

Instruction Manual

___ Compressor

____ AIRBOY SILENCE 116 OF E





Imprint

Produkt identification

Compressor Item number
AIRBOY SILENCE 116 OF E 2001250

Manufacturer

AIRCRAFT

Kompressorenbau und Maschinenhandel GmbH Gewerbestraße Ost 6 A-4921 Hohenzell

Phone: 0043 (0) 7752 70 929 - 0 Fax: 0043 (0) 7752 70 929 - 99

E-Mail: info@aircraft.at Internet: www.aircraft.at

Sales Germany

AIRCRAFT - Stürmer Maschinen GmbH Dr.-Robert-Pfleger-Straße 26 D-96103 Hallstadt/Bamberg

Fax: 0049 (0) 951 - 96555-55

E-Mail: info@aircraft-kompressoren.de
www.aircraft-kompressoren.com

Indications regarding the operating instructions

Original operating instructions according to DIN EN ISO 20607: 2019

Edition: 25.01.2022 Version: 1.03 Language: English Author: ES/MS

Indications regarding the copyright

Copyright @ 2022 AIRCRAFT Kompressorenbau und Maschinenhandel GmbH, Hohenzell, Austria.

Subject to technical modifications and error.

Contents

1.1 Copyright 3 1.2 Customer service 3 1.3 Limitation of liability 3 2 Safety 4 2.1 Symbol explanation 4 2.2 Responsibility of the operator 4 2.3 Personnel requirements 5 2.4 Personal protective equipment 5 2.5 General safety information 5 2.6 Checking the operational safety 6 2.7 Safety markings on the compressor 6 2.8 Safety devices 7 2.9 Safety data sheets 7 3 Intended Use 7 3.1 Reasonably foreseeable misuse 7 3.2 Residual risks 8 4 Technical Data 8 4.1 Table 8 4.2 Type plate 8 5 Transport, Packaging and Storage 8 5.1 Delivery and Transport 8 5.2 Packaging 8 5.3 Storage 8 6 Description of the device 9 7 Operation 9 7.1 Assembly and installation 11 7.2 Pressure switch setting 12 7.
2 Safety
2 Safety
2.1 Symbol explanation 4 2.2 Responsibility of the operator 4 2.3 Personnel requirements 5 2.4 Personal protective equipment 5 2.5 General safety information 5 2.6 Checking the operational safety 6 2.7 Safety markings on the compressor 6 2.8 Safety devices 7 2.9 Safety data sheets 7 3 Intended Use 7 3.1 Reasonably foreseeable misuse 7 3.2 Residual risks 8 4 Technical Data 8 4.1 Table 8 4.2 Type plate 8 5 Transport, Packaging and Storage 8 5.1 Delivery and Transport 8 5.2 Packaging 8 5.3 Storage 8 6 Description of the device 9 7 Operation 9 7.1 Assembly and installation 11 7.2 Electrical connection 12 7.5 Pressure switch setting 12 7.6 Switch off 13 8 Maintenance, care and repair 13 8.1 Cleaning 13
2.2 Responsibility of the operator 4 2.3 Personnel requirements 5 2.4 Personal protective equipment 5 2.5 General safety information 6 2.6 Checking the operational safety 6 2.7 Safety markings on the compressor 6 2.8 Safety devices 7 2.9 Safety data sheets 7 3 Intended Use 7 3.1 Reasonably foreseeable misuse 7 3.2 Residual risks 8 4 Technical Data 8 4.1 Table 8 4.2 Type plate 8 5 Transport, Packaging and Storage 8 5.1 Delivery and Transport 8 5.2 Packaging 8 5.3 Storage 8 6 Description of the device 9 7 Operation 9 7.1 Assembly and installation 11 7.2 Electrical connection 12 7.3 Switch on 12 7.5 Pressure switch setting 12 7.6 Switch off 13 8 Maintenance, care and repair 13 8.1 Cleaning 13
2.3 Personnel requirements. 5 2.4 Personal protective equipment 5 2.5 General safety information. 5 2.6 Checking the operational safety 6 2.7 Safety markings on the compressor 6 2.8 Safety devices 7 2.9 Safety data sheets 7 3 Intended Use 7 3.1 Reasonably foreseeable misuse 7 3.2 Residual risks 8 4 Technical Data 8 4.1 Table 8 4.2 Type plate 8 5 Transport, Packaging and Storage 8 5.1 Delivery and Transport 8 5.2 Packaging 8 5.3 Storage 8 6 Description of the device 9 7 Operation 9 7.1 Assembly and installation 11 7.2 Electrical connection 12 7.3 Switch on 12 7.5 Pressure switch setting 12 7.6 Switch off 13 8 Maintenance, care and repair 13 8.1 Cleaning 13 8.2 Maintenance 13 8.3 Funct
2.4 Personal protective equipment 5 2.5 General safety information 5 2.6 Checking the operational safety 6 2.7 Safety markings on the compressor 6 2.8 Safety devices 7 2.9 Safety data sheets 7 3 Intended Use 7 3.1 Reasonably foreseeable misuse 7 3.2 Residual risks 8 4 Technical Data 8 4.1 Table 8 4.2 Type plate 8 5 Transport, Packaging and Storage 8 5.1 Delivery and Transport 8 5.2 Packaging 8 5.3 Storage 8 6 Description of the device 9 7 Operation 9 7.1 Assembly and installation 11 7.2 Electrical connection 12 7.3 Switch on 12 7.5 Pressure switch setting 12 7.6 Switch off 13 8 Maintenance, care and repair 13 8.1 Cleaning 13 8.2 Maintenance 13 8.3 Function test of the safety valve 14 <td< td=""></td<>
2.5 General safety information 5 2.6 Checking the operational safety 6 2.7 Safety markings on the compressor 6 2.8 Safety devices 7 2.9 Safety data sheets 7 3.1 Reasonably foreseeable misuse 7 3.2 Residual risks 8 4 Technical Data 8 4.1 Table 8 4.2 Type plate 8 5.1 Delivery and Transport 8 5.2 Packaging 8 5.3 Storage 8 6 Description of the device 9 7 Operation 9 7.1 Assembly and installation 11 7.2 Electrical connection 12 7.3 Switch on 12 7.5 Pressure switch setting 12 7.6 Switch off 13 8 Maintenance, care and repair 13 8.1 Cleaning 13 8.2 Maintenance 13 8.3 Function test of the safety valve 14 8.4 Repair 14 8.5 Information about technical support 14 9 Troubleshooting 15 10 Disposal
2.6 Checking the operational safety 6 2.7 Safety markings on the compressor 6 2.8 Safety devices 7 2.9 Safety data sheets 7 3.1 Reasonably foreseeable misuse 7 3.2 Residual risks 8 4 Technical Data 8 4.1 Table 8 4.2 Type plate 8 5.1 Delivery and Transport 8 5.2 Packaging 8 5.3 Storage 8 6 Description of the device 9 7 Operation 9 7.1 Assembly and installation 11 7.2 Electrical connection 12 7.3 Switch on 12 7.5 Pressure switch setting 12 7.6 Switch off 13 8 Maintenance, care and repair 13 8.1 Cleaning 13 8.2 Maintenance 13 8.3 Function test of the safety valve 14 8.4 Repair 14 8.5 Information about technical support 14 9 Troubleshooting 15 10 Disposal, Recycling of old equipment 15 1
2.7 Safety markings on the compressor 6 2.8 Safety devices 7 2.9 Safety data sheets 7 3 Intended Use 7 3.1 Reasonably foreseeable misuse 7 3.2 Residual risks 8 4 Technical Data 8 4.1 Table 8 4.2 Type plate 8 5.1 Delivery and Transport 8 5.2 Packaging 8 5.3 Storage 8 6 Description of the device 9 7 Operation 9 7.1 Assembly and installation 11 7.2 Electrical connection 12 7.3 Switch on 12 7.5 Pressure switch setting 12 7.6 Switch off 13 8 Maintenance, care and repair 13 8.1 Cleaning 13 8.2 Maintenance 13 8.3 Function test of the safety valve 14 8.4 Repair 14 8.5 Information about technical support 14 9 Troubleshooting 15 10 Disposal, Recycling of old equipment 15 10.2 Disposal of elect
2.8 Safety devices 7 2.9 Safety data sheets 7 3 Intended Use 7 3.1 Reasonably foreseeable misuse 7 3.2 Residual risks 8 4 Technical Data 8 4.1 Table 8 4.2 Type plate 8 5 Transport, Packaging and Storage 8 5.1 Delivery and Transport 8 5.2 Packaging 8 5.3 Storage 8 6 Description of the device 9 7 Operation 9 7.1 Assembly and installation 11 7.2 Electrical connection 12 7.3 Switch on 12 7.4 Adjustment of working pressure 12 7.5 Pressure switch setting 12 7.6 Switch off 13 8 Maintenance, care and repair 13 8.1 Cleaning 13 8.2 Maintenance 13 8.3 Function test of the safety valve 14 8.4 Repair 14 8.5 Information about technical support 14 9 Troubleshooting 15 10 Disposal, Recycling of old
2.9 Safety data sheets 7 3 Intended Use 7 3.1 Reasonably foreseeable misuse 7 3.2 Residual risks 8 4 Technical Data 8 4.1 Table 8 4.2 Type plate 8 5 Transport, Packaging and Storage 8 5.1 Delivery and Transport 8 5.2 Packaging 8 5.3 Storage 8 6 Description of the device 9 7 Operation 9 7.1 Assembly and installation 11 7.2 Electrical connection 12 7.3 Switch on 12 7.4 Adjustment of working pressure 12 7.5 Pressure switch setting 12 7.6 Switch off 13 8 Maintenance, care and repair 13 8.1 Cleaning 13 8.2 Maintenance 13 8.3 Function test of the safety valve 14 8.4 Repair 14 8.5 Information about technical support 14 9 Troubleshooting 15 10 Disposal, Recycling of old equipment 15 10.2 Dis
3 Intended Use 7 3.1 Reasonably foreseeable misuse 7 3.2 Residual risks 8 4 Technical Data 8 4.1 Table 8 4.2 Type plate 8 5 Transport, Packaging and Storage 8 5.1 Delivery and Transport 8 5.2 Packaging 8 5.3 Storage 8 6 Description of the device 9 7 Operation 9 7.1 Assembly and installation 11 7.2 Electrical connection 12 7.3 Switch on 12 7.4 Adjustment of working pressure 12 7.5 Pressure switch setting 12 7.6 Switch off 13 8 Maintenance, care and repair 13 8.1 Cleaning 13 8.2 Maintenance 13 8.3 Function test of the safety valve 14 8.4 Repair 14 8.5 Information about technical support 14 9 Troubleshooting 15 10 Disposal, Recycling of old equipment 15 10.1 Decommission 15 10.2 Disposa
3.1 Reasonably foreseeable misuse
3.2 Residual risks 8 4 Technical Data 8 4.1 Table 8 4.2 Type plate 8 5 Transport, Packaging and Storage 8 5.1 Delivery and Transport 8 5.2 Packaging 8 5.3 Storage 8 6 Description of the device 9 7 Operation 9 7.1 Assembly and installation 11 7.2 Electrical connection 12 7.3 Switch on 12 7.4 Adjustment of working pressure 12 7.5 Pressure switch setting 12 7.6 Switch off 13 8 Maintenance, care and repair 13 8.1 Cleaning 13 8.2 Maintenance 13 8.3 Function test of the safety valve 14 8.4 Repair 14 8.5 Information about technical support 14 9 Troubleshooting 15 10 Disposal, Recycling of old equipment 15 10.1 Decommission 15 10.2 Disposal of electrical equipment 15
4 Technical Data
4.1 Table
4.2 Type plate 8 5 Transport, Packaging and Storage 8 5.1 Delivery and Transport 8 5.2 Packaging 8 5.3 Storage 8 6 Description of the device 9 7 Operation 9 7.1 Assembly and installation 11 7.2 Electrical connection 12 7.3 Switch on 12 7.4 Adjustment of working pressure 12 7.5 Pressure switch setting 12 7.6 Switch off 13 8 Maintenance, care and repair 13 8.1 Cleaning 13 8.2 Maintenance 13 8.3 Function test of the safety valve 14 8.4 Repair 14 8.5 Information about technical support 14 9 Troubleshooting 15 10 Disposal, Recycling of old equipment 15 10.1 Decommission 15 10.2 Disposal of electrical equipment 15
5 Transport, Packaging and Storage
5.1 Delivery and Transport 8 5.2 Packaging 8 5.3 Storage 8 6 Description of the device 9 7 Operation 9 7.1 Assembly and installation 11 7.2 Electrical connection 12 7.3 Switch on 12 7.4 Adjustment of working pressure 12 7.5 Pressure switch setting 12 7.6 Switch off 13 8 Maintenance, care and repair 13 8.1 Cleaning 13 8.2 Maintenance 13 8.3 Function test of the safety valve 14 8.4 Repair 14 8.5 Information about technical support 14 9 Troubleshooting 15 10 Disposal, Recycling of old equipment 15 10.1 Decommission 15 10.2 Disposal of electrical equipment 15
5.2 Packaging 8 5.3 Storage 8 6 Description of the device 9 7 Operation 9 7.1 Assembly and installation 11 7.2 Electrical connection 12 7.3 Switch on 12 7.4 Adjustment of working pressure 12 7.5 Pressure switch setting 12 7.6 Switch off 13 8 Maintenance, care and repair 13 8.1 Cleaning 13 8.2 Maintenance 13 8.3 Function test of the safety valve 14 8.4 Repair 14 8.5 Information about technical support 14 9 Troubleshooting 15 10 Disposal, Recycling of old equipment 15 10.1 Decommission 15 10.2 Disposal of electrical equipment 15
5.3 Storage
6 Description of the device 97 Operation 97.1 Assembly and installation 117.2 Electrical connection 127.3 Switch on 127.4 Adjustment of working pressure 127.5 Pressure switch setting 127.6 Switch off 138 Maintenance, care and repair 138.1 Cleaning 138.2 Maintenance 138.3 Function test of the safety valve 148.4 Repair 148.5 Information about technical support 149 Troubleshooting 150 Disposal, Recycling of old equipment 1510.1 Decommission 1510.2 Disposal of electrical equipment 15
7 Operation
7.1 Assembly and installation
7.2 Electrical connection
7.3 Switch on
7.4 Adjustment of working pressure
7.5 Pressure switch setting
7.6 Switch off 13 8 Maintenance, care and repair 13 8.1 Cleaning 13 8.2 Maintenance 13 8.3 Function test of the safety valve 14 8.4 Repair 14 8.5 Information about technical support 14 9 Troubleshooting 15 10 Disposal, Recycling of old equipment 15 10.1 Decommission 15 10.2 Disposal of electrical equipment 15
8 Maintenance, care and repair
8.1 Cleaning
8.2 Maintenance
8.3 Function test of the safety valve
8.4 Repair
8.5 Information about technical support
9 Troubleshooting
10 Disposal, Recycling of old equipment. 15 10.1 Decommission
10.1 Decommission
10.2 Disposal of electrical equipment
10.4 Disposal of lubricants
11 Spare parts 16
11.1 Ordering spare parts
TILI OTUETING SPATE PARTS
11.2 Spare parts drawings 17



1 Introduction

You have made a good choice by purchasing the AIR-CRAFT compressor.

Read the operating instructions carefully before commissioning.

These are an important part of the compressor and must be kept in the vicinity of the compressor and accessible to every user.

It provides information on the proper commissioning, the intended use and the safe and efficient operation and maintenance of the compressor.

The operating manual informs you about the proper commissioning, the intended use as well as the safe and efficient operation and maintenance of the compressor. In addition, observe the local accident prevention regulations and general safety regulations for the area of application of the compressor.

Illustrations in these operating instructions are for basic understanding and may differ from the actual design.

1.1 Copyright

The contents of this instruction manual are protected by copyright.

Their use is permitted within the scope of the use of the compressor. Any other use is not permitted without the written consent of the manufacturer.

Passing on and copying of this document, exploitation and communication of its contents are prohibited unless expressly permitted. Violations will result in liability for damages.

We register trademark, patent and design rights to protect our products, insofar as this is possible in individual cases. We oppose emphatically oppose any infringement of our intellectual property.

1.2 Customer service

Please contact your dealer if you have questions on your compressor or if you need technical advice. They will help you with specialist information and expert advice.

Austria:

AIRCRAFT Kompressorenbau und Maschinenhandel GmbH Gewerbestraße Ost 6 A-4921 Hohenzell

Phone: ++43 (0) 7752 70 929-0 Fax: ++43 (0) 7752 70 929-99

Email: info@aircraft.at Internet: www.aircraft.at

Germany:

Stürmer Maschinen GmbH Dr.-Robert-Pfleger-Str. 26 D-96103 Hallstadt

Repair-Service:

Fax: 0049 (0) 951 96555-111

Email: service@stuermer-maschinen.de

Spare parts orders:

Fax: 0049 (0) 951 96555-119

Email: ersatzteile@stuermer-maschinen.de

We are always interested in valuable experience and knowledge gained from using the application, which then could be shared and be valuable to develop our products even further.

1.3 Limitation of liability

All information and notes in these operating instructions were summarised taking the applicable standards and rules, the state-of-the-art and our long-term knowledge and experiences into consideration.

In the following cases the manufacturer is not liable for damages:

- Non-observance of the operating instructions,
- Inappropriate use
- Use of non-professional and non-expert personnel,
- Unauthorised modifications
- Technical changes,
- Use of not allowed spare parts.

The actual scope of delivery may deviate from the explanations and presentations described here in case of special models, when using additional ordering options or due to latest technical modifications.

The obligations agreed in the delivery contract, the general terms and conditions as well as the delivery conditions of the manufacturer and the legal regulations at the time of the conclusion of the contract are applicable.



2 Safety

This paragraph will give you an overview of all important safety packages for the protection of the people using it well as for a safe and undisturbed operation. Other task-based safety notes are included in the individual chapters.

2.1 Symbol explanation

Safety instructions

The safety notes in these operating instructions are highlighted by symbols. The safety notes are introduced by signal words which express the concern of the risk.



DANGER!

This combination of symbol and signal words indicates an imminently dangerous situation which may lead to death or severe injuries if they are not avoided.

WARNING!

This combination of symbol and signal words indicates a possibly dangerous situation which may lead to death or severe injuries if they are not avoided.

CAUTION!

This combination of symbol and signal words indicates a possibly dangerous situation which may lead to minor or light injuries if they are not avoided.

ATTENTION!

This combination of symbol and signal word indicates a possibly dangerous situation that can lead to property and environmental damage if it is not avoided.



NOTE!

This combination of symbol and signal words indicates a possibly dangerous situation which may lead to property and environmental damages if they are not avoided.



Tips and recommendations

This symbol highlights useful tips and recommendations as well as information for an efficient and trouble-free operation.

It is necessary to observe the safety notes written in these operating instructions in order to reduce the risk of personal injuries and damages to property.

2.2 Responsibility of the operator

Operator

The operator is the person who operates the compressor himself for commercial or economic purposes or gives it to a third party for use or application and bears legal product responsibility during operation for the protection of the user, the personnel or third parties.

Operator obligations

If the compressor is used in the commercial sector, the operator of the compressor is subject to the legal obligations for work safety. For this reason, the safety instructions in this operating manual as well as the safety, accident prevention and environmental protection regulations applicable to the area of use of the compressor must be observed. The following applies in particular:

- The operator must inform himself about the applicable occupational health and safety regulations and, in a risk assessment, additionally determine the dangers resulting from the special working conditions at the place of use of the compressor. He must implement these in the form of operating instructions for the operation of the compressor.
- The operator must check, throughout the service life of the compressor, that the operating instructions he has made are in line with the current state of the regulations and, if necessary, adjust them.
- The operator must clearly regulate and determine the responsibilities for installation, operation, troubleshooting, maintenance and cleaning.
- The operator must ensure that all persons who handle the compressor have read and understood this manual. In addition, he must train the staff at regular intervals and inform them about the dangers.
- The operator must provide the personnel with the necessary protective equipment and bind the wearing of the required protective equipment.

Furthermore, the operator is responsible for ensuring that the compressor is always in perfect technical condition. Therefore, the following applies:

- The operator must ensure that the maintenance intervals described in this manual are observed.
- The operator must have all safety equipment regularly checked for functionality and completeness.



2.3 Personnel requirements

Qualifications

The different tasks described in this manual place different demands on the qualifications of the people who are entrusted with these tasks.



WARNING!

Danger due to insufficient qualification of persons!

Insufficiently qualified people can not assess the risks involved in handling the compressor and expose themselves and others to the risk of serious or fatal injuries.

- All work should only be carried out by qualified persons.
- Keep inadequately qualified persons out of the work area

Only persons who are expected to carry out this work reliably are permitted for all work. Persons whose reactivity z. As influenced by drugs, alcohol or drugs are not allowed.

This manual identifies the qualifications of the persons listed below for the different tasks:

Operator

The operator has been instructed in a briefing by the operator about the tasks assigned to him and possible dangers of improper behavior. The operator may only carry out tasks that go beyond normal operation if this is specified in this operating manual and the operator has expressly entrusted this to him.

Electrician

Due to their professional training, knowledge and experience as well as knowledge of the relevant standards and regulations, the electrician is in a position to carry out work on electrical systems and to independently recognize and avoid possible dangers. The electrician is specially trained for the work environment in which he works and knows the relevant standards and regulations.

Specialist staff

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

Manufacturer

Certain work may only be carried out by specialist personnel of the manufacturer. Other personnel are not authorized to carry out this work. To carry out the work, contact our customer service.

2.4 Personal protective equipment

The personal protective equipment serves to protect persons against impairments of safety and health while working. The staff has to wear personal protective equipment while performing different works on and with the compressor which are indicated in the individual paragraphs of these instructions.

The personal protective equipment is explained in the following paragraph:



Ear protection

The hearing protection protects the ears against damages of hearing due to noise.



Eye protection

The protective goggles protect the eyes against parts flying off and splashes of liquids.



Breathing protection

The dusk mask protects from coarse dust particles



Protective gloves

The protective gloves serve to protect the hands against sharp components as well as against friction, abrasions or deep injuries.



Safety boots

The safety boots protect the feet against crushes, falling parts and slipping over on slippery underground.



Protective clothes

The protective clothes are tight clothes of little tensile strength.

2.5 General safety information

- Observe the guidelines and accident prevention regulations of the employers' liability insurance association for handling compressors and pneumatic tools
- The compressor must not be operated in rain or in a damp or wet environment.





CAUTION! RISK OF INJURY

- Never direct compressed air at people or animals.
- When releasing the quick coupling, hold the end of the compressed air line to prevent it from being knocked away by the overpressure.
- Allow the compressor to cool down before starting any maintenance work.

2.6 Checking the operational safety



DANGER

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

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

The operator must have the testable individual components checked by an expert and/or "qualified person" at the prescribed intervals. The operating regulations for this may differ in the EU member states.

Regulations for compressed air tanks in Germany Inspection intervals

The listed inspection intervals are maximum values. These should be checked by the employer's risk assessment/evaluation. An overdraft period is not permitted. Only the period can be shortened.

The pressure liter product is dependent on the inspection intervals. For this purpose, the maximum permissible pressure (PS) must be multiplied by the pressure vessel volume (V).

Example:

Pressure vessel= 75l; max. permissible pressure= 13 bar 75 l x 13 bar = 975

Inspection	Inspection pe- riod	Testing organiza- tion
Before commissioning / installation	PS x V =200</td <td>Qualified person</td>	Qualified person
	with type exami- nation certificate	Qualified person
	PS x V =1000</td <td></td>	
	PS x V >/=200	Approved inspection body

Inspection	Inspection period	Testing organiza- tion
External inspection	Every year/or every 2 years PS x V = 1000</td <td>Qualified person</td>	Qualified person
Internal testing **	Every 5 years PS x V =1000</td <td>Qualified person</td>	Qualified person
	*Every 5 years PS x V >/=1000	Approved inspection body
Strength test**	Eyery 10 years PS x V =1000</td <td>Qualified person</td>	Qualified person
	*Eyery 10 years PS x V >/=1000	Approved inspection body

*The employer must inform the competent authority of the respective inspection intervals within 6 months of commissioning the plant (§ 15 BetrSichV).

**External tests may 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 for the strength test may be extended to 15 years if the external or internal test proves that the plant can be operated safely. The evidence shall be presented in the documentation of the risk assessment. Table according to BetrSichV (as of 29.03.2017).

2.7 Safety markings on the compressor

Safety symbols are attached to the compressor:











Fig. 1: Safety signs

Damaged or missing safety symbols on the compressor can lead to incorrect actions and material damage. The safety symbols attached to the compressor must not be removed.

The following must be observed:

The instructions of the safety marking on the compressor must be followed under all circumstances. If the safety marking fades or is damaged during the service life of the machine, new signs must be attached immediately.

As soon as the signs are not immediately recognisable and comprehensible, the compressor must be taken out of operation until the new signs are affixed.



2.8 Safety devices

Safety valve with ring nut





Fig. 2: Safety valve

The safety valve is located on the vessel.

It is set to the maximum permissible pressure in the pressure vessel.

If the maximum permissible pressure is exceeded, the safety valve opens automatically and releases air until the pressure is back within the permissible range.

After the safety valve is triggered, the operator must switch off the compressor and request a check by maintenance personnel.



ATTENTION!

The safety valve must not be adjusted!

Motor protection

The compressor is equipped with a motor protection which automatically switches off the compressor in case of overload. After a sufficient cooling phase, the compressor can be restarted.

2.9 Safety data sheets

You can obtain safety data sheets on hazardous goods 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.

3 Intended Use

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

Due to its transportable design, the compressor is suitable for use in both the private and commercial sectors.

The compressors Maschinentyp are piston compressors driven by an electric motor and connected to a compressed air storage tank; they are intended to be sold and operated in the EU region as well as in the geographical region of Europe.

Intended use also includes compliance with all the information in these instructions.

3.1 Reasonably foreseeable misuse

Any use beyond the intended use or use in a different way is considered misuse.

Possible misapplications can be:

- Installation of spare parts and use of accessories and equipment not approved by the manufacturer.
- Use of the compressor outside the performance limits specified in the chapter "Technical data".
- Use of the compressor without appropriate filtering in the food and medical sector, e.g. for filling breathing gas cylinders.
- Service work by untrained or unauthorised personnel.
- Use of the compressor in closed rooms without adequate ventilation.
- Non-observance of the information in these operating instructions or non-observance of the operating instructions for the compressed air tools used.
- Use of the compressor in areas where there are aggressive or flammable substances in the air (the piston compressor is not explosion-proof as standard).
- Operating the compressor without the protective devices provided.
- Failure to observe signs of wear and damage.

Misuse of the compressor can lead to dangerous situations

Stürmer Maschinen GmbH accepts no liability for constructive and technical modifications to the compressor.

Claims of any kind for damage due to improper use are excluded.



3.2 Residual risks

Even if all safety instructions are observed and the compressor is used according to the instructions, there are still residual risks, which are listed below:

- Heat build-up on components can cause burns and other injuries.
- Hearing damage during prolonged work on the machine if hearing protection is defective.
- Danger from electric current if improper connection cables or mains plugs are used.
- Risk of injury and material damage due to parts flying off or tool attachments breaking off.

4 Technical Data

4.1 Table

AIRBOY SILENCE 116 OF E		
Suction capacity ca.	105 l/min	
Filling capacity at 6 bar ca.	54 l/min	
Maximum pressure	8 bar	
Tank volumen	6 Liters	
Cylinders / Steps	2 /1	
Speed	1450 min-1	
Output power	0,75 kW	
Supply voltage	230 V / 50 Hz	
Weight	15,5 kg	
Dimensions (LxBxH) [mm]	384x348x354	
Sound power level L _W A *	79 dB(A)	
Drive transmission	Direct coupled	

^{*}Sound power level according to DIN EN ISO 3744 (RL 2000/14/EG)

4.2 Type plate

The type plate (Fig.2) shows the following information:

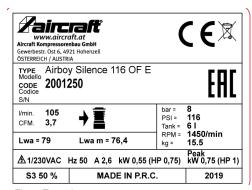


Fig. 3: Type plate

5 Transport, Packaging and Storage

5.1 Delivery and Transport

Delivery

Check the compressor after delivery for visible transport damage. If the compressor shows damage, it must be reported immediately to the transport company or the dealer.

Check that the compressor is complete and that the parts included are included. Transport, packaging and storage

Transport

The compressor may only be transported with the engine switched off and disconnected from the mains. The container must not be under pressure during transport.

5.2 Packaging

Lift the packaging for a possible move but at least during the warranty period.

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

Packaging components made of cardboard are crushed to give waste paper collection.

The foils are made of polyethylene (PE) and the upholstery parts made of polystyrene (PS). These substances must be handed over to a recycling center or to the responsible disposal company.

5.3 Storage

Thoroughly clean the compressor in a dry, clean and frost-free environment.

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

Never store the appliance in the tilted position!

Always store upright!



6 Description of the device



Fig. 4: AIRBOY SILENCE 116 OF E

- 1 Pressure switch (on/off switch) is an activation mechanism. If the switch is set to "ON", the motor and the pump compress the air until the tank pressure reaches the upper limit of the factory-set operating pressure. If the tank pressure drops below the factory set start-up pressure, the compressor automatically starts to compress air again.
- 2 Outlet pressure gauge.
- 3 Controller for adjusting the output pressure.

Clockwise rotation --> higher air pressure,

Counterclockwise rotation --> lower air pressure.

- 4 Drain valve for the condensation water in the tank.
- **5** Quick coupling for connecting the pneumatic tool..
- 6 Safety valve prevents excessive pressurisation of the tank. This valve is set at the factory and only functions when the tank pressure reaches the maximum value.



DANGER!

Do not attempt to adjust or remove this safety device. Any change to the setting could cause serious injury. If this equipment requires repair or maintenance, contact an authorized service facility.

- 7 Transport handle / carrying handle
- 8 Pressure gauge tank pressure
- 9 Foot

7 Operation



DANGER!

The compressor may only be operated within the permissible temperature range of +5°C to +40°C!



DANGER!

- Do not overload the compressor! Operate the compressor only in the power range specified in the technical data.
- There must always be a distance of at least 4 meters between the compressor and the working area.
- Only move and carry the compressor by the carrying handle.
- To switch off the compressor, use only the use the ON/OFF switch. Never switch off the unit by disconnecting the mains plug.
- Always unplug the power cord before transporting and disconnect the compressed air tools from the compressor.



WARNING! DANGER!

There is a risk of injury to the operator and others if they do not adhere to the following rules.

- The compressor and connected compressed air tools may only be operated by a trained and experienced person.
- The operator may not work while under the influence of alcohol, drugs or medication.
- The operator must not work when he is tired or suffering from concentration-impairing illnesses.
- The compressor may only be operated by one person. Other persons must keep away from the work area during operation.
- Never touch the cylinder head or the piping during or immediately after operation!
 Danger of burns!
- Never climb onto the compressor.
- -The safety devices as well as the protective covers must be in working order.
- Never leave the compressor running unattended.





WARNING!

Danger!

- Never direct the air stream from compressed air tools to persons, animals or your own body (protective goggles should be worn to protect against foreign objects that have been thrown up).
- Never aim the jet of liquids from connected pneumatic tools at people, animals or the compressor itself.
- Never place flammable objects or items of NylonR and fabric near the compressor and / or on the compressor.
- The use of the compressor is limited to the generation of compressed air. Never use the compressor for any other type of gas.



DANGER!

- The use of compressed air for the intended purposes (pumping up, pneumatic tools, painting, spraying only water-based cleaning agents, etc.) requires knowledge and compliance with the standards applicable to each application.
- The maximum pressure recommended by the manufacturer for the compressed air tools or accessories used must never be exceeded.
- Check that the air consumption and the maximum operating pressure of the compressed air tool to be used and the connecting lines to the compressor are the same as the pressure set on the pressure regulator and the amount of air generated by the compressor.
- The compressor may only be operated in a technically perfect condition. Any malfunctions must be eliminated immediately.
- The stated compressor capacity is guaranteed for operation at a height between 0 and 1000 meters above sea level.



WARNING!

Multiple switching on and off of the compressor in quick succession must be avoided at all costs, as this can cause damage to the motor!

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











The explanation of the pictograms can be found in chapter 2.4 "Personal protective equipment".

Motor protection



NOTE!

The compressor is designed for interval operation. For trouble-free operation, the duty cycle of 50 percent must not be exceeded.

For example, if you are painting for 10 minutes, the compressor must not run for longer than 5 minutes. Always match the amount of compressed air required by the tool or accessory to the amount of air provided by the compressor.

Do not keep the compressor running for more than 15 minutes.

In the event of overheating, the motor's thermal protection switch reacts and automatically switches off the power supply to the compressor. As soon as the normal temperature conditions are reached again, the motor restarts automatically. If the compressor no longer starts, contact an authorised service centre.



7.1 Assembly and installation

7.1.1 Requirements for the place of installation

- Dry, dust-free,
- Cool, well ventilated, frost-protected,
- Level, solid ground



NOTE!

Always place the compressor at least 50 cm away from any obstacle that could obstruct the air flow and thus the cooling.



DANGER!

- Secure the compressor against overturning and slipping.
- Ensure that controls and safety devices are easily accessible.
- The compressor should be installed close to the consumer.

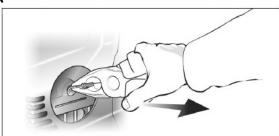
Install the compressor in a place where the size of the compressor allows the room temperature to be maintained at a maximum of 40°C while the compressor is in operation.

Only use the compressor on a firm, level surface.

7.1.2 Mounting the air filter

Step 1: emove the transport plug with a screwdriver or similar. (Fig. 5) and screw the air filter (Pos. I, Fig. 5B) to the unit.





В

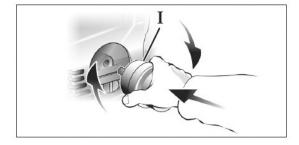


Fig. 5: Mounting the air filter

Step 2: If supplied, insert the small suction hose into the filter cover (Fig. 6).

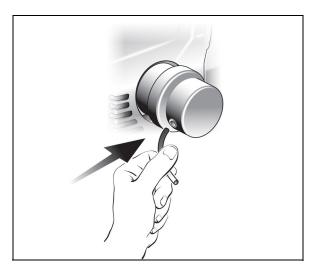


Fig. 6: Mounting the air filter

7.1.3 Mounting the Quick Coupling



NOTE!

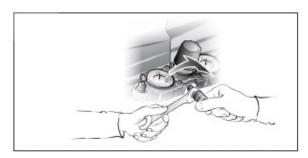
If the quick coupling is not supplied separately, it is already installed.

Screw the quick coupling for the compressed air acceptance to the outlet connection as shown in Figure 7.



DANGER!

Do not overtighten!



Wrench not included in the scope of delivery!



Fig. 7: Mounting the Quick Coupling



7.2 Electrical connection



ATTENTION!

At low temperatures below +5°C, motor start-up is endangered due to difficult running.



DANGER!

Danger of life due to electric current!

Contact with live components poses an immediate danger to life due to electric shock.

- Work on the electrical system should only be carried out by qualified electricians.
- Adjustment of the power supply to the guidelines valid in the respective country of use may only be carried out by a qualified electrician!
- Only operate the compressor in a dry environment. dry environment.
- The compressor should only be operated directly from a socket. If a cable drum is used nevertheless, the cross-section of the cable must correspond to the motor power consumption.
- There must be a minimum cross-section of 2.5 mm² for a cable length of 10 metres. The cable must be completely rolled off the drum because of the line resistance or voltage drop.
- The mains cable must be laid in such a way that it does not interfere during operation and cannot be damaged.

7.3 Switch on

- Step 1: Check that the mains voltage corresponds to the voltage rating indicated on the rating plate.

 The ON/OFF switch must be in the OFF position.
- Step 2: The compressor is equipped with a mains cable with a safety plug. Insert the mains plug into a socket that complies with the legal regulations.
- Step 3: Check that the containers are emptied and depressurised.
- Step 4: Start the compressor with the ON/OFF switch.

 To switch on, move the ON/OFF switch (Pos.1, Fig. 4) to position I.
- Step 5: If the compressor is plugged into a power source and the pressure switch is in the "ON" (I) position, the compressor will automatically start the work cycle.

7.4 Adjustment of working pressure



DANGER!

The maximum pressure of the connected tool must not be exceeded.

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.

When using pneumatic tools, always check the optimum application pressure of the accessory.

The working pressure can be adjusted with the pressure regulator (Pos. 3, Fig. 4) and displayed on the manometer (Pos. 2, Fig. 4).

The compressed air at the set pressure can be taken from the quick coupling (Pos. 5, Fig. 4).

7.5 Pressure switch setting

The pressure switch is factory set.

When the upper calibration value (set by the manufacturer in the test phase) is reached, the compressor switches off.

The compressor automatically starts up again as soon as the lower calibration value is reached by removing air.

The compressor works with this automatic cycle until it is switched off (ON / OFF) by the switch I / O (Pos.1, Fig. 4).



7.6 Switch off

Step 1: After completing the work, bring the pressure in the tank to zero. To do this, continue to operate the connected tool until the pressure has released.

Step 2: Turn off the compressor with the ON / OFF switch (position 0) and disconnect the power plug from the power outlet.

Step 3: Place a container under the condensate drain valve. Open the condensate drain valve (Pos. 4, Figs. 4 and 8) at the bottom of the pressure vessel to drain the pressure vessel.



ATTENTION!

The condensation must be drained from the container every day! If the condensation is not drained, the container may corrode. This limits its capacity and compromises safety.

Step 4: Tilt the compressor by the carrying handle until the drain valve is positioned at the lowest point on the container.

Step 5: Turn on the valve.

Step 6: Keep the compressor tilted until no more condensate escapes.

Step 4: Close the condensate drain valve.

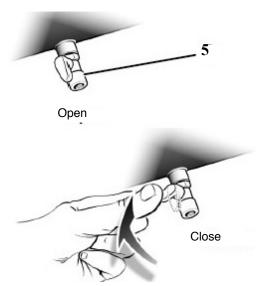


Fig 8: Drain valve

8 Maintenance, care and repair

8.1 Cleaning



DANGER!

Never clean the compressor with flammable liquids or solvents. The surface may peel off and result in consequential damage.

The mains plug must be disconnected from the socket!

Step 1: Before doing any cleaning, turn off the compressor, disconnect the power plug, and drain all air from the reservoir.Let the compressor cool down.

Step 2: Clean all plastic parts and painted surfaces with a soft, damp cloth and some neutral detergent.

Always keep the cooling fins clean and free.

8.2 Maintenance



DANGER!

All work on electrical and pneumatic systems may only be carried out by qualified personnel who have been trained to do so and are familiar with the risks involved.



NOTE!

Observe the check intervals for pressure vessels (see chapter "Checking operational safety").



DANGER!

Risk of death due to electric shock!

Contact with live components may result in fatal injury.

- Always disconnect the mains plug before starting cleaning and maintenance work.
- Connections and repairs to the electrical equipment may only be carried out by a qualified electrician.



ATTENTION!

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

Danger of burns!

Drain the compressed air completely. The container and the lines must not be under pressure.





ATTENTION!

After care, maintenance and repair work, check that all covers and protective devices have been properly fitted to the compressor and that there are no tools left inside the compressor or in its working area. If the guards are damaged, contact your dealer or customer service.

Daily:

Before starting any work, check the compressed air lines for damage and replace them if necessary.

Drainage of the container

Drain the condensate by opening the condensate drain valve located at the bottom of the pressure vessel. Close the condensate drain valve again as soon as only clean air, without condensation water emerges. Protective gloves must be worn for this job. It is recommended to use a flat vessel to catch the condensate (see chapter "Switch off").



DANGER!

Dispose of the condensation water in an environmentally friendly manner at an appropriate collection point.

Occasionally:

Thoroughly clean all components that have ribs or fins.

8.3 Function test of the safety valve

The safety valve must be operated regularly to ensure that it functions properly when required.

Safety valve with ring nut

Open the safety valve (Fig. 9) by turning the ring nut until it is completely loose.

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





Fig. 9: Safety valve with ring nut

After the safety valve has been triggered, the operator must switch off the compressor and request a check by maintenance personnel.

8.4 Repair



DANGER!

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 electricians or under the supervision and direction of a qualified electrician.

The company Aircraft Kompressoren assumes no liability and warranty for damage and malfunction as a result of non-compliance with this manual. Only use faultless and suitable tools, original spare parts or serial parts expressly approved by Aircraft Kompressoren for repairs.

8.5 Information about technical support

Repairs under warranty may only be performed by technicians authorized by us. Only use original spare parts.

For inquiries or orders, please always quote the TYPE DESIGNATION, the BYEAR OF MANUFACTURE and the ITEM NUMBER of your compressor. All information can be found on the TYPE PLATE, which is attached to the compressor.



9 Troubleshooting

Fault	Cause / Remedy
The compressor does not reach the cut-off pressure.	Seals on compressor leaking / Replace seals.
The compressor switches off.	No fault, the reservoir tank is full, the maximum pressure has been reached.
The compressor stops and resumes operation automatically after a few minutes.	Intervention of the thermal protection device due to overheating of the motor. / Clean air diffusers in the conveyor. Ventilate the room. Remove all causes of overheating.
After several attempts at commissioning, the compressor stops.	Intervention of the thermal protection device due to overheating of the motor (removal of the plug during operation, low supply voltage). / Press the on/off switch. Ventilate the room. Wait a few minutes for the compressor to restart automatically.
The pressure in the tank drops.	Check all connections and tighten if necessary. If the fault persists, contact customer service.
The compressor does not stop and the safety valve triggers and blows off air.	Irregular operation of the compressor / Pull out mains plug and contact customer service.

10 Disposal, Recycling of old equipment

In the interests of the environment, care must be taken to ensure that all components of the machine are disposed of in the proper and approved way.

10.1 Decommission

Disused devices must be taken out of service immediately in order to avoid later misuse and endangering the environment or people.

- Dispose of all environmentally hazardous fluids from the old device.
- If necessary, disassemble the device into manageable and usable assemblies and components.
- Supply the device components and operating materials to the designated disposal channels.

10.2 Disposal of electrical equipment

Electrical equipment contains a variety of recyclable materials and environmentally harmful components.

These components must be disposed of separately and properly. In case of doubt, contact the municipal waste disposal department.

If necessary, a specialist waste disposal company should be called upon to help with processing.

10.3 Disposal via municipal collection points

Disposal of used electrical and electronic equipment (to be applied in the countries of the European Union and other European countries with a separate collection system for this equipment).



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

and electronic equipment. By contributing to the correct disposal of this product, you protect the environment and the health of your fellow human beings. Environment and health are endangered by incorrect disposal. Material recycling helps to reduce the consumption of raw materials. For more information about recycling this product, contact your local community, municipal waste management company or the store where you purchased the product.

10.4 Disposal of lubricants

The disposal instructions for the lubricants used are provided by the lubricant manufacturer. If necessary, ask for the product-specific data sheets.



11 Spare parts



DANGER!

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

Dangers may result for the user and damages as well as malfunctions may be caused by using wrong or damaged spare parts.

- Only use original spare parts of the manufacturer or spare parts admitted by the manufacturer.
- Always contact the manufacturer in case of uncertainties.



Tips and recommendations

Using non-approved spare parts voids the manufacturer's warranty

The following drawings should help you in the event of service to identify necessary spare parts. If necessary, send a copy of the part drawing with the marked components to your dealer.

11.1 Ordering spare parts

The spare parts may be purchased with the authorised dealer or directly with the manufacturer. Please find the corresponding contact data in Chapter 1.2 Customer service.

Indicate the following basic information for requests or orders of spare parts:

- Type of device
- Item No.
- Position No.
- Year of construction:
- Quantity
- Required mode of dispatch (mail, freight, sea, air, express)
- Address of dispatch

Spare part orders which do not include the above indications may not be taken into consideration. If the indications regarding the mode of dispatch are missing, the product is dispatched at the discretion of the supplier.

You will find indications regarding the device type, item No. and year of construction on the type plate which is fixed on the compressor

Example:

The air filter for the Compressor AIRBOY Silence 116 OF-E must be ordered. The air filter has the number 023 in the spare parts drawing 1.

By ordering spare parts, send a copy of the spare parts drawing (1) with the marked part (air filter) and marked position number (023) to the dealer or spare parts department and provide the following information:

Device type: Compressor

AIRBOY SILENCE 116 OF E

Article number: 2001250

Drawing number: 1
Position number: 023

The following drawings should help you in case of service to identify necessary spare parts.



11.2 Spare parts drawings AIRBOY SILENCE 116 OF E

Spare parts drawing 1

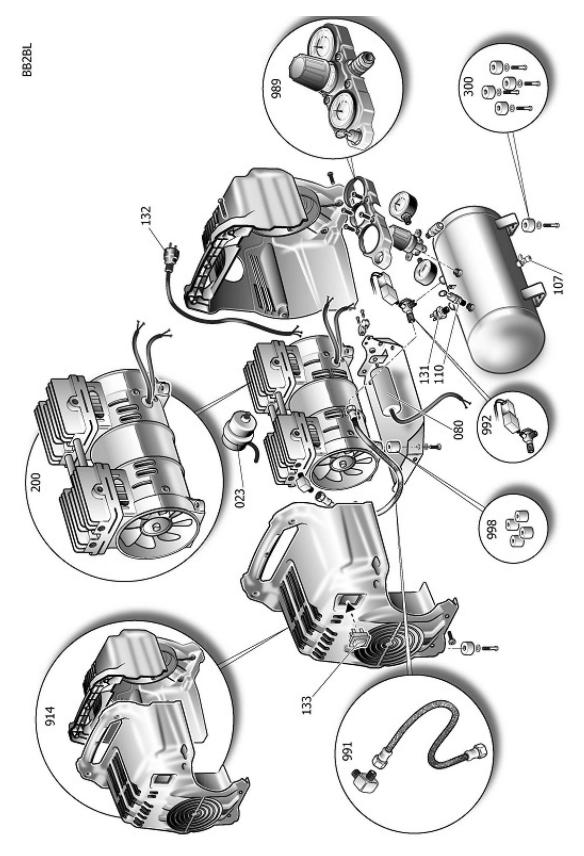


Fig. 10: Spare parts drawing 1 AIRBOY SILENCE 116 OF E



Spare parts drawing 2

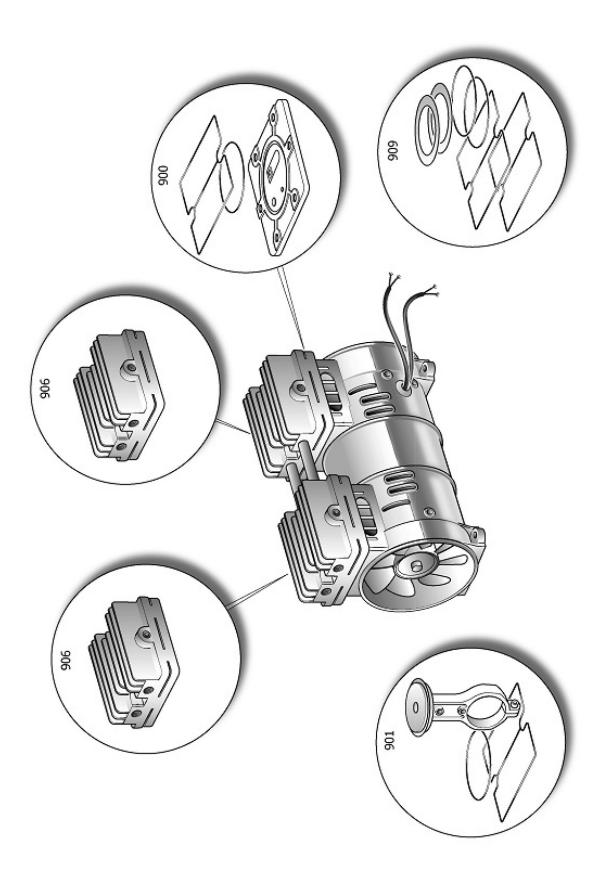


Fig. 11: Spare parts of pump assembly



12 EC - Declaration of Conformity

According to Machinery Directive 2006/42/EG Annex II 1.A

Manufacturer / distributor: AIRCRAFT Kompressorenbau GmbH

Gewerbestraße Ost 6 A-4921 Hohenzell

hereby declares that the following product

Product group: AIRCRAFT® Compressed air technology

Designation of the device: AIRBOY SILENCE 116 OF E

Item number: 2001250

Type of machine: Compressor

Serial number*:

Year of manufacture*: 20_____

complies with the relevant fundamental 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.

Relevant EU directives: 2014/30/EU EMC Directive

2000/14/EG Outdoor Directive 2011/65/EU RoHS Directive

*please fill in according to the information on the type plate.

The following harmonized standards were applied:

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

Part 1: Air compressors

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

General requirements

DIN EN 55014-1:2018-08 Electromagnetic compatibility - Requirements for household appliances, electric

tools and similar apparatus - Part 1: Emission

DIN EN 55014-2:2016-01 Electromagnetic compatibility - Requirements for household appliances, electric

tools and similar apparatus - Part 2: Immunity - Product family standard

DIN EN 61000-3-2:2019-12 Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic

current emissions (equipment input current <= 16 A per phase)

DIN EN 61000-3-3:2020-07 Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage

changes, voltage fluctuations and flicker in public low-voltage supply systems,

for equipment with rated current <= 16 A per phase and not subject to

conditional connection

Responsible for documentation: Klaus Hütter, Gewerbestraße Ost 6, A-4921 Hohenzell

Hohenzell, 12.05.2021 Hallstadt, 12.05.2021

Klaus Hütter Kilian Stürmer
Manager Manager



