

MASIA

Compressors

SINCE 1987

ALL IN ONE SERIES MNA



HIGH EFFICIENCY SCREW AIR
COMPRESSORS

7.5 KW | 15 KW

10 HP | 20 HP

www.masiacompressors.com

ABOUT MASIA



MASIA has implemented vertical integration with world-class technical, production, commercial, logistics, and organizational processes. This robust value chain, reinforced by a customer-focused strategy, drives sustained success in delivering cutting-edge products and services. These innovative solutions meet the highest quality and technology standards in the industry.

Masia Compressors is on an upward trajectory to become a leading manufacturer and supplier of integrated solutions for air compression and treatment across critical industrial sectors. With a robust portfolio encompassing compressors, treatment equipment, distribution, storage systems and parts, we position ourselves as future leaders in supporting the most demanding environments.

By offering value-added services and prioritizing performance and reliability, we establish strategic partnerships and reinforce our role as an essential ally enabling industries to optimize production.

MASIA

Group

SINCE 1987



ABOUT MASIA



Founded in 1987 as a pioneer in automation and control technology in Latin America, Masia underwent a significant transformation after entering the North American market in 2007. In this new phase, the company represented leading equipment brands for compressed air generation and treatment, delivering innovative solutions across Latin America countries.

Further expanding in 2014, Masia leveraged over 35 years of compressed air engineering expertise to launch in-house product development. Initiating operations in Venezuela, the company offered high-quality compressors, integrated systems and specialized industrial sector services.

This innovative vision has since established Masia as a global industry benchmark. With an international footprint spanning Mexico, Colombia, Brazil, Venezuela, Europe, and a widespread distributor network, the company is now positioned as a strategic partner for optimizing production at large and medium enterprises worldwide.



100.000 m²
Manufactures



83 Countries
Exports

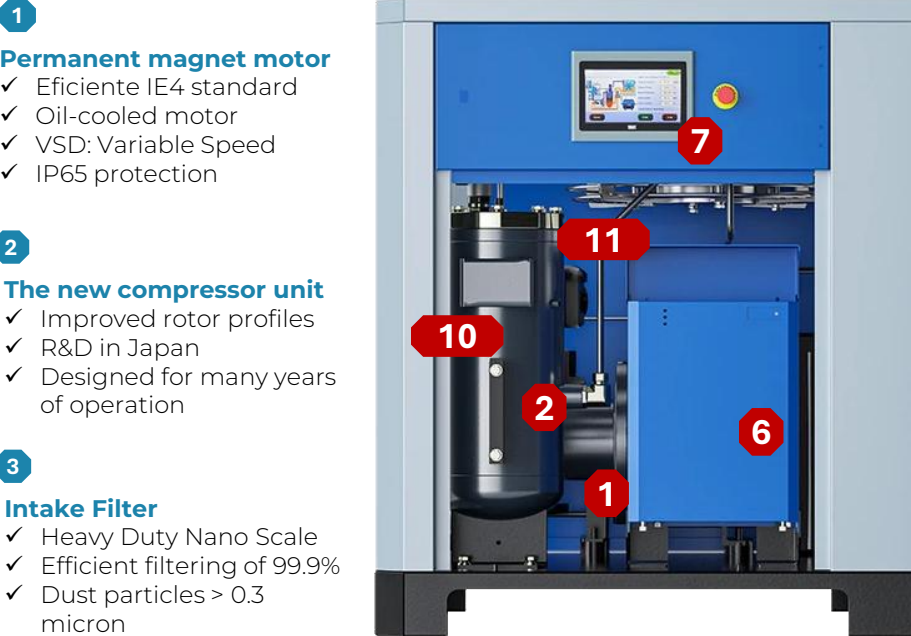


+50.000
Global Clients



+500
Employees

SERIES MNA



1

Permanent magnet motor

- ✓ Eficiente IE4 standard
- ✓ Oil-cooled motor
- ✓ VSD: Variable Speed
- ✓ IP65 protection

2

The new compressor unit

- ✓ Improved rotor profiles
- ✓ R&D in Japan
- ✓ Designed for many years of operation

3

Intake Filter

- ✓ Heavy Duty Nano Scale
- ✓ Efficient filtering of 99.9%
- ✓ Dust particles > 0.3 micron
- ✓ Differential Pressure Gauge
- ✓ 2000 Hs service interval
- ✓ Prevents bearing wear
- ✓ Extends the life of lubricant and oil filter

4

VSD Fan

- ✓ Control VSD
- ✓ Compact
- ✓ Low noise level
- ✓ High cooling capacity
- ✓ Low power consumption

5

Oil cooler and aftercooler

- ✓ Easy access for maintenance
- ✓ Surface with anti-corrosion paint

6

Innovative Flow Vector Inverter

- ✓ Wide Voltage Design
- ✓ Built-in DC reactor
- ✓ Independent cooling air duct design

7

PLC touchscreen IT 7000

- ✓ Wide Voltage Design
- ✓ Built-in DC reactor
- ✓ Independent cooling air duct design
- ✓ Rugged housing for trouble-free operation

8

Intake valve

- ✓ Optimizes inflow to the compressor unit
- ✓ Aluminum design
- ✓ High vacuum grade: 700 mmHg
- ✓ Low power consumption
- ✓ Quick Check: Prevents oil injection from being unloaded and shut off

9

Oil Filter

- ✓ Removes contaminants from oil
- ✓ Oil particles can be controlled to 0.1 microns
- ✓ Ensures a smooth, well-lubricated oil system

10

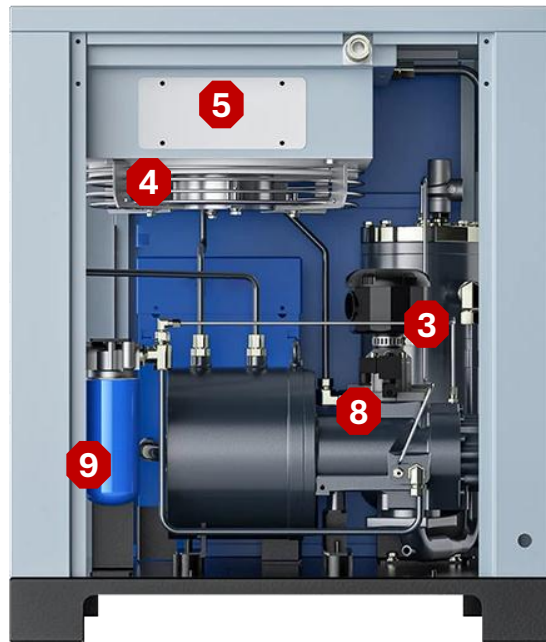
Built-in air tank and separation system

- ✓ Improves the cyclonic effect
- ✓ Ensures oil carryover is less than 3 ppm
- ✓ The pressure loss of the system is less than 0.02 MPa

11

Inner Steel Pipe System

- ✓ Prevents fujas and premature aging
- ✓ Less loss due to pipe friction



SERIES MNA

Reliable, high-quality air dryer



The heat exchanger is designed for high efficiency, maintaining a mere 41°F (5°C) temperature differential between the inlet and outlet, cooling demand and energy consumption are minimized. This achieves an elevated efficiency ratio while delivering high quality, clean compressed air.

The system's substantial heat transfer capacity utilizes eco-friendly R134a refrigerant, making it especially effective for high heat, high humidity environments.

A 99.9% efficient air-water separator works in conjunction with a reliable automated drain system to ensure condensed water is drained rapidly from the compressed air loop.

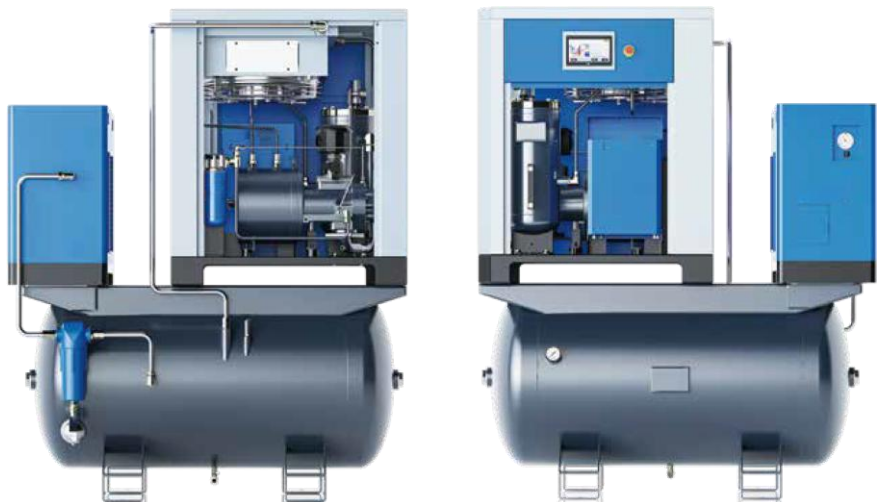
High Efficiency Air Filter



The ultra-quiet refrigeration compressor provides enduring, dependable performance. The air condenser incorporates anti-corrosive nano-coating to optimize heat transfer.

Large Capacity Air Tank

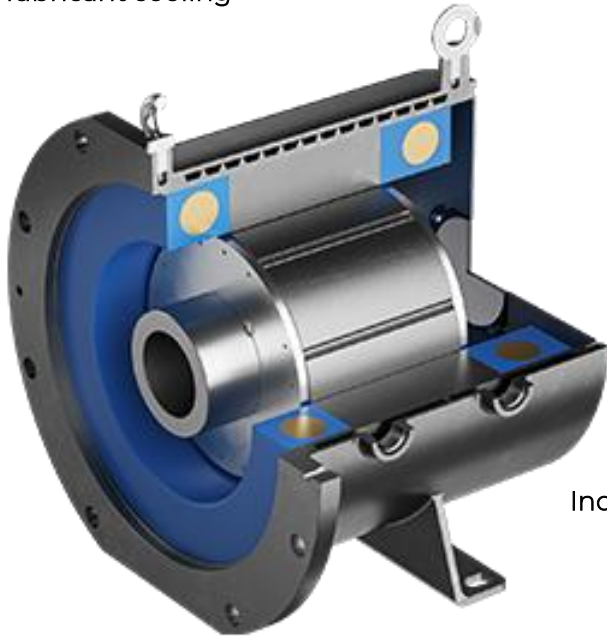
Employing a high-capacity air tank can reduce pulsation in the compressor discharge flow, stabilize system pressure, lower compressor cycling frequency, prevent wear and tear, and provide an air reserve - all simultaneously.



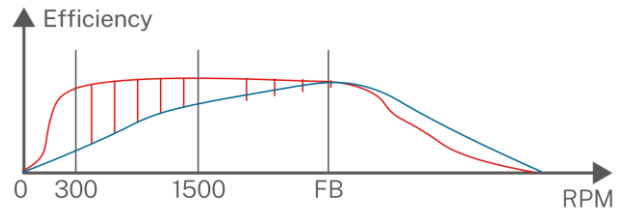
SERIES MNA

Motor APM super premium (equivalente a IE4)

Dual-layer design for optimal lubricant cooling

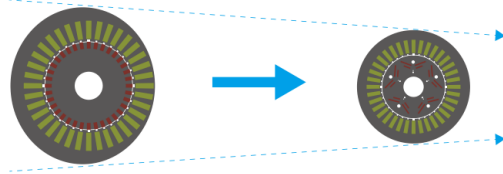


93.3% ~ 94.5%
1.2% Growth



Induction Motor (IM)

Permanent Magnet (IPM) Motor



Example: 75KW 440V | Volume 37% | Weight 26%

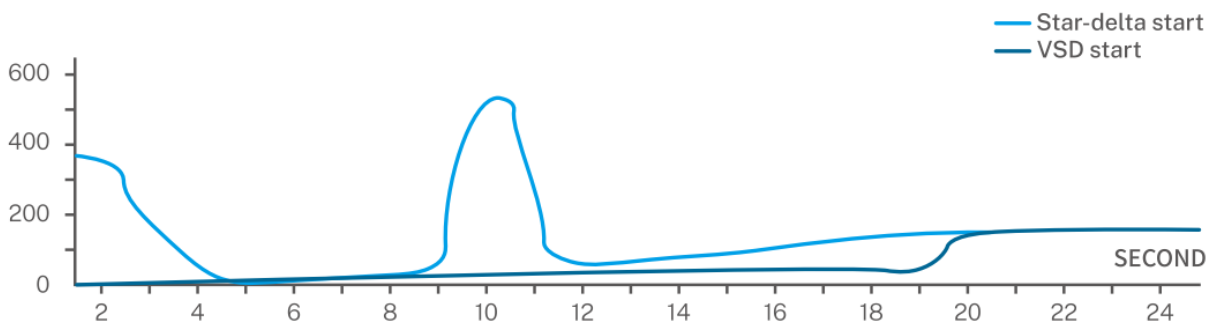
Oil-cooled motor	Achieves IE4 efficiency standard
VSD: Variable Speed Drive	Bearing-free motor is maintenance-free
UH Series Permanent Magnets Resist Up To 180 °C / 356 °F	Fully shielded, IP65 protection
Optimal cooling for all speeds and ambient conditions	Grade F Insulation and Grade B Temperature Rise Assessment

High-temperature design prevents degaussing

SERIES MNA

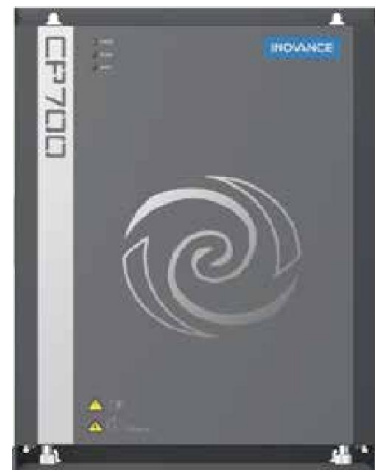
Soft Start System

The MNA series from Masia Compressors includes a soft start system for commissioning. With the Inovance Variable Speed Drive (VSD), the full load current is maintained at up to 1.5 times the rating, unlike traditional motor starters. Direct online and star-delta starters apply very high starting currents to the power supply, typically 8 to 10 times the rated full load. However, our variable speed soft start system ensures the starting current does not exceed the nominal full load value.



Main features

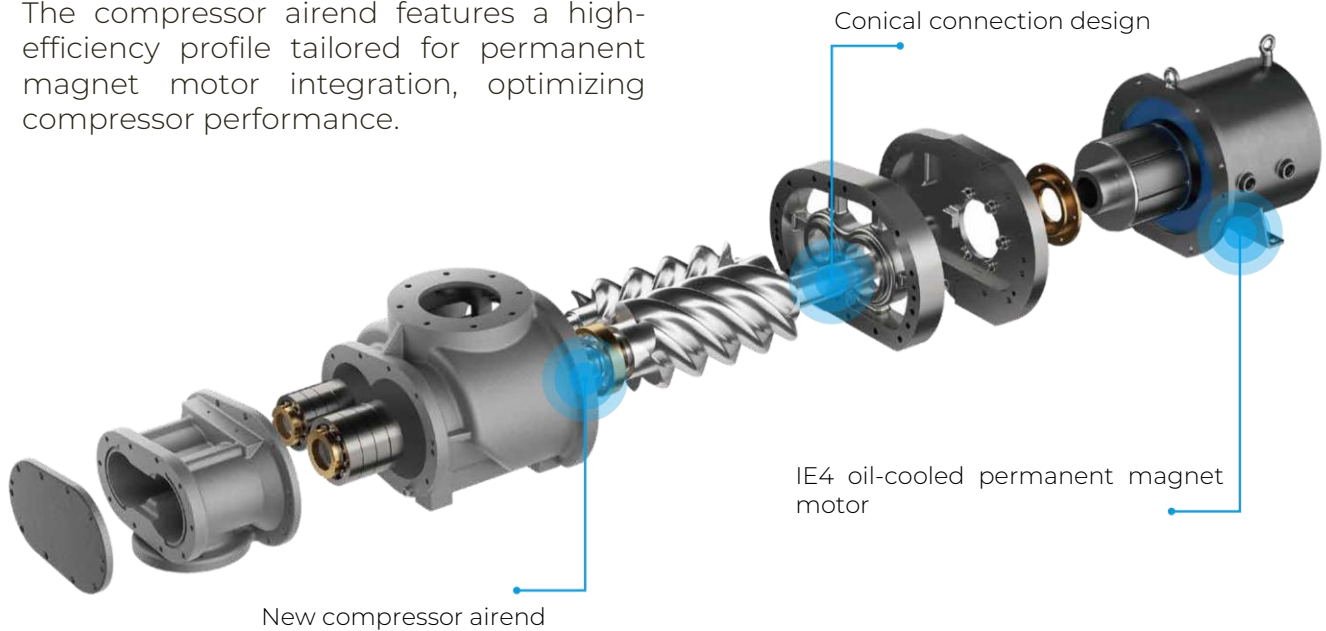
-  Built-in RS485 communication
-  Intelligent PID flow regulation mode
-  Precise torque control
-  Fast response speed for system pressure
-  Rapid acceleration and deceleration feature
-  Dynamic closed-loop control and high-precision control
-  Constant pressure control prevents excessive generation of on-site air pressure



SERIES MNA

Innovation for efficiency

The compressor airend features a high-efficiency profile tailored for permanent magnet motor integration, optimizing compressor performance.



MNA Heavy Duty Air Filter

The heavy-duty air filter is meticulously engineered for medium to high dust conditions. Building on conventional filter designs, it integrates a centrifugal separator.

This allows incoming air to spin, pre-separating and removing larger particles before reaching the filter element. This extends the service life and maintenance interval by preventing heavy particle accumulation on the filter.

Furthermore, the filter paper structure boasts an enhanced ash holding capacity. A specialized inter-fold design prevents joint deterioration. This enables effective filtration even in highly demanding environments with concentrated dust and contaminants.

By prolonging the lifespan of the air filter element, this approach helps safeguard both the main machinery as well as the oil and gas piping network.



SERIES MNA



Innovation for efficiency

The large air coolers ensures optimal operation of the compressor even in conditions up to 115°F (46°C) without any problems.

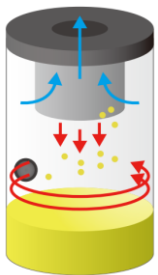


Customized PLC Permanent Magnet Motor Screw Air Compressor

A custom controller, designed specifically for permanent magnet motors, that is more precisely tailored to the demands of the compressor.

Oil sump tank with cyclonic design ensures high separation efficiency

The first stage comprises mechanical centrifugal separation, followed by the use of a highly efficient oil separator in the second stage. The oil separator has a service life of 8,000 hours, and the oil content is less than 3 ppm.



The flow guide plate alters the direction of flow, while the cross-collision causes the tiny oil particles to clump into larger particles for easier separation. This process reduces the load on the oil-air separator layer, contributing to greater durability. A reserve margin of more than 30% is maintained for the oil separator, and efficiency is increased by approximately 1 to 2%. It should be noted that the separator has a tangential vertical structure.



SERIES MNA

Model	KW	HP	Flow (CFM)	Pressure (PSI)	Pressure (BAR)	Dimension (m/inch)	Weight (Kg/Lbs)	Connection
MNA-7LG	7.5	10	15-41	100-145	7-10	1.48 x 0.77 x 1.72 58.27" x 30.31" x 67.72"	350 772	½" NPT
MNA-11LG	11	15	19-61	100-217	7-15	1.48 x 0.80 x 1.88 58.27" x 31.50" x 74"	380 838	¾" NPT
MNA-15LG	15	20	32-84	100-236	7-16	1.48 x 0.80 x 1.88 58.27" x 31.50" x 74"	410 923	¾" NPT



Main components list

Item	Brand	Origin	
Airend		Japan	
Electric motor		Japan	
Bearing		Suecia	
Air intake valve		Japan	
Pressure sensor		Alemania	
Electric control system		Alemania	
PLC		Japan	
Air filter		Japan	
Oil filter		Japan	
Oil separator		Japan	
Inverter		Alemania	
Solenoid valve		Italy	

Customers



All in one place

Synthetic lubricants



Masia Compressors synthetic and super premium category oils are designed to provide exceptional compressor performance. Manufactured in the United States of America, they last up to 8000 hours and offer significant benefits, such as increased compressor operating efficiency, extended equipment life, and reduced maintenance costs. These advanced lubricants contribute to smoother operation, reduced wear and optimal system performance, ensuring high-quality compressed air in various industrial applications.

Air/Oil Filters



Masia Compressors consumables, such as air filters, oils, and compressor separators, are manufactured in the United States and various other countries to the highest quality standards. Ensuring reliable and long-lasting performance, these consumables keep your equipment in tip-top condition, ensuring smooth operation and efficient production that ensures optimal system performance.



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