# GastroFlex

# Installation, commissioning and maintenance



Our kitchen hoods are designed to provide optimal comfort in all types of large kitchens. But we didn't stop at functionality. Sleek design, flexible configuration, and easy cleaning make life a bit easier for kitchen staff. With our wide range, it's simple to create functional and inspiring kitchen environments.

Acticon

# **Table of Contents**

## Installation

Pendant mount	3
Module installation	3
Hood sides with glass	4
Cyclone filter	4
Condensation separator	4
Cover mantle	5
Lighting Fixture	5

## Commissioning

6
6
7
7
7
8

### Maintenance

Cyclone filter	10
Supply air devices	10
Condensation separator	10
Other surfaces	11
Replace UV tubes	11

## Installation

#### Pendant mount

Pendant mounts with accompanying screws (M8) and washers are included in the delivery. The number of pendant mounts delivered depends on the design of the hood.

The pendant mount is screwed into the threaded hole in the corner profile of the hood, one at each module joint and free-hanging corner. Pendant rods (threaded rods) and nuts are not included in the delivery. When mounting the hood against the wall, the attachment is done through hole patterns in the tube profile with screws suitable for the wall.



The pendant mount is angled approximately  $45^\circ$  and screwed into the corner post.





The pendant (threaded rod) is secured with a nut. These details are not included in the delivery.

#### **Module Installation**

Large hoods are delivered in smaller modules. The modules are hung in pendants and connected with the supplied th-readed rod and screw head (hex M8).



Fastening details for joining modules are included in the delivery. Pendants are not included in the delivery.



Detail showing how modules are joined.

#### **Hood Sides with Glass**

Start by unscrewing the vertically standing metal strips. These will be used to secure the glass.

Slide the glass up behind the upper strip. Screw the vertical metal strips back in place. The glass is now secured.



The glass is easily secured with the upper and vertical metal strips.

#### **Cyclone filter**

The filter cassette is slid into the filter housing's guide system as shown below. If a blanking plate (replacing the filter cassette) is delivered, it is installed in the same manner.



The filter cassette is slid into the filter housing.



Ensure the filter cassette is fully inserted into the filter housing.

#### **Condensation separator**

Condensation separators are only found in our condensation hoods. One end of the condensation separator (U-profile) hangs on the angled roof of the hood, and the other end fits into the condensation gutter of the hood. The condensation separator is now installed.



One end of the condensation separator hooks onto the angled roof's bent edge. Place the other end in the condensation gutter.

#### **Cover mantle**

The cover mantle is slid under the fastening clips, placed on the top edge of the hood along its sides. The mantles are then screwed together with the supplied screw (M6) in the corner profile/joint profile. The screw holes in the mantles are threaded.



The cover mantle is delivered in custom lengths. Slide the mantle into the slotted grooves in the roof profile on the top of the hood.



Screw the mantles into the threaded holes in the corners. Screws (M6) are included in the delivery.

#### Lightning fixture

Fixtures with LED lighting are installed in the hood upon delivery. The recessed fixture is equipped with a 2.0-meter extension cord with quick-connect for easy connection. Quick installation with only one connection point. The starter cord with 230V plug connects to the first fixture's cable with a quick-connect.

The cable should be placed so that it is not subjected to mechanical stress or high heat.

Condensation hoods are delivered with surface-mounted lighting fixtures. A connection cable through the hood's roof is included, but the plug is not included.

All fixtures are approved to IP 65 sealing class, meaning they are dustproof and washable from normally accessible directions.



The series-connected fixtures are connected to the power grid with the supplied starter cord.

## Commissioning

#### **Measurement ports**

During adjustment, the adjustment pressure is measured in the measurement ports located inside the hood. Supply Air: Measurement port on each supply air housing Control Air: Measurement port on each control air housing Exhaust Air: Measurement port on each filter housing

In condensation hoods, the measurement ports are located as follows:

Exhaust Air: Measurement port in the fixed angled roof of the hood

Supply Air: Measurement port on each supply air housing located behind the condensation separator



Supply air hood with cover mantle and cyclone filter.



Inside the hood, behind the supply air device, is the supply air housing. The measurement port is located at the top left (see arrow). The inspection hatch is only opened for fine-tuning the airflow or internal cleaning.



The cyclone filter's measurement port is located at the top left (see arrow) on the filter housing.

#### **Comfort Nozzle**

At the bottom of the supply air device, there is a comfort nozzle. By turning the lower control, a small amount of fresh air can be directed in any direction.

To completely close the comfort nozzle, turn the upper control.



Comfort nozzle is standard on all our supply air devices.

#### Commissioning - Supply air

The supply air devices are factory-adjusted to the flow for which the hood is dimensioned. At this flow, the static pressure drop across the supply air device is approximately 20 Pa.

Airflow control is done by measuring the adjustment pressure in the measurement port of the supply air housing.

The damper is accessible when the inspection hatch is opened. Note that the hood's supply air damper is only to balance the airflow between the supply air devices. The total supply airflow to the hood is adjusted with a separate damper in the duct.

#### **Commissioning - Control air**

Open the small round hatch on the control air chamber by loosening the screw. Then adjust the damper with the damper string. Measure the current adjustment pressure in the measurement port on the control air chamber.

#### **Commissioning - Exhaust air**

In hoods with cyclone filters or condensation roofs, the connections on the exhaust air are equipped with lockable sliding dampers. At delivery, all sliding dampers are fully open. To move the damper blade to another position, first loosen the screw on the blade.

#### Hoods with cyclone filters

All filter cassettes should be installed in the filter housing before starting the adjustment. Measure the current adjustment pressure in the measurement port on the filter housing.

#### **Condensation Hood**

All condensation separators should be installed before starting the adjustment. Measure the current adjustment pressure in the measurement port located in the angled roof.

To adjust the damper, remove a condensation separator (condensation plate). Adjust the damper. Rehang the condensation separator and continue with the adjustment.



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When the inspection hatch is opened, the damper is visible at the top of the supply air housing.



The sliding damper is located in the filter housing just below the spigot opening. The damper blades slide sideways.



To adjust the damper in the filter housing, temporarily remove some filter cassettes. Then adjust the damper, rehang the cassettes, and measure the adjustment pressure.

#### **K-factors**

The adjustment pressure  $\Delta P$  (Pa) is measured in the relevant measurement port. Using the K-factor, the airflow q (I/s) is then calculated using the formula below

q (l/s) = K •  $\sqrt{\Delta P}$ 

#### Frånluft - Cyclone filter

Number of filter cassettes	K-factor
1	19,2
2	35,1
3	52,7
4	68,6
5	93,2

#### Control air - Control air hood



#### Exhaust air-UV SAFE

Number of filter cassettes	K-factor
1	17,8
2	33,9
3	53,0
4	73,4
5	89,0

#### Exhaust air - Condensation hood

The table shows the K-factor per meter of kitchen hood. The resulting K-factor is determined by the hood's length and the type of condensation separator.

Example: If the hood is 3 meters long and has a condensation separator HE 2+1, the resulting K-factor is 147 (3 m x 49.0).



#### Supply air

Upon delivery, each air device is factory adjusted to the desired airflow. At this flow, the static pressure drop across the air device is approximately 20 Pa.

#### Air Diffuser height 460 mm

Pre-set Airflow, I/s	Closed Damper Hole	K-factor
195		41,0
195		40,6
185		38,7
180		37,5
175		36,5
170		35,5
165		34,1
160		33,7
155		32,3
150		31,3
145		30,2
140		29,2
135		28,8
130		28,4
125		26,7
120		25,6
115		25,7
110		24,6
105		23,5
100		22,4
95		21,2
90		20,1

#### Air Diffuser height 260 mm

Pre-set Airflow, I/s	Closed Damper Hole	K-factor
110	88888888888	24,9
100		21,8
90		18,8
80		16,7
70	$\fbox{\begin{tabular}{c} \label{eq:constraint} \\ $	15,3
60		12,5
50		11,2

## Maintenance

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#### **Cleaning the Cyclone Filter**

The filter is cleaned as needed, depending on the hood's load, i.e., if the cooking generates a lot of grease.

For cleaning, the filter cassette is easily removed from the filter housing.

- 1. Grab the handle on the front of the cassette and support the bottom with the other hand.
- 2. Gently pull the cassette towards you. Pour out any liquid grease from the bottom of the cassette.
- 3. Clean the filter cassette upside down in a dishwasher.



Grab the handle with one hand and support the bottom of the filter cassette with the other. Then pull the cassette straight out towards you

#### Supply air devices

The supply air devices are fully integrated into the sides of the hood and therefore do not require special cleaning. Normal wiping is sufficient. If you wish to clean the inside of the air device, simply open the hatch on the supply air housing. Wipe the inside with dish soap or a mild detergent.



The hatch opens by first sliding it upwards, then tilting out the bottom edge and pulling the hatch downwards

#### **Condensation separator**

If needed, the condensation separator can be removed for cleaning. Lift the condensation separator from the bottom and slide the plate gently upwards.

The condensation separator can be cleaned in a dishwasher or wiped with dish soap or a mild detergent.



The hatch opens by first sliding it upwards, then tilting out the bottom edge and pulling the hatch downwards

#### Other surfaces

The hood is cleaned inside and out with dish soap or a mild detergent. Ensure that the condensation gutter at the bottom of the hood is clean. Wipe dry afterwards. Any glass on the sides of the hood should be polished.

#### **Recessed Lighting**

Polish the glass in the hatch that protects the lighting in the hood's ceiling. The hatch is splash- and moisture-proof and can therefore be safely cleaned with water.

#### Surface-Mounted Lighting

The fixture is cleaned externally with dish soap and a damp cloth. The lighting fixture is splash- and moisture-proof and can therefore be cleaned with water.

#### **Replacing the Lighting**

#### **Recessed Lighting**

Remove the glass hatch by loosening the screws (hex M6). Replace the lighting and reinstall the hatch.

#### Surface-Mounted Lighting

Remove the plastic cover by releasing the clips on the sides. Replace the lighting. Be careful when reinstalling the cover to avoid damaging the edge. Ensure that the cover seals tightly.



Each hood side has a condensation gutter at the bottom



The glass hatch that protects the recessed lighting is screwed into the hood's ceiling



Hold the glass hatch when loosening the screws. Be careful as the hatch is quite heavy



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