

Fixed & Regulated Speed

L110FC RS - L290FC RS



State-of-the-art new technology



Well known in the industry for quality and reliability, CompAir continuously develops the L-Series to achieve cutting edge performance and efficiency. The new high power range L110FC to L290FC of lubricated screw compressors comprises of fixed speed and regulated speed (RS) models. The design features brand new, innovative technology engineered to provide next level performance and efficiency for customers across a wide variety of industries.



Pressure range

5 to 10 bar



Volume flow

9.16 - 47.9 m³/min



Motor power

110 to 250 kW

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 ensures that operating costs will remain low throughout the compressor's life.



CompAir

FOURCORE

FourCore technology - the power of 4!

iConn°

CompAir's centre of excellence at its Simmern production site in Germany, home to the CompAir ranges of compressors, has designed and engineered a brand new, patented technology that offers best-in-class energy efficiency.

Our application engineering team have developed a premium efficiency 2-stage model for fixed and regulated speed compressors using the new technology of the compact double stage airend. What's unique about this design is that the airend has 1 motor and 4 rotors located in a single, semi-integrated casting. This differs from traditional 2-stage compressors, providing a compact package with high energy savings. In fact, these machines are the same size as a 1 stage machine due to new airend technology.



the unit's energy consumption and achieve excellent performance.

The semi integrated airend design with integrated oil filter and oil regulation valve means fewer external components and pipework, taking less physical space, eliminating the risk of leakage and offering simplified maintenance.

The innovative design of the fail safe shaft seal, ensures the highest levels of quality and reliability are achieved, minimising the down time of the compressor. Our top quality airends are covered by the 10 year warranty and up to 44,000 hours*.

warranty coverage*

^{*}Whichever is soonest, subject to Terms and Conditions.



Best-in-class efficiency & energy savings

New generation FourCore airend technology

- ✓ Very compact & very low weight
- ✓ Highest efficiency
- Semi-Integration of the oil filter, oil stop valve, oil distribution system, and oil temperature valve:
 - less hoses and hydraulic pipes → less costs
 - no leakages
- ✓ High flexibility by a 2-step drive gear configuration → UNIQUE to CompAir
 - constant interstage pressure → better efficiency
 - compact design
- ✓ Designed to implement in current L-Range → UNIQUE to CompAir
- Fixed and variable speed versions possible

Improved efficiency by 8-10% compared to a conventional single stage

CompAir's innovative new FourCore technology delivers greater efficiency in a low weight and compact size. The series comprises of best-in-class premium efficiency 2-stage oil lubricated compressors across the range of 110-250kW. In some cases, payback times can be less than a year, delivering a fantastic return on investment and incredible energy savings to the user.





- New CompAir FourCore Technology
- Comparable Single Stage Technology



One of the smallest footprints in the market of 2 stage oil lubricated units

The core benefit of the new L110FC to L290FC range is that it delivers much greater efficiency than 1 stage compressors but comes in a German engineered package that is the same size as it! Users in a variety industries benefit from an amazing, space-saving design that offer next level efficiency and performance.

A profitable investment

- · Best-in-class compressed air efficiency
- · Small footprint and sustainable compact design
- Semi-integrated "FourCore" airend delivers the best possible performance
- Less connections and pipework, minimises possibility of leaks and enables simple servicing

Unique in-house design & manufacture

2 stage compressors are not only expensive, they also take up valuable (and unnecessary) space due to their large footprint. Incorporating all of the benefits of the 2 stage compression in the same size package as a single stage unit, CompAir have developed in-house, a unique and optimised, ultra-efficient airend technology in FourCore.







Engineered to perform

Large surface after cooler

Optimum cooling of the air and oil circuit is achieved by drawing the coolest possible air into 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 is longer component life and lower downstream air treatment running costs.

High performance separator filter

Two-stage filtration ensures the 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 motor fitted as standard.

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.

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.

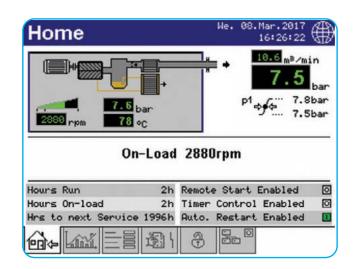


Viton vitaulic couplings

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.







The environmentally conscious solution

Reduce energy waste

In today's climate, all businesses must ensure they are doing what they can to enhance their green credentials and actively ensure their production process is as environmentally friendly as possible. CompAir are committed to creating products that have less impact on the planet, providing greener solutions for our partners in all industries.

We create solutions that help our customers save energy – including products that are fuel-efficient, aid in heat recovery, and reduce waste wherever possible. The new L110FC to L290FC range delivers a major breakthrough in compressor technology and provides enhanced levels of efficiency to offer even more energy savings, reducing CO₂ waste.

Investing in energy saving machines shows corporate responsibility and a future-proofing mentality that will help your business to tackle the challenges that industrial businesses are likely to face in the future when it comes to the environment.

Save more energy by matching output with demand

A vast amount of the energy lost in a factory or plant is due to wastage in an air compressor installation. Regulated speed (RS) technology ensures that compressed air systems perform as efficiently as possible.

CompAir's RS compressors efficiently and reliably handle the varying air demand found in most air systems which can significantly reduce the annual cost of ownership.

Total potential CO₂ reduction of 1,500 tonnes in 10 years

FourCore Technology from CompAir offers a reduced environmental footprint, cutting tonnes of CO₂ during manufacture, use and disposal, increasing your "green" credentials and market appeal.

Reduced greenhouse gas emissions*

CompAir's L160FC running 8,000 hours per year, compared to a conventional single stage 160kW compressor can reduce the amount of CO₂ produced by 134 tonnes – equivalent to 29 family cars or 337,700 miles driven by a passenger car in 1 year! That's the same as planting 165 acres of forest!

*https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator

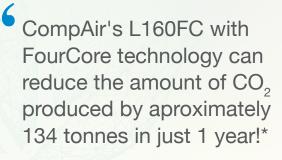
Tried and tested inverter concept

- · 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



AirPlus



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

L-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.

How to add further value









Hot Water

Heating

Industrial Process

cess Hot Air Blast

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 CO₂ emissions
- · Low investment costs

Compressed air purification

Modern production systems and processes demand increasing levels of air quality. Air treatment products **manufactured by CompAir**, utilise the latest technology and provide an energy-efficient solution at the lowest life cycle costs.

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The new downstream portfolio manufactured by CompAir utilising the latest technology, provides an energy efficient solution at lowest life cycle costs. The same quality, performance and efficiency standards delivered by the compressors can now be enjoyed from the air treatment range.

Investment in a manufacturing site in addition to the support teams, ensures that compressed air operators don't need to worry about the quality of their compressed air – quality that is key to ensuring maximum production efficiency and investment protection.

- Water Cyclone Separators
- Compressed Air Filters
- · Condensate Drain System
- Compressed Air Refrigerant Dryer
- · Heatless Desiccant Dryers
- · Heat Regenerative Desiccant Dryers
- Nitrogen Generator
- SmartAir Master Plus Multi Compressor Controllers



The best investment protection you can get

The CompAir Assure Service and Warranty agreements

Cover the airend for up to 10 years.





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.

sure

Peace of Mind

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



 $^{\rm 1)}$ 10 years/44,000 hours on the air end. Whichever is the soonest. Subject to Terms & Conditions.

CompAir genuine spare parts

Enjoy complete peace of mind.

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

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



CompAir L-Series - Technical Data

L110FC - L290FC Fixed Speed

Compressor Model	Nominal Pressure [bar g]	Drive Motor [kW]	FAD ^{1]} [m³/min]	Noise Level ^{2]} [dB(A)]	Weight [kg]	Dimensions L x W x H [mm]
L110FC	7.5	110	24.05	72	4483	2907 x 2071 x 2193
	8.5		22.56			
	10		21.21			
L132FC	7.5	132	28.79	73		2907 x 2071 x 2193
	8.5		25.27		4498	
	10		25.24			
L160FC	7.5	160	33.67	75	4542	2907 x 2071 x 2193
	10	160	29.14	75	4542	2907 x 2071 x 2193
L200FC	7.5	200	40.09	76	4765	2907 x 2071 x 2193
	10	200	35.64	76	4765	2907 x 2071 x 2193
L250FC	7.5	250	42.62	77	4975	2907 x 2071 x 2193
	10	250	38.69	77	4675	2907 x 2071 x 2193
L290FC	7.5	250	47.84	78	5000	2907 x 2071 x 2193
	10	250	45.08	78	5000	2907 x 2071 x 2193

L110FC RS - L290FC RS Regulated Speed

Compressor Model	Nominal Pressure	Drive Motor	FAD ^{1]}	Noise level at 70% load ^{2]}	Weight	Dimensions L x W x H
	[bar g]	[kW]	[m³/min]	[dB(A)]	[kg]	[mm]
L110FC RS	6 – 10	110	9.16 - 24.69	72	4672	2907 x 2071 x 2193
L132FC RS	6 – 10	132	9.16 - 29.39	72	4736	2907 x 2071 x 2193
L160FC RS	5 – 10	160	9.61 - 32.07	74	4783	2907 x 2071 x 2193
L200FC RS	5 – 10	200	9.37 - 39.14	76	5083	2907 x 2071 x 2193
L250FC RS	5 – 10	250	9.37 - 42.97	77	5253	2907 x 2071 x 2193
L290FC RS	5 – 10	250	9.37 - 47.98	78	5268	2907 x 2071 x 2193

All Models are also available as **WATER COOLED** versions. For technical specifications please refer to the water cooled technical information sheets.

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^{1]} 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).

 $^{^{2]}}$ Measured in free field conditions in accordance with ISO 2151, tolerance \pm 3dB (A).



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 Plus Sequencer
- · iConn Smart Compressor Service

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