RM Series Oil-Flooded Rotary Screw Compressors

The all-new RM high-efficiency series 7-75kW

Reliability·Efficiency·Energy-saving

Ingersoll Rand®

The Intelligence You Need To Move Your Business Forward

Ingersoll Rand works to keep you ahead of your competition with advanced compressed air systems that boost productivity, lower operating expenses and extend equipment life. These innovations are designed into every RM-Series oil-flooded rotary screw air compressor—industry-leading airend enhancements for superior efficiency, world-class delivered capacity and exceptional reliability. All supported by unique advantages, including expert design and engineering, a comprehensive suite of support programs and life-long Ingersoll Rand-branded consumables.

RM-Series compressors. The intelligence you need—to win.

Global Presence, Local Service

Manufacturing Facilities

- Buffalo, NY, US
- Campbellsville, KY, US
- Mocksville, NC, US
- West Chester, PA, US
- Curitiba, Brazil
- Wasquehal, France
- Oberhausen, Germany
- Simmerns, Germany
- Fogliano, Italy
- Milan, Italy
- Vignate, Italy
- Ahmedabad, India
- Shanghai, China
- Wujiang, China

Global Distribution Centers

- Charlotte, NC, US
- Genk, Belgium
- Singapore
- Shanghai, China

Efficient Operation and Powerful Information

We Start At The Core

When we made the RM-Series we started with an all-new, state-of-the-art airend, making it your best choice for performance. The new airend improves efficiency as much as 16% through several advancements, including an optimised rotor profile to help minimise operating expenses. The new rotor profile also provides world-class airflow, delivering up to 14% more than previous models. With more airflow for the same power input, your compressor requirements are smaller, reducing both investment costs and energy usage, to lower your total cost of ownership.

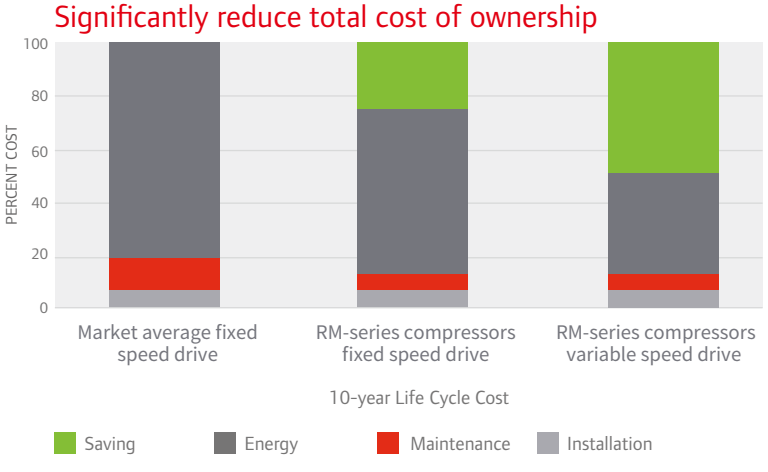
Knowledge Is Power

The best compressors deliver air and actionable information. That's why every RM-Series compressor includes an intelligent controller that monitors key operations and adjusts system parameters to maximise uptime and minimise energy consumption. It gives you real-time facts to make and execute informed decisions… from virtually anywhere in the world.

For Higher Energy Efficiency

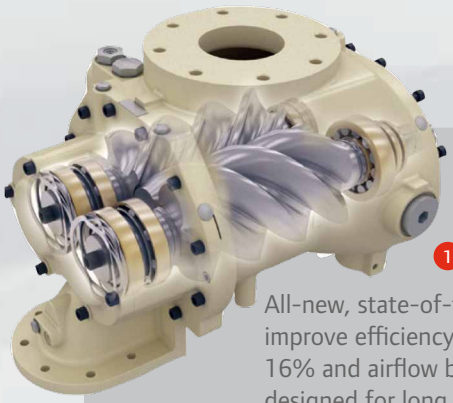
Every RM series air compressor features an all-new highly efficient airend, in combination with IE3 fixed speed and ECO*-PM VSD IE5 motor technology, helping you save up to 12-30% on energy costs.

ECO (Environment, Conservation & Optimization) adopts the basic R&D concept of environmental protection, energy conservation and economy, all of which also become three qualities persistently chased by ECO PM motor, and conform to the objectives of Ingersoll Rand corporate strategy and Paris Accord.



Rotary comparison at 79% average volume capacity; 4000 hours per year; 0.05$/kWh

Optimized internal structural design



1 Efficient

All-new, state-of-the-art airends improve efficiency as much as 16% and airflow by 34%, and are designed for long life and reliable operation.

2 Reliable*

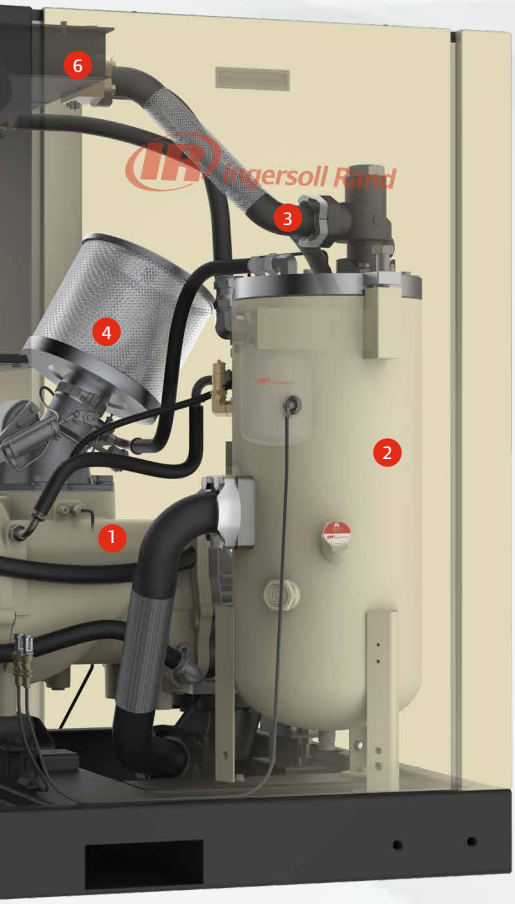
Three-stage separation system with conical baffle removes all but 3 ppm of lubricating oil from delivered air—protecting downstream equipment and extending filter life—to maximise productivity and minimise expenses.

3 Robust*

V-shield™ technology uses plane-sealed O ring that helps deliver repeatable, leak-free connections.

7 Intelligent

Luminance controller enables real-time system parameter monitoring. keeps you informed of compressor status and alarms to exempt you from losses due to unexpected sudden shutdown.



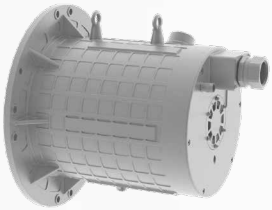
6 Reliable / Efficient / Easy to Maintain

Unwelded oil / after-cooler horizontally arranged in parallel on top of the unit decreases distortion & leakage caused by heat stress, increases reliability, extend service life, reduce maintenance work, and reduce customers' use cost during life cycle of the unit and improve their productivity.

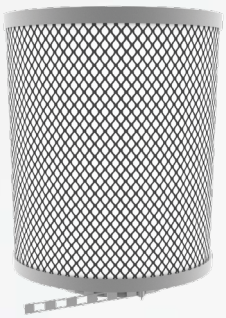
5 Motor

Fixed speed drive: premium IEC60034-30 IE3 motor enables IP55 protection grade and Class F insulation with B rise.

Variable speed drive: highly efficient oil-cooled IE5 & IP66 PM motor enables Class H insulation with B rise.



IE5 Premium Efficiency



4 Efficient / Superior In Productivity*

The air intake system with large-allowance inlet air and low pressure drop air filter effectively reduces inlet air pressure and improve efficiency of the unit, and reduces maintenance work and cost to facilitate the production for customers.

* There are slight differences between different product configurations. Please contact Ingersoll Rand's local customer consultants for details.

The Airend —the Heart Of Every Compressor

Air compressor use accounts for a significant part of your energy costs. Designed using advanced computer modeling techniques, our team of skilled engineers have optimized the airend to be with 16% higher efficiency, excellent airflow, lower operating noise, longer service life and higher reliability well known in the industry to operate reliably to improve your company's bottom line.

Designed for long life and reliable operation

1. Strategically positioned lubrication points effi ciently deliver oil exactly where it's needed, improving reliability and lowering power consumption.

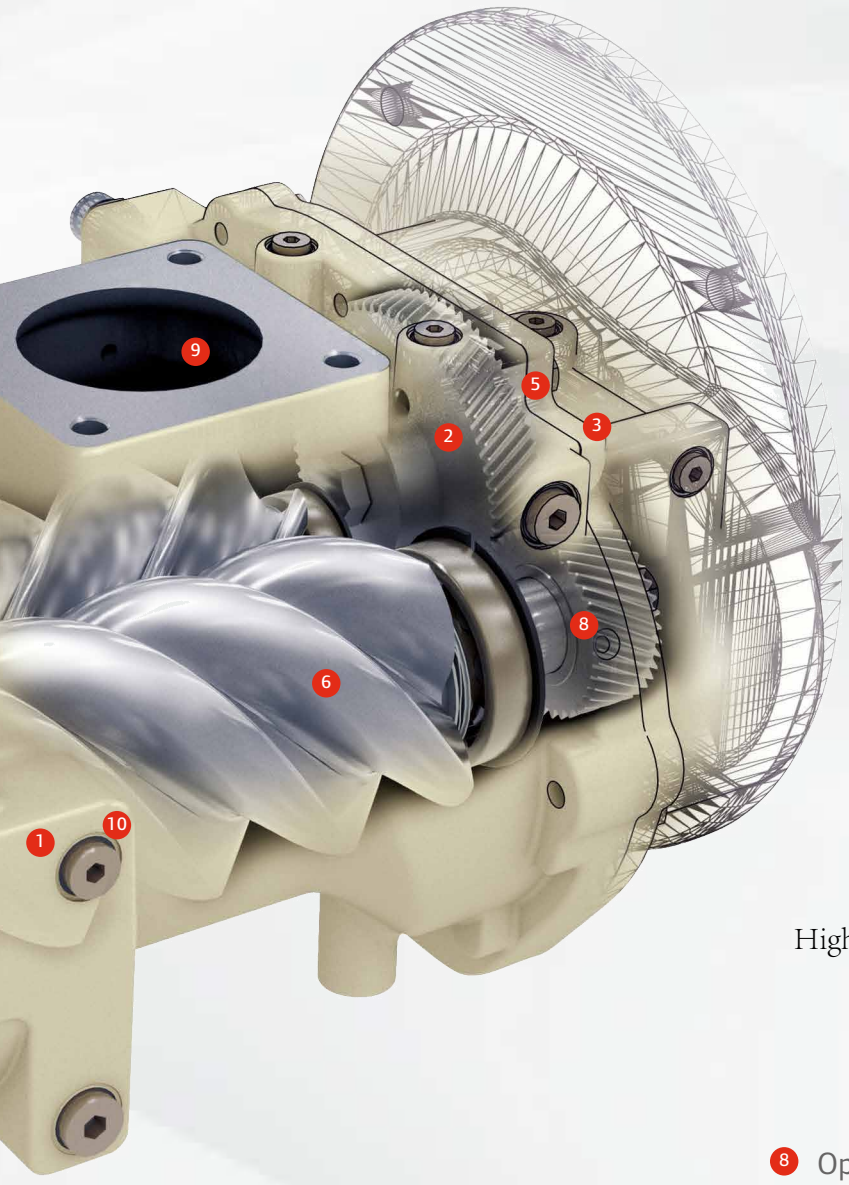
2. Advanced gear transmits drive power more efficiently and reliably.

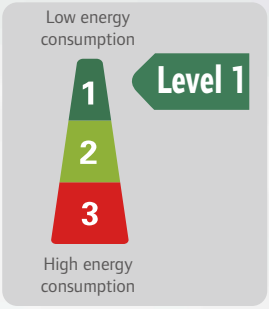
Integral Gearbox

3. Integral gearbox reduces windage losses and drivetrain length for more efficient performance and easier serviceability.

4. Enhanced bearing arrangement reduces resistance and improves power management for maximum reliability and performance.

5. Maintenance-free, sealed drive system requires no regular service and protects against damaging dirt and moisture.





*Please consult the local customer manager for specific energy efficiency.

World-class energy efficiency

Advanced Rotor Profile

6 Optimised rotor profile helps deliver up to 16% increased efficiency and 34% more airflow, reducing energy cost.

High energy consumption

7 Lower friction bearing arrangements improve energy efficiency.

8 Optimised gear lubrication increases reliability and reduces power consumption through strategically injecting oil into gear mesh.

9 Streamlined inlet and outlet flow passage reduces pressure drops.

10 Optimised oil-injection process lowers temperature and increases efficiency during compression.

Performance

Model	Nominal Power kW-50Hz	Max. Pressure barg-50Hz	Capacity (FAD)* m^3/min-50Hz	Dimensions(L x W x H) mm-50Hz	Weight kg-50Hz
RM7-11 Standard parameter					
RM7ie_A TAS RM7ie_A TAS 272	7.5	7.5	1.27	970 x 790 x 1000 1280 x 841 x 1613	358 506
		8.5	1.17		
		10	1.02		
		12.5	0.81		
		14	0.73		
RM11ie_A TAS RM11ie_A TAS 272	11	7.5	1.93		358 506
		8.5	1.81		
		10	1.56		
		12.5	1.32		
		14	1.21		
RM7ne_A RM7ne_A TAS RM7ne_A 272 RM7ne_A TAS 272	7.5	8.5	0.6-1.36	970 x 719 x 995 1280 x 770 x 1603	203 240 351 388
		14	0.3-1.07		
RM11ne_A RM11ne_A TAS RM11ne_A 272 RM11ne_A TAS 2112	11	8.5	0.6-1.96		209 246 357 394
		14	0.5-1.6		
RM15-22 Standard parameter					
RM15ie_A RM15ie_A TAS	7.5	7.5	2.9	1400 x 826 x 1275 1850 x 826 x 1275	549 628
		8.5	2.7		
		10	2.4		
		14	1.7		
RM18ie_A RM18ie_A TAS	18.5	7.5	3.5		604 683
		8.5	3.3		
		10	2.95		
		14	2.2		
RM22ie_A RM22ie_A TAS	22	7.5	4.1		619 698
		8.5	3.9		
		10	3.5		
		14	2.7		
RM15ne_A RM15ne_A TAS	15	10	1.3-3.0	1100 x 826 x 1275 1850 x 826 x 1275	366 487
		14	1.3-2.0		
RM18ne_A RM18ne_A TAS	18.5	10	1.3-3.7		366 487
		14	1.3-2.6		
RM22ne_A RM22ne_A TAS	22	10	1.3-4.4		376 497
		14	1.3-3.1		

1. Displacement (FAD*)(volume flow) is the operating parameter of the complete, measured according to the test standard of ISO1217:2009 Appendix C.

Performance

Model	Nominal Power kW-50Hz	Max. Pressure barg-50Hz	Capacity (FAD)* m³/min-50Hz	Dimensions(L x W x H) mm-50Hz	Weight kg-50Hz
RM30-45 Standard parameter					
RM30ie_A RM30ie_A TAS	30	7.5	5.6	1544 x 884 x 1376 2200 x 884 x 1376	795 1008
		8.5	5.3		
		10	4.6		
		14	3.6		
RM37ie_A RM37ie_A TAS	37	7.5	7.0		860 1073
		8.5	6.5		
		10	5.65		
		14	4.6		
RM45ie_A RM45ie_A TAS	45	7.5	8.4	1544 x 884 x 1376 2558 x 884 x 1424	930 1143
		8.5	7.9		
		10	7.0		
		14	5.7		
RM30n_A RM30n_A TAS	30	10	1.2-5.6	1544 x 884 x 1376	651 863
RM37n_A RM37n_A TAS	37	10	2.1-7.0	2200 x 884 x 1376	682 / 894 694 / 906
		14	1.9-5.1		
RM45n_A RM45n_A TAS	45	10	2.1-8.5	1544 x 884 x 1376 2558 x 884 x 1424	692 / 905 694 / 907
		14	1.9-6.0		
RM55-75 Standard parameter					
RM55i_A RM55i_W	55	7.5	10.3	1832 x 1249 x 1512	1233 1350
		8.5	9.8		
		10	8.4		
		12.5	7.5		
RM75i_A RM75i_W	75	7.5	12.8		1302 1419
		8.5	12.4		
		10	11.3		
		12.5	10.2		
RM75ie_A RM75ie_W	75	7.5	14		1623 1740
		8.5	13.5		
		10	12.5		
		12.5	10.5		
RM55n_A	55	10	2.9-10.2		978
		14	1.8-7.6		
RM75n_A	75	10	2.3-12.6		1018
RM75ne_A	75	10	4.1-15.4		1291
		14	4.5-10.8		1328

1. Displacement (FAD*)(volume flow) is the operating parameter of the complete, measured according to the test standard of ISO1217:2009 Appendix C.

Configuration

Standard Configuration Category	Description	Fixed Speed *i/ie*	Variable Speed *n/ne*
Airend	Airend with superior performance	●	●
Controller	Energy-saving controller, with Chinese / English bilingual text display	●	●
	Programmable start-stop operation and remote connection	●	●
	Built-in sequential controller program for at most 4 units*	●	●
	Standard Modbus RTU protocol, RS485 interface	●	●
	Power outage restart option (PORO)*	●	●
Active adaptive protection (PAC™)	Monitor the maintenance of filter element and other wear parts, and adjust system operating parameters accordingly	●	●
	Real-time electronic maintenance indicator & shutdown protection	●	●
Cooling system	High efficient energy-saving fan with low noise	●	●
V-Shield™ technology	Vibration isolating pad & high-class flexible metal conduit	●	●
	Reusable air-tight fluorinated sealing materials	●	●
Supporting system	Noise-reducing housing of the unit	●	●
	Drip-proof base frame (30-75kW)	○	●
	Long-life filter element and separator element	●	●
	Full-load / no-load flow regulation system control	●	\
	Variable frequency PID regulation control	\	●
Main motor & electrical system	Star-delta reduced voltage starter	●	\
	Variable frequency reduced voltage start	\	●
	High-efficiency IP55, TEFC closed motor with Class B temperature rise & Class F insulation	●	\
	Permanent magnet variable frequency TEFC, IP66 motor – Class B temperature rise, Class H insulation	\	●
General configurations	Simple single inlet-outlet line (single inlet and single outlet)	●	●
	12 months' warranty program	●	●
Protection under harsh ambient conditions	High temperature options*	○	\
	High dust inlet air filter	○	○
	272/500/750 L skid-mounted air storage reservoir (15-22kW)	○	○
Environmental protection options	Food grade coolant Ultra FG	○	○
Water-cooled options	Water-cooled unit (55-75kW)	●	○

● Standard

○ Optional

\ Not applicable

* There are slight differences between different product configurations. Please contact Ingersoll Rand's local customer consultants for details.

Air Treatment

Moisture and contamination in compressed air cause significant problems in equipment operation, such as rust, scale and clogged orifices that result in product damage or costly shutdowns. Making our air treatment equipment an integral component of your compressed air system will improve productivity, system efficiency and product or process quality.

Refrigerated dryer

Our cost-effective refrigerated dryers provide clean, dry air for most industrial applications. You choose different circulation dryers to reduce energy consumption, or choose non-circulation dryers to reduce initial costs.

D-INRi series refrigerated dryers

Features of refrigerated dryer

- Dew point as low as 3°C (38°F), in compliance with ISO Grade-4 requirements
- Non-corrosive heat exchanger design to achieve reliable operation
- Intuitive microprocessor control to simplify operation
- Compact design for easy maintenance

D-ILRi/IERi heatless / micro-heat regenerative desiccant dryers

Desiccant dryer

When the dew point requirement is very low, it is necessary to choose desiccant dryers to provide high-quality air and prevent possible freezing. Depending on your different needs to reduce initial investment cost or reduce energy cost, you can choose from compression heating, no heating, external heating or blast heating desiccant dryer.

Features of desiccant dryer

- Reliable -40°C pressure dew point under most operating conditions
- High-strength desiccant and durable valve
- Low pressure-drop design saves energy
- Advanced microprocessor control, easy to use and maximizing the extension of service time

F-series pipeline filter

Our advanced compressed air filter reduces the pollution in the air flow, which helps protect the finished products, key technologies and valuable equipment.

F-series pipeline filter

Features of F-series pipeline filter

Grade G - General Protective Filter

- Grade 2 solid particulate filtration / Grade 2 oil filtration
- Filtration of solid particulates at 0.1 micron

Grade A - Activated Carbon Filter

- Grade 1 oil filtration
- Removal of oil mist and hydrocarbons

Grade H - High Efficiency Precision Filter

- Grade 1 solid particulate filtration / Grade 1 oil filtration
- Filtration of solid particulates at 0.01 micron

Grade D - Dust Filter

- Grade 3 solid particulate filtration
- Filtration of solid particulates at 1 micron

Luminance Controller

With powerful control and remote management capability, new generation Luminance controller of Ingersoll Rand guarantees steady operation and also greatly improves operating and management efficiency of your unit.

More User-friendly Interface

- High-resolution touch screen: Le-180, 7.0''; Le-120, 4.3''
- More intuitive key parameter & information display

More Advanced Algorithm

- Advanced controller algorithm for smaller pressure fluctuation and lower energy consumption
- Sequencer for up to 4 compressors with Luminance and no other system controllers

More Efficient Management

- Built-in Internet connection for efficient remote management of operating status and maintenance schedule of the unit
- Automatic alarm & fault reminder and performance report sending

Easier Upgrade

- Modular design for easier iterative upgrade of software functions and continuous improvement of user experience

Steadier Performance

- Fully isolated design with stronger anti-interference capability and better electromagnetic compatibility
- Used in a variety of operating ambient conditions and operating life of at least 40,000 hours for 5 years

Stronger Core

- Multi-core processor for significant improvement of computing speed and communication capability
- Significantly reduce data collection and operation interface delay for more timely communication

What is Helix™?

Ingersoll Rand Helix™ Connected Platform aims to maximize the uptime and easily enable the owner's real-time compressed air system data management. The advanced sensor technology integrated in the compressor regularly sends data to our cloud platform, which can be accessed by you from PC, tablet PC or smartphone to learn machine operating condition at any time. We provide layered services for you to choose the required data monitoring and analysis level based on your specific operation demand.

Shorter Planned Stop
Better machine performance

Visualized Equipment Statistics
All units under control

Timely Maintenance
Extended service life of the unit

24-hour Operation State Monitoring
Higher productivity and mechanical efficiency

Lower Shutdown Risk
Minimum unscheduled downtime

Quick Response Services
Better & professional insights

Service Contract

PackageCARE: when the agreement becomes effective, all operating risks transfer from you to us to free you from any concerns.

You will enjoy 100% operating risk transfer for any machine model and life.

PlannedCARE: all-round genuine spare parts and maintenance services

You will enjoy preventative diagnosis, current state analysis & trend judgment; 10 years' airend warranty (for new oil-flooded rotary screw air compressor)

PartsCARE: genuine spare parts for daily maintenance

You will enjoy regular shipment of spare parts and daily maintenance reminder, 5 years' airend warranty (for new oil-flooded rotary screw air compressor)

Peace of Mind

Lower TCO	Quality Results	Increased Uptime	Efficient Energy Use	Peace of Mind
CARE service programs provide the most cost-effective solutions based on your customized maintenance strategy.	Ingersoll Rand factory-trained service technicians are backed by more than 160 years of industry experience.	Our CARE programs help decrease unplanned downtime and costly production interruptions.	Peak system efficiency is achieved through properly performed maintenance and inspection.	Our world-class services will help you achieve the results you need, while you focus on what's important to your business,

Service and Maintenance Kits

Maintenance cycle: 2000 hours /4000 hours /8000 hours

The service kit contains all the parts needed for a service maintenance

Reliability: constant air quality guarantee with genuine spare parts
Scheduling: regular maintenance & care as planned to decrease failure probability and increase operating stability
Efficiency: one chart No. replacing a number of spare parts lists to increase procurement & management efficiency
Comprehensiveness: all parts and components required for maintenance or service at a time are included for shorter lead time than individual parts
Economy: visual service cost budget and superiority in price to purchase of individual parts

One-stop service with OEM quality guarantee

Ingersoll Rand Inc. (NYSE:IR), driven by an entrepreneurial spirit and ownership mindset, is dedicated to Making Life Better for our employees, customers, shareholders, and planet. Customers lean on us for exceptional performance and durability in mission-critical flow creation and industrial solutions. Supported by over 80+ respected brands, our products and services excel in very complex and harsh conditions. Our employees develop customers for life through their daily commitment to expertise, productivity, and efficiency. For more information, visit www.IRCO.com.

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