





Innovative Oil-Free Compressed Air Technologies

**ISO CLASS: ZERO PLUS SILICONE FREE** 

Ultima™ 55 - 160kW

Variable Speed Air and Water Cooled



GERMAN ENGINEERING DESIGN&MANUFACTURE

# Utima redefines efficiency

#### Ultima™ delivers on every level

Ultima is a groundbreaking oil-free PureAir compressor from CompAir. Its unique design features two dry screw airends, each driven by a variable-speed, IE5 permanent magnet synchronous motor, offering exceptional efficiency compared to traditional oil-free technology.

With energy being the highest lifecycle cost, Ultima combines ultimate performance and efficiency while delivering a footprint 34% smaller than conventional two-stage oil-free compressors.





4 to 10 bar

Volume flow

Nominal power



## **100% oil and silicone-free** for clean air critical applications

The Ultima compressors are 100% oil and siliconefree and meet **ISO 8573-1 Class Zero (2010)**, making them the ideal choice for stringent oil-free applications within food and beverage, pharmaceutical, electronic and the automotive industries.



#### Why Choose Ultima™?

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

#### **Unrivalled** Energy Efficiency

The Ultima's advanced 2-stage airend design and high-speed permanent magnet (PM) motors deliver best-in-class efficiency, exceeding IE5 and IES2 standards—significantly lowering energy costs.

#### Space-Saving, Compact Design

With a 34% smaller footprint than its predecessor and up to 50% smaller than competing models, Ultima maximises valuable floor space while delivering powerful performance.

#### **Direct-Drive, Gearbox-Free Technology**

A fully integrated airend-drive system removes the need for a gearbox, reducing friction losses, wear and tear, and overall maintenance needs.

#### **Advanced Heat Recovery** for Cost Savings

All models support heat recovery - producing hot water up to 90°C, allowing industries to reuse waste heat for process heating, water heating, and facility warming, dramatically cutting operational costs.

#### Whisper-Quiet Operation

Ultima creates a quieter working environment designed for ultra-low noise levels, making it ideal for noise-sensitive applications.

#### **Smart Digital Control** & Remote Monitoring

The intuitive Delcos XL SE7 Controller provides a real-time overview of compressor performance, remote connectivity, and predictive maintenance insights—enhancing uptime and efficiency.

#### Future-Ready Power Upgrades

Ultima can be scaled up with on-demand power upgrades as your business grows, eliminating the need for costly additional compressors.

Multiple energy saving dryer options for lowest pressure dew points - e.g. Subfreezing, Drum dryer, HOC.

#### Comprehensive Service & Predictive Maintenance

Built-in iConn connectivity provides proactive service alerts and real-time system monitoring powered by Ecoplant, minimising downtime and ensuring continuous operation.

Ultima: Performance, Reliability, and Sustainability - All in One!



# Ituly superior, however Colon at it

#### The unique drive design

Traditional oil-free compressors use:

- · A single motor
- · A gearbox to drive both airends
- This leads to energy loss due to friction

#### Ultima offers a more efficient solution by:

• Replacing the gearbox with ultra-high-efficiency motors

#### Each airend operates:

- At variable speeds based on demand.
- Independently controlled by Ultima's intelligent "digital gearbox"

#### This design ensures:

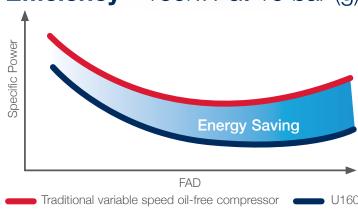
- Maximum efficiency at all times
- Optimal pressure ratios, adjusting in real-time

#### **Even greater** efficiency

- Regulated speed compressors go into idle run at minimum speed, wasting energy
- Ultima uses 45% less energy in idle run compared to conventional two-stage compressors
- A 160kW Ultima compressor uses less than 8kW in idle run



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





#### In-Built Power Upgrades

Are you prepared for your future compressed air needs?

As your business grows, so will your demand! The next-generation Ultima is available now, offering flexible adjustment of power and air delivery to match changing requirements.

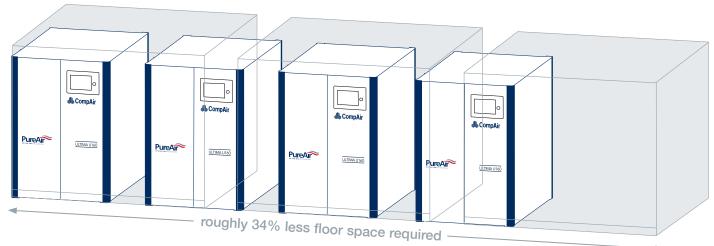
- Much cheaper than an investment in new or additional compressors
- · No waiting period for build and delivery
- No downtime for installation and commissioning

#### Premium efficiency airends

Unlike most oil-free airends that quickly lose performance, the German-engineered and manufactured airends in Ultima use a special coating to ensure maximum efficiency and protection throughout the compressor's lifetime.

#### **Lowest** noise levels

Ultima is exceptionally quiet, with 160 kW models reaching just 69 dB(A) (water-cooled) and 70 dB(A) (air-cooled) — far quieter than any comparable oil-free compressor, making it ideal for point-of-use operation.



#### **Best-in-Class** footprint

The second-generation Ultima compressors need 34% less floor space than their predecessors and up to 50% less than other brands, allowing easy installation even in tight spaces — saving both space and property costs.





SDGS

# Heat Recovery with oil-free Ultima compressors

All models support heat recovery – producing hot water up to 90°C, allowing industries to reuse waste heat for process heating, water heating, and facility warming, dramatically cutting operational costs.

#### Use waste heat

to heat:



Spaceheating



Industrial process heat



Hot water



Pre-heating for steam generation

### The Ultima compressor range offers various heat recovery options to meet individual customer needs

- **1. Integrated heat recovery** Heat exchanger for heat recovery integrated inside the compressor package. It can be either factory fitted or supplied as retrofit kit including all necessary pipe-work and fittings.
- 2. Air-Cooled Ultima with heat recovery
- 3. Water-Cooled Ultima + Emax

### The only oil-free compressor with heat recovery

The air-cooled ULTIMA is the only air-cooled oil-free compressor that is available with integrated heat recovery – delivering significant energy and costs savings.



Ultima Air Cooled



#### **Benefits**

#### Give your compressed air system an efficiency upgrade

With a CompAir heat recovery system, the heat generated by the compressor can be reused.

- Extremely short payback time
- Reduced CO, emissions
- Turnkey solutions available

- Simple installation
- · Improved environmental footprint
- · No impact on compressed air supply

#### Calculate your savings

Find out your energy and cost savings when you invest in a latest-generation compressor and a heat recovery system.





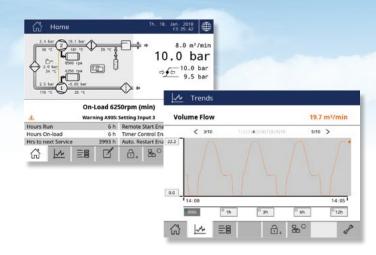
# Compressed air solution

#### **Delcos XL SE7** controller **Features**

- 7" high resolution touch screen display (1024 x 600 pixels)
- 5 standard screens
- 5 trend graphs available
- · Constant control of all relevant parameters
- · Fully compatible with SmartAir Master
- · Optional Base Load Sequencing
- Interfaces: RS-485 connectivity, Modbus RTU,
   Profibus integrated Webserver, onboard SD card and embedded iConn and much more

#### **Benefits**

- Increased operational efficiency due to intuitive, easy-to-use interface
- Intuitive operation with a user-friendly touch screen and clear menu structure
- Improved global accessibility thanks to multilingual support
- Lower operational costs through continuous monitoring of key parameters
- Enhanced investment protection by ensuring reliable performance and minimising downtime



#### **Options**

- Hot air discharge for the connection of heat-of compression dryers and rotating drum dryers
- Canopy stand still heater
- U-Cooler (External cooling module for watercooled models including pump station)
- Heat Recovery for air-cooled models
   Integrated heat exchanger for heat recovery including control and backup cooling system
- Heat Recovery for water-cooled models
   Different heat recovery options accounting
   for individual customer needs

Various controller options

And many more...



Single Source Air Treatment Systems - Air Quality Assured

#### **Designed** and manufactured by CompAir

- Air dryers to improve productivity, system efficiency and product / process quality
- · Leak-free, low pressure drop EPL Piping
- Drain Valves remove contaminates from the system without losing compressed air
- Flow and system controllers for compressed air system optimisation
- Filtration products like high-quality in-line filters and activated carbon towers ensure clean air and improve productivity
- Oil Water Separators remove lubricant from compressed air condensate for an environmentally friendly disposal

Meeting & exceeding expectations

#### **Single Source Air Treatment Systems** – The Latest Innovation

The NEW Sub-Freezing Dryer from CompAir

- Revolutionary & UNIQUE design concept sub-freezing dryer.
- -20°C sub-zero pressure dew point (PDP) meeting Class 3 requirements according to ISO 8573-1
- Low operating, energy and upfront investment
- The first of its kind delivers -20°C (-4°F) PDP at 70% lower costs compared to desiccant technologies!





### Machine intelligence drives greater energy efficiency

Ecoplant is an Al-driven energy efficiency solution that optimises compressed air systems. It continuously monitors, analyses, and adjusts compressor operations to reduce energy waste, lower CO<sub>2</sub> emissions, and cut costs by up to 20%. Integrated with iConn, it ensures:

- · Minimised outages & stable pressure
- · ISO quality standards compliance
- Proactive issue detection to prevent downtime and enhance reliability
- Optimised energy use and reduced costs

#### iConn Compressed Air Service 4.0

The Ultima Series is equipped with iConn as standard. iConn is the smart, proactive real-time monitoring service that delivers in-depth and real-time knowledge on the system to compressed air users.

- Advanced remote analysis
- Predictive evaluates historic data
- · Maximises energy efficiency
- Optimises compressor performance
- Reduces downtime
- · Works as an open standard
- Free on new compressors can be retrofitted
- Proactive maintenance

...that is why you cannot ignore iConn!

Powered by



# Protections



#### **Invest in your future with a Service & Warranty Agreement**

Compressed air is critical to your operation. A proper maintenance strategy is crucial to avoiding unplanned, unbudgeted downtime and production interruptions. By choosing a Service agreement including an extended warranty you protect your investment.

#### It all adds up to **peace of mind**

#### **Lower Cost of Ownership**

Service and Warranty Agreements provide the most cost-effective solutions based on your customised maintenance strategy.

#### **Quality Results**

Factory trained technicians allows you to focus on your core business, while they take care of your compressor system.

#### **Increased Uptime**

Service Agreements help decrease unplanned downtime and costly production interruptions.

#### **Efficient Energy Use**

Peak system efficiency is achieved through properly performed maintenance and inspection.

#### **Peace of Mind**

A Service agreement ensures an extended warranty. Depends on duration.













#### CompAir genuine spare parts

Genuine CompAir parts and lubricants ensure that compressed air plant reliability and efficiency is maintained at the highest standards. CompAir spare parts are distinguished by:

- · Long service life, even under harshest conditions
- Minimum losses contributing to energy savings
- · High reliability improving plant up-time
- · Products manufactured with the strictest Quality Assurance Systems







## Technical Data

#### CompAir Ultima™

Compressor Model	Cooling Method		Drive Motor	FAD at 8 bar g 1] min - max	FAD at 10 bar g <sup>1]</sup> min - max	Noise Level <sup>2]</sup> at 100% Load	Dimensions L x W x H	Weight
		[bar g]	[kW]	[m³/min]	[m³/min]	[dB(A)]	[mm]	[kg]
U55s	Water	5 - 10	55	4.4 - 10.4	4.3 - 8.9	64	1831 x 1081 x 1998	1750
U75	Air	4 - 10	75	6.7 - 11.9	7.7 - 9.9	64	3244 x 1394 x 1992	3360
	Water					63	2044 x 1394 x 1992	2750
U75s	Water	5 - 10	75	4.4 - 14.4	4.3 - 12.8	67	1831 x 1081 x 1998	1750
U90	Air	4 - 10	90	6.7 - 14.9	7.7 - 12.7	65	3244 x 1394 x 1992	3360
	Water					64	2044 x 1394 x 1992	2750
U90s	Water	5 - 10	90	4.4 - 17.0	4.3 - 15.5	68	1831 x 1081 x 1998	1750
U110	Air	4 - 10	110	6.7 - 18.5	7.7 - 16.3	65	3244 x 1394 x 1992	3360
	Water					64	2044 x 1394 x 1992	2750
U110s	Water	5 - 10	110	4.4 - 19.6	4.3 - 18.5	69	1831 x 1081 x 1998	1750
U132	Air	4 - 10	132	6.7 - 22.2	7.7 - 19.9	67	3244 x 1394 x 1992	3360
	Water					66	2044 x 1394 x 1992	2750
U160	Air	4 - 10	160	6.7 - 23.9	7.7 - 23.6	70	3244 x 1394 x 1992	3360
	Water					69	2044 x 1394 x 1992	2750

<sup>&</sup>lt;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  $\pm$  3dB(A)



#### Einbecker Brewery cut energy cost by 25% with CompAir's ULTIMA

One of the oldest breweries in the world, Einbecker Brewery, has upgraded its existing compressed air units to the Ultima technology.

With limited on-site space, the Einbecker Brewery required a compact new solution that could provide reliable and energy-efficient compressed air, while also meeting the stringent air quality requirements demanded by the site's operations. In order to meet these demands, CompAir has supplied two new 110kW Ultima compressors to the site.

"We needed a new compressed air solution to deliver improved operational efficiencies, help reduce our energy costs, and it had to be accommodated in the very tight installation space that was available on-site."

Christoph Benseler, Technical Manager, Einbecker Brewery

#### CompAir guarantees more process reliability for Fresenius Kabi

Fresenius Kabi, a large healthcare company in Friedberg/Hesse, Germany commissioned a new oilfree compressed air and adsorption dryer system from CompAir, replacing a cost-intensive rental compressor.

The company had been working long-term with an established compressor manufacturer, but decided on a new technology partner in CompAir. A key reason was the cooling capabilities of the ULTIMA and the technical design of CompAir's adsorption dryers.

"If the positive results we are achieving continue, this package of compressor and dryers will continue to be a positive addition to our business for the future."

Axel zur Strassen, Head of Utilities (Media supply), Fresenius Kabi in Friedberg

#### 13% increase in efficiency plus 100% sterile production guaranteed for Schwan Cosmetics 17,000m<sup>2</sup> production facility in Germany

Schwan Cosmetics, an internationally renowned cosmetics company came to the conclusion that only one compressor technology could fulfil their requirements - and that was the Ultima.

The Ultima from CompAir is the only compressor on the market where the low pressure and high pressure airends are driven and controlled separately without being connected by a gearbox. We see this as a benefit because we can achieve significantly higher efficiency levels in the intermediate and partial load range.

"When we made the decision to invest in a new compressor to replace the previous 160 kW device, we wanted to take a step forwards."

Gerhard Bottner, Head of Mechanical Plant Maintenance, Schwan Cosmetics



Click here to see more reasons why you cannot ignore ULTIMA!



## Innovation & Engineering Excellence

As a global leader in compressed air solutions, CompAir is committed to delivering comprehensive solutions for our industry partners. We offer cutting-edge oil-free and oil-lubricated technologies, along with a full range of downstream equipment, air treatment, and accessories.



Our vast network of dedicated CompAir sales teams and premium partners spans the globe, providing expert local service backed by advanced technology.

CompAir has consistently led the way in the development of energy-efficient, environmentally friendly compressors, helping customers achieve and exceed their sustainability goals.

#### CompAir compressed air product range

#### Advanced Compressor Technology Lubricated

- Rotary Screw
  - > Fixed and Regulated Speed
- Portable
- Vane

#### Oil-Free

- Water Injected Screw
  - > Fixed and Regulated Speed
- Two Stage Screw
- > Fixed and Regulated Speed
- Ultima®

#### **Complete Air Treatment Range**

- Filte
- Refrigerant and Desiccant Dryer
- · Condensate Management
- Heat of Compression Drver
- Nitrogen Generator

#### **Modern Control Systems**

- CompAir DELCOS Controllers
   Monitoring
- · SmartAir Master Plus Sequencer
- iConn Smart Compressor Service
- Ecoplant

#### Value Added Services

- Professional Air Audit
- Performance Reporting
- Leak Detection

#### **Leading Customer Support**

- Heat Recovery
- Assure Service Agreements
- Custom Engineered Solutions
- Local Service Centres
- Genuine CompAir Parts and Lubricants

CompAir policy is one of continuous improvement and we therefore reserve the right to alter specifications and prices without prior notice. All products are sold subject to the Company's conditions of sale.