

# LZ OIL-FREE COMPRESSOR

A zero-compromise  
oil-free air solution

Atlas Copco



## **PREMIUM PERFORMANCE**

Piston compressors have always presented a compelling offer: robust, low maintenance and energy efficient. However, this strong performance typically came with high noise levels and few control options. The Atlas Copco LZ eliminates this trade-off. Simply the most complete oil-free piston compressor on the market today, the LZ meets all your compressed air needs and then some.

### **ABSOLUTELY CLEAN AIR**

When your operations require unquestionably clean air, "technically oil-free" really won't do. Oil-injected compression, even filtered, cannot guarantee that all oil vapors, aerosols and other contaminants are removed from the air. Thanks to the pioneering Atlas Copco oil-free technology built into the LZ, you can be sure of absolutely clean air.

### **LOW NOISE**

Thanks to its sound-attenuating materials and canopy, the LZ offers noise levels as low as 67 dB(A). With this silent performance previously unattainable for an oil-free piston compressor, the LZ is suitable for sound-sensitive environments.

### **FIRST-CLASS RELIABILITY**

With an operational lifetime of 16,000 hours, the LZ is a long-term companion. This supreme reliability stems from the LZ's quality components as well as its compression technology. Because the LZ doesn't use any oil, it will last longer with only minimal service. No oil changes are required.

### **ADVANCED CONTROL**

The LZ comes with the Atlas Copco Elektronikon® already built in to give you advanced electronic control and monitoring. The one-touch controller is easy to use, optimizing both performance and reliability.

### **HIGH EFFICIENCY**

Energy use matters, as it constitutes the highest cost of running a compressor. The direct driven LZ comes with a number of innovations (one-bearing motor, load/stop technology, etc.) to reduce energy consumption to an impressive minimum.



# LZ

## The zero-compromise piston compressor

### Continuous operation

Lubricated compressors operate up to 20% of their running time in cool-down mode. Thanks to its oil-free technology and internal cooling fan system, the LZ can offer a 100% duty cycle for uninterrupted service.

### Quality air

- ISO 8573-1 Class 0 pump produces TÜV-certified 100% clean air.
- Dryer and filters included as standard in the full feature and pack versions.

### Complete control

- Dual pressure set point.
- Remote control.
- Remote alarm.
- Integrated saver cycles.
- Integrated smart algorithm for cooling and duty cycle.
- Maintenance schedule.
- Pressure, temperature and lifetime monitoring.

### Energy savings

- Direct drive technology offers major energy savings compared to belt-driven compressors.
- Start-stop technology eliminates waste during the unload cycle.
- One-bearing motor to reduce mechanical friction.

High-performance cooling fan

Class 0 certified oil-free pump

VV cooling design

Temperature sensor

Motor inlet

Sound insulation

Sound-attenuating canopy

Air filter

Cubicle

Atlas Copco Elektronikon® controller



### Reliability

- Patented stainless steel inlet/outlet pump valves.
- Long lifetime of 16,000 hours.
- Unbeatable low maintenance costs.

### Flexibility

- Full range with different power (7–20 hp), pressure (4–10 bar) and electric potential (230/400/460V) options.
- Pack and full feature, base and tank mounted versions available (for the LZ 7/10).

**DESIGNED  
IN EUROPE**

The Atlas Copco LZ compressor was designed and developed in the Atlas Copco piston center of excellence in Italy.



# NEED NITROGEN? ADD THE LZ

Are you a frequent user and/or producer of nitrogen? The Atlas Copco LZ is the high-performance, cost-saving foundation of your nitrogen generation system. Unlike lubricated compressors, the oil-free LZ doesn't require additional filtration equipment.

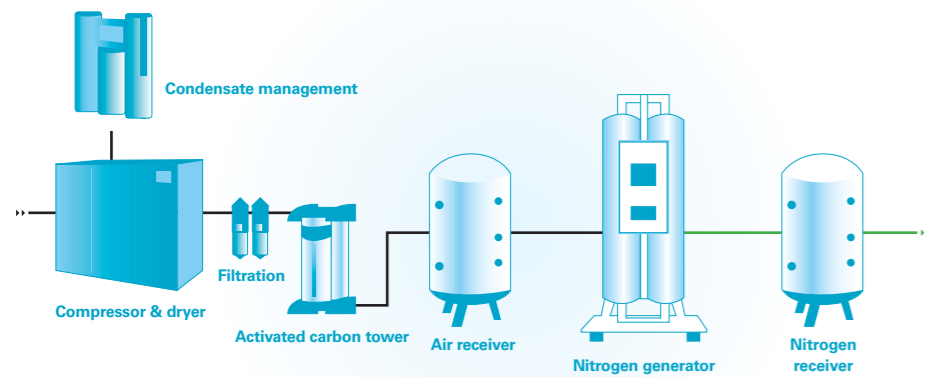
As a result, the LZ gives you a more compact footprint, lower maintenance and minimized downtime. Because the LZ doesn't compromise the adsorbent of the nitrogen generator, your system will last longer as well.

## STILL USING NITROGEN BOTTLES?

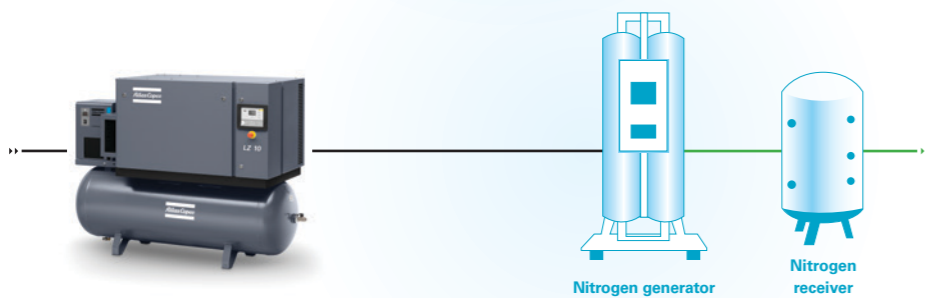
Atlas Copco nitrogen generation systems combine a compressor with a nitrogen generator to create the sustainable and cost-efficient alternative to cylinders or bulk supply. A nitrogen generation system provides an independent supply of nitrogen, when you need it and at the lowest cost, eliminating ordering, transportation, storage and delivery expenses.



### Traditional nitrogen generation systems:



### LZ-powered nitrogen generation systems:



- Smaller investment.
- Reduced maintenance cost.
- Increased generator lifetime.

# TECHNICAL SPECIFICATIONS

## PERFORMANCE

Compressor type	Maximum working pressure		FAD @ 50 Hz			FAD @ 60 Hz			Installed recommended power		Noise level db(A)	Vessel l	Version	Dewpoint FF	
	bar(e)	psig	l/s	m <sup>3</sup> /min	cfm	l/s	m <sup>3</sup> /min	cfm	kW	hp				°C	°F
LZ 7-10	10	145	11	0.66	23.3	12	0.72	25.4	5.5	7.5	67	270 500	BM/ TM/ FF*	3	37
LZ 10-10	10	145	15.5	0.93	32.8	18.2	1.1	38.9	7.5	10	69	270 500	BM/ TM/ FF*	3	37
LZ 15-10	10	145	22	1.32	46.6	24	1.44	50.8	11	15	74	-	BM	-	-
LZ 20-10	10	145	31	1.86	65.6	36.4	2.2	77.8	15	20	76	-	BM	-	-

\* BM: base mounted – TM: tank mounted – FF: full feature.

\*\* Voltage: 400 50Hz – 230/380/460 60Hz.

\*\*\* Unit performance measured according to ISO 1217, Ed.3, Annex C-2009.

\*\*\*\* Mean noise level measured according to ISO 2151/Pneurop/Cagi PN8NTC2 test code; tolerance 3 dB(A).



## REFERENCE CONDITIONS

Absolute inlet pressure	1 bar (14.5 psi)
Intake air and coolant temperature	20 °C, 68 °F
FAD	measured at 7 bar

## DIMENSIONS

Dimensions	Base mounted			Full feature 270l vessel			Full feature 500l vessel		
	L (mm)	W (mm)	H (mm)	L (mm)	W (mm)	H (mm)	L (mm)	W (mm)	H (mm)
LZ 7/10	1442	808	871	1752	808	1315	1984	808	1457
LZ 15/20	1440	808	1614	-	-	-	-	-	-

## ***COMMITTED TO SUSTAINABLE PRODUCTIVITY***

We stand by our responsibilities towards our customers, towards the environment and the people around us. We make performance stand the test of time. This is what we call – Sustainable Productivity.



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Designs and specifications are subject to change without notice or obligation.  
Read all safety instructions in the manual before usage.

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