



FF 100

115/230

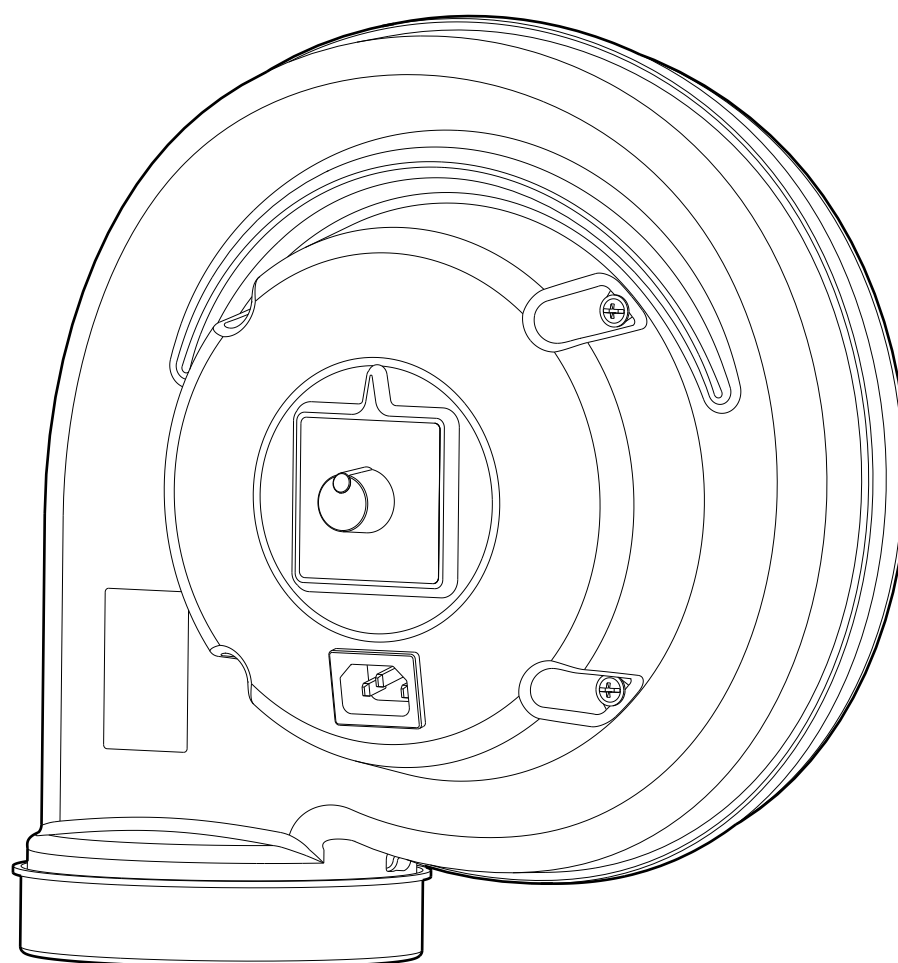


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Foreword

FUMEX operates in the environmental technology sector and specialises in extraction, fans, and filters for all work environments. The company strives to create work environments free from airborne contaminants.

Our products are manufactured using modern methods and undergo extensive quality inspections. The products comply with applicable safety and environmental requirements.

If you have any questions about FUMEX or our products, please contact your dealer or the FUMEX sales department.

1 Introduction

1.1 The manual

To ensure your knowledge of the product, you must read this manual before use.

The information in this manual is intended to facilitate the installation, operation, maintenance, troubleshooting, and repair of the product. The manual also provides the user with a technical understanding and basic safety instructions to minimise risks when working with the product, as well as to increase the product's service life.

The manual should be considered a part of the product and should always be accessible and in close proximity to the product.

The following symbols are referred to in the manual:



Safety instructions (applicable to people or machinery) that must always be adhered to. Risk of death or risk of personal injury or damage to property.



Recommendations which convey important information for an optimally functioning product.

1.2 EC Declaration

CE The product is CE certified and conforms to all applicable provisions in directives and standards as follows:

- Machinery Directive 2006/42/EC
- EMC Directive 2014/30/EU
- Safety of Machinery EN ISO 12100: 2010
- Electrical Equipment of Machines EN 60204-1

For a full EC Declaration, please contact FUMEX.

1.3 Warranty

To preserve the validity of the warranty, it is forbidden to modify or re-engineer the product during the warranty period without first obtaining prior approval from FUMEX. This is also applicable to any spare parts used which do not correspond to the manufacturer's specifications.

Damage caused by improper use of the product will result in:

- the warranty being voided
- the EC Declaration and CE certification being voided.

The warranty period is one year from the date of purchase and covers the product and its constituent parts. All manufacturing defects are covered by the warranty. FUMEX replaces defective parts in accordance with NL 17.

FUMEX is not liable for any consequential or incidental damage, or any loss of income as a result of or in connection with the warranty case.

The onus is on the buyer to select the appropriate product for the intended use. Any modifications to the FUMEX product or its intended use will void the warranty.

1.4 Manufacturer

FUMEX AB
Tel. no.: +46 910-361 80
Email: info@fumex.se

Verkstadsvägen 2
SE-931 61 Skellefteå
Sweden




2 Safety

2.1 General

The product is safe to use. It is designed in such a way that hazardous parts are only located in inaccessible areas. Even so, if the product is not used correctly or as intended, it may be hazardous to the user or cause damage to the product. The user should therefore be informed and trained to handle the product's safety features.

2.2 Warning levels (on product)

Safety signs on FUMEX products make use of colour codes and signal words in accordance with ISO 3864-2.

-  **Red (DANGER)** – used to indicate an imminently dangerous situation which, if not avoided, will result in death or serious personal injury.
-  **Orange (WARNING)** - used to indicate a potentially dangerous situation which, if not avoided, may result in death or serious personal injury.
-  **Yellow (CAUTION)** - used to indicate a potentially dangerous situation which, if not avoided, may result in moderate or minor personal injury.

2.3 Safety signs

Refer to **3.2 Labels and safety signs**.

2.4 Protective equipment

No special protective equipment is required to use the product.

2.5 General warnings & information



- The product must not be modified.
- The product must not be operated without safety devices.
- Power to the machine must be switched off prior to maintenance, repair, or adjustment.
- The machine may only be used in perfect technical condition and according to its intended use as described in Section **3.3 Areas of Use**. Faults that may jeopardise safety must be rectified immediately.
- Work on the machine's electrical equipment may only be carried out by a licenced electrician in accordance with applicable local electrical safety regulations.
- There is always risk associated with the machine's moving parts (e.g. cutting, clamping or gripping points).
- In the event of fire, hatches or service doors must not be opened.
- Under no circumstances may water be used to extinguish/cool in the event of fire or heat build-up. A powder extinguisher or other suitable extinguisher must be used instead.
- The machine must not be used in a potentially explosive atmosphere or to extract dust and gases in explosive concentrations.
- For maintenance work, where contact with dust occurs, personal protective equipment such as safety glasses, respiratory protection, and safety gloves must be worn.



- The machine should only be used by personnel with good knowledge of the machine and its operation.
- Excessive vibration and overheating shorten the lifespan of the fan.
- Waste disposal must be carried out in accordance with the relevant national regulations.

3 Product Description

3.1 Serial number & product name

Refer to the product nameplate.

3.2 Labels and safety signs



Safety signs that are missing or illegible must be replaced before the machine is used.

According to **Fig. 1**.

1. Nameplate
2. Label for control panel
3. Safety sign
"Unplug during service"

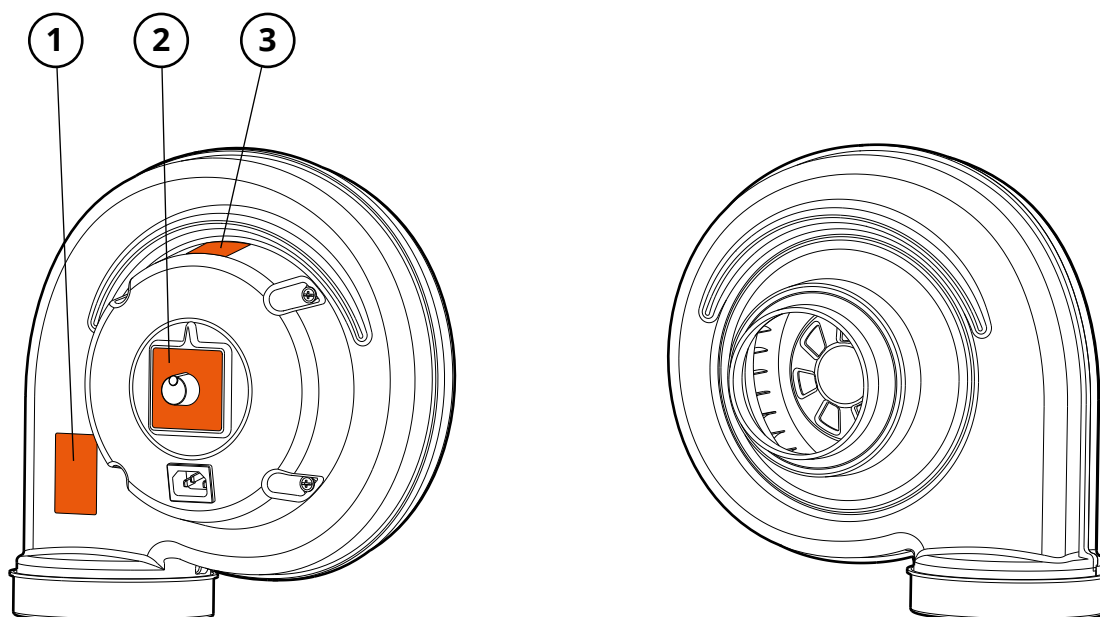
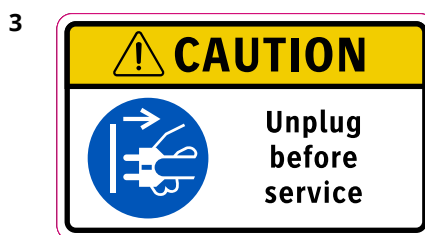
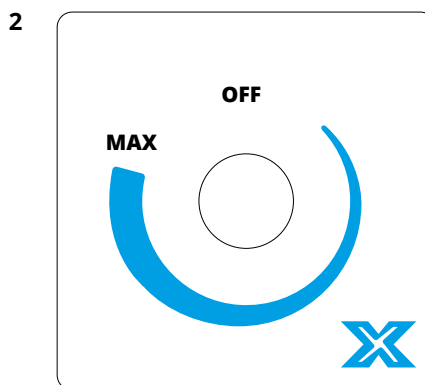


Fig. 1

3.3 Areas of Use

Fan FF 100 is intended for evacuation of dust and/or gases.

3.4 Design

See Fig. 2.

1. Inlet
2. Impeller
3. Fan housing
4. Handle
5. Outlet
6. Control panel
7. Power switch/Potentiometer
8. Power cord connector
9. Power cord

3.5 Function

FF 100 is a plug-in fan that is equipped with outgoing air evacuation. The fan is available for both 115 V and 230 V.

Air is sucked via the inlet (1) through the impeller (2) and sent out via the outlet (5).

On the control panel (6) there is a power switch/potentiometer (7) that adjusts the airflow. The handle (4) on the fan housing can be used for lifting the device. The fan is equipped with an overload protection. If the overload protection is triggered, reset is done by unplugging the fan and waiting until the temperature of the motor has fallen.

Various accessories are available, including: various classes/types/sizes of filters; suction nozzles and hoods, portable trolley with rotating and lockable wheels, adapter for exhaust air and equipment for fixed mounting. Refer to Chapter **11 Accessories & Spare Parts**.

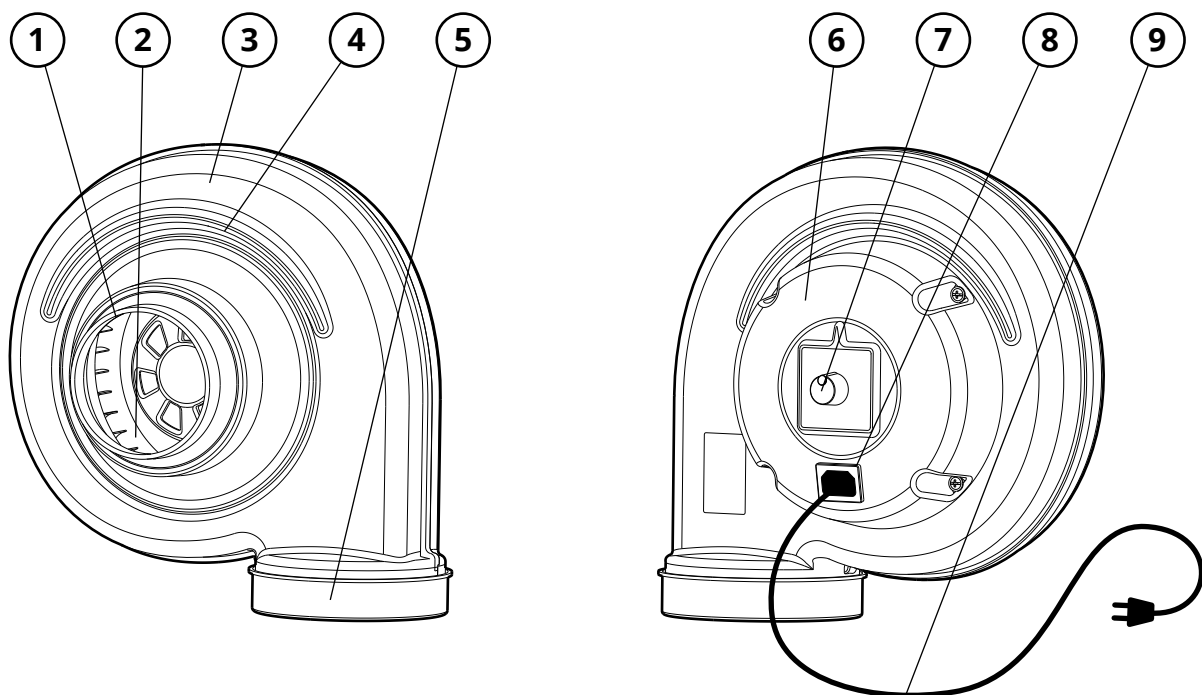


Fig. 2

4 Preparation for use

4.1 Transport & storage



Protect the machine and its parts from rain, snow, aggressive atmospheres and other harmful effects.

4.2 Electrical equipment



Faults in the electrical system must be rectified immediately.

Check all external wires as well as the power switch and motor for visible external damage. Repair any damage immediately.

4.3 Assembly & installation

National rules and regulations must always be adhered to during assembly work.

4.3.1 Unpacking

1. Unpack the product carefully.
2. Check for any damage and missing parts. Contact a local FUMEX representative directly if there is damage or if parts are missing.
3. Dispose of the packaging material according to local recycling regulations.

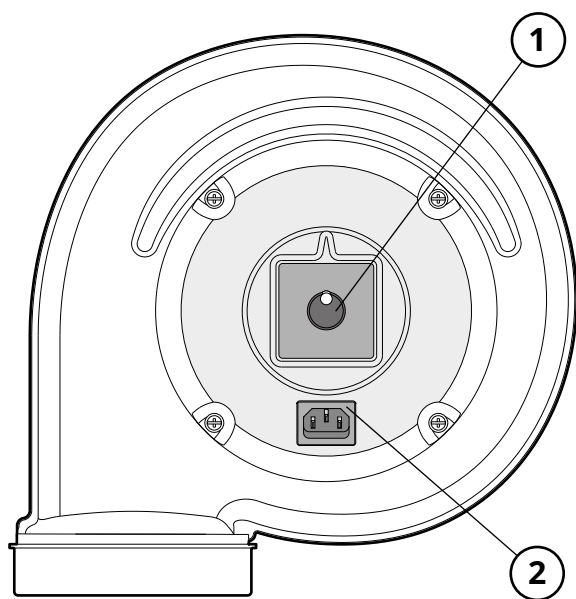


Fig. 3

5 Commissioning

5.1 Start-up



Any detected faults must be rectified before turning on the power.

1. Ensure that there are no loose items inside the fan.
2. Where applicable, connect the fan to the selected accessory or ensure that it is securely mounted.
3. Connect the plug to the wall socket.



There may be a slight delay after power is switched on.

4. Turn on the power switch.
5. Adjust the potentiometer to the desired level between max and min to ensure that the impeller is rotating without making any strange noises.



If the machine turns off automatically, the power consumption is too high. Please contact FUMEX.

6. Turn off the fan.

The fan is now ready for operation.

6 Operation



Note that electronic equipment is always sensitive to static electricity, high humidity, high temperature, and power grid disruption.

6.1 Control panel

See Fig. 3.

1. Power switch/Potentiometer
2. Power cord connector

The fan is turned on/off via the power switch (1). Regulation of the fan's rotation speed is adjusted using the potentiometer (1).

7 Troubleshooting



Troubleshooting with the power switched on may only be carried out by a licenced electrician.

7.1 Troubleshooting guide

The troubleshooting guide contains information for identifying faults which are simple to rectify. Always perform the troubleshooting procedures before contacting FUMEX.

TROUBLESHOOTING GUIDE		
Symptom	Possible cause	Recommended action
1. Poor airflow	Fan defective	Check fan suction capacity. If the fan is defective, contact FUMEX.
2. Material has accumulated in the fan housing	Wet dust is building up inside	Evacuate drier dust.
3. Vibration in the fan	Impeller is stuck	Clean the fan on the inside. If the imbalance remains after cleaning, you will need to replace the device, See 8.1 Cleaning .
4. Fan has stopped	Power supply problem	Check power supply.
	Stuck impeller	Check for any foreign objects in the fan housing.
	Too high temperature	Unplug and wait for the motor to cool down. Wait at least 25 seconds before you plug it in again.
5. Fan performance loss	Debris	Check for any foreign objects in the fan housing.

8 Maintenance



Please remember that only original spare parts may be used.

Make sure that all moving parts are secured to prevent unintentional movement.

8.1 Cleaning



Do not use any sharp or pointed objects, abrasive cleaners or coarse cleaning cloths!

Please be careful when cleaning the impeller so that balancing weights do not become dislodged.

The product should be cleaned with clean cloths and neutral detergents to avoid damage.

8.2 Maintenance schedule



Depending on the changing operating conditions between the different systems, the intervals for recommended maintenance may differ. Users should therefore determine their own maintenance intervals.

The checklist for maintenance is designed for normal use of the machine. The recommended intervals are approximate and refer to the time after the first start-up.

FUMEX recommends the following maintenance schedule:

MAINTENANCE SCHEDULE				
Interval	Item	Inspection module	Maintenance instructions	Date
As necessary	1.1	Fan	Clean the fan. Refer to Section 8.1 Cleaning .	
Every six months	2.1	Electrical equipment	Check all electrical equipment, such as the cable, plug, power switch and motor for visible external damage. Replace if necessary.	
	2.2	Fan	Check for leaks, damage, corrosion and wear. Replace if necessary.	
	2.3		Check functionality. Replace if necessary.	
	2.4		If necessary, remove any foreign objects.	

9 Decommissioning

9.1 Final decommissioning/ disassembly/disposal

Final decommissioning and disassembly of the product may only be done by authorized personnel wearing protective gear. The handling and correct removal of the various types of materials must be in accordance with the applicable legal requirements.

Please contact FUMEX if you have any questions about the various types of waste.

10 Technical information

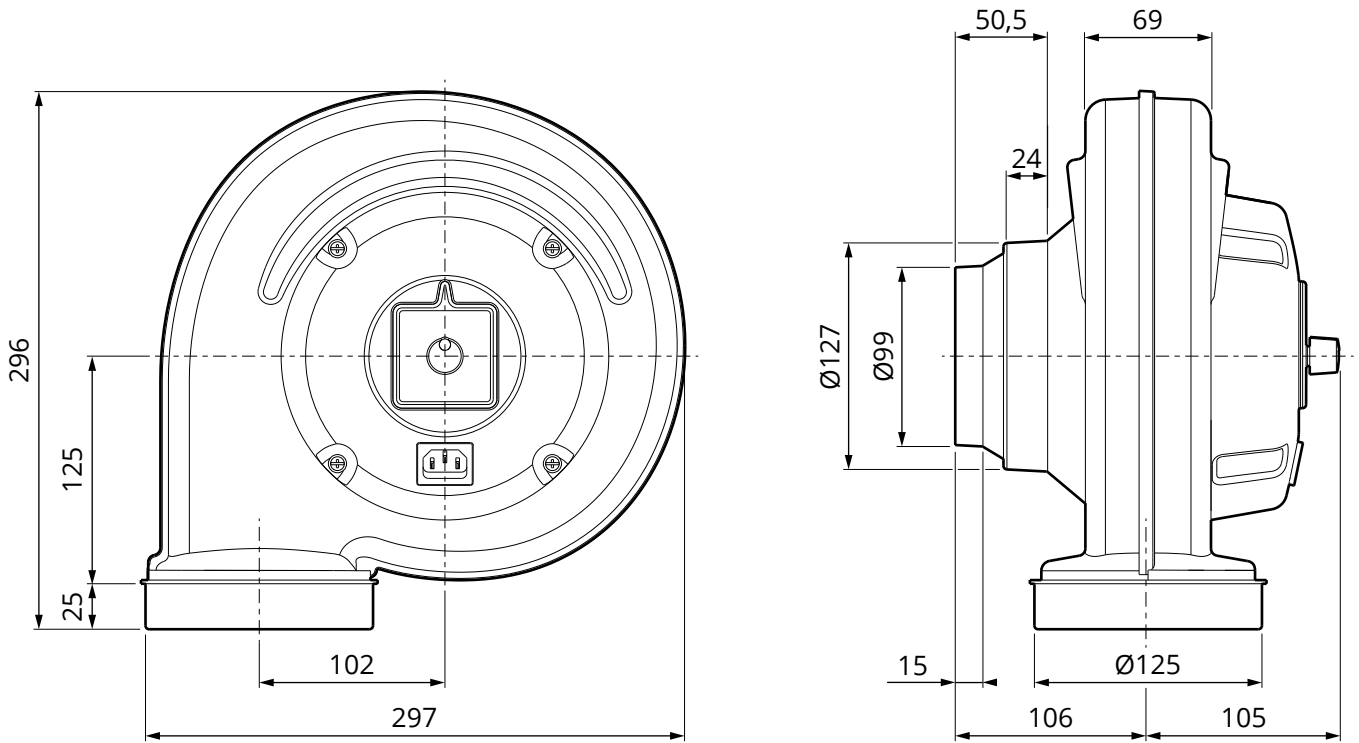


Fig. 4

10.1 Technical data

	FF 100/115	FF 100/230
Dimensions:	See Fig. 4	See Fig. 4
Weight:	3.4 kg.	3.4 kg.
Voltage:	115 V 1N~	230 V 1N~
Frequency:	50/60 Hz	50/60 Hz
Power:	145 W	165 W
Enclosure class:	IP2x	IP2x

Sound level

With ducts connected:66 dB(A)

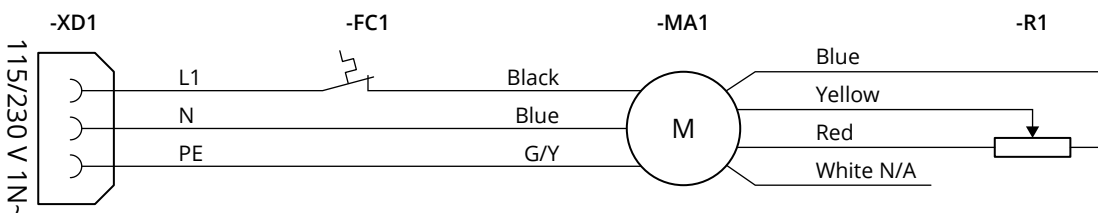
Temperature limits

Operating temperature:..... +5 °C to +50 °C
 Ambient temperature: +5 °C to +40 °C
 Transport & storage temperature: -25 °C to +60 °C
 Max. humidity:..... 80%

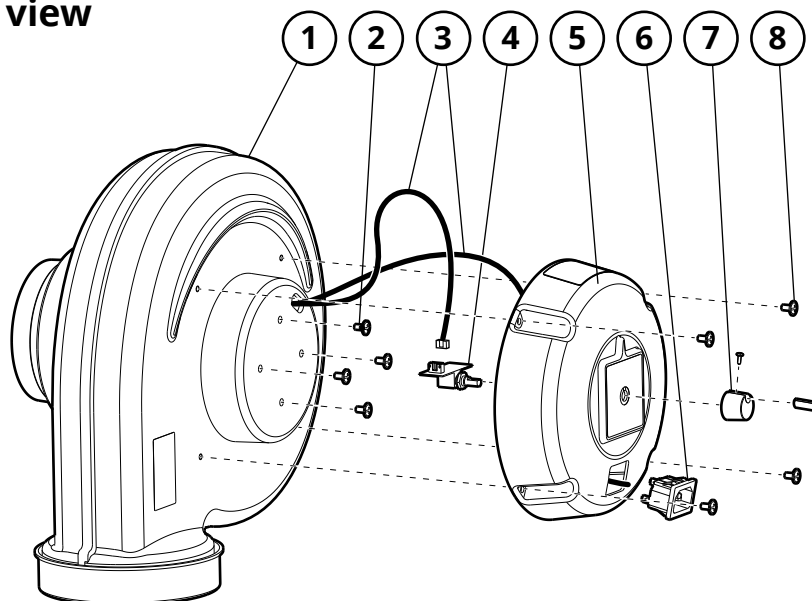
Material

Fan housing..... Grey PVC, white ABS
 Impeller..... Steel plate, galvanized

10.2 Circuit diagram electronics



10.3 Exploded view



11 Accessories & Spare Parts

Bracket LF VK

For fixed mounting of FF 100 on wall, floor or ceiling.

Art. no.: LF VK

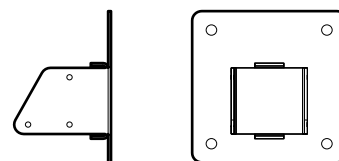


Fig. 5

Filter FHC 50/100

Art. no.: FHC 50
FHC 100

Filter FC 50/100

Art. no.: FC 50
FC 100

Filter FCC BiOn 50/100

Art. no.: FCC 50/BION
FCC 100/BION

Filter FPU 50

Art. no.: FPU 50

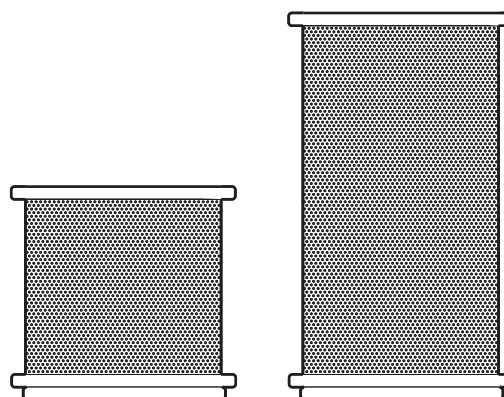


Fig. 6

Hose SL-100LF

Art. no.: SL-100LF

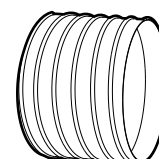


Fig. 7

FUMEX SUPPLIES EXTRACTION ARMS • VEHICLE EXHAUST EXTRACTION • FANS • FILTERS • CONTROLS • WORKSHOP EQUIPMENT

FUMEX

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