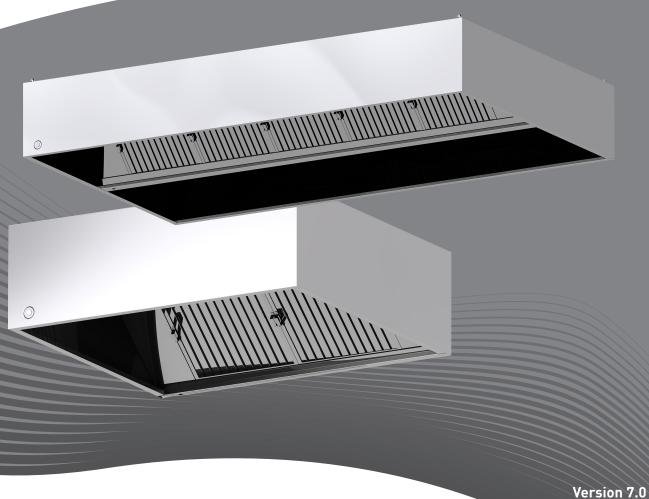


Assembly and operating instructions

**Cooker bonnets** 



Version 7.0 B17

# Content

1.	General information	3			
	1.1. Note symbols	3			
2.	Important safety instructions	3			
	2.1. Personnel	3			
	2.2. Personal protective equipment				
	2.3. The 5 safety rules for working in and on electrical systems				
3.	Warranty	.4			
4.	Delivery, transport, storage				
5.	Description	.5			
	5.1. Extractor bonnets without fan	6			
	5.2. Extractor bonnets with fan	6			
	5.3. Intended use	6			
6.	Type plate and type code	.6			
7.	Accessories	6			
8.	Installation	6			
	8.1. Wall version with wall rail	7			
	8.2. Ceiling version with suspension eyelets				
	8.3. Combined wall/ceiling version Angles and eyelets				
	8.4. Assembly of multi-piece bonnets				
	8.5. Assembly of bonnet trim (accessory).				
_	8.6. Installation of separators				
9.	Electrical connection	9			
	9.1. Connecting the version with fan and built-in controller				
	9.2. Connecting the version with fan without controller				
	9.3. Connecting the version only with lamp without fan				
10.	. Commissioning	10			
11.	. Operation1	11			
12	. Troubleshooting/repair	11			
	12.1. Safety instructions	11			
	12.2. Troubleshooting				
	12.3. Spare parts.				
13.	13. Cleaning / Maintenance				
14.	14. Disassembly/removal				
15.	15. Disposal				
16.	. EU Declaration of Conformity1	13			

# 1. General information

# 1.1. Note symbols



# Danger

#### Immediate hazard

Failure to observe the warning will result in immediate death or serious injury.



# Caution

#### Low-risk hazard

Failure to observe the warning may result in moderate injury.



# Warning

#### Potential hazard

Failure to observe the warning may result in death or serious injury.

# **Important**

### Danger with risk of damage to property

Failure to observe the warning may result in damage to property.



### Note

Useful information and instructions

# 2. Important safety instructions

Planners, system builders and operators are responsible for proper installation and operation in accordance with the intended use.

- Read the operating instructions completely and carefully.
- Operating instructions and applicable documents, such as electrical connection diagrams, must always be available at the place of use.
- Local and national laws and regulations must be observed and complied with.
- Take into account the system-relevant conditions and requirements of the system manufacturer or system builder.
- Safety devices may not be dismantled, bypassed or rendered inoperative.
- The fan may only be used when in perfect condition.
- The generally prescribed electrical and mechanical protective devices must be provided.
- During assembly, electrical connection, commissioning, troubleshooting, fault rectification and maintenance, secure the assembly site and the premises against access by unauthorised persons.
- Safety devices must not be dismantled, bypassed or rendered inoperative.
- Ensure that all warning signs on the fan are complete and legible.
- This appliance is not intended for use by persons (including children) with reduced physical or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

# 2.1. Personnel

The cooker bonnets may only be operated by qualified, instructed and trained personnel. These persons must know the relevant safety regulations in order to recognise and avoid possible dangers. The individual actions and qualifications can be found in Table 1 Qualification.

### **Table 1 Qualification**

Actions	Qualification  Trained personnel (s. following instructions)		
Storage, operation, transport, cleaning, disposal			
Electrical connection, commissioning, electrical disconnection	Qualified electrician or pers	Qualified electrician or persons with appropriate qualifications	
Installation, Dismantling	Assembly specialist or persons with appropriate qualifications		
Maintenance	Electrical specialist or persons with appropriate qualifications	Assembly specialist or persons with appropriate qualifications	
Repair	Electrical specialist or persons with appropriate qualifications Assembly specialist or persons with appropriate qualifications	Assembly specialist or persons with appropriate qualifications	



### Note

The operator must ensure that the personnel have been instructed in the operation and have understood the operating instructions.

# 2.2. Personal protective equipment

Protective equipment must be worn during all work/installation in the vicinity of the cooker bonnets.

- Protective clothing
- Protective gloves
- Safety goggles

- Safety shoes
- Hard hat

# 2.3. The 5 safety rules for working in and on electrical systems

1. Disconnect (all poles) an electrical system from live parts

- 2. Secure against being switched on again
- 3. Check that no voltage is present
- 4. Earth and short-circuit
- 5. Cover or isolate adjacent live parts

# 3. Warranty

For warranty claims to be valid, the products must be properly connected and operated and used in accordance with the data sheets. Further prerequisites are a fully completed maintenance plan, which is requested from Walpol in the event of a warranty claim. The maintenance plan must be prepared by the operator, see chapter 13 Maintenance

# 4. Delivery, transport, storage

# Safety instructions

### Warning notice (for version with built-in fan): Danger from rotating fan blades

Prevent unauthorised persons from entering by security personnel or an access guard.

### Warning: Suspended loads

- When carrying out any work in the vicinity of the cooker hood, wear the protective equipment, see 2.2 Personal
  protective equipment
- Never step under a suspended load.
- Ensure that no one is under a suspended load.

# Delivery

Every cooker bonnet leaves our factory in perfect electrical and mechanical condition. It is recommended that the cooker bonnet is transported to the installation site in its original packaging.

### Check delivery

- Check the packaging for transport damage. Any damage must be noted in the cargo manifest.
- Check that the delivery is complete.

### Unpacking



# Warning

When removing the transport packaging, there is a risk of damage due to sharp edges, nails, staples, splinters, etc.

- Unpack the fan carefully.
- Check the fan for obvious transport damage.
- Do not remove the packaging until just before assembly.
- Wear protective equipment when carrying out any work in the vicinity of the fan, see 2.2 Personal protective equipment

### **Transport**

### Safety instructions

Warning: Electrical or mechanical hazard due to fire, moisture, short circuit or malfunction.

- In the case of open transport, ensure that no water can penetrate the motor or other sensitive components.
- It is recommended that the cooker bonnet is transported to the installation site in its original packaging.

### Caution: Careless loading or unloading may damage the cooker bonnet.

- Carry out loading or unloading carefully.
- Use lifting equipment designed for the load.
- Observe the transport arrows on the packaging.
- The packaging is only used as transport protection and must not be used for lifting.

### Storage

- Store the fan in its original packaging in a dry, dust-free place protected from the weather.
- Avoid exposure to extreme heat or cold.

•

# **Important**

### Danger due to loss of function of the motor bearing - for version with fan

- Avoid excessively long storage periods (recommendation: max. 1 year).
- Before installation, check that the motor bearing is functioning correctly.

# 5. Description

Cooker bonnets are used to remove/separate vapours and fumes that arise during cooking or dishwashing processes in kitchens. Vapours are collected in the so-called collection chamber and discharged via the aerosol separators. The proper operation of cooker bonnets depends on the connected ventilation system. The necessary maintenance intervals of the ventilation system must be observed and complied with.

The supplied cooker bonnet consists of a self-supporting structure, complete panelling and top cover. The delivery includes: Filter or aerosol separator, fan (optional), speed controller (optional), lighting

The aerosol separators are suitable for ventilation systems according to VDI 2052 a distinction is made between two types:



# Note

Refer to the aerosol separator instructions for the recommended volume flow for the cooker bonnet.

A check of the volume flow should be carried out via a proper measurement in the exhaust air duct.

### Type F-1

Separators according to DIN EN 16282-6 F-1A may be used above thermal appliances with increased fire risk. Kitchen areas for which only type A is permissible:

Kitchen areas with thermal appliances (e.g. cooking kitchens, cook and chill), front cooking area

# Type F-2

Separators according to DIN EN 16282-6 F-2. Kitchen areas for which only type B is permitted:

Kitchen areas for serving food, food storage, scullery

### 5.1. Extractor bonnets without fan

The extractor bonnets are suitable for kitchen exhaust air systems according to VDI 2052 & Muster-Lüftungsanlagen-Richtline

# 5.2. Extractor bonnets with fan

The extractor bonnets are suitable for kitchen exhaust air systems below 25kW Connected load in the kitchen (see VDI 2052).

Not suitable if the system is designed in accordance with the M-LüAr model ventilation system guideline (valid in Germany)!

### 5.3. Intended use

 Cooker bonnets are used to remove/separate vapours and fumes that are produced during cooking or rinsing processes in kitchens.

Improper use is mainly when the fan is used in a way other than described. The following examples are contrary to the intended use and dangerous:

- Conveying explosive and flammable media
- Conveying aggressive media
- Conveying extremely polluted air
- Operation in an explosive environment
- Operation without a duct system
- Operation with sealed air connections
- Outdoor installation

# 6. Type plate and type code

Every cooker bonnet has a type plate.

Please compare the type/data of the cooker hood with the version you ordered to avoid misunderstandings or wrong deliveries.

# 7. Accessories

We recommend original accessories from Walpol.

# 8. Installation



# Note

Direct all persons who are not required for installation out of the danger zone.

### Warning: Risk of impact from falling cooker bonnet or components.

- Check the surface of the ceiling or wall for load-bearing capacity before installation.
- Take all static and dynamic loads into account when selecting the lifting equipment and mounting parts.
- Observe the position and projection of the bonnet (see DIN EN 16282)!

### General safety instructions

- The installation may only be carried out by appropriately qualified persons, for details, see Table 1 Qualification.
- Take into account the system-relevant conditions and requirements of the system manufacturer or system builder.
- Safety devices must not be dismantled, bypassed or rendered inoperative.
- Move the impeller of the fan by hand before installing it to check its free running (version with fan).

### Requirements

- Make sure that the cooker bonnets and all their components are undamaged.
- Make sure that the information on the type plate corresponds to the operating conditions.
- Make sure that there is sufficient space for mounting the cooker bonnet.



# Note for wall and ceiling version

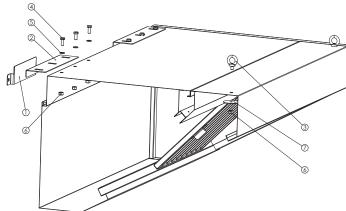
Drilling for air duct in bonnet (for version without fan) is done by specialist on site (ensure sufficiently large duct cross-sections!) Observe VDI 6022

Fit suitable connection piece (not included in delivery) / connection piece to extractor bonnet **must be sealed!** 

# 8.1. Wall version with wall rail

Wall mounting Mounting material included

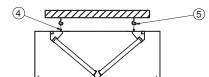


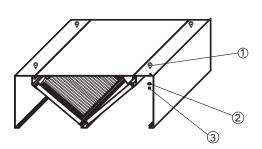


- 1. Wall rail
- 2. Hanging bracket
- 3. Screws with eyelet DIN 580
- 4. Screws M8
- 5. Shims
- 6. Nut M8
- 7. Shims

# 8.2. Ceiling version with suspension eyelets







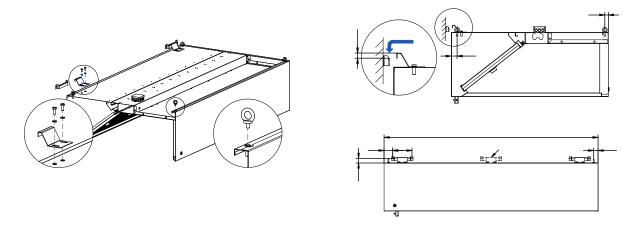




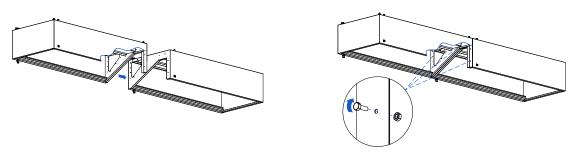
1 Eyelet DIN580

- 2 Washer wide
- 3 Nut M8
- 4 Rope/chain (not included)
- 5 Hook (not included)

# 8.3. Combined wall/ceiling version Angles and eyelets

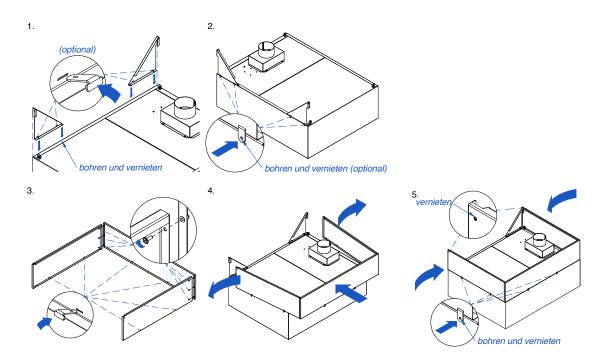


# 8.4. Assembly of multi-piece bonnets



Screw the bonnets together with the enclosed material as shown in the sketch.

# 8.5. Assembly of bonnet trim (accessory)



# 8.6. Installation of separators

First place the separator on top and then slide it into the rail at the bottom

Please observe the operating instructions for the separators.

# 9. Electrical connection

# Safety instructions

# Warning: Danger from electrical voltage!

- The 5 safety rules must be observed, see The 5 safety rules for working in and on electrical installations
- Prevent water from entering the terminal box.
- The electrical connection may only be carried out by suitably qualified persons, for details see table Qualification

### Connection

- The cross-section of the protective earth conductor must be equal to or greater than the phase cross-section.
  - Check that the data on the type plate correspond to the connection data.
  - Carry out the electrical connection according to the wiring diagram.
  - Install a disconnecting device permanently in the electrical installation (all-pole contact opening min. 3 mm).
  - Use all locking screws.

- Insert the screws by hand so that the thread is not damaged.
- Tighten all screws firmly to ensure IP protection.
- Screw the cover of the terminal box/revision switch on evenly.
- Connect the cable end in a dry environment.

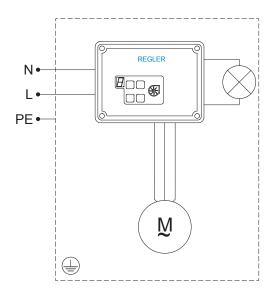
### Protective earth conductor

The cross-section of the protective earth conductor must be equal to or greater than the phase cross-section.

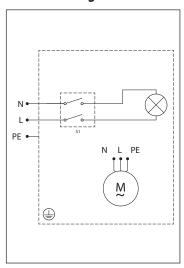
# Observe the wiring diagrams and instructions for the fan + controller

- has the electrical connection been made correctly
- has the exhaust air connection been fitted
- has the protective earth conductor been connected
- has the motor protection been installed
- in the case of speed control / is the appropriate controller being used!
- are the protective devices in the appropriate place
- has any material or other foreign bodies left over from the installation been removed from the housing
- Do the connection data match the specifications on the type plate? Voltage tolerances are permissible according to IEC 38 with a maximum of +6% or -10%. The rated current may only exceed the rated voltage by a maximum of 5%. ATTENTION! If speed regulation is done by voltage reduction, the motor current may exceed the rated current at lower voltage. In this case, the motor winding is protected by thermal contacts. However, it is essential to check whether a minimum pressure is specified for the fan.
- Does the motor protection function?
- Cable entry tight?
- The direction of rotation must correspond to the direction of rotation arrow.
- Does the motor run smoothly (no unusual noises)

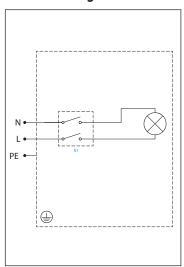
# 9.1. Connecting the version with fan and built-in controller



# 9.2. Connecting the version with fan without controller



# 9.3. Connecting the version only with lamp without fan



# 10. Commissioning

The warranty is only valid if commissioning has been carried out correctly.

# Safety instructions

Commissioning may only be carried out by appropriately qualified persons, for details see table Qualification

# **Prerequisites**

- Assembly and electrical connection have been completed properly.
- Residual material from the installation and foreign bodies have been removed from the fan and ducts.
- Check the fan for visible damage before switching it on and ensure that the protective devices are functioning properly.
- Use all locking screws.

- Permanently install a disconnecting device for the electrical installation (all-pole contact opening min. 3 mm) for version with fan
- The cable glands have been tightened.
- The data on the type plate correspond to the connection data.



### Note

# Basic cleaning after bonnet installation

After complete installation of the kitchen ventilation bonnet, basic cleaning of all construction components is mandatory.

The following measures must be carried out:

- Remove protective foils and paper packaging from all components
- Remove residues of adhesives and paint splashes
- Clean glass surfaces with commercially available glass cleaners

# 11. Operation

# Safety instructions for version with fan Warning: Danger from electrical voltage or moving parts.

- The unit may only be operated by appropriately qualified persons, for details see table 1 Qualification,
- Operate the fan only in accordance with its operating instructions and the operating instructions for the motor.

# 12. Troubleshooting/repair

# 12.1. Safety instructions

- Troubleshooting/maintenance/repair may only be carried out by appropriately qualified persons, for details see Table 1
  Qualification.
- The 5 safety rules must be observed, see 2.3 The 5 safety rules when working in and on electrical installations.
- The impeller must be stationary.

# 12.2. Troubleshooting



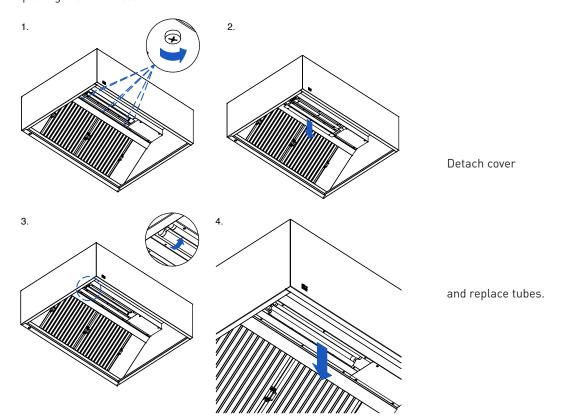
#### Note

For all other damage/failures, please contact WALPOL.

# 12.3. Spare parts

• Only use original Walpol spare parts!

Replacing the LED tubes:



# 13. Cleaning / Maintenance

# Safety instructions

- Cleaning may only be carried out by appropriately qualified persons, for details see Table 1 Qualification. The 5 safety rules must be observed, see 2.3 The 5 safety rules for working in and on electrical installations.
- The impeller must be at a standstill (for version with built-in fan).
- The rules of VDI 2052 apply
- Before any maintenance work, the fume bonnet must be disconnected electrically using the maintenance switch.
- For all maintenance work, observe the safety and work instructions (DIN EN 50110, IEC 364).
- Have maintenance work carried out by qualified personnel only
   Qualification page 4).
- The power supply is interrupted and secured against being switched on again!

### Regular cleaning of the cooker bonnet is necessary for the following reasons:

### -Reduction of the fire risk

The particles separated from the vapours consist to a large extent of aerosols. These aerosols, if not removed regularly, can act as accelerants in the event of a fire. Inadequate cleaning and maintenance can be identified as a cause of fire, this can mean loss of loss adjustment.

### -maintaining functionality and hygiene

Regular cleaning is a prerequisite, as both performance and efficiency can be affected by debris.

### -Preservation of aesthetics and reduction of material wear

In cooking vapours there are corrosive components (e.g. vinegar, salt) caused by the cooking process, this leads to corrosion, dull lacklustre surfaces, extraneous rust and possibly also to "chloride-induced pitting corrosion" if cleaned incorrectly/insufficiently, especially with stainless steel.

### **Bonnet body**

Drain the collected grease in the drainage channel into the container using the drainage tap at least once a week, but preferably daily.

Emptying the aerosolate collection channel:

- 1. Hold the container under the drainage tap
- 2. Open the drain tap
- 3. Collect aerosol
- 4. Close the drain tap
- 5. Dispose of properly

Cooker bonnets are made of rust- and acid-resistant stainless steel no. 1.4301 and do not require any special maintenance. The inner surfaces of the cooker bonnet should be cleaned daily after cooking with water and a grease-dissolving cleaning agent (approved for stainless steel, ph neutral).

After cleaning is complete, it is recommended to treat the surface with stainless steel care product.

# Aerosol separator

See the operating instructions for the aerosol separator

### Lighting

The lights are built-in and fitted with a protective glass.

Defective LED tubes should be replaced by a professional, see point 12.3.

### Fan

For a long service life, keep the fan clean.

- Do not use steel brushes or sharp-edged objects.
- Never use a high-pressure cleaner ("steam jet").
- Do not bend the fan blades when cleaning.
- When cleaning the impeller, pay attention to attached balance weights.
- Keep the airways of the fan clean and clean them carefully with a brush if necessary.

To avoid imbalance of the bearings, the fan should be cleaned gently with cleaning cloths at least once a week. (Use safety gloves!). Make sure that the fan impeller balance weights have not shifted and that the impeller is not bent. Pay attention to unusual operating noises.

### Note: Cleaning interval and documentation

GUV -R 111[BGR 111]3.2.11.4Kitchen ventilation bonnets and their components (e.g. aerosol separators) must be checked daily for soiling and cleaned if necessary. The cleaning carried out shall be documented. Kitchen ventilating ceilings and their components shall be checked monthly for soiling and cleaned if necessary. This applies in particular to the ceiling cavity if it can come into contact with the kitchen exhaust air. Exhaust air system equipment (exhaust air ducts, fans, unit chambers) must be inspected at least every six months and cleaned if necessary. Inspection and cleaning must be easy and

safe to perform.This is achieved in the case of air ducts, for example, if inspection openings are provided in the air ducts at branches, changes in cross-section and bends as well as at the installation location of components. In the case of straight air ducts, inspection openings should be provided approx. every 3 m.



The waste water from cleaning the cooker bonnet and aerosol separators must be disposed of in accordance with local waste water regulations. For example, via stationary or mobile grease separators (also in the WALPOL product range).

#### 14. Disassembly/removal

Disassembly and removal of the motor must be carried out in the reverse order of assembly and electrical connection.

#### 15. Disposal

- Ensure that the material is recycled. Observe the national regulations.
- The unit and the transport packaging consist mainly of recycling raw materials.
- Separate the parts according to:
  - reusable parts

material groups for disposal (metal, plastic, electrical parts, etc.)

#### 16. **EU Declaration of Conformity**

Walpol GmbH The manufacturer:

Benzstr. 13

45891 Gelsenkirchen

Product designation: Cooker bonnets,

kitchen bonnets

Type designation: Series B01K, B01T,

B06K, B07k

As of year of manufac-

ture:

2016

The manufacturer declares that the above-mentioned products, in their design and construction as well as the version marketed by us, comply with the harmonisation regulations listed below:

**EU Directives:** 2006/42/EC Machinery Directive

> 2014/35/EU Low Voltage Directive

Standards of the test

basis:

DIN EN 16282-6

Equipment in commercial kitchens - Elements for

Series WH, WP, WK, DH, DP, DK, DR, TH

ventilation - Part 6: Aerosol separators; design and

safety requirements;

DIN EN 60335-2-31(VDE

0700-31); 2013-03

Special requirements for cooker bonnets and other

fume extraction systems

Location: Gelsenkirchen Date: 01.012.2021

Maximilian Girnus

Managing Director WALPOL GmbH

# www. MALPOL.eu