



Reliability & efficiency  
without compromise

Rotary Screw Compressors



**L160 – L290**  
**L160RS – L290RS**

Premium compressor design

Fixed & Regulated Speed

# Where reliability is key

## The L-Series from CompAir

Well known in the industry for quality and reliability CompAir continuously develops the L-Series achieving cutting edge performance and efficiency. The new high capacity range L160 to L290 of lubricated screw compressors comprises of fixed speed and regulated speed (RS) models. The design focus of these compressors is purely on performance and efficiency. Apart from the premium efficiency airend, several features, such as fixed and regulated speed radial fans, have been added to further enhance efficiency and reduce running costs.



▶ **Pressure range**  
5 to 13 bar

▶ **Volume flow**  
6 to 47 m<sup>3</sup>/min

▶ **Motor power**  
160 to 250 kW



\*Optional IE 4

## Engineering excellence

Compressors are more than just a financial investment, they are a key component in ensuring that manufacturers, processors and operators receive consistent, high quality, low cost air. The screw compression element is the heart of the compressor and therefore CompAir keeps the design and manufacture in-house, using the latest CNC rotor grinding machinery, coupled with online laser technology. The resulting reliability and performance ensure that operating costs will remain low throughout the compressors life.



“

CompAir lubricated rotary screw compressors incorporate the very latest technological advances and guarantee a continuous supply of high quality compressed air.

”



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

### Premium efficiency airend

The high-output compression element with slow rotational speed reduces energy costs. In addition, the innovative design of the fail safe shaft seal, integrated oil filter and oil regulation valve, ensures external hoses are reduced to a minimum to guarantee highest levels of quality and reliability are achieved.



# Design Concept



## Engineered to perform

### ▶ Large surface after coolers

Optimum cooling of the air and oil circuit is achieved by drawing the coolest possible air onto the coolers from the outside. The coolers are offset and cooled independently by separate radial fans and exhaust chambers which ensures optimum oil temperature and lowest achievable air discharge temperature. This results in longer component life and lower downstream air treatment running costs.

### ▶ High performance separator filter

Two-stage filtration ensures highest quality air is delivered to your air treatment resulting in lower pressure drops and reduced overall system running costs.

### ▶ High efficiency electric motor

Premium efficiency IE3 motor fitted as standard. Optionally available with IE4 motor.

### ▶ Thermostatically controlled radial fans

High efficiency, high thrust, very low noise fans fitted on both air and oil coolers.



### ▶ Automatic motor lubrication

Correct charge of lubricant to the bearings at all times delivers unrivalled reliability and reduced motor life costs.



### ▶ Viton vitaulic couplings

High quality solid hose and pipe connections ensure leak free connections keeping your compressor clean and service friendly.

### ▶ Zero loss autodrain

Fitted to the air aftercooler to remove bulk water allowing greater flexibility of installation options.



Get in touch

## 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. The multilingual Delcos XL control system ensures reliable operation and protects your investment by continuously monitoring the operational parameters, which is essential for reducing your running costs.

### Features & functions

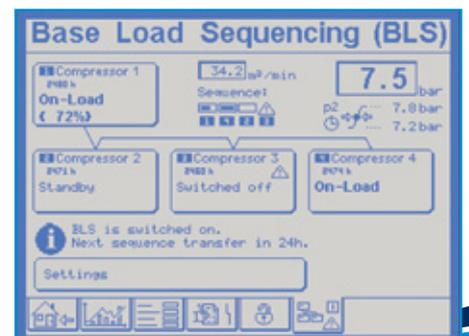
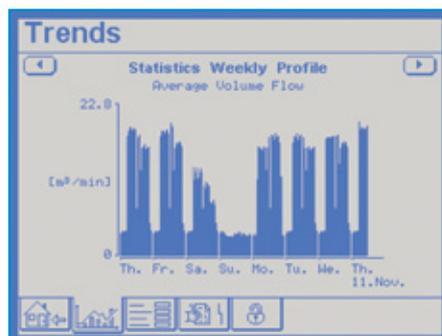
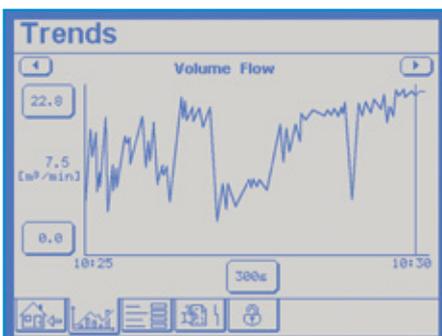
- Home Page – instant overview of the compressor status
- Real Time Clock – allows pre-setting of compressor starting/stopping
- Second Pressure Setting
- Integrated Cooling and Dryer Control
- Fault History Log – for in-depth analysis
- Remote Control via Programmable Inputs
- Auto Restart after Power Failure
- Optional Base Load Sequencing
- SD Card – stores several run characteristics



### Trend diagrams

With the ability to display detailed system analysis in the form of trend diagrams and graphs, operating parameters can be precisely set to maximise efficiency.

- Line / Network Pressure
- Motor Speed (Regulated Speed)
- On Load Hours / Total Hours Run & Average Volume Flow
- Weekly Average Volume Flow

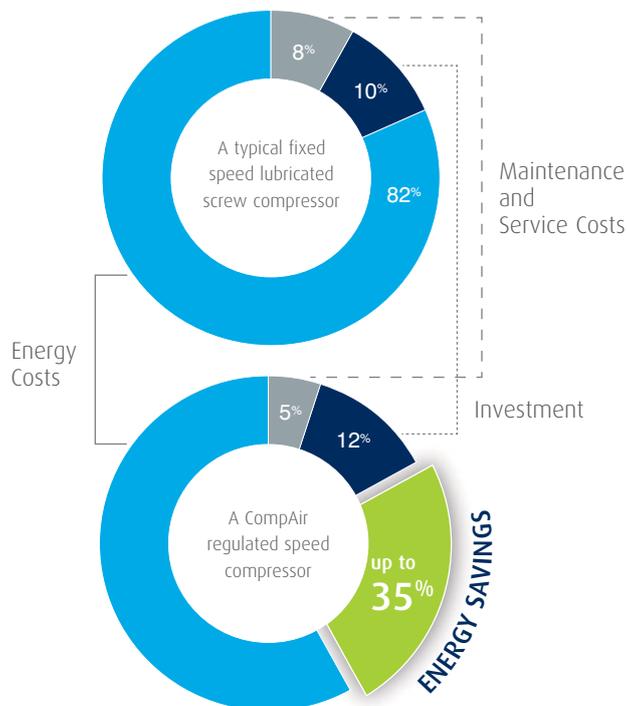


# Regulated Speed Compressors

## The perfect response to individual air demands

Regulated speed compressors from CompAir can efficiently and reliably handle the varying air demand found in most plant air systems.

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



## Tried and tested inverter concept

- Integrated in the electric cabinet
- Protected from dust by replaceable inlet filters
- Maximum reliability from optimised cooling system
- Ensures high availability and long-life

## Regulated speed radial fan

This range can be optionally equipped with inverter driven radial fan on the oil after cooler.

- Optimises oil temperature regulation
- Saves energy costs

## CompAir RS features are your benefits

The L-RS Series products are designed to obtain the greatest efficiency across the entire operating range.

- ▶ **Wide regulation range**  
No cycles means substantial energy savings
- ▶ **Perfect motor - drive - airend design**  
High efficiency across broad flow range



## 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. Over a period of five years, energy accounts for typically 80% of the total costs. Compressed air systems typically comprise of multiple compressors delivering air to a common distribution system. The combined capacity of those machines is generally greater than the maximum site demand.

With CompAir's advanced demand responsive sequencer SmartAir Master, the efficiency of the compressor stations with up to twelve compressors including downstream equipment can be maximized. Apart from the energy savings, the compressed air management system also contributes to decreased downtime, optimum performance and monitoring, and ultimately leads to increased plant productivity.



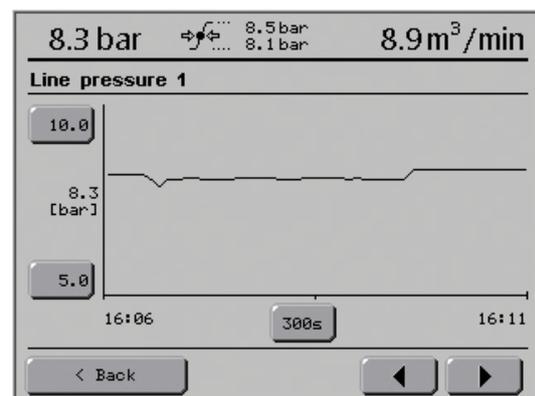
### Characteristics of each compressor

8.3 bar	8.5 bar 8.1 bar	9.0 m <sup>3</sup> /min
<b>Parameters compressor 1</b>		
Control:	DEL COS XL-LRS	
Current priority:	Norm	
Total hours:	54206 h	
Loaded hours:	52025 h	
FAD max.:	9.0 m <sup>3</sup> /min	
FAD cur.:	7.3 m <sup>3</sup> /min	
FAD min.:	3.0 m <sup>3</sup> /min	
Final temperature:	41 °C	
Final pressure:	8.8 bar	
Line press. at compressor: 8.5 bar		
<div style="display: flex; justify-content: space-between;"> <span>&lt; Back</span> <span>Events</span> <span>Service on</span> </div>		

### A profitable investment

- Harmonises the workload of up to 12 fixed or regulated speed compressors
- Eliminates energy waste by tightening the network pressure to the narrowest pressure band
- Equalises the running hours for economic servicing and increased uptime

### Diagram display



# AirPlus

## How to add further value

### Heat recovery

The heat generated during compression is paid for as part of the process, then paid for again during removal by way of cooling fans. Instead of simply removing the heat, it can be used to generate free hot process water or hot water heating systems by utilising a high efficiency, factory fitted oil to water heat exchanger.

### Upgrade your compressed air system with heat recovery

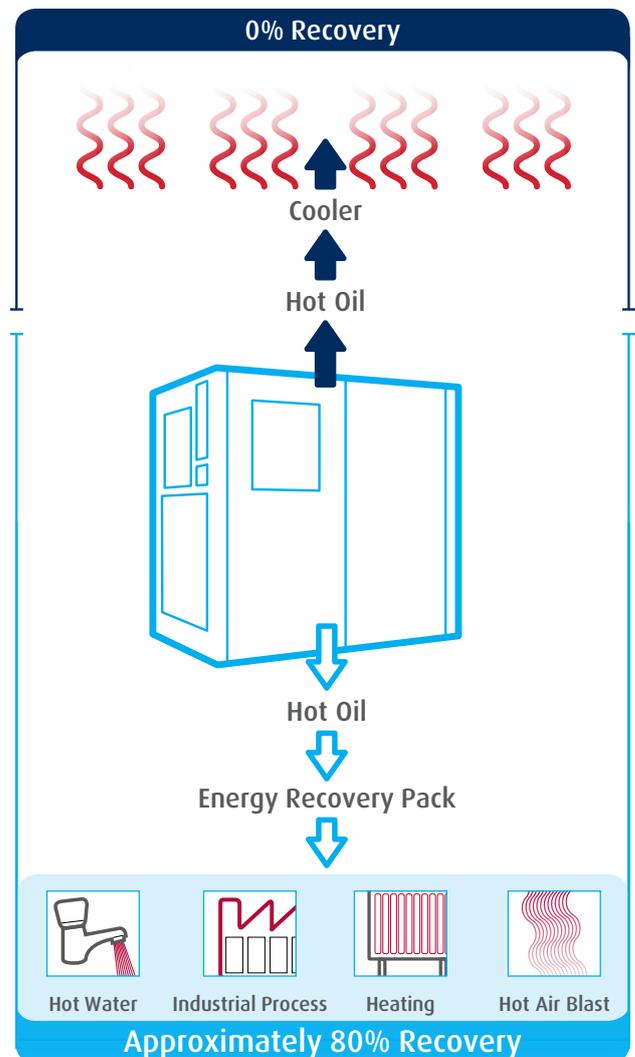
- Significant cost savings
- Lower CO<sub>2</sub> emissions
- Low investment costs

### Inverter driven radial fan

The ability to vary the speed of the fan via a frequency inverter optimises the efficiency. All regulated speed compressors are equipped with inverter driven radial fans on the oil cooler as standard. Fixed speed compressors can have it factory fitted as an option.

### 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 to control centrally up to four compressors matching the delivery to the plant demand.



Visit [www.compair.com](http://www.compair.com) to watch the heat recovery video and access the energy savings calculation tool.



## 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.



### Compressed Air Refrigerant Dryer

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



### Water Cyclone Separator X Series

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

### Heatless Desiccant Dryers

Series A\_XS and A\_TX.

### Heat Regenerative Desiccant Dryers

Series A\_TV and A\_RS.



### Compressed Air Filter CF Series

Efficient design for water, dust and particle removal.



### Bekomat Condensate Drain and Oil-Water-Separation Systems

To drain compressed air condensate without loss of compressed air and separate any filtered oil to meet all the requirements of the Water Ecology Act and of other relevant provisions.



### Nitrogen Generator

On-site industrial nitrogen gas generation using the factory compressed air. Designed to achieve maximum efficiency and gas quality.



## CompAir L-Series - Technical Data

### L160 – L290 Fixed Speed

Compressor Model	Nominal Pressure [bar g]	Drive Motor [kW]	FAD <sup>1)</sup> [m <sup>3</sup> /min]	Noise Level <sup>2)</sup> [dB(A)]	Weight [kg]	Dimensions L x W x H [mm]
L160	7.5	160	32.04	76	4186	2949 x 2111 x 2193
	10	160	28.20	76	4186	2949 x 2111 x 2193
	13	160	23.91	76	4186	2949 x 2111 x 2193
L200	7.5	200	39.23	77	4415	2949 x 2111 x 2193
	10	200	34.85	77	4415	2949 x 2111 x 2193
	13	200	29.38	77	4415	2949 x 2111 x 2193
L250	7.5	250	42.03	78	4625	2949 x 2111 x 2193
	10	250	37.01	78	4625	2949 x 2111 x 2193
	13	250	32.64	78	4625	2949 x 2111 x 2193
L290	7.5	250	47.10	79	4650	2949 x 2111 x 2193
	10	250	41.53	79	4650	2949 x 2111 x 2193
	13	250	36.44	79	4650	2949 x 2111 x 2193

### L160RS – L290RS Regulated Speed

Compressor Model	Nominal Pressure [bar g]	Drive Motor [kW]	FAD <sup>1)</sup> [m <sup>3</sup> /min]	Noise Level at 70% Load <sup>2)</sup> [dB(A)]	Weight [kg]	Dimensions L x W x H [mm]
L160RS	5 - 13	160	6.54 - 32.33	75	4378	2949 x 2111 x 2193
L200RS	5 - 13	200	5.99 - 39.44	77	4573	2949 x 2111 x 2193
L250RS	5 - 13	250	5.83 - 42.80	78	4669	2949 x 2111 x 2193
L290RS	5 - 13	250	5.87 - 47.02	79	4684	2949 x 2111 x 2193

<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 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
- Piston
- 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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