



# 100% Oil-Free

Oil-Free Rotary Screw Compressors  
Fixed & Regulated Speed (RS)

PureAir

ISO CLASS ZERO PLUS SILICONE FREE



Innovative Oil-Free  
Compressed Air Technologies

**D75 - D160**  
**D110RS - D160RS**

Air and Water Cooled



# When PureAir Technology is High Priority

There's a lot riding on the quality of your air. The presence of particles, condensate, oil and oil vapor in a compressed air system can lead to downtime, product spoilage and recall, damage to your brand reputation, or worse, harmed consumers and product liability.

### For lower cost of ownership

Higher initial costs for oil-free systems are more than offset by lower operational and maintenance costs over a system's life to maintain the highest air quality

### For reliability

A robust product and system design delivers top quality air, protecting sensitive downstream equipment, lowering maintenance and extending equipment life

### For productivity

The use of an oil-free Class 0 certified compressor guarantees contamination-free air, eliminating the risk of product spoilage and waste

### For serviceability

Our oil-free equipment is designed specifically to make maintenance easy by providing clear access to consumable components

### ISO 8573 Class 0 Oil-Free Air

Class 0 is the most stringent air class defined by ISO 8573, part 1. Our oilfree compressors are certified Class 0 for no oil content by TUV to ensure your air quality exceeds specifications.

ISO 8573-1 Air Quality Classes	
Quality Class	Oil & Oil Vapor mg/m <sup>3</sup>
0	< 0.01
1	0.01
2	0.1
3	1
4	5

## CompAir – The Compressed Air system provider you can trust



Analysis



Consulting



Project planning



Installation



Assure Service & Warranty



Maintenance



Original spare parts



iConn remote monitoring



## What makes our oil free D Series screw compressors unique?

- ✓ Premium efficiency two stage airend design
- ✓ Unique internal closed-loop cooling water circuit for airend cooling
- ✓ High quality IE3 electric motor, optional IE4, all RS models are IES2 compliant
- ✓ Efficient motor cooling
- ✓ High ambient temperatures of up to 45°C
- ✓ Delcos XL touch screen controller with enhanced monitoring
- ✓ Own designed and manufactured airend. Made in Germany
- ✓ Free iConn inside
- ✓ Up to 6 year warranty on all main components incl. airends

## Air ends – German Engineering excellence

- Advanced compression technologies are at the heart of every CompAir compressor
- Own design and manufacturing
- State-of-the-art CNC machines and online laser technology
- This technical excellence ensures that our customers receive consistently high quality at low cost



## At a glance

- Class Zero Oil FREE RotaryScrew Compressors
- Air- and Water-Cooled
- Fixed Speed and Variable Speed Models
- Air purity that meets the most stringent hygienic standards
- Outstanding reliability for demanding applications

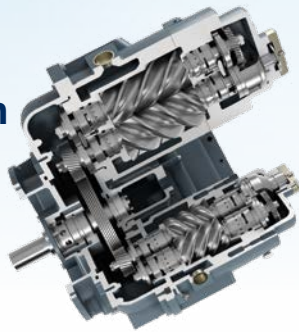
- **Pressure range**  
4 to 10 bar
- **Volume flow**  
8.89 to 23.52 m<sup>3</sup>/min
- **Motor power**  
75 to 160 kW



# Main features & benefits

## High output two stage airend design

- 100% oil-free, compression
- Stable long-time performance thanks to durable hard coating on rotors and housing parts



## Guaranteed efficiency with IE3 electric motor

- IE4 electric motor optionally available
- Automatic motor lubrication
- High reliability
- Operational safety



## Easy installation & easy servicing

- Small footprint and compact size
- All connections on one side
- Easy ducting
- Perfect service accessibility

## Excellent cooling performance

- Optimum motor cooling
- Closed cooling water circuit for airend cooling
  - For constant low temperature levels
  - Avoids fouling
- Level regulated electronic condensate drain

### Air cooling

- Two efficient radial fans
  - In accordance with ErP Efficiency Legislation 2015
  - Low noise level
  - Low pressure loss

### Water cooling

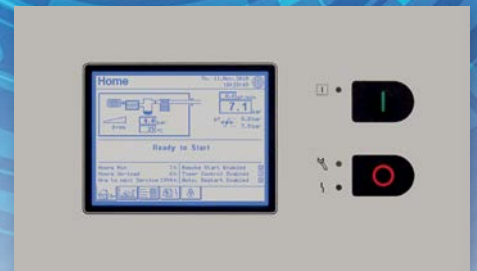
- High quality shell and tube coolers
  - Low noise level
- Optionally stainless steel coolers
- Removable tube bundles

- Low number of parts and consequently less to service
- Long-term service interval
- Separate compressed air inlet, allowing external air suction

“ The design of these packages ensures that the service points are readily accessible

### Delcos XL innovative touch screen compressor controller

The Delcos XL with its high resolution touch screen display is extremely user-friendly and self-explanatory. All functions are clearly structured in five main menus and are intuitively visual.



### Saving energy and protecting the environment

Over a period of five years, energy accounts for typically 80% of the total costs. However, this high share also means that there is considerable potential for savings.

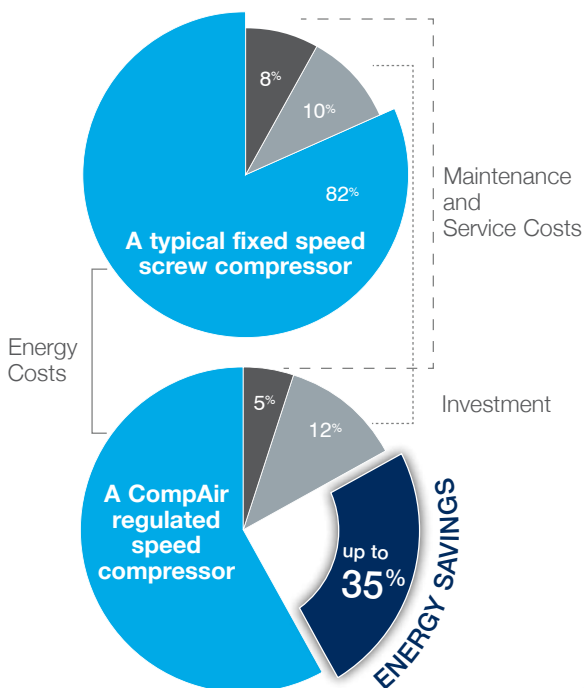
#### Why Regulated Speed Compressors?

- The annual cost of ownership can be significantly reduced using regulated speed technology.

#### Tried and tested inverter concept

- Integrated in the electric cabinet
- Maximum reliability from optimised cooling system
- Ensures high availability and long-life

### Maintenance and Service Costs



#### Perfect motor - drive - airend design

D-RS Series features a high efficient Power Drive System that exceeds the class **IES2 EN61800-9** requirements and assures high energy savings across broad flow range.

#### Wide regulation range

No cycles means substantial energy savings.

# Why **SmartAir** compressed air management system?

## Why SmartAir Master compressed air management system?

Energy management is crucial for all compressed air users, as the highest cost factor of a compressor is the energy to run it.

### Base load sequencing

Compressed air systems typically comprise of multiple compressors delivering air to a common distribution system. The addition of the optional base load sequencing module will allow central control of up to four compressors matching delivery to the plant demand.

### Why a profitable investment?

- Harmonises the workload of up to 12 fixed or regulated speed compressors including downstream
- Eliminates energy waste by tightening the network pressure to the narrowest pressure band
- Equalises the running hours for economic servicing and increased uptime
- Optimum performance and monitoring
- Increased plant productivity



# Compressed Air Heat Recovery

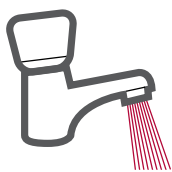
– a profitable investment!

## Why Heat recovery

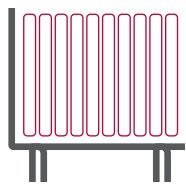
It is a thermodynamic fact that around 94 % of the energy needed to run a compressor gets converted to heat. Without heat recovery, this heat is directly blown into the atmosphere.

## Your benefits

- Significant savings in energy costs
- Extremely short payback time - typically less than 1 year
- Lower CO<sub>2</sub> emissions
- Turnkey solutions
- Easy installation and operation
- Small ecological footprint
- High reliability
- No impact on the compressed air supply
- Available for all water-cooled D Series models
- Up to 90°C hot water delivered by the compressor



Hot Water



Space Heating



Industrial Process



Steam Generation  
(pre-heating)

# Airtreatment & Condensate Management

## AirPlus



### Compressed air treatment

A modern production system and process demands increasing levels of air quality, and compressed air operators need to ensure that the downstream equipment also delivers on it 100%.

### Air Treatment Products

- ✓ Water Cyclone Separators
- ✓ Compressed Air Filters
- ✓ Condensate Drain System
- ✓ Compressed Air Refrigerant Dryer
- ✓ Heatless Desiccant Dryers
- ✓ Heat Regenerative Desiccant Dryers
- ✓ Heat-of-Compression Dryers (HOC)
- ✓ Subfreeze Dryers
- ✓ Nitrogen Generator





# 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.

## 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.



**iConn**  
inside

# Predictive Maintenance

## iConn Compressed Air Service 4.0

The D-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!**



## 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



## Oil-Free Compressors for your Application

### Technical Data

#### D75 – D160 Fixed Speed

Compressor Model	Cooling Method	Motor Rating [kW]	Nominal Pressure [bar g]	Free Air Delivered <sup>1)</sup> [m <sup>3</sup> /min]		Dimensions L x W x H [mm]	Noise Level <sup>2)</sup> [dB(A)]		Weight [kg]
				8 bar g	10 bar g		8 bar g	10 bar g	
D75	Air	75	8 - 10	12.91	10.63	2597 x 1744 x 2001	75	74	3023
	Water						72	70	3223
D90	Air	90	8 - 10	15.65	13.79	2597 x 1744 x 2001	76	75	3223
	Water						73	72	3423
D110	Air	110	8 - 10	19.51	17.39	2597 x 1744 x 2001	77	77	3265
	Water						75	74	3465
D132	Air	132	8 - 10	22.39	20.50	2597 x 1744 x 2001	78	78	3432
	Water						77	76	3632
D160	Air	160	10	–	22.33	2597 x 1744 x 2001	–	78	3644
	Water						–	77	3844

#### D110RS – D160RS Regulated Speed

Compressor Model	Cooling Method	Motor Rating [kW]	Working Pressure [bar g]	Free Air Delivered <sup>1)</sup> [m <sup>3</sup> /min]		Dimensions L x W x H [mm]	Noise Level at 70% Load <sup>2)</sup> [dB(A)]	Weight [kg]
				min.	max.			
D110RS-8	Air	110	4 - 8	8.89	19.51	2597 x 1744 x 2001	76	3278
	Water						72	3478
D110RS-10	Air	110	4 - 10	10.51	17.68	2597 x 1744 x 2001	76	3278
	Water						71	3478
D132RS-8	Air	132	4 - 8	8.95	22.95	2597 x 1744 x 2001	77	3476
	Water						73	3676
D132RS-10	Air	132	4 - 10	10.51	21.10	2597 x 1744 x 2001	77	3476
	Water						72	3676
D160RS-10	Air	160	4 - 10	10.40	23.52	2597 x 1744 x 2001	77	3688
	Water						73	3888

<sup>1)</sup> Data measured and stated in accordance with ISO 1217, Edition 4, Annex C and Annex E 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 ± 3dB (A).



# Global experience - truly local service

With over 200 years of engineering excellence, the CompAir brand offers an extensive range of highly reliable, energy efficient compressors and accessories to suit all applications.

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

### Oil-Free

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

### Complete Air Treatment Range

- Filter
- Refrigerant and Desiccant Dryer
- Condensate Management
- Heat of Compression Dryer
- Nitrogen Generator

### Modern Control Systems

- CompAir DELCOS Controllers
- SmartAir Master Sequencer
- iConn - Smart Compressor Service

### Value Added Services

- Professional Air Audit
- Performance Reporting
- Leak Detection

### Leading Customer Support

- 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.