Tyre inflator

ALF Tower ALK/ELK

Operating instructions

Store for further use.

JS Aupperle GmbH
www.js-aupperle.de

These operating instructions are a

Original operating instructions	☒
Translation of the original operating instructions	☐

Storage

These operating instructions and the operating manual are part of the ALF-Tower ALK or ELK and must always be kept within easy reach.

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1 Basic information

1.1 Manufacturer

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The address and communication details also apply to customer service requests and spare parts orders .

1.2 Information on the document

Document name	BA_ALF-Tower-ELK_2021-04-14.docx
Version	01
Creation date	23.03.2021
Last change	30.01.2025

1.2.1 Purpose of the document

These operating instructions are intended to familiarise you with the following points:

- Working method,
- Operation,
- Safety instructions,
- Maintenance, cleaning,
- Maintenance, decommissioning/storage and disposal.

You will also receive information on residual risks that may be present on the appliance. These operating instructions also contain instructions on how to avoid dangerous situations. These warnings apply to the entire range of the appliance.

Information on maintenance, repair and adjustment work on purchased parts can be found in the manufacturer's documentation supplied, if applicable.

1.2.2 Target group

The instructions must be read and applied by every person who is authorised to work with/on the system as described below, e.g.

- Operation, including troubleshooting in the work process,
- Maintenance (servicing, inspection, cleaning, repair),
- Transport, installation, commissioning, decommissioning, disposal.

See chapter2.7 , "Personnel selection and qualification - Overview ", and chapter2.6 , "Definition of "skilled worker" / "skilled personnel" .

1.2.3 Scope of the operating instructions

Information!

These operating instructions for the device are supplemented by the documents and technical documentation supplied, see chapter .1.2.4

For reasons of clarity, the operating instructions and user manual cannot contain all detailed information on possible design variants and, in particular, cannot take into account every conceivable case of installation, operation or maintenance. Accordingly, the operating instructions essentially only contain information that is necessary for qualified personnel when the appliance is used as intended in commercial applications.

In the event of any uncertainties in this regard, particularly if detailed product-specific information is missing, the necessary clarifications must be obtained from JS Aupperle GmbH. Please always state the type designation.

1.2.4 Documents supplied and technical documentation

Included in the documentation folder:

- Operating instructions / data sheets for assembly: compressor, thermostat, fan heater, switch-on delay, power supply unit
- Operating instructions for the control unit
- Drawings: Drilling template, circuit diagram

1.3 Warranty , Limitation of liability

Information!

We would like to point out that the contents of these operating instructions are not part of a previous or existing agreement, commitment or legal relationship, nor are they intended to amend such.

All obligations of JS Aupperle GmbH or the supplier arise from the respective purchase contract, which also contains the complete and solely valid warranty provisions. These contractual warranty provisions are neither extended nor limited by the statements in these operating instructions.

The information in these operating instructions corresponds to the current status at the time of publication. It has been carefully checked. Nevertheless, we cannot accept any liability for errors.

All information and instructions for operation and maintenance are provided to the best of our knowledge, taking into account our previous experience and findings. We shall be liable for any errors or omissions to the exclusion of further claims within the scope of the warranty obligations entered into in the purchase contract. Claims for damages, regardless of the legal grounds on which such claims are based, are excluded.

For services such maintenance, repair, spare parts and replacement devices, we recommend that you contact JS Aupperle GmbH.

1.3.1 Repairs

The operator's personnel may only carry out maintenance and servicing work to the extent described in these operating instructions. The instructions in this operating manual must be observed in all respects.

JS Aupperle GmbH accepts no liability or warranty for damage and malfunctions resulting from non-compliance with these instructions or improper repairs by the operator's personnel.

Please contact JS Aupperle GmbH if any uncertainties or complications arise. This may help you to prevent greater damage.

Use for repairs

- only flawless tools,
- Only original spare parts and original wearing parts,

The instructions in this manual and in the technical documentation supplied must be observed

2 Security

2.1 Basic information

The appliance has undergone a safety check.

The design and construction comply with the state of the art and the recognised safety regulations. All necessary safety and protective equipment is available.

The device may be used by all persons who are at least 16 years old and have experience in inflating vehicle tyres.

Further work on the device, e.g. maintenance and care, may only be carried out by instructed and authorised persons, see chapter2.7 , "Personnel selection and qualification - Overview ", and chapter2.6 , "Definition of "skilled worker" / "skilled personnel" .

The operator of the appliance must ensure compliance with local safety and protection regulations.

All safety and danger notices on the appliance must be kept in a legible condition and replaced if necessary.

- Only operate the appliance if all safety and protective devices are properly fitted and fully functional.
- Before switching on the appliance, make sure that nobody can be endangered.
- Check the appliance at least once per shift for externally visible damage and functionality of the safety and protective devices.
- Have any faults that impair safety rectified immediately.

These operating instructions must be supplemented by the rules and regulations for accident prevention and environmental protection applicable to the respective place of use.

Information!

If you have any unanswered questions that you cannot clarify in-house, please get in touch with your contact at the specialist company that installed and commissioned the appliance.

2.2 Prohibition of unauthorised modifications to the device

The safety of the appliance may be impaired by conversions or modifications of any kind.

- Therefore, do not make any changes or additions to the device without the written consent of JS Aupperle GmbH.
- This also applies to the installation and adjustment of safety components and mechanical conversion work.

2.3 Explanation of safety instructions

If there is a hazard when working on the appliance, this is indicated in these operating instructions. Safety instructions are provided for this purpose.

A safety note is displayed as follows:

(symbol)

Degree of hazard!

Type of hazard / cause of hazard

Hazard consequences

⇒ Instructions for action

Symbol

The symbol is intended to visually emphasise a safety instruction. The "general warning sign" shown or other warning symbols that relate directly to the hazard can be used for this purpose, see also the chapter .2.3.1

Degree of hazard

Three different words are used for the degree of risk.

Word	Meaning	Consequence
Danger	Imminent danger to the life and health of persons.	This can have serious adverse health effects, including life-threatening injuries.
Warning	Possible danger to the life and health of persons.	Can have serious adverse health effects, including life-threatening injuries.
Caution	Potentially dangerous situation.	May result in minor injuries or damage to property.

Type of hazard / cause of hazard

Explains the cause of the hazard, e.g. risk of burns from hot components.

Hazard consequences

Explains the possible consequence of the cause of the hazard.

Instructions for action

Explains how the consequence of the cause of the hazard can be avoided.

2.3.1 Symbols used

The following symbols are either present on the device or are used in these operating instructions.

Warnings

Symbol	Explanation	Symbol	Explanation
	Warning of danger zone, General warning sign		Warning of electrical voltage
	Warning of hand injuries		Warning of hot surface
	Warning of suspended load		Warning of danger of slipping

Bids

Symbol	Explanation	Symbol	Explanation
	Use hand protection		Use foot protection
	Use hearing protection		

Pay attention to all labels attached directly to the device.

- Safety instructions,
- Indicator for connections.

Keep them in a completely legible condition.

Information!

This symbol provides you with application tips for the correct use of the device. These will help you to make optimum use of the functions and avoid malfunctions.

2.4 Obligation of the operator

The operator undertakes to only authorise persons to operate or work on the appliance who fulfil the following conditions:

- The persons are familiar with the basic regulations on occupational safety and accident prevention and have been instructed in the handling of the appliance.
- The persons have read the safety chapter and the warnings in these operating instructions and are aware of the contents.

The operator must

- Clearly define the responsibilities of personnel for installation, commissioning, operation, set-up, maintenance and servicing.
- Check the safety-conscious work of the operating personnel at regular intervals.
- Provide a separately disconnectable power supply for the device.
- Regularly subject the appliance to a safety inspection or carry out a workplace risk assessment.
- Always keep the operating instructions and all necessary technical documentation available for all relevant work.

2.5 Obligation of the staff

All persons who are authorised to work on the device undertake to do the following before starting work:

- They observe the basic regulations on occupational safety and accident prevention.
- You must observe the safety chapter and the warnings in these operating instructions. To do so, you must read the relevant sections or be informed of their content.

2.6 Definition of "skilled worker" / "skilled personnel"

A qualified person is an individual who, due to their relevant professional education, training and/or experience, is able to recognise risks and avoid potential hazards that occur when using the product.

Depending on the tasks to be carried out, these are skilled workers from different specialist areas, e.g. transport specialists for machine transport or electrical specialists for work on the electrical equipment of a machine.

2.7 Personnel selection and qualification - Overview

- Work on the appliance may only be carried out by reliable persons who are also able to cope with the physical demands.
  Observe the legally authorised minimum age.
- Only use trained and instructed personnel.
- Clearly define the responsibilities of the staff.

Activity	Minimum personnel qualification
Transport	Specialists / trained persons with knowledge of load securing and authorisation for the means of transport of the respective type of transport.
Assembly / commissioning	Specialists / technically trained persons with experience in the installation and commissioning of this type of appliance.
Monitoring, cleaning, troubleshooting	Trained / instructed persons
Operation, i.e. use of the device by the user	All persons who are at least 16 years old and have experience in inflating tyres.
Troubleshooting and fault rectification Maintenance, servicing	Depending on the activity, skilled workers according to job description: plant fitter, mechatronics technician, electrical fitter
Dismantling, disposal	Depending on the job, skilled workers according to job description: plant fitter, mechatronics technician, electrical plant fitter with additional qualification for waste disposal

Table1 Personnel selection and qualification - Overview

- Only trained personnel may open the appliance and carry out activities in the appliance.
- Work on the electrical equipment of the appliance may only be carried out by qualified electricians or by instructed persons under the direction and supervision of a qualified electrician in accordance with the electrical / electronic regulations.

2.8 Personal protective equipment

Depending on the activity on the appliance, personnel must wear different personal protective equipment.

The operator must provide the personnel with personal protective equipment.

 **Protective gloves**	Depending on the activity on the appliance, protective gloves must be used to protect against the following: ■ Thermal hazards
 **Safety shoes**	Must be worn during transport activities or on slippery floors.

2.9 Intended use

The device may only be used to check, inflate and deflate tyres for motor vehicles, i.e. trucks, cars and motorbikes.

The device is **not suitable** for:

- Tyres for bicycles, children's vehicles, wheelbarrows and aerial vehicles
- Ballast tyres filled with water or tyres treated with a corrosive agent

Any other use or use beyond this is considered improper use and constitutes misuse of the device.

The manufacturer is not liable for any resulting damage; the risk is borne solely by the operator.

The operational safety of the appliance is only guaranteed if it is used as intended. Hazards may occur if the appliance is used for purposes other than those for which it is intended.

2.10 Reasonably foreseeable misuse

Reasonably foreseeable misapplications are:

- Inflating objects or toys other than those defined in the intended use.
- Modifications to safety-relevant equipment, such as pressure relief valves.
- Operating the device outside the permissible ambient conditions.
- Operating the appliance in an explosive atmosphere.

2.11 Dangers when handling the device

2.11.1 Hazardous areas

The following danger zones apply to **all** persons:

- the area inside the device

In this area there are permanent present dangers or unexpectedly occurring dangers. Special safety regulations apply.

2.11.2 Sources of danger

The main sources of danger are

- Mechanical hazards
- Electrical hazards
- Thermal hazards due to hot surfaces
- Hazards due to pressurised gases

This may pose a risk to people's health.

2.12 Safety / protective equipment

2.12.1 Safety valve

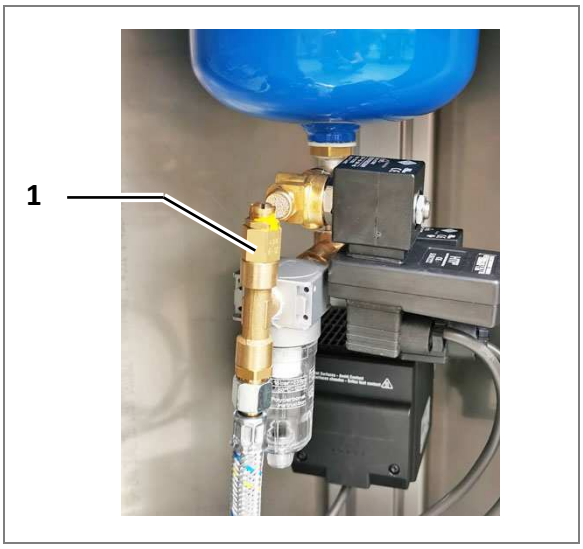


Figure1 Safety valve

Pos.	Designation
1	Safety valve

The safety valve prevents excessive pressure from building up in the pneumatic circuit.

The safety valve prevents excessive pressure from building up in the pneumatic circuit. Therefore, never change the settings or tamper with this safety device.

2.12.2 Isolating protective devices

Access to the appliance is prevented by stainless steel panelling with 2 removable front panels. The front panels can be released and removed using keys.

The front panels may only be removed for maintenance and servicing work.

Before recommissioning, the front panels must be fitted and locked in place.

The appliance must never be left unattended when open.

2.12.3 Shutdown device, operator power

The operator must provide a separate disconnectable power supply for the appliance and have the appliance connected to it by a qualified electrician.

Preferably, the switch-off device should be lockable, e.g. with a key. This allows the appliance to be switched off safely when it is not in use, e.. during the night or due to a fault. It also prevents the appliance from being switched on accidentally during maintenance work.

2.13 Information on the remaining risks

Residual risks are risks that cannot be eliminated by design measures. They are permanently present and can cause injuries, which in serious cases can lead to death.

2.13.1 Residual risks due to mechanical hazards

Danger!

Risk of crushing due to falling loads during transport.

⇒ Never stand in the area of a raised load.

⇒ Also watch out for other people and direct them away from the danger zone.

⇒ Secure the loads against falling before transport.

⇒ Observe the load capacity of the load handling and transport equipment.

Warning!

Risk of crushing due to unintentional movement of loads during transport.

⇒ Secure the loads against unintentional movement (tilting, swinging or slipping).

⇒ Note the centre of gravity.

⇒ Wear safety shoes.

Warning!

Risk of tripping, slipping and falling in the event of soiling or tripping hazards lying around.

⇒ Wear shoes with non-slip soles.

⇒ Make sure that there are no objects lying around in your work area that you could trip over.

Warning!

Missing safety devices or safety devices that do not function properly can cost lives.

⇒ Only operate the appliance with properly functioning safety devices!

⇒ Stop the appliance immediately if you notice a faulty or ineffective safety device.

⇒ Tampering with protective and safety equipment is prohibited.

You as the operator are responsible for this!

2.13.1.1 Residual risks due to compressed air

Warning!

Injuries due to trapped pressures in the pneumatic system.

⇒ Do not loosen any screw connections when the appliance is switched on.

⇒ Switch off and vent the pneumatic system before carrying out any troubleshooting, maintenance or repair work.

⇒ Make sure that there is no more pressure in the system.

To release the residual pressure in the accumulator, proceed as follows:

- Disconnect the power supply to the appliance.
- With an analogue operating device, press and hold the PLUS button until no more pressure comes out of the lever nipple.
- With an electronic control unit, you must open the front panel and release the pressure using a vent valve on the top of the accumulator.

Warning!

Blowing off soiling on the skin or clothing is prohibited.

⇒ Soiling can penetrate the skin due to the pressure

Compressed air at body orifices.

⇒ This can lead to injuries, e.g. bursting of the intestine

Filling unsuitable containers (only vehicle tyres are permitted)

⇒ These can burst

When inflating vehicle tyres, the maximum pressure specified by the tyre manufacturer must not be exceeded.

⇒ This can cause the vehicle tyre to burst

⇒ The filling process must always be monitored by the filler

2.13.2 Residual risks due to electrical hazards

Warning!

Electrical equipment can be energised and can be life-threatening if handled incorrectly.

⇒ As the operator, never work on live parts and never open the terminal box.

⇒ Work on electrical equipment and in the terminal box may only be carried out by qualified electricians in accordance with the applicable guidelines and regulations.

2.13.3 Residual risks due to thermal hazards

Caution!

Risk of burns due to contact with hot surfaces, e.g. on the compressor.

⇒ Wear the necessary protective equipment, e.g. protective gloves, when working in the vicinity of hot surfaces.

⇒ If necessary, switch off the appliance before working and allow hot surfaces to cool down.

2.13.4 Residual risks due to material/substance hazards

Warning!

Cleaning agents can be harmful to health.

⇒ Observe the information or the safety data sheet for the agent used.

⇒ Observe the environmental protection regulations for the individual materials/substances

2.13.5 Other residual risks

Warning!

People who are under the influence of alcohol, medication or drugs may not be able to correctly assess or recognise dangers.

Carelessness or negligence can cause hazards.

⇒ The device may only be installed and used by persons who are sober and not under the influence of drugs or medication that negatively affect their ability to perceive and react.

⇒ The instructions and procedures described in these operating instructions and additional operating instructions must be observed.

2.13.6 Residual risks during maintenance and servicing work

Warning!

Risk of injury during set-up, maintenance, repair, cleaning and servicing work and when searching for faults.

As far as possible, this work must be carried out with the appliance switched off. Residual energy, stored energy (e.g. in the compressed air tank) must be safely discharged as far as possible before starting work, see chapter .2.13.1.1

⇒ Disconnect the appliance from the power supply before removing covers and other protective devices and secure the appliance against accidental switching on again.

⇒ Dismantled protective devices must be reinstalled and checked for correct function before the appliance is put back into operation.

⇒ Ensure that only authorised and trained persons carry out this work.

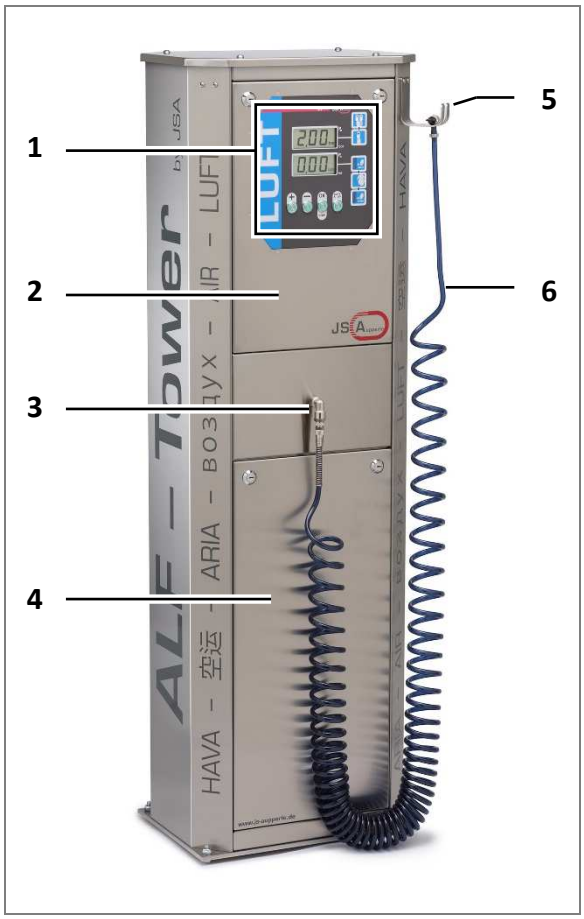
2.14 Behaviour in case of danger, information for emergencies

To stop the device in a hazardous situation, proceed as follows:

- Disconnect the power supply to the appliance.
- If possible, secure the appliance against being switched on again.
- If possible, rescue injured persons and carry out first aid measures if necessary.
- Warn the surrounding area and call the emergency services if necessary.

3 Description of the

3.1 Overview



Pos.	Designation
1	Electronic control unit * Alternatively, an analogue version (ALK) is available. (see operating instructions)
2	Upper front panel
3	Hose connection
4	Lower front panel
5	Bracket
6	Compressed air hose

Figure2 Exterior view

* Separate operating instructions are supplied for the installed operating device.

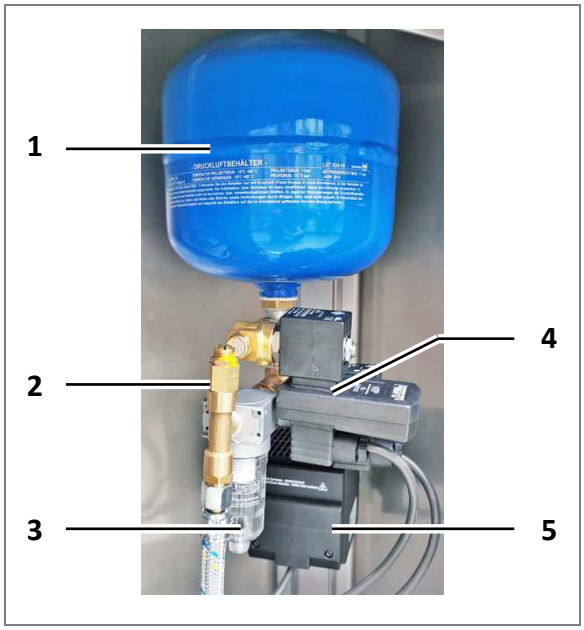


Figure3 Inside; upper area

Pos.	Designation
1	Compressed air tank
2	Safety valve
3	Water separator
4	Valve assembly
5	Fan heater

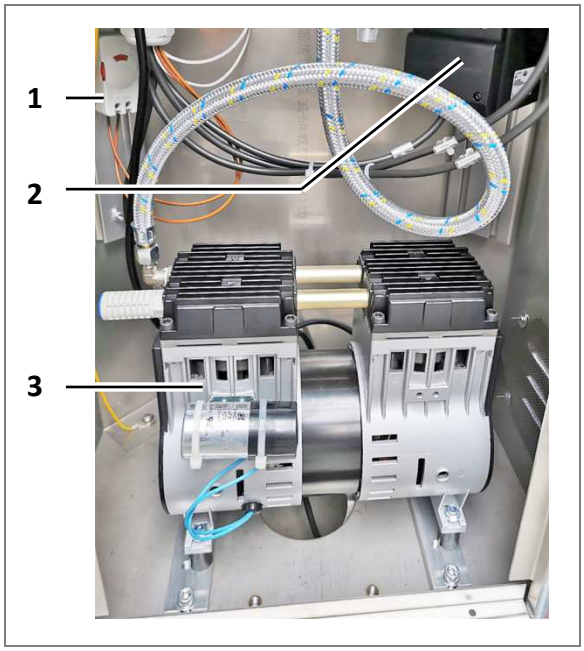


Figure4 Inside; lower area

Pos.	Designation
1	Thermostat
2	Fan heater
3	Compressor

Note: The thermostat must be set so that the interior of the appliance is always kept frost-free**.**

3.2 Functional description

The compressor generates the compressed air and uses it to fill the compressed air tank. When the pressure in the compressed air tank reaches the set value, the compressor is switched off. If the pressure falls below the set value due to air extraction, the compressor is switched on until the compressed air tank is full.

A safety valve ensures that the maximum permissible pressure of the compressed air tank is not reached.

To inflate or check the air pressure in the tyre, the lever plug nipple is connected to the valve on the tyre.

With the electronic control unit, the air pressure in the tyre is automatically adjusted to the set value. With the analogue control unit, the current pressure in the tyre is displayed and can then be corrected by pressing a button. For more detailed information on the respective control unit, please refer to the separate description.

After checking or correcting the tyre pressure, uncouple the lever plug nipple from the tyre valve and hang the lever plug nipple on the bracket.

To prevent misuse, e.g. during the night, you can switch off the power supply to the appliance during this time. However, if there is a risk of frost, you must leave the power supply switched on. This allows the built-in fan heater to keep the interior of the appliance frost-free.

3.3 Technical data

3.3.1 Identification data of the device

Type	ALF Tower
Serial no.	ELK ... (electronic version) ALK ... (analogue variant)
Date of manufacture	See type plate

3.3.2 Type plate

The rating plate is located on the lower left-hand side.

Further type plates are located on the purchased parts.

3.3.3 Weights and dimensions

Weight:	approx. 64 kg
Width× Height × Depth	approx. 475× 1510× 340 mm

3.3.4 Space requirement

An area of approx. 1 metre must be kept clear around the appliance for operation, maintenance and servicing.

3.3.5 Electrical e Energy supply

Tension	230 V
Frequency	50 Hz
Power consumption	max. 1.1 KW
Protection	10 A with RCD

For further information, please refer to the electrical wiring diagram

3.3.6 Compressed air

Operating pressure Pressure vessel	8.5 bar
Pressure vessel volume	approx. 2.5 litres
Condensate drainage	Time-controlled, automatic
Hose length	Spiral hose with 8.5 m working length

3.3.7 Operating and ambient conditions

Ambient temperatures	**Min.**	**Max.**
Storage and transport	-10°C	+60 C
Operating temperature:	**-10°C**	**+40°C**

Air humidity	**Min.**	**Max.**
Storage, transport, operation	20%	80%

- Do not drop the appliance during transport, transport it as vibration-free as possible and protect it from moisture during transport.
- Set up the appliance as vibration-free as possible and ensure adequate ventilation.
- No operation in potentially explosive atmospheres.

3.3.8 Electromagnetic compatibility

Due to the electromagnetic radiation emitted by the device, the surroundings may be affected.

- The appliance is intended for use in the commercial sector.
- It is designed and manufactured according to the state of the art in such a way that no electromagnetic interference occurs during normal operation.
- It is sufficiently insensitive to the electromagnetic interference to be expected during normal operation.

3.3.9 Airborne sound emission of the appliance, noise

- The A-weighted emission sound pressure level at the workplaces does not exceed 70 dB(A).

4 Transport, Installation and commissioning

4.1 Safety regulations

Observe the information on residual risks in chapter2.13 during transport, installation and commissioning.

Danger!

Risk of crushing due to falling loads during transport.

⇒ Never stand in the area of a raised load.

⇒ Also watch out for other people and direct them away from the danger zone.

⇒ Secure the loads against falling before transport.

⇒ Observe the load capacity of the load handling and transport equipment.

Warning!

Risk of crushing due to unintentional movement of loads during transport.

⇒ Secure the loads against unintentional movement (tilting, swinging or slipping).

⇒ Note the centre of gravity.

⇒ Wear safety shoes.

Warning!

Risk of tripping, slipping and falling in the event of soiling or tripping hazards lying around.

⇒ Wear shoes with non-slip soles.

⇒ Make sure that there are no objects lying around in your work area that you could trip over.

4.2 Transport

4.2.1 Requirements for transport personnel

Transport tasks may only be carried out by trained and authorised personnel.

Installation and commissioning only by trained and authorised specialist personnel.

Staff must know and apply the applicable legal and standardised requirements, see chapter .2.7

4.2.2 Preparation for transport

- Ensure that the device is disconnected from the power supply.
- If necessary, the appliance must be secured on a transport base.
- Clear away any objects or machines at the installation site of the appliance and in the surrounding area.

4.2.3 Inspection on arrival at destination

On arrival at the destination, check the appliance for completeness using the delivery notes and for transport damage. Transport damage must always be reported in writing.

Claims for damages can only be recognised if a corresponding written reservation was made upon delivery.

- First check the packaging for obvious transport damage.
- If the packaging is damaged, this must be noted on the carrier's documents.
- Remove the packaging carefully and cautiously.
- If there is damage to the transported goods without damage to the packaging, you must photograph the packaging and the transported goods and report the damage in writing.

4.2.4 Transport at destination

- Use a suitable means of transport to move the appliance.
- Observe the dimensions and weight of the transported goods, see chapter3.3.3 . The centre of gravity of the appliance is approximately central in the lower third of the housing height
- Use a suitable strap to secure the appliance against falling over and to attach it when lifting. Make sure that the strap does not damage the appliance. If lifting straps are passed under the appliance, another strap must be used in the upper area to secure the appliance against tipping over.
- Handle the appliance with care. This includes, among other things, vibration-free transport. This will prevent damage during transport.
- Move the means of transport at walking pace. The appliance may fall down if travelling too fast.
- Do not drive on ramps or sloping paths.

4.3 Installation and commissioning

4.3.1 Installation site

- The installation site must be level, firm and suitable for installation with ground anchors.
- The ambient conditions for operation must be met, see chapter3.3.7 . The device may only be installed in authorised zones. Local guidelines must be observed.
- An empty conduit with a minimum diameter of 40 mm should be available in the centre of the installation site for the power supply.
- The space requirements of the appliance can be found in the chapter .3.3.4
- Escape routes and rescue equipment must be freely accessible.
- Sufficient access must be guaranteed for the necessary work.
- The space required around the appliance for operation, maintenance and servicing must be taken into account.

4.3.2 Connection to the power supply and operating media

Electrical energy supply

- A voltage connection for the electrical power supply and a sufficiently dimensioned connecting cable with fuse protection are required to operate the appliance.
- It must be possible to switch the voltage for the appliance on and off using an accessible switch within the operating building.
- Qualified electricians must carry out the connection in accordance with the electrical wiring diagram supplied.
- The local mains voltage and frequency must match the device data.
- The information on the fuse protection of the feed-in must be observed.

4.3.3 Installation

- Drill 4 holes according to the drilling template supplied.
  Drill hole diameter: 10 mm
  Min. drill hole depth: 110 mm
- Drive the 4 floor anchors into the drilled holes
- Place the appliance on the floor anchors.
- If necessary, align the appliance vertically using suitable supports.
- Tighten the ground anchors.
- Lay the electrical supply cable in the prepared empty conduit. Make sure that there are no tripping hazards.
- Have the connection made by a qualified electrician.
- Clean the appliance, .e. remove all loose parts from the appliance.
- Attach the safety label to the device so that it is clearly visible to the user. The safety label shows which tyres the device may be used for and what is not permitted.
- Clear away any remaining installation material after installation.

4.4 Initial commissioning

- Remove the transport lock behind the compressor.
- Close all front panels.
- Attach the lever plug nipple with filling hose to the holder.
- Switch on the power supply.
  - The compressor builds up pressure and then switches off automatically.
- Check the appliance for leaks. No hissing noises should be audible.

5 Operation

5.1 Safety regulations

Warning!

Missing safety devices or safety devices that do not function properly can cost lives.

⇒ Only operate the appliance with properly functioning safety devices!

⇒ Stop the appliance immediately if you notice a faulty or ineffective safety device.

⇒ Tampering with protective and safety equipment is prohibited.

Observe the information on residual risks in chapter .2.13

5.2 Requirements for the person

For normal operation, the requirement for the person is twofold:

- **Operator:** The person who switches the appliance on and off and monitors it.
  - This person must be trained and have sufficient experience to recognise faulty conditions of the device and be able to act accordingly. This person must also have access to the device documentation.
- **User:** The person who uses the device, i.e. checks the tyre pressure.
  - This may be carried out by anyone who is at least 16 years old and has experience in inflating vehicle tyres.

5.3 Workplace

The workstation is located on the operating device of the appliance and/or on the tyres of the vehicle.

Other locations may be used for testing, cleaning or maintenance work.

5.4 Checks before switching on

These activities are carried out by the operator or its authorised representative.

- Ensure that the appliance is undamaged and that all front panels are closed.
- Ensure that the compressed air hose is firmly connected.
- Carry out a visual inspection of the lever plug nipple. If the seal is damaged or missing, it must be repaired.

5.5 Switch on

Once the device has been checked in accordance with the chapter5.4 , it can be switched on.

- Switch on the power supply for the device.
- Check whether the compressor is making any unusual noises. If this is the case, determine the cause and rectify it.
- Check whether the compressor switches off after reaching the maximum pressure.

Once the tests have been completed, the device can be released to the user.

5.6 Monitoring / controls

- Regularly check the condition and function of the appliance.
- If the appliance is damaged or malfunctions, switch it off and label it as "Defective".

5.7 Switch off

To switch off the device, switch off the power supply to the device.

6 Troubleshooting

6.1 Safety regulations

Warning!

Risk of injury during set-up, maintenance, repair, cleaning and servicing work and when searching for faults.

As far as possible, this work must be carried out with the appliance switched off. Residual energy, stored energy (e.g. in the compressed air tank) must be safely discharged as far as possible before starting work.

⇒ Disconnect the appliance from the power supply before removing covers and other protective devices and secure the appliance against accidental switching on again.

⇒ Dismantled protective devices must be reinstalled and checked for correct function before the appliance is put back into operation.

⇒ Ensure that only authorised and trained persons carry out this work.

Observe the information on residual risks in chapter .2.13

6.2 Requirements for the executing personnel

- The operating personnel may only carry out activities to the extent specified by the operator.
- Only appropriately trained and authorised specialists may carry out activities beyond this, see chapter .2.7

6.3 General fault diagnosis

No.	Malfunction	Possible cause	Troubleshooting
1	Compressor at short intervals	■ Leak in the compressed air system	■ Check the appliance for leaks and rectify them. ■ Contact manufacturer or authorised dealer
2	Compressor does not start	■ Power supply switched off ■ Pressure switch defective ■ Relay defective	■ Switch on the power supply ■ Check fuse ■ Have the pressure switch and relay checked by appropriately trained specialists and replaced if necessary
3	Error display in the control unit	- -	■ See operating instructions for the control unit

7 Maintenance and maintenance

7.1 Safety regulations

Warning!

Risk of injury during set-up, maintenance, repair, cleaning and servicing work and when searching for faults.

As far as possible, this work must be carried out with the appliance switched off. Residual energy, stored energy (e.g. in the compressed air tank) must be safely discharged as far as possible before starting work.

⇒ Disconnect the appliance from the power supply before removing covers and other protective devices and secure the appliance against accidental switching on again.

⇒ Dismantled protective devices must be reinstalled and checked for correct function before the appliance is put back into operation.

⇒ Ensure that only authorised and trained persons carry out this work.

Observe the information on residual risks in chapter .2.13

Under no circumstances should maintenance and adjustment work be carried out by a single person without another person in the vicinity who can provide support and assistance.

It must be ruled out that movements can be carried out during repair work, that pressurised gases are present or that electrical voltages are present.

- Before starting maintenance or repair work, you must switch off the appliance and secure it against being switched on again.
- If available, also switch off external voltage circuits.
- Make sure that there is no more voltage.
- Depressurise the pneumatic system.
  - With an analogue operating device, press and hold the PLUS button until no more pressure comes out of the lever nipple.
  - With an electronic control unit, you must open the front panel and release the pressure using a vent valve on the top of the accumulator.
  - As a safety measure, the vent valve can remain open during maintenance work.
- Ensure adequate lighting. If necessary, use additional lighting equipment for maintenance work.
- Secure the maintenance area and affix warning signs.

7.2 Requirements for the executing personnel

- Trained / instructed persons can carry out operational maintenance activities to a specified extent.
- Servicing and maintenance work that goes beyond normal maintenance may only be carried out by trained and authorised specialists, see also chapter .2.7

7.3 Cleaning agents

- Use commercially available cleaning agents.
- Do not use thinners, acids or alkalis.
- Do not use high-pressure cleaners or hard jets of water. The appliance is not suitable for cleaning with pressurised water.

7.4 Replacement of safety components

The operator must have the appliance's safety valve replaced at the end of the calculated service life.

Continued operation with safety components whose service life has been exceeded leads to increased risks and is not permitted.

Observe the information in the maintenance table in chapter .7.5

7.5 Maintenance table

Any problems or faults that occur with the device or its associated equipment should be rectified as quickly as possible and should not be postponed until the next routine maintenance.

Purchased parts must be maintained in accordance with the manufacturer's instructions.

Safety components of the appliance must be replaced at the end of their calculated service life.

If the intervals are specified both in operating hours (h) and in time periods (e.g. daily / weekly), the time that occurs first applies.

How often? Interval	**What ? activity**	**How?**
8 h / daily	Check the zero position of the pressure gauge	Visual inspection: Is the pointer of the pressure gauge in the zero position within the black area? Outside the area: Contact authorised dealer
	Lever nipple seal	Visual inspection: Is the seal still in place? If the seal is too worn, please replace it
40 h / week	Lever nipple	Visual inspection
	Filling hose	Visual / leak test If the filling hose has kinks or leaks, it must be replaced immediately.
Half-yearly	Calibration sticker	Visual inspection, validity of calibration
	Check compressor intake filter for contamination	Visual inspection, replace intake filter if too dirty
yearly	Check ventilation grille for soiling	Clean the ventilation grille if necessary
	Inspection and verification of measuring accuracy with a calibrated pressure gauge	See operating instructions point 8 Maintenance/repair
Every 5 years	Safety valve	Have the safety valve replaced by appropriately trained specialists

How often? Interval	What ? activity	How?
	Pressure vessel	Have pressurised containers inspected by appropriately trained specialists in accordance with the Ordinance on Industrial Safety and Health

7.6 Proper maintenance - by authorised personnel

Operational maintenance is an aid to help ensure smooth and efficient operation.

7.6.1 Safety inspection

- Check the safety devices for correct function.
- Check the appliance for externally recognisable damage and defects. Any changes must be reported immediately to the responsible office/person. If necessary, the appliance must be shut down and secured immediately! The changes must be rectified immediately.
- In the event of malfunctions, switch off the appliance immediately and secure it. Have faults rectified immediately.
- Check the condition and legibility of the safety label and replace it if necessary.

7.7 Proof of maintenance

Document all maintenance activities carried out in a maintenance log.

7.8 Customer service information

The address, telephone number, fax number and email address of the responsible service centres can be found in this operating manual in the chapter .1.1

8 Decommissioning / Storage

8.1 Safety regulations

Before carrying out any decommissioning work, the power supply to the appliance must be safely switched off by a qualified electrician.

Observe the information on residual risks in chapter .2.13

8.2 Requirements for the executing personnel

- Trained / instructed persons can carry out cleaning work to a specified extent.
- Further decommissioning and storage activities may only be carried out by authorised specialists, see also chapter .2.7

8.3 Decommissioning

- Clean the appliance.
- Have the electrical power supply disconnected by a qualified electrician.
- Cover the device.

8.4 Storage

- If necessary, detach the appliance from the floor anchors and store the appliance inside a building.
- Observe the storage conditions, see chapter3.3.7 , "Operating and ambient conditions ".

9 Waste disposal

Observe the information on residual risks in chapter .2.13

- Pay attention to environmental compatibility, health risks, disposal regulations and your local options for proper disposal.
- Separate metals, non-metals, composite materials and auxiliary materials by type and dispose of the materials in an environmentally friendly manner.
- Electrical and electronic components must be disposed of in accordance with legal requirements.

10 Appendix

10.1 Spare parts list

Naming	Part number
Compressor unit	5906510
Intake filter for compressor	
Switch-on delay	5906562
Voltage transformer	5906544
Relay	5906543
Pressure switch	5906335
Thermostat STO 011 NC	5906546
Fan heater CSL 028	5906284
Boiler profile	5906573
Water separator	5906517
Polycarbonate container (for water separator)	

10.2 Wear parts list

Naming	Part number
Lever nipple	5062605
Seal for lever plug nipple	030717
Hose spiral 8.5m	5900080

11 EC Declaration of Conformity

EC Declaration of Conformity

within the meaning of Directive 2006/42/EC, Annex II, No. 1, paragraph A

Tyre inflator "ALF-Tower ALK/ELK"

has been developed, designed and manufactured in accordance with the above-mentioned EC directives, under the sole responsibility of

JS Aupperle GmbH

Untere Wängen 1

D- 73119 Zell u. A

This declaration only refers to the device in the condition in which it was placed on the market; parts subsequently fitted by the end user and/or subsequent modifications are not taken into account.

The following harmonised standards were applied:

- EN ISO 12100:
- EN 60204-1:2018

is the authorised person for compiling the technical documentation:
Mr Jens Aupperle, address see above.

Zell u. A., 28.04.2021
Place, date

Jens Aupperle, Managing Director

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