



## 1000 ERC-AC Series

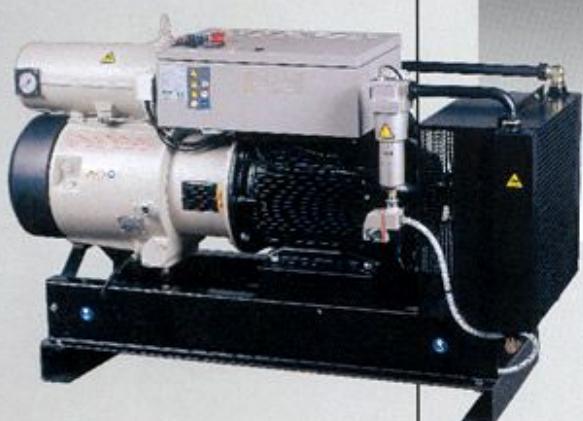


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## Technology

### Operation principle

The air is sucked in through a filter and passes through the modulating valve which adjusts the rate of flow according to requirements. The air enters a compression chamber comprising a stator and a rotor, the latter being fitted eccentrically to the former. The rotor is fitted with mobile vanes (in special grooves) which, due to the centrifugal force of the rotor, slide to create variable sectors in which the air is compressed as the volume decreases. The vanes, held against the wall of the stator by centrifugal force, slide over a fine film of oil which reduces wear and offers a perfect seal for the compressed air.



## Compact-Versatile-Silent Running

The 1000 series of Mattei rotary vane compressors, with rated power from 1.1 to 15.0 kW, is the perfect solution for the compressed air requirements of small and medium-sized companies. In addition to standard or silenced AC versions, they feature automatic control of air flow at constant pressure. Together with compact design and ease of installation, the series offers long-term performance.



### Air/Oil Separation



The three-stage system for separating the oil from the air assures the residue oil level in the compressed air remains lower than 3 ppm. This system offers low oil consumption and a

longer lifetime of the coalescence air/oil separation filters.

### No Maintenance (There are no bearings)



Unlike other compressors, the absence of axial thrust in the Mattei vane compressors eliminates the need for rotating bearings. This allows

Mattei compressors to enjoy very long and inexpensive maintenance intervals.

### Direct Coupling

A flexible joint between the motor and the compressor ensures perfect alignment, silent running, low revs (just 1500 rpm<sup>1</sup>), no power loss and no maintenance.

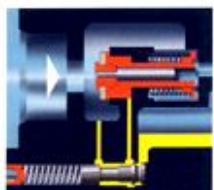


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vels ranging from 15 to 22 kW, is the um industries. Available in the ERC instant pressure and an aftercooler. reliable service and constant



#### Automatic Flow Control



The special proportioning and modulating intake valve fitted to Mattei compressors allows the compressor to work without a receiver: when the maximum required pressure is reached, the intake valve closes to reduce the quantity of intake air, thus keeping pressure constant. When the line pressure starts getting low, the valve automatically opens to keep pressure constant.

#### Control panel

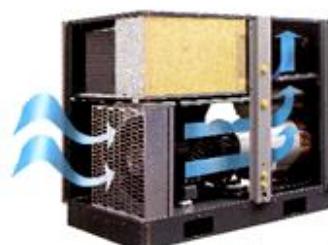


##### ERC Version.

The control panel is simple and functional: it includes an hour-meter, on and off buttons, the selection for automatic or continuous operation, and the emergency stop button. It is also equipped with different automatic safety devices and is predisposed for remote control connection.

#### MAESTRO (for AC version only).

Maestro is a programmable electronic control unit which adapts compressor operation to the requirements of the air distribution system it is connected to. It also analyses operation and records faults. The various programming and analysis levels are protected by digital codes to prevent unintentional access. Maestro is fitted with a memory device which stores settings and operating data even if the control unit is not powered. It is fitted with the following interfaces:  
RS485 for communicating with other "Maestro" units.  
RS485 (optional) for communicating with a supervisor PC.



#### Air/Flow and Cooling

The airflow produced by the axial fan, keyed to the secondary shaft of the main motor, cools the air and oil in the aluminium radiators.

## TECHNICAL SPECIFICATION

50 Hz L = 8 bar H = 10 bar HH = 13 bar  
 60 Hz LX = 8 bar HX = 10 bar

Model	ERC 1015 AC 15			ERC 1018 AC 18			ERC 1022 AC 22			
Version	L	H	HH	L	H	HH	L	H	HH	
Free air delivery*	m <sup>3</sup> /min	2,7	2,2	1,87	3,28	2,64	2,26	3,75	3,2	2,57
Version	LX	HX	-	LX	HX	-	LX	HX	-	
Free air delivery*	m <sup>3</sup> /min	3,01	2,65	-	3,67	3,18	-	3,95	3,6	-
Electric motor	kW	15			18,5			22		
ERC	Sound pressure level dB(A)**	50 Hz	79		79		79			
		60 Hz	81		81		81			
AC	Sound pressure level dB(A)**	50 Hz	70		70		70			
		60 Hz	72		72		72			

\* Free air delivery as per ISO 1217: 1996 annex "C"

\*\* Sound pressure level as per PN8NTC2.3

## DIMENSIONS (mm)

ERC	A	B	C	Weight (Kg)	AC	A	B	C	Weight (Kg)
1015	1450	542	800	305	15	1510	800	1200	445
1018	1450	542	890	305	18	1510	800	1200	445
1022	1450	600	890	310	22	1510	800	1200	450

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Since 1994 Mattei operates with UNI EN ISO 9001 Quality System Certification