

# Atlas Copco Air Compressors

## GA90-500 & GR110-200

Oil-injected rotary screw compressor series  
with Full Feature & Variable Speed Drive versions



ALL-IN-ONE  
PACKAGE

*Atlas Copco*



# The Total Energy Saving concept...

The shortest route to maximizing your profitability is to minimize operational cost. Because energy consumption is the major factor in a compressor's life cycle cost, the focus in the design of the Atlas Copco GA and GR-compressors is on

saving energy in every conceivable way. This focus is the basis for a total product development concept that encompasses every stage of R&D, manufacturing, installation and after sales service.



## The thorough needs assessment

Real savings rely on facts. Atlas Copco consultants assess the air demand profile of your application and suggest the best compressor selection for the job.



## The right core technology

Atlas Copco masters every compression principle and provides the most energy efficient technology for the required pressure and flow.

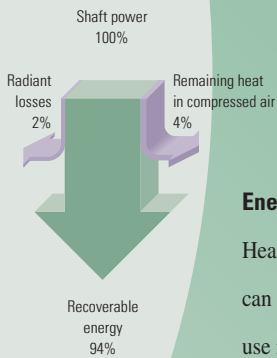
## Energy Circle



## The best drive arrangement

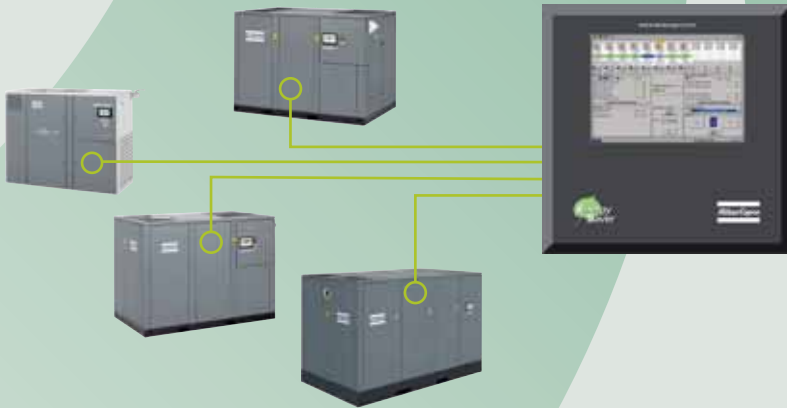
Fixed speed machines are fine when they can run at full load most of the time. But when air demand fluctuates, the Variable Speed Drive can achieve substantial savings of up to 35 %.

The lowest operating cost



### Energy recovery

Heat from the compression process can be recovered and put to good use in endothermic processes, heating of buildings etc.



### The fully optimized system

A multi-compressor installation can be centrally controlled, to achieve a tight pressure band and the lowest overall energy cost.

The highest reliability

### The professional follow-up

An Atlas Copco Service Contract will ensure you of the correct preventative maintenance, immediate response and genuine spare parts... all over the globe.



### The trouble-free installation & commissioning

An Atlas Copco GA-compressor is truly plug-and-play. Put the machine on a flat floor, connect the power line and the compressed air outlet... and push the start button.





# ... combined with the Total Reliability concept

An energy efficient machine saves money only if it runs reliably around the clock. And not just today, but day after day, year after year; with minimal service interventions and long overhaul intervals.

For over a century, Atlas Copco has been building machines that stand the test of time. With the proven GA/GR-compressors, reliability has never been so timeless.

## Reliability Circle



### The experienced partner

Atlas Copco is the world leader in compressed air technology, with over 100 years of experience in air compression systems.



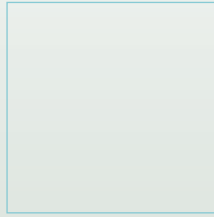
### The complete solution

Compressor, dryer, drive, filters, control system... they all carry the same mark of quality: the Atlas Copco logo.

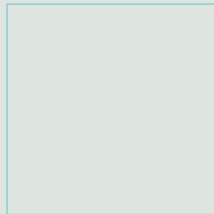
### The integrated design

Internal piping, integral air dryer, integrated Variable Speed Drive, 100 % matched components, consolidated controls... the only way to ensure total reliability.





Pushing the limits in  
energy efficiency



Pushing the limits in reliability

# Proven technology in one package

The GA/GR90-500 range comprises a series of no-nonsense machines with a robust and reliable design, easy to service and environmentally friendly. They are the culmination of decades of continuous improvement, radical innovation and interaction with the customer.

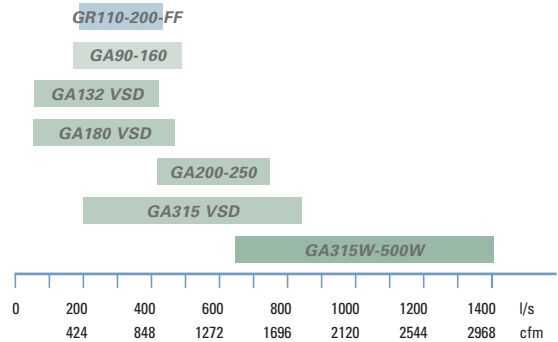
Within this range, the Total Energy Saving Concept takes solid form in the GA132/180 VSD and 315 VSD-FF compressors. They integrate a complete quality compressed air system in a compact package, featuring the ID dryer and the low energy Variable Speed Drive.

## Excellence by design

- Standard G-compressor packages and Full Feature (FF) units – all vital components and standard options integrated, for a complete ‘all-in-one’ installation
- Complete, ready-to-use compressor package
- Easy, low cost installation – no foundations
- True performance according to ISO 1217, Annex C, ed. 3
- Cost-effective and reliable Elektronikon® monitoring and control system
- Single-stage, twin-element and two-stage HP versions
- Proven reliability
- Straightforward and minimal maintenance
- Operator and service-friendly
- Silenced package – environment friendly
- Optional energy recovery system
- Water and aircooled versions (except GA315W-500W)
- A wide range of pressure and capacity variants
- Backed by a global sales and service organisation

Capacity range (50 & 60 Hz)

GA90-315-FF, GA132/180/315 VSD-FF, GA315W-500W, GR110-200-FF



VSD: Variable Speed Drive / FF: Full Feature / W: watercooled

See data pages for range details



**GR200-FF**  
Two-stage high pressure version

GR110-200-FF



**GA110-FF**  
Single-stage version

GA90-160



**GA180 VSD**  
Variable Speed Drive version

GA132-180 VSD



**GA250-FF**  
Twin element version

GA200-250



**GA315 VSD-FF**  
Variable Speed Drive version

GA315 VSD



**GA400W**  
Twin element version,  
water cooled

GA315W-500W





# A complete scope to meet every need

Most features are included as standard. Some applications may need or benefit from additional options.

## Included as standard

<input checked="" type="checkbox"/> Air intake filter	<input checked="" type="checkbox"/> Built-in electrical starters
<input checked="" type="checkbox"/> Air intake valve (not on VSD units)	<input checked="" type="checkbox"/> Flexible vibration dampers
<input checked="" type="checkbox"/> Aftercooler/Oilcooler (air or watercooled)	<input checked="" type="checkbox"/> Air/oil separator
<input checked="" type="checkbox"/> Cooling fan for aircooled units	<input checked="" type="checkbox"/> Elektronikon® control system
<input checked="" type="checkbox"/> Ventilation fan for watercooled units	<input checked="" type="checkbox"/> Full load/no load regulation system (not on VSD units)
<input checked="" type="checkbox"/> Water separators	<input checked="" type="checkbox"/> Silencing canopy
<input checked="" type="checkbox"/> Oil filters	<input checked="" type="checkbox"/> Single point inlet and outlet connections
<input checked="" type="checkbox"/> Complete air/oil/water circuit	<input checked="" type="checkbox"/> Structural steel skid – no foundations needed
<input checked="" type="checkbox"/> IP 55, Class F drive motor	

## Available options

	GA90-315	GR110-200	GA132 VSD	GA180 VSD	GA315 VSD	GA315W-500W
Full Feature: integrated ID refrigerant dryer	•	•	•	•	(1)	na
Integrated DD pre-filter (only with integrated dryer)	•	(2)	•	•	•	na
Energy recovery	•	na	na	na	•	•
Modulation control	•	•	na	na	na	•
OSD oil separator (for pack/FF units) (3)	•	•	•	•	•	•
Oil containing frame	•	•	•	•	na	•
Electronic water drain (EWD)	•	(2)	•	•	(4)	•
Heavy duty air intake filter	•	•	•	•	•	•
HAT version (50°C ambient temperature)	(5)	na	na	na	na	•
Phase sequence relay	•	•	na	na	na	•
PT 1000 thermal protection for main motor	•	•	na	na	na	•
Anti condensation heater for main motor	•	•	na	na	na	•
HD oil - 8000 h oil (instead of RIF oil)	•	(4)	•	•	•	•
NPT connections	(6)	•	•	•	na	na
ANSI flanged connections	(7)	na	na	na	•	•
Anchor pads	•	•	•	•	•	•
Performance test certificate	•	•	•	•	•	•
Witnessed performance test certificate	•	•	•	•	•	•
Material test certificate for pressure vessel approvals	•	•	•	•	•	•
Sea-worthy packaging	•	•	•	•	•	•
Rain protection	•	•	na	na	na	•
IT/NT system	na	na	•	•	•	na
Tube cooler	•	•	na	na	na	•
SPM monitoring	•	•	•	•	•	•

(1) Integrated **VSD** refrigerant dryer

(2) Only for GR 13 bar

(3) Effluent purity of 10 mg oil/liter

(4) Standard

(5) Not available for 13 bar versions and FF units

(6) Applies only to GA90-160

(7) Applies only to GA200-315

na: not applicable



# GA90-160-FF

## single-stage series...

### GA110-FF

Aircooled Full Feature model



#### Designed for optimal performance

- ▶ Split positioning of components in the cool or warm half for ultimate efficiency and maximum capacity

#### Quality air with low oil content

- ▶ three step air-oil separation (centrifuge, gravity, filter)
- ▶ oil content: less than 3 ppm by weight
- ▶ hinged cover for easy separator element change



#### Simple and efficient regulation system

- ▶ reliable, efficient load/no load or optional modulating control
- ▶ few moving parts – minimal maintenance
- ▶ largely dimensioned – minimal pressure drop



#### Superior element bearings

- ▶ high stability under varying process conditions
- ▶ adapt well to changing loads
- ▶ extended element lifetime
  - rotors revolve at low speeds minimizing wear on bearings
  - low operating temperatures and reduced bearing load



# ... big on integration – small in footprint



## Moisture separator as standard

- ▶ a cyclonic moisture separator, with automatic and manual drain, mounted as standard, after the cooler block



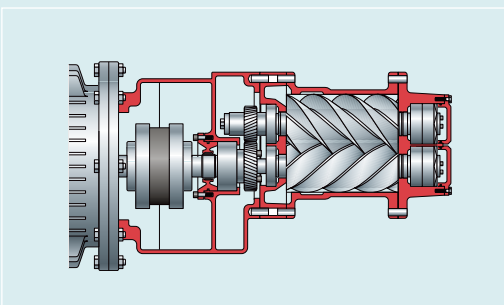
## Full Feature variant for dry air with integrated ID dryer

- ▶ by-pass system as standard
- ▶ R404A refrigerant meets environmental regulations
- ▶ quality end product and system protection



## Advanced Elektronikon® control and monitoring system

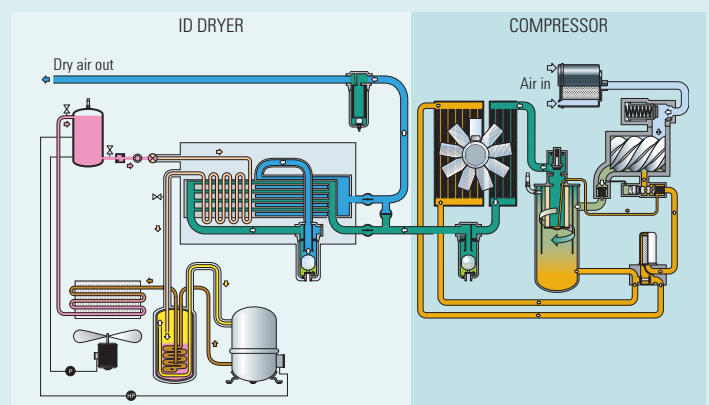
- ▶ overall system performance status with pro-active service indications, alarms for malfunctions and safety shutdowns
- ▶ multi-language selectable display
- ▶ all monitoring and control functions via one interface
- ▶ wide communication possibilities
- ▶ integration possible in many process control systems (field bus system)



## Motor and compressor permanently aligned

- ▶ unlike belt-driven compressors, GA/GR compressors incorporate a flanged motor/coupling housing - gearbox/element, offering permanent alignment during transport, installation and operation of the unit.
- ▶ highly efficient, totally enclosed fan-cooled electric motor (IP55, Class F)

## GA 90-160-FF air/oil flow (loaded condition)



- |   |   |
|---|---|
| <span style="color: pink;">■</span> refrigerant liquid          | <span style="color: lightblue;">■</span> incoming air     |
| <span style="color: orange;">■</span> refrigerant gas/liquid    | <span style="color: teal;">■</span> wet air               |
| <span style="color: yellow;">■</span> refrigerant gas           | <span style="color: blue;">■</span> dry air               |
| <span style="color: brown;">■</span> refrigerant compressed gas | <span style="color: lightgreen;">■</span> air/oil mixture |
|   | <span style="color: green;">■</span> condensate           |
|   | <span style="color: gold;">■</span> oil                   |



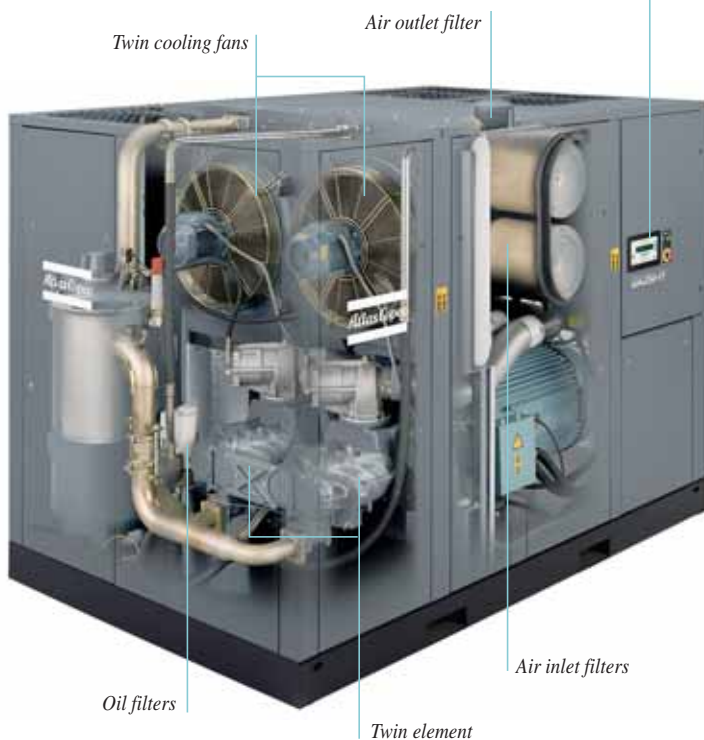
# GA200-315-FF & GA315W-500W

## twin element series ...

### GA250-FF

Aircooled Full Feature model

*Advanced Elektronikon® control and monitoring system*



### GA400W

Watercooled model



#### Practical cooler cleaning

- ▶ hinged fans, fan motors and cowls for easy cooler cleaning
- ▶ twin fans for optimal cooling
- ▶ axial cooling fans driven by separate TEFC electric motors (IP55 protection)



#### Easy oil filter exchange

- ▶ position of the spin on/off cartridge type oil filters allows for clean and easy exchange, without oil spills



#### Twin element design

- ▶ larger volume of air delivered, using less power, compared to equivalent compressor sizes
- ▶ Atlas Copco guaranteed production, quality control and service



#### Protective air filtration

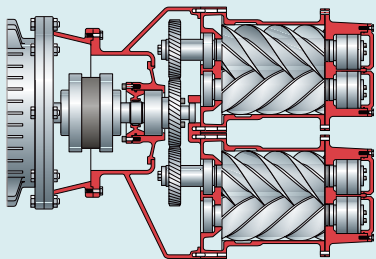
- ▶ highly efficient dry paper cartridge
- ▶ compressor protection from foreign particles ( 99.9 % for 3 micron – SAE fine )
- ▶ extends system lifetime

# ... for highest efficiency and reliability

## Dry quality air to the application point\*

- ▶ air outlet filter fitted as standard
- ▶ particle removal down to 1 micron;  
maximum remaining oil aerosol of 0.1 mg/m<sup>3</sup>

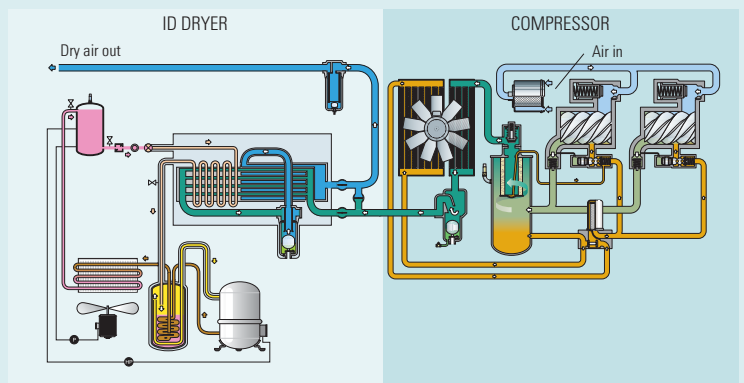
\* for GA200-315-FF versions



## Twin element on single drive & gear casing

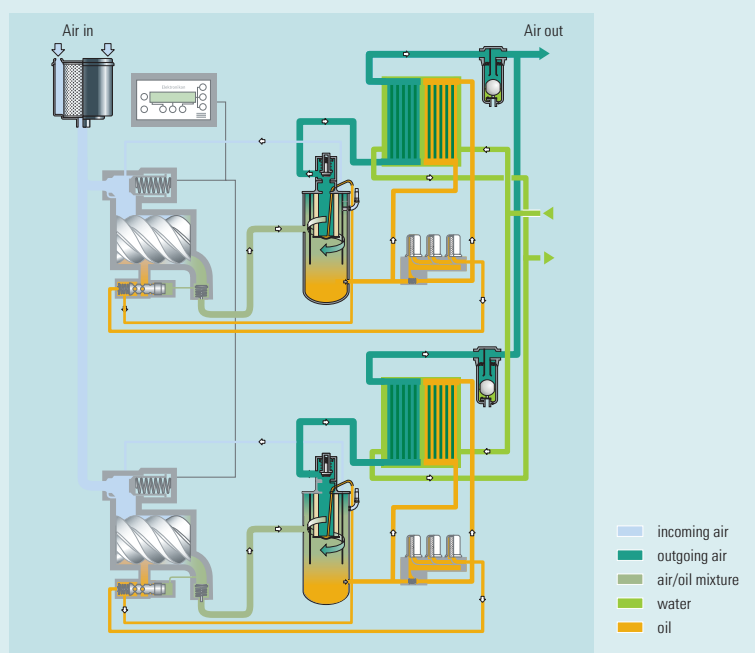
- ▶ efficiencies far superior to designs using one large element or 2-stages
- ▶ extended lifetime due to reduced loads on bearings, rotors and gears
- ▶ highly efficient motor – IP55 protection, class F insulation

## GA200-315-FF air/oil flow (loaded condition)



- |        |                            |             |                 |
|--------|----------------------------|-------------|-----------------|
| pink   | refrigerant liquid         | light blue  | incoming air    |
| orange | refrigerant gas/liquid     | dark blue   | wet air         |
| yellow | refrigerant gas            | blue        | dry air         |
| brown  | refrigerant compressed gas | green       | air/oil mixture |
|        |                            | light green | condensate      |
|        |                            | yellow      | oil             |

## GA315W-500W air/oil/cooling flow (loaded condition)



- |             |                 |
|-------------|-----------------|
| light blue  | incoming air    |
| dark blue   | outgoing air    |
| green       | air/oil mixture |
| light green | water           |
| yellow      | oil             |



# GR110-200-FF

## two-stage high pressure series ...

For high pressure applications requiring a reliable air supply of 13 and 20 bar, the Atlas Copco GR110-200-FF oil-injected screw compressors are the right choice. Not only do these workhorses offer every feature and benefit the GA series is renowned for, but the two-stage design also guarantees the most efficient operation at higher pressure.

### The GR range selection

- ▶ GR110 and GR200 – available in 20 bar version
- ▶ GR110, GR132, GR160 and GR200 – available in 13 bar version
- ▶ GR-FF – Full Feature versions with integrated ID dryer

### Advanced condition monitoring

- ▶ one integrated control and monitoring system for compressor and dryer



### GR200-FF

Aircooled Full Feature model

*Two-stage  
compression elements*

# ... in 13 bar and 20 bar versions

## GR Full Feature: compact 'all-in-one' package

- ▶ optional dry quality air variant, with integrated ID dryer and filters
- ▶ by-pass system included as standard
- ▶ R404A refrigerant, meets environmental regulations
- ▶ quality end product and system protection
- ▶ standard equipped with moisture separator
- ▶ a complete scope with many options



## The GR design criteria

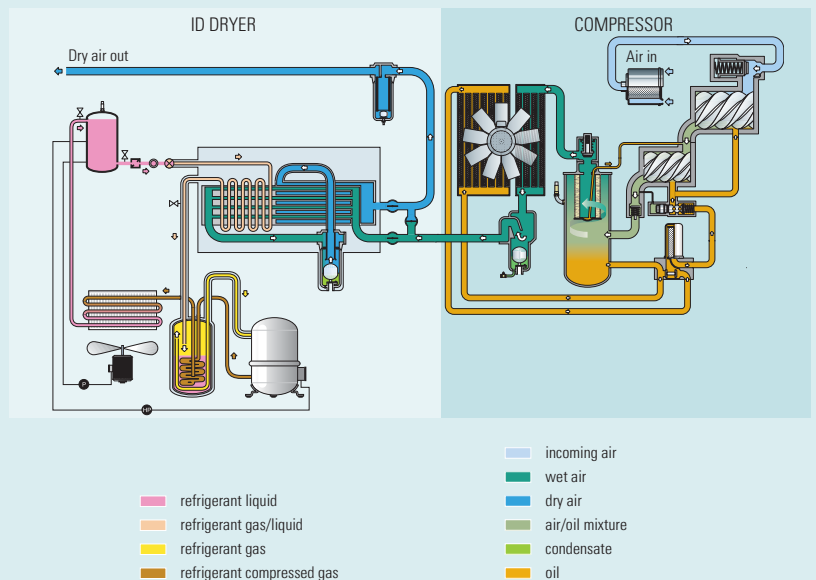
- ▶ designed to the same stringent criteria as the proven GA90-315 series
- ▶ built for high pressure applications
- ▶ very complete pack unit - options available
- ▶ air or water cooled version



## Two-stage compression elements

- ▶ increased efficiency and reliability
- ▶ extended element lifetime due to reduced load on bearings, rotors and gears

## GR110-200-FF air/oil flow (loaded condition)







# GA132/180 VSD & GA315 VSD-FF with Variable Speed Drive ...

The GA132/180/315 VSD houses the famous VSD variable drive system that brings an unprecedented level of energy savings. In addition, the GA315 VSD-FF incorporates a VSD regulated ID refrigeration dryer to further reduce the energy consumption.

## GA315 VSD-FF

Aircooled Full Feature model

Advanced Elektronikon® control and monitoring system



Highly efficient compression element



### Most efficient element performance

- ▶ longer active rotor length allows larger air volume to be compressed
- ▶ higher built-in pressure ratio for higher efficiency

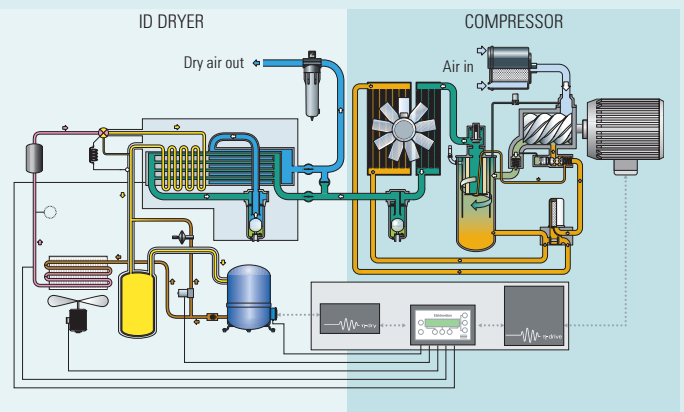
### ID – Integrated VSD dryer\*

- ▶ generates additional savings of up to 25 % compared to a fixed speed refrigerant dryer
- ▶ designed for high ambient humidity conditions

\* on GA315 VSD-FF



### GA315 VSD-FF air/oil flow (loaded condition)



- |                            |                 |
|----------------------------|-----------------|
| refrigerant liquid         | incoming air    |
| refrigerant gas/liquid     | wet air         |
| refrigerant gas            | dry air         |
| refrigerant compressed gas | air/oil mixture |
|                            | condensate      |
|                            | oil             |



# ... for the lowest cost compressed air

Because a VSD compressor precisely follows the varying air demand that is typical in most production facilities, it dramatically reduces the energy bill and provides many additional benefits. The result is a fast payback of the investment and huge yearly savings long after that.

Because energy constitutes the biggest portion of the life cycle cost of a compressor, these savings have a significant impact on the operational costs of your compressed air system.



investment  
maintenance  
energy

energy savings with VSD

## Predicting your savings

Call upon the expertise of Atlas Copco specialists and have an assessment carried out in your factory.

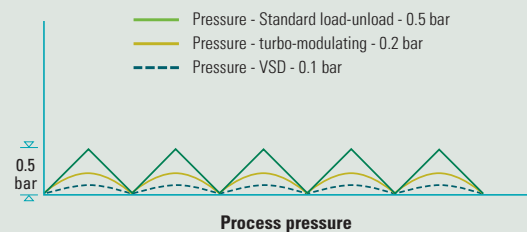
A detailed report will show your current operation and the achievable savings when adding a VSD solution to your compressed air system.



## Direct energy savings of 15 to 35 %

- ▶ Low load operation of a VSD compressor does not result in energy losses.
- ▶ Load/no load transition losses are eliminated.
- ▶ The precise pressure control of the VSD compressor allows for a tighter and often lower discharge working pressure, resulting in reduced energy consumption.

### STABLE NET PRESSURE



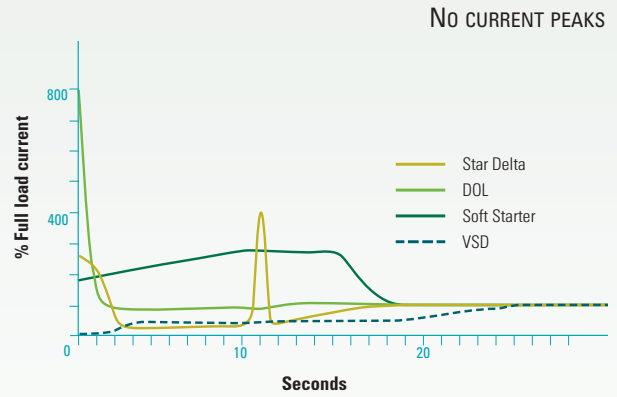
## Indirect savings

- ▶ The **lowered net pressure** obtained by the VSD compressor provides additional yearly savings:
  - other base-load compressors will consume up to 5 % less energy
  - leak losses - always present in compressed air systems - are significantly reduced: e.g. leakage at 6 bar(e) would be 13 % less than at 7 bar
  - many compressed air applications consume less air at a reduced pressure, similar to leak reduction.

In addition to the direct savings, these indirect benefits can add up to another 10 % energy savings in the complete compressed air installation.

### Additional VSD benefits

- ▶ The **constant net pressure** provides stability for all processes making use of compressed air.
- ▶ **Current peaks during start-up are eliminated**
  - VSD compressors can be started and stopped without limitation
  - frequent start-stops no longer lead to current peak penalties
  - the electrical installation can often be rated for a lower current, meaning savings in investment.



### Integrated VSD - The only way

All Atlas Copco VSD compressors are EMC tested and certified. External sources do not influence the compressor operation, nor does the compressor disturb other equipment via emissions or via the power supply line.

Mechanical enhancements are made to ensure that gears and bearings receive proper lubrication at all speeds and that all components operate well below critical vibrations.

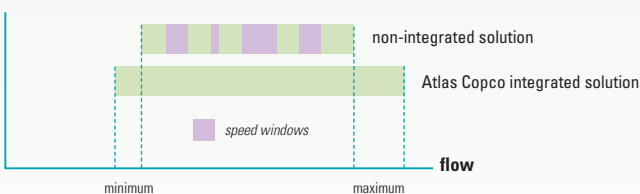
The Elektronikon® system controls both the compressor and the integrated converter; this ensures maximum machine safety and allows easy networking of the compressor.



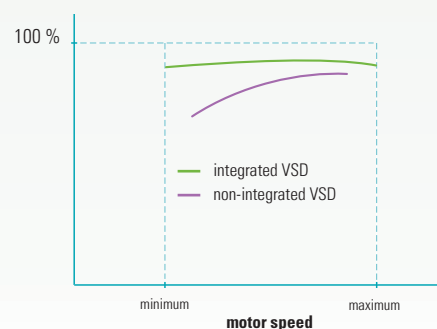
Special attention is given to the electric motor, which is specifically designed for VSD operation (inverter duty motors). Bearings are protected against induced bearing currents and both motor and converter are perfectly tuned to obtain the best efficiency over the entire speed range.

The machine is tested for the complete speed range to eliminate all "speed windows" that can jeopardize the energy savings and the stable net pressure.

#### OPERATING RANGE



#### COMBINED MOTOR/CONVERTER EFFICIENCY





## Optimize your installation

Some applications may need or benefit from additional options and more refined control and air treatment systems. Tailored to the need, Atlas Copco has developed compatible equipment, further enhancing systems reliability and quality.



### DD/DDp/PD/PDp/QD Filters

*For proper removal of oil vapour and particles, select the adequate filter from the Atlas Copco filter range*

- ▶ **Nominal airflow:** 9 - 7200 l/s
- ▶ **DD coalescing filter:** removing oil aerosol to  $0.1 \text{ mg/m}^3$  (0.1 ppm) and particles down to 1 micron
- ▶ **DDp dust filter:** removing particles down to 1 micron
- ▶ **PD coalescing filter:** removing oil aerosol to  $0.01 \text{ mg/m}^3$  (0.01 ppm) and particles down to 0.01 micron
- ▶ **PDp dust filter:** high efficiency particle removal down to 0.01 micron
- ▶ **QD oil vapour filter:** maximum remaining oil content of  $0.003 \text{ mg/m}^3$  (0.003 ppm).

### OSD - oil/water separator

- ▶ Oily waste water drainage problems with oil-injected compressors can be efficiently overcome. Either integrated or free-standing, Atlas Copco has the appropriate system solution, meeting with legal directives.



## Global presence - local service



Atlas Copco's Aftersales Service operation is unrivaled in the compressed air industry.

- ▶ High quality service is delivered locally: Atlas Copco's Aftersales is present in 150 countries around the world.
- ▶ Our service plans perfectly meet the requirements of your business and ensure a constant productivity at peak level.
- ▶ Consultancy services and on-site measurements help optimizing the complete air net, minimizing leak losses and maximizing energy savings.
- ▶ A sophisticated logistics concept brings genuine parts to your doorstep in record times, across the globe. After all, only genuine Atlas Copco parts, produced on the same assembly lines as your compressor, can guarantee a long lifetime and uninterrupted operation.

# Technical data

## GA compressor range - 50 Hz

Compressor type	Maximum working pressure				Capacity FAD <sup>(1)</sup>			Installed motor		Noise level <sup>(2)</sup>	Weight			
	Pack		Full Feature		Pack / Full Feature			kW	hp		Pack		Full Feature	
	bar(e)	psig	bar(e)	psig	l/s	m <sup>3</sup> /min	cfm			kg	lb	kg	lb	
<b>GA90-160 Single-stage</b>														
GA90 - 7.5	7.5	109	7.25	105	277	16.6	587	90	125	72	2515	5545	2825	6228
GA90 - 8.5	8.5	123	8.25	120	260	15.6	551	90	125	72	2515	5545	2825	6228
GA90 - 10	10	145	9.75	141	232	13.9	492	90	125	72	2515	5545	2825	6228
GA90 - 13	13	189	12.75	185	185	11.1	392	90	125	72	2515	5545	2825	6228
GA110 - 7.5	7.5	109	7.25	105	334	20.0	708	110	150	72	2515	5545	2825	6228
GA110 - 8.5	8.5	123	8.25	120	313	18.8	663	110	150	72	2515	5545	2825	6228
GA110 - 10	10	145	9.75	141	285	17.1	604	110	150	72	2515	5545	2825	6228
GA110 - 13	13	189	12.75	185	225	13.5	477	110	150	72	2515	5545	2825	6228
GA132 - 7.5	7.5	109	7.25	105	401	24.1	850	132	175	74	3025	6669	3355	7397
GA132 - 8.5	8.5	123	8.25	120	381	22.9	807	132	175	74	3025	6669	3355	7397
GA132 - 10	10	145	9.75	141	345	20.7	731	132	175	74	3025	6669	3355	7397
GA132 - 13	13	189	12.75	185	280	16.8	593	132	175	74	3025	6669	3355	7397
GA160 - 7.5	7.5	109	7.25	105	472	28.3	1000	160	215	74	3025	6669	3355	7397
GA160 - 8.5	8.5	123	8.25	120	450	27.0	953	160	215	74	3025	6669	3355	7397
GA160 - 10	10	145	9.75	141	410	24.6	869	160	215	74	3025	6669	3355	7397
GA160 - 13	13	189	12.75	185	342	20.5	725	160	215	74	3025	6669	3355	7397
<b>GA200-500 Twin</b>														
GA200 - 7.5	7.5	109	7.25	105	603	36.1	1278	200	270	75	4727	10421	5127	11303
GA200 - 8.5	8.5	123	8.25	120	568	34.0	1204	200	270	75	4727	10421	5127	11303
GA200 - 10	10	145	9.75	141	513	30.7	1087	200	270	75	4727	10421	5127	11303
GA200 - 13	13	189	12.75	185	436	26.1	924	200	270	75	4727	10421	5127	11303
GA250 - 7.5	7.5	109	7.25	105	730	43.7	1548	250	335	75	5017	11060	5417	11942
GA250 - 8.5	8.5	123	8.25	120	697	41.7	1477	250	335	75	5017	11060	5417	11942
GA250 - 10	10	145	9.75	141	631	37.8	1338	250	335	75	5017	11060	5417	11942
GA250 - 13	13	189	12.75	185	530	31.7	1124	250	335	75	5017	11060	5417	11942
GA315W - 7.5	7.5	109	-	-	928	55.8	1966	315	420	72	7510	16559	-	-
GA315W - 8.5	8.5	123	-	-	864	51.9	1831	315	420	72	7510	16559	-	-
GA315W - 10	10	145	-	-	784	47.1	1661	315	420	72	7510	16559	-	-
GA355W - 7.5	7.5	109	-	-	1050	63.1	2225	355	475	73	7760	17110	-	-
GA355W - 8.5	8.5	123	-	-	969	58.2	2053	355	475	73	7760	17110	-	-
GA355W - 10	10	145	-	-	890	53.5	1886	355	475	73	7760	17110	-	-
GA355W - 13	13	189	-	-	731	43.9	1549	355	475	73	7760	17110	-	-
GA400W - 7.5	7.5	109	-	-	1175	70.6	2490	400	535	74	8360	18433	-	-
GA400W - 8.5	8.5	123	-	-	1109	66.6	2350	400	535	74	8360	18433	-	-
GA400W - 10	10	145	-	-	1011	60.8	2142	400	535	74	8360	18433	-	-
GA400W-13	13	189	-	-	844	50.7	1788	400	535	74	8360	18433	-	-
GA450W - 7.5	7.5	109	-	-	1298	78.0	2750	450	600	75	8360	18433	-	-
GA450W - 8.5	8.5	123	-	-	1240	74.5	2628	450	600	75	8360	18433	-	-
GA450W - 10	10	145	-	-	1144	68.8	2424	450	600	75	8360	18433	-	-
GA450W - 13	13	189	-	-	960	57.7	2034	450	600	75	8360	18433	-	-
GA500W-7.5	7.5	109	-	-	1410	84.7	2988	500	670	76	7960	17551	-	-
GA500W-8.5	8.5	123	-	-	1347	80.9	2854	500	670	76	7960	17551	-	-
GA500W-10	10	145	-	-	1257	75.5	2664	500	670	76	7960	17551	-	-
GA500W-13	13	189	-	-	1068	64.2	2263	500	670	76	7960	17551	-	-

GA500W figures are for medium voltage IP 23 motor

W: watercooled

# Technical data

## GA-VSD / GR compressor range - 50 Hz

Compressor type	Maximum working pressure				Capacity FAD <sup>(1)</sup>			Installed motor		Noise level <sup>(2)</sup>	Weight			
	Pack		Full Feature		Pack / Full Feature			kW	hp		Pack		Full Feature	
	bar(e)	psig	bar(e)	psig	l/s	m <sup>3</sup> /min	cfm				kg	lb	kg	lb
<b>GA132/180/315 VSD</b>														
GA132 VSD - 4	4	58	-	-	404	24.2	856	132	177	75	3870	8533	4200	9261
GA132 VSD - 7	7	109	-	-	399	23.9	846	132	177	75	3870	8533	4200	9261
GA132 VSD - 10	10	145	-	-	355	21.3	752	132	177	75	3870	8533	4200	9261
GA132 VSD - 13	13	200	-	-	300	18.0	636	132	177	73	3870	8533	4200	9261
GA180 VSD - 4	4	58	-	-	482	28.9	1021	180	250	75	3870	8533	4200	9261
GA180 VSD - 7	7	109	-	-	478	28.7	1013	180	250	75	3870	8533	4200	9261
GA180 VSD - 10	10	145	-	-	418	25.1	886	180	250	75	3870	8533	4200	9261
GA180 VSD - 13	13	200	-	-	352	21.1	746	180	250	73	3870	8533	4200	9261
GA315 VSD - 4	4	58	-	-	854	51.2	1810	290	390	75	6165	13563	6615	14553
GA315 VSD - 7	7	109	-	-	847	50.8	1795	290	390	75	6165	13563	6615	14553
GA315 VSD - 10	10	145	-	-	710	42.6	1505	290	390	75	6165	13563	6615	14553
<b>GR110-200 Two-stage 13 bar</b>														
GR110-13	13	189	12.75	185	255	15.3	541	110	150	72	3140	6908	3470	7634
GR132-13	13	189	12.75	185	308	18.5	653	132	175	75	3140	6908	3470	7634
GR160-13	13	189	12.75	185	369	22.1	782	160	215	75	3547	7803	3877	8529
GR200-13	13	189	12.75	185	437	26.2	926	200	270	76	3547	7803	3877	8529
<b>GR110-200 Two-stage 20 bar</b>														
GR110-20	20	290	19.75	286	211	12.6	447	110	150	72	3140	6908	3470	7634
GR200-20	20	290	19.75	286	385	23.1	816	200	270	75	3547	7803	3877	8529

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

### 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 variants at 7 bar
- 8.5 bar variants at 8 bar
- 10 bar variants at 9.5 bar
- 13 bar variants at 12.5 bar
- 20 bar variants at 19 bar
- 100 psi variants at 100 psi
- 125 psi variants at 125 psi
- 150 psi variants at 150 psi
- 200 psi variants at 193 psi
- 290 psi variants at 276 psi

(2) **Noise level:**

measured according to Pneurop / Cagi PN8NTC2.2 test code;  
tolerance ±3 dB(A)

### Integrated dryer:

pressure dewpoint of integrated refrigerant dryer at reference conditions: 3 to 4 °C

### Integrated filter:

particle removal down to 1 micron and maximum remaining oil aerosol of 0.1 mg/m<sup>3</sup>



## Dimensions

Compressor type	Dimensions					
	A		B		C	
	mm	inch	mm	inch	mm	inch
GA90 - 110	2779	109.4	1600	63.0	1990	78.3
GA132 - 160	2779	109.4	1886	74.3	1990	78.3
GA200 - 315	3386	133.3	2120	83.4	2400	94.4
GA315W-500W	4173	164.3	2120	83.4	2500	98.4
GA132 VSD	3386	133.3	1886	74.2	2010	79.1
GA180 VSD	3386	133.3	1886	74.2	2010	79.1
GA315 VSD	4000	157.4	2120	83.4	2400	94.4
GR110-200	2779	109.4	1886	74.3	1990	78.3

# Technical data

## GA compressor range - 60 Hz

Compressor type	Maximum working pressure				Capacity FAD <sup>(1)</sup>			Installed motor		Noise level <sup>(2)</sup>	Weight			
	Pack		Full Feature		Pack / Full Feature			kW	hp		Pack		Full Feature	
	bar(e)	psig	bar(e)	psig	l/s	m <sup>3</sup> /min	cfm			kg	lb	kg	lb	
<b>GA90-160 Single-stage</b>														
GA90 - 100	7.4	107	7.15	104	298	17.9	631	90	125	76	2515	5545	2825	6228
GA90 - 125	9.1	132	8.85	128	264	15.8	559	90	125	76	2515	5545	2825	6228
GA90 - 150	10.8	157	10.55	153	239	14.3	506	90	125	76	2515	5545	2825	6228
GA90 - 200	13.8	200	13.55	196	191	11.5	405	90	125	76	2515	5545	2825	6228
GA110 - 100	7.4	107	7.15	104	353	21.2	748	110	150	76	2515	5545	2825	6228
GA110 - 125	9.1	132	8.85	128	314	18.8	665	110	150	76	2515	5545	2825	6228
GA110 - 150	10.8	157	10.55	153	289	17.3	612	110	150	76	2515	5545	2825	6228
GA110 - 200	13.8	200	13.55	196	231	13.9	489	110	150	76	2515	5545	2825	6228
GA160 - 100	7.4	107	7.15	104	467	28.0	989	150	200	76	3025	6669	3355	7397
GA160 - 125	9.1	132	8.85	128	420	25.2	890	150	200	76	3025	6669	3355	7397
GA160 - 150	10.8	157	10.55	153	390	23.4	826	150	200	76	3025	6669	3355	7397
GA160 - 200	13.8	200	13.55	196	320	19.2	678	150	200	76	3025	6669	3355	7397
<b>GA200-315 Twin</b>														
GA200 - 100	7.4	107	7.15	104	586	35.1	1242	185	250	76	4957	10928	5357	11810
GA200 - 125	9.1	132	8.85	128	532	32.0	1128	185	250	76	4957	10928	5357	11810
GA200 - 150	10.8	157	10.55	153	483	29.0	1024	185	250	76	4957	10928	5357	11810
GA250 - 100	7.4	107	7.15	104	683	41.0	1448	225	300	76	5057	11149	5457	12030
GA250 - 125	9.1	132	8.85	128	620	37.1	1314	225	300	76	5057	11149	5457	12030
GA250 - 150	10.8	157	10.55	153	569	34.1	1206	225	300	76	5057	11149	5457	12030
GA250 - 200	13.8	200	13.55	196	477	28.6	1011	225	300	76	5057	11149	5457	12030
GA315 - 100	7.4	107	7.15	104	777	46.5	1647	260	350	76	5257	11590	5657	12470
GA315 - 125	9.1	132	8.85	128	707	42.3	1499	260	350	76	5257	11590	5657	12470
GA315 - 150	10.8	157	10.55	153	660	39.5	1399	260	350	76	5257	11590	5657	12470
GA315 - 200	13.8	200	13.55	196	555	33.2	1177	260	350	76	5257	11590	5657	12470
GA355W-100	7.4	107	-	-	1032	62.1	2191	335	450	73	7760/7860	17110/17331	-	-
GA355W-125	9.1	132	-	-	940	56.5	1992	335	450	73	7760/7860	17110/17331	-	-
GA355W-150	10.8	157	-	-	831	49.9	1761	335	450	73	7760/7860	17110/17331	-	-
GA355W-200	13.8	200	-	-	692	41.6	1466	335	450	73	7760/7860	17110/17331	-	-
GA400W - 100	7.4	107	-	-	1128	67.9	2394	372	500	74	8360/7960	18433/17551	-	-
GA400W - 125	9.1	132	-	-	1042	62.6	2208	372	500	74	8360/7960	18433/17551	-	-
GA400W - 150	10.8	157	-	-	935	56.2	1981	372	500	74	8360/7960	18433/17551	-	-
GA400W - 200	13.8	200	-	-	784	47.1	1661	372	500	74	8360/7960	18433/17551	-	-
GA450W - 100	7.4	107	-	-	1334	80.4	2835	447	600	75	8360/8620	18433/19007	-	-
GA450W - 125	9.1	132	-	-	1222	73.4	2589	447	600	75	8360/8620	18433/19007	-	-
GA450W - 150	10.8	157	-	-	1126	67.7	2386	447	600	75	8360/8620	18433/19007	-	-
GA450W - 200	13.8	200	-	-	943	56.7	1998	447	600	75	8360/8620	18433/19007	-	-
GA500W-100	7.4	107	-	-	1518	91.2	3217	522	700	76	7960	17551	-	-
GA500W-125	9.1	132	-	-	1404	84.4	2975	522	700	76	7960	17551	-	-
GA500W-150	10.8	157	-	-	1296	77.9	2746	522	700	76	7960	17551	-	-
GA500W-200	13.8	200	-	-	1114	66.9	2361	522	700	76	7960	17551	-	-

GA500W figures are for medium voltage IP 23 motor

GA355W-GA400W-GA450W : two different motor types used for IEC/CSA-UL at 60Hz low voltage

W: watercooled



# Technical data

## GA-VSD / GR compressor range - 60 Hz

Compressor type	Maximum working pressure				Capacity FAD <sup>(1)</sup>			Installed motor		Noise level <sup>(2)</sup>	Weight			
	Pack		Full Feature		Pack / Full Feature			kW	hp		Pack		Full Feature	
	bar(e)	psig	bar(e)	psig	l/s	m <sup>3</sup> /min	cfm				kg	lb	kg	lb
<b>GA180 / GA315 VSD</b>														
GA132 VSD - 4	4	58	-	-	404	24.2	856	132	177	75	3870	8533	4200	9261
GA132 VSD - 7	7	109	-	-	399	23.9	846	132	177	75	3870	8533	4200	9261
GA132 VSD - 10	10	145	-	-	355	21.3	752	132	177	75	3870	8533	4200	9261
GA132 VSD - 13	13	200	-	-	300	18.0	636	132	177	73	3870	8533	4200	9261
GA180 VSD - 4	4	58	-	-	482	28.9	1021	180	250	75	3870	8533	4200	9261
GA180 VSD - 7	7	109	-	-	478	28.7	1013	180	250	75	3870	8533	4200	9261
GA180 VSD - 10	10	145	-	-	418	25.1	886	180	250	75	3870	8533	4200	9261
GA180 VSD - 13	13	200	-	-	352	21.1	746	180	250	73	3870	8533	4200	9261
GA315 VSD - 4	4	58	-	-	854	51.2	1810	290	390	75	6165	13563	6615	14553
GA315 VSD - 7	7	109	-	-	847	50.8	1795	290	390	75	6165	13563	6615	14553
GA315 VSD - 10	10	145	-	-	710	42.6	1505	290	390	75	6165	13563	6615	14553
<b>GR110-200 Two-stage 13 bar</b>														
GR110-200	13.8	200	13.55	196	261	15.6	553	110	150	72	3140	6908	3470	7634
GR160-200	13.8	200	13.55	196	350	21.0	742	150	200	75	3547	7803	3877	8529
GR200-200	13.8	200	13.55	196	442	26.5	937	185	250	78	3547	7803	3877	8529
<b>GR110-200 Two-stage 20 bar</b>														
GR110-290	20	290	19.75	286	224	13.4	475	110	150	72	3140	6908	3470	7634
GR200-290	20	290	19.75	286	384	23.0	814	185	250	78	3547	7803	3877	8529

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

### 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 variants at 7 bar
- 8.5 bar variants at 8 bar
- 10 bar variants at 9.5 bar
- 13 bar variants at 12.5 bar
- 20 bar variants at 19 bar
- 100 psi variants at 100 psi
- 125 psi variants at 125 psi
- 150 psi variants at 150 psi
- 200 psi variants at 193 psi
- 290 psi variants at 276 psi

### (2) Noise level:

measured according to Pneuop / Cagi PN8NTC2.2 test code;  
tolerance ±3 dB(A)

### Integrated dryer:

pressure dewpoint of integrated refrigerant dryer at reference conditions: 3 to 4 °C

### Integrated filter:

particle removal down to 1 micron and maximum remaining oil aerosol of 0.1 mg/m<sup>3</sup>



## Dimensions

Compressor type	Dimensions					
	A		B		C	
	mm	inch	mm	inch	mm	inch
GA90 - 110	2779	109.4	1600	63.0	1990	78.3
GA132 - 160	2779	109.4	1886	74.3	1990	78.3
GA200 - 315	3386	133.3	2120	83.4	2400	94.4
GA315W-500W	4173	164.3	2120	83.4	2500	98.4
GA132 VSD	3386	133.3	1886	74.2	2010	79.1
GA180 VSD	3386	133.3	1886	74.2	2010	79.1
GA315 VSD	4000	157.4	2120	83.4	2400	94.4
GR110-200	2779	109.4	1886	74.3	1990	78.3



The face of innovation

What sets Atlas Copco apart as a company is our conviction that we can only excel in what we do, if we provide the best possible know-how and technology to really help our customers produce, grow and succeed.

There is a unique way of achieving that - we simply call it the Atlas Copco way. It builds on **interaction**, on long-term relationships and involvement in the customers' process, needs and objectives. It means having the flexibility to adapt to the diverse demands of the people we cater for.

It's the **commitment** to our customers' business that drives our effort towards increasing their productivity through better solutions. It starts with fully supporting existing products and continuously doing things better, but it goes much further, creating advances in technology through **innovation**. Not for the sake of technology, but for the sake of our customer's bottom line and peace-of-mind.

That is how Atlas Copco will strive to remain the first choice, to succeed in attracting new business and to maintain our position as the industry leader.



**ISO 9001**

A consistent quality earned us the industry's leadership and the customer's trust.



**ISO 14001**

Atlas Copco's Environmental Management System forms an integral part of each business process.

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

