operating instructions

piston compressor

- Handy Silence 221 OF E
- Mobilboy Silence 211/24 OF E
- Mobilboy Silence 241/24 OF E
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Handy Silence 221 OF E

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Product identification

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information on the operating instructions

Original operating instructions
according to DIN EN ISO 20607:2019

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copyright information

Contents

1 Introduction

By purchasing the AIRCRAFT compressor you have made a good choice.

Please read the operating instructions carefully before commissioning.

This is an important component and must be kept near the compressor and accessible to every user.

This provides information on the proper commissioning, the intended use as well as the safe and efficient operation and maintenance of the
pressors.

The operating instructions provide information on the correct commissioning, the intended use and the safe and efficient operation and maintenance of the compressor. Please also observe the local accident prevention regulations and general safety regulations for the area of application of the compressor.

Illustrations in this operating manual are intended to provide basic understanding and may differ from the actual design.

1.1 Copyright

The contents of this manual are protected by copyright and are the sole property of Stürmer Maschinen GmbH.

Their use is permitted within the scope of use of the machine. Any other use is not permitted without the written permission of the manufacturer.

Distribution, copying and use of this document as well as communication of its contents is prohibited unless expressly permitted.

Violations will result in compensation for damages.
To protect our products, we register trademark, patent and design rights whenever possible in individual cases. We vigorously oppose any infringement of our intellectual property.

1.2 Customer Service

Our customer service is available for technical information.

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We are always interested in information and experiences that arise from application and can be valuable for improving our products.

1.3 Limitation of Liability

All information and instructions in the operating manual have been compiled taking into account the applicable standards and regulations, the state of the art and our many years of knowledge and experience.

The manufacturer assumes no liability for damages in the following cases:

- Failure to follow the operating instructions,
- Improper use,
- Use of non-professional and non-expert personnel,
- Unauthorized modifications,
- Technical changes,
- Use of unauthorized spare parts.

The actual scope of delivery may differ from the explanations and representations described here in the case of special designs, when additional ordering options are used or due to the latest technical changes.

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

2 Security

This section provides an overview of all important safety packages for the protection of people and for safe and trouble-free operation.
Further task-related safety instructions are contained in the individual chapters.

2.1 Explanation of symbols

safety instructions

Safety instructions are marked with symbols in this operating manual. The safety instructions are introduced by signal words that express the extent of the danger.

DANGER!

This combination of symbol and signal word indicates an immediately dangerous situation which, if not avoided, will result in death or serious injury.

WARNING!

This combination of symbol and signal word indicates a potentially dangerous situation which, if not avoided, will result in death or serious injury.

CAUTION!

This combination of symbol and signal word indicates a potentially dangerous situation which, if not avoided, may result in minor or minor injuries.

DANGER!

This combination of symbol and signal word indicates a potentially dangerous situation which, if not avoided, can lead to property damage and environmental damage.

A NOTICE!

This combination of symbol and signal word indicates a potentially dangerous situation which, if not avoided, can lead to property damage and environmental damage.

tips and recommendations

tips and recommendations

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

To reduce the risk of personal injury and damage to property and to avoid dangerous situations, the safety instructions contained in this operating manual must be observed.

2.2 Responsibility of the operator

operator

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

operator obligations

If the device is used in a commercial area, the operator of the compressor is subject to legal obligations regarding occupational safety. Therefore, the safety instructions in this operating manual as well as the safety, accident prevention and environmental protection regulations applicable to the area of application of the compressor must be observed. The following applies in particular:

- The operator must be aware of the applicable occupational health and safety regulations and, in a risk assessment, identify additional hazards that arise from the special working conditions at the location where the compressor is used.
  He must implement these in the form of operating instructions for the operation of the compressor.
- The operator must be present during the entire installation Before the compressor is put into service, check whether the operating instructions it has drawn up correspond to the current regulations and adapt them if necessary.
- The operator must clearly regulate and define the responsibilities for installation, operation, troubleshooting, maintenance and cleaning.
- The operator must ensure that all persons who handle the compressor have read and understood these instructions. In addition, he must train the personnel at regular intervals and inform them about the dangers.

  ren.
- The operator must provide the personnel with the necessary protective equipment and instruct them to wear the necessary 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 devices checked regularly for functionality and completeness.

2.3 Personnel requirement

qualifications

The various tasks described in this manual place different demands on the qualifications of the persons entrusted with these tasks.

WARNING!

Danger due to insufficient qualification of persons!

Inadequately qualified persons cannot assess the risks involved in handling the device and expose themselves and others to the risk of serious or fatal injuries.

- All work must be carried out by qualified persons only have it carried out.
- Keep insufficiently qualified persons away from the work area.

Only people who can be expected to carry out the work reliably are permitted to do the work. People whose ability to react is affected by drugs, alcohol or medication, for example, are not permitted to do so.

In this operating manual, the qualifications of the persons for the various tasks are listed below:

Server

The operator has been instructed by the owner about the tasks assigned to him and the potential dangers of improper conduct. The operator may only carry out tasks that go beyond normal operation if this is specified in these operating instructions and the owner has expressly entrusted him with this task.

electrician

Due to their technical training, knowledge and experience as well as knowledge of the relevant standards and regulations, the electrician is able to carry out work on electrical systems and independently identify and avoid potential dangers. The electrician is specially trained for the working environment in which they work and knows the relevant standards and regulations.

specialist staff

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

Manufacturer

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

2.4 Personal protective equipment

Personal protective equipment is intended to protect people from impairments to their safety and health at work. During the various work on and with the device, personnel must wear personal protective equipment, which is specifically referred to in the individual sections of this manual.

The following section explains personal protective equipment:

hearing protection

The hearing protection protects the ears from hearing damage the noise.

eye protection

The safety goggles protect the eyes from flying parts and liquid splashes.

respiratory protection

The dust mask protects against coarse dust particles.

protective gloves

The protective gloves protect the hands from sharp-edged components, as well as from friction, abrasions or deeper injuries.

safety shoes

The safety shoes protect the feet from crushing, falling objects and slipping on slippery surfaces.

protective work clothing

The protective work clothing is tight-fitting clothing with low tear resistance.

2.5 General safety instructions

- Observe the guidelines and accident prevention regulations of the professional association for the handling of compressors and pneumatic tools.
- The compressor and/or the motor become hot during operation. Never touch the motor, cylinder head, radiator or pressure lines during operation.
- The air produced by the compressor must not be be breathed.
- The compressor may only be operated by operated by trained personnel.
- The compressor must not be used in rain or damp or wet environments.
- 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 container. Carry out work. If there is damage or corrosion, it must be completely replaced.
- Never place flammable objects or objects made of nylon or fabric near and/or on the compressor.
- Never use the compressor with flammable liquids cleaning agents or solvents.
- The use of the compressor is limited to the production of compressed air. The compressor must not be used for other types of gas.
- Check regularly whether nuts and have loosened the screws.
- Always disconnect the power cable and air hose from the air compressor before transport.
- For operation, the compressor must be set to stable and horizontal surface.

CAUTION!
RISK OF INJURY

- Never direct compressed air at people or animals.
- When releasing the quick coupling, the end of the Hold the compressed air line firmly to prevent it from being blown away by the excess pressure.
- The compressor is not suitable for continuous operation; allow it to cool down in between uses.
- Never touch the cylinder head or pipes during or immediately after operation (risk of burns)!

2.6 Verification of operational safety

DANGER!

According to §15 BetrSichV, a system requiring monitoring may only be put into operation after the system has been subjected to a pre-commissioning test. Recurring tests must also be carried out in accordance with §16 BetrSichV.

Such tests must be carried out by an approved inspection body or a qualified person. Details can be found in the BetrSichV.

The pressure vessel of the compressor is subject to inspection. The pressure vessel was 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-examination certificate and/or declaration of conformity is enclosed with each compressor.

The operator must have the individual components that require testing checked at the prescribed intervals by an expert/or “qualified person”. The operating regulations for this may differ between EU member states.

Regulations for compressed air tanks in Germany

inspection periods

The inspection periods listed are maximum values. These should be checked by the employer's risk assessment/evaluation. No extension of the deadline is permitted. The deadline can only be shortened.

The pressure liter product depends on the inspection intervals. To do this, the maximum permissible pressure (PS) must be multiplied by the pressure vessel volume (V).

Example:
Pressure vessel = 50 l; max. permissible pressure = 10 bar
50 lx 10 bar = 500

Test	inspection period	testing organization
Before commissioning/ installation	PS x V </=200	Qualified Person
	with type-examination certificate PS x V </=1000	Qualified Person
	PS x V >/=200	Approved monitoring body
Outer Test**	Each/or every 2 Years PS x V </= 1000	Qualified Person
Internal Examination**	Every 5 years at PS x V </=1000	Qualified Person
	*Every 5 years at PS x V >1000	Approved monitoring body
strength test**	Every 10 years PS x V </=1000	Qualified Person
	*Every 10 years PS x V >1000	Approved monitoring body

*The employer must inform the responsible authority of the respective inspection intervals within 6 months of commissioning the system (Section 15 BetrSichV).

**External tests can be omitted: a) for pressure vessels according to BetrSichV number 2.2 letter a, unless they are fire-heated, exhaust-gas-heated or electrically heated, and b) for simple pressure vessels according to BetrSichV number 2.2 letter d. The period for the strength test can be extended to 15 years if it is proven during the external or internal test that the system can be operated safely. The proof must be presented in the risk assessment documentation. Table according to BetrSichV (as of March 29, 2017).

2.7 Safety markings on the compressor

Damaged or missing safety symbols on the compressor can lead to incorrect handling and damage to property. The safety symbols attached to the machine must not be removed. Damaged safety symbols must be replaced immediately.

The following should be noted:

The instructions on the safety markings on the compressor must be followed under all circumstances.
If the safety signs fade or become damaged during the service life of the machine, new signs must be installed immediately.

From the moment the signs are no longer immediately recognisable and understandable at first glance, the machine must be taken out of service until the new signs are fitted.

The following safety symbols are attached to the compressor:

1

2

Fig. 1: Safety and application instructions on the compressor:
1 Mandatory sign: general mandatory sign, read the instructions for use, use hearing protection, unplug the power cord I
2 warning signs: Warning of electrical voltage, Warning of hot surface

2.8 Safety data sheets

Safety data sheets for dangerous goods are available from your specialist dealer or by calling: +49 (0)951/96555-0
Specialist retailers 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 on the fitting.
When the safety value is reached, the safety valve opens and releases air.
After the safety valve is triggered, the operator must switch off the compressor and request an inspection by maintenance personnel.

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

engine protection

The compressors are equipped with a motor protection switch which is installed in the motor terminal box.

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 systems.

Proper use also includes compliance with all information in this manual.

The compressors may only be used in enclosed spaces with adequate ventilation.

The MOBILBOY compressors are piston compressors driven by an electric motor with a connected compressed air storage tank, intended for sale and operation in the EU and geographically European area.

3.1 Reasonably foreseeable misuse

Any use beyond the intended use or any use other than that intended is considered misuse.

Possible misuses may include:

- Installation of spare parts and use of accessories and operating materials that are not approved by the manufacturer.
- Use of the compressor outside the operating conditions specified in chapter performance limits specified in the “Technical Data” section.
- Use of the compressor without appropriate filtration in the food and medical sectors, e.g. for filling breathing gas cylinders.
- Service work by untrained or non-automatic ized staff.
- Use of the compressor in enclosed spaces without adequate ventilation.
- Failure to comply with the information in this operating manual instruction manual or disregard of the operating instructions for the pneumatic 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 wear and tear and damage traces of transport.

Misuse of the compressor can lead to dangerous situations.

Stürmer Maschinen GmbH assumes no liability for design and technical changes to the compressor.

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

its.

3.2 Residual risks

Even if all safety regulations are observed and the compressor is used as directed, there are still residual risks, which are listed below:

- Heat development on components can lead to burns and other injuries.
- Hearing damage when working for long periods at the machine machine with defective hearing protection.
- Danger from electric current when using improper connecting cables or mains plugs.
- Risk of injury and property damage from flying parts or broken tool attachments.

4 Technical data

	Handy Silence 221 OF E	Mobilboy Silence 211/24 OF E	Mobilboy Silence 241/24 OF E	Mobilboy Silence 241/50 OF E	Mobilboy Silence 401/50 OF E
suction capacity approx.	200 l/min	approx. 200 l/min	approx. 240 l/min	approx. 240 l/min	approx. 400 l/min
filling capacity at 6 bar	approx. 90 l/min	approx. 90 l/min	approx. 115 l/min	approx. 115 l/min	approx. 180 l/min
maximum pressure	8 bar	8 bar	10 bar	10 bar	10 bar
container contents	6 l	24 l	24 l	50 l	50 l
air outlet	1/4“	1/4“	1/4“	1/4“	1/4“
cylinders/stages	2/1	2/1	2/1	2/1	2/1
speed engine/compressor	2850 min^{-1}	2850 min^{-1}	2850 min^{-1}	2850 min^{-1}	2850 min^{-1}
Connection-tension	230 V, AC, ~ 50 Hz	230 V, AC, ~ 50 Hz	230 V, AC, ~ 50 Hz	230 V, AC, ~ 50 Hz	230 V, AC, ~ 50 Hz
protection class/ protection class	F / 145	F / 145	F / 145	F / 145	F / 145
rated current	4,5 A	4,5 A	6,5 A	6,5 A	11 A
starting current	12 A	12 A	18 A	18 A	30 A
recording performance	1,1 kW	1,1 kW	1,4 kW	1,4 kW	2,3 kW
output power 1.0 kW		1,0 kW	1,3 kW	1,3 kW	2,2 kW
Performance drive motor	0,75 kW	0,75 kW	0,95 kW	0,95 kW	1,55 kW
protection class drive motor	IP 20	IP 20	IP 20	IP 20	IP 20
Motor efficiency class 68%		70%	70%	70%	68%
duty cycle drive motor 70%		70%	70%	70%	70%
Total current consumption 4.2 A		4,2 A	6,1 A	6,1 A	10,5 A
total connection value	4,5 A	4,5 A	6,5 A	6,5 A	11,0 A
Weight	16 kg	21 kg	23 kg	31 kg	40 kg
Dimensions (LxWxH)	370x270x530 mm	590x280x600 mm	600x280x600 mm	600x280x600 mm	800x360x720 mm
sound pressure level Lp	61 dB(A)	61 dB(A)	62 dB(A)	64 dB(A)	67 dB(A)
piston stroke / Piston Ø	11,2 / 63,7 mm	11,2 / 63,7 mm	13 / 63,7 mm	13 / 63,7 mm	18 / 69,7 mm
connection cable 1.5 m		1,5 m	1,5 m	1,5 m	1,5 m

4.1 Type plate

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

Fig. 2: Type plate Handy Silence 221 OF E

5 Transport, packaging, storage

5.1 Delivery and transport

delivery

After delivery, check the compressor for visible transport damage. If the device shows any damage, this must be reported immediately to the transport company or the dealer.

Check that the compressor is complete and that all parts included are present.

Transport

CAUTION!

Risk of injury due to equipment tipping over or falling from a forklift truck, pallet truck or transport vehicle.

Only use means of transport and load-slinging equipment that can support the total weight.

Improper transport of individual devices, packaged or unpacked unsecured devices that are stacked on top of each other or next to each other is prone to accidents and can cause damage or malfunctions for which we accept no liability or guarantee.

Transport the delivery to the installation site using a sufficiently dimensioned industrial truck, ensuring that it cannot shift or tip over.

General hazards during internal Transport

CAUTION: RISK OF TIPPING

The device may be lifted unsecured by a maximum of 2 cm.

Employees must stay outside the danger zone zone, the reach of the load.
Warn employees and instruct employees to the danger.

Transport may only be carried out by authorized and qualified persons. Act responsibly during transport and always consider the consequences. Avoid daring and risky actions.

its.

Slopes and gradients (e.g. driveways, ramps and the like) are particularly dangerous. If driving on such passages is unavoidable, special caution is required.

Before starting the transport, check the transport route for possible hazards, unevenness and faults as well as for sufficient strength and load-bearing capacity.

Dangerous areas, unevenness and faults must be inspected before transport. The removal of dangerous areas, unevenness and faults by other employees at the time of transport leads to considerable dangers.

Careful planning of internal transport is therefore essential

5.2 Packaging

Keep the packaging in case you move, but at least for the duration of the warranty period.

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

Cardboard packaging components must be shredded and disposed of as waste paper.

The films are made of polyethylene (PE) and the upholstery parts are made of polystyrene (PS). These materials must be handed in at a recycling center or to the responsible waste disposal company.

5.3 Storage

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

6 Construction and assembly

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”

6.1 Installation location

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

Requirements for the installation location:

- Dry, dust-free,
- Cool, well ventilated, frost-protected, -
  Level, solid ground,
- adequate lighting (see Workplace Ordinance and DIN EN 12464).

A NOTICE!

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

Secure the compressor against tipping over and slipping!

6.2 Montage

The compressor is already pre-assembled when delivered.

Step 1: If necessary, first mount the wheels and/or vibration protection elements (Fig. 3).

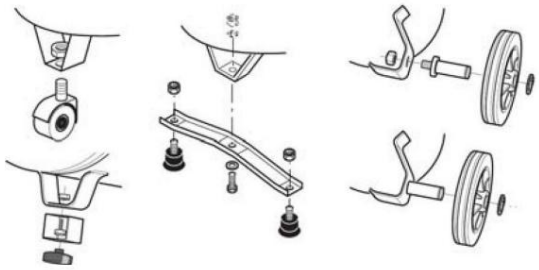

Fig. 3: Wheel assembly

Step 2: Remove the plug from the compressor head and install the intake filter if it is not already installed.

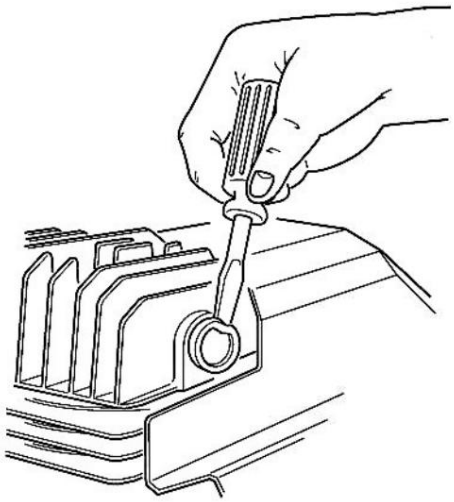

Fig. 4: Remove compressor head cover for filter installation

6.3 Electrical connection

DANGER!

Danger to life from electric current!

Contact with live components poses an immediate risk of death from electric shock.

Only operate the compressor in a dry environment.

DANGER!

1. Operation on long cable drums or –
   Extensions can lead to start-up problems.
2. If the compressor is operated on an extension cable, make sure that the cross-section is correct, at least 2.5 mm².
3. Always unwind cable reels completely.
   Failure to do so may result in damage to the cable drum or even a fire.
4. Motors need more power to start than in normal operation. This starting current can trigger the normal B circuit breaker or normal fuses. To avoid this, the socket from which the compressor is to be operated should be protected with a circuit breaker with C or K characteristics or a slow-blow fuse.

WARNING!

Do not interrupt the power supply while the engine is running!

Pressure switch does not relieve pressure ÿ

Motor cannot start against pressure.

DANGER!

When the power supply

First set the pressure switch to the "OFF" position to relieve pressure, then switch the power supply back on.

Always switch the device on and off using the pressure switch.

A NOTICE!

Adaptation of the power supply to the guidelines valid in the respective country of use may only be carried out by a qualified electrician!

tripping characteristics of a circuit breaker

The circuit breakers are provided with different nominal currents and tripping characteristics depending on the area of application.

The circuit breakers with B characteristic are used as standard line protection.
The circuit breakers with C characteristics are used in circuits with increased inrush peaks. This allows the problem-free use of machines or devices whose motors have high starting currents.

The circuit breakers with K characteristic are used to protect circuits with high inrush peaks (industrial applications and other special areas of use).

The correct selection of whether a circuit breaker with C or K characteristic should be used

or its installation must be carried out by a qualified electrician on site!

Step 1: Check whether the mains voltage corresponds to the voltage indicated on the type plate.

Step 2: Make sure the ON-OFF Switch is in position “0”. Then plug in the ker into the socket.

7 Commissioning

device description

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Fig. 5: MOBILBOY

1 handle

2 air filters

3 ON/OFF switches (on the pressure switch)

4 compressors

5 pressure reducers

6 safety valves

7 compressed air extraction connection

8 pressure gauge boiler pressure

9 Manometer working pressure

10 Kessel

11 Drainage

12 check valve

8 Operation

A NOTICE!

The compressor is designed for interval operation. To ensure trouble-free operation, the duty cycle must not exceed 70 percent

For example, if you paint for 10 minutes, the compressor must not run for longer than 7 minutes.

Do not leave the compressor in the

Maintain continuous operation.

The compressor may only be operated within the permissible temperature range of +5°C to +35°C!

8.1 Motor protection

The compressors are equipped with a motor protection switch that automatically interrupts the power supply in the event of an overload. If the motor protection switch triggers a forced shutdown, leave the compressor in this state and wait approx. 5 minutes before activating the motor protection switch and restarting the compressor using the ON/OFF switch. If the protection switch trips again

trigger, switch the ON/OFF switch to 0, disconnect the device from the power supply and contact an authorized service center.

8.2 Switching on

Step 1: Check if the ON/OFF switch is set to 0 (OFF) position (Fig. 6).

Step 2: Connect the power plug to the power supply.

Step 3: Start the device with the ON/OFF Switch.

Step 4: When starting the compressor for the first time, let it run for about ten minutes with the drain (pos. 12, Fig. 5) open.

Step 5: Close the drain and check that the compressor loads the boiler and stops at Pmax (max. pressure; indicated by the pressure gauge (pos. 9, Fig. 5)).

The ON/OFF switch enables the function of the pressure switch. The pressure switch switches the compressor on or off depending on the tank pressure reached. The compressor works automatically, stops when the maximum pressure is reached and then starts

again when the switch-on pressure is reached.

8.3 Setting the working pressure

DANGER!

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

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

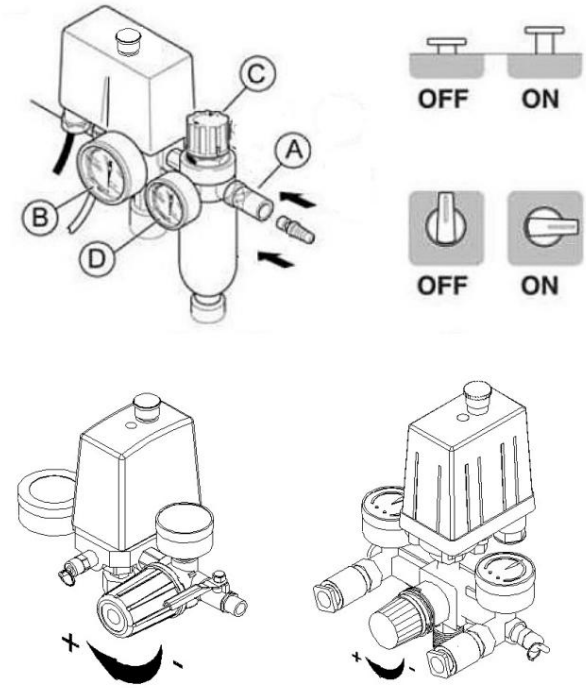


Fig. 6: Setting the working pressure

The working pressure is regulated by the pressure reducer (pos. **C,** Fig. 6) (lift the rotary cap, set the desired pressure and press the rotary cap down again to fix it) and on the pressure gauge (Pos. **D,**

Fig. 6). The removal takes place via coupling (item **A,** Fig. 6).

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

8.4 Pressure switch

DANGER!

Before carrying out this adjustment, always switch off the compressor at the main switch.

Due to thermal interaction (cold, warm) and vibrations of the compressor, the setting of the pressure switch may change.

If necessary, have the pressure switch replaced by the customer stop service.

The pressure switch must be released before the pressure can be adjusted. The pressure can only be adjusted on the mounted pressure switch when the device is under pressure.

8.5 Shutdown

Step 1: Turn on the compressor using the ON/
OFF switch on the pressure switch and
pull the power plug out of the socket
dose.

Step 2: Place a collecting container under the
Condensate drain valve. Open
the condensate drain valve to drain the pressure
vessel and reduce the boiler pressure.

Step 3: Close the condensate drain valve.

9 Maintenance, care and repair/ repair

9.1 Maintenance and care

DANGER!

All work on electrical and pneumatic systems may only be carried out by qualified personnel who are trained and familiar with the associated risks.

After maintenance, repair and cleaning work, check that all panels and protective devices are properly refitted on the compressor and that no tools are left in the working area of the compressor.

Damaged protective devices and machine parts must be replaced or repaired as intended by an approved specialist workshop.

Step 1: Before performing any maintenance
, switch off the compressor, unplug the power cord and let
all the air out of the container.

After the first warm-up:

When the compressor is warm, tighten the cylinder screws with a torque wrench.

After the first 50 hours:

Step 2: Check that all screws, especially those on the motor head and
frame, are firmly tightened.

Once a week:

Step 2: Drain the condensate by
Open the valve located under the container (Fig. 7).
Close the valve again as soon as only pure air, without
Condensation water is leaking out. For this work,
Wear protective gloves. It is recommended to use a flat
container to collect the condensation.

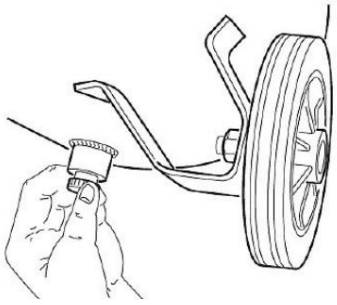


Fig. 7: Drainage

Once a month (or more frequently if the device is subjected to heavy use and/or used in dusty environments):

Step 2: Remove the intake filter and replace it (if damaged) or clean the filter element (Fig. 8).

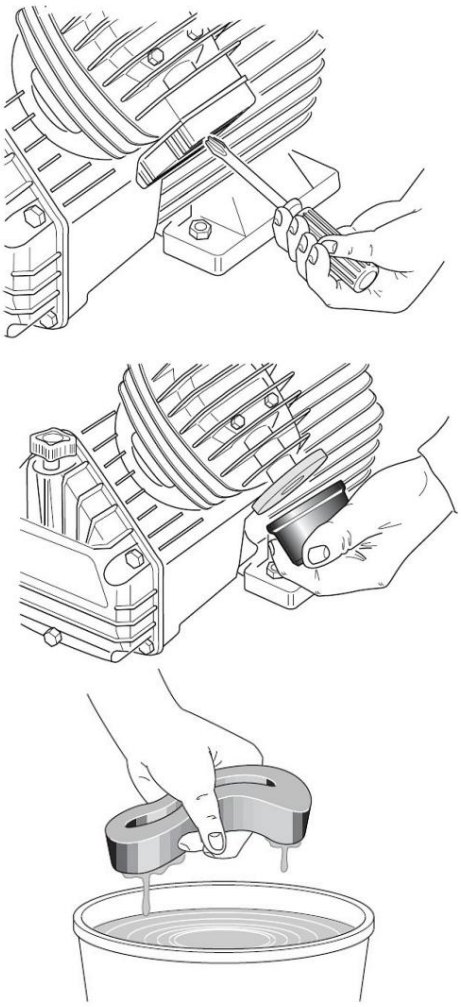


Fig. 8: Cleaning the air filter

Filter element made of PAPER: Blow with compressed air from inside out.

Filter element made of SPONGE: Wash it with detergent medium, rinse it and dry it completely.

METAL filter element: Rinse it with non-greasy solvent and blow it through with compressed air

DANGER!

Never operate the compressor without an intake filter!

Quarterly or every 300 hours:

- Check the air tank for corrosion or other damages.

Every 6 months:

Step 2: Thoroughly clean all components that have ribs or fins.

Step 3: Check the compressor for possible air leaks.

Every 2 years:

Step 2: Check the check valve and If necessary, replace the sealing element (item D, Fig. 9).

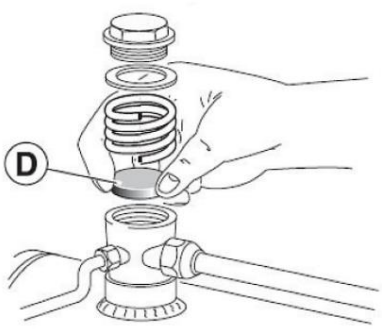


Fig. 9: Check valve

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

Aircraft Kompressoren assumes no liability and provides no guarantee for damages or malfunctions resulting from non-compliance with these operating instructions.
For repairs, use only flawless and suitable tools, original spare parts or series parts expressly approved by Aircraft Kompressoren.

9.3 Information about technical customer service

Repairs covered by the warranty may only be carried out by technicians who have been authorized by us. Only use

original spare parts.

Please always state the TYPE DESCRIPTION, YEAR OF MANUFACTURE and ARTICLE NUMBER of your compressor for inquiries or orders. You can find all information on the type plate attached to the compressor.

9.4 Functional test of the safety valve

The safety valve must be operated regularly (every 6 months) to ensure that it functions properly when needed.

Version A (safety valve with ring)

Open the safety valve (Fig. 10) by briefly pulling the ring outwards until compressed air escapes and then releasing it again (the pressure vessel must be under pressure).

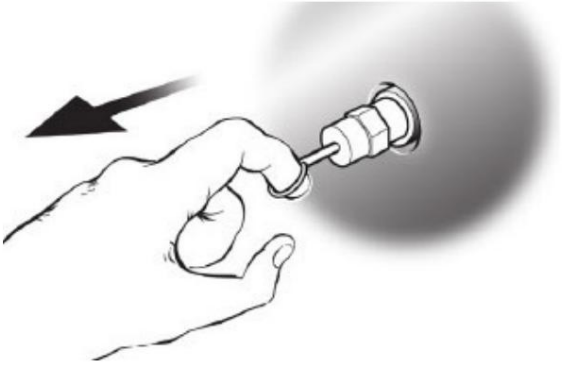


Fig. 10: Safety valve version A

Version B (safety valve with clamp)

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).

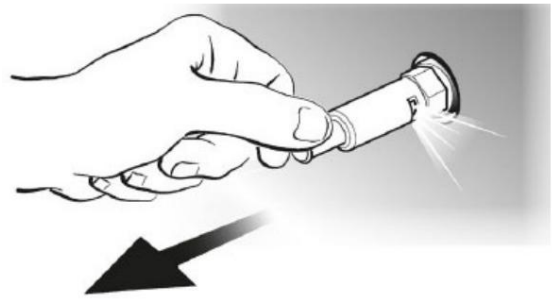


Fig. 11: Safety valve version B

Version C (safety valve with ring nut)

Open the safety valve (Fig. 12) by turning the ring nut until compressed air escapes and then screwing it back on (the pressure vessel must be under pressure).

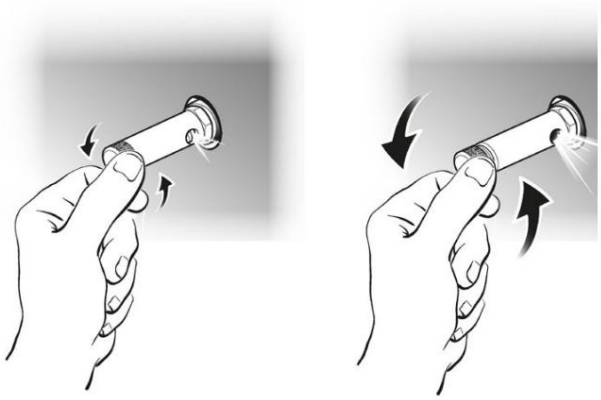


Fig. 12: Safety valve version C

10 Troubleshooting

Disturbance	remedy
The compressor does not start	The pressure switch is in the off position. Switch the compressor on using the pressure switch.
The compressor does not reach the cut-off pressure.	Seals on the compressor or check valve are leaking. Replace seals.
The compressor switches off.	No fault, the reservoir is full, the maximum pressure has been reached.
The compressor stops and does not start again.	The motor protection switch has tripped. Leave the compressor switched off. After about 5 minutes, press the motor protection switch and switch the device back on. If the motor protection switch trips again after restarting, please contact customer service.
The compressor only runs briefly until the cut-off pressure is reached and switches on again after a short time.	Switching distance of the pressure switch too small. Increase switching distance. A lot of condensation in the pressure vessel. Drain the condensation.
The pressure in the container drops.	Check all connections and tighten them if necessary. If the problem persists, contact customer service.
Air leaks at the pressure switch valve when the compressor is off.	Clean the seat of the check valve very thoroughly. Replace the sealing element if necessary.
The safety valve blows off.	The cut-off pressure on the pressure switch is set too high. Reduce the cut-off pressure on the pressure switch. Safety valve defective. Replace safety valve.
The compressor does not charge and heats up too much.	The cylinder head gasket or a valve plate is damaged. Stop the compressor immediately and contact customer service. Air filter dirty. Clean air filter.
The compressor is very loud and produces rhythmic, metallic beats.	The sliding bushing or bearing bushing is seized. Stop the compressor immediately and contact customer service.
The compressor does not stop when max. Pmax pressure is reached; the safety valve is activated. The compressor switches off too early.	The pressure switch may be out of adjustment (see section "Pressure switch"). If the problem persists after carrying out maintenance, please contact customer service.

11 Disposal, recycling of old devices

In the interest of the environment, care must be taken to ensure that all components of the machine are disposed of only via the intended and approved methods.

11.1 Decommissioning

Obsolete equipment must be taken out of service immediately and professionally in order to avoid subsequent misuse and danger to the environment or persons.

- Dispose of all environmentally hazardous operating materials from the old device.
- If necessary, dismantle the machine into manageable and reusable assemblies and components.
- Dispose of machine components and operating materials using the appropriate disposal methods.

11.2 Disposal of lubricants

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

11.3 Disposal via municipal collection points

Disposal of used electrical and electronic equipment (Applicable in the countries of the European Union and other European countries with a separate collection system for these devices).

The symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be taken to a collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help protect the environment and the health of others. Incorrect disposal of this product endangers the environment and health. Recycling materials helps reduce the consumption of raw materials. For more information about recycling this product, please contact your local council, your household waste disposal service or the shop where you purchased the product.

12 spare parts

DANGER!

Risk of injury due to use of incorrect spare parts!

Using incorrect or faulty spare parts can endanger the operator and cause damage and malfunctions.

- Only original spare parts from the manufacturer manufacturer or use spare parts approved by the manufacturer.

- In case of any doubt, always contact the manufacturer. animals.

A NOTICE!

Using unauthorized spare parts will void the manufacturer's warranty.

12.1 Ordering spare parts

The spare parts can be obtained from the authorized dealer.

Please provide the following key data when making enquiries or ordering spare parts:

- device type
- Article number
- Position number
- year of manufacture
- Crowd
- desired shipping method (post, freight, sea, air, Express)
- Shipping address

Spare parts orders without the above information cannot be considered. If the shipping method is not specified, shipping will be at the supplier's discretion. Information about the device type, article number and year of manufacture can be found on the type plate attached to the compressor.

Example:

The safety valve from the Handy Silence 221 OF E must be ordered.

The safety valve has the position number 17 in the spare parts drawing.

When ordering spare parts, send a copy of the spare parts drawing with the component marked (safety valve) and marked position number (17) to the authorized dealer and provide the following information:

Device type:	**Handy Silence 221 OF E**
Article number:	**2001221**
Position number:	**17**

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

12.2 Spare parts drawings

Spare parts drawing Handy Silence 221 OF E

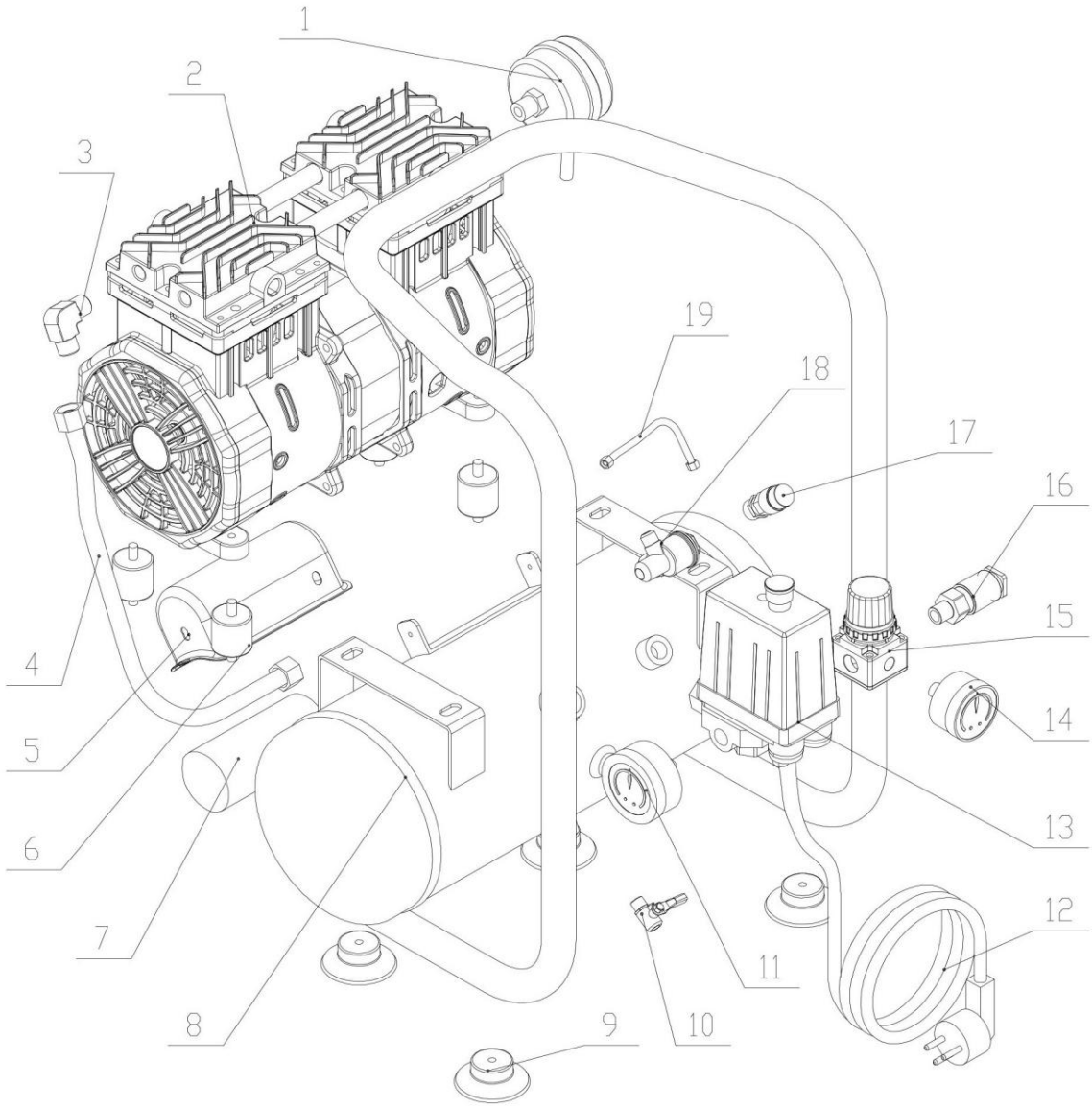


Fig. 13: Spare parts for mobile phone Silence 221 OF E

Pos.	Description	Anz.		Pos.	Designation	Anz.
1	air filter	1		11	Manometer	1
2	compressor head	1		12	power cord	1
3	angle piece	1		13	pressure switch	1
4	drain pipe	1		14	Manometer	1
5	capacitor cover	1		15	Rules	1
6	compressor rubber pad	4		16	air connection	1
7	Capacitor	1		17	safety valve	1
8	Kessel	1		18	check valve	1
9	Rubber sole	4		19	drainage pipe	1
10	drain valve	1		20	handle	1

Spare parts drawing Mobilboy Silence 211/24 OF E and Mobilboy Silence 241/24 OF E

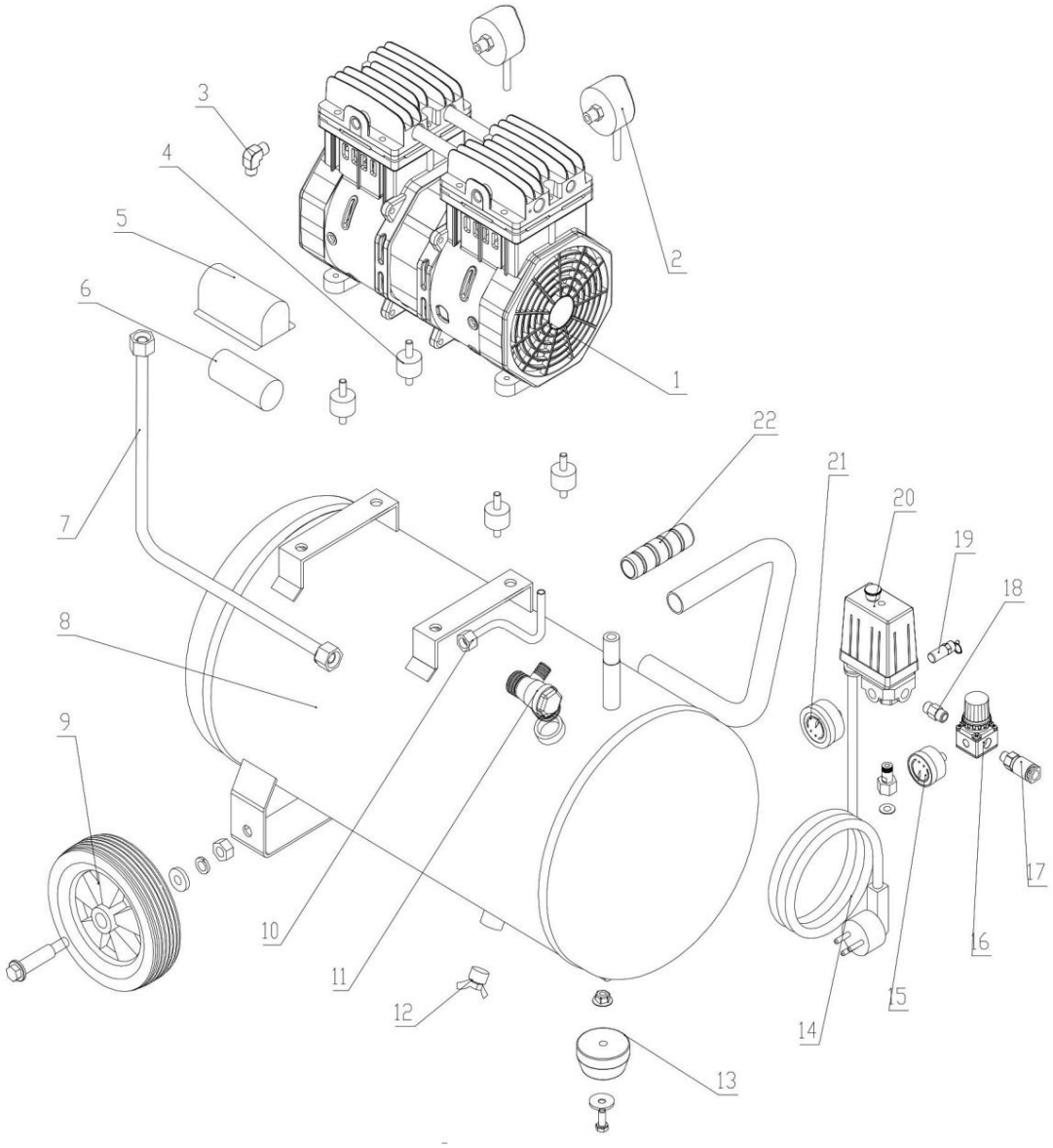


Fig. 14: Spare parts Mobilboy Silence 211/24 OF E and Mobilboy Silence 241/24 OF E

Pos.	Description	Anz.		Pos.	Designation	Anz.
1	compressor head	1		12	drain valve	1
2	air filter	2		13	Rubber sole	2
3	angle piece	1		14	power cord	1
4	compressor rubber pad	4		15	Manometer	1
5	capacitor cover	1		16	Rules	1
6	Capacitor	1		17	air connection	1
7	drain pipe	1		18	1/4-connector	1
8	Kessel	1		19	safety valve	1
9	Rad	2		20	pressure switch	1
10	drainage pipe	1		21	Manometer	1
11	check valve	1		22	handle	1

Spare parts drawing Mobilboy Silence 241/50 OF E

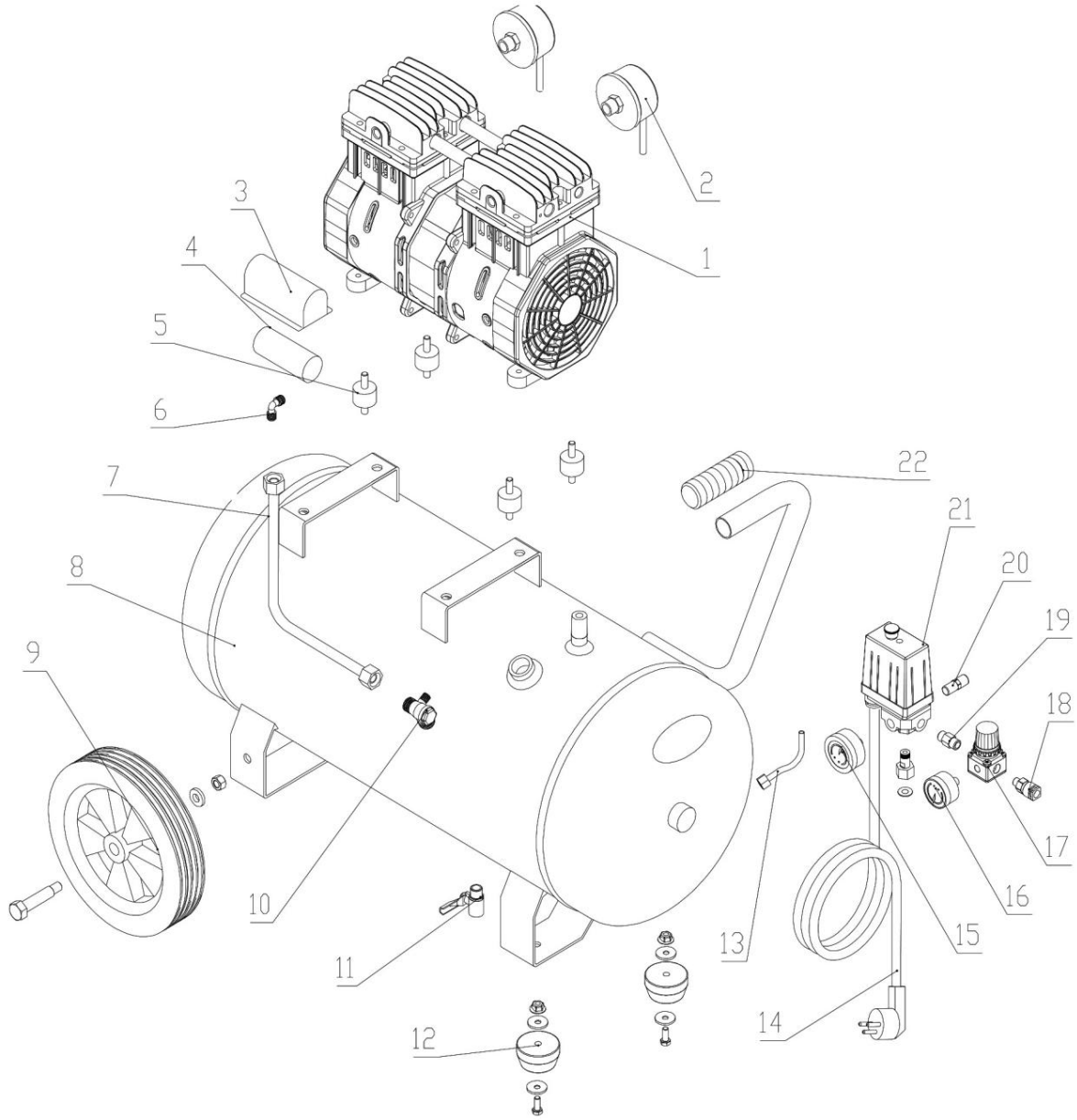


Fig. 15: Spare parts Mobilboy Silence 241/50 OF E

Pos.	Description	Anz.		Pos.	Designation	Anz.
1	compressor	1		12	Rubber sole	2
2	air filter	2		13	drain pipe	1
3	capacitor cover	1		14	power cord	1
4	Capacitor	1		15	Pressure gauge Ø 50	1
5	compressor rubber pad	4		16	Pressure gauge Ø 40	1
6	angle piece	1		17	Rules	1
7	drain pipe	1		18	air connection	1
8	Kessel	1		19	1/4-connector	1
9	Rad	2		20	safety valve	1
10	check valve	1		21	pressure switch	1
11	drainage pipe	1		22	handle	1

Spare parts drawing Mobilboy Silence 401/50 OF E

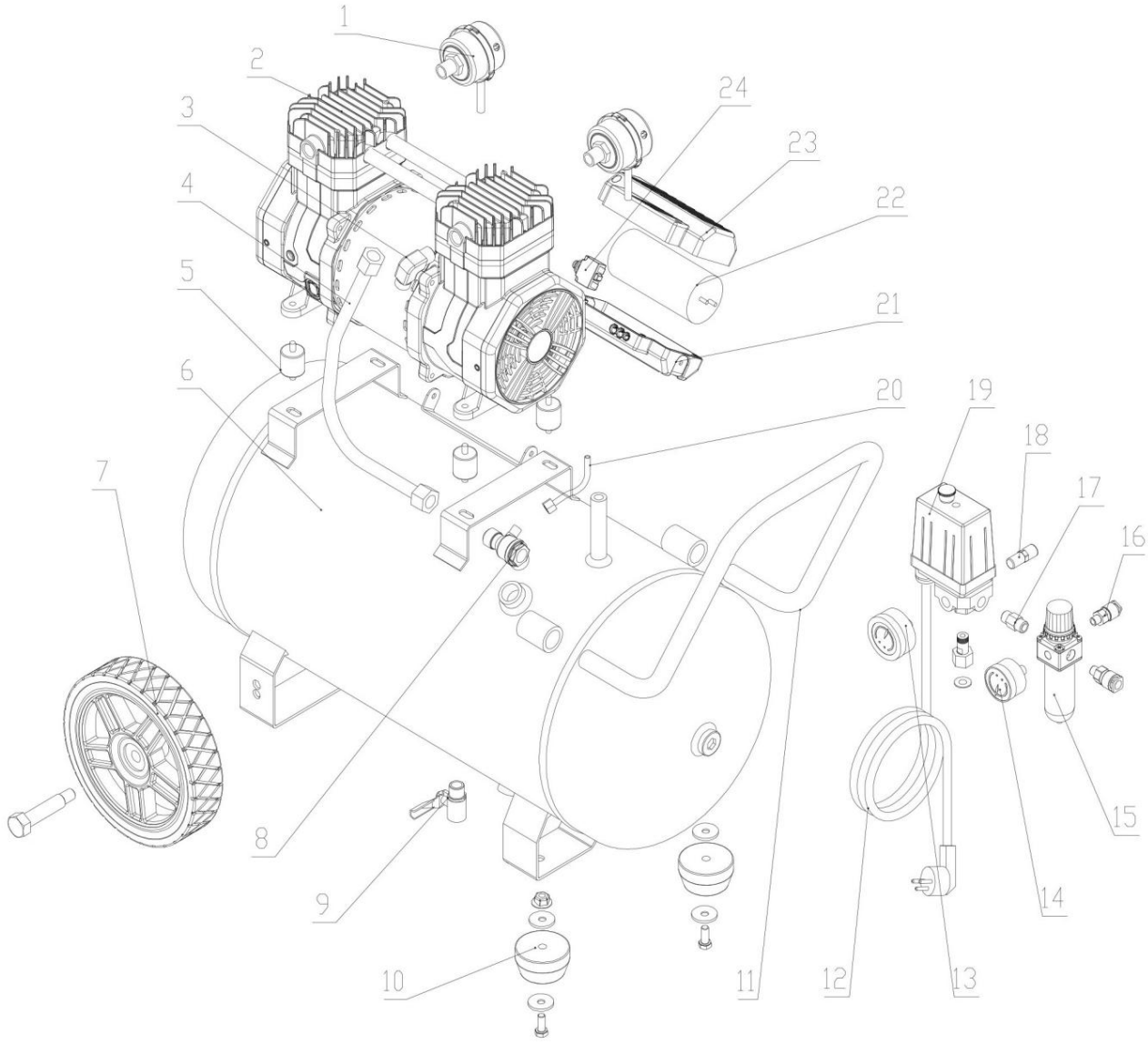


Fig. 16: Spare parts Mobilboy Silence 401/50 OF E

Pos.	Description	Anz.		Pos.	Designation	Anz.
1	air filter	2		13	Manometer	1
2	compressor	1		14	Manometer	1
3	angle piece	1		15	water filter regulator	1
4	drain pipe	1		16	air connection	2
5	compressor base	4		17	1/4-connector	1
6	Kessel	1		18	safety valve	1
7	Rad	2		19	pressure switch	1
8	check valve	1		20	exhaust pipe	1
9	drain valve	1		21	capacitor base	1
10	Rubber sole	2		22	Capacitor	1
11	U-handle	1		23	capacitor cover	1
12	power cord	1		24	circuit breaker 15A	1

13 electrical circuit diagrams

Elektroschaltplan Handy Silence 221 OF E, Mobilboy Silence 211/24 OF E, Mobilboy Silence 241/24 OF E

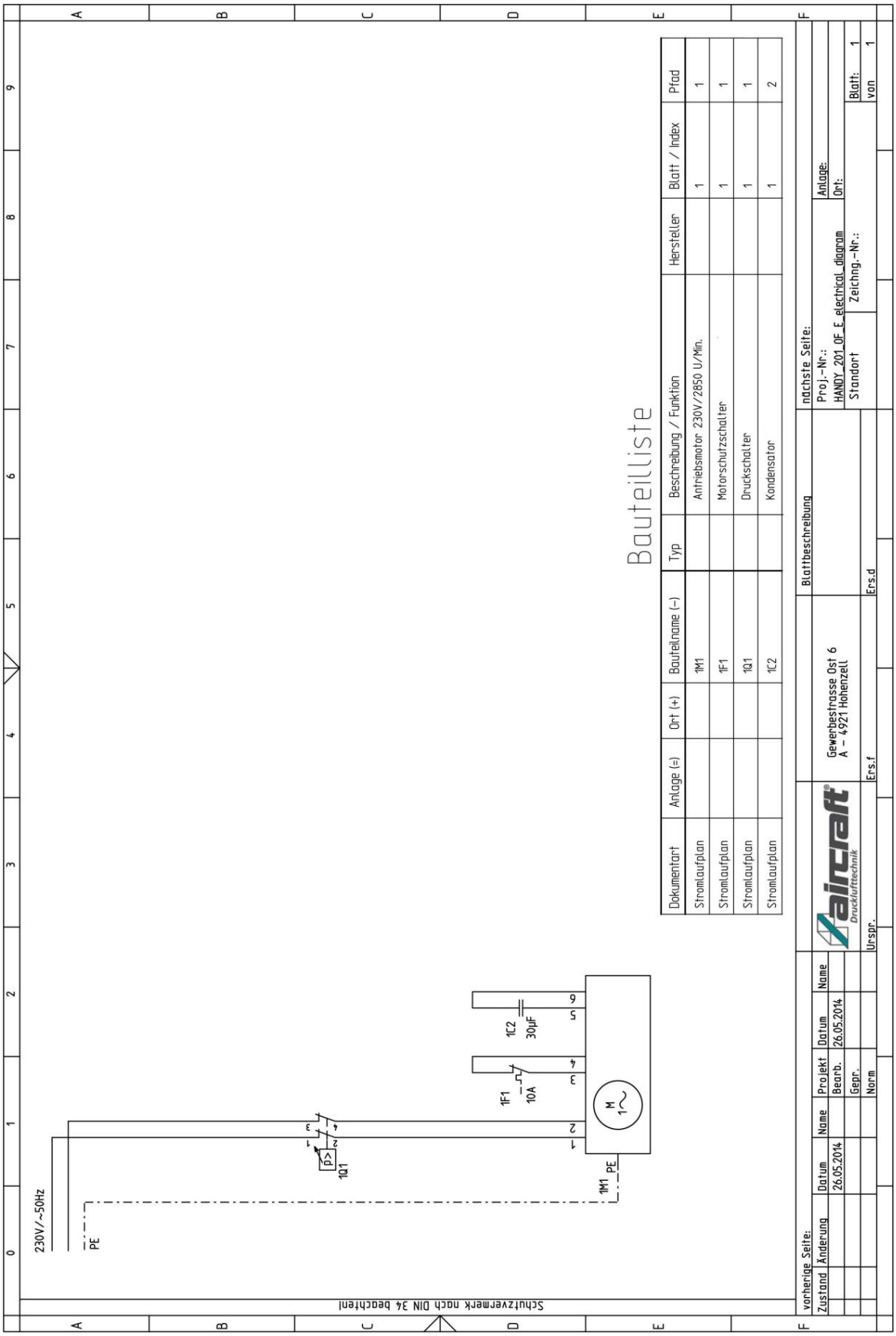


Abb. 17: Elektroschaltplan Handy Silence 221 OF E, Mobilboy Silence 211/24 OF E, Mobilboy Silence 241/24 OF E

Electrical diagram Mobilboy Silence 241/50 OF E and Mobilboy Silence 401/50 OF E

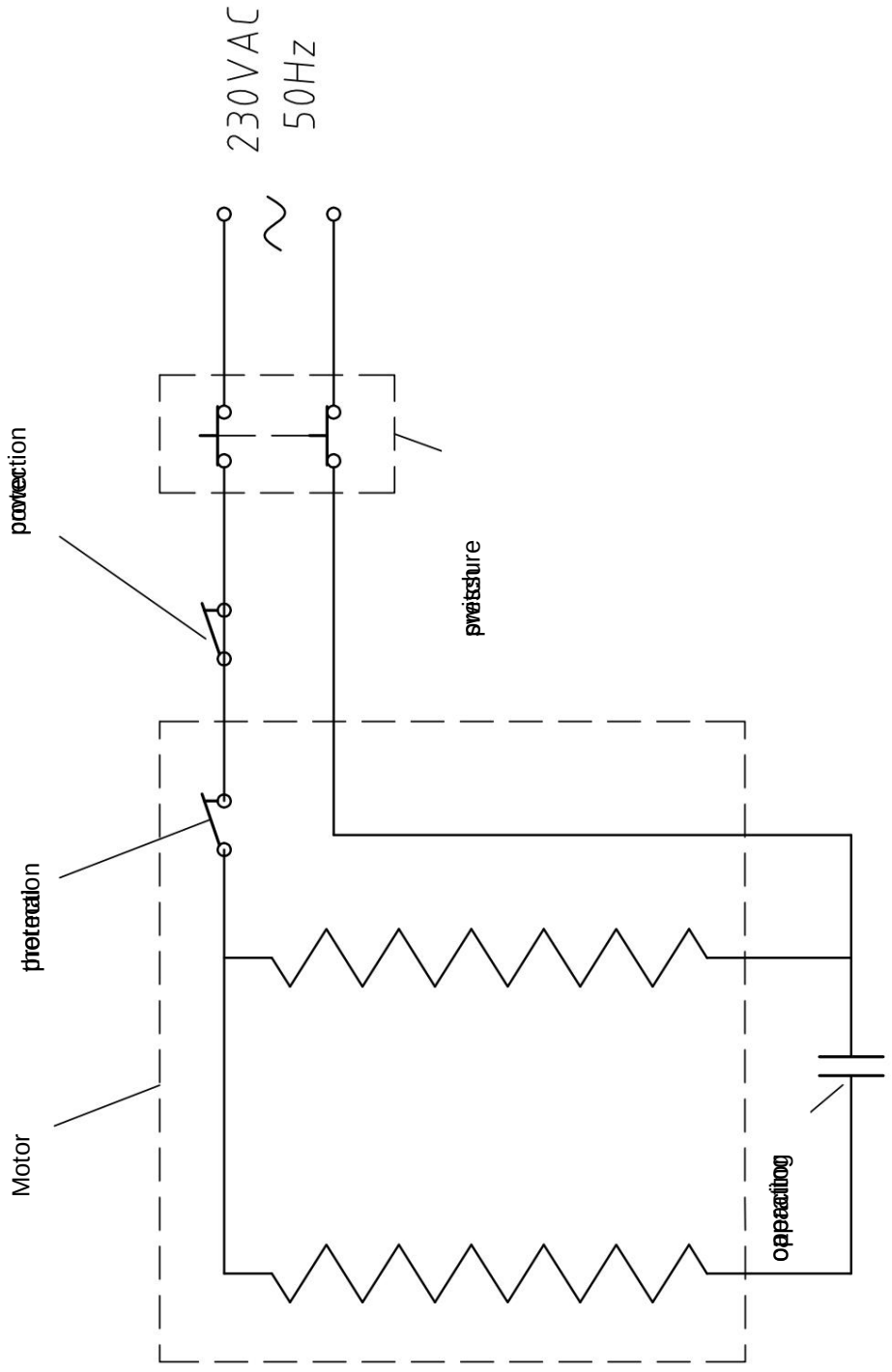
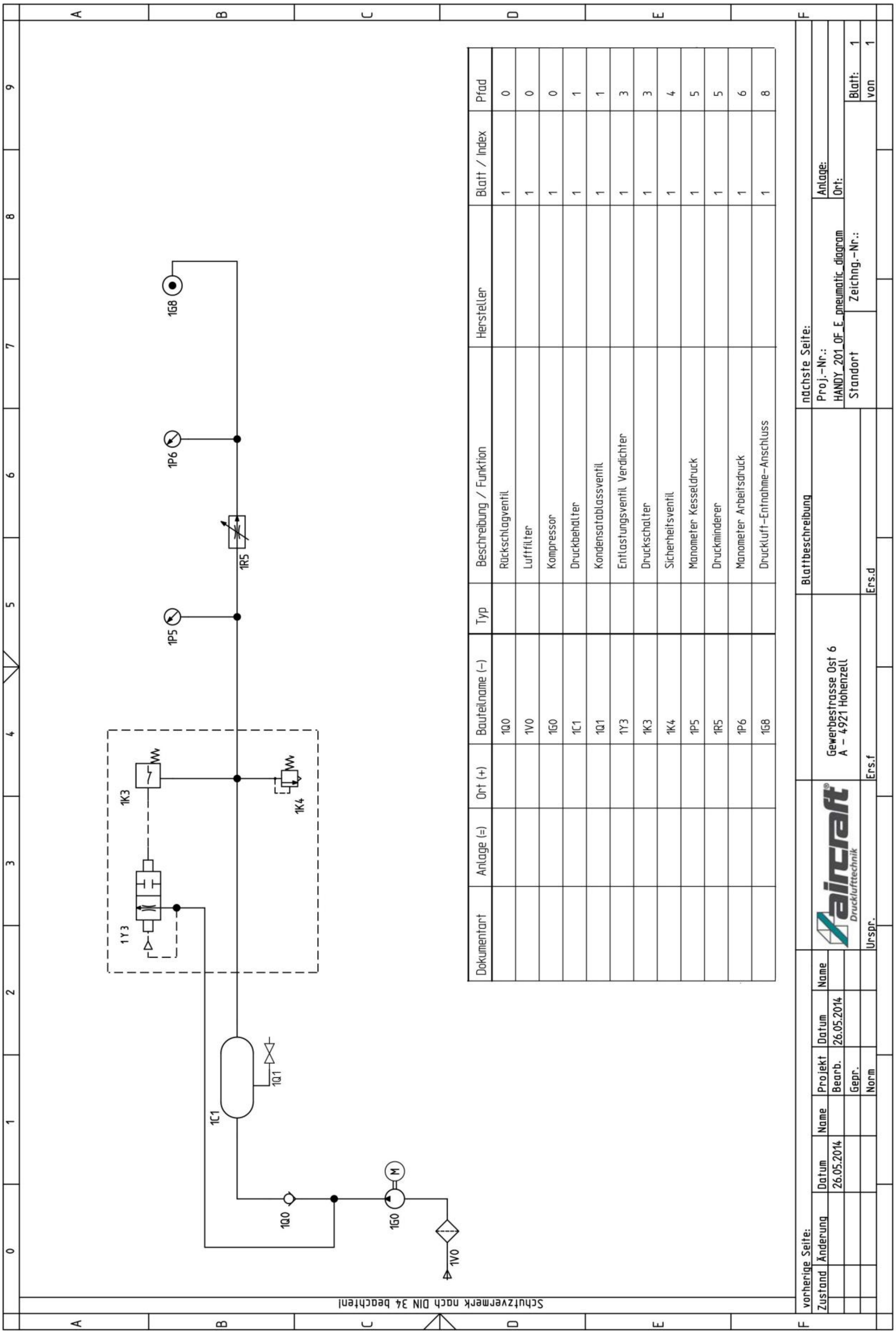


Fig. 18: Electrical diagram Mobilboy Silence 241/50 OF E and Mobilboy Silence 401/50 OF E

14 Pneumatic circuit diagram



Dokumentart	Anlage (=)	Ort (+)	Bauteilname (-)	Typ	Beschreibung / Funktion	Hersteller	Blatt / Index	Pfad
			1Q0		Rückschlagventil		1	0
			1V0		Luftfilter		1	0
			1G0		Kompressor		1	0
			1C1		Druckbehälter		1	1
			1Q1		Kondensatablassventil		1	1
			1Y3		Entlastungsventil Verdichter		1	3
			1K3		Druckschalter		1	3
			1K4		Sicherheitsventil		1	4
			1P5		Manometer Kesseldruck		1	5
			1R5		Druckminderer		1	5
			1P6		Manometer Arbeitsdruck		1	6
			1G8		Druckluft-Entnahme-Anschluss		1	8

Fig. 19: Pneumatic circuit diagram

15 EU Declaration of Conformity

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

Manufacturer/distributor: AIRCRAFT Kompressorenbau und Maschinenhandel GmbH
Gewerbestraße Ost 6
A-4921 Hohenzell

hereby declares that the following product

Product group: AIRCRAFT® compressed air technology

Machine type*: piston compressor

Name of the machine*: **Article number:**

☐ Handy Silence 221 OF E 2001221
☐ Mobilboy Silence 211/24 OF E 2002215
☐ Mobilboy Silence 241/24 OF E 2002245
☐ Mobilboy Silence 241/50 OF E 2002246
☐ Mobilboy Silence 401/50 OF E 2002401

Serial number*: _____

Year of manufacture*: 20_____

*Fill in these fields according to the information on the type plate

due to its design and construction, as well as the version placed on the market by us, complies with the relevant essential 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 met.

Relevant EU directives:

2014/30/EU	EMC Directive
2014/29/EU	Directive on simple pressure vessels
2011/65/EU	RoHS Directive

The following harmonized standards were applied:

EN 60204-1:2018	Safety of machinery – Electrical equipment of machines – Part 1: General requirements
EN IEC 61000-3-11:2019	EMC - Part 3-11: Limits - Limitation of voltage changes, Voltage fluctuations and flicker in public low-voltage Supply networks for devices with a rated current ÿ 75 A per conductor, which are subject to a special connection condition
EN IEC 55014-1:2021	Electromagnetic compatibility - Requirements for household appliances, Electric tools and similar electrical equipment - Part 1: Emitted interference
EN IEC 55014-2:2021	Electromagnetic compatibility - Requirements for household appliances, Electric tools and similar equipment - Part 2: Immunity - Product family standard
EN IEC 61000-3-2:2019 + A1:2021	EMC - Part 3-2: Limits - Limits for harmonic currents (device input current ÿ 16 A per conductor)
EN 286-1:1998	Simple unfired pressure vessels for air or nitrogen - Part 1: pressure vessels for general purposes
EN 61000-3-3:2013 + A1:2019 + A2:2021 + A2:2021/AC:2022	EMC - Part 3-3: Limits - Limitation of voltage changes, Voltage fluctuations and flicker in public low-voltage Supply networks for devices with a rated current ÿ 16 A per conductor that are not subject to special connection conditions
EN 60335-1:2012 + AC:2014 + A11:2014 + A13:2017 + A1:2019 + A2:2019 + A14:2019	Safety of electrical appliances for household and similar purposes - Part 1: General requirements

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

Hohenzell, 06.06.2024 Hallstadt, 06.06.2024

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