

Oil-injected rotary screw compressors



Atlas Copco

GA 355-500 (355-500 kW / 450-700 hp)





Outstanding performance

GA 355-500 compressors provide high-quality compressed air in the harshest environmental conditions. Incorporating Atlas Copco's oil-injected screw element, they provide a long and trouble-free life at the lowest possible operating cost.

Metal industry

QUALITY AND EFFICIENCY

Metal plants use compressed air for instrumentation, plant air and pneumatic conveying for raw materials or ash and are in need of an efficient solution to reduce their operating costs. Thanks to their innovative features, our GA air compressors meet this demand.

Mining industry

ROBUSTNESS AND RELIABILITY

Compressed air is vital for the mining industry: applications include dust bad filtration, service air, ventilation air and pneumatic tools. The reliability and robustness of GA compressors will accomplish the job even in the harshest conditions.

Power plants

SMOOTH AND COST-EFFECTIVE OPERATION

Power plants run round-the-clock to supply vital energy. A continuous supply of compressed air is absolutely critical for trouble-free operation. GA air compressors provide a reliable source of compressed air of applications such as silt blowing and fly ash handling.

General industry

A SAFE AND RELIABLE POWER SOURCE

Many industrial companies use compressed air in their daily operations. Applications include pneumatic tools for cutting, drilling, hammering and grinding, pneumatic actuators and valves, ventilation systems, packing and palleting machinery and conveyer systems. GA compressors are designed for ultimate performance and reliability.





Keeping your production up and running

GA compressors ensure long and trouble-free lifetime at the lowest operating cost. At their heart are state-of-the-art compression elements based on innovative asymmetric rotor profiles and powered by a high efficiency electric motor. Combined with a built-to-last drive system and heavy duty air inlet filters, this results in maximum reliability to operate in the toughest conditions.

Reducing your production costs

The innovative design of GA compressors reduces your energy bill and overall compressor lifecycle costs. GA compressors are pre-assembled packages: installation is fault-free, commissioning time is low and no external instrumentation air is required.

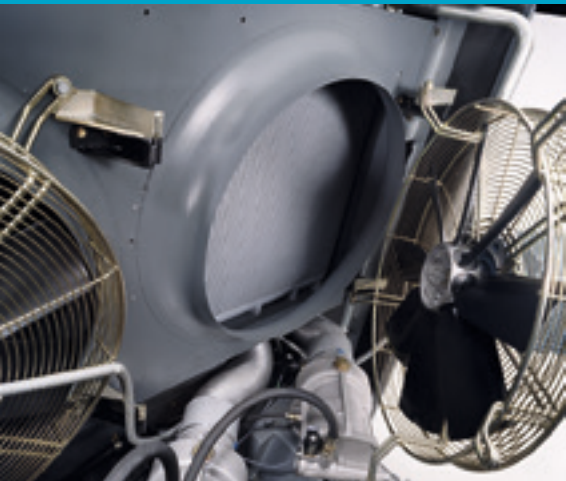
Protecting your process

The integrated water separator immediately removes 100% of the condensate, resulting in higher air quality.

Maximizing your savings

As there is no "one size fits all" concept, we have developed a range of features and options to help you optimize the use of your compressor: from running the machine at high temperatures, to extra safety devices.

Twin element series for highest efficiency and reliability



1

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).

2

Superior air quality

- 3-step efficient oil separation process for low residual oil content in the compressed air (less than 3 ppm)
- Hinged cover for easy separator element change



3

Protective air filtration

- Protects the compressor components by removing 99.9% of dirt particles down to 3 microns.
- Extends the system lifetime



7

Elektronikon unit controller

- High resolution color display gives you an easy to understand readout of the equipment's running conditions.
- Clear icons and intuitive navigation provides you fast access to all of the important settings and data.
- Monitoring of the equipment running conditions and maintenance status.



6

Energy recovery

- The optional energy recovery system can recover up to 75% of the compressor's shaft power as hot water.
- The main module of the recovery system is integrated in the compressor.
- Recovered hot water can be used as preheated boiler feed water, space heating, showering or other industrial applications.



5

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 – TEFC protection (IP55), class F insulation.

4

Moisture separator as standard

A cyclonic moisture separator, with automatic and manual drain, mounted as standard, after the cooler block.



Technical specifications

| Compressor type | Maximum working pressure | | Capacity FAD (1) | | | Installed motor | Noise level (2), (3) | Weight (3) | |
|-----------------|--------------------------|------|------------------|---------------------|------|-----------------|----------------------|------------|-------|
| | Pack | | Pack | | | | | kg | lb |
| | bar(e) | psig | l/s | m ³ /min | cfm | | | | |
| 50 Hz | | | | | | | | | |
| GA 355 - 75 | 75 | 109 | 1050 | 63.1 | 2225 | 355 | 73 | 8402 | 18523 |
| GA 355 - 8.5 | 8.5 | 123 | 969 | 58.2 | 2053 | 355 | 73 | 8402 | 18523 |
| GA 355 - 10 | 10 | 145 | 890 | 53.5 | 1886 | 355 | 73 | 8402 | 18523 |
| GA 355 - 13 | 13 | 189 | 731 | 43.9 | 1549 | 355 | 73 | 8402 | 18523 |
| GA 400 - 75 | 75 | 109 | 1175 | 70.6 | 2490 | 400 | 74 | 8602 | 18964 |
| GA 400 - 8.5 | 8.5 | 123 | 1109 | 66.6 | 2350 | 400 | 74 | 8602 | 18964 |
| GA 400 - 10 | 10 | 145 | 1011 | 60.8 | 2142 | 400 | 74 | 8602 | 18964 |
| GA 400 - 13 | 13 | 189 | 844 | 50.7 | 1788 | 400 | 74 | 8602 | 18964 |
| GA 450 - 75 | 75 | 109 | 1298 | 78.0 | 2750 | 450 | 75 | 8702 | 19185 |
| GA 450 - 8.5 | 8.5 | 123 | 1240 | 74.5 | 2628 | 450 | 75 | 8702 | 19185 |
| GA 450 - 10 | 10 | 145 | 1144 | 68.8 | 2424 | 450 | 75 | 8702 | 19185 |
| GA 450 - 13 | 13 | 189 | 960 | 57.7 | 2034 | 450 | 75 | 8702 | 19185 |
| GA 500 - 75 | 75 | 109 | 1410 | 84.7 | 2988 | 500 | 76 | 8202 | 18082 |
| GA 500 - 8.5 | 8.5 | 123 | 1347 | 80.9 | 2854 | 500 | 76 | 8202 | 18082 |
| GA 500 - 10 | 10 | 145 | 1257 | 75.5 | 2664 | 500 | 76 | 8202 | 18082 |
| GA 500 - 13 | 13 | 189 | 1068 | 64.2 | 2263 | 500 | 76 | 8202 | 18082 |

GA 500 figures are for medium voltage IP 23 motor.

Reference conditions:

Absolute inlet pressure 1 bar (14.5 psi)
Intake air temperature 20°C (68°F)
Cooling medium temperature 20°C (68°F)

(1) **Unit performance** measure according to ISO 1217, Annex C, Edition 4 (2009), 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

(2) **Noise level**

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.

(3) Water-cooled models

| Compressor type | Maximum working pressure | | Capacity FAD (1) | | | Installed motor | Noise level (2), (3) | Weight (3) | | |
|-----------------|--------------------------|------|------------------|---------------------|------|-----------------|----------------------|------------|-------|----|
| | Pack | | Pack | | | | | hp | kg | lb |
| | bar(e) | psig | l/s | m ³ /min | cfm | | | | | |
| 60 Hz | | | | | | | | | | |
| GA 355-100 | 7.4 | 107 | 1032 | 62.1 | 2191 | 450 | 73 | 8102 | 17862 | |
| GA 355-125 | 9.1 | 132 | 940 | 56.5 | 1992 | 450 | 73 | 8102 | 17862 | |
| GA 355-150 | 10.8 | 157 | 831 | 49.9 | 1761 | 450 | 73 | 8102 | 17862 | |
| GA 355-200 | 13.8 | 200 | 692 | 41.6 | 1466 | 450 | 73 | 8102 | 17862 | |
| GA 400-100 | 7.4 | 107 | 1128 | 67.9 | 2394 | 500 | 74 | 8202 | 18082 | |
| GA 400-125 | 9.1 | 132 | 1042 | 62.6 | 2208 | 500 | 74 | 8202 | 18082 | |
| GA 400-150 | 10.8 | 157 | 935 | 56.2 | 1981 | 500 | 74 | 8202 | 18082 | |
| GA 400-200 | 13.8 | 200 | 784 | 47.1 | 1661 | 500 | 74 | 8202 | 18082 | |
| GA 450-100 | 7.4 | 107 | 1334 | 80.4 | 2835 | 600 | 75 | 8352 | 18413 | |
| GA 450-125 | 9.1 | 132 | 1222 | 73.4 | 2589 | 600 | 75 | 8352 | 18413 | |
| GA 450-150 | 10.8 | 157 | 1126 | 67.7 | 2386 | 600 | 75 | 8352 | 18413 | |
| GA 450-200 | 13.8 | 200 | 943 | 56.7 | 1998 | 600 | 75 | 8352 | 18413 | |
| GA 500-100 | 7.4 | 107 | 1518 | 91.2 | 3217 | 700 | 76 | 8002 | 17641 | |
| GA 500-125 | 9.1 | 132 | 1404 | 84.4 | 2975 | 700 | 76 | 8002 | 17641 | |
| GA 500-150 | 10.8 | 157 | 1296 | 77.9 | 2746 | 700 | 76 | 8002 | 17641 | |
| GA 500-200 | 13.8 | 200 | 1114 | 66.9 | 2361 | 700 | 76 | 8002 | 17641 | |

GA 500 figures are for medium voltage IP 23 motor.

Reference conditions:

Absolute inlet pressure 1 bar (14.5 psi)
Intake air temperature 20°C (68°F)
Cooling medium temperature 20°C (68°F)

(1) **Unit performance** measure according to ISO 1217, Annex C, Edition 4 (2009), FAD is measured at the following working pressures:

- 100 psi variants at 100 psi
- 125 psi variants at 125 psi
- 150 psi variants at 150 psi
- 200 psi variants at 193 psi

(2) **Noise level**

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.

(3) Water-cooled models

| Compressor type | L | | W | | H | |
|-------------------------------|------|-------|------|------|------|------|
| | mm | inch | mm | inch | mm | inch |
| GA 355-500 A (LV and MV-IP23) | 5855 | 230.5 | 2120 | 83.5 | 2500 | 98.4 |
| GA 355-500 A (MV-IP55) | 6055 | 238.4 | 2120 | 83.5 | 2500 | 98.4 |
| GA 355-500 W (LV and MV-IP23) | 4000 | 157.5 | 2120 | 83.5 | 2500 | 98.4 |
| GA 355-500 W (MV-IP55) | 4200 | 165.4 | 2120 | 83.5 | 2500 | 98.4 |

A = air-cooled
W = water-cooled

LV = low voltage
MV = medium voltage



COMMITTED TO SUSTAINABLE PRODUCTIVITY

We stand by our responsibilities towards our customers, towards the environment and the people around us. We make performance stand the test of time. This is what we call – Sustainable Productivity.



www.atlascopco.com

The Atlas Copco logo, consisting of the brand name 'Atlas Copco' in a stylized, italicized font, positioned between two horizontal bars.