RM Series Oil-Flooded Rotary Screw Compressors

90-160 kW

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 Next Generation 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.

Next Generation 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 Next Generation 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

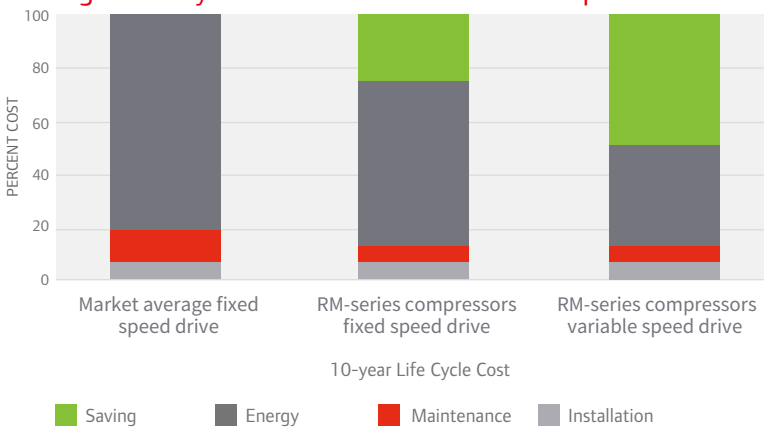
The best compressors deliver air and actionable information. That's why every Next Generation RM-Series compressor includes an intelligent controller that monitors key operations and adjusts system parameters to maximise uptime and minimise energy consumption. It gives you real-time facts to make and 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.

Significantly reduce total cost of ownership



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

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.

Le Controller Features

More User-friendly Interface

- High-resolution 7.0″ touch screen
- 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

Shorter Scheduled Downtime

Better performance of the unit

Visual Maintenance Plan

A panoramic view of maintenance plans under control

Timely Maintenance

Longer service life of the unit

Lower Malfunction Risk

Minimized unscheduled downtime

Quick Contact With Product Experts

Better professional insights

Service Contract

PackageCARE™

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™

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™

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,

Maintenance Service Package

Replacement/Maintenance Content and Periods

2,000 hours Package	4,000 hours Package	8,000 hours Package
Air filter element	Air filter element	Air filter element
Oil filter element	Oil filter element	Oil filter element
Greasing	Oil-air separator element	Oil-air separator element
	Motor grease	Spare parts package
		Minimum pressure valve
		Thermostatic valve care package
		Inlet air valve care package
		Water cooler seal care package
		Motor grease

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

Optimized internal structural design

1 Efficient

All-new, state-of-the-art airends improve efficiency as much as 16% and airflow by 14%, 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.

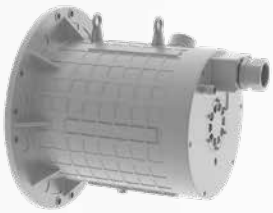
6 Reliable / Efficient / Easy to Maintain

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.



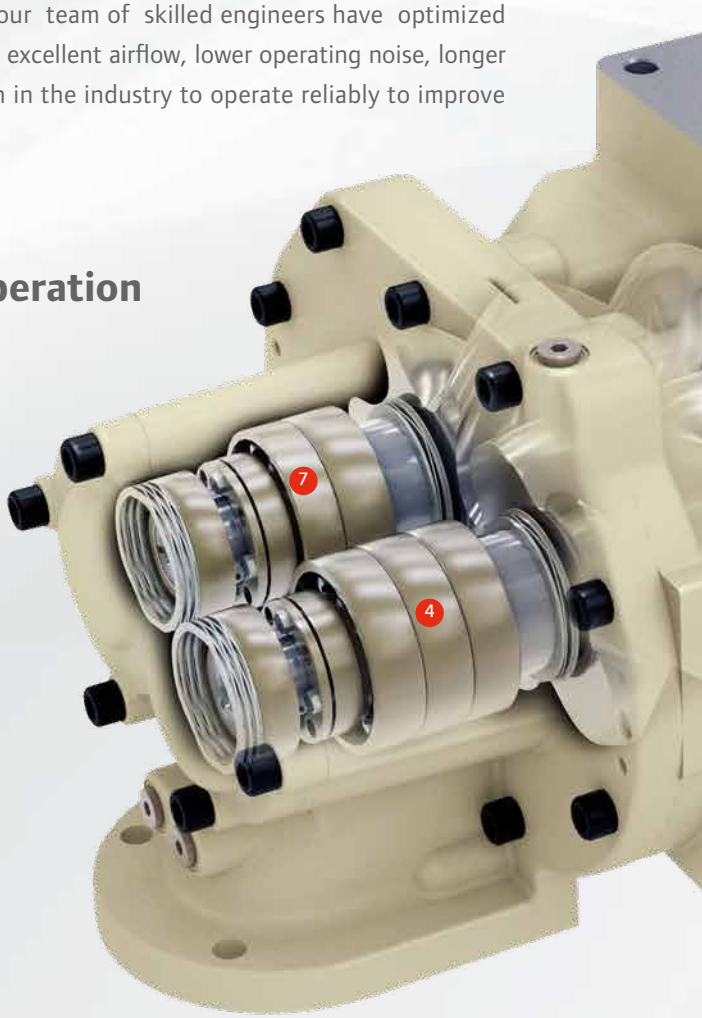
4 Efficient / Superior In Productivity

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.

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.

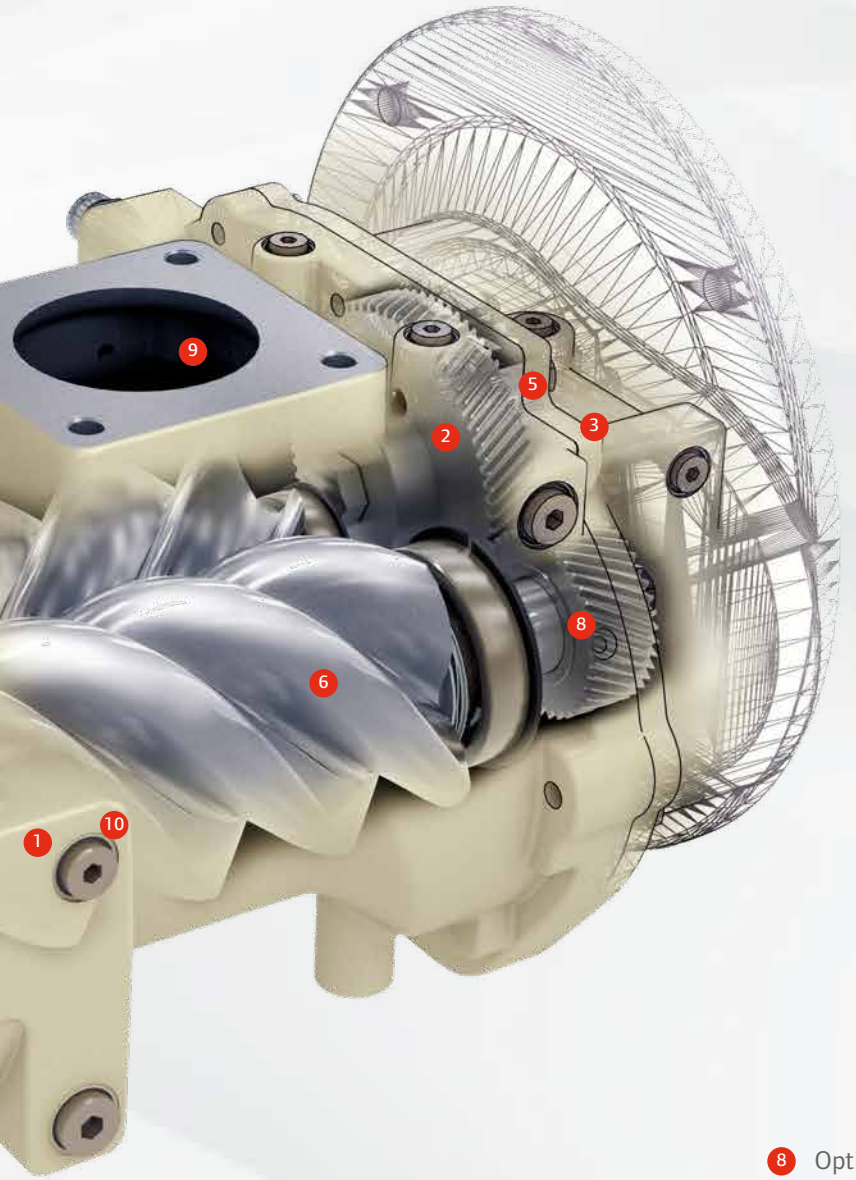
2. Advanced gear transmits drive power more efficiently and reliably.

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.



World-class energy efficiency

Advanced Rotor Profile

6 Optimised rotor profile helps deliver up to 16% increased efficiency and 14% more airflow, reducing energy cost.

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.

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 Dryers

Our cost-effective refrigerated dryers provide clean, dry air for most industrial applications. Choose efficient cycling dryers to maximize energy savings or non-cycling dryers for a lower initial cost

Refrigerated Dryer Features

- Dew points as low as 3°C (38°F), meeting ISO Class 4 requirements
- Corrosion-free heat exchanger design for reliable operation
- Intuitive microprocessor control for easy operation
- Compact design for easy serviceability

Cost-Effective Operation

Choose refrigerated dryers for lower capital, operating and maintenance costs for many industrial applications.

Better Performance

Dehumidification dryer can be used at low dew point and for higher air quality in your applications.

Desiccant Dryers

Choose desiccant dryers when very low dew points are necessary for high-quality air and to prevent potential freeze-up. Depending on whether you require lower initial capital costs, or lower energy use, choose from heatless, externally heated or heated blower desiccant models.

Desiccant Dryer Features

- Deliver reliable -40℃ pressure dew point in most operating conditions
- High-strength desiccant and durable valves
- Low pressure drop design saves energy
- Advanced microprocessor control is easy to use and maximizes uptime

90-160kW Performance

Model	Max. Pressure barg-50Hz	Max. Pressure psig-60Hz	Nominal Power kW-50Hz	Nominal Power hp-60Hz	Capacity(FAD*) m³/min-50Hz	Capacity(FAD*) cfm-60Hz**	Dimensions(L x W x H) mm-50Hz	Dimensions(L x W x H) in-60Hz	Weight kg-50Hz**	Weight lb-60Hz**
i Standard Performance										
RM90i	7.5	110	90	125	16.5	586/594	2455 x 1586 x 1670	96.7 x 62.4 x 65.7	2262/2266	4987/4996
	8.5	125			16.4	584/593				
	10	145			15.1	521/529				
RM110i	7.5	110	110	150	20.8	760/773	2455 x 1586 x 1670	96.7 x 62.4 x 65.7	2590/2602	5710/5736
	8.5	125			20.0	732/745				
	10	145			18.0	653/665				
RM132i	7.5	110	132	175	25.5	900/912	WC:2520 x 1598 x 1740 AC:2620 x 1598 x 1740	WC:99.2 x 62.9 x 68.5 AC:103.2 x 62.9 x 68.5	3159/3122	6964/6883
	8.5	125			24.8	866/877				
	10	145			22.0	767/777				
RM160i	7.5	110	160	200	30.6	1069/1065	WC:2520 x 1598 x 1740 AC:2620 x 1598 x 1740	WC:99.2 x 62.9 x 68.5 AC:103.2 x 62.9 x 68.5	3234/3241	7130/7145
	8.5	125			30.0	1030/1029				
	10	145			26.4	918/918				

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n Standard Performance										
RM90n_A	10	145	90	125	18.0	635	2455 x 1586 x 1670	96.7 x 62.4 x 65.7	1751	3860
RM90n_W	10	145	90	125	18.0	635	2455 x 1586 x 1670	96.7 x 62.4 x 65.7	1755	3869
RM110n_A	10	145	110	150	21.8	770	2455 x 1586 x 1670	96.7 x 62.4 x 65.7	1802	3974
RM110n_W	10	145	110	150	21.8	770	2455 x 1586 x 1670	96.7 x 62.4 x 65.7	1814	3999
RM132n_A	10	145	132	175	25.2	890	2520 x 1598 x 1740	99.2 x 62.9 x 68.5	2104	4639
RM132n_W	10	145	132	175	25.2	890	2520 x 1598 x 1740	99.2 x 62.9 x 68.5	2067	4557
RM160n_A	10	145	160	200	31.4	1109	2520 x 1598 x 1740	99.2 x 62.9 x 68.5	2333	5143
RM160n_W	10	145	160	200	31.4	1109	2520 x 1598 x 1740	99.2 x 62.9 x 68.5	2340	5159

1. Exhaust volume (FAD*)(volume flow) is the complete operation parameter, according to ISO1217:2009 Appendix C test standard;
2. ** Indicates air cooling or water cooling

90-160kW Configuration

Standard Configuration Category	Description	Fixed Speed *i*	Variable Speed *n*
Airend	Airend of excellent performance	●	●
Controller	Energy-saving controller, available in two languages	●	●
	Programmable start-stop operation and remote connection	●	●
	Built-in sequence control program to jointly control up to 4 compressors (1)	●	●
	Standard Modbus RTU protocol, RS485 interface	●	●
	Power off and restart (PORO) (2)	●	●
Active adaptive protection (PAC™)	Monitor maintenance for filter element and other wearing parts and correspondingly adjust system operating parameters	●	●
	Real-time electronic maintenance indicator and stoppage protection	●	●
Cooling system	Highly efficient, energy saving and low noise fan	●	●
	Used in environment up to 46°C	●	●
V-Shield™ technology	Shock-absorbing pads and high-class flexible metal hose	●	●
	Recyclable fluorinated material for non-leakage seal	●	●
Auxiliary system	Noise-reducing housing of the unit	●	●
	Anti-drip stand	○	●
	Long-lasting filter element and separator element	●	●
	8,000-hour Ultra CoolantTM	●	●
	Full-load/no-load flow regulation system control	●	\
	Variable-frequency PID adjustment control	\	●
Master motor & electrical system	Control panel of IP54/NEMA4 protection grade	●	\
	Star triangle buck starter	●	\
	Variable-frequency step-down start	\	●
	High efficiency enclosed TEFC,IP55 electric motor – Grade B temperature rise, Class F insulation	●	\
	Variable-frequency PM TEFC,IP66 electric motor – Grade B temperature rise, Class H insulation	\	●
General configuration	Simple single air inlet-outlet pipeline (single air inlet and single air outlet)	●	●
	12-month warranty program	●	●
Options			
Protection against harsh environment	High temperature protection (up to 55℃) (3)	○	\
	Electric control box heater	\	○
	Dusty intake air filter	○	○
Environment-friendly options	Food-grade coolant Ultra FG	○	○

● Standard ○ Optional \ Not applicable

(1) To be realized after software update
(2) With standard software and non-standard buzzer
(3) 99 and 132kW unit can reach the temperature

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.

Contact Ingersoll Rand

Add.: F11, L'Avenue, 99 Xianxia Road, Shanghai

Tel.:021-2221 6000

Website: www.ingersollrand.com

24-Hour Free Service Hotline

800 820 2128

400 820 2128

SN: Completes-158-2503-EN