

MADE IN ITALY



## INDUSTRIAL range



## OS

Oil-free  
Scroll Compressors

Belt driven, fix or variable speed  
2.2-22 kW (3-30 HP)

# Company Profile

FINI boasts more than 60 years of experience and it is one of the most important global organizations in the professional and industrial compressed air sector. Synonymous with quality and professionalism, the Fini brand not only has one of the most complete ranges in the alternative piston compressors sector but above all it is one of the global points of reference in the industrial compressed air sector.



FINI industrial compressors, entirely **MADE IN ITALY**, are dedicated to heavy duty use and they stand out from the others on the market because of their specific energy savings solutions.

Our compressors are the answer to the needs of large-scale industry and small and mid-sized companies, where compressed air is one of the main source of energy. They are designed for continuous duty in very hard conditions of use, with special attention to energy consumption, low operating and maintenance costs, simple installation and easy use.

The entire production process, from project to packaging, is carried out at our facilities in Italy. Our highly skilled staff are dedicated to supporting the manufacturing and assembling activities. The continuous control and monitoring of each manufacturing process grants the utmost precision at every step, in order to achieve the highest quality, supreme product reliability and flexibility of use.



# Innovation, Quality, Know-how

Our construction philosophy is based on the selection and simple assembly of the most reliable and efficient technical solutions.

The constant pursuit of excellent quality, innovative spirit and great attention to customer needs are the values that have always characterized FINI and its products.



Continuous investment in technical and product innovation has allowed FINI to expand their offer in the industrial sector with the introduction of both the oil injection 2.2 to 315 kW rotary compressors and the new OIL-FREE models with SCROLL spiral rotary system with rated power from 2.2 up to 22 kW.

Assembly and testing performed on automated lines, robotic systems of the latest generation, and computer tools for design and control are the main investments that the Company implemented to realize products that meet the markets quality standards. Since 1996, the Company has certified its quality system in compliance with UNI EN ISO 9001.



# When choose a SCROLL compressor?

The new range of "OS" compressors series, with oil-free scroll technology, is the result of many years of Fini experience in the field of industrial compressed air. This innovative range opens up a new world of possibilities for all those applications where the total absence of oil is required: 100% oil-free air ensures longer working life of the plants, resulting in lower operating costs, in addition to granting the highest quality standard of the final product.



| FIELD OF APPLICATION  | CLASS    | Max oil residue<br>mg/m <sup>3</sup> |
|---|----------|--------------------------------------|
| <b>All applications where the Class 0 certification is required.</b>  | <b>0</b> | <b>0.00</b>                          |
| Medical, chemical, biotechnologies, food and beverages, pharmaceuticals, electronics, packaging, PET bottles. | 1        | < 0.01                               |
| Paper industry, photographic laboratories, colour injectors.  | 2        | < 0.1                                |
| Control instruments, sand-blasting.   | 3        | < 1                                  |
| Low-performance sand-blasting.  | 4        | < 5                                  |

The oil-free scroll OS range developed by Fini satisfies all these sectors, with a dynamical range of power and model sizes from 2,2 to 22 kW, with optional integrated dryer, to suit any specific requirement of high quality totally oilless compressed air.

## Scroll compressors are Class 0 products.

Totally Oilless compressed air is a specific requirement in the following production processes:

- Pharmaceutical industry.
- Medical Laboratories.
- Food and Beverages production.
- Chemical industry.
- Special Food Treating Equipment (milking robot).
- Laser Equipments.
- Packaging, PET bottles.
- Industrial Painting.





# Why choose a SCROLL compressor?

- To supply high quality oil-free compressed air.
- To reduce installation and maintenance costs.
- To increase efficiency in all areas of the compressors operation.
- To save energy and reduce environmental impact.
- To provide the most modern, compact, robust, reliable and durable oilless rotary compressors.
- To safeguard ambient sustainability.



## High quality air

OS compressors supply 100% oil-free compressed air.



## Low noise

OS compressors are very quiet due to a very low speed of scroll elements. Furthermore, the use of very efficient soundproof material makes them suitable for installation in any working place.



## High energy saving

Due to the use of high quality motors and efficient but simple control system the "OS" range stands out for its reduced power consumption, thus, resulting in increase of energy saving in the long run.



## High reliability

Quality control, components from primary global manufacturers guarantee long operating life and maintenance intervals.



## High productivity

High air output performances is one of the characteristic of FINI project engineering. OS range follows this tradition.



## High compactness

The very compact design enables these compressors to be installed close to the working station.

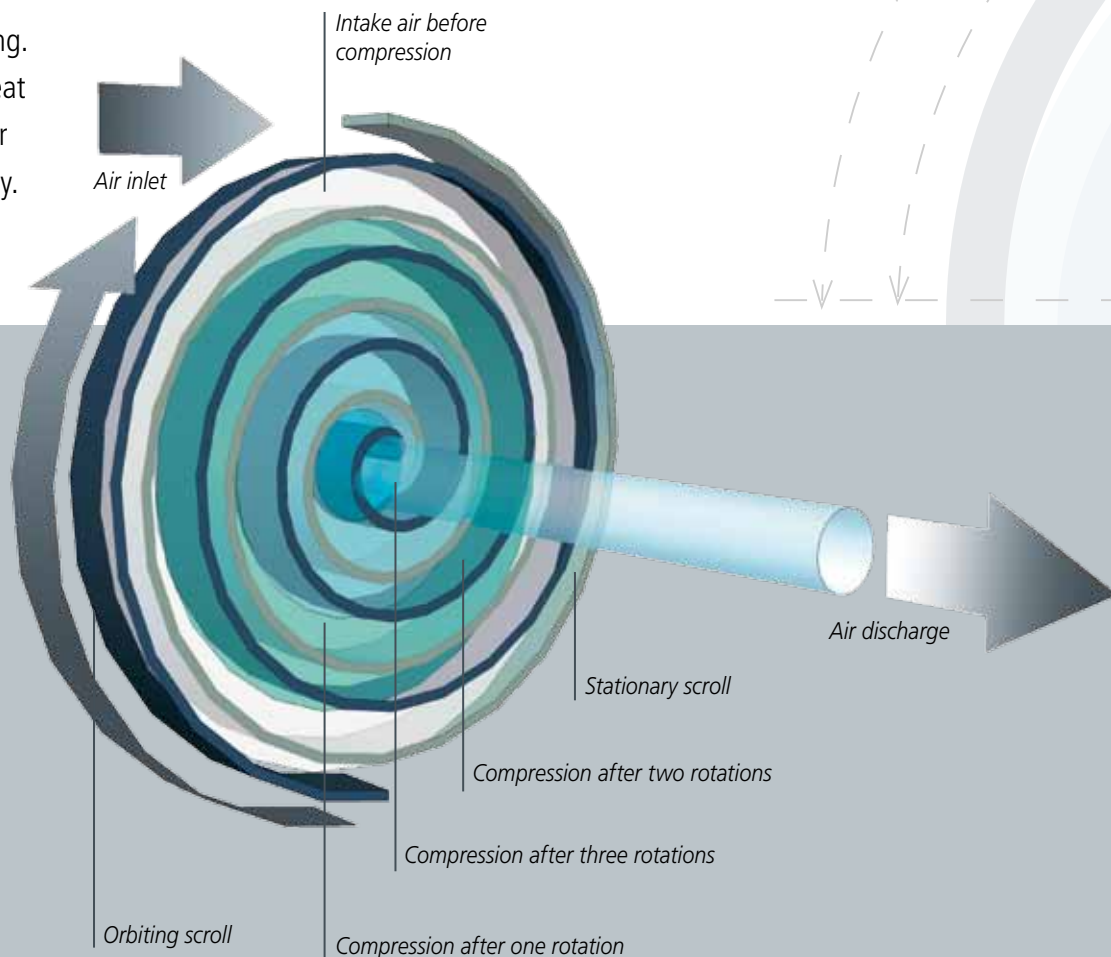


# The spiral SCROLL technology...

The highest manufacturing standards are applied to guarantee maximum performance and reliability. A proven technology developed to compress air in absolute absence of oil, two spirals turning without any metal-to-metal contact in between intake air through a suction chamber and compress it in 3 successive phases. This simple process allows a smooth contact-free operation of the scrolls and thus provides a very long service life to all the components and therefore the complete unit.

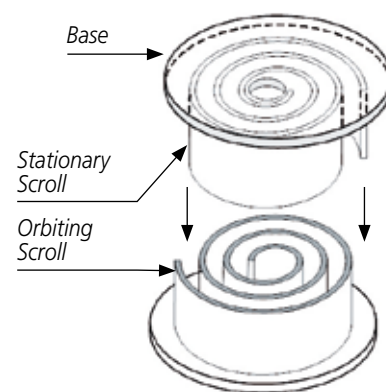
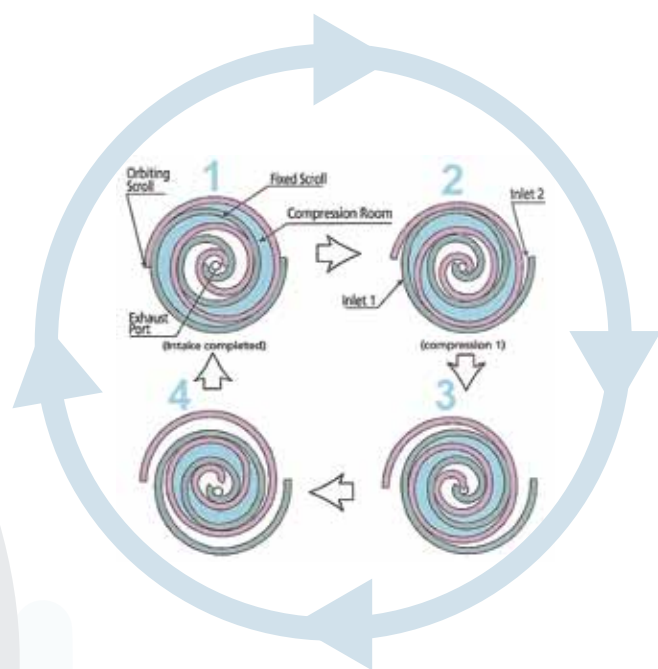
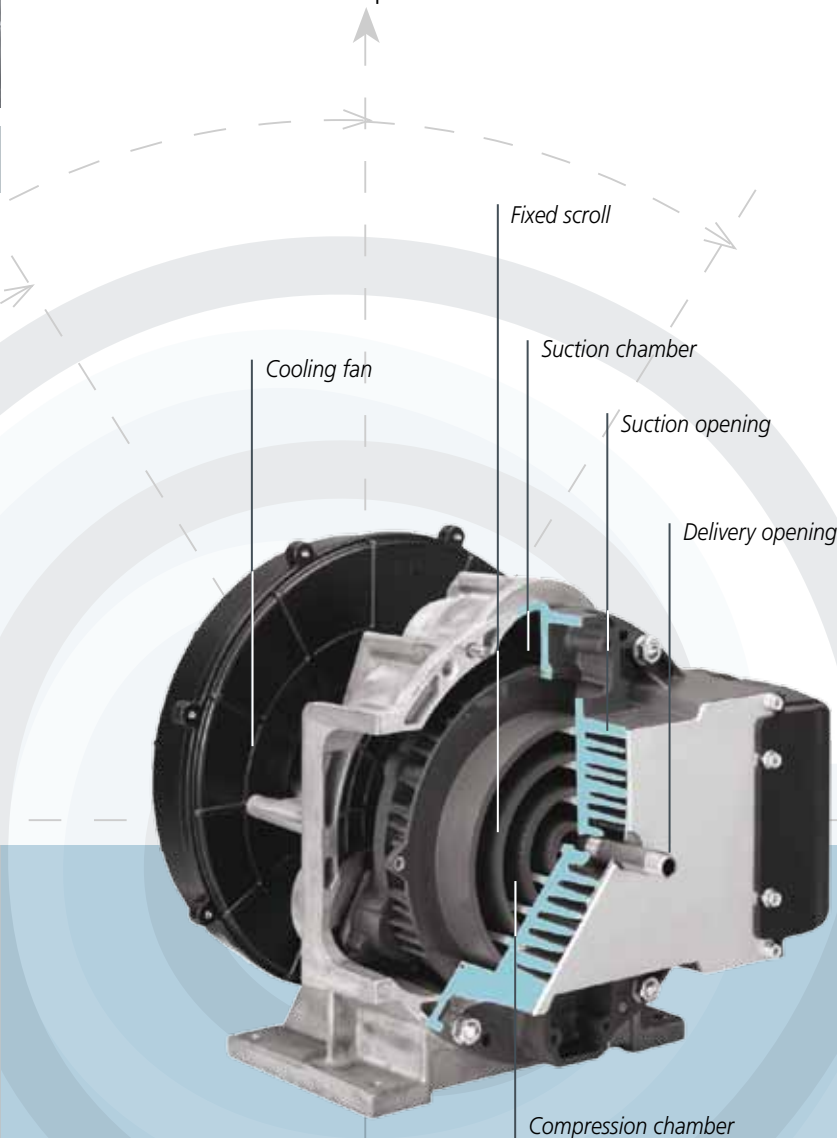


- Labyrinth lap for high compressor reliability.
- Alumite treatment.
- Aluminium die casting.
- Oil-free compression chamber for high quality air.
- Over sized roller bearing.
- Effective aluminium heat radiation fan for higher efficiency and durability.



## ...for high quality compressed air

The rotating orbiting scroll within the stationary scroll causes a crescent shaped compression cavity. This crescent shaped compression cavity moves around the point of symmetry reducing the cavities size and exhausting the compressed air out of the center of the stationary scroll. No other technology offers fewer moving components and lower bearing loads than the Scroll Compressor.



SCROLL WORKING PRINCIPLE

## OS 3-5-7: Simple and silent

2.2-5.5 kW

The Fini OS range with single unit is extremely quiet and can be installed in any environment ensuring the comfort and safety of all operators with minimum impact to the surroundings.

- Extremely silent.
- Very compact design.
- Automatic start/stop.
- IP 55 class F motor.
- Each cabinet is equipped with a small 10-lt tank internally protected against corrosion.
- Also available with 270-lt tank**, with internal treatment of PTFE coating.
- Open version** available on demand, with 200 or 270 liters tank, without soundproof cabinet.



*Advanced cooling system*

*Scroll compressor*

*High-standard soundproof material*

*SSC intelligent controller*

*10-lt air receiver*

*Air inlet filter to eliminate dust and particles down to 1 micron*

*IP 55 Class F electric motor*



*Open version*

### SSC (SingleScrollController)

The advanced controllers fitted to the Fini OS range have been specifically developed to guarantee optimum monitoring and regulation of the compressors operation, allowing flexibility and full programming of the complete compressed air station, for maximum efficiency and safety.

SSC controller is installed on 3.7 and 5.5 kW models. The clear LCD display monitors the working conditions and controls a single scroll compressor according to the air demand. Other functions include remote control, auto-restart, "fault display" and display of routine maintenance information.





# OS 10-15-20-30: Total flexibility

7.5-22 kW

The OS range with "Multi-Scroll" units: two, three or four compressor units integrated in the same machine, as a very flexible modular system, **also available with integrated refrigerating dryer**: the maximum flexibility to suit any high quality compressed air requirements.

- Maximum reliability.
- Very compact design.
- High efficiency.
- Easy maintenance and installation.
- IP 55 class F motor.
- Low vibration.
- Super soundproof cabinet with labyrinth ventilation.
- Easy maintenance: the scroll-motor module is extractable from the cabinet for an easy and immediate accessibility.



## Advanced cooling system

Our oversized air-air heat exchangers provide our machines with low operating temperatures even in severe working conditions. The large coolers coupled with separate thermostatically controlled electro-fans ensure lower compressed air outlet temperatures.



## MSC (MultiScrollController)

Installed on models from 7.5 up to 22 kW. With clear alphanumeric LCD display features full menu in 12 languages and convenient RS485 interfacing, controls the operation of multi-scroll compressors in order to satisfy the air demand, automatically starting and stopping the number of compressors needed.

Furthermore the MSC controller changes continuously the starting order of the units to balance the operating time of each pumping unit. Other functions include remote control, auto-restart, and powerful MOD-BUS interface, allowing energy consumption monitoring and automatic reduction of operating pressure according to varying demands through the working profile.

# Variable speed drive

Nowadays, the reduction of the energy consumption has become a global challenge in terms of environmental impact. Multiscroll series, ranging from 7.5 to 22 kW, are also available in variable speed drive version: new "ScrollTronic" system allows the air compressor to automatically and continuously adapt to the air demand of the production process. The inverter controls the speed of a single unit, adjusting its capacity in accordance with the process requirements. In case the air demand is higher than the capacity of the unit, the operation of this unit continues at a fixed speed, while a second unit is switched one running at a variable speed.



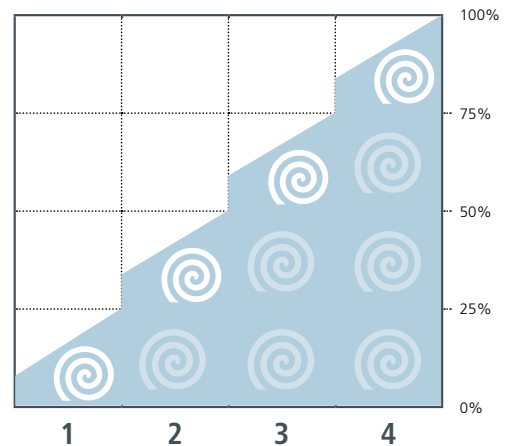
**ScrollTronic**  
control

## STC (ScrollTronicController)

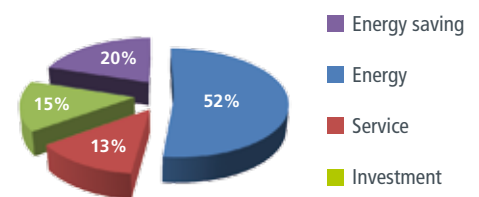
In addition to the features of the MSC controller the multi-scroll compressors could be optionally fitted with the "ScrollTronic" controller that introduces completely new features:

- Elimination of electric absorption peaks in the motor's start-up phase.
- Optimization of the electric consumption of the compressor with a ratio directly proportional to the request for compressed air.
- Constant regulation of the working pressure with a maximum drift of 0.2 bar as to the operating set pressure.
- Reduced wearing of the mechanical parts, scroll bearings and motor, with consequent reduction of the maintenance costs.

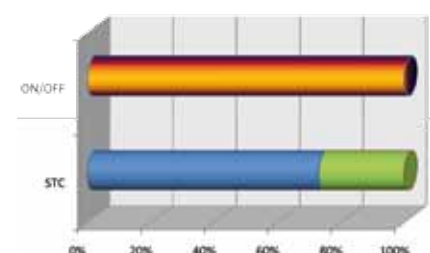
Variable flow system










Management costs



Energy costs



# OS Technical data

| Code  | ℓ   | Product             | Scroll block |  |     |  AIR* |       |        |  MAX |     |  |  |  |  |       |
|---|-----|---------------------|--------------|---|-----|--|-------|--------|--|-----|---|---|---|---|-------|
|   |     |                     |              | kW  | HP  | l/min.   | m³/h  | c.f.m. | bar  | psi | dB(A)   | BSP   | L x D x H (cm)  | kg  | lbs   |
| OPEN (single unit with tank)                          |     |                     |              |   |     |  |       |        |  |     |   |   |   |   |       |
| VW2SK72FNM221   | 200 | OS 308-200F open    | 1            | 2.2   | 3   | 240  | 14.4  | 8.5    | 8  | 116 | 70  | 1/2"  | 140 x 55 x 97   | 109   | 240   |
| VW3SB92FNM221   | 270 | OS 508-270F TA open | 1            | 3.7   | 5   | 410  | 24.6  | 15     | 8  | 116 | 74  | 1/2"  | 164 x 65 x 103  | 157   | 345   |
| VW3SD92FNM221   | 270 | OS 708-270F TA open | 1            | 5.5   | 7.5 | 630  | 37.8  | 22.5   | 8  | 116 | 76  | 1/2"  | 164 x 65 x 103  | 167   | 367   |
| SILENCED (single unit without tank)                   |     |                     |              |   |     |  |       |        |  |     |   |   |   |   |       |
| VW0SK92FNM021   | –   | OS 308              | 1            | 2.2   | 3   | 240  | 14.4  | 8.5    | 8  | 116 | 64  | 1/2"  | 70 x 65 x 89  | 97  | 213.4 |
| VW0SB92FNM021   | –   | OS 508 TA           | 1            | 3.7   | 5   | 410  | 24.6  | 15     | 8  | 116 | 67  | 1/2"  | 70 x 65 x 89  | 150   | 330   |
| VW0SD92FNM021   | –   | OS 708 TA           | 1            | 5.5   | 7.5 | 630  | 37.8  | 22.5   | 8  | 116 | 69  | 1/2"  | 70 x 65 x 89  | 160   | 352   |
| SILENCED (single unit with tank)                      |     |                     |              |   |     |  |       |        |  |     |   |   |   |   |       |
| VW2SK72FNM021   | 200 | OS 308-200F         | 1            | 2.2   | 3   | 240  | 14.4  | 8.5    | 8  | 116 | 64  | 1/2"  | 140 x 53 x 124  | 155   | 341   |
| VW3SB92FNM021   | 270 | OS 508-270F TA      | 1            | 3.7   | 5   | 410  | 24.6  | 15     | 8  | 116 | 67  | 1/2"  | 155 x 65 x 155  | 240   | 528   |
| VW3SD92FNM021   | 270 | OS 708-270F TA      | 1            | 5.5   | 7.5 | 630  | 37.8  | 22.5   | 8  | 116 | 69  | 1/2"  | 155 x 65 x 155  | 245   | 539   |
| SILENCED (single unit with tank and dryer)            |     |                     |              |   |     |  |       |        |  |     |   |   |   |   |       |
| VW3SB92FNM121   | 270 | OS 508-270F-ES TA   | 1            | 3.7   | 5   | 410  | 24.6  | 15     | 8  | 116 | 67  | 1/2"  | 155 x 65 x 155  | 265   | 583   |
| VW3SD92FNM121   | 270 | OS 708-270F- ES TA  | 1            | 5.5   | 7.5 | 630  | 37.8  | 22.5   | 8  | 116 | 69  | 1/2"  | 155 x 65 x 155  | 270   | 594   |
| MULTI SILENCED (twin and multi unit without tank)     |     |                     |              |   |     |  |       |        |  |     |   |   |   |   |       |
| VW0SE92FNM021   | –   | OS 1008 TA          | 2            | 7.5 (2 x 3.7)   | 10  | 820  | 49.2  | 30     | 8  | 116 | 67  | 1/2"  | 116 x 60 x 103  | 265   | 583   |
| VW0SF92FNM021   | –   | OS 1508 TA          | 2            | 11 (2 x 5.5)  | 15  | 1260   | 75.6  | 45     | 8  | 116 | 68  | 1/2"  | 155 x 65 x 155  | 275   | 605   |
| VW0SC92FNM021   | –   | OS 2008 TA          | 3            | 15 (3 x 5.5)  | 20  | 1890   | 113.4 | 68     | 8  | 116 | 69  | 3/4"  | 141 x 80 x 150  | 515   | 1133  |
| VW0SI92FNM021   | –   | OS 3008 TA          | 4            | 22 (4 x 5.5)  | 30  | 2520   | 151.2 | 90     | 8  | 116 | 70  | 3/4"  | 141 x 80 x 150  | 580   | 1276  |
| MULTI SILENCED (twin unit with 270-lt tank)           |     |                     |              |   |     |  |       |        |  |     |   |   |   |   |       |
| VW3SE92FNM021   | 270 | OS 1008-270F TA     | 2            | 7.5 (2 x 3.7)   | 10  | 820  | 49.2  | 30     | 8  | 116 | 67  | 1/2"  | 158 x 60 x 155  | 350   | 770   |
| VW3SF92FNM021   | 270 | OS 1508-270F TA     | 2            | 11 (2 x 5.5)  | 15  | 1260   | 75.6  | 45     | 8  | 116 | 68  | 1/2"  | 158 x 60 x 155  | 360   | 792   |
| MULTI SILENCED (twin unit with 270-lt tank and dryer) |     |                     |              |   |     |  |       |        |  |     |   |   |   |   |       |
| VW3SE92FNM121   | 270 | OS 1008-270F ES TA  | 2            | 7.5 (2 x 3.7)   | 10  | 820  | 49.2  | 30     | 8  | 116 | 67  | 1/2"  | 158 x 60 x 155  | 380   | 836   |
| VW3SF92FNM121   | 270 | OS 1508-270F ES TA  | 2            | 11 (2 x 5.5)  | 15  | 1260   | 75.6  | 45     | 8  | 116 | 68  | 1/2"  | 158 x 60 x 155  | 390   | 858   |
| VARIABLE SPEED MULTISCROLL SILENCED                   |     |                     |              |   |     |  |       |        |  |     |   |   |   |   |       |
| VW0SE97FNM021   | –   | OS 1008 STC         | 2            | 7.5 (2 x 3.7)   | 10  | 820  | 49.2  | 30     | 8  | 116 | 67  | 1/2"  | 116 x 60 x 103  | 285   | 627   |
| VW0SF97FNM021   | –   | OS 1508 STC         | 2            | 11 (2 x 5.5)  | 15  | 1260   | 75.6  | 45     | 8  | 116 | 68  | 1/2"  | 155 x 65 x 155  | 295   | 649   |
| VW0SC97FNM021   | –   | OS 2008 STC         | 3            | 15 (3 x 5)  | 20  | 1890   | 113.4 | 68     | 8  | 116 | 69  | 3/4"  | 141 x 80 x 150  | 535   | 1179  |
| VW0SI97FNM021   | –   | OS 3008 STC         | 4            | 22 (4 x 5.5)  | 30  | 2520   | 151.2 | 90     | 8  | 116 | 70  | 3/4"  | 141 x 80 x 150  | 600   | 1323  |
| VARIABLE SPEED MULTISCROLL SILENCED WITH DRYER        |     |                     |              |   |     |  |       |        |  |     |   |   |   |   |       |
| VW0SE97FNM121   | –   | OS 1008 ES STC      | 2            | 7.5 (2 x 3.7)   | 10  | 820  | 49.2  | 30     | 8  | 116 | 67  | 1/2"  | 116 x 60 x 103  | 315   | 693   |
| VW0SF97FNM121   | –   | OS 1508 ES STC      | 2            | 11 (2 x 5.5)  | 15  | 1260   | 75.6  | 45     | 8  | 116 | 68  | 1/2"  | 155 x 65 x 155  | 325   | 715   |
| VW0SC97FNM121   | –   | OS 2008 ES STC      | 3            | 15 (3 x 5)  | 20  | 1890   | 113.4 | 68     | 8  | 116 | 69  | 3/4"  | 141 x 80 x 150  | 575   | 1268  |
| VW0SI97FNM121   | –   | OS 3008 ES STC      | 4            | 22 (4 x 5.5)  | 30  | 2520   | 151.2 | 90     | 8  | 116 | 70  | 3/4"  | 141 x 80 x 150  | 640   | 1411  |

\* Free air delivery as per ISO 1217 Annex C, at 0.5 bar less than maximum working pressure at the compressor outlet.

\*\* ± 3 dB (A) as PNEUROP/CAGI PN-NTC 2.3.

MODELS WITH DIFFERENT VOLTAGES, FREQUENCIES AND 10 BAR, AVAILABLE ON DEMAND.

## Finì also recommends:

### Original Spare Parts



[www.fsnspareparts.com](http://www.fsnspareparts.com)

The "FSN" brand states the originality of the components, which are specifically manufactured and tested to be used on our compressors. The use of original, certified spare parts guarantees the efficiency and reliability of the compressor, extending its lifespan and lowers management costs.

### Air Dryers



NPS dryers are designed for drying and purification of compressed air for breathing air applications. Type BI for "Breathing air Industrial" and model BM for "Breathing air Medical". With both systems, apart from the drying process to a pressure dew point of  $-40^{\circ}\text{C}$ , the components  $\text{CO}$ ,  $\text{CO}_2$ , hydrocarbons, nitrogen oxides and  $\text{SO}_2$  are eliminated.

### Nitrogen Generators



The NGN nitrogen generators represent an economical way for the production of Nitrogen on site. Models sized for a wide range of flow and purity of the product, the NGN series stands for efficiency and versatility exceptional. Ideal for: food packaging, plastic moulding, welding metal treatment, pharmaceutical/chemical industry, blowing tyres.



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