

MADE IN ITALY



**INDUSTRIAL range**



**TERA SD**  
Direct driven rotary  
screw compressors



Fixed or variable speed  
**75-250 kW**

# 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, 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 (STC version).

Optional versions have available water cooling and heat recovery "oil to water" heat exchanger.

#### Optimum efficiency

TERA SD compressors are equipped with high efficiency 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.



#### RotEnergyPlus

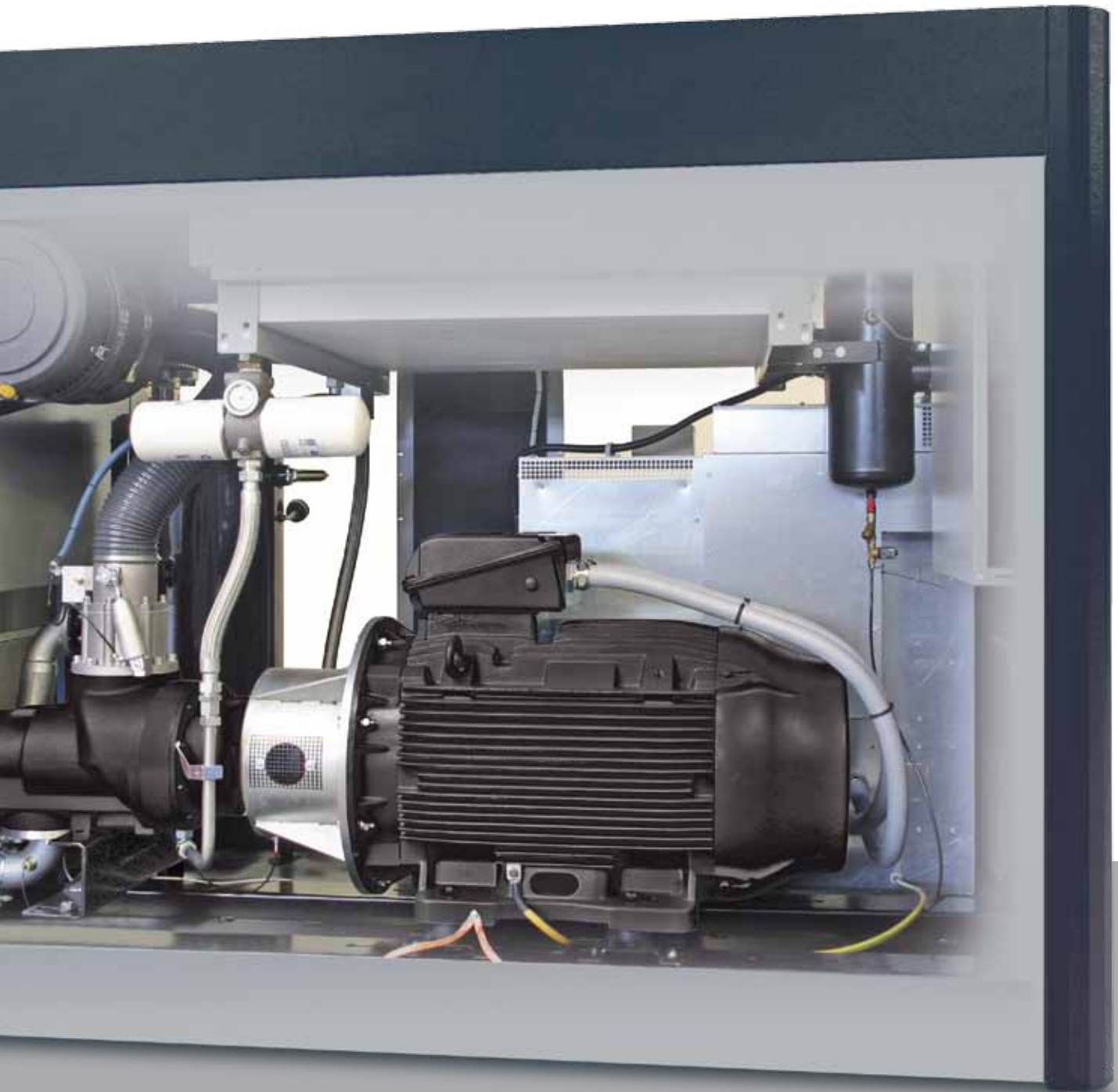
As well as all Fini rotary screw compressors, also TERA SD models are ready to use and equipped with RotEnergyPlus cooling lubricant to synthetic base.

RotEnergyPlus separates quickly from water, reduces friction and energy consumption, extends maintenance intervals and guarantees excellent bearing lubrication, providing great protection against rust and corrosion.

POWER: 75-250 kW

MAX. PRESSURE: 7.5-10-13 bar

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## 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

Asynchronous IE2 (Variable Speed versions) or IE3 (Fixed Speed versions) 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 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.

Maximum efficiency in the power transmission, excellent alignment, maintenance free.

## 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 in 13 languages and convenient CAN-BUS interfacing. The controller also allows remote control, auto-restart, daily and weekly start up programming and remote monitoring of working conditions.

The System allows energy consumption monitoring and automatic reduction of operating pressure according to varying demands through the working profile. The controller includes a 'Fault Log' and routine maintenance information.

The extremely user-friendly serial interfacing allows maximum connectivity to peripheral controls and to up to 6 other compressors in the same network.

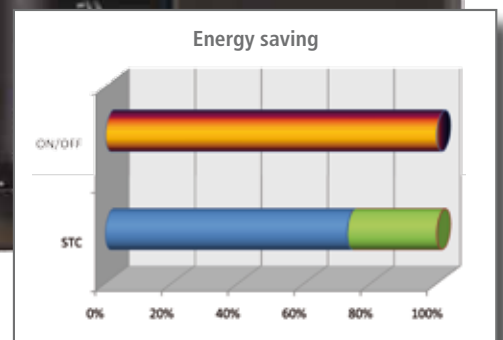


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STC version: with inverter drive

SpeedTronic  
control



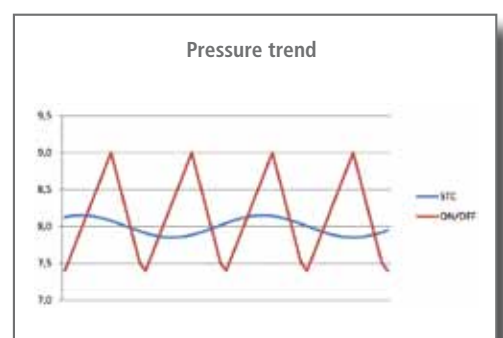
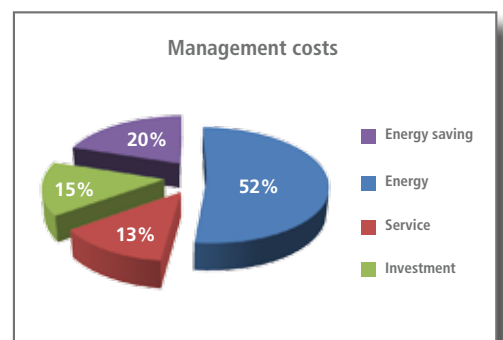
All Fini TERA SD models can be also available at variable speed, equipped with Inverter option (STC = SpeedTronicControl), that enables the compressor to adapt to the flow rate demanded by the application.

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 with a constant visual display of the energy savings achieved.
- Optimum control of acceleration and other characteristics.
- Selectable second parameter set for different load characteristics.
- Automatic re-start after a power failure.










# TERA SD

Direct driven rotary screw compressors








## Technical data and dimension

### TERA SD

Code	Product			 AIR							 L x W x H (cm)		
		kW	HP	l/min.	m³/h	c.f.m.	bar	psi	dB(A)	G		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)



Code	Product			 AIR (max. - min.)							 L x W x H (cm)		
		kW	HP	l/min.	m³/h	c.f.m.	bar	psi	dB(A)	G		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)

## 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".



	2,000 hrs	4,000 hrs * (or every year)	8,000 hrs	24,000 hrs
	- 1 Air filter cartridge - 2 Oil filter cartridges	- 2 Air filter cartridges - 4 Oil filter cartridges - 1 Separator cartridge - 2 Prefilters	- 1 x 4,000 hrs kit - 1 Thermostatic valve kit - 1 Intake regulator kit - 1 Minimum pressure valve kit - 1 Elastic joint (except for TERA SD 100)	- 1 x 8,000 hrs kit - 1 Gears kit (only for TERA SD 100)
TERA SD 10008 - TERA SD 10008 STC	#260KTA250	#260KTB250	#260KTC250	#260KTD250
TERA SD 10010 - TERA SD 10010 STC			#260KTC251	#260KTD251
TERA SD 10013 - TERA SD 10013 STC			#260KTC252	#260KTD252
TERA SD 125 - TERA SD 125 STC	#260KTA254	#260KTB254	#260KTC254	#260KTD254
TERA SD 150 - TERA SD 150 STC	#260KTA258	#260KTB258	#260KTC258	#260KTD258
TERA SD 180 - TERA SD 180 STC		#260KTB262	#260KTC262	#260KTD262
TERA SD 220 - TERA SD 220 STC	#260KTA266	#260KTB266	#260KTC266	#260KTD266
TERA SD 280 - TERA SD 280 STC	#260KTA275	#260KTB275	#260KTC275	#260KTD275
TERA SD 340 - TERA SD 340 STC			#260KTC278	#260KTD276
 <p>* We recommend to change oil every 4,000 hours or every year. We suggest to use our oil: <b>3 x #600000007 (RotEnergyPlus 46 cSt - 16 kg/18.5 lt)</b></p>				

Models and features in this catalogue may be subject to changes without prior notice. rel. 07/15



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