



# **ROTARY SCREW COMPRESSORS**

FIXED SPEED REGULATED SPEED (RS)



INTELLIGENT AIR TECHNOLOGY

# ➔ INTELLIGENT AIR TECHNOLOGY – FROM 30–132 kW

### PREMIUM EFFICIENCY AIREND

The high output compression element with slow rotational speed reduces energy costs. In addition to this, 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 the highest levels of quality and reliability are achieved.

### BUILT-IN INTELLIGENT CONTROLS

Precise operational control is essential to reduce running costs. All CompAir rotary screw compressors are supplied with intelligent, fully electronic controllers with efficient monitoring and user-friendly menu. This system optimises performance to demand and monitors operating parameters of the unit on site and remotely.



# ➡ LARGE SURFACE AFTER COOLER

Optimum cooling to ensure low operating and discharge temperatures.

# HIGHEST QUALITY CONNECTIONS

Solid hoses and pipe-connections with viton victaulic couplings increase reliability, and are easy to maintain.

### AUTOMATIC MOTOR LUBRICATION SYSTEM (55–132 kW)

Increases bearing life and is maintenance free.

# HIGH PERFORMANCE SEPARATOR FILTER

Two stage filtration ensures highest quality air is delivered to your system < 3ppm oil carryover. The vessel has a hinged cover for easy maintenance.

### TRIED AND TESTED INVERTER CONCEPT

Integrated in the electric cabinet.

# SENERGY SAVING ELECTRIC MOTOR

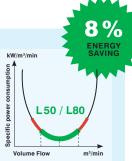
The compressors are equipped with TEFC IP55 energy saving CEMEP CLASS EFF1 high efficiency electric motor which reduces CO<sub>2</sub> emissions.

### THERMOSTATICALLY CONTROLLED MOTOR DRIVEN FAN

High efficiency extremely quiet fan allows the compressor to be operated in the work place, and achieves the maximum duct length without assistance.

### L50 / L80 – THE ENERGY SAVERS

The extension of the 45/75kW class with L50/80 allows 8% energy saving. Utilising the premium sized airend with optimised rotor tip speed, the compressor works more efficiently and furthermore lowers the noise level.



Best performance for optimal volume flow – AirEnd Performance

# COMPAIR'S ENERGY SAVING MACHINES COMPRESS NOT ONLY AIR BUT ALSO:

- Your Energy Costs
- Your Maintenance Bills
- The Noise Level
- The Footprint
- The Environmental Burden

### OIL-INJECTED ROTARY SCREW COMPRESSORS

The new range of CompAir oil-injected rotary screw compressors incorporate the very latest technological advances and manufacturing processes to provide users with a continuous supply of economic and reliable high quality compressed air.

# COMPACT DESIGN

The small footprint reduces the space required for installation. As the doors can be removed in seconds this allows full access for easy maintenance.



# ➡ INTELLIGENT CONTROLLER TECHNOLOGY BY COMPAIR

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The DELCOS control system ensures reliable operation and protects your investment by continuously monitoring the operational parameters, which is essential to reducing your running costs.

The DELCOS 3100 also has the capability to

additional equipment as well as providing the

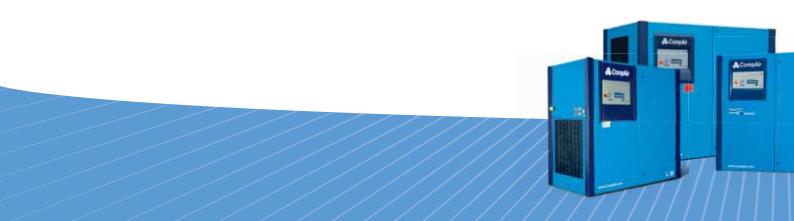
following features with a clear readable text.

have programmable inputs and outputs, control

FLEXIBLE
EASY TO USE
COST EFFECTIVE



- Air/Oil temperature display
- Total hours run and loaded hours
- Service due indicator
- Fault log monitor
- Remote stop/start
- Auto restart on power failure
- Status Indication
- RS485 Modbus RTU



# SmartAir MASTER – HIGH EFFICIENT MULTI-COMPRESSOR CONTROL SYSTEM

Modern compressed air stations are required to be more energy efficient, reliable and meet higher standards of safety.

The SmartAir Master can efficiently control up to 12 compressors of any combination, fixed or variable speed, and will reduce energy consumption by tightening the network pressure to the smallest possible band, keeping off-load running to the absolute minimum.

Demand responsive operation ensures that where varying capacity compressors are installed only the correct combinations of compressors are selected to meet the system demand, resulting in maximum energy savings.

8.7 bar

44

Do 19.83.89 18/22/40

20.0 m3/min

2.0 m<sup>3</sup>/min

#### Benefits at a Glance:

- User-friendly and self-explanatory colour graphics displayed via touch screen
- Maximum energy and cost savings by reducing off-load times to a minimum
- Simple installation with low cabling costs using a data cable with a "bus structure"
- Complete overview of the status of the entire compressed air station

8.7 bar

- The DELCOS controllers can be connected
  - without any extra hardware

# L/LRS COMPRESSOR RANGE

	OUR FEATURES	YOUR BENEFITS
	<ul> <li>Energy Saving Drive Concept</li> <li>Direct Drive – Zero Loss Transmission</li> <li>High Efficiency CompAir Airend</li> <li>High Efficiency IP55 EFF1 Motor</li> <li>Optional Regulated Speed Technology</li> </ul>	Reduced Power Costs + High Reliability & Efficiency + High Free Air Delivery = Low Cost Of Ownership
	Modern Compressor Concept	Low Noise Level Low Installation Costs Small Footprint Easy Servicing
	<ul><li>Advanced Cooling System</li><li>Efficient Radial Cooling Fan</li><li>Reliable Enclosure Filter</li></ul>	Best Performance Reliability Under Difficult Ambient Conditions Less Installation Costs For Air Duct Excess Heat Can Be Easily User For Space Heating
	Advanced DELCOS 3100 Controller	Clear Text Display Comprehensive Diagnostic Function Combined With Energy Calculator Pro-Active Maintenance And Service Scheduling
-	ASSURE™ Extended Warranty	Free Of Charge All Around Protection Comprehensive Service And Warranty Programmes Based On Product Usage Up To 44,000 Hours



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# INTELLIGENT ENERGY SAVING TECHNOLOGY!

#### Seduce the cost of ownership and relativise your energy consumption!

Compressed air is a versatile, flexible and safe way to transmit energy. Almost all industrial businesses use it. In fact, over 10% of electricity supplied to industry is used to compress air.

According to "EU-SAVE II" project in Europe compressed air stations consumed in 2000 roughly 80,000,000,000 kWh. However, as much as 30% of this energy is lost through leaking systems – equal to the entire output of a medium-sized power station. Much more is wasted due to compressed air misuse and poor maintenance.

CompAir Products and Services have been designed to save energy across your compressed air system.

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

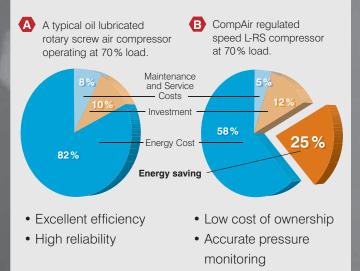
Regulated speed compressors from CompAir can efficiently and reliably handle the varying air demand found in most plant air systems.

These compressors speed up and slow down to match air supply to air demand as it fluctuates. The right variable speed compressor in the right application delivers significant energy savings and a stable, consistent air supply.

E = mc

#### REMARKABLE ENERGY SAVINGS

Annual cost of ownership with regulated speed compressors



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

### CompAir RS features are your benefits!

Wide regulation range

• No cycles means substantial energy savings

Perfect motor – drive – airend design

- High efficiency across broad flow range
- Substantial energy savings performance.

### Tried and tested inverter concept

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

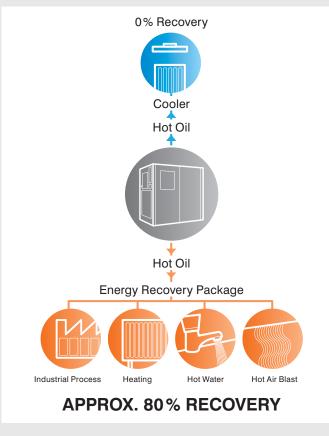


# RECOVER THE EXCESS HEAT IN YOUR COMPRESSOR AND SAVE MONEY

Approximately 10% of all electricity used in industry is accounted for by compressed air systems. It is a thermodynamic fact that around 95% of this energy is converted to heat and is wasted to the atmosphere through heat dissipated by the motor and cooling system, with the majority lost via the oil cooler.

CompAir's heat exchangers give you the opportunity to save money, energy and reduce your carbon footprint. They can be factory fitted, or are available in a kit form comprising all the necessary pipe-work and fittings to be retrofitted in the field.

Energy Recovery System – factory fitted or retrofit kit



# ◆ ALL AROUND PROTECTION ASSURE™ EXTENDED WARRANTY FREE OF CHARGE

The new CompAir Assure Warranty is the first of its kind in the world, based on a 'working when you are' approach instead of the yearly based industry standard warranty.

CompAir Comprehensive Service and Warranty Programmes based on product usage up to 44,000 hours.

### ASSURE™

24,000 hour extended warranty for new machines.

### ASSURE™ EXTENSION

Extension of the standard 24,000 hour warranty up to 32,000 hours.

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Re-Warranting of machines up to 28,000 hours which are not presently covered by warranty.

### ASSURE™ PLUS

44,000 hour extended warranty for machines which run more than 5,000 hours annually.



44,000

CompAir 🍪

22,000

12,000

32,000

# GENUINE SPARE PARTS

# Enjoy complete peace of mind with CompAir

Genuine CompAir spare 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 the following characteristics:

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

### Immediate availability of spare parts and lubricants

CompAir's stock control policy makes use of best practice found in the aerospace and automotive industries. This ensures that the most appropriate spare parts and lubricants are available on demand, guaranteed. This guarantee of the availability of parts applies throughout the service life of your installation, whatever the purchase date of your compressor.



# ADVANCED DESIGN – EASY SERVICING

The design of these packages assures the service points are readily accessible. The enclosure side doors are hinged and removable to allow complete access to all service points. The reduced number of moving parts also lowers maintenance costs.

# SCOMPRESSED AIR PURIFICATION

A modern production system and process demand increasing levels of air quality. This requires the elimination of moisture; filtration guarantees the highest product quality and efficient operation.

The perfect compressed air system consists of a compressor with after cooler, water separator, pre filter

to refrigerant or desiccant dryer and high efficient filtration system complete with a condensate management system and storage tank.

A CompAir compressed air system utilising the latest technology provides an energy efficient solution at lowest life cycle costs.





#### Water Cyclone Separator X N Series

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

#### Integrated Dryer

L30F to L80F with integrated refrigerant dyer and water separator both with zero loss drain provide clean and dry compressed air and is ready to operate. No site installation of tubes and fittings between compressor, dryer and drain and no pre filter or by pass are required. Dryer performance fits 100% to the compressor – no dew point peak caused by overload at high compressed air demand. The small footprint requires less space and is suitable for work place installation having a low noise level.



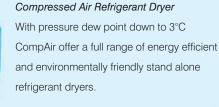


Compressed Air Filter CF N Series Particle removal including water and oil aerosols.













Heat Regenerative Desiccant Dryers Series A\_TV and A\_RS.

Condensate Drain Bekomat System to drain compressed air condensate without loss of compressed air.

#### **Oil-Water Separation System**

Proven and enhanced oil-water separation system for disposal of compressed air condensate.





# TECHNICAL DATA

# FIXED SPEED ROTARY SCREW COMPRESSORS:

COMPRESSOR MODEL		L30			L37			L45			L50		L55		
Nominal pressure	bar g	7.5	10	13	7.5	10	13	7.5	10	13	7.5	10	7.5	10	13
Drive motor	kW		30		37		45		45		55				
FAD <sup>1)</sup>	m³/min	5.75	5.11	4.36	7.10	6.17	5.30	8.00	7.00	6.11	8.67	7.40	10.69	9.51	8.24
Noise level <sup>2)</sup> , 1 m	dB(A)		67			68			69		6	67		69	
Weight	kg	923		966			988			1055		1725			
Dimensions (LxWxH) mm		1722	1722 x 920 x 1659		1722 x 920 x 1659			1722 x 920 x 1659			1722 x 920 x 1659		2158 x 1223 x 1971		
INTEGRATED DRYER OPTION		F30E (L30F)			F45E (L37F)		F	45E (L45	F)	F45E (L50F)		F55E (L55F)		=)	
Pressure dew point <sup>3)</sup>	°C		3			3		4	3	3	4	3		3	
Pressure Drop	kPa		8			12			14		1	7	20	16	12
Total power kW		1.3					1.8					2.2			
Refrigerant R407C kg 1.6						1.	35				1.5				
Weight	kg		110					120					128		

COMPRESSOR MODEL		L75		L80		L90			L110			L132				
Nominal pressure	bar g	7.5	10	13	7.5		10	7.5	10	13	7.5	10	13	7.5	10	13
Drive motor	kW		75			75			90			110			132	
	m³/min	13.74	12.44	10.43	14.72		12.26	17.45	15.47	13.45	20.77	18.63	16.21	22.87	21.27	18.59
Noise level <sup>2)</sup> , 1 m	dB(A)		72			69			73			75			76	
Weight	/eight kg 1765			2010		2513		2614		2778						
Dimensions (LxWxH) mm		2158 x 1223 x 1971		2158 x 1223 x 1971		2337 x 1368 x 2039		2337 x 1368 x 2039		2337 x 1368 x 2039						
INTEGRATED DRYER OPTION		F75E (L75F)		F75E (L80F)												
Pressure dew point <sup>3)</sup>	°C		3			3										
Pressure Drop	kPa	16	12	10	16	12	10									
Total power	kW		3.3			3.3										
Refrigerant R407C	kg		1.9			1.9										
Weight	kg		139			139										

L55 to L132 models are also available as WATER COOLED versions, for technical specifications please refer to the water cooled technical information sheets.

# ➡ REGULATED SPEED ROTARY SCREW COMPRESSORS (RS):

COMPRESSOR MODEL	-	L37RS	L45RS	L75RS	L90RS	L132RS	
Min – Max Pressure bar g		5 – 13	5 – 13	5 – 13	5 – 13	5 – 13	
Drive motor	kW	37	45	75	90	132	
FAD <sup>1)</sup> at <b>7.5 bar g</b>	m³/min	1.47 – 6.84	1.47 – 7.93	2.25 – 13.47	4.76 - 17.60	4.76 - 22.72	
Noise level at 70% load <sup>2)</sup> , 1 m	dB(A)	67	70	71	72	74	
Weight	kg	952	974	1800	2768	2786	
Dimensions (LxWxH)	mm	1722 x 920 x 1659	1722 x 920 x 1659	2158 x 1223 x 1971	2337 x 1368 x 2039	2337 x 1368 x 2039	

L75RS to L132RS models are also available as WATER COOLED versions, for technical specifications please refer to the water cooled technical information sheets.

<sup>1)</sup> Data measured and stated in accordance with ISO1217 Ed. 4, Annex C & Annex E and Pneurop / Cagi PN2CPTC2 at 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 the Pneurop/Cagi PN8TNC2.2 test code, + / - 3 dB

<sup>3)</sup> Flow capacities to ISO 7183 refer to a working pressure of 7 bar, an inlet temperature of 35°C and an ambient temperature of 25°C, saturated / dew point to ISO 8573-1



# INNOVATIVE PRODUCTS AND SERVICES

- TRUST COMPAIR TO SUPPLY INTELLIGENT COMPRESSED AIR SOLUTIONS



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

# 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 Dryer
- Desiccant Dryer
- Condensate Management
- Heat of Compression Dryer

#### Modern Control Systems

- CompAir DELCOS Controllers
- SmartAir Master Sequencer



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.

### Value Added Services

- 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.



www.compair.com <u>sales</u>@compair.com