

AL-KO

QUALITY FOR LIFE



EN

AIR PURIFIER

OPERATING MANUAL

AL-KO AIRSAFE® 1200 / 1600

Legal

AL-KO THERM GMBH
Hauptstraße 248 - 250
D-89343 Jettingen-Scheppach
Germany
Fon: +49 8225 39 - 0
Fax: +49 8225 39 - 2113
E-mail: klima.technik@al-ko.com

Revision history

Version	Description	Date
1.0	Initial release	14/12/2020

Table of contents

1	About this manual	5
1.1	Explanation of symbols	5
1.1.1	Safety instructions.....	5
1.2	Safety symbols.....	6
1.2.1	Abbreviations.....	7
1.3	Legal notices	7
2	Safety instructions	8
2.1	General safety instructions	8
2.2	Specific safety instructions.....	11
2.2.1	Warnings for cleaning work.....	11
2.2.3	Intended use.....	11
2.2.4	Foreseeable misuse	12
3	Product description	13
3.1	Functional description	13
3.1.1	Overview.....	13
3.1.2	Measures to improve air quality	14
3.1.3	Operating and display elements.....	15
3.1.3.1	Control panel.....	15
3.1.3.2	Hygiene timer	15
3.1.3.3	Device plug, device main switch, fine-wire fuse	16
3.2	Technical data.....	16
3.2.1	General technical data	16
3.2.2	Air filtration data.....	16
3.3	Rating plate of the AL-KO AIRSAFE® 1200 / 1600 air purifier	17
4	Delivery, transport, storage	18
4.1	Delivery	18
4.1.1	Scope of supply.....	18
4.1.2	Transport damage.....	18
4.2	Transport	19
4.2.1	Safety	19
4.2.2	Transport under aggravated conditions	20
4.2.3	Transport with fork-lift truck or pallet truck	20
4.2.4	Transport from the delivery to the installation location.....	20
4.3	Storage prior to installation	21
4.4	Disposal of packaging	22
5	Installation	23
5.1	Safety	23
5.2	Remove the outer packaging	23
5.3	Set up the device and secure it.....	24
5.4	Connect the device to the mains power supply.....	25
6	Commissioning	26
6.1	Safety	26
6.2	Switching the device on and off.....	27
6.2.1	Overview.....	27
6.2.2	Switching on the device.....	27
6.2.3	Switching off the device	27
6.3	Operating the device with a timer	28

7	Service and maintenance	29
7.1	Safety	29
7.2	Maintenance schedule	30
7.3	Carry out filter change	31
7.3.1	Safety	31
7.3.2	Filter change indicator	32
7.3.3	Preparation	32
7.3.4	Replace pre-filter	33
7.3.5	Replace HEPA filter	34
7.3.6	Complete the filter change	35
7.4	Circuit diagrams	36
8	Help in the event of faults	37
8.1	Safety	37
8.2	Possible malfunctions	37
8.3	Contacts	38
9	Replacement parts	39
9.1	Spare part list	39
9.2	Proof of delivery	39
10	Disposal	40
11	EC Declaration of Conformity in accordance with 2006/42/EC	41

1 About this manual

- These installation instructions and the operating manual apply to both devices, **AL-KO AIRSAFE® 1200** and **AL-KO AIRSAFE® 1600**, hereinafter referred to as **AL-KO AIRSAFE® 1200 / 1600**.
- The German version is the original text of the installation instructions and the operating manual. All further language versions are translations of the original installation instructions and the operating manual.
- Read these installation instructions and the operating manual carefully before installation, commissioning and maintenance. This is the prerequisite for safe work and trouble-free handling.
- Observe the safety instructions and warnings in this documentation and on the product.
- This documentation is a permanent part of the described product, and must be handed over to the buyer if the product is sold.

1.1 Explanation of symbols

1.1.1 Safety instructions

DANGER



This signal word is used to indicate an immediate dangerous situation which, if not avoided, will result in death or severe injury.

WARNING



This signal word is used to indicate a potentially dangerous situation which, if not avoided, could result in death or severe injury.

CAUTION



This signal word is used to indicate a potentially dangerous situation which, if not avoided, could result in minor injury.

ATTENTION






This signal word is used to indicate a potential risk of property damage.

NOTE










Special instructions for ease of understanding and handling.


1.2 Safety symbols

Meaning	Symbol
GENERAL DANGER SYMBOL If the required safety instructions are not observed, this can lead to death, severe injuries and severe property damage.	
IMPORTANT NOTE If this notice is not observed, problems can arise with the device.	
OBSERVE THE INSTALLATION INSTRUCTIONS AND THE OPERATING MANUAL If the notices in the installation instructions and the operating manual are not observed, problems can arise with the device.	

Warning symbol






The warning symbols used in these installation instructions and the operating manual draw attention to specific hazards.

Meaning	Warning symbol
Warning of electric shock hazard If the necessary safety instructions are not observed, this can lead to severe injury or even death due to hazardous electric shock.	
Warning of crushing hazard If the necessary safety instructions are not observed, this can lead to severe injury or even death due to crushing.	
Warning of hand injury risk If the necessary safety instructions are not observed, this can lead to severe injury or even death.	
Warning of substances hazardous to health If the necessary safety instructions are not observed, this can lead to severe injury or even death.	
Warning of hazards due to industrial trucks If the necessary safety instructions are not observed, this can lead to severe injury or even death.	
Warning of falling from heights If the necessary safety instructions are not observed, this can lead to severe injury or even death.	
Warning of obstacles on the floor If the necessary safety instructions are not observed, this can lead to severe injury or even death.	

Meaning	Warning symbol
<p>Warning of falling objects If the necessary safety instructions are not observed, this can lead to severe injury or even death.</p>	

Instruction symbol

The instruction symbols used in these installation instructions and the operating manual draw attention to instructions to be observed.

Meaning	Instruction symbol
<p>Wear eye protection If eye protection is not worn, injuries may be caused to the eyes.</p>	
<p>Wear foot protection If foot protection is not worn, injuries may be caused to the feet.</p>	
<p>Wear hand protection If hand protection is not worn, injuries may be caused to the hands.</p>	
<p>Wear breathing masks If respiratory protection is not worn, poisoning and chemical burns to the lungs may occur.</p>	
<p>Isolate before maintenance or repair Failure to disconnect the device from all energy sources before starting maintenance or repair work can result in serious injuries.</p>	

1.2.1 Abbreviations

PPE – Personal Protective Equipment: for example, cut-proof gloves, safety goggles, helmet, working gloves, helmet, mask

1.3 Legal notices

All specified data serve solely to describe the product. No statement on a specific characteristic or suitability for a specific purpose can be derived from these data. The data do not exempt the user from his own judgement and checks.

2 Safety instructions

2.1 General safety instructions

2.1.1 Warnings

WARNING



Risk of serious injury or even death due to working without personal protective equipment!

Working on the **AL-KO AIRSAFE® 1200 / 1600** without personal protective equipment (PPE) can result in serious injuries or even death.



- Observe the safety instructions in these installation instructions and the operating manual.
- Wear your PPE during all work on the device.
- Use further protective equipment according to the work to be carried out.

WARNING



Risk of serious injuries or death!

Working on the **AL-KO AIRSAFE® 1200 / 1600** can result in serious injuries or even death.



- Have repair, maintenance and service work carried out only by qualified personnel.
- Disconnect the device from the mains power supply and protect it against being reconnected and restarted before starting repair or maintenance work.
- Avoid naked flames and sparks in the intake area of the device.
- Observe the working instructions and these installation instructions and the operating manual.
- Work carefully at all times.
- Wear your PPE during all work on the device.

WARNING



Risk of injury from unauthorised opening.

- Keep the rear housing cover and the cover with control panel closed during operation.
- Never open the device during operation.
- The rear housing cover may only be opened by qualified personnel.

2.1.2 Children and persons with limited capabilities

This device may be operated by children aged eight years and older and by persons with limited physical, sensory or mental capabilities or lacking experience and/or knowledge as long as they are supervised or have been instructed in the safe use of the device and are aware of the resulting dangers. Children must not be allowed to play with the device. Children may not clean or perform user maintenance on the pump without supervision.

Persons with very severe and complex limitations may have requirements going beyond the instructions given here.

2.1.3 Improper use and operation

Observe the safety instructions in these installation instructions and the operating manual in order to avoid injury, fire and other dangers caused by improper use and operation of the device:

- The design and construction of the **AL-KO AIRSAFE® 1200 / 1600** device complies with the standards listed in the declaration of conformity.
- If installation is performed contrary to our regulations, and the defect/damage which has occurred is attributable to improper modification, processing or any other treatment, all damage compensation or warranty claims are ruled out. The orderer must prove that improper installation did not cause the defect which has occurred.
- Safety and monitoring equipment must not be removed, bridged or disabled in any other way.
- All authorised persons must have read and understood the installation instructions and the operating manual in full before starting work on the device and must observe them at all times!
- In order avoid hazards during operation, all company, operating and work instructions of the user apply in addition to these installation instructions and the operating manual.

2.1.4 Safety instructions for operation

- The device may only be operated in the performance range specified in the AL-KO THERM technical documents.
- The **AL-KO AIRSAFE® 1200 / 1600** air purifier must be installed correctly and used in strict compliance with our installation instructions and the operating manual.
- The device may only be operated fully assembled and fitted with effective contact guards.
- The device may only be operated in a technically flawless condition. Malfunctions and damage that can affect safety must be immediately and professionally rectified.
- The design and construction of the **AL-KO AIRSAFE® 1200 / 1600** air purifier complies with the standards listed in the Declaration of conformity or Installation Declaration . All electrical parts are protected by fixed, securely fastened guards that can only be removed using tools.
- Avoid spark formation in the vicinity of the **AL-KO AIRSAFE® 1200 / 1600** air purifier.

2.1.5 Safety instructions for maintenance

- Replace damaged and worn components only with original spare parts.
- Always disconnect the mains plug before starting repair and maintenance work.
- The general maintenance instructions in the AL-KO THERM installation instructions and the operating manual must be observed.
- Observe the run-on time of the fan. Wait at least three minutes for the fan impeller to come to a standstill before opening the rear housing cover and the cover with control panel.

2.1.6 Personal safety instructions

- The **AL-KO AIRSAFE® 1200 / 1600** air purifier may only be operated by persons trained in its use and expressly authorised to do so.
- The wearing of PPE is necessary when working on the **AL-KO AIRSAFE® 1200 / 1600** air purifier!
- The installation instructions and the operating manual must be available at a suitable place in the device operating location.

2.1.7 Residual dangers

The device may pose hazards if it is not operated by trained personnel and/or is operated improperly or not according to its intended use.

Residual dangers are potential hazards that are not immediately apparent, such as:

- Injuries due to failure to observe the safety instructions, standards, directives or regulations.
- Injuries caused by uncoordinated work.
- Injuries or death from electric shock due to working on cables with damaged insulation and defective connections.
- Risk of fire hazard due to damaged fan parts, e.g. hot-running bearings.
- Injuries caused by working on the fan before it has come to a standstill.
- Injuries caused by pinching or crushing and collisions during transport, unpacking and setup of the device.
- Tipping of the device due to installation on uneven or loose ground and due to inadequate fixation of the device using the wall mounting bracket.
- Risk of tripping and falling due to improper routing of the electrical connecting lead.
- Health hazards due to poor hygiene, such as failure to change filters at regular intervals.
- Hazards due to improper conduct resulting from failure to observe the safety instructions, standards and regulations.

2.2 Specific safety instructions

2.2.1 Warnings for cleaning work

WARNING



Risk of injury due to collisions, cutting, pinching and crushing.

There is a risk of injury to hands and arms during cleaning work.

- Work carefully at all times.
- Wear your PPE (cut-proof gloves, safety goggles, safety shoes).

WARNING



Health hazards due to contact with media.

There is a risk of health hazards during cleaning work due to skin contact with microbially contaminated impurities and liquids and inhalation of vapours.

- Minimise the risk of contamination by observing the maintenance intervals.
- Use food-safe and paint-compatible disinfectants and cleaning agents.
Test the paint compatibility on an inconspicuous area of the housing surface.
- Use only approved containers.
- Ensure an adequate supply of fresh air.
- Wear your PPE (cut-proof gloves, goggles, breathing mask).
- Observe the hazardous substances regulations for the cleaning agents used.

2.2.2 Training

The owner/operator of the **AL-KO AIRSAFE® 1200 / 1600** air purifier must brief his personnel on the following subjects at regular intervals:

- Compliance with the installation instructions and the operating manual and the statutory regulations.
- Intended use of the device.
- Observance of all company, operating and work instructions at the owner's/operator's setup location.
- Response to faults.

2.2.3 Intended use

The **AL-KO AIRSAFE® 1200 / 1600** air purifier is intended exclusively for the sterilisation of atmospheric air in heavily frequented rooms. The device reduces the risk of infection by lowering the dust content, aerosol concentrations and other contaminants in the air.

The **AL-KO AIRSAFE® 1200** air purifier is intended for rooms from 20 to 140 m².

The **AL-KO AIRSAFE® 1600** air purifier is intended for rooms from 30 to 180 m².

The devices may only be used for room air sterilisation in large, heavily frequented rooms, such as:

- Classrooms in schools
- Day care centres
- Restaurants
- Conference rooms
- Shops

The devices are suitable for operation in the temperature range from -20°C to +40°C. Deviating fields of application must be agreed upon with the manufacturer.

The risk is borne solely by the user. Furthermore, the intended use also means compliance with the operating and maintenance conditions listed in these installation instructions and the operating manual (see sections "6 Commissioning" on page 26 and "7 Service and maintenance" on page 29).

- Operate the device only when it is fully assembled.
- Set up the device on level ground.
- Protect the device from moisture.
- Use only original replacement parts from AL-KO THERM.
- Children and persons who are not familiar with the device must not use it.
- Observe all accident prevention and fire protection regulations.

2.2.4 Foreseeable misuse

The **AL-KO AIRSAFE® 1200 / 1600** air purifier may only be operated within the limits of the technical data specified by AL-KO THERM. Any other use or use beyond that described in section "2.2.3 Intended use" on page 11 is regarded as being not in accordance with the intended use. The manufacturer cannot be held liable for damage resulting from this. Possible misuse includes:

- Not setting up the device on level ground.
- Conveying media with impermissibly high or low temperatures.
- Conveying aggressive media or media with a high dust content.
- Installation and operation in an environment with aggressive media (e.g. sea air) or media with a high dust content (desert).
- Installation in rooms larger than the maximum size specified for this device.
- Installation and operation outdoors.
- Operation without pre-filter and/or without HEPA filter.
- Use in a potentially explosive atmosphere.
- Failure to observe the static limits (additional components).

3 Product description

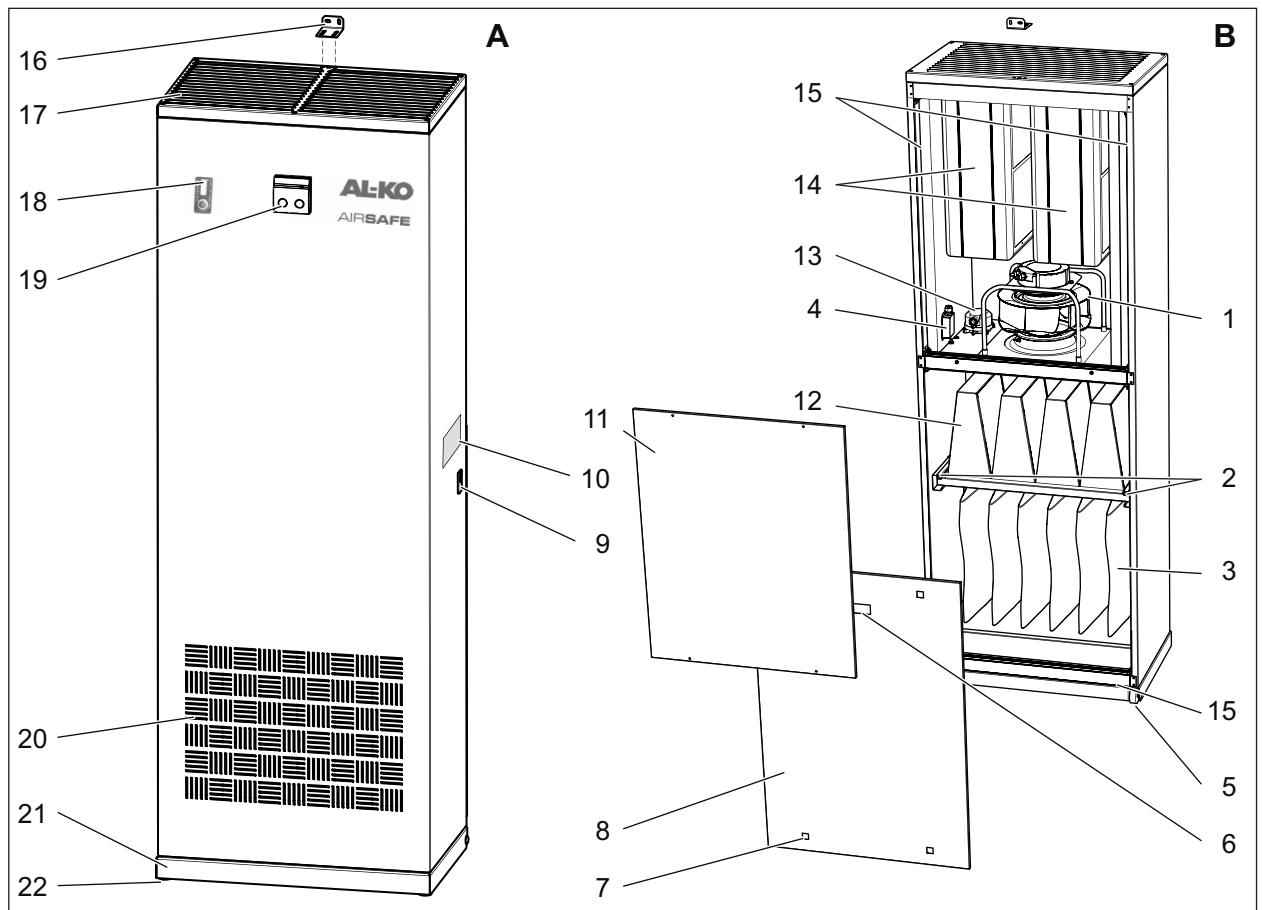
The flexible, quiet and space-saving **AL-KO AIRSAFE® 1200 / 1600** air purifier is used to purify the air in rooms.

- The exact type designation can be found on the rating plate attached to the housing. When ordering replacement parts or in case of other queries, please specify the type designation of the **AL-KO AIRSAFE® 1200 / 1600** device, the year of construction and the serial number (see section "3.3 Rating plate of the AL-KO AIRSAFE® 1200 / 1600 air purifier" on page 17).
- The device is suitable for operation in the temperature range from -20°C to +40°C.
- The device consists of one component.
- The device is available only for indoor installation.

3.1 Functional description

3.1.1 Overview

The **AL-KO AIRSAFE® 1200 / 1600** air purifier makes a significant contribution to improving the air quality in heavily frequented indoor rooms. By filtering the air through an H13 class HEPA filter, 99.95% of viruses, bacteria, pollen, spores and aerosols are absorbed in the particulate filter, thus effectively reducing the risk of infection. The device can be used for room sizes up to 180 m² with infinitely variable, quiet continuous operation.



A	Operating side (front side)	11	Rear housing cover
B	Maintenance side (rear side)	12	HEPA filter (HEPA H13)
1	Fan	13	Load cell
2	HEPA filter guide rail (HEPA H13)	14	Silencers
3	Pre-filter (bag filter)	15	Sound insulation
4	Device plug cover	16	Wall mounting bracket
5	Castor	17	Outlet hood
6	Handle recess	18	Hygiene timer (time strip)
7	Lock (8 mm Allen screw)	19	Control panel
8	Cover with control panel	20	Intake grille
9	Device plug, main switch, fine-wire fuse	21	Device base
10	Rating plate	22	Height-adjustable foot

The **AL-KO AIRSAFE® 1200 / 1600** air purifier has castors (5) and height-adjustable feet (22) on the device base (21) and a handle recess (6) on the rear of the housing. The device can thus be easily set up and positioned horizontally on a level surface with sufficient load-bearing capacity, on a straight interior wall at its intended installation location by two persons. The air purifier can be easily moved away from the wall for maintenance.

The device draws in room air through the intake grille (20) on the front and passes it through a two-stage filter system. A bag pre-filter (3) first removes coarse dirt particles before the pre-cleaned air is passed on to the HEPA H13 filter (12) above it. This is designed in accordance with the EN 1822 and removes the smallest aerosols and particles. The cleaned air is then returned to the room via the outlet hood (17) on the top of the device.

The air flow is conveyed by a fan (1). Its sound emissions are minimised by two silencers (14) and sound insulation (15) inside the housing. Furthermore, the choice of the H13 class HEPA filter ensures extremely quiet continuous operation of the air purifier.

In order to guarantee a high quality of the cleaned air leaving the outlet hood (17), the filter is constantly monitored by means of a differential pressure measurement using the load cell (13). The pre-filter can easily be removed by the owner/operator by opening the four retaining clamps. The HEPA filter is only pushed in on rails (2) and can be removed by pulling it out.

The device is switched on and off, its function monitored, the status of the two filters displayed and the fan controlled via a clearly arranged control panel (19) on the front of the **AL-KO AIRSAFE® 1200 / 1600** air purifier. An additional hygiene timer (18) stuck to the housing signals when the pre-filter needs to be replaced. The hygiene timer is always replaced together with the pre-filter by the owner/operator.

After the filter has been changed and the device switched on, the hygiene timer is activated by the owner/operator with a firm press on its integrated start button. A red bar in the sight glass indicates the correct function. When the level reaches the upper edge of the scale, the pre-filter has to be replaced.

3.1.2 Measures to improve air quality

NOTE



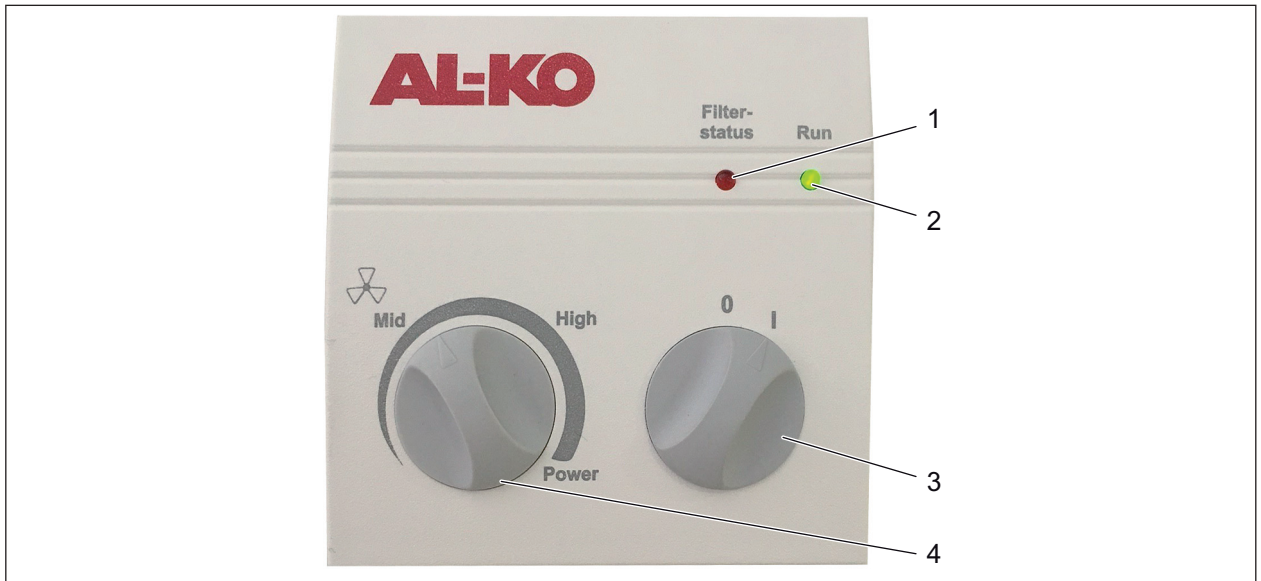
Our products are subject to continuous quality control, and comply with the applicable regulations.

In addition to the operation of an **AL-KO AIRSAFE® 1200 / 1600** air purifier, the following measures are necessary to ensure a consistently high indoor air quality:

- Ensure an adequate air cleaning capacity appropriate to the size of the room. The hourly air flow rate of the air purifier should be at least three times the air volume of the room, in the case of high contaminant concentrations six times the room volume. If necessary, use several devices in one room.
- Eliminate or reduce the cause of the room air contamination.
- Ensure a regular supply of fresh air.

3.1.3 Operating and display elements

3.1.3.1 Control panel



1	Filter status LED (red)	3	Fan rotary switch (0 / I)
2	Run LED (green)	4	Fan control knob (Mid / High / Power)

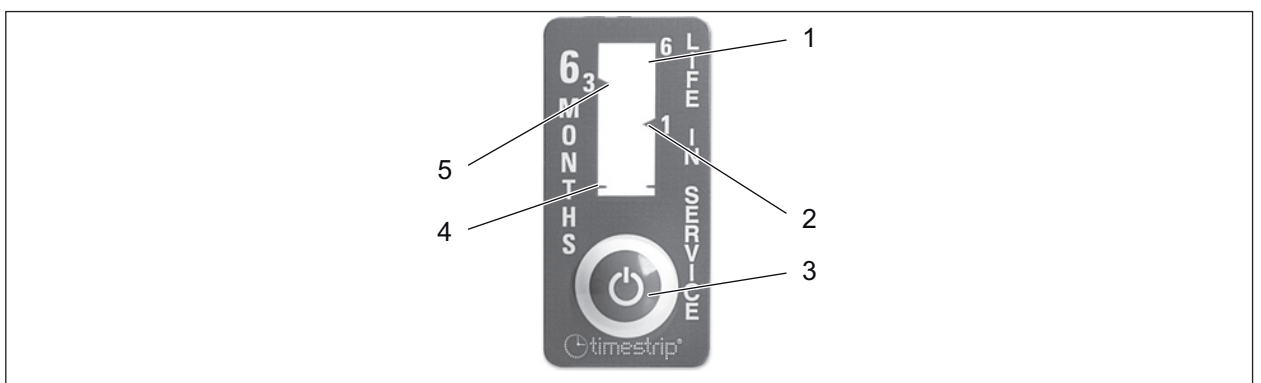
The fan is switched on and off with the fan rotary switch (3). The green **Run** LED (2) indicates that the fan is running. The air flow rate through the air purifier can be steplessly regulated with the fan control knob (4). The red **Filter status** LED (1) lights up when a filter change is necessary.

3.1.3.2 Hygiene timer

NOTE



The illustration of the hygiene timer is purely an example. The hygiene timer on your device may differ slightly from that illustrated here.



1	Scale, fill level indicator max. 6 months	4	Fill level pointer
2	Fill level indicator 1 month	5	Fill level indicator 3 months
3	Activation panel		

The hygiene timer signals the period of use of the pre-filter. It is started immediately after commissioning of the air purifier via the activation panel (3). A liquid rises from the bottom to the top; the fill level indicator (4) shows the period of use of the pre-filter on the scale in steps of one month (2), three months (5) and six months (1). When a period of use of six months is reached, the pre-filter has to be replaced.

3.1.3.3 Device plug, device main switch, fine-wire fuse



1	230 V device plug	3	Device main switch
2	Cover over fine-wire fuse		

The power is supplied to the air purifier via the 230 V device plug (1). The device is then switched on at the device main switch (3). A fine-wire fuse (T 6.3 A) is installed under the cover (2).

3.2 Technical data

ATTENTION



Read the documentation supplied with the device. Information on the technical and electrical data can be found there.

3.2.1 General technical data

Data	AL-KO AIRSAFE® 1200	AL-KO AIRSAFE® 1600
Dimensions (W x D x H) in mm	661 x 418 x 1900	661 x 573 x 1900
Weight in kg	100	128
Intended room sizes	20 m ² to 140 m ²	30 m ² to 180 m ²
Article No.	340 6881	340 6882

3.2.2 Air filtration data

Infinitely variable control	AL-KO AIRSAFE® 1200			AL-KO AIRSAFE® 1600		
	MID	HIGH	POWER	MID	HIGH	POWER
Air filtration in m ³ /h	600	980	1200	800	1300	1600
Recommended room size ¹⁾ in m ²	36 - 72	59 - 118	73 - 146	48 - 96	79 - 158	91 - 182
Sound pressure level ²⁾ in dB[A]	35	45	50	35	45	50
Power consumption in W	18	78	130	31	116	191

¹⁾ For efficient reduction of an infection risk, an hourly air filtration rate of 3 to 6 times the room volume is recommended for a room height of 2.75 m.

²⁾ Measured in a 9 x 10 x 2.75 m room with average sound absorption, air purifier installed in the corner.

3.3 Rating plate of the AL-KO AIRSAFE® 1200 / 1600 air purifier

The article number, serial number, year of construction, manufacturer information and the design data can be found on the rating plate. This rating plate is attached to the outside of the device.

AL-KO		THERM GMBH		CE
Hauptstraße 240 - 250 D-89343 Jettingen Scheppach				
Art.-Nr.: 3406881	S/N: 020501-01540	Bj.: 2020		
AIRSAFE 1200				
Stufe:	MID	HIGH	POWER	
Luftfiltration:	600 m ³ /h	980 m ³ /h	1200 m ³ /h	
Empfohlene Raumgröße*:	36-72 m ²	59-118 m ²	73-146 m ²	
Leistungsaufnahme:	18 W	78 W	130 W	
Spannung/Stromart/ Frequenz:	230/1~/50 V/Hz			
Art.-Nr. Ersatzvorfilter:	3407764			
Art.-Nr. Ersatzschwebstofffilter:	3406724			
* Empfehlung 3 bis 6-fache stündliche Luftfiltrationsrate bei 2,75 m Raumhöhe 3407145				Made in Germany

4 Delivery, transport, storage

4.1 Delivery

4.1.1 Scope of supply

ATTENTION



Suitable screws and dowels for the wall mounting bracket must be supplied by the customer. Use only approved fastening materials suitable for the wall mounting.

- The **AL-KO AIRSAFE® 1200 / 1600** air purifier is delivered as a complete unit. The delivery contains:
 - **AL-KO AIRSAFE® 1200 / 1600** air purifier
 - Pre-filter, H13 HEPA filter
 - Hygiene timer
 - Wall mounting bracket
- The **AL-KO AIRSAFE® 1200 / 1600** air purifier is delivered wrapped in plastic foil and mounted on a one-way pallet. The intake grille is packed separately in plastic foil.
- The **AL-KO AIRSAFE® 1200 / 1600** air purifier may only be transported, lifted and installed within the standard operating limits (-20°C to +40°C).

4.1.2 Transport damage

ATTENTION



Claims for damages can only be made within the applicable complaint periods. Report defects or damage to the supplier immediately on discovery.

Inspect the delivery for transport damage immediately. If damage is discovered, proceed as follows:

- Do not accept the delivery or accept it only conditionally.
- Document the extent of damage discovered on the delivery note.
- Initiate a complaint.

4.2 Transport

4.2.1 Safety

⚠ WARNING



Risk of injury during transport and setup of the device.

Risk of injury during transport and setup of the device due to bumping hands and arms, tripping over foreign objects, falling from steps and ladders, cutting on sharp edges, parts falling or tipping over.



- Observe the applicable safety conditions in DGUV regulation 68 “Industrial trucks”.
- Have a second person to help you.
- Use only suitable lifting equipment, industrial trucks and load securing devices.
- Use the specified pick-up and lifting points.
- Use safe steps and ladders.
- Do not stand or walk under suspended loads.
- Secure loads to prevent tipping, slipping and rolling away using suitable lashing straps.
- Observe the indicated weights.
- Keep the transport route and setup location free of tripping hazards.
- Wear your PPE (cut-proof gloves, safety shoes).

⚠ CAUTION



Risk of injury due to the device falling or tipping over.

Failure to observe the safety instructions, standards, directives and regulations leads to a risk of injury due to the device falling or tipping over.



- Observe the applicable standards, directives and regulations.
- Observe the instructions in these installation instructions and the operating manual.
- Work only on surfaces on site that are suitable for installation preparation and lifting.

ATTENTION



- Uniform lifting of the device must be ensured.
- Only approved lifting equipment with a sufficient load-bearing capacity may be used.
- The lifting equipment must be in a flawless condition.
- The load handling equipment must be inspected for load-bearing capacity and damage before use.
- Secure the load during transport.
- Use only suitable transport locks.
- Plan for a second person to help if there is a load to be lifted or moved.
- Move this device only with the intended transport equipment.
- Use only suitable transport devices and industrial trucks.
- The rear fixed housing cover and the cover with control panel must always be closed during transport.

- Ensure sufficient visibility during transport (support personnel, if necessary).
- No persons must be allowed to remain in the transport area.
- The device must only be transported by trained and qualified personnel and in observance of the safety aspects.

- If transport devices are used that require a driving licence, the personnel operating these devices must have an applicable, valid driving licence for this.
- Observe the instructions in these installation instructions and the operating manual and the relevant regulations on occupational health & safety and environmental protection during transport.
- Transport the device only upright and secure the device to prevent tipping and slipping.
- Avoid damaging the device.
- Damage resulting from improper packaging, storage and transport are at the expense of the person responsible.
- The device should be transported in a closed vehicle. Use a forklift or pallet truck together with a hand truck at the setup location. On short, flat surfaces, the castors under the base of the device can be used.
- The **AL-KO AIRSAFE® 1200 / 1600** air purifier may only be transported, lifted and installed within the standard operating limits (-20°C to +40°C).

4.2.2 Transport under aggravated conditions

- When transporting under aggravated conditions (e.g. on open vehicles, under unusual vibrational stresses, transport by sea or in subtropical countries), additional packaging must be used that will protect the device from these particular influences.

4.2.3 Transport with fork-lift truck or pallet truck

The air purifier is delivered standing upright and secured with lashing straps on a one-way pallet.

ATTENTION



Always engage the forks of the fork-lift truck with the pallet.
Pay attention to possible protrusions.

- Before lifting the device, ensure that the rear housing cover and the cover with control panel are closed.
- Suitable fork lengths must be used to prevent damaging the device.
- Use suitable wooden props.

4.2.4 Transport from the delivery to the installation location

ATTENTION

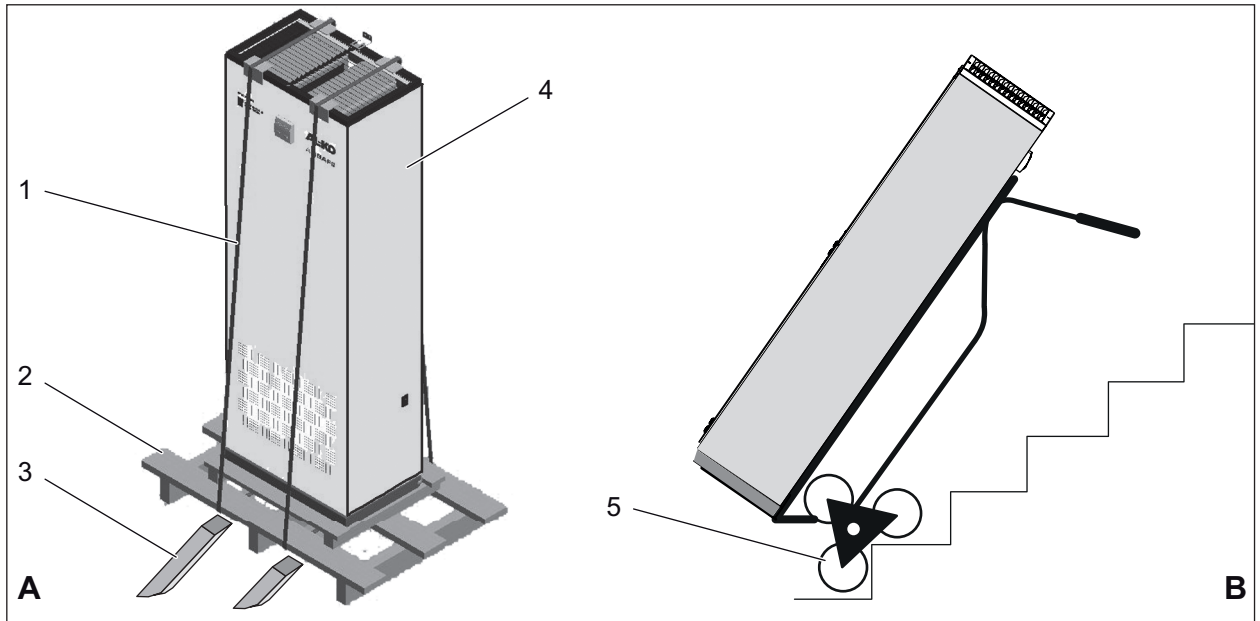


The castors on the housing base may only be used for positioning the air purifier at its installation location and for moving for maintenance work. Use a pallet truck or a hand truck to transport the device over longer distances.

ATTENTION



Secure the air purifier against falling of used transport equipment, tipping over and rolling away during the following work. Have a second person to help you.



A	Transport on one-way pallet	3	Forks
B	Transport on hand truck	4	Air purifier
1	Lashing strap	5	Hand truck
2	One-way pallet		

Use a forklift or pallet truck to transport the air purifier on its one-way pallet (A).

Use a hand truck to transport the air purifier to its intended installation location (B).

- Position the forks (3) of the forklift or pallet truck in the middle of the one-way pallet (2). Pay attention to a uniform distribution of the weight.
- Lift the one-way pallet from the loading area of the transport vehicle and place it on level ground.
- Loosen and remove the two lashing straps (1).
- Lift the air purifier (4) off the one-way pallet.
- Use a hand truck (5) for the further transport of the device to its setup location.

NOTE



To protect the surface of the device during transport, we recommend that the outer packaging (plastic foil) is left on the device and removed only at the final setup location.

4.3 Storage prior to installation

If the air purifier has been delivered, but cannot be installed immediately in its intended installation location, observe the following:

- Store the air purifier in its original packaging or protect the device from dust using a flexible cover during prolonged storage.
- Store the air purifier in a dry location where it is protected from the weather.
- Do not store the air purifier outdoors.
- Frequent and, above all, abrupt temperature changes must be avoided during storage. This entails a risk of moisture condensing. Mould could develop as a result.
- In order to avoid bearing damage, the fan impeller must be turned once a month during standstill times of more than one month. To do this, switch on the device briefly at the device main switch and then switch off again.

- In the case of storage periods of more than one year, the smooth running of the fan bearings must be checked (by turning by hand) before installation. This must only be carried out with the air purifier switched off, disconnected from the power supply and protected against being restarted. Please contact your Customer Service.
- Pay attention to unusual noises when switching on the device after prolonged storage. If in doubt, switch off the device immediately at the device main switch. Disconnect the mains plug.
- Avoid distortion of the housing or other damage during storage.
- Damage resulting from improper packaging and storage is at the expense of the person responsible.

4.4 Disposal of packaging



When disposing of the packaging, proceed according to the relevant local environmental and recycling regulations in your country and community applicable at the time.

5 Installation

5.1 Safety

WARNING



Risk of injury or death from electric shock.

When working on the electrical equipment of the device, there is an increased risk of injury or death due to contact with live parts.

- Such work may only be carried out by a qualified electrician.
- Visually inspect the mains lead and mains plug for damage.
- Ensure that the mains lead is routed correctly.
- Ensure that the device is not standing on the mains lead.
- Wear your PPE (safety shoes).

ATTENTION



Take care during installation work that loosened parts do not fall through the outlet hood into the interior of the air purifier.

5.2 Remove the outer packaging

Step	Action
1	Remove the plastic foil from the device.
2	Remove the protective plastic foil from the intake grille.

5.3 Set up the device and secure it

⚠ CAUTION



Risk of hand injuries due to pinching or crushing during adjustment of the correct height at the device feet.

Risk of pinching or crushing of the hands when adjusting the device feet.

- Use suitable tools for the adjustment work.
- Wear your PPE (protective gloves, safety shoes).

ATTENTION



When choosing the setup location for the air purifier, avoid exposing the hygiene timer to direct sunlight.

ATTENTION



Ensure that the air purifier cannot tip over during the following work. Have a second person to help you.

ATTENTION



Suitable screws and dowels for the wall mounting bracket must be supplied by the customer. Use only approved fastening materials suitable for the wall mounting.

The **AL-KO AIRSAFE® 1200 / 1600** air purifier is bolted to a wall at the installation location using a wall mounting bracket to ensure stability. Proceed as follows:

Step	Action
1	Ensure that both filters are installed in the air purifier.
2	Ensure that the rear housing cover and the cover with the control panel are closed and screwed tight.
3	Ensure that the air purifier is standing on a level surface with sufficient load-bearing capacity.
4	Ensure that the domestic power socket is within reasonable reach of the setup location.
5	Push the air purifier with its rear side against the wall on the castors under the device base. Use the handle recess on the rear side of the device for positioning.
6	Observe the minimum clearances of 0.25 m to the sides and above the device.
7	Ensure that the air purifier is set up on level ground. Correct the alignment of the device using the height-adjustable feet on the device base.
8	Fasten the air purifier to the wall using the wall mounting bracket so that it is secured to prevent tipping or rolling away.
9	Ensure that the air can be drawn in unhindered through the intake grille on the front side of the device, that the intake grille is not obstructed by objects and that the air purifier is not in the vicinity of contamination source (kitchen extractor hood, central dust extraction system, etc.).
10	Ensure that the purified air can be discharged unhindered through the outlet hood on the upper device cover. Do not place anything on the cover.
11	Ensure that the air purifier does not obstruct any access or escape routes.

5.4 Connect the device to the mains power supply

ATTENTION



The use of a all-current sensitive residual current circuit breaker instead of an earth-leakage circuit breaker is recommended for the electrical protection of the air purifier.

ATTENTION



Ensure that no access or escape routes are obstructed when routing the mains lead.

The **AL-KO AIRSAFE® 1200 / 1600** air purifier has a five metre long mains lead with 230 V mains plug (normal domestic power socket).

Proceed as follows to connect the air purifier to the mains power supply:

Step	Action
1	Check that the air purifier is securely mounted on the wall.
2	Connect the 230 V mains plug to the domestic power socket.
3	Particularly in the event of excess length, secure the mains lead so that it does not pose a tripping hazard.

6 Commissioning

6.1 Safety

WARNING



Accident and injury risk due to human misconduct

Failure to observe the safety instructions, standards, directives and regulations leads to a risk of injury.

- Work carefully at all times.
- Wear your PPE.
- Perform a visual inspection for damage, particularly to the mains lead of the device.
- Carry out commissioning only when you have been instructed in doing so.
- Observe the standards and directives.

Before commissioning, ensure that:

- The device has been installed as described in these installation instructions and the operating manual (see "5 Installation" on page 23).
- All the filter elements are correctly installed.
- The device is connected to the mains power supply.

WARNING



Risk of damage to property

There is a risk of property damage or total destruction of the device if the components come into contact with solid or liquid media.

- Install the device only in indoor rooms intended for this purpose.
- Ensure that no solid or liquid media can enter the device through the intake grille or outlet hood.
- Should foreign media have entered the device, switch it off immediately at the device main switch and disconnect the mains plug.
- In the event of damage, have the device inspected by qualified specialist personnel.
- Put the device into operation again only when it has been approved by qualified personnel.

6.2 Switching the device on and off

6.2.1 Overview

NOTE



The illustration of the hygiene timer is purely an example. The hygiene timer on your device may differ slightly from that illustrated here.



1	Device plug	6	Fan rotary switch (0 / I)
2	Main switch	7	Hygiene timer
3	Control panel	8	Pre-filter age indicator
4	Fan control knob (Mid / High / Power)	9	Activation panel
5	Run LED (green)		

6.2.2 Switching on the device

Step	Action
1	Switch on the device at the device main switch (2) on the device plug (1). The device is connected to the mains power supply.
2	Turn the fan rotary switch (6) to position I. The fan goes into operation. Pay attention to the green Run LED (5) on the control panel (3); it must come on. The device is ready for operation.
3	Set the air flow rate to the air filtration rate specified for this room at the fan control knob (4) with the steps Mid , High and Power . Follow the recommendations in section "3.2.2 Air filtration data" on page 16.

6.2.3 Switching off the device

Step	Action
1	Turn the fan rotary switch (6) on the control panel (3) to position 0 . The device comes to a standstill.
2	Switch off the device at the device main switch (2) on the device plug (1). The mains power supply is interrupted.
3	Pay attention to the green Run LED (5) on the control panel (3); it must not be lit. The fan is switched off.
4	Disconnect the mains plug if maintenance work is to be carried out or if the device is not going to be in operation for a prolonged period.

6.3 Operating the device with a timer

The power supply to the air purifier can be switched on and off with a timer at the mains plug. This can be expedient for rooms that are heavily frequented at certain times, e.g. in classrooms in schools.

The settings previously made on the device are retained even when the mains power supply is disconnected by the timer.

7 Service and maintenance

7.1 Safety

⚠ WARNING



Risk of fatal electric shock.

There is a risk of a fatal electric shock if live terminals or connections are touched, even when the device is switched off.

- Switch off the device at the device main switch.
- Disconnect the mains plug.
- Wait at least five minutes before starting maintenance and repair work. Only then open the rear housing cover.
- Wear your PPE (safety shoes, cut-proof gloves).

⚠ WARNING



Risk of injury.

- Disconnect the mains plug before starting any maintenance or repair work on the device.
- Protect the device against unauthorised restarting.
- Observe the applicable safety rules.
- Have installation, commissioning, maintenance and repair work carried out only by qualified specialist personnel!
- Make sure that all safety devices installed at the factory are functional before switching the device on again.

⚠ WARNING



Risk of injuries from the run-on of the fan.

- The rear housing cover is firmly screwed on and may only be opened by qualified specialist personnel.
- The rear housing cover may only be opened when the fan has been switched off and has come to a standstill.
- Observe the run-on time of the fan. Wait at least three minutes for the fan impeller to come to a standstill before opening the service cover and the cover with control panel.

⚠ WARNING



Health hazards when removing the filter elements.

- Wear your PPE (FFP2 dust mask) when removing the filters.
- Use further protective equipment according to the work to be carried out (safety shoes, gloves).
- Avoid contact with the dust.

WARNING**Risk of injury when opening the rear housing cover and the cover with control panel.**

There is a risk of injury from falling parts when the rear housing cover or the cover with control panel is opened.

- Use a safe step or approved ladder.
- Make sure you have a secure footing.
- Work carefully when loosening the fasteners of the cover with control panel.
- Have a second person to help you who can take the removed parts off you and put them in a safe place.
- Wear your PPE (safety shoes, cut-proof gloves).

NOTE

The owner/operator of the air purifier is obliged to carry out visual inspections of the device at regular intervals, but at the latest after a prolonged standstill. This includes in particular checking the mains lead, the displays on the control panel and the hygiene timer.

NOTE

The owner/operator of the air purifier is obliged to have the device serviced at regular intervals by qualified personnel.

AL-KO recommends that maintenance is carried out in accordance with the German DIN EN 60335.

If a maintenance contract is concluded, AL-KO THERM will carry out this work in a professional manner.

Customer Service
Fon: +49 8225 39 - 2440
E-mail: airsafe@al-ko.com
Web: www.al-ko.com

ATTENTION

Only use original consumable materials and replacements parts. This is the only way to ensure safe operation. Use of other parts will void the warranty!

A replacement parts list can be found as part of the device documentation.

Customer Service
Fon: +49 8225 39 - 2440
E-mail: airsafe@al-ko.com
Web: www.al-ko.com

7.2 Maintenance schedule

Activity	At least		every		
	daily	as re- quired	6 months	12 months	24 months
Visual inspection for damage, contamination	X				
Visual inspection of the mains lead	X				
Wall mounting bracket	X				
Replace pre-filter		X	X		
Replace HEPA filter		X			X
Clean housing on the outside		X		X	
Clean housing on the inside		X	X		
Replace hygiene timer		X	X		

7.3 Carry out filter change

7.3.1 Safety

WARNING



Risk of injury due to collisions, cutting, pinching, crushing and tripping.

Risk of injury during filter changing due to bumping hands, arms and head on the device housing, cutting on metal parts, pinching or crushing between filter and filter frame and tripping and tripping over foreign objects.

- This work may only be carried out by qualified personnel.
- Wear your PPE (breathing mask, cut-proof gloves, helmet, safety shoes).
- Clear away tripping hazards such as parts lying around.

WARNING



Risk of fatal electric shock from live parts

Working on the **AL-KO AIRSAFE® 1200 / 1600** air purifier can result in serious injuries or even death due to electric shock.

- Disconnect the device from the mains power supply and protect it to be reconnected and restarted.
- Disconnect the 230 V mains plug from the domestic power socket.
- Secure the mains lead so that it does not pose a tripping hazard.
- Never open the rear housing cover of the device.

WARNING



Health hazards due to dust load and microbial contamination.

Lack of maintenance of the filters can cause these to collect dust and microbial contamination. Skin contact with germs or inhalation of escaping dusts can lead to health hazards.

- Observe the filter monitor on the device control panel.
- Observe the prescribed maintenance intervals.
- Wear your PPE (FFP2 dust mask, cut-proof gloves).
- If there is a risk of the air in a room being contaminated, allow the device to run in the unoccupied room for a few hours and change the filters before the room is occupied again.

NOTE



In order to comply with hygiene requirements, do not reuse used filters; dispose of them in accordance with the local regulations currently in force.

ATTENTION



Use only original consumables materials and spare parts.

This is the only way to ensure safe operation. Otherwise the warranty will be voided.

The filters must be disposed of in accordance with the local regulations currently in force.

Customer Service

Fon: +49 8225 39 - 2440

E-mail: airsafe@al-ko.com

Web: www.al-ko.com

7.3.2 Filter change indicator

A necessary filter change is indicated by the red **Filter status** LED on the control panel lighting up when the fan control knob is turned to **High** or **Power**.

ATTENTION



The pre-filter must always be changed if the device has not been in use for more than six months.

In case of heavy contamination, the pre-filter may have to be changed before the hygiene timer has expired.

To check the filter status, turn the fan control knob on the control panel to position **High** or **Power**.

ATTENTION



If the red **Filter status** LED on the control panel still lights up after the pre-filter has been replaced, the HEPA filter must also be replaced.

Filter status LED	Action
Lights up	Inspect pre-filter and HEPA filter for obvious contamination.
	Replace pre-filter.
	Replace HEPA filter only if obviously contaminated.
	Switch on the device again.
Lights up even though the pre-filter has been replaced	Replace HEPA filter.
	Switch on the device again.
Not lit	Device is in operation.

The pre-filter must also be changed if:

- The hygiene timer has reached the end position of the red liquid in the display;
- The pre-filter was last replaced six months ago.

The HEPA filter must also be changed if:

- The HEPA filter was last replaced two years ago.

7.3.3 Preparation

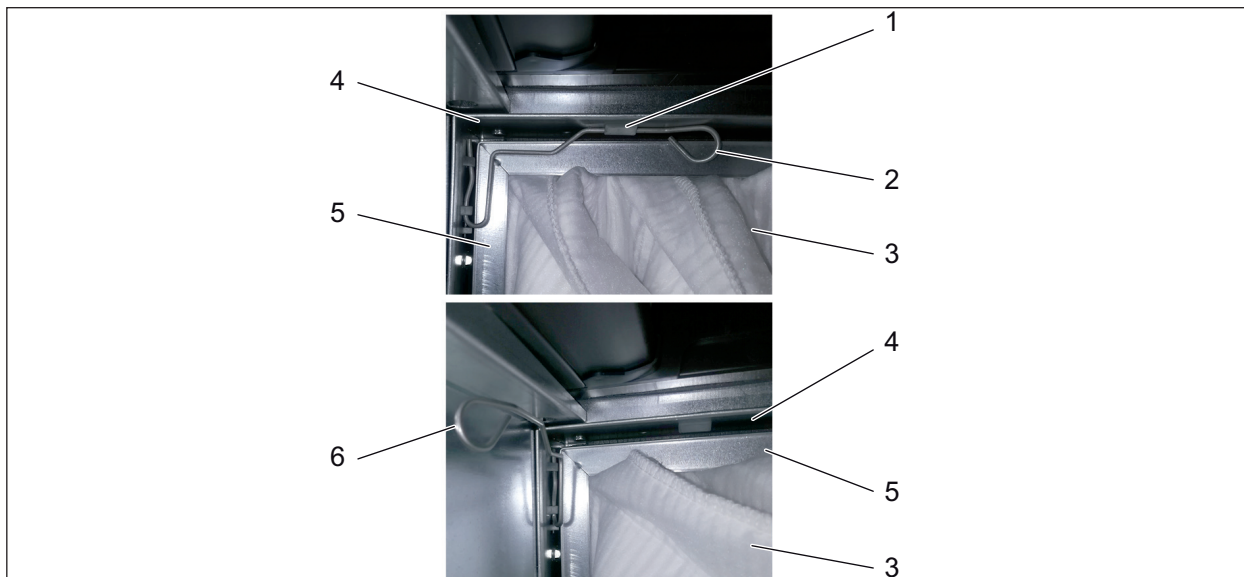
Step	Action
1	Have a second person to help you.
2	Switch off the device fan at the fan control knob, position 0 .
3	Switch off the power supply at the device main switch, position 0 .
4	Disconnect the mains plug.
5	Route the mains lead so that it does not pose a tripping hazard.
6	Release the wall mounting bracket of the air purifier by loosening the screws at the device.
7	Pull the device away from the wall on its castors until the cover with control panel on the rear side is easily accessible.
8	Release the four latches of the cover with control panel by turning completely to the left.
9	Remove the cover with control panel and place it to one side.

7.3.4 Replace pre-filter

ATTENTION



The hygiene timer must always be replaced together with the pre-filter.

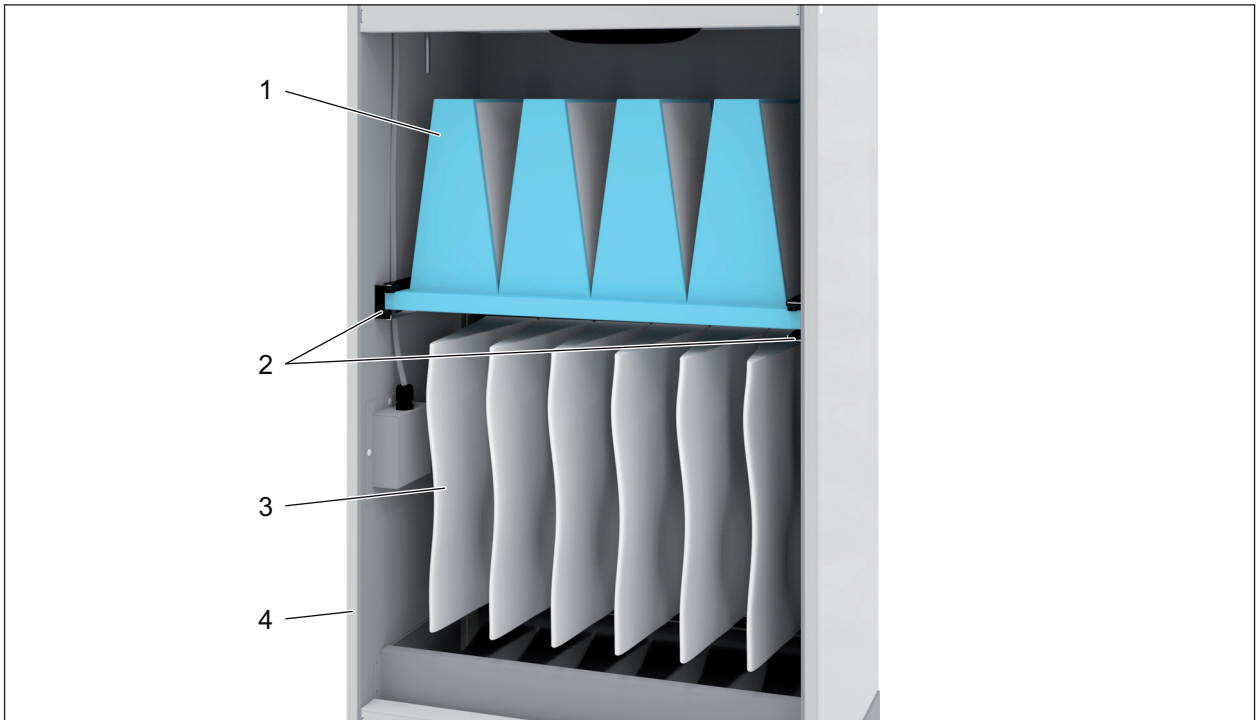


1	Fixation	4	Holder
2	Filter clamp, fixed	5	Frame
3	Pre-filter	6	Filter clamp, released

Proceed as follows to replace the pre-filter:

Step	Action
1	Release the four filter clamps (2) from the fixation (1).
2	Swivel the filter clamps 90° away from the holder (4).
3	Pull the frame (5) with the pre-filter (3) out of the holder.
4	Place the frame with the new pre-filter into the holder.
5	Swivel the four filter clamps (6) 90° towards the holder.
6	Hook the filter clamps into the fixation.
7	Dispose of the used pre-filter in an environmentally friendly manner.
8	Remove the hygiene timer from the front of the air purifier. Dispose of it in an environmentally friendly manner.
9	Attach the new hygiene timer to the front of the device to the left of the control panel.
10	Start the hygiene timer.

7.3.5 Replace HEPA filter



1	HEPA filter	3	Pre-filter
2	HEPA filter guide rail	4	Housing

Proceed as follows to replace the HEPA filter:

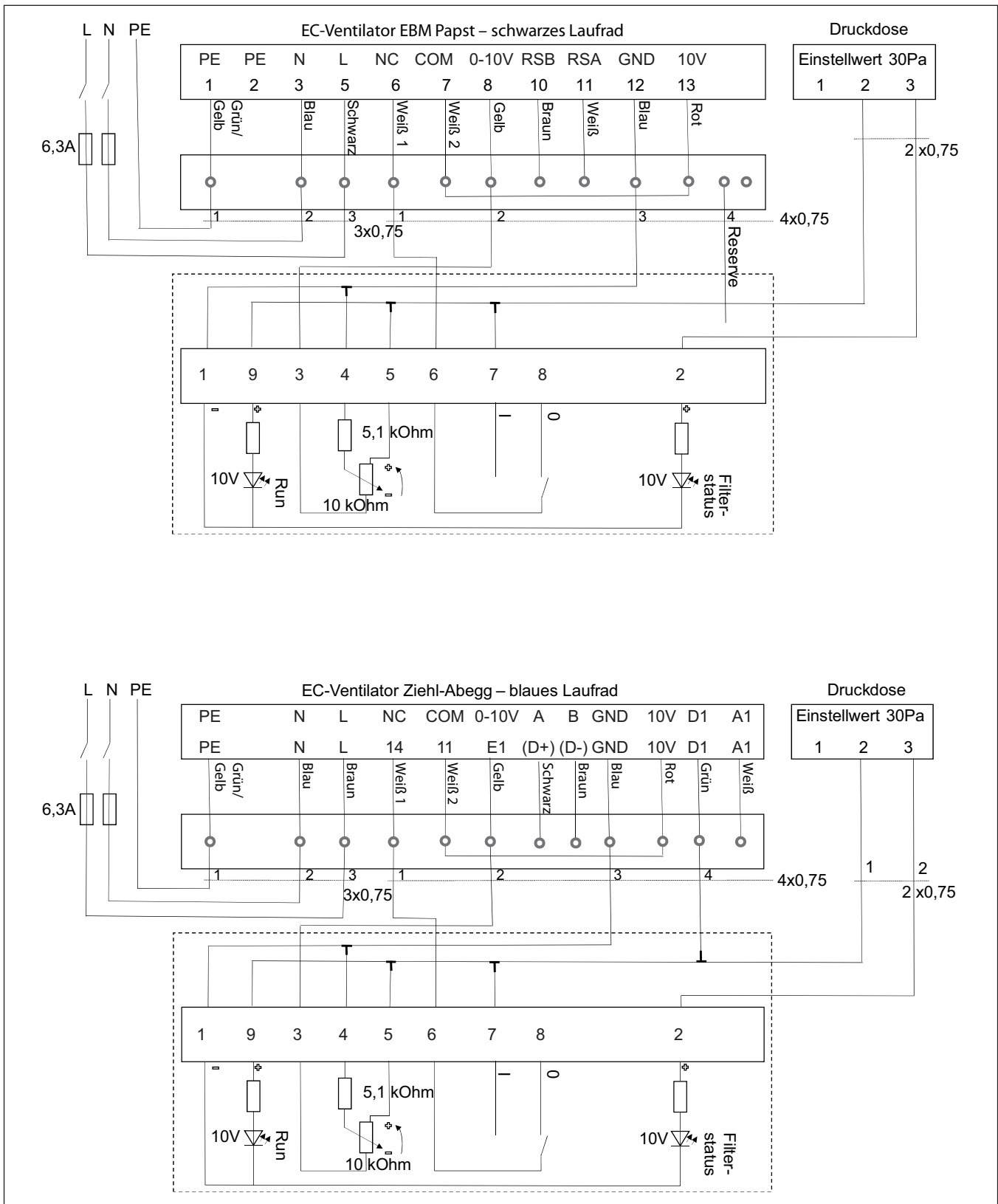
Step	Action
1	Pull the HEPA filter (1) completely out of the housing (4) of the air purifier.
2	Place the new HEPA filter into the guide rails.
3	Push the HEPA filter completely into the housing of the air purifier.
4	Dispose of the used HEPA filter in an environmentally friendly manner.

7.3.6 Complete the filter change

Proceed as follows to conclude the filter change and to put the device back into operation:

Step	Action
1	Check that both filters are tight.
2	Place the cover with control panel onto the housing of the air purifier.
3	Secure the cover with control panel by turning the four latches completely to the right.
4	Have a second person to help you.
5	Push the air purifier on its castors on the base of the device back into its original position with the rear side to the wall. Use the handle recess on the rear side of the device for positioning.
6	Check that the air purifier is set up on level ground. Correct the alignment of the device, if necessary, using the height-adjustable feet on the device base.
7	Secure the air purifier with the wall mounting bracket to the device.
8	Connect the mains power supply.
9	Switch on the device at the device main switch; it is connected to the mains power supply.
10	Pay attention to the green Run LED on the control panel; it must come on. The fan is in operation.
11	Turn the fan rotary switch on the control panel to position I . The device is in operation.
12	Pay attention to the red Filter status LED; it must not be lit.
13	Ensure that the hygiene timer is in operation.

7.4 Circuit diagrams



8 Help in the event of faults

8.1 Safety

⚠ WARNING



Risk of serious injuries or death.

Wrong or incorrectly performed measures can bring the device into a potentially dangerous condition. The risk then ranges from injury to electric shock.

- Have work on electrical equipment inside the device (inspections, fuse replacement) carried out only by qualified personnel.
- Have diagnostics, troubleshooting and recommissioning carried out only by authorised persons.
- The rear housing cover may only be opened by qualified personnel.
- Wear your PPE during all work on the device.
- Use further protective equipment according to the work to be carried out.

8.2 Possible malfunctions

NOTE



In the event of malfunctions that you cannot rectify yourself, contact the AL-KO Customer service or a qualified electrician.

Malfunction / description of fault	Possible cause	Remedy
Device does not start, green Run LED on the control panel does not light up.	Device main switch not turned on.	Turn on the device at the device main switch.
	Device switched on, no power supply.	Check fan, wiring and fine-wire fuse of the device. Check the mains fuse. Disconnect the mains plug and inspect for damage.
Red Filter status LED on the control panel lights up.	Pre-filter soiled.	Replace pre-filter (see "7.3.4 Replace pre-filter" on page 33).
Red Filter status LED on the control panel lights up after replacement of the pre-filter.	HEPA filter soiled / saturated.	Remove soiling, replace HEPA filter if necessary (see "7.3.5 Replace HEPA filter" on page 34).
Hygiene timer: Red colour of the time marker reaches the end of the scale.	Pre-filter has exceeded its service life.	Replace pre-filter
Air flow rate too high or too low.	Incorrect controller setting on control panel.	Set air flow rate to the desired value at the controller on the control panel (see "3.2.2 Air filtration data" on page 16).
Device not installed level.	Floor uneven	Select a different setup location
	Adjustable feet not adjusted correctly	Tilt the device backwards and have it supported by a second person, then adjust the adjustable feet to the correct length.
Device is unusually loud or vibrates or causes unusual odour.	Rear housing cover and/or cover with control panel not properly closed.	Check the cover catches and close securely, if necessary.
	Fan defective	Turn off the device at the device main switch. Disconnect the mains plug. Contact Customer Service.
	Heavily soiling of the device	Carry out a visual inspection from above for foreign objects in the device.

8.3 Contacts

For all questions arising in conjunction with our products, please contact one of our branches or contact us directly at:

AL-KO THERM GmbH	Fon:	(+49) 82 25 / 39 - 2440
Hauptstraße 248-250	Fax:	(+49) 82 25 / 39 - 2113
D-89343 Jettingen-Scheppach	E-mail:	airsafe@al-ko.com
Germany	Web:	www.al-ko.com
Customer Service	Fon:	(+49) 82 25 / 39 - 2574
	E-mail:	service.center@al-ko.com

9 Replacement parts

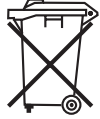
9.1 Spare part list

Spare part	Article No.
HEPA filter 1200	3406724
HEPA filter 1600	3406725
Pre-filter incl. hygiene timer	3407764
Control panel	3406732
Filter clamps (4x)	3407152
Mains cable	3406840
Fan	3406721
Plug for non-heating appliances	3406839
Load cell	964291

9.2 Proof of delivery

AL-KO THERM GmbH	Fon:	(+49) 82 25 / 39 - 2440
Hauptstraße 248-250	Fax:	(+49) 82 25 / 39 - 2113
D-89343 Jettingen-Scheppach	E-mail:	airsafe@al-ko.com
Germany	Web:	www.al-ko.com
Customer Service	Fon:	(+49) 82 25 / 39 - 2574
	E-mail:	service.center@al-ko.com

10 Disposal

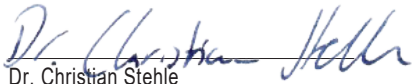


Do not dispose of worn-out devices, spent batteries or rechargeable batteries in domestic waste. When disposing of the device, operating equipment and accessories, proceed according to the relevant local environmental and recycling regulations in your country and community applicable at the time.

11 EC Declaration of Conformity in accordance with 2006/42/EC

The following EU Declaration of Conformity is issued individually for each order, depending on its validity.

Both the order number and the position of the device is indicated. The issued document is therefore specific to the respective device.

EG-KONFORMITÄTSERKLÄRUNG		AL-KO
EC DECLARATION OF CONFORMITY DÉCLARATION DE CONFORMITÉ CE		QUALITY FOR LIFE
Hersteller / Manufacturer / Fabricant: AL-KO THERM GMBH Hauptstraße 248-250 89343 Jettingen-Scheppach Germany		
Im Sinne der EG-Maschinenrichtlinie 2006/42/EG, Anhang II, Teil 1, Abschnitt A		
As defined in EC Machinery Directive 2006/42/EC, Annex II, Part 1, Section A Au sens de la directive Machines CE 2006/42/CE, annexe II, partie 1, section A		
Produkt / Product / produit:	Luftreiniger / Air cleaner / purificateur d'air	
Typ / type / Type:	AL-KO AIRSAFE 1200, AL-KO AIRSAFE 1600	
Hiermit erklären wir, dass die oben genannte Maschine alle sicherheitstechnischen Anforderungen der folgenden anwendbaren EG/EU-Richtlinien erfüllt:		
<i>We hereby declare that the above-mentioned machine conforms to all relevant safety-provisions of the following EG/EC directives: Nous déclarons par la présente que la machine susmentionnée correspond à toutes les exigences de sécurité pertinentes de la directive CE/UE suivante:</i>		
Maschinenrichtlinie 2006/42/EG / Machinery Directive 2006/42/EC / Directive Machines CE 2006/42/CE:		
Niederspannungsrichtlinie 2014/35/EU / Low Voltage Directive 2014/35/EU / Directive Basse Tension 2014/35/UE		
<u>Angewandte harmonisierte Normen</u> / Applied harmonized standards / Normes harmonisées appliquées :		
- DIN EN ISO 12100-1/-2,	Sicherheit von Maschinen – Allgemeine Gestaltungsleitsätze – Risikobeurteilung und Risikominderung <i>Safety of machinery - General principles for design - Risk assessment and risk reduction Sécurité des machines – Principes généraux de conception – Appréciation et réduction du risque</i>	
- DIN EN 60204-1,	Sicherheit von Maschinen – Elektrische Ausrüstung von Maschinen – Teil 1: Allgemeine Anforderungen <i>Safety of machinery - Electrical equipment of machines - Part 1: General requirements Sécurité des machines – Equipement électrique des machines – Partie 1 : exigences générales</i>	
- DIN EN 349,	Sicherheit von Maschinen - Mindestabstände zur Vermeidung des Quetschens von Körperteilen <i>Safety of machinery - Minimum gaps to avoid crushing of parts of the human body Sécurité des machines – Distances minimales de prévention des contusions de parties du corps humain</i>	
- DIN EN ISO 13857,	Sicherheit von Maschinen – Sicherheitsabstände gegen das Erreichen von Gefährdungsbereichen mit den oberen und unteren Gliedmaßen <i>Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs Sécurité des machines – Distances de sécurité empêchant l'entrée dans les zones dangereuses des membres supérieurs et inférieurs</i>	
- DIN EN 60335-1:2020-08	Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke – Teil 1 <i>Household and similar electrical appliances – Safety – Part 1 Sécurité des équipements électriques ménagers et similaires – Partie 1</i>	
- DIN EN 60335-2:2013-02	Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke – Teil 2-65 <i>Household and similar electrical appliances – Safety – Part 2-65 Sécurité des équipements électriques ménagers et similaires – Partie 2-65</i>	
Bei einer mit uns nicht abgestimmten Änderung der Maschine verliert diese Erklärung ihre Gültigkeit.		
<i>Any modification of this machine without confirmation shall automatically annul this declaration. En cas de modification de la machine non convenue avec nous, la présente déclaration perd sa validité.</i>		
Bevollmächtigter für die Zusammenstellung der technischen Unterlagen: <i>Authorized representative in charge of the technical document compilation: Personne autorisée à constituer le dossier technique</i>	Leiter der Abteilung Entwicklung <i>Head of Development Department Chef du département de développement</i>	
Anschrift siehe Hersteller / <i>see manufacturer's address above</i> / Adresse, voir fabricant		
Jettingen-Scheppach, <u>11.12.2020</u>	 Dr. Christian Stehle Geschäftsführer / <i>Managing Director</i> / <i>Directeur général</i>	

Notes

© Copyright 2020

AL-KO THERM GMBH | Jettingen-Scheppach | Germany

All rights reserved for AL-KO THERM GMBH, as well as in the event of applications for industrial property rights. This documentation or excerpts thereof may not be copied or forwarded to third parties without the express consent of AL-KO THERM GMBH. We reserve the right to make technical changes that do not impair the function.

3426558/December 2020