

## 100% Oil-Free - Guaranteed

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





D160-D275



# The D-range can be relied on to deliver high quality & economical oil-free compressed air

### Oil-free technology delivers many benefits

Where contaminated compressed air can result in expensive product spoilage, you can rest assured that a CompAir oil-free compressor will eliminate oil-carryover in the compressed air supply. In addition, the removal of oil from the compression process enables compressed air users to operate with maximum environmental efficiency.

CompAir have been designing, manufacturing and supplying oil-free compressors for more than 90 years.

CompAir's D-range of compressors generate the highest quality oil-free air and have been certified ISO 8573-1



Class Zero (2010) and silicone free, making them the ideal choice for manufacturing processes where air is in direct contact with the product or sensitive equipment.

## CompAir compression element – 100% oil-free compressed air, guaranteed

Non-contact, non-wearing labyrinth seals prevent bearing lubricant entering the compression chamber.

The design also features heavy duty, low friction ball and roller bearings and helical drive and timing gears. Thrust balance pistons equalise the loads across the bearings, allowing each bearing to achieve its optimum life expectancy.







# Quality features for quality oil-free air...

Motor-driven oil pump extends component life through optimum bearing and gear lubrication



Thrust balance pistons on low and high pressure compression elements equalise bearing loads and extend element life



#### **Excellent efficiency**

The CompAir compression element design sets the industry standard for energy efficiency. Advanced asymmetric rotor profiles and optimised radial and axial porting ensure maximum air output for minimum energy consumption.

The rotor casings feature generously-sized liquid cooling passages for even heat dissipation, enabling closer tolerances to be used for high compression efficiency.

Protection relay ensures security of operation and safeguards your investment



#### Extended service life

For the longest working life, the correct lubrication and cooling of gears and bearings under all conditions is essential. For this reason, the CompAir D-range features an electric motor-driven oil pump that delivers full lubricant pressure prior to starting and during the stopping phases, thereby extending the operating life of the compression element.

Two-stage inlet filtration protects against the ingress of airborne particles into the compression elements. Filter element life is extended by the enclosure mesh panel filters. This also ensures that the motors and coolers operate with the maximum cooling capability.

IP55 totally enclosed, fan cooled, energy efficient drive motor



Coated rotors and casings for maximum protection and long operating life





## Maximise your energy savings and sustainability

## Perfect response to your individual air demands with regulated speed technology

The D-range of compressors offers a number of regulated speed models using high efficiency inverter drives and modern easy-to-use touch screen technology. Adding a regulated speed compressor to any installation of standard compressors gives the entire system the ability to precisely match output to demand, allowing the compressors to consume exactly the right amount of energy to do the job

and no more, providing excellent energy savings.



#### **Energy recovery**

D-range water-cooled compressors can be factory configured to provide cooling water outlet temperatures of up to 85°C, enabling the water to be used for process or heating requirements.

#### High reliability control system

CompAir's microprocessor-based compressor management system simplifies operation and allows instant review of status. Comprehensive control, condition monitoring, protection and remote control facilities are incorporated into the system.

Recognising that many electrical supplies are subject to irregularities, a protection relay is fitted to provide security against reverse rotation, phase imbalance, phase failure and phase reversal.

With flexibility built in, the D-range can meet specific control requirements such as:

- Remote start and stop
- Remote load and unload
- · Automatic power failure restart
- Available output
- · Running output
- On-load output
- Service due output
- Group alarm and trip outputs
- RS485 communications interface for remote monitoring and control





Examples of customer engineered products:

- Alternative voltages
- Outdoor weather protection
- Freeze protection
- Non-standard motors
- Silicone-free compressors

- Soft starter solutions
- HOC (Heat Of Compression) connections for HOC dryers
- Special control and instrumentation for oil and gas industry
- Stainless steel canopies and special paintings
- Company specific documentation



#### CompAir in action

#### AES Energia Cartagena

Joaquin Sanchez, Plant Maintenance Manager said,

"We considered compressed air solutions from several suppliers, but found that the CompAir system offered the best overall solution, with economic air production, a guaranteed oil-free supply and compressor sequencing to ensure equipment longevity."



## Simplified maintenance reduces life cycle costs

Servicing costs and downtime are kept to a minimum with:

- A grouped service area
- Simplified access for cooler cleaning
- Hinged service access doors all round
- 8000 hours standard service interval

A pumped lubricant drain facility ensures that lubricant changes are both quick and clean.

The CompAir SureScan control system identifies servicing needs and allows for services to be conveniently planned.



#### Compressed air purification

A modern production system and process demands increasing levels of air quality. A CompAir compressed air system utilising the latest technology provides an energy efficient solution at lowest life cycle costs.



#### Water Cyclone Separator

Designed for efficient removal of bulk liquid contamination from compressed air.



#### **Compressed Air Filter CF Series**

Efficient design for water, dust and particle removal.



#### Condensate Drain Bekomat System

To drain compressed air condensate without loss of compressed air.

#### **Compressed Air Refrigerant Dryer**

CompAir offer a full range of energy efficient and environmentally friendly stand alone refrigerant dryers.



#### **Heatless Desiccant Dryers**

Series A XS and A TX.



Series A\_TV and A\_RS.



#### Nitrogen Generator

Designed to achieve maximum efficiency and gas quality.





SmartAir Master Multi Compressor **Controllers** 

Sequencers for up to 12 units.



#### CompAir D - Technical Data Fixed Speed - Water Cooled

Model	Nominal Pressure (bar g)	Drive Motor (kW)	FAD¹) (m³/min)	Noise Level <sup>2)</sup> dB(A)	Dimensions L x W x H (mm)	Weight (kg)
D160	8	150	24.21	77	3200 x 1900 x 1841	4243
D185	9	185	28.95	78	3200 x 1900 x 1841	4253
כסוע	10	165	23.96	77	3200 X 1900 X 1841	
D200	9	200	34.34	79	3200 x 1900 x 1841	4743
D200	10	200	28.74	78	3200 X 1900 X 1641	
D250	8	260	42.42	80	3200 x 1900 x 1841	4894
U250	10	260	34.18	79	3200 X 1900 X 1841	
D275	9	300	42.30	80	3200 x 1900 x 1841	5244

#### **Regulated Speed - Water Cooled**

	Model	Min-Max pressure (bar g)	Drive Motor (kW)	FAD¹) (m³/min)	Noise Level <sup>2)</sup> dB(A)	Dimensions Compressor L x W x H (mm)	Dimensions Inverter Box L x W x H (mm)	Weight (kg)
	D275RS	4	300	20.50 - 43.00	81	3200 x 1900 x 1841	1600 x 600 x 2525	5100
U2/5K5	10	300	20.50 - 45.00	01	3200 X 1900 X 1641	1000 X 000 X 2525	5100	

Data measured and stated in accordance with ISO 1217 Edition 4, Annex C & E at the following conditions: Air Intake Pressure 1 bar a / 14.5 psi; Air Intake Temperature 20° C / 68° F; Humidity 0 % (dry)









# Innovative products & services

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 distributors across all continents provide global expertise with a truly local service, ensuring our advanced technology is backed up with the right support.

As part of the worldwide Gardner Denver operation, 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
- Piston
- Portable

#### Oil-Free

- Water Injected Screw
  - > Fixed and Regulated Speed
- Two Stage Screw
  - > Fixed and Regulated Speed
- Pistor
- High Speed Centrifugal Quantima®

#### 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

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.

#### **Value Added Services**

- Professional Air Audit
- Performance Reporting
- Leak Detection

#### **Leading Customer Support**

- Custom Engineered Solutions
- Local Service Centres
- Genuine CompAir Parts and Lubricants

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