T O P P T R Y K L U F T A / S

MARK

Rotary Screw Compressor

RMF 110 - 132 - 160 kW

TECHNOLOGY YOU CAN TRUST

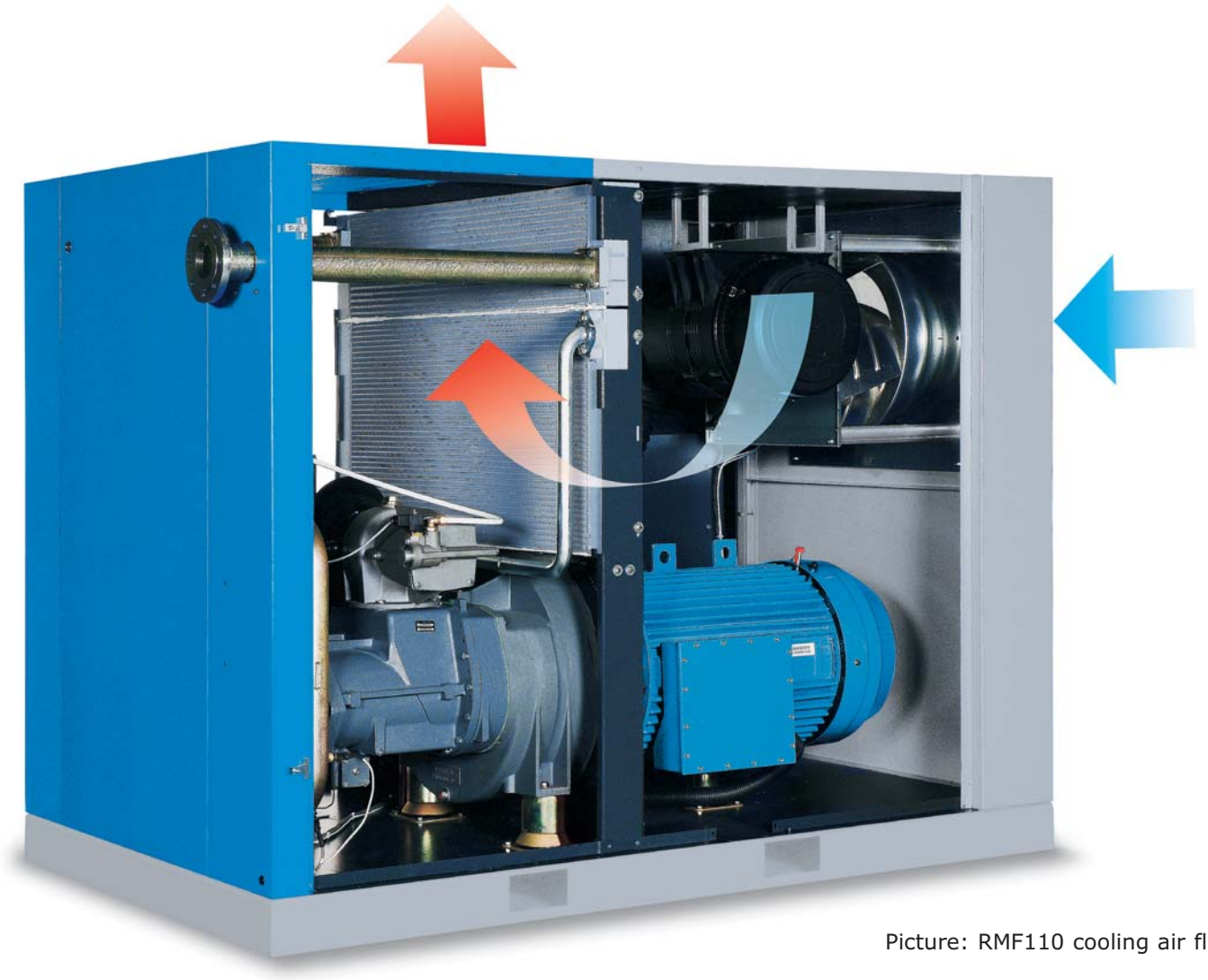
www.topptrykluft.dk

EN

The RMF Coaxial Rotary Compressor

High Performance
High Reliability
Low Maintenance

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



Picture: RMF110 cooling air flow

STANDARD EQUIPMENT

- Intake filter
- Capacity control device
- Screw compressor with asymmetrical profile rotors
- Direct drive with elastic coupling
- Self-aligning end cap
- 4-pole IP55 electrical motor, class F insulation
- Air/Oil separator
- Oil filter
- Air/Oil coolers
- Oil pressure regulating valve
- Star delta starter control panel
- Electronic controller
- Insulated sound cover

MARK

Reliable and functional

HIGH EFFICIENCY FILTRATION

Air filter. The highly efficient, robust air filter operates with a cyclonic action and maintains low leakage rates. This ensures better pump protection and high operational reliability by preventing harmful particles from entering the pump and oil circuit. The air to be compressed enters the air filter in the cold area for improved efficiency, and is then diverted through a duct to the suction valve.
To prevent damage in case of clogging, a safety device stops the unit.

ENERGY EFFICIENT VENTILATION

The RMF range is fitted with speed regulated EC (Electronic Commutation) turbines. The speed is automatically regulated to the cooling requirements of the machine.

This technology brings many benefits:

- Low noise level compared to a conventional fan.
- Increased energy savings, as the turbine is speed regulated to the cooling requirement.
- Turbine control of the oil temperature eliminates the need for a thermostatic valve, ensuring a constant temperature and reduced maintenance.

OPTIMISED AIR/OIL CIRCUIT

Large aluminium air and oil exchangers:
- Direct air flow from the turbine for improved efficiency
- Air outlet temperature never exceeds 10°C above ambient in maximum conditions.
- Vertically mounted for easy maintenance.

Vertical air/oil separator:
- Efficient, three-stage air/oil separation, (centrifugal/gravitational/coalescent).
- Quality of the separator filter ensures that residual oil content is less than 3 mg/m^3.

Rigid pipes and elastic coupling:
- Durability, reduced pressure drop, and leak free.

Regulation

AIRLOGIC® - the Electronic Control

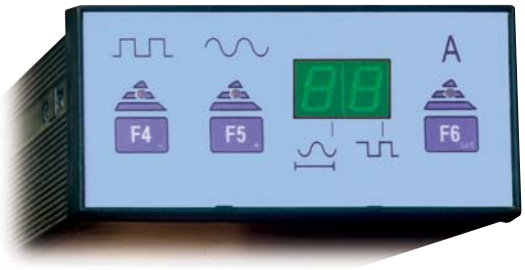
FUNCTIONS:
- Operating system configuration
- Weekly programme for two pressure fields
- Password access
- Automatic restart
- Remote control
- Fault report with a record of the last 10 cases
- Percentage calculation of operating times
- Multiple control
- Scheduled maintenance

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

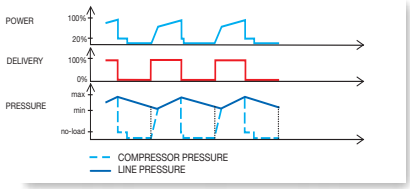
PROTECTS
- The motor by limiting the number of start-ups
- The compressor against oil overheating

Multicontrol (optional)

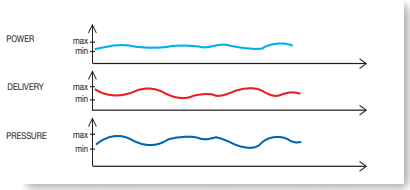


Multicontrol is a simple, reliable and flexible way to regulate the range of RMF compressors.
It controls air load, idling times and motor restarts, optimising the work cycle and preventing costly and unnecessary energy wastage.
Three operating modes can be selected to adapt to your specific air requirements:

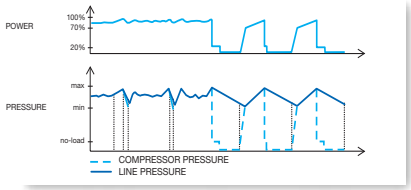
F4 INTELLIGENT ON/OFF CONTROL



F5 MODULATION



F6 AUTOMATIC CONTROL



RMF 160 IVR: variable speed

Typically up to 30% savings on your energy consumption can be achieved.
The fixed speed RMF 160 is also available in a variable speed variant (IVR). The inverter, located in the cubicle, regulates the speed of the main motor to adapt the air delivery to your exact requirement.
Check our IVR brochure and evaluate your potential savings.

Quality and efficiency

Options available for demanding environments

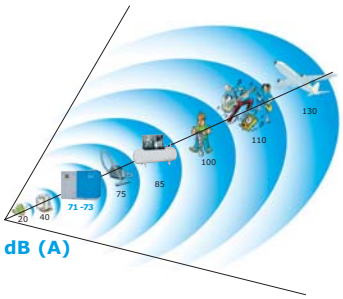
Special conditions require special care for your compressor. A carefully designed choice of optional features protect your machine or process when it is required: high efficiency external intake filter ①, dust filtration panels ②, water separator and automatic drain ③, oil heater.
An energy recovery option ④ has also been engineered for reduced operating costs.

① 

③ 

② 

④ 



Low noise level

Years of experience in design, use of selected components and advanced technology, have been the key to reach extremely low acoustic when compared with compressors of a similar size.
With noise levels as low as 71 dB(A) for RMF 110, the unit is compatible with most operating environments.

Energy savings

A high efficiency pump, optimum motor output, EC turbine ventilation and precise pressure band setting on the AIRLOGIC® are key features that minimize energy consumption of the RMF range.
A water cooled variant is also available for any model, including the RMF 160 IVR, our energy saving variable speed model. The cooling water flow can be utilised in a variety of heat recovery applications.

environmentally RMF friendly

Easy maintenance

Doors that open 180° and large removable panels offer easy access to all internal components, ensuring easy scheduled checks and fast routine maintenance. The careful location of components avoids the need for special tooling. The AIRLOGIC® monitors the condition of components and gives advanced warning of service operations as and when needed.

TECHNICAL DATA (IN ACCORDANCE WITH ISO 1217 AND CAGI PNEUROP PN8NTC2)

Type	bar	psi	HP	kW	m³/1′	m³/h	cfm	dB (A)	gas	L	W	H	Kg
RMF 110/7,5	7,5	108	150	110	20,2	1214	715	71	3″(DN 80)	2627	1490	1938	2455
RMF 110/8	8	116	150	110	19,5	1171	689	71	3″(DN 80)	2627	1490	1938	2455
RMF 110/10	10	145	150	110	17,2	1035	609	71	3″(DN 80)	2627	1490	1938	2455
RMF 110/13	13	188	150	110	13,6	818	481	71	3″(DN 80)	2627	1490	1938	2455
RMF 132/7,5	7,5	108	180	132	24,5	1470	865	72	3″(DN 80)	2787	1490	1938	2565
RMF 132/8	8	116	180	132	23,2	1392	819	72	3″(DN 80)	2787	1490	1938	2565
RMF 132/10	10	145	180	132	21,1	1265	745	72	3″(DN 80)	2787	1490	1938	2565
RMF 132/13	13	188	180	132	17,1	1025	603	72	3″(DN 80)	2787	1490	1938	2565
RMF 160/7,5	7,5	108	220	160	28,6	1717	1011	73	3″(DN 80)	2963	1610	1992	2830
RMF 160/8	8	116	220	160	27,3	1641	966	73	3″(DN 80)	2963	1610	1992	2830
RMF 160/10	10	145	220	160	24,8	1490	877	73	3″(DN 80)	2963	1610	1992	2830
RMF 160/13	13	188	220	160	20,5	1231	725	73	3″(DN 80)	2963	1610	1992	2830

Air cooled units

Sizes and weights without packaging.

Standard version:
- Power supply 400/3/50
- Air cooling system
- AIRLOGIC® controller
- Tank in conformance with ECC standards
- Other voltages and water cooled units available upon request

RMF 110

RMF 132

RMF 160

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

UNI EN ISO 9001: 2000

According to

UNI EN ISO 14001

MARK

ORIGINAL PART

SOLD AT

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