



CompAir



PERFORMANCE, RELIABILITY & SUSTAINABILITY – ALL IN ONE.

EXPERIENCE THE NEXT GENERATION OF ULTIMA OIL-FREE COMPRESSORS



PureAir

ISO CLASS: ZERO PLUS SILICONE FREE

Innovative Oil-Free Compressed Air Technologies

Ultima™ 55 - 160 kW
Variable Speed Air and Water Cooled



Ultima™ 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.

Why Choose Ultima™?

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

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

The Ultima compressors are 100% oil and silicone-free 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.

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.



▶ Pressure range

4 to 10 bar

▶ Volume flow

4.3 to 23.9 m³/min

▶ Motor power

55 to 160 kW





Achieving substantial
efficiency gains
while surpassing
environmental targets.

Ultima™: Performance, Reliability, and Sustainability – All in One!

▶ 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.

▶ Whisper-Quiet Operation

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

▶ 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.

▶ 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.

▶ 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.

▶ 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.

GERMANENGINEERING
DESIGN & MANUFACTURE

Ultima™ truly superior, however you look 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

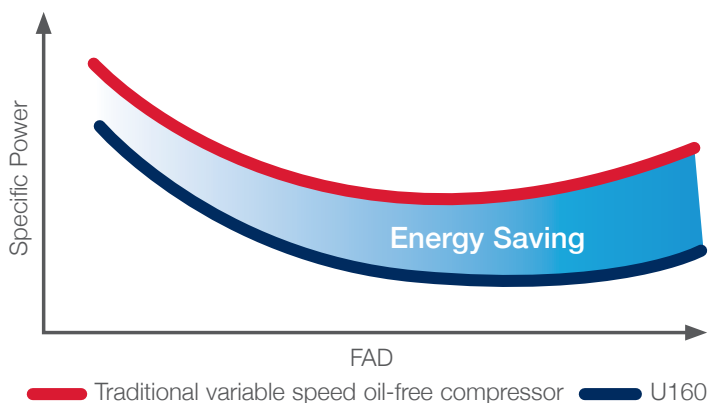
Ultima Water Cooled



Even greater efficiency

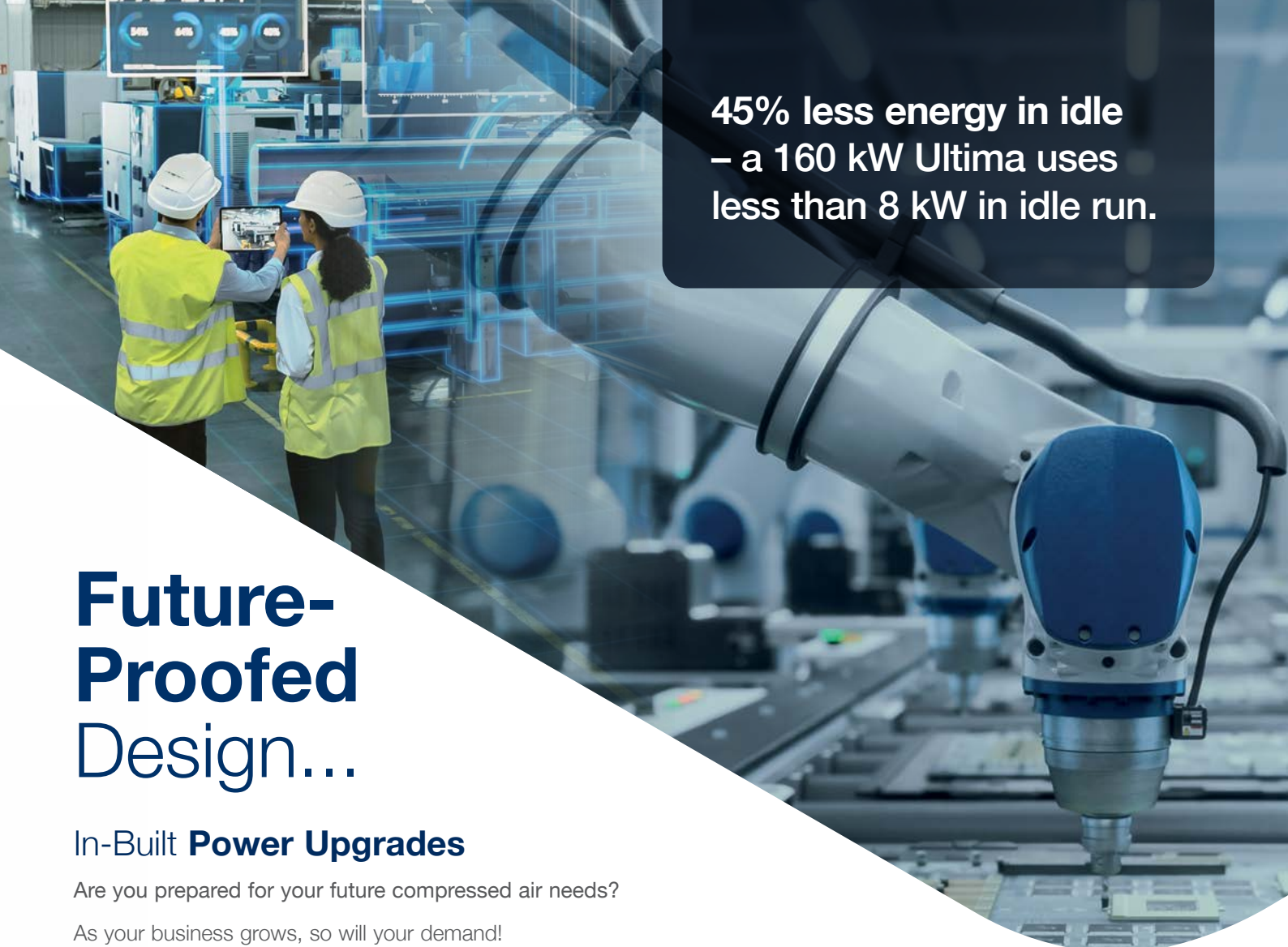
- Regulated speed compressors go into idle run at minimum speed, wasting energy
- Ultima uses 45% less energy in idle run compared to conventional two-stage compressors
- A 160 kW Ultima compressor uses less than 8 kW in idle run

Efficiency – 160 kW at 10 bar (g)



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.



**45% less energy in idle
– a 160 kW Ultima uses
less than 8 kW in idle run.**

Future- Proofed Design...

In-Built **Power Upgrades**

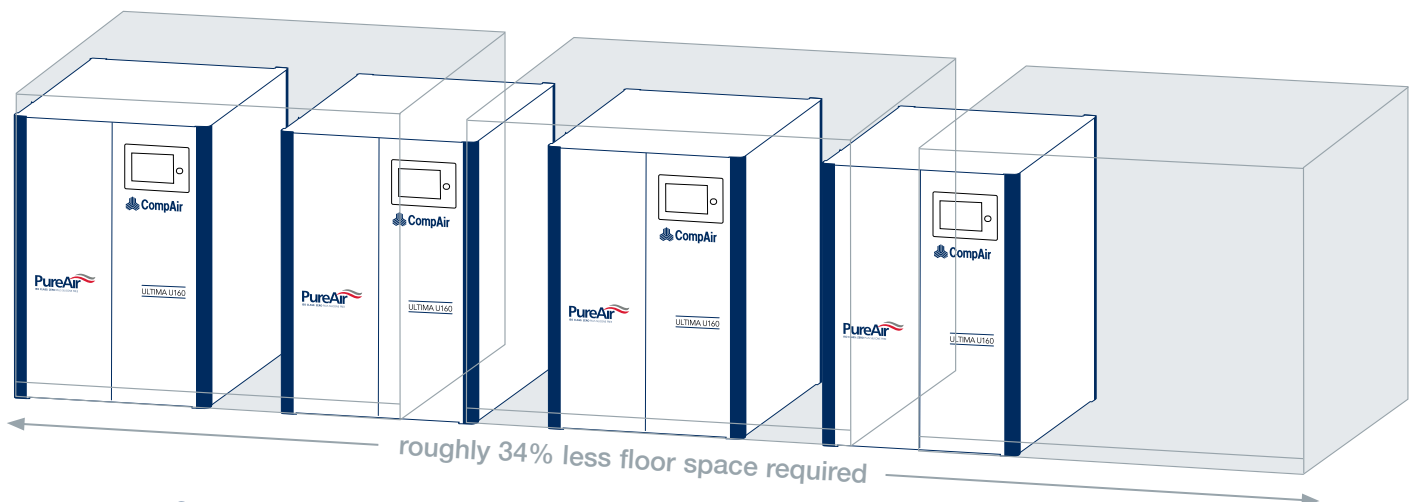
Are you prepared for your future compressed air needs?

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

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.

Heat Recovery with oil-free **Ultima™** compressors

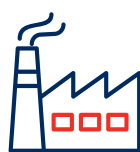


All models support **heat recovery** – **producing hot water up to 90°C**, allowing industries to **reuse waste heat** for **process heating, water heating, and facility warming**, dramatically cutting operational costs.

Use waste heat
to heat:



Space-heating



Industrial
process heat



Hot
water



Pre-heating for
steam generation

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

The only air-cooled 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.

Everything needed for a turnkey heat recovery system is fully integrated into the compressor package.



Ultima Air Cooled

Water-cooled Ultima™ + E-max

The turnkey heat recovery box for oil-free compressors.

E-max includes all the main components required for a heat recovery system. The installation of a heat recovery system using E-max is very straightforward and virtually maintenance-free.

The two frame sizes are the perfect match for connection of up to 3 water-cooled Ultima compressors 55-200 kW, and 250-400 kW, each with an extremely compact design and footprint.



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 CO₂ emissions
- Turnkey solutions available
- Simple installation
- Improved environmental footprint
- No impact on compressed air supply

Calculate your potential energy and CO₂ savings

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



Click here to **Calculate your savings now!**

1 Compressor 2 Temperature 3 Usage



Specify volume flow
How much volume flow is required?

15 m³/min



Operating pressure
Specify the level of operating pressure required

7 bar



Compressor Cooling Type
Specify how the compressor is cooled

Please choose ↓

Ultima™ – driving the **perfect** compressed air solution

[Click the link to learn more...](#)

The **Delcos XL SE7** controller

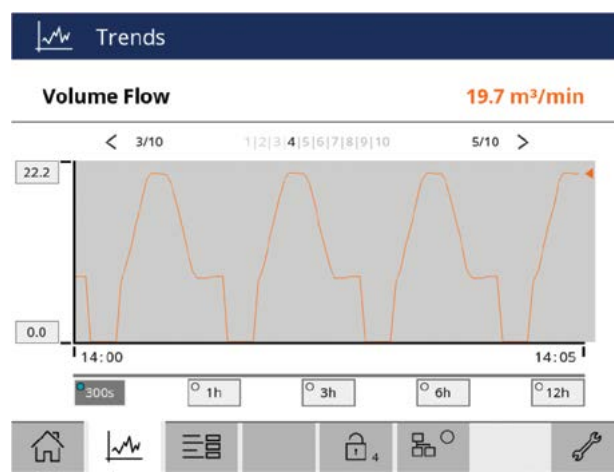
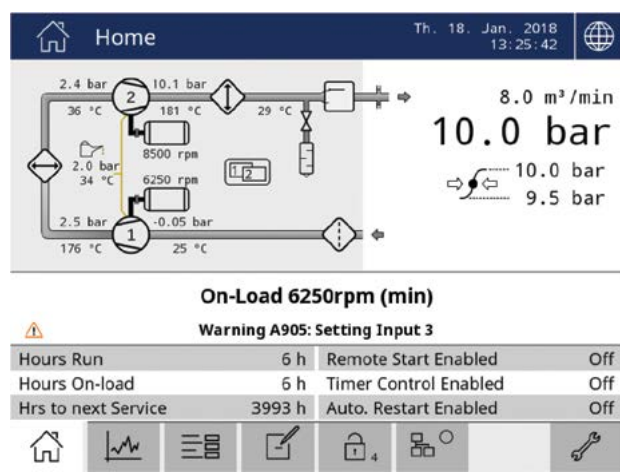
Benefits

Ultima's **Delcos XL SE7** controller delivers visibility, easy operation, connectivity and reduced downtime...

- 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

Features

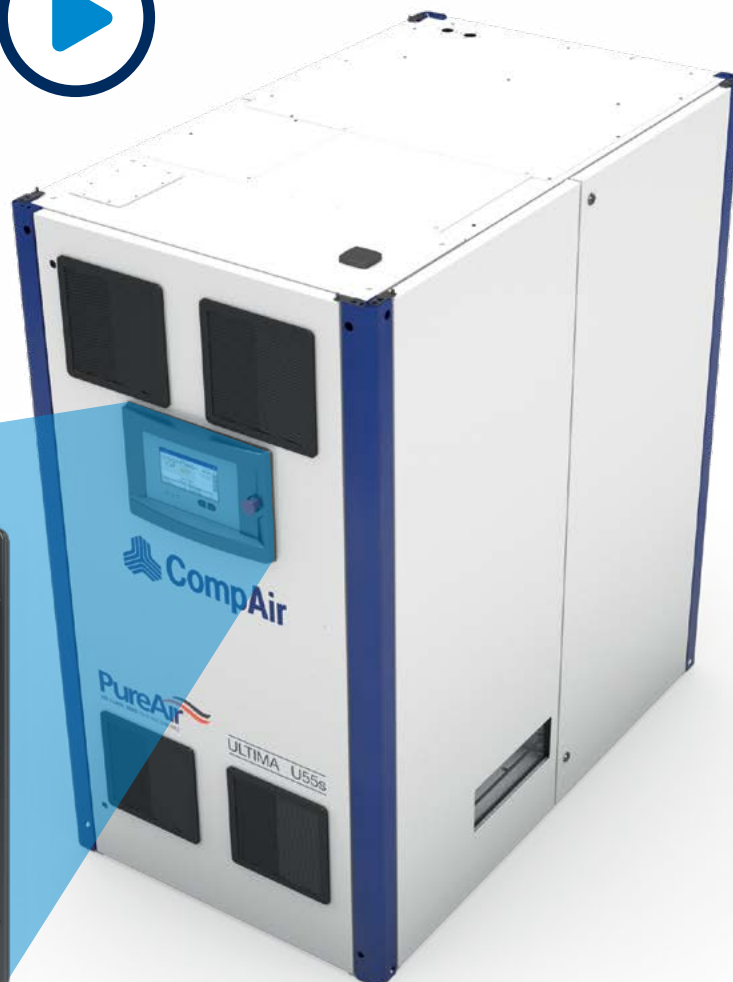
- 7" high resolution touch screen display (1024 x 600 pixels)
- 5 standard screens
- 5 trend graphs available
- Constant control of all relevant parameters
- Fully compatible with SmartAir Master
- Optional Base Load Sequencing
- Interfaces: RS-485 connectivity, Modbus RTU, Profibus integrated Webserver,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



Further Ultima™ 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 water-cooled 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...





Complete oil-free air solutions from a single source



Air Quality & Energy Efficiency Assured – designed & manufactured by CompAir

- **Air dryers** to improve productivity, system efficiency and product/process quality, including refrigerant, modular desiccant, and heatless desiccant as well as HOC (heat of compression), and Sub Zero dryers
- **Air/Water Aftercoolers** used to cool compressed air easily, optimising the downstream process
- Leak-free, low pressure drop **EPL Piping**
- **Drain Valves** remove contaminants 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
- **Oxygen and Nitrogen Generators** using innovative PSA technology to provide a reliable and instant source of oxygen or nitrogen, cutting out the complex and costly process of managing and storing traditional gas supplies



Single Source Air Treatment Systems

– The Latest Innovation

THE 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!**

Meeting & exceeding expectations



Predictive Maintenance

Powered by



ECOPLANT



[Click the link to learn more...](#)



Machine intelligence drives greater energy efficiency

Ecoplant is an AI-driven energy efficiency solution that optimises compressed air systems. It continuously monitors, analyses, and adjusts compressor operations to reduce energy waste, lower CO₂ emissions, and cut costs. **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

...exactly why
you cannot ignore iConn!



[Click the link to learn more...](#)



CompAir genuine spare parts

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

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





Protect your investment



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.

Tailored service and warranty packages are available, tailored to your own specific needs.

We are so sure of our groundbreaking technology that **we include a 12 year warranty on the airends!**

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

LOWER COST OF OWNERSHIP

Assure 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 & Warranty 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

Assure Service agreements ensure an extended warranty. Depends on duration.



Ultima™ in Action

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 110 kW 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 oil-free 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 17,000m² 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!



Technical Data CompAir Ultima™

Compressor Model	Cooling Method	Working Pressure [bar g]	Drive Motor [kW]	FAD at 8 bar g ¹⁾ min - max [m³/min]	FAD at 10 bar g ¹⁾ min - max [m³/min]	Noise Level ²⁾ at 100% Load [dB(A)]	Dimensions L x W x H [mm]	Weight [kg]
U55s	Air	5 - 10	55	4.4 - 10.4	4.3 - 8.9	72	2281 × 1081 × 1998	2300
	Water					64	1831 × 1081 × 1998	1750
U75s	Air	5 - 10	75	4.4 - 14.4	4.3 - 12.8	73	2281 × 1081 × 1998	2300
	Water					67	1831 × 1081 × 1998	1750
U75	Air	4 - 10	75	6.7 - 11.9	7.7 - 9.9	64	3244 × 1394 × 1992	3360
	Water					63	2044 × 1394 × 1992	2750
U90s	Air	5 - 10	90	4.4 - 17.0	4.3 - 15.5	74	2281 × 1081 × 1998	2300
	Water					68	1831 × 1081 × 1998	1750
U90	Air	4 - 10	90	6.7 - 14.9	7.7 - 12.7	65	3244 × 1394 × 1992	3360
	Water					64	2044 × 1394 × 1992	2750
U110s	Air	5 - 10	110	4.4 - 19.6	4.3 - 18.5	75	2281 × 1081 × 1998	2300
	Water					69	1831 × 1081 × 1998	1750
U110	Air	4 - 10	110	6.7 - 18.5	7.7 - 16.3	65	3244 × 1394 × 1992	3360
	Water					64	2044 × 1394 × 1992	2750
U132	Air	4 - 10	132	6.7 - 22.2	7.7 - 19.9	67	3244 × 1394 × 1992	3360
	Water					66	2044 × 1394 × 1992	2750
U160	Air	4 - 10	160	6.7 - 23.9	7.7 - 23.6	70	3244 × 1394 × 1992	3360
	Water					69	2044 × 1394 × 1992	2750

¹⁾ 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)

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



Innovation & Engineering Excellence

A leading global manufacturer of a wide range of world-class compressed air solutions, CompAir is dedicated to providing a complete solution for our industry partners. From the latest advances in oil-free and oil-lubricated technologies to a complete range of downstream equipment, air treatment and accessories.

An extensive network of dedicated CompAir sales companies and premium partners across all continents provide global expertise with a truly local service, ensuring our advanced technology is backed up with the right support.

CompAir has consistently been at the forefront of compressed air systems development, culminating in some of the most energy efficient and low environmental impact compressors on the market today, helping customers achieve or surpass their sustainability targets.

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

- Filter
- Refrigerant and Desiccant Dryer
- Condensate Management
- Heat of Compression Dryer
- 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.

