MADE IN ITALY

Fini COMPRESSORS

INDUSTRIAL range







TERA

Oil injected rotary screw compressors with direct transmission

Fixed and variable speed

110-250 kW

EN

TERA 110-250 kW Quiet, reliable, efficient, designed to last

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 inside the oil cooling system ensure lower compressed air outlet temperatures, eliminating the risk of condensate from forming in the lubricant, providing the best protection against damage to internal components, ensuring a much longer service life to the entire compressor.

The FINI direct-driven screw compressors of the TERA range provide a very high performance solution for the most demanding applications.
he TERA range offers a wide selection of models from 110 to 250 kW with operating pressure from 8 to 13 bar, also at variable speed (VS models).

Easy access and maintenance
The air-end - motor unit is completely removable.
The radiators, the oil filters and the air filter are easy to reach and inspect.
Wide front and rear access panels allow immediate access to the internal components, thus reducing inspection and maintenance times.

over time.

Reliable transmission
The direct drive arrangement eliminates power losses in the transmission and is virtually maintenance free.
The low operating speed and low operating temperature ensure very reliable operation and a long service life. The direct drive system also contributes to a higher output and therefore reduced power consumption.

TERA compressors are built using the highest quality components throughout. The attention to detail in the build, finishing and testing of the product results in a high performance, extremely durable, quiet and energy efficient air compressor that is built to last.

TERA 200 - 250

TERA 110-250 kW Designed to achieve the highest energy savings

Condensate separator with automatic drain.

Cleaning and protection
The pre-filter panel separates incoming dust and keeps the inside of the machine clean, thereby increasing the life cycle of the internal components.

Energy savings
The electropneumatic system regulates compressor operation, ensures the minimum required pressure during no-load operation and maximum energy savings at start-up, thus optimising the energy cost / air generated ratio.

High efficiency electric motors
Asynchronous IE3 High Efficiency electric motor 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 efficient operation and maximum reliability. Moreover, IE3 motors help reduce CO_2 emissions.

Noise and temperature under control.

Double oil filter
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.

2-Year warranty

Air-ends, inverters and controllers are covered by a 2-year warranty.

TERA 110 - 132 - 160
upper view

High performance air-ends
Our proven and extremely reliable lubricated single-stage compressor air-end with asymmetrical profile to the rotors, 5 male lobe rotors and 6 female lobe rotors, ensures low maintenance and long lasting durability characteristics.

DNAir2 Advanced electronic controller

The advanced controller DNAir2 featured in the entire TERA Series has been specifically developed to guarantee optimum monitoring and regulation of compressors operation, allowing flexibility and full programming of the complete compressed air station for maximum efficiency and safety.

The DNAir2 controller features a large backlit LCD display with clear and simple icons, offering 19 languages and RS485 communication port.

The main screen displays:

- Operating pressure
- Oil temperature
- Compressor status (stand-by, idle, load)
- Fan status (off/on)
- Date and time
- Remaining hours to maintenance
- Drive speed percentage (for units with inverter)

TERA 110 - 132 - 160

Compressor rotation management
The extremely user-friendly serial interface allows maximum connectivity to up to 4 screw compressors (all models at fixed speed or all models at variable speed), equipped with the DNAir2 controller.
The controller software provides the ability to balance each machine's operating hours and at the same time the pre-set pressure values are rotated along with the machine sequence.

SMS Device Service Management System

SMS is the innovative device for remote control and perform predictive maintenance on screw compressors equipped with DNAir2 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 pre-set thresholds (every hour, every day, every week): this feature allows you to schedule routine maintenance and timely intervention in case of special maintenance on the compressor it is connected to. Furthermore, you can have full 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.

Compressor remote control:

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

Preventive and targeted maintenance:

- automatic sending of e-mails in case of alarms,
- possibility of sending e-mails which notify the compressor status and settings at pre-set intervals (hourly, daily or weekly), programmed maintenance advise.

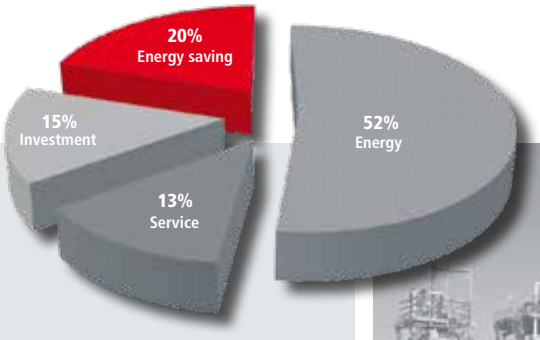
9062744	ANTENNA+SMS DEVICE KIT

Variable speed to achieve maximum energy saving

Reducing power consumption and protecting our valuable energy resources represents one of the greatest global environmental challenges of our times. The **TERA** series is also available in the Variable Speed version, providing high performance, robust and reliable solutions to suit all heavy duty industrial requirements.

The inverter application of a leading world manufacturer, able to dynamically adjusts 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.



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

EATool - EASoftware Detection and analysis of energy consumption

The energy efficiency of a production plant using compressed air allows for countless advantages for the company's entire production process, in terms of consumption and costs. Based on decades of experience in the industrial sector, Fini provides a professional auditing service to companies, through skilled technicians and advanced measurement and analysis equipment (EATool and EASoftware). Such equipment allows us to offer one or more rotary screw compressors, in alternative to the existing ones, to achieve considerable annual economic and energy savings.

EATool

- Designed to measure pneumatic systems where up to 4 compressors work.
- Measurements are downloaded to a USB drive (included).
- Supplied: up to 4 x 400 A ampere clamps (optional up to 1000A) and a pressure probe.
- Possible equipment sale or rental.

9062747	EATOOL EA400

EASoftware

- Acquires the actual consumption of a compressed air system.
- Processes a complete Energy Audit of the system.
- Suggests one or more compressors as an alternative to the existing ones, to achieve the highest energy savings.

TERA 110 - 250 kW FIXED SPEED

Model	CODE			Delivered air		MAX										
		kW	HP	m³/min.	c.f.m.	bar	psi	dB(A)	BSP	kg	Lbs	L x W x H (cm)	kg	Lbs	L x W x H (cm)
TERA 110-08	**V60MT92FNM180**	110	150	18.7	660.4	8	116	75 ± 3	3"	3,240	7,143	290 x 155 x 216	3,410	7,502	306 x 171 x 234
TERA 110-10	**V60MI92FNM180**	110	150	16.3	575.6	10	145	75 ± 3	3"	3,240	7,143	290 x 155 x 216	3,410	7,502	306 x 171 x 234
TERA 110-13	**ON DEMAND**	110	150	13.9	490.9	13	189	75 ± 3	3"	3,240	7,143	290 x 155 x 216	3,410	7,502	306 x 171 x 234
TERA 132-08	**V60MV92FNM180**	132	180	23.4	826.4	8	116	76 ± 3	3"	3,300	7,275	290 x 155 x 216	3,470	7,634	306 x 171 x 234
TERA 132-10	**V60MN92FNM180**	132	180	19.9	702.8	10	145	76 ± 3	3"	3,300	7,275	290 x 155 x 216	3,470	7,634	306 x 171 x 234
TERA 132-13	**V60MZ92FNM180**	132	180	16.3	575.6	13	189	76 ± 3	3"	3,300	7,275	290 x 155 x 216	3,470	7,634	306 x 171 x 234
TERA 160-08	**V60MX92FNM180**	160	220	26.8	946.4	8	116	76 ± 3	3"	3,850	8,488	290 x 155 x 216	4,020	8,844	306 x 171 x 234
TERA 160-10	**V60MQ92FNM180**	160	220	23.4	826.4	10	145	76 ± 3	3"	3,850	8,488	290 x 155 x 216	4,020	8,844	306 x 171 x 234
TERA 160-13	**ON DEMAND**	160	220	19.9	702.8	13	189	76 ± 3	3"	3,850	8,488	290 x 155 x 216	4,020	8,844	306 x 171 x 234
TERA 200-08	**V60MA92FNM180**	200	270	34.8	1.229	8	116	76 ± 3	5"	4,550	10,031	330 x 210 x 216	4,728	10,402	346 x 226 x 234
TERA 200-10	**V60MC92FNM180**	200	270	28.8	1,017.1	10	145	76 ± 3	5"	4,550	10,031	330 x 210 x 216	4,728	10,402	346 x 226 x 234
TERA 200-13	**ON DEMAND**	200	270	24.4	861.7	13	189	76 ± 3	5"	4,550	10,031	330 x 210 x 216	4,728	10,402	346 x 226 x 234
TERA 250-08	**V60ML92FNM180**	250	340	40.5	1,430.2	8	116	76 ± 3	5"	4,700	10,362	330 x 210 x 216	4,878	10,732	346 x 226 x 234
TERA 250-10	**V60MO92FNM180**	250	340	36.8	1,299.6	10	145	76 ± 3	5"	4,700	10,362	330 x 210 x 216	4,878	10,732	346 x 226 x 234
TERA 250-13	**ON DEMAND**	250	340	28.8	1,017.1	13	189	76 ± 3	5"	4,700	10,362	330 x 210 x 216	4,878	10,732	346 x 226 x 234

TERA 110 - 250 kW VARIABLE SPEED

Model	CODE			Delivered air (min. / max)		MAX									
		kW	HP	m³/min.	c.f.m.	bar	psi	dB(A)	BSP	kg	Lbs	L x W x H (cm)	kg	Lbs	L x W x H (cm)
TERA 110-08 VS	**V60MT97FNM180**	110	150	3.9 / 18.5	137.7 / 653.3	8	116	75 ± 3	3"	3,315	7,293	290 x 155 x 216	3,485	7,667	306 x 171 x 234
TERA 110-10 VS	**V60MI97FNM180**	110	150	4.5 / 15.9	158.9 / 561.5	10	145	75 ± 3	3"	3,315	7,293	290 x 155 x 216	3,485	7,667	306 x 171 x 234
TERA 110-13 VS	**ON DEMAND**	110	150	4.4 / 13.5	155.4 / 476.7	13	189	75 ± 3	3"	3,315	7,293	290 x 155 x 216	3,485	7,667	306 x 171 x 234
TERA 132-08 VS	**V60MV97FNM180**	132	180	3.55 / 22.2	125.4 / 784	8	116	75 ± 3	3"	3,380	7,436	290 x 155 x 216	3,550	7,810	306 x 171 x 234
TERA 132-10 VS	**V60MN97FNM180**	132	180	5.4 / 19	190.7 / 671	10	145	75 ± 3	3"	3,380	7,436	290 x 155 x 216	3,550	7,810	306 x 171 x 234
TERA 132-13 VS	**ON DEMAND**	132	180	6.22 / 16.1	219.7 / 568.6	13	189	75 ± 3	3"	3,380	7,436	290 x 155 x 216	3,550	7,810	306 x 171 x 234
TERA 160-08 VS	**V60MX97FNM180**	160	220	5 / 25.6	176.6 / 904.1	8	116	74 ± 3	3"	3,950	8,690	290 x 155 x 216	4,120	9,064	306 x 171 x 234
TERA 160-10 VS	**V60MQ97FNM180**	160	220	5.12 / 22.9	180.8 / 808.7	10	145	74 ± 3	3"	3,950	8,690	290 x 155 x 216	4,120	9,064	306 x 171 x 234
TERA 160-13 VS	**ON DEMAND**	160	220	6 / 19.4	211.9 / 685.1	13	189	74 ± 3	3"	3,950	8,690	290 x 155 x 216	4,120	9,064	306 x 171 x 234
TERA 200-08 VS	**V60MA97FNM180**	200	270	9.45 / 33.5	333.7 / 1.183	8	116	76 ± 3	5"	4,660	10,252	330 x 210 x 216	4,838	10,644	346 x 226 x 234
TERA 200-10 VS	**V60MC97FNM180**	200	270	9.9 / 28.5	349.6 / 1,006.5	10	145	76 ± 3	5"	4,660	10,252	330 x 210 x 216	4,838	10,644	346 x 226 x 234
TERA 200-13 VS	**ON DEMAND**	200	270	9.2 / 24.6	324.9 / 868.7	13	189	76 ± 3	5"	4,660	10,252	330 x 210 x 216	4,838	10,644	346 x 226 x 234
TERA 250-08 VS	**V60ML97FNM180**	250	340	9.9 / 42.1	349.6 / 1,486.7	8	116	76 ± 3	5"	4,855	10,681	330 x 210 x 216	5,033	11,073	346 x 226 x 234
TERA 250-10 VS	**V60MO97FNM180**	250	340	9.6 / 35.7	339 / 1,260.7	10	145	76 ± 3	5"	4,855	10,681	330 x 210 x 216	5,033	11,073	346 x 226 x 234
TERA 250-13 VS	**ON DEMAND**	250	340	9.7 / 30.6	342.6 / 1,080.6	13	189	76 ± 3	5"	4,855	10,681	330 x 210 x 216	5,033	11,073	346 x 226 x 234

Reference conditions: air intake temperature 20°C (68°F) – atmospheric pressure 1 bar (14.5 p.s.i.).
Air flow was measured in the following operative pressures: 7.5 bar for models at 8 bar - 9.5 bar for models at 10 bar - 12.5 bar for models at 13 bar. The data and results were measured in accordance with standard ISO 1217.
The sound level was measured in accordance with standard ISO 3744.

Original Spare Parts: Extend the life and efficiency of your screw compressor

FSN Original Spare parts is the brand of the original spare parts for SHAMAL compressors and identifies after-sales services.
It guarantees that the components are original and that they were carefully selected, checked and tested by skilled technicians. Using FSN certified original spare parts reduces management costs and guarantees the efficiency, reliability and longevity of the compressor. 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.

Long Life Kit for the scheduled maintenance of screw compressors

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

RotarECOFLUID oil with mineral base

#600000020	RotarECOFLUID 46 cSt - 1 x 3.8 L (3.3 kg) tank
#600000021	RotarECOFLUID 46 cSt - 1 x 20 L (17.36 kg) tank
#600000022	RotarECOFLUID 46 cSt - 1 x 200 L (174 kg) drum

Formulated with high quality selected mineral base oils enhanced with advanced anti-oxidants, anti-wear (zinc free), rust preventers and antifoams, this oil offers an optimal control of oxidation and residue deposits as well as an excellent level of thermal stability and oxidation to ensure the longevity of equipment and long life performances.

RotEnergyPlus oil with synthetic base

#600000018A	RotEnergyPlus 46 cSt - 1 x 3.8 L (3.25 kg) tank
#600000009A	RotEnergyPlus 46 cSt - 4 tanks x 3.8 L (3.25 kg) each
#600000007A	RotEnergyPlus 46 cSt - 1 x 19 L (16 kg) tank
#600000012A	RotEnergyPlus 46 cSt - 1 x 208 L (181 kg) drum

Formulated with selected high quality synthetic base lubricants, this oil separates quickly from water, reduces friction and energy consumption, extends maintenance intervals and guarantees excellent bearing lubrication, providing great protection against rust and corrosion.

RotEnergyFood oil with synthetic base for use in the food industry

#600000014A	RotEnergyFood 46 cSt - 4 tanks x 3.9 L (3.25 kg) each
#600000016A	RotEnergyFood 46 cSt - 1 x 19 L (18.5 kg) tank
#600000017A	RotEnergyFood 46 cSt - 1 x 208 L (175 kg) drum

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

All the exploded drawings and the spare parts lists for every compressor model are available at any time on the Fini and FSN website:

www.finicompressors.com

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

We recommend to change the oil according to the interval reported in the use and maintenance manual of the compressor or at least once a year.
We suggest to use our lubricants: RotarECOFLUID, RotEnergyPlus and RotEnergyFood.
THE OILS ARE NOT INCLUDED IN THE LONG LIFE KITS.

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A wide range of solutions for industrial applications

K-MAX
Oil-injected rotary screw compressors, with direct transmission with or without gears, at fixed or variable speed and power values from 5.5 to 90 kW.

MICRO - PLUS
Oil-injected rotary screw compressors, with belt transmission, at fixed or variable speed and power values from 2.2 to 75 kW.

OS Scroll
Single and multi-scroll fixed speed oil-free spiral scroll compressors with power values from 2.2 to 30 kW.

AIR TREATMENT
Air driers, filters, accessories and a wide range of products for compressed air treatment.

Fini COMPRESSORS

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