MSG[®] Centac[®] Centrifugal Air Compressors

(IR) Ingersoll Rand



A Tradition of Proven Reliability, Efficiency and Productivity



Over 100 years of Oil-Free Innovation

We introduced our first oil-free centrifugal compressor in 1912, and over the decades we've continued to develop rugged, reliable, industry-leading compressor technologies. Ingersoll Rand has become the

leader in oil-free centrifugal compressed air because our technological advances are designed for the specific performance needs of our customers' industries.

No matter what the application, Ingersoll Rand centrifugal compressors help eliminate inefficiencies, contaminants and breakdowns that can result in costly downtime, product liability or damage to your brand reputation, while reducing total lifecycle costs.

RELIABILITY Superior Design, Superior Life

- Fewer moving parts means less downtime
- Dynamically balanced rotor assemblies ensure extremely low vibration
- Carbon ring seals minimise air leakage

Lowers cost of ownership

PRODUCTIVITY

User-Friendly Operation and Accessibility

- Easy-access components make maintenance faster and easier
- Simplified compressor design provides longer intervals between maintenance
- A visually intuitive and web connected controller

Maximises uptime

EFFICIENCY Optimized Components and Systems

- Multi-stage compressors combine performance with energy savings
- Advanced impeller design provides maximum pressure control over the widest operating range
- Provide 100% oil-free compressed air under any operating conditions

Reduces energy use and operating costs



The Centrifugal Technology Your Industry Demands



Oil-Free, Risk Free

The first to be certified ISO 8573-1:2001 Class 0, our oil-free centrifugal compressors offer efficient, economical and reliable solutions for delivering compressed air. These highperforming, versatile compressors provide 100% oil-free air in all operating conditions. Class 0 Oil-Free Air

The ISO 8573-1:2001 zero level standard specifies the quality standards for compressed air used in most industries with strict process requirements. It is the strictest grading standard that specifies the quantity standards for oil content in three forms: liquid, mist, and vapor. If your production process requires absolutely pure compressed air, Ingersoll Rand will be your top choice.





MSG[®] Centac[®]...Engineered for Performance

Ingersoll Rand centrifugal compressors are designed for applications where reliability, productivity and efficiency are essential to getting the job done right...and the compressor's packaged design makes it easy to install wherever needed.

Efficient Impeller Design Moisture Separator Stainless steel moisture separator provides Backward leaning impellers provide constant superior reliability and helps prevent pressure control while maximising efficiency Long-Life Gears and turndown range corrosion, ensuring high air quality 25-year rated, uniformly hardened gears provide extreme reliability Coolers Precisely engineered coolers maintain a low pressure drop and the large surface area provides maximum cooling efficiency. The Integral cooler design helps the compressor keep a compact footprint* *Optional external configurations available **High Capacity Bearings** Hydrodynamic bearings are completely non-contact, offering virtually unlimited life and maximum efficiency with 2-3 times the lifespan of traditional bearings Diffuser Seals Rotors

High grade stainless steel rotors are fully balanced and require no coating, providing constant performance over time

Fully floating, non-contact carbon ring seals minimise air leakage and prevent oil from migrating into the compressed air stream; single-piece seal construction provides significantly better performance than other technologies, saving valuable compressed air

Optimally designed to work with Ingersoll Rand's backward leaning impellers for maximum efficiency



Intelligent Air Compressor Control – The Key to System Productivity

Ingersoll Rand controllers can effectively control variables that affect operating costs and production capacity, helping you provide productivity

An intuitive high-definition color display provides you with a window to monitor all important information about the air compressor. In addition to ensuring high performance of the equipment, it also predicts maintenance status by continuously monitoring and mastering the development trend of key data. In order to improve productivity and facilitate use, the controller has an open web structure, allowing operators to remotely operate the air compressor from almost anywhere.









Web-Enabled Communication

- Start/stop/load/unload and checks parameters remotely
- Email notification of alarms and trips
- Built-in performance reporting and visual trending with automated inspection logs
- There are 26 languages to choose from

More Connectivity Choices

- Communicates directly with your DCS system through Modbus
- Ethernet connection enables communication and control through tablets, computers or mobile devices
- Connects seamlessly with Ingersoll Rand system controls
- Sequences up to four additional controlled compressors with no additional hardware

Intelligent Compressor Control

- Constant Pressure Control Continually maintains precise discharge pressure to adjust for sudden demand variations
- Auto Dual Control Provides enhanced energy savings during partial load conditions
- Energy Smart Set Point (ESS) Adjusts settings to balance and share loads between multiple compressors in the same system, reducing bypassed air and saving energy

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We Build Solutions

We do more than build products at Ingersoll Rand. We bring our customers unmatched experience in designing comprehensive compressed air systems that cover virtually any need.

Systems and Support to Keep You Productive

Ingersoll Rand not only designs and builds extremely efficient air systems, it solves process and business problems as well. This helps customers succeed in today's global economy through enhanced reliability, energy efficiency and productivity.

No matter what your industry or location, Ingersoll Rand is committed to serving you 24/7. Our worldwide network of distributors, engineers and certified, factory-trained technicians are a phone call away-ready to support you with innovative, cost-effective and performance-enhancing solutions.





| Model | Flow Range | | Pressure Range | |
|--------|------------|-------------|----------------|--------|
| | m³/min | icfm | bar | psi |
| C400 | 35~70 | 1250~2500 | 3.4~8.6 | 49~125 |
| C700 | 45~120 | 1500~4200 | 3~11 | 45~160 |
| C800 | 100~160 | 3500~5700 | 3~14 | 45~200 |
| C950 | 110~195 | 3900~6700 | 3~11 | 45~150 |
| C1000 | 130~240 | 4600~8500 | 3~11 | 45~160 |
| 3CII | 180~300 | 6400~10600 | 3~11 | 45~160 |
| C3000 | 270~480 | 9500~17000 | 3.5~11 | 50~160 |
| 3C | 140~300 | 5000~10000 | 2.5~25 | 36~360 |
| 4C | 280~480 | 9000~17000 | 3.5~25 | 50~360 |
| 5CII | 400~900 | 14000~32000 | 2.2~11 | 30~160 |
| CH5 | 30~90 | 1100~3200 | 0.7~2.2 | 10~30 |
| CH6 | 90~180 | 3200~6350 | 0.7~2.2 | 10~30 |
| 2CII | 80~140 | 2825~5000 | 2.5~24 | 36~350 |
| 2CIIDF | 35~270 | 1250~9500 | 1.1~2.2 | 15~30 |

Weights and dimensions are estimated and will vary with scope and options. Performance is nominal. Please contact Ingersoll Rand for specific data.



MSG[®] Centac[®] Full range of centrifuges Meet the needs of your various industries





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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