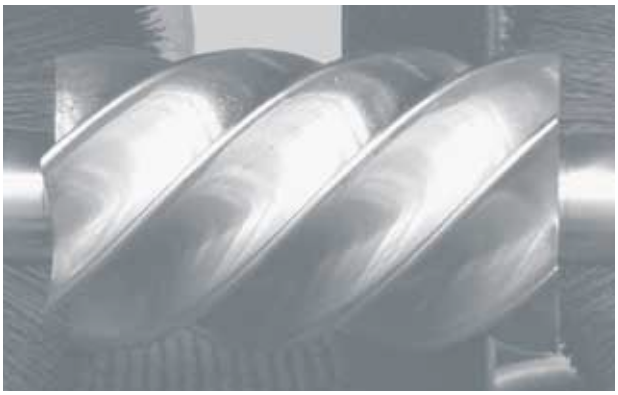
CE IE3

MADE IN ITALY

Fini COMPRESSORS

INDUSTRIAL range




MICRO - PLUS

Belt-driven oil-injected rotary screw compressors

Fixed and Variable Speed

2.2-75 kW

EN

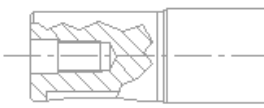
Company Profile

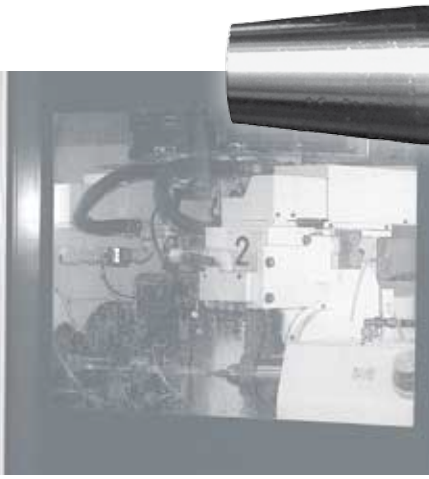
FINI boasts more than 60 years of experience and is one of the most important global organisations in the professional and industrial compressed air sector. Synonymous with quality and professionalism, the Fini brand not only provides one of the most comprehensive ranges in the field of rotary air compressors, but above all Fini is now established as a global reference point in terms of quality and technology recocnised throughout out the industrial compressed air sector.

All Fini industrial compressors are MADE IN ITALY and are designed for heavy duty use and distinguished by offering unique and advanced technologies that provides energy saving solutions that work!

- Our compressors offer the ideal solution to the needs of larger-scale industry as well as smaller and mid-sized companies, where compressed air is a most important source of energy.
Fini Screw Compresssors are designed for continuous duty in the most arduous operating conditions, with a special attention to reducing energy consumption, lowering operating and maintenance costs along with offering simple installation and ease of use.

- The entire production process, from project design and research through to packaging of the final product is carried out at our facilities in Italy.
Our highly skilled work force 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.

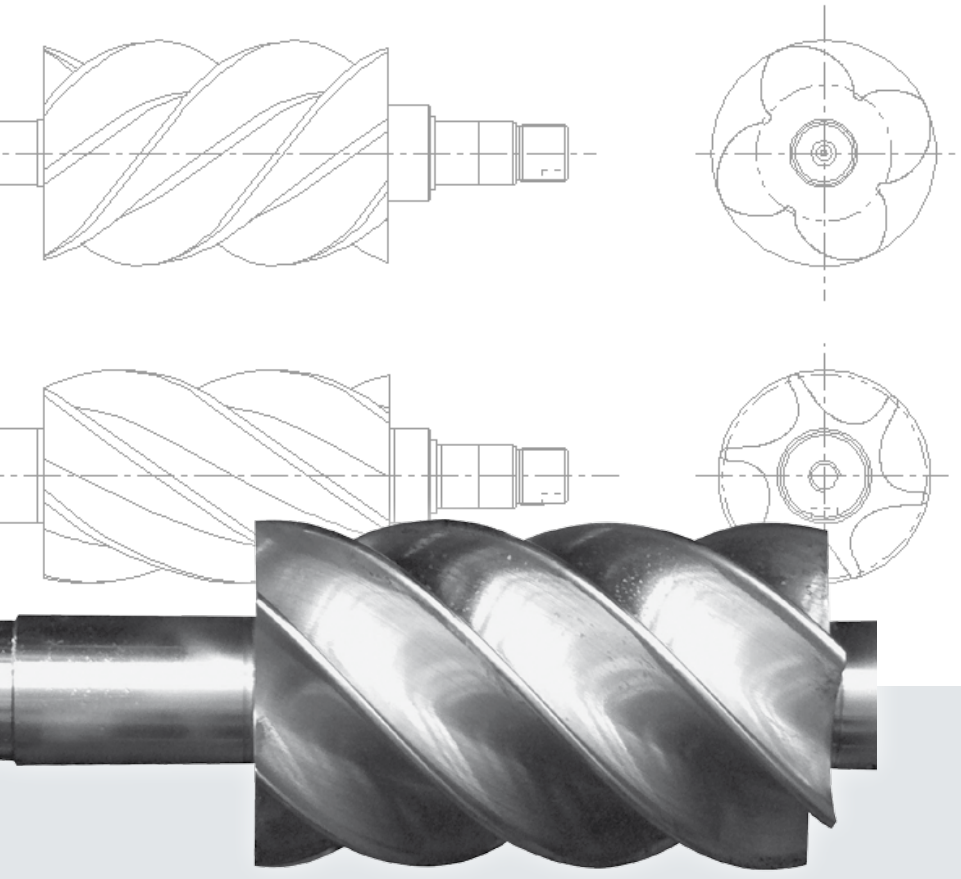




Innovation, Quality and Know-how

Our engineering philosophy is based on the selection and highly controlled assembly of the most reliable and efficient technical solutions. The constant pursuit of excellence in quality along with an innovative spirit and particular attention to the customers demands, are the values that have always characterised FINI and its products.

The continuous investment in technical design and product innovation has allowed FINI to take a further step forward in the sector, with the launch of the latest range of industrial air compressors- **MICRO and PLUS Series: oil-injected belt-driven rotary screw compressors**, in an extensive range from 2.2 kW to 75 kW.



During production all of the assembly and testing of products is performed on automated assembly lines that utilise the latest robotic systems. The use of the most advanced and modern machine tools in manufacturing coupled with the employment of advanced controls and processes have been a major focus for the Company representing a very significant investment in order to create products that exceed the quality standards demanded by the market.

Since 1996, the Company has certified its quality systems in compliance with UNI EN ISO 9001.

Our TARGET: Maximum efficiency, lower energy consumption and total convenience.

The new belt-driven oil injected Micro and Plus screw compressors have been designed to minimise energy costs, without sacrificing performance. The modularity and flexibility of these products provide multiple solutions suitable for different user's requirements: with or without air receiver, with or without refrigerated dryer, in fixed speed or variable speed formats.

▲ Floor mounted

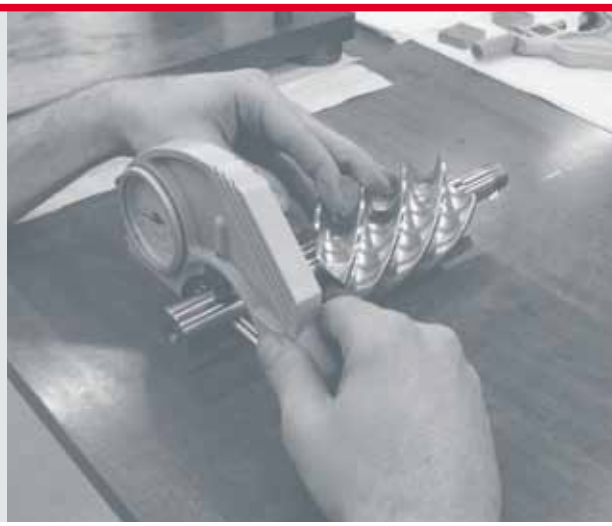
▲ With air receiver

▲ With air receiver and dryer

▲ Variable speed

Why you should choose a Fini SCREW compressor?

- To control and reduce operating costs.
- To provide the most modern, compact, robust, reliable and quiet rotary screw compressor.
- To provide a continous source compressed air.
- To increase operational efficiency in all areas where compressed air is used.
- To save energy and reduce CO_2 emmisions.



High energy saving

The choice of high quality components, combined with our high performance air-ends and **Premium Efficiency IE3 motors**, ensure reduced power consumption, substantial energy savings and exceptional performance.
Furthermore, the IE3 motors reduce CO_2 emissions: an important contribution to protecting the environment.

Plug&Play

Micro and Plus compressors are thoroughly tested at our factories to ensure they are ready for immediate use following delivery, thereby saving time and cutting installation costs.

Low noise level

Micro and Plus compressors are very quiet: the use of very efficient soundproofing materials means that they are suitable for installation in any working environment.

High reliability

The use of premium components from primary global manufacturers along with our advanced assembly with strict quality control and testing, results in a final product that offers a long service life with maximum reliability and fewer maintenance interventions.

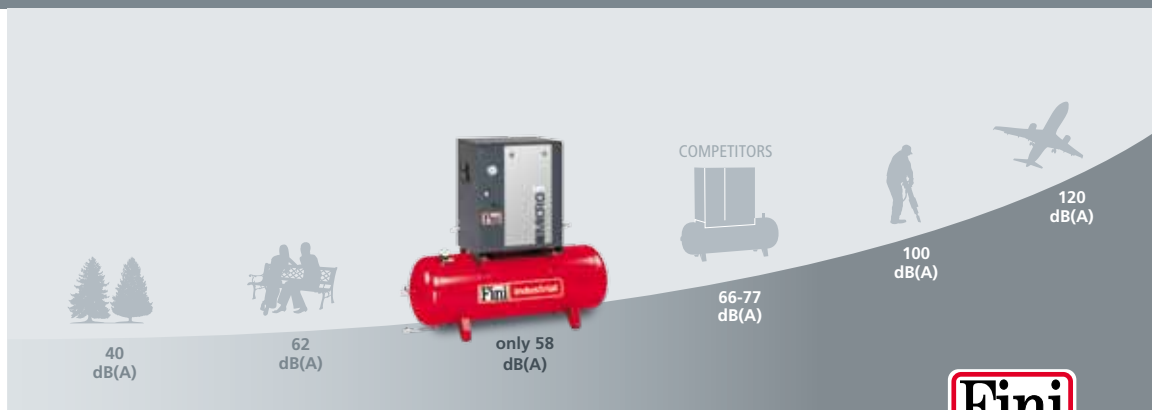
High efficiency

Higher air output performance is a key focus for the renown FINI project engeneering and design team. The new Micro and Plus series follows this tradition by offering premium performance levels across the entire range.

Very compact design

The very compact design enables Micro and Plus compressors to be installed close to the application reducing installation costs and improving efficiency.

Our air-ends, inverters and controllers are covered by 2 YEARS WARRANTY



Designed to offer a long service life

1 Innovative cooling system
The cooling system is among the most innovative in the field.
A thermostatic controlled centrifugal fan keeps the temperature of the entire compressor to specific tolerance and at a constant level, avoiding temperature peaks that can be harmful for the correct operation of the compressor. The action of the fan, combined with the efficiency of the oversized oil cooler, guarantees the ideal operation of the compressor in differing and even extreme climatic conditions.
The "silent" fans along with the specially developed labyrinth ventilation and the use of high quality soundproofing materials ensure one of the lowest acoustic levels of any air compressor.

2 Efficient transmission
The POLY-V belt drive ensures significantly lower power losses and three times longer service life compared to standard range "V" type belts fitted to other compressors on the market. simple belt tensioning is carried out through a sliding belt tensioner.

3 High performance flexible tubing
All air-oil circuit flexi-tubes are of premium quality and made of multi layer rubber covered with a metal mesh which are resistant to very high temperatures and capable of operation at high pressure.

4 Intake valve
The intake valve is entirely designed and manufactured at our facilities. This most important device, adjusts the compressor's operation to guarantee minimum pressure during idle running and maximum savings upon start-up.

5 Accurate working pressure
The use of a digital transducer guarantees an accurate and stable function during operation. It allows direct modification of the working pressure from the electronic controller without any mechanical intervention.

Noise and temperature under control

10 High performance ROTARY SCREW AIR-ENDS
The Fini FS air ends are entirely designed, produced and tested at our Italian facilities: the special design of the screw profile ensures high performance, low temperature and reduced energy consumption.

6 SPIN-ON filters
Routine service parts that are easy to remove and replace offering long service intervals for lower maintenance costs.

Air filters
Protecting the compressor the oversized filter mass with double filtering media allows operation even in arduous environments.

7 Minimum pressure valve
Manufactured and designed in house using advanced anti corrosive materials and fully machined at our facilities, to grant maximum reliability in any operating conditions.

8 Cleaner components in any conditions
A cabinet prefiltering panel (standard from 18.5 kW) inhibits dust and dirt from entering the inside of the compressor cabinet increasing the life of air filters and the drive belt by 15%, whilst keeping coolers cleaner thereby reducing operating temperature.

9 Simple maintenance
All of the internal mechanical and service parts are easy to access, for fast and simple routine maintenance.

Advanced electronic controllers

ETMII

Installed on models from 4 to 15 kW.

- Four maintenance timers (air filter, oil, oil filter, oil separator).
- Automatic re-start after power failure (subject to safety conditions).
- Cooling fan temperature control.
- Compressor remote start facility.
- Integrated phase sequence relay.

Controller with multi-function backlight display, the menu is alphanumeric type. The main screen display indicates:

- Working pressure (offload/load);
- Oil temperature;
- Total working hours;
- On-load working hours;
- Compressor status led (stand-by, offload, load);
- Hours remaining before maintenance.

ETIV

Installed on models from 18.5 to 75 kW.

Controller with multi-function backlight LCD graphic display, the menu is drop down type.
In the main screen the display indicates:

- Working pressure (offload/load);
- Oil temperature;
- Compressor status (stand-by, off load, load);
- Fan status (off/on);
- Date and time;
- Hours remaining before maintenance;
- Inverter use percentage.
- Compressor rotation management, for up to 4 units.

SMS Device Service Management System

SMS is the innovative device to allow the remote control of the compressor and to perform predictive maintenance available on screw compressors equipped with the latest ETIV controller. The device automatically sends an e-mail (up to 3 addresses to be defined during set-up) in case of an alarm and according to preset thresholds (every hour, every day, every week): this feature allows you to accurately schedule routine maintenance and to allow intervention in case of special maintenance or fault finding. Furthermore, you can have remote control from any device (tablet, smartphone, PC, notebook, etc.), via a web page, as long as it is connected to the same Internet network as the SMS device.

Predictive and targeted maintenance:

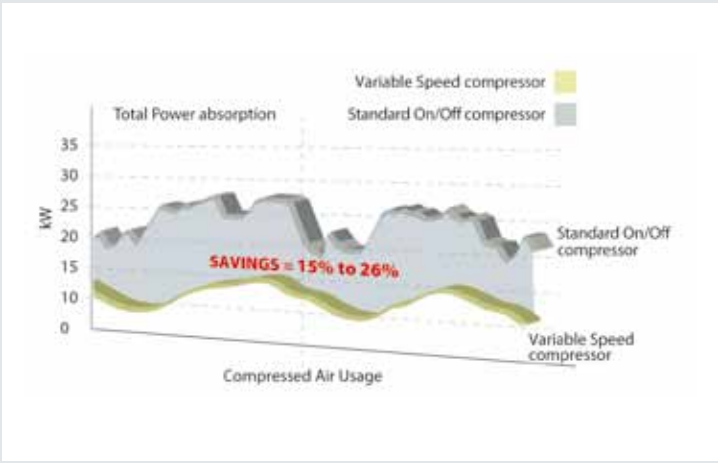
- automated e-mail in case of alarms,
- automated e-mail every hour / day / week.

Compressor remote control:

- access to the various menu levels (user, service),
- check the status of the compressor online,
- on/off control,
- no software to be installed.

Variable speed drive

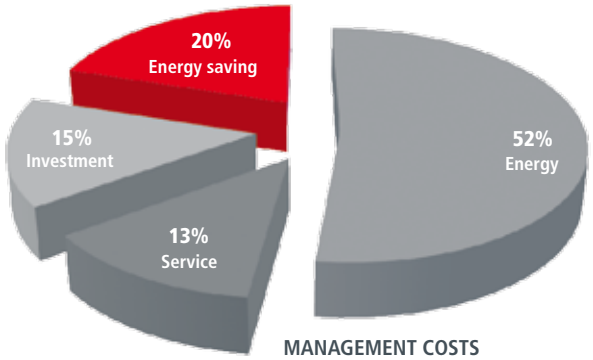
Nowadays, the reduction of the energy consumption has become a global challenge in terms of environmental impact. Reducing power consumption and protecting our valuable energy resources represents one of the greatest global environmental challenges of our times.
The Plus series version with 22, 37, 55 and 75 kW electric motor are available in a variable speed drive version, providing high performance combined with the most effective energy saving solution.



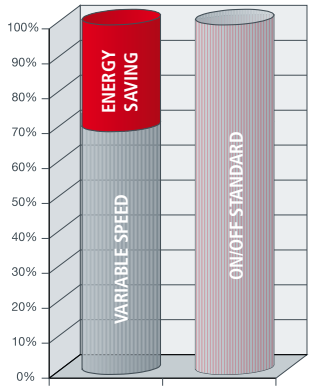
The application of a frequency inverter, able to dynamically adjust the voltage/frequency/current values of the motor, allows the elimination of unnecessary power losses by constantly adjusting the generation of compressed air to match the real air demand, offering many proven advantages for the user in terms of reducing energy consumption:

- Continuous regulation of the motor speed and compressed air generation to precisely match the air demand.
- The air output is constantly adjusted between 40% and 100% of the compressor full capacity.
- Constant and accurate air pressure control selectable at any value between 6 and 10 bar (13 bar on demand).
- Energy consumption is proportional to the delivered compressed air so you only pay for the compressed air that is used!

The graph below shows the significant energy saving using variable speed compressors in a typical installation.



MANAGEMENT COSTS



ENERGY COSTS

MICRO 2.2-5.5 kW: simple, silent and economical.

The MICRO range is available in 2 versions:
- **MICRO "SE" 2.2-4 kW**: electromechanical ON/OFF switch, with motor protection. The pressure gauge and hour counter are included in the control panel. Easy to use, no idle running means considerable energy saving.
- **MICRO 4-5.5 kW**: star-delta starter, including the ETMII electronic controller, which controls the complete operation of the machine.

- **Extremely quiet operation.**
- **Very compact design.**
- **NEW anti-rotation system.**
- **Low maintenance costs.**
- **Ease of installation and use.**
- **Plug and play.**

Micro SE 2.2-3.0-4.0

2.2-4 kW

Available versions:
- floor mounted compressor
- compressor + air receiver
- compressor + air receiver + air dryer
  (air receiver: 200 liters)

Air-end:
FS14

Controller:
–

Fixed speed

Micro 4.0-5.5

4-5.5 kW

Available versions:
- floor mounted compressor
- compressor + air receiver
- compressor + air receiver + air dryer
  (air receiver: 200, 270 or 500 liters)

Air-end:
FS14

Controller:
ETMII

Fixed speed

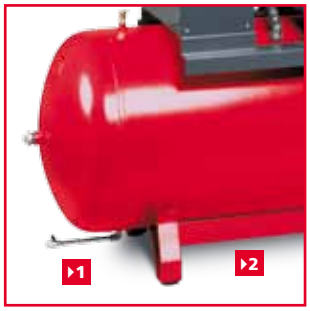
PLUS 7.5-15 kW: the modular choice.

- **Extremely quiet operation.**
- **Very compact design.**
- **High efficiency.**
- **Low R.P.M.**
- **Ease of installation and use.**
- **Plug and play.**

Dryer module
The models with air receiver are also available with dryer ("ES" versions): supplied ready to operate with a minimum of installation.

Condensate ball valve (1)
Receiver-mounted models with ball valve for convenient discharge of condensate (refer to local regulations).

Easy to transport (2)
The machine is particularly easy to lift with a fork truck or hand truck thanks to a steel bar secured between the feet at the base of the air receiver (both at the front and to the side).



Plus 8-11-15

7.5-15 kW

Available versions:
- floor mounted compressor
- compressor + air receiver
- compressor + air receiver + air dryer
  (air receiver: 270 or 500 liters)

Air-end:
FS26 TF

Controller:
ETMII

Fixed speed

Plus 16

15 kW

Available versions:
- floor mounted compressor
- compressor + air receiver
- compressor + air receiver + air dryer
  (air receiver: 500 liters)

Air-end:
FS50 TF

Controller:
ETMII

Fixed speed

PLUS 18.5-37 kW: new design with higher performance.

The new PLUS compressors from 18.5 to 75 kW are entirely designed and manufactured so that they function as an integrated system with the maximum efficiency.
All of the most important components within the compressor are manufactured in house using state of the art methods including the use of very modern machine tool and process control technology: this allows full control of the production cycle and maximum control in resect to the total quality of the entire compressor.
The cooling air flow, channeled by the thermostatic controlled centrifugal fan, provides maximum circulation to the oversized combined oil/air heat exchanger: this permits the compressor to run at optimised temperature even in severe ambient conditions.

Dryer module
Plus 18.5, 22, 31 and 38 models with dryer module (ES) provide clean, dry air that improves the system's reliability, avoids costly downtime and production delays, and safeguards the quality of the final product.

Plus 18.5-22

18.5-22 kW

Available versions:
- base compressor
- compressor + air dryer

Air-end:
FS50TF

Controller:
ETIV

Fixed or Variable Speed (Plus 22 VS)

Plus 31-38

30-37 kW

Available versions:
- base compressor
- compressor + air dryer

Air-end:
FS100
FS130

Controller:
ETIV

Fixed or Variable Speed (Plus 38 VS)

PLUS 45-75 kW: a quality choice.

- Extremely quiet operation.
- High performance screw air-end.
- Ease of access for routine maintenance.
- Low maintenance costs.
- Ease of installation and use.
- Prefiltering panel.

Plus 45-55

45-55 kW

Available versions:
- base compressor

Air-end:
FS130

Controller:
ETIV

Fixed speed

Plus 56-75

55-75 kW

Available versions:
- base compressor

Air-end:
FS250

Controller:
ETIV

Fixed or Variable Speed (Plus 56 and Plus 75 VS)

HRS Heat Recovery System

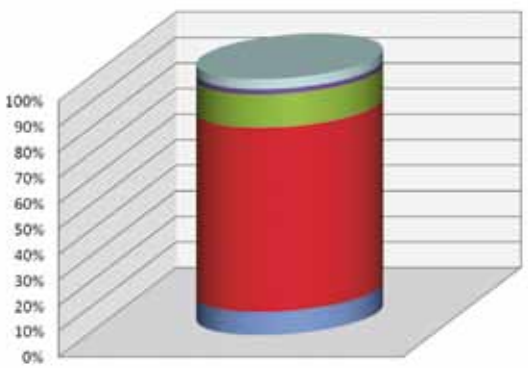
HRS is a system for the recovery of the heat generated by the screw compressors, for the production of hot water.

Most of the energy used to produce compressed air is actually converted into heat: up to 90% of this energy is reusable! About 75% of the energy used is found in the lubrication and cooling circuit and can be used as a heat source, the remaining 15% is contained in the compressed air which enters the network. It is therefore quite simple to recover the thermal energy (for alternative use) in the compression process... valuable energy that is normally wasted!

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

HEAT OF COMPRESSION

4%	Heat remaining in the air
2%	Losses by radiation
13%	Heat removed from the air cooler
72%	Heat removed from the oil cooler
9%	Heat radiated by the electric motor



Recover energy - Save money!

How great the recovery of energy actually is, depends of course on the size of the compressors and the type of replaced energy (electricity, gas, heating oil), but the investment becomes very important for the compressors starting from 11 kW installed power. Given the current energy costs, the return on investment of a typical heat recovery system can be as short as 6 months with less than 2 years being the standard (with reference to a plate heat exchanger for heating systems).
Heat recovery is a real opportunity to increase the effectiveness of a compressed air system, the impact on energy costs allows greater savings, up to 3 times compared to even the most efficient compressor.

Optimised control in the compressor room

Many compressed air stations include several compressors: EasyX4 is a weekly programmable sequencer, capable of configuring up to 4 compressors, based on the amount of air actually required.

EasyX4 is the easiest solution for compressor sequencing and supervision over complex systems of compressors, up to 4 units: fixed or variable speed.

The programming is intuitive. It is sufficient to set the 4 pressure ranges (if 4 is the number of connected units) and later define at what time the entire compressor station shall start and stop, assigning at which pressure each compressor must work.

EasyX4 sequencer
code #405531604

Three programming levels:

- **MANUAL**: compressors are fixed to a given operational pressure range;
- **AUTOMATIC**: with pressure range swapping after a programmable time interval;
- **GROUP PROGRAMMING**: where compressors can be switched within groups.

High quality compressed air, safeguarding the final product quality.

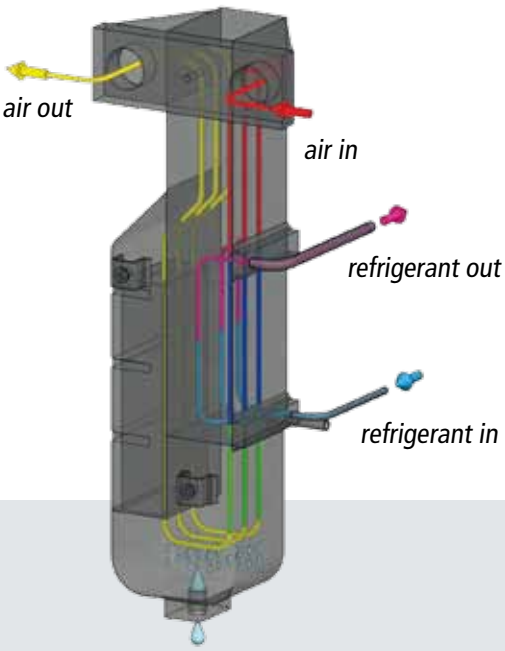
The compression process increases the concentration of solid particles that are suspended in the atmosphere, generated by natural phenomena but also by polluting agents or industrial processes.
Water, oil, impurities and odours cause many issues in respect of the quality of the air produced, corrosion to pipe work and damage to the pneumatic equipment, thus negatively affects performance, efficiency and reliability.
The quality of compressed air is therefore fundamental for the reliability of the machinery and quality of the final product.

Fini has developed **refrigerated dryers that are integrated with the compressor,** with centralised condensate drain, in order to:

- Obtain clean air that is free from condensate and impurities;
- Reduce maintenance costs and down time;
- Protecting all down stream equipment and their investment costs;
- Safeguarding the environment and the quality of the final product;
- Compliance with safety standards.

Efficient, functional, ecologic.
The refrigerated air dryer ensures the production of high quality dry compressed air that is essential to maintaining reliable systems and to ensure the highest quality of the finished product.
The refrigerated dryer achieves excellent performance even in unfavourable environmental conditions, and high inlet temperatures.

HEAT EXCHANGER



The highly efficient and ultra compact heat exchanger is able to operate effectively in ambient temperatures up to 45°C, ensuring a reduced compressed air pressure drop.
This compact aluminium module contains the various stages of the compressed air treatment.
Air-air exchanger: a pre-cooling of the intake air takes place in this section.
This allows to reduce the energy consumption of the refrigeration circuit and reduces the possibility of condensation on the outer surface of the pipe from the dryer.
Air-gas exchanger: the pre-cooled air in the air/air heat exchanger comes in the evaporator and cools to the dew point.
Demister: the air cooled in the evaporator passes through a demister separator that allows the drainage of the condensate in a large collection chamber. The geometry of the module and the demister allows to keep the load losses low.

Code	ℓ	Product	kW	HP	l/min.	m³/h	c.f.m.	bar	psi	dB(A)	G	kg	Lbs	L x W x H (cm)
FLOOR MOUNTED														
V51JT60FNM560	–	MICRO SE 2.2-10 M	2.2	3	240	14.4	8.5	10	145	58	1/2"	87	192	58 x 48 x 76
V51JU72FNM760	–	MICRO SE 2.2-08	2.2	3	325	19.5	11.5	8	116	58	1/2"	87	192	58 x 48 x 76
V51JT72FNM760	–	MICRO SE 2.2-10	2.2	3	290	17.4	10.2	10	145	58	1/2"	87	192	58 x 48 x 76
V51JS72FNM760	–	MICRO SE 3.0-08	3	4	430	25.8	15.2	8	116	59	1/2"	92	203	58 x 48 x 76
V51JQ72FNM760	–	MICRO SE 3.0-10	3	4	385	23.1	13.6	10	145	59	1/2"	92	203	58 x 48 x 76
V51JR72FNM760	–	MICRO SE 4.0-08	4	5.5	580	34.8	20.5	8	116	60	1/2"	93	205	58 x 48 x 76
V51JP72FNM760	–	MICRO SE 4.0-10	4	5.5	485	29.1	17.1	10	145	60	1/2"	93	205	58 x 48 x 76
V51JR92FNM760	–	MICRO 4.0-08	4	5.5	580	34.8	20.5	8	116	60	1/2"	94	208	58 x 48 x 76
V51JP92FNM760	–	MICRO 4.0-10	4	5.5	485	29.1	17.1	10	145	60	1/2"	94	208	58 x 48 x 76
V51JV92FNM760	–	MICRO 4.0-13	4	5.5	330	19.8	11.6	13	188	60	1/2"	94	208	58 x 48 x 76
V51JW92FNM760	–	MICRO 5.5-08	5.5	7.5	720	43.2	25.4	8	116	64	1/2"	125	276	60 x 52 x 78
V51JO92FNM760	–	MICRO 5.5-10	5.5	7.5	650	39	22.9	10	145	64	1/2"	125	276	60 x 52 x 78
V51JM92FNM760	–	MICRO 5.5-13	5.5	7.5	485	29.1	17.1	13	188	64	1/2"	125	276	60 x 52 x 78
WITH AIR RECEIVER														
V77JT60FNM501	200	MICRO SE 2.2-10 M - 200	2.2	3	240	14.4	8.5	10	145	58	1/2"	144	318	144 x 51 x 128
V77JU72FNM701	200	MICRO SE 2.2-08 - 200	2.2	3	325	19.5	11.5	8	116	58	1/2"	144	318	144 x 51 x 128
V77JT72FNM701	200	MICRO SE 2.2-10 - 200	2.2	3	290	17.4	10.2	10	145	58	1/2"	144	318	144 x 51 x 128
V77JS72FNM701	200	MICRO SE 3.0-08 - 200	3	4	430	25.8	15.2	8	116	59	1/2"	149	329	144 x 51 x 128
V77JQ72FNM701	200	MICRO SE 3.0-10 - 200	3	4	385	23.1	13.6	10	145	59	1/2"	149	329	144 x 51 x 128
V77JR72FNM701	200	MICRO SE 4.0-08 - 200	4	5.5	580	34.8	20.5	8	116	60	1/2"	150	331	144 x 51 x 128
V77JP72FNM701	200	MICRO SE 4.0-10 - 200	4	5.5	485	29.1	17.1	10	145	60	1/2"	150	331	144 x 51 x 128
V77JR92FNM701	200	MICRO 4.0-08 - 200	4	5.5	580	348	20.5	8	116	60	1/2"	151	333	144 x 51 x 128
V77JP92FNM701	200	MICRO 4.0-10 - 200	4	5.5	485	29.1	17.1	10	145	60	1/2"	151	333	144 x 51 x 128
V91JW92FNM701	270	MICRO 5.5-08 - 270	5.5	7.5	720	43.2	25.4	8	116	64	1/2"	185	408	156 x 57 x 139
V91JO92FNM701	270	MICRO 5.5-10 - 270	5.5	7.5	650	39	22.9	10	145	64	1/2"	185	408	156 x 57 x 139
V83JW92FNM701	500	MICRO 5.5-08 - 500	5.5	7.5	720	43.2	25.4	8	116	64	1/2"	247	545	198 x 60 x 148
V83JO92FNM701	500	MICRO 5.5-10 - 500	5.5	7.5	650	39	22.9	10	145	64	1/2"	247	545	198 x 60 x 148
WITH AIR RECEIVER AND DRYER														
V77JU72FNM801	200	MICRO SE 2.2-08 - 200 ES	2.2	3	325	19.5	11.5	8	116	58	1/2"	174	384	144 x 51 x 128
V77JT72FNM801	200	MICRO SE 2.2-10 - 200 ES	2.2	3	290	17.4	10.2	10	145	58	1/2"	174	384	144 x 51 x 128
V77JS72FNM801	200	MICRO SE 3.0-08 - 200 ES	3	4	430	25.8	15.2	8	116	59	1/2"	179	395	144 x 51 x 128
V77JQ72FNM801	200	MICRO SE 3.0-10 - 200 ES	3	4	385	23.1	13.6	10	145	59	1/2"	179	395	144 x 51 x 128
V77JR72FNM801	200	MICRO SE 4.0-08 - 200 ES	4	5.5	580	34.8	20.5	8	116	60	1/2"	180	397	144 x 51 x 128
V77JP72FNM801	200	MICRO SE 4.0-10 - 200 ES	4	5.5	485	29.1	17.1	10	145	60	1/2"	180	397	144 x 51 x 128
V77JR92FNM801	200	MICRO 4.0-08 - 200 ES	4	5.5	580	34.8	20.5	8	116	60	1/2"	181	399	144 x 51 x 128
V77JP92FNM801	200	MICRO 4.0-10 - 200 ES	4	5.5	485	29.1	17.1	10	145	60	1/2"	181	399	144 x 51 x 128
V91JW92FNM801	270	MICRO 5.5-08 - 270 ES	5.5	7.5	720	43.2	25.4	8	116	64	1/2"	215	474	156 x 57 x 139
V91JO92FNM801	270	MICRO 5.5-10 - 270 ES	5.5	7.5	650	39	22.9	10	145	64	1/2"	215	474	156 x 57 x 139
V83JW92FNM801	500	MICRO 5.5-08 - 500 ES	5.5	7.5	720	43.2	25.4	8	116	64	1/2"	277	611	198 x 60 x 148
V83JO92FNM801	500	MICRO 5.5-10 - 500 ES	5.5	7.5	650	39	22.9	10	145	64	1/2"	277	611	198 x 60 x 148

Free air delivery as per ISO 1217 Annex C, at 7.5 - 9.5 - 12.5 bar at the compressor outlet. ± 3 dB (A) as PNEUROP/CAGI PN-NTC 2.3.

Code	ℓ	Product			AIR			MAX						
			kW	HP	l/min.	m³/h	c.f.m.	bar	psi	dB(A)	BSP	kg	Lbs	L x W x H (cm)
FLOOR MOUNTED														
V60NG92FNM760	–	PLUS 8-08	7.5	10	1250	75	44.1	8	116	68	3/4"	185	407	80 x 70 x 98
V60NH92FNM760	–	PLUS 8-10	7.5	10	1000	60	35.3	10	145	68	3/4"	185	407	80 x 70 x 98
V60NI92FNM760	–	PLUS 8-13	7.5	10	750	45	26.5	13	188	68	3/4"	185	407	80 x 70 x 98
V60NL92FNM760	–	PLUS 11-08	11	15	1650	99	58.2	8	116	69	3/4"	200	440	80 x 70 x 98
V60NM92FNM760	–	PLUS 11-10	11	15	1500	90	53	10	145	69	3/4"	200	440	80 x 70 x 98
V60NN92FNM760	–	PLUS 11-13	11	15	1100	66	38.8	13	188	69	3/4"	200	440	80 x 70 x 98
V60NP92FNM760	–	PLUS 15-08	15	20	2150	129	75.9	8	116	70	3/4"	235	517	80 x 70 x 98
V60NQ92FNM760	–	PLUS 15-10	15	20	1850	111	65.3	10	145	70	3/4"	235	517	80 x 70 x 98
V60NR92FNM760	–	PLUS 15-13	15	20	1500	90	53	13	188	70	3/4"	235	517	80 x 70 x 98
V60NB92FNM760	–	PLUS 16-08	15	20	2350	141	83	8	116	68	3/4"	240	528	80 x 70 x 98
V60NY92FNM760	–	PLUS 16-10	15	20	2050	123	72.4	10	145	68	3/4"	240	528	80 x 70 x 98
V60NW92FNM760	–	PLUS 16-13	15	20	1750	105	61.8	13	188	68	3/4"	240	528	80 x 70 x 98
WITH AIR RECEIVER														
V91NG92FNM701	270	PLUS 8-08-270	7.5	10	1250	75	44.1	8	116	68	3/4"	245	541	155 x 70 x 151
V91NH92FNM701	270	PLUS 8-10-270	7.5	10	1000	60	35.3	10	145	68	3/4"	245	541	155 x 70 x 151
V91NL92FNM701	270	PLUS 11-08-270	11	15	1650	99	58.2	8	116	69	3/4"	260	574	155 x 70 x 151
V91NM92FNM701	270	PLUS 11-10-270	11	15	1500	90	53	10	145	69	3/4"	260	574	155 x 70 x 151
V83NG92FNM701	500	PLUS 8-08-500	7.5	10	1250	75	44.1	8	116	68	3/4"	307	678	198 x 70 x 163
V83NH92FNM701	500	PLUS 8-10-500	7.5	10	1000	60	35.3	10	145	68	3/4"	307	678	198 x 70 x 163
V83NL92FNM701	500	PLUS 11-08-500	11	15	1650	99	58.2	8	116	69	3/4"	322	711	198 x 70 x 163
V83NM92FNM701	500	PLUS 11-10-500	11	15	1500	90	53	10	145	69	3/4"	322	711	198 x 70 x 163
V83NP92FNM701	500	PLUS 15-08-500	15	20	2150	129	75.9	8	116	70	3/4"	357	788	198 x 70 x 163
V83NQ92FNM701	500	PLUS 15-10-500	15	20	1850	111	65.3	10	145	70	3/4"	357	788	198 x 70 x 163
V83NB92FNM701	500	PLUS 16-08-500	15	20	2350	141	83	8	116	68	3/4"	362	799	198 x 70 x 163
V83NY92FNM701	500	PLUS 16-10-500	15	20	2050	123	72.4	10	145	68	3/4"	362	799	198 x 70 x 163
WITH AIR RECEIVER AND DRYER														
V91NG92FNM801	270	PLUS 8-08-270 ES	7.5	10	1250	75	44.1	8	116	68	3/4"	343	757	155 x 70 x 151
V91NH92FNM801	270	PLUS 8-10-270 ES	7.5	10	1000	60	35.3	10	145	68	3/4"	343	757	155 x 70 x 151
V91NL92FNM801	270	PLUS 11-08-270 ES	11	15	1650	99	58.2	8	116	69	3/4"	363	801	155 x 70 x 151
V91NM92FNM801	270	PLUS 11-10-270 ES	11	15	1500	90	53	10	145	69	3/4"	363	801	155 x 70 x 151
V83NG92FNM801	500	PLUS 8-08-500 ES	7.5	10	1250	75	44.1	8	116	68	3/4"	375	828	198 x 70 x 163
V83NH92FNM801	500	PLUS 8-10-500 ES	7.5	10	1000	60	35.3	10	145	68	3/4"	375	828	198 x 70 x 163
V83NL92FNM801	500	PLUS 11-08-500 ES	11	15	1650	99	58.2	8	116	69	3/4"	395	872	198 x 70 x 163
V83NM92FNM801	500	PLUS 11-10-500 ES	11	15	1500	90	53	10	145	69	3/4"	395	872	198 x 70 x 163
V83NP92FNM801	500	PLUS 15-08-500 ES	15	20	2150	129	75.9	8	116	70	3/4"	436	962	198 x 70 x 163
V83NQ92FNM801	500	PLUS 15-10-500 ES	15	20	1850	111	65.3	10	145	70	3/4"	436	962	198 x 70 x 163
V83NB92FNM801	500	PLUS 16-08-500 ES	15	20	2350	141	83	8	116	68	3/4"	436	962	198 x 70 x 163
V83NY92FNM801	500	PLUS 16-10-500 ES	15	20	2050	123	72.4	10	145	68	3/4"	436	962	198 x 70 x 163

ALL MODELS WITH AIR RECEIVER ARE ALSO AVAILABLE ON REQUEST WITH A WORKING PRESSURE OF 13 BAR, PROVIDING THE SAME PERFORMANCE OF MODELS ON GROUND.

Free air delivery as per ISO 1217 Annex C, at 7.5 - 9.5 - 12.5 bar at the compressor outlet. ± 3 dB (A) as PNEUROP/CAGI PN-NTC 2.3.

Code	Product			AIR **			MAX						
		kW	HP	l/min.	m³/h	c.f.m.	bar	psi	dB(A)	BSP	kg	Lbs	L x W x H (cm)
FLOOR MOUNTED													
V60QA92FNM760	PLUS 18.5-08	18.5	25	2800	168	99	8	116	66	3/4"	350	774	135 x 80 x 113
V60QB92FNM760	PLUS 18.5-10	18.5	25	2500	150	88	10	145	66	3/4"	350	774	135 x 80 x 113
V60QC92FNM760	PLUS 18.5-13	18.5	25	2150	129	76	13	188	66	3/4"	350	774	135 x 80 x 113
V60QD92FNM760	PLUS 22-08	22	30	3350	201	118	8	116	68	3/4"	380	840	135 x 80 x 113
V60QE92FNM760	PLUS 22-10	22	30	3000	180	106	10	145	68	3/4"	380	840	135 x 80 x 113
V60QF92FNM760	PLUS 22-13	22	30	2400	144	85	13	188	68	3/4"	380	840	135 x 80 x 113
WITH DRYER													
V60QA92FNM860	PLUS 18.5-08 ES	18.5	25	2800	168	99	8	116	66	3/4"	400	883	169 x 80 x 113
V60QB92FNM860	PLUS 18.5-10 ES	18.5	25	2500	150	88	10	145	66	3/4"	400	883	169 x 80 x 113
V60QC92FNM860	PLUS 18.5-13 ES	18.5	25	2150	129	76	13	188	66	3/4"	400	883	169 x 80 x 113
V60QD92FNM860	PLUS 22-08 ES	22	30	3350	201	118	8	116	68	3/4"	430	949	169 x 80 x 113
V60QE92FNM860	PLUS 22-10 ES	22	30	3000	180	106	10	145	68	3/4"	430	949	169 x 80 x 113
V60QF92FNM860	PLUS 22-13 ES	22	30	2400	144	85	13	188	68	3/4"	430	949	169 x 80 x 113
VARIABLE SPEED													
V60QD97FNM760	PLUS 22-08 VS	22	30	3350 / 1350	201 / 81	118 / 48	8	116	68	3/4"	390	861	135 x 80 x 113
V60QE97FNM760	PLUS 22-10 VS	22	30	3050 / 1220	183 / 73.2	108 / 43	10	145	68	3/4"	390	861	135 x 80 x 113
VARIABLE SPEED WITH DRYER													
V60QD97FNM860	PLUS 22-08 ES VS	22	30	3350 / 1350	201 / 81	118 / 48	8	116	68	3/4"	440	971	169 x 80 x 113
V60QE97FNM860	PLUS 22-10 ES VS	22	30	3050 / 1220	183 / 73.2	108 / 43	10	145	68	3/4"	440	971	169 x 80 x 113

Free air delivery as per ISO 1217 Annex C, at 7.5 - 9.5 - 12.5 bar at the compressor outlet. ± 3 dB (A) as PNEUROP/CAGI PN-NTC 2.3.
*** Variable Speed models: max./min. values.*

Code	Product	kW	HP	AIR ** l/min.	AIR ** m³/h	AIR ** c.f.m.	MAX bar	MAX psi	dB(A)	BSP	kg	Lbs	L x W x H (cm)
FLOOR MOUNTED													
V60BU92FNM760	PLUS 31-08	30	40	4700	282	165.9	8	116	70	1 -1/4"	630	1392	153 x 83 x 144
V60BV92FNM760	PLUS 31-10	30	40	4200	252	148.3	10	145	70	1 -1/4"	630	1392	153 x 83 x 144
V60BW92FNM760	PLUS 31-13	30	40	3400	204	120	13	188	70	1 -1/4"	630	1392	153 x 83 x 144
V60BK92FNM760	PLUS 38-08	37	50	6000	360	212	8	116	68	1 -1/4"	700	1547	153 x 83 x 144
V60BJ92FNM760	PLUS 38-10	37	50	5300	318	187	10	145	68	1 -1/4"	700	1547	153 x 83 x 144
V60BI92FNM760	PLUS 38-13	37	50	4000	240	141	13	188	68	1 -1/4"	700	1547	153 x 83 x 144
V60BM92FNM860	PLUS 45-08	45	60	7200	432	254	7.5	109	72	1 -1/2"	910	2002	160 x 97 x 186
V60BN92FNM860	PLUS 45-10	45	60	6500	390	229	10	145	72	1 -1/2"	910	2002	160 x 97 x 186
V60BQ92FNM860	PLUS 45-13	45	60	5100	306	180	13	188	72	1 -1/2"	910	2002	160 x 97 x 186
V60BR92FNM760	PLUS 55-08	55	75	8600	516	304	7.5	109	74	1 -1/2"	952	2094	160 x 97 x 186
V60BS92FNM760	PLUS 55-10	55	75	7800	468	275	10	145	74	1 -1/2"	952	2094	160 x 97 x 186
V60BT92FNM760	PLUS 55-13	55	75	6400	384	226	13	188	74	1 -1/2"	952	2094	160 x 97 x 186
V60BA92FNM760	PLUS 56-08	55	75	9300	558	328	7.5	109	70	2"	1650	3630	180 x 110 x 215
V60BB92FNM760	PLUS 56-10	55	75	8300	498	293	10	145	70	2"	1650	3630	180 x 110 x 215
V60BC92FNM760	PLUS 56-13	55	75	7000	420	247	13	188	70	2"	1650	3630	180 x 110 x 215
V60BD92FNM760	PLUS 75-08	75	100	12200	732	431	7.5	109	72	2"	1720	3784	180 x 110 x 215
V60BE92FNM760	PLUS 75-10	75	100	10500	630	371	10	145	72	2"	1720	3784	180 x 110 x 215
V60BF92FNM760	PLUS 75-13	75	100	8300	498	293	13	188	72	2"	1720	3784	180 x 110 x 215
WITH DRYER													
V60BU92FNM860	PLUS 31-08 ES	30	40	4700	282	165.9	8	116	70	1 -1/4"	710	1567	153 x 83 x 144
V60BV92FNM860	PLUS 31-10 ES	30	40	4200	252	148.3	10	145	70	1 -1/4"	710	1567	153 x 83 x 144
V60BW92FNM860	PLUS 31-13 ES	30	40	3400	204	120	13	188	70	1 -1/4"	710	1567	153 x 83 x 144
V60BK92FNM860	PLUS 38-08 ES	37	50	6000	360	212	8	116	68	1 -1/4"	780	1721	186 x 83 x 144
V60BJ92FNM860	PLUS 38-10 ES	37	50	5300	318	187	10	145	68	1 -1/4"	780	1721	186 x 83 x 144
V60BI92FNM860	PLUS 38-13 ES	37	50	4000	240	141	13	188	68	1 -1/4"	780	1721	186 x 83 x 144
VARIABLE SPEED													
V60BK97FNM760	PLUS 38-08 VS	37	50	5900 / 2350	354 / 141	208 / 83	8	116	72	1 -1/4"	725	1600	153 x 83 x 144
V60BJ97FNM760	PLUS 38-10 VS	37	50	5200 / 2050	312 / 123	184 / 72	10	145	72	1 -1/4"	725	1600	153 x 83 x 144
V60BA97FNM760	PLUS 56-08 VS	55	75	9300 / 3700	558 / 222	328 / 131	7.5	109	70	2"	1686	3721	180 x 110 x 215
V60BB97FNM760	PLUS 56-10 VS	55	75	8300 / 3300	498 / 198	293 / 116	10	145	70	2"	1686	3721	180 x 110 x 215
V60BD97FNM760	PLUS 75-08 VS	75	100	12200 / 4800	732 / 288	431 / 169	7.5	109	72	2"	1756	3875	180 x 110 x 215
V60BE97FNM760	PLUS 75-10 VS	75	100	10500 / 4200	630 / 252	371 / 148	10	145	72	2"	1756	3875	180 x 110 x 215
VARIABLE SPEED WITH DRYER													
V60BK97FNM860	PLUS 38-08 ES VS	37	50	5900 / 2350	354 / 141	208 / 83	8	116	72	1 -1/4"	805	1777	186 x 83 x 144
V60BJ97FNM860	PLUS 38-10 ES VS	37	50	5200 / 2050	312 / 123	184 / 72	10	145	72	1 -1/4"	805	1777	186 x 83 x 144

Free air delivery as per ISO 1217 Annex C, at 7.5 - 9.5 - 12.5 bar at the compressor outlet. ± 3 dB (A) as PNEUROP/CAGI PN-NTC 2.3.
*** Variable Speed models: max./min. values.*

Long Life Kit for screw compressors scheduled maintenance

- **FSN original spare parts** have been rigorously selected, checked and tested by specialised technicians to ensure the utmost efficiency and endurance of the compressor. The parts are stocked in our "LOGIMAT" centralised and automated warehouse in Zola Predosa (BO) - Italy, where 12,000 part codes on 10,000 sqm are managed every day.
- Specialised staff are continuously in contact with our distribution centres worldwide, to deliver spare parts to our customers in the shortest possible time.
- The use of **FSN Long Life Kit**, specifically studied for screw compressors, extends maintenance intervals, cutting down service costs and ensuring consistent product performance.
  Ask for the catalog with reference codes, suitable for all the Micro and Plus compressors!

Maintenance interval, using original parts **+20%**

MICRO - MICRO SE 2.2 - 5.5 kW

1,000 h (or every year)	2,000 h (or every year)	4,000 h	6,000 h	8,000 h	12,000 h
	KIT A	KIT B	KIT C	KIT D	KIT E
1 Air filter cartridge	1 Air filter cartridge 1 Oil filter cartridge 1 Separator cartridge	1 Kit 2,000 h 1 Oil check valve	1 Kit 2,000 h 1 Poly-V belt	1 Kit 4,000 h 1 Minimum pressure valve kit	1 Kit 4,000 h 1 Poly-V belt 1 Solenoid valve

PLUS 7.5 - 15 kW

1,000 h (or every year)	2,000 h (or every year)	4,000 h	8,000 h	12,000 h
	KIT A	KIT B	KIT D	KIT E
1 Air filter cartridge	1 Air filter cartridge 1 Oil filter cartridge 1 Separator cartridge	1 Kit 2,000 h 1 Oil check valve	1 Kit 4,000 h 1 Minimum pressure valve kit 1 Poly-V belt	1 Kit 4,000 h 1 Solenoid valve

PLUS 18.5 - 75 kW

2,000 h (or every year)	4,000 h (or every year)	8,000 h	12,000 h
	KIT B	KIT D	KIT E
1 Air filter cartridge	1 Air filter cartridge 1 Oil filter cartridge 1 Separator cartridge (≤ 45 kW) or 2 separator cartridges (≥ 55 kW) 1 Oil check valve (≤ 45 kW) or 2 oil check valves (≥ 55 kW) 1 Prefilter	1 Kit 4,000 h 1 Minimum pressure valve kit	1 Kit 4,000 h 1 Poly-V belt 1 Solenoid valve

PLUS VS 22 - 75 kW

2,000 h (or every year)	4,000 h (or every year)	8,000 h	12,000 h
	KIT B	KIT D	KIT E
1 Air filter cartridge	1 Air filter cartridge 1 Oil filter cartridge 1 Separator cartridge (≤ 45 kW) or 2 separator cartridges (≥ 55 kW) 1 Oil check valve (≤ 45 kW) or 2 oil check valves (≥ 55 kW) 1 Prefilter 1 Electric cabinet prefilter	1 Kit 4,000 h VS 1 Minimum pressure valve kit	1 Kit 4,000 h VS 1 Poly-V belt 1 Solenoid valve

We recommend to change oil at the indicated intervals (see the user's manual) or every year. We suggest to use our RotEnergyPlus oil (NOT INCLUDED IN THE LONG LIFE KIT).

RotEnergy synthetic base lubricants

- FSN lubricants are specially designed for rotary screw compressors to achieve rapid water separation, lower friction, enhanced energy savings, longer maintenance intervals and excellent bearing lubrication while offering superior rust and corrosion protection.
- RotEnergyFood is a high quality food-grade rotary compressor lubricant specifically designed for use in the food and beverage industries to meet their production quality standards.

#600000018	RotEnergyPlus 46 cSt - 1 x 3.25 kg (3.75 lt) package
#600000009	RotEnergyPlus 46 cSt - 4 x 3.25 kg (3.75 lt) packages
#600000007	RotEnergyPlus 46 cSt - 1 x 16 kg (18.5 lt) package
#600000012	RotEnergyPlus 46 cSt - 1 x 175 kg (210 lt) can
#600000014	RotEnergyFood 46 cSt - 4 x 3.25 kg (3.75 lt) packages
#600000016	RotEnergyFood 46 cSt - 1 x 16 kg (18.5 lt) package
#600000017	RotEnergyFood 46 cSt - 1 x 180 kg (207 lt) can

FSN original spare parts

FSN
ORIGINAL SPARE PARTS

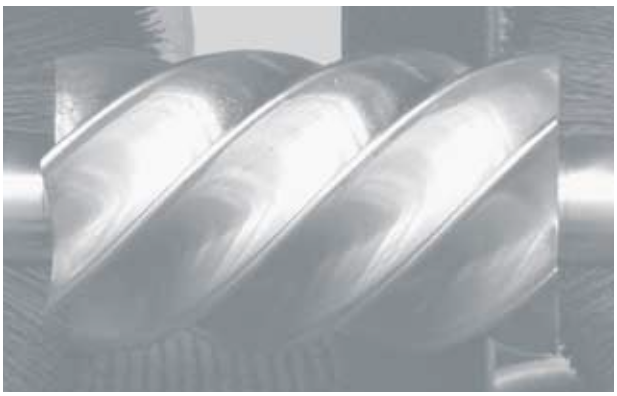
- Our "Hot-Line" service is able to prepare and ship urgent orders on the same day.
- All the exploded drawings and the spare parts lists for every compressor model are available at any time on the Fini and FSN websites:
www.finicompressors.com - www.fsnspareparts.com

MADE IN ITALY

Fini COMPRESSORS

INDUSTRIAL range




CUBE SD

Silenced Rotary
Screw Compressors

Fixed Speed
4-7.5 kW

EN

CUBE SD

Silenced rotary screw compressors

only 63 dB(A)

POWER: 4 - 5.5 - 7.5 kW

MAX. PRESSURE: 10 bar

MADE IN ITALY

Main features and advantages

Reliable direct transmission for energy saving
The whole power of the electric motor in then transferred to the airend with maximum efficiency and reliability of operation.
Rotar CUBE SD series are built for continuous duty in very hard conditions of use.
The design of the machine has been focused non only on power consumption, but also on maintenance and operational costs and installation ease.
The Cube SD range represents an outstanding machine in the compressed air market also due to the integrated refrigerating dryer which can be host in the compressors frame, with no change in shape or dimensions.

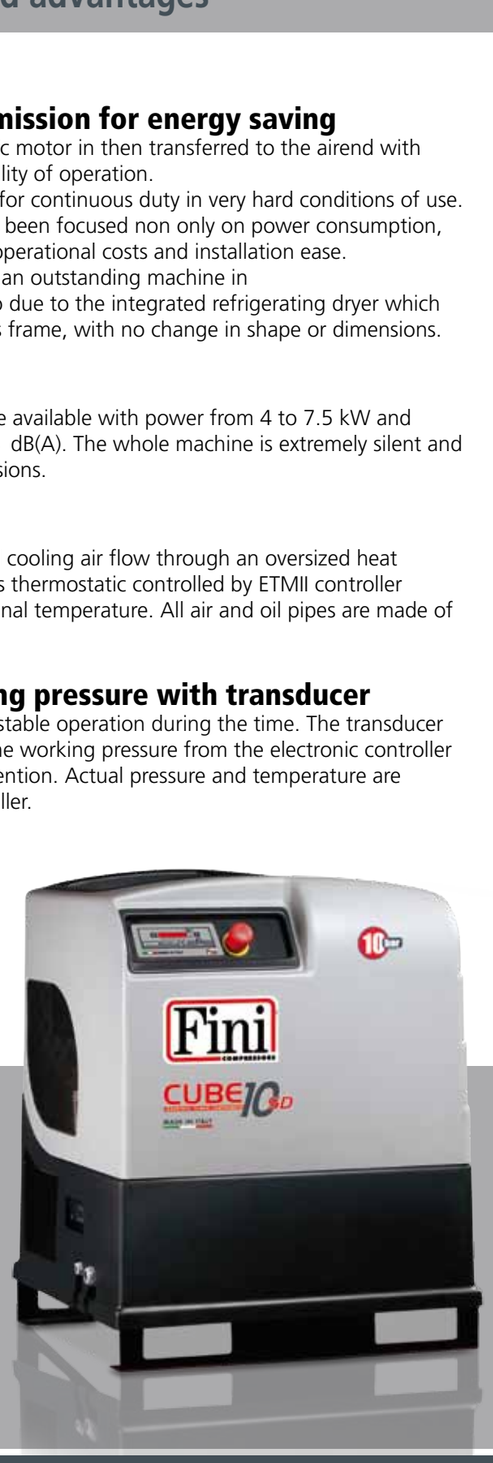
Compact and silent
The Rotar CUBE SD models are available with power from 4 to 7.5 kW and noise level between 63 and 68 dB(A). The whole machine is extremely silent and compact with balanced dimensions.

Cooling system
An axial fan grants the optimal cooling air flow through an oversized heat exchanger. The fan operation is thermostatic controlled by ETMII controller monitoring the airend operational temperature. All air and oil pipes are made of heat-resistant rubber.

Control of the working pressure with transducer
It guarantees an accurate and stable operation during the time. The transducer allows direct modification of the working pressure from the electronic controller without any mechanical intervention. Actual pressure and temperature are always displayed on the controller.

Simple maintenance
All of the internal mechanical and service parts are easy to access, for fast and simple routine maintenance.

Low noise level
CUBE SD compressors are very quiet: the use of very efficient soundproofing materials means that they are suitable for installation in any working environment.



Available versions:
- floor mounted compressor
- compressor + air receiver
- compressor + air receiver + air dryer (air receiver: 270 or 500 liters)

CUBE SD
Silenced rotary screw compressors

Main components

Transmission
The drive between the air-end and electric motor is carried out by means of gearless direct connection. Optimal power transmission and maximum reliability and efficiency. A dedicated air-end for any machine at any pressure in order to grant maximum performance in the complete range. The small dimensions of the screw-engine connecting system allows to realize a very compact machine.

Integrated air dryer
ROTAR CUBE SD is available in "ES" version with integrated dryer, entirely included in the machine.
Immediately ready to operate without any installation effort.
It provides clean, dry air that improves the system's reliability, avoids costly downtime and production delays, and safeguards the quality of your products.
The dryer is equipped with a control panel and a timed condensate drain.

SPIN-ON filters
Routine service parts that are simple to replace offering long service intervals for lower maintenance costs.

Oil separator tank
Comply with the CE 87/404 regulation and assure an excellent oil-air pre-separation, increasing the efficiency of the oil separating filter.

Intake regulator
IR10 intake regulator designed and manufactured by Fini.

Easilly transportable
The machine is particularly easy to lift with a fork truck or hand truck thanks to a steel bar secured between the feet at the base of the air receiver (both at the front and to the side).

Condensate ball valve
Receiver-mounted models with ball valve for convenient discharge of condensate (refer to local regulations).

ETMII advanced controller
Controller with multi-function backlight display, the menu is alphanumeric type. The main screen display indicates:
- Working pressure (offload/load);
- Oil temperature;
- Total working hours;
- On-load working hours;
- Compressor status led (stand-by, offload, load);
- Hours remaining before maintenance.

Four maintenance timers (air filter, oil, oil filter, oil separator).
- Automatic re-start after power failure (subject to safety conditions).
- Cooling fan temperature control.
- Compressor remote start facility.
- Integrated phase sequence relay.

FS 26TFC
High performance screw air-end
The Fini air ends are entirely designed, produced and tested at our Italian facilities: the special design of the screw profile ensures high performance, low temperature and reduced energy consumption.

CUBE SD

Silenced rotary screw compressors

Technical data

Code	ℓ	Product	kW	HP	l/min.	m³/h	c.f.m.	bar	psi	dB(A)	BSP	L x D x H (cm)	kg	Lbs
FLOOR MOUNTED														
V51PD92FNM043	–	CUBE SD 510	4	5,5	460	27,6	16,2	10	145	63	1/2"	65 x 58 x 80	101	223
V51PE92FNM043	–	CUBE SD 710	5,5	7,5	705	42,3	24,9	10	145	68	1/2"	65 x 58 x 80	103	227
V51PO92FNM043	–	CUBE SD 1010	7,5	10	1050	63	37,1	10	145	67	1/2"	65 x 58 x 80	113	249
WITH AIR RECEIVER														
V91PD92FNM001	270	CUBE SD 510-270F	4	5,5	460	27,6	16,2	10	145	63	1/2"	120 x 60 x 150	185	408
V91PE92FNM001	270	CUBE SD 710-270F	5,5	7,5	705	42,3	24,9	10	145	68	1/2"	120 x 60 x 150	187	412
V91PO92FNM001	270	CUBE SD 1010-270F	7,5	10	1050	63	37,1	10	145	67	1/2"	120 x 60 x 150	197	434
V83PO92FNM001	500	CUBE SD 1010-500F	7,5	10	1050	63	37,1	10	145	67	1/2"	200 x 60 x 150	229	505
WITH AIR RECEIVER AND DRYER														
V91PE92FNM101	270	CUBE SD 710-270F ES	5,5	7,5	705	42,3	24,9	10	145	68	1/2"	120 x 60 x 150	211	465
V91PO92FNM101	270	CUBE SD 1010-270F ES	7,5	10	1050	63	37,1	10	145	67	1/2"	120 x 60 x 150	220	485
V83PO92FNM101	500	CUBE SD 1010-500F ES	7,5	10	1050	63	37,1	10	145	67	1/2"	200 x 60 x 150	279	615

Optional

#448417000	Air dryer

Long Life Kit

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.

The experience we have acquired in over 65 years of business in the compressed air industry has led to the creation of the "Long Life Kit", specifically conceived to extend compressor lifespan upon the first service tasks. Easy and intelligent solutions to keep the compressor as though it were "brand new".

SCHEDULED MAINTENANCE

1,000 hrs (*or every year*)	**2,000 hrs *** (*or every year*)	**4,000 hrs**	**12,000 hrs**
	KIT A	**KIT B**	**KIT E**
- 1 Air filter cartridge	- 1 Air filter cartridge - 1 Oil filter cartridge - 1 Separator cartridge	- 1 x 2,000 hrs kit - 1 Oil check valve	- 1 x 4,000 hrs kit - 1 Minimum pressure valve - 1 Solenoid valve
CUBE SD 510	**#017092000**	**#260KTA15E**	**#260KTB24E**	**#260KTE1HE**
CUBE SD 710				
CUBE SD 713				
CUBE SD 1010 *up to 2017/02/25*				
CUBE SD 1013 *up to 2017/02/25*				
CUBE SD 1010 *starting from 2017/02/26*		**#260KTA16E**	**#260KTB84E**	**#260KTE1KE**
CUBE SD 1013 *starting from 2017/02/26*				

** We recommend to change oil every 2,000 hours or every year. We suggest to use our oil:*

1 x #600000018A **(RotEnergyPlus Oil - 46 cSt - 3.8 Ltr bottle (3.25 kg)**

SINGLE COMPONENTS

4,000 hrs	**12,000 hrs**			**24,000 hrs**
Oil check valve	Intake regulator kit	Minimum pressure valve kit	Solenoid valve	Air-end
CUBE SD 510	**#012097000**	**#260249050**	**#347111000**	**#008195010**	**#5303000210**
CUBE SD 710					**#5303000705**
CUBE SD 713					
CUBE SD 1010 *up to 2017/02/25*					**#5303000210**
CUBE SD 1013 *up to 2017/02/25*					**#5303000705**
CUBE SD 1010 *starting from 2017/02/26*					**#5303000210**
CUBE SD 1013 *starting from 2017/02/26*					**#5303000705**

Please refer ALWAYS to the User and Maintenance Manual of your compressor in order to clearly identify the right components and actions to do for the maintenance.

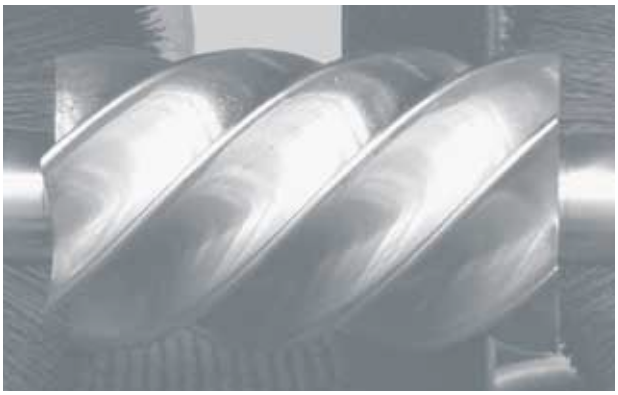
CE IE3

MADE IN ITALY

Fini COMPRESSORS

INDUSTRIAL range




K-MAX

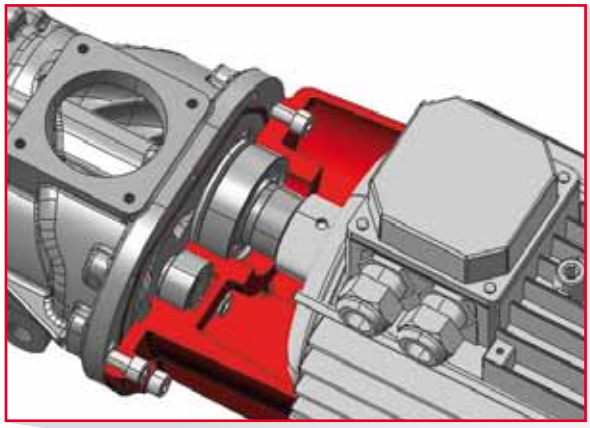
Gearless direct drive
oil-injected
screw compressors

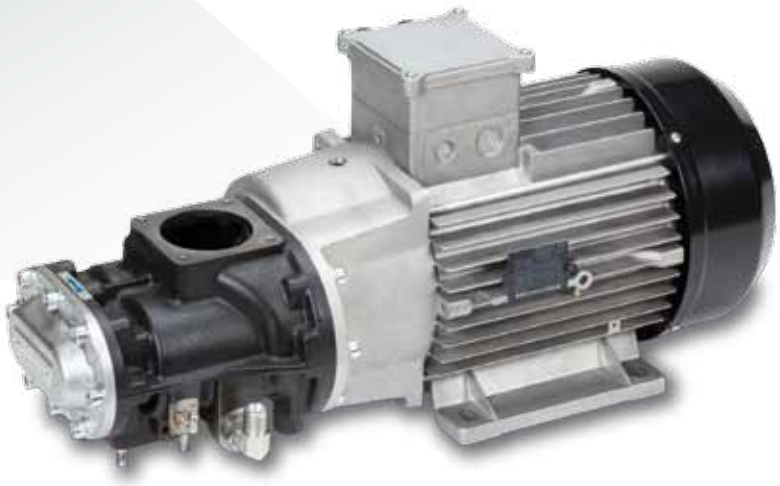
Fixed and Variable Speed
5.5-15 kW

EN

Our TARGET: Maximum efficiency, lower energy consumption and total convenience.

The new gearless direct-driven oil injected K-MAX screw compressors have been designed to minimise energy costs, without sacrificing performance. The modularity and flexibility of these products provide multiple solutions suitable for different user's requirements: with or without air receiver, with or without refrigerated dryer, in fixed speed or variable speed formats.



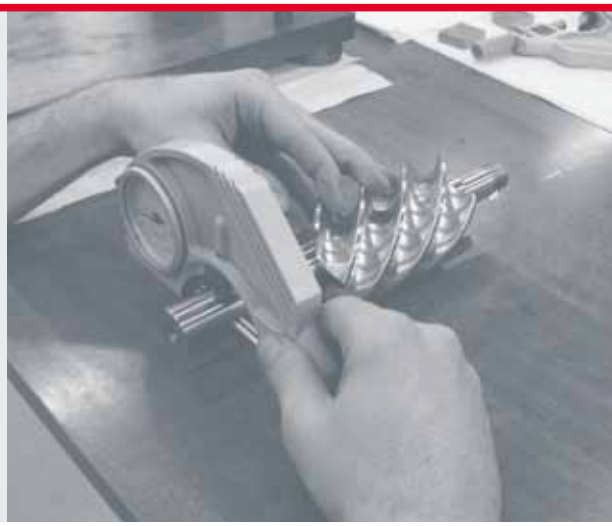


▲ Gearless direct drive transmission

The drive between the air-end and electric motor is carried out by means of gearless direct connection. Power transmission without loss can reach an advantage up to 4% in front of a normal belt driven compressor,thanks to the special motor with tubular crankcase and no frontal bearing: this connection doesn't need flexible coupling for compressor maximum reliability and efficiency and no drive maintenance.

Why you should choose a Fini SCREW compressor?

- To control and reduce operating costs.
- To provide the most modern, compact, efficient, reliable and quiet rotary screw compressor.
- To provide a continous source compressed air.
- To increase operational efficiency in all areas where compressed air is used.
- To save energy and reduce CO_2 emmisions.



High energy saving

The choice of high quality components, combined with our high performance air-ends and **Premium Efficiency IE3 motors**, ensure reduced power consumption, substantial energy savings and exceptional performance.
Furthermore, the IE3 motors reduce CO_2 emissions: an important contribution to protecting the environment.

Plug&Play

K-MAX compressors are thoroughly tested at our factories to ensure they are ready for immediate use following delivery, thereby saving time and cutting installation costs.

Low noise level

K-MAX compressors are very quiet: the use of very efficient soundproofing materials make them suitable for installation even near workstations.

High reliability

The use of premium components from primary global manufacturers along with our advanced assembly with strict quality control and testing, results in a final product that offers a long service life with maximum reliability and fewer maintenance interventions.

High efficiency

Higher air output performance is a key focus for the renown FINI project engeneering and design team. The K-MAX series follows this tradition by offering premium performance levels across the entire range.

Very compact design

The very compact design enables K-MAX compressors to be installed close to the application reducing installation costs and improving efficiency.

Our air-ends, inverters and controllers are covered by 2 YEARS WARRANTY

Noise and temperature under control

Innovative cooling system
The cooling system is among the most innovative in the field.
A thermostatic controlled centrifugal fan keeps the temperature of the entire compressor to specific tolerance and at a constant level, avoiding temperature peaks that can be harmful for the correct operation of the compressor. The action of the fan, combined with the efficiency of the oversized oil cooler, guarantees the ideal operation of the compressor in differing and even extreme climatic conditions. The "silent" fans along with the specially designed labyrinth ventilation and the use of top quality soundproofing materials ensure one of the lowest acoustic levels of any air compressor.

Cleaner components in any conditions
The pre-filtering panel separates incoming dust and keeps the inside of the machine clean, thereby increasing the longevity of internal components and reducing operating temperature.

High performance ROTARY SCREW AIR-ENDS
The Fini air ends are entirely designed, produced and tested at our Italian facilities: the special design of the screw profile ensures high performance, low temperature and reduced energy consumption.

SPIN-ON filters
The oil filter and oil-separator filter are easy to remove and replace whilst offering a long service life with low maintenance costs.

Intake valve
The intake valve is entirely designed and manufactured at our facilities. This most important devise, adjusts the compressor's operation to guarantee minimum pressure during idle running and maximum savings upon start-up.

Easy handling
All tanks are equipped with anti-tip brackets for safe handling with transpallet. The air storage tanks have drain cock in a easily accessible position and are equipped with ball valve.

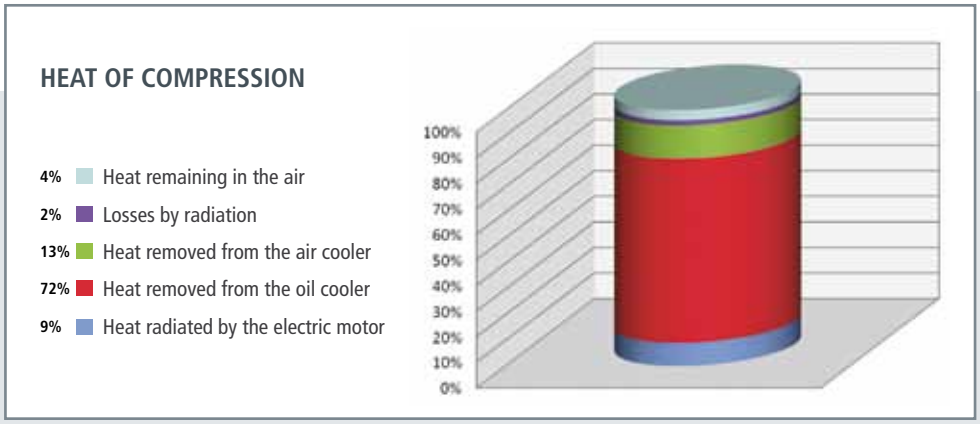
Accurate working pressure
The use of a digital transducer guarantees an accurate and stable function during operation. It allows direct modification of the working pressure from the electronic controller without any mechanical intervention.

HRS Heat Recovery System

HRS is a system for the recovery of the heat generated by the screw compressors, for the production of hot water.

Most of the energy used to produce compressed air is actually converted into heat: up to 90% of this energy is reusable! About 75% of the energy used is found in the lubrication and cooling circuit and can be used as a heat source, the remaining 15% is contained in the compressed air. It is therefore easier to produce the compressed air which enters the network.
It is therefore quite simple to recover the thermal energy (for alternative use) in the compression process... valuable energy that is normally wasted!

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



Recover energy - Save money!

How great the recovery of energy actually is, depends of course on the size of the compressors and the type of replaced energy (electricity, gas, heating oil), but the investment becomes very interesting for the compressors starting from 11 kW installed power. Given the current energy costs, the return on investment of a typical heat recovery system can be as short as 6 months with less than 2 years being the standard (with reference to a plate heat exchanger for heating systems).
Heat recovery is a real opportunity to increase the effectiveness of a compressed air system, the impact on energy costs allows greater savings, up to 3 times compared to even the most efficient compressor.

Optimised control in the compressor room

Many compressed air stations include several compressors: EasyX4 is a weekly programmable sequencer, capable of configuring up to 4 compressors, based on the amount of air actually required.

EasyX4 is the easiest solution for compressor sequencing and supervision over complex systems of compressors, up to 4 units: fixed or variable speed.

The programming is intuitive. It is sufficient to set the 4 pressure ranges (if 4 is the number of connected units) and later define at what time the entire compressor station shall start and stop, assigning at which pressure each compressor must work.

EasyX4 sequencer
code #405531604

Three programming levels:

- **MANUAL**: compressors are fixed to a given operational pressure range;
- **AUTOMATIC**: with pressure range swapping after a programmable time interval;
- **GROUP PROGRAMMING**: where compressors can be switched within groups.

K-MAX 5.5-7.5 kW: compact design meets high performance.

K-Max 5.5

5.5 kW

Available versions:
- floor mounted compressor
- compressor + air receiver
- compressor + air receiver + air dryer

Air-end:
FSC 26

Controller:
ETIV

Fixed speed

K-Max 7.5

7.5 kW

Available versions:
- floor mounted compressor
- compressor + air dryer
- compressor + air receiver
- compressor + air receiver + air dryer

Air-end:
FSC 26

Controller:
ETIV

Fixed and variable speed

K-MAX 11-15 kW: a quality choice.

The Fini K-MAX series is available in a variety of configurations to suit the exact requirements of the customer: starting with the standard floor mounted version, the range can also be selected with a 270 or 500 litre air receiver, with or without refrigerated dryer, also available with inverter (variable speed control) drive. The whole machine forms an extremely compact and aesthetic design.

- **Direct drive technology for maximum reliability.**
- **High performances provides excellent efficiency.**
- **Intelligent microprocessor control system.**
- **Very compact design.**
- **No drive belts for less maintenance.**

Dryer module
K-MAX compressors are also available with dryer ("ES" versions): supplied ready to operate with a minimum of installation.

K-Max 11

11 kW

Available versions:
- floor mounted compressor
- compressor + air dryer
- compressor + air receiver
- compressor + air receiver + air dryer

Air-end:
FSC 50

Controller:
ETIV

Fixed and variable speed

K-Max 15

15 kW

Available versions:
- floor mounted compressor
- compressor + air dryer
- compressor + air receiver
- compressor + air receiver + air dryer

Air-end:
FSC 50

Controller:
ETIV

Fixed and variable speed

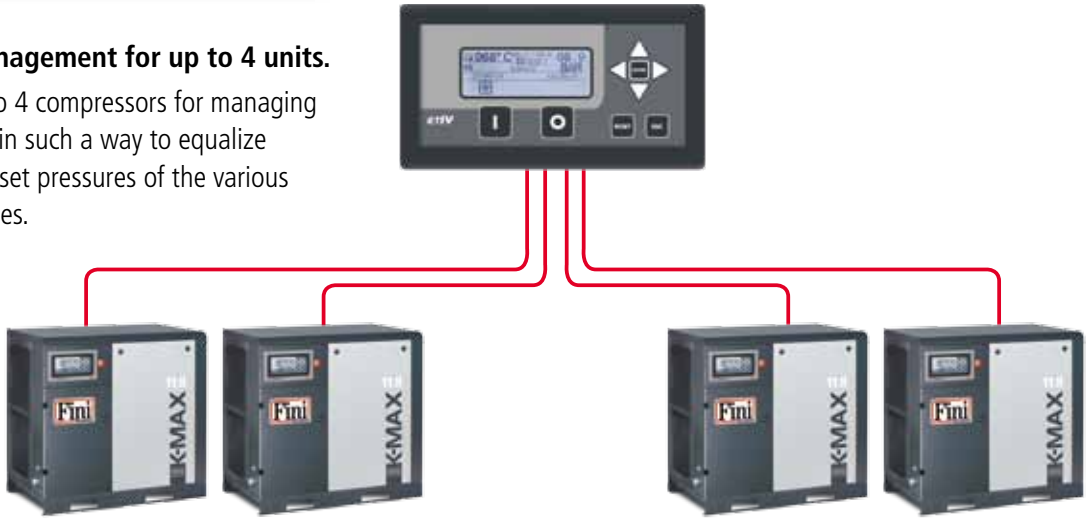
ETIV Advanced electronic controller

The advanced ETIV controller installed on the K-MAX range has been specially designed to ensure optimal monitoring and regulation of the operation of the compressor, allowing flexibility and complete programming, to ensure maximum efficiency and safety.

Controller with multi-function backlight LCD graphic display, the menu is drop down type.
In the main screen display indicates:

- Working pressure (offload/load);
- Oil temperature;
- Compressor status (stand-by, offload, load);
- Fan status (off/on);
- Date and time;
- Hours remaining before maintenance;
- Inverter use percentage.

- **Compressor rotation management for up to 4 units.**
  It is possible to connect up to 4 compressors for managing distribution of the workload in such a way to equalize the hours but also changing set pressures of the various compressors for different times.



SMS Device Service Management System

SMS is the innovative device to allow the remote control of the compressor and to perform predictive maintenance available on screw compressors equipped with the latest ETIV controller. The device automatically sends an e-mail (up to 3 addresses to be defined during set-up) in case of an alarm and according to preset thresholds (every hour, every day, every week): this feature allows you to accurately schedule routine maintenance and to allow intervention in case of special maintenance or fault finding. Furthermore, you can have remote control from any device (tablet, smartphone, PC, notebook, etc.), via a web page, as long as it is connected to the same Internet network as the SMS device.

Predictive and targeted maintenance:

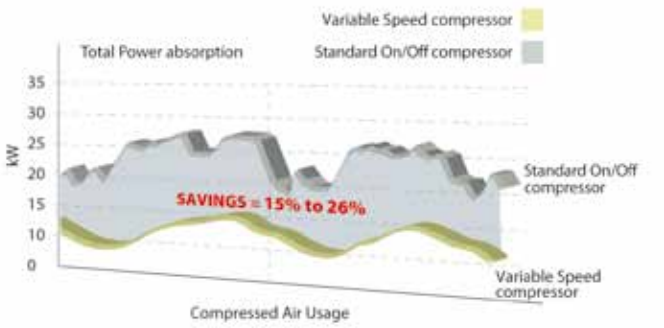
- automated e-mail in case of alarms,
- automated e-mail every hour / day / week.

Compressor remote control:

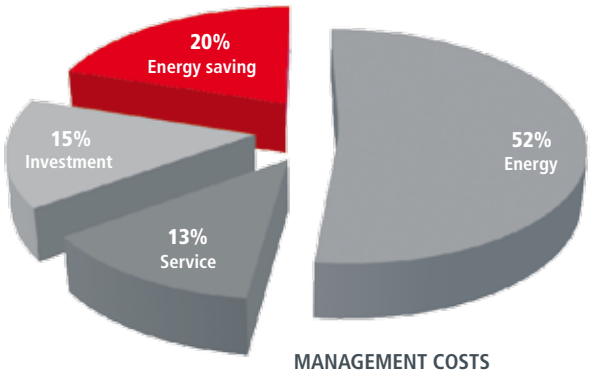
- access to the various menu levels (user, service),
- check the status of the compressor online,
- on/off control,
- no software to be installed.

Variable speed drive

Nowadays, the reduction of the energy consumption has become a global challenge in terms of environmental impact. Reducing power consumption and protecting our valuable energy resources represents one of the greatest global environmental challenges of our times.
The **K-Max series** version with **7.5, 11 and 15 kW** electric motor are available in a variable speed drive version, providing high performance combined with the most effective energy saving solution.



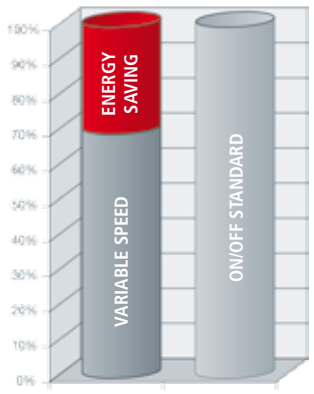
The graph below shows the significant energy saving using variable speed compressors in a typical installation.



MANAGEMENT COSTS

The application of a frequency inverter, able to dynamically adjust the voltage/frequency/current values of the motor, allows the elimination of unnecessary power losses by constantly adjusting the generation of compressed air to match the real air demand, offering many proven advantages for the user in terms of reducing energy consumption:

- Continuous regulation of the motor speed and compressed air generation to precisely match the air demand.
- The air output is constantly adjusted between 40% and 100% of the compressor full capacity.
- Constant and accurate air pressure control.
- Energy consumption is proportional to the delivered compressed air, so you only pay for the compressed air that is used!



ENERGY COSTS

Designed for a long service life

High quality compressed air, safeguarding the final product quality

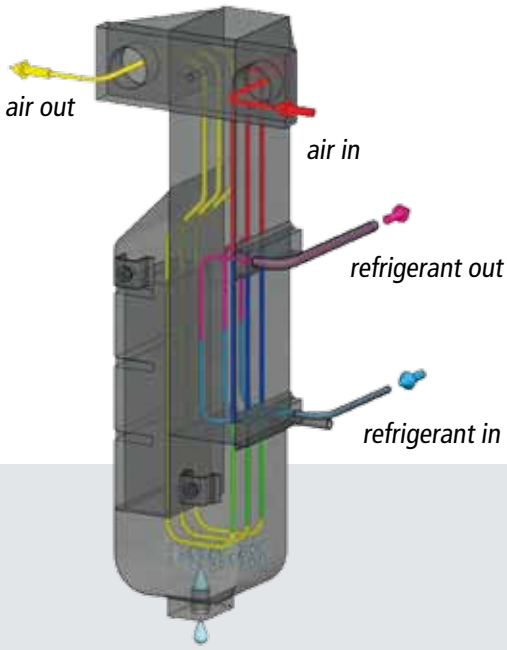
The compression process increases the concentration of solid particles suspended in the atmosphere, generated by natural phenomena but also by polluting agents or industrial processes.
Water, oil, impurities and odours cause many issues in respect of the quality of the air produced, corrosion to pipe work and damage to the pneumatic equipment, thus negatively affects performance, efficiency and reliability.
The quality of compressed air is therefore fundamental for the reliability of the machinery and quality of the final product.

Fini has developed **refrigerated dryers that are integrated with the compressor,** with centralised condensate drain, in order to:

- Obtain clean air that is free from condensate and impurities;
- Reduce maintenance costs and down time;
- Protecting all down stream equipment and their investment costs;
- Safeguarding the environment and the quality of the final product;
- Compliance with safety standards.

Efficient, functional, ecologic.
The refrigerated air dryer ensures the production of high quality dry compressed air that is essential to maintaining reliable systems and to ensure the highest quality of the finished product.
The refrigerated dryer achieves excellent performance even in unfavourable environmental conditions, and high inlet temperatures.

HEAT EXCHANGER



The highly efficient and ultra compact heat exchanger is able to operate effectively in ambient temperatures up to 45°C, ensuring a reduced compressed air pressure drop.
This compact aluminium module contains the various stages of the compressed air treatment.
Air-air exchanger: a pre-cooling of the intake air takes place in this section.
This allows to reduce the energy consumption of the refrigeration circuit and reduces the possibility of condensation on the outer surface of the pipe from the dryer.
Air-gas exchanger: the pre-cooled air in the air/air heat exchanger comes in the evaporator and cools to the dew point.
Demister: the air cooled in the evaporator passes through a demister separator that allows the drainage of the condensate in a large collection chamber. The geometry of the module and the demister allows to keep the load losses low.

Code	ℓ	Product	kW	HP	Air delivered l/min.	Air delivered m³/h	Air delivered c.f.m.	MAX bar	MAX psi	dB(A)	BSP	kg	Lbs	L x D x H (cm)
FLOOR MOUNTED														
V51PS92FNM760	–	K-MAX 5.5-10	5.5	7.5	705	42	25	10	145	62	1/2"	160	353	80 x 65 x 85
V51PT92FNM760	–	K-MAX 7.5-10	7.5	10	1050	63	37	10	145	62	1/2"	165	364	80 x 65 x 85
V51PY92FNM760	–	K-MAX 7.5-13	7.5	10	700	42	25	13	188	62	1/2"	165	364	80 x 65 x 85
V60PU92FNM760	–	K-MAX 11-08	11	15	1700	102	60	8	116	68	3/4"	240	529	100 x 70 x 100
V60PJ92FNM760	–	K-MAX 11-10	11	15	1550	93	55	10	145	68	3/4"	240	529	100 x 70 x 100
V60PW92FNM760	–	K-MAX 11-13	11	15	1200	72	42	13	188	68	3/4"	240	529	100 x 70 x 100
V60PV92FNM760	–	K-MAX 15-10	15	20	2100	126	74	10	145	68	3/4"	250	551	100 x 70 x 100
V60PX92FNM760	–	K-MAX 15-13	15	20	1550	93	55	13	188	68	3/4"	250	551	100 x 70 x 100
WITH DRYER														
V51PT92FNM860	–	K-MAX 7.5-10 ES	7.5	10	1050	63	37	10	145	62	1/2"	200	441	109 x 65 x 85
V60PU92FNM860	–	K-MAX 11-08 ES	11	15	1700	102	60	8	116	68	3/4"	282	622	136 x 70 x 100
V60PJ92FNM860	–	K-MAX 11-10 ES	11	15	1550	93	55	10	145	68	3/4"	282	622	136 x 70 x 100
V60PW92FNM860	–	K-MAX 11-13 ES	11	15	1200	72	42	13	188	68	3/4"	282	622	136 x 70 x 100
V60PV92FNM860	–	K-MAX 15-10 ES	15	20	2100	126	74	10	145	68	3/4"	292	644	136 x 70 x 100
V60PX92FNM860	–	K-MAX 15-13 ES	15	20	1550	93	55	13	188	68	3/4"	292	644	136 x 70 x 100
WITH TANK														
V91PS92FNM701	270	K-MAX 5.5-10-270	5.5	7.5	705	42	25	10	145	62	1/2"	260	573	120 x 65 x 154
V91PT92FNM701	270	K-MAX 7.5-10-270	7.5	10	1050	63	37	10	145	62	1/2"	265	584	120 x 65 x 154
V83PT92FNM701	500	K-MAX 7.5-10-500	7.5	10	1050	63	37	10	145	62	1/2"	330	727	200 x 65 x 154
V83PU92FNM701	500	K-MAX 11-08-500	11	15	1700	102	60	8	116	68	3/4"	422	930	200 x 73 x 170
V83PJ92FNM701	500	K-MAX 11-10-500	11	15	1550	93	55	10	145	68	3/4"	422	930	200 x 73 x 170
V83PW92FNM701	500	K-MAX 11-13-500	11	15	1200	72	42	13	188	68	3/4"	422	930	200 x 73 x 170
V83PV92FNM701	500	K-MAX 15-10-500	15	20	2100	126	74	10	145	68	3/4"	442	974	200 x 73 x 170
V83PX92FNM701	500	K-MAX 15-13-500	15	20	1550	93	55	13	188	68	3/4"	442	974	200 x 73 x 170
WITH TANK AND DRYER														
V91PS92FNM801	270	K-MAX 5.5-10-270 ES	5.5	7.5	705	42	25	10	145	62	1/2"	295	650	120 x 65 x 154
V91PT92FNM801	270	K-MAX 7.5-10-270 ES	7.5	10	1050	63	37	10	145	62	1/2"	300	661	120 x 65 x 154
V83PT92FNM801	500	K-MAX 7.5-10-500 ES	7.5	10	1050	63	37	10	145	62	1/2"	380	838	200 x 65 x 154
V83PU92FNM801	500	K-MAX 11-08-500 ES	11	15	1700	102	60	8	116	68	3/4"	464	1023	200 x 73 x 170
V83PJ92FNM801	500	K-MAX 11-10-500 ES	11	15	1550	93	55	10	145	68	3/4"	464	1023	200 x 73 x 170
V83PW92FNM801	500	K-MAX 11-13-500 ES	11	15	1200	72	42	13	188	68	3/4"	464	1023	200 x 73 x 170
V83PV92FNM801	500	K-MAX 15-10-500 ES	15	20	2100	126	74	10	145	68	3/4"	484	1067	200 x 73 x 170
V83PX92FNM801	500	K-MAX 15-13-500 ES	15	20	1550	93	55	13	188	68	3/4"	484	1067	200 x 73 x 170

Free air delivery as per ISO 1217 Annex C, at 7.5 - 9.5 - 12.5 bar at the compressor outlet. ± 3 dB (A) as PNEUROP/CAGI PN-NTC 2.3.

K-MAX VARIABLE SPEED 7.5 - 11 - 15 kW

Codice	ℓ	Prodotto			Air delivered (max. / min.)			MAX						
			kW	HP	l/min.	m³/h	c.f.m.	bar	psi	dB(A)	BSP	kg	Lbs	L x D x H (cm)
VARIABLE SPEED														
V51QT97FNM760	–	K-MAX 7.5-08 VS	7.5	10	1300 / 520	78 / 31	46 / 18	8	116	63	1/2"	180	397	80 x 65 x 85
V51PT97FNM760	–	K-MAX 7.5-10 VS	7.5	10	1100 / 440	66 / 26	39 / 16	10	145	63	1/2"	180	397	80 x 65 x 85
V60PU97FNM760	–	K-MAX 11-08 VS	11	15	1700 / 680	102 / 41	60 / 24	8	116	68	3/4"	256	564	100 x 70 x 100
V60PJ97FNM760	–	K-MAX 11-10 VS	11	15	1580 / 620	95 / 37	56 / 22	10	145	68	3/4"	256	564	100 x 70 x 100
V60PI97FNM760	–	K-MAX 15-08 VS	15	20	2500 / 950	150 / 57	88 / 34	8	116	68	3/4"	276	608	100 x 70 x 100
V60PV97FNM760	–	K-MAX 15-10 VS	15	20	2100 / 840	126 / 50	74 / 30	10	145	68	3/4"	276	608	100 x 70 x 100
VARIABLE SPEED WITH DRYER														
V51QT97FNM860	–	K-MAX 7.5-08 ES VS	7.5	10	1300 / 520	78 / 31	46 / 18	8	116	63	1/2"	215	474	109 x 65 x 85
V51PT97FNM860	–	K-MAX 7.5-10 ES VS	7.5	10	1100 / 440	66 / 26	39 / 16	10	145	63	1/2"	215	474	109 x 65 x 85
V60PU97FNM860	–	K-MAX 11-08 ES VS	11	15	1700 / 680	102 / 41	60 / 24	8	116	68	3/4"	298	657	136 x 70 x 100
V60PJ97FNM860	–	K-MAX 11-10 ES VS	11	15	1580 / 620	95 / 37	56 / 22	10	145	68	3/4"	298	657	136 x 70 x 100
V60PI97FNM860	–	K-MAX 15-08 ES VS	15	20	2500 / 950	150 / 57	88 / 34	8	116	68	3/4"	308	679	136 x 70 x 100
V60PV97FNM860	–	K-MAX 15-10 ES VS	15	20	2100 / 840	126 / 50	74 / 30	10	145	68	3/4"	308	679	136 x 70 x 100
VARIABLE SPEED WITH TANK														
V91QT97FNM701	270	K-MAX 7.5-08-270 VS	7.5	10	1300 / 520	78 / 31	46 / 18	8	116	63	1/2"	280	617	120 x 65 x 154
V91PT97FNM701	270	K-MAX 7.5-10-270 VS	7.5	10	1100 / 440	66 / 26	39 / 16	10	145	63	1/2"	280	617	120 x 65 x 154
V83PU97FNM701	500	K-MAX 11-08-500 VS	11	15	1700 / 680	102 / 41	60 / 24	8	116	68	3/4"	438	966	200 x 73 x 170
V83PJ97FNM701	500	K-MAX 11-10-500 VS	11	15	1580 / 620	95 / 37	56 / 22	10	145	68	3/4"	438	966	200 x 73 x 170
V83PI97FNM701	500	K-MAX 15-08-500 VS	15	20	2500 / 950	150 / 57	88 / 34	8	116	68	3/4"	458	1010	200 x 73 x 170
V83PV97FNM701	500	K-MAX 15-10-500 VS	15	20	2100 / 840	126 / 50	74 / 30	10	145	68	3/4"	458	1010	200 x 73 x 170
VARIABLE SPEED WITH TANK AND DRYER														
V91QT97FNM801	270	K-MAX 7.5-08-270 ES VS	7.5	10	1300 / 520	78 / 31	46 / 18	8	116	63	1/2"	315	694	120 x 65 x 154
V91PT97FNM801	270	K-MAX 7.5-10-270 ES VS	7.5	10	1100 / 440	66 / 26	39 / 16	10	145	63	1/2"	315	694	120 x 65 x 154
V83PU97FNM801	500	K-MAX 11-08-500 ES VS	11	15	1700 / 680	102 / 41	60 / 24	8	116	68	3/4"	480	1058	200 x 73 x 170
V83PJ97FNM801	500	K-MAX 11-10-500 ES VS	11	15	1580 / 620	95 / 37	56 / 22	10	145	68	3/4"	480	1058	200 x 73 x 170
V83PI97FNM801	500	K-MAX 15-08-500 ES VS	15	20	2500 / 950	150 / 57	88 / 34	8	116	68	3/4"	500	1102	200 x 73 x 170
V83PV97FNM801	500	K-MAX 15-10-500 ES VS	15	20	2100 / 840	126 / 50	74 / 30	10	145	68	3/4"	500	1102	200 x 73 x 170

Free air delivery as per ISO 1217 Annex C, at 7.5 - 9.5 bar at the compressor outlet. ± 3 dB (A) as PNEUROP/CAGI PN-NTC 2.3.

Long Life Kit for screw compressors scheduled maintenance

- **FSN original spare parts** have been rigorously selected, checked and tested by specialised technicians to ensure the utmost efficiency and endurance of the compressor. The parts are stocked in our "LOGIMAT" centralised and automated warehouse in Zola Predosa (BO) - Italy, where 12,000 part codes on 10,000 sqm are managed every day.
- Specialised staff are continuously in contact with our distribution centres worldwide, to deliver spare parts to our customers in the shortest possible time.
- The use of **FSN Long Life Kit**, specifically studied for screw compressors, extends maintenance intervals, cutting down service costs and ensuring consistent product performance.
  Ask for the catalog with reference codes, suitable for all K-MAX compressors.

Maintenance interval, using original parts **+20%**

K-MAX 5.5 - 15 kW		
1,000 h (or every year)	**4,000 h** (or every year)	**12,000 h**
	KIT B	**KIT E**
1 Air filter cartridge	1 Air filter cartridge 1 Oil filter cartridge 1 Separator cartridge 1 Oil check valve 1 Prefilter	1 Kit 4,000 h 1 Solenoid valve 1 Minimum pressure valve kit

K-MAX VS 7.5 - 15 kW		
1,000 h (or every year)	**4,000 h** (or every year)	**12,000 h**
	KIT B	**KIT E**
1 Air filter cartridge	1 Kit 4,000 h 1 Electric cabinet prefilter	1 Kit 4,000 h VS 1 Solenoid valve

We recommend to change oil at the indicated intervals (see user's manuals) or every year. We suggest to use our RotEnergyPlus oil (NOT INCLUDED IN THE LONG LIFE KIT).

RotEnergy synthetic base lubricants

- FSN lubricants are specially designed for rotary screw compressors to achieve rapid water separation, lower friction, enhanced energy savings, longer maintenance intervals and excellent bearing lubrication while offering superior rust and corrosion protection.
- RotEnergyFood is a high quality food-grade rotary compressor lubricant specifically designed for use in the food and beverage industries to meet their production quality standards.

#600000018	RotEnergyPlus 46 cSt - 1 x 3.25 kg (3.75 lt) package
#600000009	RotEnergyPlus 46 cSt - 4 x 3.25 kg (3.75 lt) packages
#600000007	RotEnergyPlus 46 cSt - 1 x 16 kg (18.5 lt) package
#600000012	RotEnergyPlus 46 cSt - 1 x 175 kg (210 lt) can
#600000014	RotEnergyFood 46 cSt - 4 x 3.25 kg (3.75 lt) packages
#600000016	RotEnergyFood 46 cSt - 1 x 16 kg (18.5 lt) package
#600000017	RotEnergyFood 46 cSt - 1 x 180 kg (207 lt) can

FSN original spare parts

FSN
ORIGINAL SPARE PARTS

- Our "Hot-Line" service is able to prepare and ship urgent orders on the same day.
- All the exploded drawings and the spare parts lists for every compressor model are available at any time on the Fini and FSN websites: **www.finicompressors.com - www.fsnspareparts.com**

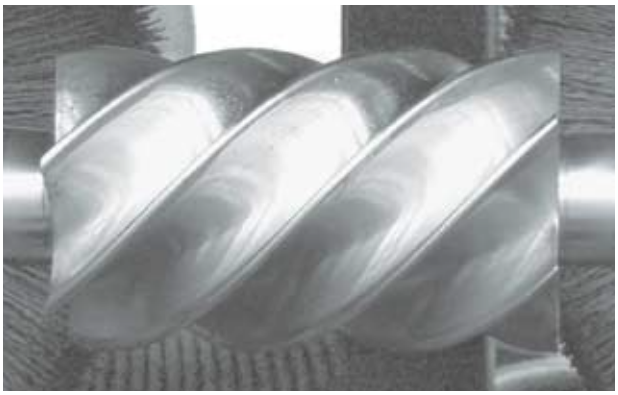
CE IE3

MADE IN ITALY

Fini COMPRESSORS

INDUSTRIAL range




K-MAX

Gearless direct drive
oil-injected
screw compressors

Fixed and Variable Speed
22-37 kW

EN

Our TARGET: maximum efficiency, lower energy consumption and low noise impact.

The new gearless direct-driven oil injected K-MAX screw compressors have been designed to minimise energy costs, without sacrificing performance. The modularity, reduced noise and flexibility of these products provide multiple solutions suitable for different user's requirements: with or without air dryer, in fixed speed (only 7.5 bar) or variable speed version.

▲ FS 130 air-end, installed on K-MAX 22-08 and 22-08 ES

▲ Gearless direct drive transmission

The drive between the air-end and electric motor is carried out by means of gearless direct connection. Power transmission without loss can reach an advantage up to 4% compared to a normal belt driven compressor: this type of connection ensures maximum reliability and efficiency and no drive maintenance.

K-MAX 22 - 38 compact design meets high performance.

▲ K-MAX 22-08

▲ K-MAX 38-08

K-Max 22

22 kW

Available versions:
- floor mounted compressor
- compressor + air dryer
- fixed and variable speed

Air-end:
FS 100 (variable speed version)
FS 130 (fixed speed version, 7.5 bar)

Controller:
ETIV

K-Max 38

37 kW

Available versions:
- floor mounted compressor
- compressor + air dryer
- fixed and variable speed

Air-end:
FS 260 (fixed speed version, and variable speed 7.5 bar)
FS 190 (variable speed version, 10-13 bar)

Controller:
ETIV

Dryer module

K-MAX compressors are also available with dryer ("ES" versions). The refrigerated air dryer ensures the production of high quality dry compressed air that is essential to maintaining reliable systems and to ensure the highest quality of the finished product, achieves excellent performance even in unfavorable environmental conditions, and high inlet temperatures.

▲ K-MAX 22-08 ES

▲ K-MAX 38-10 VS

Code	Product			Air delivered			MAX						
		kW	HP	l/min. (max. / min.)	m³/h (max. / min.)	c.f.m. (max. / min.)	bar	psi	dB(A)	BSP	kg	Lbs	L x D x H (cm)
FIXED SPEED													
V60DR92FNM060	K-MAX 22-08	22	30	3600	216	127	7.5	109	58	1-1/4"	430	195	133 x 80 x 136
V60DU92FNM060	K-MAX 38-08	37	50	6600	396	233	7.5	109	70	1-1/2"	920	418	159 x 95 x 156
FIXED SPEED WITH DRYER													
V60DR92FNM160	K-MAX 22-08 ES	22	30	3600	216	127	7.5	109	58	1-1/4"	480	218	167 x 80 x 136
V60DU92FNM160	K-MAX 38-08 ES	37	50	6600	396	233	7.5	109	70	1-1/2"	1000	455	191 x 95 x 156
VARIABLE SPEED													
V60DR97FNM060	K-MAX 22-08 VS	22	30	3600 / 1170	216 / 68	127 / 40	7.5	109	62	1-1/4"	445	202	133 x 80 x 136
V60DS97FNM060	K-MAX 22-10 VS	22	30	3010 / 1170	181 / 70	106 / 41	10	145	60	1-1/4"	445	202	133 x 80 x 136
V60DT97FNM060	K-MAX 22-13 VS	22	30	2560 / 965	155 / 58	91 / 34	13	188	60	1-1/4"	445	202	133 x 80 x 136
V60DU97FNM060	K-MAX 38-08 VS	37	50	6600 / 2680	396 / 161	233 / 95	7.5	109	70	1-1/2"	960	436	159 x 95 x 156
V60DV97FNM060	K-MAX 38-10 VS	37	50	5400 / 1715	324 / 103	191 / 61	10	145	69	1-1/2"	880	400	159 x 95 x 156
V60DW97FNM060	K-MAX 38-13 VS	37	50	4520 / 1705	272 / 102	160 / 60	13	188	66	1-1/2"	880	400	159 x 95 x 156
VARIABLE SPEED WITH DRYER													
V60DR97FNM160	K-MAX 22-08 ES VS	22	30	3600 / 1170	216 / 68	127 / 40	7.5	109	62	1-1/4"	495	225	133 x 80 x 136
V60DS97FNM160	K-MAX 22-10 ES VS	22	30	3010 / 1170	181 / 70	106 / 41	10	145	60	1-1/4"	495	225	133 x 80 x 136
V60DT97FNM160	K-MAX 22-13 ES VS	22	30	2560 / 965	155 / 58	91 / 34	13	188	60	1-1/4"	495	225	133 x 80 x 136
V60DU97FNM160	K-MAX 38-08 ES VS	37	50	6600 / 2680	396 / 161	233 / 95	7.5	109	70	1-1/2"	1040	473	159 x 95 x 156
V60DV97FNM160	K-MAX 38-10 ES VS	37	50	5400 / 1715	324 / 103	191 / 61	10	145	69	1-1/2"	960	436	159 x 95 x 156
V60DW97FNM160	K-MAX 38-13 ES VS	37	50	4520 / 1705	272 / 102	160 / 60	13	188	66	1-1/2"	960	436	159 x 95 x 156

Free air delivery as per ISO 1217 Annex C, at 7 - 9.5 - 12.5 bar at the compressor outlet. ± 3 dB (A) as PNEUROP/CAGI PN-NTC 2.3.

ETIV Advanced electronic controller

The advanced ETIV controller installed on the K-MAX models has been specially designed to ensure optimal monitoring and regulation of the operation of the compressor, allowing flexibility and complete programming, for maximum efficiency and safety.

Controller with multi-function backlight LCD graphic display, the menu is drop down type. In the main screen the display indicates:

- Working pressure (off load / load);
- Oil temperature;
- Compressor status (stand-by, off load, load);
- Fan status (off / on);
- Date and time;
- Hours remaining before maintenance;
- Inverter use percentage.

- **Compressor rotation management for up to 4 units.**

  It is possible to connect up to 4 compressors for managing distribution of the workload in such a way to equalize the hours but also changing set pressures of the various compressors for different times.

SMS Device Service Management System

SMS is the innovative device to allow the remote control of the compressor and to perform predictive maintenance available on screw compressors equipped with the latest ETIV controller. The device automatically sends an e-mail (up to 3 addresses to be defined during set-up) in case of an alarm and according to preset thresholds (every hour, every day, every week): this feature allows you to accurately schedule routine maintenance and to allow intervention in case of special maintenance or fault finding. Furthermore, you can have remote control from any device (tablet, smartphone, PC, notebook, etc.), via a web page, as long as it is connected to the same Internet network as the SMS device.

Predictive and targeted maintenance:

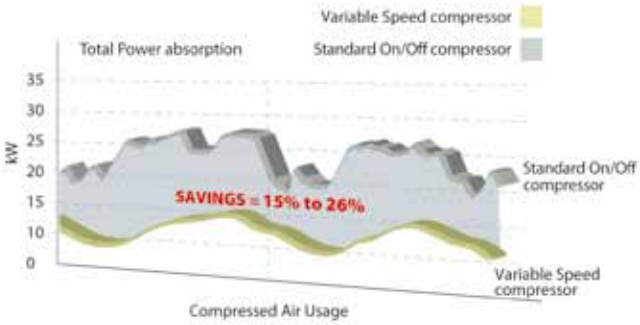
- automated e-mail in case of alarms,
- automated e-mail every hour / day / week.

Compressor remote control:

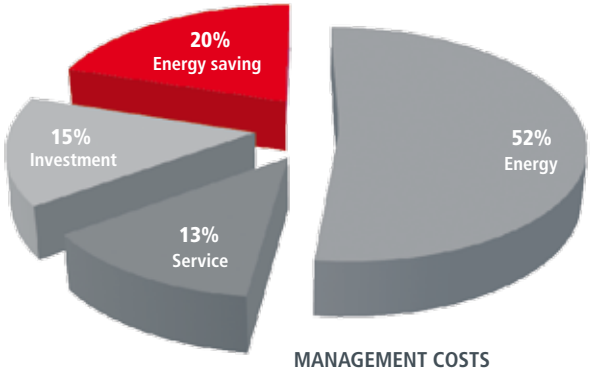
- access to the various menu levels (user, service),
- check the status of the compressor online,
- on/off control,
- no software to be installed.

Variable speed drive

Reducing power consumption and protecting our valuable energy resources represents one of the greatest global environmental challenges of our times.
The **K-Max series** version with **22 and 37 kW** electric motor are available in a variable speed drive version, providing high performance combined with the most effective energy saving solution.



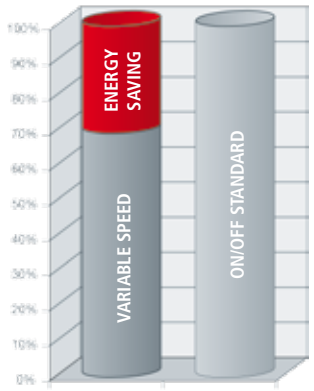
The graph below shows the significant energy saving using variable speed compressors in a typical installation.



MANAGEMENT COSTS

The inverter application of a leading world manufacturer, able to dynamically adjust the voltage/frequency/current values of the motor, allows the elimination of unnecessary power losses by constantly adjusting the generation of compressed air to match the real air demand, offering many proven advantages for the user in terms of reducing energy consumption:

- Continuous regulation of the motor speed and compressed air generation to precisely match the air demand.
- The air output is constantly adjusted between 40% and 100% of the compressor full capacity.
- Constant and accurate air pressure.
- Energy consumption is proportional to the delivered compressed air.



ENERGY COSTS

Designed for a long service life

Long Life Kit for screw compressors scheduled maintenance

- **FSN original spare parts** have been rigorously selected, checked and tested by specialised technicians to ensure the utmost efficiency and endurance of the compressor. The parts are stocked in our "LOGIMAT" centralised and automated warehouse in Zola Predosa (BO) - Italy, where 12,000 part codes on 10,000 sqm are managed every day.
- Specialised staff are continuously in contact with our distribution centres worldwide, to deliver spare parts to our customers in the shortest possible time.
- The use of **FSN Long Life Kit**, specifically studied for screw compressors, extends maintenance intervals, cutting down service costs and ensuring consistent product performance.
  Ask for the catalog with reference codes, suitable for all K-MAX compressors!

Maintenance interval, using original parts **+20%**

	2,000 h (or every year)	4,000 h (or every year)	12,000 h
		KIT B	KIT E
K-MAX 22 - 37 kW	1 Air filter cartridge	1 Air filter cartridge 1 Oil filter cartridge 1 Separator cartridge (22 kW) - 2 Separator cartridges (37 kW) 1 Oil check valve (22 kW) - 2 Oil check valves (37 kW) 1 Prefilter	1 Kit 4,000 h 1 Solenoid valve
K-MAX VS 22 - 37 kW	1 Air filter cartridge	1 Kit 4,000 h 1 Electric cabinet prefilter	1 Kit 4,000 h VS 1 Solenoid valve

We recommend to change oil at the indicated intervals (see the user's manual) or every year. We suggest to use our RotEnergyPlus oil (NOT INCLUDED IN THE LONG LIFE KIT).

RotEnergy synthetic base lubricants

- FSN lubricants are specially designed for rotary screw compressors to achieve rapid water separation, lower friction, enhanced energy savings, longer maintenance intervals and excellent bearing lubrication while offering superior rust and corrosion protection.
- RotEnergyFood is a high quality food-grade rotary compressor lubricant specifically designed for use in the food and beverage industries to meet their production quality standards.

#600000018	RotEnergyPlus 46 cSt - 1 x 3.25 kg (3.75 lt) package
#600000009	RotEnergyPlus 46 cSt - 4 x 3.25 kg (3.75 lt) packages
#600000007	RotEnergyPlus 46 cSt - 1 x 16 kg (18.5 lt) package
#600000012	RotEnergyPlus 46 cSt - 1 x 175 kg (210 lt) can
#600000014	RotEnergyFood 46 cSt - 4 x 3.25 kg (3.75 lt) packages
#600000016	RotEnergyFood 46 cSt - 1 x 16 kg (18.5 lt) package
#600000017	RotEnergyFood 46 cSt - 1 x 180 kg (207 lt) can

FSN ORIGINAL SPARE PARTS

- All the exploded drawings and the spare parts lists for every compressor model are available at any time on the Fini and FSN websites: **www.finicompressors.com - www.fsnspareparts.com**

24 HOT-LINE service

- Our "**Hot-Line**" service is able to prepare and ship urgent orders on the same day.

MADE IN ITALY

Fini COMPRESSORS

INDUSTRIAL range







TERA SD

Direct driven rotary screw compressors

Fixed or variable speed

75-250 kW

EN

TERA SD

Direct driven rotary screw compressors

Main features and advantages

Compact and reliable

Fini Rotar TERA SD screw compressor, single stage lubricated, ranging from 75 to 250 kW, is the optimal response to the modern industry compressed air demands.
Compact, with direct drive and operational pressures 7.5, 10 and 13 bar.
The machine is fitted with electronic controller, aftercooler, integrated condensate separator (external for models 280 and 340) with time based drain.
TERA SD in the standard configuration, is air cooled and it is designed for continuous operation 24/7. It is also available with inverter drive (Speed Tronic Control version).
Optional versions have available "oil to water" heat exchanger.

Optimum efficiency

TERA SD compressors are equipped with high efficiency IE3 electric motors with protection degree IP55 and insulation class F.
Power transmission to the airend is carried out by means of a flexible coupling and a helical gearbox. This configuration allows the perfect alignment of the shafts, granting optimal power transmission.

Silent, clean, easy to use and maintain

TERA SD standard configuration includes a prefiltering panel which separates dust and powder in order to keep the interior of the machine clean and easy to maintain. Wide opening doors with safety locks grant ease of access for maintenance and service.
Coolers are easily accessible. Separated fans with Class F IP54 motors provide maximum cooling air flow: the number of fans depends on the size of the compressor. Due to the type of fans, their position and the excellent soundproofing of the whole machine, TERA SD compressors are extremely silent.

Our FSN lubricants are specially designed for rotary screw compressors to achieve rapid water separation, lower friction, enhanced energy savings, longer maintenance intervals and excellent bearing lubrication while offering superior protection.
Synthetic base oil: RotEnergyFood and RotEnergyPlus.
Mineral base oil: RotarECOFLUID.

POWER: 75-250 kW

MAX. PRESSURE: 7.5-10-13 bar

MADE IN ITALY

TERA SD

Direct driven rotary screw compressors

Main components

Advanced cooling system

Our oversized premium quality air-oil heat exchangers guarantee low operating temperatures even in severe working conditions. The large coolers coupled with separate thermostatically controlled electro-fans and a thermostatic valve within the oil cooling system ensures lower compressed air outlet temperatures, eliminating the risk of condensation in the lubricant, providing the best protection against damage to internal components, ensuring a much longer service life to the entire compressor.

High efficiency electric motor

High efficiency IE3 electric motors fully protected with insulation class F and protection to IP 55. All the energy of the motor is transferred to the compression process thanks to the simple direct drive arrangement, ensuring the most energy efficiency and maximum reliability.

Tank and oil-separator filter

Steel CE separator tank with internal separator cartridge granting optimal filtering degree "low losses" and long service intervals.
Minimum pressure and non return valve easily accessible for easy maintenance and check.
ASME, "U" Stamp, Nema or SQL tanks available on request.

Oil filter and temperature control

Double oil filter to grant total operational safety.
Filter support includes the thermostatic element.
The working temperature of the compressor is controlled by both the throttling of the oil flow through the thermostatic element and the switching of the fans according to the air-end discharge temperature.

Direct drive

Direct drive realized through a flexible coupling and a helical gearbox.
Maximun efficiency in the power transmission, excellent alignment, easy maintenance.

Intelligent controller

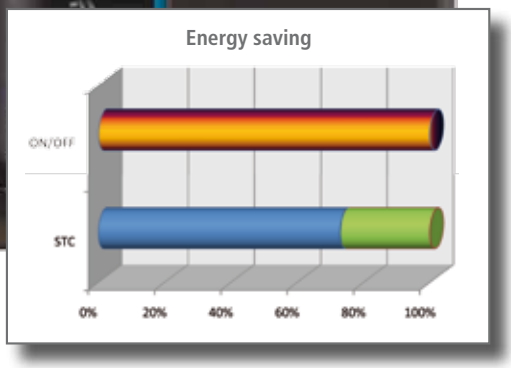
The advanced controller fitted to the TERA SD series has been specifically developed to guarantee optimum monitoring and regulation of the compressors operation, allowing flexibility and full programming of the complete compressed air station for maximum efficiency and safety.
The intelligent controller with clear alphanumeric LCD display features full menu in13 languages and convenient CAN-BUS interfacing. The controller also allows remote control, auto-restart, daily and weekly start up programming.
The System allows automatic reduction of operating pressure according to varying demands through the working profile. The controller includes a 'Fault Log' and routine maintenance information.

TERA SD

Direct driven rotary screw compressors

STC version: with inverter drive

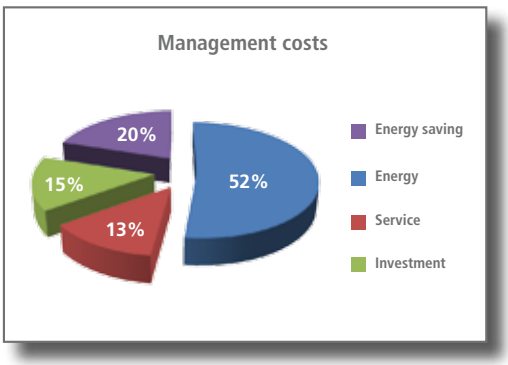
SpeedTronic control

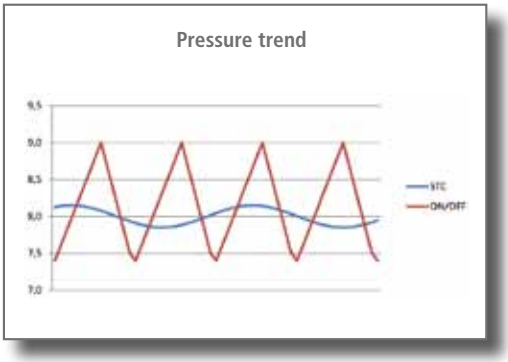


All Fini TERA SD models can be also available at variable speed, equipped with Inverter option (STC = SpeedTronicControl), that enables the compressor to adapt to the flow rate demanded by the application.
The electronic controller monitors and controls air-end speed, modulating the air production in order to keep constant pressure in the network.
They are particularly suitable for those companies that use compressed air with frequently changing flow: the variable frequency drive allows the machine to adjust the flow rate to the actual demand.

The 'Vector' type frequency inverters with exceptional power saving features, are characterized by the ability to provide a constant load torque curve over the motor's total operating speed range.

- Power-saving mode.
- Optimum control of acceleration and other characteristics.
- Automatic re-start after a power failure.





TERA SD

Direct driven rotary screw compressors

Technical data and dimension

TERA SD

Code	Product	kW	HP	l/min.	m³/h	c.f.m.	bar	psi	dB(A)	G	L x W x H (cm)	kg	Lbs
V60MJ92FNM460	**TERA SD 10008**	75	100	12600	756	445	7.5	109	73	2"	180 x 110 x 178	1620	3572
V60MB92FNM460	**TERA SD 10010**	75	100	10500	630	371	10	145	73	2"	180 x 110 x 178	1620	3572
V60MD92FNM460	**TERA SD 10013**	75	100	8800	528	311	13	189	73	2"	180 x 110 x 178	1620	3572
V60MR92FNM460	**TERA SD 12508**	90	125	15900	954	561	7.5	109	75	2"	238 x 130 x 178	2420	5336
V60MF92FNM460	**TERA SD 12510**	90	125	13400	804	473	10	145	75	2"	238 x 130 x 178	2420	5336
V60MS92FNM460	**TERA SD 12513**	90	125	11600	696	409	13	189	75	2"	238 x 130 x 178	2420	5336
V60MT92FNM460	**TERA SD 15008**	110	150	18700	1122	660	7.5	109	75	3"	290 x 155 x 215	3240	7144
V60MI92FNM460	**TERA SD 15010**	110	150	16300	978	575	10	145	75	3"	290 x 155 x 215	3240	7144
V60MU92FNM460	**TERA SD 15013**	110	150	13900	834	491	13	189	75	3"	290 x 155 x 215	3240	7144
V60MV92FNM460	**TERA SD 18008**	132	180	23400	1404	826	7.5	109	74	3"	290 x 155 x 215	3300	7277
V60MN92FNM460	**TERA SD 18010**	132	180	19900	1194	702	10	145	74	3"	290 x 155 x 215	3300	7277
V60MZ92FNM460	**TERA SD 18013**	132	180	16300	978	575	13	189	74	3"	290 x 155 x 215	3300	7277
V60MX92FNM460	**TERA SD 22008**	160	220	26800	1608	946	7.5	109	75	3"	290 x 155 x 215	3850	8489
V60MQ92FNM460	**TERA SD 22010**	160	220	23400	1404	826	10	145	75	3"	290 x 155 x 215	3850	8489
V60MY92FNM460	**TERA SD 22013**	160	220	19900	1194	702	13	189	75	3"	290 x 155 x 215	3850	8489
V60MA92FNM460	**TERA SD 28008**	200	275	34800	2088	1228	7.5	109	75	5"	330 x 210 x 215	4550	10033
V60MC92FNM460	**TERA SD 28010**	200	275	28800	1728	1017	10	145	75	5"	330 x 210 x 215	4550	10033
V60MG92FNM460	**TERA SD 28013**	200	275	24400	1464	861	13	189	75	5"	330 x 210 x 215	4550	10033
V60ML92FNM460	**TERA SD 34008**	250	340	40500	2430	1430	7.5	109	76	5"	330 x 210 x 215	4700	10364
V60MO92FNM460	**TERA SD 34010**	250	340	36800	2208	1299	10	145	76	5"	330 x 210 x 215	4700	10364
V60MW92FNM460	**TERA SD 34013**	250	340	28800	1728	1017	13	189	76	5"	330 x 210 x 215	4700	10364

TERA SD STC (variable speed)

SpeedTronic control

Code	Product	kW	HP	l/min.	m³/h	c.f.m.	bar	psi	dB(A)	G	L x W x H (cm)	kg	Lbs
V60MJ97FNM460	**TERA SD 10008 STC**	75	100	12100 - 1900	726 - 114	427 - 67	7.5	109	73	2"	180 x 110 x 178	1650	3638
V60MB97FNM460	**TERA SD 10010 STC**	75	100	10600 - 2000	636 - 120	374 - 71	10	145	73	2"	180 x 110 x 178	1650	3638
V60MR97FNM460	**TERA SD 12508 STC**	90	125	15200 - 3240	912 - 194	537 - 114	7.5	109	74	2"	238 x 130 x 178	2150	4741
V60MF97FNM460	**TERA SD 12510 STC**	90	125	13400 - 4110	804 - 247	473 - 145	10	145	74	2"	238 x 130 x 178	2150	4741
V60MT97FNM460	**TERA SD 15008 STC**	110	150	18500 - 3900	1110 - 234	653 - 138	7.5	109	75	3"	290 x 155 x 215	2860	6306
V60MI97FNM460	**TERA SD 15010 STC**	110	150	15900 - 4500	954 - 270	561 - 159	10	145	75	3"	290 x 155 x 215	2860	6306
V60MV97FNM460	**TERA SD 18008 STC**	132	180	22200 - 3550	1332 - 213	784 - 125	7.5	109	75	3"	290 x 155 x 215	3200	7056
V60MN97FNM460	**TERA SD 18010 STC**	132	180	19000 - 5400	1140 - 324	671 - 191	10	145	75	3"	290 x 155 x 215	3200	7056
V60MX97FNM460	**TERA SD 22008 STC**	160	220	25600 - 5000	1536 - 300	904 - 177	7.5	109	74	3"	290 x 155 x 215	3350	7387
V60MQ97FNM460	**TERA SD 22010 STC**	160	220	22900 - 5120	1374 - 307	808 - 181	10	145	74	3"	290 x 155 x 215	3350	7387
V60MA97FNM460	**TERA SD 28008 STC**	200	275	33500 - 9450	2010 - 567	1183 - 334	7.5	109	76	5"	330 x 210 x 215	4670	10297
V60MC97FNM460	**TERA SD 28010 STC**	200	275	28500 - 9900	1710 - 594	1006 - 349	10	145	76	5"	330 x 210 x 215	4670	10297
V60ML97FNM460	**TERA SD 34008 STC**	250	340	42100 - 9900	2526 - 594	1486 - 349	7.5	109	76	5"	330 x 210 x 215	4830	10650
V60MO97FNM460	**TERA SD 34010 STC**	250	340	35700 - 9600	2142 - 576	1260 - 339	10	145	76	5"	330 x 210 x 215	4830	10650

STC models at 13 bar available on demand.

* Free air delivery as per ISO 1217 Annex C at 7 - 9.5 - 12.5 bar at the compressor outlet. For STC models, we indicate the min. and max. values.

** ± 3 dB (A) as PNEUROP/CAGI PN-NTC 2.3 (1 meter)