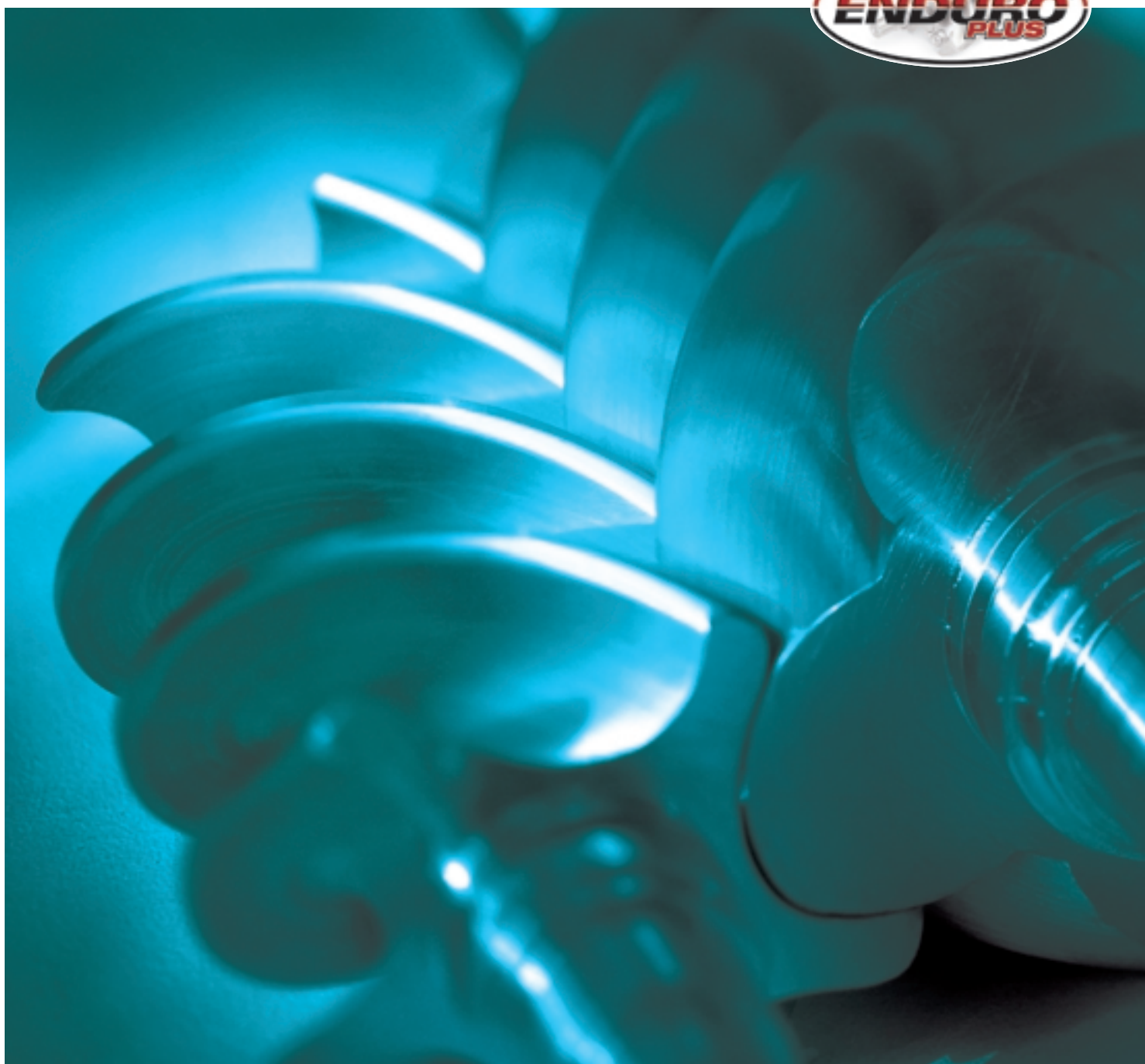


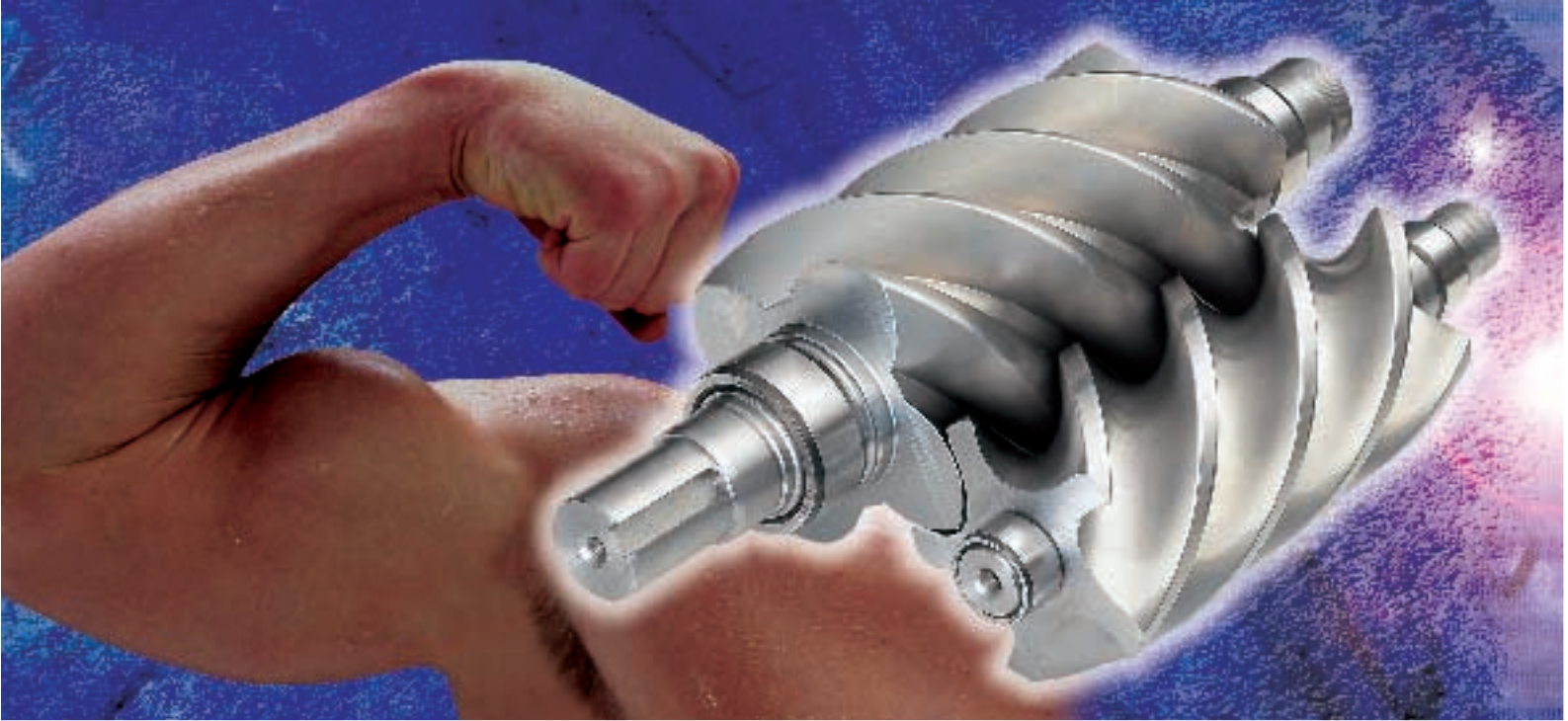
**Gardner**  
**Denver**

# SCREW COMPRESSORS

22-37 kW – 50 Hz



ES 22, ES 30, ES 37



# EVERYTHING YOU NEED IN A HEAVY-DUTY COMPRESSOR

## **P**erfect for industrial use

Gardner Denver has developed its ES 22-37 kW compressor series to provide a full package of benefits for all industrial and heavy-duty compressed air applications. We have increased the capacity by several percentage points, achieved noise levels lower than ever before and made servicing quick and easy. With this compressor series, Gardner Denver reaches new dimensions of performance in the same compact size for easy transportation and placement.

## **Your silent partner**

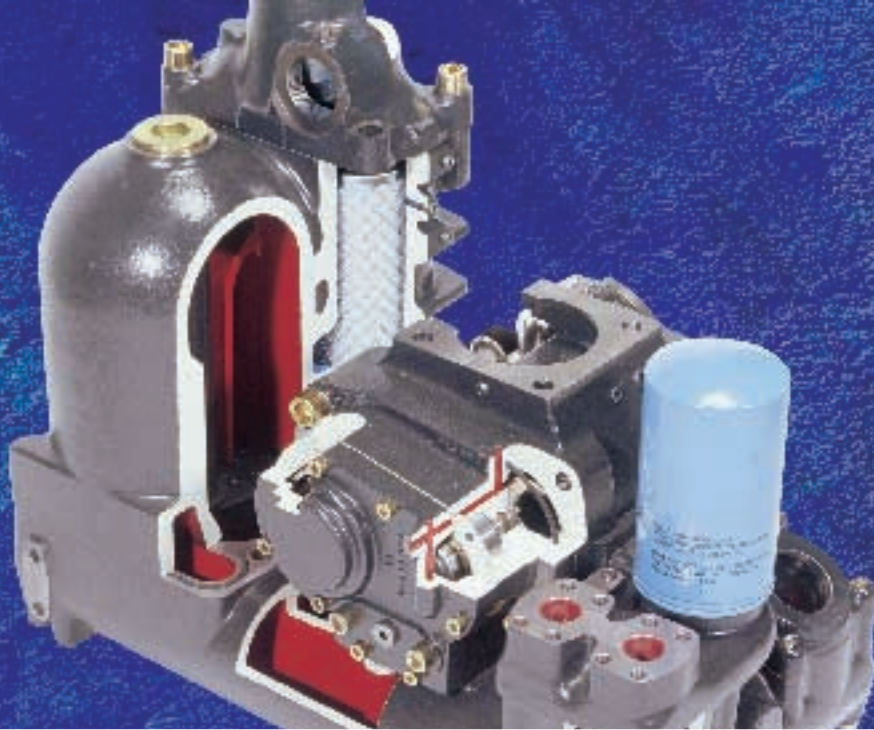
When it comes to noise reduction, the 22-37 kW compressor series is in a class of its own. With its efficient super silencer, even the largest compressor operates at only 68 dB(A)\*\*.

## **A full package of benefits for you**

- Increased output
- Low noise levels
- 30% less parts than in conventional compressors
- Unique, leak-tight TEMPEST® design
- Automatic belt-tensioning
- Advanced AirPilot controls
- Built-in dryer for easy 'plug-and-play' assembly

These benefits represent savings in both energy consumption and maintenance time. At Gardner Denver, we strongly believe that the ES 22-37 kW series will set the standard for efficient and environmentally sound industrial compressors for years to come.





## WITH A REVOLUTIONARY DESIGN

### **T**he integrated compressor unit

The heart of the ES 22-37 kW compressor series is the revolutionary integrated TEMPEST® compressor unit.

The TEMPEST® is an excellent example of Gardner Denver's ingenuity as a leading developer of compressor technology. With ENDURO® air end, it fulfills the most demanding specifications for all kinds of industrial compressor applications.

#### **More size – more benefits**

Designed to match the ES 22-37 kW compressor series, the TEMPEST® 12 provides unbeatable benefits.

- Compact cast-iron design
- ENDURO® 12 air end for record-breaking reliability
- Completely leak-tight o-ring design
- Reduced noise levels

#### **Superior oil separation**

The TEMPEST® features an innovative three-stage oil separation system which is superior to the oil separation of

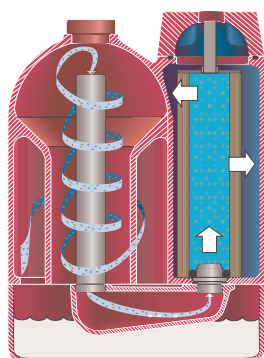
any other oil-lubricated screw compressor. The result is an oil carry-over of less than 3.0 mg/m<sup>3</sup>.

- Superior oil separation efficiency
- Single unit to eliminate extra oil separation systems
- Low internal pressure drop
- Original Gardner Denver innovation, in-to-out flow separator element
- Integrated discharge valve, oil filter and oil thermostat

#### **Built-in dryer – the 'plug and play' option**

The optional built-in refrigerated dryer reduces both extra installations and the required floor space, making the compressor easier to install.

- Low pressure drop
- Dryer dew point; 3 °C at 25 °C ambient.



*TEMPEST® oil separation principle: Compressed air-oil mist flows from the air end to mechanical impingement chamber. The flow then enters the centrifugal cyclone for high efficiency separation. After that, the air flows to high-capacity separator elements for final separation, after which it passes through the minimum pressure discharge valve further on in the process.*



# EVERYTHING MADE **EASIER**

## **L**ess maintenance

With 30% less parts, the ES 22-37 kW compressor series needs less maintenance and requires less stocked parts. With all service points accessible from one side, these compressors are easier to service and assemble than ever.

### **Airpilot for a steady compressor run and proactive service**

Reliable AirPilot controls facilitate digital readings for the most common compressor variables. An advanced service countdown indicator tells you



when the next service is due, thereby enabling proactive service planning.

- Easy-to-understand symbols, such as pressure, temperature and dryer dew point
- User-configurable settings

### **Automatic belt-tensioning**

The simple yet advanced belt-tensioning is automatic. It provides the optimal belt tension in all operating conditions – no additional adjusting required.

- Extended belt life – no wear and tear from extra pulleys
- Quick and easy belt change in less than a minute without tools

### **High-efficiency, high-quality motors**

Electra Screw motors are yet another example of high quality and high efficiency. Gardner Denver uses the best electric motors available.

- IP55 protection
- Insulation class F
- Thermistor protection



# ENDURO® — THE WORLD STANDARD FOR ENDURANCE AND EFFICIENCY

## **E**nduring quality

The ES 22-37 kW compressor series features the proven ENDURO® air end for true 24-hour-a-day heavy-duty use. As the world's most manufactured air end, ENDURO® has set new standards for air end endurance and efficiency. This air end can be economically used in a wide range of industrial applications.

## Unique TAMROTOR® technology

The ENDURO® design is based on an innovative and proprietary rotor profile, resulting from TAMROTOR®'s almost 40 years of expertise as an industry leader in screw compressor technology.

- Unique lobe combination for short seal line means fewer leaks
- Patented rotor profile yields maximum performance and high efficiency
- Ultra-modern manufacturing technology guarantees high and consistent quality

## The number one

Numerous global screw compressor manufacturers regard ENDURO® as their absolute choice and over 100,000 ENDURO® units have made their mark as the number one in the world market.

Once you've seen for yourself how ENDURO® works, we're sure you'll agree that its endurance and quality outperform anything you've experienced before.



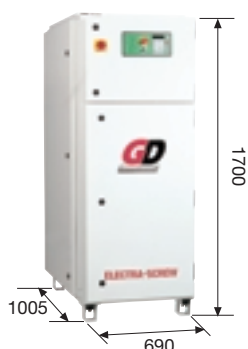
# TECHNICAL DATA

Gardner Denver Model	Maximum pressure*		Capacity at nom. pressure**		Motor power 50 Hz		Net weight kg	Compressed air outlet	Noise level*** dB(A)
	bar	psig	m <sup>3</sup> /min	cfm	kW	Hp			
ES 22	7.5	110	3,84	136	22	30	628	G 1.1/4	66
	10	145	3.14	111					
	13	190	2.50	88					
ES 30	7.5	110	5.24	185	30	40	645	G 1.1/4	68
	10	145	4.34	153					
	13	190	3.71	131					
ES 37	7.5	110	6.31	223	37	50	670	G 1.1/4	68
	10	145	5.48	194					
	13	190	4.70	166					

\* For RD models max. pressure is 0.25 bar less. Pressure dew point of integrated dryer at reference conditions: +3°C. Reference conditions: intake air temperature for dryer: +35°C, ambient temperature: +25°C.

\*\* Capacity measured in accordance with Cagi Pneurop PN2CPTC2 and the following working pressures are used: 7.5 bar models at 7 bar, 10 bar models at 9 bar and 13 bar models at 12 bar

\*\*\* Noise level measured in accordance with Cagi Pneurop PN8NTC2.2 ± 3 dB (A) with Super Novox.



## Standard Equipment

- Air inlet filter
- Fully automatic capacity control: full load, off-load, idle run and start/stop
- AirPilot microprocessor controller
- 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
- Alarms for
  - oil filter
  - inlet filter
  - oil separator elements
  - motor overload
  - compressor overload (alarm at 100 °C and tripping at 115 °C)
  - service interval

- Safety valve
- Running condition indicators:
  - pressure
  - temperature
  - hour meter; total running hours, full load
- Automatic re-start after power cut
- Automatic belt-tensioning system
- Epoxy powder painted enclosure
- After cooler and moisture separator with automatic drain
- Three-way mixing oil thermostat
- Integrated TEMPEST® compressor unit with ENDURO® air end

## Optional Extras

- DigiPilot microprocessor controller
- Pre-filter for air intake
- Additional super silencers
- Low pressure models
- Special voltages
- Water-cooled versions
- Integrated RD dryer

The refrigerant used in the integrated dryers fulfills the EC norm No 2037/2000 requirements

- Heat recovery systems: DIR, PRE and +W

## Auxiliary Equipment

- MiniPilot multi-compressor controller for 2-3 equal size compressors
- MultiPilot multi-compressor controller for several compressors
- Air dryers
- Compressed air after treatment line

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**Tempest;** Australia, European Union, Korea, Russia, United States

# Gardner Denver

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