

Ingersoll Rand®

The SSR 50-100HP/37-75 kW Compressor



SSR 50-100HP/37-75 kW

Looking for a rugged, reliable and energy efficient air compressor? The Ingersoll-Rand SSR is for you. With our integral gear drive system, 8000-hour coolant, and leak-free design you can count on the SSR for years to come.

If your business demands any of these then check out the SSR.

- ✓ Reliability
- ✓ Efficiency
- ✓ Ease of installation
- ✓ Quiet operation
- ✓ Accurate information
- ✓ Flexible options
- ✓ Easy and low cost of maintenance



There is more to the picture. Providing air solutions is our specialty. We offer compressed air audits, system design assistance, and other services and products that maximize the efficiency of your *entire* plant air system.

LINK 1 – Air Compressor: An air compressor is the first link in a chain that acts as a dependable supply of air to your plant. Shouldn't the strength of the other links matter?

LINK 2 – System components: We offer a complete lineup of compressed air dryers, filters, Simplair distribution pipework and other accessories that work seamlessly with your SSR rotary compressor to provide the air quantity and quality you need.

LINK 3 – Service providers: The backbone of our business is the quality of **your** service provider. Factory certification to service SSRs is a rigorous process unmatched in the industry. Our worldwide distribution network knows what to do and how to do it.



LINK 4 – Manufacturer: Ingersoll-Rand is the compressed air solutions global leader with well over 100 years of experience in the manufacture of compressed air products. We've earned our market-leading position through our commitment to the highest levels of customer service and product performance, reliability and quality.



Package design – It's tough, it's quiet, and it's easy to service

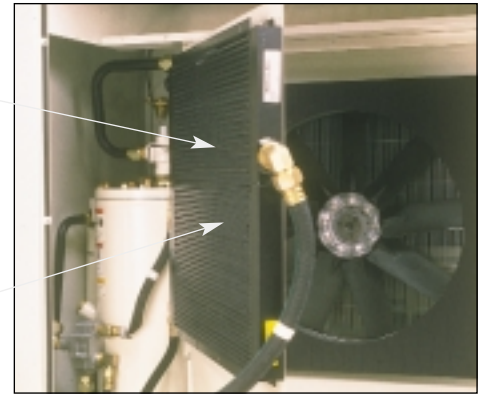
Higher Ambient Rating – Can you afford a shutdown in the heat of summer? The SSR operates easily in ambient temperatures up to 115°F/46°C. Even if you're not in a sweltering climate, it ensures fewer nuisance shutdowns due to summer heat or dirty coolers.

Superb Serviceability – Routine maintenance is done through one convenient latched panel on the front of the machine making machine servicing easier and quicker.

Easy Installation – Set it down, hook it up to the proper electrical service and piping system, cover the forklift holes and let it go. No vibration mounts are required.

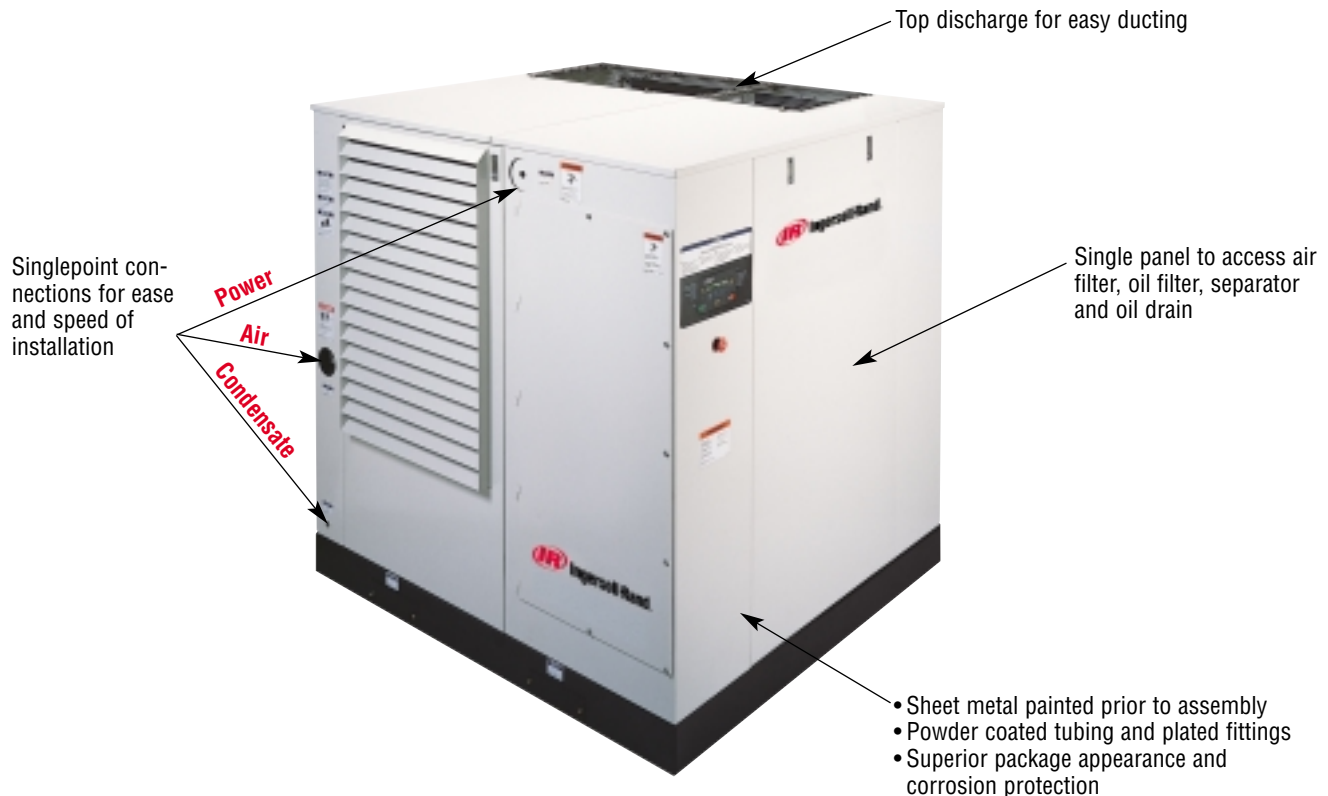
Aftercooler for moisture reduction

Swing out cooler for ease of cleaning



Quiet operation – A subassembly isolates the drive train from the package for virtually vibration free and quiet operation. The standard enclosure limits the sound level to 85dB(A); an optional low sound enclosure limits its sound levels to 75dB(A).

Tested as a Complete Package – Every SSR completes our state of the art computer based performance and operations test. This multi-point test ensures our rigid manufacturing quality standards have been met as well as trouble-free operation of the unit, beginning with the initial start-up at your facility.



The SSR Drive Train

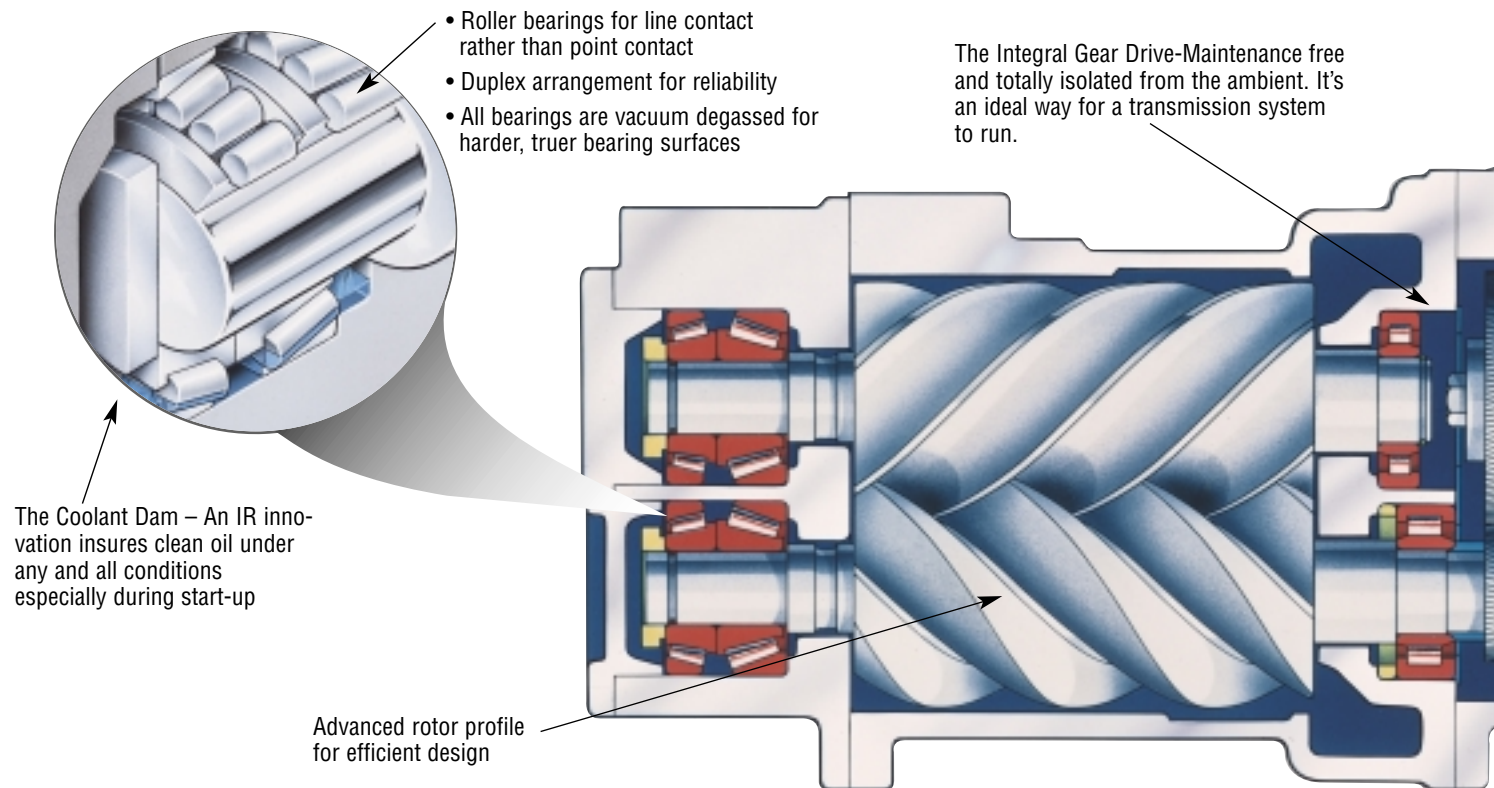
There are many reasons that customers like you consistently give us high ratings for quality and reliability. The SSR drive train is certainly one of them. First used in the 1970s, the SSR drive train has proven itself over 100,000 times.

Superior Airend Design – At the heart of the SSR is our time-proven rotary screw airend, known for trouble free operation with minimal maintenance. All airends are designed and built in-house, guaranteeing critical quality control. The airends are built on technically advanced machinery that is generations ahead of what other manufacturers use. This ability to hold tolerances meas-

ured in microns increases the reliability and life of the airend. The airend is a robust design, built with premium materials.

Integral Gear Drive – It's the only drive system that is maintenance free and totally isolated from the environment.

The Dedicated Motor – Compressor motors are usually one of the hardest running motors in a plant. If your business depends on compressed air, then it depends on the quality and strength of the motor. The extra toughness designed and built into the SSR motor means it will run when other motors quit. Maintenance and repair on the SSR motor is just like any other motor you own.





Intellisys® – Total control at your fingertips.

The SSR comes standard with the Intellisys controller—the most advanced active micro-processor available on any compressor. First built into SSRs in the late 1980s, Intellisys has been updated to employ the latest technology, increasing the reliability while keeping it simple.

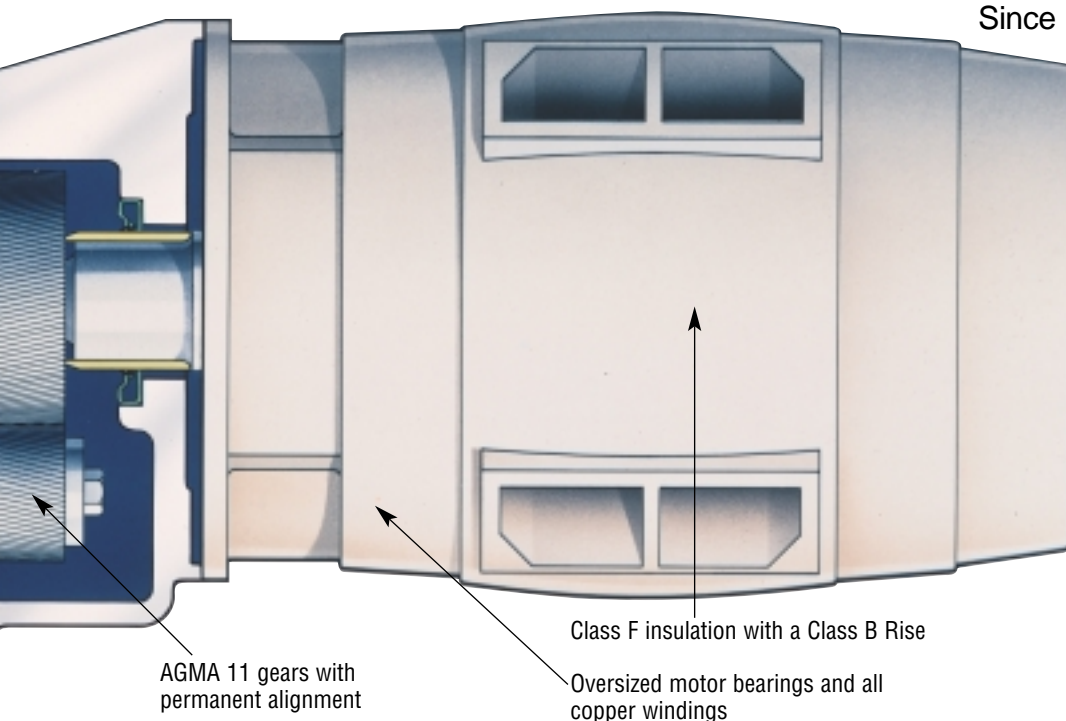
Simple use – You don’t need to be a computer guru or symbol reader to use the Intellisys controller. Information is displayed in clear, plain text and not in codes. Adjustments are easily made through the finger touch control panel and there are no pressure switches to drift or adjust.

More information, more accurate –

Intellisys constantly monitors and displays exactly what’s happening in your SSR and displays it on the face panel. That same information can be sent via modem to your service provider for trending or it can be sent in a modbus protocol to your building control system.

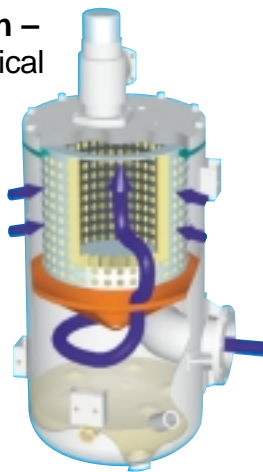
Time saving diagnostics – The Intellisys monitors 11 key internal functions of the SSR. If any of those deviate from its preprogrammed limit, the controller will automatically warn and, if required, shutdown the compressor. The display then indicates the problem and the sequence of events leading to the shutdown. This feature reduces costly troubleshooting and minimizes downtime.

Since Intellisys remembers what all operating parameters were prior to shutdown, the restarting process is a snap.

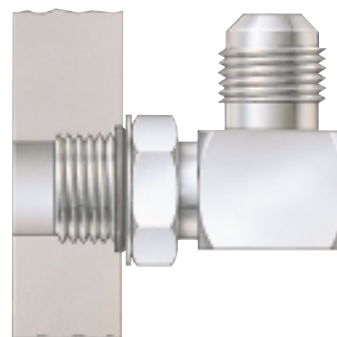


Ultracoolant – Let The Fluid Run Its Course! You'll be surprised by the advantages of using UltraCoolant. First, UltraCoolant has a 2-year/8000 hour life. The coolant is changed less often, keeping maintenance costs to a minimum. Secondly, since UltraCoolant was designed specifically for rotary compressors, it assures uninterrupted service by lubricating, sealing, and cooling under all normal operating conditions. Third, UltraCoolant's superior separating properties combined with our patented separator system means less coolant is passed downstream to your plant's processes. Lower coolant carry-over equals less cost for coolant make-up. Finally, UltraCoolant's lack of hydrocarbons eliminates the chance of varnish formation. Varnish shortens separator life, coats rotors, bearings and heat exchangers (raising operating temperatures) and reduces airend reliability.

Patented Separator Design – Our patented two stage conical baffle separator minimizes coolant carryover to your plant and reduces the amount of make-up replaced. This design also reduces the impact that overfilling or underfilling can have on coolant carryover.

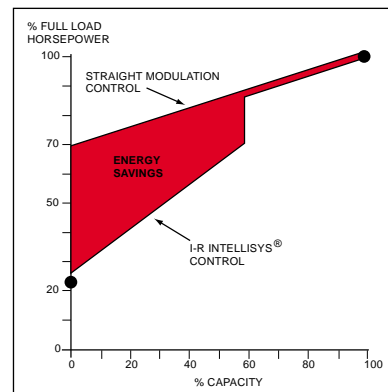


Inherent Leak Free Design – Lubricant on the floor doesn't do the compressor much good and can create an unsightly mess. By reducing the number of fittings and using SAE O-ring fittings on all connections larger than 1/4" (6 mm), we've significantly reduced the potential leakage problem associated with conventional threaded connections and piping schemes.



Options and Accessories

Upper range modulation with Automatic Control Selector – For those plants where the demand profile is high or storage is minimal, upper range modulation stabilizes plant air pressure, reducing cycling of components with a minimal power penalty. Automatic Control Selector uses the Intellisys' built in intelligence to monitor air consumption and choose the appropriate control mode.



Star Delta Starting – A motor requires 600% of its full load amps to start. With star delta starting, the current used to start is only 200%, resulting in a cushioned start for both mechanical and electrical components (standard on 50Hz units).

Power outage restart – If a power failure occurs, your air compressor automatically restarts after incoming power is restored. Restarting occurs only after an alarm horn sounds.

Remote start/stop – This option gives you offsite on/off control.

Phase monitor – This option protects against phase loss (single phasing), phase reversal, or low voltage (brownout).

TEFC motors – While ODP motors run cooler, not every application is clean and dry. For dirty and wet applications, TEFC motors are available (standard on 50Hz units).

Premium efficient motors – This option lowers operating costs by maximizing main motor efficiency.

Outdoor modification – Outdoor modification includes NEMA 4 option and moves the package discharge from the top of the package to the side.

Heavy Duty filter – The heavy duty air filter is designed for applications where the heavy dust load would cause the air filter to plug early.

Alternate coolants – H1F food grade or diester-based SSR coolant are available.

Condensate Separator System (CSS) – Provides clean water disposal with minimal operating costs.

Intellisys System Controller (ISC) – Maintains system pressure while minimizing operating costs.

NEMA 4 – For those applications where the compressor will be exposed to water.

Low ambient – Low ambient packaging is available for applications where ambient temperatures drop to levels between -10 to 35°F/-23 to 2°C. More than heat tracing and space heaters, this option controls internal package temperature at start up protecting the coolers and the airend as well as maintaining the motor and starter temperatures.

Watercooled – SSRs can be outfitted with a variety of watercooled heat exchangers. The standard cooler is admiralty brass with options existing for 90/10 copper nickel, 70/30 copper nickel and stainless steel.

Variable Frequency Drive – Offers constant pressure control with maximum energy savings.

60Hz SSR 50-100HP Performance

Free Air Delivery - CFM

Nominal HP	Model XF 100 psig	Model EP 125 psig	Model HP 140 psig	Model XP 165 psig	L (in)	W (in)	H (in)	Weight (lbs)	Discharge (NPT)
50	229	211	203	–	67	63	67	2000	1.5
60	269	246	236	–	67	63	67	2100	1.5
75	386	332	299	248	67	63	67	2800	1.5
100	495	446	412	358	67	63	67	2900	2.0

50Hz SSR 37-75kW Performance

Free Air Delivery - M³/min.

Nominal kW	Model MLD 7.5 barg	Model MMD 8.5 barg	Model MHD 10 barg	Model MJD 11.4 barg	L (mm)	W (mm)	H (mm)	Weight (kg)	Discharge (NPT)
37	6.3	6.0	5.6	–	1689	1605	1696	907	1.5
45	7.4	7.1	6.5	–	1689	1605	1696	953	1.5
55	10.2	9.2	8.5	7.6	1689	1605	1696	1270	1.5
75	13.0	12.2	11.0	10.1	1689	1605	1696	1315	2.0

(1) FAD (Free Air Delivery) CFM and M³/Min. are ratings of full package performance in accordance with CAGI-PNEUROP acceptance test standard PN2CPTC2 or ISO1217: 1996 Annex C.

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.

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