



LRS Series
L07RS–L22RS (10–30 hp)
Variable Speed Rotary Screw Compressors

NEW



Engineered to Save

➔ VARIABLE SPEED ROTARY SCREW COMPRESSORS

Reliable compressed air provided at maximum efficiency under all operating conditions with quick, economical servicing and maintenance.

The CompAir LRS Series of rotary screw air compressors incorporates a variable speed inverter drive system which precisely matches power consumption with air demand.

Maximum efficiency at any level of demand cuts energy costs and saves money

The ability to precisely match output to demand allows the compressors to consume exactly the right amount of energy to do the job, and no more. This is achieved by varying the speed of the drive motor with a level of efficiency which cannot be matched.

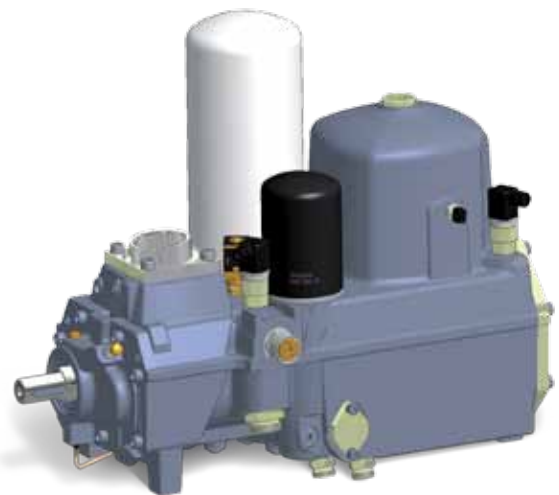
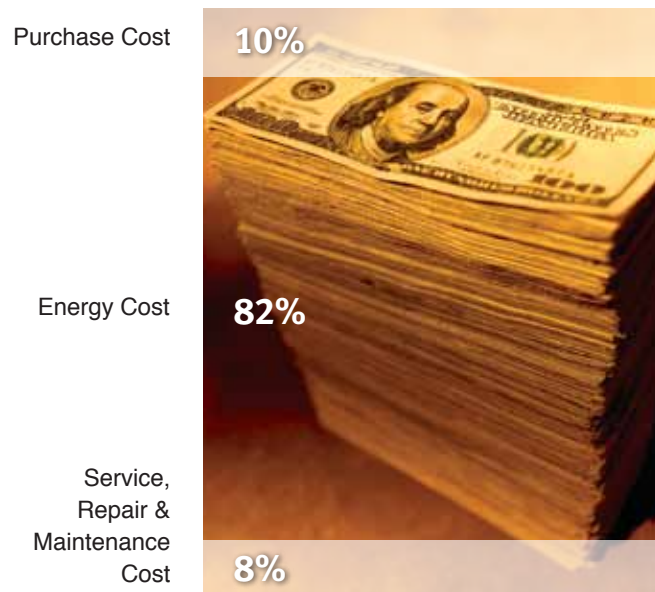
The right variable speed compressor in the right application delivers significant energy savings and a stable consistent air supply.

In addition, precise pressure control and smooth acceleration and deceleration of rotary components extends service life improving payback on your investment.

Premium efficiency airend

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

Cost of Compressed Air Over 5 Years



High performance compressed air element (L22RS shown) with integrated oil filtration, oil separation and thermal mixing valve.

Eliminates Waste

- Regulates compressor speed to match output to system demand.
- Eliminates run-on time during periods of low system demand.
- Eliminates over pressurization.

Proven & Dependable Inverter Drive System

- CompAir's inverter drive system incorporates the latest in inverter drive technology.
- Simple motor and controller design.
- Established, proven and reliable.

Wide Turndown Range

Capable of meeting a wide variety of air demand needs.

Reduces Electrical & Mechanical Loads

Soft starting with no current peaks.

Economical to Maintain

Grouped service components reduce down time and simplify servicing.

Easy to Install and Operate

Low noise level, free standing and simple operator controls.

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 optimizes performance to demand and monitors operating parameters of the unit on site and remotely.



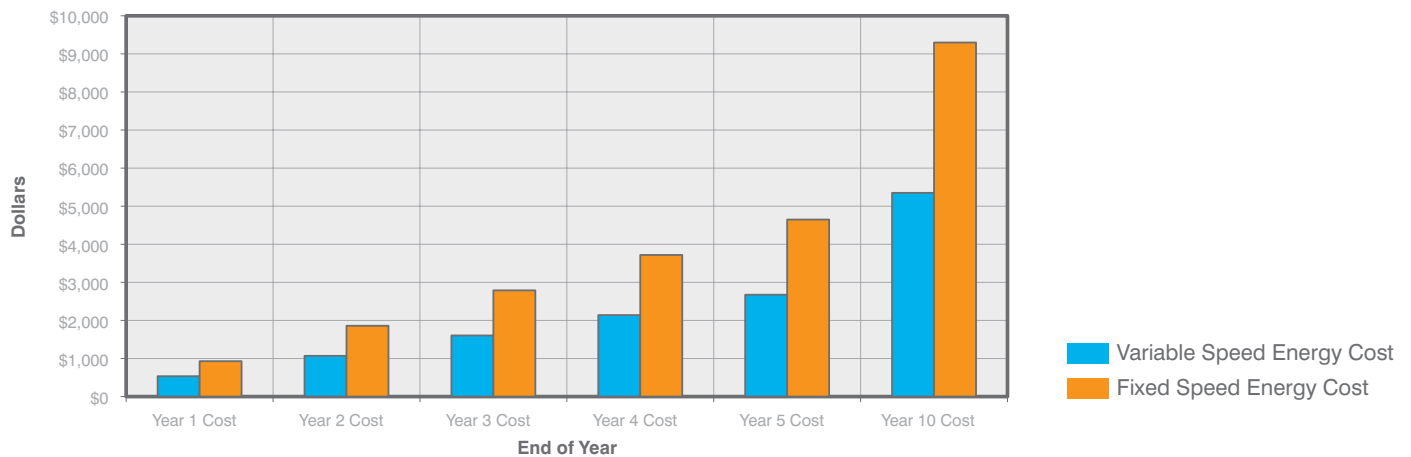
Remarkable energy savings

Air compressors are designed to be capable of performing continuously at maximum output capacity and the CompAir LRS Series is no exception.

However, many times the maximum capacity is only required at limited, peak times. The majority of air compressors operate at an average 50–70% of full capacity. Below maximum capacity is where the true energy saving potential of the LRS Series can be realized.

With energy consumption in near perfect proportion to demand, the energy wasted with conventional regulation systems can be saved. Combine this energy-saving concept with the CompAir compression element and you have a formidable duo with significant energy saving potential.

Variable Speed to Fixed Speed Energy Cost Comparison





Grouped Service Components



Fully Integrated Design



Easy operator interface and status monitoring via the microprocessor based control system.



A Reliable and Highly Efficient Drive System

➔ The LRS Series compressors use proven and dependable variable speed inverter drive technology.

Service-Friendly Design

Although compact, the compressor design allows for:

- Short servicing times
- Long service intervals
- Reduced service costs

Easy Service Items

- Spin on/off separator cartridge gives residual oil carryover of less than 3 ppm
- Quick oil change via external drain
- Easy access suction filter element

Minimum Space Requirement

- Small footprint saves space, allowing installation even in restricted areas

High Performance Standard Features

- Quiet enclosed
- TEFC motor
- Microprocessor based control system

Airend

- Integrated design delivers maximum performance
- Provides high air output
- Minimum power consumption
- Optimized oil injection
- Low rotational speeds

Innovative Control Panel

- Avoids input errors
- Increases operational safety
- Dual position for ease of access

Automatic Belt Tensioning System

- Maintenance free
- Provides correct belt tension
- Gives long belt life

➤ *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.

Dual Position Delcos Pro Electronic Control

Innovative design provides flexibility in controller location, optimizing access when base- or tank-mounted.

Low Maintenance Costs

All service components are conveniently grouped and are accessed via the easy to remove canopy, keeping service time and costs to a minimum.

Fully Integrated Airend

The new design of the high efficiency airend operates at low rotational speeds, and as a result reduces energy costs.

Up to 113° F (45° C) Ambient Capability

Ensures continuous and stress-free operation through efficient heat dissipation.

High Efficiency Drive Motor

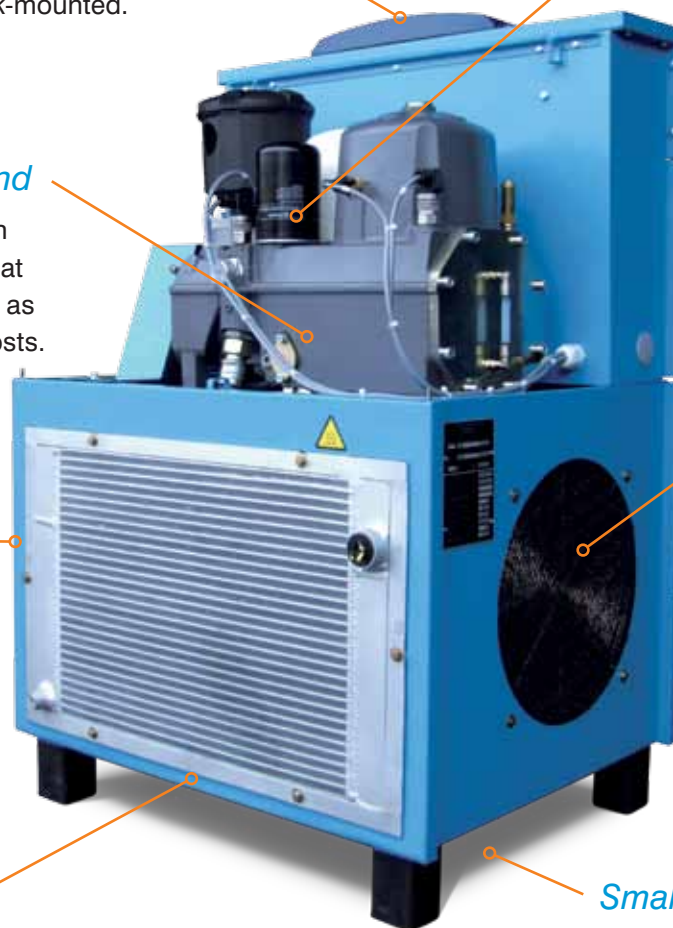
TEFC motor for operational reliability.

Low Noise Levels

Reduced installation cost can be achieved by locating the compressor near personnel or equipment.

Small Installation Footprint

For ease of installation, the package is fully accessible from all sides and designed to pass through a standard doorway.



Easy to maintain

The compressor is designed to help reduce maintenance costs. It will provide you with advance indication of service requirements allowing you to schedule maintenance at convenient times.



Protection you can count on.



Three-Way Dryer Bypass

Standard bypass allows for servicing of dryer without air interruption.

Stainless Steel Tubing

Rugged and high quality stainless steel tubing for years of reliable operation.

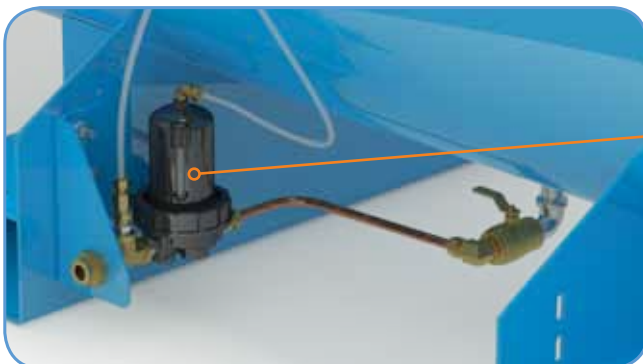
Integrated Forklift Slots

Allows for ease of installation and transport.



Recessed Pressure Gauge

High quality pressure gauge is protected from damage.



Automatic Zero-Loss Drains

Provides automatic drain of liquid with no loss of air from tank and dryer.

⇒ DELCOS PRO INTELLIGENT CONTROLLER

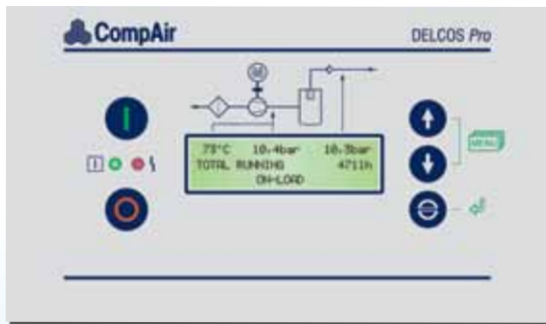
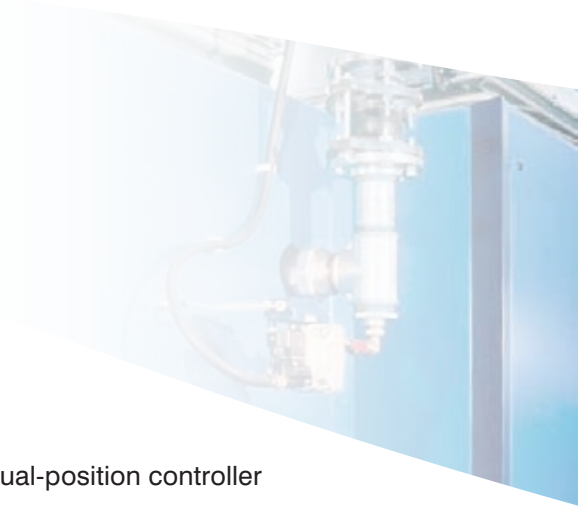
Innovative Compressor Controller

The DELCOS Pro with its three line LCD display is extremely intuitive and user-friendly. All functions are clearly structured.

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



Dual Position Controller



Delcos Pro Controller

- Industry's only dual-position controller
- Standard real-time clock for use of dual pressure bands
- Timer-controlled stop/start
- Remote-controlled stop/start
- Standard Modbus RTU interface
- External dryer control contacts
- Programmable digital inputs and fault outputs
- Auto restart on power failure
- Easy to read and navigate LCD display
 - » Discharge/line pressure
 - » Air/oil temperature
 - » Total run and loaded hours
 - » Service due indicator
 - » Fault log monitor
 - » General status indicator

SmartAir Master: Highly Efficient Multi-Compressor Control System (Optional)

Modern compressed air systems are required to be more energy efficient, reliable and meet higher standards of safety than ever before.

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 multi-capacity compressors are installed, only the correct combinations of compressors are selected to meet the system demand, resulting in maximum energy savings.



Benefits at a Glance

- User-friendly and intuitive color 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
- The DELCOS controllers can be connected without any additional hardware

➔ ENERGY EFFICIENT AT ALL LOAD LEVELS



The single largest “cost” item, during the life of a compressor is the cost of the electricity required to run the compressor. With *e•Compare*, the CompAir Rotary Screw Energy Cost Calculator, no matter what load demand, the cost of the electricity used by a compressor can be calculated. Ask your local CompAir Authorized Distributor to demonstrate this unique cost-saving tool.

Compressor Energy Cost Estimator

Nominal kW	Operating Cost per Year (5000 hours) at Cost per kWh (\$)				
	\$.04	\$.06	\$.08	\$.10	\$.12
7	1,400	2,100	2,800	3,500	4,200
11	2,200	3,300	4,400	5,500	6,600
15	3,000	4,500	6,000	7,500	9,000
18	3,600	5,400	7,200	9,000	10,800
22	4,400	6,600	8,800	11,000	13,200

Note: Hours of operation based on two 8-hour shifts, 6 days per week. Calculations based on nominal kW.



Frame 1

Compressor Model		L07 RS				L11 RS			
Normal Pressure	psi g	75	100	125	190	75	100	125	190
Drive Motor	HP (kW)	10 (7)				15 (11)			
FAD Min.–Max.	Scfm	18–46	17–45	16–39	15–29	23–65	22–64	22–59	20–45
Noise Level	dB(A)	63 (at 70% load)				64 (at 70% Load)			
Weight	Lbs (kg)	489 (222)				509 (231)			
Dimensions L x W x H	inches (mm)	26.5 x 24.8 x 41.3 (667 x 630 x 1050)				26.5 x 24.8 x 41.3 (667 x 630 x 1050)			
Discharge Pipe	NPT	¾"				¾"			
Refrigeration Dryer ³⁾		CNC50				CNC75			
Absorbed	kW	0.4				0.6			
Voltage	V / Hz	115 / 1 / 60							
Refrigerant	Type	R134a							
Dryer Air Outlet	NPT	½"				¾"			
Receiver	Volume	80 / 120 gal							
Rec. Air Outlet	NPT	1"							
L x W x H	in	63.3 x 32 x 67.8 (80 gal)				79.6 x 32 x 73.8 (120 gal)			
Weight LD	lbs	859 (80 gal) / 942 (120 gal)				879 (80 gal) / 962 (120 gal)			
Weight WD	lbs	959 (80 gal) / 1032 (120 gal)				1130 (80 gal) / 1214 (120 gal)			

Frame 2

Compressor Model		L15 RS				L18 RS				L22 RS			
Normal Pressure	psi g	75	100	125	190	75	100	125	190	75	100	125	190
Drive Motor	HP (kW)	20 (15)				25 (18)				30 (22)			
FAD Min.–Max.	Scfm	34–93	33–92	32–85	29–59	49–109	47–108	46–96	43–78	38–126	37–125	34–116	32–94
Noise Level	dB(A)	67 (at 70% load)				68 (at 70% Load)				69 (at 70% Load)			
Weight	Lbs (kg)	805 (365)				840 (381)				851 (386)			
Dimensions L x W x H	inches (mm)	31 x 27.5 x 47.3 (787 x 698 x 1202)				31 x 27.5 x 47.3 (787 x 698 x 1202)				31 x 27.5 x 47.3 (787 x 698 x 1202)			
Discharge Pipe	NPT	1"				1"				1"			
Refrigeration Dryer ³⁾		CNC100 / CES90				CNC125 / CES120				CNC150 / CES140			
Absorbed	kW	0.9				1.3				1.3			
Voltage	V / Hz	115 / 1 / 60											
Refrigerant	Type	R134a											
Dryer Air Outlet	NPT	1"											
Receiver	Volume	120 gal											
Rec. Air Outlet	NPT	1"											
L x W x H	in	79.6 x 32 x 73.8											
Weight LD	lbs	1260				1295				1306			
Weight WD	lbs	1571 (CNC100) / 1555 (CES90)				1628 (CNC125) / 1612 (CES120)				1645 (CNC150) / 1629 (CES140)			

¹⁾ Data measured and stated in accordance with ISO 1217 Annex C 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 and ISO 9614-2, tolerance ± 3 dB(A).

³⁾ The refrigeration dryer requires a separate electric supply. Data refer to DIN ISO 7183, 8573-1:2001 (class 4, pressure dew point 3°C).

Aftermarket Parts & Lubricants

Protect the Investment in CompAir

Regular maintenance and service of CompAir product is critical to the performance and longevity of the equipment. Only CompAir can provide the assurance that the investment will provide a lifetime of productivity.

Reliability

Only CompAir can provide aftermarket parts and services that are engineered for use in CompAir products. The parts and lubricant have been tested under rigorous conditions at the factory to the highest quality standards.

Performance

Only CompAir can provide aftermarket parts designed specifically for the CompAir product. Use of OEM parts ensures that the investment in CompAir will continue to perform year in and year out with the same reliability and efficiency.

Ease of Doing Business

Only CompAir can provide the peace of mind of turning to one supplier and one source for all aftermarket needs. CompAir has the support network in place to handle all customer service, service and technical support needs.

Value

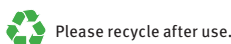
Only CompAir can provide the high quality aftermarket parts and services for the life of the investment in CompAir. Proper care of the CompAir product is vital to the equipment's performance and efficiency. Lean on a trusted source—CompAir.



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Member

