



ROTARY SCREW COMPRESSOR

RMD 30 - 37 - 45 - 55 kW

TECHNOLOGY YOU CAN TRUST

The RMD Coaxial Rotary Compressor

high reliability

high performance

low maintenance

is the result of decades of experience in manufacturing design and construction of rotary screw compressors.

STANDARD EQUIPMENT:

- Intake filter
- Flow regulator
- Screw compressor with asymmetrical profile rotors
- · Elastic coupling
- Coupling protective cap
- IP 55 electric motor EFF.1
- · Air-oil separator
- Oil filter
- Air and oil cooler
- Oil differential pressure regulating valve
- · Start-up panel
- Control panel
- Sound insulation cover
- Initial oil fill

Available versions:

- Inverter
- Dry version

Optional equipment:

- Condensate separator
- Multicontrol regulation
- Filter for dusty environments
- Energy recovery kit



High-efficiency, low load-loss, 2 micron pleated **intake filter** with cyclonic pre-filter; the filter prevents damaging particles from entering the air and oil circuits, achieves improved oil efficiency and prolongs the life of the air/oil separator element and oil filter.

High-performance **element** with asymmetrical profile rotors, which, due to the absence of vibrations and the range of nominal speeds, limits wastage and improves overall output.

Centrifugal, gravitational and coalescing **separator** for high clean air and oil separation efficiency (less than 3 mg/m³ at reference conditions) with a large delivery hose for low load losses.

AIRLOGIC, the air management system regulator, monitors all information regarding proper machine operation, warns the operator of any faults and formulates a "Preventive Maintenance Schedule".



RMD - Efficient and Reliable

Ventilation and cooling system

The prefilter panel ensures maximum protection of internal components; the high-capacity, silent-running turbine ventilator improves cooling capacity; low airspeed reduces the amount of dust taken into the unit, careful monitoring of air flows; all these features ensure that all components are efficiently cooled, preventing heat pockets and optimizing operating temperature.

The cooling air flow is conveyed to a single expulsion point so that over 90% of the heat that would otherwise be lost is recovered by simply recycling the cooling air.

The aluminum air/oil cooling system features a large surface area available for heat transfer, guaranteeing maximum air cooling while maintaining optimum oil temperature levels.

The unique horizontal position improves the unit's balance and facilitates oil changes while specially-designed supports simplify all assembly and disassembly phases.

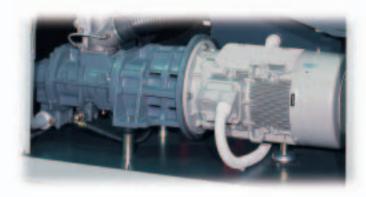


Easy to maintain

Wide doors opening to 180°, easily removable panels, easily accessible components, completely free sides and programmable Maintenance Schedule (none of which require any special tools) simplify normal control operations as well as both routine and extraordinary maintenance.



Coaxial Coupling



More reliable, more efficient, more compact and quieter.

Motion is transmitted by an elastic coupling which absorbs all vibrations, thus prolonging the life of the electric motor and the compressor.

A special cover protects the coupling and gears (if applicable), ensuring correct motor/compressor alignment.

Continuous development of MARK products guarantees improved output and lower noise levels.

Regulation

AIRLOGIC the Electronic Control



FUNCTIONS:

- Operating system configuration
- Weekly programme for two pressure fields
- Password access
- Automatic restart
- Remote control
- Fault report with record of the last 10 cases
- Percentage calculation of operating times
- Multiple control
- Scheduled maintenance

CONTROLS:

- Input and output signals
- Delivery pressure
- Delta pressure in the air/oil separator

PREVENTS:

- Reverse rotation
- Low temperature start-ups
- Start-up under pressure
- Automatic re-start after long periods of shutdown
- Overpressure in the air/oil separator

PROTECTS:

- The motor by limiting the number of start-ups
- The compressor against oil overtemperature

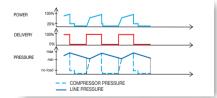
Multicontrol (optional)

Multicontrol is a simple, reliable and flexible way to regulate the RMD series of compressors.

It controls airflow, operating times when empty and motor re-starts, optimizing all three according to the work cycle, thus avoiding costly and unnecessary energy waste.



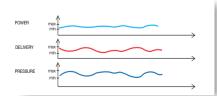
F4 INTELLIGENT ON/OFF



Ideal for low to medium air consumption with long idling periods.

Energy is saved because idling periods are reduced.

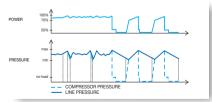
F5 MODULATION



Ideal air for consumption approaching the compressor's full capacity with brief idling periods. By adjusting the airflow in the compressor to meet the

requirements of the distribution network, idling.

F6 AUTOMATIC



Ideal for variable consumption; the regulation adapts automatically to the F4 and/or F5 systems according to the type of consumption.



RMD for QUALITY



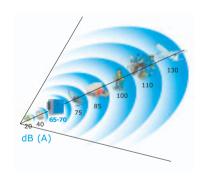
Compressor unit

- High efficiency pump under any operating conditions, with reduced number of revolutions, low noise level and improved reliability.
- Top-of-the-range, high-performance, European voltage electric motor, with cast-iron casing, EFF. 1, Class F insulation, IP 55 protection; all standard.
- Coaxial coupling guaranteeing high output, better performance and lower maintenance costs.



Design

- Easily accessible, well-integrated components simplify all maintenance operations.
- Careful monitoring of the cooling system and well-distributed air flows guarantees optimum operating temperature.
- The low level of residual noise means that it also can be installed in workplaces.
- Ergonomic arrangement of components facilitates any control and/or maintenance required.
- A state-of-the-art compressor designed using the latest technology and taking users' requirements into consideration.



Performance

Years of experience, exclusive use of high-quality, proven components, efficient production on up-to-date assembly lines, high-effficiency pumps, optimum motor output and standard AIRLOGIC regulation all mean that our compressors have increasingly lower specific energy consumption and lower noise levels.



Range of Options

- Multicontrol: adjusts airflow in the compressor according to the work cycles.
- Inverter:
 adjusts airflow in the compressor according to the air required by the applications.
- Integrated dryer: a central production and air-drying unit with a bypass system to guarantee a supply of compressed air even when the dryer has stopped operating.
- And many other features:
 in a compressor built with the latest technology, designed to be used with any application and environment-friendly.

| TECHNICAL DATA (IN ACCORDANCE WITH ISO 1217 AND CAGI PNEUROP PN8NTC2) | | | | | | | | |
|---|---------|-------|-----------------|--------|-----------|--|---------------|----------------|
| Туре | .bar. | | | ₩. | 4 | Ø | L W | ∱ kg |
| • | bar psi | HP kW | m³/min m³/h cfm | dB (A) | V/Hz/Ph | gas | L W H | Kg |
| RMD 30/7,5 | 7,5 107 | 40 30 | 5,583 335 197 | 65 | 400/50/03 | 1 ¹ / ₂ " | 1810 950 1760 | 785 |
| RMD 30/8 | 8 116 | 40 30 | 5,266 316 186 | 65 | 400/50/03 | 1 ¹ /2" | 1810 950 1760 | 815 |
| RMD 30/10 | 10 145 | 40 30 | 4,683 281 165 | 65 | 400/50/03 | 1 ¹ /2" | 1810 950 1760 | 815 |
| RMD 30/13 | 13 188 | 40 30 | 3,833 230 135 | 65 | 400/50/03 | 1 ¹ /2" | 1810 950 1760 | 815 |
| RMD 37/7,5 | 7,5 107 | 50 37 | 6,900 414 244 | 66 | 400/50/03 | 1 ¹ / ₂ " | 1810 950 1760 | 900 |
| RMD 37/8 | 8 116 | 50 37 | 6,633 398 234 | 66 | 400/50/03 | 1 ¹ /2" | 1810 950 1760 | 900 |
| RMD 37/10 | 10 145 | 50 37 | 5,983 353 208 | 66 | 400/50/03 | 1 ¹ / ₂ " | 1810 950 1760 | 900 |
| RMD 37/13 | 13 188 | 50 37 | 4,683 281 165 | 66 | 400/50/03 | 1 ¹ /2" | 1810 950 1760 | 900 |
| RMD 45/7,5 | 7,5 107 | 60 45 | 8,033 482 284 | 67 | 400/50/03 | 1 ¹ / ₂ " | 1810 950 1760 | 975 |
| RMD 45/8 | 8 116 | 60 45 | 7,866 472 278 | 67 | 400/50/03 | 1 ¹ /2" | 1810 950 1760 | 975 |
| RMD 45/10 | 10 145 | 60 45 | 7,200 432 254 | 67 | 400/50/03 | 1 ¹ / ₂ " | 1810 950 1760 | 975 |
| RMD 45/13 | 13 188 | 60 45 | 6,000 360 212 | 67 | 400/50/03 | 1 ¹ / ₂ " | 1810 950 1760 | 975 |
| RMD 55/7,5 | 7,5 107 | 75 55 | 9,483 569 335 | 70 | 400/50/03 | 1 ¹ / ₂ " | 1810 950 1760 | 1165 |
| RMD 55/10 | 10 145 | 75 55 | 8,467 508 299 | 70 | 400/50/03 | 1 ¹ / ₂ " | 1810 950 1760 | 1165 |
| RMD 55/13 | 13 188 | 75 55 | 7,267 436 257 | 70 | 400/50/03 | 11/2" | 1810 950 1760 | 1165 |

Dimensions and weights without packaging

- Standard version:
 AIRLOGIC regulation
- Tank in conformance with EEC standards
- Air cooling system

Available versions:

- InverterDry version

- Optional equipment:
 Intake filter for dusty environments

- Energy recovery kitCondensate separatorMULTICONTROL regulation



MARK has a policy of continuous product improvement. We reserve the right to change specifications and product design without notice.





