

ESP 90 - 132 Series Screw Compressors



Reliability to maximize uptime

**The Most Modern Solution
from 90 up to 132 kW**



The ESP fixed speed screw compressors are designed to meet the highest requirements that modern work environment and machine operators place on them. As a result, our gear driven ESP 90, ESP 110 and ESP 132 compressors are extremely energy efficient, quiet, reliable, easy to use, possess long operating life and deliver optimal air quality.

For these fixed speed compressors, we have generated the easy-to-use and accurate drive systems and greatly invested on developing optimal cooling and ventilation. All these features are of direct benefit to the users. Maintenance of these compressors is facilitated by having an enclosure with six doors. The number of special options available makes ESP fixed speed compressors the right choice for producing high-quality compressed air for a wide range of needs.

These compressors continue to further strengthen Gardner Denver's success story as a world leader in compressors.

Heavy duty applications

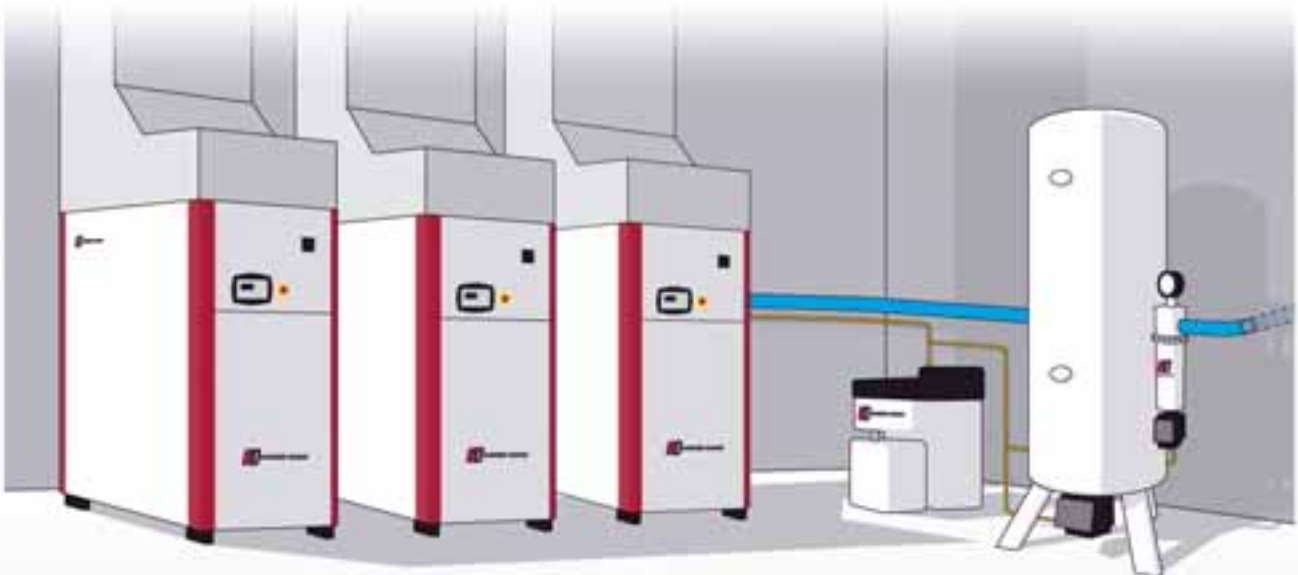
The ESP 90 - 132 compressors are designed using advanced technology to meet the highest quality standards that the customers are accustomed to expect from Gardner Denver. This series is an efficient and versatile solution even for the most demanding industrial applications.

The ESP 90 - 132 compressors carry all the Gardner Denver features and benefits associated with reliable, easy use and operations and high efficiency.



Lasse Arvidson / Stora Enso

AirSmart™ – controlling and monitoring your compressor station



Clear text indicator display

The controller has a four line display with the menus and tactile buttons for easy navigation. Two lines display operating information such as pressure, temperature, operating hours

etc. while the other two lines display advisory and shutdown messages, recommended part numbers and service contact information.

It is the same controller used in Gardner Denver's variable speed series, but programmed for load / no load operations with fixed speed compressors.

Communication and sequencing

The optional communication module allows the AirSmart™ units to talk to each other. This isn't just hour-balancing, on/off sequencing scheme. Our controller allows the system to truly optimize efficiency because it knows the capabilities of other machines and orchestrates their operation. The communication module also allows remote monitoring of the variable speed and fixed speed units.

This application provides better energy efficiency in part load operations.

Focus on Design

Quieter than quiet

The cleverly engineered enclosure is safe and compact and absorbs noise efficiently without the need for any additional parts. Standard package noise level is only 73 - 76 dB(A).

Low noise level allows you to install ESP compressors on the work floor and thus saves the cost of a separate compressor room and associated piping.

Performance of the new ESP fixed speed screw compressors is further enhanced by a new cooling system that features separate cooling air flow paths without influencing cooling efficiency.

As a result, normal conversation can take place right next to the running compressor.

Most efficient drive system

The high capacity Gardner Denver ENDURO® air end, with lowest rotor-tip speeds, gives high efficiency with maximum reliability.

The ESP 90 - 132 series incorporates a flanged motor/coupling housing –gearbox/element to ensure a constant alignment during transport, installation and operation of the unit.

Even more the highly efficient electric motor (IP55, Class F) is fan-cooled to offer a permanent cooling.

Low speed ENDURO® air end

The new ESP 90 - 132 screw element means durability,



savings in energy costs, less wear and just the right RPMs. The compressors are easy to service, thanks to the functional Gardner Denver design.

Optimized cooling system

Upgraded after-cooler provides cool air to the after-treatment equipment.

The cooling can be easily ducted.

Our optional heat recovery system is the right solution for all the demanding users and work environments.

Integrated separators

ESP 90 - 132 range comes equipped with integrated separators that provide the best possible filtration of solid particulates. Our aim is better air.



Service is easier than ever before

Effortless and quick

The design of these packages assures the service points are readily accessible. The enclosure side doors are hinged and removable to allow complete access to all service points. The reduced number of moving parts also lowers maintenance costs.

Gardner Denver carries a full line of after sales products to meet all your requirements. By using original spare parts, you will save both time and money in the long term.

Support network

Gardner Denver has a wide network of authorised distributors available whenever needed to keep your compressors in top form.

We are committed to stocking components to support your compressed air system needs.

AEON™ lubricants

Gardner Denver's AEON™ Screw Compressor Lubricants provide the right high quality care for your compressor. Choose the right lubricant by your temperature and service life needs.



Your benefits at a glance

- Advanced AirSmart™ Control System
- Serviceability
- Modern Design
- Low Noise level



- Great Performance
- Maximum Flexibility
- Optional connectivity & sequencing function

Technical Data

Gardner Denver Model	Maximum target pressure		Capacity at working pressure*		Motor power		Net weight kg	Noise level ** dB(A)	Size (Length x Width x Height) mm
	bar	psig	m³/min	cfm	kW	hp			
ESP 90	7.5	110	16.00	565	90	120	2800	73	3210 x 1382 x 2208
	8.5	125	14.00	495					
	10	145	13.00	460					
ESP 110	13	190	11.00	390			3000	74	3210 x 1382 x 2208
	7.5	110	19.50	690	110	150			
	8.5	125	17.50	620					
ESP 132	10	145	17.00	600			3200	76	3210 x 1382 x 2208
	13	190	13.80	487					
	7.5	110	23.45	830	132	180			
	8.5	125	22.10	780					
	10	145	20.20	713					
	13	190	16.40	580					

* Capacity and Power measurements according to ISO 1217, ed. 3, Annex C -1996 test code and the following working pressures are used: 7.5 bar models at 7 bar, 8.5 bar models at 8 bar, 10 bar models at 9 bar and 13 bar models at 12 bar.

** Noise values determined according to ISO 2151 and ISO 3744; Tolerance ± 2 dB (K_{pA}).

Standard equipment

- Air-cooled or water-cooled versions
- Air inlet filter
- Zero loss inlet valve
- Fully automatic capacity control: full load, off-load, idle run and timed stop
- Gardner Denver AirSmart™ Controller
- Easy to use operator interface
- Multiple languages
- Y/D starter
- Main switch
- TEFC electric motors: IP55, F-class insulation, thermistor protection
- Emergency stop
- Safety devices for
 - high motor temperature
 - high compressor temperature
 - high compressor pressure
 - main motor overload
 - fan motor overload
- Alarms for
 - inlet filter
 - oil separator elements (alarm and tripping)
 - compressor overheat (alarm at 105 °C and tripping at 115 °C)
 - service interval
- Indicator for
 - oil filter
- Safety valve

- Running condition indicators:
 - pressure
 - temperature
 - hour meter; total running and loaded hours
- Automatic re-start after power cut
- Remote control
- Epoxy powder painted enclosure
- Fan motor and cooling fan (air cooled models)
- Sound absorbing enclosure
- After cooler
- Condensate separator with zero loss automatic drain
- Cold start oil thermostat
- ENDURO® air end

Optional Equipment

- Low pressure model
- Special voltages
- Multiple AEON™ lubricant options
- Communications / sequencing module
- +W heat recovery systems

Auxiliary equipment

- MiniPilot multi-compressor controller for 2 - 3 equal size compressors
- Compressed air after treatment products

For additional information please contact your local representative or

Gardner Denver®



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