

# Atlas Copco mobility air systems

Oil injected Screw Compressor GAR 5-37

# **GAR 5 - 14**

## Safety engineered from reliability

The oil-injected, air-cooled GAR 5-14 screw compressors are designed for dedicated mobility applications in extreme ambient conditions. They are a reliable, compact, low-weight, low-noise solution meant to be installed on top of, inside or underneath the vehicle. Available from 500 to 1600 l/min (18 to 57 cfm) free air delivery.



# **Features and benefits**

#### Space-saving design

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

#### **Enduring performance**

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

### **Reliability and durability**

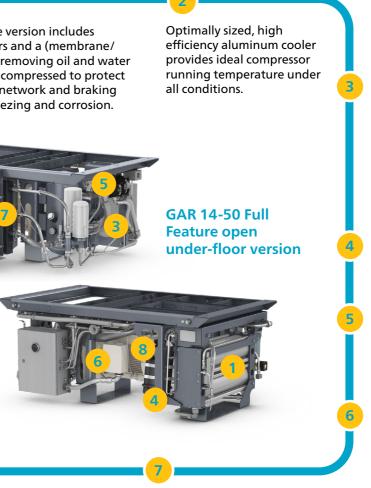
- Minimum number of moving parts.
- Use of corrosive resistant materials like stainless steel and aluminum.
- Long service intervals.
- Gear driven.

## Flexible and easy installation

- Plug and play system.
- Easy to adapt downwards or backwards cooling air flow direction
- Mainly used under or on top of the vehicle.

The Full Feature version includes integrated filters and a (membrane/ dessicant dryer removing oil and water vapor from the compressed to protect your air piping network and braking system from freezing and corrosion.





High efficiency, totally enclosed fancooled (TEFC), IP 55, class F railway-gualified electric motor for continuous trouble-free operation with greased-for-life bearings.

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.

## **Options**

- Different drives The compressor can be equipped with an AC powered or a hydraulic motor.
- Control voltage connector To easily connect the control voltage cables.
- Motor voltage connector To easily connect the power voltage cable.
- Condensate treatment To treat the condensate from the filtration line to disposable clean water.
- Different approvals CE, ASME, etc.
- Load/unload valve To be able to control the compressor in different applications.

- Control pressure switch To regulate the compressor by measuring the pressure in the system.
- Alarm pressure switch restarting too soon against high back-pressure in case
- Anti-rotation switch starting up into the wrong rotation direction.

Oil-injected screw compressors are especially recommended in hot and/or dust-loaded environments. The multi-stage, highly corrosion resistant oil separator with a low (3 ppm) oil carry- over keeps the oil within the compressor circuit.

Heavy duty air inlet filter for efficient operation in dustloaded environments.

Atlas Copco's patented screw compression element for optimal energy efficiency and outstanding reliability

High precision gears manufactured according to DIN 3961/class 6, oil-lubricated and temperature- controlled by the compressor oil.

according to the air demand

To prevent the compressor from of power supply interruption.

To prevent the compressor from

#### • Inlet filter switch For remote warning in case the inlet filter is clogged.

Heating kit To operate the compressor in low ambient temperatures between -40 °C / -40 °F and -25 °C / -13 °F.

• Motor starter Y/D or DOL.

#### **Customized frame**

To easily integrate the compressor into the available space envelope inside, under or on top of the vehicle.

#### Noise hood

Adapted to the available cooling flow directions, protecting the compressor from external parts, reducing the noise emission of the compressor.

# **GAR** 11 - 37 **Compact and tough**

The space-saving GAR 11-37 oil-injected screw compressors are designed, built and tested to meet the toughest ambient conditions, such as extreme climates, high humidity, heavy dustload, shocks and vibrations. Available from 1100 to 4500 l/min (40 to 160 cfm) free air delivery.

## **Features and benefits**

### Space-saving design

- Optional compressed air dryer, filters and control integrated in a very compact compressor package.
- Integrated radial fan concept to avoid extra external fans.
- Minimum required footprint with one single access side for easy maintenance.

### **Enduring performance**

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

## **Reliability and durability**

- Minimum number 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 directions.
- Mainly used inside the vehicle.

The Full Feature version includes integrated filters and a membrane dryer removing oil and water vapor from the compressed air to protect your air piping network and braking system from freezing and corrosion.

High efficiency, totally enclosed fan- cooled (TEFC), IP 55, class F railway- qualified electric motor for continuous trouble-free operation with greased- for-life bearings.

Heavy duty air inlet filter for efficient operation in dust-loaded environments.

Oil-injected screw compressors are especially recommended in hot and/or dust-loaded environments. The multi-stage, highly corrosion resistant oil separator with a low oil carry-over (3 ppm) keeping the oil within the compressor cicuit.

Atlas Copco's patented screw compression element for optimal energy efficiency and outstanding reliability.

# **Options**

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- Different drives The compressor can be equipped with an AC powered or a hydraulic motor.
- Control voltage connector To easily connect the control voltage cable.
- Motor voltage connector To easily connect the power voltage cable.
- Condensate treatment To treat the condensate from the filtration line to disposable clean water.
- Different approvals CE, ASME, etc.

• Load/unload valve To be able to control the compressor in different applications.

**Control pressure switch** To regulate the compressor according to air demand by measuring the pressure in the system.

Alarm pressure switch To prevent the compressor from restarting too soon against high back-pressure in case of power supply interruption.

Anti-rotation switch starting up into the wrong rotation direction.

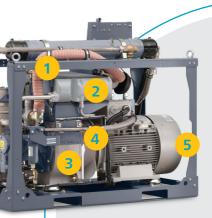


Optimally sized, high efficiency aluminum cooler provides ideal compressor running temperature under all conditions.

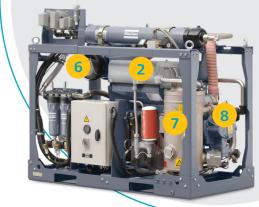
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High precision gears manufactured according to DIN 3961/class 6. oil- lubricated and temperature- controlled by the compressor oil.

tegrated 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.



**GAR 30-50 Full Feature with** heating kit, power connectors, floor version, in customized frame



To prevent the compressor from

#### Inlet filter switch

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 compressor package into the available space envelope inside the vehicle.

# **Technical specifications**

Compressor type	Capacity			Installed motor power		Pressure**		Sound pressure level		Weight
	l/s	l/min	cfm	kw	hp	bar(e)	psig	dB(A)	psig	Ibs
50 Hz version										
GAR 5	9.0	540	19.0	5.5	7.5	10	145	61	154	339
GAR 7	13.2	792	28.0	7.5	11	10	145	63	163	359
GAR 10	16.5	990	35.0	11	15	10	145	64	188	414
GAR 11	20.0	1200	42	11	15	10	145	70	309	681
GAR 14	26.2	1572	55.5	15	20	10	145	73	193	425
GAR 15	29.0	1740	61	15	20	10	145	71	333	734
GAR 18	35.0	2100	74	18.5	25	10	145	72	333	734
GAR 22	45.0	2700	95	22	30	10	145	76	333	734
GAR 30	58.0	3480	123	30	40	10	145	77	381	840
GAR 37	72.0	4320	153	37	50	10	145	78	392	862
				60 Hz	version					
GAR 5	9.0	540	19.0	5.5	7.5	10	145	61	154	339
GAR 7	13.2	792	28.0	7.5	11	10	145	63	163	359
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GAR 11	19.0	1140	40	11	15	10	145	72	309	681
GAR 14	22.3	1338	55.5	15	20	10	145	75	193	425
GAR 15	27.5	1650	58	15	20	10	145	73	333	734
GAR 18	39.5	2370	84	18.5	25	10	145	74	333	734
GAR 22	45.0	2700	95	22	30	10	145	79	333	734
GAR 30	55.0	3300	117	30	40	10	145	80	381	840
GAR 37	72.0	4320	153	37	50	10	145	81	392	862

#### **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



Atlas Copco



## **Atlas Copco Mobility Solution**

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