

Ingersoll Rand

37-75 kW Single Stage
Contact-cooled rotary screw air compressors

Innovation

Reliability

Efficiency



Reliability and Energy Efficiency at Your Fingertips

Competing in today's business environment requires manufacturers to keep their operating systems up and running. When systems go down, production stops. **Reliable, flexible and easy to use equipment is essential for efficient operation.**

Consistent and dependable

Focusing on reliability, Ingersoll Rand rotary screw air compressors are designed with a unique, maintenance-free drive system — a simple gear drives the airend. Since the motor and airend are permanently aligned, no adjustments are needed during the course of normal operation. Additionally, since no inspection covers are required, the gear drive provides a user-safe means of turning the airend.

Durable, High-efficiency Airends

Refined over many years of continuous improvement and used in tens of thousands of Ingersoll Rand compressors worldwide, our time-proven airend provides trouble-free operation, minimal maintenance and consistently high performance. By avoiding the use of temporary close clearances to achieve the rated performance, we ensure that our machines deliver leading performance year after year.

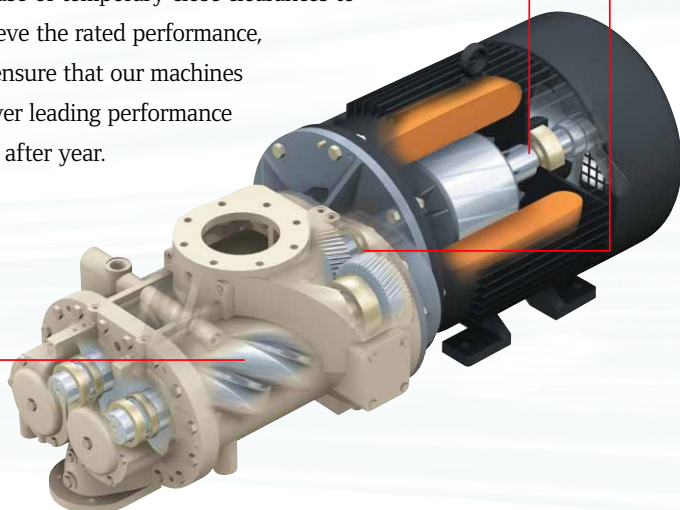
Totally Enclosed,

Fan-cooled (TEFC) Motors

The main and fan motors, constructed of rugged cast-iron frames and other durable components, are specified to operate continuously in high ambient temperatures up to 46°C (115°F) and with load capacity in reserve. The TEFC motor enclosure delivers outstanding protection against the elements frequently encountered in industrial applications, preventing internal dirt build-up and ensuring long life and reliability.

Integral Gear Design

At the heart of an Ingersoll Rand unit is our dependable integral gear drive arrangement. This simple and reliable drive system features smooth-running helical gears that compensate thrust for optimised performance. By eliminating couplings and stub shafts with additional bearings or power sapping belts, the Ingersoll Rand drive arrangement assures trouble-free, efficient operation plus longer life.



Innovative Energy Efficient Design

Energy efficiency is one of the most important considerations in judging the successful operation of a compressed air system. Energy costs can often exceed the purchase price of equipment, even during the system's first year of operation. To further system efficiency, our rotary screw compressor motor is built to rigorous Ingersoll Rand specifications. Unlike other motors, our motor operates at peak efficiency at full load conditions ensuring minimal operating and maintenance expenses.

Precise One-touch Control with Intellisys®

Whether the application requires eight hours of continuous-duty compressed air or an intermittent supply over a 24-hour period, the Intellisys® microprocessor is in complete control. The Intellisys controller provides quick, comprehensive access to your compressed air system at the touch of a button — nothing could be more intuitive and user-friendly. The compressor's operating parameters can be quickly and easily adjusted to meet the plant air system's requirements and minimise operating costs.

Automatic Service Prompts for Ensured Maintenance

Intellisys indicates when it is time to perform maintenance. This function encourages routine service in a timely fashion, thereby increasing uptime.

Timesaving Diagnostics

Intellisys provides a fast diagnosis of system demand, displays a warning and stops the compressor if it exceeds operating parameters. It also provides a history of events leading up to the condition. This will keep troubleshooting expenses and downtime to a minimum. An easy-to-read, liquid crystal display (LCD) provides you with the critical details of the compressor's operation, allowing fast adjustments when necessary.

Ethernet remote connectivity

It may be necessary to monitor the compressor parameters and alarms or control its operation remotely through the plant automation system. An Intellisys controller gives you this possibility with a common Ethernet connection.



Power Outage Restart Option (PORO)

With the Power Outage Restart Option, following a disruption to your power supply, your compressor will be restored to its previous running condition once the power is reinstated to the compressor.

Power Conservation System (PCS)

When low demand for compressed air is required, the compressor switches to unloaded running and then may even stop. PCS decreases the time of unloaded operation when the compressor is going to stop. Therefore, reduce non-productive operations and energy costs when using PCS.

Superior Features that Reduce Operating Costs

Ingersoll Rand rotary screw compressors add unequalled reliability, efficiency and productivity to virtually any compressed air system and could **save you 25-50% of your compressed air system operating costs.**

Convenient Top Exhaust

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

Air or Water-cooled Packages

To fit the needs of the compressed air system, Ingersoll Rand offers the choice of an air-cooled or water-cooled design.

Easy Serviceability

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

Voltage Options

Depending on the site electrical installation, compressors can be supplied with a range of electric motors from 400V up to 6,600V, avoiding replacement of electric cables and switchboards.

Water Separation Components

The water separator and drain valve are included in this package, making installation straightforward and less time consuming.

Up to 46°C (115°F) Operating Ambient

Our rotary screw 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.



Quiet Enclosure

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

ISO 14000

Ingersoll Rand air compressors are designed to support the environmental policies of ISO 14000.

Factory Tested

Every rotary screw compressor undergoes state-of-the-art testing to ensure that you get the best possible performance under varying conditions.

Energy Recovery System Option

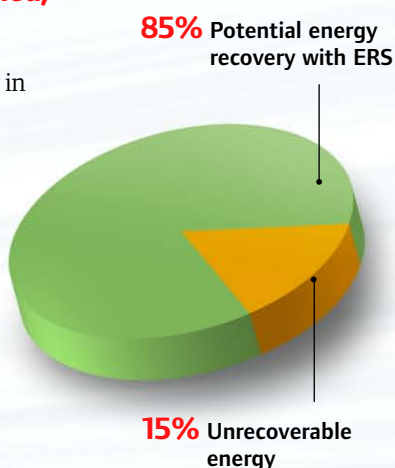
The compressor can be equipped with the Energy Recovery System (ERS) to minimise energy costs even further and benefit the environment. The Ingersoll Rand ERS coolant-to-water heat exchanger utilises the thermal energy captured in compressor coolant to heat the water up to 70°C. Energy costs can be significantly reduced by supplementing your current water heating system with recovered heat.

Energy flow in typical air-cooled, contact-cooled compressor

Hot water heated by ERS can be used in a variety of applications, for example:

- ▶ Pre-heated boiler feed water
- ▶ Process water
- ▶ Tap water
- ▶ Heating applications

In fact, all other applications that require warm water!



Durable Motor

The motor is designed to be as rugged as possible, however the efficiency is not compromised in any way. This motor will ensure the most economical running of your compressed air system. The life-time of the motor is significantly increased due to its class F insulation with class B temperature rise.

Food Grade Coolant Option

The air compressor is available factory filled, with Ingersoll Rand X-tend Food Grade Coolant and Filters. This will aid compliance with food industry standards.

8,000 Hour/ 2-year Lubricant

Ultra Coolant™ reduces maintenance costs by lasting longer between changes. Also, because of its superior separation properties, less coolant is passed downstream to the air system, further minimising coolant replacement costs.

Finally, Ultra Coolant's biodegradable properties eliminate the need for an oil-water separator, thereby reducing the problems associated with condensate disposal (Subject to local approval).



Intelligence for your air system

Ultimate system optimisation can be achieved using the Ingersoll Rand X-Series System Automation.



Optimised System Operation

X-Series System Automation eliminates waste by managing up to twelve positive displacement compressors simultaneously. This includes compressors of different capacities, different types (fixed speed, variable speed and variable capacity) and in any combination or configuration.

Through advanced control functionality and universal connectivity, the X-Series System Automation products will work with your existing compressors, from Ingersoll Rand or any manufacturer, to improve operating efficiency, reduce energy costs and eliminate waste!

VX System Visualisation

The monitoring of your compressor system has never been so easy. Just add the VX module to an X-Series System Automation and you will gain complete system visibility. In addition to the compressor operating status, also visible are alarms and energy consumption trends either from local or remote computers. No special software is required just use a standard web browser.



VX System Visualisation

Ingersoll Rand Ultra Care

Helping you maintain a healthy business

UltraCare five year maintenance and performance agreements have been designed to be easy to understand with absolutely no surprises.

Find out more about protecting the heart of your business contact your local distributor or Ingersoll Rand Sales office.



Features and Options

| Category | Description | Standard | Optional |
|----------------------|--|----------|----------|
| Main motor | High efficiency IP 55 | ✓ | |
| | High ambient rated 46° C | ✓ | |
| | Class F insulation B temperature rise | ✓ | |
| Controller | Full compressor diagnostic with alarm history | ✓ | |
| | Automatic maintenance indication | ✓ | |
| | Load/unload capacity regulation system | ✓ | |
| | Power Conservation System | ✓ | |
| | Remote monitoring and control by Ethernet connection | | ✓ |
| | Automatic start/stop shut down timer | ✓ | |
| | Remote load and unload | ✓ | |
| | Modulation control | | ✓ |
| | Power Outage Restart (PORO) | | ✓ |
| | Multiple Compressors System controllers | | ✓ |
| Visualisation system | | ✓ | |
| Power | Star/delta starter | ✓ | ✓ |
| | Phase Monitor | | ✓ |
| | Different voltages (220 - 6600V) | | ✓ |
| | Anti-condensation heaters for main and fan motors | | ✓ |
| | Thermal protection for main motor | | ✓ |
| Lubricant | 8000 hr life Ultra Coolant | ✓ | |
| | X-tend food grade coolant | | ✓ |
| | X-tend filtration system | | ✓ |
| Environmental | Low noise enclosure | ✓ | |
| | Designed to help meet ISO 14000 obligations | ✓ | |
| | Oil containing frame | ✓ | |
| | Heat recovery system (ERS) | | ✓ |
| Auxiliary Systems | Cooling fan for air-cooled compressors | ✓ | |
| | Water separator and drain valve | ✓ | |
| | High dust filter | | ✓ |
| | Water-cooled | | ✓ |
| | Seawater-cooled | | ✓ |
| Convenience | Single point connectivity | ✓ | |
| | Steel skid, no foundations needed | ✓ | |
| Services | 12 months factory warranty | ✓ | |
| | UltraCare 5 year maintenance program | | ✓ |
| Documentation | Performance test certificate | ✓ | |
| | Witness test certificate | | ✓ |

Specifications

| Nominal kW | Free Air Delivery m ³ /min | | | | Length mm | Width mm | Height mm | Weight kg |
|------------|---------------------------------------|-----------------|------------------|------------------|-----------|----------|-----------|-----------|
| | ML 7.5 bar g | MM 8.5 bar g | MH 10.0 bar g | MU 13.0 bar g | | | | |
| 37 | 6.3 | 6.0 | 5.6 | 4.70 | 1,600 | 900 | 1,780 | 880 |
| 45 | 7.4 | 7.1 | 6.5 | 5.70 | 1,600 | 900 | 1,780 | 900 |
| 55 | 10.2 | 9.2 | 8.5 | 6.50 | 2,180 | 900 | 1,840 | 1,375 |
| 75 | 12.9 | 12.2 | 11.0 | 8.42 | 2,180 | 900 | 1,840 | 1,425 |

(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.



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 and environmentally friendly microturbines. We also enhance productivity through solutions created by Club Car®, the global leader in golf and utility vehicles for businesses and individuals.

air.ingersollrand.com

Ingersoll Rand Industrial Technologies
Swan Lane, Hindley Green
Wigan WN2 4EZ, UK
Tel: +44 (0) 1942 257171
Fax: +44 (0) 1942 254162
Email: asgesawebleads@irco.com



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