Oil-injected rotary screw compressors

GA 7-37 VSD+ (7-37 kW/10-50 hp)

A new standard in compressed air performance and efficiency

Atlas Copco's GA 7-37 VSD+ is a true game changer for your operational environment. It reduces energy consumption by on average 50% and assures performance even in the harshest conditions. The GA 7-37 VSD+ comes with Variable Speed Drive as standard, our in-house designed iPM motor technology, and advanced connectivity. The result is a compact compressor that fits in the smallest room and that sets a new standard in efficiency and performance for years to come.

Innovative

Atlas Copco has revolutionized compressor build and performance. Instead of the normal space-taking horizontal design, the new GA 7-37 VSD+ has an upright, compact layout. This saves valuable floor and work space, eases maintenance access, and reduces the total cost of ownership for all customers.

Efficient

- Reduced energy consumption by 50% on average compared to the current idling models.
- Free Air Delivery (FAD) increase of up to 12%.

IE5

Meeting and exceeding efficiency benchmarks:

- The iPM motor of the GA 7-37 VSD+ equals IE5 standards.
- The inverter and iPM motor exceed IES2 (EN 50598) requirements for power drive efficiency.

VSD

Reliable

- Low maintenance: fewer components, increased uptime.
- Based on the unique combination of proven technologies and existing components, optimally brought together by Atlas Copco's experience and know-how.

Smart

- Easy monitoring and maintenance thanks to the Elektronikon® Touch controller.
- Maintenance notifications and machine status are available via SMARTLINK e-mail or text messages.
- Customized reports on the energy performance of your machine, in compliance with ISO 50001.

Inside the innovative GA 7-37 VSD+

IE5

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- The iPM motor of the GA 7-37 VSD+ equals IE5 standards.
- Inverter and iPM motor exceed IES2 (EN 50598) requirements for power drive efficiency.

1 Interior Permanent Magnet (iPM) motor

- Compact, customized design for optimal cooling by oil.
- Designed in-house in Belgium.
- IP66 protection rating.
- No cooling air flow required.
- Oil-lubricated motor bearing: no (re)grease(ing), increased uptime.

2 Element

- Made by Atlas Copco.
- Robust and silent.

3 Direct drive

- Vertical design, fewer parts.
- Oil-cooled, pressure-tight.
- No gears or belts, no shaft seal.
- Compact: footprint down 60%.

4 Innovative fan

- Based on the newest technologies.
- In compliance with ERP2015 efficiency.
- Low noise levels.

5 Robust oil filter/separator

- Integrated bypass valve with the oil filter.
- Easy maintenance.

6 Electronic no-loss water drain

- Included as standard.
- Efficient removal of condensate without loss of compressed air.
- Manual integrated bypass for effective condensate removal in case of power failure.

7 Elektronikon® Touch controller

- High-tech controller with warning indications, compressor shut-down and maintenance scheduling.
- Easy to use and designed to perform in the toughest conditions.
- Standard SMARTLINK remote monitoring to maximize air system performance and energy savings.
- Optional multiple compressor control (2, 4 or 6 compressors).

8 Sentinel valve

- No inlet arrestor.
- No blow-off or pressure drop losses.
- Maintenance-free.

9 VSD+ cubicle

- VSD+ is superior to idling machines.
- Electrical components remain cool, enhancing their lifetime.
- Dedicated drive for iPM technology motors.
- 5% DC choke as standard.
- Heat dissipation of inverter in separate compartment.

VSD+ for 50% average energy savings

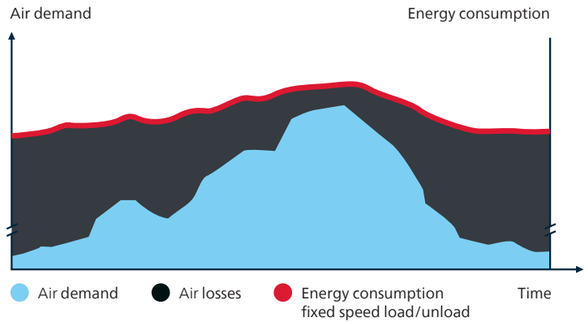
Atlas Copco's GA Variable Speed Drive+ (VSD+) technology closely matches the air demand by automatically adjusting the motor speed. Combined with the innovative design of the iPM (Permanent Magnet) motor, this results in average energy savings of 50% and an average reduction of 37% in the lifecycle cost of a compressor.

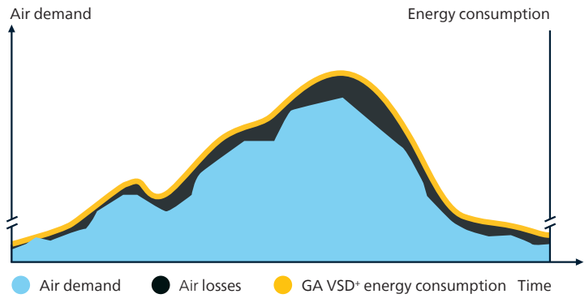
Why Atlas Copco Variable Speed Drive+ technology?

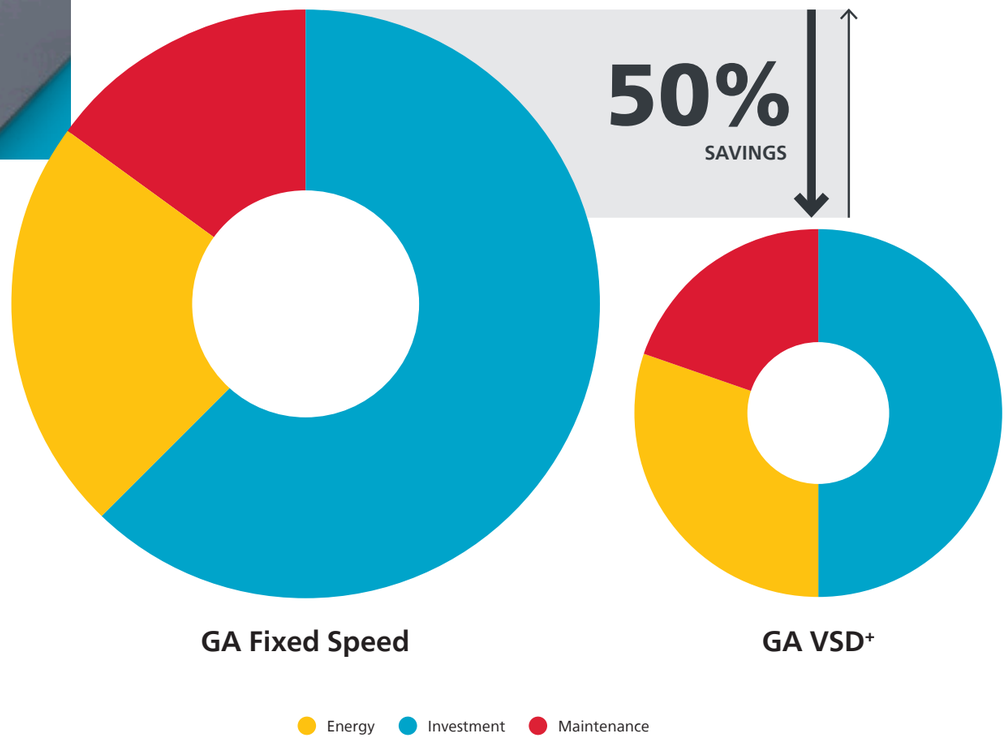
- On average 50% energy savings with an extensive flow range (20-100%).
- Integrated Elektronikon® Touch controller controls the motor speed and high-efficiency frequency inverter.
- No wasted idling times or blow-off losses during operation.
- Compressor can start/stop under full system pressure without the need to unload.
- Eliminates peak current penalty during start-up.
- Minimizes system leakage due to a lower system pressure.
- EMC compliance to directives (2004/108/EG).

*Compared to fixed speed compressors, based on measurement performed by an independent energy audit agency.

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.

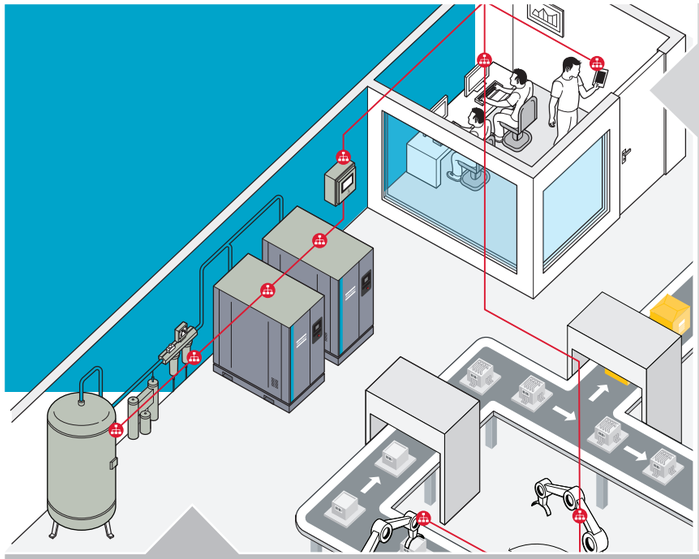






Advanced monitoring, control & connectivity

Whether you call it Industry 4.0 or the Internet of Things (IoT), interconnectivity is the future. The GA 7-37 VSD+ comes fully prepared. Its advanced monitoring, control and connectivity features allow you to optimize compressor performance, resources, efficiency and productivity.



CONNECT SMARTLINK*: Data Monitoring Program

- Remote monitoring that helps you optimize your compressed air system and save energy and costs.
- Provides a complete insight in your compressed air network.
- Anticipates potential problems by warning you upfront.

* Please contact your local sales representative for more information.

Control

To maximize energy efficiency, the Elektronikon® controls the main drive motor and regulates system pressure within a predefined and narrow pressure band.

State-of-the-art Elektronikon® Touch controller

- ✓ Improved user-friendliness: 4.3-inch high-definition color display with clear pictograms and service indicator.
- ✓ Built-in SMARTLINK online monitoring.
- ✓ Increased reliability: new, user-friendly, multilingual user interface and durable touch screen.

Key features:

- Automatic restart after voltage failure.
- Internet-based compressor visualization using a simple Ethernet connection.
- Dual Pressure Set Point.
- 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 service plan indication.
- Remote control and connectivity functions.
- Control up to 6 compressors by installing the optional equalizer central controller software.

Excellence in integrated air quality

Untreated compressed air contains moisture and aerosols which increase the risk of corrosion and compressed air system leaks. This can result in a damaged air system and contaminated end products. Maintenance costs can far exceed air treatment costs. The GA 7-37 VSD+ provides the clean, dry air that improves your system's reliability, avoids costly downtime and production delays, and safeguards the quality of your products.

On average 50% energy savings with newly designed integrated dryers

- Pressure dewpoint of 3°C/37.4°F (100% relative humidity at 20°C/68°F).
- Heat exchanger cross-flow technology with low pressure drop.
- Zero waste of compressed air thanks to no-loss condensate drain.
- Reduced operating costs.
- Environmentally-friendly characteristics: zero ozone depletion.
- Global warming potential has been lowered by an average of 50% by reducing the amount of refrigerant in the new dryer.

Meet your specific requirements

Thanks to its integrated dryer, the Atlas Copco GA 7-37 VSD+ offers the right air quality for your application.

Compressed air purity classification ISO 8573-1:2010

Purity class	Solid particles			Water		Total oil*
	Number of particles per m³			Pressure dewpoint		Concentration
	0.1 < d ≤ 0.5 µm**	0.5 < d ≤ 1.0 µm**	1.0 < d ≤ 5.0 µm**	°C	°F	mg/m³
0	As specified by the equipment user or supplier and more stringent than Class 1.					
1	≤ 20000	≤ 400	≤ 10	≤ -70	≤ -94	≤ 0.01
2	≤ 400000	≤ 6000	≤ 100	≤ -40	≤ -40	≤ 0.1
3	-	≤ 90000	≤ 1000	≤ -20	≤ -4	≤ 1
4	-	-	≤ 10000	≤ 3	≤ 37.4	≤ 5
5	-	-	≤ 100000	≤ 7	≤ 44.6	-
6	≤ 5 mg/m³			≤ 10	≤ 50	-

* Liquid, aerosol and vapor.
** d= diameter of the particle.

Technical specifications GA 7-37 VSD+

Compressor type	Max. working pressure		Capacity FAD* (min-max)			Installed motor power		Noise level**	Weight WorkPlace	Weight WorkPlace Full Feature
	bar(e)	psig	l/s	m^3/h	cfm	kW	hp	dB(A)	kg	kg
GA 7 VSD+	5.5	80	7.2-21.9	25.9-78.8	15.2-46.4	7.5	10	62	193	277
	7	102	7.0-21.7	25.2-78.1	14.8-46.0	7.5	10	62	193	277
	9.5	138	6.8-18.0	24.5-64.8	14.4-38.1	7.5	10	62	193	277
	12.5	181	7.3-14.2	26.3-51.1	15.5-30.1	7.5	10	62	193	277
GA 11 VSD+	5.5	80	7.3-32.9	26.3-118.4	15.5-69.7	11	15	63	196	280
	7	102	7.3-32.5	26.3-117.0	15.5-68.8	11	15	63	196	280
	9.5	138	7.0-27.2	25.2-97.9	14.8-57.6	11	15	63	196	280
	12.5	181	7.6-23.5	27.4-84.6	16.1-49.8	11	15	63	196	280
GA 15 VSD+	5.5	80	7.2-42.3	25.9-152.3	15.2-89.6	15	20	64	199	288
	7	102	7.1-41.8	25.6-150.5	15.0-88.6	15	20	64	199	288
	9.5	138	6.8-35.5	24.5-127.8	14.4-75.2	15	20	64	199	288
	12.5	181	7.3-27.9	26.3-100.4	15.5-59.1	15	20	64	199	288
GA 18 VSD+	4	58	15.1-63.9	54.4-230.0	32.0-135.4	18	25	67	367	480
	7	102	14.9-62.5	53.6-225.0	31.6-132.4	18	25	67	367	480
	9.5	138	17.1-53.6	61.6-193.0	36.2-113.6	18	25	67	367	480
	12.5	181	16.4-43.5	59.0-156.6	34.7-92.2	18	25	67	367	480
GA 22 VSD+	4	58	15.3-76.9	55.1-276.8	32.4-162.9	22	30	67	363	485
	7	102	15.0-75.1	54.0-270.4	31.8-159.1	22	30	67	363	485
	9.5	138	17.3-65.2	62.3-234.7	36.7-138.2	22	30	67	363	485
	12.5	181	17.1-54.1	61.6-194.8	36.2-114.6	22	30	67	363	485
GA 26 VSD+	4	58	14.9-86.3	53.6-310.7	31.6-182.9	26	35	67	373	490
	7	102	14.5-85.5	52.2-307.8	30.7-181.2	26	35	67	373	490
	9.5	138	17.0-78.4	61.2-282.2	36.0-166.1	26	35	67	373	490
	12.5	181	16.4-64.5	59.0-232.2	34.7-136.7	26	35	67	373	490
GA 30 VSD+	4	58	15.1-98.0	54.4-352.8	32.0-207.7	30	40	67	376	500
	7	102	15.0-97.4	54.0-350.6	31.8-206.4	30	40	67	376	500
	9.5	138	17.1-85.6	61.6-308.2	36.2-181.4	30	40	67	376	500
	12.5	181	16.7-72.0	60.1-259.2	35.4-152.6	30	40	67	376	500
GA 37 VSD+	4	58	15.3-116.5	55.1-419.4	32.4-246.8	37	50	67	376	500
	7	102	14.8-115.0	53.3-414.0	31.4-243.7	37	50	67	376	500
	9.5	138	17.1-102.3	61.6-368.3	36. 2-216.8	37	50	67	376	500
	12.5	181	16.4-86.7	59.0-312.1	34.7-183.7	37	50	67	376	500
GA 37L VSD+ ***	4	58	26.2-132.9	94.2-478.6	55.5-81.7	37	50	67	860	1060
	7	102	25.8-131.9	92.9-474.7	54.7-279.4	37	50	67	860	1060
	9.5	138	24.8-116.0	89.2-417.7	52.5-245.8	37	50	67	860	1060
	12.5	181	38.2-98.7	137.5-355.2	80.9-209.1	37	50	67	860	1060

* Unit performance measured according ISO 1217 ed. 4 2009, annex E, latest edition.

** Mean noise level measured at a distance of 1 m at max. working pressure according to ISO 2151: 2004 using ISO 9614/2 (sound intensity method); tolerance 3 dB(A).

***** L = larger drive train. This model is part of a different series with different specifications and additional benefits: more energy savings, higher FAD, and a lower noise level.**

FAD is measured at the following effective working pressures:
- 4 bar(e) (GA 18-37L VSD+)
- 5.5 bar(e) (GA 7-15 VSD+)
- 7 bar(e)
- 9.5 bar(e)
- 12.5 bar(e)

Maximum working pressure:
13 bar(e) (188 psig)

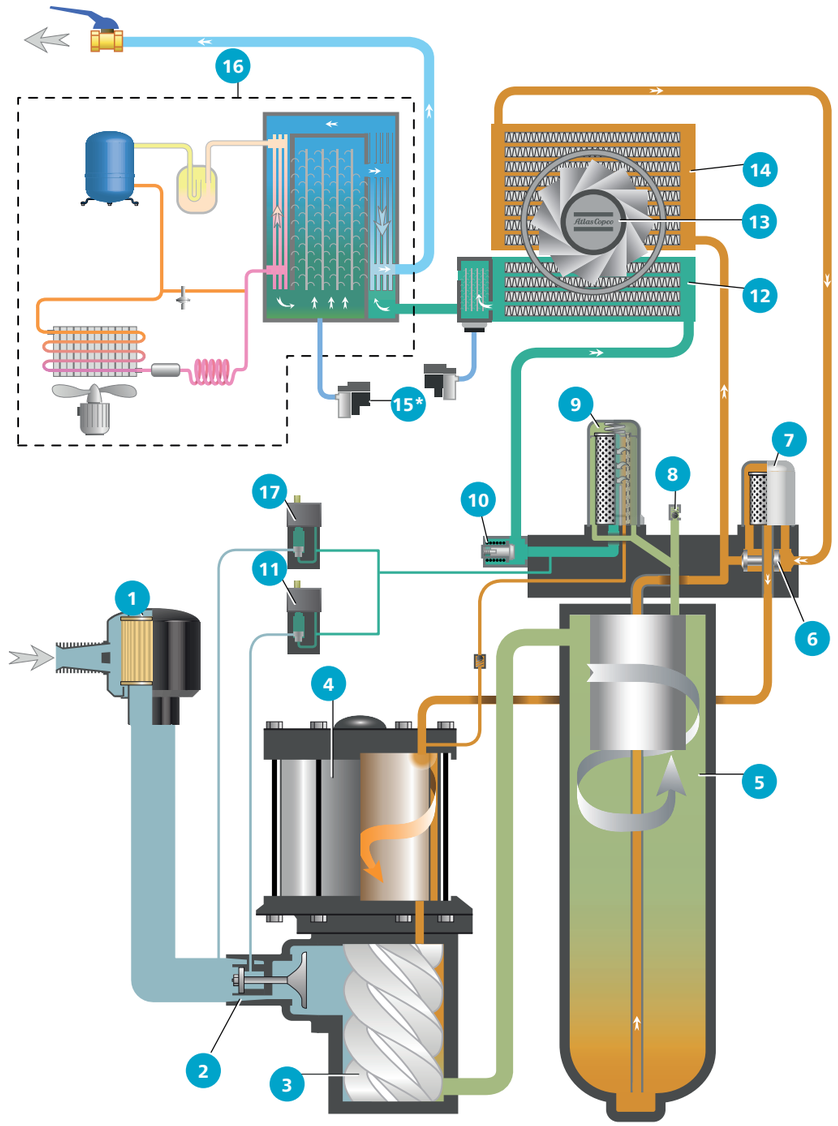
Reference conditions:
- Absolute inlet pressure 1 bar (14.5 psi).
- Intake air temperature 20°C/68°F.

Options

Energy recovery
Dryer bypass
Main switch
Freeze protection
Heavy duty inlet filter
Pre-filter
Tropical thermostat
IT ancillaries
DD+ filter
FoodGrade oil
UD+ filter
Roto Synthetic Xtend oil
EQ2i, EQ4i, EQ6i
Transformer sales kit 200-230V / 500-575V

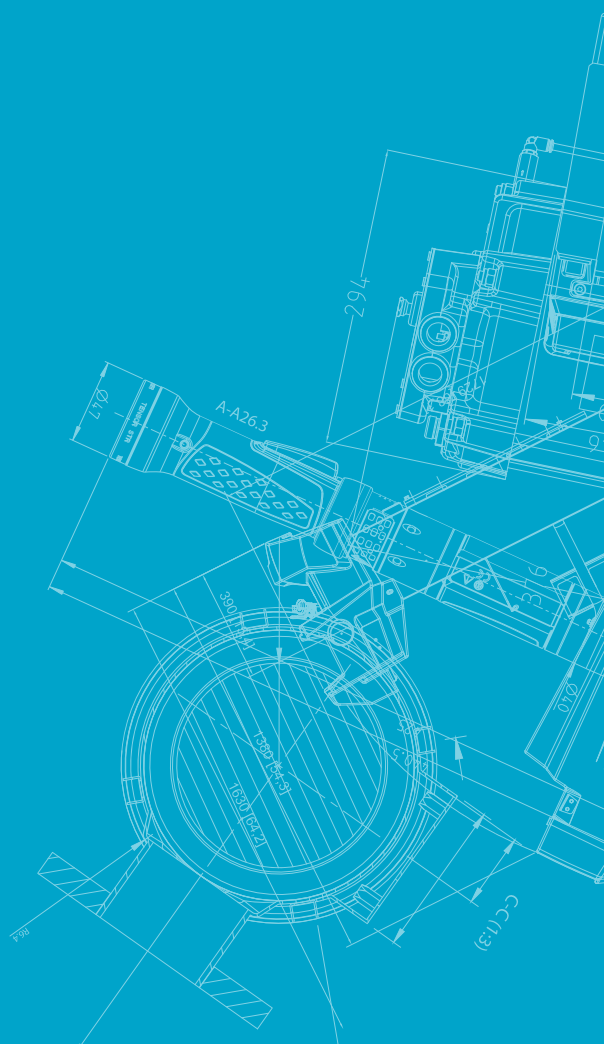
Dimensions	Standard						Full Feature					
	D (mm)	W (mm)	H (mm)	D (in)	W (in)	H (in)	D (mm)	W (mm)	H (mm)	D (in)	W (in)	H (in)
GA 7-15 VSD+	630	610	1420	24.80	24.02	55.91	630	985	1420	24.80	38.78	55.91
GA 18-37 VSD+	780	811	1590	30.71	31.93	62.60	780	1273	1590	30.71	50.12	62.60
GA 37L VSD+	1100	1153	1968	43.31	45.39	77.48	1100	1656	1968	43.31	65.20	77.48

Flow chart GA 7-37 VSD+



1. Inlet filter
2. Sentinel valve
3. Screw element
4. Interior permanent magnet motor (iPM)
5. Air/oil vessel separator
6. Thermostatic bypass valve
7. Oil filter
8. Safety valve
9. Oil separator
10. Minimum pressure valve
11. Solenoid valve
12. Aftercooler
13. Fan
14. Oil cooler
15. Electronic drain (* mounted on aftercooler on models without dryer)
16. Dryer (Full Feature option)
17. Condensate prevention cycle

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



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ISO 9001 · ISO 14001
OHSAS 18001

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