mattei®

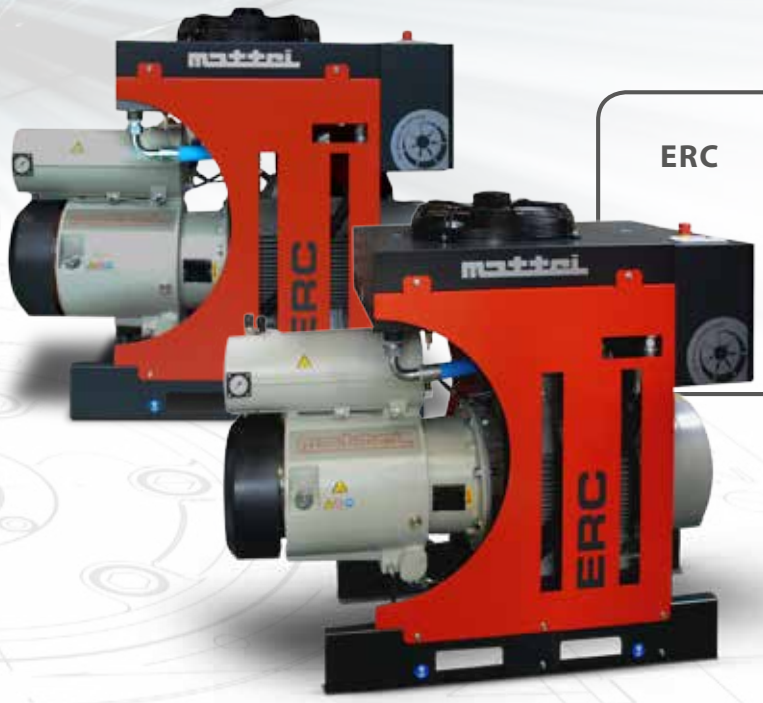
2000

English

SERIES

CLASSIC 30 - 55 kW

ROTARY VANE COMPRESSORS



ERC

THINK GREEN

SERIES
CLASSIC

About us

Ing. **Enea Mattei SpA** is an Italian company that has been producing air compressors since 1919. Over the years, the company has continually evolved and is today one of the world's foremost companies in the compressed air sector and the leader in the production of rotary vane compressors.

Behind the success of Mattei are the choice the company has made in terms of design, production and marketing, driven by the results of its continual and in-depth research and development programmes.

During these years of continual change, Mattei has been able to adapt to the requirements of the market and through the results of its research has created products that are always innovative and technologically advanced.

Certified quality

Quality as an integral part of all company functions and constant improvement of all production processes so as to always guarantee the maximum level of reliability and satisfaction. This, in brief, is the value and the meaning of **Mattei's** operational philosophy. A way of approaching the market and customers that makes **Mattei** an absolute point of reference in the compressed air sector.
Since 1994, **Mattei** has been operating with a Quality System certified by the DNV Institute under UNI EN ISO 9001 regulations.

PERFORMANCE, EFFICIENCY, QUALITY

Ideal for industrial use and 24 hour a day operation

The ERC 2000 series is equipped with an exclusive state-of-the-art computerised controller, Maestroxs. This system automatically controls, monitors and programmes the unit's operation, and can be connected to a PC for a remote control. If connected to other compressed air packages equipped with Maestroxs, the unit can become master of a compressed air plant, thus saving on the installation of a superior controller. Maestroxs can be interfaced via web or cellular technology to provide remote service monitoring.

Direct coupling

Mattei has always produced compressors in wich the eletric motor, which turns at a speed of only 1,500 rpm, is directly coupled to the compression unit by means of a flexible joint. This direct, in-line coupling results in considerable energy saving as there are no losses due to the presence of pulley wheels and drive belts.

Reliability

Maestroxs hardware has been specifically designed for industrial use and has been tested in the worst operating conditions.

Programming

There are two levels of programming:
- Basic: to best adapt the compressor performance to the customer's needs;
- Advanced: with access code for more complex controls on operating functions.

AIR cooling

The coolers guarantees air temperatures no higher than 11 °K above room temperature.

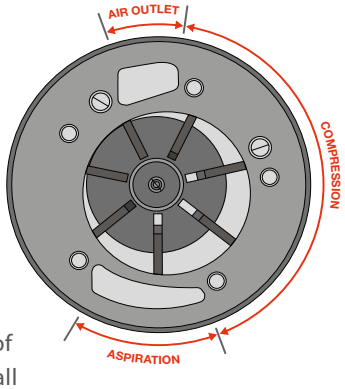
Energy Consumption

Thanks to the meticulous design, the compressor has one of the lowest energy consumption per cubic metre of delivered air rates. The regulation system, allowing to choose between continuous or automatic with off-load operation, is standard on each machine and allows to adapt operation to the needs of the customer.

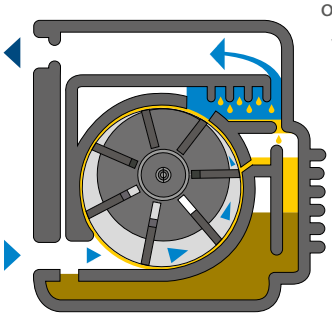
Automatic flow rate control

As well as the classic "ON/OFF OPERATION" mode, all of the models, are fitted with the special modulating proportional intake valve which allows air supply at a constant pressure and even offers the possibility of working without an air storage tank.

Operating principle



Maximum efficiency of the air compression process, excellent reliability and low running costs; are just some of the key benefits that rotary vane technology can offer.
The vane compressor is a volumetric rotary compressor that consists of a stator cylinder in wich a rotor is mounted off-centre but parallel to its sides.
The rotor has slots in wich the vanes are free to slide: centrifugal force keeps them in contact with the sides of the stator during rotation. The rotary vane compressor, thanks to its **simple construction**, offers remarkable advantages, first among them being **greater volume yield** because the vanes are in constant contact with the inner wall of the stator and form a perfectly airtight seal with no leaks along the wall thanks to a continuous film of oil. In this type of compressor no axial thrust is generated so the side surfeces of the rotor are not subject to wear and thus no rotating bearings or thrust bearings are needed. The vanes, too, because of the special way they are made have practically **unlimited life.** Behind the success of Mattei compressors there is thus **extreme reliability, long life, quiet operation and simplicity of maintenance.** Design is important too: compactness and clean lines, together with harmonious shapes, give Mattei compressors an image of robustness and ease of use.

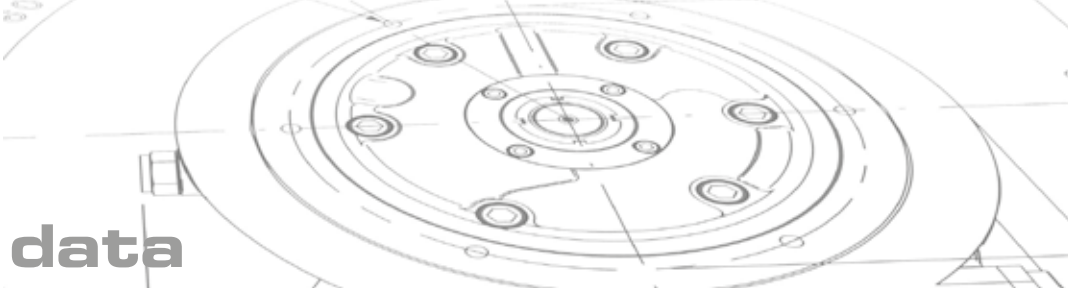


Features

- DIRECT COUPLING THROUGH FLEXIBLE JOINT
- OIL RADIATOR AND CENTRIFUGAL COOLING FAN
- AIR DELIVERY AUTOMATIC CONTROL WITH CONSTANT PRESSURE
- THERMO DYNAMICALLY BALANCED INLET AIR FLOW TO ENSURE MAXIMUM EFFICIENCY OF THE COMPRESSOR
- THERMOSTATIC VALVE ENSURES OPTIMUM OPERATING TEMPERATURE AND ENERGY EFFICIENCY

Standard equipment

- SAFETY THERMOSTAT FOR HIGH OIL TEMPERATURE
- ON BOARD MANOMETER
- VISUAL OIL LEVEL INDICATOR
- FIRST FILLING WITH "ROTOROIL F2" OIL
- HIGH EFFICIENCY INTAKE FILTER
- AFTERCOOLER



Technical data

50 Hz

Model	8 bar 115 psig L		10 bar 150 psig H		13 bar 175 psig HH		Sound pressure level	Power		Tension	Length		Width		Height		Weight	
	m^3/min	cfm	m^3/min	cfm	m^3/min	cfm	dB(A)	kW	hp	V/f	mm	inch	mm	inch	mm	inch	kg	lbs
ERC 30	5,62	198,4	4,67	164,9	3,67	129,6	84	30	40	400/3	1620	63,8	770	30,3	1340	53	650	1430
ERC 37	6,8	240,1	5,65	199,5	4,8	169,5	84	37	50	400/3	1620	63,8	770	30,3	1340	53	725	1595
ERC 45	8,28	292,4	7	247,2	5,85	206,6	84	45	60	400/3	1620	63,8	770	30,3	1340	53	755	1661
ERC 55	-	-	8,9	314,3	7,1	250,7	84	55	75	400/3	1620	63,8	770	30,3	1340	53	760	1672
ERC 30 R	5,62	198,4	4,67	164,9	3,67	129,6	84	30	40	400/3	1620	63,8	770	30,3	1340	53	670	1477
ERC 37 R	6,8	240,1	5,65	199,5	4,8	169,5	84	37	50	400/3	1620	63,8	770	30,3	1340	53	745	1642
ERC 45 R	8,28	292,4	7	247,2	5,85	206,6	84	45	60	400/3	1620	63,8	770	30,3	1340	53	775	1708
ERC 55 R	-	-	8,9	314,3	7,1	250,7	84	55	75	400/3	1620	63,8	770	30,3	1340	53	780	1719

60 Hz

Model	8 bar 115 psig L X		10 bar 150 psig HX		13 bar 175 psig HHX		Sound pressure level	Power		Tension	Length		Width		Height		Weight	
	m^3/min	cfm	m^3/min	cfm	m^3/min	cfm	dB(A)	kW	hp	V/f	mm	inch	mm	inch	mm	inch	kg	lbs
ERC 30	6	211,9	5,7	201,3	4,9	173	86	30	40	460/3	1620	63,8	770	30,3	1340	53	650	1430
ERC 37	7,4	261,3	6,9	243,6	5,85	206,6	86	37	50	460/3	1620	63,8	770	30,3	1340	53	725	1595
ERC 45	9,9	349,6	8,7	307,2	7,2	254,2	86	45	60	460/3	1620	63,8	770	30,3	1340	53	755	1661
ERC 30 R	6	211,9	5,7	201,3	4,9	173	86	30	40	460/3	1620	63,8	770	30,3	1340	53	670	1477
ERC 37 R	7,4	261,3	6,9	243,6	5,85	206,6	86	37	50	460/3	1620	63,8	770	30,3	1340	53	745	1642
ERC 45 R	9,9	349,6	8,7	307,2	7,2	254,2	86	45	60	460/3	1620	63,8	770	30,3	1340	53	775	1708

F.A.D. in accordance with ISO 1217, annex "C"
Sound pressure level according to ISO 2151, tolerance ± 3dB(A).
Working pressure: 7,5 bar for version 8 bar - 9,5 bar for version 10 bar - 12,5 bar for version 13 bar

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UNI EN ISO 9001:2015

REV.0

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