

OPERATING MANUAL

Meat/bone band saw

ADE



ROBUSTA series

Robusta-210614-Rev007-UM-en



TABLE OF CONTENTS

1. About this operating manual	2
General information	2
Storage.....	2
Target group	2
Explanation of symbols	2
2. Intended use	3
3. Safety instructions.....	3
General safety instructions	3
Danger from electricity.....	3
Warning of risk of injury	4
Beware of damage to property.....	4
4. Scope of delivery	4
5. Installation and commissioning	5
Set up.....	5
Checking the running direction	5
6. 5	
7. Device overview.....	6
8. Safety devices and operating elements.....	7
Working posture	7
Pressing device	7
Scoop	7
Door interlock	7
Power on/off	8
9. Operating the machine.....	8
10. Cleaning and maintenance	9
Cleaning	9
Maintenance	10
Troubleshooting.....	12
11. Transport	12
12. Disposal.....	12
13. Warranty	13
14. Technical data	13
15. CE marking and declaration of conformity.....	14
16. Circuit diagrams.....	15
17. Exploded views.....	17
18. Spare parts lists	17

1. About this operating manual



This symbol means: "Consult operating instructions". Read the instructions for use carefully before use and follow all instructions provided therein. Keep the instructions for use for future reference.

General information

This operating manual describes the safe operation as well as the handling, care and maintenance of the machine.

Only compliance with the operating manual is considered to be proper use.

Therefore, read this operating manual carefully before connecting and using the machine. Failure to observe this operating manual may result in injuries or damage to your product.

Our products are constantly being developed and improved. For this reason, design and technical modifications are possible at any time. However, this has no influence on the content of this manual.

The machine is designed and evaluated in accordance with the safety standard EN 12268 in its current version and bears the CE mark as a sign of conformity with relevant requirements.

Production based on the technical documents supplied is not permitted.

Storage

The operating manual is an integral part of the machine. It must be kept in the immediate vicinity of the machine and be easily accessible to everyone.

If the machine is resold, the operating manual must be included.

Target group

This operating manual is intended for personnel entrusted with the installation, handling, care and maintenance of the machine.

Personnel who operate the machine must have read and understood this operating manual before using it for the first time and must have been instructed in the operation of the machine by the owner/operator. Above all, the dangers arising from improper use must therefore be pointed out. The owner/operator must ensure that the operating personnel ("operators") are able to use the machine as intended and safely.

Maintenance and adjustment work, e.g. blade sharpening, may only be carried out by authorised and trained personnel.

Explanation of symbols

Some parts of the text have been marked to warn of dangers that could lead to injury or damage or to underline the importance of the message:



Attention!

Indicates something important which includes: Operations requiring caution, safety warnings and/or important safety information.



Disconnect from the mains!

Before any action on the machine, disconnect it from the mains supply.



Qualified staff!

Any action indicated by this symbol may only be carried out by qualified staff.

2. Intended use

This meat/bone band saw is used for cutting

bones,

fresh or frozen meat with or without bones, and

fresh or frozen fish, whole or filleted.

Goods other than those mentioned above may not be processed.

The products to be processed are placed on the work table. They may only be guided against the saw band with the aid of the pressing device.

The device may only be used as intended. All applications of the device that are not mentioned in the chapter "Intended use" are considered non-intended use, just like non-observance of the safety instructions. It is the user of the device, but not the manufacturer, who assumes liability for any resulting damage to property or personal injury resulting from misuse.

The use of accessories other than the original accessories supplied by the manufacturer may void this warranty.

3. Safety instructions

General safety instructions

This slicer may only be used by persons of legal age.

The operator must be in full possession of his/her mental and physical capacities. Persons who do not speak the German language or who cannot read are to be informed about the content of these instructions by suitable personnel or trained on this machine in accordance with the operating manual.

The machine may only be used if it has been visually inspected before use and is clearly undamaged and fully assembled.

Always observe the safety rules and regulations of the owner/operator.

Danger from electricity

Do not immerse the motor housing, power cord or mains plug in water or other liquids.

Do not operate the machine with wet hands.

Do not operate the machine outdoors.

Connect the machine to a properly installed mains outlet with a voltage that corresponds to the name plate.

Only connect the device to mains outlets that are protected by an earth leakage circuit breaker with $\Delta I = 30\text{mA}$.

Ensure that the mains outlet is readily accessible so that you can quickly unplug the power cord, if necessary.

Do not use the machine:

- if the machine or its parts are damaged,
- if the power cord or plug is damaged,
- if the machine has fallen down.

Unwind the power cord completely before each use. Ensure that the power cord is not damaged by sharp edges or hot objects.

Unplug the power cord from the mains outlet:

- if you are not using the machine,
- before cleaning or servicing the device,
- if there appears to be a malfunction during operation,
- during thunderstorms.

Do not modify the machine or power cord. Only have repairs carried out by a specialist workshop, as improperly repaired machines endanger the operator.

Do not use an extension cable.

Warning of risk of injury

The saw band is very sharp. Never touch the saw band with your fingers or other parts of your body.

Always wear suitable protective gloves that protect against cuts during cleaning or maintenance works.

Pull back long hair and secure it or cover it under a cap while working. Avoid loose or hanging clothes such as scarves, ties, etc.

Lay the power cord so that it does not create a tripping hazard.

Beware of damage to property

Never place the machine on or near hot surfaces (e.g. hot plates, etc.).

Avoid contact of the power cord with hot objects.

Never expose the machine to a high temperature (heating, etc.) or adverse weather conditions (rain, etc.).

Use only original accessories and spare parts.

Never clean the machine itself or any part of it in the dishwasher or with a water jet.

After cleaning, allow the machine and the accessories used to dry.

Never pull on the cord to remove the plug from the mains outlet.

Switch off the device immediately in the event of malfunctions or suspected defects. Never attempt to repair the device yourself. Call the customer service department.

4. Scope of delivery

Check the scope of delivery for completeness immediately after receipt of the machine. Carefully remove the machine and accessories from the packaging and remove all packaging materials.

Included in the delivery are:

Bone band saw

Operating manual with declaration of conformity

5. Installation and commissioning

Set up

Place the bone band saw on a flat, smooth and vibration-free surface.

Any unevenness can be corrected using the regular feet (A).

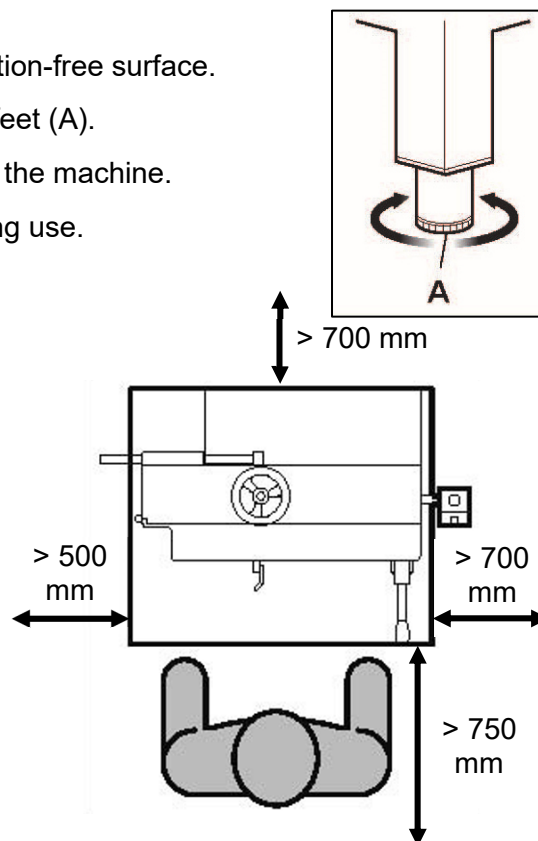
Make sure that the surface can support the weight of the machine.

Make sure that the machine is absolutely stable during use.

Place the machine on a 70 – 75 cm high work surface. This allows an ergonomic working posture and the machine's on/off switch is easily accessible for all operators, even in emergency situations.

The machine must be positioned so that the machine with the pressing device and the teeth of the saw band are facing the operator.

When setting up the machine, make sure that there is sufficient space to allow easy operation, cleaning and maintenance of the meat/bone band saw. At least the distances shown below should be observed.



Checking the running direction

Checking the running direction is only necessary for 400 V machines. The saw band can run in the wrong direction due to different configuration of the local power supply system.



Attention!

When the machine is switched on, the saw band must run from top to bottom at the cutting point!



Qualified staff!

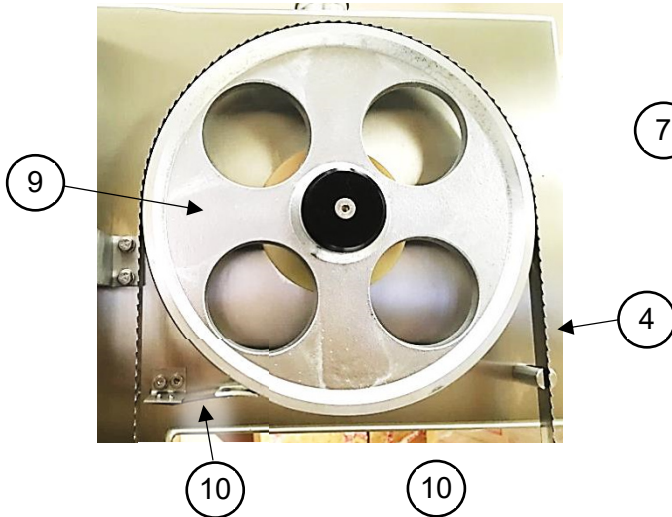
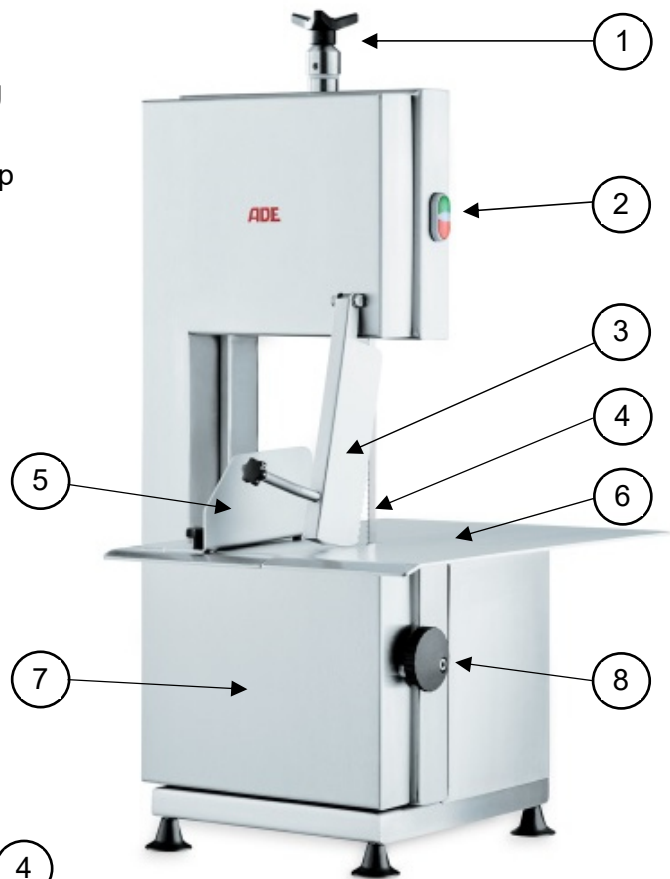
If the saw band runs from bottom to top at the cutting point (due to different configuration of the local power supply system), 2 of the 3 current phases in the plug must be swapped. However, this work must be carried out by a specialist!

6.

7. Device overview

The machine consists of:

- 1 Rotary handle for unclamping/tensioning the saw band
- 2 START/STOP switch with operating lamp
- 3 Pressing device
- 4 Saw band
- 5 Scoop
- 6 Cutting table
- 7 Access door to rollers
- 8 Door interlock



- 9 Upper roller
- 10 Roller scraper unit
- 11 Saw band scraper unit
- 12 Lower roller (drive)

8. Safety devices and operating elements

Working posture

The user should always stand in front of the machine to be protected by the machine's safety devices.

Never wear the following when using the machine:

Clothing with wide sleeves

Ties

Scarves

Bracelets

Rings

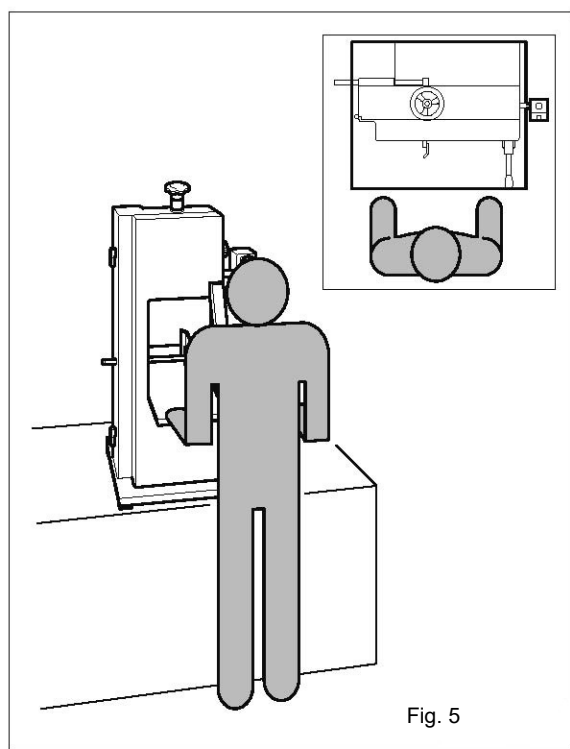
Watches

Loose hair

Always wear:

Non-slip footwear

Safety clothing that complies with health and safety standards



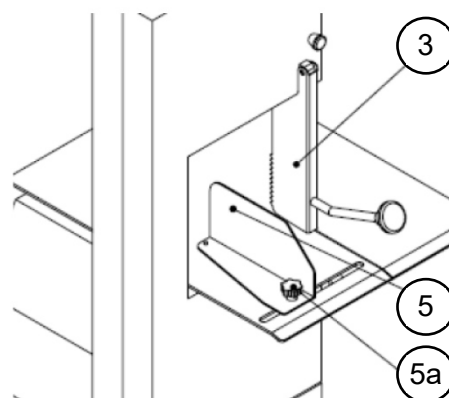
Pressing device

In rest position, the saw band must always be covered by the pressing device (3).

The pressing device must always be used.

The pressing device should only ever be lifted as far as necessary and placed on the material to be cut.

The pressing device must always fall automatically into the protective position and must not be tied up or otherwise put out of operation.




Scoop

The scoop (5) is locked with a star grip (5a). To set the desired position or cutting thickness, the star grip must first be loosened slightly. The scoop can then be moved parallel to the saw band. When the desired position is reached, the grip must be tightened again. Make sure that the scoop remains in its working position.

Door interlock

The machine cannot be switched on when the door is open. If the door is opened during operation, the machine is automatically switched off. The saw band comes to a standstill within 4 seconds.

Power on/off

Symbol	Description	Function
	START switch	Press this switch to turn on the machine. The saw band starts to run.
	Light	The operating lamp lights up as soon as and as long as the machine is switched on.
	STOP switch	Press this switch to turn off the machine. Press this button to stop the machine. Observe the runout time of the saw band!

9. Operating the machine

- Place the material to be cut on the work table to the right of the pressing device.
- Set the scoop to the desired cutting width.
- With your left hand, lift the pressing device on the star grip.
- Use your right hand to push the food to be sliced towards the scoop.



Attention!

Please be careful at this stage so that the product does not come in contact with the saw band.

- Press the START button. The saw band starts running.
- With your left hand, press the pressing device and thus the material to be cut against the saw blade.



Attention!

The product to be cut must rest at the interface on the table to prevent the saw band from jumping out or canting.

- Use your right hand to direct the material to be cut.



Attention!

The product must be guided straight over the table and must not be canted to prevent damage (tearing) to the saw band.

If the saw band is torn, switch off the device immediately.

- The faster the cutting movement, the better the cut quality.
- After the saw cut, pull back the material to be cut with the right hand only and repeat the process as described above.
- Make sure that the cut portions do not pile up on the work surface, thus preventing further cutting operations. If necessary, remove the cut portions from the work table while the machine is switched off and the blade is secured by the pressing device.
- Switch off the machine after use.



Attention!

The cutting zone remains dangerous for the operator even when the machine is switched off and especially when the pressing device is in the raised position.

10. Cleaning and maintenance

Cleaning



Disconnect from the mains!

Before cleaning, switch off the machine and unplug the power cord.



Attention!

When cleaning, there is a risk of cutting yourself even on a resting saw blade! Take extreme care. We recommend that you wear suitable cut-resistant gloves.



Attention!

It is forbidden to use cleaning agents that are not suitable for objects and accessories that may come into contact with people or food.

The meat and bone band saw must always be clean for hygienic reasons.

Depending on the load and frequency of use, the machine must be cleaned regularly – at least after each daily work sequence.

All parts and cavities that come into contact with meat, where deposits can form, must be cleaned.

Clean the machine with a damp cloth or a brush in approx. 60 °C warm water. For cleaning and disinfecting, choose only products or accessories that are food-grade and approved for this purpose.

Observe the instructions for use of this disinfectant. After this type of treatment, rinse with clean drinking water.

The bone meal container, band scrapers, disc scrapers, saw band and impeller surfaces must also be thoroughly cleaned.

The saw band must be greased with food grade oil.

Residues such as bone meal below the lower impeller must be thoroughly wiped out.

Never use a water jet to clean the machine and keep moisture away, especially from live parts!

Maintenance



Qualified staff!

The following activities may only be carried out by qualified, technically experienced personnel.



Disconnect from the mains!

Before maintenance, the machine must be switched off and the mains plug must be pulled out.



Attention!

During maintenance, there is a risk of cutting even on a stationary saw blade! Take extreme care. Wear suitable cut protection gloves.



Attention!

Do not carry out any maintenance other than that described. If necessary contact the manufacturer.

Removing the saw band

Open the access door (7).

To remove the old saw band, turn the rotary handle (1) for releasing the saw band counter-clockwise until the saw band (4) can be removed from the rollers (9+12).

Installing the saw band

It is recommended to clean the new saw band before and after insertion to ensure that the product to be cut is not contaminated with lubricants.

Grip the saw band with both hands. Make sure that the saw teeth are facing you and that the tips of the teeth in your right hand are pointing downwards.

With your right hand, insert the saw band into the slot in the table.

Place the saw band on the upper roller (9).



Attention!

During the next steps, make sure that the saw band does not slip off the upper roller. There is a risk of injury!

Pass the saw band between the scrapers (11).

Place the saw band on the lower roller (12).

Turn the rotary handle (1) clockwise to tension the saw band. Torque monitoring is implemented in the clamping device. Turn the rotary handle until you hear a clearly audible clicking sound.

Check that the saw band is correctly positioned on the two rollers. Please refer to the section “

Aligning the saw band".

Turn the roller several turns clockwise and check that the saw band has not moved on the rollers.



Attention!

If the position of the saw band has changed, there is a risk that the saw band will slip off the rollers during operation. For an adjustment of the rollers, please contact the authorised service partner.

Aligning the saw band

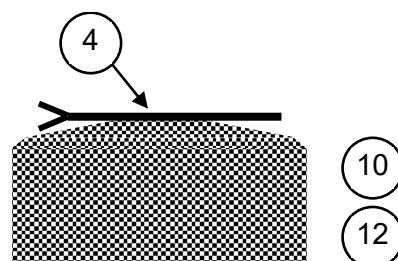
To prevent the saw band from jumping off the rollers during operation, the saw band must be aligned as shown.

Place the saw band centrally on the roller.

The back of the saw band must be aligned parallel to the back of the roller.

The teeth of the saw band must not touch it.

A new alignment and re-tensioning of the band must always be carried out when a new band is installed.



Troubleshooting

Problem	Cause	Remedy
The band is slipping.	A band side is not ground.	Mount a new band.
The saw band gets hot.	The guide and scrapers are blocked by meat remains.	Clean the guide and scrapers.
The band produces noises.	A band side rubs against the guide.	The band is insufficiently tensioned. Re-tension.
The cut meat turns black at the cutting edge.	The guide and scrapers are dirty.	Clean the impeller surface, band guide and scraper.
Loud noise.	The impeller surface is contaminated with meat and bone remains.	Clean the surface of the impellers and replace the scraper.
The cutting process is tiring and noisy.	The saw band is worn.	Replace the saw band.
The motor is running, but the saw band is stationary.	The saw band is jammed by the product.	Switch off the machine immediately. Remove the obstacle and switch on again.
The saw band is stationary.	The power supply to the motor is interrupted.	Call customer service.

11. Transport

The transport packaging should be kept for possible return transport in case of repair at least during the warranty period. It is better to keep the packaging during the lifetime of the device.

12. Disposal

Disposing of the packaging



Dispose of the packaging with similar materials. Dispose of cardboard with waste paper and of films with recyclable materials.

Disposing of the machine

Dispose of the machine in accordance with the regulations that apply in your country.



Devices must not be disposed of in normal household waste.

The machine must be disposed of properly at the end of its service life. In this way, valuable materials contained in the device will be recycled and the burden on the environment avoided. Bring the old device to a collection point for electronic waste or to a recycling depot. For more information, contact your local waste disposal firm or your local administrative body.

13. Warranty

ADE will repair or replace this product if it has failed within 1 year from the date of purchase (proof of purchase is required) due to poor workmanship or defective material.

The above does not apply to all moving parts such as a saw band, a scoop, etc. The warranty does not apply to the normal appearance of usage or signs of wear or any damage caused by accidents or misuse.

The warranty will not apply for devices that have been opened by unauthorised persons.

This warranty agreement does not affect the customer's legal rights in any manner.

The dealer from whom you purchased the machine is responsible for complaints.

14. Technical data

Model	Robusta-230	Robusta-400
Band length	1700 mm	1700 mm
Band speed	17.3 m/s	17.3 m/s
Cutting area	195 x 227 mm	195 x 227 mm
Work table	400 x 500 mm	400 x 500 mm
Dimensions	545 x 510 x 816 mm	545 x 510 x 816 mm
Power	0.75 kW	0.75 kW
Net weight	45 kg	45 kg
Current type	230 V	400 V

Base frame (optional)	Stationary	Mobile
Item no.	Z2231	Z2232
Dimensions	450 x 410 x 758 mm	450 x 410 x 761 mm
Net weight	15 kg	17 kg

15. CE marking and declaration of conformity



Declaration of conformity by the manufacturer

This product has been manufactured in accordance with the harmonised European standards.

They conform to the regulations of the EC-directives listed below:

- Machinery directive 2006/42/EC
- EMC Directive 2014/30/EU
- Low voltage directive 2014/35/EU
- RoHS Directive 2011/65/EC

in the currently valid versions.

The declaration will be void if a change that was not agreed with us has been made on the machine.

Hamburg, June 2021

ADE Germany GmbH

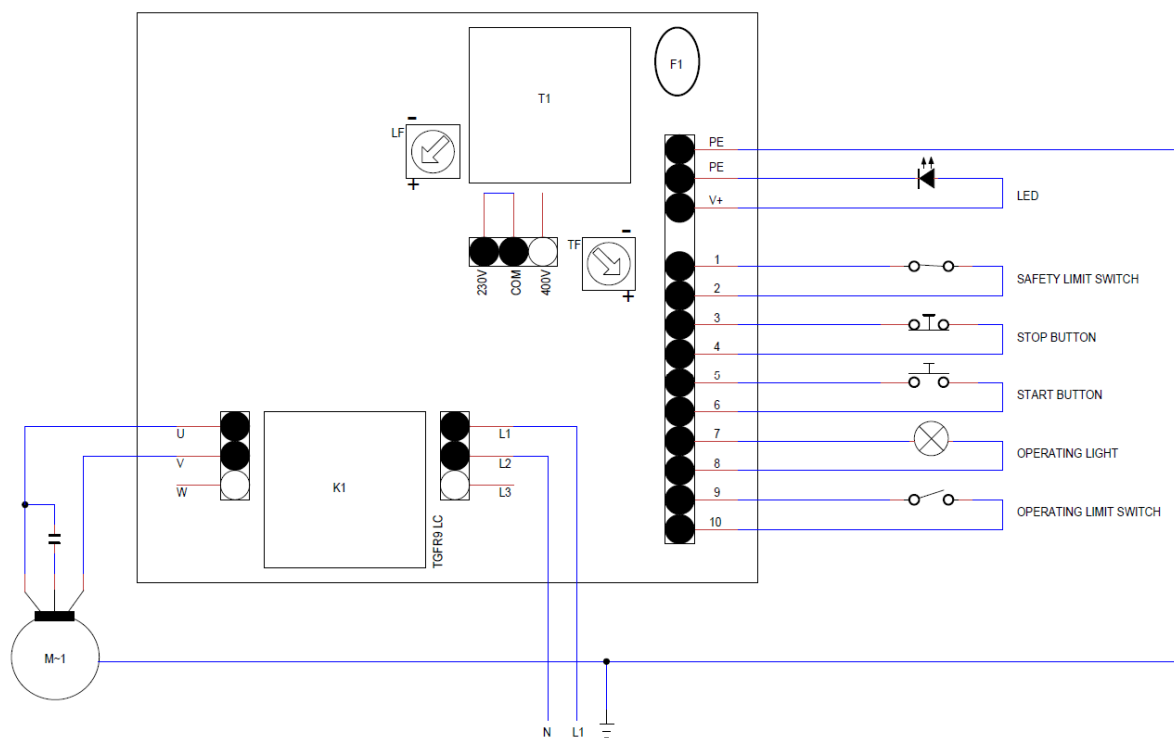
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22143 Hamburg / Germany

Manufacturer:

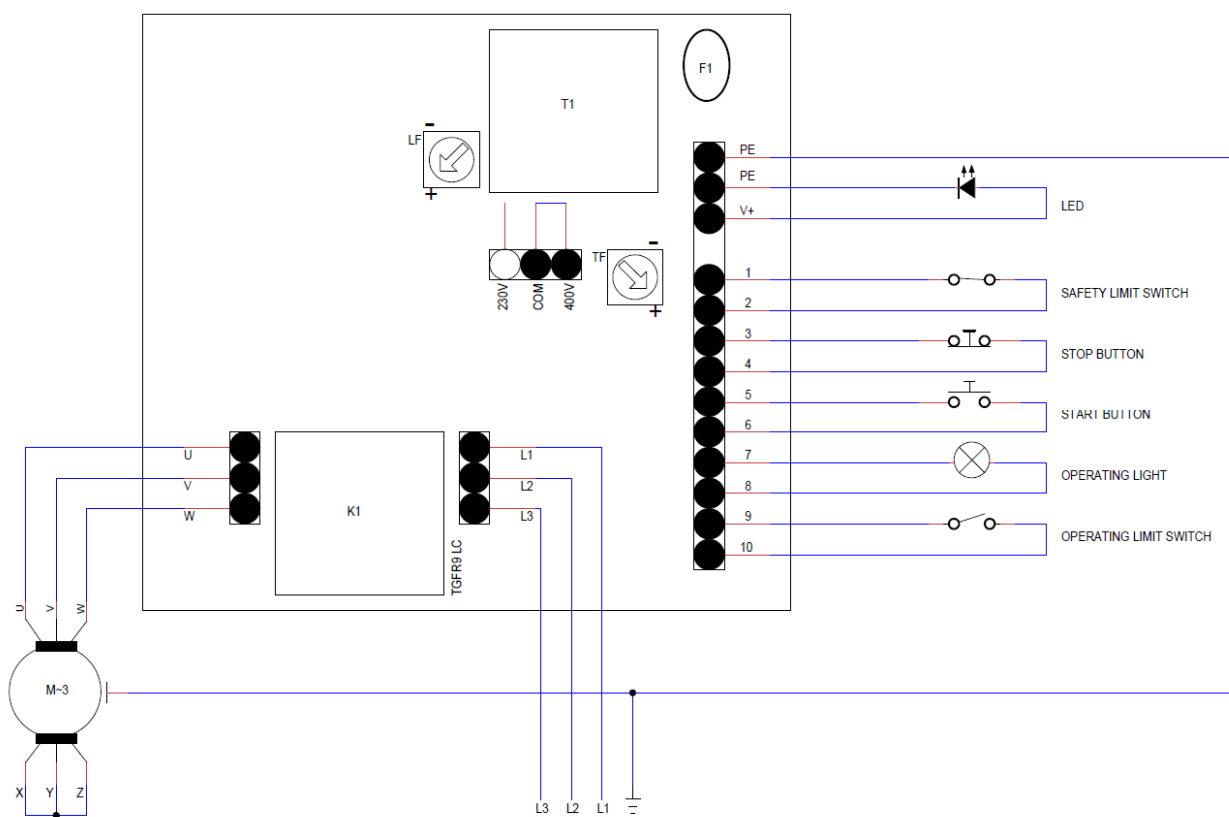
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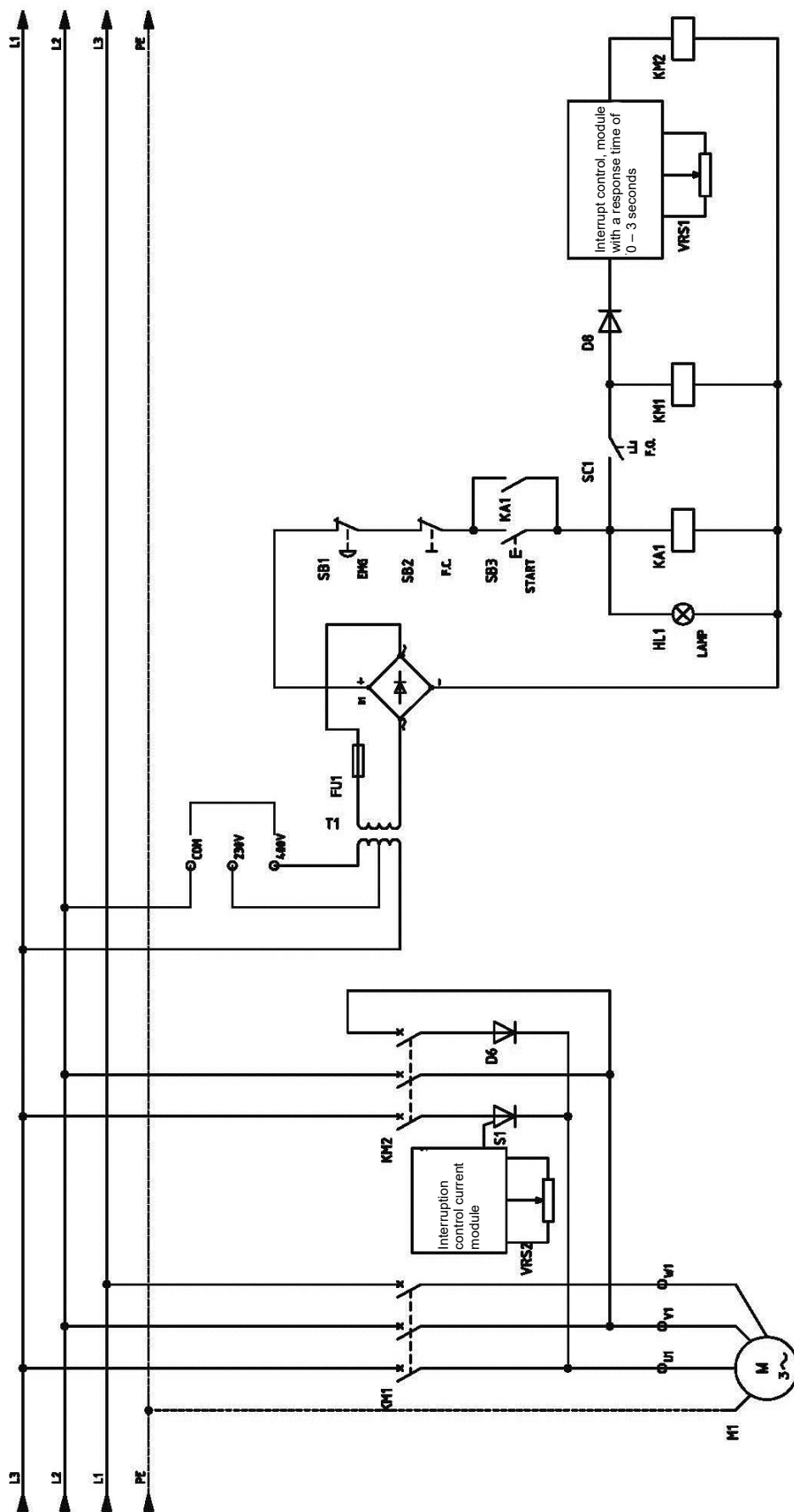
16. Circuit diagrams

230V:

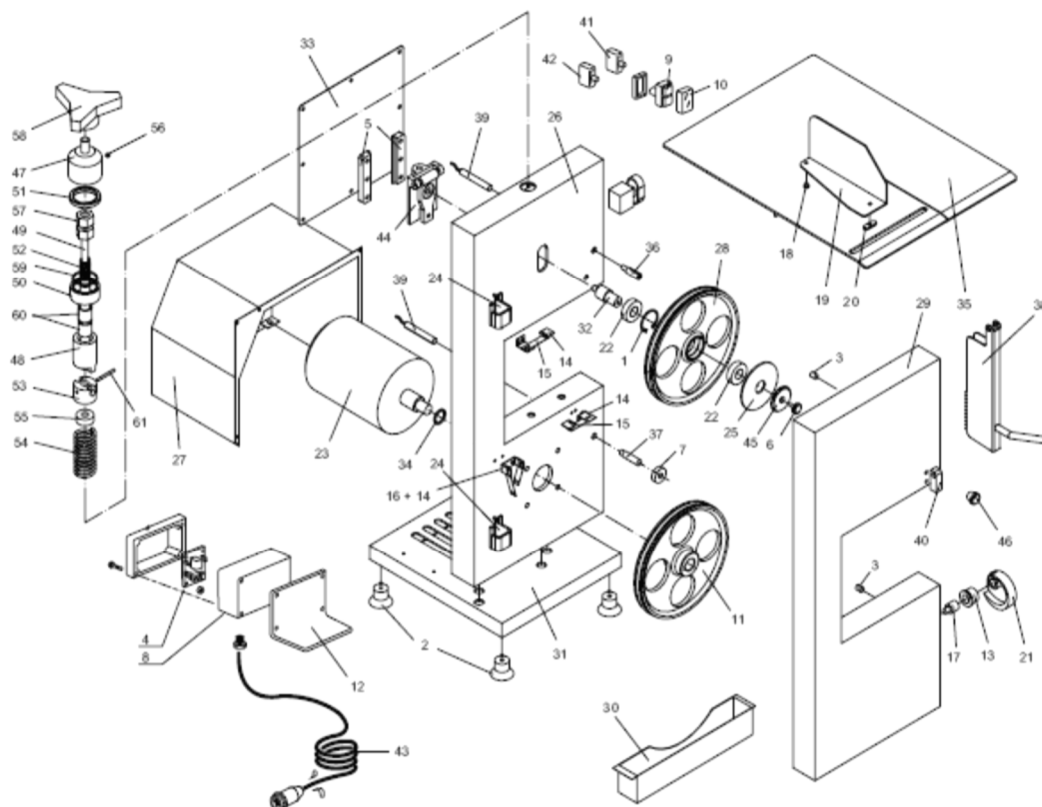


400V:





17. Exploded views



18. Spare parts lists

NO.	DESCRIPTION	QUANTITY	ITEM NO.
4+6	Circuit board	1	
9+10+41+42	Switching unit	1	
11	Lower impeller	1	
14+15	Right-hand scraper	1	
14+16	Left-hand scraper	1	
23a	Motor 230V	1	
23b	Motor 400V	1	
25	Rubber disc	1	
28	Upper impeller	1	
36	Pressing device	1	
44	Clamping slide	1	

Distributor: