



varithek® acs® 1100 d3



varithek® acs® 1500 d3



varithek® acs® 600 ec



varithek® acs® 1000 ec

**varithek® acs®**



air-cleaning-system **acs®**

- With integrated side extraction and circulating-air cleaning for food delivery
- With electronic fan control

The illustrations show configuration examples, which do not necessarily have to be included in the scope of delivery.



Observe the operating instructions

Translation of the Original Operating Instructions

DOWNLOAD: USER MANUAL

QR code on type plate





Our solutions guarantee high quality, safety and, above all, excellent energy efficiency and cost effectiveness.

The basic task of the patented air-cleaning-system **acs**® is to collect the vapour and steam that occur during cooking at the point of origin, clean them in a sophisticated filter system and then pass them back into the room free from odours.

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## 1 Revision Index

Revision	Change
2013-10-01	New edition
2013-11-19	Potential equalisation system, damaged supply line
2014-04-11	Index
2015-06-15	General modification, adaptation to acs 1600 O <sub>3</sub> , ISO 82079, VDE requirement, electronic fan control
2016-08-05	New Eisfink active carbon filter, plus electronic control
2018-06-07	Entfall 800 ec; Absaugung

## 2 Important Information

### 2.1 Use of this guide

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This guide contains important information about how you can use the appliance safely and correctly.



- ▶ It is essential that you read the user guide before using the product for the first time.
- ▶ Keep this guide in a safe place and pass it onto the next owner should you wish to part with the product.

Our customers often express the wish to have one compact guide instead of a number of different guides for these product variants, which have similar functions.

If there are any shortcomings in your opinion, please do not hesitate to let us know. With your help, we will try to become even better.

Please add your notes here 😊

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## 2.2 Reference to trademark rights granted for these appliances

- DE – Design patent no. 202 05 642.2 and no. 201 17 490.1
- International patent application no. PCT/EP01/04469/ (WO 01/81831 A 1)
- European Patent no. 1 194 721

## 2.3 Representation conventions in the text

- Lists are represented in this way.
- Instructions on certain actions are represented in this way.



*See '...' cross-references are represented in this way*

### Notes



#### ATTENTION

indicates potential damage to property without any personal injury.

Failure to follow these instructions may cause damage to property.



#### User tip

▶ Useful information or tip

## 2.4 Structure of safety instructions

The signal words DANGER - WARNING - CAUTION classify the degree of risk of bodily injury in an actual situation. You can avoid injury by complying with the behavioural rules provided.

The warning triangle symbol indicates a "General Danger".



#### DANGER

indicates imminent danger.

Failure to follow these warning instructions will result in **serious bodily injury or even death**.



#### WARNING

indicates a **potentially hazardous situation**.

Failure to follow these warning instructions **may** cause **serious bodily injury or even death**.



#### CAUTION

indicates a **potentially harmful situation**.

Failure to follow these warnings **may** cause **minor bodily injury**.

### 3 General Safety Instructions

This section covers residual risks and hazards associated with the intended use of the appliance. We have provided a list of all generally valid safety instructions which must be followed.

In the following section, safety information relating to a particular operation or situation is placed before the appropriate operation step or description of the situation.

The information provided here such as 'Basic rules of conduct', 'Operator's obligations' etc. only refers to the legally required observance of requirements such as the Workplaces Ordinance (ArbStättV) according to German law.

#### 3.1 General behaviour

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This appliance meets the current state of the art and complies with all acknowledged technical safety-related regulations. Nevertheless hazards may still arise.

- Only use this appliance when it is in fault-free condition and according to the instructions in this user guide.
- During all phases of the appliance's life please ensure that the appliance is safely integrated into its environment.
- Do not make any conversions or modifications to the appliance.

#### 3.2 On use of electrical appliances

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Safety instructions according to EN 60745-1:

##### Work area

- Keep your work area clean and tidy. A messy or unlit work area can cause accidents.
- Keep children and other persons at a distance when using the product.

##### Electrical safety

- The plug on the unit must fit in the socket. Do not modify the plug in any way. Never use an adapter in combination with earthed appliances. Using an unmodified plug and a suitable socket will reduce the risk of an electric shock.
- Keep the appliance away from rain or damp. Allowing water to get into an electric appliance will increase the risk of electric shock.
- Do not misuse the cable by using it to remove the plug from the socket. Always remove whilst holding onto the plug. Keep the cable away from heat, oil, sharp edges or the moving parts of other appliances. Using damaged or tangled cables increases the risk of electric shock.
- Potential risk of fire due to heat build-up. Unwind the cable from the spool to prevent any heat build-up or cable fire. The coupling must have splash protection, must be made of rubber or be rubber-coated.

##### Safety guidelines for persons

- Be attentive and pay attention to what you are doing, act rationally when working with an electrical appliance. Do not use the appliance when tired or under the influence of drugs, alcohol or medication.  
Just one moment of inattention whilst using the appliance can result in serious injury.
- Make sure the appliance cannot be switched on unintentionally. Double check that the main switch is in the "OFF" position before inserting the plug in the socket. Connecting the appliance to the power supply while it is switched on can cause an accident.

### Careful handling and use of electrical appliances

- Never use an electrical appliance with a faulty switch. An electrical appliance which can no longer be switched on or off is dangerous and must be repaired.
- Keep unused electrical appliances in places where children are not able to reach them. Do not allow the appliance to be used by persons who are not familiar with it or persons who are not familiar with this user guide. Electrical appliances are dangerous when in the hands of inexperienced persons.
- Treat the device with care. Check that moving parts are functioning properly and do not block; check whether parts are broken or damaged and impairing the functioning of the device. Have any damaged parts repaired before using the appliance. Many accidents are caused by poorly-maintained electrical appliances.
- Use electrical appliances, accessories etc. in accordance with these guidelines and in a manner that is specified for this particular appliance type. When using the appliance, please take into account the working conditions and the work being carried out. Using electrical appliances for other uses than that intended can lead to hazardous situations.

### Service

- Only have the device repaired by qualified and authorised staff. Only use original spare parts. In this way you can ensure that the appliance remains safe.

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## 3.3 Operator's obligations

### Operator

The operator is the person who operates the appliance for commercial or economic purposes either himself/herself or lets others use it and bears the legal appliance responsibility for protection of the user, staff or any third parties during operation.

### Operator's obligations

The appliance is used in commercial applications. For this reason, the operator of the appliance must meet all legal duties relating to work safety.

In addition to the safety instructions in this guide, the safety, accident prevention and environmental protection regulation applying to the application of the appliance must be complied with.

In particular, the following shall apply:

- The operator must be familiar with the applicable work safety regulations and identify, by carrying out a risk analysis, any additional hazards which are due to the place where the appliance is used. These hazards must be addressed in the form of operating instructions governing the operation of the appliance.
- During the whole service life of the appliance, the operator must verify if the operator's operating instructions reflect the current versions of the applicable regulations. If necessary, the operator must update the operating instructions accordingly.
- The operator must define and assign the responsibilities for installation, operation, repair, maintenance and cleaning clearly.
- The operator must make sure that all personnel working with the appliance have read and understood this guide. In addition, the operator must train the personnel and inform them of the hazards involved at regular intervals.
- The operator must provide the personnel with the necessary protective equipment and make sure that they wear it.

In addition, the operator must ensure that the appliance is always in a perfect technical condition. For this reason, the following shall apply:

- The operator must ensure that the maintenance intervals defined in this guide are obeyed.
- The operator must have all safety equipment checked regularly for completeness and proper function.
- The operator must ensure that the required media connections are available.
- The operator must ensure that all safety-relevant measures required on site are taken.

### 3.4 Qualification of personnel

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Safe operation requires certain technical skills and personal qualification of each person.

- The responsibility for organization lies with the '**Designated Representative**' (operator). According to EN 50110-1, the Designated Representative is a 'person assigned the direct responsibility for the performance of the work. If necessary, this responsibility can be assigned partly to other persons. [...] The designated representative must instruct all persons involved in the work on all hazards which may not be obvious for them'.
- The work may only be performed by '**instructed persons**' who have been trained accordingly. Training, instructions must be repeated, proper understanding must be verified (ideally by way of an appropriate test).
- Only '**Qualified Staff**' are allowed to carry out repair work. IEC 60204-1 defines qualified personnel as "persons who, on account of their training and relevant experience are in the position to recognise risks and avoid potentially dangerous situations."
- Electrical work may only be carried out by trained and experienced **electricians**. Electro-technically instructed persons may only work under the supervision of a qualified electrician.
- Any repairs and/or overhaul during the warranty period may only be carried out by the manufacturer's service department.



*Chapter 'Warranty and Liability', page 55*

### 3.5 Provision of protective equipment for personnel

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- Ensure that the personnel wear the personal protective equipment appropriate to the relevant situation.
- Wear safety shoes to prevent injuries when transporting or moving the appliance.
- Wear protective gloves to prevent burns to hands and arms when using the cooking accessories.




## 3.6 Appliance-specific safety instructions

This chapter describes general, appliance-specific safety instructions. In the following section, additional safety information relating to a particular operation or situation is placed before the appropriate operation step or description of the situation.

### 3.6.1 Risks due to cooking accessories

All kinds of risks may occur if the wrong cooking accessories are selected.

-  **User tip**  
The cooking modules in the Rieber varithek® range are recommended. Baking, grilling, cooking, wok cooking and frying.
- Observe the instructions in the relevant operating manuals.

#### # Deep-fryer

- For the deep-fryer, use an insertion mask that prevents slipping into the system carrier.

### 3.6.2 Risks due to ventilation, circulating-air cleaning

The unit's extraction and circulating-air cleaning is not a replacement for an air-conditioning system. Always ensure an adequate supply of fresh air.

**⚠ Risks due to human error when → using the Eisfink active carbon filter for odour and contaminant absorption and odour elimination using plasma technology**

#### **WARNING**



Breathing difficulties, lacrimal irritation, mucosal irritations in throat, neck and lungs, headache, strong tickle in the throat, cannot be excluded in the case of human error.

- ▶ Only use with Eisfink active carbon filters, which are correctly mounted.
- ▶ Do not interfere with the extraction and circulating-air cleaning: Do not place any objects on the Eisfink active carbon filter in the technical compartment. Only operate with a dry Eisfink active carbon filter.

#### **⚠ Fire risks**



#### **Risk of fire**

Risk of fire due to missing or incorrectly mounted filter components.

- ▶ Only use with original filter components and grease drip trays, which are correctly fitted.
- ▶ Clean filter area daily.



*Chapter 'Cleaning, Maintenance and Care', page 33 ff.*

### 3.6.3 Risks due to opened technical compartment

The technical compartment contains a rotating fan wheel. Keep the technical compartment closed. Use a suitable tool to open and close the technical compartment.

Before opening the technical compartment

- Switch off the 'ON/OFF pushbutton with indicator light' and
- Switch off the electrical power to the unit by unplugging the main plug.

### 3.6.4 Risks due to transport of mobile appliance

Numerous hazards such as crushing can arise when transporting this heavy product 110 to 160 kg.

- Remove accessories and transport them separately.
- Disconnect the connection cable.
- Only transport unit on a straight surface. Do not transport on a sloping surface.
- Carry out transport with an adequate number of people, at least two.
- Transport only permissible using the casters.
- Secure the appliance against inadvertently rolling away with the 'parking brake'.
- Wear safety shoes to prevent injuries.



#### ➤ **ATTENTION**

Observe the permissible step height of maximum 4 mm, otherwise the 'casters with parking brake' could be damaged.

- Do not push or pull the appliance over sharp edges; Otherwise the casters could sustain damage.
- Do not use this appliance with poor floor conditions.  
We are not able to rule out the possibility of marks appearing on the floor due to friction with casters or the formation of scratches due to split cracks in the casters, for example.  
We are not able to rule out the possibility that the casters may be damaged or become unusable due to swelling or sharp edges on the floor.
- Mobile appliances may only be moved manually. Machine-aided transport, e.g. using fork lift trucks or lift trucks, is not permissible. Risk of injury and risk of damaging the appliance.

### 3.6.5 Dangers due to electricity

- Before each use, inspect the product, the connecting plug and electric cable for any visible signs of damage.
- The cable must be routed so that it cannot be squeezed or overheated.
- The socket outlet must be easily accessible so that the unit can be disconnected from the power supply at any time.
- Compare the connection data on the type plate with the data of the electrical network before connecting (voltage and frequency, power rating).

### 3.6.6 Risks due to power interruption possible


Possibility of malfunction after power interruption.

- Disconnect the unit from the mains completely after a power failure.
- Then switch back on.

### 3.6.7 Warnings concerning the use of the appliance by children

- This appliance may be used by children over 12 and by persons with limited physical, sensory and intellectual abilities or a lack of experience and/or knowledge if they are supervised or if they were instructed in the safe use of the appliance and have understood the resulting dangers.
- When using the appliance with 'accessories', other risks may arise.
- Children may not play with the appliance.
- Cleaning and user maintenance may not be carried out by children without supervision.

### 3.6.8 Safety and monitoring devices


- High-performance grease separator (100% flame propagation proof) with Cyclone® blade profile (separation efficiency approx. 95%)
-  In addition to protection against electric shock and in order to ensure that the frames of electrical equipment and any external conductive components are at an equal (or practically equal) potential, the appliance must be connected to the potential equalisation system. The connection of all conductive bodies (housing) of electrical equipment to an earthed protective conductor and the main earthing bar is the basic principle for protection against electric shock.

For variant with odour elimination using plasma technology:

- Pressure sensor monitors the pressure conditions in the technical compartment; in the event of a fault the plasma generator is switched off

### 3.6.9 Product identification

#### ⚠ Product identification at the housing, outside

- The type plate bears the legally required product data.
  - The technical compartment is identified. 
  - High-performance grease separators are marked with **raised points**. These markings can also be found on the counterpart or frame.
- 'Clean filter area daily'.

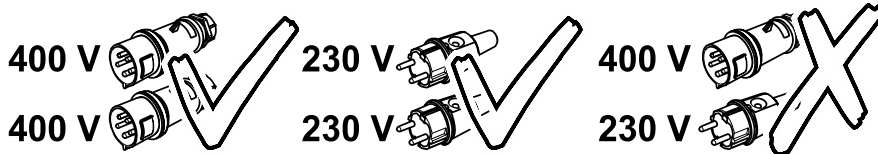


Equipotential bonding on the underside of the appliance. Note the symbol.

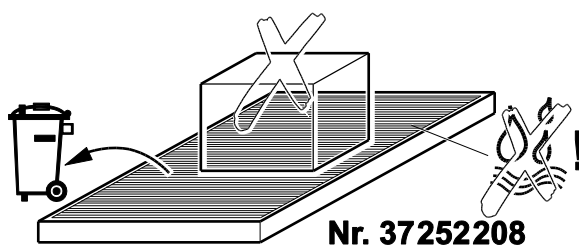
#### ⚠ Product identification, especially 600 ec, 1000 ec, 1100 d3

(Variant with 16 A)

- Only connect varithek® appliances with the same voltage, i.e. 400 V or 230 V.




#### ⚠ Product identification in technical compartment for all appliance types



#### ➤ ⚠ WARNING

Unplug mains plug before removing the fan device.'

**⚠ Product identification in technical compartment for → variant with Eisfink active carbon filter for odour and contaminant absorption and odour elimination using plasma technology**

	<b>⚠ WARNING</b>
	<p><b>Health risks, respiratory disorders</b></p> <ul style="list-style-type: none"> <li>▶ Only use Eisfink active carbon filter, install correctly.</li> <li>▶ Do not place any objects on the Eisfink active carbon filter.</li> <li>▶ All interference with the plasma generator is forbidden.</li> </ul>

**⚠ Product identification in technical compartment for → appliance type 'ec' → 'Setting mark'**

In the technical compartment, the bottom opening on the left in the floor of the technical compartment set by the manufacturer is to be left as is.



### 3.7 Information about regulations to be followed

In addition to this user guide there are a range of health and safety and other regulations that are relevant for the operation of this cooking station; these include HACCP food hygiene regulations for example.

#### # Fulfillment of standards and guidelines

- VDI directive 2052 Air-conditioning systems. The unit's extraction system is not a replacement for an air-conditioning system.

### 3.8 Instructions on behaviour in an emergency

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- In an emergency always interrupt the power connection immediately, by disconnecting the electrical connector.

**⚠ First aid in the case of burns and scalding or electric shock:**

- Inform yourself on this before commissioning the appliance.
- Store the emergency equipment, including the relevant instructions, at a readily accessible place near the place of use.



#### User tip

- Inform yourself in details by reading the in-house operating instructions.
- We recommend that half-yearly emergency training sessions should be carried out.

**⚠ First aid in the case of unaccountable irritations of the mucous membranes, strong urge to cough when using appliances with additional odour elimination using plasma technology**

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#### WARNING



Breathing difficulties, lacrimal irritation, mucosal irritations in throat, neck and lungs, headache, strong tickle in the throat, cannot be excluded in the case of human error.

- Only use with Eisfink active carbon filters, which are correctly mounted. Replace active carbon filters after at least 500 operating hours.
  - Do not interfere with the extraction and circulating-air cleaning. Do not place any objects on the active carbon filter in the technical compartment, for example. Only operate with a dry Eisfink active carbon filter.
  - Seek medical treatment if necessary. Ozone-containing air can trigger complaints.
- 

## 4 Purpose

This chapter describes the intended use and contains warnings against misuse, for your safety.

**⚠ Generally, the following are intended uses for the product:**

- For mobile service in the catering, hotel, and food processing industry; also suitable for the care and school catering sectors.
- Use correctly sized cooking units, like the cooking modules in the Rieber varithek® range. Baking, grilling, cooking, wok cooking and frying. The relevant operating instructions must be observed.
- The patented **air-cleaning-system®** (acs®) collects the vapour and steam that occur during cooking at the point of origin, cleans them in a sophisticated filter system and then passes them back into the room free from odours.
- To prevent persons from burning themselves on hot surfaces, use of the product in public/for self-service should only be allowed under constant supervision.

- The variant with Eisfink active carbon filter for odour and contaminant absorption and odour elimination using plasma technology is intended for applications requiring a high level of odour neutralisation.
- The intended use includes compliance with the technical data. Note the information on the rating plate as well as the product identification.
- Equipotential bonding must be carried out by a qualified electrician.
- For use only by appropriately trained and suitable operating personnel.

**⚠ Prevent any potential misuse in advance:**

- Only use with original filter components, which are correctly mounted.
- Only Use correctly sized cooking units, such as the cooking modules in the Rieber varithek® range.
- Provide the unit with electrical fuse connection on site.
- The integrated **air-cleaning-system acs®** ensures that the extracted air is passed back into the room odour-free. This is not a replacement for an air-conditioning system.
- For variants with Eisfink active carbon filter and odour elimination using plasma technology: Any inference in the 'plasma generator' is forbidden.
- In appliance type '**ec**': in the technical compartment, do not adjust the bottom opening which has been correctly set by the manufacturer. Can be recognised by product identification with 'Setting mark'.
- Only use one deep-fryer per the appliance, as otherwise the extraction and circulating air cleaning system may be overloaded and odours may develop.
- Do not use gas cooking units, as this can be dangerous.
- Do not flambé, as this can be dangerous.
- Never operate the appliance unsupervised. To prevent persons from burning themselves on hot surfaces, use of the product in public, e.g. for self-service, should only be allowed under supervision.
- Front cooking is only admissible with the sneeze guard that can be closed on four sides. Observe the Food Hygiene Regulations under German law.
- Not intended for private use at home.
- Do not lean against or sit on the appliance.
- Incorrect cleaning can substantially and irreparably damage the stainless steel surfaces.
- Do not push or pull the appliance over sharp edges; Otherwise the casters could sustain damage.
- Do not use this appliance with poor floor conditions.  
We are not able to rule out the possibility of marks appearing on the floor due to friction with casters or the formation of scratches due to split cracks in the casters, for example.  
We are not able to rule out the possibility that the casters may be damaged or become unusable due to swelling or sharp edges on the floor.
- Mobile appliances may only be moved manually. Machine-aided transport, e.g. using fork lift trucks or lift trucks, is not permissible. There is a risk of injury and substantial damage to the appliance.

### 5 Description of the Equipment

This chapter provides useful information on the structure and function of the equipment.

#### 5.1 Designation

The illustration shows a configuration example which does not necessarily have to be included in the scope of delivery.

##### 5.1.1 Appliance type 'd3'

**i** Appliance type 'd3' means three- sided extraction Extraction of steam and vapour.  
Extraction at front left / right or on both sides and at the back.

Example  
1500 d3



- 1 4 swivel casters, including 2 'swivel casters with parking brakes' on the operator side  
→ Always secure the position of the appliance with the parking brakes.
- 2 Technical compartment
- 3 Power connections for cooking units
- 4 Extraction areas → three-sided extraction of steam and vapour
- 5 Splash guard; removable for cleaning → option
- 6 Sneeze guard attachment, including shelf for serving food → option
- 7 Operating elements, power connections for cooking units

The electrical connection with cable and plug is located at the back of the product.



## Appliance type 'ec'

**i** Appliance type 'ec' means 'EasyClean', German 'Einfach reinigen', one-sided extraction of steam and vapour. The extraction system (push & pull system) is designed in such a way that the vapour created when cooking and roasting is collected by a transversally running air stream and is extracted into the side flank.

Example  
600 ec



- 1 4 swivel casters, including 2 'swivel casters with parking brakes' on the operator side  
→ Always secure the position of the appliance with the parking brakes.
- 2 Technical compartment
- 3 Operating elements, power connections for cooking units
- 4 sided extraction of vapour and steam
  - 4.1 Air supply area → from radial fan
  - 4.2 Extraction area → one-sided extraction of steam and vapour
- 5 Splash guard; removable for cleaning
- 6 Cutting board → fresh preparation of food on the cutting board.

The electrical connection with cable and plug is located at the back of the product.

### 5.1.2 Cooking units



#### User tip

Only use correctly sized cooking units.

- ▶ Use cooking modules from the Rieber varithek® range. Baking, grilling, cooking, wok cooking and frying.

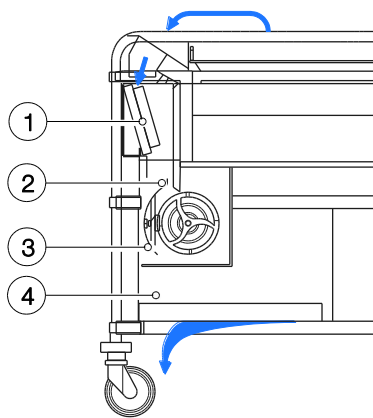
### 5.1.3 Extraction and circulating-air cleaning

Appliance type 'd3': The **acs® side extraction systems in appliance type 'd3'** are designed in such a way that the generated steam is extracted on three sides; Extraction at front left / right or on both sides and at the back.

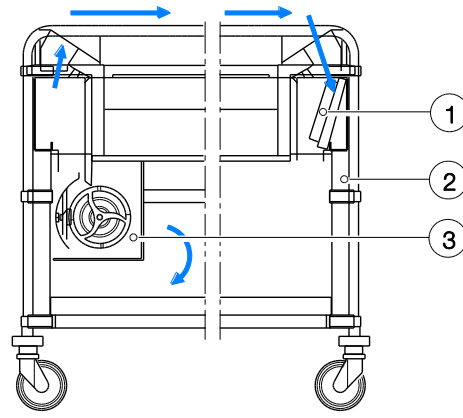
The variant "Eisfink active carbon filter for odour and contaminant absorption and odour elimination using plasma technology" is intended for applications requiring a high level of odour neutralisation.

Appliance type 'ec': In appliance type 'ec', the extraction system (push & pull system) is designed in such a way that the vapour created when cooking and roasting is collected by a transversally running air stream and extracted into the side flank.

Schematic diagrams



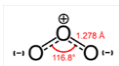
↑ Appliance type 'd3'



↑ Appliance type 'ec'

- 1 High-performance grease separator
- 2 Grease drip trays, removable
- 3 Radial fan
- 4 # Model type A: Eisfink active carbon filter

# Model type B: Eisfink active carbon filter for odour and contaminant absorption and odour elimination using plasma technology



The **plasma generator** converts odorous substances into odourless substances. Germs and odour-causing bacteria are also killed in the process.

**Active carbon filter.** Adsorbed substances accumulate in the carbon. Substances to be filtered are physically absorbed by means of the active carbon filter. When the capacity is exhausted, the filter must be replaced.

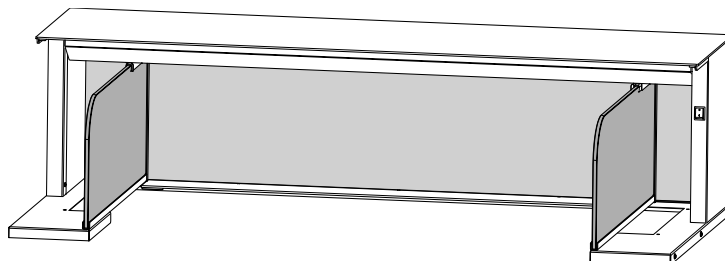
A wet active carbon filter is unusable. Never dry a wet Eisfink active carbon filter in the oven or dryer, as there is a risk of fire. Let the active carbon filter dry in dry ambient air.

### 5.1.4 Sneeze guard attachment /Option

Standard: 3-sided splash guard made of stainless steel.

Option: Sneeze guard attachment, including storage space for food delivery made of composite safety glass and lighting.

Option



## 5.2 Technical data


### 5.2.1 Generally applicable data

Rated voltage / mains frequency

3N AC 400V 50/60Hz,



Equipotential bonding on the underside of the appliance. This protective measure serves for additional safety. Standard-compliant implementation with subsequent inspection of the system is carried out by a qualified electrician.

 IEC 60364-5-54:2011;  
for Germany DIN VDE 0100:540:2012-06

Protection class

IPX4 according to DIN EN 60529

→ Unit offers protection against water splashes on all sides.

→ Only use unit inside buildings. Protection against penetrating moisture is required.

Ambient temperature

+5 °C to +40 °C

3-sided splash guard

Detachable splash guard made of chromium-nickel steel CNS 1810 (WN 1.4301). Laminated safety glass optional

Rustproof casters

In accordance with DIN 18867, Part 8. 4 height-adjustable swivel casters made from chromium-nickel steel CNS 1810 (WN 1.4301), wheel diameter 80 mm.

Including 2 'swivel casters with parking brakes' on the operator side;

Option: 4 stands, height-adjustable

Material

Stainless steel CNS 18/10, WN 1.4301

Circulating air cleaning

Radial fan,

High-performance grease separator (100% flame propagation proof) with Cyclone<sup>®</sup> blade profile (separation efficiency approx. 95%),

Grease drip trays. In addition

Version A: Eisfink active carbon filter

Model type B: Eisfink active carbon filter for odour and contaminant absorption and odour elimination using plasma technology

### 5.2.2 Concerning appliance type 'd3'

	varithek® <b>acs® 1100 d3</b>	varithek® <b>acs® 1500 d3</b>
Power consumption	Maximum 11 kW / 22 kW	maximum 22 kW
Electrical fuse	Connect the unit on site to a socket with a series-connected residual current operated device (RCD) with a tripping current of 30 mA.  <b>16 A:</b> Only connect appliances that have the same voltage, i.e. 400 V <b>or</b> 230 V.  <b>32 A:</b> Automatic circuit breaker for integrated power outlets in the device, right installation compartment.	
Permissible loading	maximum 80 kg	maximum 120 kg
Air capacity in accordance with DIN 61591	Circulating air 1150 m <sup>3</sup> per hour	Circulating air 1250 m <sup>3</sup> per hour
External dimensions (L x W x H) approx.	1100 x 722 x 900 (1100) mm	1500 x 770 x 900 (1100) mm
Placement niche (L x W x H) approx.	805 x 615 x 260 mm	1205 x 660 x 260 mm
Weight approx.	115 kg	155 kg
Emitted sound pressure level	$L_{pa} \leq 70$ dB(A)	$L_{pa} \leq 70$ dB(A)
Electrical connection	Approx. 3 m cable / CEE plug 3x 16 / 32 A / L1 / L2 / L3 / N / PE	

### 5.2.3 Relating to appliance type 'ec'

	varithek® <b>acs® 600 ec</b>	varithek® <b>acs® 1000 ec</b>
Power consumption	Maximum 11 kW	Maximum 11 kW
Electrical fuse	<b>16 A.</b> Connect the unit on site to a socket with a series-connected residual current operated device (RCD) with a tripping current of 30 mA. Only connect appliances that have the same voltage, i.e. 400 V <b>or</b> 230 V.	
Permissible loading	maximum 40 kg	maximum 80 kg
Air capacity in accordance with DIN 61591	Circulating air 750 m <sup>3</sup> per hour	
External dimensions (L x W x H) approx.	600 x 720 x 900 (1000 <sup>1</sup> ) mm	1000 x 720 x 900 (1000 <sup>1</sup> ) mm
Placement niche (L x W x H) approx.	405 x 690 x 260 mm	805 x 690 x 260 mm
Weight approx.	110 kg	140 kg
Emitted sound pressure level	$L_{pa} \leq 70$ dB(A)	
Connected load	3N AC 230 V / 400 V, 50 Hz, 16 A, maximum 11 kW	
Electrical connection	Approx. 3 m cable / CEE plug 3x 16 A / L1 / L2 / L3 / N / PE	

For detailed information on dimensions, order number, accessories, circuit diagrams, spare and wearing parts:



[see type plate, catalogue, brochure](#)

<sup>1</sup> Complete with splash guard

## 6 Before First Use

This chapter describes the measures to be taken before use.

### 6.1 Transport

#### 6.1.1 Check/handle transport damage

- Immediately after delivery, visually check the appliance for any transport damage.
- Document any potential transport damage on the consignment note in the presence of the haulage contractor, and have the damage confirmed by the haulage contractor (with signature).
- Decide if you wish to keep the appliance and report the defect using the consignment note, or if you wish to reject the appliance.

■ By following this procedure you will ensure proper claim settlement.

#### 6.1.2 Unpack

- Open the transport packaging at the positions provided for this purpose. Do not tear or cut.
- Remove any packaging remnants.

#### 6.1.3 Unload appliance from the pallet



#### **WARNING**

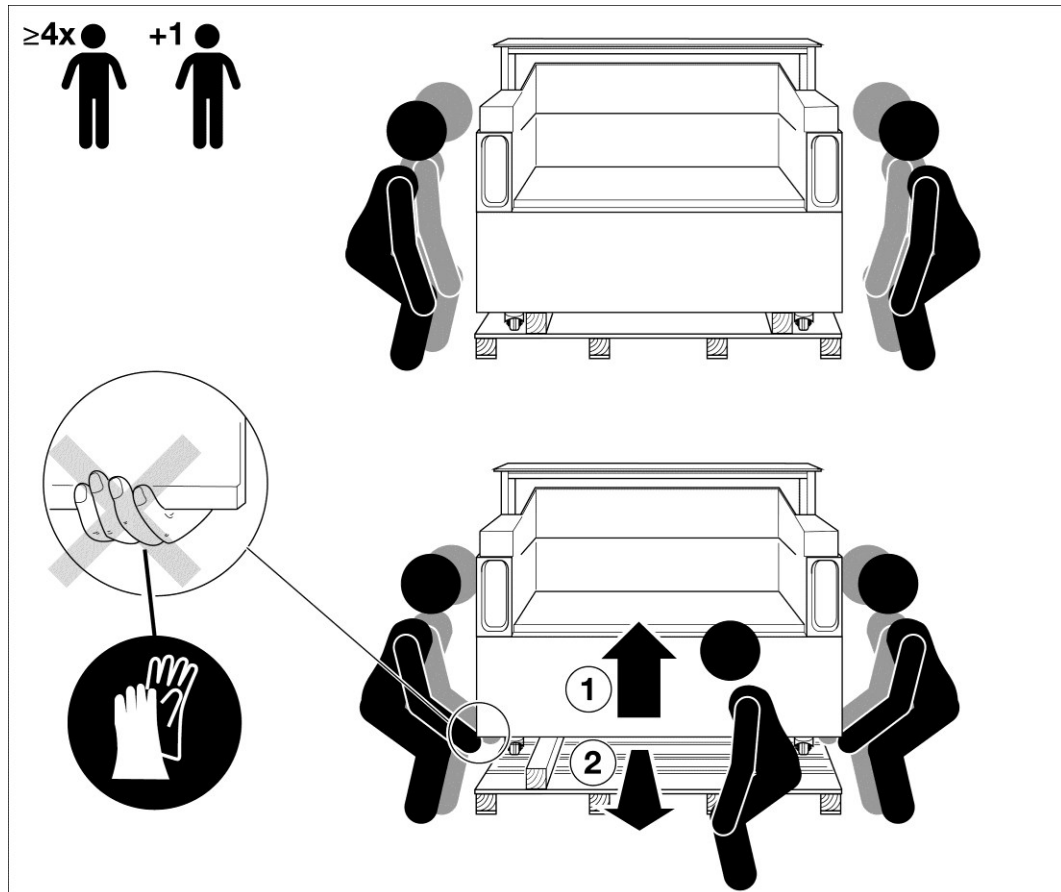
Heavy appliance, 110 to 160 kg. See type plate.

- ▶ Wear protective gloves and safety shoes.
- ▶ Lift the appliance using at least 4 people. Another person quickly pulls the pallet together with the 2 profiles away. Only appropriately trained personnel are permitted.



Transport with high physical demands should be avoided where possible, as the risk of an accident or injury is always higher.

Lift / deposit a heavy load evenly with your knees bent and your upper body straight and upright. Your feet should be at least hip-width apart and your abdominal muscles braced. Breathe out. Do not twist your spine.



➤ **ATTENTION**

Do not unload from the pallet using a fork-lift truck, as this could cause substantial damage.

#### 6.1.4 Scope of delivery

1x wrench for the adjustment and/or setting of the installation height:

- Swivel casters or stands, fixed

#### 6.1.5 Note on packaging material

Disposable packaging or Euro-pallet

- Decide whether to: Keep the Euro-pallet for subsequent transport or return?
- Dispose of the disposable packaging with respect for the environment.

#### 6.1.6 Clean the appliance

- Clean the appliance thoroughly before using for the first time.  
Clean with a damp cloth and rub dry with a clean cloth.



See 'Cleaning, Maintenance and Care', page 33

## 6.2 Observe when commissioning/recommissioning

### **Preconditions**

- The appliance has no defects or visible damage.
- The appliance is at room temperature and is dry.
- Wear safety shoes to prevent injuries.



### **ATTENTION**


Protective foils or heat-sensitive objects at/in the appliance might damage the appliance during heating.

- ▶ Ensure that there are no protective foils on the inside or outside of the appliance.

### **Comply with the mechanical installation conditions**

- The place of installation must be horizontal.
- The casters must be secured by 'parking brakes' to prevent accidental running away.
- Maintain a minimum distance from walls, to prevent fingers, clothes, etc. from getting caught when putting food in/taking food out.
- Do not use the appliance as a means of transport.

### **If necessary, adjust the height-adjustable swivel casters**

- For this, loosen the locking nut with the wrench and adjust the axle.
  - When turning clockwise, the installation height is reduced.
-  **User tip.** Use a spirit level for lengthwise and transversal adjustment.

### **Comply with the applicable electrical requirements**

- Before commissioning, check the mains voltage and type of current.
- Check that these match the specifications on the type plate.
- Connect this electrical appliance to an outlet with an upstream ground fault circuit interrupter with a tripping current of 30 mA.
- The electrical requirements of VDE 0100 ff. and the technical connection requirements of the local electricity company must be met.
- The socket outlet must be easily accessible so that the unit can be disconnected from power supply at anytime.



Equipotential bonding must be carried out by a qualified electrician.

## 7 Use

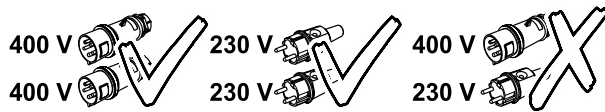
This chapter provides information on the use and operation of the appliance.

### **⚠ Keep to the basic rules for operating the product**

- Before each use, check the appliance for any visible damage.
- Only use in dry rooms in the building.
- Never operate the appliance unsupervised.
- Only operate the appliance with adequate lighting.

For version with **16 A, acs® 600 ec, acs® 1000 ec, acs® 1100 d3**:

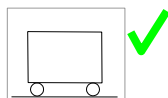
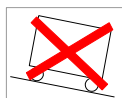
- Connect varithek® appliances with the same voltage, i.e. 400 V or 230 V.



Equipotential bonding must be carried out by a qualified electrician.

### **⚠ Avoid risks when transporting the mobile appliance**

- Numerous hazards can arise when transporting this relatively heavy product, **110 to 160 kg**. Disconnect the connection cable. Only transport the product on straight surfaces using the required number of people. Always secure the position with the parking brakes. Wear safety shoes to avoid injuries.
- Do not use the appliance as a means of transport. Remove accessories and transport them separately.



#### **➤ ATTENTION**

Note the permissible step height, maximum 4 mm, otherwise the casters might be damaged.

### **⚠ Prevent risks due to electricity**

#### **➤ ⚠ Danger of electric shock. Risk of death**

Before each use, inspect the product, the connecting plug and electric cable for any visible signs of damage. Only connect to a socket with series-connected residual current operated device (RCD) with a tripping current of 30 mA. Never direct a jet of water at electrical components such as heater, controller or ventilation grille.

### **⚠ Avoid malfunctions after a power interruption**

- Disconnect the unit from the mains completely after a power failure. Then switch on the electrical appliances again.



**⚠ Keep the technical compartment closed**

➤ **⚠ Danger of electric shock. Risk of death. Rotating parts.**

Keep the technical compartment closed. Switch off the electrical power to the unit before opening the technical compartment.

## 7.1 Only equip the appliances with suitable accessories



### User tip

Only use correctly sized cooking units.

- Use cooking modules from the Rieber varithek® range. Baking, grilling, cooking, wok cooking and frying. Use **varithek®** functional components.

### 7.1.1 Examples for the configuration of the acs® 600 ec

varithek® functional elements	in system unit
1/1 – gp	AST 255 (high)
1/1 – ck, ik	AST 155 (low) AST 255 (high) Ensure that the upper edge of the cookware does not protrude over the upper edge of the ATS 255. Ensure uninterrupted extraction.
400 – ik, iw, gp	

### 7.1.2 Examples for the configuration of the acs® 1000

- Only connect varithek® appliances with the same voltage, i.e. 400 V **or** 230 V.

varithek® functional elements	in system unit	Position in the acs®
1/1 – gp	AST 255 (high)	right in connection with ck, ik, iw
1/1 – ck, ik	AST 155 (low) AST 255 (high) Ensure that the upper edge of the cookware does not protrude over the upper edge of the ATS 255. Ensure uninterrupted extraction.	left in connection with gp
400 – gp		right in connection with ck, ik, iw
400 – ik, iw		left in connection with gp
800 – gp		

### 7.1.3 Examples for the configuration of the acs® 1100 d3 and 1500 d3

varithek® functional elements	in system unit
1/1 – gp	AST 255 (high)
1/1 – ck, ik	AST 155 (low) AST 255 (high) Ensure that the upper edge of the cookware does not protrude over the upper edge of the ATS 255. Ensure uninterrupted extraction.
400 – ik, iw, gp	
800 – gp	

### 7.1.4 Observe the rules for using the deep-fryer

- Only use one deep-fryer per product, otherwise odours may develop.
- Use an insertion mask (EM AST FT 6) for the deep-fryer, to prevent slipping in the system module.

### 7.1.5 Instructions for griddle on the acs® 600 ec, acs® 1000 ec

- Position griddle to the right.
- Do not position a ceramic hob next to the griddle, as otherwise odours may develop due to splashes of grease.



*'Ensure undisturbed extraction of steam and vapours', page 27*

## 7.2 Ensure undisturbed extraction of steam and vapours

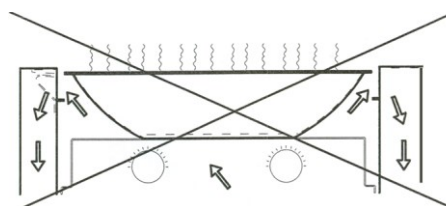
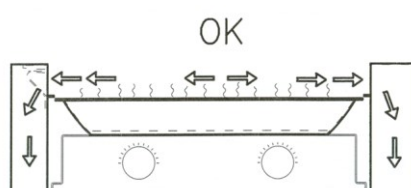


### User tip

If the extraction is interrupted, unpleasant odours can develop.

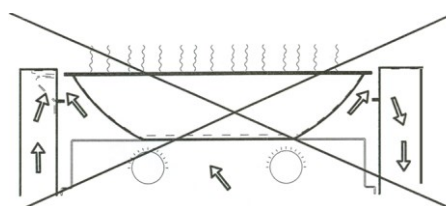
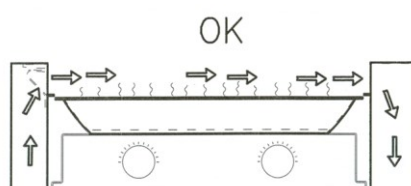
- ▶ Ensure that suitable cooking units are selected. See illustrations below.
- ▶ Ensure that the parts of the upper extraction area are completely assembled.
- ▶ Ensure that the cutting board is in position.

Appliance  
type  
'd3'



The **acs**® side extraction systems in appliance type 'd3' are designed in such a way that the generated steam is extracted on three sides; Extraction at front left / right or on both sides and at the back.

Appliance  
type  
'ec'



In appliance type 'ec', the extraction system (push & pull system) is designed in such a way that the vapour created when cooking and roasting is collected by a transversally running air stream and extracted into the side flank.

## 7.3 Freshly prepare food on the cutting board

Example  
'ec'



- Freshly prepare food on the cutting board.



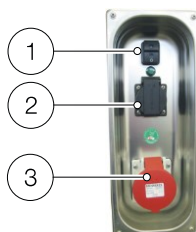
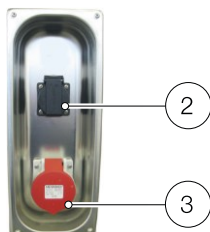
### User tip

If the cutting board is not in place unpleasant odours can develop, due to interrupted extraction.

- Ensure that the cutting board is in position. Briefly removing the cutting board for cleaning will not interrupt the extraction.

## 7.4 Switch appliance on and off electrically

Example  
1500 d3



- 1 ON/OFF push- button switch with light indicator
- 2 230 V — grounded socket
- 3 400 V — CEE power outlet

- Switch the device 'ON/OFF at the rocker switch with indicator light'.
- Green indicator light illuminates.

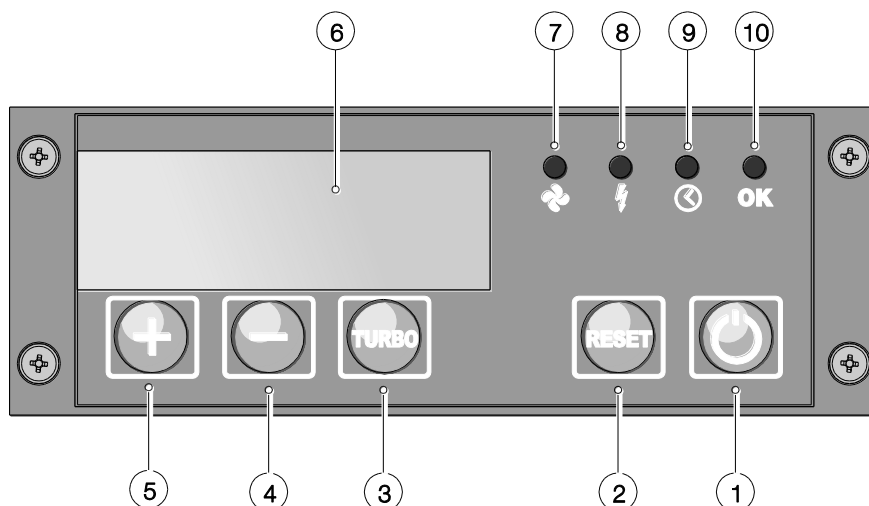


### User tip

- We recommend letting the **extraction system run for another 10 minutes at the end of the cooking process**, so that the vapour caused by residual heat cannot disperse into the environment.

## 7.5 Electronic fan control (option)

### 7.5.1 Operating panel



#### Button

- 1 ON/OFF
- 2 RESET
- 3 TURBO
- 4 Decrease ventilation intensity, levels 4 to 1
- 5 Increase ventilation intensity, levels 1 to 4

#### Display

- 6 LED display
- 7 LED fan fault, red = alarm
- 8 LED plasma fault, red = alarm
- 9 LED filter usage time exceeded, red = alarm
- 10 LED OK, green = fault-free

## 7.5.2 Switching on / Switching off



- Switch the ON/OFF pushbutton with indicator light on the air-cleaning-system **acs**® to ON.

■ Control is in STANDBY.



- Press **ON/OFF** button (1).

■ During normal operation the OK LED shows a green light.

■ The extraction system starts at the lowest fan speed, level 1.



Allow the ventilation to run on briefly if necessary, so that the vapours rising due to residual heat cannot spread to the surrounding environment.

- Press the **ON/OFF** button to switch off.

■ The display goes out. The display is black.

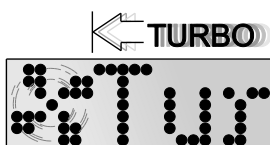
## 7.5.3 Adjust ventilation intensity



### Adjust intensity, levels 1 to 4

- Press the PLUS button (5), to increase the level.  
Press the MINUS button (4), to decrease the level.

■ The selected level and the fan icon appear in the display.



TURBO is the highest ventilation intensity level.

### Adjust TURBO

- Press the TURBO button (3).

■ The fan icon and TURBO appear in the display.



■ After 5 minutes the fan switches back to the last selected ventilation intensity.

### 7.5.4 Notes on troubleshooting



#### WARNING

Danger of electric shock. Dangerous electrical voltage.

- Repairs may only be carried out by specialists
- Any interference in the 'plasma generator' is forbidden.



In the event of a fault a continuous acoustic tone is emitted.

- Press **ON/OFF** button (1).
- The fan control is switched off.



- Press the RESET button.
- The continuous tone stops.

- Eliminate the fault or arrange for repair by a specialist.

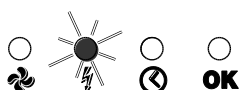
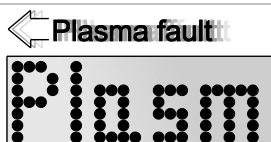
### 7.5.5 Messages and measures for fault elimination

A fault is indicated in the display. If several faults are present at the same time, the fault with the highest priority is displayed. The fault display replaces the fan operating state display. Faults (7), (8), (9) remain illuminated until they have been eliminated and acknowledged.



#### Check for possible errors:

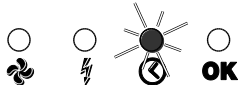
- Is the technical compartment closed?
- Are the filters in the technical compartment free from objects?
- Are the Eisfink active carbon filters correctly inserted?
- Are the high-performance grease separators, grease drip trays and filter mats correctly mounted in the air supply area?
- Is the fan defective? No air flow?



#### Check for possible errors:

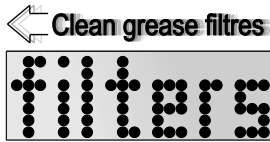
- Is the technical compartment closed?
- Is the plug of the radial fan / plasma generator inserted?
- Are the active carbon filters correctly positioned?

### 7.5.6 Messages due to exceeded usage times



If the usage time is exceeded:

- The red usage time LED lights up.
- A continuous acoustic tone is emitted.
- The text shown on the display indicates the necessary measure.



The time intervals for cleaning the high-performance grease separators are no more than 12 operating hours.

#### Clean grease filters

- **⚠ Risk of fire**  
Clean the high-performance grease separators and reinsert them correctly with the other filter components.
- Replace filter mat if necessary.

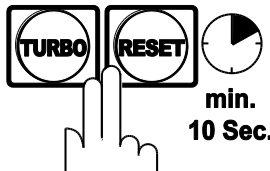


The time intervals for replacing the Eisfink active carbon filters are no more than 500 operating hours. Only use the filter type specified in the display.

#### Replace Eisfink active carbon filters

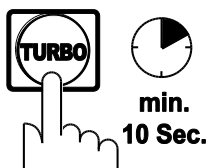
- Replace the Eisfink active carbon filters in the technical compartment.

### 7.5.7 Reset usage times, display operating hours



#### Reset the usage time counters to '0'

- Carry out the maintenance work correctly as indicated in the display. Only then should you reset the message. To do this:
- Still in off mode, press the TURBO and RESET buttons simultaneously for at least 10 seconds.
- The counters are set to '0' counter status.



#### Display operating hours

- Press the TURBO button and hold it pressed for at least 10 seconds.
- The total number of operating hours is shown in the display. This is the time during which the fan control is switched on. The display cannot be reset.

## 7.6 Clean the appliance after use

- **⚠ Risk of fire**

Clean the appliance daily after use.



See 'Cleaning, Maintenance and Care', page 33



## 8 Cleaning, Maintenance and Care

This chapter will help you to meet the hygiene requirements. Before reading this section, please read through the "General safety instructions" section thoroughly first.

### 8.1 Safety information relating to cleaning, maintenance and care

#### Avoid dangers due to electricity



#### WARNING

Danger of electric shock. Risk of death.



- ▶ Disconnect the appliance from the mains; disconnect the power supply unit.
- ▶ Protect the appliance against moisture. Never direct a jet of water at electrical components such as heater, controller or ventilation grille.
- ▶ Check the heating and connecting cable for any damage.
- ▶ Do not use a steam cleaning unit to clean electrical appliances. Doing so may allow moisture to get into the electrical system and cause a short circuit. Do not expose to spray water. To clean the electrical part, use a damp cloth and dry the surface using a dry cloth.
- ▶ Have electrical equipment inspected **at least every 6 months**<sup>2</sup> by a qualified electrician.

#### Risks due to human error when → using the Eisfink active carbon filter for odour and contaminant absorption and odour elimination using plasma technology

#### WARNING



Breathing difficulties, lacrimal irritation, mucosal irritations in throat, neck and lungs, headache, strong tickle in the throat, cannot be excluded in the case of human error.

- ▶ Only use with Eisfink active carbon filters, which are correctly mounted.
- ▶ Do not interfere with the extraction and circulating-air cleaning: Do not place any objects on the Eisfink active carbon filter in the technical compartment. Only operate with a dry Eisfink active carbon filter.

#### Fire risks



#### Risk of fire

Risk of fire due to missing or incorrectly mounted filter components.

- ▶ Only use with original filter components and grease drip trays, which are correctly fitted.
- ▶ Clean filter area daily.

<sup>2</sup> Source: DGUV Regulation 3. Electrical Systems and Equipment

## 8.2 Cleaning agents for stainless steel

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### # The following applies for all cleaning agents:

- Observe the instructions for use provided by the cleaning agent manufacturer.

### # Mechanical cleaners for stainless steel

Cleaning agent	Suitable
Brush products	Brushes with natural or synthetic bristles
Textiles	Textile material comprising natural and chemical cleaning fibres and textile fabrics (knitted and woven fabric, cleaning cloths, floor cloth, fringed material, fleece). Microfibre cleaning textiles are ideal for removing finger marks from stainless steel surfaces.
Synthetic fleece	Without abrasives. Mainly produced in the colours white, beige, yellow.
Other	Natural leather (chamois), synthetic leather, synthetic fleece, sponges, sponge cloths

### # Chemical cleaners for stainless steel

Cleaning agent	Areas of application
All-purpose cleaners	Particularly for lighter grease stains.
Neutral cleaners	For surfaces soiled with grease and oil (fingerprints); also suitable as a dishwashing detergent.
Alcohol cleaners	As all-purpose cleaner
Alkaline cleaners	Especially for heavy grease and oil stains (dried-in oils). Observe the manufacturer's dosage instructions.
Solvent cleaners	Depending on the type, particularly good for the removal of grease, oil, wax, tar, adhesives, paints and lacquers. Not suitable for plastics.
Disinfectant cleaners	Effect on pathogenic germs differs depending on active disinfectant ingredient. Long-term exposure to sodium hypochlorite can cause damage to the material. It should not be used if possible. Products should be used, which are specified in the list of the German Society of Hygiene and Microbiology (DHGM).

### 8.3 Overview of maintenance measures and intervals

Interval	Activity to be performed	Page
After use, at least daily	Clean <b>generally</b>	 <a href="#">Page 36</a>
	Clean upper area of air extraction system:	 <a href="#">Page 38</a>
	Clean grease <b>drip trays</b> ,	 <a href="#">Page 40 ff.</a>
	Clean high-performance grease separator Inspect <b>filter mat</b>	
Every 7 working days or weekly	Inspect technical compartment; <b>clean</b> if necessary	 <a href="#">Page 48</a>
After at least 500 hours of operation	<b>Replace</b> Eisfink active carbon filter	 <a href="#">Page 48, 51</a>
Monthly	Ensure preservation of the product identification	 <a href="#">Page 12, 52</a>
Every 6 months	Have electrical equipment inspected by a qualified electrician in accordance with DGUV regulation 3, Also have the residual current operated device inspected	 <a href="#">Page 33</a>
After at least 3000 hours of operation	For version with 'plasma generator': Clean <b>plasma generator</b>	 <a href="#">Page 51</a>

## 8.4 Choose the correct cleaning method

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### ATTENTION

Incorrect cleaning can damage the surface or even destroy the appliance. Please note:

- ▶ Do not scratch the surface with sharp-edged objects. Do not use any abrasive or aggressive cleaning agents, such as oven spray or a sponge with an abrasive surface.
- ▶ Remove dirt with cleaning and care products that are suitable for stainless steel.
- ▶ Do not mix standard cleaning agents; do not produce your own cleaning agent.
- ▶ Do not use steel wool or steel brushes.
- ▶ Avoid extended exposure of stainless steel to liquid containing salt, as this can lead to surface discolouration and corrosion.
- ▶ Avoid direct, extended contact of stainless steel with corroding iron parts, e.g. cast iron pans or steel kitchen sponges.

### # Note on regular cleaning

Abrasive-free cleaning agents are primarily used for regular cleaning.

Grease stains or grease-bound pigment dirt can generally be easily removed with

- All-purpose cleaners
- Neutral cleaners
- Alkaline cleaners.

Solvent cleaners or non-abrasive emulsions are helpful for very heavy grease stains (dried-in oil and grease) and tar marks (but not on painted surfaces).

## 8.5 Clean and service stainless steel parts

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- Clean the stainless steel surfaces with **warm, mild** soapy water. After cleaning, rub the surfaces dry with a **soft cloth**.



*'Cleaning agents for stainless steel', page 34*



### User tip

- ▶ We recommend **Rieber cleaning agent for stainless steel** for cleaning stainless steel.

■ It is an especially tough yet gentle cleaner, produces a dazzling shine, cleans and protects in one.

Order no.: 72 10 24 08

## 8.6 Clean casters



### ATTENTION

Cleaning the casters incorrectly can damage them.

- ▶ Never clean the casters with a steam-jet blower, as this may cause lubricating grease to escape from the wheel bearings.
- ▶ Clean the casters with **mild washing up detergent diluted in hot water**. After cleaning, rub surfaces dry with a **soft cloth**.

## 8.7 Clean and service plastic parts

- Clean the plastic parts with **mild washing up detergent diluted in hot water**. After cleaning, rub the surfaces dry with a **soft cloth**.

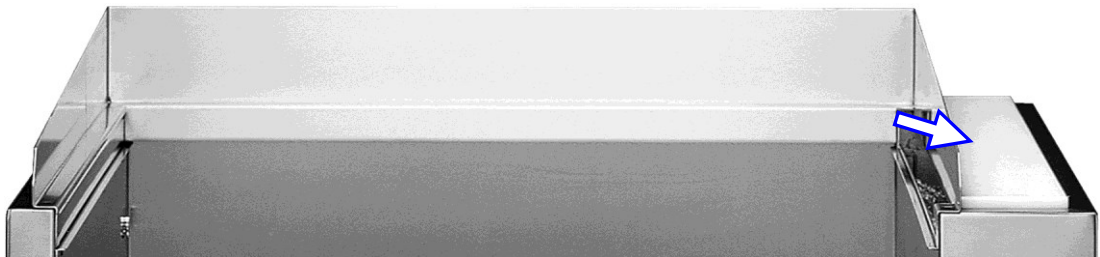
### # Clean technical compartment seal

The seal can be removed for cleaning if necessary.

- Clean the dirty seals with **mild washing up detergent diluted in hot water**. Then rub dry with a **soft cloth**.
- Reinsert removed seals correctly in the cover of the technical compartment.

### # Clean cutting board

Example  
'ec'



- Remove, rinse with lukewarm water, and rub dry.
- If necessary, clean the cutting board in the dishwasher.



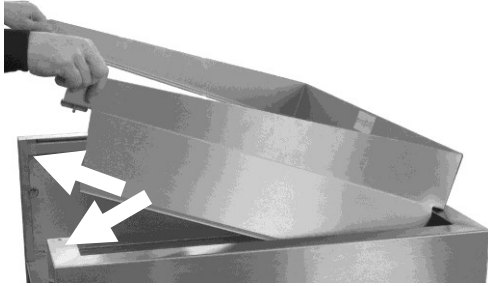
### User tip

If the cutting board is not in place unpleasant odours can develop, as the extraction is interrupted.

- ▶ Ensure that the cutting board is in position. Briefly removing the cutting board for cleaning will not interrupt the extraction.

## 8.8 Appliance type 'ec'

'ec'

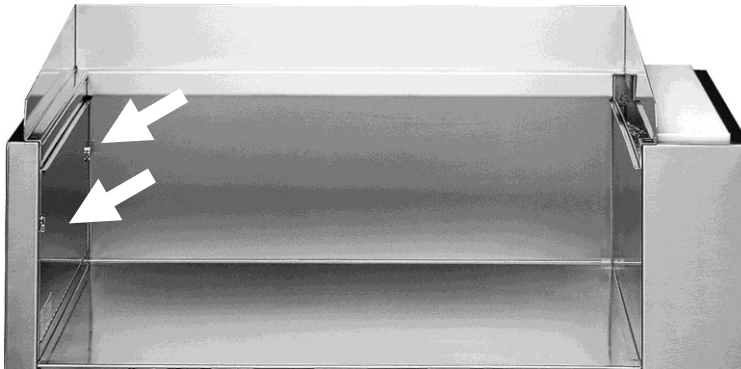


➤ **ATTENTION**

Handle the splash guard with care to prevent surface damage and scratches.

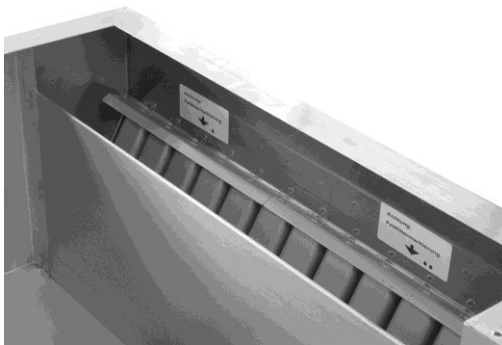
- Remove stainless steel splash guard for cleaning.
- Ensure exact positioning when mounting; use 2x fixings per pin.

'ec'



- For cleaning, open the cover on the left; for this activate closures.
- Clean the stainless steel part and the air supply area.

'ec'



↑ High-performance grease separator



↑ Grease drip tray




### User tip

Note the arrangement of the parts. Installation is then easier to carry out.

- Remove the 2x high-performance grease separators.
- Remove the 1x grease drip tray.

### # Notes on cleaning

The cleaning intervals depend on the intensity of use.

-  **Risk of fire**  
Clean the filter components in the extraction area daily after use.
- Clean the high-performance grease separators and grease drip trays with a fat-soluble detergent, rinse thoroughly and then dry completely. The parts are dishwasher-safe.

### # Notes on assembly



#### Risk of fire

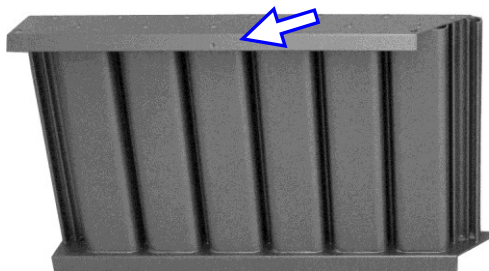
Risk of fire due to missing or incorrectly mounted filter components.

- Insert the grease drip trays.
- Insert the (dry, unused) filter mat. The visible side is blue.
- Insert the grease separator with **1 raised point**, then the one with **3 raised points**.

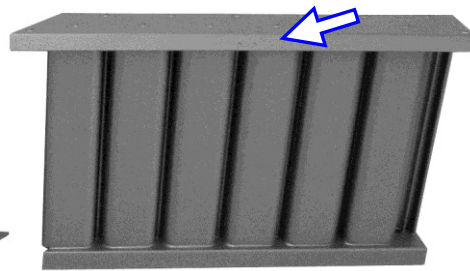
The high-performance grease separators are marked with **raised points**. These markings can also be found on the counterpart or frame of the product.

The illustration shows the right side from the operator's viewpoint, as an example.

Right side  
'ec'



↑ Order no. **61550346** (1 raised point)  
(no further identification available)



↑ Order no. **61550347** (2 raised point)

- Ensure that the parts are completely dry and undamaged prior to assembly.

## 8.9 Clean cooking area and splash guard

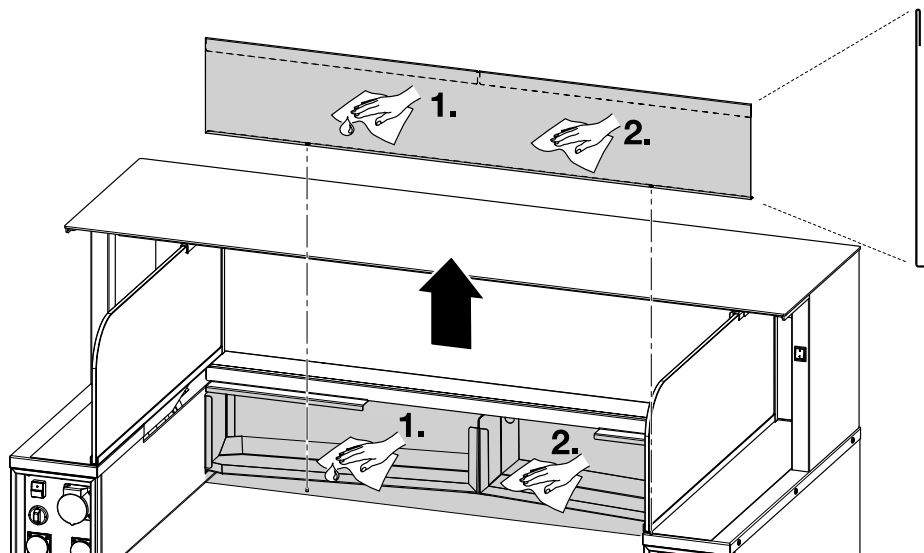
---

### # Note on preparation

- Remove the cooking units and other equipment from the cooking area.
- **i User tip.** Place an adequately large, soft surface in the cooking area for placing the parts to be cleaned.

### 8.9.1 Clean air ducts

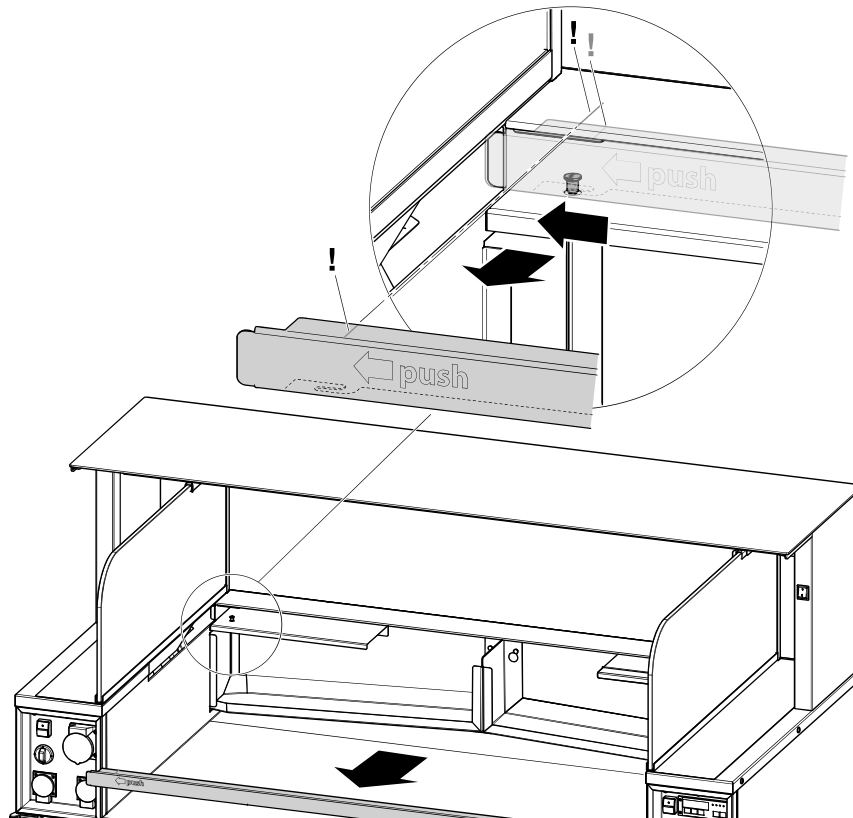
Example  
'd3'



The cover of the air ducts is fixed with pins at the bottom left and clipped in at the top.



### # Note on removable U-profile on the attachment



The yellow markings, arrow and 'push' lettering are engraved on the surface.

- **To remove the U-profile**, push it to the left in the direction of the arrow and remove it on the operator side.
- **To insert the U-profile**, position the profiles on top of each other and then push the U-profile to the right into the operating position.

### # Notes on removal and installation of the cover

- **ATTENTION**  
Incorrect handling can cause scratches.
- Grasp the cover with both hands, lift it vertically upwards out of the fixing and remove.
- When inserting the part after cleaning, ensure that it is fixed with the pins on both sides simultaneously.

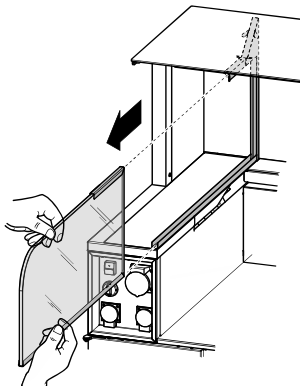
### # Note on cleaning

- Clean the casing and air ducts with a **hot, mild** detergent diluted in water. After cleaning, rub surfaces dry with a **soft cloth**.

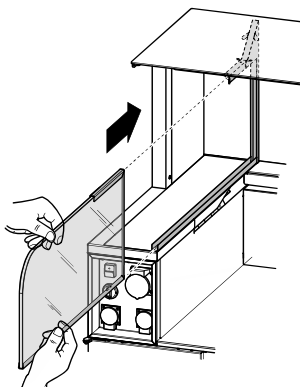
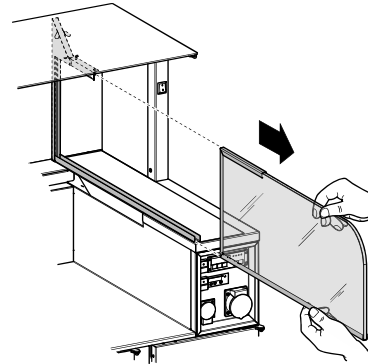
## 8.9.2 Clean cooking area

- Clean the appliance with a **hot, mild** detergent diluted in water. After cleaning, rub surfaces dry with a **soft cloth**.

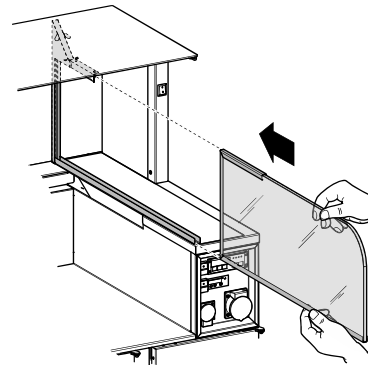
### 8.9.3 Remove and clean splash guard



- Remove the splash guard, holding it with both hands.



- When re-inserting, ensure correct mounting in the guides at the top and bottom. Simply push the splash guard into the guide as far as it will go.



➤ **ATTENTION**

Clean laminated safety glass parts like normal glass surfaces.

➤ **ATTENTION**

Ensure correct positioning and condition of the plastic profiles, replace if necessary; Order no. **37160605** /bulk goods

**# NOTE**

- Only re-install the splash guard after cleaning the side edge extraction units.



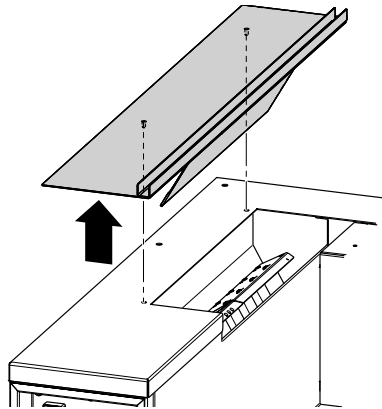
*Chapter 'Insert the parts again', page 46*

## 8.10 Clean high-performance grease separator, grease drip trays ...

### ➤ ⚠ Danger of electric shock. Risk of death

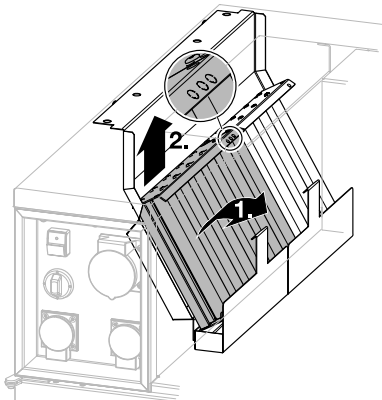
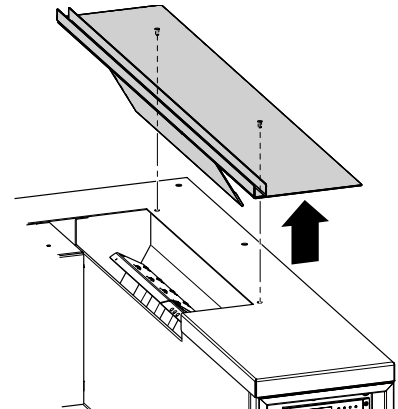
Disconnect the appliance from the power supply before carrying out repair, maintenance and cleaning work; Do this by unplugging the power plug.

### 8.10.1 Remove the parts



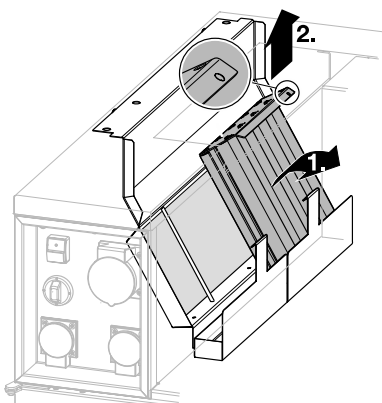
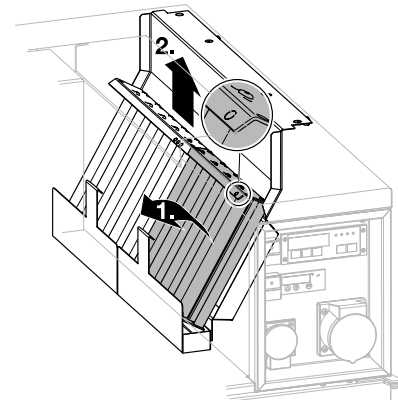
#### # Remove cover

- Grasp the part in the centre and pull it out vertically upwards.
- Remove the part.
- Place the part on the prepared surface.

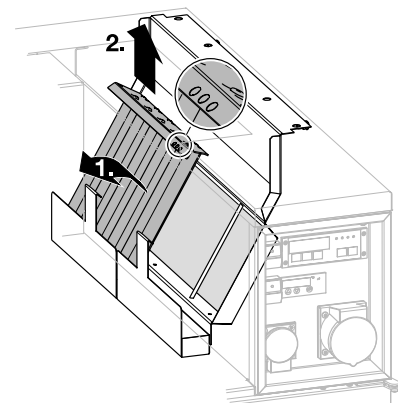


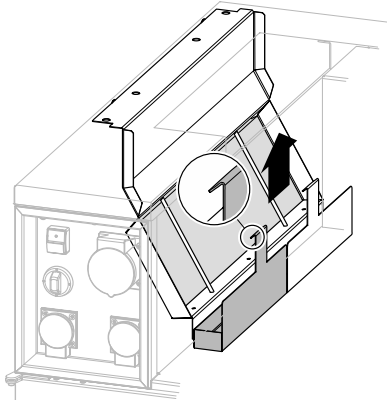
#### # Remove high-performance grease separator

- Grasp the front filter centrally at the handle strip, tilt the part and pull it out vertically upwards.



- Repeat with the rear filter.



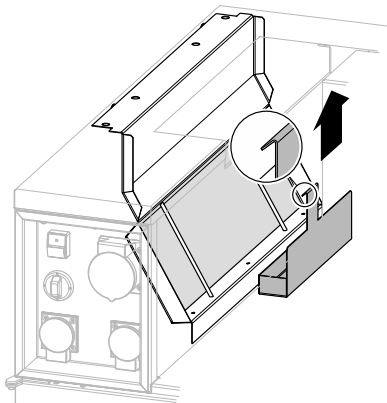
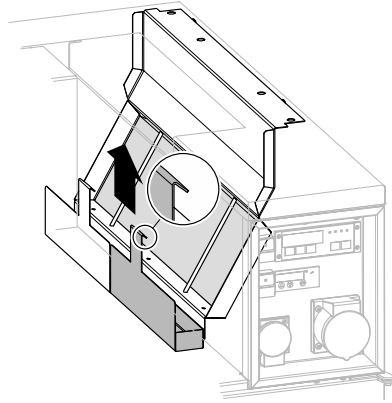


### # Remove grease grip trays

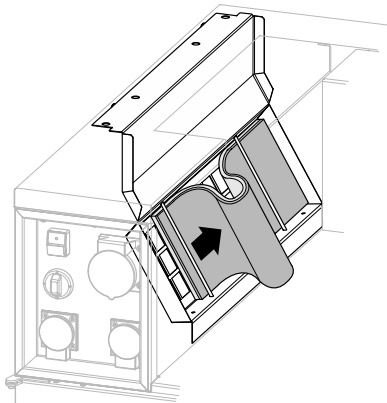
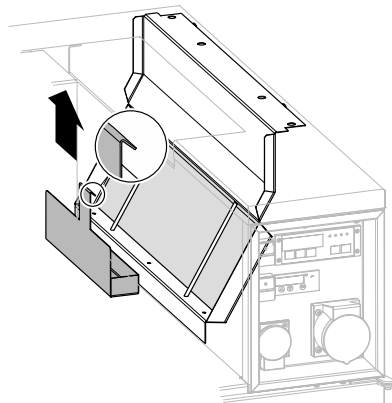
#### ➤ NOTE

Do not spill the grease, as considerable additional cleaning work would then be required. Thorough cleaning of the technical compartment would be necessary.

- Grasp the front grease drip tray by the handle and pull it out vertically upwards.

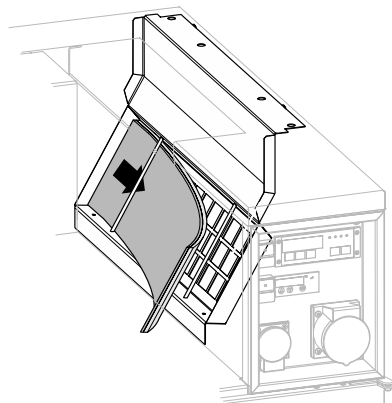
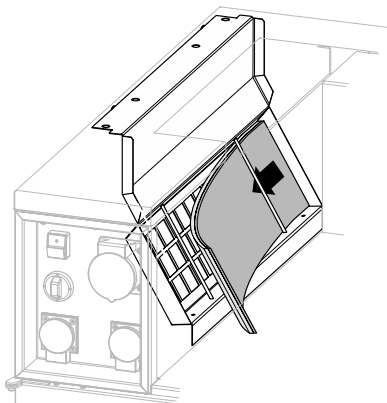
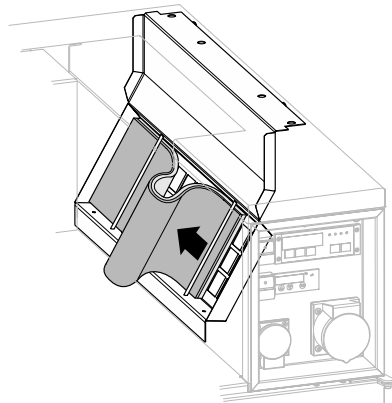


- Repeat with the rear grease drip tray. Slide forward around 10 cm first of all.



### # Remove filter mat

- Grasp the filter mat centrally and pull it out.

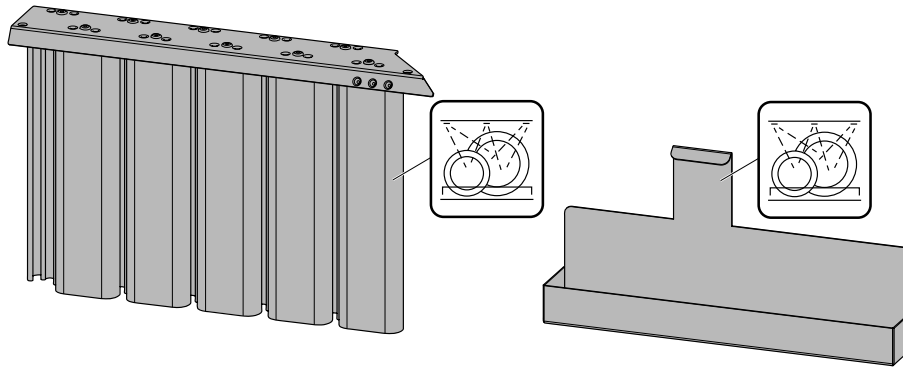


## 8.10.2 Clean the parts

### # Clean removed stainless steel parts

The parts are dishwasher-safe.

- Clean the high-performance grease separators and the grease drip trays with fat-soluble cleaning agents. Rinse thoroughly and then dry completely.



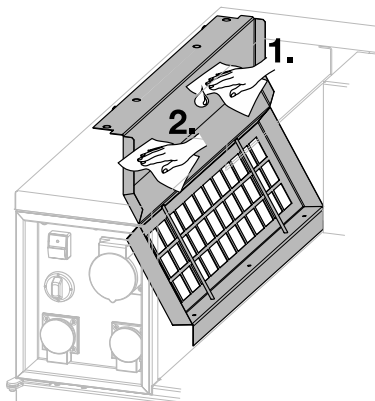
### # Inspect Filter mat, replace if necessary

Grease particles are mainly deposited on the blue side of the filter mat. If grease stains have formed and the filter mat feels greasy, you should replace it immediately.

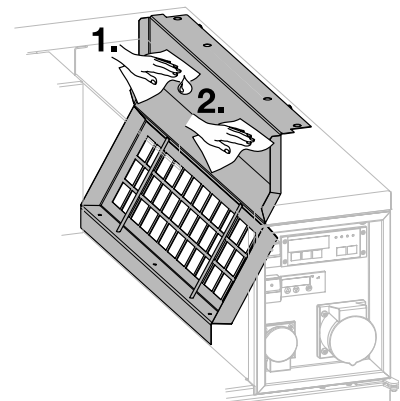
- Dispose of the used filter mat in the household waste.

Order no. 91 70 05 15

### # Clean inside of appliance

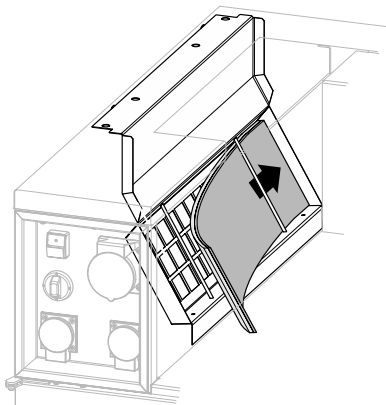


- Clean with a **hot, mild** detergent diluted in water, using a slightly damp cloth.
- After cleaning, rub surfaces dry with a **soft cloth**.



### 8.10.3 Insert the parts again

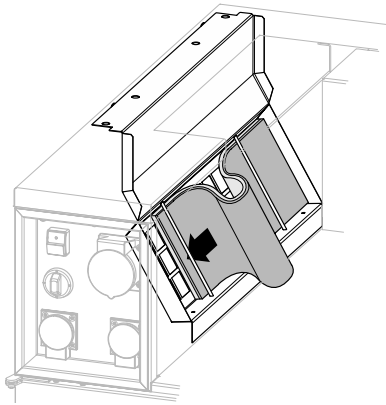
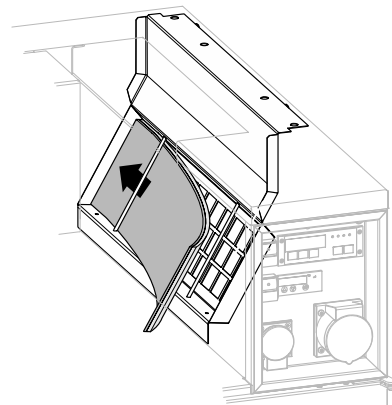
The parts are inserted in the reverse order to that described for removal.



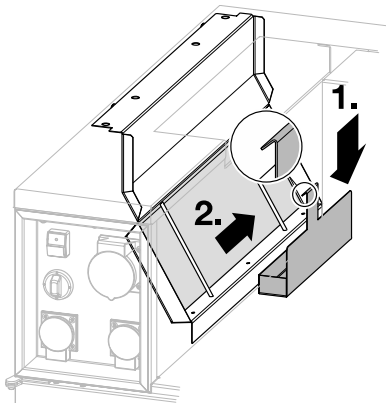
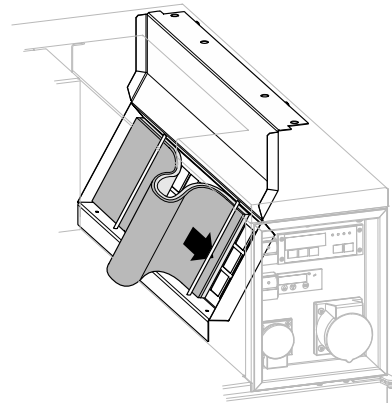
#### # Feed in filter mat

The visible side is blue.

- Feed the filter mat through the rear wire. Push it back as far as it will go.

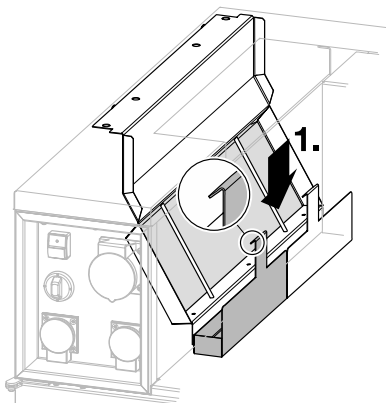
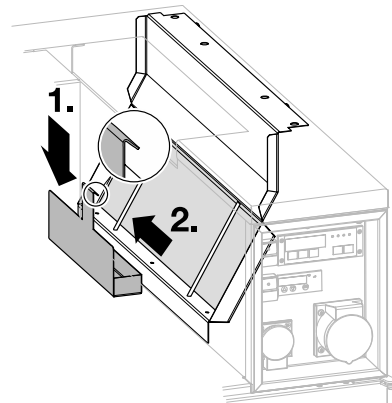


- Make a loop and push the mat forward through the front wire as far as it will go.
- Make sure that the filter mat is positioned smoothly.

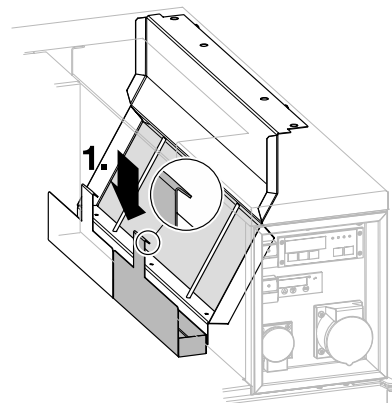


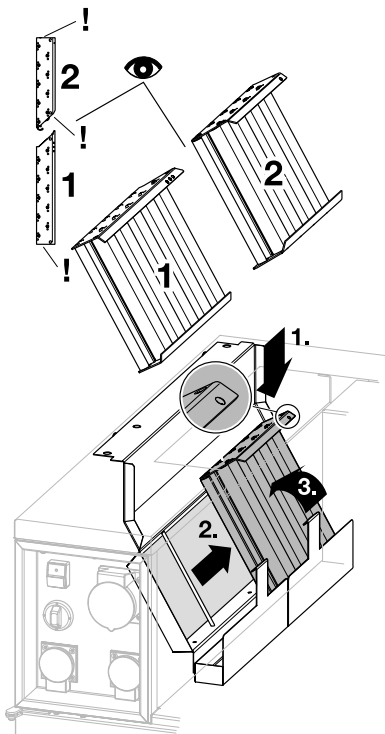
#### # Install grease drip trays

- Grasp the grease drip tray at the handle edge and push it down vertically as far as it will go.
- Then push it back as far as it will go.



- Insert the other grease drip tray at the front.

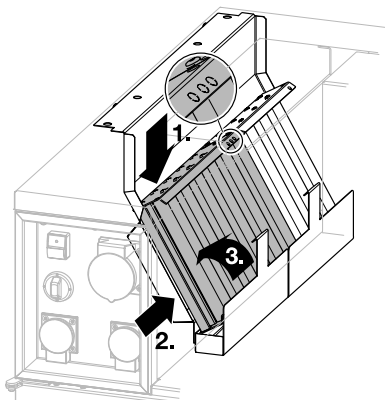
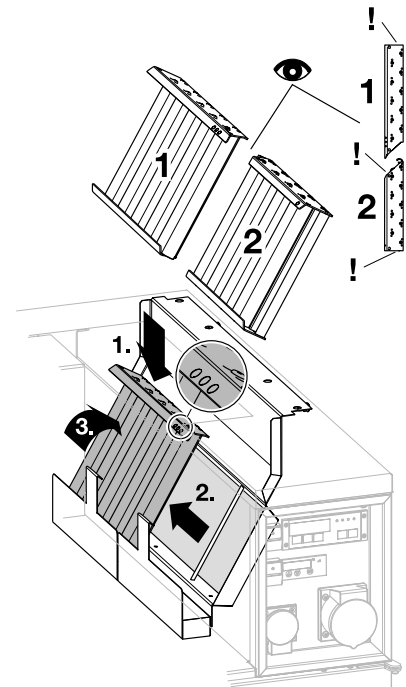




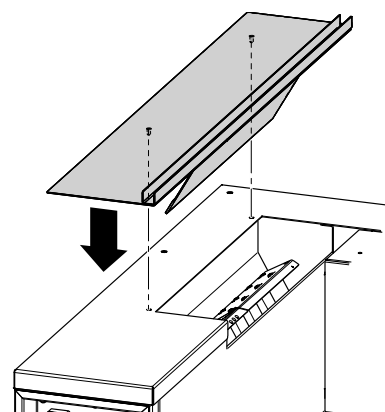
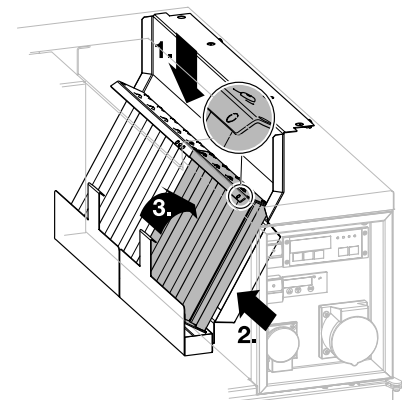
### # Install high-performance grease separators

The high-performance grease separators are marked with **raised points**. These markings are also found on the housing in the cooking area.

- Align the grease separators for the left and right side with each other and position like this.
- Hold the rear grease separator at the handle edge and insert it. Push it back as far as it will go, swing it up and push it sideways as far as it will go.

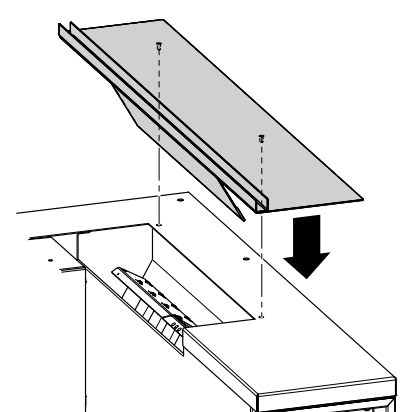


- Insert the front grease separator. Push it forward, swing it up and push it sideways as far as it will go.
- Make sure that the grease separators are positioned flush.



### # Install cover

- **ATTENTION**  
Do not scratch the surface.
- Install the cover. Make sure it is firmly in place.



### # Re-install side splash guard

- Install the side splash guard, left and right.



Chapter 'Remove and clean splash guard', page 42



## 8.11 Inspect technical compartment; clean if necessary

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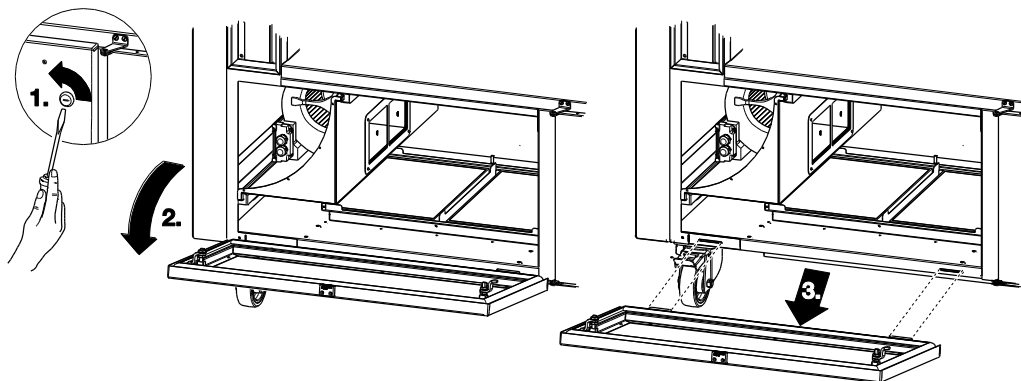
### WARNING

**Rotating parts.** The impeller wheel of the radial fan rotates when the power to the appliance is switched on.

- Switch off the electrical power to the appliance and disconnect from the power supply before opening the technical compartment.

### 8.11.1 Inspect and clean technical compartment, replace filter

#### # Notes on opening and closing



- Opening angle around 70 to 90 °, simply remove or insert the cover.

#### # Inspect technical compartments for soiling

The steam and vapour extracted by the radial fans, which contain grease in addition to water vapour, are also deposited on the surfaces.

- Inspect the condition, such as greasy surfaces. Do this by touching several points on the stainless steel surfaces with your finger and feeling it.

#### # Note on quick cleaning

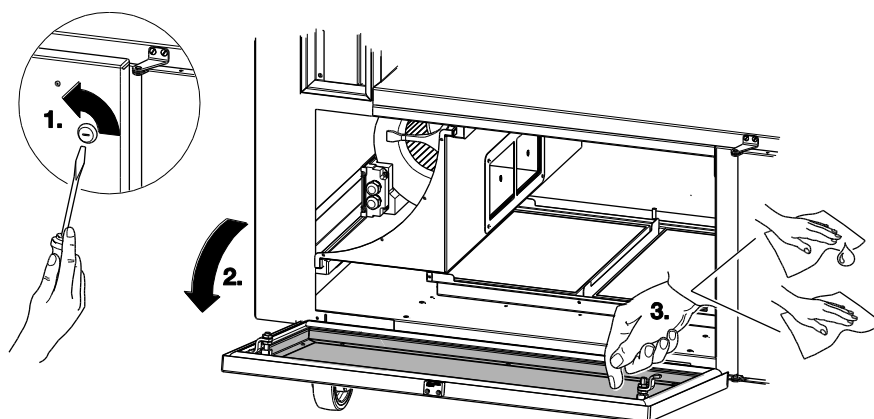
- Clean the soiled stainless steel surfaces with a **hot cloth slightly dampened** with a **mild** detergent solution. After cleaning, rub the surfaces dry with a **soft cloth**.

#### # Note on professional cleaning

- Remove active carbon filter.
- Remove the radial fan if necessary by pulling it out along the guides and place it on a soft surface.
- Clean the **surfaces in the technical compartment** with a **hot, mild** detergent diluted in water. After cleaning, rub the surfaces dry with a **soft cloth**.



- The seals of the covers can be removed for cleaning. Ensure that it is mounted correctly with the seal ends at the bottom.



### **⚠ DANGER**

Danger of electric shock. Dangerous electrical voltage.

- Unplug mains plug before removing the fan device.

- Unplug the plug of the radial fan / plasma generator. Then close with the end cap.
- Remove the assembly together with the radial fan by pulling it to the front.
- Eliminate any traces of grease. Then rub dry.
- Clean the soiled **surfaces of the radial fan** with a **hot cloth slightly dampened** with a **mild detergent** diluted in water. After cleaning, rub the surfaces dry with a **soft cloth**.
- Install again in the reverse order.

### **# Notes on inspecting and replacing the active carbon filter**

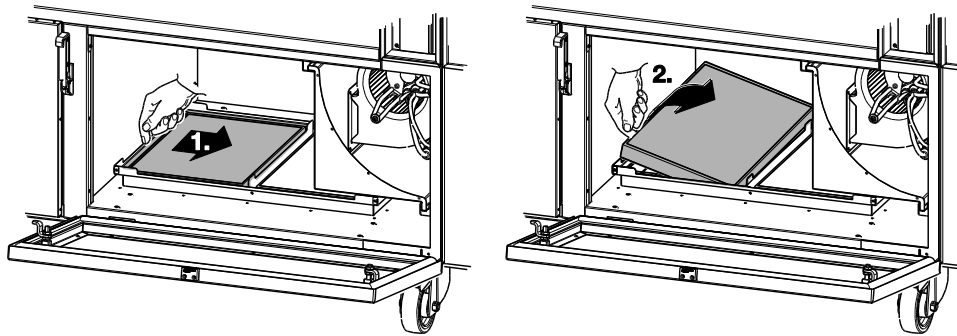


#### **User tip**

The period of use of the Eisfink active carbon filter depends on the type of vapour and the amount of grease. The degree of soiling of the active carbon filter cannot be visually assessed. The active carbon filter cannot be cleaned.

- We recommend **replacing** the Eisfink active carbon filter at least **after 500 operating hours**. Replace the filters early in the case of unwanted odours.
- Always replace the active carbon filters completely.
- Dispose of the active carbon filter with respect for the environment, as domestic waste.

Example



- To remove an active carbon filter, tap it on the side and tilt or turn it upwards.
- Ensure correct positioning when inserting the active carbon filter in the mounting recess.

Detail  
'd3'




Order no. 37252208, quantity dependent on appliance type

Detail  
'ec'



Order no. 37252208, quantity dependent on appliance type

-  **Risk of fire**  
Never dry a wet Eisfink active carbon filter in the oven or dryer, as there is a risk of fire. Let the active carbon filter dry in dry ambient air.

## 8.11.2 For appliance type 'd3' with 'plasma generator'/option

### 8.11.2.1 Replace Eisfink active carbon filter after at least 500 operating hours

#### **WARNING**



Breathing difficulties, lacrimal irritation, mucosal irritations in throat, neck and lungs, headache, strong tickle in the throat, cannot be excluded in the case of human error.

- ▶ Only use with Eisfink active carbon filters, which are correctly mounted.
- ▶ Replace Eisfink active carbon filter **after at least 500 operating hours**.
- ▶ Do not interfere with the extraction and circulating-air cleaning. Do not place any objects on the filter in the technical compartment, for example. Only operate with a dry Eisfink active carbon filter.

#### ➤ **Risk of fire**

Never dry a wet Eisfink active carbon filter in the oven or dryer, as there is a risk of fire. Let the active carbon filter dry in dry ambient air.



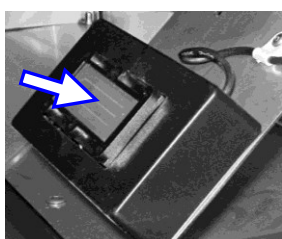
#### **User tip**

The period of use of the Eisfink active carbon filter depends on the type of vapour and the amount of grease. The active carbon filter cannot be cleaned.

- ▶ Replace the filter early in the case of unwanted odours. We recommend **replacing** the Eisfink active carbon filter at least **after 500 operating hours**.
- ▶ Dispose of the active carbon filter with respect for the environment, as domestic waste.

### 8.11.2.2 Clean the plasma generator at least every 3,000 operating hours.

Detail



Failure to clean the diode on the plasma generator can cause unpleasant odours when using the appliance, due to malfunction.

- Clean the electrode on the plasma generator **at least every 3,000 operating hours**.  
For this, use a scratch-free cloth.  
Use a little alcohol-based liquid if necessary, then rub dry.

### 8.12 Disinfect the appliance as required

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- Please clarify this with your hygiene officer.

### 8.13 Keep ready for next use in dry condition

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- Dry the inside of the appliance and leave the door open until the residual moisture has dried off.
- Store appliance at room temperature.

### 8.14 Ensure preservation of the product identification

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The product identification of your appliance on the type plate provides important technical data for use and a unique identification, which is necessary for replacement and wearing parts, for example. Safety instructions assist safe handling.

- Make sure that the appliance is correctly identified. Inspect this at least 1x every six months.



*Chapter 'Product identification', page 14*

## 9 Troubleshooting

### 9.1 Notes on troubleshooting


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



#### **WARNING**

Danger of electric shock. Dangerous electrical voltage.

- ▶ Disconnect the connecting plug on the unit before starting repair work.
- ▶ Have all electrical repairs carried out by an authorised electrician only.
- ▶ Any interference in the 'plasma generator' is forbidden.

-  **Possibility of malfunction after power interruption.** Disconnect the unit from the mains completely after a power failure. Then switch back on.

Any repairs during warranty period may only be carried out by the manufacturer's service department of Rieber. Please contact the manufacturer's service department of Rieber.

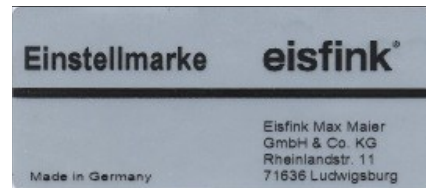
Fault	Possible cause	Possible remedy
Cooking units do not work	Plug not plugged in	<ul style="list-style-type: none"> <li>➤ Plug in the connecting plug.</li> <li># Operating staff</li> </ul>
Sockets do not work <b>acs® 1100 d3</b> 32 A <b>acs® 1500 d3</b>	Automatic circuit-breaker was triggered	<ul style="list-style-type: none"> <li>➤  <b>Electrical hazard</b> Check status. The automatic circuit-breaker for the power outlets is located at the upper right behind the socket for the electrical connector plugs.</li> <li># Qualified electrician</li> </ul>
'ON/OFF pushbutton with indicator light' does not illuminate	Device not connected correctly	<ul style="list-style-type: none"> <li>➤ Check electrical connection. Completely disconnect the unit from the mains. Then switch back on.</li> <li># Operating staff</li> </ul>
	(The automatic breakers for line protection are located: at <b>acs® 1100 d3</b> 32 A left behind the switch panel, at <b>acs® 1500 d3</b> right behind the switch panel)	<ul style="list-style-type: none"> <li>➤  <b>Electrical hazard</b> Check status.</li> <li># Qualified electrician</li> </ul>
Smoke and odours	Temperature of cooking units set too high	<ul style="list-style-type: none"> <li>➤ Set temperature to maximum 250 °C.</li> <li># Operating staff</li> </ul>
	High-performance grease separators, grease drip trays, filter mats	<ul style="list-style-type: none"> <li>➤  <b>Risk of fire</b> Check status</li> <li> <a href="#">Page 33 ff.</a></li> <li># Operating staff</li> </ul>
	Extraction and circulating-air cleaning malfunction.	<ul style="list-style-type: none"> <li>➤ Check status</li> <li># Operating staff</li> </ul>
	Electrode on plasma generator soiled	<ul style="list-style-type: none"> <li>➤ Clean.</li> <li> <a href="#">Page 51</a></li> <li># Operating staff</li> </ul>
	In appliance type ' <b>ec</b> ' the bottom opening correctly set by the manufacturer is located on the left in the floor of the technical compartment.	<ul style="list-style-type: none"> <li>➤ Check status. Adjust if necessary.</li> <li> <a href="#">See below</a></li> <li># Operating staff</li> </ul>
Message on display of the electronic fan control	Various	<ul style="list-style-type: none"> <li>➤ Clean.</li> <li> <a href="#">Page 29</a></li> <li>➤ Operating staff</li> </ul>

### # Troubleshooting instructions for appliance type 'ec'

The manufacturer's setting of the bottom opening in appliance type 'ec' is identified by the "setting mark"; located on the left in the floor of the technical compartment.



↑ **INCORRECT**



↑ **CORRECT**

- Ensure that the "setting mark" is perfectly aligned, set the bottom opening correctly if necessary.

### Customer service, spare parts



#### IMPORTANT

Customer service needs information about the type and number of your appliance.

- If you have a fault which you cannot remedy yourself, please get in touch with your Eisfink specialist dealer or Eisfink central customer services.

## 9.2 Disposing of your product

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Your appliance is made of high-quality material which can be reused / recycled. For disposal, disconnect the appliance from mains supply. Unplug the mains plug. Cut off the cable directly at the casing. Dispose of this appliance properly via your local disposal facility.



#### WARNING

Persons with limited sensory and mental ability might get locked in.

- When disposing of the unit, destroy the door lock.

## 10 Warranty and Liability

Manufacturer liability and warranty shall no longer apply if

- you do not follow the information and instructions in this user guide,
- you use the appliance for any purpose other than the intended use,



*See chapter "Intended use"*

- make conversions or functional modifications,
- use non-original spare parts.

The "Sales and delivery terms and conditions" of Eisfink Max Maier GmbH & Co. KG shall apply for all warranty claims made against the manufacturer. For instance, any repairs and/or overhaul during the warranty period may only be performed by the manufacturer's service department of Rieber, failing which any claims hereof may be voided. Please contact the manufacturer's service department of Rieber.

The following wearing parts are not included in the warranty:

- Caster, caster with parking brake
- Filter mat
- Eisfink active carbon filter

## 11 Excerpt from EC Declarations of Conformity

The company Eisfink Max Maier GmbH & Co. KG herewith declares that the product

- |                                                  |                                                  |
|--------------------------------------------------|--------------------------------------------------|
| • varithek <sup>®</sup> acs <sup>®</sup> 1100 d3 | • varithek <sup>®</sup> acs <sup>®</sup> 600 ec  |
| • varithek <sup>®</sup> acs <sup>®</sup> 1500 d3 | • varithek <sup>®</sup> acs <sup>®</sup> 1000 ec |

complies with the basic requirements of the EC Machinery Directive 2006/42/EC, Appendix II A, harmonised standards (DIN EN ISO 12100:2011-03 Safety of Machinery — General principles for design — Risk assessment and risk minimisation) and with the basic requirements of the European Directive on Electromagnetic Compatibility 2014/30/EU.

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## 13 Contact address

### Manufacturer:

Eisfink Max Maier GmbH & Co. KG  
Rheinlandstraße 10  
D 71636 Ludwigsburg  
Phone +49 (0) 7141 479-0  
FAX +49 (0) 7141 479-200  
Email [info@eisfink.de](mailto:info@eisfink.de)  
[www.eisfink.de](http://www.eisfink.de)

### Responsible for Sales and Service:

Rieber GmbH & Co. KG  
Hoffmannstraße 44  
D72770 Reutlingen, Germany  
Phone +49 (0) 7121 518-0  
FAX +49 (0) 7121 518-302  
Email [info@rieber.de](mailto:info@rieber.de)  
[www.rieber.de](http://www.rieber.de)