RMD 45 – 75
IVR PM

Direct driven

Oil-injected screw

Compressors

Variable speed

Advanced reliability in
compressed air.

AVAILABILITY
SERVICEABILITY
RELIABILITY
SIMPLICITY
PARTNERSHIP

TECHNOLOGY YOU CAN TRUST

MARK

User benefits

Minimal energy costs

- More compressed air for less energy thanks to newest generation of screw elements
- Significant energy savings through IE4 Super Premium Efficiency motor
- Minimal losses thanks to integrated direct drive transmission
- Instant savings brought by Imperium variable speed technology vs. traditional fixed speed compressors

Userfriendly operation & maintenance

- In-house designed large 4.3" graphical controller with touchscreen
- Integrated connectivity helps you optimize and save energy
- All consumables are at easy reach for fast service and minimal downtime of your compressor
- The coolers are mounted on gliding rails and can easily be dragged out and cleaned, making service a one-person job
- Low noise radial fan as standard

Reliable productivity & operational efficiency

- Patented and in-house designed interior permanent magnet (iPM) motor with innovative oil-cooling technology for optimal cooling at all speeds and conditions
- In-house designed Imperium inverter, tailor-made for screw compressor applications.
- Maintenance-free components enable higher uptime and increased productivity

Simple installation

- Compact and all in one system
- Innovative design
- Easy and full protected transport
- Placement with forklift (2 lifting points) or transpallet (1 lifting point)
- No special foundation needed

A peace of mind investment

- Quality filtration with long lifetime protects internal components and increases lifetime
- Packaged in a proven canopy design with already thousands of installations around the globe.

RMD IVR PM

• Variable speed • Direct driven
• Interior Permanent Magnet Motor

Compressed air drives your processes and with it, the operational efficiency and performance of your company. With this principle in mind, Mark has designed the RMD IVR PM, a range of variable speed, oil-injected screw compressors with iPM motor technology to offer your business a compressed air solution that adds value and saves you money at the same time.

Why energy efficiency?

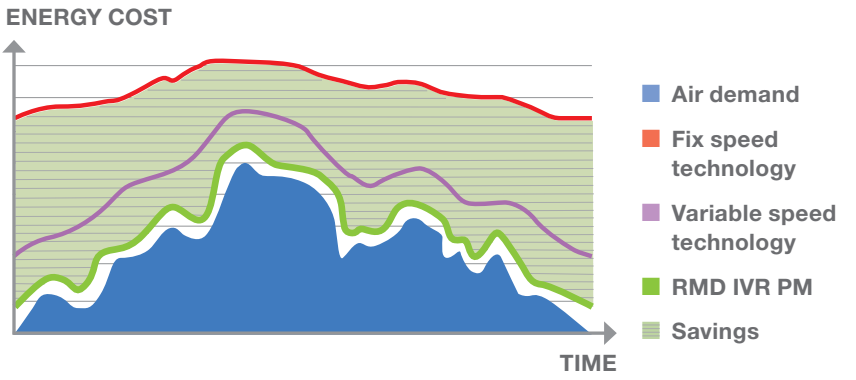
Energy costs represent about 70% of the total operating cost of your compressor over a 5-year period. That is why efficiently reducing the energy consumption of your compressed air installation should be a major focus.

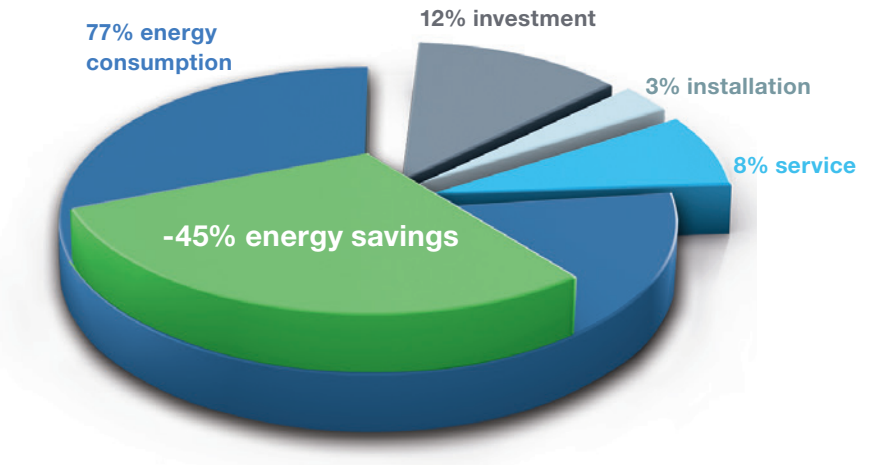
Why Variable Speed?

As a majority of customers have a variable demand for compressed air, a variable speed compressor is superior vs. a fixed speed compressor in terms of energy savings by perfectly matching air supply to air demand and avoiding unload losses.

Why RMD IVR PM?

The RMD IVR PM range combines our Imperium variable speed technology with our new and highly efficient drive train with iPM motor technology and evolved the energy efficiency of variable speed compressors to a new level, resulting in energy savings of up to 45%.





SMART TECHNICAL ADVANTAGES

RELIABLE PERFORMANCE

- New generation in-house designed screw elements, delivering more compressed air for less energy.
- In-house designed iPM motor with IE4 Super Premium Efficiency. Oil-cooled for optimal cooling at all speeds.
- Integrated direct drive transmission for minimal losses.

EASY & FULL CONTROL AT YOUR FINGERTIPS

ES 4000T TOUCH CONTROLLER

- In-house designed graphical controller with a large 4,3" full-color touchscreen.
- Easy to read and user-friendly to operate.
- Integrated connectivity enables remote monitoring possibilities and helps to further.
- Monitoring key parameters to ensure safe operation.

SIMPLE MAINTENANCE

- Separate air and oil cooler which reduces the thermal tension extending the lifetime of the coolers.
- Easy gliding ridges making maintenance a one man job.

ROBUST, COMPACT AND USER-FRIENDLY FREQUENCY INVERTER

- In-house designed Imperium inverter.
- IP5X protection rating for harshest conditions.
- Plug-and-play solution, controlled by ES4000T controller.
- Installed in separate cubicle for easy maintenance and optimized cooling.

A REVOLUTION IN THE COMPRESSED AIR INDUSTRY

Innovative drive train technology

Improved energy efficiency saves you money

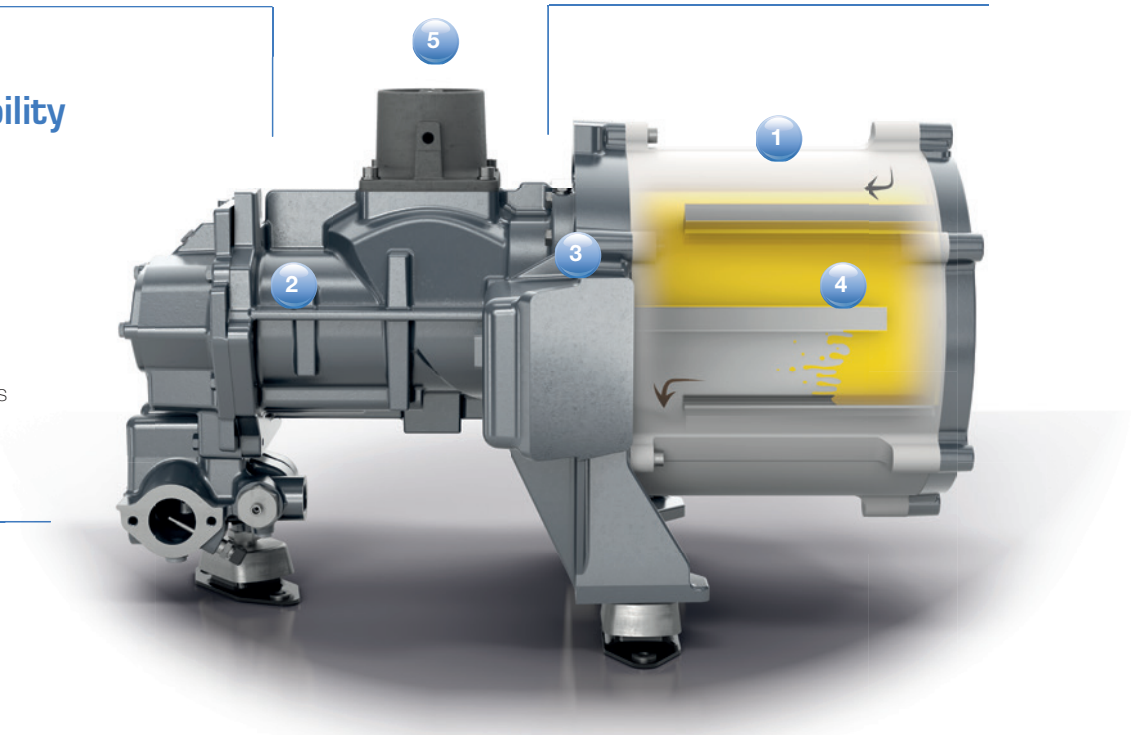
- In-house designed iPM motor (1) with IE4 Super Premium Efficiency.
- New generation in-house designed screw elements (2), with improved efficiency.
- Integrated direct drive transmission (3) for minimal losses.
- Smart inlet valve (5) optimizes the inlet flow and improves efficiency.

Maintenance-free design minimizes downtime and improves your productivity

- No (re)grease(ing) of the motor (1) bearing needed.
- Coupling-free direct drive design (3), no maintenance needed.
- Smart inlet valve (5), no maintenance needed.

Increased reliability extends lifetime

- iPM motor (1) rated IP66, premium protection against dust and water ingress.
- Globally renowned screw elements (2), proven in thousands of installations.
- Optimal cooling at all speeds and conditions thanks to oil-cooling principle (4) of the iPM motor (1).



Scope XT

How do you get the most out of your compressor in the most cost-effective way? The simple answer is: SCOPE XT, the service plan that makes your life easy, keeps your compressor running energy-efficiently and avoids breakdowns. If you have just purchased a new machine, SCOPE XT provides an extending warranty up to 5 years. You do not have to worry about unexpected repair costs: it is all part of the plan!

Save energy

Original parts are replaced on time, ensuring optimal efficiency and reducing energy costs. for the whole period between service visits.

Control budget

SCOPE XT offers full transparency, as the costs are fixed for the duration of the agreement.

One order

Instead of ordering and paying for every individual spare part and service, one order is all you need.

Flexibility on top

You can decide how long you want the agreement to run and you can cancel with a notice of termination.

"SCOPE customers have on average 2 weeks of extra operation per year due to increased machine availability!"

OPTIMIZE YOUR OPERATIONS FOR SUPERIOR PRODUCTIVITY AND QUALITY

Optional and standard features

OPTION	RMD IVR PM
Water separator	✔
Automatic drain for water separator*	✔
Standard filtration panel	Standard
High efficiency pre-filtration panel	✔
Noise reduction baffle (super silent)	✔
Oil heater	✔
8000 hours oil	✔
Foodgrade oil	✔
Integrated energy recovery system (1)	✔
Wooden box packaging	✔
Tropical thermostatic valves	✔
Automatic restart after power failure	Standard
ES4000^{T} controller (2)	Standard

(1)

(2)

Combine your RMD IVR PM with downstream equipment

Line Filters

- Purify the compressed air by eliminating oil/dust contaminants resulting in higher final product quality and an increase of your overall productivity.

Air Receiver

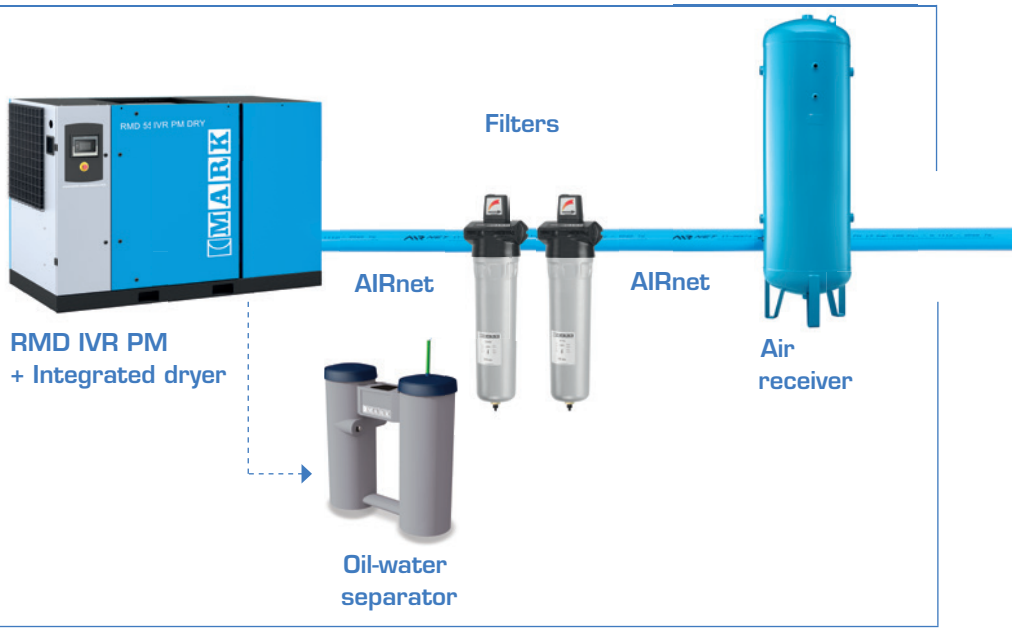
- Buffer storage for compressed air. Helps with condensate separation, pressure stabilization and more efficient operation of the compressor.

Oil-Water Separator

- Captures the oil in compressor condensate so it can be disposed of in an safe and environment-friendly way.

AIRnet

- Fast to install, reliable piping system, designed for compressed air applications offers lowest total cost of ownership.



ICONS

Connectivity is the future. The RMD 45-75 IVR PM comes fully prepared and enables you to benefit from all the advantages of ICONS:

- Remote monitoring that helps you optimize your compressed air system and save energy.
- On-time maintenance which optimizes costs and ensures a longer machine life.
- Potential problems are recognized before they can pose a threat to the continuity of your production

ICONS
INTELLIGENT CONNECTIVITY SYSTEM

TAKE YOUR PERFORMANCE AND ENERGY EFFICIENCY TO NEW HEIGHTS

Continuous investment in product development has resulted in our most innovative and energy efficient compressor to date. A brand new and groundbreaking drive train coupled with our Imperium inverter has pushed energy efficiency to the next level, bringing energy savings of up to 45%. Designed with the customer in mind, the RMD 45-75 IVR PM range brings:

Increased performance with lower energy costs

- New generation screw elements, delivering more compressed air for less energy.
- IE4 Super Premium Efficiency motor, resulting in significant energy savings.
- Integrated direct drive transmission for minimal losses.
- Imperium variable speed technology, bringing instant savings vs. traditional fixed speed compressors.

In-house designed innovations

- In-house designed interior permanent magnet (iPM) motor with innovative oil-cooling technology for optimal cooling at all conditions.
- In-house designed Imperium inverter, tailor-made for screw compressor applications.
- In-house designed graphical controller with touchscreen for user-friendly operation.

Improving your productivity

- Maintenance-free components enable higher uptime and increased productivity.
- Consumables with long lifetime ensure optimal reliability and low total cost of ownership.
- Packaged in a proven canopy design with already thousands of installations around the globe.

Components

1. *Filtration panel*
2. *Emergency stop*
3. *Controller*
4. *Air filter*
5. *Oil filter*
6. *Air cooler*
7. *Oil cooler*
8. *Cubicle*
9. *Inverter*
10. *Oil-seperator vessel*
11. *Radial fan*
12. *Screw element*
13. *Inlet valve*
14. *Direct drive transmission*
15. *iPM motor*
16. *Integrated dryer*

How much can I save with the RMD IVR PM range?

Contact us for an energy audit. We will measure the air demand and energy consumption of your existing installation and generate a detailed report at the end. Based on your specific situation we can simulate and show how much your energy costs would reduce with a RMD IVR PM. If you would decide to invest in a RMD IVR PM, you can expect a typical payback of 1-2 years.

Technical data

	Max. Working Pressure	Min Free Air Delivery (7 bar)			Max Free Air Delivery *								
					7			9,5			12,5		
	Bar	m3/h	l/s	cfm	m3/h	l/s	cfm	m3/h	l/s	cfm	m3/h	l/s	cfm
RMD 45 IVR PM	4-13	108	30	64	547	152	322	486	135	286	407	113	239
RMD 55 IVR PM	4-13	104	29	61	662	184	390	587	163	345	493	137	290
RMD 75 IVR PM	4-13	101	28	59	792	220	466	698	194	411	590	164	347

* Unit performance measured according to ISO 1217, Annex C, latest edition
** Noise level measured according to ISO 2151 with optional baffle
All technical data for Aircooled machines without integrated dryer. For technical data of Watercooled machines or machines with integrated dryer, please contact your local salesforce.

	Motor Power		Noise Level **	Cooling Air Volume	Compressed Air output diameter	Weight	
	kW	hp	dB(A)	m3/h	“	kg	
RMD 45 IVR PM	45	60	69	6660	1”1/2	860	1060
RMD 55 IVR PM	55	75	71	11160	2”	880	1150
RMD 75 IVR PM	75	100	71	11160	2”	900	1170

Dimensions

	Length std mm	Length with dryer mm	Width mm	Height mm
RMD 45 - 75 IVR PM	1761	2611	1060	1630

Oil-injected screw compressors, direct driven, variable speed Range RMD IVR PM

MARK

- A high quality product offering you technology you can trust.
- Our products are easy to use and guarantee high reliability.
- Distributors are always nearby ensuring availability of both products and support.
- Choosing our high performance products entails a partnership that will boost your business.
- Safeguarding long-term productivity through optimal serviceability and use of original parts.

ORIGINAL PART

Care. Trust. Efficiency.

Care.
Care is what service is all about: professional service by knowledgeable people, using high-quality original parts.

Trust.
Trust is earned by delivering on our promises of reliable, uninterrupted performance and long equipment lifetime.

Efficiency.
Equipment efficiency is ensured by regular maintenance. Efficiency of the service organization is how Original Parts and Service make the difference.

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Contact your local Mark representative now!

www.mark-compressors.com