# ATLAS COPCO RAILWAY AIR SYSTEMS



Piston Compressor LER/LTR/LFR 3-10



Sustainable Productivity

### Reliable piston performance

Exceptionally reliable at a low cost, LER/LTR oil-lubricated and LFR oil-free aluminum piston compressors are built for high performance and extended lifetime even in the harshest ambient conditions. Available from 140 to 1100 l/min free air delivery.



# FEATURES AND BENEFITS

#### Space-saving design

- Minimized footprint with a single access side for maintenance and installation.
- Very compact directly-coupled hydraulic motor.

#### **Enduring performance**

- The compressor is designed, built and tested to meet the toughest conditions in railway applications (extreme climatic conditions, high humidity, and shocks and vibrations).
- Built in accordance with international railway standards.
- Proven railway technology used in various applications worldwide with a robust design similar to the railway industry.

#### Reliability and durability

- Minimum amount of moving parts.
- Corrosive resistant materials like stainless steel and aluminum.
- Long service intervals.
- Low maintenance drive concept.

#### Flexible and easy installation

- Plug and play system.
- Easy access to main connections.
- Integrated load/unload, blow off and non-return valve.



- Optimized fan assembly for efficient cooling and optimal compressor performance.
- Railway qualified vibration dampers for a minimum transfer of vibrations from and to the compressor package.
- High performance finned tube interand aftercooler.

# VARIANTS

High-pressure compressor variant

- Two-stage up to 30 bar.
- Equipped with intercooler for improved efficiency.

#### **Oil-free compressor variant**

- Where oil should be avoided.
- Environmentally friendly oil-free piston.
- Less maintenance.

## **TECHNICAL SPECIFICATIONS**

- Load/unload valve with integrated blowoff function and non-return valve for low
- Top quality direct drive aluminum LER/LFR/LTR compressor block in a V-arrangement, for a compact and lightweight installation, high in the harshest ambient conditions.

**OPTIONS** 

- starting torque and easy control.
- performance and extended lifetime even

Heavy duty inlet filter For efficient

Railway-gualified vibration dampers

longer maintenance intervals.

operation in dusty environments and

For a minimum transfer of vibrations

from and to the compressor and motor.

- High efficiency industrial air intake filter for trouble-free operation.
- High efficiency hydraulic gear motor with superior performance and low noise levels, working even at high hydraulic operating pressures.
- Hydraulic connections according to international standards.
- Different selection of hydraulic gear motors For an optimal fit between the performance of the compressor and the available hydraulic flow and pressure.
- Protection canopy To protect the compressor from big external particles and to be able to place the compressor outside.

Compressor type	Maximum working pressure		Effective working pressure	FAD at effective working pressure and minimum speed of 1200 rpm (40 Hz)			Installed recommended shaft power		FAD at effective working pressure and maximum speed of 1800 rpm (60 Hz)			Installed recommended shaft power	
	bar(e)	psig	bar(e)	l/s	m³/min	cfm	kW	hp	l/s	m³/min	cfm	kW	hp
10 BAR LER					·								,
LER 3-10	10	145	7	3.5	0.21	7.5	1.5	2.0	5.1	0.31	10.8	2.6	3.5
LER 5-10	10	145	7	6.7	0.40	14.2	2.9	3.8	9.7	0.58	20.6	4.6	6.2
LER 7-10	10	145	7	9.4	0.56	19.8	4.0	5.3	13.6	0.82	28.8	6.2	8.3
LER 10-10	10	145	7	12.6	0.75	26.6	5.7	7.6	18.2	1.09	38.6	8.6	11.5
10 BAR LFR													
LFR 3-10	10	145	7	3.2	0.19	6.8	1.6	2.1	4.6	0.28	9.7	2.3	3.1
LFR 5-10	10	145	7	6.6	0.39	13.9	3.0	4.0	9.1	0.55	19.3	4.3	5.8
LFR 7-10	10	145	7	8.8	0.53	18.6	3.8	5.1	12.0	0.72	25.4	5.8	7.7
LFR 10-10	10	145	7	12.4	0.74	26.3	5.3	7.1	18.2	1.09	38.6	8.6	11.5
15 BAR LTR													
LTR 3-15	15	218	12	3.2	0.19	6.8	1.6	2.1	4.7	0.28	10.0	2.5	3.3
LTR 5-15	15	218	12	5.4	11.4	11.4	2.9	3.9	7.9	0.47	16.7	4.5	6.1
LTR 7-15	15	218	12	7.4	0.44	15.6	4.0	5.4	10.9	0.65	23.1	6.3	8.5
LTR 10-15	15	218	12	9.4	0.56	19.8	5.5	7.4	Limited at 1500 rpm				
20 BAR LTR													
LTR 3-20	20	290	15	2.4	0.14	5.1	1.4	1.8	3.8	0.23	8.1	2.2	2.9
LTR 5-20	20	290	15	4.1	0.24	8.6	2.4	3.2	6.4	0.38	13.6	3.7	4.9
LTR 7-20	20	290	15	5.4	0.33	11.5	3.3	4.4	8.5	0.51	18.0	5.1	6.9
LTR 10-20	20	290	15	7.4	0.45	15.8	4.4	5.9	14.0	0.84	29.7	8.0	10.7
30 BAR LTR													
LTR 3-30	30	435	20	2.3	0.14	4.9	1.5	2.0	3.6	0.22	7.6	2.4	3.2
LTR 5-30	30	435	20	4.0	0.24	8.5	2.6	3.5	6.3	0.38	13.3	4.1	5.5
LTR 7-30	30	435	20	5.4	0.32	11.4	3.6	4.8	8.4	0.50	17.8	5.6	7.5
LTR 10-30	30	435	20	7.3	0.44	15.4	4.8	6.4	Limited at 1500 rpm				

#### Reference conditions:

Absolute inlet pressure: 1 bar (14.5 psi)

Intake air temperature: 20 °C (68 °F) For the higher pressure variants, the effective working pressure is 12, 15 and 20 bar, see data above Mean noise level measured according to ISO 2151/Pneurop/Cagi PN8NTC2 at 4.6 meter free field Unit performance measured at a standard unit (before dryer) according to ISO 1217, Annex C, latest edition

2935 0952 41 - Subject to alteration without prior notice.

Never use compressed air as breathing air without prior purification in accordance with local legislation and standards.

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