



# 1000

ERC-AC Series



## 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 1000W, are the perfect solution for the compressed air requirements of small and medium-sized enterprises. In AC 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)



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  
nstant pressure and an aftercooler.  
: reliable service and 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.

### 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.

## 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			
	L	H	HH	L	H	HH	L	H	HH	
Version										
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										
Free air delivery*	m <sup>3</sup> /min	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		

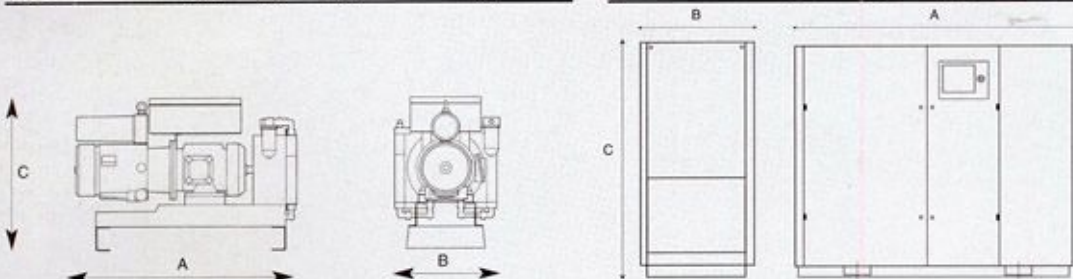
\* Free air delivery as per ISO 1217: 1996 annex "C"

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

## DIMENSIONS (mm)

ERC	A	B	C	Weight (Kg)
1015	1450	542	800	305
1018	1450	542	890	305
1022	1450	600	890	310

AC	A	B	C	Weight (Kg)
15	1510	800	1200	445
18	1510	800	1200	445
22	1510	800	1200	450



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MI - J - C3004 - Studio E. Guerin & C.

**ITALY**  
**ING. ENEA MATTEI SpA**  
 Strada Padana Superiore, 307  
 20090 VIMODRONE (Milano)  
 Tel +39 02253051 (16 linee) Fax +39 0225305243  
 E-MAIL: info@mattei.it  
 www.matteiaircompressors.com

**SINGAPORE** Representative Office Asia Pacific  
**ING. ENEA MATTEI SpA**  
 No. 2 Kallang Pudding Road  
 #06-10, Mactech Industrial Building  
 Singapore 349307  
 Phone +65 6741 8187 - Fax. +65 6741 6826  
 E-MAIL: mattei@singnet.com.sg

**GREAT BRITAIN**  
**MATTEI COMPRESSORS Ltd**  
 Admington Lane, Admington  
 Shipston-on-Stour - Warwickshire CV36 4JJ  
 Phone +44 1789 450577 - Fax +44 1789 450698  
 E-MAIL: info@mattei.co.uk

**FRANCE**  
**MATTEI COMPRESSEURS Sarl**  
 Parc des Tuileries - 22 Rue de Derrière la Montagne  
 BP 215 - 77646 Chelles Cedex  
 Phone +33 1 60081212 - Fax +33 1 60085252  
 E-MAIL: info@mattei.fr

**GERMANY**  
**MATTEI KOMPRESSOREN**  
 Deutschland GmbH  
 Schüttelgrabenring 3b, Haus 3 - 71332 Waiblingen  
 Phone +49 7151 5002560 - Fax +49 7151 5002565  
 E-MAIL: info@mattei-kompressoren.de

**U.S.A.**  
**MATTEI COMPRESSORS Inc**  
 9635 Liberty Road, Suite E-J  
 Randallstown, MD 21133  
 Phone +1 410 5217020 - Fax +1 410 5217024  
 E-MAIL: info@matteicomp.com



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