

# Operating Instructions

\_\_\_\_\_ Compressor

\_\_\_\_\_ MOBILBOY 185 OF E



MOBILBOY 185 OF E

MOBILBOY 185 OF E

## Imprint

### Product identification

Piston Compressor	Item number
MOBILBOY 185 OF E	2001240

### Manufacturer

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

Telefon: 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  
Internet: www.aircraft-kompressoren.com

### Indications regarding the operating instructions

Original instructions  
Edition: 01.12.2022  
Version: 1.07  
Language: English  
Author: FL/ES

### Indications regarding the Copyright

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

Subject to technical modifications and error.

## Contents

<b>Imprint.....</b>	<b>2</b>
<b>Contents .....</b>	<b>2</b>
<b>1 Introduction .....</b>	<b>3</b>
1.1 Copyright .....	3
1.2 Customer service .....	3
1.3 Limitation of liability .....	3
<b>2 Safety .....</b>	<b>3</b>
2.1 Symbol explanation .....	4
2.2 Responsibility of the operator .....	4
2.3 Requirements to staff .....	5
2.4 Personal protective equipment .....	5
2.5 General safety notes .....	6
2.6 Verification of operational safety .....	6
2.7 Safety marking on the compressor .....	7
2.8 Safety data sheets .....	7
2.9 Safety devices .....	7
<b>3 Intended use .....</b>	<b>8</b>
3.1 Reasonably foreseeable misuse .....	8
3.2 Residual risks .....	8
<b>4 Technical Data .....</b>	<b>8</b>
4.1 Table .....	8
4.2 Type plate .....	9
<b>5 Transportation, packaging, storage .....</b>	<b>9</b>
5.1 Transport .....	9
5.2 Packaging .....	9
5.3 Storage .....	9
<b>6 Mounting and installation .....</b>	<b>9</b>
6.1 Setting up .....	9
6.2 Electrical connection .....	10
<b>7 Description of the device .....</b>	<b>10</b>
7.1 Scope of delivery .....	10
<b>8 Operation .....</b>	<b>11</b>
8.1 Switch on .....	11
8.2 Connection of accessories to the compressor .....	12
8.3 Connection blowgun .....	12
8.4 Adjustment of working pressure .....	12
8.5 Motor protection .....	13
<b>9 Maintenance, care and servicing/ repair .....</b>	<b>13</b>
9.1 Maintenance and care .....	13
9.2 Cleaning .....	14
9.3 Draining the condensate .....	14
9.4 Repair .....	14
9.5 Functional test of the safety valve .....	15
9.6 Troubleshooting .....	15
<b>10 Disposal, recycling of used devices .....</b>	<b>16</b>
10.1 Decommissioning .....	16
10.2 Disposal of lubricants .....	16
<b>11 Spare parts .....</b>	<b>16</b>
11.1 Ordering spare parts .....	16
11.2 Spare parts drawings .....	17
<b>12 EC Declaration of Conformity .....</b>	<b>19</b>

# 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 and must be kept near the compressor and accessible to every user.

The operating instructions inform 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.

The illustrations in these operating instructions serve the general comprehension and may deviate from the actual type.

## 1.1 Copyright

The contents of these instructions are copyright. Their application is admissible in the frame of the compressor utilisation. An application beyond the described application is not allowed without written approval of the manufacturer.

For the protection of our products, we shall register trademark, patent and design rights, as this is possible in individual cases. We strongly oppose any infringement of our intellectual property.

## 1.2 Customer service

Please contact your dealer if you have questions on your Kompressor 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

Telefon: 0043 (0) 7752 70 929-0

Fax: 0043 (0) 7752 70 929-99

E-Mail: [info@aircraft.at](mailto:info@aircraft.at)

Internet: [www.aircraft.at](http://www.aircraft.at)

### **Germany:**

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

### **Repair service:**

Fax: 0049 (0) 951 96555-111

E-Mail: [service@stuermer-maschinen.de](mailto:service@stuermer-maschinen.de)

### **Spare part orders:**

Fax: 0049 (0) 951 96555-119

E-Mail: [ersatzteile@stuermer-maschinen.de](mailto: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 untrained staff,
- 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.

#### **ATTENTION!**

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.

#### **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.



#### **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

### Of the operator

The operating company is the person who operates the compressor for business or commercial reasons by herself, or leaves it to a third party for use or application, and who bears the legal product responsibility for the protection of the user, the staff or for third parties.

### Obligations of the operating company

If the compressor is used for commercial purposes, the operating company of the compressor must comply with the legal working safety regulations. Therefore, the safety notes in this operating manual, as well as the safety, accident prevention and environment protection regulations applying for the area of application of the compressor must be met. The following applies in particular:

- The operating company must be informed about the applying industrial safety regulations and further analyse hazards resulting from the special working conditions at the place of use of the compressor. She must implement these in form of operating manuals for the operation of the compressor.
- During the entire lifetime of the compressor, the operating company must verify whether the operating manuals prepared by her correspond to the current status of the regulations, and must adapt these if necessary.
- The operating company must unambiguously regulate and determine the responsibilities for installation, operation, troubleshooting, maintenance and cleaning.
- The operating company must ensure that all persons who work with the compressor, have read and understood this manual. Furthermore she must instruct the staff in regular intervals and inform them about the hazards.
- The operator must provide the necessary protective equipment to the staff and order the use of the necessary protective equipment in a binding way.

Furthermore the operating company is responsible to keep the compressor always in a technically flawless state. Thus, the following applies:

- The operator must ensure that the maintenance intervals described in this manual are kept.
- The operator must have all safety devices checked regularly for their good working order and their integrity.

## 2.3 Requirements to staff

### Qualifications

The different tasks described in this manual represent different requirements to the qualification of the persons entrusted with these tasks.



#### **WARNING!**

#### **Danger in case of insufficient qualification of the staff!**

Insufficiently qualified persons cannot estimate the risks while using the compressor and expose themselves and others to the danger of severe or lethal injuries.

- Have all works only performed by qualified persons.
- Keep insufficiently qualified persons out of the working area.

Only persons reliable working procedures can be expected from, are allowed to perform all works. Persons the responsiveness of which is affected by e. g. drugs, alcohol or medication, are not allowed to work with the machine.

The qualifications of the personnel for the different tasks are mentioned below:

### Operator

The operator is instructed by the operating company about the assigned tasks and possible risks in case of improper behaviour. Any tasks which need to be performed beyond the operation in the standard mode must only be performed by the operator if it is indicated in these instructions and if the operating company expressly commissioned the operator.

### Electrical specialist

Due to his professional training, knowledge and experience as well as his knowledge of respective standards and regulations the electrical specialist is able to perform works on the electrical system and to recognise and avoid any possible dangers himself.

The electrical specialist is specially trained for the working environment in which he is working and knows the relevant standards and regulations.

### Specialist staff

Due to their professional training, knowledge and experience as well as their knowledge of relevant regulations the specialist staff is able to perform the assigned tasks and to recognise and avoid any possible dangers themselves.

### Manufacturer

Certain works may only be performed by specialist personnel of the manufacturer. Other personnel is not authorized to perform these works. Please contact our customer service for the execution of all arising work.

## 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:



#### **Use 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 dust 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 under-ground.



#### **Protective clothes**

The protective clothes are tight clothes of little tensile strength.

## 2.5 General safety notes

- Observe the guidelines and accident prevention regulations of the employers' liability insurance association for the handling of compressors and pneumatic tools.
- The compressor may only be used in a suitable environment (good ventilation and ambient temperatures of +5°C to +40°C) and never near dust, acids, vapours or explosive/flammable gases.
- Do not overload the compressor! Only operate the compressor in the power range specified in the technical data.
- For operation, the compressor must be placed on a stable and horizontal base.
- The compressor is suitable for use in dry rooms. It must not be used in areas where splash water is present.
- Never operate the compressor with wet hands.
- Never transport the compressor while the container is under pressure.
- Do not carry out any welding or mechanical work on the tank. In case of damage or corrosion, replace it completely.
- Never place flammable objects or objects made of nylon or fabric near and/or on the compressor.
- Never clean the compressor with flammable liquids or solvents.
- The use of the compressor is limited to the production of compressed air. The compressor must not be used to compress other types of gas.
- The extendable handle may only be used to move the compressor. Note that the compressor is never lifted or carried by the extendable handle.
- Only move and shift the compressor by the handle.
- Always disconnect the power cable and air hose from the air compressor before transport.
- Always keep a distance of at least 4 metres between the compressor and the work area.
- Never operate the compressor without all guards and covers in place and in working order.
- The red marking on the pressure gauge refers to the maximum operating pressure of the tank. It does not refer to the set pressure.
- During the assembly of a tool, it is essential to cut off the flow of escaping air.
- The use of compressed air for the intended purposes (pumping up, pneumatic tools, painting, washing with detergents on an exclusively aqueous basis, etc.) requires knowledge of and compliance with the standards applicable in each case.
- The maximum pressure recommended by the manufacturer of any attachment or accessory used with this compressor must never be exceeded.

- Check that the air consumption and maximum working pressure of the air tool to be used and of the connecting pipes (with the compressor) correspond to the pressure set on the pressure regulator and the amount of air produced by the compressor.
- When using with spraying accessories (e.g. paint spray gun): When filling the spraying accessory, keep your distance from the appliance and do not spray in the direction of the compressor.



### ATTENTION! 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 off by the overpressure.
- Allow the compressor to cool before beginning maintenance
- Never touch the cylinder head or piping during or immediately after operation (risk of burns)!

## 2.6 Verification of operational safety

The pressure tank of the compressor is submitted to inspection. The manufacturer submitted the pressure tank to an inspection according to the EC Directive 2014/29/EG in conjunction with the EC type examination according to article 10 as well as according to EN 286-1. A copy of this type examination certification and/or declaration of conformity is included in the scope of delivery of every compressor.

The operating company must have re-inspected the individual components to be inspected by an expert or by a "qualified person" in the prescribed intervals. The operating regulations for this may differ in the individual EC countries.



### ATTENTION!

Pursuant to §15 BetrSichV, a plant in need of monitoring may only be put into operation after the plant has been subjected to a pre-commissioning test. Likewise recurring inspections according to §16 BetrSichV are to be carried out. Such tests shall be carried out by an approved inspection body or a qualified person. Details can be found in the BetrSichV.

## Regulations for compressed air tanks in Germany

### Inspection periods

The given inspection periods are maximum values. They should be verified by the risk/safety assessment of the operating company. No delays are admissible for this. It is only possible to shorten the period.

The product of pressure and volume depends on the inspection periods. For this, the maximum admissible pressure (PS) must be multiplied with the pressure tank volume (V).

Example:

Pressure tank = 50 l ; max. admissible pressure = 10 bar  
50 l x 10 bar = 500.



Check	Inspection periods	Inspection organisation
Prior to commissioning/ positioning	PS xV $\leq$ 200	Qualified person
	with type examination certificate PS xV $\leq$ 1000	Qualified person
	PS xV $>$ 200	Approved inspection agency
Exterior inspection**	Once a year/every two years PS x V $\leq$ 1000	Qualified person
Interior inspection**	Once every 5 years for PS xV $\leq$ 1000	Qualified person
	*Once every 5 years for PS xV $>$ 1000	Approved inspection agency
Strength test**	Once every 10 years PS xV $\leq$ 1000	Qualified person
	*Once every 10 years PS xV $>$ 1000	Approved inspection agency

\*The operating company must communicate the relevant inspection periods to the responsible authority within 6 months after commissioning the installation (par. 15 BetrSichV).

\*\* External tests can be omitted: a) for pressure tanks according to point 2.2 (letter a), unless they are fire-heated, heated exhaust gas or electrically heated, and b) in the case of simple pressure tanks according to BetrSichV point 2.2 letter d. The deadline of the strength test may be extended to 15 years if it is shown in the external or internal test that the machine can be safely operated. The confirmation must be shown in the documentation of the risk assessment. Table according to BetrSichV (State: 2017-03-29).

## 2.7 Safety marking on the compressor

Damaged or missing safety symbols on the compressor may lead to errors and material damages. The safety symbols applied to the compressor must not be removed. Damaged safety symbols must be replaced immediately.

### Please observe the following points:

The instructions of the safety symbols at the compressor must be observed under all circumstances. Attach new labels immediately if the safety symbols fade out or become damaged during the lifetime of the compressor. The compressor must be put out of operation from the moment when the labels are unable to be recognized and understood at first glance, until new labels are attached.

The following safety symbols are attached to the compressor:

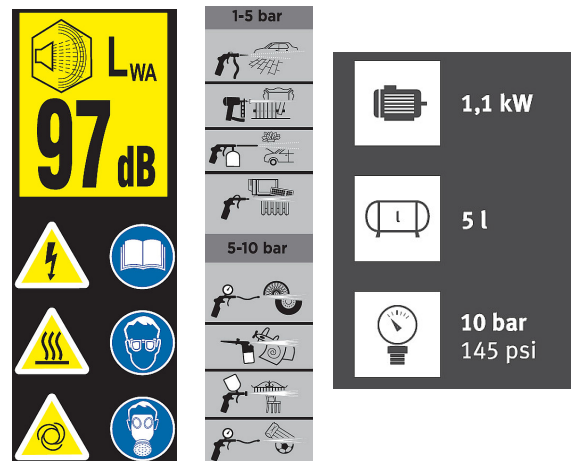


Fig. 1: Safety symbols on the compressor

## 2.8 Safety data sheets

- You can obtain safety data sheets on hazardous materials from your specialist dealer or by calling  
Tel:  
+49 (0)951/96555-0

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

## 2.9 Safety devices

### Safety valve

The safety valve is located on the pressure switch or directly on the vessel. It is set to the maximum permitted pressure.

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

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

Do not attempt to adjust or remove this safety device. Any changes to the adjustment could cause serious injury!

### Motor protection

The compressor is equipped with a motor protection switch installed at the rear side of the motor at the left.

### 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.

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

The MOBILBOY 185 OF E compressor is a two-stage piston compressor without connected compressed air storage tank, which is driven by an electric motor. It is intended for sale and operation in the EU and European geographical area.

#### 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.
- Damage to pneumatic tools due to incorrectly set working pressure.

## 4 Technical Data

#### 4.1 Table

MOBILBOY	185 OF E
Compressor system	WDS
Dimensions LxWxH	320 x 380 x 467 mm
Weight	12 kg
Input power	1,1 kW
Supply voltage	230 V
Mains frequency	50 Hz
Current type	AC
Schutzart	IP30
Suction capacity	180 l/min
Fill capacity	90 l/min
Maximum pressure	10 bar
Tank capacity	5 Liter
Cylinders/Stages	1/1
Speed	3400 rpm
Drive	Belt drive
Sound power level L <sub>w</sub>	97 dB(A)



## 4.2 Type plate

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

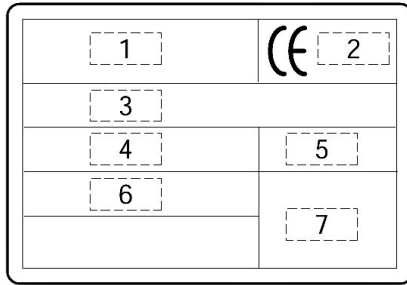


Fig. 2: Type plate

1 Manufacturer data

2 CE mark - year of construction

3 TYPE: Name of the compressor

CODE: identification number of the compressor

SERIAL N: Serial number of the purchased compressor

4 compressed air - delivery quantity in l / min

5 Max. Operating pressure - noise

6 Electrical data: Supply voltage (V / ph), Frequency (Hz), Current consumption (A) - Power (PS and kW), U./min (Rpm)

7 Other possible approval marks

## 5 Transportation, packaging, storage

### 5.1 Transport

#### Delivery

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

Check whether the compressor is complete and whether the parts included in the scope of delivery are available.

#### Transport

Improper transport is accident-prone and can cause damage or malfunctions for which we do not grant any liability or guarantee.

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

### 5.2 Packaging

Be careful not to touch people or things when handling, even if the packaging is not particularly heavy. To lift, reach with your hands into the slots in the box. Put on protective gloves and cut the strapping of the box with scissors or pliers. Open the top flaps, carefully lift out the compressor and place it on the work surface.

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

All used packaging materials and packaging aids of the compressor are recyclable and generally need to be transported to the material recycling.

Crush the packaging material made of cardboard and supply it to the waste paper collection.

The films are made of polyethylene (PE) and the upholstery parts are made of polystyrene (PS). These materials have to be delivered to a recycling station of the responsible dumping company.

### 5.3 Storage

The Compressor must be stored thoroughly cleaned in a dry, clean and frost-free environment.

Do not store or transport the compressor unprotected outdoors or in a damp environment. Store the compressor upright only. Do not tilt it!

## 6 Mounting and installation

**The following personal protective equipment must be worn when assembling the compressor:**



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

### 6.1 Setting up

Design the working space around the compressor according to local safety regulations. The working space for operation, maintenance and repair must not be restricted.

The installation site must have sufficient lighting. (see workplace regulations and DIN EN 12464).

#### Requirements for the site:

- Dry, dust-free.
- Cool, well ventilated, frost protected.
- Install the compressor in a location whose size allows the ambient temperature 40 ° C while the compressor is operating.
- Always place the compressor at least 50 cm away from any obstacle that could obstruct the air flow and thus the cooling.
- The compressor should be placed close to the consumer.
- Secure the compressor against tipping over, rolling away and slipping.
- Ensure easy maintenance of controls and safety devices.

## 6.2 Electrical connection



### DANGER!

#### Risk of fatal injury from electric current!

There is a danger of life in case of contact with current running through components.

Use the compressor only in the dry environment.

- The compressor may only be connected by qualified electricians.
- Work on the electrical system may only be carried out by
  - 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. For the power cable, extension cables with a maximum length of 5 metres and a cable cross-section of at least must be used. 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.
- Only use the "I/O" switch to switch off the compressor.
- The use of a residual current device (RCD) with a tripping current <30 mA is recommended.

The compressor is equipped with a mains cable with earthing contact plug. This can be connected to any 230V ~ 50 Hz socket, which is fused with 16A.

## 7 Description of the device



Fig. 3: Description of the Device

- 01 Telescopic handle (extendable)
- 02 Carrying handle
- 03 Pressure gauge
- 04 Regulator button air pressure
- 05 Quick coupling
- 06 Transport wheel
- 07 Drain valve (below the compressor)
- 08 Power cable
- 09 ON / OFF switch

### 7.1 Scope of delivery

- Air pistol
- Compressed air hose 5 m
- Operating manual

## 8 Operation



### ATTENTION!

Before commissioning the compressor, always read the section "Safety", especially chapter 2.6 "Checking the operational safety"!



### WARNING! DANGER!

There is danger of injury for the operator and for other persons if they do not comply with the following rules.

- Only an instructed and experienced person is allowed to operate the compressor. Other persons must not enter the working area during operation.
- Children and adolescents which are not familiar with the compressor must not operate the compressor.

**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".

To protect against overheating of the electric motor, this compressor was designed for intermittent operation (duty cycle up to 25% of the duty cycle). For trouble-free operation, the duty cycle of 25 percent must not be exceeded. For example, if you paint for 10 min., the compressor must not run for longer than 2.5 min. Do not keep the compressor in continuous operation for longer than 15 min.

If this air compressor pumps more than 25% of an hour of air, the compressor will not be able to fully supply the requested amount of compressed air. Always balance the amount of compressed air required by the attachment or accessory with the amount of air supplied by the compressor). Overheating will cause the engine's thermal protector to react and automatically shut off power to the compressor if the temperature is too high. Once the normal temperature conditions are restored, the motor will restart automatically.

When the compressor is connected to a power source and the pressure switch is set to "ON", the compressor automatically starts the duty cycle.

### 8.1 Switch on

Step 1: Check if the ON / OFF switch is OFF.

Step 2: Check if the tank pressure is 0 PSI.

Step 3: Plug the device into a properly grounded electrical outlet.

Step 4: Connect the air hose (K) to the drain pipe (L) (Fig. 4).

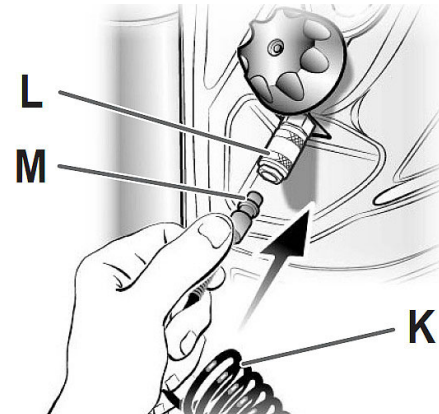


Fig. 4: Connection drain line

Step 5: Turn the On / Off switch to On. The on / off switch lights up to indicate that the compressor is on. The compressor will automatically turn the duty cycle on and off to maintain tank pressure.

Step 6: Adjust the pressure regulator to the pressure setting required for your air tool.

To turn off the compressor, set the ON / OFF switch from "ON" to "OFF". This allows the discharge of the compressed air contained in the compressor head. In addition, this makes the next start of the compressor easier.



### NOTE!

Never remove the plug from the socket to switch off the compressor!

## 8.2 Connection of accessories to the compressor

All accessories are connected to the compressor via the spiral hose (K) equipped with quick-release couplings.

Connect the spiral hose (K) on the side of the coupling (M) to the compressed air outlet (L) (Fig. 4). Insert the coupling (M) firmly until it clicks audibly.

Connect the desired accessory to the other end (P) of the spiral hose (Fig. 5): Firmly insert the coupling (Q) of the accessory into (P). In this case, too, it must audibly click.

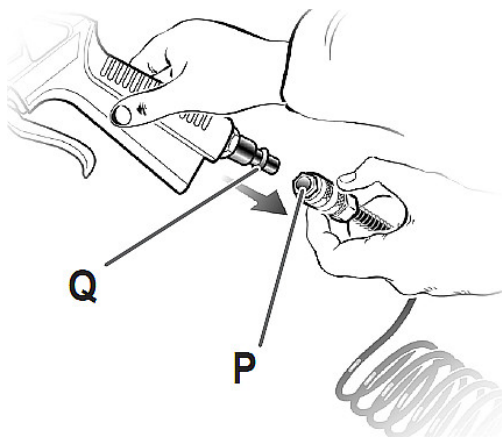


Fig. 5: Connection coupling

After use, switch off the compressor and empty the compressed air tank by idling the connected accessories (for example, blow with the gun). Then pull the outer nut (N) (Fig. 6) rearward to release the spiral hose from the compressor.

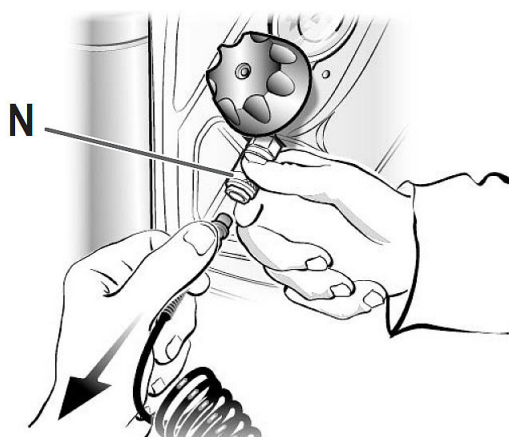


Fig. 6: Release hose coupling

In the same way (that is, pull the nut of the clutch P backwards), disconnect the spiral hose from the accessory (Fig. 7).

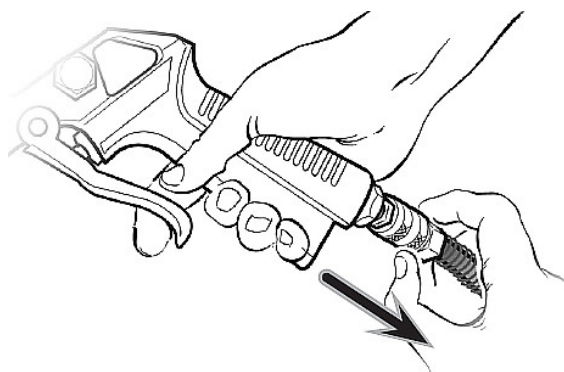


Fig. 7: Disconnect coupling

## 8.3 Connection blowgun

Step 1: Connect the blow gun to the compressor as described in 8.2.

Step 2: Adjust the operating pressure to the value specified for this accessory.

Function	Application	Operating pressure in BAR
Blow off	For blowing off dust from ordinary objects.	8 Bar
	For blowing off dust from precision equipment.	4 Bar

Step 3: Point the blow gun at the surface to be cleaned and push the lever. The air flow can be regulated by pushing the lever more or less.



### NOTE!

Do not clean the blow gun with solvents, flammable or toxic liquids.

## 8.4 Adjustment of working pressure



### DANGER!

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

The working pressure setting must be done with the tool connected and running in order to be able to set the actual required working pressure.



Fig. 8: Setting working pressure

The working pressure is adjusted with the pressure reducer (Fig. 8) (set the desired pressure by turning to the right and reducing the pressure to the left) and read off the pressure gauge. The removal takes place via the coupling.

It is recommended to reset the pressure to zero after using the compressor. When using pneumatic tools, always check the optimum application pressure of the accessory.

### 8.5 Motor protection

The compressors are equipped with a motor protection switch integrated in the pressure switch which acts directly on the ON/OFF switch and automatically interrupts the power supply in case of overload. If the motor protection switch triggers a forced shutdown, wait at least 20 minutes before you switch the compressor on again at the ON/OFF switch. If the protection switch should trigger again, disconnect the power supply and contact the authorised customer service.



#### ATTENTION!

If the motor protection triggers, let the compressor cool down completely (at least 20 minutes). Eliminate the cause for the motor shutdown before switching on again.

#### Possible causes for the shutdown:

- Long connecting cable,
- Coiled connecting cable (e. g. on cable reel),
- Bad power supply (too many parallel consumers)
- Environmental temperature too cold
- Bad cooling
- Oil level in the compressor too low
- Long period without operation prior to return to service

## 9 Maintenance, care and servicing/ repair



### Tips and recommendations

In order that the compressor is always in good operating status, it is necessary to regularly perform care and maintenance works.



### NOTE!

Observe the inspection periods for pressure tanks (see section "Verification of operational safety").



### DANGER!

#### Electric shock is life-threatening!

There is a danger of life in case of contact with current running through components.

- Always disconnect the mains plug before you start cleaning and maintenance works.
- Connections and repairs of the electrical equipment may only be carried out by specialized electrical staff.
- Switch the compressor off and allow it to cool down completely prior to maintenance work.
- Discharge the compressed air completely. Tank and pipes must not be under pressure.

### 9.1 Maintenance and care



### ATTENTION!

After maintenance, repair and cleaning works, check if all covers and protective equipment are properly reassembled to the compressor and that there are no more tools inside or in the working area of the compressor.

Inform the dealer or the customer service in case of damaged protection devices.

#### Daily:

Before starting work, check the compressed air lines for damage.

#### After the first 50 hours:

- Check that all screws, especially those on the engine head and the frame, are tight.
- Check all hose connections for damage, replace if necessary.
- Check if dust has accumulated inside the cladding. If necessary, change the place of operation.



## 9.2 Cleaning

Keep protective equipment as dust and dirt free as possible. Wipe the device with a clean cloth or blow it out with compressed air at low pressure.

We recommend that you clean the unit immediately after each use.

Clean the device regularly with a damp cloth and some soft soap. Do not use detergents or solvents; these could attack the plastic parts of the device. Make sure that no water can get inside the unit.

Hose and spray tools must be disconnected from the compressor before cleaning. The compressor must not be mixed with water, solvents or the like. getting cleaned.

## 9.3 Draining the condensate

The condensation must be drained from the tank every day. Open the drain valve (Fig. 9) below the pressure vessel.

Step 1: Make sure the compressor is off.

Step 2: Hold the handle and tilt the compressor to the drain valve.

Step 3: Turn on the valve.



Fig. 9: Drain valve

Step 4: Keep the compressor tilted until there is no more water vapor.

Step 5: Close the drain valve.



### **DANGER!**

The condensation water from the pressure vessel contains residual oil. Dispose of the condensation water in an environmentally friendly manner at a suitable collection point.

## 9.4 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 compressors 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.

Repairs under warranty may only be performed by technicians authorized by the manufacturer.



## 9.5 Functional test of the safety valve

The safety valve must be operated regularly (approx. every 6 months) 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. 10) by pulling the ring briefly outwards until compressed air escapes, and release it again (the pressure vessel must be under pressure).



Fig. 10: Safety valve, Version A

### Version B (Safety valve with collar)

Open the safety valve (Fig. 11) by briefly pulling the clamp outwards until compressed air escapes and then releasing it again (the pressure vessel must be under pressure).

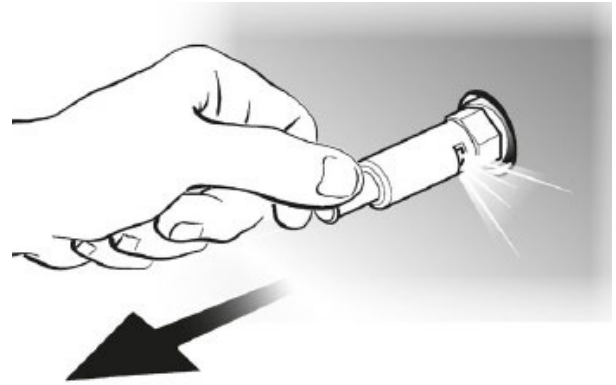


Fig. 11: Safety valve, Version B

### Version C (Safety valve with ring nut, fig. 12)

Open the safety valve by turning the ring nut until compressed air escapes and then screw it back on (the pressure vessel must be under pressure).

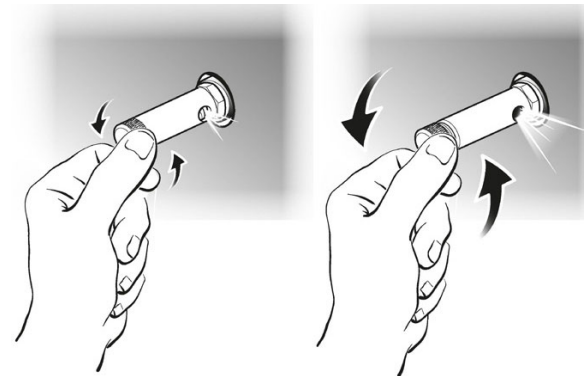


Fig. 12: Safety valve with ring nut

## 9.6 Troubleshooting

The following table lists possible errors and their remedies.

Fault	Remedy	Measure
Derating. Frequent commissioning. Low pressure values.	Check for excessive power requirements or possible leaks in connections and / or wiring. Possibly intake filter clogged.	Replace seals of connections. Clean or replace the filter.
The compressor stops and resumes operation after a few minutes.	Intervention of the thermal protection device due to overheating of the motor.	Clean the air outlets in the conveyor. Ventilate the room.
After several commissioning attempts, 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 start up by itself.
The compressor does not stop and the safety valve intervenes.	Malfunction of the compressor or defect of the pressure switch.	Disconnect the plug and contact the service center.

## 10 Disposal, recycling of used devices

For environmental benefits it is necessary to ensure that all components of the compressor are only disposed of by the provided and allowed means.

### 10.1 Decommissioning

Immediately decommission used compressors in order to avoid later misuse and endangering of the environment or of persons.

- Dispose of all environmentally hazardous operating materials from the used compressor.
- If required, disassemble the compressor into easy-to-handle and usable components and parts.
- Supply the components and operating materials to the provided disposal routes.

### 10.2 Disposal of lubricants

The manufacturer of the lubricant makes the disposal instructions for the used lubricants available. If applicable, 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**

The manufacturer's warranty will become null and void if non admitted spare parts are being used.

### 11.1 Ordering spare parts

The spare parts may be purchased with the authorised dealer.

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 manometer of the compressor MOBILBOY 185 OF E must be ordered. The manometer has the position number 108 in the spare parts drawing (1).

By ordering spare parts, send a copy of the spare parts drawing (1) with the marked part (manometer) and marked position number (108) to the dealer and provide the following information:

Type of device:	<b>MOBILBOY 185 OF E</b>
Item number:	<b>2001240</b>
Drawing number:	<b>1</b>
Position number:	<b>108</b>

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

## 11.2 Spare parts drawings

### Spare parts drawing 1

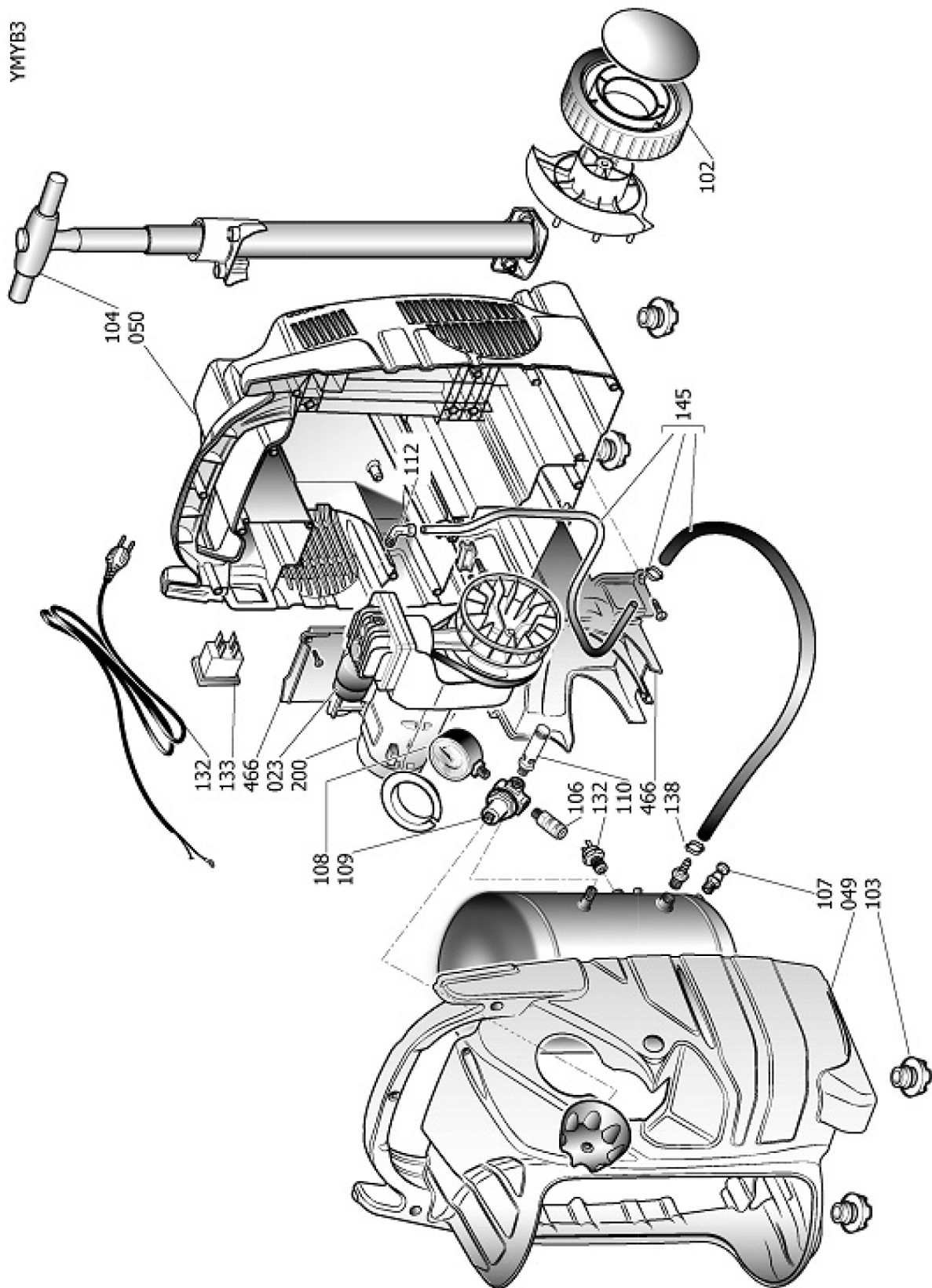


Fig. 13: Spare parts drawing 1 MOBILBOY 185 OF E

Spare parts drawing 2

AA6KT

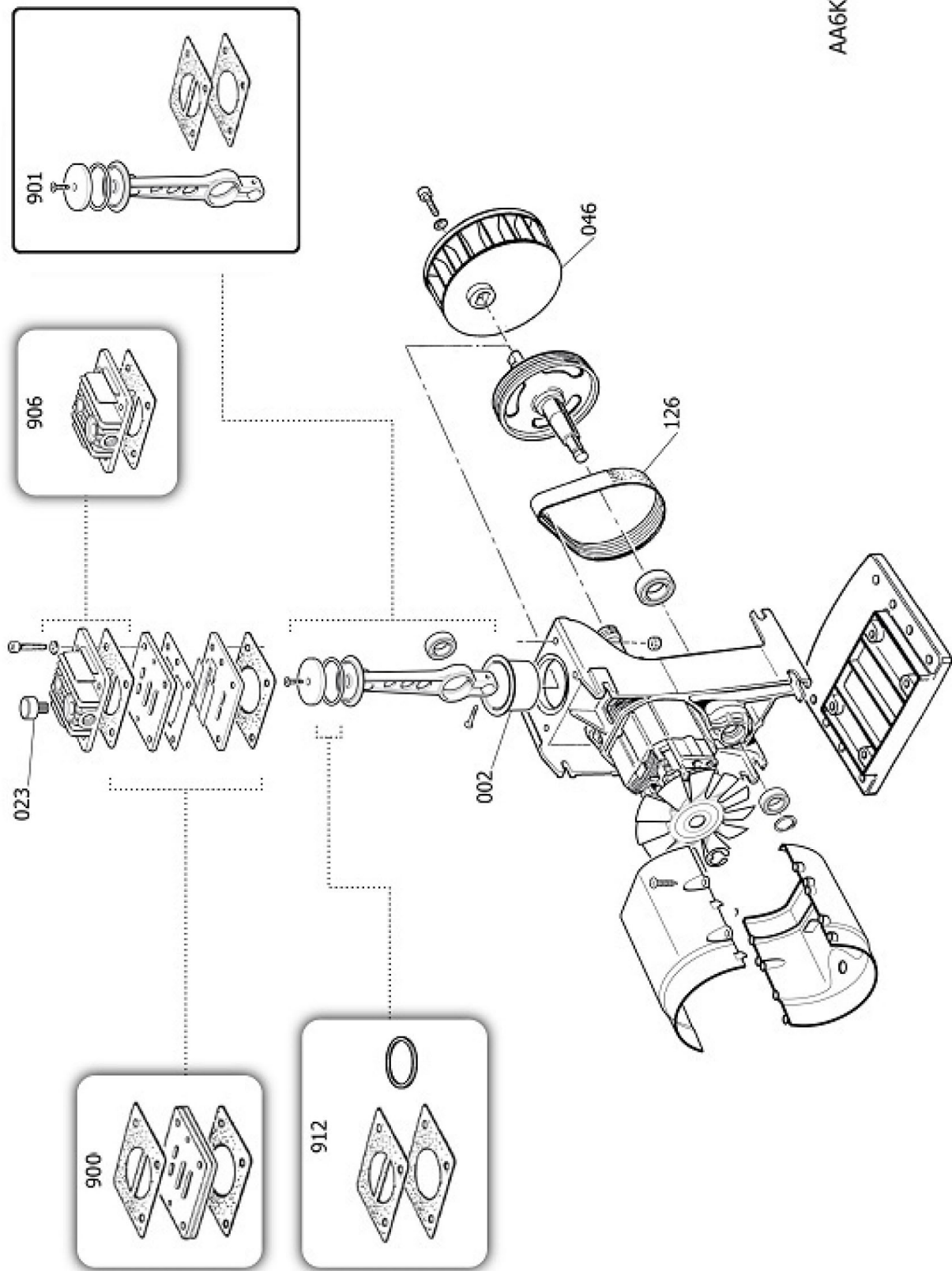


Fig. 14: Spare parts drawing 2 MOBILBOY 185 OF E

## 12 EC Declaration of Conformity

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

**Manufacturer/distributing company:** AIRCRAFT Kompressorenbau und Maschinenhandel GmbH  
Gewerbestraße Ost 6  
A-4921 Hohenzell

herewith declares that the following product

**Product group:** AIRCRAFT® Compressed air technology  
**Machine type:** Compressor  
**Designation of the machine:** MOBILBOY 185 OF E  
**Item number:** 2001240  
**Serial number\*:** \_\_\_\_\_  
**Year of manufacturer\*:** 20\_\_\_\_\_

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

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

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

<b>EU directives:</b>	2000/14/EG	Outdoor Directive
	2014/30/EU	EMC Directive
	2011/65/EU	RoHS Directive

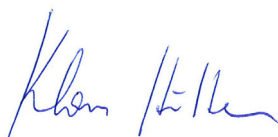
### The following harmonized standards were applied:

DIN EN 1012-1:2011-02	Compressors and vacuum pumps— safety requirements— Part 1: Compressors.
DIN EN 62841-1:2016-07	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - 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 55014-2:2022-10	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 2: Immunity - Product family standard
DIN EN IEC 61000-3-2:2019-12	Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic cur- rent 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

**Person responsible for the documentation:** Klaus Hütter, Gewerbestraße Ost 6, A-4921 Hohenzell

Hohenzell, 01.12.2022

Hallstadt, 01.12.2022



Klaus Hütter  
Manager



Kilian Stürmer  
Manager



