

# Operating Instructions

## — Chip Extraction Unit

- SAA 2001
- SAA 2003
- SAA 3001
- SAA 3003



SAA 2001



SAA 3001

SAA - SERIES

## Imprint

### Product identification

Chip Extraction Unit	Art. No.
SAA 2001	5922201
SAA 2003	5922203
SAA 3001	5922301
SAA 3003	5922303

### Manufacturer

Stuermer Maschinen GmbH  
Dr.-Robert-Pfleger-Str. 26  
D-96103 Hallstadt  
Germany

Fax: 0049 (0) 951 96555 - 55  
E-Mail: info@holzstar.de  
Internet: www.holzstar.de

### Information about the operating instructions

Original operating instructions

Published: 01.03.2023  
Version: 1.11  
Language: English

Author: ES/MS

### Copyright information

Copyright © 2023 Stürmer Maschinen GmbH, Hallstadt, Germany.

Subject to technical changes and errors.

## Contents

<b>1 Introduction .....</b>	<b>3</b>
1.1 Copyright .....	3
1.2 Customer service.....	3
1.3 Disclaimer.....	3
<b>2 Safety .....</b>	<b>3</b>
2.1 Legend of symbols.....	3
2.2 Operator responsibility.....	4
2.3 Operating staff qualification .....	4
2.4 Personal protective equipment .....	5
2.5 Safety labels on the chip extraction unit .....	5
2.6 General safety aspects.....	6
2.7 Safety aspects in dealing with electricity .....	6
2.8 Safety aspects in dealing with application of tools.....	7
2.9 Safety to operation.....	7
2.10 Safety aspects on servicing and maintenance.....	7
2.11 Safety data sheets .....	7
2.12 Security check .....	7
<b>3 Intended use.....</b>	<b>8</b>
3.1 Reasonably foreseeable Misuse.....	8
3.2 Residual risks .....	8
<b>4 Technical Data.....</b>	<b>8</b>
4.1 Table .....	8
4.2 Type plate .....	9
<b>5 Transport, packaging, storage.....</b>	<b>9</b>
5.1 Delivery and transport.....	9
5.2 Packaging .....	9
5.3 Storage .....	9
<b>6 Machine description .....</b>	<b>10</b>
6.1 Illustration .....	10
6.2 Scope of supply .....	10
6.3 Optional accessories .....	10
<b>7 Installation and connection.....</b>	<b>10</b>
7.1 Requirements to the installation location.....	10
7.2 Set up the Chip Extraction Unit.....	11
7.3 Initial operation the chip extraction unit .....	11
7.4 Electrical connection.....	11
7.5 Static charge.....	11
<b>8 Installation of the chip extraction unit .</b>	<b>12</b>
<b>9 Maintenance and Service .....</b>	<b>13</b>
<b>10 Malfunctions, their potential causes and remedies.....</b>	<b>14</b>
<b>11 Disposal, reusing used machines .....</b>	<b>14</b>
11.1 Decommissioning .....	14
11.2 Disposal of electrical equipment.....	14
11.3 Disposing of lubricants.....	14
11.4 Disposal by municipal collection point .....	15
<b>12 Spare parts .....</b>	<b>15</b>
12.1 Spare parts orders .....	15
12.2 Spare parts drawings.....	16
<b>13 Wiring diagrams .....</b>	<b>20</b>
<b>14 EC - Declaration of Conformity.....</b>	<b>21</b>

## 1 Introduction

You have made an excellent choice in purchasing a HOLZSTAR Chip Extraction Unit.

**Carefully read the operating instructions prior to commissioning.**

These are an important part of the chip extraction unit and must be kept near the machine and accessible to every user.

The operating instructions inform you about the proper commissioning, the intended use as well as the safe and efficient operation and maintenance of the chip extraction unit.

In addition, observe the local accident prevention regulations and general safety regulations for the area of application of the chip extraction unit.

### 1.1 Copyright

The contents of these operating instructions are protected by copyright. Their use is permitted within the context of using the chip extraction unit. Any further use shall not be permitted without written consent by the manufacturer.

Passing on and reproduction of this document, utilisation and communication of its contents are prohibited unless expressly permitted. Violations will result in liability for damages.

To protect our products, we register our rights to our brands, patents and designs where possible in each individual case. We take strong action against any violation of our intellectual property.

### 1.2 Customer service

Please contact your specialist retailer if you have any questions regarding your Extraction Unit or require any technical information. Your specialist retailer will be happy to support you with specialist advice and information.

#### Germany:

Stürmer Maschinen GmbH  
Dr.-Robert-Pfleger-Str. 26  
D-96103 Hallstadt / Germany

#### Repair service:

**Fax:** 0951 96555-111  
**E-Mail:** service@stuermer-maschinen.de  
**Internet:** www.holzstar.de

#### Spare parts orders:

**Fax:** 0951 96555-119  
**E-Mail:** ersatzteile@stuermer-maschinen.de

Please submit any information and experiences you make during application of the machine as these may be valuable for product improvements.

### 1.3 Disclaimer

All data in this operation manual has been compiled on the basis of the state-of-the-art, valid standards and guidelines as well as our many years of expertise and experience.

The manufacturer shall not be liable for damage in the following cases:

- Failure to comply with the operation manual,
- Unintended use,
- Use of non-professional and non-expert personnel,
- Conversions at one's own responsibility,
- Technical modifications,
- Use of unauthorised spare parts

The actual scope of delivery may deviate from the descriptions and illustrations in this document as a result of special variants, optional extras or recent, technical modifications. The obligations defined in the supply contract shall apply in addition to the general terms and conditions and the manufacturer's general terms and conditions as well as the statutory regulations valid at the time of the conclusion of the contract.

## 2 Safety

This section provides an overview of all important safety packages for personal protection as well as safe and reliable operation. The individual sections contain additional, task-specific safety information.

### 2.1 Legend of symbols

#### Safety instructions

Safety instructions in this operation manual have been highlighted with symbols. Safety instructions are indicated by signal terms that express the degree of risk involved.



### **DANGER!**

This combination of symbol and signal words indicates an imminently dangerous situation which may lead to death or severe injury if not avoided.

### **WARNING!**

This combination of symbol and signal words indicates a potentially dangerous situation which may lead to death or severe injury if not avoided.

### **CAUTION!**

This combination of symbol and signal words indicates a potentially dangerous situation which may lead to slight or minor injury if not avoided.

### **ATTENTION!**

This combination of symbol and signal words indicates a possibly dangerous situation which may lead to property and environmental damages if they are not avoided.



### **NOTE!**

This combination of symbol and signal term indicates a potentially dangerous situation which may cause material damage or harm the environment if it is not averted.



### **Tips and recommendations**

This symbol highlights useful tips and recommendations as well as information for efficient and reliable operation.

Observe the safety information in these operating instructions to minimise the risk of personal injury as well as material damage and prevent hazardous situations.

## **2.2 Operator responsibility**

Operators are defined as the persons who operate the chip extraction unit for commercial purposes or provide the machine to third parties for use or application and bear the legal product responsibility in terms of the protection of users, staff or third parties during operation.

### **Obligations of the operator:**

If the chip extraction unit is used for commercial purposes, operators are subject to the legal stipulations in terms of occupational safety. For this reason, the safety instructions in these operating instructions as well as the safety, accident prevention and environmental protection regulations valid at the installation location must be complied with. In this process, the following shall apply in particular:

- Operators shall obtain information about valid occupational safety regulations and determine additional hazards as part of a risk assessment which result from the specific operating conditions at the machine's installation location. Said risk assessment shall be reflected in operating instructions for machine operation.
- During the entire chip extraction unit operating time operators must check whether the operating instructions they created meet current standards and adapt the operating instructions where necessary.
- Operators shall clearly manage and specify the responsibilities for installation, operation, troubleshooting, maintenance and cleaning.
- Operators must make sure that all persons handling the chip extraction unit have read and understood these operating instructions. Operators must also regularly train staff and notify of the hazards.
- Operators shall provide staff with the required protective equipment and wearing the required protective equipment shall be mandatory.

Operators shall also be responsible for maintaining the chip extraction unit in a technically perfect condition. For this reason, the following shall apply:

- Operators shall make sure that the maintenance intervals described in these operating instructions are complied with.
- Operators shall regularly check that the safety equipment is fully functional and complete.

## **2.3 Operating staff qualification**

The different tasks described in these operating instructions require different levels of skills in terms of the qualifications of operating staff working with the machine.



### **WARNING!**

#### **Risk from inadequately qualified persons!**

Inadequately qualified persons are unable to assess the risks when handling the machine, thus putting themselves and others at risk of severe injuries.

- All work must be carried out by qualified persons only.
- Keep inadequately qualified persons and children away from the work area.

Exclusively persons of whom it can be expected that they reliably complete assigned tasks shall be authorised to carry out any tasks. Persons whose reactions have been impaired shall not be authorized, e.g. drug users, users under the influence of alcohol or medication.

These operating instructions specify the following personal qualifications for the different tasks:

#### Operating staff:

Operating staff has undergone an induction by the operator about the entrusted tasks and potential hazards resulting from improper behaviour. Tasks which go beyond normal operation may only be carried out by the operator if they are listed in the operation manual and the operator has made him/herself familiar with them.

#### Qualified electrician:

Due to the electrician's specialised training, know-how, experience and knowledge of pertinent standards and regulations the electrician is in a position to work on the electrical systems, and autonomously identify and avoid potential hazards.

#### Specialist staff:

As a result of specialist training, expertise, experience and skills in terms of the relevant standards and regulations, specialist staff is able to complete the tasks they are entrusted with and independently identify hazards and avert risks.

#### Manufacturer:

Certain work must be carried out by manufacturer specialist staff only. Other staff is not permitted to carry out this work. Contact our customer service to have the work carried out.

## 2.4 Personal protective equipment

Personal protective equipment is intended to protect the health and safety of persons at work. Staff must wear the personal protective equipment indicated in individual sections of these operating instructions when carrying out the different tasks on the machine.

The personal protective equipment is described in the following section:



#### Hearing protection

Hearing protection protects the ears against hearing damage caused by noise.



#### Eye protection

Protective glasses protect the eyes against projected parts and splashes of liquid.



#### Protective gloves

Protective gloves protect the hands from components with sharp objects as well as friction, abrasion, and deep-cut injuries.



#### Protection of face

The face protection prevent the face of objects flying around.



#### Safety shoes

Safety shoes protect feet from pinching, falling parts and slipping on slippery surfaces.



#### Protective clothing

Protective work clothing means tight-fitting clothing with low tear resistance.

## 2.5 Safety labels on the chip extraction unit

The following safety labels and instructions are attached to the chip extraction unit s (Fig. 1) and must be observed.



Fig. 1: Safety labels: 1 Warning of dangerous electrical voltage | 2 Safety instructions

If safety labels on the machine are damaged or missing, this can cause errors, personal injury and material damage. The safety symbols attached to the machine must not be removed. Damaged safety symbols must be replaced immediately.

As soon as the signs are not clearly visible and comprehensible at first glance, the machine must be stopped until new signs have been attached.



## 2.6 General safety aspects

Note the following:



### ATTENTION!

In spite of taking care of all working tips, security and accident prevention regulations a rest risk continues with the contact with the machine.

By concentrated and farsighted work and action you can diminish the rest risk.

1. The Extraction Unit may be served only by persons who have read and understood this manual. The operator must be trained in use, setting and service.
2. If you transmit this chip extraction unit, you must hand over all tools provided to the withdrawal system and documents.
3. Switch on the machine only immediately before the beginning of the exhaust process. Switch off the machine during breaks and when the machine is not in operation. Don't leave the machine unattended, if it is ready for use.
4. Never open the protective covers by hand, while the chip extraction unit is in operation.
5. Keep the working area and the floor nearby the chip extraction unit free of any objects which endanger your stability or show a trip danger. Keep the working area clean. Mess can cause accidents.
6. Control the safety area of the machine before and during operation that unauthorized people keep off. Don't let the chip extraction unit touch by other people, in particular by children.
7. Don't use the machine close to ignitable gases, liquids and solids. Flying sparks can cause danger of explosion or fire risk.
8. Use the machine only in dry rooms or in dry surroundings and provide for sufficient illumination.
9. Protect the working area against rains, moisture and humidity, to avoid electrical danger.
10. Never leave a running machine unattended. Switch off the machine before leaving the workplace.
11. Wood dust is explosive and can be harmful to health. In particular, tropical woods and hardwoods such as beech and oak are classified as carcinogenic.
12. Work with reason and with concentration. Do not use the chip extraction unit if you are not concentrated.

13. The operation or servicing of the chip extraction unit is forbidden for people who are less than 18 years or are under influence of alcohol or drugs.
14. Check the material to be worked on before starting the chip extraction unit and check about a possible health danger by released dust. Take suitable precautions if necessary.
15. While working with the chip extraction unit a hearing protection is always to be carried. Carrying of loose clothes (ties, scarfs, open jackets and not clinging clothes) is forbidden. There is injury danger by getting stuck or by insertion in moving machine parts. A hairnet is to be carried on long hair.
16. Protect yourselves from noise by carrying a suitable and admitted hearing protection.
17. Avoid an unnatural position and keep the balance at any time. Wear protective shoes to raise stability. Carry safety clothes.

## 2.7 Safety aspects in dealing with electricity

Please observe the following:



### ATTENTION!

The conditions on electric devices are valid for the Chip Extraction Unit. These are to be checked by an approved electric expert in a regular time interval according to their electrical security. The test cycles are depending on the regulations to consider.

- To protect against an electric shock the machine must be connected only by an electric expert.
- Do not use the aspiration system if it cannot be switched on or switched off properly and if the control components do not reach proper operation conditions.
- Protect the mains connection cable against heat, oil and sharp edges.
- Exchange a damaged mains connection cable immediately.

## 2.8 Safety aspects in dealing with application of tools

Please observe the following:

- Use only dust bags which are not damaged.
- Use only original metal strength-dust bags.
- Exchange damaged dust bags immediately. Until replacement of the dust bag the use of the machine is prohibited.
- Always use new dust bags

## 2.9 Safety to operation

Please observe the following:



### Breathing protection

A dust protection mask (filter mask with particle filter) is to be worn during the chngement and emptying of the dust bag.

- Do not overload the chip extraction unit. It works better and safer in the specified performance range. Don't use the Extraction Unit for operation a stronger machine is required for.
- Check the stability of the machine.
- Please note, that the use of different tools not recommended by the manufacturer may cause danger of injury for the operator.
- Do not allow any tools to be inserted. Check that all tools are removed before starting the machine.
- This machine is not suitable for aspiration of dangerous dust.
- If necessary, wear suitable personal protective equipment. This could be: Hearing protection to avoid the risk to damage hearing; breathing protection to avoid the risk of breathing dangerous dust.
- Take care that the aspiration system cannot be started during servicing work and chngement of dust bag.
- Never touch the machine during operation.
- Provide for good illumination.
- To avoid contact with the blower wheel, unused exhaust connections must always be covered.
- While working outside good footwear is recommended.
- Keep the working area free of rubbish.
- All protective devices must be mounted immediately after servicing.

## 2.10 Safety aspects on servicing and maintenance



### WARNING!

At servicing and repair work always switch off the machine at the main switch and protect it against a start.

- After servicing, repair and cleaning please check whether all protective devices are mounted properly again, and no more tools are left inside the machine.
- Damaged safety devices, machine parts and counters must be exchanged in accordance with the requirements by an approved professional workshop.
- Repairing work at electric power tools must be carried out only by an electric expert. Only original spare parts may be used. Otherwise there is danger of accident for the operator.

## 2.11 Safety data sheets

Safety data sheets on hazardous materials can be obtained from your specialist dealer or by calling +49(0)951/96555-0. Specialist dealers can find safety data sheets in the download area of the partner portal.

## 2.12 Security check

Check the Chip Extraction Unit regularly.

Check all security devices

- before start working,
- once weekly (at continuous operation),
- after every servicing and repair.

### 3 Intended use

The chip extraction unit is used for extracting dust and chips which are produced when working with wood or wood-like materials.

The extraction system may only be installed and operated in dry rooms.

Intended use also includes compliance with all information in these instructions.

#### 3.1 Reasonably foreseeable Misuse

Any use beyond the intended use or any other use is considered misuse.

**Possible misapplications may include:**

- Use of the extraction unit in areas where there are aggressive, flammable or explosive substances or gases in the air (the extraction unit is not explosion-proof as standard).
- The use of an incompletely assembled unit.
- Modifications to the unit or the use of modified accessories.
- Installation of spare parts and use of accessories and equipment not approved by the manufacturer.
- Failure to observe the signs of wear and damage.
- Non-observance of the maintenance instructions.
- Deliberate or careless handling of the extraction system during operation.
- Service work by untrained or unauthorised personnel.
- Misuse of the extraction system.
- Generation of negative pressure on closed systems.
- Use of the extraction system for commercial purposes.
- Use of the extraction system for drying objects.
- Operating the unit even though the operating instructions have not been read.

Misuse of the chip extraction unit can lead to dangerous situations.

Stürmer Maschinen GmbH accepts no liability for design and technical modifications to the chip extraction unit..

Claims of any kind for damage due to improper use are excluded.

### 3.2 Residual risks

Even if all safety instructions are observed and the high-pressure cleaner is used as prescribed, there are still residual risks, which are listed below:

- Risk of fire and explosion if ignitable mixtures are formed in the extraction air.
- Danger from electric current if improper connection cables or mains plugs are used, or if electrical components are worn.
- Health hazard during waste disposal.
- Unintentional suction of objects.
- Danger of being crushed by the clamping lever when installing the chip bag.
- Hearing damage during prolonged work on the extraction system with defective hearing protection.

## 4 Technical Data

### 4.1 Table

Model	SAA 2001/ SAA 2003	SAA 3001 / SAA 3003
Air flow rate	2.553 m³/h	3.910 m³/h
Duct input	Ø 125 mm	Ø 150 mm
Duct output	2 x Ø100 mm	3 x Ø100 mm
Negative pressure max.	<b>SAA 2001:</b> 1950 PA <b>SAA 2003:</b> 1950 PA	<b>SAA 3001:</b> 1900 PA <b>SAA 3003:</b> 1900 PA
Motor output	1,5 kW	2,2 kW
Dimensions [L x W x H]	1.000 x 750 x 2.000 mm	1.450 x 800 x 2.000 mm
Weight	37 kg	48kg

Electrical connection:	
SAA 2001/ SAA 3001	230 V/50 Hz
SAA 2003 / SAA 3003	400 V/50 Hz



## 4.2 Type plate

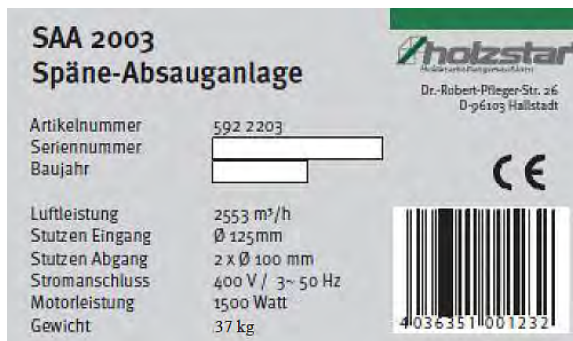


Fig. 2: Type plate SAA 2003

## 5 Transport, packaging, storage

### 5.1 Delivery and transport

#### Delivery

Check the chip extraction unit for visible transport damage upon delivery. In case of visible damage to the chip extraction unit, immediately notify the carrier or your retailer.

#### Transport

Improper transport is accident-prone and can cause damage or malfunctions for which we do not grant any liability or guarantee.

Transport the scope of delivery secured against shifting or tilting with a sufficiently dimensioned industrial truck to the installation site.



#### WARNING!

Severe or fatal injuries may occur if parts of the machine tumble or fall down from the forklift truck, pallet truck or from the transport vehicle. Follow the instructions and information on the transport box.

Note the total weight of the machine. The weight of the machine is indicated in the "Technical data" of the machine. When the machine is unpacked, the weight of the machine can also be read on the rating plate.

Only use transport devices and load suspension gear that can hold the total weight of the machine.



#### WARNING!

The use of unstable lifting and load suspension equipment that might break under load can cause severe injuries or even death. Check that the lifting and load suspension gear has sufficient load-bearing capacity and that it is in perfect condition.

Observe the accident prevention regulations issued by your Employers Liability Insurance Association or other competent supervisory authority, responsible for your company.

Fasten the loads properly.

### General risks during internal transport



#### WARNING: DANGER OF TIPPING

The device may be lifted unsecured by a maximum of 2cm.

Employees must be outside the danger zone, the reach of loads.

Warn employees and, if necessary, advise employees of the hazard.

Devices may only be transported by authorized and qualified persons. Act responsibly during transport and always consider the consequences. Refrain from daring and risky actions.

Gradients and descents (e.g. driveways, ramps and the like) are particularly dangerous. If such passages are unavoidable, special caution is required.

Before starting the transport check the transport route for possible danger points, unevenness and disturbances as well as for sufficient strength and load capacity.

Danger points, unevenness and disturbance points must be inspected before transport. The removal of danger spots, disturbances and unevenness at the time of transport by other employees leads to considerable dangers.

Careful planning of internal transport is therefore essential.

### 5.2 Packaging

All of the Chip Extraction Unit's packaging materials and packing aids are suitable for recycling and must always be disposed of using material-based recycling systems.

Packaging materials made of cardboard must be shredded and recycled as waste paper.

The foils are made of polyethylene (PE), padding is made of polystyrene (PS). Dispose of these substances at a recycling centre or hand them over to a qualified waste disposal company.

### 5.3 Storage

Always store the chip extraction unit in a clean condition and a dry, clean and frost-free environment. It must not be stored in the same room as chemicals. Cover the machine with a protective tarpaulin.

## 6 Machine description

### 6.1 Illustration

Figures in this operation manual serve to provide a basic understanding and may differ from the actual design.

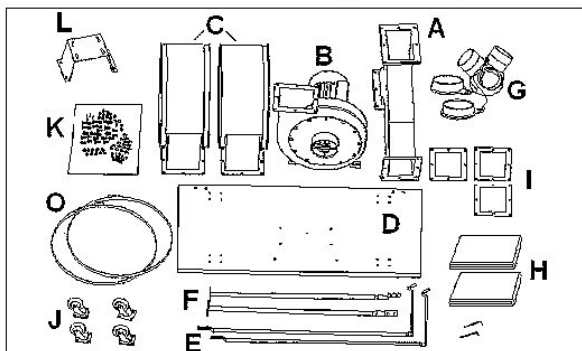


Fig. 3: Chip Extraction Unit SAA 3001

Pos.	Description	Pos.	Description
A	Connector	H	Bag
B	Fan/Motor assembly	I	Packing
C	Casing	J	Four casters
D	Base Plate	K	Nuts, screws, washers, spring washers
E	Upper bag support	L	Motor base
F	Support rods	O	Bag clamp
G	Intake duct	P	Filter
R	Filter (Inlet)		

### 6.2 Scope of supply

1. Filter bag
2. Chip bag
3. Operating instructions

### 6.3 Optional accessories



#### Tips and recommendations

We recommend using only high-quality original Holzstar accessories. Only with original accessories can be guaranteed a perfect operation and optimal work results.

#### Description

PU extraction hose, Ø100 mm/2,5 m
Polyurethane flexible hose, available in 2,5 / 5 / 7,5 or 10 m Lengths, Ø 40 mm, Ø 60 mm, Ø 80 mm, Ø 100 mm, Ø 120 mm
Reducing socket, machine connecting pieces, straight, non-crimped, interior Ø - 100-60 mm
Floor cleaning set, incl. 2,5 m spiral hose, extraction pipe, floor nozzle with rollers, handle and 2 pipe clamps
Filterbag for SAA 2001, SAA 2003, SAA 3001 or SAA 3003
Filter cartridge Ø500mm / height 610mm

## 7 Installation and connection

### 7.1 Requirements to the installation location

Remove the chip extraction unit from its packaging and remove all protective foils. To achieve a good function and a long life of the Chip Extraction Unit, the installation location should satisfy the following criteria:

- The machine state and machine table must be stable, level and free of vibrations ground.
- Don't expose the machine to moisture, rain or snow. Don't place or operate the machine in a humid or wet environment.
- The installation or worker area must be dry and well ventilated.
- The ambient temperature must be within -10 ° to + 50 ° Celsius, max. air humidity 90%.
- It must be sufficient space for the operator, for material transport and for adjustment and maintenance work.
- The chip extraction unit must be well grounded. Mains voltage and frequency correspond to the values of the engine of the machine.
- The installation location must have good illumination.

## 7.2 Set up the Chip Extraction Unit

Place the machine on a stable, level ground. The distance to the wall should be min. 800 mm.  
Check the data of electric connection.  
The ambient temperature must be within  $-10^{\circ}$  to  $+50^{\circ}$  Celsius, max. air humidity 90%.  
Don't expose the machine to moisture, rain or snow.  
Carry out maintenance and servicing regularly.



### ATTENTION!

Risk of injury through a non-stable adjusted machine!  
Check the stability of the machine always after installation or maintenance.



**Wear the safety gloves!**



**Wear the protective clothing!**



**Wear the safety shoes!**

## 7.3 Initial operation the chip extraction unit

- Step 1: Check whether of the extraction hose on to Extraction Unit and the extraction adapter on the woodworking machine are connected.
- Step 2: Check whether the chip bag is good fixed.
- Step 3: Switch on first the chip extraction unit and then only the woodworking machine.
- Step 4: Before switch off the extraction unit, first switch off the woodworking machine.
- Step 5: Inspect regularly the chip bag and empty it if full is.
- Step 6: Before operating the on / off switch, make sure that the filter bag is good fixed.

## 7.4 Electrical connection



### ATTENTION!

#### **Danger to life due to electrical shock!**

Danger of live through electric shock by contact with live power components!

- The Chip Extraction Unit may connected only from Qualified electrician.
- Work on the electrical system must execute only from Qualified electrician.

In the follow Steps the chip extraction unit can connected to the electricity network:

Step 1: The chip extraction unit must be off.

Step 2: The chip extraction unit (SAA 2003 und SAA 3003 Model) connect on the 400 V / 3-phase connection.

Step 3: Check, whether all protective devices are mounted.

Step 4: Switch on the chip extraction unit.

Step 5: Check, whether the direction of rotation of the motor is correct.

## 7.5 Static charge

Due to friction in the suction hose, a static charge can occur.

To prevent sparks from causing a dust explosion or fire, the static charge must be dissipated via the grounding.

For this purpose, it is recommended that a suction hose with metal wire is used.

The ends of the metal wire are then connected to the conductive housing of the extraction system and the machine to be extracted.

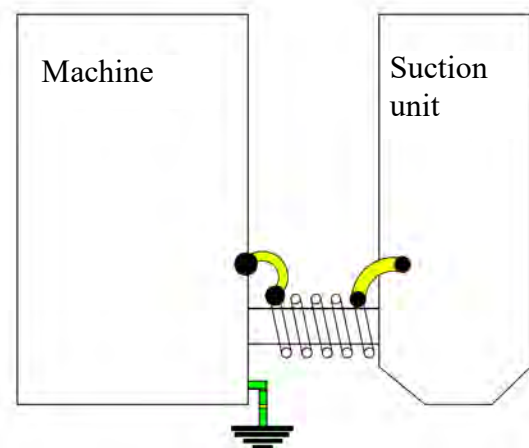


Fig. 4: Connection machine and exhaust system

## 8 Installation of the chip extraction unit



**Wear protective goggles!**



**Wear the protective clothing!**



**Wear the safety shoes!**

### Installation of the casters

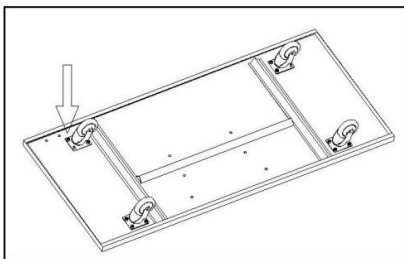


Fig. 5: Installation of the casters

To assemble, first place the base plate upside down and attach the four casters to the holes provided and tighten with wrench.

### Installation of the fan/motor assembly

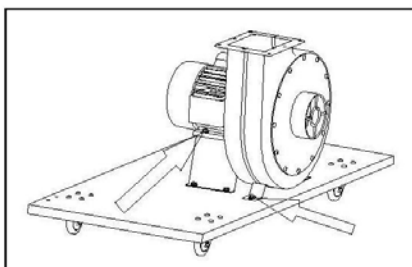


Fig. 6: Installation of the fan/motor assembly (1)

**Step 1:** With the motor base, collector body & fan/motor assembly in place, secure it to the base plate using the screw and washers provided as shown.

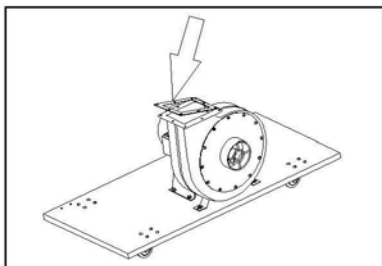


Fig. 7: Installation of the fan/motor assembly (2)

**Step 2:** Install the packing and square connecting tube, connector to the collector body assembly using screw and washers provided .

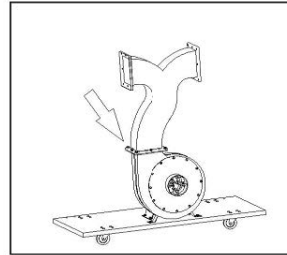


Fig. 8: Installation of the fan/motor assembly (3)

**Step 3:** Install the two collectors and two packing to the outlet.

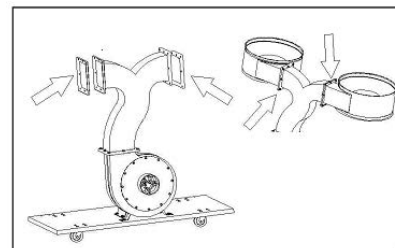


Fig. 9: Installation of the fan/motor assembly (4)

### Installation of the support rods

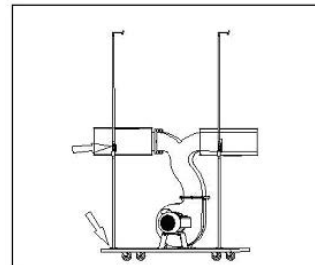


Fig. 10: Installation of the support rods (1)

**Step 1:** Install the two collector supports and two upper bag support.

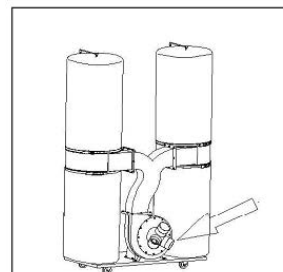


Fig. 11: Installation of the support rods (2)

**Step 2:** Attach the Y-piece.

**Step 3:** Attach the filter bag at the top with the bag clamp.

**Step 4:** Fasten the chip bag at the bottom with the clamp.

## 9 Maintenance and Service



### Tips and recommendations

The Chip Extraction Unit is constructed for efficient operating. To guarantee a long life the servicing aspects are to be carried out regularly.



### ATTENTION!

#### **Danger to life due to electrical shock!**

Danger of live through electric shock by contact with live power components!

- The Chip Extraction Unit may connected only from Qualified electrician.
- Repairs on the electrical system must execute only from Qualified electrician.
- Switch off the machine and pull the plug out before starting any cleaning or maintenance work.



### WARNING!

#### **Risk from inadequately qualified persons!**

Inadequately qualified persons are unable to assess the risks when handling the machine, thus putting themselves and others at risk of severe injuries.

**All work must be carried out by qualified persons only.**



### NOTE!

After servicing, repair or cleaning please check whether all protective devices are mounted properly again, and no more tools are left inside the machine. Damaged safety devices, machine parts and counters must be exchanged in accordance with the requirements by an approved professional workshop.

### Daily Service

- Clean the machine after every use.
- Replace damaged security devices immediately.



### **Wear the safety gloves!**

### Weekly Service

- Clean the machine regularly with a humid cloth and some soft soap. Don't use cleaning agents or solvents; these could damage the plastic parts of the machine. Take care that no water can get into the machine.
- Keep safety devices, air openings and engine cabinet free of dust and dirt. Clean the machine with a clean cloth or blow it out with air pressure at a low pressure.
- A dust protection mask is to be worn while changing and emptying the dust bag.

### Monthly Service

- Control fixing bolts of the machine.

### Service after 6 month

- Check electric security and safety devices

## 10 Malfunctions, their potential causes and remedies



### IMPORTANT!

If one of the following malfunctions occurs, immediately stop working with the machine. Before you start troubleshooting, turn off the machine and unplug the power plug. Failure to do so can lead to serious injury. All repairs or replacement work may be performed by qualified and trained expert staff only.

Malfunction	Possible cause	Remedy
Machine does not start	1. Power plug is not plugged in. 2. Power supply cables defective. 3. Switch defective 4. Motor defective	1. Plug in the power plug. 2./3./4. Call a service technician
Strong vibrations	1. Loose component  2. Motor support is brocked. 3. Motor bearing is used up	1. Check all connections, tighten bolts and nuts. 2. Replace the motor support 3. Replace the motor bearding
Poor extraction	1. Dust container is full 2. Filter is blocked 3. The Extraction Unit is under-sized  4. The extraction line is too long	1. Empty the dust container. 2. Clean the filter. 3. Use The extraction line with Ø larger than 100 mm. 4. Set the Extraction Unit near on the wood-working machine

## 11 Disposal, reusing used machines

To protect the environment make sure that all machine components are exclusively disposed of as intended and legally permitted.

### 11.1 Decommissioning

Disused machines must be decommissioned immediately to prevent unintended use at a later point and putting the environment or persons at risk.

Step 1: Disposable environmental in hazardous operating materials from the end of life device.

Step 2: If necessary, disassemble the machine into assemblies and components that are easy to handle and suitable for recycling.

Step 3: Dispose of the machine components and processing materials using the intended disposal methods.

### 11.2 Disposal of electrical equipment

Electrical devices contain a variety of recycling-capable materials and also environmentally hazardous components.

Separate these components and dispose of them appropriately. In case of doubt, contact your local waste disposal authority. Consult a specialist disposal agent for recycling if needed.

### 11.3 Disposing of lubricants

The disposal instructions for the lubricants used are provided by the lubricant manufacturer. If necessary, ask for the product-specific data sheets.



## 11.4 Disposal by municipal collection point

The appliance contains electric and electronic components and may not be disposed as domestic waste. According to European directive about old electric and electronic appliances and the conversion into national law, electric power tools and electric machines must be collected apart and be supplied to an environmentally sound recycling.



The symbol on the product or its packaging points out that this product is not to be treated as a normal domestic waste, but must be delivered to collecting company for the recycling of electric and electronic devices. By your contribution to correct disposal of this product you protect the environment and the health of people. Environment and health are endangered by wrong disposal. Recycling of material helps the consumption to reduce of materials. You receive further information about the recycling of this product from your municipality, the municipal disposal companies or from the trader, where you have bought the product.

## 12 Spare parts



### DANGER!

#### Risk of injury caused by the use of incorrect spare parts!

The use of incorrect or faulty spare parts may cause risks for operating staff and damage as well as malfunctions.

- Exclusively genuine spare parts made by the manufacturer or spare parts authorised by the manufacturer shall be used.
- Always contact the manufacturer if you are unsure.



### NOTE!

The manufacturer warranty shall be rendered void in the event of a use of unauthorised spare parts.

## 12.1 Spare parts orders

Spare parts are available from authorised retailers or directly from the manufacturer. The contact details have been listed in section 1.2 Customer service.

Always quote the following key data with your spare parts orders:

- Device type
- Serial number
- Quantity
- Designation
- Desired shipping type (post, freight, sea, air, express)
- Shipping address

Spare parts orders without the aforementioned data cannot be taken into account. The supplier shall determine the shipping type if no relevant data was provided.

Information on the device type, article number and year of manufacture can be found on the type plate attached to the device.

### Example

The motor for the chip extraction unit SAA 2001 must be ordered. The motor has the number 8 in the spare parts drawing 1.

By ordering spare parts, send a copy of the spare parts drawing (1) with the marked part (motor) and marked position number (8) to the dealer or spare parts department and provide the following information:

**Device type:** Chip Extraction Unit SAA 2001

**Item number:** 5922201

**Drawing number:** 1

**Position number:** 8

### Item number of your machine:

Chip Extraction Unit SAA 2001	<b>5922201</b>
Chip Extraction Unit SAA 2003	<b>5922203</b>
Chip Extraction Unit SAA 3001	<b>5922301</b>
Chip Extraction Unit SAA 3003	<b>5922303</b>

## 12.2 Spare parts drawings

The following drawings are intended to help identify the necessary spare parts. To order, please send a copy of the part drawing with the marked components to your dealer.

### Spare parts drawing SAA 2001/ SAA 2003

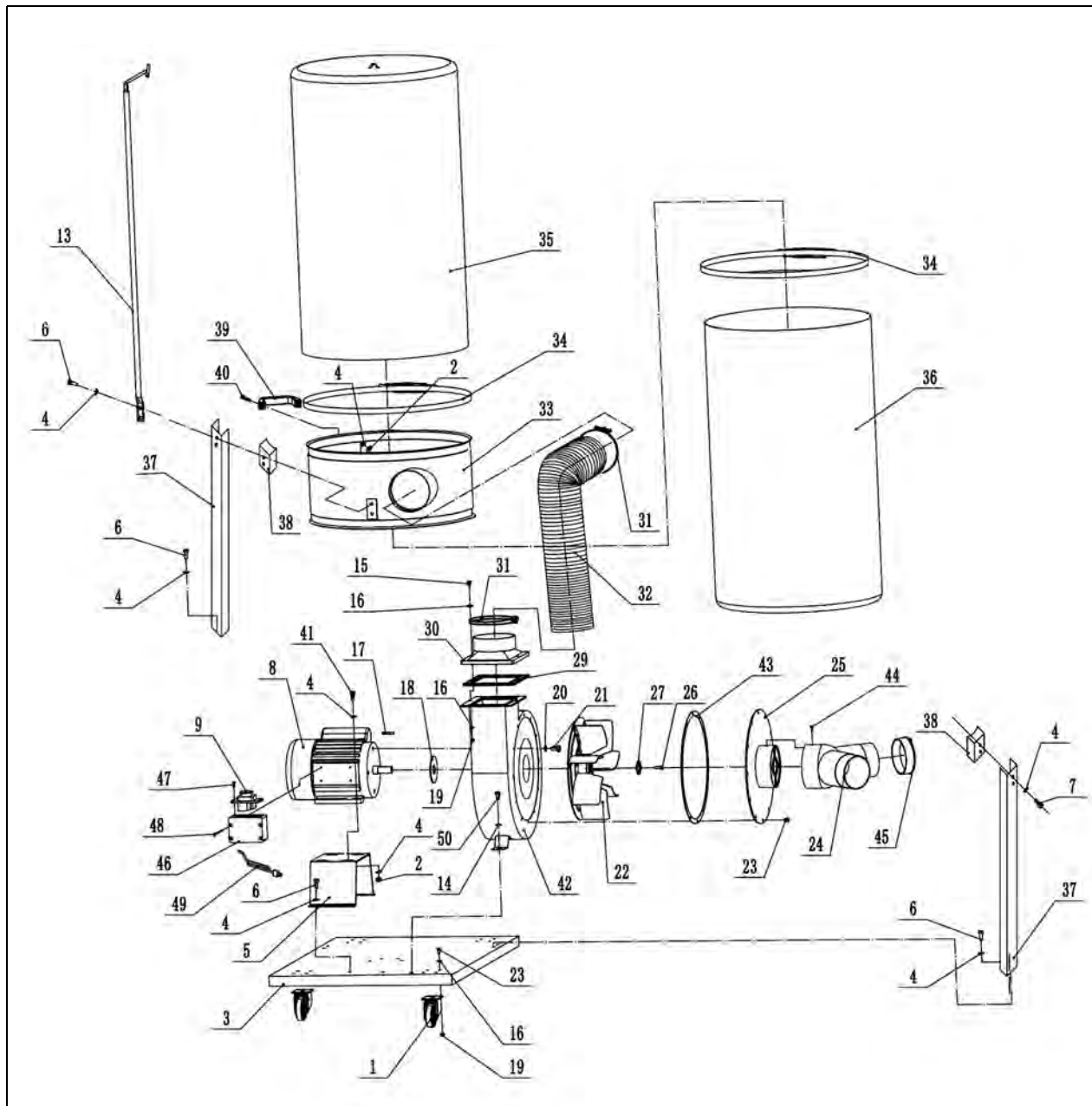


Fig. 12: Spare parts drawing SAA 2001/ SAA 2003

## Spare parts drawing SAA 2001 & SAA 2003

Pos.	Designation	Size
1	Caster	
2	Nut	
3	Base plate	
4	Wascher *	M8
5	Motor base	
6	Hex screw*	M8x16
7	Hex screw*	M8x45
8	Motor	
9	ON/OFF switch	
13	Upper bag support	
14	Wascher	
15	Hex screw*	M8x45
16	Wascher	
17	Key	A5x25
18	Packing	
19	Nut*	M6
20	Spring washer	M10
21	Hex screw*	M8x16
22	Fan	
23	Cross head screw*	M6x10
24	Inlet	
25	Inlet cover	
26	Hexagon socket screw*	M6x20

Pos.	Designation	Size
27	Retaining ring	
29	Packing	
30	Outlet	
31	Hose clamp	
32	Hose	
33	Collector	
34	Bag clamp	
35	Filter bag	
36	Collector bag	
37	Collector support	
38	Pad	
39	Handle	
40	Hexagon socket screw*	M8x25
41	Hex screw*	M8x25
42	Fan housing	
43	Packing	
44	Cross head screw*	M5x10
45	Cover	
46	Switch box	
47	Cross head tapping screw	
48	Cross head screw*	M4x60
49	Cable	
50	Bolt	

\* Standard part, available from specialist retailers

This exploded perspective view illustrates the assembly of a mechanical device. The components are numbered as follows:

- 1**: Base plate
- 2**: Screws
- 3**: Nut
- 4**: Main body plate
- 5**: Washer
- 6**: Seal ring
- 7**: Bolt
- 8**: Nut
- 9**: Bolt
- 10**: Nut
- 11**: Motor housing
- 12**: Screws
- 13**: Base plate
- 14**: Bolt
- 15**: Nut
- 16**: Motor housing
- 17**: Motor
- 18**: Bolt
- 19**: Bolt
- 20**: Bolt
- 21**: Bolt
- 22**: Motor housing
- 23**: Bolt
- 24**: Motor housing
- 25**: Bolt
- 26**: Bolt
- 27**: Motor housing
- 28**: Bolt
- 29**: Bolt
- 30**: Bolt
- 31**: Bolt
- 32**: Bolt
- 33**: Bolt
- 34**: Bolt
- 35**: Bolt
- 36**: Bolt
- 37**: Bolt
- 38**: Bolt

SAA Series | Version 1.11

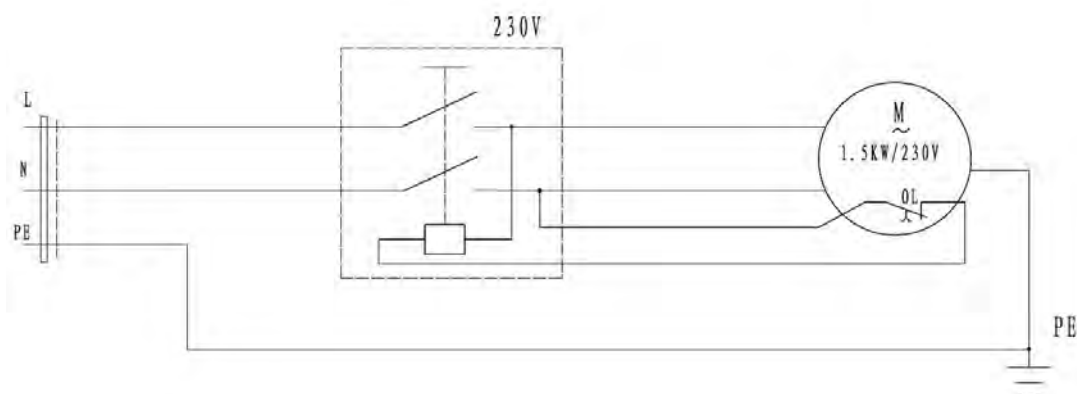
**Spare parts list SAA 3001 & SAA 3003**

Pos.	Designation
1	Caster
2	Screw
3	Screw
4	Base plate
5	Screw
6	Inlet
7	Screw
8	Hex screw
9	Unterlegscheibe
10	Turbo fan
11	Collector
12	Washer
13	Motor base
14	Hex screw
15	Hex screw
16	Bolt
17	Motor
18	Nut

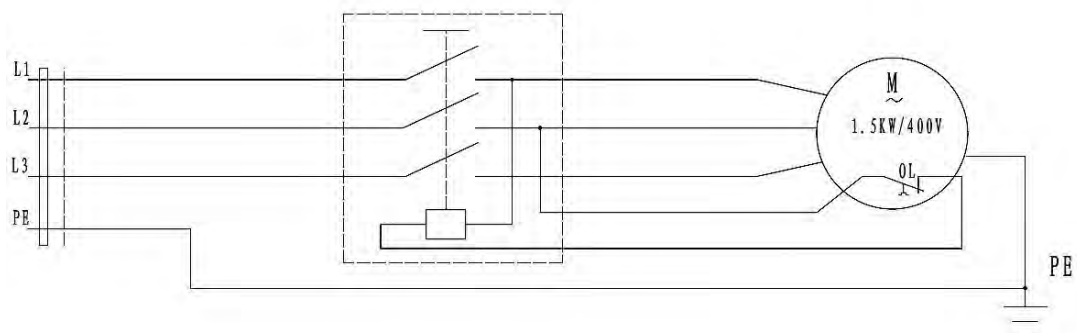
Pos.	Designation
19	Connector
20	Screw
21	Collector left
22	Collector bag
23	Collector support
24	Collector right
25	Washer
26	Upper bag support
27	Filter bag
28	Packing
29	Inlet
30	Key
31	Switch
34	Cable
35	Cap
36	Bag clamp
37	Switch box
38	Head screw

## 13 Wiring diagrams

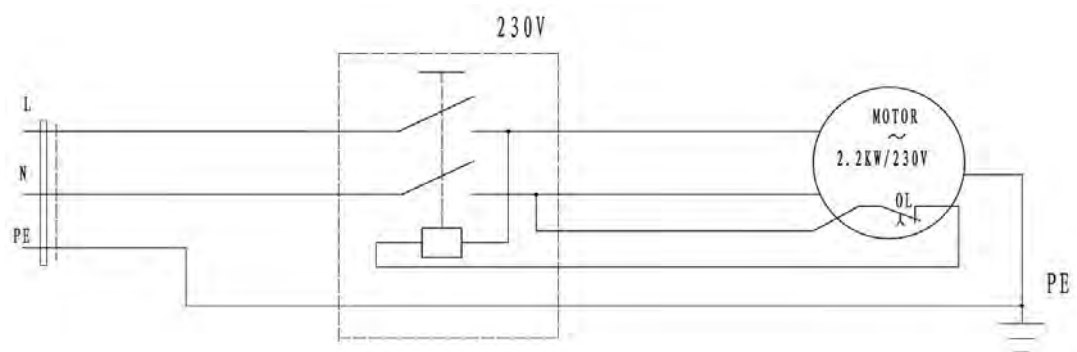
Wiring diagram SAA 2001/ 230



Wiring diagram SAA 2003 / 400



Wiring diagram SAA 3001 / 230



Wiring diagram SAA 3003 / 400

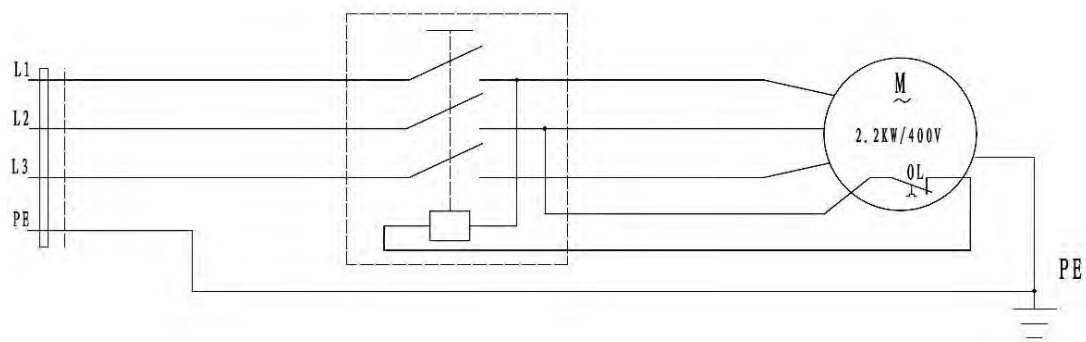


Fig. 14: Wiring diagrams



## 14 EC - Declaration of Conformity

As per machine directive 2006/42/EC, Appendix II 1.A

**Manufacturer / distributor:** Stürmer Maschinen GmbH  
Dr.-Robert-Pfleger-Str. 26  
D-96103 Hallstadt

hereby declares that the following product

**Product Category:** Holzstar® Woodworking machines

**Machine typ:** Chip Extraction Unit

<b>Description of the device *:</b>	<input type="checkbox"/> SAA 2001 / 230 V	<b>Item number *:</b> <input type="checkbox"/> 5922201
	<input type="checkbox"/> SAA 2003 / 400 V	<input type="checkbox"/> 5922203
	<input type="checkbox"/> SAA 3001 / 230 V	<input type="checkbox"/> 5922301
	<input type="checkbox"/> SAA 3003 / 400 V	<input type="checkbox"/> 5922303

**Serial number\*:** \_\_\_\_\_

**Year of manufacture\*:** 20\_\_\_\_

\* please fill in according to the information on the type plate

corresponds, on the basis of its design and construction, as well as the version that we have put into circulation, with the relevant fundamental health and safety requirements of (subsequent) EU Directives.

**Relevant EU Directives:** 2014/30/EU EMC Directive

### The following harmonized standards have been applied:

DIN EN ISO 12100:2011-03	Safety of machinery. General principles for design. Risk assessment and risk reduction
DIN EN 60204-1:2019-06	Safety of machinery - Electrical equipment of machines - Part 1: General requirements

**Responsible for documentation:** Kilian Stürmer, Stürmer Maschinen GmbH,  
Dr.-Robert-Pfleger-Str. 26, D-96103 Hallstadt

Hallstadt, 09.11.2020



Kilian Stürmer  
CEO, Director



