Rotary screw air compressors
5.5kW - 22 kW
The complete compressed air workstation
A true compressed air work station, providing clean and dry air, in less than one square metre of floor space.

*Genesis 5.5, 7.5, 11 and 15

Yesterday’s Traditional installation

INNOVATION
The new Genesis is a unique all encompassing compressed air station replacing the many individual components that comprise a traditional system, saving you valuable space. The new Genesis includes everything you need to provide a reliable source of high quality, dry, clean compressed air to your system in one convenient unit.

LOWER NOISE LEVELS
With operating noise levels between 57db(A) and 69 dB(A) the Genesis compressor can be located directly into the working environment and nearer the point of use, creating a more comfortable workplace and reducing installation costs.

REDUCED MAINTENANCE
Special attention has been directed toward the ease of service in the design of the new Genesis compressor. Extended service intervals, quick and simple access to all components and the use of convenient ‘spin on’ oil filter and air/oil separator allow for a minimum disruption and a reduction in maintenance costs.

AESTHETIC DESIGN
The Genesis is a hardworking industrial machine designed for heavy use, even so the design of the new Genesis means that it looks good. The proportional, clean and modern design of the new Genesis is attractive in any environment.

INSTALLATION
A traditional compressed air system comprising eight individual components can be replaced entirely with a single Genesis compressed air station. The unique Genesis concept is not only convenient but is also much simpler to install, easier to move and requires far less space when compared to a traditional system. A simple connection to a suitable power supply and to the compressed air network is all that is required to effect an immediate installation.

AIR QUALITY
The new Genesis compressor has been designed from the outset to provide clean compressed air in line with key environmental objectives. This means the Genesis runs cooler and cleaner than other compressors. In addition the Genesis is fitted with an efficient air treatment package comprising refrigerant dryer with R134a gas, pre filtration, hyper filtration and modular condensate drain. The compressed air provided by the Genesis is exceptionally clean and dry, suitable for hundreds of sophisticated applications throughout industry.

The Genesis solution
NEW GENESIS

The 16 points making the difference:

1. Compressor Air end
2. IP55 Electric Motor
3. MC2 Controller
4. Starter Enclosure
5. Built-in refrigerant dryer, pre-filter and final-filter.
6. Frequency converter fitted to variable speed (I) version
7. Automatic cooling fan
8. Air inlet filter
9. Spin on separator cartridge
10. Spin on oil filter
11. Intake regulator
12. Cabinet pre-filter
13. Air and oil cooler
14. Automatic drive belt tensioner
15. Minimum pressure valve
16. Air receiver
The complete compressed air workstation

**TriAB Air Ends**

The ABAC screw compressors are fitted with the unique TriAB air ends that are designed and built exclusively at the ABAC factories, which are certified to ISO 9001. The highest quality standards are strictly adhered to throughout the manufacturing process ensuring continuous high quality.

- Highly developed, asymmetric rotor profiles with precision ground 5/6 lobe configuration, provides higher compressed air output with lower power consumption.
- Each rotor is fitted with 3 oversized high precision bearings allowing a longer air end life.
- The shaft seal with a 3 lip design provides total protection from oil and other contaminants.
- Toothed safety washers and special locking nut ensure that the rotor tolerances are set throughout the life of the unit for improved reliability.

**MC2 Controller**

Latest generation microprocessor based multi-controller, with easy to use menu driven operation with backlit display, message box and fault log, special functions and emergency warning. The MC2 controller also features:

- Optional hardware expansion
- Ability to interface with other compressors using the optional interface card.

Daily and/or weekly operational programming of up to 4 compressors allowing start/stop switching and sequencing control.

- Remote control
- Auto-restart
- Programmed routine maintenance
- Diagnostic functions with fault log

**Efficient air Inlet filtration**

One of the most important factors in achieving increased performance and a longer service life with all rotary screw compressors is the quality of the inlet air. With this in mind, the GENESIS range features a two stage air filtration system; air enters through a cabinet pre-filter panel, which helps to keep the internal components of the compressor clean, as well as maintaining optimum cooling efficiency. The second stage of filtration occurs as the air flows through a highly efficient air suction filter, this ensures that the air entering the compressor element is cleaned efficiently, thus providing a considerably longer service life to the whole compressor.
In the design of the GENESIS series a good deal of consideration was given to providing accessibility and ease of maintenance. All standard service components have been positioned at the front of the compressor thus allowing immediate accessibility by simply removing the front panel.

**Convenient service access**

The ideal positioning of all service items along with the simple quick access and the use of spin on oil filter and separator allow service work to be carried out quickly and safely. The extended service intervals help to reduce costs further.

**Simple maintenance and reduced costs**

The GENESIS compressor provides high quality compressed air in line with key environmental objectives. The unique internal design of the vertical air/oil separator vessel coupled with the high efficiency separator cartridge allows very clean compressed air to be provided at outlet. Oil content within the delivered compressed air is less than 3 mg per cubic metre. A large capacity delivery hose made with robust stainless steel ensures low losses and improved reliability.

**High quality air**

The greater air flow generated by the electric fan provides for very efficient cooling even during continuous use and in higher ambient temperatures. This combined with the use of over sized air and oil heat exchangers allow the GENESIS compressor to operate at very low temperatures, resulting in a longer life to both the machine and all components including the lubricant.

**Low operating temperatures**

The GENESIS has been acoustically engineered so as to reduce noise levels entering the environment significantly.

**Low noise levels**

The entire GENESIS range features an automatic transmission belt tensioning system. This ensures a longer life to the belts and improved power transmission and therefore lower energy costs. The design of the new system also allows simple and quick replacement to the belts when required.

**Automatic transmission belt adjustment**
All GENESIS compressors are fitted with a built-in air treatment package comprising refrigerant dryer with R134A gas, pre-filter, final filter, and modular condensate drain. The operation of the dryer and condensate drains is conveniently controlled by the compressor's main MC2 controller, which provides for efficient dew point control and allows the fridge compressor to cycle efficiently.

The GENESIS is fitted with both pre and final high efficiency filtration resulting in particles, oil, and water droplets being removed before entering the compressed air system.

The compressed air produced therefore is extremely clean and dry and suitable for use in applications in various industries. For added convenience, all the various condensate drain points are connected to a common manifold which is then connected to a single condensate outlet which can be easily piped to a suitable collection facility.

### Technical data

<table>
<thead>
<tr>
<th>Model</th>
<th>Capacity Clm</th>
<th>FAD ISO m³/min</th>
<th>Pressure Bar</th>
<th>Motor kW</th>
<th>Air-end type</th>
<th>Dimensions W x D x H</th>
<th>Weight</th>
<th>Noise dB (A) * *</th>
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* Denotes minimum and maximum free air delivery for variable speed (I) version only.
** Noise pressure level measured at 4m in accordance with ISO 3744.
*** Noise level on variable speed version will vary according to load conditions.

** Working conditions:**
- Intake air pressure 1 bar
- Air temperature at intake 20°C

**Compressed air treatment**

GENERAL

- Intake air pressure 1 bar
- Air temperature at intake 20°C

- Compressed air produced therefore is extremely clean and dry and suitable for use in applications in various industries.

- For added convenience, all the various condensate drain points are connected to a common manifold which is then connected to a single condensate outlet which can be easily piped to a suitable collection facility.
The Genesis I version with advanced high efficiency vectorial frequency inverter offers many advantages over normal air compressors.

- Provides a constant air pressure selectable to any value between 6 and 13 bar.
- The compressed air generated precisely matches the demands of the system with no wasteage.
- Soft start reduces current surges providing further energy savings.
- Constantly varying output between 25% and 100% capacity.

**Genesis I variable speed - V-normal air compressors**

The solid state high quality frequency inverter is housed in the ideal position within the main starter enclosure. The cabinet and cables are fully protected to provide electromagnetic screening to stringent EC directives. A safety cut out switch is located on the door of the enclosure providing additional safety.

Approximately 80% of the cost of owning and running an air compressor over 5 years is electricity.
CUSTOMER SERVICE

A full product support package is available to all of our customers throughout the world. Qualified technical advice and support is provided in strategic locations and in all major countries. Advice on installation, selection, additional equipment, maintenance management and environmental issues is available on request.

ABAC air compressors are manufactured in compliance with:
- 98/37 CE machinery Directive;
- 87/404 CE simple pressure vessels Directive;
- 73/23 CE low voltage Directive;
- 89/336 CE for electromagnetic compatibility;
- 2000/14 CE for noise level.

Providing the highest levels of performance for the entire life of the compressor is our main objective. The use of GENUINE ABAC SPARE PARTS guarantees the correct and safe operation of the GENESIS Compressor and maintains continuous performance.

Demand GENUINE ABAC SPARE PARTS from your local distributor.

ABAC UK LTD
Unit 11 Granville Way
Chaucer Business Park
Bicester, Oxon
OX26 4JT
UK

Tel: 01869 326226
Fax: 01869 326216
e-mail: enquiries@abac.co.uk
www.abac.co.uk