



English

SERIES  
**AIR CENTRE 30 - 45 kW**

ROTARY VANE COMPRESSORS



- AC
- AC R
- AC W
- AC PLUS
- AC R PLUS
- AC W PLUS

# SERIES AIR CENTRE



## 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 choices 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.





## Rotary vane compressors

### Series AIR CENTRE

- ▶ The AC 2000 Series offers a flexible choice of setup. The basic version of the AC 2000 series differentiates itself and stands out for the absence of an independent electrically driven fan. The cooling of the compressed air system is guaranteed by a fan directly mounted on the main motor's shaft. This solution is not only extremely essential in design but also energy effective, since the electric motor of the fan has been eliminated.
- ▶ For those applications in which environmental awareness is at its highest, Mattei offers the version equipped with a centrifugal fan. In fact, this solution offers an extremely reduced sound level, amongst the lowest in its category.

- ▶ The new design is essential and combines compactness, occupying minimal space, and excellent accessibility to all components, of great advantage for an easy and quick maintenance.



#### Efficiency

Mattei's exclusive high technology airends have been reengineered to deliver even better performances in industrial applications. Reliability and efficiency are enhanced by the airend's extremely reduced rotational speed only 1500 rpm.

#### Simple and economic maintenance\*

Maintenance operations only include changing the oil at predetermined intervals, cleaning or replacing the air filter and cleaning the radiator. The separator filters are substituted every 10,000 working hours, with significant savings. The absence of roller bearings helps to reduce significantly the cost for maintenance.

#### Energy saving

The range is equipped with energy saving electric motors. The electric motor is directly coupled to the airend, allowing great advantages in overall efficiency of the compressed air unit, meaning less kW per m<sup>3</sup>/min.

#### Direct coupling

The electric motor and the compressor are coupled directly by means of flexible coupling and turn at only 1500 rpm. Direct coupling determines a remarkable "energy saving" because there are no energy losses caused by gears or V belts.

#### Blades designed for over 100,000 hours life\*

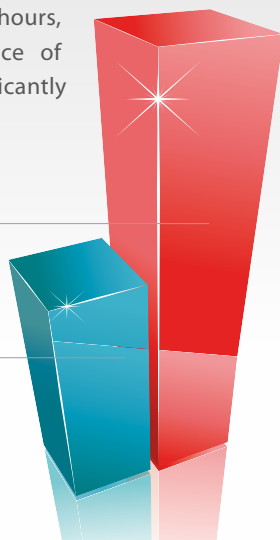
An oil film on the stator's inside surface prevents the moving parts from wearing out by avoiding a direct contact with the blades.

OTHER COMPRESSORS

MAINTENANCE

MATTEI'S COMPRESSORS

MAINTENANCE



\*with Mattei Rotoroil

## Operational mode

### Modulation operating mode at constant pressure

Thanks to a modulating proportional intake valve that supplies air at constant pressure, these compressors can even work without a receiver. With this regulation air delivery is automatically adapted to the system demand.

### Combined ON/OFF load and modulation regulation

This regulation allows Mattei compressors to modulate within a set pressure range (for example,  $\pm 0.3$  bar). Should the air demand decrease, this regulation also allows the compressor to run off load and stop, with evident energy savings.

### Energy saving automatic on load / off load

This regulation maintains the line pressure within a range of minimum and maximum pressure set by the pressure switch and the compressor may stop and restart according to air demand.

When the line pressure reaches the minimum value the compressor will run on load delivering 100% of its capacity. When the pressure reaches the maximum value the compressor will run off load with the immediate closure of the intake valve, which sets off the rapid decompression phase, allowing a significant reduction of the absorbed power consumption. Should the pressure continue to remain high, the compressor will stop.



## PLUS VERSION

### Dryer with ecological gas

The plus version includes the integrated installation of a direct expansion refrigeration dryer, which is air cooled and filled with environmentally friendly gas. The combination of a Mattei rotary vane air compressor with an integrated dryer and where applicable mounted on an air receiver is the ideal solution for a complete and compact system.

- ▶ Efficient refrigerating power partialization
- ▶ Constant dewpoint
- ▶ MAESTRO<sup>XS</sup> control
- ▶ High efficiency



## MAESTRO<sup>XS</sup>

### To have everything under control

The AC 2000 series is equipped with an exclusive state-of-the-art computerised controller, Maestro<sup>XS</sup>. 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 Maestro<sup>XS</sup>, the unit can become master of a compressed air plant, thus saving on the installation of a superior controller. Maestro<sup>XS</sup> can be interfaced via web or cellular technology to provide remote service monitoring.



# Technical data

## 50 Hz

Model	Tension	Air receiver	Power		Flow						Sound pressure level	Dimensions						Weight	
					8 bar 115 psig L		10 bar 150 psig H		13 bar 175 psig HH			Length		Width		Height			
	V/f	l	kW	hp	m <sup>3</sup> /min	cfm	m <sup>3</sup> /min	cfm	m <sup>3</sup> /min	cfm	dB(A)	mm	inch	mm	inch	mm	inch	kg	lbs
AC 30	400/3	-	30	40	5,62	198,4	4,67	164,9	3,67	129,6	66	1830	72,1	960	37,8	1670	65,8	800	1760
AC 37	400/3	-	37	50	6,8	240,1	5,65	199,5	4,8	169,5	66	1830	72,1	960	37,8	1670	65,8	830	1826
AC 45	400/3	-	45	60	8,28	292,4	7	247,2	5,85	206,6	66	1830	72,1	960	37,8	1670	65,8	940	2068
AC 30 PLUS	400/3	-	30	40	5,62	198,4	4,67	164,9	3,67	129,6	66	1830	72,1	960	37,8	1670	65,8	900	1980
AC 37 PLUS	400/3	-	37	50	6,8	240,1	5,65	199,5	4,8	169,5	66	1830	72,1	960	37,8	1670	65,8	930	2046
AC 45 PLUS	400/3	-	45	60	8,28	292,4	7	247,2	5,85	206,6	66	1830	72,1	960	37,8	1670	65,8	1040	2288
AC 30 R	400/3	-	30	40	5,62	198,4	4,67	164,9	3,67	129,6	66	1830	72,1	960	37,8	1670	65,8	820	1804
AC 37 R	400/3	-	37	50	6,8	240,1	5,65	199,5	4,8	169,5	66	1830	72,1	960	37,8	1670	65,8	850	1870
AC 45 R	400/3	-	45	60	8,28	292,4	7	247,2	5,85	206,6	66	1830	72,1	960	37,8	1670	65,8	960	2112
AC 30 R PLUS	400/3	-	30	40	5,62	198,4	4,67	164,9	3,67	129,6	66	1830	72,1	960	37,8	1670	65,8	920	2024
AC 37 R PLUS	400/3	-	37	50	6,8	240,1	5,65	199,5	4,8	169,5	66	1830	72,1	960	37,8	1670	65,8	950	2090
AC 45 R PLUS	400/3	-	45	60	8,28	292,4	7	247,2	5,85	206,6	66	1830	72,1	960	37,8	1670	65,8	1060	2332
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AC 37 W PLUS	400/3	-	37	50	6,8	240,1	5,65	199,5	4,8	169,5	66	1830	72,1	960	37,8	1670	65,8	950	2090
AC 45 W PLUS	400/3	-	45	60	8,28	292,4	7	247,2	5,85	206,6	66	1830	72,1	960	37,8	1670	65,8	1060	2332

## 60 Hz

AC 30	460/3	-	30	40	6	211,9	5,7	201,3	4,9	173	68	1830	72,1	960	37,8	1670	65,8	800	1760
AC 37	460/3	-	37	50	7,4	261,3	6,9	243,6	5,85	206,6	68	1830	72,1	960	37,8	1670	65,8	830	1826
AC 45	460/3	-	45	60	9,9	349,6	8,7	307,2	7,2	254,2	68	1830	72,1	960	37,8	1670	65,8	940	2068
AC 30 PLUS	460/3	-	30	40	6	211,9	5,7	201,3	4,9	173	68	1830	72,1	960	37,8	1670	65,8	900	1980
AC 37 PLUS	460/3	-	37	50	7,4	261,3	6,9	243,6	5,85	206,6	68	1830	72,1	960	37,8	1670	65,8	930	2046
AC 45 PLUS	460/3	-	45	60	9,9	349,6	8,7	307,2	7,2	254,2	68	1830	72,1	960	37,8	1670	65,8	1040	2288
AC 30 R	460/3	-	30	40	6	211,9	5,7	201,3	4,9	173	68	1830	72,1	960	37,8	1670	65,8	820	1804
AC 37 R	460/3	-	37	50	7,4	261,3	6,9	243,6	5,85	206,6	68	1830	72,1	960	37,8	1670	65,8	850	1870
AC 45 R	460/3	-	45	60	9,9	349,6	8,7	307,2	7,2	254,2	68	1830	72,1	960	37,8	1670	65,8	960	2112
AC 30 R PLUS	460/3	-	30	40	6	211,9	5,7	201,3	4,9	173	68	1830	72,1	960	37,8	1670	65,8	920	2024
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F.A.D. in accordance with ISO 1217, annex "C" | Sound pressure level according to ISO 2151, tolerance  $\pm 3$ dB(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 9001:2008**

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