



OIL-INJECTED ROTARY SCREW COMPRESSORS

GA 7-11 / GA 7-11-15 VSD
(7-15 kW/10-20 hp)



Atlas Copco

GA 7-11: THE PREMIUM SOLUTION

Able to tackle extreme duties as daily challenges, Atlas Copco's high-performance tank-mounted GA compressors beat any workshop solution. Ready to supply high-quality air, they keep the air network clean and your production up and running.

Built to last

- Outfitted with a new generation element with improved bearings and seal arrangement.
- Unequaled reliability during the system's lifetime thanks to the belt-driven drive train, newly developed in accordance with the highest industry standards.
- Maximized durability thanks to the usage of advanced development tools and extensive real-life training.
- Fit for environments with ambient temperatures up to 46°C due to improved component design.

Protecting your production

- Web based online compressor status viewer on new Elektronikon® for remote monitoring using a standard Ethernet connection.
- Protection from oil contamination: extremely low oil carry-over thanks to the vertical design of the oil vessel.
- Protection of downstream air equipment in all working conditions: the integrated dryer avoids condensation and corrosion in the network. Optional filters can be added to obtain air quality up to class 1 level (<0.01 ppm).
- Water separator included as standard.
- Water separation of nearly 100% in all conditions with the standard electronic no-loss drain in combination with the integrated water separator in the dryer.

Minimized energy costs

- The Free Air Delivery is increased up to 8% and power consumption is reduced by 7% thanks to optimized packaging and the new compressor element.
- Extremely low losses of compressed air during load/unload cycle thanks to minimized oil vessel size.
- Additional energy savings with the dryer's no-loss electronic drain.
- The GA 7-11's compression element is combined with a class 1 efficiency motor resulting in minimized energy costs.

Effortless maintenance

- Minimized service costs thanks to high-quality and easily replaceable consumables with a long lifetime and easy servicing.
- The Elektronikon®'s monitoring features include new service and warning indications, error detection and compressor shut-down. The optional Elektronikon® graphic controller provides further enhanced visual service indications and warnings.





New generation element



Elektronikon® controller



Oil filter & oil separator



Optimized drive train



Combi-cooler (oil & air)



Integrated dryer

Easy installation

- Improved sound quality and noise levels starting from 60 dB(A).
- A true plug-and-play solution ready to be installed close to the point of use, the GA is ideal for installation companies and OEMs. Optionally, the system can be expanded with an integrated dryer, air filters and a factory-mounted 270L receiver (optional 500L).
- Effortless transportation by forklift.
- Standard equipped with a 3-metre power supply cable.

GA 7-11-15 VSD: ULTIMATE ENERGY SAVERS

The GA 7-11 VSD range is the ideal solution for productions with a fluctuating air demand. By monitoring the outlet pressure, the Elektronikon® steers the Variable Speed Drive (VSD) continuously to adjust the air flow to the demand. Energy savings of up to 35% become a reality thanks to the high turndown ratio, the new fan Saver Cycle and dryer saver cycle. The brand-new GA 15 VSD is the latest extension to this successful GA 7-11 VSD range.

Built to last

- Outfitted with a new generation element with improved bearings and seal arrangement.
- Unequaled reliability during the system's lifetime thanks to the belt-driven drive train, newly developed in accordance with the highest industry standards.
- Maximized durability thanks to the usage of advanced development tools and extensive real-life training.
- Fit for environments with ambient temperatures up to 46°C due to improved component design.

Protecting your production

- Excellent quality air thanks to the integrated dryer range with counterflow heat exchanger & integrated water separator: the integrated dryer can be outfitted with optional DD and PD filters, resulting in oil carry-over as low as 0.01 ppm.
- Web based online compressor status viewer on new Elektronikon® graphic controller for remote monitoring using a standard Ethernet connection.
- Water separator included as standard.
- Water separation of nearly 100% in all conditions with the standard electronic no-loss drain in combination with the integrated water separator in the dryer.

Minimized energy costs

- The GA 7-11's compression element is combined with a class 1 efficiency optimized VSD motor resulting in minimized energy costs.
- Standard with new fan Saver Cycle, optimizing oil temperature and saving extra energy costs.
- Energy savings of up to 35% compared to a fixed speed compressor thanks to the combination of VSD technology with the advanced compressor algorithms in the Elektronikon® graphic controller.
- The Free Air Delivery is increased up to 8% and power consumption is reduced by 7% thanks to optimized packaging and the new compressor element.
- Optional centralized control over up to 4 or 6 compressors, without the need for an external control system.

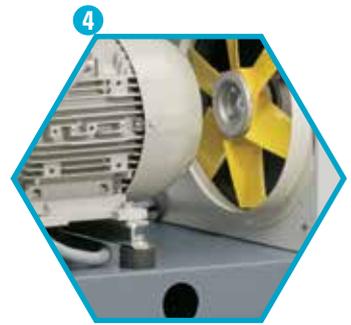
Effortless maintenance

- The high-tech Elektronikon® graphic controller's monitoring features include warning indications, compressor shut-down, maintenance scheduling and visualization of machine conditions.
- Modular system: the VSD drive makes diagnostics and repairs fast and easy.
- High-quality consumables with a long lifetime (up to 8,000 hours) and easy servicing.
- Connectivity (optional) SMS warning, logging and trending functionalities.





Combi-cooler (oil & air)



Controlled cooling fan



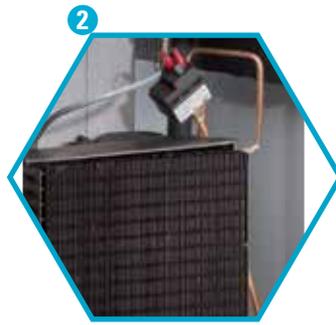
New VSD cubicle



Elektronikon® graphic controller



New generation element



Integrated dryer

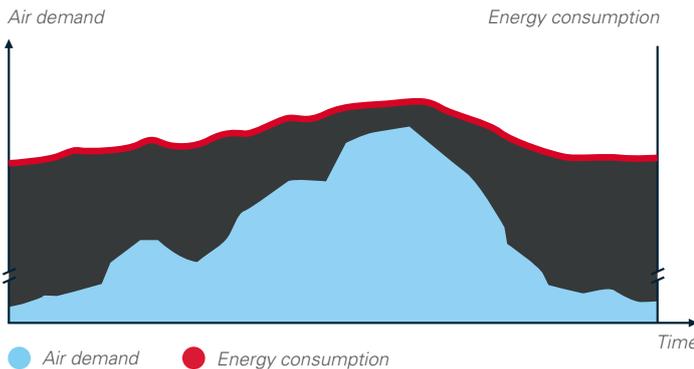
Easy installation

- Thanks to the improved sound quality and noise levels (62-69 dB(A)), the GA can be placed close to the point of use, resulting in minimized installation costs and reduced risk of air leakage and flow losses.
- Tank-mounted under compressor, integrated dryer and 3-metre power supply cable (standard equipment).
- A wide range of factory-mounted options to customize the GA VSD to suit specific needs: air and condensation treatment, special protection, air inlet protections and communication features.

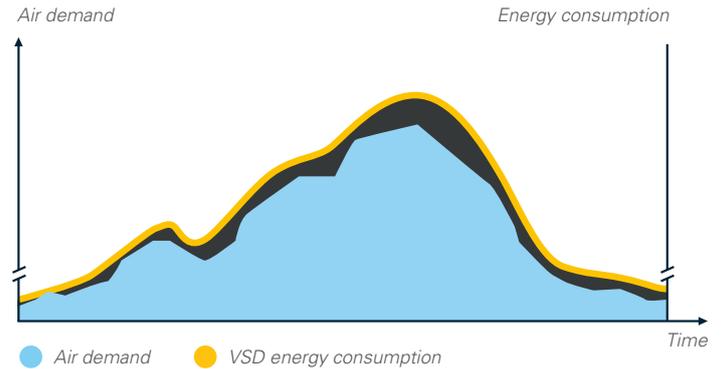
VSD: DRIVING DOWN ENERGY COSTS

Energy typically represents over 80% of a compressor's life cycle cost. Looking continuously to innovate and reduce customer costs, Atlas Copco pioneered the Variable Speed Drive technology (VSD) in 1994. VSD stands for major energy savings, while protecting the environment for future generations. Due to our ongoing investments in R&D, Atlas Copco offers the widest range of integrated VSD compressors on the market.

The high price of fluctuating demand



VSD: variable volume, controlled costs



Traditional compressors working with a full load, no load control operate between two set pressure points. When maximum pressure is reached the compressor goes off load. During periods of medium to low air demand, the no load power consumption can be excessive – wasting large amounts of energy.

Because there is no unnecessary power generated, the GA VSD can reduce energy costs by 35% or more. Life cycle costs (LCC) of the compressor can be reduced by an average of 22%. In general, the extra cost of a VSD compressor compared to a fixed speed one can be earned back after just one to two years.



ENERGY SAVINGS OF UP TO 35%

Atlas Copco's VSD technology closely follows the air demand by automatically adjusting the motor speed. This results in large energy savings of up to 35%. The life cycle cost of a compressor can be cut by an average of 22%. In addition, lowered system pressure with VSD minimizes energy use across your production dramatically.

TOTAL COMPRESSOR LIFE CYCLE COST

● Energy ● Investment
● Energy savings with VSD ● Maintenance

Find out how much you can save

In almost every production environment, air demand fluctuates depending on different factors such as the time of the day, week or even month. Extensive measurements and studies of compressed air demand profiles show that many compressors have substantial variations in air demand.

A STEP AHEAD IN MONITORING AND CONTROLS

The next-generation Elektronikon® operating system offers a great variety of control and monitoring features to increase efficiency and reliability. The Elektronikon® controls the main drive motor and regulates system pressure within a predefined and narrow pressure band.



Elektronikon® controller

- Improved ease of use: intuitive navigation system with clear pictograms and extra 4th LED indicator for service.
- Free online compressor status visualization through a web browser using a standard Ethernet connection.
- Easy to upgrade.
- Maximum reliability: more durable keyboard.

Key features:

- Automatic restart after voltage failure.
- Dual pressure set point.
- Delayed Second Stop function.
- Option to upgrade to the advanced Elektronikon® graphic controller.

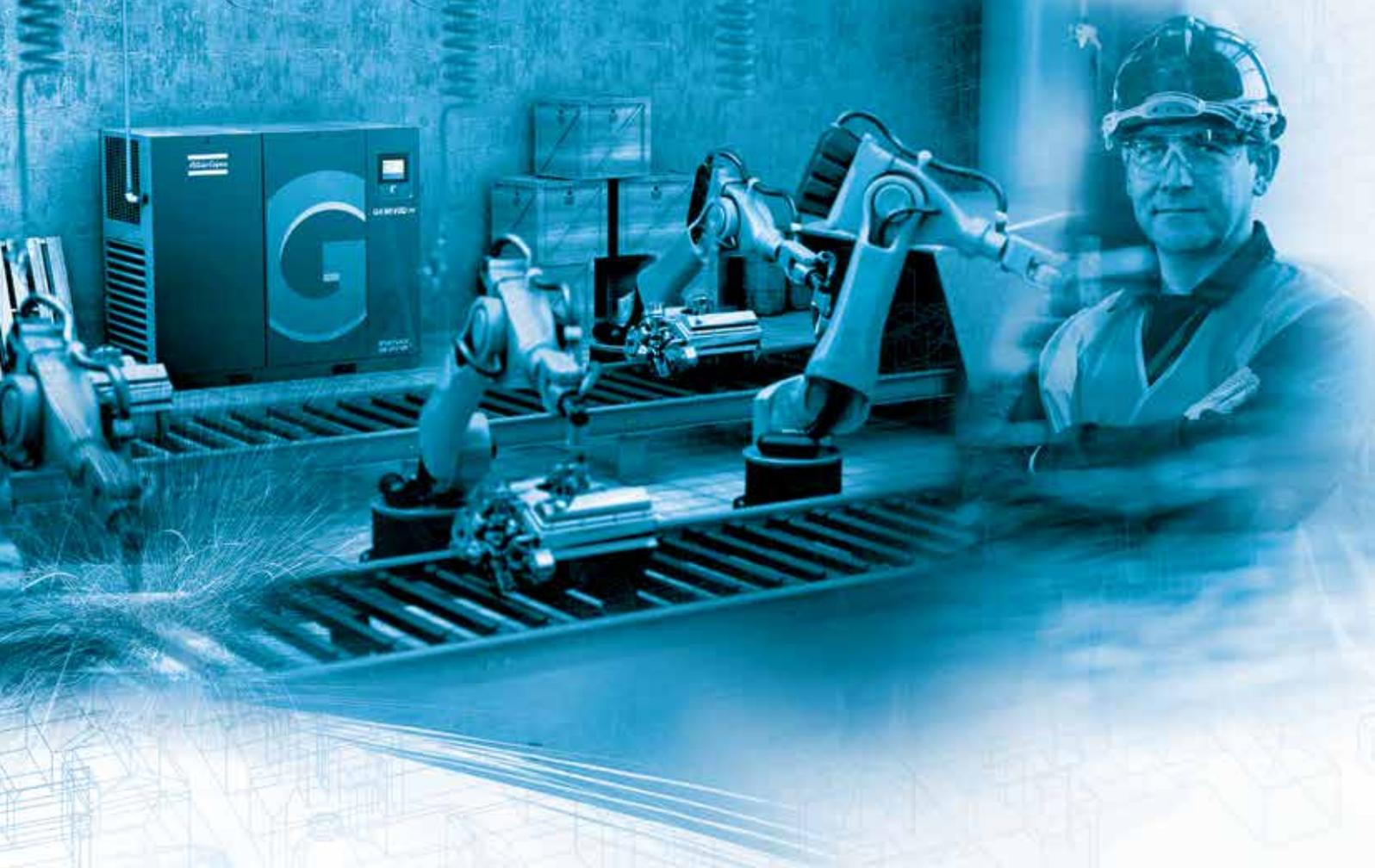


Elektronikon® graphic controller

- User-friendliness: 3.5-inch high-definition color display with clear pictograms and extra 4th LED indicator for service.
- Internet-based compressor visualization using a standard Ethernet connection.
- Increased reliability: new, user-friendly, multilingual user interface and durable keyboard.
- Standard on VSD machines and optional on fixed speed models.

Key features:

- Automatic restart after voltage failure.
- More flexibility: four different week-schedules that can be programmed for a period of 10 consecutive weeks.
- On-screen Delayed Second Stop function and VSD savings indication.
- Graphical indication Serviceplan.
- Factory-fitted remote control and connectivity functions are optionally available.
- Software upgrade available to control up to 4 or 6 compressors by installing the optional integrated multi compressor control to further reduce the total power consumption.
- Dual pressure band clock-based.



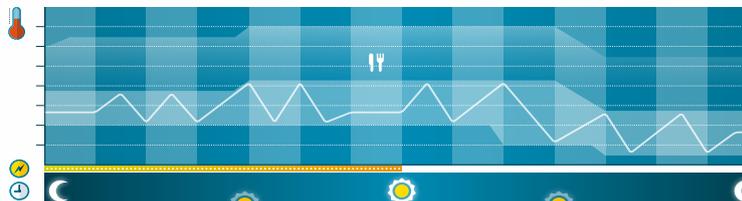
DUAL PRESSURE SET POINT & DELAYED SECOND STOP

The production process creates fluctuating levels of demand which can cause energy losses in low use periods. The Elektronikon® can manually or automatically create two different system pressure bands to optimize energy use and reduce costs at low use times. In addition, the sophisticated Delayed Second Stop (DSS) runs the drive motor only when needed. As the desired system pressure is maintained while the drive motor's run time is minimized, energy consumption is kept at a minimum.



SAVER CYCLE

Saver cycle technology reduces energy consumption. The Elektronikon® is linked to both saver cycles: fan and dryer. Monitoring the oil temperature, the fan saver cycle regulates the fan and minimizes energy use. Using an ambient sensor to monitor the required dew point suppression, the dryer saver cycle starts and stops the dryer when the compressor has stopped, minimizing energy use and protecting the air system from corrosion.



GA & GA VSD: MATCHING ALL YOUR NEEDS



GA 7-11: THE PREMIUM SOLUTION

By far the most reliable tank-mounted premium solution that supplies high-quality compressed air, plug-and-play.

- Premium GA quality and improved serviceability at the lowest life cycle cost.
- Total control and assured efficiency with the new Elektronikon® controller.
- Extreme low power consumption and noise emission.
- Excellent-quality compressed air thanks to the new, integrated dryer range.
- Fully customizable with various options to meet every need.

GA 7-11-15 VSD: ULTIMATE ENERGY SAVINGS

Minimized energy consumption for the most demanding applications, making major energy savings a reality.

- GA 15 VSD: brand-new model in the VSD range.
- Average energy savings of 35%.
- Advanced Variable Speed Drive technology.
- Flexible pressure selection: 4-13 bar.
- Excellent-quality compressed air at the lowest energy cost thanks to the new, integrated dryer range.
- User-friendly Elektronikon® graphic controller: the most advanced on the market.



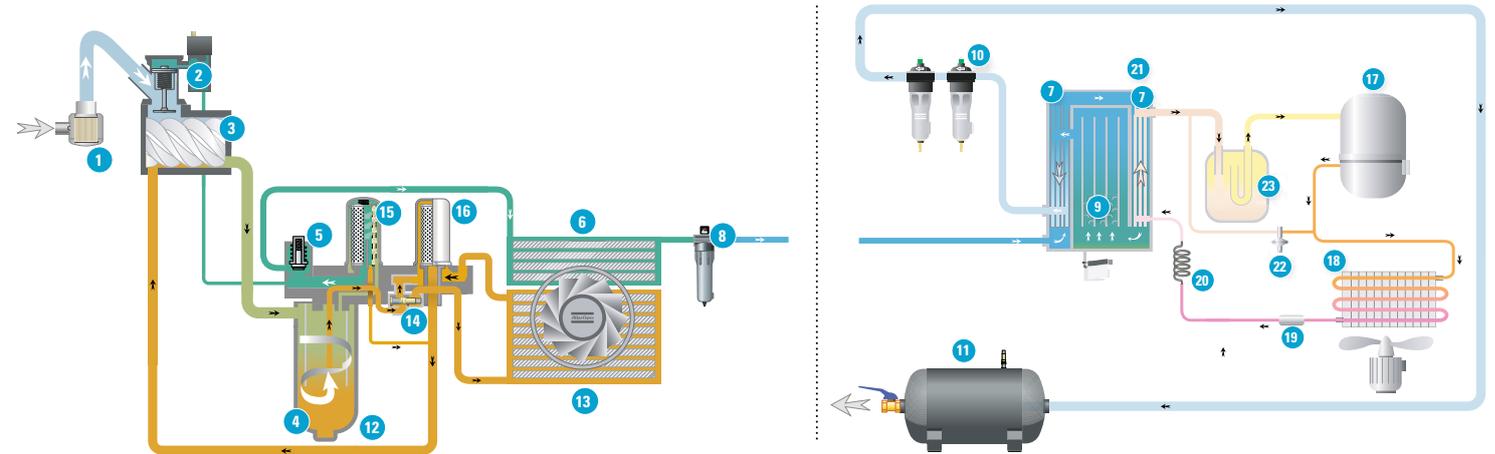
TAILORED TO YOUR NEEDS

Some applications may need or may benefit from additional options and air treatment systems. To meet these needs, Atlas Copco has developed options and easily integrated compatible equipment providing the lowest cost compressed air.

OPTIONS

	GA7-11	GA 7-15 VSD
Roto-Xtend duty oil	Standard	Standard
Heavy duty air inlet filter	Standard	Standard
500L Air receiver	X	X
270L tank with integrated filters kit (FF units)	X	NA
FM with integrated filters kit (FF units)	X	NA

FLOW CHARTS



- Intake air
- Air/oil mixture
- Oil
- Wet compressed air

- Condensate
- Dry compressed air
- Water
- Refrigerant gas/liquid mixture

- High pressure, hot refrigerant gas
- Low pressure, cool refrigerant gas
- High pressure refrigerant liquid
- Low pressure refrigerant liquid

AIR FLOW

- 1 Air intake filter
- 2 Air intake valve
- 3 Compression element
- 4 Air/oil separator vessel
- 5 Minimum pressure valve
- 6 After-cooler
- 7 Air-air heat exchanger
- 8 Water separator (pack only)

OIL FLOW

- 9 Water separator with drain
- 10 DD/PD filters (optional)
- 11 Air receiver
- 12 Oil
- 13 Oil cooler
- 14 Thermostatic bypass valve
- 15 Oil separator
- 16 Oil filter

REFRIGERANT FLOW

- 17 Refrigerant compressor
- 18 Condenser
- 19 Liquid refrigerant dryer/filter
- 20 Capilar
- 21 Evaporator
- 22 Hot gas bypass valve
- 23 Air intake valve

TECHNICAL SPECIFICATIONS GA 7-11

COMPRESSOR TYPE	Working pressure WorkPlace		Capacity FAD* min-max			Installed motor power		Noise level**	Weight (kg)			
									WorkPlace		WorkPlace Full Feature	
	bar(e)	psig	l/s	m3/h	cfm	kW	hp	dB(A)	Floor-mounted	Tank-mounted	Floor-mounted	Tank-mounted
50 Hz VERSION												
GA 7	7.5	109	21.8	78.5	46.2	7.5	10	64	270	330	315	375
	8.5	123	19.6	70.6	41.5	7.5	10	64	270	330	315	375
	10	145	17.2	61.9	36.4	7.5	10	64	270	330	315	375
	13	189	14.2	51.1	30.1	7.5	10	64	270	330	315	375
GA 11	7.5	109	30.7	110.5	65.1	11	15	66	300	350	345	405
	8.5	123	28.3	101.9	60.0	11	15	66	300	350	345	405
	10	145	26.0	93.6	55.1	11	15	66	300	350	345	405
	13	189	22.0	79.2	46.6	11	15	66	300	350	345	405

TECHNICAL SPECIFICATIONS GA 7-11-15 VSD

COMPRESSOR TYPE	Working pressure WorkPlace		Capacity FAD* min-max						Installed motor power		Noise level**	Weight (kg/lbs)			
			l/s		m³/h		cfm					WorkPlace		WorkPlace Full Feature	
	bar(e)	psig	Min	Max	Min	Max	Min	Max	kW	hp	dB(A)	Floor-mounted	Tank-mounted	Floor-mounted	Tank-mounted
50 Hz VERSION															
GA 7 VSD	5.5	80	5.1	20.5	18.36	73.80	10.8	43.4	7.5	10	64	280	325	293	338
	7.5	109	4.9	20.3	17.64	73.08	10.4	43.0	7.5	10	64	280	325	293	338
	9.5	145	5.1	16.8	18.36	60.48	10.8	35.6	7.5	10	64	280	325	293	338
	12.5	188	6.4	13.8	23.04	49.68	13.5	29.2	7.5	10	64	280	325	293	338
GA 11 VSD	5.5	80	6.6	31	23.76	111.60	14.0	65.6	11	15	66	293	343	354	394.0
	7.5	109	6.5	30.7	23.40	110.52	13.8	65.0	11	15	66	293	343	354	394.0
	9.5	145	8.7	24.1	31.32	86.76	18.4	51.1	11	15	66	293	343	354	394.0
	12.5	188	7.9	20.7	28.44	74.52	16.7	43.8	11	15	66	293	343	354	394.0
GA 15 VSD	5.5	80	9	37.5	32.40	135.00	19.0	79.4	15	20	69	300	350	345	395
	7.5	109	9.1	37.1	32.76	133.56	19.3	78.5	15	20	69	300	350	345	395
	9.5	145	8.8	30.9	31.68	111.24	18.6	65.4	15	20	69	300	350	345	395
	12.5	188	8.5	24.8	30.6	89.28	18.0	52.5	15	20	69	300	350	345	395

* Unit performance measured according to ISO 1217, Ed. 3, Annex C-1996.

** Mean noise level measured at a distance of 1 m according to ISO 2151; tolerance 3 dB(A).

Reference conditions:

- Absolute inlet pressure 1 bar (14.5 psi).

- Intake air temperature 20°C, 68°F.

FAD is measured at the following working pressures:

- 7.5 bar versions at 7 bar(e).

- 8.5 bar versions at 8 bar(e).

- 10 bar versions at 9.5 bar(e).

- 13 bar versions at 12.5 bar(e).

Maximum working pressure for VSD machines:

- 13 bar(e) (188 psig)



GA 7-11 pack & GA 7-11-15 VSD pack (tank-mounted)



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.

Atlas Copco Compressor Technique

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