Oil-flooded Screw Compressed Air System

New RM Series 7-22 kW

Ingersoll Rand offers the intelligence you need to win

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 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 long-life Ingersoll Rand-branded consumables.

New RM series oil-flooded screw air 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 & Strong Information

We Started at the Core

We utilize new state-of-the-art airend for development of the new RM series to deliver better performance for you. Through rotor profile optimization and many other improvements, the new airend can increase efficiency by 11% and reduce operating cost to a greater extent. Besides, new rotor profile achieves ideal air capacity, i.e. 11% more than the previous model. Smaller specific power means lower equipment investment cost and energy consumption, thus lowering your total cost.

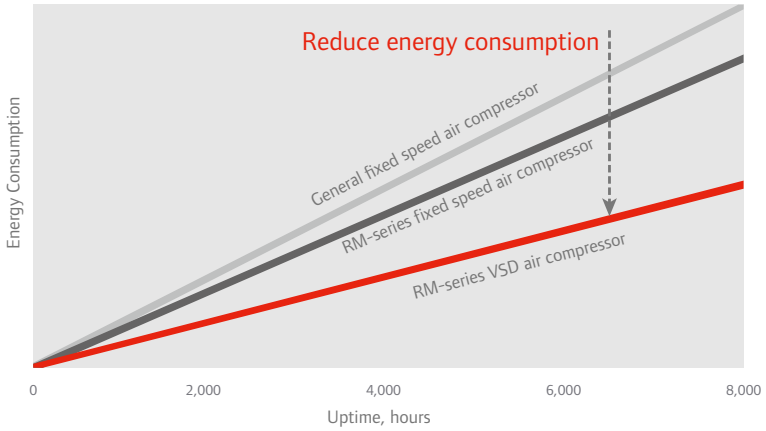
Technology is Power

A high-quality compressor provides required operating parameters while supplying air. So, every RM series compressor is equipped with an intelligent controller to monitor key operating points and adjust system parameters, so as to prolong the uptime and reduce energy consumption. Wherever you are, you can learn the operating status of an air compressor in a real-time manner and promptly take necessary actions.

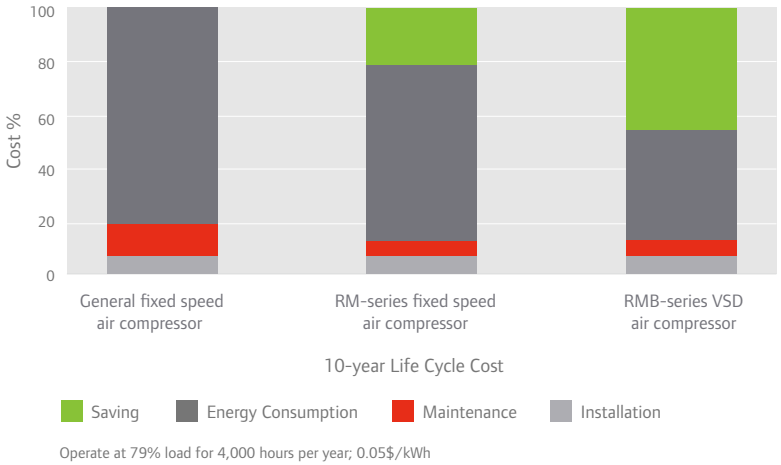
For Higher Energy Efficiency

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.



Greatly reduce total cost



Operate at 79% load for 4,000 hours per year; 0.05$/kWh

Luminance Controller

With its strong control and remote management function, the new generation Luminance controller of Ingersoll Rand guarantees steady operation and also greatly improves the operating and management efficiency of your compressor.

Controller Features

More User-friendly Interface

- High-resolution 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

What is Helix™ AI Cloud?

Ingersoll Rand Helix™ AI Cloud 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 Stops
Better machine performance

Visualized Maintenance Plan
All units under control

Timely Maintenance
Extended service life of the unit

Online State Monitoring of the Unit
Higher productivity and mechanical efficiency

Lower Shutdown Risk
Minimum unscheduled downtime

Quick Response Services
Better & professional insights

Service Contract

PackageCARE: from 1st day 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 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 screw air compressor

It All Adds Up to Peace of Mind

Lower TCO

CARE service programs provide the most cost-effective solutions based on your customized maintenance strategy.

Quality Results

Ingersoll Rand factory-trained service technicians are backed by more than 160 years of industry experience.

Increased Uptime

Our CARE programs help decrease unplanned downtime and costly production interruptions.

Efficient Energy Use

Peak system efficiency is achieved through properly performed maintenance and inspection.

Peace of Mind

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 period: 2,000 / 4,000 / 8,000 hours

All parts and components required for maintenance or service at a time are included in the package.

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

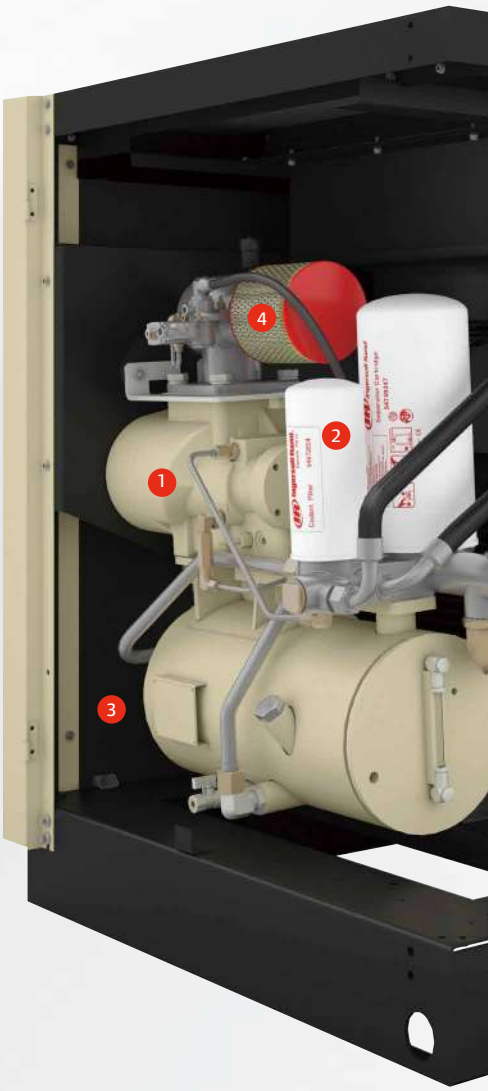
Economy: visual service cost budget and superiority in price to purchase of individual parts

One-stop service with OEM quality guarantee

Internal Structure Design Optimization

❶ Efficiency

New efficient airend design increases efficiency by 11% & air capacity by 11%, and achieves long-lasting reliable operation.



❷ Reliability

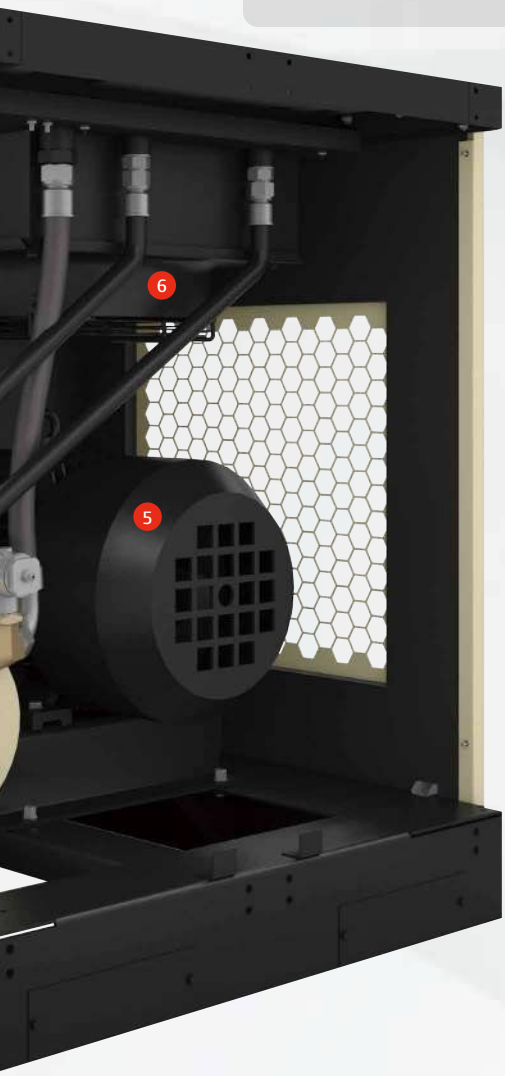
It can remove lubricant in compressed air to below 3-5ppm, so as to protect downstream equipment, extend filter service life, increase productivity and reduce maintenance cost for customers.

❸ Ease of Maintenance

Fixed speed unit with standard belt auto-tensioning system requires no manual maintenance and reduces maintenance cost.

7 Intelligence

Luminance series intelligent controllers achieves real-time monitoring of system parameters, whose standard IoT function enables you to learn air compressor status, wherever you are, and pre-alarms to exempt you from losses due to unexpected sudden shutdown.



6 Efficiency / Ease of Maintenance

Integrated cooling fan reduces energy consumption, improves efficiency of the unit, and saves more space for maintenance of other components.

5 Robustness

Fixed speed: highly efficient IEC60034-30 IE3 motor enables IP55 protection grade, Class F insulation and Grade B temperature rise.

Variable speed drive (VSD): highly efficient IE5, IP66 oil-cooled permanent magnet VSD motor enables Class H insulation and Class B temperature rise.

4 Efficiency / Productivity Superiority

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.

Note: Please consult your local Ingersoll Rand advisor for models and configurations, which may vary slightly for different products.

7-22kW Performance

Model	Rated Power kW	Nominal Pressure barg	Air Volume (FAD*) m³/min	Dimensions (L x W x H) mm	Weight kg
i Standard unit performance					
RM7i_A	7.5	7	1.22	716 x 677 x 1061	222
		8	1.14		
		10	1.00		
		12.5	0.81		
RM11i_A	11	7	1.69		225
		8	1.58		
		10	1.41		
		12.5	1.23		
RM15i_A	15	7	2.50	984 x 1017 x 1065	465
		8	2.40		
		10	2.07		
		12.5	1.70		
RM18i_A	18.5	7	3.10	993 x 1020 x 1118	509
		8	3.00		
		10	2.61		
		12.5	2.15		
RM22i_A	22	7	3.70		524
		8	3.41		
		10	3.08		
		12.5	2.72		

Model	Rated Power kW	Nominal Pressure barg	Air Volume (FAD*) m³/min	Dimensions (L x W x H) mm	Weight kg
n Standard unit performance					
RM7n_A	7.5	12.5	0.15-1.18	840 x 680 x 810	169
RM11n_A	11	12.5	0.15-1.65		182

1. Air volume (FAD*) (volume flow) is the operation parameter of the entire machine and measured as per the test standard in ISO1217:2009 Annex C.

7-22kW Configurations

Standard Features	Description	Fixed Speed RM7-11i	Fixed Speed RM15-22i	Variable Speed RM7-11n
Airend	Airend with premium 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(1)	●	●	●
	Standard Modbus RTU protocol, RS485 interface	●	●	●
	Power outage restart option (PORO)(2)	●	●	●
Active self-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	●	\	●
	Long-life filter element and separator element	●	●	●
	Full-load / no-load flow regulation system control	●	●	\
	Variable frequency PID regulation control	\	\	●
Main motor and electrical system	Direct start	●	\	\
	Star-delta reduced voltage starter	○	●	\
	Variable frequency reduced voltage start	\	\	●
	High-efficiency TEFC, IP55 closed motor with Class B temperature rise & Class F insulation	●	●	\
	Permanent magnet variable frequency TEOC, IP66 motor – Class B temperature rise, Class H insulation	\	\	●
General configurations	12 months' warranty program	●	●	●
Protection under harsh ambient conditions	50°C high temperature option(3)	○	○	\
	14barg discharge pressure	○	○	\
	272L skid-mounted air tank	○	○	○
Environmental protection options	Food grade coolant Ultra FG	○	○	○

● Standard feature ○ Optional feature \ Not applicable

(1) To be realized after software update (2) Standard for software, buzzer for non-standard (3) Only for RM7/15/18i unit

Customized Products for Your Application

Ingersoll Rand offers a wide portfolio of reliable products that will adapt to your industry and application. We will assess and customize the system solution to reduce the total air consumption cost of your compressed air system, maximizing your operational productivity.

Sewage Treatment

- Aeration
- Mixing
- Material conveying
- Sludge purging
- Air source for ozone generator

Animal Husbandry

- Pneumatic valve
- Pneumatic switch
- Power conveying
- Purging

Medical Gas Supply & Oxygen Generation

- Air supply for oxygen generation
- Dental treatment gas
- Medical devices
- Cleaning equipment

Air Treatment

Moisture and contaminants in compressed air can cause serious equipment operation problems, such as rust, scaling, and pipe clogging, which can lead to product damage or even shutdown. Using our air treatment equipment as an integral component of your compressed air system will help improve productivity, system efficiency and product quality.

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

Desiccant dryer

- Reliable -40℃ 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

High efficiency filter

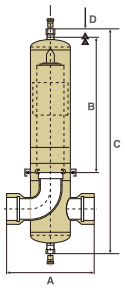
- G(GP) class –conventional protective filtration
- D(DP) class - general dust removal filtration
- H(HE) class - high efficiency precision filtration
- A(AC) class - activated carbon filtration
- F-IU class - absolute sterilizing-grade filtration

Dryer Performance

Model	Flow m³/min	Power V/Ph/hz	Air connector diameter inch	Dimensions (L x W x H) mm	Weight kg
D-IN series refrigerated dryer					
D72IN-A	1.2	230/1/50	1/2″ BSP	390 x 432 x 453	26
D108IN-A	1.8	230/1/50	3/4″ BSP	420 x 516 x 563	33
D144IN-A	2.4	230/1/50	3/4″ BSP	420 x 516 x 563	38
D180IN-A	3	230/1/50	3/4″ BSP	420 x 516 x 563	43
D240IN-A	4	230/1/50	1-1/2″ BSP	503 x 604 x 980	76
D-INRi series refrigerated dryer					
D216INRi-A	3.6	220/1/50	1.5″ BSP	620 x 480 x 720	72
D294INRi-A	4.9	220/1/50	1.5″ BSP	700 x 520 x 850	100
D-ILRi series heatless desiccant dryer					
D72ILRi20	1.2	220/1/50	1/2″ BSPT	730 x 480 x 1550	132
D126ILRi20	2.1	220/1/50	3/4″ BSPT	850 x 500 x 1620	144
D216ILRi20	3.6	220/1/50	1″ BSPT	950 x 550 x 1620	168
D282ILRi20	4.7	220/1/50	1-1/2″ BSPT	1000 x 600 x 1660	321
D72ILRi40	1.2	220/1/50	1/2″ BSPT	730 x 480 x 1550	132
D126ILRi40	2.1	220/1/50	3/4″ BSPT	950 x 550 x 1630	168
D216ILRi40	3.6	220/1/50	1″ BSPT	1050 x 600 x 1680	321
D282ILRi40	4.7	220/1/50	1-1/2″ BSPT	1050 x 600 x 1680	342
D-IERi series micro heat desiccant dryer					
D72IERi20	1.2	220/1/50	1/2″ BSPT	730 x 480 x 1550	145
D126IERi20	2.1	220/1/50	3/4″ BSPT	850 x 500 x 1620	152
D216IERi20	3.6	220/1/50	1″ BSPT	950 x 550 x 1620	186
D282IERi20	4.7	220/1/50	1-1/2″ BSPT	1000 x 600 x 1660	347
D72IERi40	1.2	220/1/50	1/2″ BSPT	730 x 480 x 1550	145
D126IERi40	2.1	220/1/50	3/4″ BSPT	950 x 550 x 1650	186
D216IERi40	3.6	220/1/50	1″ BSPT	1050 x 600 x 1720	347
D282IERi40	4.7	220/1/50	1-1/2″ BSPT	1050 x 600 x 1720	385

High-efficiency Filter Performance

Filtration class	Connector Dimensions	Flow @7barg/100psig m³/min	Dimensions mm A	B	C	D	Weight kg	Standard configuration Max.working pressure barg	Housing material
G D H A class pipe filter									
FA30I(x)	3/8"	0.48	76	172	16	53	0.56		
FA40I(x)	1/2"	0.62	76	172	16	53	0.55		
FA75I(x)	3/4"	1.27	98	227	22	53	1.07		
FA110I(x)	3/4"	1.84	98	227	22	53	1.09	17	Die-casting aluminum
FA150I(x)	1"	2.49	129	266	32	53	2.06		
FA190I(x)	1"	3.12	129	266	32	53	2.06		
FA230I(x)	1"	3.82	129	266	32	53	2.06		
F-IU级除菌过滤器									
F150IU	1"BSPT	2.5	160	168	282	170	0.5		
F216IU	1"BSPT	3.6	220	210	435	220	2.6	10	304 stainless steel
F480IU	2"BSP	8	220	335	560	350	3.5		



Ingersoll Rand Inc. (NYSE:IR), driven by an entrepreneurial spirit and ownership mindset, is dedicated to helping make life better for our employees, customers and communities. Customers lean on us for our technology-driven excellence in mission-critical flow creation and industrial solutions across 40+ respected brands where our products and services excel in the most complex and harsh conditions. Our portfolio of products consists of air compressors, pumps, blowers, and systems for fluid management, loading and material handling as well as power tools. With over 17,000 employees globally, our team develops customers for life through their daily commitment to expertise, productivity and efficiency. For more information, visit www.IRCO.com.

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