

Operating Instructions

Piston Compressor

■ AIRBOY 131 OF E



AIRBOY 131 OF E



Imprint

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Foreword

Dear customer,

thank you for purchasing the **Paircraft**-compressor.

Paircraft compressorour products offer the highest level of quality, technically optimized solutions and an outstanding price-performance ratio. Continuous further developments and product innovations guarantee state-of-the-art technology and safety at all times.

Please read these operating instructions thoroughly before commissioning and familiarize yourself with compressor. Also ensure that all persons operating the compressor have always read and understood the operating instructions beforehand. Keep these operating instructions in a safe place near the compressor.

Information on

The operating instructions contain information on the safe and proper installation, operation and maintenance of the compressor. The constant observance of all instructions contained in this manual ensures the safety of persons and the compressor.

The manual specifies the intended use of the compressor and contains all the information required for its economical operation and long service life.

The Maintenance section describes all maintenance work and functional checks that must be carried out regularly by the user.

The illustrations and information contained in this manual may differ from the current state of your compressor. As a manufacturer, we are constantly striving to improve and renew our products, which is why changes may be made without prior notice. The illustrations of the compressormay differ in some details from the illustrations in these instructions, but this has no influence on the usability of the compressor.

No claims can therefore be derived from the information and descriptions. We reserve the right to make changes and errors!

Your suggestions regarding these operating instructions are an important contribution to optimizing the work we offer our customers. If you have any questions or suggestions for improvement, please contact our service department.

If you still have questions after reading these operating instructions or if you cannot solve a problem with the help of these operating instructions, please contact your specialist dealer.

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Information on the operating instructions

Original operating instructions according to DIN EN ISO 20607:2019

Issue: 06.06.2023 Version 1.01 Language: EN

Author: ES

Product identification

Piston Compressor Item number AIRBOY 131 OF E 2001225



1 Safety

Conventions of presentation

rg	provides additional information
→	calls you to action
0	Enumerations

This part of the operating instructions

- O explains the meaning and use of the warning notices used in these operating instructions,
- O specifies the intended use of the compressor,
- O draws your attention to the dangers that could arise for you and other persons if you do not follow these instructions,
- O informs you how to avoid dangers.

In addition to the operating instructions, please note

- O the applicable laws and regulations,
- O the statutory provisions on accident prevention,
- O the prohibition, warning and mandatory signs.

Always keep the documentation close to the compressor.

1.1 Safety instructions (Warnings)

Hazard classification

We divide the safety instructions into different levels. The table below gives you an overview of the assignment of symbols (pictograms) and signal words to the specific hazard and the (possible) consequences.

Pictogram	Signal word	Definition/consequences
	DANGER!	Immediate danger that will result in serious personal injury or death.
	WARNING!	Risk: a hazard could result in serious personal injury or death.
<u> </u>	CAUTION!	Dangerous or unsafe practices that could result in personal injury or property damage.
<u> </u>	ATTENTION!	Situation that could lead to damage to the compressorand other damage. No risk of injury to persons.
i	Information	Application tips and other important/useful information and advice. No dangerous or damaging consequences for persons or property.



Pictograms that indicate specific hazards



General warning sign



Warning of electrical voltage



Warning of hand injuries



Warning of hot surface



Warning of automatic start-up



Warning of obstacles on the ground



Warning: Danger of tipping!



Warning of suspended load!



Warning of flammable substances!

Pictograms that refer to commands/prohibitions



Prohibited for persons with pacemakers or implanted defibrillators!



Use hearing protection!



Follow the instructions!



Pull out the mains plug!



Use eye protection!



Use hand protection!



Use foot protection!



Use protective clothing!



1.2 Intended use

The compressor is used to compress clean, dust-free, dry and uncontaminated air. The compressed air generated can then be used for suitable pneumatic tools, pneumatic controls and systems.

The AIRBOY compressor is a piston compressor with a connected compressed air tank, which is driven by an electric motor. It is intended for sale and operation in the EU and the geographical European area.

Part of the intended use is that you

- O observe the operating instructions,
- O comply with the inspection and maintenance instructions.

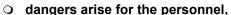
1.3 Reasonably foreseeable misuse

- O Use of the compressor in rooms with aggressive, explosive or flammable substances (the piston compressor is not explosion-proof as standard).
- O Use of the compressor in closed rooms without adequate ventilation.
- Use of the compressor without appropriate filtration in the food and medical sector, e.g. for filling breathing gas cylinders.
- Failure to observe the information in these operating instructions or failure to observe the operating instructions for the pneumatic tools used.
- O Operating the compressor without the protective devices provided.
- O Failure to observe signs of wear and damage.
- O Use of the compressor outside the performance limits specified in the "Technical data" chapter.
- O Service work by untrained or unauthorized personnel.
- O Installation of spare parts and use of accessories and equipment not approved by the manufacturer.
- O Unobserved excessive air extraction rate, so that the required continuous load of the compressor in the commercial sector is not achieved.

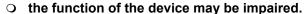
If the compressor is used for purposes other than those specified under "1.2 Intended use" or modified without the approval of Aircraft Kompressorenbau und Maschinenhandel GmbH, the Piston Compressor is no longer used for its intended purpose.

Warning!

In the event of improper use of the compressor







We accept no liability for damage resulting from improper use.

Any use beyond the intended use or any other use is considered misuse. To avoid misuse, the operating instructions must be read and understood before initial commissioning.

The operating personnel must be qualified.

ATTENTIONUN!

Conversions and modifications to the compressorare prohibited! They endanger people and can lead to damage to the appliance.

!

Improper use of the compressorand disregard of the safety instructions or the operating instructions exclude the manufacturer's liability for any resulting damage to persons or objects and invalidate the warranty!



1.4 Residual risks

Even if all safety regulations are observed and the Piston Compressor is used in accordance with the instructions, there are still residual risks, which are listed below:

- Heat build-up on components can lead to burns and other injuries.
- O Hearing damage due to prolonged work with the compressor and tools with high noise levels or use of defective hearing protection.
- O Risk of electric shock if damaged connecting cables or mains plugs are used.
- O Risk of injury and material damage due to flying tool parts or tool attachments breaking off.

Information!

All persons who have anything to do with compressor must

- O have the necessary qualifications,
- follow these operating instructions carefully.



1.5 Qualification of staff

Target group

These instructions are intended for

- O the operators,
- O the operators,
- O the personnel for maintenance work.

The warnings therefore relate to both the operation and maintenance of the compressor.

Define clearly and unambiguously who is responsible for the various activities on the compressor (operation, maintenance and repair).

Unclear competencies are a safety risk!

These instructions specify the qualifications of the persons for the various tasks listed below:

Operator

The operator was instructed by the operator about the tasks assigned to him and the possible dangers of improper behavior. The operator may only carry out tasks that go beyond normal operation if this is specified in these instructions and the operator has expressly authorized him to do so.

Electrician

Due to their specialist training, knowledge and experience as well as knowledge of the relevant standards and regulations, qualified electricians are able to carry out work on electrical systems and independently recognize and avoid potential hazards.

The qualified electrician is specially trained for the working environment in which they work and knows the relevant standards and regulations.

Specialist staff

Due to their professional training, knowledge and experience as well as knowledge of the relevant regulations, qualified personnel are able to carry out the work assigned to them and to independently recognize and avoid possible dangers.

Instructed person

The instructed person was briefed by the operator on the tasks assigned to them and the possible dangers of improper behavior.



Authorized persons

Warning!

Improper operation and maintenance of the compressormay pose a risk to people, property and the environment.



Only authorized persons may work with the compressor!

Authorized persons for operation and maintenance are the instructed and trained specialists of the operator and the manufacturer.

The operator must

- O train the staff,
- O instruct staff at regular intervals (at least once a year) about
 - all safety regulations relating to compressor,
 - the operation,
 - the recognized rules of technology,
- O check the level of knowledge of the staff,
- O document the training/instructions,
- have participation in the training/instructions confirmed by signature,
- O check whether the personnel work in a safety-conscious manner and observe the operating instructions.

The operator must

- O know the function and mode of operation,
- O before commissioning
 - have read and understood the operating instructions,
 - be familiar with all safety equipment and regulations.

1.6 General safety instructions

PLEASE NOTE THE FOLLOWING:

O Check the compressor for externally visible damage and defects before commissioning. Defects and damage must be rectified immediately.



- Observe the guidelines and accident prevention regulations of the employers' liability insurance association for handling compressors and pneumatic tools.
- Always use a clean cloth for cleaning. Never use brake fluids, gasoline, petroleum-based products or other solvents to clean the compressor.
- O Never work under the influence of illnesses that impair concentration, fatigue, drugs, alcohol or medication.
- O Do not use aggressive cleaning agents to clean the appliance.
- O Repairs may only be carried out by qualified persons.
- Only use original spare parts and accessories.

1.7 Machine-specific safety measures

- O The compressor and / or the motor become hot during operation. Never touch the motor, cylinder head, radiator or pressure lines during operation.
- O Never point compressed air at people or animals.
- When releasing the quick-release coupling, hold the end of the compressed air line to prevent it from being knocked away by the excess pressure.
- The air generated by the compressor must not be inhaled.
- O Always use a respirator when spraying paint or chemicals or when sandblasting.
- O Always wear a face mask or dust mask to avoid inhaling hazardous dust or airborne particles including wood dust, crystalline silica dust and asbestos dust while using air tools.
- O Always check that the compressor is switched off before connecting it to a power source.
- Do not wear loose clothing, ties or jewelry that can get caught and pulled into moving parts. Non-slip footwear is recommended when working on the compressor.
 Wear a hairnet to protect long hair.



- Unauthorized persons are not permitted in the work area.
 Keep children and untrained persons away from the working area of the compressor and the connected compressed air devices to avoid injury.
- O Protect the compressor, power cable and the respective pneumatic tool from heat, oil and sharp edges.
- O Check the pneumatic tools for damage before connecting them to the compressor.
- O Never leave the compressor unattended while it is in operation. Do not leave the workplace until the compressor has come to a complete standstill.
- O Do not leave any tools on the compressor during operation.
- O The compressor must not be operated in the rain or in a damp or wet environment.
- O Keep the cooling fins of the compressor clean and free of objects that could impair cooling.
- O Switch off the compressor and disconnect the mains plug before carrying out maintenance and adjustment work. Release the compressed air from the boiler and the compressed air lines.

1.8 Checking operational safety

WARNING!

According to §15 BetrSichV, a system requiring monitoring may only be put into operation after the system has undergone a pre-commissioning inspection. Periodic inspections must also be carried out in accordance with §16 BetrSichV. Such inspections must be carried out by an approved inspection body or a competent person. Details can be found in the BetrSichV.



The pressure vessel of the compressor is subject to inspection. The pressure vessel has been tested by the manufacturer in accordance with EC Directive 2014/29/EU in conjunction with the EC type examination in accordance with Article 10 and EN 286-1. A copy of this type examination certificate and/or declaration of conformity is enclosed with each compressor.

The operator must have the individual components subject to mandatory inspection inspected by an expert and/ or "competent person" at the prescribed intervals. The operating regulations for this may differ in the EU member states.

Regulations for compressed air tanks in Germany

Test deadlines

The test intervals listed are maximum values. These should be checked by the employer's risk assessment/ evaluation. No overdraft period is permitted. The deadline can only be shortened.

The pressure liter product depends on the test intervals. For this purpose, the max. permissible pressure (PS) must be multiplied by the pressure vessel volume (V).

Example:

Pressure tank= 50 I; max. permissible pressure= 10 bar 50 I x 10 bar = 500

Examination	Inspection period	Testing organization	
Before commissioning/	PS xV =200</td <td>Qualified person</td>	Qualified person	
Set up	with type examination certificate PS xV =1000</td <td colspan="2">Qualified person</td>	Qualified person	
	PS xV >/=200	Approved monitoring body	
External inspection **	Every/ or every 2 years	Qualified person	
Internal audit **	Every 5 years for PS xV =1000</td <td>Qualified person</td>	Qualified person	
	*Every 5 years for PS xV >/=1000	Approved monitoring body	
Strength test **	Every 10 years PS xV =1000</td <td>Qualified person</td>	Qualified person	
	*Every 10 years PS xV >/=1000	Approved monitoring body	

^{*}The employer must inform the competent authority of the respective inspection deadlines within 6 months of commissioning the system (§ 15 BetrSichV).

^{**}External tests can be omitted: a) for pressure vessels according to BetrSichV number 2.2 letter a, unless they are fire-heated, exhaust gas-heated or electrically heated, and b) for simple pressure vessels according to BetrSichV number 2.2 letter d. The period of the strength test can be extended to 15 years if it can be demonstrated during the external or internal test that the system can be operated safely. Proof must be provided in the documentation of the risk assessment. Table according to BetrSichV (Status: 29.03.2017).



1.9 Safety devices

Safety valve

The safety valve is located on the pressure switch or on the fitting. If the nominal pressure of the safety valve is exceeded, it opens and the excess pressure is released. After the safety valve has been triggered, the operator must switch off the compressor and request a check by the maintenance personnel. Never attempt to adjust or remove the safety valve. Any changes to the setting could cause serious injury.

Motor protection

The compressor is equipped with a motor protection switch, which is installed on the compressor.

1.10 Safety labels on the compressor

NOTE:

Damaged or missing safety symbols on the Piston Compressor can lead to incorrect actions resulting in personal injury and damage to property. The safety symbols attached to the appliance must not be removed. Damaged safety symbols must be replaced immediately.



Please note the following:

- O The instructions on the safety markings on the appliance must be followed under all circumstances. If the safety labels fade or become damaged during the service life of the device, new labels must be attached immediately.
- From the point at which the signs are not immediately recognizable and understandable at first glance, the device must be taken out of operation until the new signs are attached.





Fig. 1-1: Safety markings: 1 Mandatory sign - follow instructions, use hearing protection, pull out mains plug 2 warning signs - warning of automatic start-up, warning of electrical voltage, warning of hot surface

1.11 Safety data sheets

Safety data sheets for hazardous goods can be obtained from your specialist dealer or by calling: +49 (0)951/96555-0.

Specialist dealers can find safety data sheets in the download area of the partner portal.



2 Technical data

2.1 Table

AIRBOY	131 OF E
Suction capacity approx.	107 l/min
Filling capacity at 6 bar approx.	42 l/min
Maximum pressure	8 bar
Container contents	61
Cylinders/steps	2/1
Compressor speed	1450 min ⁻¹
Compressor type	Silent / oil-free
Piston stroke / Piston Ø	5.8 mm / 63.7 mm
Air outlet	Quick coupling
Drive motor: Protection class Degree of protection Duty type drive motor	F IPXX S3 (50%)
Supply voltage / frequency	230 V / ~ 50Hz
Phase(s)/current type	1 / AC
Output power	0.6 kW
Rated current	2,7 A
Motor speed	1450 min ⁻¹
Dimensions (LxWxH)	345x340x315 mm
Weight	15.9 kg
Sound power level LW*	71 dB(A)
Sound pressure level Lp	49 dB(A)
Connection cable	1,8 m

^{*} according to DIN EN ISO 3744 (RL 2000/14/EC)



2.2 Type plate



Fig.2-1: Type plate AIRBOY 131 OF E

3 Transportation, packaging, storage

3.1 Transportation

Check the compressor for visible transport damage after delivery. If you discover any damage to the compressor, report this immediately to the transport company or the dealer.

Notes on transportation

Improper transportation of individual appliances, packaged or unpackaged unsecured appliances stacked on top of or next to each other is accident-prone and can cause damage or malfunctions for which we do not accept any liability or warranty.

Transport the scope of delivery to the installation site secured against shifting or tipping using a sufficiently dimensioned industrial truck.

The compressor may only be transported with the motor switched off and disconnected from the power supply. The container must not be under pressure during transportation.

WARNING!

Risk of injury due to equipment falling over and falling off the forklift truck, pallet truck or transport vehicle.



Only use means of transportation and load lifting equipment that can take the total weight.

3.2 Packaging

Save the packaging for a possible move, but at least during the warranty period

All packaging materials and packaging aids used at compressorare recyclable and must always be recycled.

Packaging components made of cardboard should be shredded and taken to the waste paper collection.

The films are made of polyethylene (PE) and the padding parts are made of polystyrene (PS). Hand these materials in at a recycling collection point or to your local waste disposal company.

3.3 Storage

Store the compressor in a dry, clean and frost-free environment, thoroughly cleaned.

Do not store or transport the compressor unprotected outdoors or in a damp environment.



4 Installation and connection

The following personal protective equipment must be worn when working on the compressor:













4.1 Set up

Design the working area around the compressor in accordance with local safety regulations. The working area for operation, maintenance and repair must not be restricted.

The installation site must have adequate lighting (see Workplace Ordinance and DIN EN 12464).

Requirements for the installation site:

- O Dry, dust-free,
- O Cool, well ventilated, frost-protected
- O Flat, firm surface

NOTE

Place the compressor in a location that is large enough to maintain the room temperature at a maximum of 40° C while the compressor is in operation. If this is not possible, it is necessary to install one or more extraction systems to extract the hot air.



Always place the compressor at least 50 cm away from any obstacles so that the air flow can circulate freely.

4.2 Mains connection

DANGER! Electrical voltage

- O Contact with live components poses an immediate danger to life due to electric shock.
- O Only operate the compressor in a dry, clean environment.
- O The compressor may only be connected by qualified electricians.
- O Adjustments to the power supply may only be carried out by a qualified electrician. The locally applicable guidelines must be observed!

ATTENTION!

- O The compressor should only be operated directly from a power socket. However, if a cable reel is used, the cross-section of the cable must correspond to the motor power consumption. A minimum cross-section of 2.5 mm² for a cable length of 10 meters must be available. The cable must be completely unwound from the reel due to the cable resistance and voltage drop.
- O Operation on long cable drums or cable extensions can lead to start-up problems.
- O The mains cable must be routed in such a way that it does not interfere during operation and cannot be damaged
- O Motors need more current to start up than in normal operation. This starting current can trigger the normal B circuit breakers or normal fuses. To avoid this, the socket outlet on which the compressor is to be operated should be protected by a circuit breaker with a C or K characteristic or a slow-blow fuse.







5 Description

5.1 Security

Only operate the compressor under the following conditions:

- O The technical condition of the compressoris flawless.
- O The device is used as intended.
- O The operating instructions are observed.
- O All safety devices are present and active.

Eliminate faults or have them eliminated immediately. Set the Piston Compressor immediately in the event of malfunctions and secure it against unintentional or unauthorized activation.

Report any changes immediately to the responsible office.

5.2 Description of device

INFORMATION!

Illustrations in these operating instructions may differ from the original!





- 01 Transport handle
- 02 Pressure regulator for tapping pressure
- 03 Boiler pressure gauge
- 04 Working pressure gauge
- 05 Air filter
- 06 ON/OFF switch
- 07 Compressed air tank (boiler)
- 08 Quick coupling for Compressed air extraction
- 09 Drain valve (drainage)
- 10 Safety valve

Fig.5-1: Device description AIRBOY 131 OF E



6 Operation

WARNING!

O The compressor is designed for intermittent operation. To ensure trouble-free operation, the duty cycle of 50 percent must not be exceeded. If you are painting for 10 minutes, for example, the compressor must not run for longer than 5 minutes.



• The connected compressed air tools must be designed for the output pressure of the compressor or be operated with a pressure reducer.

6.1 Switching on and off

- → To switch on, set the on/off switch (pos. 6, fig. 5-1) to position 1.
- → To switch off, set the on/off switch (pos. 6, fig. 5-1) to position 0.

6.2 Setting the working pressure

The working pressure setting must be made with the tool connected and running in order to be able to set the actual required working pressure. The maximum pressure of the connected tool must not be exceeded.

The working pressure is set using the pressure regulator (pos. 3, fig. 6-1). The pressure can be read on the pressure gauge (pos. 2, fig. 6-1). The pneumatic tools are connected to the coupling (pos. 4, Fig. 6-1).



Fig.6-1: Setting the working pressure

It is recommended to reset the pressure value to 0 bar after using the tool. When using pneumatic tools, always check the optimum application pressure of the accessories.

If the motor does not switch on and off when using an air tool, but runs continuously, the capacity of the compressor may be too low.

Pressure switch

The pressure switch is set at the factory. Switch-on pressure approx. 6 bar Switch-off pressure approx. 8 bar

7 Troubleshooting

WARNING!

Only specialist personnel authorized by us may maintain and repair the compressor ! Always switch off the compressor when rectifying faults.



Malfunction	Cause	Solution
Compressor does not run	Mains voltage not available. Mains voltage too low.	Check the cable, mains plug, fuse and socket. Avoid extension cords that are too long. Use extension cables with a sufficient wire cross-section.
	3. Outside temperature too low.	3. Do not operate below +5° C outside temperature.
	4. Motor overheats.	4. Allow the motor to cool down and eliminate the cause of overheating if necessary.



Malfunction	Cause	Solution
Compressor running, but no	Non-return valve leaking.	Have the non-return valve replaced by a specialist workshop.
pressure	2. Seals defective.	Check seals, have defective seals replaced by a specialist workshop.
	Drain plug for condensation water leaking.	Tighten the screw by hand. Check the seal on the screw, replace if necessary.
Compressor is running, pressure is displayed on the	Hose connections leaking. Quick coupling leaking.	Check compressed air hose and tools, replace if necessary. Check quick coupling, replace if necessary.
pressure gauge, but tools are not running.	Too little pressure set on the pressure regulator.	3. Turn the pressure regulator up further.

8 Care and maintenance

Regular and conscientious maintenance of the compressoris a basic prerequisite for a long service life, good working conditions and maximum productivity of the Piston Compressor. Ensure that maintenance work is carried out regularly.

Warning! Danger if persons are insufficiently qualified:

Inadequately qualified persons cannot assess the risks to the user arising from improper repair work on the compressor and expose themselves and others to the risk of serious injury.



All maintenance work may only be carried out by qualified persons.

Before starting maintenance work, switch off the compressor and allow it to cool down completely.

Release the compressed air completely. The container and the pipes must not be under pressure.

ATTENTION!

After care, maintenance and repair work, check that all covers and protective devices have been properly reinstalled on the compressor . Damaged protective devices and appliance parts must be repaired or replaced by customer service.



8.1 Care through cleaning

- → Keep protective devices, air slots and motor housing free of dust and dirt.
- → Clean the appliance with a clean cloth or blow it out with compressed air at low pressure.

 Clean the appliance regularly with a damp cloth and a little soft soap. Do not use any cleaning agents or solvents as these can damage the plastic parts of the appliance.
- → Make sure that no water can get inside the appliance. The ingress of water into an electrical appliance increases the risk of electric shock.
 - The compressor must not be cleaned with water!
- → The hose and spraying tools must be disconnected from the compressor before cleaning.



8.2 Maintenance of the compressor

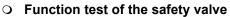
The maintenance intervals are recommended by Aircraft Kompressorenbau und Maschinenhandel GmbH for normal standard requirements.

O After each use, drain the condensation water by opening the valve located on the underside of the container. Close the valve again as soon as only clean air, without condensation, emerges. Protective gloves must be worn for this work.

We recommend using a shallow container to collect the condensation water.

Once a month

 Remove the intake filter (pos. 5, fig. 5-1) and replace it (if it is damaged) or clean the filter element. Never operate the compressor without the intake filter!



The safety valve must be actuated regularly to ensure that it functions properly when required. Depending on the model, three different versions of safety valves can be installed.

Version A (safety valve with ring)

Open the safety valve (Fig. 8-1) by briefly pulling the ring outwards until compressed air escapes and releasing it again (the pressure vessel must be pressurized).

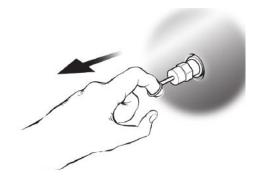


Fig. 8-1: Safety valve with ring

Safety valve with clamp

Open the safety valve (Fig. 8-2) by briefly pulling the clamp outwards until compressed air escapes and releasing it again (the pressure vessel must be pressurized).



Fig. 8-2: Safety valve with clamp

Safety valve with ring nut

Version B1: Open the safety valve (Fig. 8-3A) by turning the ring nut until it is completely loosened.

Then pull the ring nut with sufficient force until compressed air escapes. Then release the ring nut, push it back to the threaded base and screw it back on (the pressure vessel must be under pressure).

Version B2: Open the safety valve (Fig. 8-3B) by turning the ring nut until compressed air escapes. Then screw them back on (the pressure vessel must be under pressure).



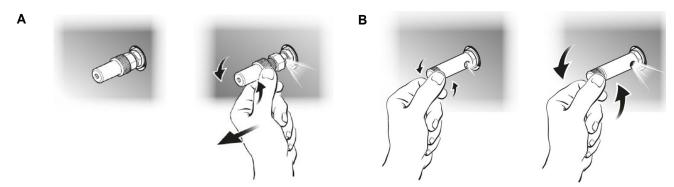


Fig.8-3: Safety valve with ring nut

Note

Always disconnect the compressor from the power supply before carrying out maintenance work or replacing components on the Piston Compressor.



After care, maintenance and repair work, check that all covers and protective devices have been properly reinstalled on the compressor and that there are no tools inside or in the working area of the compressor.

If the protective devices are damaged, contact the specialist dealer or customer service.

If maintenance and repair work on this device is carried out by persons who are not authorized to do so, the warranty claim against will be invalidated.

8.3 Repair

ATTENTION!

Maintenance work may only be carried out by a specialist workshop or by trained specialists. Maintenance work on the electrical equipment may only be carried out by qualified electricians or under the supervision and direction of a qualified electrician.



Aircraft Kompressorenbau und Maschinenhandel GmbH accepts no liability or guarantee for damage or malfunctions resulting from failure to observe these operating instructions. Only use faultless and suitable tools, original spare parts or standard parts expressly approved by Aircraft Kompressoren for repairs.

Repairs covered by the warranty may only be carried out by technicians authorized by the manufacturer.

For inquiries or orders, please always state the TYPE DESIGNATION, the YEAR OF MANUFACTURE and the ITEM NUMBER of your compressor. All information can be found on the rating plate attached to the compressor.



9 Spare parts

Risk of injury due to the use of incorrect spare parts!

The use of incorrect or faulty spare parts can result in danger to the operator and cause damage and malfunctions.



Aircraft Kompressorenbau und Maschinenhandel GmbH accepts no liability or guarantee for damage or malfunctions resulting from failure to observe these operating instructions. Only use faultless and suitable tools, original spare parts or standard parts expressly approved by Aircraft Kompressorenbau und Maschinenhandel GmbH for repairs.

The manufacturer's warranty is void if unauthorized spare parts are used.

Information about technical customer service

Repairs covered by the warranty may only be carried out by service technicians authorized by us. Only use original spare parts.

9.1 Spare parts ordering

The spare parts can be obtained from the specialist dealer.

Send a copy of the spare parts drawing with the marked components to the specialist dealer and state the following:

- O Item number
- Designation of device
- O Date of manufacture
- O Item numbers of the components and, if applicable, the corresponding spare part drawing number
- Quantity
- O Desired shipping method (post, freight, sea, air, express)
- Shipping address

Spare parts orders without the above information cannot be considered. If the shipping method is not specified, shipping shall be at the discretion of the supplier.

Information on the appliance type, article number and year of manufacture can be found on the rating plate attached to compressor .

Example

The pressure switch for the compressor AIRBOY 131 OF E must be ordered.

The pressure switch has the number 180 in spare parts drawing 1.

When ordering spare parts, send a copy of the spare parts drawing (1) with the marked component (pressure switch) and marked item number (180) to the authorized dealer and provide the following information:

O Item number 2001225

Model designation
 AIRBOY 131 OF E

O Item number 180



9.2 Spare parts drawings

9.2.1 Spare parts drawing 1: AIRBOY 131 OF E

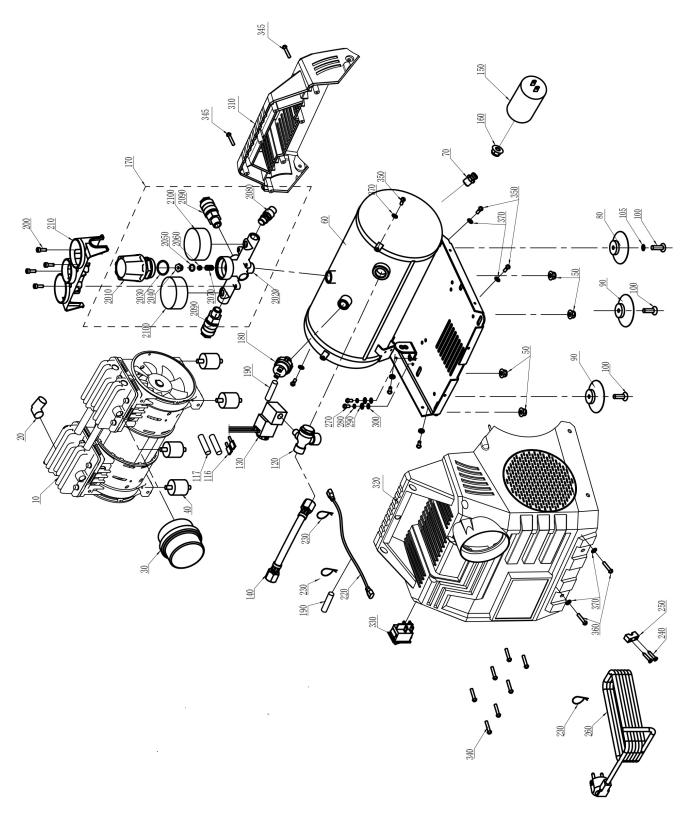


Fig.9-1: Spare parts drawing 1 - AIRBOY 131 OF E



9.2.2 Spare parts drawing 2: AIRBOY 131 OF E

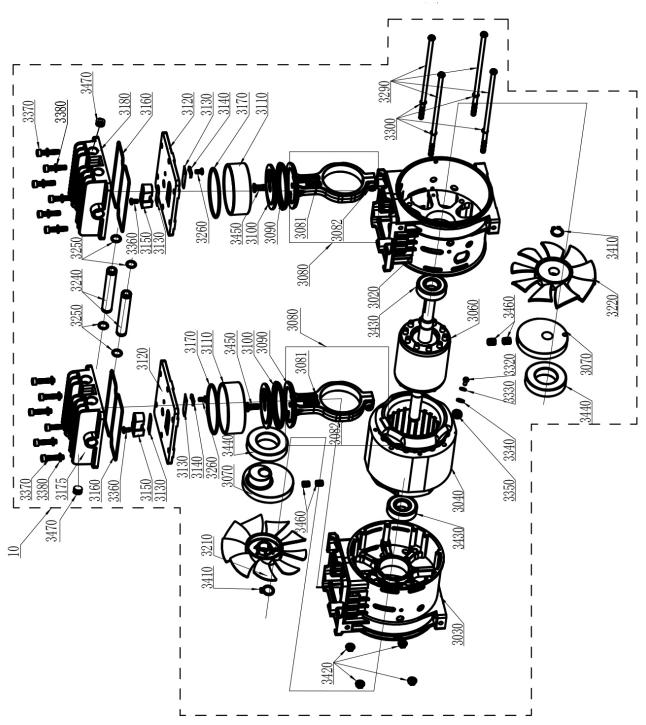


Fig.9-2: Spare parts drawing 2 - AIRBOY 131 OF E



Spare parts list AIRBOY 131 OF E

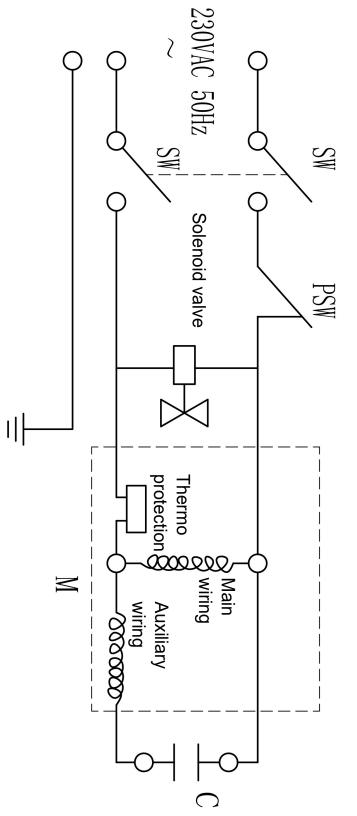
Pos.	Designation	Qty.		Pos.	Designation	Qty.
10	Compressor	1		70	Drain valve	1
3020	Crankcase right	1		80	Shock absorber	1
3030	Crankcase left	1		90	Shock absorber	2
3040	Stator	1		100	Hexagon bolt	3
3060	Rotor	1		105	Washer	1
3070	Eccentric	2		116	Connection terminal	
3080	Connecting rod	2		117	Shrink tubing	
3082	Screw	1		120	Non-return valve	1
3090	Piston ring			130	Solenoid valve	1
3100	Piston cover	2		140	Flexible hoses	1
3110	Cylinder	2		150	Capacitor	1
3120	Valve plate	2		160	Flange lock nut	1
3130	Inlet valve blade	24		170	Device components	1
3140	Inlet valve cover	2		2010	Air regulator assembly	1
3150	Exhaust valve cover	2		2020	Air distribution box	1
3160	Sealing ring	2		2030	O-ring	1
3170	Sealing ring	2		2040	Regulator pressure cap	1
3180	Cylinder cover	2		2050	O-ring	1
3210	Fan A	1		2060	Controller cores	1
3220	Fan B	1		2070	Regulator valve spring	1
3240	Feed pipe	2		2080	Safety valve	1
3250	Sealing ring	4		2090	Quick coupling	2
3260	Tap screw	2		2100	Pressure gauge	2
3290	Hexagon bolt	4		180	Pressure switch	1
3300	Vibrating disk	4		190	Fiberglass pipe	2
3320	Flat-head screws with cross recess	1	1	200	Tap screw	4
3330	Vibrating disk	1		210	Pressure gauge panel	1
3340	Washer	1		220	Cable line	1
3350	Washer	1		230	Cable tie	3
3360	Tap screw	2		240	Flat-head screws with cross recess	2
3370	Hexagon bolt	12		250	Mains cable clamp	1
3380	Washer	12		260	Mains cable	1
3410	Shaft retaining rings	2		270	Tap screw	2
3420	Flange lock nut	4		280	Vibrating disk	2



Pos.	Designation	Qty.		Pos.	Designation	Qty.
3430	Warehouse	2		290	Washer	2
3440	Warehouse	2		300	Carpet pad	2
3450	Countersunk head screws with hexagon socket	2		310	Front panel	1
3460	Hexagon socket grub screws with concave end	4		320	Rear cover	1
3470	Screw plug	2		330	Mains switch	1
20	Elbow	1		340	Tap screw	7
30	Intake filter	1		350	Tap screw	6
40	Carpet pad	4		360	Tap screw	2
50	Flange lock nut	4		370	Washer	8
60	Container	1	Ī		•	•



10 Electrical circuit diagram



SW: Mains switch PSW: Pressure switch

C: Capacitor M: Motor

Fig.10-1: Electrical circuit diagram



11 EU Declaration of Conformity

For the following products

Manufacturer / distributor: AIRCRAFT Kompressorenbau und Maschinenhandel GmbH

Gewerbestrasse East 6 A-4921 Hohenzell

Product group:

Compressed air technology

Type designation: Piston Compressor Item number

Product description: * ☐ AIRBOY 131 OF E 2001225

Serial number: *

Year of manufacture: * 20____

complies with the relevant essential health and safety requirements of the Machinery Directive 2006/42/EC due to its design and construction, as well as in the version placed on the market by us.

With regard to pressure hazards, the relevant requirements of Directive 2014/68/EU are complied with.

Applicable EU directives: 2014/30/EU EMC Directive

2011/65/EU RoHS Directive 2000/14/EC Outdoor Directive 2012/19/EU WEEE Directive

The following harmonized standards were applied:

DIN EN 1012-1:2011-02 Compressors and vacuum pumps - Safety requirements-

Part 1: Compressors

DIN EN 62841-1:2023-03 Electric motor-operated hand-held tools, transportable tools and lawn and

garden machinery - Safety - Part 1: General requirements

DIN EN 60204-1:2019-06 Safety of machinery - Electrical equipment of machines - Part 1: General

requirements

DIN EN IEC 55014-1:2022-12 Electromagnetic compatibility - Requirements for household appliances,

Power tools and similar electrical appliances - Part 1: Interference emission

DIN EN IEC 55014-2:2022-10 Electromagnetic compatibility - Requirements for household appliances, electric

tools and similar electrical appliances - Part 2: Interference immunity - product

family standard

DIN EN IEC 61000-3-2:2019-12 EMC - Part 3-2: Limit values - Limit values for harmonic currents

(Device input current ≤ 16 A per conductor)

DIN EN 61000-3-3:2020-07 EMC - Part 3-3: Limit values - Limitation of voltage changes,

Voltage fluctuations and flicker in public low-voltage systems

Supply networks for devices with a rated current <= 16 A per conductor,

that are not subject to special connection conditions

Name and address of the person authorized to compile the technical documentation: Klaus Hütter, Gewerbestraße Ost 6, A-4921 Hohenzell

Klaus Hütter (Managing Director) Hohenzell, 05.06.2023 Kilian Stürmer (Managing Director) Hallstadt, 05.06.2023

^{*} fill in these fields using the information on the rating plate



12 Appendix

12.1 Copyright

The contents of this manual are protected by copyright and are the sole property of Aircraft Kompressoren und Maschinenhandel GmbH. Their use is permitted within the scope of the use of compressor.

Any other use is not permitted without the written permission of the manufacturer.

Distribution and reproduction of this document, utilization and communication of its contents are prohibited unless expressly permitted.

Infringements will result in compensation for damages.

We register trademark, patent and design rights to protect our products, insofar as this is possible in individual cases.

We strongly oppose any infringement of our intellectual property.

We reserve the right to make technical changes at any time.

12.2 Storage

WARNING!

Incorrect and improper storage can lead to electrical and mechanical components are damaged and destroyed.



Only store the packed or already unpacked parts under the intended environmental conditions.

Ask your specialist dealer if the appliance and accessories need to be stored for longer than three months and under ambient conditions other than those specified.

12.3 Disposal instructions / recycling options:

Please dispose of your Piston Compressor in an environmentally friendly manner by disposing of waste properly and not in the environment.

Please do not simply throw away the packaging and later the used Piston Compressor, but dispose of both in accordance with the guidelines issued by your local authority or waste disposal company.

12.3.1 Decommissioning

CAUTION!

Disused appliances must be taken out of service immediately in a professional manner in order to prevent



Avoid misuse and endangering the environment or people.

- O Remove batteries and rechargeable batteries, if present.
- O If necessary, disassemble the cutting device into manageable and usable assemblies and components.
- O Dispose of the appliance components in the appropriate disposal channels.

12.3.2 Disposal of new appliance packaging

All packaging materials and packaging aids used in the appliance are recyclable and must always be recycled.

The packaging wood can be disposed of or recycled.

Cardboard packaging components can be shredded and sent for waste paper collection.

The films are made of polyethylene (PE) or the padding parts are made of polystyrene (PS). These materials can be reused after processing if they are passed on to a collection point for recyclable materials or to the waste disposal company responsible for you.

Only pass on the packaging material sorted by type so that it can be recycled directly.



12.3.3 Disposal of the old appliance

INFORMATION

In your own interest and in the interest of the environment, please ensure that all components of the appliance are only disposed of via the designated and approved channels.



Please note that electrical appliances contain a large number of recyclable materials and components that are harmful to the environment. Help to ensure that these components are disposed of separately and properly. If in doubt, please contact your municipal waste disposal service. If necessary, the help of a specialized waste disposal company should be used for processing.

12.3.4 Disposal of electrical and electronic components

Please ensure that the electrical components are disposed of correctly and in accordance with legal regulations.

The appliance contains electrical and electronic components and must not be disposed of as household waste. In accordance with the European Directive on Waste Electrical and Electronic Equipment and its transposition into national law, used power tools and electrical appliances and machines must be collected separately and recycled in an environmentally friendly manner.

As the operator, you should obtain information about the authorized collection and disposal system that applies to you.

Please ensure that the batteries and/or rechargeable batteries are disposed of correctly and in accordance with legal regulations. Please only dispose of discharged batteries in the collection boxes at retailers or municipal waste disposal companies.

12.4 Disposal via municipal collection points

Disposal of used electrical and electronic devices

(To be used in the countries of the European Union and other European countries with a separate collection system for these appliances).



The symbol on the product or its packaging indicates that this product is not to be treated as normal household waste, but must be taken to a collection point for the recycling of electrical and electronic equipment.

By contributing to the correct disposal of this product, you are protecting the environment and the health of your fellow human beings. The environment and health are endangered by incorrect disposal. Material recycling helps to reduce the consumption of raw materials. For more information on recycling this product, please contact your local authority, municipal waste disposal service or the store where you purchased the product.

13 Product monitoring

We are obliged to monitor our products even after delivery.

Please let us know everything that is of interest to us:

- O Changed setting data.
- O Experiences with the compressorthat are important for other users.
- Recurring faults.

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