

GA 5, GA 7, GA 11 Full Feature

ATLAS COPCO OIL INJECTED SCREW COMPRESSOR

General Description

The GA 5-11 oil injected screw air compressors are available in 5kW, 7kW and 11kW provide an energy efficient, reliable work place air compressor that minimizes the total cost of ownership. These air compressors are designed to withstand the harshest of environments while providing you with a quiet air compressor with sound levels ranging between 60 and 62 dB(A). The GA 5-11 series are designed and manufactured in accordance with ISO 9001, ISO 14001 and ISO 1217 which insures a reliable trouble free air compressor. Additionally these units boast a very compact footprint and utilize the next generation Elektronikon® controller that offers you a great variety of control and monitoring features that allow you to increase you compressor's efficiency and reliability. As standard these units are designed to operate in 46°C/115°F ambient conditions and are available as a stand-alone compressor (Pack) or including an integrated dryer (Full Feature) .



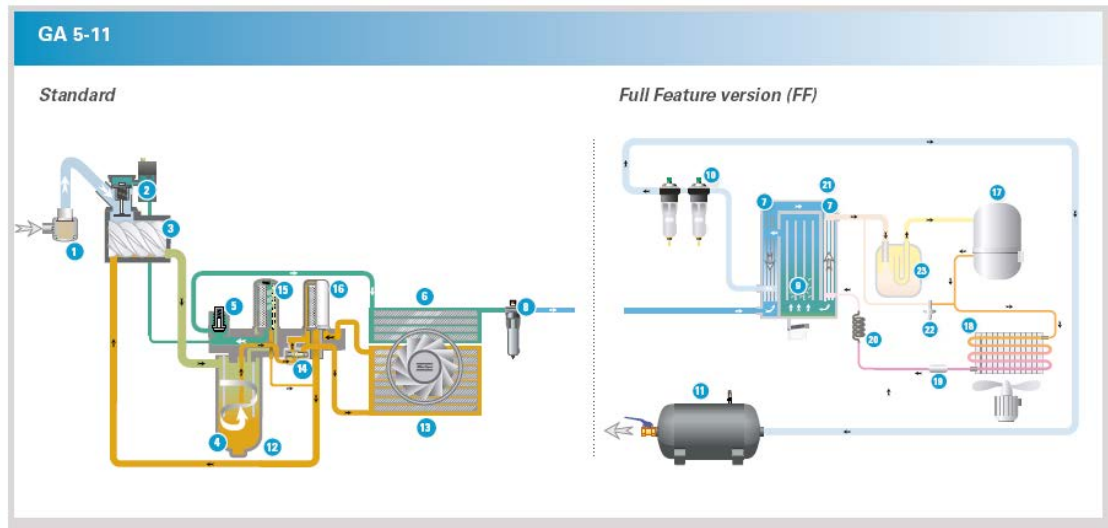
The GA 5-11 air compressors are available in 5kW, 7kW and 11kW variants with flows ranging from 8.4 to 30.7 l/s (24.7 to 54.8 cfm).

The compressors are constructed with the following major components:

- State of the art compression element
- IP55 (TEFC) motor meeting or exceeding IE3 and NEMA Premium efficiency standards with greased for life bearings
- Elektronikon® controller
- High efficiency aftercooler
- Moisture separator
- Inlet air filter
- **Full Feature** includes an integrated refrigerated air dryer.

Working Principle

Air is drawn in through the air filter, the inlet valve into the compression element. This compressed air is forced through the air/oil separator, past the minimum pressure valve and into the after-cooler through the water separator to the discharge. In the case of a Full Feature unit the air will then circulate through the refrigerated dryer and then to the discharge.



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|------------------------------|--------------------------------------|
| 1. Intake filter | 12. Scavenging line |
| 2. Inlet valve | 13. Oil cooler |
| 3. Screw element | 14. thermostatic bypass valve |
| 4. Oil reservoir | 15. Air/oil separator |
| 5. Minimum pressure valve | 16. Oil filter |
| 6. After cooler | 17. Refrigerant compressor* |
| 7. Air/air heat exchanger* | 18. Air/ refrigerant heat exchanger* |
| 8. Water separator | 19. Refrigerant filter* |
| 9. Air/refrigerant exchanger | 20. Capillary tube* |
| 10. Filters | 21. Integrated Ref Dryer* |
| 11. Air receiver | 22. Hot gas by pass* |

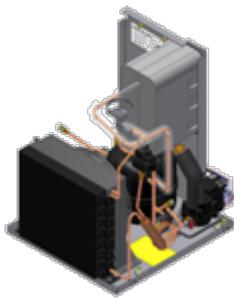
*excludes in Pack version

Scope of Supply



Air Oil Separator

High efficiency 2 step air oil separator system for reduced oil consumption ensuring low maintenance costs and good oil separation result in between 2 service intervals. The oil filter cleans the oil continuously from particles bigger than 25 micron with 99% efficiency in order to protect the lubrication quality and health of the rotating components.



Air Dryer (Full Feature models)

The integrated dryer efficiently removes 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.

Pressure dew point at 3°C /37°F at maximum FAD. (100% relative humidity at 20°C/68°F)

Can be outfitted with optional DD and PD filters, allowing you to obtain the exact air quality you need for your specific application.

ELEKTRONIKON®

Elektronikon® MK5 regulator and control panel



The Elektronikon standard is offered as standard for the GA 5-11 for fixed speed compressors with online visualization. Elektronikon standard controls and monitors the key compressor parameters efficiently as stated below.

GA 5-11 compressors are equipped with the power conscious, efficient, automatic full-load / no-load regulation system. The Elektronikon regulation is equipped with the delayed second stop feature (DSS) for the main motor which significantly cuts the electricity cost

The regulating system includes the Elektronikon® Standard module to regulate, control and monitor compressor operation. All GA 5-11 series Elektronikon® control modules display and monitor the following:

1. Compressor Status Indication
 - Voltage on (LED indication)
 - Compressor loaded
 - Compressor unloaded
 - Compressor maximum allowed unloading pressure
 - Automatic operation (LED indication)
 - General warning/alarm (LED indication)
 - Service required (LED indication)
2. Temperature, numerical readouts
 - Delivery air
 - Ambient air temperature
3. Pressure, numerical readouts
 - Delivery air
4. Compressor Control
 - Start / Stop
 - Emergency stop
 - Reset / Test
5. Hour meters
 - Total running hours
 - Total loading hours
6. Service requirement indications
 - Air filter
 - Oil filter
 - Oil lifetime
 - Oil separator
7. Compressor safety - warning indications
 - High dew point temperature
 - Sensor error
8. Compressor safety - shutdown indications
 - High element outlet temperature.
 - Drive motor/fan motor overload
 - Emergency stop
9. Digital output relays for remote monitoring (voltage free)
 - Remote start and stop
10. Optional upgradable to Elektronikon® graphic without re-cabling
11. Option energy saving through integrated multi compressor control (Elektronikon® Graphic only)
 - ES4i (up to 4 compressors)
 - ES6i (up to 6 compressors)

Features & Benefits

Energy Savings

- State of the Art compression element
 - Low energy consumption and high output of compressed air
- Integrated Dryer with Saver cycle technology
 - Reduces the energy consumption of the integrated air treatment in light load conditions. Water separation is improved. Pressure Dew Point (PDP) becomes more stable.
- Fully Integrated & Compact design
 - Controller to ensure optimum efficiency and reliability. Ensures compliance with your air requirements and makes the best use of your valuable floor space.

Quite operation

- Sound insulated canopy
 - No separate compressor room required. Allows for installation in most working environments.

Highest reliability

- Robust Air Filter
 - Offers long lifetime and high reliability for long service intervals and low maintenance needs. Air filter is very easy to replace.
- IP55 (TEFC) IE3 Motor
 - Totally enclosed fan cooled motor insures reliability. Efficiency ratings at or above premium regulations