

MADE IN ITALY



NOBEL 2S

Two-stage rotary screw compressors
from 75 kW to 315 kW
with variable speed and flow rate





*A world of services...
at your service.*

Since 1992 Power System, part of the international FNA Group has been a worldwide leader in the design, development, production and distribution of high quality industrial rotary screw air compressors, suitable for every application and technological sector, from large scale industry to small businesses.

From consultation, to identifying the best products to meet any compressed air requirement, from design to installation, and an effective after-sales service. Power System supports industries worldwide by promoting the best system solutions to optimise the energy performance of businesses, ensuring high standards of efficiency, maximum reliability and simplicity in terms of ownership.

EXTENDED
WARRANTY

MAINTENANCE

CUSTOMER CARE

EMERGENCY
RESPONSE

DESIGN AND
PROJECT
FACILITIES

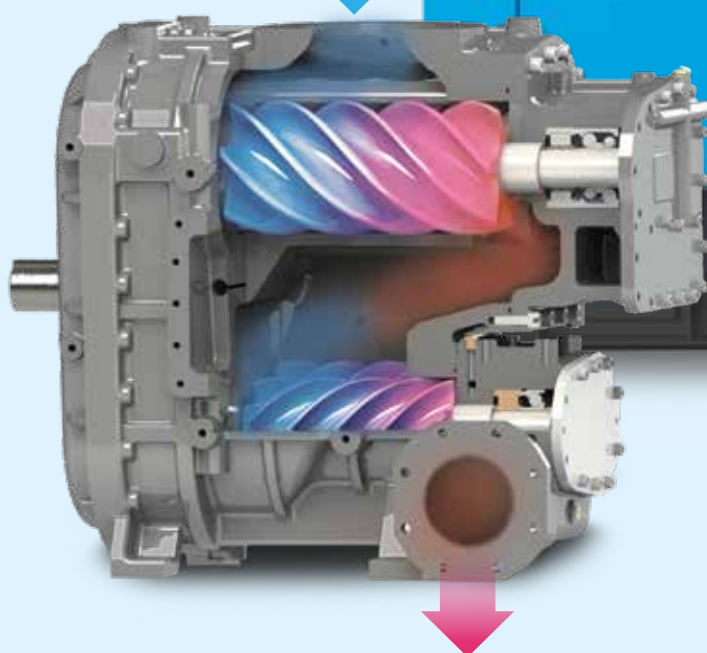


**POWER
SYSTEM**
AIR COMPRESSORS

THE RANGE **NOBEL 2S**

With the introduction of the 2S models in the NOBEL series, Power System is once more redefining the standard in terms of efficiency, reliability, ease of maintenance and available energy savings.

The NOBEL range now includes the new 2S series: air-cooled, two-stage rotary screw compressors with power ratings from 75 kW to 315 kW, with variable speed and flow rate, supplied ready for use and complete with all the components required for safe and reliable operation, driven by a premium high-efficiency electric motor. The two-stage range represents the ultimate advancement in oil-injected screw compressor technology today, ensuring a very high level of reliability and unrivalled performance in a fully integrated and technically advanced solution.



2S
NOBEL 132

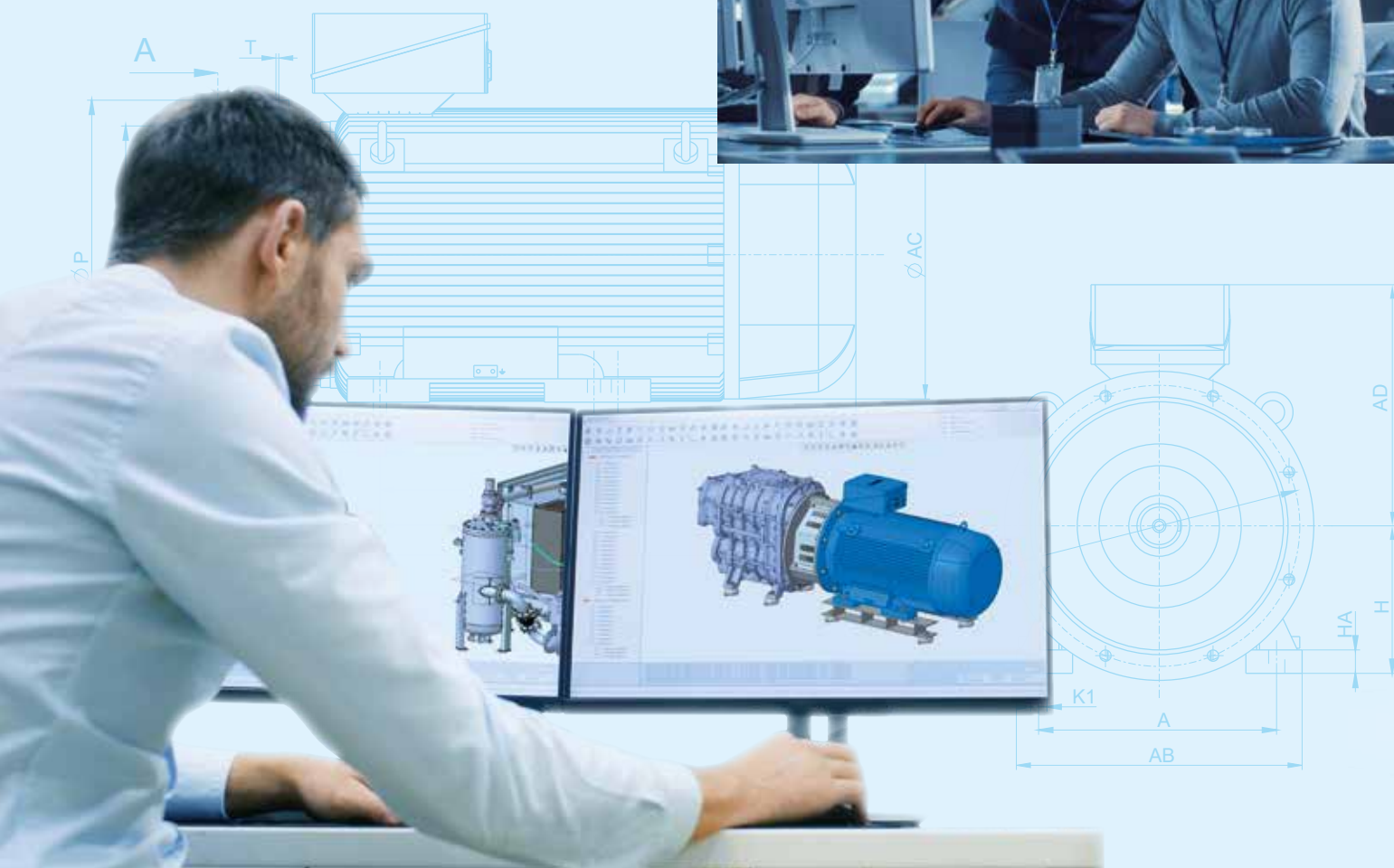
Designed to last.



THE RANGE **NOBEL 2S**

A complete range from 75 kW to 315 kW, in air-cooled versions, with variable speed and flow rates: 3 sizes, 24 available configurations.

The NOBEL 2S two-stage range, entirely manufactured in Italy at our plant in Bologna, has been designed by our engineering team with the support of our experienced after-sales service technicians to achieve a compressor that meets the requirements of the most demanding users, with particular regard to energy saving, silenced operation and with ease of maintenance in mind.



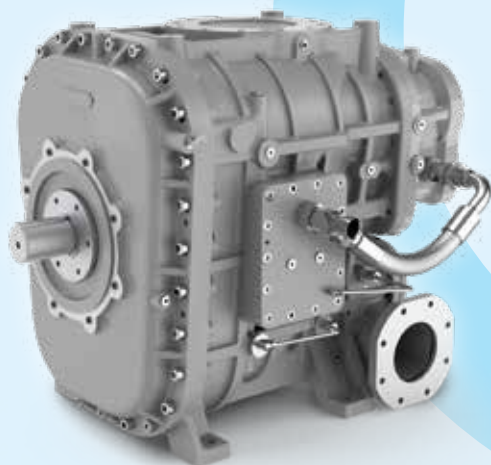
Born out of experience and know how.



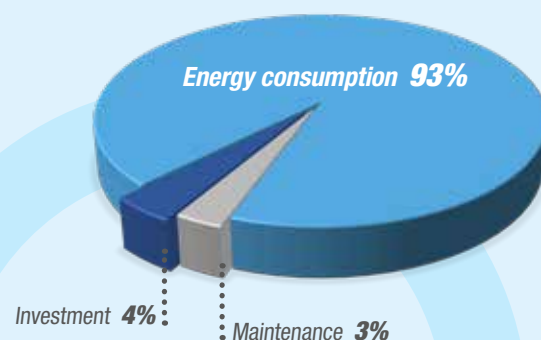
WHY NOBEL 2S

In Europe, compressed air production accounts for approximately **14% of total energy consumption in the industrial sector**.

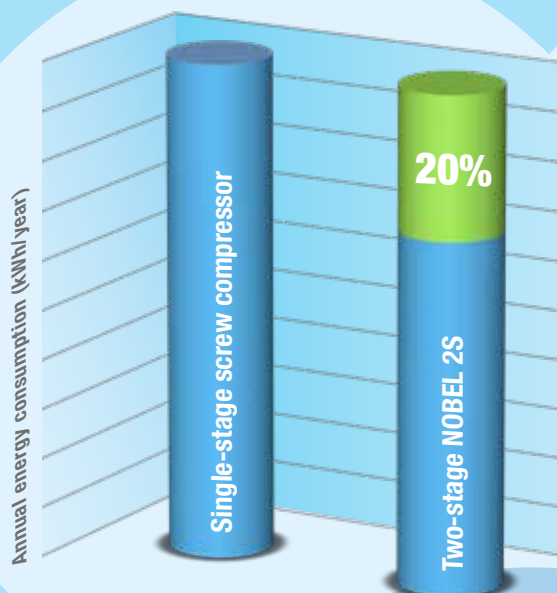
In order to achieve a sustainable future and to be more competitive in the market, there is a major challenge to face: increasing the efficiency of compressed air systems used in industry!



The two-stage NOBEL 2S range, with its new and exclusive two-stage air-end, meets this challenge.



The graph indicates the breakdown of the total costs during the life cycle of a Single-stage compressor appropriate to five years of use, considering 6000 working hours per year.



● Energy consumption
● Energy saving

The histogram shows the estimated annual energy savings of our two-stage compressor compared to a Single-stage compressor with the same power.

Return on Investment

Comparing a Single-stage compressor with our two-stage compressor, with the same volume flow, considering 6,000 working hours per year and with a 70% duty cycle, it is possible to estimate that the acquisition investment in our two-stage compressor can be **recouped** in less than 24 months from installation.

Efficiency is also synonymous with sustainability.

Because they consume less

Our two-stage compressor allows energy savings of up to 20% compared to a similarly powered Single-stage compressors.

Because they are designed to last

The two-stage air-end technology ensures less wear and greater longevity for the compressor because the final pressure is divided between the two compression stages.

Because their efficiency is always under control

All NOBEL 2S functions are fully controlled by the integrated electronic "Login" controller, which constantly monitors the compressor.

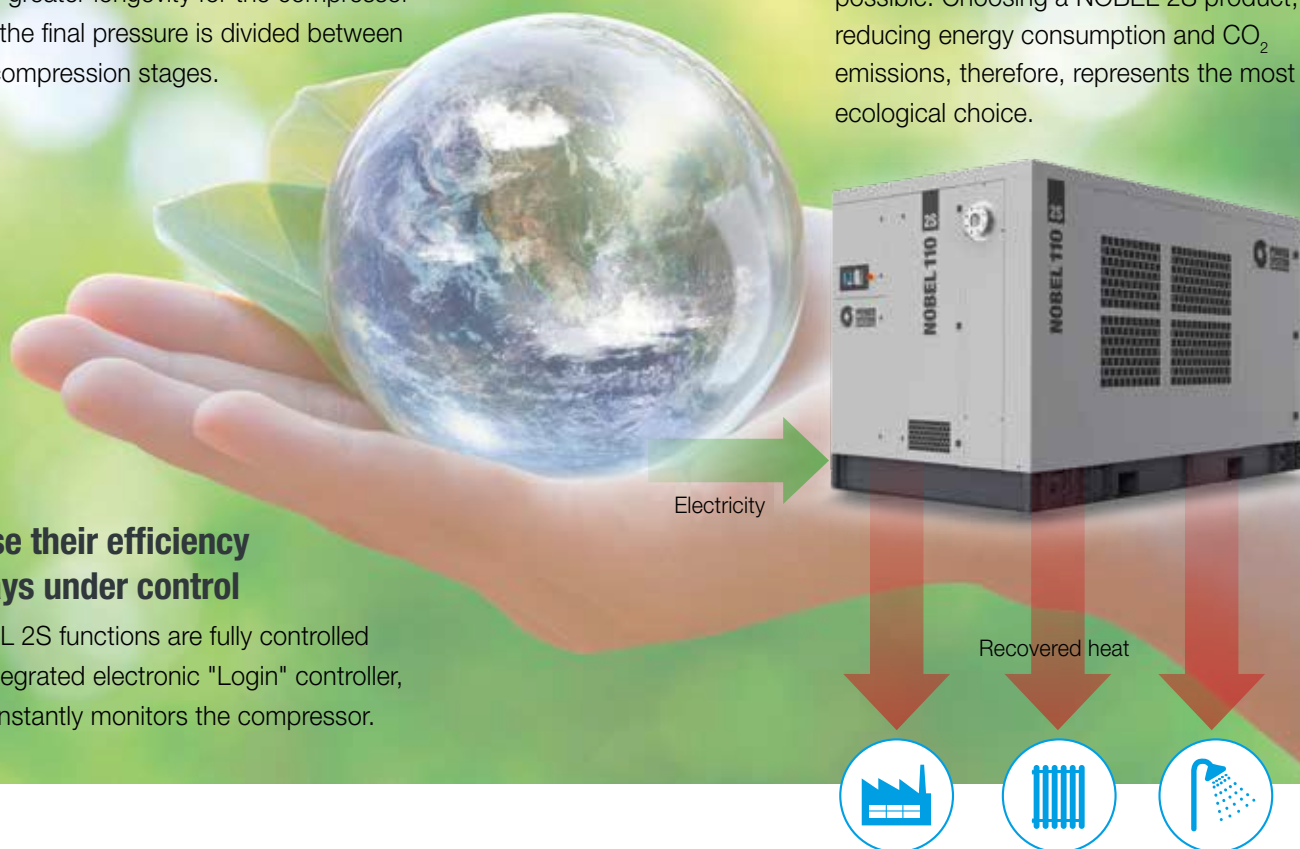
Because they are designed for industrial applications

Compressed air is an essential energy source in the production processes of medium and large-scale industries, operating in a wide variety of sectors.

Thanks to our innovative two-stage technology, the NOBEL 2S models ensure a constant and reliable supply of compressed air.

Eco-friendly technology

The search for energy efficiency in the production processes of industry is one of the main challenges we face in order to maintain our competitive advantage in the market. We also seek to optimise the sustainability of our processes at the same time. Living sustainably means preserving our natural resources as much as possible. Choosing a NOBEL 2S product, reducing energy consumption and CO₂ emissions, therefore, represents the most ecological choice.



Integrated heat recovery system

NOBEL 2S is designed to include an integrated water-oil plate exchanger (option) that allows the recovery of energy that may be converted into heat, suitable as an energy source to provide heated water for room heating, washrooms and for many industrial applications.

WHY NOBEL 2S

Oil separator vessel

The highly efficient design guarantees excellent compressed air quality with a very low residual oil content (less than 2 parts per million by weight). The separator element is easier to replace thanks to the sliding lid of the vessel (1-2), which facilitates convenient element replacement (3), reducing downtime and maintenance time.



Oil filter housing complete with thermostatic valve

The filter cartridges are of the screw-on type, making them simple to replace in a clean, safe way reducing the risk of oil spillage. The thermostatic valve is located in a position that is immediately accessible and convenient to check/maintain. The thermostatic valve controls the oil flow avoiding sudden temperature changes and reduces the formation of condensate inside the lubrication circuit. It is not necessary to remove the oil from the radiator in order to replace it or for service.

Integrated design

NOBEL 2S compressors have been designed to ensure perfect accessibility to the internal components. This is achieved by paying care full attention to both the layout and design. All sides of the machine can be accessed easily thanks to flush-mounted hinged doors for ease of maintenance.



Damping joint

This allows for the suppression of possible stresses and for the use of rigid pipes thus avoiding the risk of failure. Maintenance operations are simplified because the pipe can be disconnected without misalignment of the two flanges.

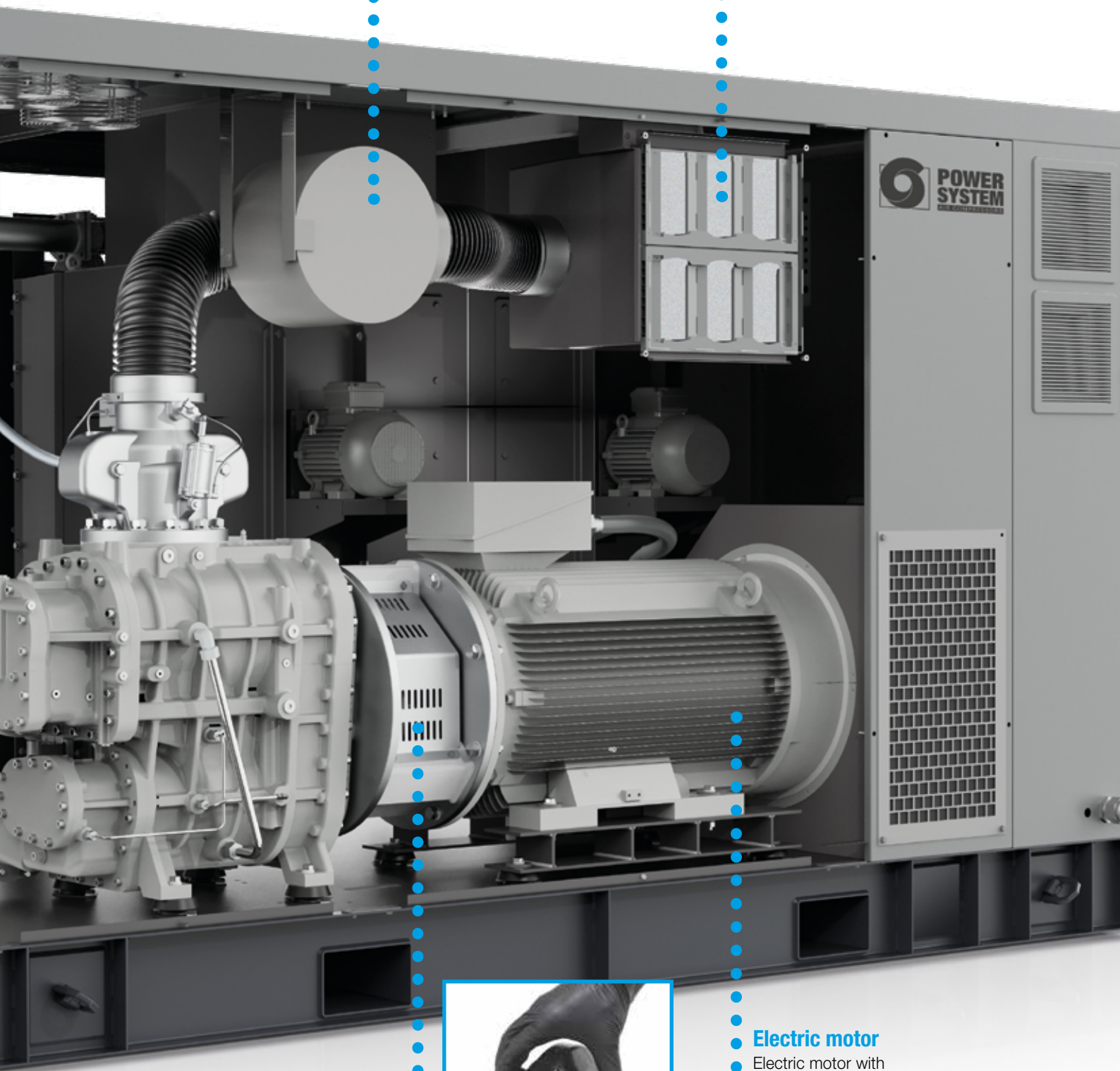
Silencer

The exclusive and unique soundproof chamber has been developed to ensure maximum silencing and to maintain high suction efficiency.

Suction filter

The pocket type filtering element is designed to ensure minimum pressure drop and maximum filtration efficiency.

Maintenance is facilitated through the easily accessible and removable external panel, with no need to enter the main machine.



Flexible coupling

With elastic insert that is both easily accessible and simply removed during longer term maintenance.



Electric motor

- Electric motor with energy efficiency class
- IE4 'Super Premium Efficiency'.

WHY NOBEL 2S

Soundproof cabinet

Manufactured from heavy gauge steel and with applied multi-layer protective coating. The cabinet is completely lined internally with high-density sound-absorbing material, reducing the overall sound level to extremely low values. The cabinet consists of panels that can be easily opened or removed for quick inspection and maintenance. The cabinet is solidly fixed to a steel support frame that is also designed to allow the safe and convenient lifting and positioning of the compressor.

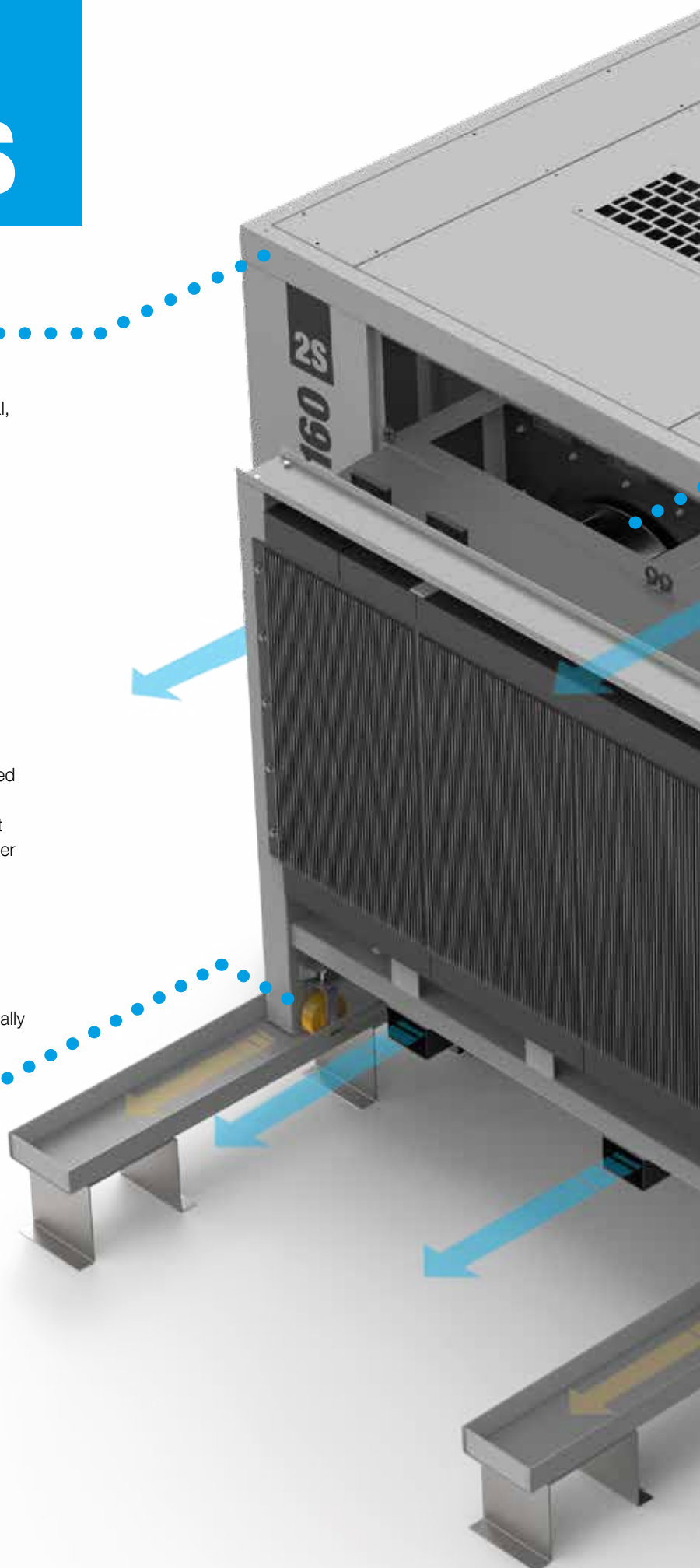
Cooling system

The individually sized cooling system allows NOBEL 2S to operate at full load even under severe conditions in ambient temperatures of up to 45 °C.

The cooling fans have a variable flow rate and are regulated by the central electronic controller. This ensures that the operating temperature of the machine and of the lubricant is kept constant, preserving efficiency and allowing a longer life to the lubricant.

Heat exchanger and ventilation unit

The innovative design simplifies maintenance of the heat exchanger and fan unit, as it can be removed either vertically or horizontally, using a lifting device or by removing it outwards on the wheels at the base. These wheels slide on special tracks (optional) specially designed for this purpose and can be supplied on request.

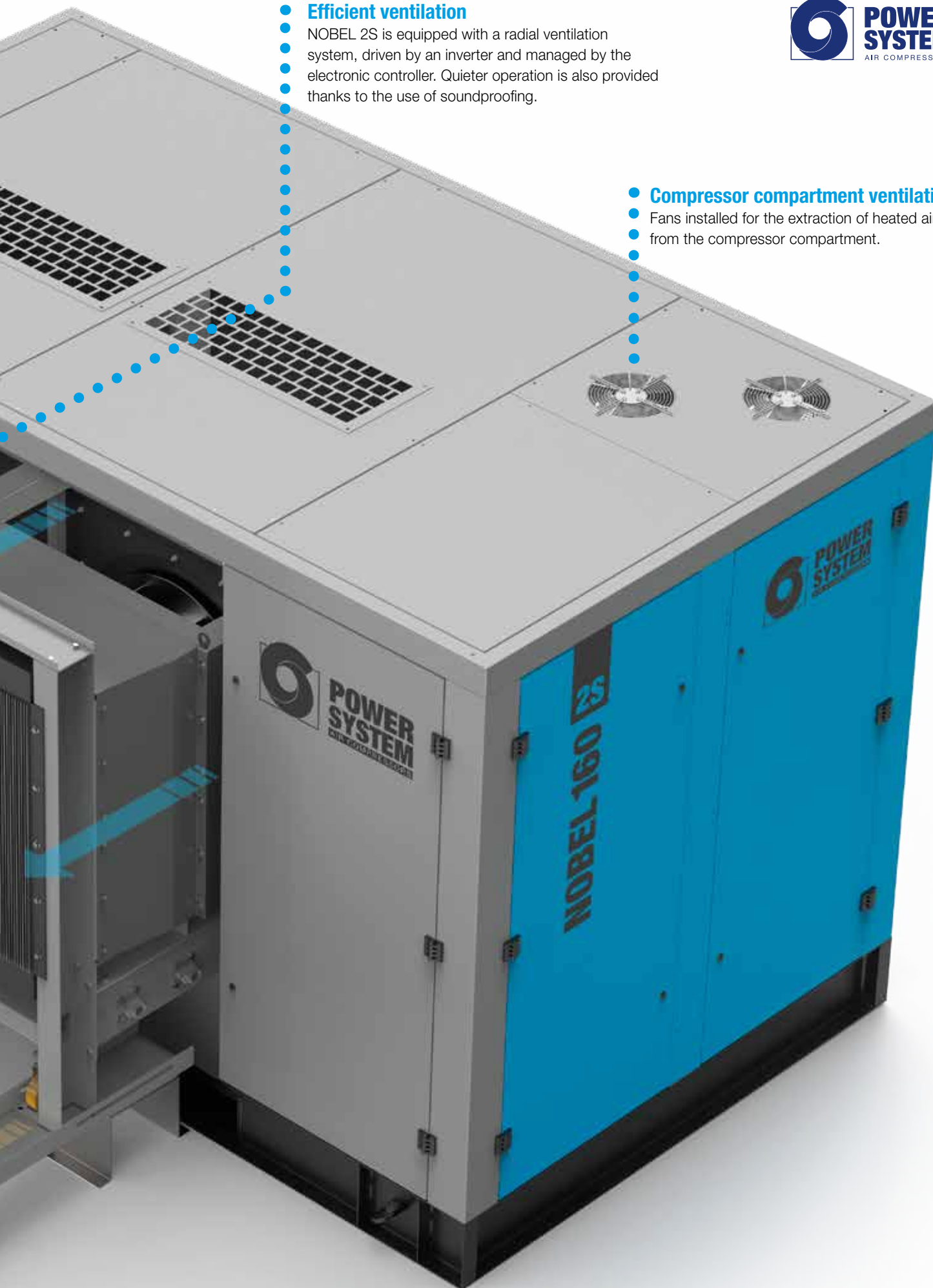


- **Efficient ventilation**

- NOBEL 2S is equipped with a radial ventilation system, driven by an inverter and managed by the electronic controller. Quieter operation is also provided thanks to the use of soundproofing.

- **Compressor compartment ventilation**

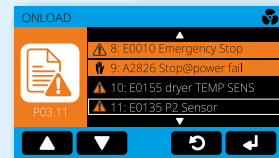
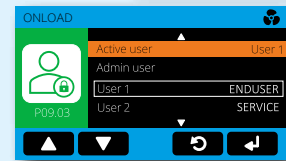
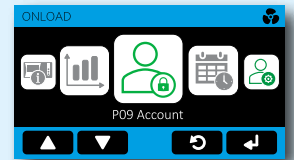
- Fans installed for the extraction of heated air from the compressor compartment.





EFFICIENCY UNDER CONTROL

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



Intelligent control

All of NOBEL 2S' functions are entirely managed by the centralised 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.

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 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. The system can also be used with other compressors not equipped with Login by using the optional modules suitable for specific compressors.



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.



Multilanguage management

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



Remote control

This allows a complete remote control 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

All the data that you need.



SMS 2.0

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



Preventive and targeted maintenance

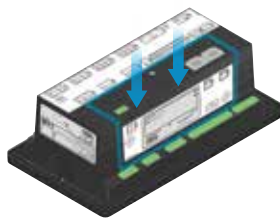
A LAN connection with Ethernet cable, SMS 2.0 allows e-mails to be sent automatically should an irregular event occur (up to 5 settable e-mail addresses).

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.



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

CODE #005560002



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.



THE RANGE **NOBEL 2S**

5-year warranty.

The customer may choose to join the Trust extended warranty programme, protecting your investment for 5 years or 36,000 operating hours*.

** whichever occurs first.*



• **NOBEL 2S**
• 75 - 90 kW



• **NOBEL 2S**
• 110 - 132 - 160 kW

A complete range for all applications.

**Power ratings from 75 kW to 315 kW,
with variable speed and variable flow rate:
3 frame sizes, 24 possible configurations.**



• **NOBEL 2S**
• 200 - 250 - 315 kW

Key words: easy maintenance

The two-stage NOBEL 2S range has been designed with a focus on simplifying routine maintenance work.



**VARIABLE SPEED
AND FLOW RATE**

75-90 kW

75 kW										
NOBEL 2S 75-07 DV	V60ZB97PWS045	75	6.64 / 16.60	234 / 586	7	101	73	DN50	3260	3000 x 2000 x 2200
NOBEL 2S 75-08 DV		75	6.28 / 15.70	222 / 554	8	116	73	DN50	3260	3000 x 2000 x 2200
NOBEL 2S 75-10 DV		75	5.64 / 14.10	199 / 498	10	145	73	DN50	3260	3000 x 2000 x 2200
90 kW										
NOBEL 2S 90-07 DV	V60ZE97PWS045	90	7.68 / 19.20	271 / 678	7	101	73	DN50	3500	3000 x 2000 x 2200
NOBEL 2S 90-08 DV		90	7.64 / 19.10	270 / 675	8	116	73	DN50	3500	3000 x 2000 x 2200
NOBEL 2S 90-10 DV		90	6.80 / 17.00	240 / 600	10	145	73	DN50	3500	3000 x 2000 x 2200

**VARIABLE SPEED
AND FLOW RATE**

110-160 kW

110 kW										
NOBEL 2S 110-07 DV	V60ZH97PWS045	110	9.96 / 24.90	352 / 879	7	101	76	DN80	5300	3600 x 2000 x 2250
NOBEL 2S 110-08 DV		110	9.01 / 22.52	318 / 795	8	116	76	DN80	5300	3600 x 2000 x 2250
NOBEL 2S 110-10 DV		110	8.48 / 21.19	299 / 748	10	145	76	DN80	5300	3600 x 2000 x 2250
132 kW										
NOBEL 2S 132-07 DV	V60ZL97PWS045	132	11.20 / 28.00	396 / 989	7	101	76	DN80	5500	3600 x 2000 x 2250
NOBEL 2S 132-08 DV		132	10.80 / 27.00	381 / 953	8	116	76	DN80	5500	3600 x 2000 x 2250
NOBEL 2S 132-10 DV	V60ZM97PWS045	132	10.38 / 25.94	367 / 916	10	145	76	DN80	5730	3600 x 2000 x 2250
160 kW										
NOBEL 2S 160-07 DV	V60ZP97PWS045	160	13.86 / 34.65	489 / 1224	7	101	76	DN80	5730	3600 x 2000 x 2250
NOBEL 2S 160-08 DV		160	13.20 / 33.00	466 / 1165	8	116	76	DN80	5730	3600 x 2000 x 2250
NOBEL 2S 160-10 DV	V60ZQ97PWS045	160	12.00 / 30.00	424 / 1059	10	145	76	DN80	5890	3600 x 2000 x 2250

**VARIABLE SPEED
AND FLOW RATE**

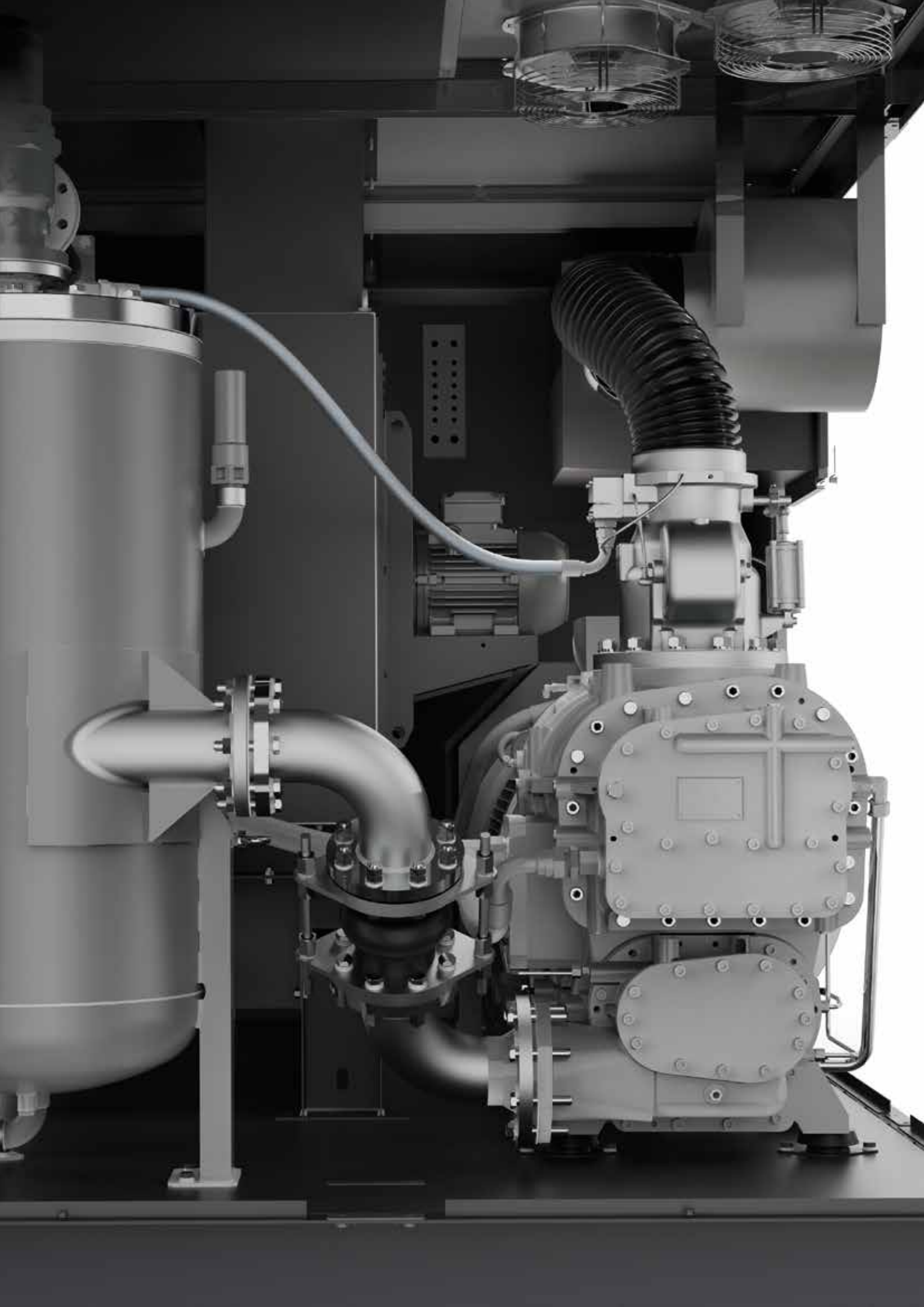
200-315 kW

200 kW										
NOBEL 2S 200-07 DV	V60ZS97PWS045	200	17.40 / 43.50	614 / 1536	7	101	79	DN100	7310	4350 x 2250 x 2450
NOBEL 2S 200-08 DV		200	16.28 / 40.70	575 / 1437	8	116	79	DN100	7310	4350 x 2250 x 2450
NOBEL 2S 200-10 DV	V60ZT97PWS045	200	14.80 / 37.00	523 / 1307	10	145	79	DN100	7400	4350 x 2250 x 2450
250 kW										
NOBEL 2S 250-07 DV	V60ZV97PWS045	250	21.40 / 53.50	756 / 1889	7	101	79	DN100	8440	4350 x 2250 x 2450
NOBEL 2S 250-08 DV		250	20.42 / 51.05	721 / 1803	8	116	79	DN100	8440	4350 x 2250 x 2450
NOBEL 2S 250-10 DV		250	18.04 / 45.10	637 / 1593	10	145	79	DN100	8440	4350 x 2250 x 2450
315 kW										
NOBEL 2S 315-07 DV	V60ZY97PWS045	315	25.20 / 63.00	890 / 2225	7	101	79	DN100	8500	4350 x 2250 x 2450
NOBEL 2S 315-08 DV		315	24.60 / 61.50	869 / 2172	8	116	79	DN100	8500	4350 x 2250 x 2450
NOBEL 2S 315-10 DV		315	22.40 / 56.00	791 / 1978	10	145	79	DN100	8500	4350 x 2250 x 2450

** Max. pressure up to 13 bar on request.

The data and results were measured in accordance with standard ISO 1217.

The sound level was measured in accordance with ISO 2151, with a tolerance of ± 3 dB(A).



FNA Group figures:

11.000 Screw compressors produced per year

Plants worldwide **5**

1.300 Employees across 3 continents

Countries we export to **120**

270 Million € turnover

Global service centres **1.500**

As a result of the consolidated experience and leadership of a family that has been operating exclusively in the compressed air sector for two generations and since 1948, the FNA Group is one of the leading manufacturers of air compressors for industrial, professional and consumer use, thanks to its internationally renowned and respected brands, offering an allround service with security. FNA is the only company in the sector that has produced and distributed more than 40 million air compressors worldwide, since the formation of the company. The secret to this success lies in the constant pursuit of innovative products and cutting-edge technical solutions to meet our customers demands in terms of safety, reliability, energy saving and quiet operation. All of this is combined carefully with the highest standards in customer service, technical assistance and commercial support.



Production plant of Zola Predosa (BO).

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a brand of



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