K2V Series, Two-Stage Benefits

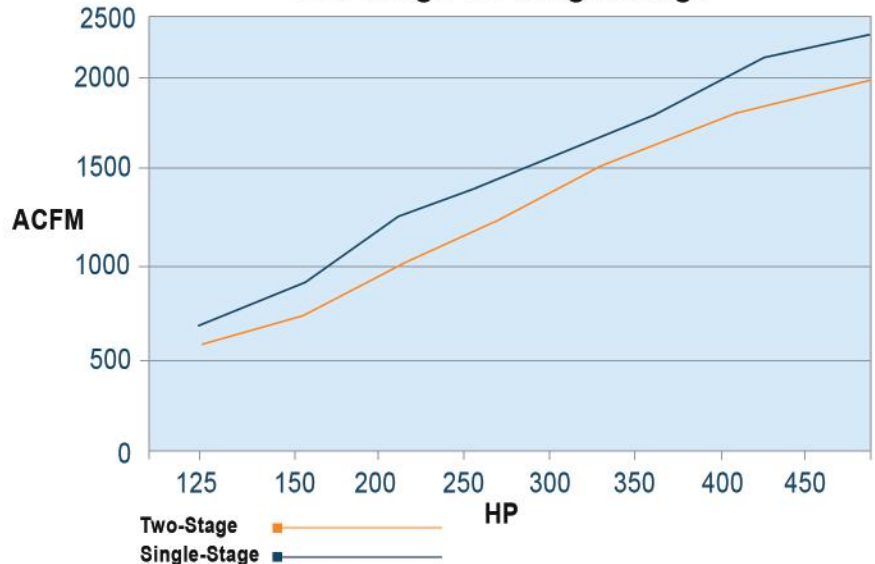
## Exceptional, Dependable Performance



- **ROGERS® K2/K2V** Series assemblies are designed to provide best-in-class efficiency.
- **Two-Stage** technology offers a 10-15% increased efficiency over our outstanding single-stage performance.
- **Market Leader** consistently out-performing competitors in factory and field performance tests.

- **ROGERS® K2/K2V** Series are optimal designs for base-load or variable speed trim applications.
- **Two-Stage** design significantly reduces electrical operating costs.
- **U.S. Department of Energy** studies have confirmed that energy costs for compressed air systems are typically 75% of operating costs during the first 10 years of operation.

Two-Stage vs. Single Stage



- **Designed** with a simple, flexible yet rugged packaging.
- **Robust** airend and easy-to-use controls will continue to deliver on the promise of long-term savings.
- **Rotors** are housed in precision machined castings for smooth, quiet, operation.
- **Stages** optimized to maximize flow and pressure rise to limit power consumption.
- **Optimized** inlet flow, lubricant injection, and discharge porting for low inlet pressure drop, efficiency and compression ratio.

# ROGERS® K2-K2V Series

## Customization Options Give Ultimate Flexibility

### REMOTE AIR COOLERS

Eliminate ventilating hot air from compressor coolers by locating remote coolers outside or other well-ventilated areas.

Remote coolers with robust fan and moisture separator mounting are provided on structural steel support frames for floor mounting. Custom mounting design is also available.



### CUSTOM DESIGNS

Custom-designed systems available to fit your compressor room.

These designs help you save on installation costs.



## Upgrade Your Control System To A ROGERS® GOAT 3

Graphic Operator Access Terminal

### User-Friendly Digital Control with Fast Maintenance and Troubleshooting Information at Your Fingertips

Features Include:

- Allen Bradley CompactLogix™ L306PLC.
- Beijer Electronics X2, seven-inch color touchscreen controller optimizes and enhances the user interface.
- Large, easy-to-see pilot lights immediately informs you of the unit's status from clear across the room.





Serving the United States and  
International Markets With  
Compressed Air, Blowers,  
Pumps and Vacuum Solutions  
Since 1949



Centralia Branch Office, Production and Warehouse Facilities Centralia, WA

## K Series

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ROGERS® **K Series** is designed  
and built in the USA.

**ROGERS® K Series** family of compressors and vacuum pumps



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