

**Gardner  
Denver**

# Oil Free Screw Compressors

Ultima™ U75 - U160  
Oil-free variable speed screw  
compressor technology

**PureAir**  
ISO CLASS: ZERO PLUS SILICONE FREE

Industry 4.0



Ultimate oil-free  
efficiency - guaranteed



## Why oil-free? Don't compromise on quality...

The Ultima series from Gardner Denver sets the standards for air purity. These revolutionary oil-free compressors are ISO 8573-1 CLASS 0 compliant.

Offering not only 100% oil-free air but also breakthrough energy efficiency, these compressors are made to meet the precise needs of a diverse range of industries and applications with stringent oil-free air requirements.

- Automotive
- Lab/Research
- Biotechnology
- Pharmaceutical
- Food & Beverage
- Semi-conductor
- Electronics

**PureAir**  
ISO CLASS: ZERO PLUS SILICONE FREE



Pure air quality demands are rapidly growing with new regulations and laws regarding oil contamination throughout multiple industries and applications.

Gardner Denver has designed the Ultima compressor specifically for these applications that require **100% OIL-FREE AIR.**

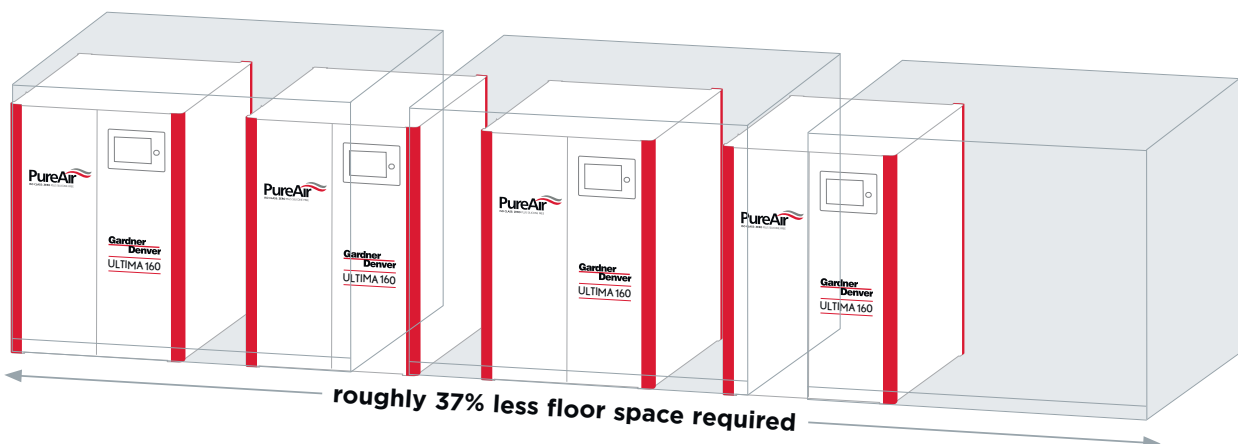
**GERMAN**   
**ENGINEERING**  
& DESIGN



## Ultima™ – The real deal

The unique patented design delivers numerous benefits to compressed air users:

- ▶ **100% oil and silicone free**
  - Highest levels of air quality
- ▶ **Highest efficiency levels**
  - Low running costs
- ▶ **Low noise design**
  - Installation at point of use
- ▶ **LP & HP airends individually driven**
  - Energy efficient across the flow range
- ▶ **Very efficient heat recovery**
  - Most efficient machine
- ▶ **Easy installation**
  - No ducting required
- ▶ **On-board monitoring**
  - Very user-friendly
- ▶ **Available with iConn remote monitoring**
  - IoT connected



### Unrivalled power to weight ratio

Ultima contributes to bottom line cost savings in many ways. Not only do they deliver outstanding efficiency and significantly lower lifecycle costs, the Ultima requires on average, 3.4 m<sup>3</sup> less space (or up to 37% less floor space) than a conventional two-stage oil-free compressor. This allows easy installation in the smallest possible space - not only a benefit where space is limited - it also translates into property cost saving.

# Oil-Free Clean Air

Premium Technology

User Friendly

Saving



## Cost reducing innovative design

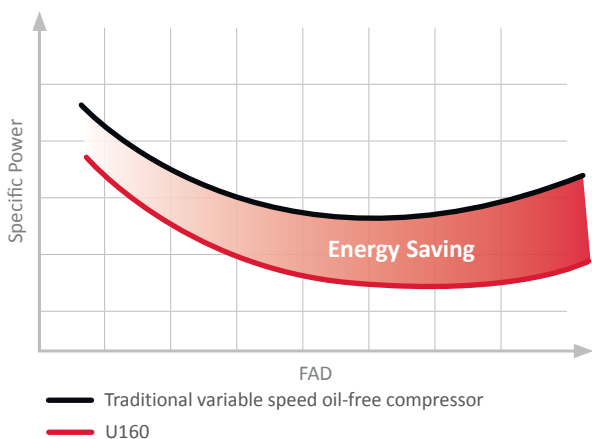
With each compression stage being driven by individual, highly efficient, permanent magnetic motors with two separate airends - unlike traditional two-stage compression technology - the on-board controller perfectly and intelligently matches demand efficiency by independently controlling the speed of each stage.

By varying the speed of the oil-free compressor, the Ultima achieves the highest levels of productivity across the full turndown range.

This allows the compressor to use 13% less power than traditional technology equating to an average saving of up to €8,000\* per annum.

\*based on average running hours and conditions.

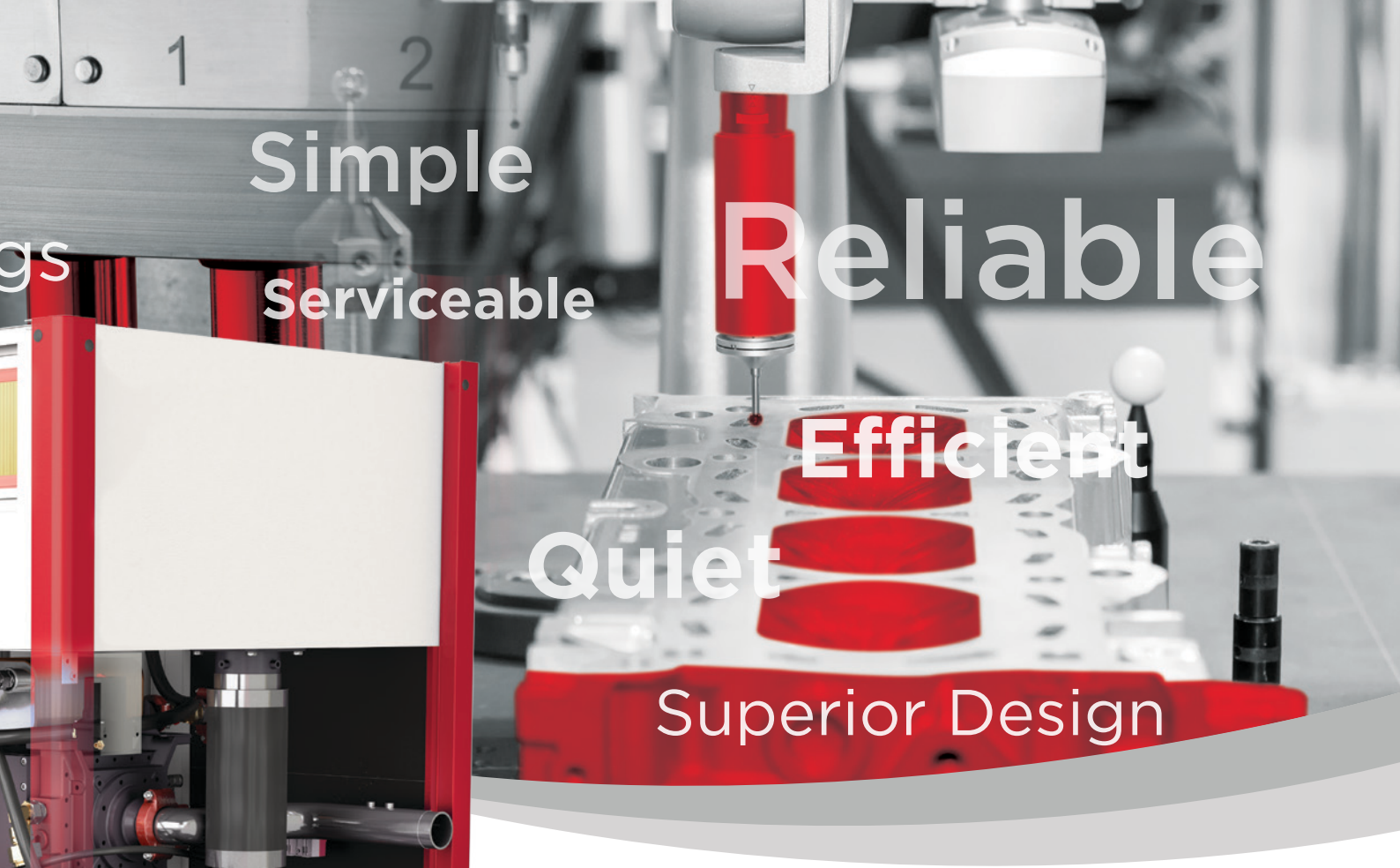
### Efficiency - 160kW at 10 bar (g)



## Airend performance - the perfect balance

Unlike conventional oil-free compressors that have both stages controlled by a single drive - as the machine speeds up or slows down, demand changes and efficiency is affected - Ultima utilises two high speed, highly efficient motors that combine with the high efficiency airends.

Maximum efficiency is provided by the intelligent on-board controller, which perfectly matches the delivery ratio by individually controlling the speed of each stage.



Simple

Serviceable

Reliable

Efficient

Quiet

Superior Design

## Optimum heat recovery - ultimate cooling

Using a closed loop water cooling system to cool all major components, and with separate water cooling for the inter and after coolers, Ultima compressors offer the highest outputs for heat recovery - approximately 10% more than comparable compressors on the market. Ultima also offers the option of air-cooling.

## Premium productivity

Where the majority of oil-free airends on the market quickly succumb to performance deterioration, Ultima utilises German engineered and manufactured airends incorporating a special coating to ensure life-long protection of the compressor and maximum efficiency.

## Quiet. Ultima at work!

The unique design of Ultima means that it is very quiet - just 69dB(A) for a 160kW compressor. So for customers wanting to use air compressors at the point of use, Ultima is the perfect choice - no complicated and expensive pipework plus maximised efficiency.

# Industry 4.0

## GD Pilot XTC Peace-of-mind protection - smarter performance

Fitted with an updated GD Pilot XTC touch screen controller, Ultima provides the ability to monitor the installation's operational parameters, through a multilingual and user-friendly control system, which is essential for protecting your investment and lowering running costs.

### iConn - Supporting Industry 4.0 standards

The controller in turn allows connection to iConn - the real-time monitoring service providing in-depth, accurate and real-time knowledge about the system. This pro-active, smart technology provides total peace-of-mind, ensuring that production planning is protected by precise statistics and insight generated by the controller. This data keeps users informed on true and current performance and will highlight any cause for concern before a problem arises.



Open to API's, such as SAP, GE, Oracle, Microsoft



Analytical → Predictive → Cognitive

# The ultimate compressed air solutions from Gardner Denver

Gardner Denver provide a total compressed air solution to satisfy the most demanding of modern production systems and processes - in turn delivering the levels of air quality demanded.

Compressed air systems designed and installed by Gardner Denver utilise the latest technology which not only provides an energy efficient solution, but also, the lowest lifecycle costs.

Add to this heat recovery and sequencers to further increase efficiency and the correct filtration and drying components to ensure the optimum protection for the equipment.

Gardner Denver for the total package.

## PureCARE - our total commitment to quality and worry free ownership

The Gardner Denver PureCARE warranty and service programmes ensure uninterrupted compressed air supply coupled with best compressor performance.

The PureCARE Service Plans offer on-time servicing by our factory-trained Gardner Denver technicians, combined with the unrivalled quality of Gardner Denver genuine parts. Tailored to the application and site circumstances, the maintenance schedule always fits operators' needs, providing more uptime, increased reliability and ultimately more productivity.



## Technical data

### Ultima™ U75 - U160

Model	Working Pressure	Drive Motor	FAD at 8 bar g* min - max	FAD at 10 bar g* min - max	Noise level	Dimensions L x W x H	Weight
	bar g	kW	m <sup>3</sup> /hr	m <sup>3</sup> /hr	dB(A)	mm	[kg]
U75	4 - 10	75	6.7 - 12.5	7.7 - 11.2	69	2044 x 1394 x 1992	2500
U90	4 - 10	90	6.7 - 14.9	7.7 - 13.4	69	2044 x 1394 x 1992	2500
U110	4 - 10	110	6.7 - 18.2	7.7 - 16.3	69	2044 x 1394 x 1992	2500
U132	4 - 10	132	6.7 - 21.5	7.7 - 19.6	69	2044 x 1394 x 1992	2500
U160	4 - 10	160	6.7 - 23.3	7.7 - 21.5	69	2044 x 1394 x 1992	2500

<sup>1)</sup> Data measured and stated in accordance with ISO 1217, Ed. 4, Annex C & E at the following conditions:

Air Intake Pressure: 1 bar a / 14.5 psia

Air Intake Temperature: 20°C / 68°F

Humidity: 0% (dry)

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



## 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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[www.gardnerdenver.com/gdproducts](http://www.gardnerdenver.com/gdproducts)

For additional information please contact Gardner Denver or your local representative.  
 Specifications subject to change without notice.

