



MADE IN ITALY

BORA-E **BORA-E PM**

5.5-75 kW

Rotary screw compressors with direct-drive transmission,
fixed speed and variable speed with
Permanent Magnet motor



NEW
2026 RANGE

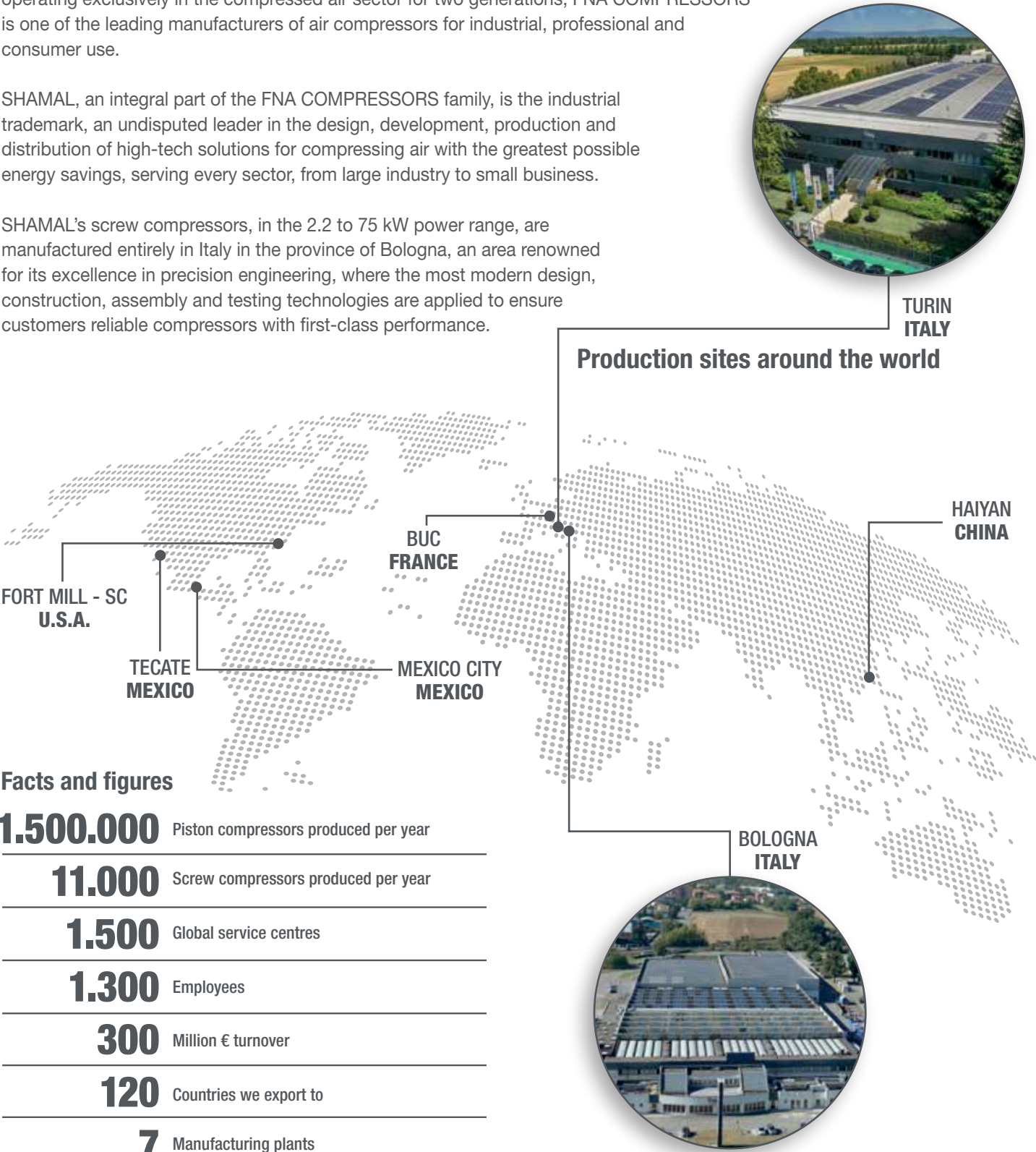
FNA COMPRESSORS

80 years of compressed air.

FNA COMPRESSORS is a Multinational company with 80 years of experience in the compressed air sector, founded from the merger of three long-established Italian compressor companies, which has developed an industrial synergy capable of competing on the world market without fear of comparison. Thanks to the consolidated experience and leadership of a family that has been operating exclusively in the compressed air sector for two generations, FNA COMPRESSORS is one of the leading manufacturers of air compressors for industrial, professional and consumer use.

SHAMAL, an integral part of the FNA COMPRESSORS family, is the industrial trademark, an undisputed leader in the design, development, production and distribution of high-tech solutions for compressing air with the greatest possible energy savings, serving every sector, from large industry to small business.

SHAMAL's screw compressors, in the 2.2 to 75 kW power range, are manufactured entirely in Italy in the province of Bologna, an area renowned for its excellence in precision engineering, where the most modern design, construction, assembly and testing technologies are applied to ensure customers reliable compressors with first-class performance.



Facts and figures

1.500.000	Piston compressors produced per year
11.000	Screw compressors produced per year
1.500	Global service centres
1.300	Employees
300	Million € turnover
120	Countries we export to
7	Manufacturing plants

The SHAMAL brand

Manufacturers of air-ends for over 30 years.

SHAMAL is the leading Italian company, that has been able to combine craftsmanship passion with the most modern industrial technologies, integrating highly specialised labour with last-generation automatic machinery. The Made in Italy trademark is the expression of typical Italian quality and creativity, recognised and appreciated around the world, and which is now one of the distinguishing elements of our industrial production.

What makes SHAMAL screw compressors unique is the guarantee of a product that is made entirely in Italy: from design to packaging, each stage of production is carefully overseen by our engineers and aimed at developing a machine that exceeds the most demanding requirements in terms of reliability, energy saving, performance, quiet and safe operation.

SHAMAL air-ends, the true heart of our compressors, feature rotors with an optimised profile and outstanding performance. Their production process is completely integrated thanks to robotic machine tools and sophisticated control instrumentation that guarantees the highest level of quality. Each single rotor is machined in four very specific stages to achieve high precision and repeatability.

Before reaching the customer, every individual compressor is fully tested before completing final checks that ensure total compliance with over fifty stringent technical requirements.

Since 1996, the company's Quality System has been certified according to UNI EN ISO 9001:2015.



BORA-E 5.5-15 kW

BORA-E PM 5.5-75 kW

Compact, silent, efficient and ready to use.
Available in multiple versions to suit many applications.

SHAMAL's new BORA-E series screw compressors provide a high-performance solution for the most demanding applications. Designed to fulfill compressed air requirements in terms of reliability, energy efficiency, quiet operation, reduced maintenance costs, and simple installation and use, the BORA-E range offers a broad selection of models, from 5.5 to 75 kW with operating pressures between 8 and 13 bar, available with or without air receiver or dryer. Each compressor is built according to the highest standards, using high quality components, to guarantee a long operating life and complete reliability. The motor shaft is coaxial to the rotor of the air-end: this configuration means less wear on components, therefore less need for maintenance and quieter operation in comparison to belt transmission.



With the introduction of the latest PM models to the renowned BORA-E series, SHAMAL is once more redefining the standards in respect to efficiency, reliability and energy savings.

The continuous investment in Research & Development has allowed the further improvement to the acclaimed BORA series, already a leading-edge product in the industrial market, by introducing Permanent Magnet Motors (with IE5 "Ultra Premium Efficiency" class). This is integrated with our direct transmission system and optimised controls in the form of the highly advanced LOGIN electronic controller. These innovative technologies, combined with the application of our latest generation air-ends, has allowed to build the most advanced, quiet, reliable and efficient compressor ever.



A complete and versatile range, 7 sizes, from 5.5 to 75 kW with more than 90 possible configurations!

BORA-E 5.5-15 kW - FIXED SPEED

Size	Power (kW)	Model	Fixed speed	Floor mounted	With air receiver	With air receiver + dryer (D)	Air-end	Electronic controller	Motor efficiency
1	5.5	BORA-E 5.5	•	•	270 ℓ	270 ℓ	FS26	LOGIN Mini	IE3
	7.5	BORA-E 7.5	•	•	270-500 ℓ	270-500 ℓ	FS26	LOGIN Mini	IE3
2	11	BORA-E 11	•	•	500 ℓ	500 ℓ	FS50	LOGIN Mini	IE3
	15	BORA-E 15	•	•	500 ℓ	500 ℓ	FS50	LOGIN Mini	IE3

BORA-E PM 5.5-15 kW - VARIABLE SPEED WITH PERMANENT MAGNET MOTOR

Size	Power (kW)	Model	Variable speed with Permanent Magnet Motor	Floor mounted	With air receiver	With air receiver + dryer (D)	Air-end	Electronic controller	Thermostatic valve	Motor efficiency
3	5.5	BORA-E 5.5 PM	•	•	270-500 ℓ	270-500 ℓ	FS26	LOGIN	•	IE5
	7.5	BORA-E 7.5 PM	•	•	270-500 ℓ	270-500 ℓ	FS26	LOGIN	•	IE5
	11	BORA-E 11 PM	•	•	500 ℓ	500 ℓ	FS50	LOGIN	•	IE5
	15	BORA-E 15 PM	•	•	500 ℓ	500 ℓ	FS50	LOGIN	•	IE5

BORA-E PM 18.5-75 kW - VARIABLE SPEED WITH PERMANENT MAGNET MOTOR

Size	Power (kW)	Model	Variable speed with Permanent Magnet Motor	Floor mounted	Air-end	Electronic controller	Thermostatic valve	Motor efficiency
4	18.5	BORA-E 18.5 PM	•	•	FS100	LOGIN	•	IE5
	22	BORA-E 22 PM	•	•	FS100	LOGIN	•	IE5
5	30	BORA-E 30 PM	•	•	FS140	LOGIN	•	IE5
	37	BORA-E 37-10 PM	•	•	FS140	LOGIN	•	IE5
6	37	BORA-E 37-08 PM	•	•	FS270	LOGIN	•	IE5
	45	BORA-E 45 PM	•	•	FS270	LOGIN	•	IE5
7	55	BORA-E 55 PM	•	•	FS320	LOGIN	•	IE5
	75	BORA-E 75 PM	•	•	FS400	LOGIN	•	IE5

BORA-E 5.5-15 kW FIXED SPEED



Efficiency and energy savings

Significant energy savings thanks to “IE3 Premium Efficiency” class motors. Direct 1:1 transmission based on an original SHAMAL design.
Our own in-house air-ends offering the highest performance with the lowest energy consumption.
Air and oil circuit components are optimised for efficiency.
LOGIN Mini electronic controller for complete control of all compressor functions.



LOGIN Mini controller

All BORA-E 5.5-15 models are equipped with the LOGIN Mini electronic controller with colour display. In addition to full control of all compressor functions, it also manages multiple compressors (up to 8 units, even different types) and features an RS485 port with an integrated Modbus protocol for communication with external devices.



Quiet operation

The low speed air-ends and radial fans allow BORA-E compressors to maintain the lowest noise values in their category, thus ensuring the possibility for the installation close to the point-of-use.



Simplified maintenance

All machine parts subject to periodic maintenance are placed in a visible and easily accessible position.
Maintenance costs are reduced thanks to the use of selected, top quality materials.



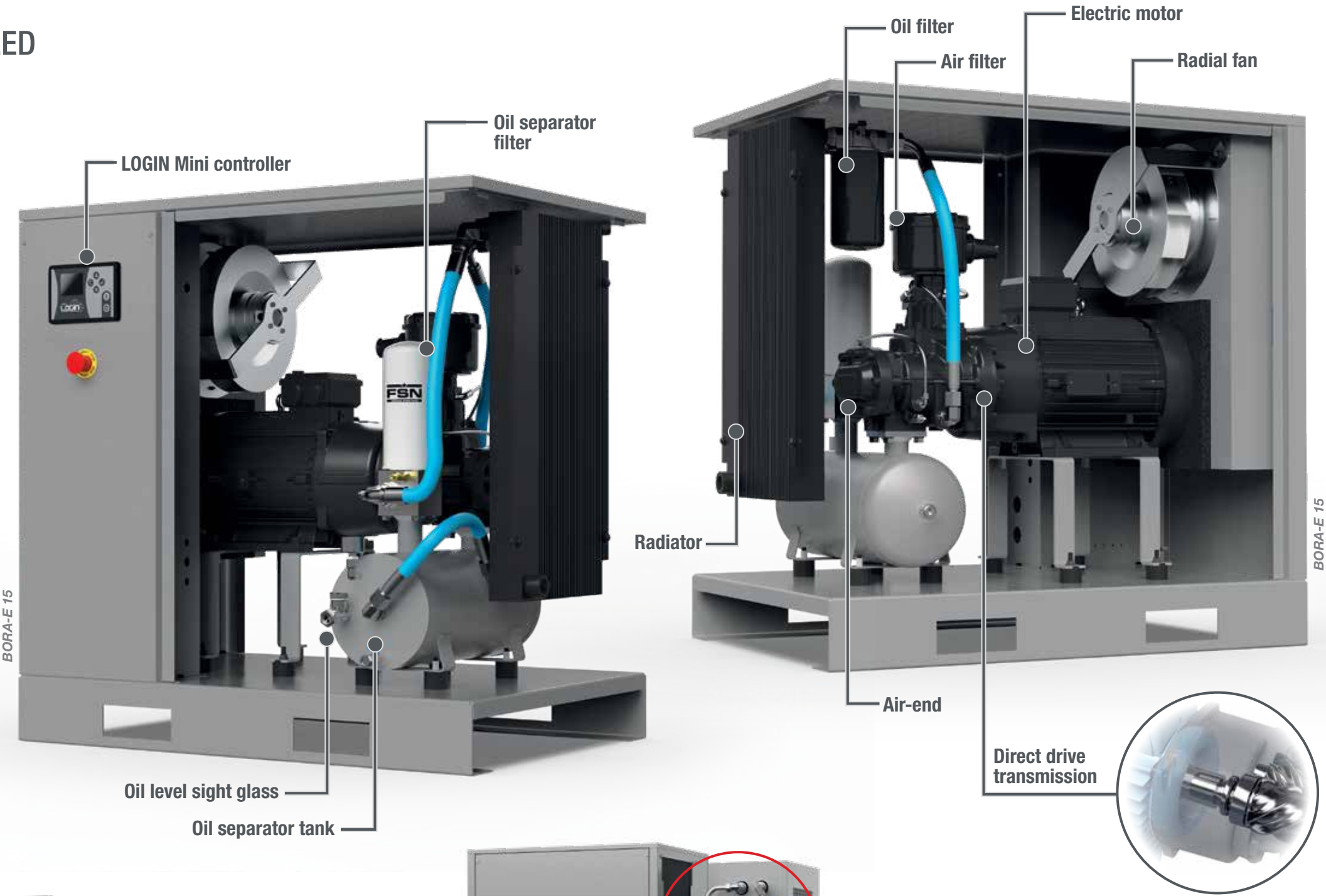
Robust construction

The compact design has been created to achieve the best performance with the utmost reliability, tested and proven in thousands of installations around the world. This makes BORA-E machines dependable and long-lasting.



Refrigerated dryer and filters (optional)

The BORA-E version from 5.5 to 15 kW with air receiver can be equipped with F-DRY, a +3 °C dew point refrigerated dryer, and retrofitted with line filters, mounted on the rear of the air receiver.



F-DRY dryer

Models equipped with the F-DRY, a +3 °C DEW POINT refrigerated dryer, are complete, ready-to-use machines, with no additional installation costs.



A complete solution

For all BORA-E from 5.5 to 15 kW with air receiver and dryer, a retrofittable **optional filter set** is available (including oil and fine oil filters with total filtration degree 0.01 micron and oil residual 0.01 mg/m³) to obtain a complete workstation.

Model	Motor power	Air receiver	Dryer	Connection	Air flow rate	Filter kits
	kW	lt	model	G	m³/min.	code
BORA-E 5.5 - 7.5	5.5 - 7.5	270 - 500	F-DRY 18	1"	1.8	C260KFL060
BORA-E 11 - 15	11 - 15	500	F-DRY 25	1"	2.5	

BORA-E PM 5.5-75 kW

VARIABLE SPEED WITH PERMANENT MAGNET MOTOR



Maximum efficiency and energy saving

Significant energy savings are achieved thanks to the "IE5 Ultra Premium Efficiency" class in the BORA-E PM models. The latest generation air-ends ensure greater compressed air flow rates with reduced energy consumption. Direct-drive transmission technology. The oil circuit is controlled by the thermostatic valve, guaranteeing ideal and constant temperature. Application of the latest generation inverters combined to the high energy efficiency Permanent Magnet motors.



LOGIN controller

All BORA-E PM models are equipped with the LOGIN electronic controller with touch-screen display. In addition to full control of all compressor functions, it also stores the data on a specific memory card, for compressor data restore. Ref. to page 18 for controller extensive description.



Simplified maintenance

All machine parts subject to periodic maintenance are placed in a visible and easily accessible position. Maintenance costs are reduced thanks to the use of selected, top quality materials.



Compact design

The BORA-E PM series has been designed to offer maximum performance and highest reliability, in a compact space saving format.



Remote monitoring and preventive maintenance

LOGIN controller features RS485 ports for communication with remote systems via Modbus protocol. Furthermore, the "ISC" system (Internal Sequencing of Compressors) allows up to 8 different compressors (fixed and/or variable speed) to be sequenced using master-slave functionality.



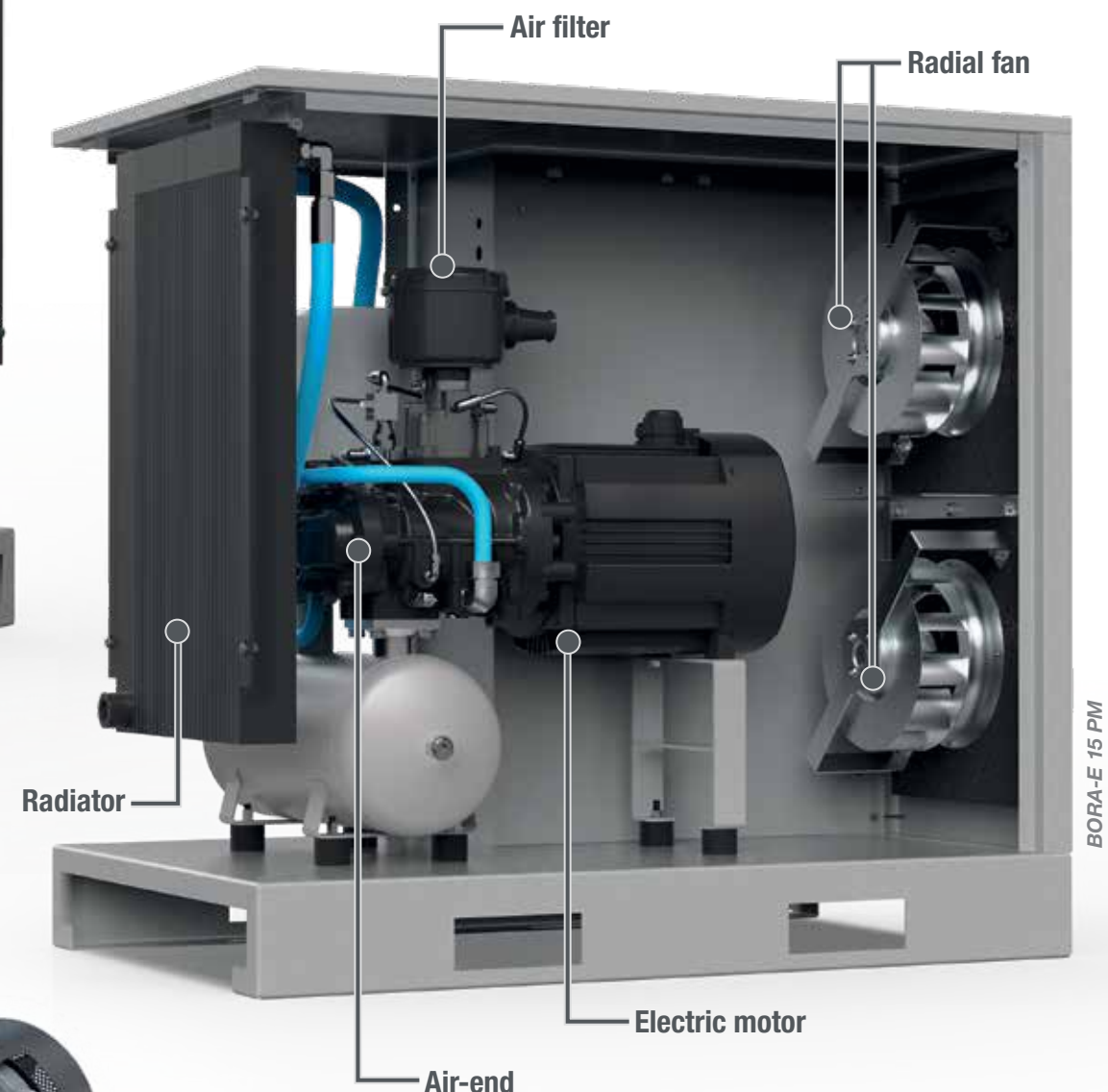
Refrigerated dryer and filters (optional)

The BORA-E PM version from 5.5 to 15 kW with air receiver can be equipped with F-DRY, a +3 °C dew point refrigerated dryer, and retrofitted with line filters, mounted on the rear of the air receiver.



F-DRY dryer

Models equipped with the F-DRY, a +3 °C DEW POINT refrigerated dryer, are complete, ready-to-use machines, with no additional installation costs!



Cleaning and protection

The ventilation circuit is protected by a pre-filtering panel (standard on all BORA-E PM models) that separates the incoming dusts and keeps the inside of the machine clean, increasing the longevity of internal components.

Very high efficiency motors

IE5 "Ultra Premium Efficiency" Permanent Magnet motors, with IP55 protection as standard on all BORA-E PM models.

BORA-E PM 5.5-15 kW

VARIABLE SPEED WITH PERMANENT MAGNET MOTOR

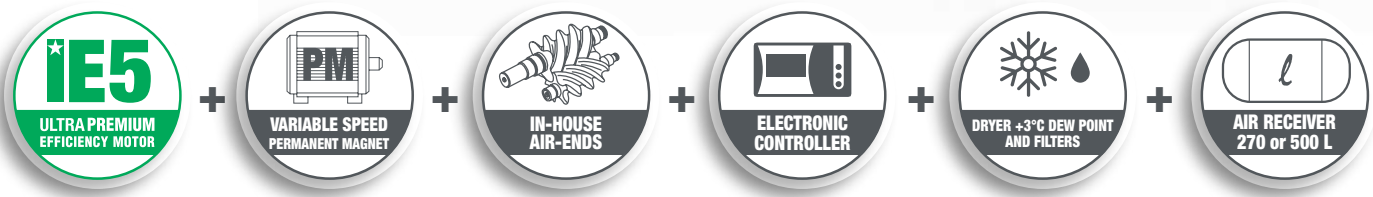
A complete solution with air receiver + optional dryer and filters

The BORA-E PM with optional dryer and filters is a full feature compressed air station: all the fundamental components that form a complex system are assembled conveniently into workstation, saving space and improving efficiency.

- Air compressor.
- Air receiver (270 or 500 lt).
- Integrated refrigerated dryer with +3 °C dew point and with automatic condensate drain.
- Installed oil and fine oil filters with total filtration degree 0.01 micron and oil residual 0.01 mg/m³.
- LOGIN electronic controller.
- Application of the latest generation inverters combined to the high energy efficiency Permanent Magnet motors.

Significant advantages:

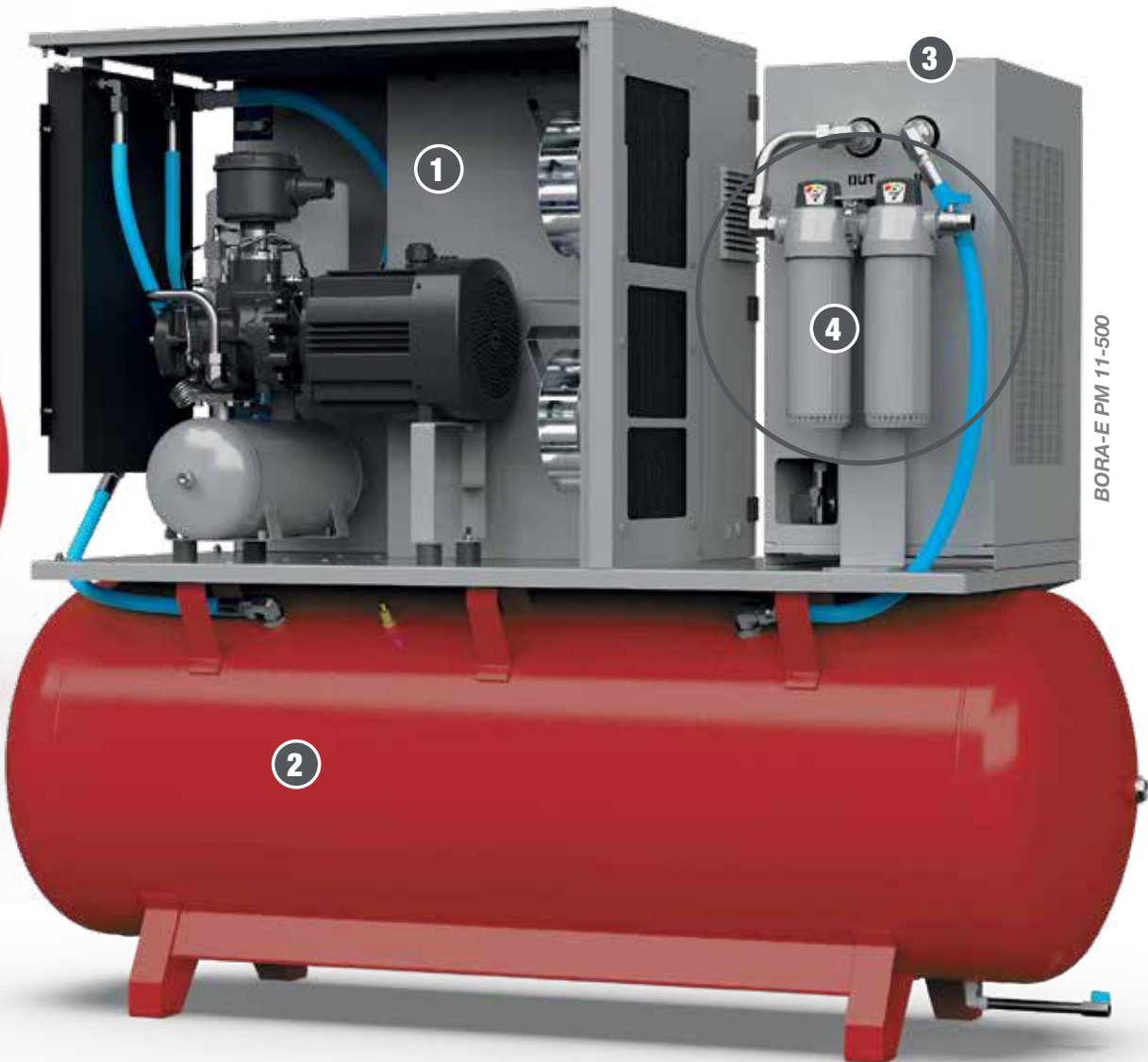
- Drastically reduced installation time and cost.
- High quality, clean and dry compressed air.
- The maintenance friendly design allows complete and simple access to all service components, reducing costs and downtime.
- Lower operating costs.
- The thermostatic valve regulates the oil temperature, preventing the formation of condensation inside the oil-separator vessel.
- Clear visualization of all operating values of the compressor on the large clear display from the proven LOGIN controller.



BORA-E PM with optional dryer and filters is a very user friendly compressor, perfect for industrial and automotive situations or any application that requires dry and clean compressed air, with minimal space requirement.

ALL-IN-ONE SOLUTION:

- 1 compressor
- 2 air receiver
- 3 dryer
- 4 filters



Model	Motor power	Air receiver	Dryer	Connection	Air flow rate	Filter kits
	kW	lt	model	G	m³/min.	code
BORA-E 5.5 - 7.5 PM	5.5 - 7.5	270	F-DRY 18	1"	1.8	C260KFL060
BORA-E 11 - 15 PM	11 - 15	500	F-DRY 25	1"	2.5	

For all BORA-E PM from 5.5 to 15 kW with air receiver and dryer, a retrofittable **optional filter set** is available (including oil and fine oil filters with total filtration degree 0.01 micron and oil residual 0.01 mg/m³) to obtain a complete workstation.

BORA-E PM 18.5-75 kW

VARIABLE SPEED WITH PERMANENT MAGNET MOTOR

Air filter

Easily accessible for easy maintenance. Single or two stage air filter, depending on the model. The carefully designed service items allow long operating life, guarantee excellent reliability and reduced maintenance costs.

Minimum pressure valve

Guarantees minimum pressure loss.

Thermostatic valve

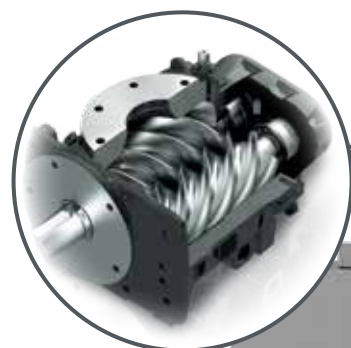
Controls the oil flow granting constant working temperatures and preventing the formation of condensate inside the lubrication circuit.

Intake regulator

The intake regulator controls operation of the compressor to ensure minimum pressure during idle operation, resulting in lower power consumption.

Direct transmission, with latest generation air-ends

The motor shaft is coaxial to the rotor of the air-end: this configuration means less wear on components, therefore less need for maintenance and quieter operation in comparison to belt transmission. This innovative design, combined with IE5 motors, guarantees superior efficiency and reliability.



Monoblock drive housing for air-end-motor connection

Allows quick access for inspection and replacement of the coupling.



Heat exchanger

Carefully designed to combine highly efficient heat transfer in all conditions and reduced pressure losses.

Simplified maintenance

Fast and simple routine maintenance thanks to the large removable panels offering unhindered access to the internal components.

Fan and radiator inspection ports

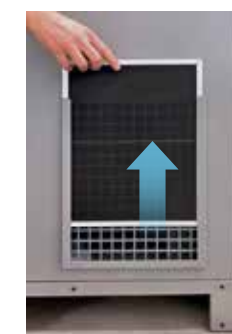
In the BORA-E PM 18.5 to 75 kW models, the compartment hosting the fan is accessible via two inspection doors which also allow counterflow cleaning of the radiator.

Cooling system

The radiator and radial fan are mounted in a dedicated compartment that maximizes the thrust of the outgoing air and allows the compressor to be used even with the open doors.

Radial ventilation

This combines excellent cooling of the compressor with very quiet operation.



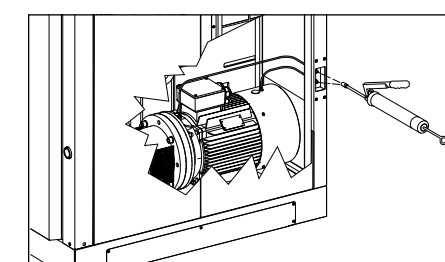
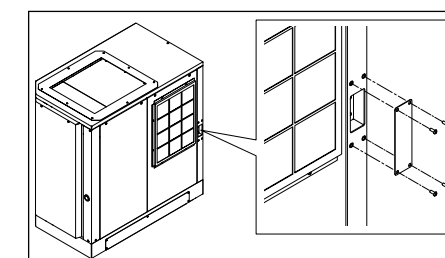
Pre-filtration panels

The ventilation circuit is completed by pre-filter panels that separate incoming dust, protecting internal components for a longer service life.



External greasing points

The greasing points for the main electric motor bearings are accessible from the outside of the compressor, allowing safe lubrication, even with the machine running.



Very high efficiency motors

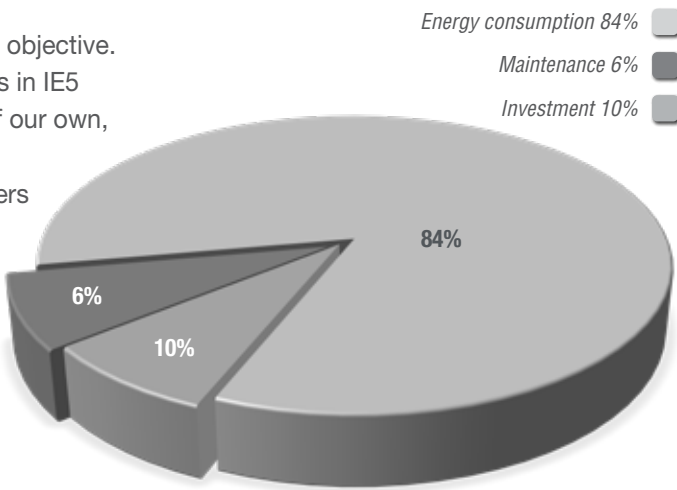
IE5 "Ultra Premium Efficiency" Permanent Magnet synchronous motors with IP55 protection on all variable speed BORA-E PM between 5.5 and 75 kW.



BORA-E PM with variable speed and Permanent Magnet synchronous IE5 motor

Why choose an air compressor with Permanent Magnet motor?

The energy costs linked to an air compressors operation during its life cycle represent more than 80% of the total life cycle costs. For SHAMAL the improved energy efficiency of its products is a key objective. This objective is achieved with the use of Permanent Magnet motors in IE5 "Super Premium Efficiency" category, along with the employment of our own, latest generation compressor air-ends. The application of these cutting- edge technologies, provides all users an air compressor with superior energy saving characteristics. The compressors from this new range offer greater flexibility in the delivery of compressed air. The output flow of compressed air may span a capacity range of between 15% to 100% of the maximum flow rate. This makes possible to greatly reduce unloaded operation, saving significant amounts of energy and minimising component wear, whilst adding greater reliability and longer service life.



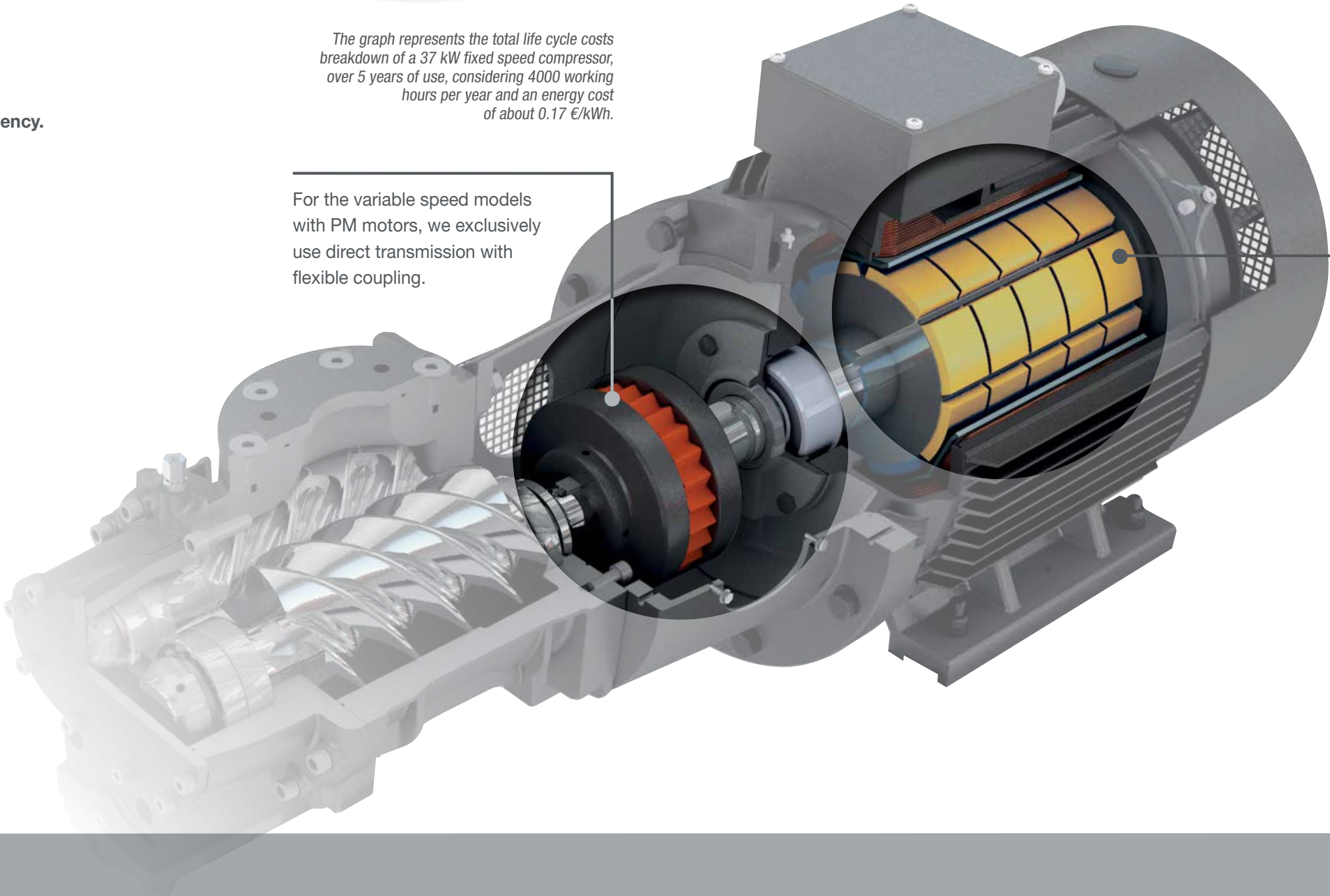
The graph represents the total life cycle costs breakdown of a 37 kW fixed speed compressor, over 5 years of use, considering 4000 working hours per year and an energy cost of about 0.17 €/kWh.

Why choose a BORA-E PM?

- Permanent Magnet motor with IE5 efficiency.
- Latest generation air-ends.
- Direct transmission.
- Efficient intake regulator.
- High performing inverter.
- Intuitive touchscreen controller.
- Low noise levels.
- High quality components.
- Minimum maintenance.



For the variable speed models with PM motors, we exclusively use direct transmission with flexible coupling.

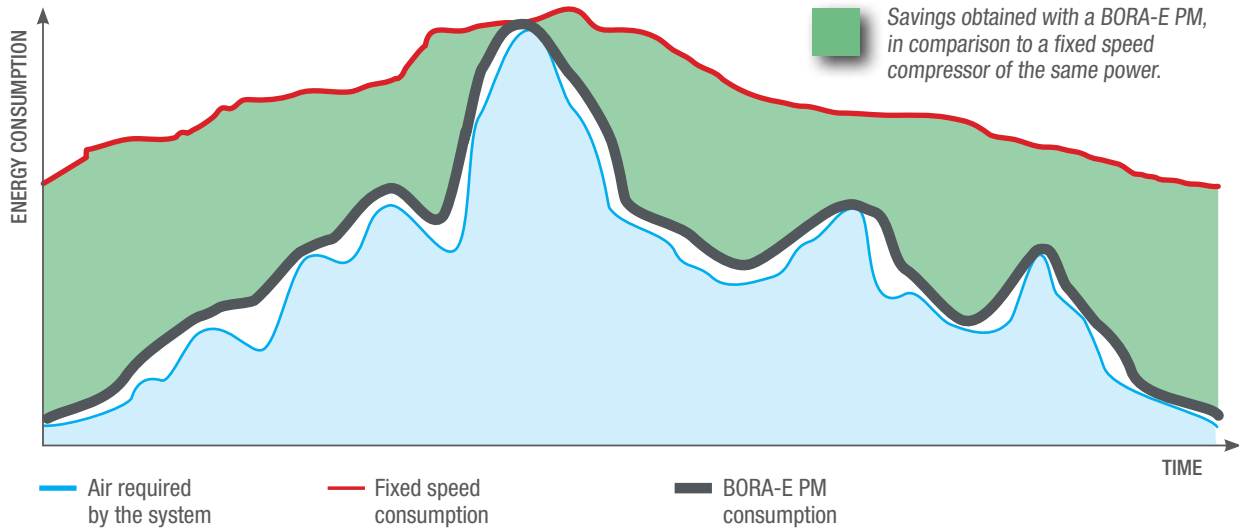


The advantages offered by the BORA-E PM range are considerable:

- The compressed air generated is aligned to the system requirements and is achieved by regulating the speed of the electric motor, which can range from 15% to 100% of the maximum speed.
- Excellent and precise pressure control thanks to the permanent magnet synchronous motor.
- Accurate and optimised cooling of the compressor is obtained through the use of efficient, powerful and quiet radial fans.
- Proven, highly reliable design.
- Attention to details, to maximise quiet operation and reliability.

Improved efficiency in all applications of compressed air.

The advanced and extremely compact Permanent Magnet motors, guarantee the highest performance along with a much wider speed/load range when compared to traditional inverter-controlled asynchronous motors. They offer the greatest possible advantages in terms of energy savings. This applies especially when used at partial capacity and load, which is a characteristic seen frequently in modern applications throughout all industrial sectors.

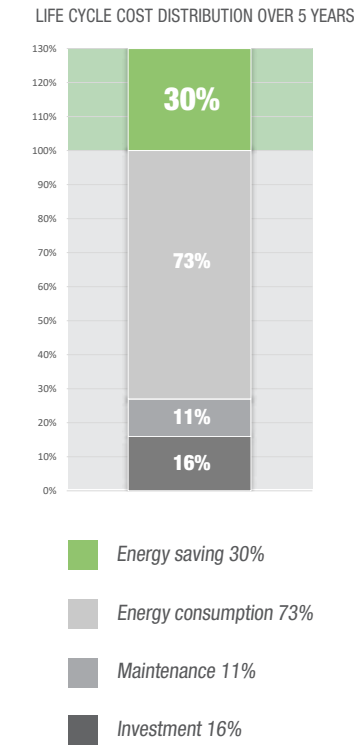


More efficient than ever

The inverter, installed in the compressor's electrical panel allows for a dynamic regulation of the motors rotational speed. The speed and therefore the output of the compressor can be constantly adjusted according to demand. This also eliminates current surges thanks to the soft start-up and drastically reduces operating cycles avoiding unnecessary no-load operation, avoiding significant energy wastage and reducing energy costs.

Significant energy savings

When compared to the operation of a fixed speed compressor, a BORA-E PM is able to achieve significant energy savings, up to 50%. This represents a reduction of around 30% to the total life cycle costs during 5 years of use.



Efficiency is synonymous with sustainability

For all companies, environmental sustainability is a most important objective and a focus on the efficiency of all processes is mandatory. Working and living sustainably means preserving our natural resources as much as possible: choosing a BORA-E or BORA-E PM product, reducing energy consumption and CO₂ emissions therefore, represents an ecological and sensible choice.



The calculation shown in the graphs is based on the energy analysis of a 37 kW BORA-E PM, considering 4000 working hours per year and an energy cost of about 0.17 €/kWh.



Analyze your company's consumption to minimize energy waste

Compressed air is an essential resource in industrial applications, as well as one of the main sources of energy consumption. Energy costs are constantly increasing, therefore it is a fundamental need to monitor, analyse and reduce the energy consumption of the compressed air system. This not only applies for large companies, but equally for medium and small-sized facilities.

Why run an energy audit?

Compressed air is most critical to production and manufacturing operations everywhere. The energy audit provides a valuable analysis of the system, identifying all operating data including power consumption. The very precise data collected is then used to provide a simulation report, identifying opportunities for reducing energy consumption and improving efficiencies.

Our experience at your service

Thanks to decades of experience in the industrial sector, SHAMAL can provide companies with a detection and analysis service for professional auditing (EATool). Furthermore, with "Demo Login" it is possible to simulate compressor operation to provide immediate technical assistance remotely and/or use it as a tool to train maintenance technicians and installers on the full operation of the LOGIN controller.



	ideal for compressors' rooms up to 3 units
EA 400 cod. 9062747	➤ 4 analogue inputs: - 3 measuring clamps - 1 pressure sensor ➤ 1 extension for cables (10m long) ➤ 4.3" colour touch screen display
	ideal for compressors' rooms up to 4 units
EA 500 cod. 9062748	➤ 5 analogue inputs: - 4 measuring clamps - 1 pressure sensor ➤ 2 extensions for cables (10m long) ➤ 7" colour touch screen display

	ideal for technical assistance and training
DEMO LOGIN cod. 8101980	➤ complete simulation of the functions of a compressor controlled from Login ➤ 3 potentiometers (pressure, oil temperature values, dryer temperature) ➤ 7 switches (alarm simulation and remote control)





Efficiency that is always under control

Installed on BORA-E PM models from 5.5 to 75 kW, the new **LOGIN** controller introduces new software functions to enhance diagnostic controls, thereby guaranteeing excellent performance in all conditions, facilitating remote control and multi-compressor management.



Intelligent control

All of BORA-E PM's functions are entirely managed by the LOGIN electronic controller, which constantly monitors the compressor status ensuring efficient and reliable operation of the machine in all conditions with customised functions to suit any application.

Always connected

During an irregular event within the machine, LOGIN reports the presence of such and incident by creating an alert for the user, allowing prompt operator intervention. The integrated connectivity with remote monitoring (optional), makes possible to get complete information on the compressor status remotely.

Compressor rotation management

Thanks to the 'ISC' system (Internal Sequencing of Compressors), up to 8 different compressors (fixed and/or variable speed) can be connected simultaneously, with 'master-slave' logic. The LOGIN controller features an RS485 port with an integrated Modbus protocol for communication with external devices.



Exclusive design

Italian design, functionality, simple to use and with the latest generation technology all come together with the innovative Login controller. The touch-screen display and the icon-based menu make it extremely intuitive and easy to use.



Memory card slot

LOGIN features a memory card slot which can be used to store compressor data and configurations and to transfer them to another control unit.



Multilingual management

It is possible to select the local language or any one of 20 pre-installed languages.



Remote control

Allows a complete remote monitoring of the compressor.



Multicolour display

All of the operational parameters are displayed on the large 4.3" colour screen which also displays graphs in real time (pressure, power, energy/time).



Designed for Industry 4.0



Intuitive and efficient.

Installed on the 5.5 to 15 kW BORA-E series, the **LOGIN Mini** is a digital electronic controller featuring six buttons for complete control of all compressor functions. The multilingual colour display, intuitive and complete, displays extended text.



- Menu navigation is simplified by icons displayed on the bottom navigation bar.

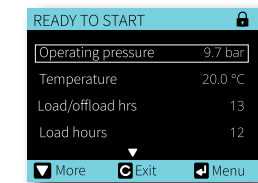
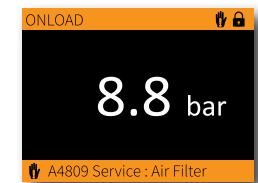
- Pressure is continuously monitored via a dedicated sensor and compared with the setpoints of the controller, ensuring optimal compressor operation.

- The simple and effective motor control monitors both temperature and running/idling cycles, ensuring all operational parameters are met and maximising reliability.

- Thanks to the native ISC function (Internal Sequencing of Compressors), the controller can manage up to 8 units in master/slave mode.

- The LOGIN Mini features an RS485 port with an integrated Modbus protocol for communication with external devices.

- Configurable auto-restart and remote ON/OFF complete the LOGIN Mini's extensive feature set.



Intuitive interface

The display features two permanently visible bars: a status bar at the top and a navigation bar at the bottom. This allows the user to view the status of the machine and the active functions at any time.



Multilingual management

It is possible to select the local language or any one of 20 pre-installed languages.



Multi-compressor management

Allows simultaneous management of up to 8 machines, in master/slave mode.



Multicolour display

All operating parameters are shown on the 2.4" colour display.



Remote control

Allows compressor remote control.



Designed for Industry 4.0

BORA-E
5.5-15 kW

BORA-E 5.5-15 kW	P/N	Tank	Power		Air outflow rate			Max. pressure		Air-end	Sound level	Ø	Net weight	Net dimensions	Gross weight	Gross dimensions
		ℓ	kW	HP	l/min	m³/min	cfm	bar	psi		dB(A)	G	kg	L x W x H (mm)	kg	L x W x H (mm)
FIXED SPEED - LOGIN Mini controller - Star-delta start																
5.5 kW																
BORA-E 5.5-10	V51LQ92SHAA72	–	5.5	7.5	710	0.71	25	10	145	FS26	62	3/4"	140	820x680x960	155	940x770x1150
BORA-E 5.5-10-270	V91LQ92SHAA72	270	5.5	7.5	710	0.71	25	10	145	FS26	62	3/4"	215	1530x680x1490	250	1720x750x1700
BORA-E 5.5-10-270 ES	V91LQ92SHAB72	270	5.5	7.5	710	0.71	25	10	145	FS26	62	1"	265	1570x680x1490	300	1720x750x1700
7.5 kW																
BORA-E 7.5-10	V51LR92SHAA72	–	7.5	10	950	0.95	33	10	145	FS26	62	3/4"	145	820x680x960	160	940x770x1150
BORA-E 7.5-13	V51LS92SHAA72	–	7.5	10	700	0.70	25	13	189	FS26	62	3/4"	145	820x680x960	160	940x770x1150
BORA-E 7.5-10-270	V91LR92SHAA72	270	7.5	10	950	0.95	33	10	145	FS26	62	3/4"	220	1530x680x1490	255	1720x750x1700
BORA-E 7.5-13-270	V91LS92SHAA72	270	7.5	10	700	0.70	25	13	189	FS26	62	3/4"	220	1530x680x1490	255	1720x750x1700
BORA-E 7.5-10-270 ES	V91LR92SHAB72	270	7.5	10	950	0.95	33	10	145	FS26	62	1"	270	1570x680x1490	305	1720x750x1700
BORA-E 7.5-13-270 ES	V91LS92SHAB72	270	7.5	10	700	0.70	25	13	189	FS26	62	1"	270	1570x680x1490	305	1720x750x1700
BORA-E 7.5-10-500	V83LR92SHAA72	500	7.5	10	950	0.95	33	10	145	FS26	62	3/4"	275	1970x680x1580	315	2070x800x1850
BORA-E 7.5-10-500 ES	V83LR92SHAB72	500	7.5	10	950	0.95	33	10	145	FS26	62	1"	325	1970x680x1580	365	2070x800x1850
11 kW																
BORA-E 11-08	V60LT92SHAA72	–	11	15	1700	1.70	60	8	116	FS50	63	3/4"	200	970x680x960	221	1200x810x1220
BORA-E 11-10	V60LU92SHAA72	–	11	15	1600	1.60	56	10	145	FS50	63	3/4"	200	970x680x960	221	1200x810x1220
BORA-E 11-13	V60LV92SHAA72	–	11	15	1250	1.25	44	13	189	FS50	63	3/4"	200	970x680x960	221	1200x810x1220
BORA-E 11-08-500	V83LT92SHAA72	500	11	15	1700	1.70	60	8	116	FS50	63	3/4"	315	1950x680x1580	355	2070x800x1850
BORA-E 11-10-500	V83LU92SHAA72	500	11	15	1600	1.60	56	10	145	FS50	63	3/4"	315	1950x680x1580	355	2070x800x1850
BORA-E 11-13-500	V83LV92SHAA72	500	11	15	1250	1.25	44	13	189	FS50	63	3/4"	345	1950x680x1580	385	2070x800x1850
BORA-E 11-08-500 ES	V83LT92SHAB72	500	11	15	1700	1.70	60	8	116	FS50	63	1"	360	1950x680x1580	400	2070x800x1850
BORA-E 11-10-500 ES	V83LU92SHAB72	500	11	15	1600	1.60	56	10	145	FS50	63	1"	360	1950x680x1580	400	2070x800x1850
BORA-E 11-13-500 ES	V83LV92SHAB72	500	11	15	1250	1.25	44	13	189	FS50	63	1"	390	1950x680x1580	430	2070x800x1850
15 kW																
BORA-E 15-10	V60LX92SHAA72	–	15	20	2000	2.00	70	10	145	FS50	63	3/4"	205	970x680x960	226	1200x810x1220
BORA-E 15-13	V60LY92SHAA72	–	15	20	1550	1.55	55	13	189	FS50	63	3/4"	205	970x680x960	226	1200x810x1220
BORA-E 15-10-500	V83LX92SHAA72	500	15	20	2000	2.00	70	10	145	FS50	63	3/4"	320	1950x680x1580	360	2070x800x1850
BORA-E 15-13-500	V83LY92SHAA72	500	15	20	1550	1.55	55	13	189	FS50	63	3/4"	350	1950x680x1580	390	2070x800x1850
BORA-E 15-10-500 ES	V83LX92SHAB72	500	15	20	2000	2.00	70	10	145	FS50	63	1"	365	1950x680x1580	405	2070x800x1850
BORA-E 15-13-500 ES	V83LY92SHAB72	500	15	20	1550	1.55	55	13	189	FS50	63	1"	395	1950x680x1580	435	2070x800x1850

ES = model with F-DRY refrigeration dryer with +3 °C dew point and automatic condensate drain (filters excluded - see page 7).
PM = model with variable speed and Permanent Magnet motor.
PM-ES = model with variable speed, Permanent Magnet motor and F-DRY refrigeration dryer with +3 °C dew point with automatic condensate drain.
Reference conditions: air intake temperature 20°C (68°F) – atmospheric pressure 1 bar (14.5 p.s.i.).
The data and results were measured in accordance with ISO 1217.
The sound level was measured in accordance with ISO 2151, with a tolerance of ±3 dB(A).

BORA-E PM
5.5-15 kW

BORA-E PM 5.5-15 kW		P/N	Tank	Power	Air outflow rate (min.-max)			Max. pressure		Air-end	Sound level	Ø	Net weight	Net dimensions	Gross weight	Gross dimensions
			ℓ	kW	HP	l/min	m³/min	cfm	bar		psi	dB(A)	G	kg	L x W x H (mm)	kg
VARIABLE SPEED with PERMANENT MAGNET MOTOR - LOGIN controller																
5.5 kW																
BORA-E 5.5-08 PM	V60GS97SHAA72	–	5.5	7.5	350-820	0.35-0.82	12.3-28.9	8	116	FS26	60	3/4"	165	1020x690x960	185	1200x810x1220
BORA-E 5.5-10 PM	V60GT97SHAA72	–	5.5	7.5	350-710	0.35-0.71	12.3-25	10	145	FS26	60	3/4"	165	1020x690x960	185	1200x810x1220
BORA-E 5.5-08-270 PM	V91GS97SHAA72	270	5.5	7.5	350-820	0.35-0.82	12.3-28.9	8	116	FS26	60	3/4"	240	1510x690x1480	275	1720x750x1700
BORA-E 5.5-10-270 PM	V91GT97SHAA72	270	5.5	7.5	350-710	0.35-0.71	12.3-25	10	145	FS26	60	3/4"	240	1510x690x1480	275	1720x750x1700
BORA-E 5.5-08-270 PM-ES	V91GS97SHAB72	270	5.5	7.5	350-820	0.35-0.82	12.3-28.9	8	116	FS26	60	1"	290	1620x690x1480	325	1720x750x1700
BORA-E 5.5-10-270 PM-ES	V91GT97SHAB72	270	5.5	7.5	350-710	0.35-0.71	12.3-25	10	145	FS26	60	1"	290	1620x690x1480	325	1720x750x1700
7.5 kW																
BORA-E 7.5-08 PM	V60GV97SHAA72	–	7.5	10	350-1270	0.35-1.27	12.3-44.7	8	116	FS26	60	3/4"	165	1020x690x960	185	1200x810x1220
BORA-E 7.5-10 PM	V60GW97SHAA72	–	7.5	10	350-1060	0.35-1.06	12.3-37.3	10	145	FS26	61	3/4"	165	1020x690x960	185	1200x810x1220
BORA-E 7.5-13 PM	V60GX97SHAA72	–	7.5	10	300-621	0.30-0.62	10.6-21.8	13	189	FS26	61	3/4"	165	1020x690x960	185	1200x810x1220
BORA-E 7.5-08-270 PM	V91GV97SHAA72	270	7.5	10	350-1270	0.35-1.27	12.3-44.7	8	116	FS26	61	3/4"	240	1510x690x1480	275	1720x750x1700
BORA-E 7.5-10-270 PM	V91GW97SHAA72	270	7.5	10	350-1060	0.35-1.06	12.3-37.3	10	145	FS26	61	3/4"	240	1510x690x1480	275	1720x750x1700
BORA-E 7.5-13-270 PM	V91GX97SHAA72	270	7.5	10	300-621	0.30-0.62	10.6-21.8	13	189	FS26	61	3/4"	240	1510x690x1480	275	1720x750x1700
BORA-E 7.5-08-270 PM-ES	V91GV97SHAB72	270	7.5	10	350-1270	0.35-1.27	12.3-44.7	8	116	FS26	61	1"	290	1620x690x1480	325	1720x750x1700
BORA-E 7.5-10-270 PM-ES	V91GW97SHAB72	270	7.5	10	350-1060	0.35-1.06	12.3-37.3	10	145	FS26	61	1"	290	1620x690x1480	325	1720x750x1700
BORA-E 7.5-13-270 PM-ES	V91GX97SHAB72	270	7.5	10	300-621	0.30-0.62	10.6-21.8	13	189	FS26	61	1"	290	1620x690x1480	325	1720x750x1700
11 kW																
BORA-E 11-08 PM	V60HA97SHAA72	–	11	15	620-1750	0.62-1.75	21.8-61.6	8	116	FS50	60	3/4"	210	1020x690x960	231	1200x810x1220
BORA-E 11-10 PM	V60HB97SHAA72	–	11	15	580-1550	0.58-1.55	20.4-54.6	10	145	FS50	60	3/4"	210	1020x690x960	231	1200x810x1220
BORA-E 11-13 PM	V60HC97SHAA72	–	11	15	375-1250	0.37-1.25	13-44	13	189	FS50	60	3/4"	210	1020x690x960	231	1200x810x1220
BORA-E 11-08-500 PM	V83HA97SHAA72	500	11	15	620-1750	0.62-1.75	21.8-61.6	8	116	FS50	60	3/4"	325	1950x690x1580	365	2070x800x1850
BORA-E 11-10-500 PM	V83HB97SHAA72	500	11	15	580-1550	0.58-1.55	20.4-54.6	10	145	FS50	60	3/4"	325	1950x690x1580	365	2070x800x1850
BORA-E 11-13-500 PM	V83HC97SHAA72	500	11	15	375-1250	0.37-1.25	13-44	13	189	FS50	60	3/4"	355	1950x690x1580	395	2070x800x1850
BORA-E 11-08-500 PM-ES	V83HA97SHAB72	500	11	15	620-1750	0.62-1.75	21.8-61.6	8	116	FS50	60	1"	370	1950x690x1580	410	2070x800x1850
BORA-E 11-10-500 PM-ES	V83HB97SHAB72	500	11	15	580-1550	0.58-1.55	20.4-54.6	10	145	FS50	60	1"	370	1950x690x1580	410	2070x800x1850
BORA-E 11-13-500 PM-ES	V83HC97SHAB72	500	11	15	375-1250	0.37-1.25	13-44	13	189	FS50	60	1"	400	1950x690x1580	440	2070x800x1850
15 kW																
BORA-E 15-08 PM	V60HD97SHAA72	–	15	20	400-2600	0.40-2.60	14-91.5	8	116	FS50	62	3/4"	215	1020x690x960	235	1200x810x1220
BORA-E 15-10 PM	V60HE97SHAA72	–	15	20	590-2250	0.59-2.25	20.7-79.2	10	145	FS50	62	3/4"	215	1020x690x960	235	1200x810x1220
BORA-E 15-13 PM	V60HF97SHAA72	–	15	20	585-1600	0.58-1.60	20.6-56.3	13	189	FS50	62	3/4"	215	1020x690x960	235	1200x810x1220
BORA-E 15-08-500 PM	V83HD97SHAA72	500	15	20	400-2600	0.40-2.60	14-91.5	8	116	FS50	62	3/4"	330	1950x690x1580	350	2070x800x1850
BORA-E 15-10-500 PM	V83HE97SHAA72	500	15	20	590-2250	0.59-2.25	20.7-79.2	10	145	FS50	62	3/4"	330	1950x690x1580	350	2070x800x1850
BORA-E 15-13-500 PM	V83HF97SHAA72	500	15	20	585-1600	0.58-1.60	20.6-56.3	13	189	FS50	62	3/4"	360	1950x690x1580	380	2070x800x1850
BORA-E 15-08-500 PM-ES	V83HD97SHAB72	500	15	20	400-2600	0.40-2.60	14-91.5	8	116	FS50	62	1"	375	1950x690x1580	395	2070x800x1850
BORA-E 15-10-500 PM-ES	V83HE97SHAB72	500	15	20	590-2250	0.59-2.25	20.7-79.2	10	145	FS50	62	1"	375	1950x690x1580	395	2070x800x1850
BORA-E 15-13-500 PM-ES	V83HF97SHAB72	500	15	20	585-1600	0.58-1.60	20.6-56.3	13	189	FS50	62	1"	405	1950x690x1580	425	2070x800x1850

BORA-E PM 18.5-75 kW		P/N	Power	Air outflow rate (min.-max)			Max. pressure		Air-end	Sound level	Ø	Net weight	Net dimensions	Gross weight	Gross dimensions
			kW	HP	l/min	m³/min	cfm	bar		psi	dB(A)	G	kg	L x W x H (mm)	kg
VARIABLE SPEED with PERMANENT MAGNET MOTOR - LOGIN controller															
18.5 kW															
BORA-E 18.5-08 PM	V60HG97SHAA72	18.5	25	550-3000	0.55-3.00	19.4-106	8	116	FS100	61	3/4"	625	1400x1040x1450	675	1510x1100x1600
BORA-E 18.5-10 PM	V60HH97SHAA72	18.5	25	549-2700	0.54-2.70	19-95	10	145	FS100	63	3/4"	625	1400x1040x1450	675	1510x1100x1600
22 kW															
BORA-E 22-08 PM	V60HJ97SHAA72	22	30	460-3500	0.46-3.50	16.2-123	8	116	FS100	61	3/4"	635	1400x1040x1450	685	1510x1100x1600
BORA-E 22-10 PM	V60HK97SHAA72	22	30	710-3200	0.71-3.20	25-117	10	145	FS100	63	3/4"	635	1400x1040x1450	685	1510x1100x1600
30 kW															
BORA-E 30-08 PM	V60HL97SHAA72	30	40	845-5500	0.85-5.50	30-194	8	116	FS140	66	1"1/2	950	1600x1100x1450	1000	1710x1100x1600
BORA-E 30-10 PM	V60HM97SHAA72	30	40	830-5000	0.83-5.00	29-176	10	145	FS140	66	1"1/2	950	1600x1100x1450	1000	1710x1100x1600
37 kW															
BORA-E 37-08 PM	V60HP97SHAA72	37	50	1350-6750	1.35-6.75	48-238	8	116	FS270	68	1"1/2	1100	1700x1300x1620	1150	1810x1410x1770
BORA-E 37-10 PM	V60HQ97SHAA72	37	50	830-5400	0.83-5.40	29-190	10	145	FS140	66	1"1/2	970	1600x1100x1450	1020	1710x1100x1600
45 kW															
BORA-E 45-08 PM	V60OA97SHAA72	45	60	1420-8500	1.42-8.50	50-299	8	116	FS270	68	1"1/2	1100	1700x1300x1620	1150	1810x1410x1770
BORA-E 45-10 PM	V60OB97SHAA72	45	60	2120-7800	2.12-7.80	75-275	10	145	FS270	68	1"1/2	1100	1700x1300x1620	1150	1810x1410x1770
55 kW															
BORA-E 55-08 PM	V60OC97SHAA72	55	75	3470-10000	3.47-10	122-352	8	116	FS320	70	2"	1485	2100x1450x1950	1535	2210x1560x2100
BORA-E 55-10 PM	V60OD97SHAA72	55	75	3430-8800	3.43-8.80	120-310	10	145	FS320	70	2"	1485	2100x1450x1950	1535	2210x1560x2100
75 kW															
BORA-E 75-08 PM	V60OE97SHAA72	75	100	5280-13800	5.28-13.8	186-486	8	116	FS400	72	2"	1600	2100x1450x1950	1650	2210x1560x2100
BORA-E 75-10 PM	V60OF97SHAA72	75	100	4240-12000	4.24-12	149-423	10	145	FS400	72	2"	1600	2100x1450x1950	1650	2210x1560x2100

Extend the life and efficiency of your screw compressor.

In addition to offering the highest quality and technologically advanced products, SHAMAL focuses its attention on customer care and full technical and product support, identifying our customers' needs and the most suitable solutions. Our skilled and professional team grants assistance over the phone/email, technical on-site consultancy, personalised quotations, maintenance programmes, training programmes, etc.

The importance of original spare parts...

FSN is the brand of the original spare parts and after sales activities for all SHAMAL compressors. FSN guarantees that the components are original and that they were carefully selected, checked and tested by skilled technicians. Using FSN certified original spare parts reduces management costs and guarantees the efficiency, reliability and longevity of the compressor. Our “Hot-Line” service guarantees the shipment of urgent spare parts within 24 hours from the order.

LONG LIFE KIT for the scheduled maintenance of screw compressors

To make maintenance planning simple and in accordance with the recommendations, SHAMAL has developed its “LONG LIFE SERVICE KITS”, specifically created for all SHAMAL screw compressor models. Using Long Life Kits ensures an extended service life, increased safety whilst ensuring maximum compressor performance.



Investment guaranteed up to 5 years! with the TRUST warranty extension

SHAMAL believes so strongly in the quality and reliability of its compressors as to guarantee them up to 60 months! By choosing TRUST it is possible to extend the standard warranty period by 3 or 5 years, through a complete preventive maintenance program. There are many benefits: the customer can thereby avail of the qualified assistance of authorised technicians in complete safety, reducing the uncertainty of maintenance costs and foreseeing any downtime. Also, the use of original spare parts guaranteed by the FSN trademark will ensure that the compressor operates with maximum efficiency and for a longer service life. The “Trust” warranty can be easily extended online through EasyConnect portal on the website shamalcompressors.com.



... and specific lubricants

RotarECOFLUID 46 cSt mineral oil

C600000023	1 x 5-litre can (4.385 kg)
C600000021	1 x 20-litre can (17.36 kg)
C600000022	1 x 200-litre drum (174 kg)

Formulated with high quality selected mineral oil, this lubricant offers optimal control of oxidation and residue deposits as well as an excellent level of thermal stability and oxidation to ensure the longevity of equipment and continued high performance.

RotEnergyPlus 46 cSt synthetic oil

C600000024A	1 x 5-litre can (4.37 kg)
C600000007A	1 x 19-litre can (16 kg)
C600000012A	1 x 208-litre drum (181 kg)

Ensures quick water separation with reduced friction and energy consumption, provides long maintenance intervals and ensures excellent lubrication of the bearings while offering an excellent protection throughout.

RotEnergyFood 46 cSt synthetic oil

C600000025A	1 x 5-litre can (4.20 kg)
C600000016A	1 x 19-litre can (18.5 kg)
C600000017A	1 x 208-litre drum (175 kg)

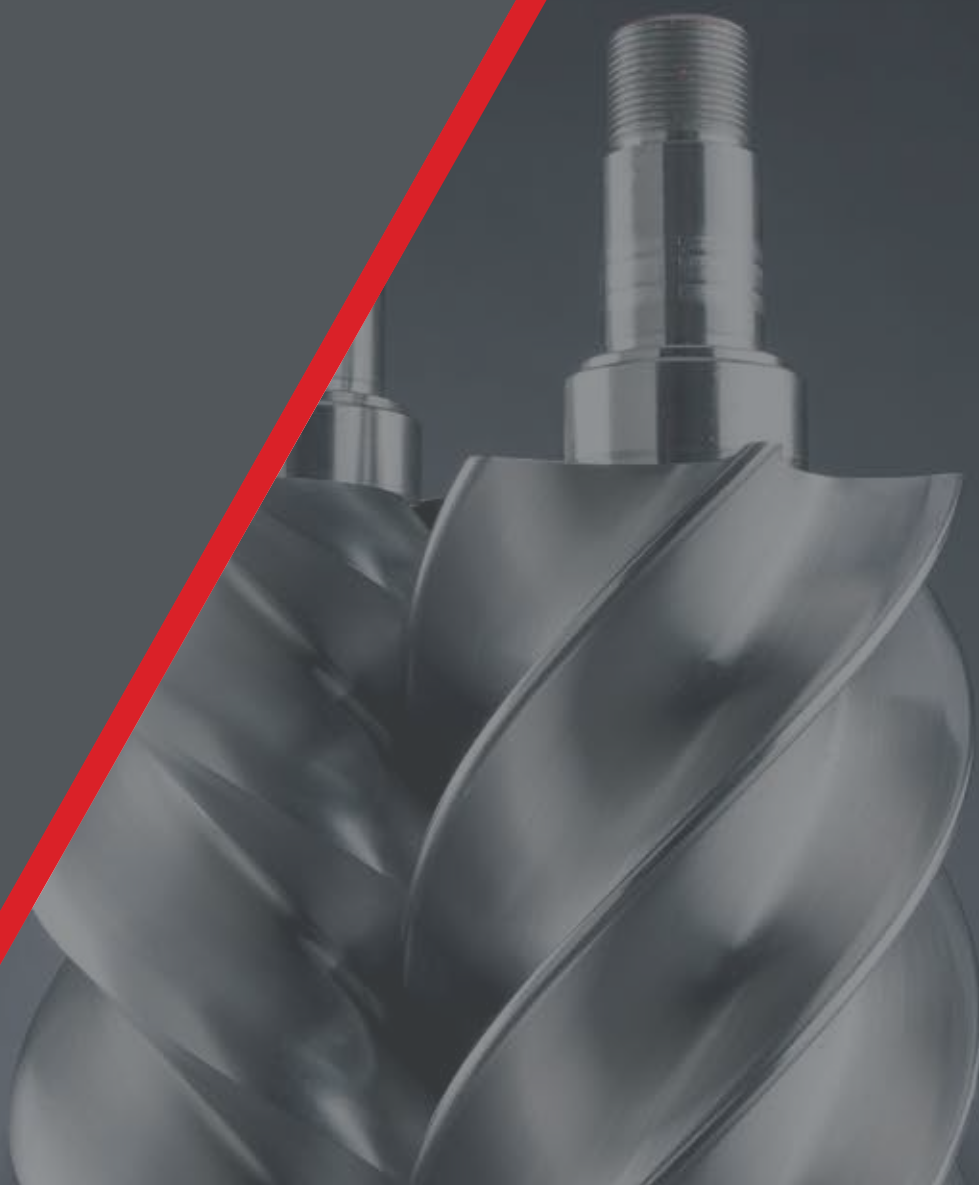
A high quality lubricant for rotary compressors, suitable for use in the food industry, where specific quality standards are required.

Our FSN mineral or synthetic based lubricants are specifically designed for use on our screw compressors. They are available in cans or drums in various sizes.

We recommend replacing the oil according to the interval reported in the handbook / maintenance manual of the compressor or once a year if sooner. We recommend using our original RotarECOFLUID mineral oils, or RotEnergyPlus and RotEnergyFood synthetic oils (OILS ARE NOT INCLUDED IN LONG LIFE KITS).



You can download the Long Life Kit catalogues from the shamalcompressors.com website and see the exploded diagrams and spare parts list online. They are continuously updated for each compressor model.



AUTHORISED DISTRIBUTOR:

FNA S.p.A. L. Via Einaudi, 6
10070 Robassomero Torino ITALY
T: +39 011 92 33 000 F: +39 011 92 41 138

BOLOGNA PLANT:
Via Toscana, 21 40069 Zola Predosa Bologna ITALY
T: +39 051 61 68 111 F: +39 051 75 24 08
info@fnacompressors.com
www.fnacompressors.com



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