



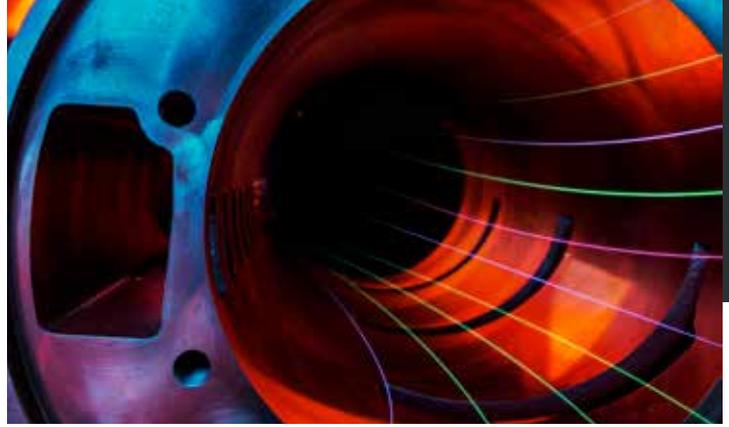
# BLADE

BRINGING YOU THE FUTURE TODAY



**BLADE 8 - 12**

DIRECT COUPLING



## Mattei: over 90 years of research and reliability

Ing. Enea Mattei SpA is an Italian company that has been manufacturing air compressors since 1919. Since then the company has continually evolved and is now 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. Mattei's vision and interpretation of industry's changing needs, has consistently created innovative and technologically advanced products.



## Mattei MyCare 6



With Blade 8-12 you can benefit from the new **MyCare 6** extended warranty plan, this provides cover for 6-years of service assistance and any repair required.

Carrying out regular and correct maintenance is the simplest and best way to ensure your compressor continues to perform reliably and efficiently, avoiding faults and energy wastage. Mattei's Service Centres employ qualified service engineers and carry specific tooling and original spare parts for maintenance operations.

**GET MYCARE 6 PLAN.** You will benefit from monetary savings and a defined cost for easier budget planning.

## MATTEI ORIGINAL SPARE PARTS

**Mattei Original Spare Parts** and **Mattei lubricants** are made to very high design standards and conform to exact technical specifications. Only Mattei original spare parts allow you to be sure of maintaining, over time, the same levels of performance, reliability and safety of your Mattei product.

- ▶ Mattei Original Spare Parts are crucial to ensure the efficiency of your compressed air equipment
- ▶ Parts are always available in stock
- ▶ They are quality tested and conform to manufacturer's specifications
- ▶ Parts are designed for Mattei's recommended maintenance intervals

## BLADE 8 - 12

The **BLADE 8-12** compressor range, with powers **from 7,5 to 11 kW**, is the ideal solution for the needs of small and medium sized companies as well as artisan businesses.

The rotary vane technology ensures high quality compressed air, an extremely compact airoend and low noise levels. All combined with undisputed product reliability for any application.

When compared to other compressors the BLADE's very low rotational speed, a distinctive feature of a Mattei compressor, means more air, greater reliability, reduced energy consumption and quiet operation.

Available in the silenced **BLADE**, **BLADE E** (with dryer kit), **BLADE S** (on receiver) and **BLADE SE** (on receiver with dryer kit) versions, they feature automatic control of air flow at constant pressure and an aftercooler.



- |    |                                     |
|----|-------------------------------------|
| 1. | FLEXIBLE COUPLING                   |
| 2. | MAESTRO <sup>XB</sup> CONTROLLER    |
| 3. | RADIATOR                            |
| 4. | VALVES ASSEMBLY                     |
| 5. | ROTOR-STATOR ASSEMBLY               |
| 6. | OIL FILTER AND OIL SEPARATOR FILTER |
| 7. | MOTOR                               |

# BLADE 8 - 12

## 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.

## A USER-FRIENDLY CONTROLLER



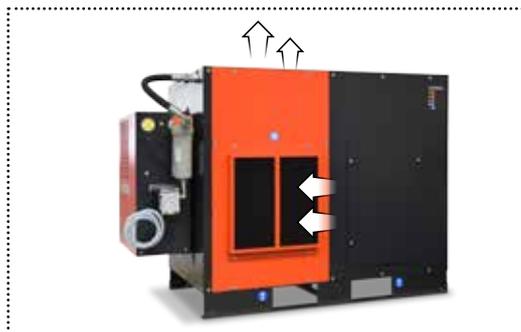
**Maestro<sup>XB</sup>** is a programmable controller which regulates the operation of the compressor to suit the specific requirements of the air distribution system. It has different programming levels and special options for controlling and analysing the operation and faults.

## EASIER MAINTENANCE



BLADE 8-12 has been designed in a way that makes it possible **to replace the elastic element** without having to dismantle the rotor-stator unit.

## IMPROVED COOLING



Cooling is an important factor during the compressed air production process, as it helps to increase system efficiency and reliability. **The new Blade 8-12 is equipped with an electric fan with an integrated inverter.** The rotation speed of the cooling fan adapts itself to the working conditions and the environment, optimizing performance and allowing safe operation up to an ambient temperature of + 46 °C.

## MAXIMUM ENERGY EFFICIENCY



When there is no air demand for short periods of time, the on/off load valve allows the compressor to **significantly reduce its internal pressure thereby reducing energy consumption to a minimum**, without having to stop the compressor. The number of stops and subsequent starts is therefore reduced, which **helps increase the life span of the compressor and its electric motor**.

## RELIABILITY AND LONGEVITY



Mattei airends rotate slower than other types of compressors and their blades slide frictionless on a thin film of oil which ensures complete reliability. Mattei machines also have fewer moving parts than other compressors and as the rotor runs on bushes, it has a **virtually unlimited lifespan**.

## HIGH QUALITY COMPRESSED AIR



The separation of the oil from air is carried out in several stages and allows an **exceptionally low oil carryover**. After the compression cycle the air-oil mixture reaches the separator tank, most of the lubricant is collected here due to the change in air speed and the cyclonic action as it enters the tank. The air with the remaining oil residue is then filtered in the coalescing separator. The complete system ensures that the residual oil content is less than 3 mg/m<sup>3</sup> of air, the over-sized separator element and the quality of the materials used guarantee longer working hours.

## STRESS-FREE START-UP



Motor **soft-starter** allows a reduction of the load and torque in the power train and electrical current surge of the motor during start-up. This reduces the mechanical stress on the motor and shaft, as well as the electrodynamic stresses on the attached power cables and electrical distribution network, extending the lifespan of the system.

# BLADE 8 - 12

## BLADE

The design and operation of BLADE compressors ensures the correct operating temperature is quickly and effectively reached.

This is important in order to extend the operating life by preventing condensation from forming in the system.

- ▶ IE3 MOTOR, IE4 MOTOR OPTION ALSO AVAILABLE
- ▶ ROTARY VANE TECHNOLOGY
- ▶ MAXIMUM RELIABILITY
- ▶ EFFICIENT
- ▶ LOW MAINTENANCE COSTS
- ▶ QUIET
- ▶ COMPACT
- ▶ OPERATING PRESSURES FROM 8 TO 10 BAR

## OPERATIONAL MODE

The BLADE 8-12 compressor series have state-of-the-art electronic control devices to automatically control the compressor operating states.

### “Continuous” mode

The compressor supplies air that falls within a pressure minimum and maximum. When the maximum pressure is reached, the compressor is placed “under vacuum” and decompressed to reduce the absorption of energy, and the intake valve closes. When the line pressure lowers to the minimum set, the compressor is “loaded” and instantly recovers delivery.

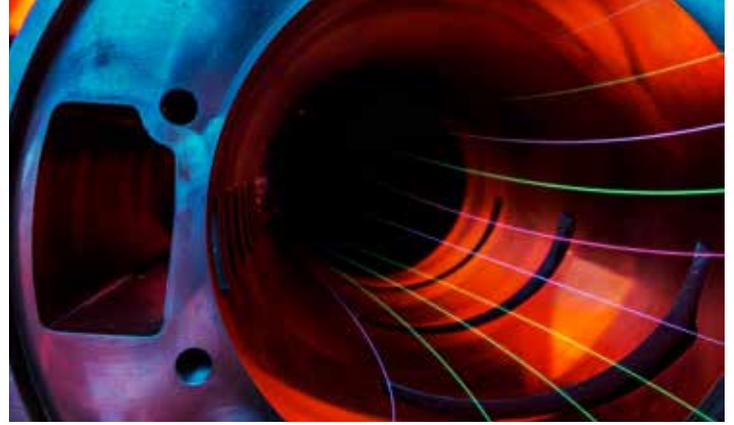
### “Automatic” mode

This allows the compressor to work continuously with the additional possibility of automatically stopping in the absence of required air.

### “Modulation” mode

A feature of the Mattei rotary compressors is that the airflow is adjusted and adapted to the network requests by the hydraulic control system that is integrated into the intake valve and done using a servo valve. The compressor has a maximum pressure, set by the servo valve regulation system, to which air is no longer delivered. For pressures below the maximum, in a range of 0.3 bar, the compressor delivers a variable and continuous flow corresponding to the network request. For lower pressures, the compressor delivers maximum capacity.





Model	8 bar 115 psig L		10 bar 150 psig H		Sound pressure level db(A)	Power		Air receiver l	Length		Width		Height		Weight	
	m³/min	cfm	m³/min	cfm		kW	hp		mm	inch	mm	inch	mm	inch	kg	lbs
<b>400 / 50 / 3</b>																
<b>BLADE 8</b>	1,21	43	0,995	35	65	7,5	10	-	1180	46,5	760	29,9	990	39	270	595
<b>BLADE 12</b>	1,70	60	1,37	49	65	11	15	-	1180	46,5	760	29,9	990	39	308	679
<b>BLADE S 8</b>	1,21	43	0,995	35	65	7,5	10	270	1560	61,4	760	29,9	1610	63,4	358	789
<b>BLADE S 12</b>	1,70	60	1,37	49	65	11	15	270	1570	61,8	760	29,9	1610	63,4	396	873
<b>BLADE E 8</b>	1,21	43	0,995	35	65	7,5	10	-	1410	55,5	790	31,1	990	39	303	668
<b>BLADE E 12</b>	1,70	60	1,37	49	65	11	15	-	1410	55,5	810	31,9	990	39	346	763
<b>BLADE SE 8</b>	1,21	43	0,995	35	65	7,5	10	270	1490	58,7	790	31,1	1610	63,4	385	849
<b>BLADE SE 12</b>	1,70	60	1,37	49	65	11	15	270	1490	58,7	810	31,9	1610	63,4	428	944
<b>400 / 60 / 3</b>																
<b>BLADE 8</b>	1,12	40	1,10	39	66	7,5	10	-	1180	46,5	760	29,9	990	39	270	595
<b>BLADE 12</b>	1,62	57	1,49	53	66	11	15	-	1180	46,5	760	29,9	990	39	308	679
<b>BLADE S 8</b>	1,12	40	1,10	39	66	7,5	10	270	1560	61,4	760	29,9	1610	63,4	358	789
<b>BLADE S 12</b>	1,62	57	1,49	53	66	11	15	270	1570	61,8	760	29,9	1610	63,4	396	873
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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

## BLADE E equipped with dryer and BLADE SE on 270-litre receiver with dryer

Extremely compact, simple and inexpensive to install. Ideal for clean and dry compressed air.

The dryer module outside the compressor allows to work efficiently even in environments with high temperatures (46°C).





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UNI EN ISO 9001:2015

