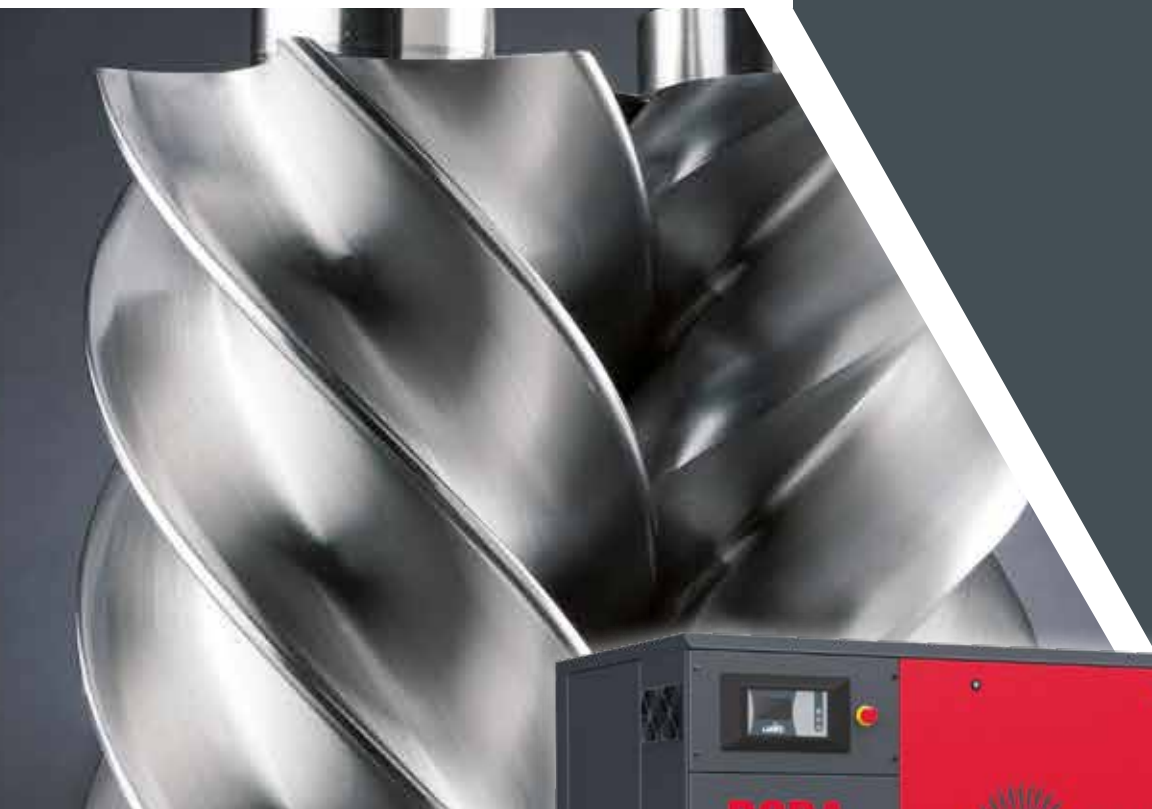




THE RELIABILITY OF COMPRESSORS.



MADE IN ITALY



BORA 5.5-45 kW

Oil injected rotary screw compressors with direct-drive transmission, at fixed speed, variable speed and variable speed with permanent magnet motor.

NEW



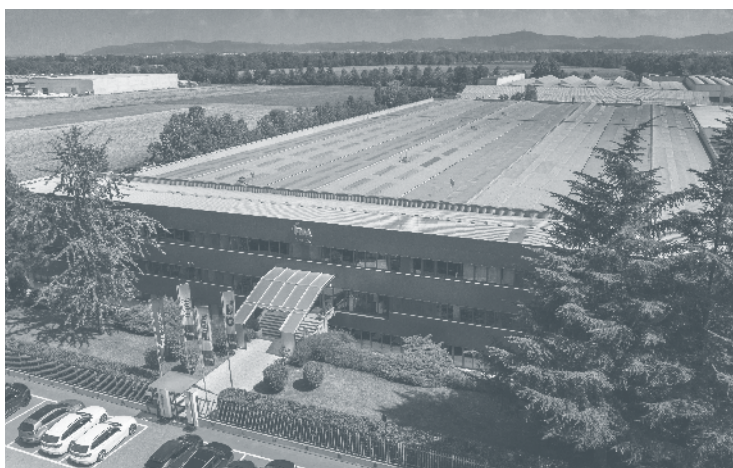
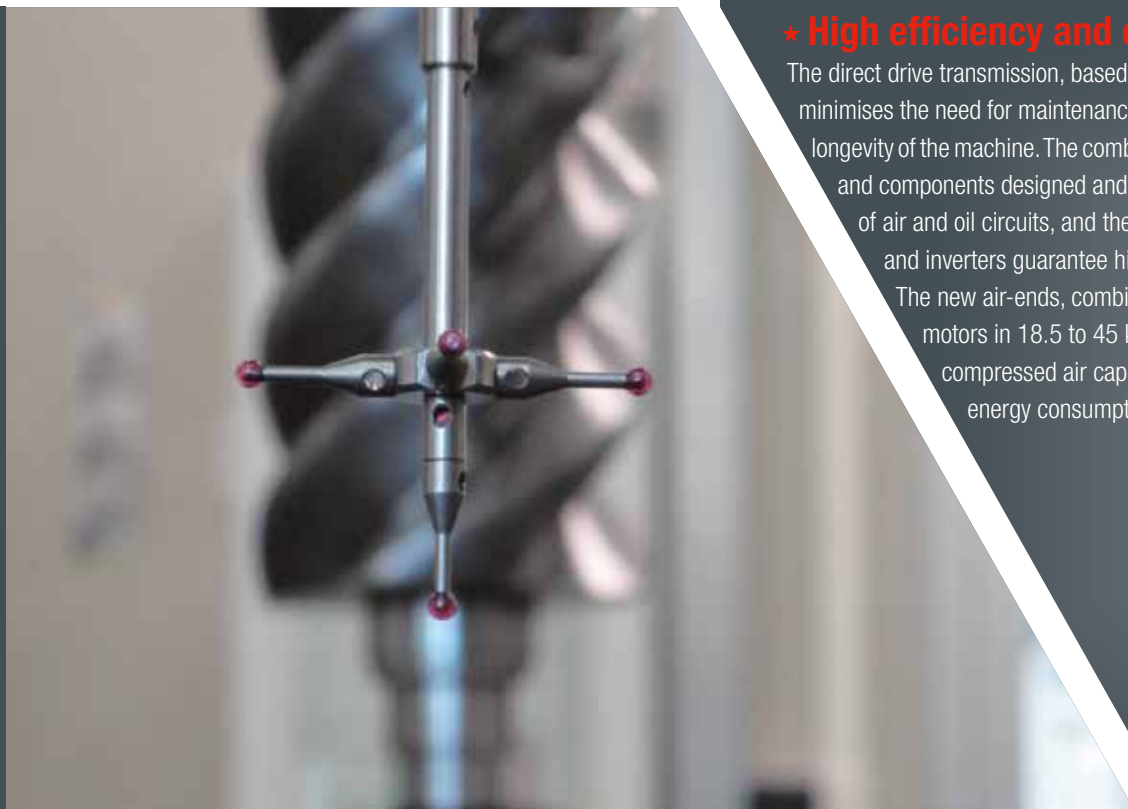
NEW BORA: ROTARY SCREW COMPRESSORS FROM 5.5 TO 45 KW WITH DIRECT-DRIVE TRANSMISSION.

The new BORA screw compressors are the answer to the needs of large, small and medium-sized enterprises where compressed air is one of the main energy sources.

★ High efficiency and energy savings

The direct drive transmission, based on an original Shamal design, minimises the need for maintenance and increases the reliability and longevity of the machine. The combination of innovative technologies and components designed and built by Shamal, the optimisation of air and oil circuits, and the use of state-of-the-art motors and inverters guarantee high efficiency.

The new air-ends, combined with permanent magnet motors in 18.5 to 45 kW versions, ensure higher compressed air capacities with lower energy consumption.



Our figures

1300	Employees across 3 continents
1500	Global service centres
120	Countries we export to
11000	Screw compressors produced per year
5	Manufacturing plants

The group

The Shamal brand is part of the FNA international group, which has 75 years of experience in the compressed air industry. FNA, the world's leading manufacturer of piston compressors, undisputed leader in the production of professional compressors and among the first in Europe in the industrial screw compressor segment, has established itself on the market thanks to its strengths: dynamism, technological innovation, know-how, creativity, integrated marketing, flexible production processes and 'tailor-made' customer service. The group counts on an experienced and highly qualified team, capable of interpreting the market needs in defining, developing and distributing its products.

Shamal's industrial range is wide and comprehensive and includes oil injected rotary screw compressors from 2.2 to 75 kW with belt-drive transmission and the new BORA range, with direct-drive transmission and power from 5.5 to 45 kW.

★ New Login controller

All BORA models are equipped with the new 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, so as to manage multiple compressors (up to 8 units, even different types) and for remote control via SMS Device 2.0 that can be matched to the control unit.

★ Simplified maintenance

All of the routine service components are located in the most convenient and easily accessible position. The panels can be taken away or opened for complete access. Maintenance costs are reduced and efficiency improved thanks to the use of the highest quality components

★ Silence at the highest levels

The low speed air-ends and the use of radial cooling fans allow BORA products to offer amongst the lowest noise values in their category. This means a simplified installation allowing the compressor positioning close to the point-of-use.

★ Compact design

The BORA series has been designed to offer maximum performance and highest reliability, in a compact space saving format. The modularity of the different setups allows more than 100 possible configurations.



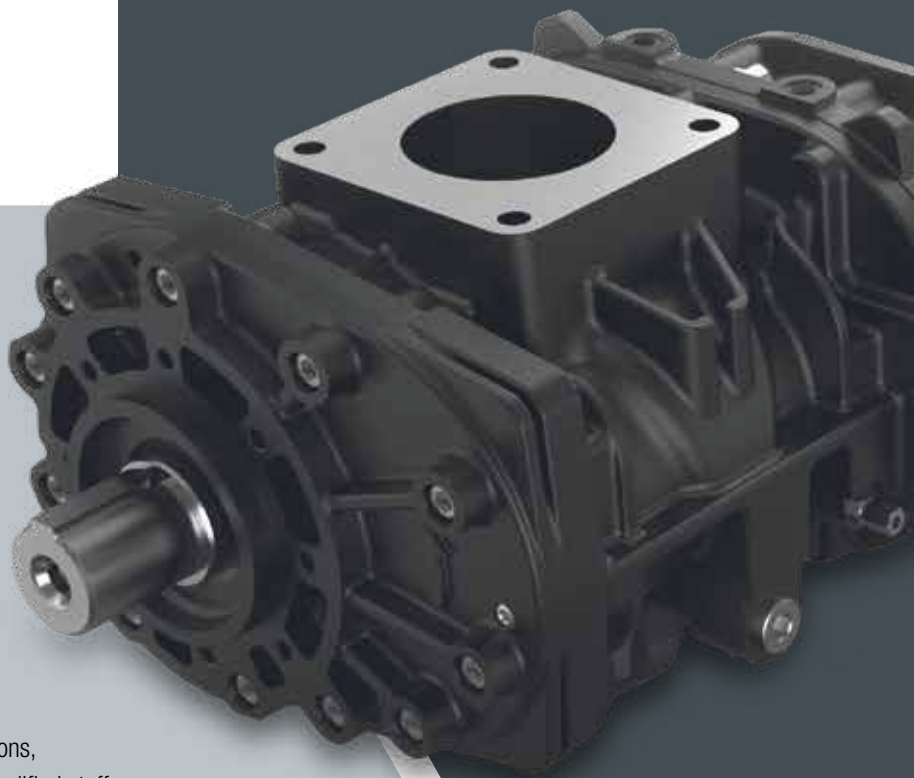
A modular and complete range from 5.5 to 45 kW, with more than 100 possible configurations!

Power (kW)	Model	Floor mounted	Floor mounted + dryer (ES)	Tank-mounted	Tank-mounted + dryer (ES)	Air-end	Intake regulator	Fixed speed	Variable speed (VS)	Electric motor	Permanent magnet motor (PM)
5.5	BORA 5.5	●	●	270 l	270 l	FS26	IR10	●	—	IE3	—
7.5	BORA 7.5	●	●	270 - 500 l	270 - 500 l	FS26	IR10	●	●	IE3	—
11	BORA 11	●	●	500 l	270 - 500 l	FS50	IR30	●	●	IE3	—
15	BORA 15	●	●	500 l	500 l	FS50	IR30	●	●	IE3	—
18.5	BORA 18.5	●	●	—	—	FS100	IR60	●	●	IE4	●
22	BORA 22	●	●	—	—	FS100 FS140	IR60	●	●	IE4	●
	BORA 24	●	●	—	—	FS140	IR70	—	●	IE4	●
30	BORA 31	●	●	—	—	FS140	IR100	●	●	IE4	●
37	BORA 38	●	●	—	—	FS140 FS270	IR100	●	●	IE4	●
	BORA 39	●	—	—	—	FS270	IR100	—	●	IE4	●
45	BORA 45	●	—	—	—	FS270	IR100	●	—	IE4	—
	BORA 45E	●	—	—	—	FS270	IR100	—	●	IE4	●

DESIGN AND PRODUCTION: MADE IN ITALY.

What makes our BORA 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 which is our commitment to producing a machine that meets and exceeds the most demanding requirements in terms of efficiency, quality, energy saving, high performance and quiet operation.

Every product, built in compliance with the current regulations, is closely followed up in all process steps by trained and qualified staff, to ensure that more than 50 specific quality and functional tests are passed. Furthermore, since 1996, the Company has certified its quality systems in compliance with UNI EN ISO 9001:2015.



WE HAVE BEEN PRODUCING AIR-ENDS FOR OVER 30 YEARS.

Shamal air-ends feature rotors with an optimised profile offering outstanding performance. The production process is completely integrated thanks to the use of modern and advanced machine tools along with sophisticated process and quality control measures, that guarantees the highest level of quality.

A highly developed CAD modelling system optimises the set-up of the components. Each rotor is machined in four manufacturing stages to achieve an extremely precise execution, this is maintained continuously using advanced machining technology.

All of the air-ends are tested twice: individually after assembly and later upon installation to the complete machine.



ITALIAN EXCELLENCE.

Shamal is a leading Italian company that succeeds in combining craftsmanship with the most modern industrial technologies, all executed and controlled by a highly experienced and specialised workforce. The Made in Italy trademark is the expression of typical Italian quality and creativity, recognised and appreciated around the world, and which defines all of the elements of our industrial production.

INTAKE REGULATORS AND SEPARATOR BLOCKS.

In addition to the assembly of a complete product and air-ends, Shamal also produces a vast range of intake regulators, thermostatic valves, separator blocks and accessories for the assembly of rotary compressors.



	Power range [kW]	Max.* operating pressure [bar]
FS26	5.5 ÷ 7.5	15
FS50	11 ÷ 15	15
FS100	18.5 ÷ 22	15
FS140	22 ÷ 37	15
FS270	37 ÷ 45	15

	Power range [kW]	Max.* operating pressure [bar]
IR10	5.5 ÷ 7.5	15
IR30	11 ÷ 15	15
IR60	18.5 ÷ 22	15
IR70	24	15
IR100	30 ÷ 45	15

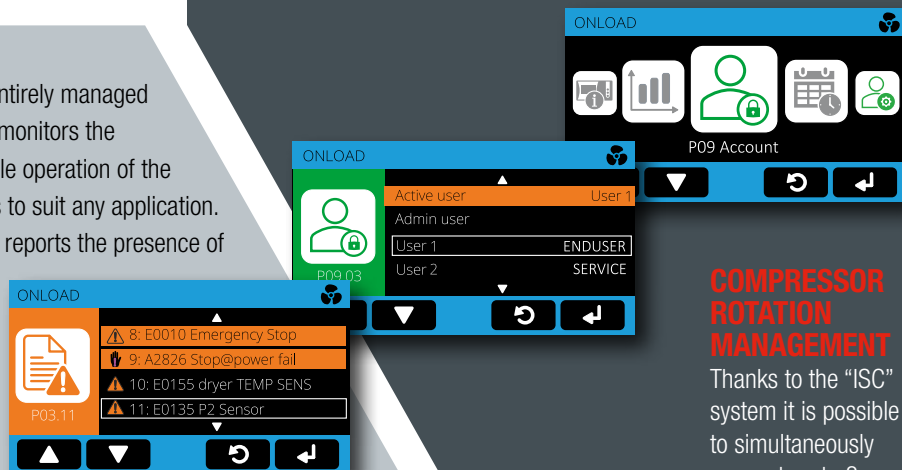
* The value indicated refers to the maximum pressure that can be reached by the air-end and intake regulator.
Max. pressure of Bora series compressors: 13 bar.

LOGIN: INTUITIVE AND INTELLIGENT CONTROL.

The Login controller, installed on all BORA models, introduces new software capabilities to upgrade diagnostic functions, thereby guaranteeing excellent performance in all conditions. Login provides additional facilities including remote control and multi-compressor management.

All functions of the BORA series compressors are entirely managed by the Login electronic controller, which constantly monitors the compressors operation ensuring efficient and reliable operation of the machine in all conditions with customised functions to suit any application. During an irregular event within the machine, Login reports the presence of such and incident by creating an alert for the user, allowing for prompt operator intervention.

The integrated connectivity with remote monitoring (optional), makes it possible to obtain complete information on the compressor status remotely.



COMPRESSOR ROTATION MANAGEMENT

Thanks to the "ISC" system it is possible to simultaneously connect up to 8 different compressors (fixed and/or variable speed combinations), with "master-slave" logic, also for compressors not equipped with Login by using an optional dedicated module.

NEW!



Exclusive design

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



Remote control

Allows a complete remote monitoring of the compressor.



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.



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).



Multilanguage management

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



Designed for Industry 4.0

SMS 2.0

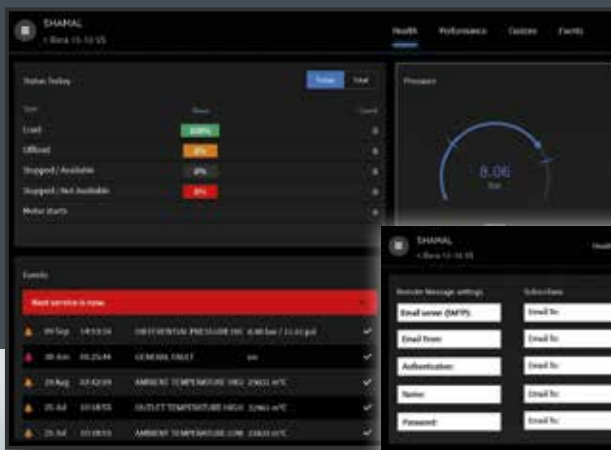
PREVENTIVE AND TARGETED MAINTENANCE.

SMS 2.0 (Service Management System) is the innovative device (optional) to remotely access and perform preventive maintenance checks on any of Shamil screw compressors equipped with a Login controller.

Through a LAN connection with Ethernet cable, SMS 2.0 allows e-mails to be sent automatically should an irregular event occur (up to 5 settable e-mail addresses). At the same time, it is possible to monitor the correct operation of the compressor and to check the scheduling for future maintenance interventions and checks.

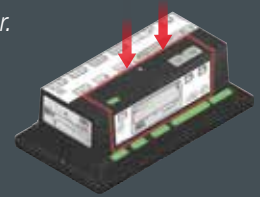
COMPRESSOR REMOTE CONTROL.

- Online compressor status control (view of temperature and pressure parameters);
- On/off control;
- View of events and alarms;
- View of remaining hours for maintenance;
- Graphic view of analogue signals connected to the controller, in real time;
- No additional software is needed.



SMS 2.0 is installed directly on the Login controller, at the rear.

code #005560002SGL





New LOGIN controller

All Shamal BORA models are equipped with the new 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, so as to manage multiple compressors (up to 8 units, even different types) and for remote control via SMS Device 2.0 that can be matched to the control unit itself.



Maximum efficiency and energy saving

Significant energy savings are achieved thanks to the IE3 and IE4 "Super Premium Efficiency" class motors. The latest generation air-ends ensure greater compressed air flow rates with reduced energy consumption. Direct-drive transmission technology. Air and oil circuits components are optimised for efficiency. Use of latest generation inverters.



Quiet operation

The low speed air-ends and the use of radial cooling fans allow BORA products to maintain amongst the lowest noise values in their category. This means a simplified installation allowing the compressor positioning close to the point-of-use.





Simplified maintenance



All of the routine service components are located in the most convenient and easily accessible position.

The panels can be taken away or opened for complete access. Maintenance costs are reduced and efficiency improved thanks to the use of the highest quality components.

Compact design



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

Remote monitoring and preventive maintenance



The optional SMS 2.0 system allows the remote monitoring of the compressor and promptly informs the user or the service centre on the machine status, reporting any alarms or the need to perform maintenance operations.

Refrigerated dryer

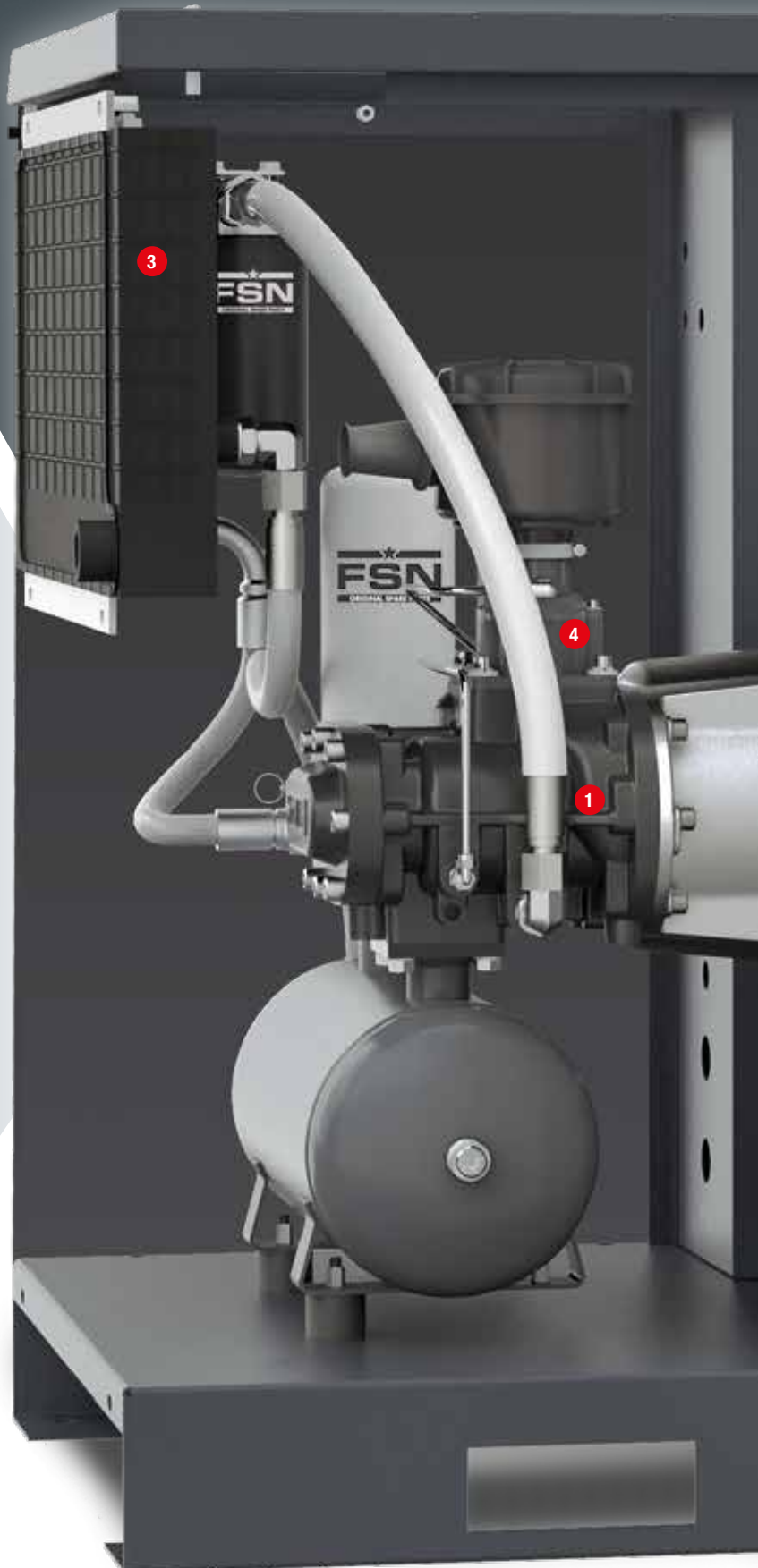


The BORA series up to 37 kW can be equipped with a refrigerated dryer, powered and controlled separately from a dedicated control unit.

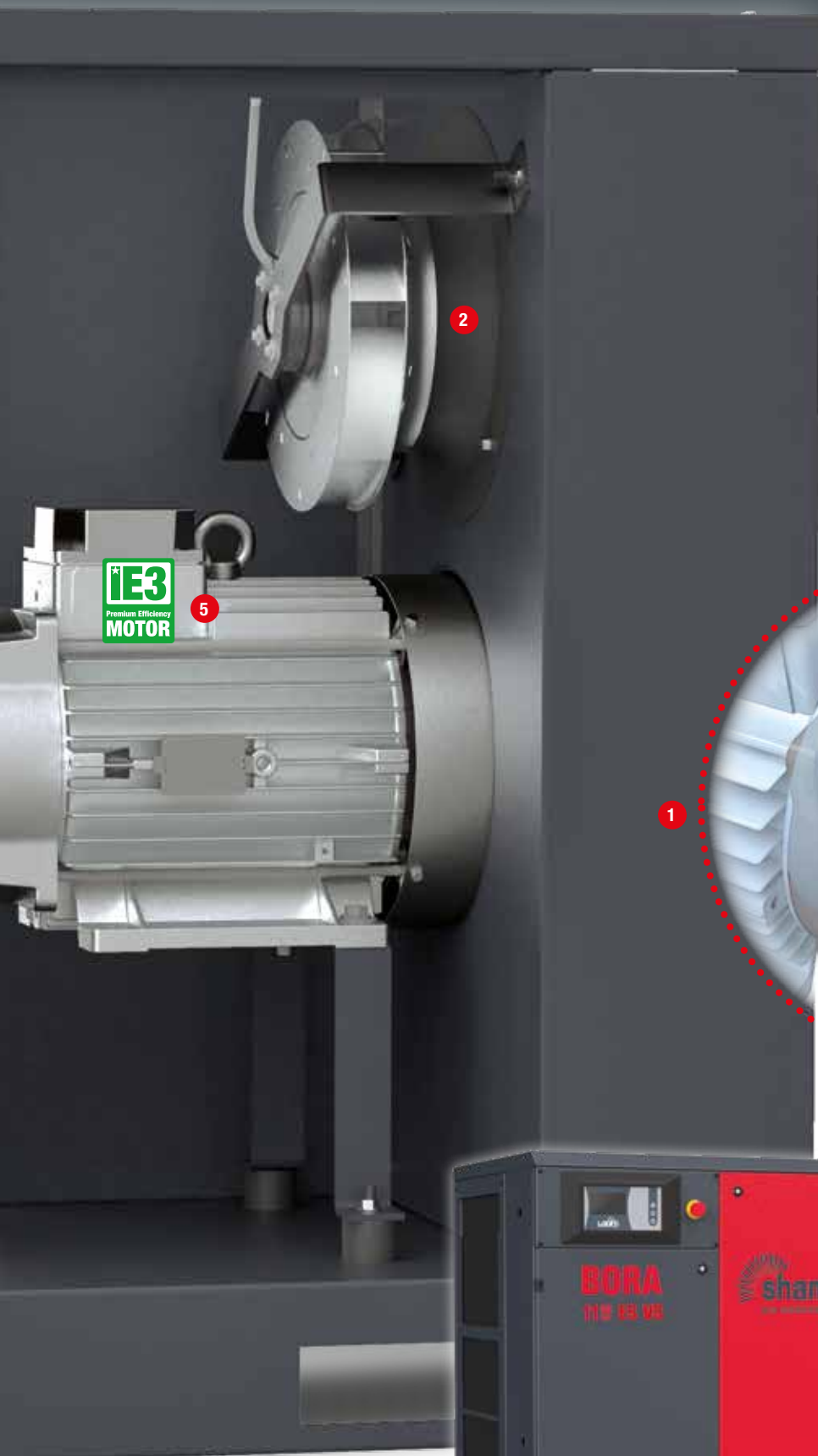
- 1 Direct-drive transmission**
Special 1:1 coupling based on original Shamal design: offers the maximum mechanical transmission efficiency.
- 2 Radial fan**
This combines excellent cooling of the compressor with very quiet operation.
- 3 Combined air-oil heat exchanger**
- 4 Intake regulator**
Designed and manufactured by Shamal, guarantees high efficiency, low noise and high reliability.
- 5 IE3 electric motor**
The highly efficient electric motors that equip the BORA range from 5.5 to 15 kW, combined with our high-performance air-ends, cut energy costs and reduce CO₂ emissions: an important contribution to environmental protection.



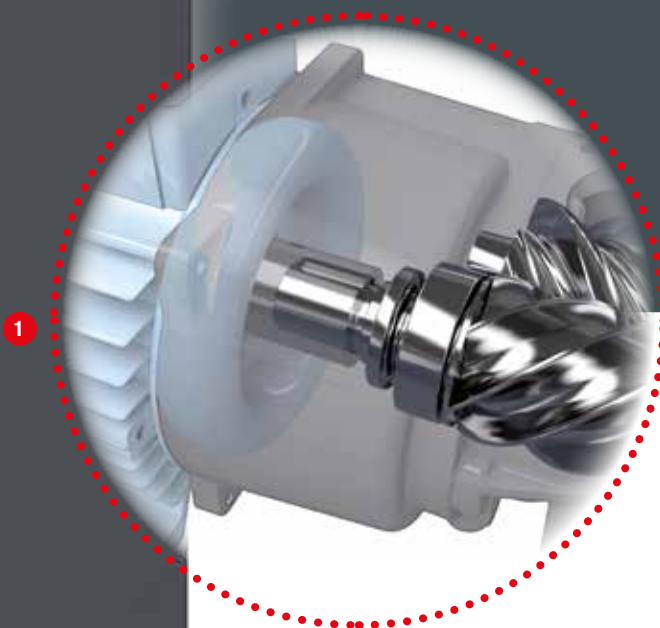
"In-house" air-ends 
Extremely reliable and highly efficient, they are entirely designed, manufactured and tested in our Italian factories. The special design of the rotor profile ensures excellent performance.



BORA 11



- ★ Low r.p.m.
- ★ Extremely quiet
- ★ Compact design
- ★ User-friendly
- ★ High efficiency
- ★ Plug&Play



- **Refrigerated dryer (optional)**
Powered separately from the compressor and managed independently from the DMC35 controller, to obtain clean, dried air. In the "ES" versions the dryer improves system reliability, avoids costly downtime and delays in production, and protects the quality of the final product.

- 1 New Login controller**
In addition to full control of all compressor functions, it allows data to be stored on a specific memory card, enables multiple compressor management and remote control via SMS 2.0.

- 2 Inverter**
The latest-generation inverter allows for a controlled use of energy resources minimising consumption.

- 3 Minimum pressure valve**
Designed by Shamal to ensure reduced pressure losses and reduce energy consumption.



Cleaning and protection

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



BORA 15 VS

VARIABLE SPEED WITH INVERTER

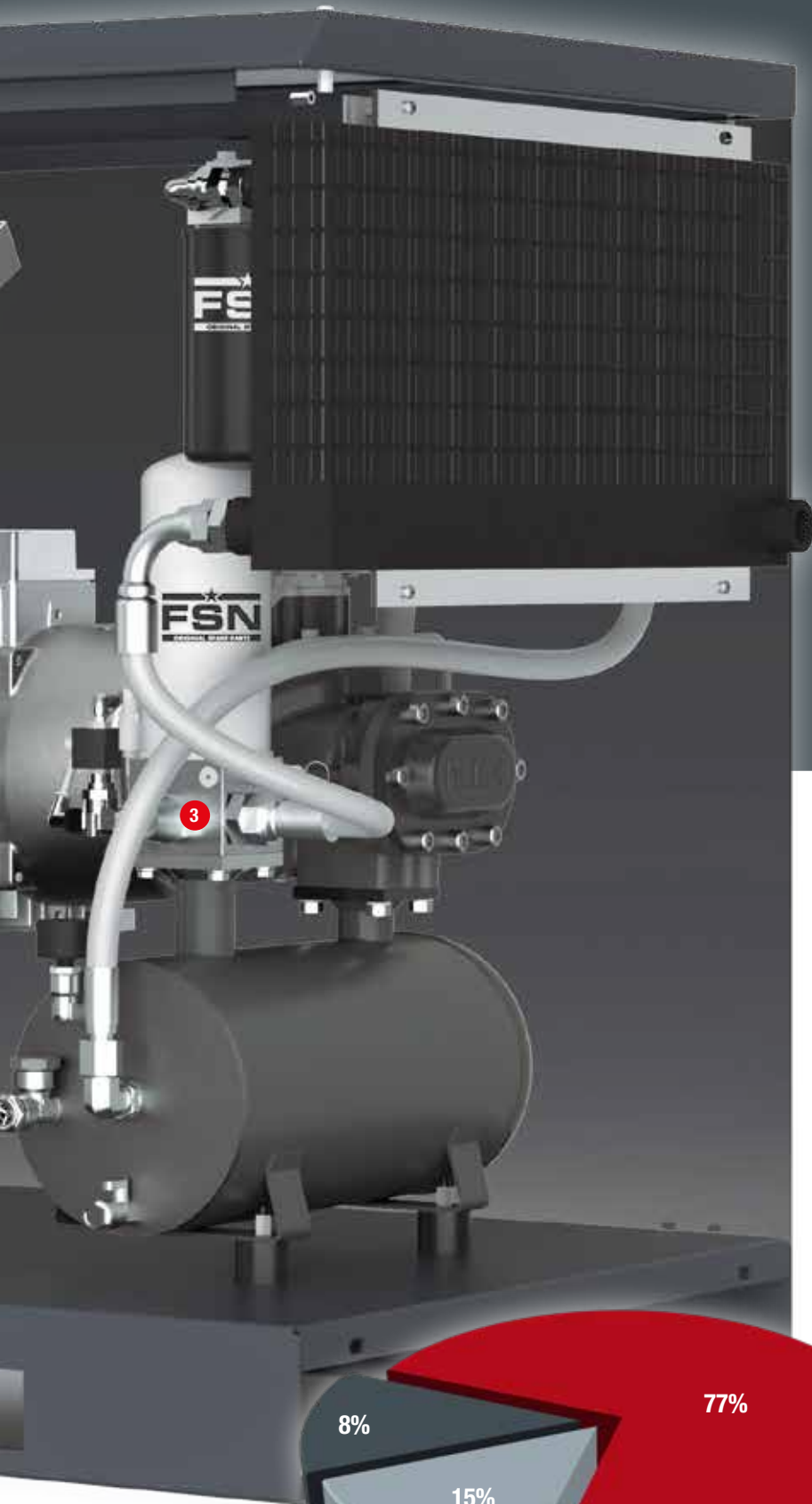
The reduction of energy consumption and the protection of our precious environmental resources is one of the major global challenges in our times.

Thanks to many years of experience in the industrial sector, Shamal is recognised as a technological leader in the field of variable speed compressors, capable of guaranteeing high performance levels and efficient energy solutions.

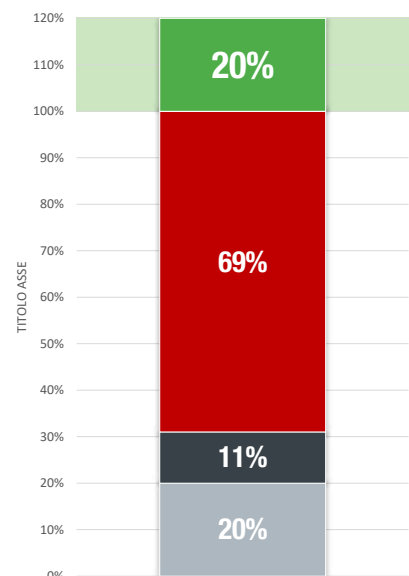
The inverter is able to dynamically adjust the speed of the motor, thereby regulating the production of the compressed air that is required.

The benefits of using the BORA VS with inverter are remarkable:

- continuous control and regulation of the compressed air volume generated by varying the speed of the electric motor from 40% up to 100% of the full speed;
- the compressed air generated is therefore constantly proportional to the system requirements.



THE HISTOGRAM SHOWS THE BREAKDOWN OF THE TOTAL COSTS DURING THE LIFE CYCLE OF A BORA VS DURING 5 YEARS OF USE, COMPARED TO A FIXED SPEED COMPRESSOR WITH THE SAME POWER.



- Energy saving
- Energy consumption
- Maintenance
- Investment

THE GRAPH INDICATES THE BREAKDOWN OF THE TOTAL COSTS DURING THE LIFE CYCLE OF A FIXED SPEED COMPRESSOR APPROPRIATE TO FIVE YEARS OF USE.

The calculation shown in the graphs is based on the energy analysis of a 11 kW BORA, considering 2000 hours of operation a year and an energy cost of about 0.17 €/kWh

BORA 18.5-45 kW

FIXED SPEED AND VARIABLE SPEED WITH PERMANENT MAGNET MOTORS



1 LOGIN controller

Simple and intuitive, powerful and flexible programming. For remote control and multi-compressor management. Designed for Industry 4.0.

2 Inverter

Combined with Permanent Magnet motor, ensures maximum performance and energy-saving, across the entire speed and load range.

Easy maintenance

The careful design of the BORA models, which can be fully opened on all 4 sides, allows easy and quick access to its internal components.

3 The "spin-on" oil filter, air filter and oil separator filter are positioned for easy access and therefore quick to replace. The air-end-motor unit is completely removable.

4 Single or two-stage air filter, depending on the model. The top-quality consumables ensure a long operating life, excellent reliability and reduced maintenance costs.

Cleaning and protection

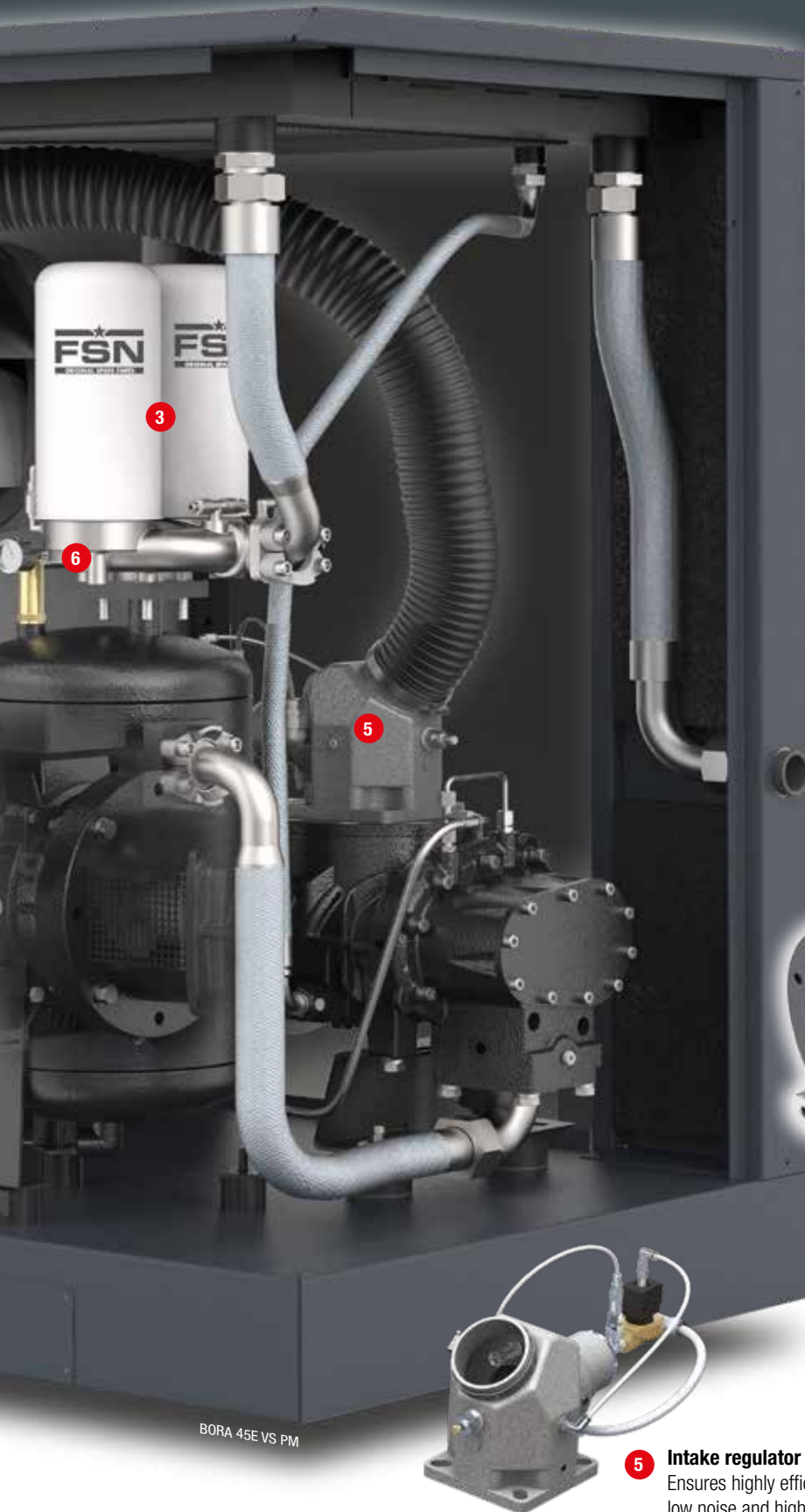
The ventilation circuit is protected by a pre-filtering panel (standard on all BORA models) that separates the incoming dusts and keeps the inside of the machine clean, increasing the longevity of internal components.



Improved air quality

The BORA models up to 37 kW can be equipped with a refrigerated dryer, powered and controlled separately by a dedicated control unit.

- ★ Highest energy savings
- ★ Extremely quiet
- ★ High efficiency
- ★ Easy maintenance



ENERGY EFFICIENCY CLASSES
according to IEC standard 60034-30-1



Super Premium Efficiency

IE3 Premium Efficiency

IE2 High Efficiency

IE1 Standard Efficiency

Non standard

- 7 Very high efficiency motors**
IE4 "Super Premium Efficiency" motors, with IP55 protection as standard on all models. The variable speed versions feature Permanent Magnet synchronous motors.



- 5 Intake regulator**
Ensures highly efficient operation, low noise and high reliability.

- 6 Minimum pressure valve**
Guarantees minimum pressure losses and reduces energy consumption.

BORA 18.5-45 kW

FIXED SPEED AND VARIABLE SPEED WITH
PERMANENT MAGNET MOTORS

1 Efficient cooling system

A thermostatic-control centrifugal fan ensures the temperature inside the compressor remains within a specific tolerance and at a constant level, avoiding temperature peaks that may prevent the machine from operating correctly.

The particularly quiet fans and the use of top quality soundproofing materials ensure one of the lowest acoustic levels of the range.

2 Easy to transport

The basement design allows handling with a pallet truck or with a forklift truck, simply by removing the panels which, when installed, minimise machine noise.

3 Heat exchangers

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

4 Oil separator filter

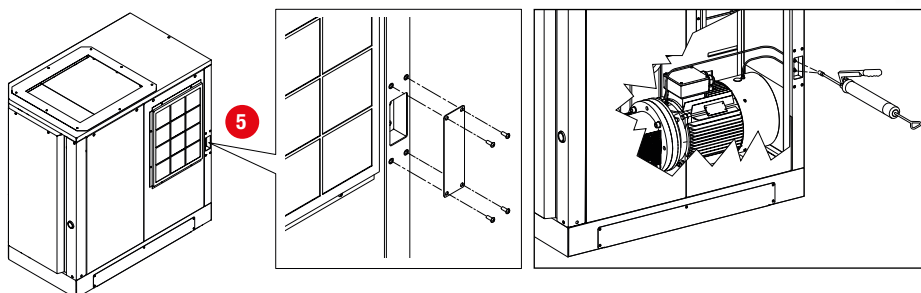
Easily accessible for maintenance operations, it is spin-on type on models up to 37 kW, while it is basket-type on BORA 45 version.

5 Remotely controlled grease nipples

Installed as standard on all BORA models from 18.5 to 45 kW, they facilitate and reduce routine maintenance time by lubricating the electric motor bearings even when the machine is running and without having to access the inside of the compressor.



BORA 24 VS PM



6 Direct transmission, with latest generation air-ends

The motor shaft is coaxial to the male 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 design, in combination with IE4 motors, guarantees superior efficiency and reliability.

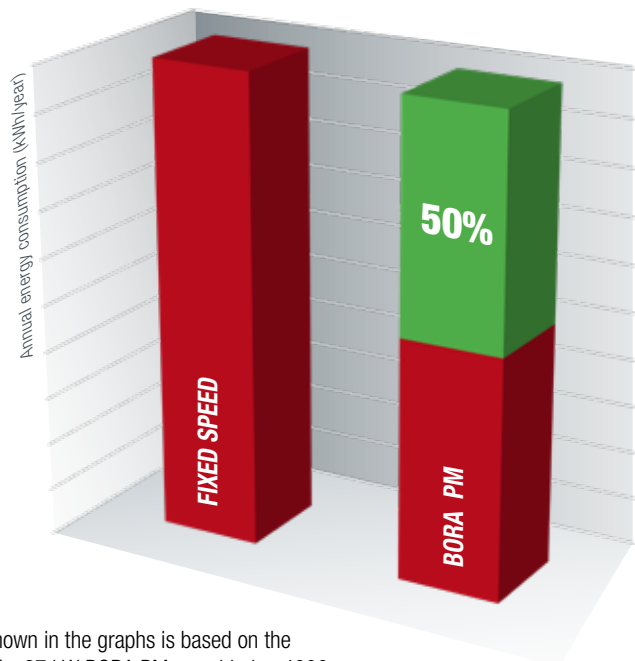


Efficiency is synonymous with sustainability

For all companies, environmental sustainability is a most important objective and why a focus on the efficiency of all processes is critical. BORA PM compressors provide a significant opportunity in this area. Working and living sustainably means preserving our natural resources as much as possible: choosing a BORA or BORA PM product, reducing energy consumption and CO₂ emissions therefore, represents an ecological and sensible choice.

Significant energy savings

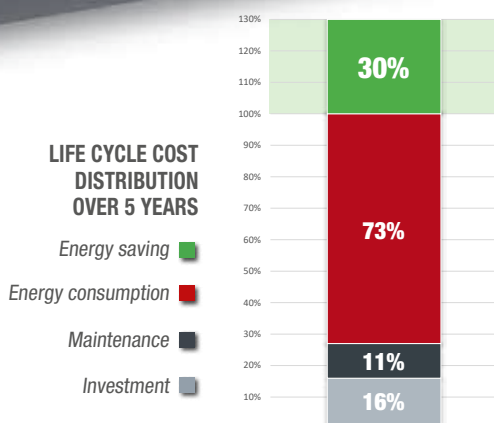
The inverter, pre-installed in the compressor's electrical panel, dynamically regulates the speed of the electric motor and therefore the speed of the air-end, continuously adjusting the delivered air flow to the system's real time compressed air requirements. This also eliminates current surges thanks to the soft start-up and drastically reduces operating cycles avoiding unnecessary no-load operation, avoiding significant energy wastage and reducing energy costs.



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

When compared to the operation of a fixed speed compressor, a BORA 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.

LIFE CYCLE COST DISTRIBUTION OVER 5 YEARS

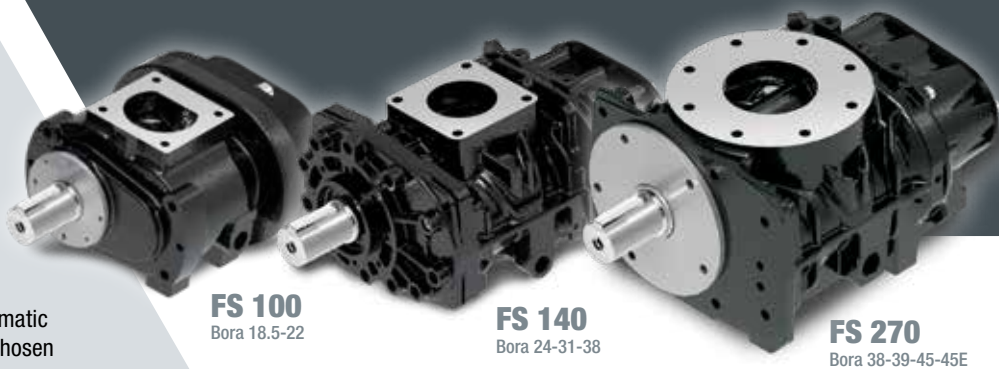


BORA 18.5-45 kW

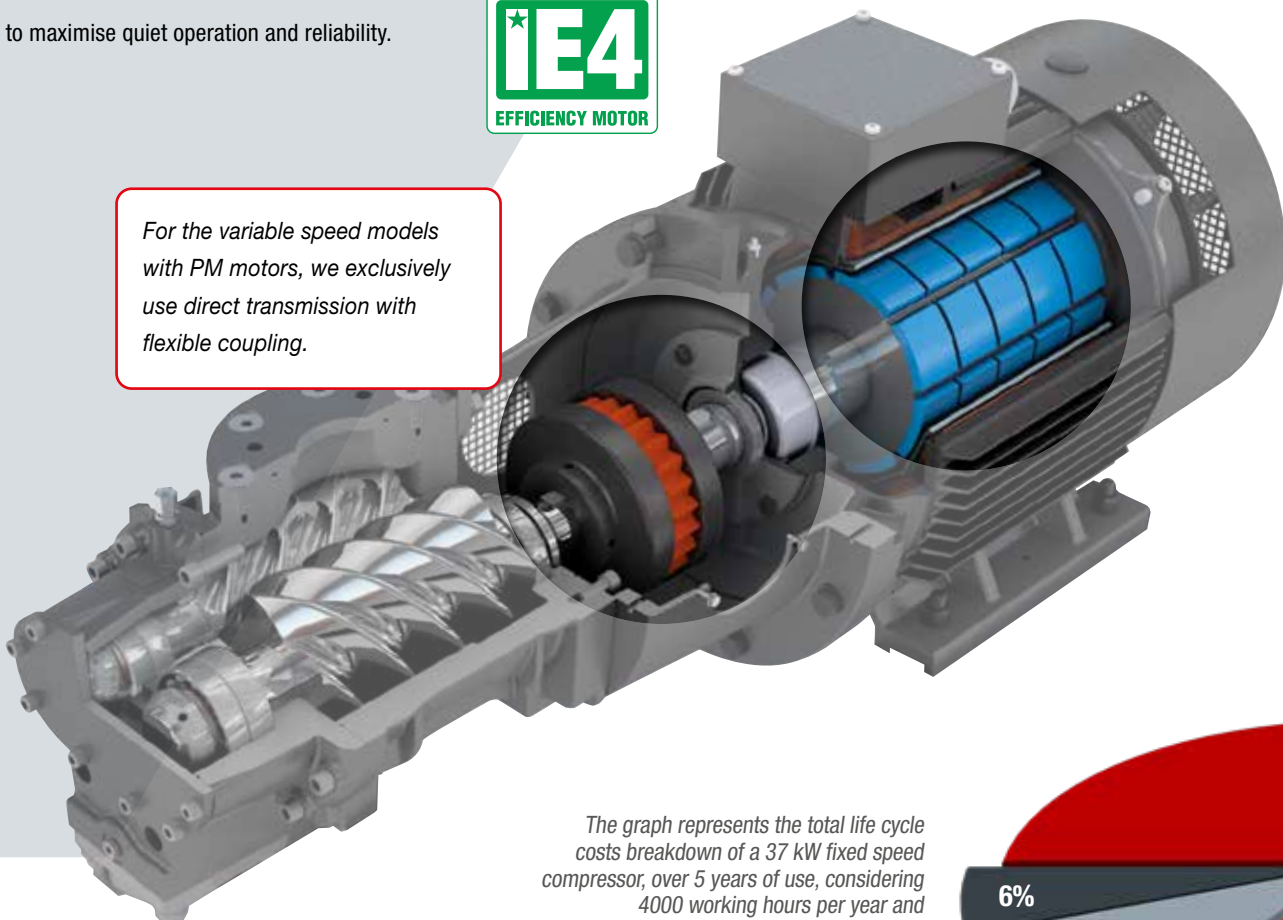
FIXED SPEED AND VARIABLE SPEED WITH
PERMANENT MAGNET MOTORS

The advantages offered by the new BORA 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 of the pneumatic system, in a range 6 to 13 bar, depending on the chosen compressor model.
- Accurate and optimised cooling of the compressor is obtained through the use of efficient, powerful and quiet radial fans.
- Attention to details, to maximise quiet operation and reliability.



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

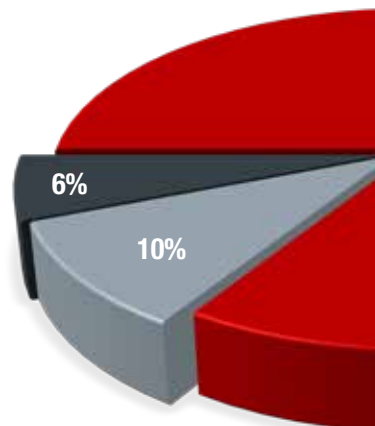


The graph represents the total life cycle costs breakdown of a 37 kW fixed speed compressor, over 5 years of use, considering 4000 working hours per year and an energy cost of about 0.17 €/kWh.

Energy consumption

Maintenance

Investment



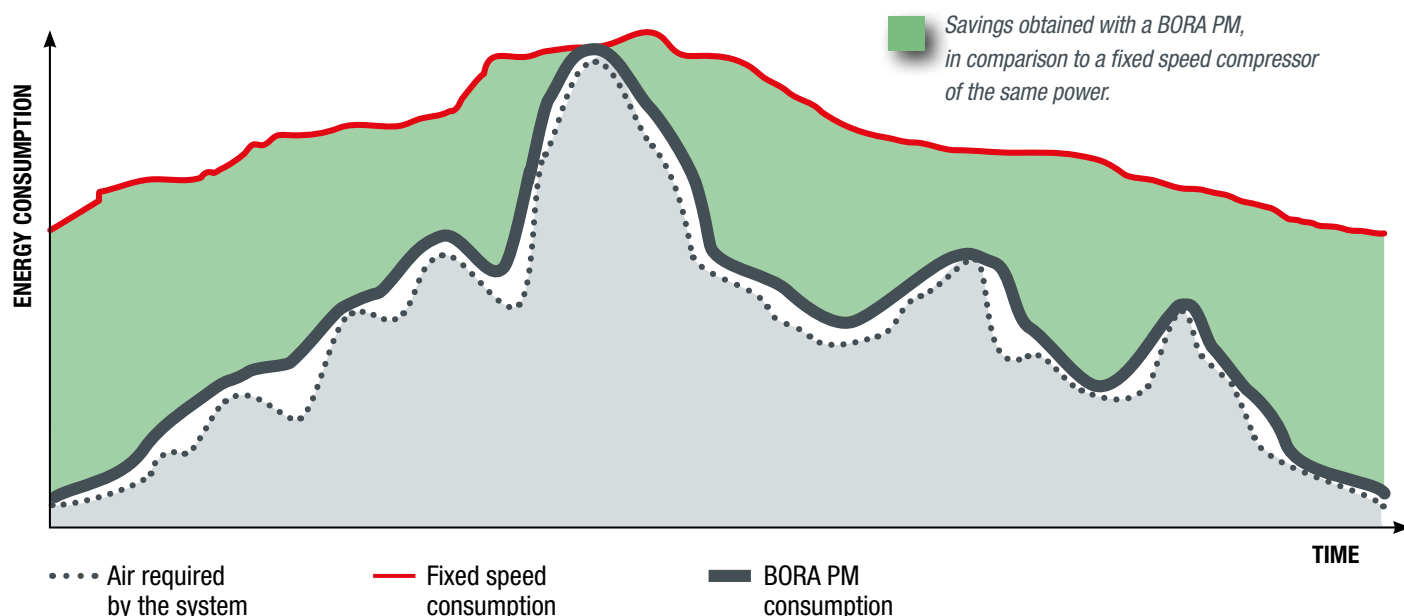
Why choose a Permanent Magnet compressor?

The energy costs linked to an air compressor operation during its life cycle represent more than 80% of the total life cycle costs. For Shamal the improved energy efficiency of its products represents a key objective. This objective is achieved with the use of Permanent Magnet motors in IE4 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 it possible to greatly reduce waste full unloaded operation, saving significant amounts of energy and minimising component wear, whilst adding greater reliability and longer service life.

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.



Why choose a BORA PM?

- Permanent Magnet motor with IE4 efficiency.
- Latest generation air-ends.
- Direct transmission.
- Efficient intake regulator.
- High performing inverter.
- Intuitive touchscreen controller.
- High quality components.
- Low noise levels.
- Low maintenance.

84%



FIXED SPEED (IE3)

Model	Code	Tank <i>ℓ</i>	Power kW HP	Air outflow rate			Max. pressure		Air-end	Sound level dB(A)	Air outlet G	Net weight kg	Net dimensions LxWxH (mm)	Gross weight kg	Gross dimensions LxWxH (mm)
5.5 kW															
BORA 5.5-10	V51PS92SHAA72	-	5.5 7.5	710	0.71	25	10	145	FS26	62	1/2"	162	830x680x850	176	940x770x1030
BORA 5.5-10 ES	V51PS92SHAB72	-	5.5 7.5	710	0.71	25	10	145	FS26	62	1/2"	200	1120x710x850	220	1290x770x1030
BORA 5.5-10-270	V91PS92SHAA72	270	5.5 7.5	710	0.71	25	10	145	FS26	62	1/2"	239	1200x680x1540	266	1320x850x1720
BORA 5.5-10-270 ES	V91PS92SHAB72	270	5.5 7.5	710	0.71	25	10	145	FS26	62	1/2"	277	1200x680x1540	303	1320x850x1720
7.5 kW															
BORA 7.5-10	V51PT92SHAA72	-	7.5 10	1050	1.05	37	10	145	FS26	62	1/2"	165	830x680x850	179	940x770x1030
BORA 7.5-13	V51PY92SHAA72	-	7.5 10	700	0.70	25	13	189	FS26	62	1/2"	165	830x680x850	179	940x770x1030
BORA 7.5-10 ES	V51PT92SHAB72	-	7.5 10	1050	1.05	37	10	145	FS26	62	1/2"	203	1120x710x850	223	1290x770x1030
BORA 7.5-10-270	V91PT92SHAA72	270	7.5 10	1050	1.05	37	10	145	FS26	62	1/2"	242	1200x680x1540	270	1320x850x1720
BORA 7.5-13-270	V91PY92SHAA72	270	7.5 10	700	0.70	25	13	189	FS26	62	1/2"	265	1200x680x1540	291	1320x850x1720
BORA 7.5-10-500	V83PT92SHAA72	500	7.5 10	1050	1.05	37	10	145	FS26	62	1/2"	292	2000x680x1520	332	2065x800x1680
BORA 7.5-10-270 ES	V91PT92SHAB72	270	7.5 10	1050	1.05	37	10	145	FS26	62	1/2"	280	1200x680x1540	308	1320x850x1720
BORA 7.5-13-270 ES	V91PY92SHAB72	270	7.5 10	700	0.70	25	13	189	FS26	62	1/2"	280	1200x680x1540	308	1320x850x1720
BORA 7.5-10-500 ES	V83PT92SHAB72	500	7.5 10	1050	1.05	37	10	145	FS26	62	1/2"	330	2000x680x1520	370	2065x800x1680
11 kW															
BORA 11-08	V60PU92SHAA72	-	11 15	1700	1.70	60	8	116	FS50	67	3/4"	238	1030x730x1000	265	1240x850x1190
BORA 11-10	V60PJ92SHAA72	-	11 15	1600	1.60	57	10	145	FS50	67	3/4"	238	1030x730x1000	265	1240x850x1190
BORA 11-13	V60PW92SHAA72	-	11 15	1250	1.25	44	13	189	FS50	67	3/4"	238	1030x730x1000	265	1240x850x1190
BORA 11-08 ES	V60PU92SHAB72	-	11 15	1700	1.70	60	8	116	FS50	67	3/4"	283	1400x730x1000	303	1505x810x1180
BORA 11-10 ES	V60PJ92SHAB72	-	11 15	1600	1.60	57	10	145	FS50	67	3/4"	283	1400x730x1000	303	1505x810x1180
BORA 11-13 ES	V60PW92SHAB72	-	11 15	1250	1.25	44	13	189	FS50	67	3/4"	283	1400x730x1000	303	1505x810x1180
BORA 11-08-500	V83PU92SHAA72	500	11 15	1700	1.70	60	8	116	FS50	67	3/4"	365	2000x730x1660	405	2065x800x1850
BORA 11-10-500	V83PJ92SHAA72	500	11 15	1600	1.60	57	10	145	FS50	67	3/4"	365	2000x730x1660	405	2065x800x1850
BORA 11-13-500	V83PW92SHAA72	500	11 15	1250	1.25	44	13	189	FS50	67	3/4"	400	2000x730x1660	440	2065x800x1850
BORA 11-08-270 ES	V91PU92SHAB72	270	11 15	1700	1.70	60	8	116	FS50	67	3/4"	343	1450x730x1700	376	1720x750x1770
BORA 11-08-500 ES	V83PU92SHAB72	500	11 15	1700	1.70	60	8	116	FS50	67	3/4"	410	2000x730x1660	450	2065x800x1850
BORA 11-10-500 ES	V83PJ92SHAB72	500	11 15	1600	1.60	57	10	145	FS50	67	3/4"	410	2000x730x1660	450	2065x800x1850
BORA 11-13-500 ES	V83PW92SHAB72	500	11 15	1250	1.25	44	13	189	FS50	67	3/4"	442	2000x730x1660	482	2065x800x1850
15 kW															
BORA 15-10	V60PV92SHAA72	-	15 20	2100	2.10	74	10	145	FS50	67	3/4"	248	1030x730x1000	275	1240x850x1190
BORA 15-13	V60PX92SHAA72	-	15 20	1550	1.55	55	13	189	FS50	67	3/4"	248	1030x730x1000	268	1240x850x1190
BORA 15-10 ES	V60PV92SHAB72	-	15 20	2100	2.10	74	10	145	FS50	67	3/4"	293	1400x730x1000	313	1505x810x1180
BORA 15-13 ES	V60PX92SHAB72	-	15 20	1550	1.55	55	13	189	FS50	67	3/4"	293	1400x730x1000	313	1505x810x1180
BORA 15-10-500	V83PV92SHAA72	500	15 20	2100	2.10	74	10	145	FS50	67	3/4"	375	2000x730x1660	415	2065x850x1850
BORA 15-13-500	V83PX92SHAA72	500	15 20	1550	1.55	55	13	189	FS50	67	3/4"	404	2000x730x1660	446	2065x850x1850
BORA 15-10-500 ES	V83PV92SHAB72	500	15 20	2100	2.10	74	10	145	FS50	67	3/4"	420	2000x730x1660	460	2065x850x1850
BORA 15-13-500 ES	V83PX92SHAB72	500	15 20	1550	1.55	55	13	189	FS50	67	3/4"	452	2000x730x1660	495	2065x850x1850

Air flow was measured in the following operating pressure values: 8 bar for "08" models - 10 bar for "10" models - 13 bar for "13" models.
The data and results were measured in accordance with Standard ISO 1217. The sound level was measured in accordance with Standard ISO 3744.



VARIABLE SPEED (IE3)

Model	Code	Tank	Power		Air outflow rate (min. - max.)			Max. pressure		Air-end	Sound level dB(A)	Air outlet G	Net weight kg	Net dimensions LxWxH (mm)	Gross weight kg	Gross dimensions LxWxH (mm)
		ℓ	kW	HP	l/min.	m ³ /min.	c.f.m.	bar	p.s.i.							
7.5 kW																
BORA 7.5-08 VS	V51QT97SHAA72	-	7.5	10	600-1300	0.60-1.30	21-46	8	116	FS26	63	1/2"	172	830x680x850	186	940x770x1030
BORA 7.5-10 VS	V51PT97SHAA72	-	7.5	10	500-1100	0.50-1.10	18-39	10	145	FS26	63	1/2"	172	830x680x850	186	940x770x1030
BORA 7.5-13 VS	V51PY97SHAA72	-	7.5	10	207-621	0.21-0.62	7-22	13	189	FS26	63	1/2"	172	830x680x850	186	940x770x1030
BORA 7.5-08 ES VS	V51QT97SHAB72	-	7.5	10	600-1300	0.60-1.30	21-46	8	116	FS26	63	1/2"	210	1120x710x850	230	1290x770x1030
BORA 7.5-10 ES VS	V51PT97SHAB72	-	7.5	10	500-1100	0.50-1.10	18-39	10	145	FS26	63	1/2"	210	1120x710x850	230	1290x770x1030
BORA 7.5-13 ES VS	V51PY97SHAB72	-	7.5	10	207-621	0.21-0.62	7-22	13	189	FS26	63	1/2"	210	1120x710x850	230	1290x770x1030
BORA 7.5-08-270 VS	V91QT97SHAA72	270	7.5	10	600-1300	0.60-1.30	21-46	8	116	FS26	63	1/2"	250	1200x680x1540	278	1320x850x1720
BORA 7.5-10-270 VS	V91PT97SHAA72	270	7.5	10	500-1100	0.50-1.10	18-39	10	145	FS26	63	1/2"	250	1200x680x1540	278	1320x850x1720
BORA 7.5-13-270 VS	V91PY97SHAA72	270	7.5	10	207-621	0.21-0.62	7-22	13	189	FS26	63	1/2"	273	1200x680x1540	278	1320x850x1720
BORA 7.5-08-270 ES VS	V91QT97SHAB72	270	7.5	10	600-1300	0.60-1.30	21-46	8	116	FS26	63	1/2"	290	1200x680x1540	318	1320x850x1720
BORA 7.5-10-270 ES VS	V91PT97SHAB72	270	7.5	10	500-1100	0.50-1.10	18-39	10	145	FS26	63	1/2"	290	1200x680x1540	318	1320x850x1720
BORA 7.5-13-270 ES VS	V91PY97SHAB72	270	7.5	10	207-621	0.21-0.62	7-22	13	189	FS26	63	1/2"	290	1200x680x1540	318	1320x850x1720
11 kW																
BORA 11-08 VS	V60PU97SHAA72	-	11	15	680-1700	0.68-1.70	24-60	8	116	FS50	67	3/4"	246	1030x730x1000	273	1240x850x1190
BORA 11-10 VS	V60PJ97SHAA72	-	11	15	620-1580	0.62-1.58	22-56	10	145	FS50	67	3/4"	246	1030x730x1000	273	1240x850x1190
BORA 11-13 VS	V60PW97SHAA72	-	11	15	373-1250	0.37-1.25	13-44	13	189	FS50	67	3/4"	246	1030x730x1000	273	1240x850x1190
BORA 11-08 ES VS	V60PU97SHAB72	-	11	15	680-1700	0.68-1.70	24-60	8	116	FS50	67	3/4"	290	1400x730x1000	310	1505x810x1180
BORA 11-10 ES VS	V60PJ97SHAB72	-	11	15	620-1580	0.62-1.58	22-56	10	145	FS50	67	3/4"	290	1400x730x1000	310	1505x810x1180
BORA 11-13 ES VS	V60PW97SHAB72	-	11	15	373-1250	0.37-1.25	13-44	13	189	FS50	67	3/4"	290	1400x730x1000	310	1505x810x1180
BORA 11-08-500 VS	V83PU97SHAA72	500	11	15	680-1700	0.68-1.70	24-60	8	116	FS50	67	3/4"	372	2000x730x1660	402	2065x800x1850
BORA 11-10-500 VS	V83PJ97SHAA72	500	11	15	620-1580	0.62-1.58	22-56	10	145	FS50	67	3/4"	372	2000x730x1660	402	2065x800x1850
BORA 11-13-500 VS	V83PW97SHAA72	500	11	15	373-1250	0.37-1.25	13-44	13	189	FS50	67	3/4"	404	2000x730x1660	444	2065x800x1850
BORA 11-10-270 ES VS	V91PJ97SHAB72	270	11	15	620-1700	0.62-1.70	22-60	10	145	FS50	67	3/4"	353	1450x730x1700	385	1720x750x1770
BORA 11-08-500 ES VS	V83PU97SHAB72	500	11	15	680-1700	0.68-1.70	24-60	8	116	FS50	67	3/4"	420	2000x730x1660	460	2065x800x1850
BORA 11-10-500 ES VS	V83PJ97SHAB72	500	11	15	620-1580	0.62-1.58	22-56	10	145	FS50	67	3/4"	420	2000x730x1660	460	2065x800x1850
BORA 11-13-500 ES VS	V83PW97SHAB72	500	11	15	373-1250	0.37-1.25	13-44	13	189	FS50	67	3/4"	452	2000x730x1660	492	2065x800x1850
15 kW																
BORA 15-08 VS	V60PI97SHAA72	-	15	20	950-2500	0.95-2.50	34-88	8	116	FS50	68	3/4"	263	1030x730x1000	290	1240x850x1190
BORA 15-10 VS	V60PV97SHAA72	-	15	20	840-2100	0.84-2.10	30-74	10	145	FS50	68	3/4"	263	1030x730x1000	290	1240x850x1190
BORA 15-13 VS	V60PX97SHAA72	-	15	20	585-1600	0.59-1.60	21-57	13	189	FS50	68	3/4"	263	1030x730x1000	290	1240x850x1190
BORA 15-08 ES VS	V60PI97SHAB72	-	15	20	950-2500	0.95-2.50	34-88	8	116	FS50	68	3/4"	308	1400x730x1000	328	1505x810x1180
BORA 15-10 ES VS	V60PV97SHAB72	-	15	20	840-2100	0.84-2.10	30-74	10	145	FS50	68	3/4"	308	1400x730x1000	328	1505x810x1180
BORA 15-13 ES VS	V60PX97SHAB72	-	15	20	585-1600	0.59-1.60	21-57	13	189	FS50	68	3/4"	308	1400x730x1000	328	1505x810x1180
BORA 15-08-500 VS	V83PI97SHAA72	500	15	20	950-2500	0.95-2.50	34-88	8	116	FS50	68	3/4"	390	2000x730x1660	430	2065x850x1850
BORA 15-10-500 VS	V83PV97SHAA72	500	15	20	840-2100	0.84-2.10	30-74	10	145	FS50	68	3/4"	390	2000x730x1660	430	2065x850x1850
BORA 15-13-500 VS	V83PX97SHAA72	500	15	20	585-1600	0.59-1.60	21-57	13	189	FS50	68	3/4"	423	2000x730x1660	463	2065x850x1850
BORA 15-08-500 ES VS	V83PI97SHAB72	500	15	20	950-2500	0.95-2.50	34-88	8	116	FS50	68	3/4"	435	2000x730x1660	475	2065x850x1850
BORA 15-10-500 ES VS	V83PV97SHAB72	500	15	20	840-2100	0.84-2.10	30-74	10	145	FS50	68	3/4"	435	2000x730x1660	475	2065x850x1850
BORA 15-13-500 ES VS	V83PX97SHAB72	500	15	20	585-1600	0.59-1.60	21-57	13	189	FS50	68	3/4"	467	2000x730x1660	507	2065x850x1850

Air flow was measured in the following operating pressure values: 7.5 bar for "08" models - 9.5 bar for "10" models - 12.5 bar for "13" models.
The data and results were measured in accordance with Standard ISO 1217. The sound level was measured in accordance with Standard ISO 3744.



FIXED SPEED (IE4)

Model	Code	Power		Air outflow rate			Max. pressure		Air-end	Sound level dB(A)	Air outlet G	Net weight kg	Net dimensions LxWxH (mm)	Gross weight kg	Gross dimensions LxWxH (mm)
		kW	HP	L/min.	m³/min.	c.f.m.	bar	p.s.i.							
18.5 kW															
BORA 18.5-10	V60DQ92SHAA72	18.5	25	2600	2.60	92	10	145	FS100	62	1" 1/4	527	1330x850x1370	597	1530x1000x1590
BORA 18.5-10 ES	V60DQ92SHAB72	18.5	25	2600	2.60	92	10	145	FS100	62	1" 1/4	587	1710x850x1370	677	2060x1140x1680
22 kW															
BORA 22-08	V60DR92SHAA72	22	30	3600	3.60	127	7.5	109	FS140	60	1" 1/4	620	1330x850x1370	690	1530x1000x1590
BORA 22-13	V60DT92SHAA72	22	30	2600	2.60	92	13	189	FS100	62	1" 1/4	560	1330x850x1370	630	1530x1000x1590
BORA 22-08 ES	V60DR92SHAB72	22	30	3600	3.60	127	7.5	109	FS140	60	1" 1/4	680	1710x850x1370	770	2060x1140x1680
BORA 22-13 ES	V60DT92SHAB72	22	30	2600	2.60	92	13	189	FS100	62	1" 1/4	620	1710x850x1370	710	2060x1140x1680
37 kW															
BORA 38-08	V60DU92SHAA72	37	50	6600	6.60	233	7.5	109	FS270	70	1" 1/2	902	1590x1000x1560	987	1800x1200x1810
BORA 38-08 ES	V60DU92SHAB72	37	50	6600	6.60	233	7.5	109	FS270	70	1" 1/2	986	1960x1000x1560	1078	2130x1200x1810
45 kW															
BORA 45-10	V60FV92SHAA72	45	60	6700	6.70	237	10	145	FS270	72	2"	1194	1700x1250x1700	1305	1920x1420x1960

Air flow was measured in the following operating pressure values: 7.5 bar for "08" models - 10 bar for "10" models - 13 bar for "13" models.

The data and results were measured in accordance with Standard ISO 1217. The sound level was measured in accordance with Standard ISO 3744.



VARIABLE SPEED WITH PERMANENT MAGNET MOTOR (IE4)

Model	Code	Power		Air outflow rate (min.-max.)			Max. pressure		Air-end	Sound level dB(A)	Air outlet G	Net weight kg	Net dimensions LxWxH (mm)	Gross weight kg	Gross dimensions LxWxH (mm)
		kW	HP	l/min.	m ³ /min.	c.f.m.	bar	p.s.i.							
18.5 kW															
BORA 18.5-08 VS PM	V60DP97SHAG72	18.5	25	630-3500	0.63-3.50	22-124	8	116	FS100	63	1" 1/4	475	1330x850x1370	545	1530x1000x1590
BORA 18.5-10 VS PM	V60DQ97SHAG72	18.5	25	633-3050	0.63-3.05	22-108	10	145	FS100	63	1" 1/4	475	1330x850x1370	545	1530x1000x1590
BORA 18.5-13 VS PM	V60D097SHAG72	18.5	25	583-2500	0.58-2.50	21-88	13	189	FS100	63	1" 1/4	475	1330x850x1370	545	1530x1000x1590
BORA 18.5-08 ES VS PM	V60DP97SHAH72	18.5	25	630-3500	0.63-3.50	22-124	8	116	FS100	63	1" 1/4	535	1710x850x1370	625	2050x1140x1670
BORA 18.5-10 ES VS PM	V60DQ97SHAH72	18.5	25	633-3050	0.63-3.05	22-108	10	145	FS100	63	1" 1/4	535	1710x850x1370	625	2050x1140x1670
BORA 18.5-13 ES VS PM	V60D097SHAH72	18.5	25	583-2500	0.58-2.50	21-88	13	189	FS100	63	1" 1/4	535	1710x850x1370	625	2050x1140x1670
22 kW															
BORA 22-08 VS PM	V60DR97SHAA72	22	30	560-3800	0.56-3.80	20-134	8	116	FS100	61	1" 1/4	475	1330x850x1370	545	1530x1000x1590
BORA 22-10 VS PM	V60DS97SHAA72	22	30	572-3300	0.57-3.30	20-117	10	145	FS100	63	1" 1/4	475	1330x850x1370	545	1530x1000x1590
BORA 22-13 VS PM	V60DT97SHAA72	22	30	533-2700	0.53-2.70	19-95	13	189	FS100	63	1" 1/4	475	1330x850x1370	545	1530x1000x1590
BORA 22-08 ES VS PM	V60DR97SHAB72	22	30	560-3800	0.56-3.80	20-134	8	116	FS100	61	1" 1/4	535	1710x850x1370	625	2050x1140x1670
BORA 22-10 ES VS PM	V60DS97SHAB72	22	30	572-3300	0.57-3.30	20-117	10	145	FS100	63	1" 1/4	535	1710x850x1370	625	2050x1140x1670
BORA 22-13 ES VS PM	V60DT97SHAB72	22	30	533-2700	0.53-2.70	19-95	13	189	FS100	63	1" 1/4	535	1710x850x1370	625	2050x1140x1670
BORA 24-08 VS PM	V60LD97SHAA72	22	30	810-4500	0.81-4.50	29-159	8	116	FS140	61	1" 1/4	590	1330x850x1370	660	1530x1000x1590
BORA 24-10 VS PM	V60LF97SHAA72	22	30	790-3750	0.79-3.75	28-132	10	145	FS140	63	1" 1/4	590	1330x850x1370	660	1530x1000x1590
BORA 24-13 VS PM	V60LG97SHAA72	22	30	775-3300	0.78-3.30	27-117	13	189	FS140	63	1" 1/4	590	1330x850x1370	660	1530x1000x1590
BORA 24-08 ES VS PM	V60LD97SHAB72	22	30	810-4500	0.81-4.50	29-159	8	116	FS140	61	1" 1/4	650	1710x850x1370	725	2050x1140x1670
BORA 24-10 ES VS PM	V60LF97SHAB72	22	30	790-3750	0.79-3.75	28-132	10	145	FS140	63	1" 1/4	650	1710x850x1370	725	2050x1140x1670
BORA 24-13 ES VS PM	V60LG97SHAB72	22	30	775-3300	0.78-3.30	27-117	13	189	FS140	63	1" 1/4	650	1710x850x1370	725	2050x1140x1670
30 kW															
BORA 31-08 VS PM	V60DY97SHAG72	30	40	845-5500	0.85-5.50	30-194	8	116	FS140	68	1" 1/2	795	1590x1000x1560	870	1800x1200x1810
BORA 31-10 VS PM	V60DX97SHAG72	30	40	850-5050	0.85-5.05	30-178	10	145	FS140	68	1" 1/2	795	1590x1000x1560	870	1800x1200x1810
BORA 31-13 VS PM	V60DZ97SHAG72	30	40	900-4500	0.90-4.50	32-159	13	189	FS140	68	1" 1/2	795	1590x1000x1560	870	1800x1200x1810
BORA 31-08 ES VS PM	V60DY97SHAH72	30	40	845-5500	0.85-5.50	30-194	8	116	FS140	68	1" 1/2	875	1960x1000x1560	965	2130x1200x1810
BORA 31-10 ES VS PM	V60DX97SHAH72	30	40	850-5050	0.85-5.05	30-178	10	145	FS140	68	1" 1/2	875	1960x1000x1560	965	2130x1200x1810
BORA 31-13 ES VS PM	V60DZ97SHAH72	30	40	900-4500	0.90-4.50	32-159	13	189	FS140	68	1" 1/2	875	1960x1000x1560	965	2130x1200x1810
37 kW															
BORA 38-08 VS PM	V60DU97SHAA72	37	50	1350-6900	1.35-6.90	48-244	8	116	FS270	70	1" 1/2	795	1590x1000x1560	925	1800x1200x1810
BORA 38-10 VS PM	V60DV97SHAA72	37	50	950-5500	0.95-5.50	34-194	10	145	FS140	70	1" 1/2	795	1590x1000x1560	870	1800x1200x1810
BORA 38-13 VS PM	V60DW97SHAA72	37	50	900-5100	0.90-5.10	32-180	13	189	FS140	68	1" 1/2	795	1590x1000x1560	870	1800x1200x1810
BORA 38-08 ES VS PM	V60DU97SHAB72	37	50	1350-6900	1.35-6.90	48-244	8	116	FS270	70	1" 1/2	875	1960x1000x1560	1020	2130x1200x1810
BORA 38-10 ES VS PM	V60DV97SHAB72	37	50	950-5500	0.95-5.50	34-194	10	145	FS140	70	1" 1/2	875	1960x1000x1560	965	2130x1200x1810
BORA 38-13 ES VS PM	V60DW97SHAB72	37	50	900-5100	0.90-5.10	32-180	13	189	FS140	68	1" 1/2	875	1960x1000x1560	965	2130x1200x1810
BORA 39-08 VS PM	V60LL97SHAA72	37	50	1570-7255	1.57-7.26	55-256	8	116	FS270	70	1" 1/2	855	1590x1000x1560	930	1800x1200x1810
BORA 39-10 VS PM	V60LM97SHAA72	37	50	1570-6335	1.57-6.34	55-224	10	145	FS270	70	1" 1/2	855	1590x1000x1560	930	1800x1200x1810
45 kW															
BORA 45E-08 VS PM	V60KT97SHAA72	45	60	1570-8800	1.57-8.80	55-311	8	116	FS270	72	2"	855	1590x1000x1560	930	1800x1200x1810
BORA 45E-10 VS PM	V60KV97SHAA72	45	60	1570-7350	1.57-7.35	55-260	10	145	FS270	72	2"	855	1590x1000x1560	930	1800x1200x1810

Air flow was measured in the following operating pressure values: 7.5 bar for "08" models - 9.5 bar for "10" models - 12.5 bar for "13" models.
The data and results were measured in accordance with Standard ISO 1217. The sound level was measured in accordance with Standard ISO 3744.

Save money in your company!

Heat recovery is a real opportunity to increase the effectiveness of a compressed air system: with HRS it is possible to recover the heat generated by screw compressors to generate hot water within the plant itself.

Most of the energy used to produce compressed air is converted into heat, much of it recoverable. About 75% of the energy used in the compressor process in the lubrication system and in the cooling circuit can be reused as a source of heat. Therefore, the system can be used to produce compressed air in a reliable way, by also recovering the thermal energy.

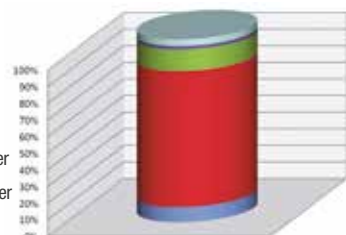
The amount of energy recovery depends on the compressor capacity, and the investment becomes interesting on compressors with installed capacities above 11 kW.



The HRS system can be used on all oil-injected screw compressors

COMPRESSION HEAT

- 4% Remaining heat in the air
- 2% Losses due to radiation
- 12% Heat removed by the air heat exchanger
- 75% Heat removed by the oil heat exchanger
- 7% Heat released by the electric motor



Compressor model	KRC connection kit for HRS	HEAT RECOVERY SYSTEM		V/Ph/Hz	Max. water flow rate (m³/h)	G	Dimensions	kg
	code	model	code				L x W x H (mm)	
BORA 11 BORA 15	#260PU0200	HRS 30	#548700000	230/1/50	1.92	3/4"	666 x 236 x 430	24.4
BORA 18.5 BORA 22 BORA 24	#260DP0050	HRS 50	#548720000	230/1/50	4.2	3/4"	666 x 236 x 430	27,5
BORA 31 BORA 38	#260DY0050							
BORA 39 BORA 45E	#260LL0050	HRS 75	#548730000	230/1/50	6	3/4"	666 x 236 x 430	29.3
BORA 45	#260GB0050							

The energy audit measures consumption in the company to reduce waste

EATOOL - EASOFTWARE

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 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?

The energy efficiency of a compressed air system within a production facility, is a large influence on the company's entire production process, in terms of the potential for increased efficiency and reducing costs. The energy audit is a process, that identifies potential efficiency improvements.

The report that we provide allows our customer to accurately identify the amount of energy being used and wasted, the energy that may be saved, along with suitable alternative equipment and controls to maximise energy efficiency, specific to the exact requirements and operational characteristics of the application.

Our experience at your service

Thanks to the consolidated 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.



EA 400
cod. 9062747

Ideal for compressors' rooms up to 3 units

- 4 analogue inputs:
 - 3 measuring clamps
 - 1 pressure sensor
- 1 extension for cables (10m long)
- 4.3" colour touch screen display



EA 500
cod. 9062748

Ideal for compressors' rooms up to 4 units

- 5 analogue inputs:
 - 4 measuring clamps
 - 1 pressure sensor
- 2 extensions for cables (10m long)
- 7" colour touch screen display

DEMO LOGIN
cod. 8101979

Ideal for technical assistance and training

- 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)



ORIGINAL SPARE PARTS

Extend the life and efficiency
of your screw compressor

FSN is the brand of the original spare parts for Shamal compressors and identifies after-sales services. It 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.

LONG LIFE KIT

To make it easier to replace components throughout the various maintenance intervals specified in the use and maintenance manuals, Shamal developed its **LONG LIFE KITS**, specifically created for all screw compressor models. Using LONG LIFE KIT ensures the maximum performances of the compressor. You can download the LLK catalogues from the website www.shamalcompressors.com and see the exploded drawings and spare parts, constantly updated for each compressor model.



SPECIFIC LUBRICANTS FOR SCREW COMPRESSORS

The use of low-quality lubricants may cause irreparable damages to the compressor or lead to unforeseen repair and maintenance costs. The original FSN lubricants, with synthetic or mineral base, have been specifically designed for use on our screw compressors, supplied by the world leading manufacturers to maintain efficiency and reliability over time. They are available in cans or drums.



#600000020	1 x 3.8-litre can (3.3 kg)
#600000021	1 x 20-litre can (17.36 kg)
#600000022	1 x 200-litre drum (174 kg)

Mineral oil RotarECOFLUID 46 cSt

Formulated with high quality selected mineral-based oils, it offers an 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 long life performances.



#600000018A	1 x 3.8-litre can (3.25 kg)
#600000007A	1 x 19-litre can (16 kg)
#600000012A	1 x 208-litre drum (181 kg)

Synthetic oil RotEnergyPLUS 46 cSt

Ensures quick water separation and lower frictions and energy consumptions, extends maintenance intervals and ensures excellent lubrication of the bearings while offering an excellent protection.



#600000019A	1 x 3.9-litre can (3.25 kg)
#600000016A	1 x 19-litre can (18.5 kg)
#600000017A	1 x 208-litre drum (175 kg)

Synthetic oil RotEnergyFOOD 46 cSt

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

We recommend changing the oil according to the interval reported in the use and maintenance manual of the compressor or once a year avoiding mixing different oils. THE OILS ARE NOT INCLUDED IN THE LONG LIFE KITS.

- ★ *Easy and fast online activation.*
- ★ *You can choose to extend warranty to 3 or 5 years.*
- ★ *Lower maintenance costs as a result of using original spare parts.*
- ★ *Qualified assistance by authorised technicians.*



Protect your investment, extend the Warranty up to 5 years!

When installing your new Shamal screw compressor, join the "Trust" Warranty 3- to 5-year extension program to benefit from countless advantages by maximising the effectiveness, safety and duration over time of your investment. Thanks to scheduled maintenance programs exclusively performed by Shamal Authorised Assistance Centres, you can rely on timely, highly professional service, as well as on the use of only original spare parts guaranteed by the FSN brand.

The "Trust" warranty can be easily extended online through EasyConnect, the new Shamal service portal specially created to simplify customers' lives by providing them with quick, clear responses about product availability, order management and goods shipping times.





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Authorized distributor: