



Contact-Cooled Rotary Screw Air Compressors

R-Series 55-75 kW (75-100 hp)



A New Level of Reliability, Efficiency and Productivity

Ingersoll Rand R-Series rotary screw air compressors offer the very best of time-proven designs and technologies with new, advanced features to ensure the highest levels of reliability, efficiency and productivity available.

Progressive Adaptive Control™ – (PAC™) Protection

An integrated, intelligent system that continuously monitors key operating parameters and adapts to prevent unexpected downtime.

- Scans and adjusts operating parameters in response to changes in filter condition.
- Ensures peak performance through real-time electronic maintenance indicators.
- Optimizes energy consumption and reduces noise by adjusting fan speed.
- Increases bearing life by eliminating any chance of water build-up in the coolant.
- Improves productivity by proactively monitoring and conditioning incoming power.

V-Shield™ Technology

A totally integrated, leak-free design using stainless steel pipes and long-life metal-flex hoses.

- Superior elastomeric seals for repeatable leak-free connections.
- Reduced downstream contamination with stainless steel air piping.
- Vibration isolation system and metal-flex hoses extend compressor life and reduce noise.
- Significantly reduced potential leak paths.



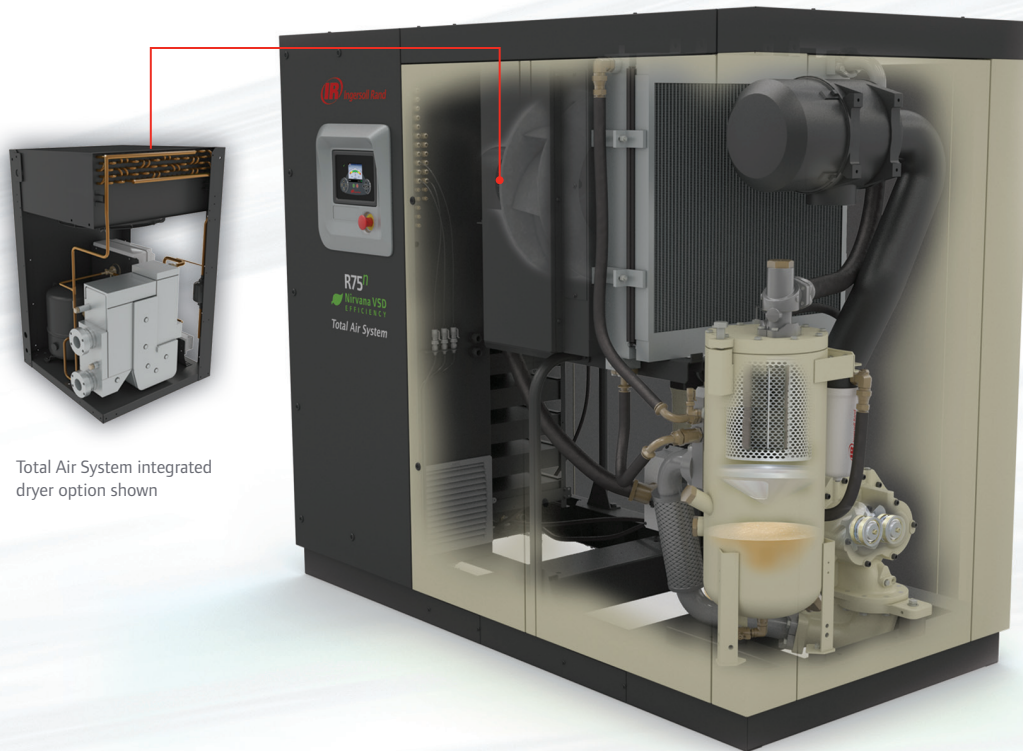
Xe-145M
option shown

Xe-Series Controller

The Xe-Series controller features an intuitive high resolution color display that provides a window into all vital compressor data.

- Remotely access and control your compressor from almost anywhere.
- High intensity LED indicators clearly show compressor status from a distance.
- Sequence up to 4 Xe controlled compressors without any additional hardware.
- Customizable to operate in 30 different languages.
- Real-time clock with scheduled start and stop ability.
- Web-enabled communication and control.
- Large navigation buttons and an intuitive menu layout for easy compressor control.
- Built-in performance analysis graphics and visual trending.
- Access automated inspection logs using a standard Web browser.
- Automatic email notification of warnings and trips.





Total Air System integrated dryer option shown

Sequential Cooling System

Significantly improves efficiency, serviceability and noise level.

- Low energy consumption and quiet operation with an energy-efficient centrifugal blower.
- Significantly reduces the energy required to remove harmful condensate in downstream air treatment by lowering discharge temperatures to as low as 5°C (9°F) above ambient.
- Integrated moisture separator delivers higher quality air by decreasing harmful condensate carryover, while electronic no-loss drain valves improve efficiency.
- Independently-mounted, free-floating air and coolant heat exchangers extend life by reducing thermal stress.
- Available for operation in extreme environments up to 55°C (131°F).

Total Air System™ (TAS™)

The R-Series Total Air System™ (TAS™) provides clean, dry air in a single package that minimizes installation costs and space.

- Integrated refrigerated dryer provides dew point suppression up to 46°C (115°F) and 40% relative humidity.
- Standard high efficiency coalescing filter delivers ISO Class 1-4-2 quality air.
- Patented 3-in-1 heat exchanger provides increased reliability and efficiency due to a lower pressure drop versus typical dryers.
- Integrated system design provides single-point maintenance and monitoring of the complete air system.
- Integrated PAC™ protection reduces compressor flow or pressure to compensate for a dirty pre-filter and prevent unplanned shutdowns.

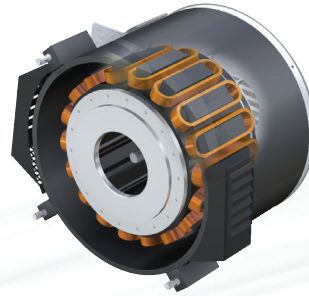
R-Series Compressors: Innovative Design, Flexible Choice



Ingersoll Rand rotary compressors provide superior operating features, benefits and equipment choices. Mix and match variable and fixed speed motors with single-stage airends for the exact level of performance and economy your operation and your budget require.



Efficiency for Variable Demand



Maintenance-free, bearingless motor design

Fewer rotating parts — no pulleys, belts or couplings to wear out

Nirvana™ Variable Speed Drive (VSD) Compressors

Ingersoll Rand VSD compressors maximize the full potential of variable speed technology. Only Nirvana™ VSD technology with the Hybrid Permanent Magnet™ (HPM™) motor — the highest efficiency motor available — gives you all this:

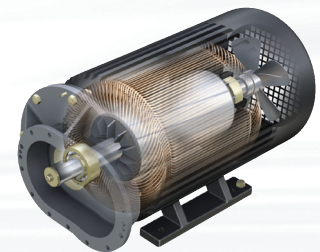
- Unlimited starts/stops.
- Shuts off rather than run unloaded, conserving energy.
- Rated for continuous duty — 100% load, 24/7, 46°C (115°F) — to reduce downtime and lost production.
- Stable, constant pressure control.
- Smooth soft-starting — starting amps always below full load.
- Virtually no degradation in specific power at partial load.
- Variable speed blower allows the compressor to run at a constant discharge temperature.
- Automatic coolant temperature control to eliminate moisture build up.



Efficiency for Constant Demand

Fixed Speed Compressors

Ingersoll Rand R-Series fixed speed compressors are the most reliable and energy-efficient solution for processes with constant demand.



Continuous duty high-performance TEFC induction motor

- The compressors can be outfitted for continuous and reliable operation in the harshest conditions, even outdoors in rain and dust, from -23°C (-10°F) up to 55°C (131°F).
- Clean compressor package design with fewer components that need servicing.
- NEMA 4/IP65 electric panels.
- High-efficiency, quiet centrifugal blower.
- Voltage and frequency fluctuation protection.

Time-Proven Reliable Airends

Robust Airends

Used in compressors worldwide, Ingersoll Rand single-stage airends have proven to be the market leader in both reliability and efficiency.

- Precision machined rotors.
- Highest quality tapered roller bearings.
- All coolant flow paths are integral to the cast housing, eliminating potential leak paths.



Trouble-Free Operation

Ingersoll Rand provides many more ways to ensure your operation remains productive while providing the lowest cost of ownership.

- Increased uptime, reduced maintenance and improved performance with our unique two-stage filtration, extended filtration life and extended life Ingersoll Rand premium grade coolant.
- High-quality air delivered through high-efficiency coolant separation that allows as little as 3 ppm carryover.
- Safe, easy maintenance via removable hinged doors, swing out separator lid and easy-slide heat exchangers.
- Minimized installation costs and complexity with single cooling air inlet and outlet, and easy exhaust heat management for lower utility costs.

Energy Recovery System (ERS)

The Ingersoll Rand Energy Recovery System (ERS) provides a cost-effective way to reduce your energy bills and benefit the environment by capturing compressor heat and putting it to work.

- Supplement your current water heating system.
- Corrosion resistant material ensures years of trouble-free operation.



The Decision is Yours

Our optimized, energy-efficient packages deliver the combination of performance and value that best fits your specific needs. At Ingersoll Rand, it's all about value...and choice!

n Nirvana™ VSD
EFFICIENCY

Variable speed with
single-stage airend



Fixed speed with
single-stage airend

Total Air System™

Optimized dryer, filtration
system and compressor in one
convenient package.

Applying technology to help
our customers achieve their
sustainability goals



Standard Features		Fixed Speed	Nirvana™ VSD		
Category	Description	✓	☐		
Airend	Time-proven single-stage airend	●	●		
PAC™ Protection 	Scans and adjusts operating parameters in response to filtration changes	●	●		
	Real-time electronic maintenance indicators and shutdown protection	●	●		
	Blower speed adaptable to ambient temperature		●		
	Automatic coolant temperature control to eliminate moisture build-up		●		
	Integrated line reactor in compliance with industrial EMC standards		●		
Cooling System	Air-cooled sequential cooling system optimized for efficiency & serviceability	●	●		
	Energy-efficient and low noise centrifugal blower	●	●		
	Generous package cooling system rated for 46°C (115°F) ambient	●	●		
	Moisture separator	●	●		
	Electronic no-loss condensate drains	○	●		
V-Shield™ Technology 	Stainless steel air piping	●	●		
	Vibration isolation pads and premium metal-flex hoses	●	●		
	Repeatable leak-free connections with superior elastomeric seals	●	●		
Services	Ergonomic swing-out lid on the separator tank	●	●		
	Simple ducting (single air inlet and single air outlet)	●	●		
	12-month full package warranty	●	●		
Auxiliary Systems	Noise attenuation enclosure	●	●		
	Package pre-filtration	●	●		
	Long life filtration and separation elements	●	●		
	Extended-life Ingersoll Rand premium grade coolant	●	●		
	Flow control by variable speed technology		●		
	Flow control by full load/no load regulation system	●			
Motors & Electrical Systems 	Control panel protection, NEMA 4/IP65 electrics	●			
	Star-delta reduced voltage starter	●			
	High-efficiency TEFC IP55 motors - Class F insulation with B rise	●			
	Hybrid Permanent Magnet™ (HPM™) motor – EMC-compliant		●		
	Control panel protection, NEMA 12/IP54		●		
	Variable speed drive on main motor & centrifugal blower motor		●		
Optional Features					
Total Air System™ (TAS™) 	Single point maintenance and monitoring				
	High efficiency pre-filter	○	○		
	3-in-1 heat exchanger				
	ISO Class 1-4-2 quality air delivered				
Weather Protection	Outdoor modification/rain protection [†]	○			
	Frost protection to -10°C (14°F) [†]	○			
	Extreme low ambient protection to -23°C (-10°F) ^{*†}	○			
	High ambient protection up to 55°C (131°F) [†]	○			
	Premium high dust filtration	○			
	Motor space heater	○			
	Water cooling	○	○		
	Sea water and harsh water cooling	○	○		
Environmental 	Energy Recovery System (ERS)	○	○		
	Fluid containment system	○	○		
	Food grade coolant and X-tend filtration system	○	○		
Power Protection 	Power Outage Restart Option (PORO)	○	○		
	Safety switch disconnects	○	○		
	Phase monitor (protection)	○	●		
	Electronic solid state reduced voltage starter	○			
General Options	Flow control by inlet modulation control	○			
	Comprehensive service and coverage plan	○	○		
Xe-Series Controllers		Xe-90M		Xe-145M	
Description		Fixed Speed	Nirvana™ VSD	Fixed Speed	Nirvana™ VSD
Built-in energy savings calculator			●		●
On controller graphing and trending				●	●
Standard Web pages		●	●	●	●
Remote control via Web pages		●	●	●	●
Automated reporting				●	●
Web-based graphing and trending				●	●
Email notification of warnings and trips				●	●
Built-in sequencer for up to 4 units		●	●	●	●
Direct communications with Xi system controls		●	●	●	●

 Sustainable Technology ● Standard Feature ○ Optional Feature "Blank" Not Available * Available in North America Only †Not available on Total Air System™ (TAS™) model

Ingersoll Rand...At Your Service

No matter where your facility is located, Ingersoll Rand is committed to serving you 24 hours a day, seven days a week, available to support you with innovative and cost-effective service solutions that will keep you running at peak performance.



PackageCare™

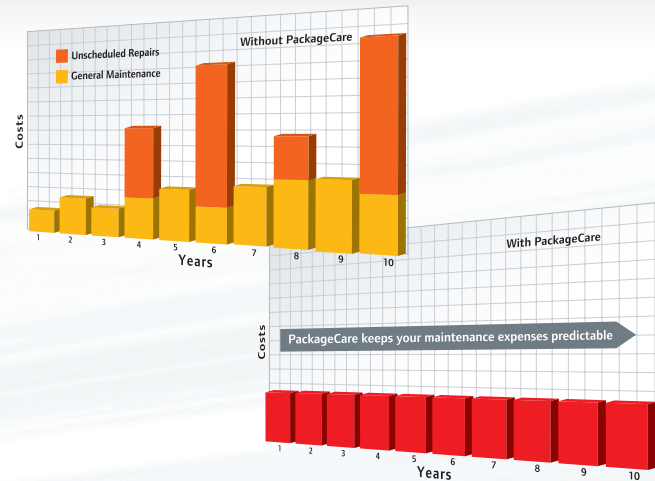
Eliminate the Inconvenience



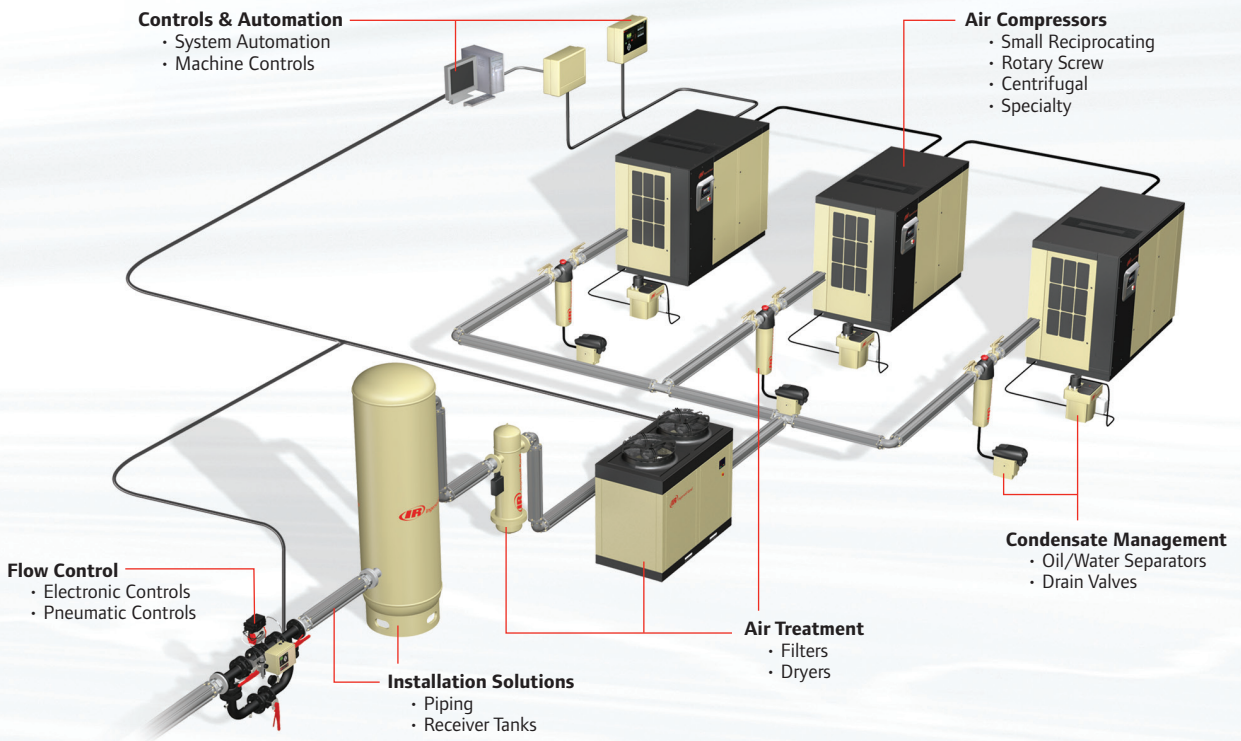
Let Ingersoll Rand handle the pressures and responsibilities of owning a compressed air system with our signature service contract.

With PackageCare, you can...

- Control costs and keep your equipment running at peak efficiency.
- Protect yourself from all repair and replacement expenses over the life of the agreement.
- Maintain or improve the operational efficiency of any compressor, regardless of age, make or model.



Count on Ingersoll Rand for All Your Air System Requirements





Ingersoll Rand Industrial Technologies provides products, services and solutions that enhance our customers' energy efficiency, productivity and operations. Our diverse and innovative products range from complete compressed air systems, tools and pumps to material and fluid handling systems. We also enhance productivity through solutions created by Club Car®, the global leader in golf and utility vehicles for businesses and individuals.

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