# Ingersoll Rand ®

Rotary Screw Air Compressors 90-160 kW Single Stage





# Ingersoll-Rand. More Than Air. Solutions.

Ingersoll-Rand became the world leader in compressed air technology not by building more air compressors, but by providing more problem-solving system solutions for its customers. And no one offers more solutions than IR: rotary screw or centrifugal, versatile controls, air system audits, turnkey installation, "air over the fence," financing, rentals and full service. And, Ingersoll-Rand customers know that IR is with them for the life of their compressed air installation.

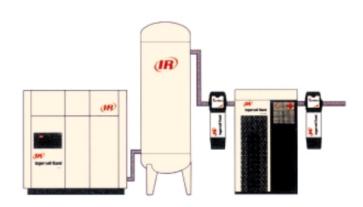
#### INGERSOLL-RAND' S YEARS OF APPLICATION EXPERIENCE WILL HELP YOU ARRIVE AT YOUR COMPRESSED AIR SOLUTION.

Ingersoll-Rand has tackled virtually every conceivable compressed air system application in the world, and yet every day there is a new customer need to be addressed. You can be certain, whatever the size or nature of your application, IR will have the experience, the right product and the right system solution for you.

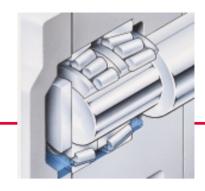


## THE INGERSOLL-RAND TEAM. WITH YOU FOR THE LONG HAUL.

Ingersoll-Rand's team of professionals, from product design and development to sales consulting, application engineering, installation, startup and aftersale service, knows how to keep your compressed air system operating costs down while maintaining peak performance for the life of your system. IR's 24/7 parts and service network is ready to serve you 365 days a year with whatever it takes to keep your system up and running.



# Intellisys Gives You Total Control of Your Compressed Air Delivery





Whether you need continuous duty compressed air or an intermittent supply, Intellisys puts you in complete control.

#### TOTAL CONTROL AT YOUR FINGERTIPS

With finger-touch control, an Intellisys controller provides quick, comprehensive access to your compressed air system.

#### ADJUSTABLE OPERATING PARAMETERS

To satisfy your system requirements, you can change your operating parameters quickly and easily.

#### **BUILT-IN SEQUENCER**

You can sequence up to two similarly equipped Intellisys compressors. The lead machine automatically rotates among the compressors based on accumulated hours, so maintenance levels are kept equal.

#### TIMESAVING DIAGNOSTICS

Intellisys provides fast diagnosis of system demand and displays a warning and/or stops the compressor if it exceeds operating parameters. This will keep troubleshooting expenses and downtime to a minimum.

#### COMPREHENSIVE DATA DISPLAY

An easy-to-read, liquid crystal display provides you with critical details of your compressor's operation, allowing you to make fast adjustments when necessary.

#### GIVING YOU COMPLETE FLEXIBILITY

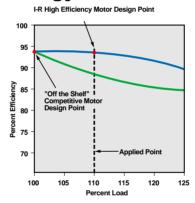
With Intellisys, you are always in control. You can change your operating parameters to maintain the best performances level.

#### SSR: Unparalleled Reliability

Our time-proven integral gear drive is the only maintenancefree drive system in the industry. The airend and motor are permanently aligned, so during the course of normal operation no adjustments are ever required.

The drive train is totally enclosed so that no dust or dirt can get in, and our triple-lip shaft seal prevent leakage of coolant to the motor.

#### **Energy Efficient Motor**

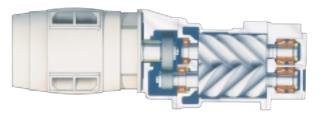


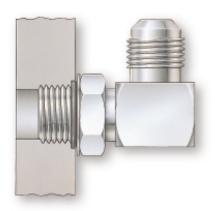
Every SSR compressor incorporates a durable high efficiency motor. SSR motors operate at peak efficiency under full load conditions, ensuring maximum energy savings.

#### Advanced Airend Design

At the core of the SSR is our rugged and reliable airend. Used in thousands of compressors worldwide, our airend is known for trouble-free operation and minimal maintenance.

Our airends utilize only the highest quality duplex tapered roller bearings. Roller bearings provide line contact for thrust loads, and dramatically improve the life of the airend. The SSR airend also incorporates a bearing coolant dam that traps coolant in the bearing during shutdown. This ensures proper bearing lubrication during the critical start-up phase, and a longer bearing life.





#### Inherent Leak-Free Design

By using SAE O-ring fittings on all connections 1/4" and larger, we've significantly reduced potential leakage problems associated with conventional threaded connections.

#### 115°F/46°c Ambient

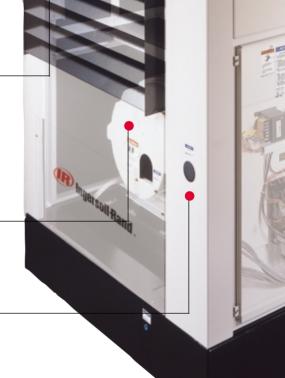
SSR compressors operate in high ambient conditions, making them suitable for locations around the world. Even if the compressor is not operated in sweltering climates, the high temperature rating ensures fewer nuisance shutdowns caused by fouled coolers.

#### **Rugged Motor**

The extra toughness built into the SSR motor means it will run when other motors quit. Maintenance and repair of the SSR motor are just like any other motor you own.

#### **Easy Connectivity**

The SSR is fully piped and wired, resulting in simply external connection of all utilities.



#### The SSR Package

To fit the need of your compressed air system, we offer you the choice of an air-cooled or water-cooled design.

#### **Factory-Tested**

While to some quality process, spot testing meets the requirement of quality control process, IR test each-and every compressor to ensure the customer receives the highest reliability and lowest operating cost availability.



The cooling airflow discharges from the top of the package facilitating easy ducting for removal and/or recovery of exhaust heat.

#### **Quiet Enclosure**

A low sound enclosure is standard and keeps sound levels to a minimum.

#### **Easy Serviceability**

The SSR package is remarkably uncluttered, making servicing easy. All components are readily accessible behind easily removable panels.

#### **End-to-End Cooling**

The aftercooler is located at the inlet end of the package. This allows cool compressed air only 15°F/8°c above the ambient temperature to pass downstream to the air system.

#### 8000 Hour/2-Year Lubricant

UltraCoolant reduces maintenance costs by going longer between changes. Also, because of UltraCoolant's superior separating properties, less coolant is passed downstream to the air system, further minimizing coolant costs.

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#### Star-Delta Starter

This advanced starter gives the compressor a controlled, cushioned start, eliminating current surges and extending component life for increased system reliability.

## SSR Options



#### **Digital Control**

Our exclusive digitally controlled stepper motor inlet valve system precisely matches the airflow to the system demand. Just set the preferred system pressure and the built-in Intellisys microprocessor controller takes care of the rest.

To enhance reliability the inlet control system requires no maintenance. There are no pressure switches to manually recalibrate and no valves that can stick openand, as a matter of fact, there are no manual adjustments required during the course of normal operation.



# Straight Modulation Control 70 Geometry Controller On Line/Off Line % CAPACITY

#### **Energy Saving Control System**

We equip each compressor with not one, but three separate control modes: On-line/Off-line, Upper Range Modulation, and Auto Control Select. Simply set the Intellisys controller to the desired control method, and the microprocessor does the rest.

For the best overall efficiency, choose IR's patented Auto Control Select (ACS) system. ACS constantly monitors the compressor's operation and automatically adjusts the control system to the mode that best suits your system's needs: On-line/Off-line or Upper Range Modulation.

- Multiple unit sequencer
- Remote communications capability
- Remote starter/no starter
- Variable frequency drive
- Air-cooled or water-cooled

- High dust inlet filter
- No aftercooler
- IP65 electrical option
- Outdoor modification

If you need special options, please contact your local Ingersoll-Rand distributor. We offer this options.

#### 90-160kW Performance

Models	Operating Pressure (bar/psig)	Capacity (m³/min/cfm)	Length (mm/in)	Width (mm/in)	Height (mm/in)	Weight (kg/lbs)
90 kW						
ML90	7.5/110	17.1/604	3200/131	1587/65	1905/78	2617/5769
MM90	8.5/125	15.3/540	3200/131	1587/65	1905/78	2617/5769
MH90	10/145	14.0/494	3200/131	1587/65	1905/78	2617/5769
110 kW						
ML110	7.5/110	20.0/706	3200/131	1587/65	1905/78	2640/5820
MM110	8.5/125	19.2/678	3200/131	1587/65	1905/78	2640/5820
MH110	10/145	17.5/618	3200/131	1587/65	1905/78	2640/5820
132 kW						
ML132	7.5/110	23.5/830	3200/131	1587/65	1905/78	2702/5957
MM132	8.5/125	22.3/788	3200/131	1587/65	1905/78	2702/5957
MH132	10/145	21.0/742	3200/131	1587/65	1905/78	2702/5957
160 kW						
ML160	7.5/110	28.0/989	3200/131	1587/65	1905/78	2731/6020
MM160	8.5/125	26.0/918	3200/131	1587/65	1905/78	2731/6020
MH160	10/145	25.0/883	3200/131	1587/65	1905/78	2731/6020

## More Than Air. Answers.

Online answers: http://www.air.ingersoll-rand.com





Ingersoll-Rand air compressors are not designed, intended or approved for breathing air. Compressed air should not be used for breathing air applications unless treated in accordance with all applicable codes and regulations.

Nothing contained in this brochure is intended to extend any warranty or representation, expressed or implied, regarding the products described herein. Any such warranties or other terms and conditions of sale shall be in accordance with Ingersoll-Rand's standard terms and conditions of sale for such products which are available upon request.

Product improvement is a continuing goal at Ingersoll-Rand. Designs and specifications are subject to change without notice or obligation.



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