

OIL-INJECTED ROTARY SCREW COMPRESSORS

GA 160+-250 (160-250 kW/215-335 hp)



Atlas Copco





HIGHEST RELIABILITY, LOWEST OPERATING COSTS

The shortest route to maximize your profitability is to minimize your operational cost. As energy consumption is the major factor (up to 70%) of a compressor's lifecycle cost, the Atlas Copco GA 160+250 compressors are designed to help you achieve significant savings. The compressors provide high-quality compressed air to meet your requirements even in the most demanding applications.

Mining industry

- Years of experience with thousands of compressors running around the world.
- High product reliability with maximum uptime even in harsh conditions.
- Strong global support network to provide 24/7 assistance even in remote locations.

Energy industry

- Protect downstream equipment and increase component lifetime.
- Integrated water separator with electronic drain as standard.

Metal industry

- Easy and quick installation, with flexible ducting possibilities.
- A complete, ready-to-use solution including all components and options.
- Low service cost thanks to high accessibility of components and long service intervals.

General industry

- GA compressors are designed for ultimate efficiency in all your industrial applications.
- Ideal for machinery operation, plant maintenance, cleaning, pneumatic tools and controls, sand- and shot-blasting.





Reducing your operating costs

The GA 160+-250 provide maximum output at the lowest energy consumption. They will reduce your energy bill and your CO₂ emissions. The right core technologies with our experience in design and manufacture combine to produce a solution to match your needs. Generous cooling capacity, low pressure drop and a highly efficient drive train ensure optimum operation over a long lifetime.

Ensuring your peace of mind

The GA 160+-250 optimize uptime by keeping your production running, 24/7. The highly advanced controller ensures optimum operation by controlling all compressor inputs and outputs.

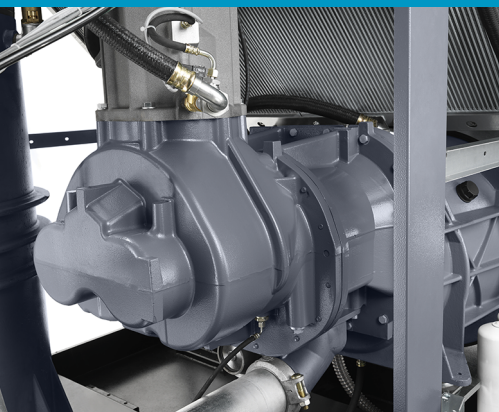
Easy installation and service

Easy to install, the 'all-in-one' package includes all necessary equipment. There are no hidden costs, nor any extra devices to install. Ducting is easy for increased flexibility. Service cost is reduced to a minimum: all parts are easily accessible via large opening doors, consumables are long-lasting, and service operations are easy and safe to perform.

Maximizing your profitability

As there is no "one size fits all" concept, we have developed a range of features and options to help you optimize the use of your compressor: from running the machine at high temperatures, to extra safety devices. Our highly skilled engineering team can help you develop a customized compressor based on your specific needs.

THE GA 160⁺-250 SETS A NEW STANDARD IN THE INDUSTRY



1 High-efficiency motor

- TEFC IP55 motor (Class F insulation B rise) protects against dust and chemicals.
- Continuous operation in ambient temperatures up to 46°C/115°F).

2 State-of-the-art screw element

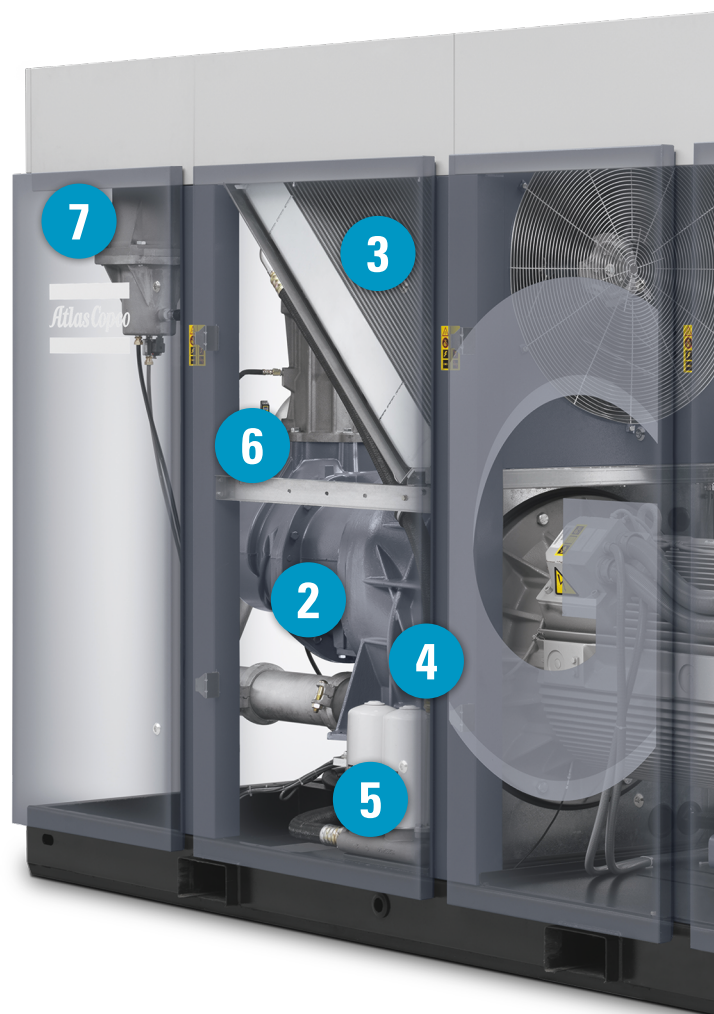
- Patented asymmetric rotor profile and meticulous selection of bearings.
- Low wear and tear leads to increased reliability.
- Proven reliability with thousands of installations throughout the world.

3 Cooling module

- Separated oil and aftercoolers for highest efficiency.
- Axial cooling fans driven by separate TEFC electric motors (IP55 protection).
- Low noise level.

4 Gear-driven transmission

- Maintenance-free; totally enclosed and protected against dirt and dust.
- Optimal working range of the screw element.
- Bowex coupling to absorb the trust load and increase the reliability.



5 Service-friendly

- Selection of long lifetime consumables.
- Easy and safe access to all service parts.
- Unique sliding system to access the oil coolers.



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Optimized loading/unloading valve

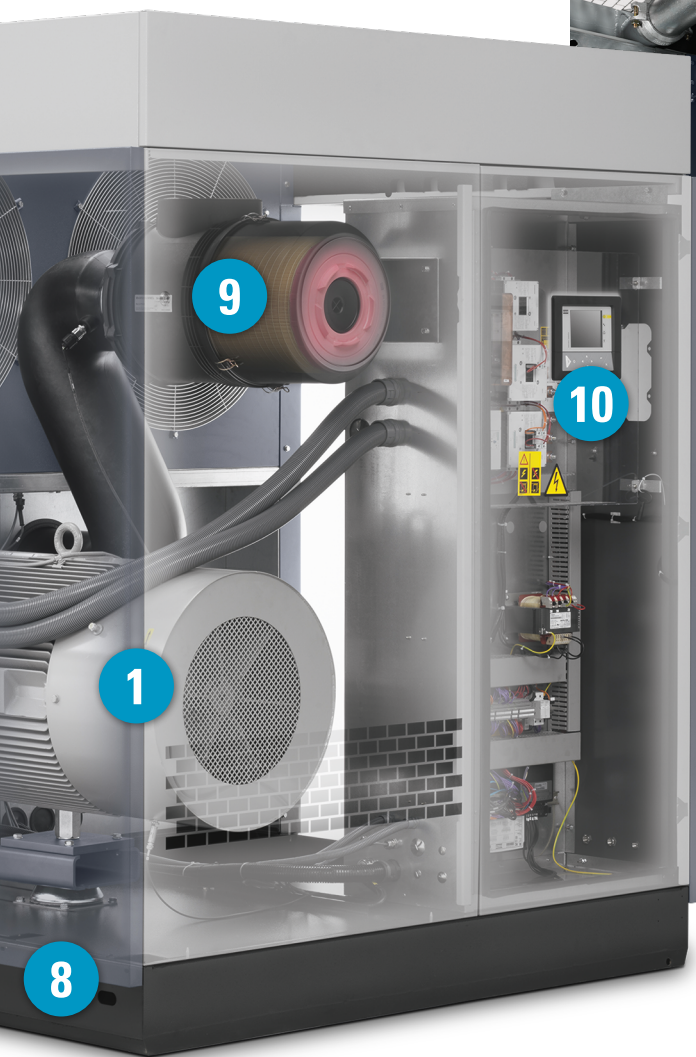
- Ensures constant optimized pressure in the system, resulting in significant energy savings.
- Simple, maintenance-free set-up with few moving parts for highest reliability.
- Accurate control through solenoid valve.



7

Superior air quality

- Integrated water separator with electronic drain removes 100% of condensate.



8

Easy to install

- Oil-containing frame as standard.
- All-in-one package, no hidden costs.
- Flexible ducting possibilities.

9

Superior air intake filter

- Protects the compressor components by removing 99.9% of dirt particles > 3 µm.
- Reduces the dust load in the fine filter, doubling the filter element lifetime without reducing filter efficiency.

10

Elektronik® for advanced monitoring

- Integrated smart algorithms reduce system pressure and energy consumption.
- Monitoring features include warning indications, maintenance scheduling and online visualization of machine's condition.



INCREASE YOUR SAVINGS WITH ENERGY RECOVERY

The Kyoto directives and the continuing depletion of traditional energy sources mean that businesses throughout the world are making commitments to significantly reduce overall energy consumption. Through innovative products and solutions, Atlas Copco helps you achieve your goals in this area. When it comes to compressed air production – where energy costs can constitute 70% of total lifecycle costs – saving energy can also lead to substantial cost savings.

Integrated heat exchanger

Air compression creates heat that is normally wasted in the coolers. Energy recovery systems designed by Atlas Copco enable the recovery of most of this heat. Recovery of energy from the shaft input of the compressor can be up to 94% of the compressor shaft power. The heat is directly usable as a source of energy in the form of hot water (85-90°C/185- 194°F). The main module of the recovery system is built into the compressor. The investment needed to link the hot oil circuit from the compressor to the existing water circuit is relatively modest and the time needed before seeing payback from your investment is generally very short.



Warm air heat recovery

The ducting on your GA compressors also constitutes a simple and smart solution to generate space heating. Ducting simply directs the warmed cooling air to where it is needed – such as workshops, storage warehouses or other facilities. To cope with seasonal changes, louver flaps can be used to vent the warm air to the outside. An installation with motorized and thermostatically controlled louvers is the ideal solution to accurately monitor the temperature with a full control of the flow of heating air.

Applications:

- Heating of facilities, warehouses or workshops.
- Drying air for painting and washing applications.

MONITORING AND CONTROL: HOW TO GET THE MOST FROM THE LEAST

The Elektronikon® unit controller is specially designed to maximize the performance of your compressors and air treatment equipment under a variety of conditions. Our solutions provide you with key benefits such as increased energy efficiency, lower energy consumption, reduced maintenance times and less stress... less stress for both you and your entire air system.



Intelligence is part of the package

- High resolution color display gives you an easy to understand readout of the equipment's running conditions.
- Clear icons and intuitive navigation provides you fast access to all of the important settings and data.
- Monitoring of the equipment running conditions and maintenance status; bringing this information to your attention when needed.
- Operation of the equipment to deliver specifically and reliably to your compressed air needs.
- Built in remote control and notifications functions provided as standard, including simple to use Ethernet based communication.
- Support for 31 different languages, including character based languages.



Online & mobile monitoring

Monitor your compressors over the Ethernet with the Elektronikon® unit controller. Monitoring features include warning indications, compressor shut-down and maintenance scheduling. An Atlas Copco App is available for iPhone/Android phones as well as iPad and Android tablets. It allows fingertip monitoring of your compressed air system through your own secured network.

OPTIMIZE YOUR SYSTEM

Scope of supply

Air circuit	Superior air inlet filters and flexibles
	Air intake valve (not on VSD units)
	Full load/no load regulation system (not for VSD)
Oil circuit	Heavy-duty oil filters
	Complete oil circuit
	Air/oil separation system
Cooling circuit	Compressed air aftercooler and oil cooler
	Stainless steel tube for water-cooled versions
	Axial cooling fans for air-cooled versions.
	Integrated water separator
	Electronic water drains with no loss of compressed air
	Complete air, oil, water circuit
Electrical components	TEFC IP55 Class F IE3 electric motor
	Starters* (Star-Delta)
	Elektronikon® unit controller
Framework	Flexible vibration dampers
	Silenced canopy
	Structural skid with no need for foundations
	Suppression of emissions/harmonic distortions

* Only for low voltage motors.

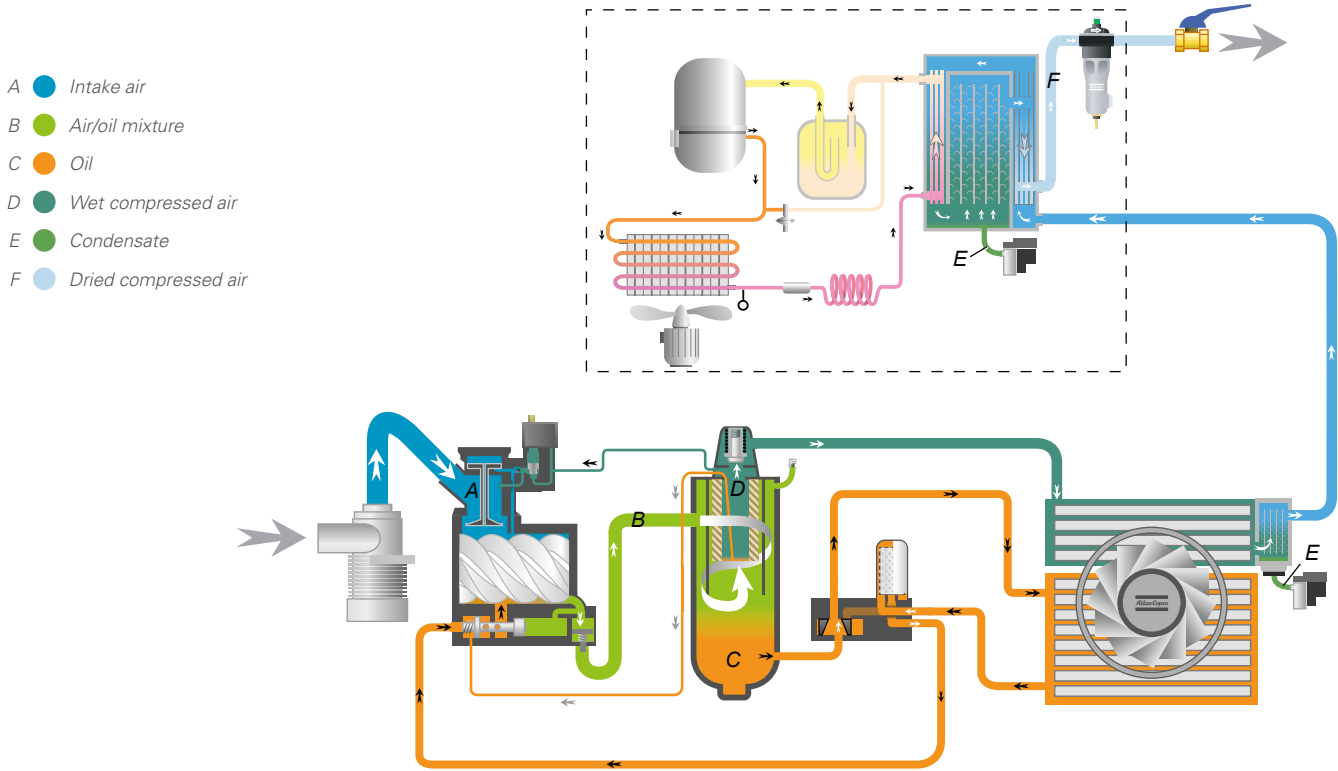
Additional features & options

		GA 160* -250
Electrical protection	Phase sequence relay	•
	PT1000 thermal protection (windings and bearings)	•
	Anti-condensation heater in the main motor	•
General options	Roto-Xtend duty fluid 8000h	✓
	Performance test certificate	•
	Witnessed performance test	•
	Seaworthy packaging	•
	Heavy-duty filter	✓
	Integrated Energy Recovery system	•
	Medium voltage motor	✓

• : Optional ✓ : Standard

FLOW CHARTS

Fixed speed: GA+ & GA



DIMENSIONS

50 Hz	L	W	H
	mm		
GA 160*-250 A/W	3400	2174	2300
GA 160*-250 A/W (MV)	3700	2174	2300

60 Hz	L	W	H
	inch		
GA 160*-250 A/W	134	86	91
GA 160*-250 A/W (MV)	146	86	91

A = air-cooled.
W = water-cooled.

TECHNICAL SPECIFICATIONS

GA 160⁺-250 (50 Hz)

TYPE	Working pressure		Capacity FAD (1)			Installed motor power	Noise level (2)	Weight	
	Standard		Standard					Standard	
	bar(e)	psig	l/s	m³/min	cfm			kg	lb
GA 160+ - 5.5 bar	5.5	80	621	372	1316	160	78	4793	10567
GA 160+ - 7.5 bar	7.5	109	538	32.2	1140			4648	10247
GA 160+ - 8.5 bar	8.5	123	498	29.8	1055			4648	10247
GA 160+ - 10 bar	10	145	448	26.9	949			4648	10247
GA 200 - 5.5 bar	5.5	80	748	44.8	1585	200	78	4913	10831
GA 200 - 7.5 bar	7.5	109	674	40.4	1428			4913	10831
GA 200 - 8.5 bar	8.5	123	632	37.9	1339			4768	10512
GA 200 - 10 bar	10	145	572	34.3	1212			4768	10512
GA 200 - 14 bar	14	203	440	26.4	932	220	78	4768	10512
GA 220 - 5.5 bar	5.5	80	837	50.2	1773			5099	11241
GA 220 - 7.5 bar	7.5	109	744	44.7	1576			5099	11241
GA 220 - 8.5 bar	8.5	123	671	40.2	1421			5099	11241
GA 220 - 10 bar	10	145	612	36.7	1296	250	78	4954	10922
GA 220 - 14 bar	14	203	492	29.6	1042			4954	10922
GA 250 - 5.5 bar	5.5	80	923	55.4	1956			5099	11241
GA 250 - 7.5 bar	7.5	109	833	50.0	1765			5099	11241
GA 250 - 8.5 bar	8.5	123	773	46.4	1638	250	78	5099	11241
GA 250 - 10 bar	10	145	709	42.5	1503			4954	10922
GA 250 - 14 bar	14	203	575	34.5	1219			4954	10922

TECHNICAL SPECIFICATIONS

GA 160⁺-250 (60 Hz)

TYPE	Working pressure		Capacity FAD (1)			Installed motor power	Noise level (2)	Weight	
	Standard		Standard / Full Feature					Standard	
	bar(e)	psig	l/s	m³/min	cfm	hp	dB(A)	kg	lb
GA 160+ - 75 psi	5.5	80	635	38.1	1346	215	77	4793	10567
GA 160+ - 100 psi	7.4	107	553	33.2	1171		77	4648	10247
GA 160+ - 125 psi	9.1	132	474	28.4	1004		76	4648	10247
GA 160+ - 150 psi	10.9	158	440	26.4	932		76	4648	10247
GA 200 - 75 psi	5.5	80	763	45.8	1617	268	77	4948	10908
GA 200 - 100 psi	7.4	107	680	40.8	1441		77	4948	10908
GA 200 - 125 psi	9.1	132	606	36.3	1283		77	4803	10589
GA 200 - 150 psi	10.9	158	547	32.8	1159		77	4803	10589
GA 200 - 200 psi	14	203	458	27.5	971	295	76	4803	10589
GA 220 - 100 psi	7.4	107	759	45.6	1608		79	5168	11393
GA 220 - 125 psi	9.1	132	676	40.6	1433		78	5168	11393
GA 220 - 150 psi	10.9	158	626	37.6	1326		78	5023	11074
GA 220 - 200 psi	14	203	469	28.1	994		78	5023	11074
GA 250 - 100 psi	7.4	107	831	49.9	1761	335	79	5168	11393
GA 250 - 125 psi	9.1	132	758	45.5	1605		78	5168	11393
GA 250 - 150 psi	10.9	158	690	41.4	1462		78	5023	11074
GA 250 - 200 psi	14	203	601	36.1	1273		78	5023	11074

(1) Unit performance measured according to ISO 1217, Annex C and E, Edition 4 (2009).
Reference conditions:
- Absolute inlet pressure 1 bar (14.5 psi).
- Intake air temperature 20°C (68°F).

(2) A-weighted emission sound pressure level at the work station, Lp WSA (re 20 µPa) dB (with uncertainty 3 dB). Values determined according to noise level test code ISO 2151 and noise measurement standard ISO 9614. Pressure dew point of integrated refrigerant dryer at reference conditions: 2°C to 3°C (36°F to 37°F).

FAD (1) is measured at the following working pressures:

	Standard
5.5 bar version at	5 bar
7.5 bar version at	7 bar
8.5 bar version at	8 bar
10 bar version at	9.5 bar
14 bar version at	13.5 bar

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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