Atlas Copco

Oil-injected Rotary Screw Compressors

GA 5-11 / GA 7-11 VSD

5-11 kW/7-15 hp

Atlas Copco

Total capability, total responsibility

Right at the heart of your business, Atlas Copco delivers quality compressed air for superior operational capacity. From compressed air generation to point of use, you can choose from our wide range of products to create a complete compressed air system tailored to your specific needs. All Atlas Copco products are engineered to integrate seamlessly, ensuring the highest level of reliability and energy efficiency. As a result, Atlas Copco can take full responsibility for your compressed air infrastructure with a guarantee of best-in-class quality. With a global presence in over 150 countries, we can provide an unrivalled service to maintain and continually improve your compressed air system performance.

Backed by 100 years at the forefront of compressed air, Atlas Copco products offer the finest quality and efficiency. Our goal is to be First in Mind—First in Choice™. That is why Atlas Copco's pursuit of innovation never ceases, driven by the dedication to meet and exceed your demands. Always working with you, we are committed to providing the customized air solution that is the driving force behind your business.

We are committed to your superior productivity through interaction and innovation.

Efficient power

Demands for efficient, reliable and high performance compressed air solutions are on the rise in today's busy production environments. With the GA WorkPlace Air System™ compressors, Atlas Copco answers even the most stringent requirements. With their excellent reliability, small footprint, extremely quiet operation and integration of air and condensate treatment, GA compressors are ideal to run at point of use and offer exceptional versatility and peace of mind. No need for a separate compressor room and an elaborate and costly piping system.

A VARIETY OF BENEFITS

- The best air delivery capacity in the industry thanks to an innovative compressor element and efficient package design.
- Outstanding energy efficiency and reliability.
- Continuous trouble-free operation.
- An agreeable and pleasant work environment with extremely low noise levels: 60-62 dB(A).
- Easy and low cost maintenance: long service interval on consumables, less oil capacity and life time greased motor bearing.

ACHIEVE THE OPTIMUM COMPRESSED AIR SYSTEM

- Assured reliability even in extreme ambient temperature conditions.
- Dependable flow of compressed air directly to the point of use.
- Low noise operation, reduced piping costs and limited pressure drop.
- Advanced control and monitoring capabilities.
- Exact tuning capabilities to your specific process.

GA 11 VSD

REDUCED ENERGY COSTS

Energy can represent over 70% of a compressor's lifecycle costs (LCC). As the generation of compressed air can account for more than 40% of your plant's total electricity bill, optimizing energy consumption is crucial. By tuning compressor capacity to the air demand, GA VSD (Variable Speed Drive) compressors reduce energy costs by 35% or more. This not only generates a much lower electricity bill but also substantially adds to the protection of the environment.

GA 7

GA 11 VSD

Built to last

Set to meet your specific demands and tackle your daily challenges, Atlas Copco offers you the GA, by far the most reliable compressor solution. Immediately ready to supply high quality air, this powerful solution provides you with the exceptional reliability, efficiency and integration you are looking for.

1 FAN

- Dedicated cooling fan with optimized capacity for each cooler ensuring the right amount of cooling air is delivered in the most efficient manner.
- Finger-proof protection meeting safety codes all over the world.

2 COOLER

- Optimally sized aluminium block and fin style coolers guaranteeing ideal running under all conditions.
- Horizontally mounted on the top, the coolers are easily accessible for cleaning and easy for ducting.

3 CANOPY

- The sophisticated flow and canopy design as well as top quality production process control generate an extremely low noise level of 60-62 dB(A).

4 ELEKTRONIKON®

- Advanced microprocessor based automatic electronic control and monitoring optimizes the operation for efficiency and reliability through fantastic functions such as ES, DSS and Dual setting.

5 AIR INLET FILTER

- Generously dimensioned air intake filter for efficient operation even in dirty conditions.

6 INTEGRATED REFRIGERANT DRYER

- The Full Feature variants include, as standard, an integrated refrigerant dryer removing water from the compressed air to protect your air piping network, production process and end products.

7 MOTOR

- Eff 1 (EPAct) high efficiency, totally enclosed fan-cooled (TEFC), IP55, class F electric motor for continuous trouble-free operation.
- Bearings greased for life.

8 ELEMENT

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

9 DRIVE ARRANGEMENT

- Top quality V-belt drive system.
- The pulleys and belts ensure maximum life with minimum slip and wear.
- The V-belts use an optimized belt notch profile that makes the belts run quietly, coolly and smoothly for the highest efficiency and maximum life.
- High quality slide base provides easy belt tensioning that delivers at least same performance with all kinds of automatic tension systems.

THE LATEST ELEMENT TECHNOLOGY

Atlas Copco is committed to developing the most efficient screw element for each GA generation. Developed from extensive R&D by dedicated Atlas Copco engineers, the latest version of the patented oil-injected rotary screw element provides unrivalled efficiency and reliability.

Protecting your production

Untreated compressed air contains moisture, aerosols and dirt particles that can damage your air system and contaminate your end product. Resulting maintenance costs can far exceed air treatment costs. We believe in effective prevention.

INCREASE YOUR PRODUCTION RELIABILITY

Low quality air heightens the risk of corrosion in your system, which can lower the life span of your air tools and production equipment. The GA VSD's filtration process produces clean air that enhances your system's reliability, avoiding costly downtime and production delays.

SAFEGUARD YOUR PRODUCT QUALITY

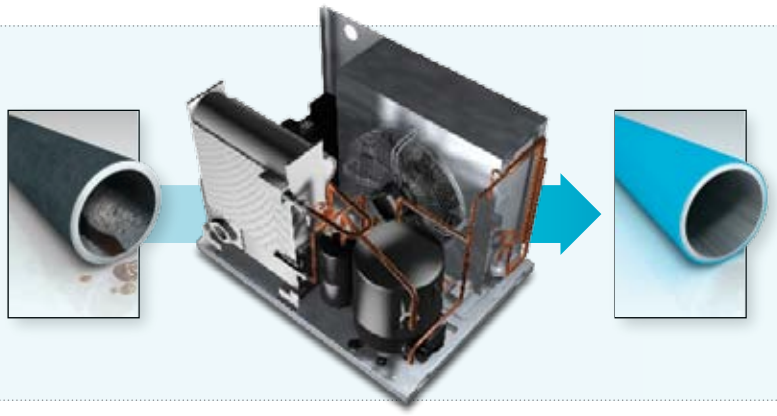
Compressed air coming into contact with your final products should not affect their quality. The GA VSD provides the clean, dry air that will protect your product's reputation in the marketplace.

REDUCE YOUR ENERGY COSTS

Clean, treated air reduces the risk of corrosion and leaks in your compressed air system. A 3 mm leak could easily add up to €1800 to your energy bill annually.

PROTECT THE ENVIRONMENT

With leaks and energy waste minimized and the unsafe disposal of untreated condensate eliminated, you can safeguard the environment and comply with stringent international regulations.



INTEGRATED PURITY

The filters and integrated refrigerant-type air dryer (IFD) efficiently remove moisture, aerosols and dirt particles to protect your investment. This quality air expands the life of equipment, increasing efficiency and ensuring quality in your final product.

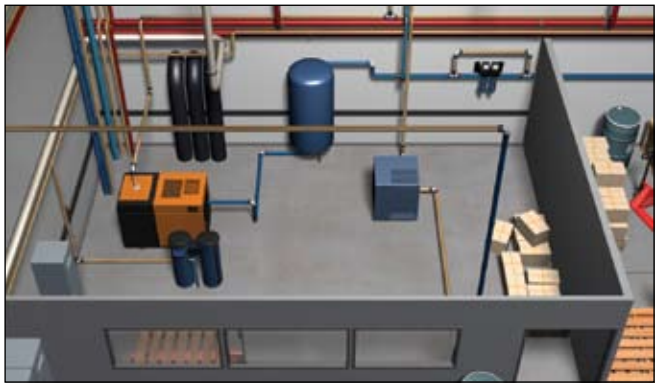
CONFIGURE YOUR GA FOR THE AIR QUALITY YOU NEED	ISO QUALITY CLASS	DIRT PARTICLE SIZE	WATER PRESSURE DEW POINT	OIL CONCENTRATION
GA WorkPlace	3.–.4	3 microns	–	3 ppm
GA WorkPlace FF with IFD	3.4.4	3 microns	+3°C, 37°F	3 ppm
GA WorkPlace FF with IFD & Class 2 integrated filter	2.4.2	1 micron	+3°C, 37°F	0.1 ppm
GA WorkPlace FF with IFD & Class 1 integrated filters	1.4.1	0.01 microns	+3°C, 37°F	0.01 ppm

WorkPlace: complete versatility, total capability

With its compact footprint, low noise operation and integration of air and condensate treatment equipment, the GA offers complete versatility for your production. The GA's integrated design allows the compressor to be placed on the production floor, reducing external piping costs and minimizing pressure drop across the system. This increased efficiency can create strong energy savings for your business.

LOWERED INSTALLATION COSTS

- The GA can operate close to the point of use – eliminating the need for a dedicated compressor room.
- The GA is delivered ready for use – minimizing production downtime and reducing installation costs.
- With filtration equipment integrated, the GA reduces the need for costly external piping and minimizes pressure drop.

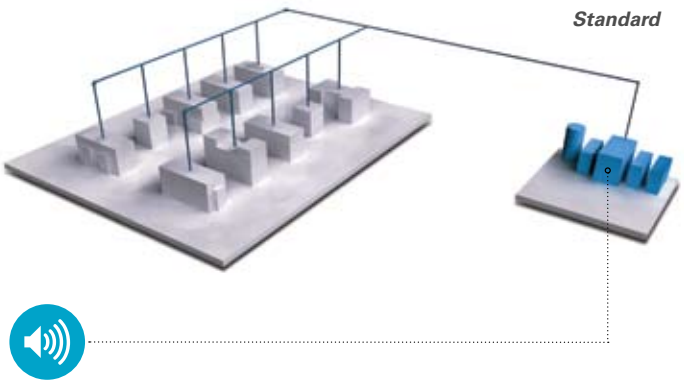


A conventional compressor, with external filtration equipment and high noise operation, has to be placed away from the production area. This lack of integration can raise installation costs.

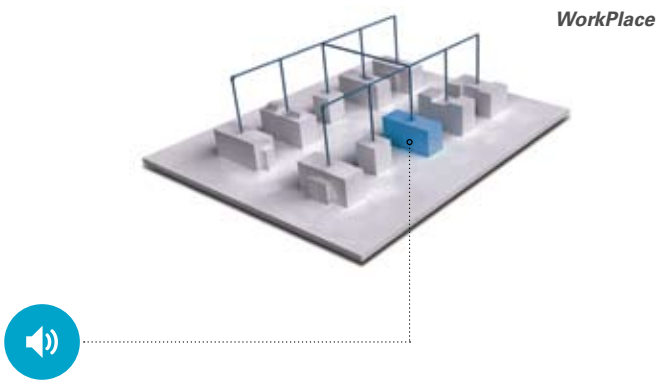
The GA WorkPlace, with its low noise operation and integrated condensate and air treatment equipment, can be placed directly at your point of use. This integration saves space and reduces piping costs.

REDUCED ENERGY AND MAINTENANCE COSTS

- With less external piping, the GA minimizes pressure drop across the system which can reduce energy costs.
- The filtration system produces clean air to prevent network corrosion – minimizing energy, repair and maintenance costs.
- The GA operates at the lowest possible system pressure to reduce energy costs thanks to the Elektronikon® advanced monitoring system.



Placed away from the production area, external piping is increased which can create higher pressure drop across the system.

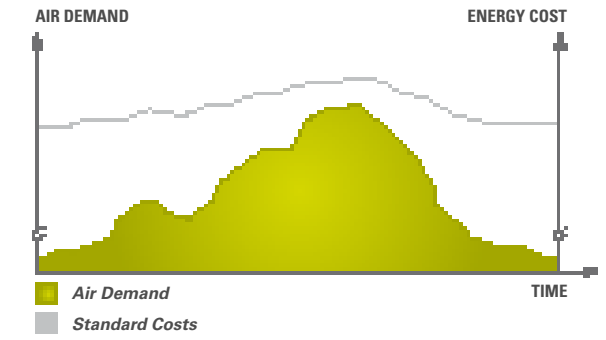


The GA's integration reduces external pipework. This minimizes pressure drop from the compressor to the production area and reduces energy costs.

Driving down energy costs

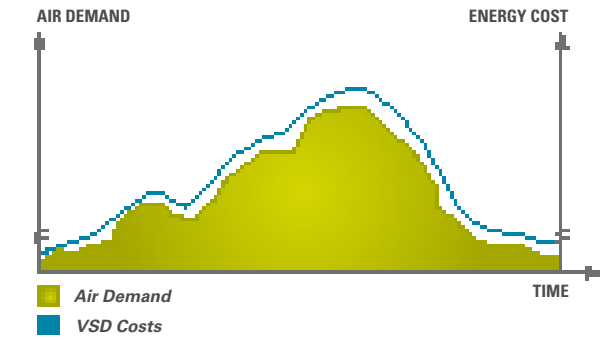
Energy can represent over 70% of a compressor's lifecycle costs (LCC). Generating compressed air can account for more than 40% of a plant's total electricity bill. Most production environments have a fluctuating air demand depending on the time of day, week, or even months per year. With Atlas Copco's VSD (Variable Speed Drive) technology mirroring compressed air requirements, fluctuating demand no longer equals high energy costs.

THE HIGH PRICE OF FLUCTUATING DEMAND



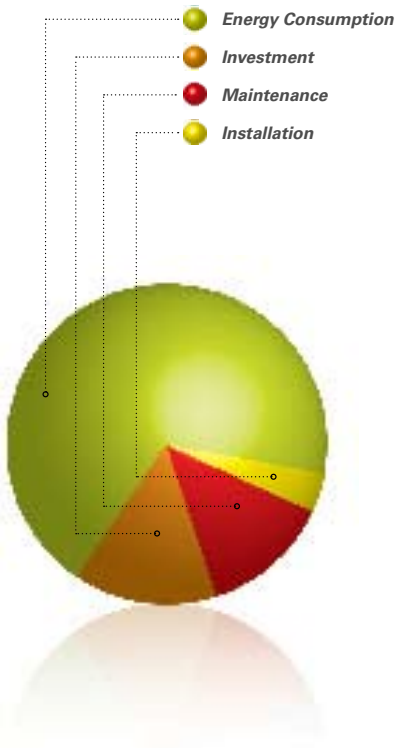
Traditional compressors working with a full load, no load control operate between two set pressure points. When maximum pressure is reached the compressor goes off load. During periods of medium to low air demand, the no load power consumption can be excessive – wasting large amounts of energy.

VSD: VARIABLE VOLUME, CONTROLLED COSTS

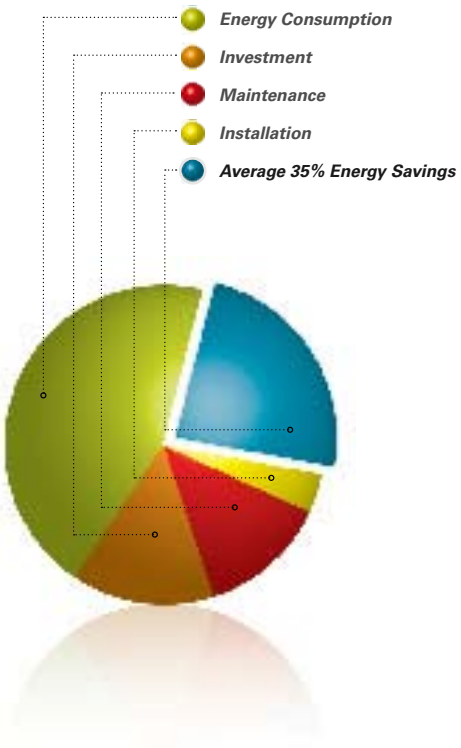


Because there is no unnecessary power generated, the GA VSD can reduce energy costs by 35% or more. Lifecycle costs (LCC) of the compressor can be reduced by an average of 22%. In general, the extra cost of a VSD compressor compared to a fixed speed one can be earned back after just one to two years.

LCC OF A STANDARD COMPRESSOR



LCC OF A VSD COMPRESSOR



VSD: Variable volume, controlled costs

VSD (Variable Speed Drive) technology mirrors air usage – automatically adjusting the motor speed depending on demand. Lowered system pressure minimizes energy use across the production to reduce energy costs. With VSD technology, Atlas Copco has made major energy cost savings a reality.

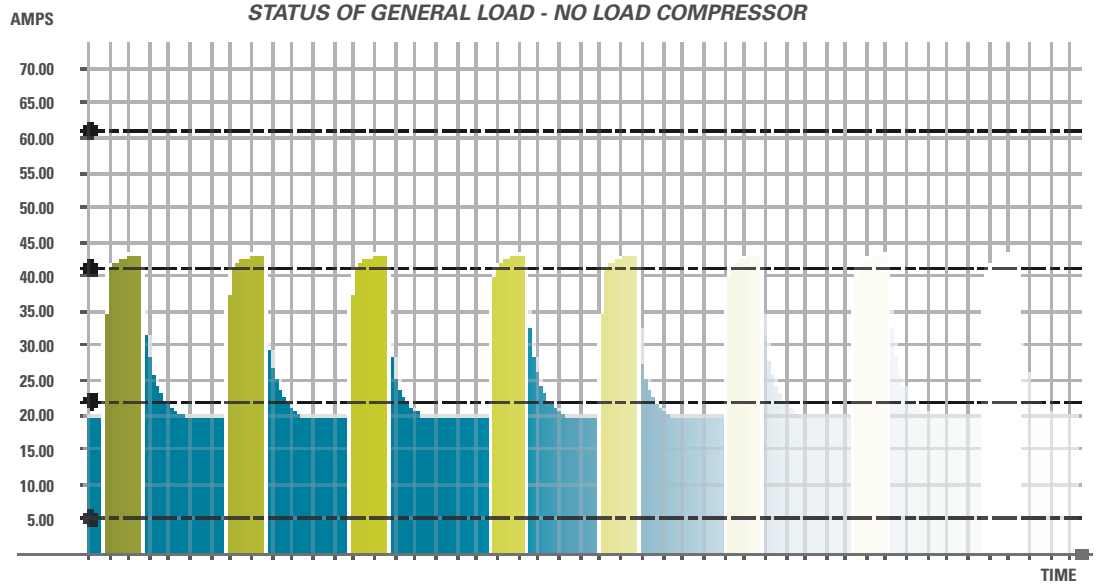
Operating at lowest possible energy use, the GA VSD helps to protect the environment for future generations.

THE GA VSD REDUCES ENERGY COSTS BY:

- Avoiding excessive off load power consumption.
- Maintaining the net pressure band to within 0.10 bar, 1.5 psi.
- Reducing overall average working pressure.
- Minimizing system leakage due to a lower system pressure.
- Increasing flexibility with soft starting gradual motor ramp-up to avoid electricity surges.
- Offering flexible pressure selection from 4 to 13 bar with electronic gearing to ensure lowered electricity costs.

REDUCING YOUR COSTS

Using innovative real-time measuring equipment and sophisticated analysis software, Atlas Copco engineers can help you map the load/air demand profile of your current compressor installation and demonstrate the potential energy savings using Atlas Copco's VSD compressors. This unique service allows you to obtain full control of your compressed air system and make conscious future investment decisions.



The simulation software configures the data, visualizes the load profile in time and immediately shows the energy inefficiency of the measured compressor. In a next step, the Atlas Copco VSD compressor energy savings can be simulated and a detailed report of the actual versus the optimal compressed air system can be generated.

Total control, assured efficiency

The ES operating system provides control and monitoring to increase your compressor's efficiency and reliability. Easily expandable with extra sensors, digital inputs and internet communication functions, ES can be adapted to your specific needs – offering simple, central monitoring and control of up to four compressors. For optimal ease of use, the display can be set to 27 different languages. To maximize energy efficiency, ES controls the main drive motor and regulates system pressure within a predefined and narrow pressure band. With a simple push of a button, you can remotely start and stop, load and unload the compressor.

1 CENTRAL CONTROL

ES manages up to four compressors simultaneously. The result is a substantial reduction in system pressure and energy consumption, in addition to minimal compressed air leakage and a more stable pressure across the network.

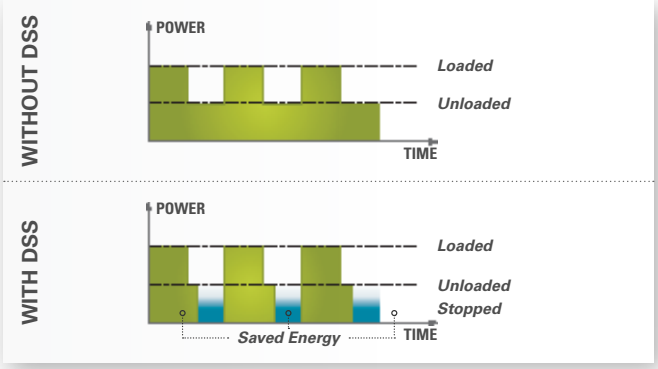
ES continuously monitors critical parameters. Monitoring features include service and warning indications, error detection, compressor shut-down and maintenance scheduling.

2 DUAL PRESSURE SET POINT

The production process creates fluctuating levels of demand which can create energy waste in low use periods. Elektronikon can manually or automatically create two different system pressure bands to optimize energy use and reduce costs at low use times.

3 DELAYED SECOND STOP

The sophisticated Delayed Second Stop (DSS) runs the drive motor only when needed. Because the Elektronikon maintains the desired system pressure while minimizing the drive motor run time, energy consumption is kept at a minimum.



Peace of mind

With the GA, Atlas Copco does not just offer the most reliable and efficient compressors. From filter kits to a complete piping installation, Atlas Copco can take responsibility of your entire compressed air system to provide you with best-in-class air. Choose from a wide range of Atlas Copco after sales products and services that will have your GA performing at its best for years to come. Qualified Atlas Copco support is available in over 150 countries.

Providing easy access to all components, the GA is built to facilitate maintenance.

GENUINE PARTS & LUBRICANTS

Don't compromise your investment in quality by buying parts that are not manufactured according to Atlas Copco's standards of excellence. Only Atlas Copco genuine parts can deliver our well-known quality, durability, and low energy and oil consumption. Atlas Copco lubricants ensure that your GA continues to run smoothly.

SERVICEPLAN

Choose a Total Responsibility, Preventative Maintenance or Inspection Plan to get the scheduled maintenance to keep your compressor operating trouble free. Rest assured that Atlas Copco can offer its 24/7 backup to keep your production running.

AIRMONITOR

Monitor the performance of your GA at any time from your desk, or let your local Atlas Copco center do it for you. With AIRmonitor™, you check your compressed air system online, immediately receiving warning indications and even remotely taking preventive action to avoid downtime.

AIRNET

Expect the highest efficiency from your GA, and the piping built around it. AIRnet™ safely delivers high-quality compressed air from point of generation to point of use. Separate workplaces are effortlessly connected. Fixed to walls or ceilings, AIRnet's range of fittings lets you custom-build a compressed air system specific to your production needs.

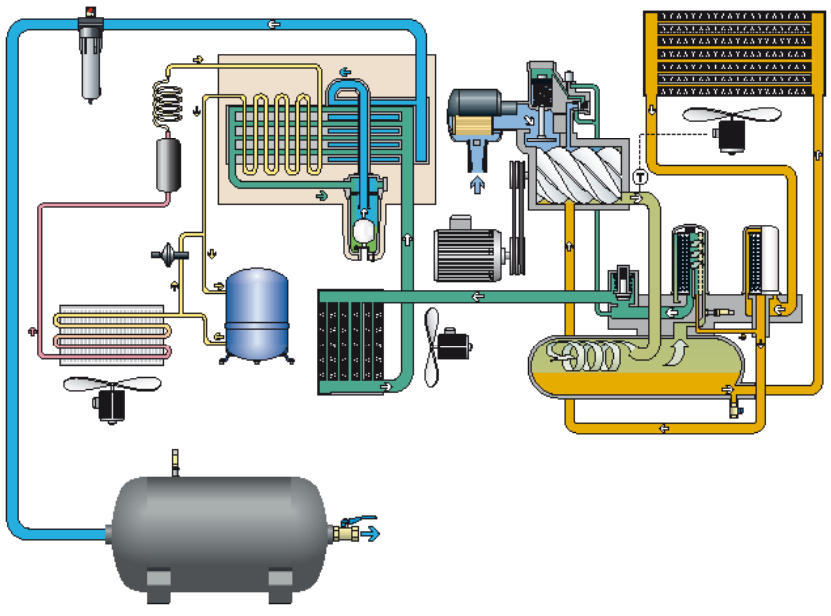
Optimize your system

The GA can be tailored to your needs. From an integrated dryer and filter to rain protection, all optional parts are available to further optimize the GA's performance, or to simply tailor it to your specific production environment.

		GA 5-11	GA 7-11 VSD
AIR TREATMENT	Integrated filter kit class 1[1]	•	•
	Integrated filter kit class 2[1]	•	•
	Dryer bypass[1]	•	•
CONDENSATE TREATMENT	Integrated oil/water separator (OSD)	•	•
	Electronic water drain (EWD) on coolers	•	•
	Timer drain on air receiver[2]	•	•
PROTECTION	Oil retaining frame	•	•
	Motor space heater + thermistors	•	N/A
	Phase sequence relay	•	N/A
	Tropical switch	•	N/A
	Freeze protection	•	N/A
	Heavy duty inlet filter	•	•
PUBLIC WORKS	Rain protection	•	•
	Main power isolator switch	•	•[3]
	Lifting device	•	•
COMMUNICATION	Relays for ES 100 sequence selector[4]	•	N/A
	High-resolution graphical display[4]	•	•
OILS	Food grade oil	•	•
	Roto – Xtend duty oil	•	•
GENERAL OPTIONS	Special canopy color	•	•
	Modulating control	•	N/A
	Marine approvals	•	N/A
	High ambient temperature versions (HAV 50°C, 122°F)	•	N/A
	IT ancillaries	N/A	•
	500 liter air receiver[2]	•	•

[1] FF units only. - [2] Tank-mounted units only. - [3] GA 11 VSD only. - [4] EL II units only.

FLOW CHART



GA 5-11 / GA 7-11 VSD

- *Intake air*
- *Air/oil mixture*
- *Oil*
- *Water*
- *Wet air*
- *Insulation*
- *Refrigerant gas*
- *Refrigerant liquid*
- *Dry air*

According to the chosen product type, slight differences in the flow chart may appear.

Technical specifications GA 5-7-11 / GA 7-11 VSD

COMPRESSOR TYPE		Working pressure WorkPlace		Capacity FAD* min-max			Installed motor power		Noise level**	Weight (kg/lbs)			
										WorkPlace		WorkPlace Full Feature	
		bar(e)	psig	l/s	m³/min	cfm	kW	hp	dB(A)	Floor-mounted	Tank-mounted	Floor-mounted	Tank-mounted
50 Hz VERSION													
GA 5	7.5	7.5	109	14.9	0.9	31.6	5.5	7.5	60	223/492	308/679	253/558	338/745
	8.5	8.5	123	13.0	0.8	27.5	5.5	7.5	60	223/492	308/679	253/558	338/745
	10	10	145	11.5	0.7	24.4	5.5	7.5	60	223/492	308/679	253/558	338/745
	13	13	189	8.4	0.5	17.8	5.5	7.5	60	223/492	308/679	253/558	338/745
GA 7	7.5	7.5	109	20.2	1.2	42.8	7.5	10	61	237/522	322/710	267/589	352/776
	8.5	8.5	123	18.6	1.1	39.4	7.5	10	61	237/522	322/710	267/589	352/776
	10	10	145	16.6	1.0	35.2	7.5	10	61	237/522	322/710	267/589	352/776
	13	13	189	13.3	0.8	28.2	7.5	10	61	237/522	322/710	267/589	352/776
GA 11	7.5	7.5	109	28.5	1.7	60.4	11	15	62	252/556	337/743	287/633	372/820
	8.5	8.5	123	26.5	1.6	56.1	11	15	62	252/556	337/743	287/633	372/820
	10	10	145	24.5	1.5	51.9	11	15	62	252/556	337/743	287/633	372/820
	13	13	189	19.9	1.2	42.2	11	15	62	252/556	337/743	287/633	372/820

COMPRESSOR TYPE		Max. Working pressure WorkPlace		Capacity FAD* min-max			Installed motor power		Noise level**	Weight (kg/lbs)			
										WorkPlace		WorkPlace Full Feature	
		bar(e)	psig	l/s	m³/min	cfm	kW	hp	dB(A)	Floor-mounted	Tank-mounted	Floor-mounted	Tank-mounted
60 Hz VERSION													
GA 5	100	7.4	107	15.0	0.9	31.8	5.5	7.5	60	223/492	308/679	253/558	338/745
	125	9.1	132	12.6	0.8	26.7	5.5	7.5	60	223/492	308/679	253/558	338/745
	150	10.8	157	10.7	0.6	22.7	5.5	7.5	60	223/492	308/679	253/558	338/745
	175	12.5	181	9.0	0.5	19.1	5.5	7.5	60	223/492	308/679	253/558	338/745
GA 7	100	7.4	107	20.7	1.2	43.9	7.5	10	61	237/522	322/710	267/589	352/776
	125	9.1	132	18.2	1.1	38.6	7.5	10	61	237/522	322/710	267/589	352/776
	150	10.8	157	15.6	0.9	33.1	7.5	10	61	237/522	322/710	267/589	352/776
	175	12.5	181	13.6	0.8	28.8	7.5	10	61	237/522	322/710	267/589	352/776
GA 11	100	7.4	107	28.9	1.7	61.2	11	15	62	252/556	337/743	287/633	372/820
	125	9.1	132	26.1	1.6	55.3	11	15	62	252/556	337/743	287/633	372/820
	150	10.8	157	23.8	1.4	50.4	11	15	62	252/556	337/743	287/633	372/820
	175	12.5	181	21.2	1.3	44.9	11	15	62	252/556	337/743	287/633	372/820

COMPRESSOR TYPE	Max. Working pressure WorkPlace		Capacity FAD* min-max			Installed motor power		Noise level**	Weight (kg/lbs)			
									WorkPlace		WorkPlace Full Feature	
	bar(e)	psig	l/s	m³/min	cfm	kW	hp	dB(A)	Floor-mounted	Tank-mounted	Floor-mounted	Tank-mounted
50/60 Hz VERSION												
GA 7 VSD	4	58	7.5-20.3	0.45-1.22	16-43	7.5	10	64-66	245/540	330/728	275/606	360/794
	7.5	109	7.2-20.2	0.43-1.21	15-43	7.5	10	64-66	245/540	330/728	275/606	360/794
	10	145	6.6-17.0	0.40-1.02	14-36	7.5	10	64-66	245/540	330/728	275/606	360/794
	13	188	5.9-13.5	0.35-0.81	13-29	7.5	10	64-66	245/540	330/728	275/606	360/794
GA 11 VSD (10 bar)	4	58	7.3-29.1	0.44-1.75	15-62	11	15	67-69	255/562	290/639	340/750	375/827
	7.5	109	7.0-28.4	0.42-1.70	15-60	11	15	67-69	255/562	290/639	340/750	375/827
	10	145	6.3-25.2	0.38-1.51	13-53	11	15	67-69	255/562	290/639	340/750	375/827
GA 11 VSD (13 bar)	4	58	7.2-25.2	0.43-1.51	15-53	11	15	67-69	270/595	360/794	305/672	395/871
	7.5	109	6.8-24.6	0.41-1.48	14-52	11	15	67-69	270/595	360/794	305/672	395/871
	10	145	6.2-24.3	0.37-1.46	13-51	11	15	67-69	270/595	360/794	305/672	395/871
	13	188	5.9-20.9	0.35-1.25	13-44	11	15	67-69	270/595	360/794	305/672	395/871

** 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/Pneurop/ Cagi PN8NTC2 test code; 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).*

Pressure dew point of integrated refrigerant dryer at reference conditions: 3°C (37°F).

Maximum working pressure for VSD machines:
- *13 bar(e) (188 psig).*
- *10 bar(e) (145 psig) for GA 11 VSD 10 bar version.*

GA 5-7-11 / GA 7-11 VSD

Floor-mounted	Tank-mounted
H: 1212 mm, 47.7"	H: 1779 mm, 70"
W: 976 mm, 38.4"	W: 1158 mm, 45.6"
D: 595 mm, 23.4"	D: 638 mm, 25.1"

Floor-mounted *Tank-mounted*

In order to be First in Mind—First in Choice™ for all your compressed air needs, Atlas Copco delivers the products and services that help increase your business' efficiency and profitability.

Atlas Copco's pursuit of innovation never ceases, driven by your need for reliability and efficiency. Always working with you, we are committed to providing you the customized quality air solution that is the driving force behind your business.

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

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Atlas Copco

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