

# Atlas Copco

Oil-injected Rotary Screw Compressors

MAS(+) GA 30+-90/MAS+ GA 37-90 VSD (30-90 kW/40-125 hp)

MAS+ GA 55-90PP (55-90 kW/75-120 hp)



*Sustainable Productivity*

**Atlas Copco**



## The ultimate smart solution, driven by efficiency

Atlas Copco's Marine Air Systems bring you outstanding sustainability, reliability and performance, while minimizing the total cost of ownership. You can choose between two compressor types MAS GA 30+90 and MAS GA 37-90 VSD, either water-cooled or air-cooled, available as MAS+ and MAS version. Built to perform even in the harshest environments at sea, these compressors keep your vessel and equipment running efficiently.



### NEW HEIGHTS IN SUSTAINABILITY

The MAS GA 30+90 family stands for sustainable productivity through lower lifecycle costs and maximum uptime. Operating cost is minimized thanks to Marine Premium Efficiency motors with integrated gearbox and the highly efficient element. The integrated dryer R410A has a Global Warming Potential (GWP) of 1725 and is compliant with all environmental classification notations. Maximum uptime is achieved by maintenance from one side and complete drive train accessibility.



### BENCHMARKING PERFORMANCE

Outstanding performance is ensured by design, with Marine Premium Efficiency motors in combination with Atlas Copco's highly efficient element and an oversized cooling arrangement resulting in significant energy savings. Internal pressure drops from inlet to discharge are optimized. Efficient smart compressor controls and Atlas Copco algorithms minimize the working pressure band, saving energy.



### NEW MILESTONES IN RELIABILITY

The reliability of the MAS GA 30+90 range starts with the cool canopy and low element outlet temperatures, an oversized separate oil cooler and an aftercooler with patented integrated mechanical separator. The three-stage air/oil separation assures low oil consumption. All electrical cubicles are in overpressure, increasing the lifetime of electrical components.



## MAS+ GA VSD: ULTIMATE ENERGY SAVER

- Unique integrated Variable Speed Drive (VSD) technology for on average 35% energy savings.
- Industry-leading operating turndown range and flexible pressure selection: 4-13 bar.
- Start under system pressure due to special VSD motor, no idling time.
- Integrated Dryer Saver Cycle saves up to 60% of the dryer's electrical consumption.
- Smart Elektronikon® graphic compressor controller with high-definition color display working to a set point minimizes pressure drops.
- MAS+ GA 55-90PP only available in water-cooled version.

## MAS + GA: LEADING PERFORMANCE

- Built according to all marine notified bodies.
- The advanced Elektronikon® control and monitoring system maximizes overall compressor efficiency and reliability and reduces maintenance costs.
- Air dryer, compressed air filters and condensate treatment equipment can be integrated in the compressor package which minimizes installation costs and space requirements.
- Same performance as MAS GA.

## MAS GA: PREMIUM COMPRESSOR

- Designed, built and tested to meet the toughest conditions in the engine room, such as ambient temperatures of 55°C/131°F, high humidity, vibrations, 22.5° inclination tests.
- Can be delivered as air-cooled or water-cooled version.



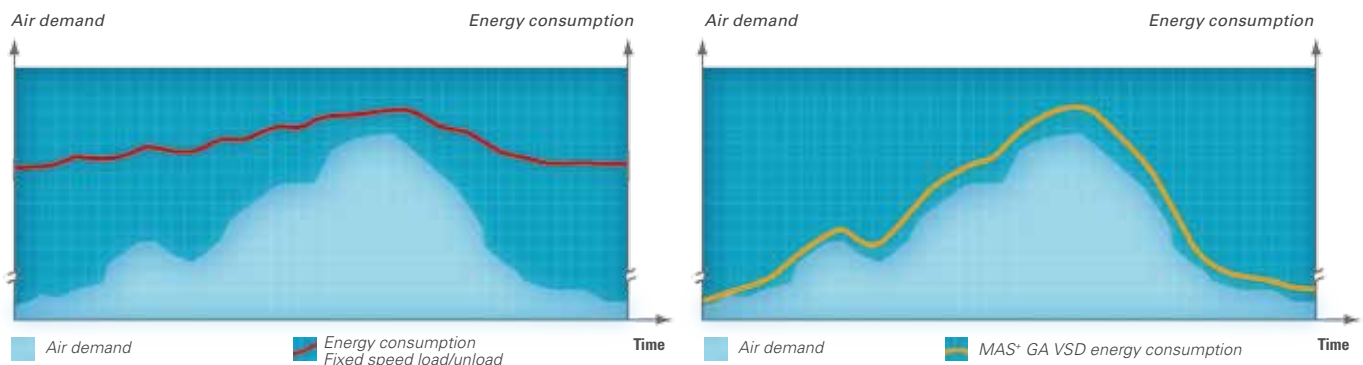
# VSD: Driving down your energy costs

Over 80% of a compressor's lifecycle cost is taken up by the energy it consumes. To cut your energy costs, Atlas Copco pioneered Variable Speed Drive (VSD) technology in the compressed air industry. VSD leads to major energy savings as well as a substantial reduction in diesel and maintenance costs. Thanks to continual investments in this technology, Atlas Copco offers the widest range of integrated VSD compressors on the market.

## WHY ATLAS COPCO VARIABLE SPEED DRIVE TECHNOLOGY?

- On average 35% energy savings\* during fluctuations in production demand with an extensive turndown range.
- Integrated Elektronikon® Graphic controller controls the motor speed and high efficiency frequency inverter.
- No wasted idling times or blow-off losses in normal operation.
- Compressor can start/stop under full system pressure without the need to unload with special VSD motor.
- Eliminates peak current penalty during start-up.
- Minimizes system leakage due to a lower system pressure.
- EMC Compliance to directives (2004/108/EG).

**NO IDLING TIME**



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.

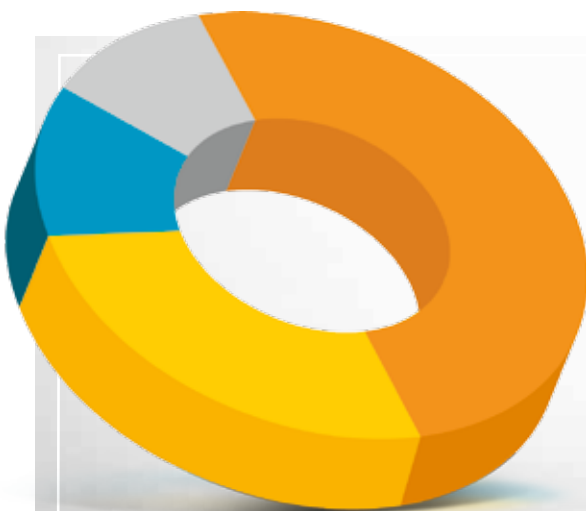
### ON AVERAGE 35% ENERGY SAVINGS\*

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

### TOTAL COMPRESSOR LIFECYCLE COST

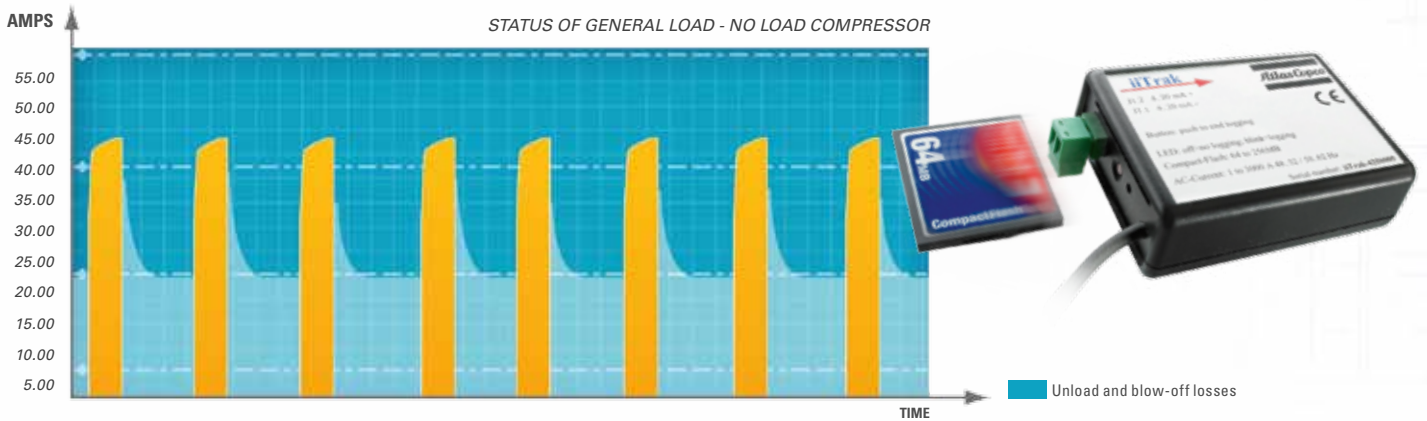
- Energy
- Investment
- Energy savings with VSD
- Maintenance

\* Depending on total running hours.



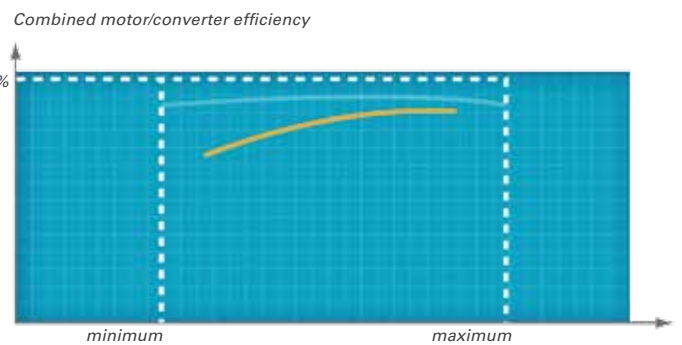
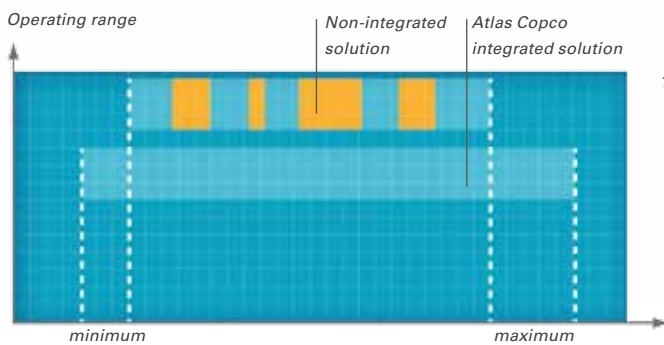
# HOW MAS+ GA VSD TECHNOLOGY SAVES ENERGY

Contact your local Atlas Copco representative for an audit of your compressed air system. A real-time measurement simulation and audit report can be provided with recommendations for additional savings and sizing to meet your compressed air needs.



## WHAT IS UNIQUE ABOUT THE INTEGRATED ATLAS COPCO GA VSD?

- 1** The Elektronikon® controls both the compressor and the integrated converter, ensuring maximum machine safety within parameters.
- 2** Flexible pressure selection from 4 to 13 bar with electronic gearing reduces electricity costs.
- 3** Special electric motor specifically designed for VSD operation (inverter duty motor). Bearings are protected against induced bearing currents. Both motor and converter are perfectly tuned for highest efficiency across the entire speed range.
- 4** Electric motor specifically designed for low operating speeds with clear attention to motor cooling and compressor cooling requirements.
- 5** All Atlas Copco MAS+ GA VSD compressors are EMC tested and certified. External sources do not influence compressor operation, nor does the compressor affect the operation of other instruments via emissions or via the power supply line.
- 6** Mechanical enhancements ensure that all components operate below critical vibration levels throughout the entire compressor speed range.
- 7** A highly efficient frequency converter in a cool overpressure cubicle ensures stable operation in high ambient temperatures up to 50°C/122°F\*.  
\* Standard up to 46°C/114.8°F.
- 8** No 'speed windows' that can jeopardize the energy savings and the stable net pressure. Turndown capability of the compressor is maximized to 80-85%.
- 9** The cubicle cooling booster increases the lifetime of electrical components due to a cool cubicle in overpressure and reduced dust ingress.
- 10** Net pressure band is maintained within 0.10 bar, 1.5 psi.



Speed windows

Non-integrated VSD

Integrated VSD

# High reliability and smart energy

1

## Maintenance-free drive system

- 100% maintenance-free; totally enclosed and protected against dirt and dust.
- Suitable for harsh environments.
- High-efficiency drive arrangement; no coupling or slippage losses.
- High ambient version for both MAS and MAS+ compressors up to 55°C/131°F.



2

## Marine Premium Efficiency (60 Hz) electrical motors

- IP55, insulation Class F, B rise.
- Non-drive side bearing greased for life.
- Designed for continuous operation in harsh environments.

3

## Robust spin-on oil filter

- High-efficiency, removing 300% smaller particles than a conventional filter.
- Integrated bypass valve with the oil filter.

4

## SIL Smart inlet lock system for MAS+ GA VSD compressors

- Superior designed vacuum and air pressure controlled valve with minimal pressure drop and no springs.
- Smart stop/start which eliminates back-pressure oil vapor.



5

## Separate oversized oil cooler and aftercooler

- Low element outlet temperatures, ensuring long oil lifetime.
- Removal of nearly 100% condensate by mechanical separator.
- No consumables.
- Eliminates possibility of thermal shocks in coolers.
- Only for air-cooled versions.





10

### Integrated highly efficient R410A dryer

- Excellence in air quality.
- 50% reduction in energy consumption compared to traditional dryers.
- Zero ozone depletion.
- Incorporates optional DD and PD filters according to Class 1.4.1.
- Can be equipped with optional bypass.
- GWP <1850 (not applicable for MAS+ GA 55-90PP).

9

### Cubicle cooling booster

- Cubicle in overpressure minimizes ingress of conductive dust.
- Electrical components remain cool, enhancing lifetime of components.

8

### Elektronik® for remote monitoring

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

7

### Heavy-duty air intake filter

- Protects the compressor components by removing 99.9% of dirt particles down to 3 microns.
- Differential inlet pressure for proactive maintenance while minimizing pressure drop.



6

### Electronic no-loss water drain

- Ensures constant removal of condensate.
- Manual integrated bypass for effective condensate removal in case of power failure.
- Integrated with compressor's Elektronik® with warning/alarm features.
- Not applicable for the MAS+ GA 55-90PP.



# A step ahead in monitoring and controls

The next-generation Elektronikon® operating system offers a wide variety of control and monitoring features that allow you to increase your compressor's efficiency and reliability. To maximize energy efficiency, the Elektronikon® controls the main drive motor and regulates system pressure within a predefined and narrow pressure band.



## IMPROVED USER-FRIENDLINESS

- 3.5-inch high-definition color display with clear pictograms and extra 4th LED indicator for service.
- Graphical display of key parameters (day, week, month) and 32 language settings.
- Internet-based compressor visualization using a simple Ethernet connection.
- On-screen Delayed Second Stop function and VSD savings indication.
- Graphical indication Serviceplan, remote control and connectivity functions.
- Software upgrade available to control up to 6 compressors by installing the optional integrated compressor controller.



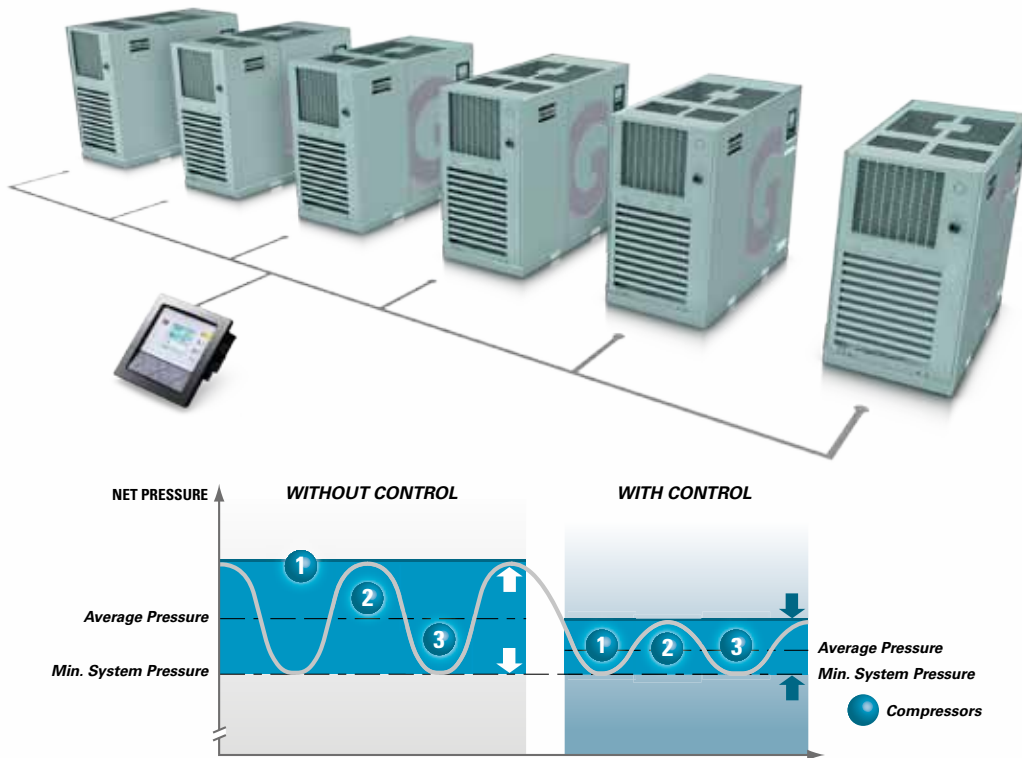
## ONLINE & MOBILE MONITORING

Monitor your compressors over the Ethernet with the new Elektronikon® controller. Monitoring features include warning indications, compressor shut-down and maintenance scheduling. The 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.



# Optional integrated compressor controller

Install, with a simple license, the optional integrated compressor controller and get simple, central control to reduce system pressure and energy consumption in installations of up to 4 (ES4i) or 6 (ES6i) compressors.

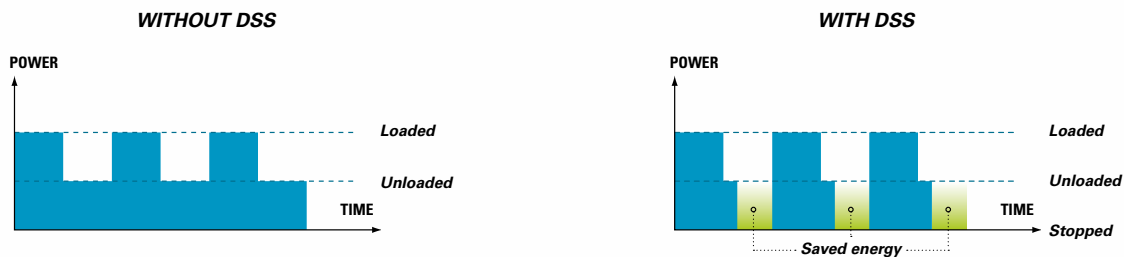


The Elektronikon® continuously monitors critical parameters. Monitoring features include service and warning indications, error detection, compressor shut-down and maintenance scheduling.

## DUAL PRESSURE SET POINT & DELAYED SECOND STOP

Most production processes create fluctuating levels of demand which, in turn, can create energy waste in low use periods. Using either the standard or graphic Elektronikon® controller, you 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.



## INTEGRATED DRYER SAVER CYCLE

Saver Cycle technology reduces the energy consumption of the integrated refrigerant dryers with the fan in light load applications. Using an ambient sensor to monitor the required

dew point suppression, the Elektronikon® starts and stops the dryer and the fan, minimizing energy use and protecting the air system from corrosion.

# Excellence in integrated air quality

Untreated compressed air contains moisture, aerosols and dirt particles that can damage your air system and contaminate your end product, resulting in risk of corrosion and compressed air system leaks. Maintenance costs can far exceed air treatment costs. Our compressors provide the clean, dry air that improves your system's reliability, avoids costly downtime and production delays, and safeguards the quality of your products.

**ZERO OZONE DEPLETION**



## ON AVERAGE 50% ENERGY SAVINGS WITH R410A INTEGRATED DRYERS

- Use of energy-efficient refrigerant R410A reduces operating costs.
- R410A refrigerant reduces global warming potential by an average of 50%.
- Environmentally-friendly characteristics; zero ozone depletion.
- Unique Saver Cycle Control, with ambient temperature sensor and based on dryer load and relative humidity of compressed air, saves energy at partial load.
- Heat exchanger cross-flow technology with low pressure drop.
- Zero waste of compressed air thanks to no-loss condensate drain.
- Pressure dew point of 3°C (100% relative humidity at 20°C).

## INTEGRATED PURITY

The optional DD/PD filters and integrated refrigerant air dryer (IFD) efficiently remove moisture, aerosols and dirt particles to protect your investment. This air quality prolongs the life of

downstream equipment, increasing efficiency and ensuring quality of your final product.

ISO quality class*	Dirt particle size	Water pressure dew point**	Oil concentration
3..4	3 microns	-	3 ppm
3.4.4	3 microns	+3°C, 37°F	3 ppm
2.4.2	1 micron	+3°C, 37°F	0.1 ppm
1.4.1	0.01 microns	+3°C, 37°F	0.01 ppm

\*The table values reflect the maximum limits according to the temperature ISO gravity class.

\*\* Water pressure dew point based on 100% RH at 20°C/68°F.

# MAS compressors: compressed air at the point of use

With the industry-leading low noise operation and integration of air and condensate treatment equipment, the MAS GA offers complete versatility for your working air on board. The compressor's integrated design allows it to be installed in the workshop or close to the accommodation area, especially for ships or offshore units working 24 hours a day.

## LOW INSTALLATION COSTS

- The MAS and MAS+ GA can operate close to the point of use – eliminating the need for a dedicated compressor room.
- The MAS and MAS+ GA are delivered ready for use – minimizing production downtime and reducing installation costs.
- Filtration equipment is integrated – reducing the need for costly external piping and minimizing pressure drops (not applicable for MAS+ GA 55-90PP).
- Low noise enables the above to be a reality (not applicable for MAS+ GA 55-90PP).



## REDUCED ENERGY AND MAINTENANCE COSTS

- With less external piping, the MAS(+) 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 (not applicable for MAS+ GA 55-90PP).
- The MAS(+) GA operates at the lowest possible system pressure to reduce energy costs thanks to the Elektronikon® advanced monitoring system.



# MAS PP compressors: high performance marine air

Atlas Copco's Marine Air Systems PP compressors bring you the same optimum sustainability, reliability and performance as their MAS GA counterparts, while boasting a very small footprint. Built to withstand the harshest environments at sea, these compressors are robust yet extremely easy to maintain.

- Compact & space-saving.
- Superb reliability and durability.
- Low installation costs.

- Easy maintenance.
- Optional canopy is available.



## OPTIMIZE YOUR SYSTEM

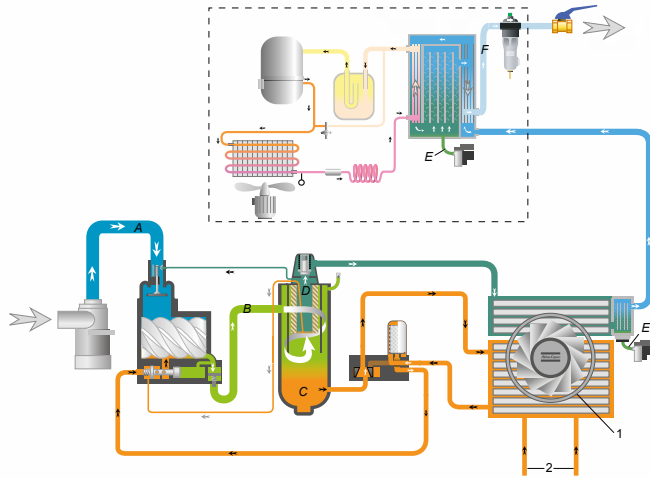
Some applications may need or may benefit from additional options and more refined control/air treatment systems. To meet these needs, Atlas Copco has developed options and easily integrated compatible equipment.

DESCRIPTION	MAS	MAS <sup>+</sup>	MAS <sup>+</sup> PP
Marine motor	-	✓	✓
Ambient temperature 55°C	✓	✓	✓
Controller with DSS function	✓	✓	✓
Tropical thermostat	✓	✓	✓
AM meter	-	✓	✓
Halogen-free cabling	-	✓	✓
Flame retardant wiring	-	✓	✓
Doorstopper	-	✓	-
Remote stop/start	✓	✓	✓
Voltage-free contacts	○	✓	✓
Motor heating and thermistor protection	-	✓	✓
Star-delta start	✓	✓	✓
Variable Speed Drive (VSD)	○	○	-
400/460/690 V 50 & 60 Hz	✓	✓	✓
Main switch	○	✓	✓
Re-silent chocks	✓	✓	✓
Approvals	-	✓	✓
Built-in air dryer	○	○	-
Oil-containing frame	-	-	○
Closed design	✓	✓	○*

\* Extra canopy reducing noise level to 76 dB(a).  
 ✓: Standard    ○: Optional    -: Not available

# Flow charts

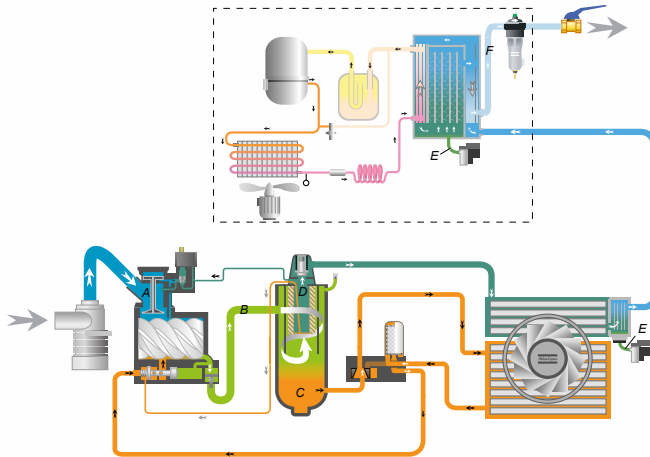
## VARIABLE SPEED DRIVE: MAS+ GA VSD



- A Intake air
- B Air/oil mixture
- C Oil
- D Wet compressed air
- E Condensate
- F Dried compressed air

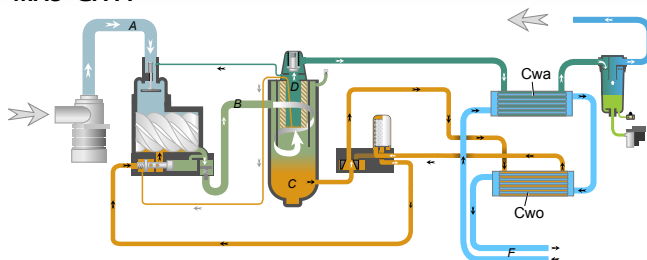
- 1 Aircooled version
- 2 Watercooled version

## FIXED SPEED: MAS(+) GA



- A Intake air
- B Air/oil mixture
- C Oil
- D Wet compressed air
- E Condensate
- F Dried compressed air

## MAS+ GA PP



- A Intake air
- B Air/oil mixture
- C Oil
- D Wet compressed air
- F Cooling water flow

**MAS+ GA 37, 45 VSD** Width 1766 mm, 69.5"  
**MAS+ GA 30+, 37, 45** Depth 970 mm, 38.2"  
**MAS GA 30+, 37, 45** Height 1800 mm, 70.9"

**MAS+ GA 55, 75, 90 VSD** Width 2316 mm, 91.2"  
**MAS+ GA 55, 75, 90** Depth 1080 mm, 42.5"  
**MAS GA 55, 75, 90** Height 1955 mm, 77"

**MAS+ GA 55, 75, 90PP** Width 1540 mm, 60.6"  
 Depth 1000 mm, 39.4"  
 Height 1540 mm, 60.6"



## Technical specifications MAS(+) GA 30+-90 (50 Hz versions)

COMPRESSOR TYPE	kW	Outlet air temperature				Weight Air-cooled / Water-cooled	Dimensions L (mm) W (mm) H (mm)			Free Air Delivery*				Sound level**	Heat dissipation kW	Cooling Water-cooled l/min
		Air-cooled Without dryer	Air-cooled With dryer	Water-cooled Without dryer	Water-cooled With dryer					7.5 bar	8.5 bar	10 bar	13 bar			
						P/ kg	m³/h									
MAS(+) GA 30+	30	a+7°C	a+3°C	cwt+7°C	cwt+3°C	817/898	1766	970	1800	321	289	269	228	74	26	35
MAS(+) GA 37	37	a+7°C	a+3°C	cwt+7°C	cwt+3°C	820/905	1766	970	1800	371	342	326	259	78	30	39
MAS(+) GA 45	45	a+7°C	a+3°C	cwt+7°C	cwt+3°C	894/979	1766	970	1800	443	409	379	335	81	36	45
MAS(+) GA 55	55	a+7°C	a+3°C	cwt+7°C	cwt+3°C	1229/1329	2316	1080	1955	522	503	477	405	78	43	65
MAS(+) GA 75	75	a+7°C	a+3°C	cwt+7°C	cwt+3°C	1259/1379	2316	1080	1955	737	657	584	507	82	57	90
MAS(+) GA 90	90	a+7°C	a+3°C	cwt+7°C	cwt+3°C	1425/1545	2316	1080	1955	866	865	777	652	82	72	90

## Technical specifications MAS(+) GA 30+-90 (60 Hz versions)

COMPRESSOR TYPE	kW	Outlet air temperature				Weight Air-cooled / Water-cooled	Dimensions L (mm) W (mm) H (mm)			Free Air Delivery*				Sound level**	Heat dissipation kW	Cooling Water-cooled l/min
		Air-cooled Without dryer	Air-cooled With dryer	Water-cooled Without dryer	Water-cooled With dryer					7.4 bar	9.1 bar	10 bar	13 bar			
						P/ kg	m³/h									
MAS(+) GA 30+	30	a+7°C	a+3°C	cwt+7°C	cwt+3°C	817/898	1766	970	1800	326	277	262	239	74	26	35
MAS(+) GA 37	37	a+7°C	a+3°C	cwt+7°C	cwt+3°C	820/905	1766	970	1800	372	344	312	284	78	30	39
MAS(+) GA 45	45	a+7°C	a+3°C	cwt+7°C	cwt+3°C	894/979	1766	970	1800	449	414	379	340	81	36	45
MAS(+) GA 55	55	a+7°C	a+3°C	cwt+7°C	cwt+3°C	1229/1329	2316	1080	1955	554	494	452	411	78	43	65
MAS(+) GA 75	75	a+7°C	a+3°C	cwt+7°C	cwt+3°C	1259/1379	2316	1080	1955	705	656	600	542	82	57	90
MAS(+) GA 90	90	a+7°C	a+3°C	cwt+7°C	cwt+3°C	1425/1545	2316	1080	1955	927	865	796	716	82	72	90

\* Unit performance measured according to ISO 1217, Annex C, Edition 4

### 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
- 8.5 bar versions at 8 bar
- 10 bar versions at 9.5 bar
- 13 bar versions at 12.5 bar

\*\* 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



## Technical specifications MAS+ GA 55-90PP (50 Hz versions)

COMPRESSOR TYPE	kW	Outlet air temperature				Weight Air-cooled / Water-cooled	Dimensions L (mm) W (mm) H (mm)			Free Air Delivery*				Sound level** dB(A)	Heat dissipation kW	Cooling Water-cooled l/min
		Air-cooled Without dryer	Air-cooled With dryer	Water-cooled Without dryer	Water-cooled With dryer					7.5 bar	8.5 bar	10 bar	13 bar			
						P/ kg	m³/h									
MAS+ GA 55PP	55	N/A	N/A	cwt+7°C	N/A	930	1540	1000	1540	517	498	472	401	85	48	55
MAS+ GA 75PP	75	N/A	N/A	cwt+7°C	N/A	930	1540	1000	1540	729	651	578	502	85	64	90
MAS+ GA 90PP	90	N/A	N/A	cwt+7°C	N/A	980	1540	1000	1540	857	857	770	646	85	80	90
MAS+ GA 55PP <sup>1</sup>	55	N/A	N/A	cwt+7°C	N/A	930	1540	1000	1540	582	545	509	435	85	48	55
MAS+ GA 75PP <sup>1</sup>	75	N/A	N/A	cwt+7°C	N/A	930	1540	1000	1540	760	720	652	561	85	64	90
MAS+ GA 90PP <sup>1</sup>	90	N/A	N/A	cwt+7°C	N/A	980	1540	1000	1540	967	945	859	755	85	80	90

<sup>1</sup> Max. ambient temperature 46°C

## Technical specifications MAS+ GA 55-90PP (60 Hz versions)

COMPRESSOR TYPE	kW	Outlet air temperature				Weight Air-cooled / Water-cooled	Dimensions L (mm) W (mm) H (mm)			Free Air Delivery*				Sound level** dB(A)	Heat dissipation kW	Cooling Water-cooled l/min
		Air-cooled Without dryer	Air-cooled With dryer	Water-cooled Without dryer	Water-cooled With dryer					7.4 bar	9.1 bar	10 bar	13 bar			
						P/ kg	m³/h									
MAS+ GA 55PP	55	N/A	N/A	cwt+7°C	N/A	930	1540	1000	1540	548	489	447	407	85	48	55
MAS+ GA 75PP	75	N/A	N/A	cwt+7°C	N/A	930	1540	1000	1540	698	650	594	536	85	64	90
MAS+ GA 90PP	90	N/A	N/A	cwt+7°C	N/A	980	1540	1000	1540	918	857	788	709	85	80	90
MAS+ GA 55PP <sup>1</sup>	55	N/A	N/A	cwt+7°C	N/A	930	1540	1000	1540	599	531	487	444	85	48	55
MAS+ GA 75PP <sup>1</sup>	75	N/A	N/A	cwt+7°C	N/A	930	1540	1000	1540	771	688	651	584	85	64	90
MAS+ GA 90PP <sup>1</sup>	90	N/A	N/A	cwt+7°C	N/A	980	1540	1000	1540	996	917	860	789	85	80	90

<sup>1</sup> Max. ambient temperature 46°C

## Technical specifications MAS+ GA 37-90 VSD (50/60 Hz versions)

COMPRESSOR TYPE	Working pressure		Capacity FAD*						Installed motor power		Noise level** dB(A)	Weight WorkPlace		Weight WorkPlace Full Feature	
			l/s		m³/h		cfm								
	bar(e)	psig	min	max	min	max	min	max	kW	hp	kg	lbs	kg	lbs	
MAS+ GA 37 VSD	4	58	26.0	124	96	444	55	263	37	50	66/67	1042	2297	1127	2485
	7	102	26.0	123	96	444	55	260	37	50	66/67	1042	2297	1127	2485
	10	145	25.8	107	90	384	55	226	37	50	66/67	1042	2297	1127	2485
	13	189	40.3	87	144	312	85	185	37	50	66/67	1042	2297	1127	2485
MAS+ GA 45 VSD	4	58	26.0	146	96	528	55	310	45	60	69/72	1100	2425	1190	2624
	7	102	26.0	145	96	522	55	307	45	60	69/72	1100	2425	1190	2624
	10	145	25.8	128	90	462	55	271	45	60	69/72	1100	2425	1190	2624
	13	189	40.3	107	144	384	85	226	45	60	69/72	1100	2425	1190	2624
MAS+ GA 55 VSD	4	58	32.4	197	114	708	69	418	55	75	69/72	1380	3042	1480	3263
	7	102	26.0	175	96	630	55	371	55	75	69/72	1380	3042	1480	3263
	10	145	25.4	155	90	558	54	328	55	75	69/72	1380	3042	1480	3263
	13	189	37.0	129	132	462	78	273	55	75	69/72	1380	3042	1480	3263
MAS+ GA 75 VSD	4	58	37.8	250	138	900	80	529	75	100	69/70	1534	3382	1654	3646
	7	102	37.4	250	132	900	79	530	75	100	69/70	1534	3382	1654	3646
	10	145	48.1	219	174	792	102	465	75	100	69/70	1534	3382	1654	3646
	13	189	58.3	182	210	654	124	386	75	100	69/70	1534	3382	1654	3646
MAS+ GA 90 VSD	4	58	37.0	293	132	1056	78	621	90	125	73/74	1534	3382	1654	3646
	7	102	39.4	292	144	1050	84	619	90	125	73/74	1534	3382	1654	3646
	10	145	48.3	257	174	924	102	545	90	125	73/74	1534	3382	1654	3646
	13	189	59.4	214	216	774	126	454	90	125	73/74	1534	3382	1654	3646

\* Unit performance measured according to ISO 1217, Annex E, Edition 4

### 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
- 8.5 bar versions at 8 bar
- 10 bar versions at 9.5 bar
- 13 bar versions at 12.5 bar

\*\* 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



### **Driven by innovation**

With more than 140 years of innovation and experience, Atlas Copco will deliver the products and services to help maximize your company's efficiency and productivity. As an industry leader, we are dedicated to offering high air quality at the lowest possible cost of ownership. Through continuous innovation, we strive to safeguard your bottom line and bring you peace of mind.



### **Building on interaction**

As part of our long-term relationship with our customers, we have accumulated extensive knowledge of a wide diversity of processes, needs and objectives. This gives us the flexibility to adapt and efficiently produce customized compressed air solutions that meet and exceed your expectations.



### **A committed business partner**

With a presence in over 170 countries, we will deliver high-quality customer service anywhere, anytime. Our highly skilled technicians are available 24/7 and are supported by an efficient logistics organization, ensuring fast delivery of genuine spare parts when you need them. We are committed to providing the best possible know-how and technology to help your company produce, grow, and succeed. With Atlas Copco you can rest assured that your superior productivity is our first concern!

