

# Roots™ Blower



## 821 RCS-VJ

Part Number – depends on shaft config, call 816-207-0090

Repair Kit: 667461RK

Patented WHISPAIR™ Water Sealed Vacuum Exhausters include an inlet spray nozzle and seal water flow meter for water injection. It is designed to handle a limited quantity of liquid without damage. This permits introduction of sealing water at the blower inlet to improve operating efficiency and reduce internal temperature rise.

WHISPAIR blowers reduce noise and power loss by utilizing an exclusive wrap-around plenum and proprietary WHISPAIR jet to control pressure equalization-feeding backflow in the direction of impeller movement, thereby aiding rotation. This design results in longer bearing life, lower vibration, and reduces noise up to 5 dBA pressure or vacuum.

- Heavy-duty unit with integral-shaft ductile iron impellers with an involute profile
- Rigid one-piece casing, head plates and end covers are grey iron
- Carburized and ground alloy steel spur timing gears
- Cylindrical roller bearings
- Piston rings reduce air leakage
- Lip type oil seals prevent lubrication from entering the air chamber.
- Hydrodynamic seal on the drive shaft prevent oil leaks
- Splash oil lubricated gears on drive and gear ends
- Horizontal and vertical configurations available

### Quick Specs

Maximum Recommended Sealing	8 Gallons/Min
Water Flow Rate – Includes injected and process water (single or two stage operation)	
Flow Range	to 2710 CFM
Max ΔVacuum	24" Hg
Maximum RPM	1800
Minimum RPM	850
Max ΔT	160°F
Inlet Connection Size	12" Flange
Discharge Connection Size	10" Flange
Shaft Dia.	2.75"
Min Sheave Dia.	13.2"
Drive End Lubrication	Oil
Gear End Lubrication	Oil
Oil Sump Horiz Config	3 Gallons
Oil Sump Vert Config	40 oz
Bare Unit Weight	1800 lbs
Container	Wood Skid
Skid Size (L x W x H)	54" x 32" x 36"
Shipping Weight on Skid	~1850 lbs
Recommended to Ship Via	Truck



## Roots Authorized

Representative  
Distributor

Packager

Repair Center

**816-207-0090**

Sound Enclosures

Custom Fabrication

Blower Packages

Valves, Gauges & Sensors

Spool Pieces

Blower Parts

Oil and Grease

Silencers & Filters

Filter Elements

Air Handling Equipment

Screw Conveyors

