

**Gardner**  
**Denver**

**Premium**  
compressor design

2.2 to 7.5 kW  
Fixed Speed



Reliability & efficiency  
without compromise

“Gardner Denver lubricated rotary screw compressors incorporate the very latest technological advances and guarantee a continuous supply of high quality compressed air.”

## High reliability – Low service costs

### The ESM Series from Gardner Denver

Well known in the industry for quality and reliability, Gardner Denver continuously develops the ESM Series to achieve cutting edge performance and efficiency. The ESM02-ESM06 range of lubricated screw compressors comprises of many different models and versions to allow maximum flexibility.

- ▶ **Pressure range**  
10 bar
- ▶ **Volume flow**  
0.18 to 0.9 m<sup>3</sup>/min
- ▶ **Motor power**  
2.2 to 7.5 kW

### Engineering excellence

Compressors are more than just a financial investment, they are a key component in ensuring that manufacturers, processors and operators receive consistent, high quality low cost air. The screw compression element is the heart of the compressor and therefore Gardner Denver keeps the design and manufacture in-house, using the latest CNC rotor grinding machinery, coupled with online laser technology.

The resulting reliability and performance ensure that operating costs will remain low throughout the compressor's life.



### Engineered for total piece of mind

Thanks to the user-friendly design, these compressors are easy to use, easy to install and fully ready for plug and play. Designed with a minimum number of moving parts, the compressors are very reliable, robust and capable to run continuously. The new canopy design of the compressors guarantees a quick and easy maintenance, minimising the downtime and maximising the reliability.



## Compact & Flexible

### ▶ Reliable electric motor

IP55, F-class insulation, IE3 class

### ▶ Safety devices for

- Motor over temperature
- Compressor over temperature
- Airend rotation

### ▶ Receiver mounted

High quality receiver built to EN87/404 (AD2000)

### ▶ Airstation

Equipped with high performance dryer featuring intelligent control system for low pressure losses.

- Pressure dew point +3°C (ISO 7183, A)
- Environmentally friendly refrigerant R134a
- Digital controller displaying:
  - Dew point indication
  - Additional energy saving mode
  - Maintenance display
  - Fault memory

### ▶ Small footprint

The compressor itself requires a minimum floor space of only 62 x 60 cm, with the receiver mounted models being exceptionally space-saving.

### ▶ 4 - 7.5kW extended features

- Star Delta starter is included as standard from 4 up to 7.5kW
- 5.5 + 7.5 kW variants include an after cooler also as standard to optimise air quality and minimise the size of downstream needed





## Maximum flexibility

Based on the individual customer requirements the compressors can be combined with different options to provide everything from a stand alone compressor to the complete airstation.

The options include:



Compressor base mounted



Receiver mounted compressor



Complete airstation including compressor, dryer and receiver



## New C-Pro1.0+ User-friendly control system

The new compressor controller C-Pro1.0+ is equipped as standard for all models and provides information about pressure, oil temperature and compressor status (load/unload) together in one display and offers many useful features, such as:

- Communication port RS485 supporting Modbus
- Integrated sequencer for easy control for 2 compressors
- Plastic box for higher IP protection degree
- Auto restart after black-out
- Password protection
- Air and oil filter replacement
- Separator filter replacement and oil change
- Pressure setting easily adjustable
- Unload timer for both DOL & SDS

## Optional equipment

- Receivers available at 270lt and 500lt for ESM04-ESM06
- Prefilter and microfilter combination
- Timed or float drains for receiver mounted units and airstation

# Technical data

## Base Mounted

Gardner Denver model	Maximum Pressure	FAD @ 10 bar/145 psi <sup>1)</sup>	Motor		Starter Options	Receiver Size	Noise Level <sup>2)</sup>	Weight	Dimensions L x W x H
	bar g	m <sup>3</sup> /min	kW	hp					mm
ESM02 - (230 V)	10	0.18	2.2	3	DOL	-	63	151	600 x 650 x 1100
ESM02	10	0.21	2.2	3	DOL	-	63	151	600 x 650 x 1100
ESM03	10	0.35	3	4	DOL	-	64	151	600 x 650 x 1100
ESM04	10	0.45	4	5	Star-Delta	-	67	154	600 x 650 x 1100
ESM05	10	0.66	5.5	7	Star-Delta	-	68	173	600 x 650 x 1100
ESM06	10	0.89	7.5	10	Star-Delta	-	70	179	600 x 650 x 1100

## Receiver Mounted

Gardner Denver model	Maximum Pressure	FAD @ 10 bar/145 psi <sup>1)</sup>	Motor		Starter Options	Receiver Size	Noise Level <sup>2)</sup>	Weight	Dimensions L x W x H
	bar g	m <sup>3</sup> /min	kW	hp					mm
ESM02-270 (230V)	10	0.18	2.2	3	DOL	270	63	242	1539 x 720 x 1604
ESM02-270	10	0.21	2.2	3	DOL	270	63	242	1539 x 720 x 1604
ESM03-270	10	0.35	3	4	DOL	270	64	242	1539 x 720 x 1604
ESM04-270	10	0.45	4	5	Star-Delta	270	67	245	1539 x 720 x 1604
ESM04-500	10	0.45	4	5	Star-Delta	500	67	314	1885 x 720 x 1700
ESM05-270	10	0.66	5.5	7	Star-Delta	270	68	263	1539 x 720 x 1604
ESM05-500	10	0.66	5.5	7	Star-Delta	500	68	333	1885 x 720 x 1700
ESM06-270	10	0.89	7.5	10	Star-Delta	270	70	269	1539 x 720 x 1604
ESM06-500	10	0.89	7.5	10	Star-Delta	500	70	339	1885 x 720 x 1700

## AIRSTATION<sup>3)</sup>

Gardner Denver model	Maximum Pressure	FAD @ 10 bar/145 psi <sup>1)</sup>	Motor		Starter Options	Receiver Size	Noise Level <sup>2)</sup>	Weight	Dimensions L x W x H
	bar g	m <sup>3</sup> /min	kW	hp					mm
ESM02FS-270 (230V)	10	0.18	2.2	3	DOL	270	63	261	1539 x 720 x 1604
ESM02FS-270	10	0.21	2.2	3	DOL	270	63	261	1539 x 720 x 1604
ESM03FS-270	10	0.35	3	4	DOL	270	64	261	1539 x 720 x 1604
ESM04FS-270	10	0.45	4	5	Star-Delta	270	67	270	1539 x 720 x 1604
ESM04FS-500	10	0.45	4	5	Star-Delta	500	67	339	1885 x 720 x 1700
ESM05FS-270	10	0.66	5.5	7	Star-Delta	270	68	289	1539 x 720 x 1604
ESM05FS-500	10	0.66	5.5	7	Star-Delta	500	68	358	1885 x 720 x 1700
ESM06FS-270	10	0.89	7.5	10	Star-Delta	270	70	295	1539 x 720 x 1604
ESM06FS-500	10	0.89	7.5	10	Star-Delta	500	70	364	1885 x 720 x 1700

<sup>1)</sup> Data measured and stated in accordance with ISO 1217 Ed. 4, Annex C and the following conditions: Air Intake Pressure 1 bar a ; Air Intake Temperature 20° C ; Humidity 0 % (dry)

<sup>2)</sup> Measured in free field conditions in accordance with ISO 2151, tolerance ± 3 dB(A)

<sup>3)</sup> The refrigerant dryer requires a separate electric supply. Data refer to ISO 7183, A; pressure dew point 3° C

## Global Expertise

The GD rotary screw compressor range from 2.2 – 500 kW, available in both variable and fixed speed compression technologies, are designed to meet the highest requirements which the modern work environment and machine operators place on them.



The oil-free EnviroAire range from 15 – 315 kW provides high quality and energy efficient compressed air for use in a wide range of applications. The totally oil-free design eliminates the issue of contaminated air, reducing the risk and associated cost of product spoilage and rework.



A modern production system and process demands increasing levels of air quality. Our complete **Air Treatment Range** ensures the highest product quality and efficient operation.



Compressor systems are typically comprised of multiple compressors delivering air to a common header. The combined capacity of these machines is generally greater than the maximum site demand. To ensure the system is operated to the highest levels of efficiency, the **GD Connect** air management system is essential.



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For additional information please contact Gardner Denver or your local representative.

Specifications subject to change without notice.