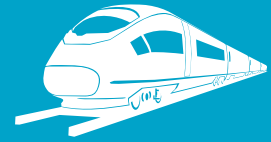


ATLAS COPCO RAILWAY AIR SYSTEMS



Oil-injected Screw Compressor
GAR 5-14

Sustainable Productivity

Atlas Copco

i *Less weight, more safety, consequently reliable*

The oil-injected, air-cooled GAR 5-14 screw compressors are designed for dedicated railway applications in extreme ambient conditions. They are a reliable, compact, low-weight, low-noise solution that can be installed on top of, inside or underneath the vehicle. Available from 500 to 1600 l/min free air delivery.



FEATURES AND BENEFITS

Space-saving design

- Minimal required footprint with a single access side for maintenance and installation.
- Optional air dryer, filters and control cubicle can all be integrated in a very compact compressor package.
- Integrated fan concept to avoid extra external fans.

Enduring performance

- The compressor is designed, built and tested to meet the toughest conditions in railway applications (extreme climatic conditions, high humidity, and shock and vibrations).
- Built in accordance with international railway standards.

Reliability and durability

- Minimum amount of moving parts.
- Use of corrosive resistant materials like stainless steel and aluminum.
- Long service intervals.
- Gear driven.

Flexible and easy installation

- Plug and play system.
- Easy to adapt cooling flow direction.
- Mainly used under or on top of a railway vehicle.



- 1 The Full Feature version includes integrated filters and a membrane dryer which removes oil and water vapor from the compressed air in order to protect your air piping network and braking system from freezing and corrosion.
- 2 Optimally sized, high efficiency aluminum cooler provides ideal compressor running temperature under all conditions.
- 3 Multi-stage, highly corrosion resistant oil separator, with a low (3 ppm) oil carry-over, reduces contamination and maintenance requirements.
- 4 Heavy duty air intake filter for efficient operation in dusty environments.
- 5 Atlas Copco's patented screw compression element for optimal energy efficiency and outstanding reliability.
- 6 High precision gears manufactured according to DIN 3961/class 6. Gears are oil-lubricated and temperature-controlled by the compressor oil.
- 7 Integrated cooling fan to optimize the air flow, which ensures that the right amount of cooling air is delivered efficiently to where it is needed with minimal noise.
- 8 High efficiency, totally enclosed fan-cooled (TEFC), IP 55, class F electric railway motor for continuous trouble-free operation with greased-for-life bearings.

OPTIONS

- **Different drives** The compressor can be equipped with different drives, like an AC motor, DC motor and hydraulic drive.
- **Control voltage connector** To easily connect the control voltage lines.
- **Motor voltage connector** To easily connect the power voltage lines.
- **Condensate treatment** To treat the condensate from the filtration line.
- **Different approvals** CE, ASME, SQL.
- **Load/unload valve** To be able to control the compressor in different applications.
- **Control pressure switch** To adjust the compressor according to air demand by measuring the pressure in the system.
- **Alarm pressure switch** To indicate that the compressor is still under pressure and to prevent the compressor from restarting too soon against a too high back-pressure in case of power supply interruption.
- **Anti-rotation switch** To signal the compressor is running and to prevent the compressor from running in the opposite direction due to a phase switch of the electro motor dP-switch.
- **Inlet filter** For remote warning in case the inlet filter is clogged.
- **Heating kit** To be able to run the compressor in ambient temperatures between -40 °C (-40 °F) and -25 °C (-13 °F).
- **Motor starter** Y/D or DOL.
- **Customized frame** To easily integrate the complete package into the available space envelope in, under or on top of the railway vehicle.
- **Noise hood** An engineered noise hood adapted to the available cooling flow directions to protect the compressor from external parts and to reduce the noise emission of the complete package.

TECHNICAL SPECIFICATIONS

Compressor type	Capacity*			Installed motor power		Pressure**		Sound pressure level dB(A)	Weight	
	l/s	l/min	cfm	kW	hp	bar(e)	psig		kg	lbs
50 Hz version										
GAR 5	9.0	540	19.0	5.5	7.5	10	145	56	154	339
GAR 7	13.2	792	28.0	7.5	11	10	145	57	163	359
GAR 10	16.5	990	35.0	11	15	10	145	58	188	414
GAR 14	26.2	1572	55.5	15	20	10	145	64	193	425
60 Hz version										
GAR 5	8.5	510	18	5.5	7.5	10	145	56	154	339
GAR 7	12.9	774	27.3	7.5	11	10	145	57	163	359
GAR 10	16.6	996	35.2	11	15	10	145	58	188	414
GAR 14	22.3	1338	55.5	15	20	10	145	64	193	425

Reference conditions:

Absolute inlet pressure: 1 bar (14.5 psi)

Intake air temperature: 20 °C (68 °F)

Effective working pressure: 9.5 bar (138 psi)

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

** Outlet pressures possible between 6 and 13 bar

