

L37SR - L45SR - L75SR - L110SR - L132SR
Speed Regulated Rotary Screw Compressors



Engineered to Save

SPEED REGULATED ROTARY SCREW COMPRESSORS

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

The CompAir LSR Series of rotary screw air compressors incorporates a variable speed switched reluctance drive system of outstanding efficiency, offering the ability to precisely match 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 by any other conventional variable speed drive system.

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

Proven and dependable switched reluctance drive systems in a new application concept

CompAir's switched reluctance drive systems offer the most significant technological advance in rotary drives since the inception of the induction motor over a century ago and, combined with the latest features for control and monitoring, overcome many of the commonly accepted disadvantages of induction motors, still used in many applications today.



LSR Series compressors are able to accurately maintain a set pressure while responding instantly to changes in air demand.

Maintaining air system pressure at an exact pre-set level eliminates the need to operate within pressure bands, enhancing efficiency still further. The quality of your process or product can also be improved with the guarantee of constant, unchanging air system pressure.

- ➔ **Saves Energy Costs**
Regulates compressor speed to match output to system demand.
Eliminates run-on time during periods of low system demand.
Eliminates over pressurization.
- ➔ **Improves Process or Product Quality**
Constant pressure air supply.
- ➔ **Unique Switched Reluctance Drive System**
Higher efficiency than alternative variable speed drives.
Simple motor and controller design.
Established, proven and reliable.
- ➔ **Reduces Electrical and 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.



The LSR Series of compressors are designed to operate effectively as stand alone units or in conjunction with other compressor packages to provide maximum air efficiency at all times.

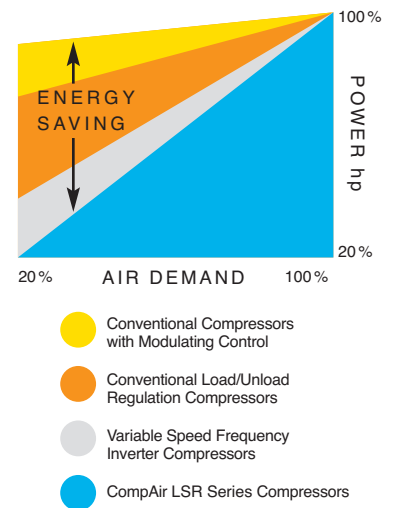
Remarkable energy savings

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

Surveys show, however, that maximum capacity is only required at limited, peak times with a majority of air compressors operating at an average 50% - 70% of full capacity. Below maximum capacity is where the true energy saving potential of the LSR 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 designed, developed and manufactured compression element, giving high air output for minimum power consumption, and you have a formidable duo with significant energy saving potential.

Power Consumption Comparison

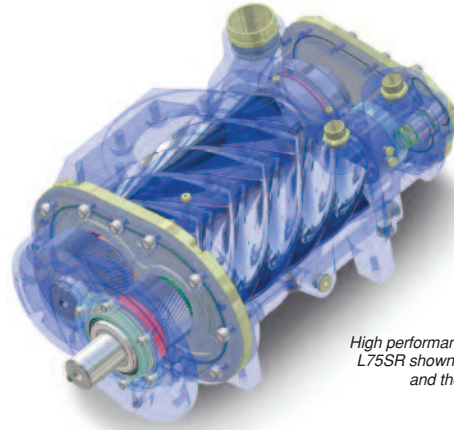


➔ Enhanced reliability

The CompAir Switched Reluctance drive systems are inherently soft starting, with smooth and controlled acceleration and deceleration, reducing stress on mechanical and electrical components. Compared to conventional variable speed drives, the electronically controlled regulation of the LSR Series simplifies system construction resulting in a 'less to go wrong' enhanced reliability concept.

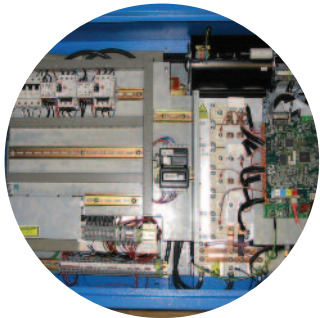
➔ Quality you can rely on

An ISO9001 certified design and manufacturing process, continuously audited by our internal auditors ensures a high quality and reliable product.

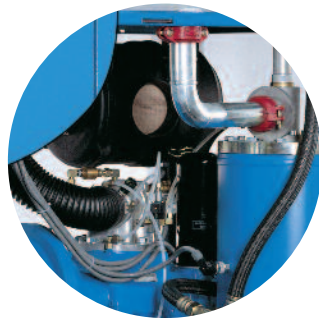


High performance compressed air element L75SR shown with integrated oil filtration and thermal mixing valve.

The LSR Series compressor drives use tried and tested Switched Reluctance Drive Technology in a new application concept



Grouped service components and easy access keeps service downtime and costs to a minimum.



Drive efficiency losses are eliminated by direct coupling of the motor and compression element.

➔ Easy to install

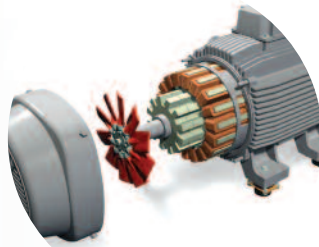
The compressor's small installation footprint, lifting slots and vertical air discharge simplify installation.

➔ Easy starting

All conventional motor drive systems require a high starting peak current. The LSR Series compressor drive system, however, is able to start without any increase in power supply current above normal running levels, reducing stress on the site power supply system and eliminating peak current energy cost penalties.



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



SR motor assembly utilizing standard IP55 housings. (L75SR shown)

➔ Easy to operate

The compressor controller continuously protects your investment by monitoring every vital operational parameter. Once installed and commissioned, just tell any of the LSR Series compressors what pressure you require and press the start button.



➔ 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.

Servicing is simple, quick and economical. All routine maintenance parts are conveniently grouped behind the hinged and removable service door, providing instant access and reducing service times.

LSR Series compressors represent CompAir's commitment to providing innovative and high technology solutions for complete compressed air systems



L45SR



L132SR



L75SR

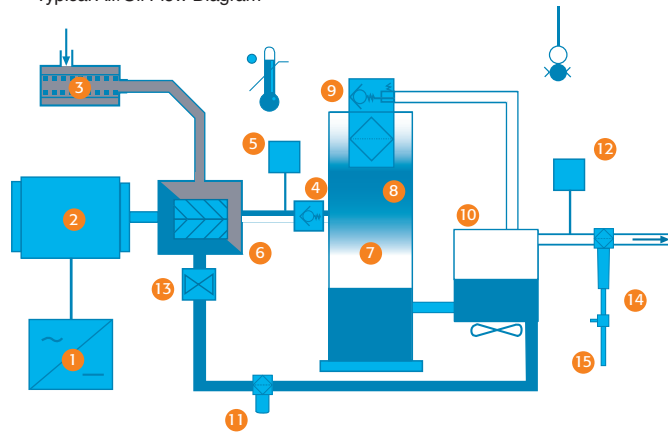


L110SR



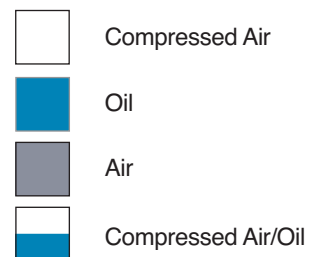
L37SR

Typical Air/Oil Flow Diagram



Key to diagram

- | | |
|--|--------------------|
| 1 Switched Reluctance Motor Controller | 10 Oil Cooler |
| 2 Switched Reluctance Motor | 11 Air Cooler |
| 3 Air Intake Filter | 12 Oil Filters |
| 4 Non Return Valve | 13 Pressure Sensor |
| 5 Temperature Sensor | |
| 6 Air Compression Element | |
| 7 Reclaimer Vessel | |
| 8 Air/Oil Separator Element | |
| 9 Minimum Pressure Non Return Valve | |



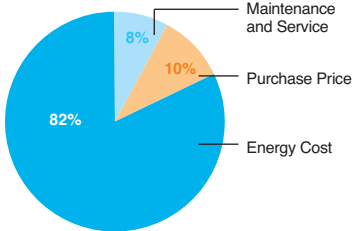
FRAME 3									
Compressor Model		L37 SR				L45 SR			
Normal Pressure	psi g	75	100	125	190	75	100	125	190
	bar g	6	7.5	9	13	6	7.5	9	13
Drive Motor	HP	50				60			
	Kw	37				45			
Free Air Delivered Minimum-Maximum	Scfm	53-244	52-242	51-228	47-186	53-283	52-280	51-265	47-217
Noise Level	dB(A)	70 (at 70% Load)				71 (at 70% Load)			
Weight	Lbs (kg)	2275 (1032)				2281 (1035)			
Dimensions	L x W x H INS.	68 x 36 x 65				68 x 36 x 65			
	L x W x H MM	1722 x 920 x 1659				1722 x 920 x 1659			
Discharge Pipe Size	NPT	1.5"				1.5"			

FRAME 4									
Compressor Model		L75 SR							
Normal Pressure	psi g	72		100		125		190	
	bar g	6		7.5		9		13	
Drive Motor	HP	100							
	Kw	75							
Free Air Delivered Minimum-Maximum	Scfm	81-493		79-481		78-446		77-377	
Noise Level	dB(A)	73 (at 70% Load)							
Weight	Lbs (kg)	4075 (1848)							
Dimensions	LxWxH INS.	73x85x48							
	LxWxH MM	2158x1223x1971							
Discharge Pipe Size	NPT	2.0"							

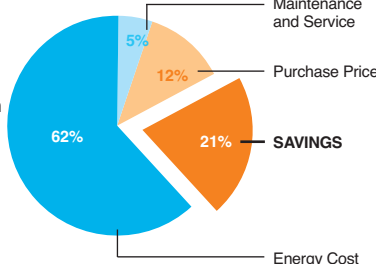
FRAME 5									
Compressor Model		L110 SR				L132 SR			
Normal Pressure	psi g	75	100	125	160	75	100	125	190
	bar g	6	7.5	9	11	6	7.5	9	13
Drive Motor	HP	150				180			
	Kw	110				132			
Free Air Delivered Minimum-Maximum	Scfm	171-626	168-623	167-583	164-506	171-806	169-803	167-760	161-609
Noise Level	dB(A)	72 (at 70% Load)				76 (at 70% Load)			
Weight	Lbs (kg)	5514 (2501)				5595 (2538)			
Dimensions	L x W x H INS.	92 x 54 x 80				92 x 54 x 80			
	L x W x H MM	2337 x 1368 x 2039				2337 x 1368 x 2039			
Discharge Pipe Size	NPT	2.5"				2.5"			

Annual Cost of Ownership

A typical oil lubricated rotary screw air compressor operating at 70% load.



A typical comparison of an LSR Series compressor with a conventional air compressor.



➔ COMPRESSED AIR SOLUTIONS FOR EVERY APPLICATION

Compressors

Up to 2750 cfm

1 - 604 hp

Up to 6000 psi

Lubricated

Rotary Vane

Single Stage Screw

Speed Regulated Screw

Piston

Portable

Oil-Free

Two Stage Screw

Water-Sealed Screw

Piston

Portable

Complete Accessories Program

Filters and Dryers

Cooling Systems

Heat Recovery

Condensate Management

Air Receivers

Multi-Set Controllers

Lubricants

Value Added Services

Air Audit

Performance Reporting

Utility Air

Performance Contracting

Complete Service for Compressed Air Technology

Engineering of Complete Compressor Stations

Local Service Centers

Guaranteed Parts Availability



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