

## Operating manual

### Spiral mixer Model PK 25 / PK 50 / PK 50-2V

Item-No.: 395-1020 / 395-1025 / 395-1005



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**Dear Customer,**

**Congratulations on purchasing your new SARO dough kneading machine.**

**This device has been specifically designed for professional use in bakeries, food service operations, hotels, canteens, and the food processing industry. It is ideally suited for mixing and kneading doughs of various consistencies.**

**Please read this operating manual carefully before using the machine. This is the only way to ensure safe and efficient operation.**

**We wish you great success and reliable performance with your new SARO product.**

## **SCOPE OF DELIVERY**

- Spiral mixer
- Operating manual

## **STANDARDS AND DIRECTIVES**

The device complies with the current EU standards and directives:  
Machinery Directive – 2006/42/EC,  
Electromagnetic Compatibility Directive – EMC 2014/30/EU,  
RoHS Directives – 2011/65/EU and 2015/863/EU.

The corresponding declaration of conformity is available upon request.

**TECHNICAL OVERVIEW**

<b>Spiral mixer</b>			
<b>Model</b>	PK 25	PK 50	PK 50-2V
<b>Item-No.</b>	395-1020	395-1025	395-1005
<b>Housing Material</b>	Reinforced steel, powder-coated		
<b>Material (Bowl, Central Shaft, Guard)</b>	Stainless steel		
<b>Kneading Hook</b>	Cast steel spiral hook		
<b>Transmission System</b>	Ball bearing-mounted, rotating parts		
<b>Gearbox</b>	Self-lubricating reduction gear		
<b>Dough Capacity (approx.)</b>	12-18 kg	25-38 kg	
<b>Bowl</b>	Ø 360 mm x H 210 mm (fixed, non-removable)	Ø 450 mm x H 260 mm (fixed, non-removable)	
<b>Speed Levels</b>	1		2
<b>Wheels</b>	4 (not pre-assembled)		
<b>On/Off Switch</b>	yes		
<b>Power Connection</b>	Heavy current cable, must be connected by a qualified technician		
<b>Electrical Connection</b>	400 V – 50 Hz – 1,1 kW	400 V – 50 Hz – 2 kW	
<b>External Dimensions</b>	W 400 x D 720 x H 620 mm	W 500 x D 840 x H 720 mm	
<b>Weight net/gross</b>	87 / 100 kg	125 / 143 kg	
<b>GTIN [EAN-Code]</b>	4017337395002	4017337395026	4017337052325

## SYMBOL EXPLANATIONS



### WARNUNG!

Dieses Symbol kennzeichnet Gefahren, die zu Verletzungen führen können. Halten Sie die angegebenen Hinweise zur Arbeitssicherheit unbedingt genau ein und verhalten Sie sich in diesen Fällen besonders vorsichtig.

### WARNING!

This symbol indicates hazards that may cause injuries. Always follow the specified safety instructions precisely and exercise extra caution in these situations.



### WARNUNG: GEFAHR DURCH ELEKTRISCHEN STROM!

Dieses Symbol macht auf gefährliche Situationen durch elektrischen Strom aufmerksam. Bei Nichtbeachten der Sicherheitshinweise besteht Verletzungs- oder Lebensgefahr!

### WARNING: DANGER OF ELECTRIC SHOCK!

This symbol warns of hazardous situations caused by electric current. Failure to follow the safety instructions may result in injury or death!

## GENERAL INSTRUCTIONS

- Keep this operating manual within easy reach near the machine.
- The manufacturer/supplier cannot be held liable for any damage resulting from failure to follow these instructions.
- Failure to follow this manual voids the operational safety of the device.
- When passing the device on to third parties, this manual must be handed over as well.
- This device must not be operated by children or persons with limited physical, sensory, or mental capabilities, as they may not recognize the dangers of using electrical and/or refrigeration equipment, which can lead to accidents, fires, explosions, or property damage.
- After unpacking the device, ensure everything is in perfect condition. If you notice any damage, do not connect the machine – contact your supplier immediately.
- Check whether all components listed in the scope of delivery are present. If anything is missing, inform your supplier.
- Keep the device's original packaging. The unit can only be safely transported (e.g. for repair or relocation) in its original packaging. Be aware that all packaging components (plastic bags, boxes, Styrofoam, etc.) can pose hazards to children and must be kept out of their reach.
- The machine is to be used **only** for kneading dough. Improper use may cause damage and void the warranty.
- If keeping the packaging is not possible, separate the packaging materials and dispose of them properly at the nearest collection point.
- Do not use the device outdoors in the rain or in damp environments.
- Do not operate the device unattended.
- Follow all applicable accident prevention regulations and general safety rules for the work environment.
- Place the unit on a dry, well-ventilated surface that is flat and stable.
- Before connecting to the power supply and starting operation, clean the device thoroughly as described under "Cleaning."
- For hygienic reasons, daily cleaning during operation is recommended.
- In case of malfunction or defect, disconnect the unit from the power supply and contact your dealer. Repairs should only be carried out using original spare parts.

## SAFETY INSTRUCTIONS

- Improper use or handling can lead to malfunctions and user injury.
- Follow all accident prevention regulations and general safety rules relevant to your area of application.
- Ensure the machine stands securely on a dry, stable, non-slip surface suitable for its weight and in a well-ventilated area.



- Do not move the machine during operation.
- Do not use the machine in damp, wet, or poorly lit areas, or near gas or electric stoves or other heat sources.
- Before moving the device, switch it off (if a switch is available) and unplug it from the power supply.
- Ensure the unit does not tip over while being moved, as this may cause injury.
- Do not let the power cord hang over sharp edges, crush it, or allow it to touch hot surfaces or open flames.
- For hygiene and safety reasons, keep long hair tied back and wear protective gloves.
- Prevent tripping hazards or accidental pulling of the power cord.
- Regularly inspect the power cord. If it is damaged (e.g. crushed), it must be replaced by a qualified technician.
- Never leave the machine unattended during operation. Be especially cautious when children are nearby, as they may not understand the risks of electrical appliances.



- Do not touch the device, plug, or cable with wet or damp hands.
- Warning! The machine remains live as long as it is connected to the power supply.
- Keep the device protected from moisture.
- Do not clean the device with a water jet.
- The device must not be immersed in water or any other liquid or exposed to splashing liquids.  
If the device gets wet, unplug it immediately and have it inspected by a qualified technician before using it again. **Risk of electric shock!**
- Do not use a damaged device!  
If damaged, disconnect it from the power supply and contact your dealer.
- Repairs must be carried out by qualified personnel using original spare parts.
- Always disconnect the device from the power supply before cleaning or if it will not be used for an extended period.

## DEVICE INSTALLATION

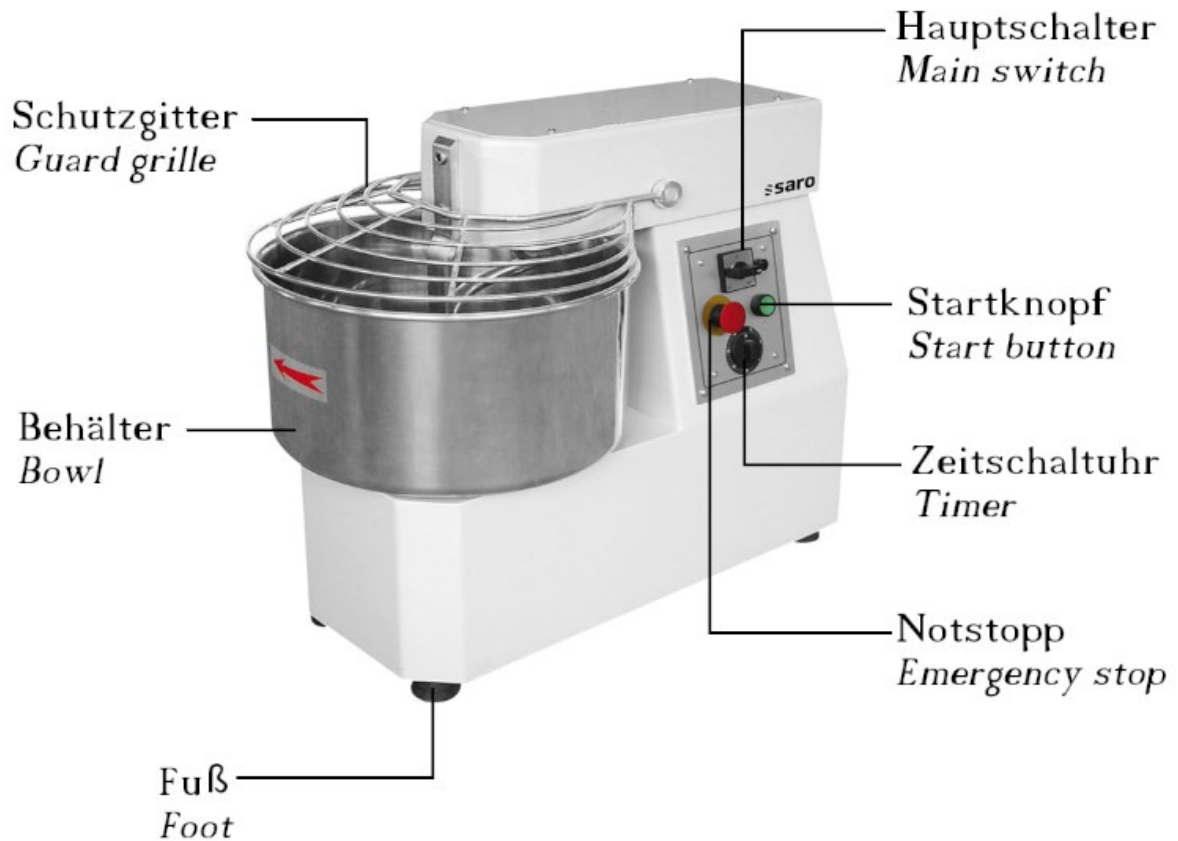
Place the device in a dry and well-ventilated room. Ensure it stands securely on a dry, non-slip surface.

Make sure that the power plug is always easily accessible and can be disconnected from the power supply without difficulty.

## ELECTRICAL CONNECTION

- Installation must be carried out by a qualified technician in accordance with applicable legal regulations if the machine is to be connected directly to the power supply.
- Remove all protective and packaging materials and dispose of them properly.
- Check the machine (cable, accessories, etc.) for possible damage. Do not use the machine if it is damaged.
- Place the machine on a stable, level, non-tilting surface. You may also place it on a worktable at a comfortable working height.
- Maintain a clearance of 50 cm around the machine. This facilitates operation and cleaning.
- The voltage indicated on the nameplate (on the back of the machine) must match your power supply voltage.
- If the machine is to be connected to the power supply using a cable, first ensure the machine is switched off and that the plug fits the socket. The socket must be easily accessible so the plug can be quickly disconnected in an emergency.
- Extension cords, reducing plugs, or adapters must not be used.
- When routing the power cable, ensure it does not create a tripping hazard during operation.

## STRUCTURE AND COMPONENTS



## INITIAL START-UP

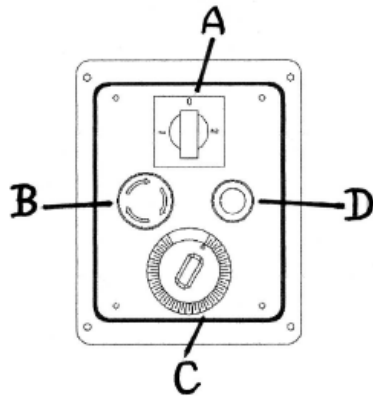
### **Before First Use:**

The device may only be operated by trained personnel in compliance with basic occupational safety and accident prevention regulations.

- Before initial startup, clean the machine. Proceed as follows:
- Ensure that the machine is switched off.
- If the power is supplied via a power cord, unplug it by pulling the plug housing from the socket.
- Clean the machine using a soft, damp cloth and a standard cleaning agent to remove grease and adhesive residues.
- Wipe everything thoroughly dry.
- Plug the device back into the socket.

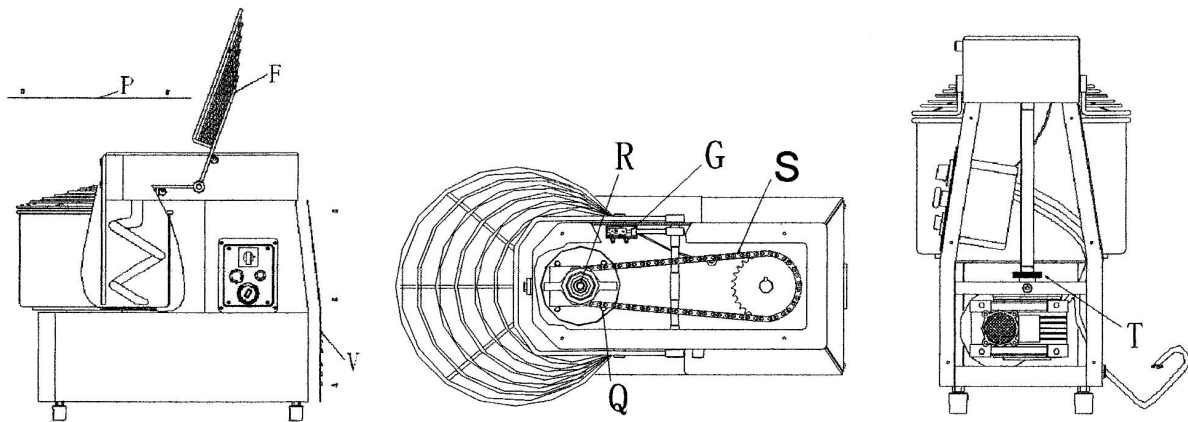


## OPERATION – SETTINGS



- A Hauptschalter
- B Roter Knopf: Notstopp
- C Zeitschaltuhr
- D Grüner Knopf: Inbetriebnahme

### Safety Device



**Protective Guard (F):** Must be fully lowered for operation to be possible.

**Micro Switch (G):** Automatically interrupts operation if the guard is opened.

**Note:** The machine will only start when the protective guard is properly closed.

### Function Test

#### **Start:**

1. Set the main switch to position 1 (for 400 V: set to 1 or 2).
2. Set the timer (C).
3. Press the green button (D) → kneading starts.

#### **Stop:**

- Set the main switch to position 0 or
- Press the red button (B) → emergency stop.

#### **Important:**

- Never operate the machine without the protective guard properly in place.
- If emergency stop is active: close the guard again and restart the machine.

#### **Recommended test run:**

Let the machine run empty for 1 minute to check functionality.

## Operating Instructions

### Filling Ingredients:

1. Lift the protective guard (F).
2. Add ingredients (dough quantity 12–18 kg).
3. Close the guard.
4. Set the timer (C).
5. Press the green button (D).

### Notes:

- Distribute ingredients evenly (flour, water, yeast, etc.)
- Do not add ingredients afterwards – risk of injury!
- The protective guard must not be opened during operation.

### After kneading is complete:

- Switch off the machine.
- Remove the dough using suitable tools.
- Clean the machine according to section 7.

## Using the Timer

### Function:

The timer allows the run time to be set between 1 and 30 minutes.

### Bedienung:

- Set the time (position 1 to 5)
- Start by pressing the green button (D).
- The machine stops automatically after the set time expires.

**Caution: Always ensure the timer is set to position 0 before removing the dough.**

## Maximum Dough Quantities

### Mixing Process 1

Ingredients (flour and water) are added **simultaneously** into the bowl.

Model	Max. Dough Quantity
PK 25	12½ kg
PK 50 + PK 50-2V	25 kg

### Mixing Process 2

Ingredients are added **gradually**, with water first and flour added during mixing

Model	Max. Dough Quantity
PK 25	18 kg
PK 50 + PK 50-2V	38 kg

### Recommendation:

**For optimal kneading performance and to protect the equipment, mixing process 2 is recommended.**

## CLEANING

- For hygienic and functional reasons, the machine should be cleaned after every use.
- Always switch off the machine before cleaning. If the machine is not hardwired, unplug it from the socket.
- First, remove dough residues using a wooden or plastic scraper.
- Then clean the machine, the bowl, and the kneading hook with a soft, damp cloth or sponge and a standard cleaning agent.
- Wipe everything thoroughly dry, e.g., with paper towels.
- Plug the machine back into the socket unless you do not plan to use it for an extended period.
- **Warning:** Never use aggressive cleaning agents, sharp tools, or abrasive sponges. This can damage the surface and pose a hygiene risk.

## TAKING MIXER OUT OF OPERATION / STORAGE / TRANSPORT

Remove all food items, switch off the machine, and unplug it from the power supply.

Thoroughly clean the machine inside and out.

Once it is dry and not intended for use over a longer period, store it in a dry, dust-free, and cool location. Ideally, cover the device or use the original packaging to protect it from damage.

Ensure that children or pets cannot climb into the machine or become trapped inside — secure the device accordingly.

If only storing the packaging material, be aware that components such as plastic bags, cardboard, Styrofoam, etc., can pose a danger to children if they are allowed to play with them unsupervised (e.g. risk of suffocation).

For transporting the machine, it is best to use the original packaging to provide optimal protection against impacts, sharp edges, weather conditions, etc.

Do not tilt the machine more than 45 degrees, do not expose it to moisture or rain, and avoid strong vibrations.

## IMPORTANT NOTE

### **Der Spiralkneter muss von einem Fachmann angeschlossen werden.**

The spiral mixer must be installed by a professional.

Le mixer à vrille doit être installé par un professionnel.

De spiraal kneedmachine moet worden geïnstalleerd door een professional.

### **Bitte achten Sie auf die Drehrichtung (siehe Pfeil auf dem Behälter).**

Please note the direction of rotation (see arrow on the container).

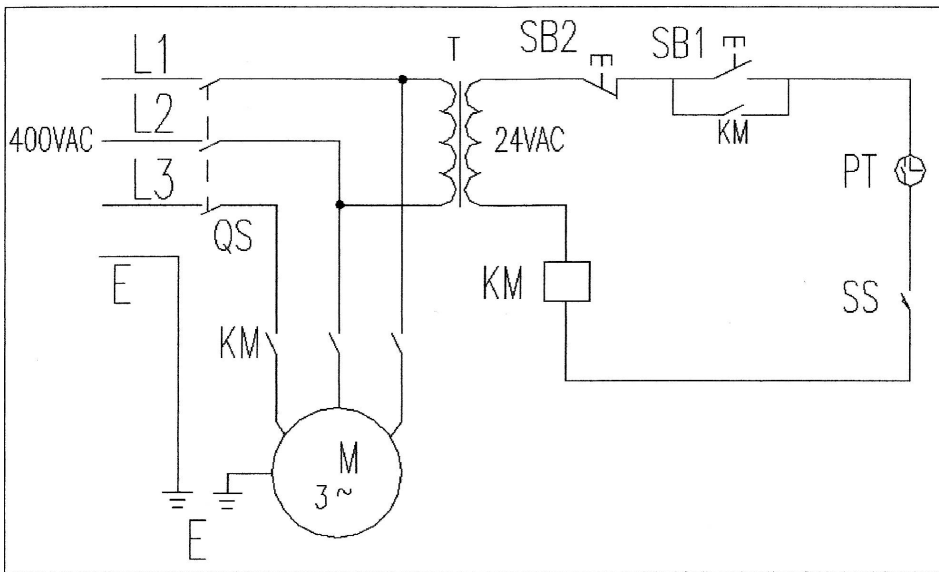
S'il vous plaît noter le sens de rotation (voir la flèche sur le contenant).

Let op de draairichting (zie pijl op de mengbak).

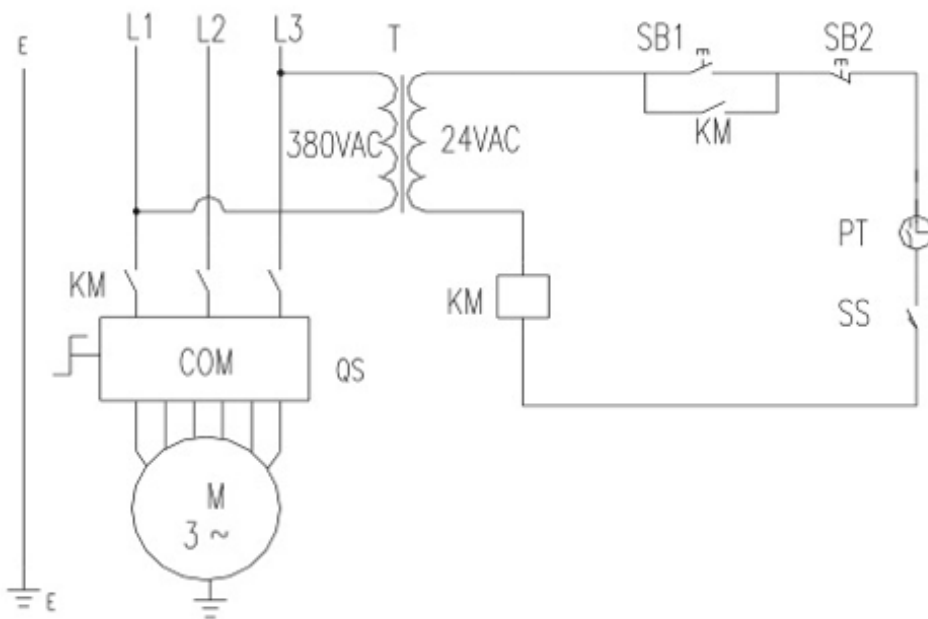


## WIRING DIAGRAM

### PK 25 + PK 50

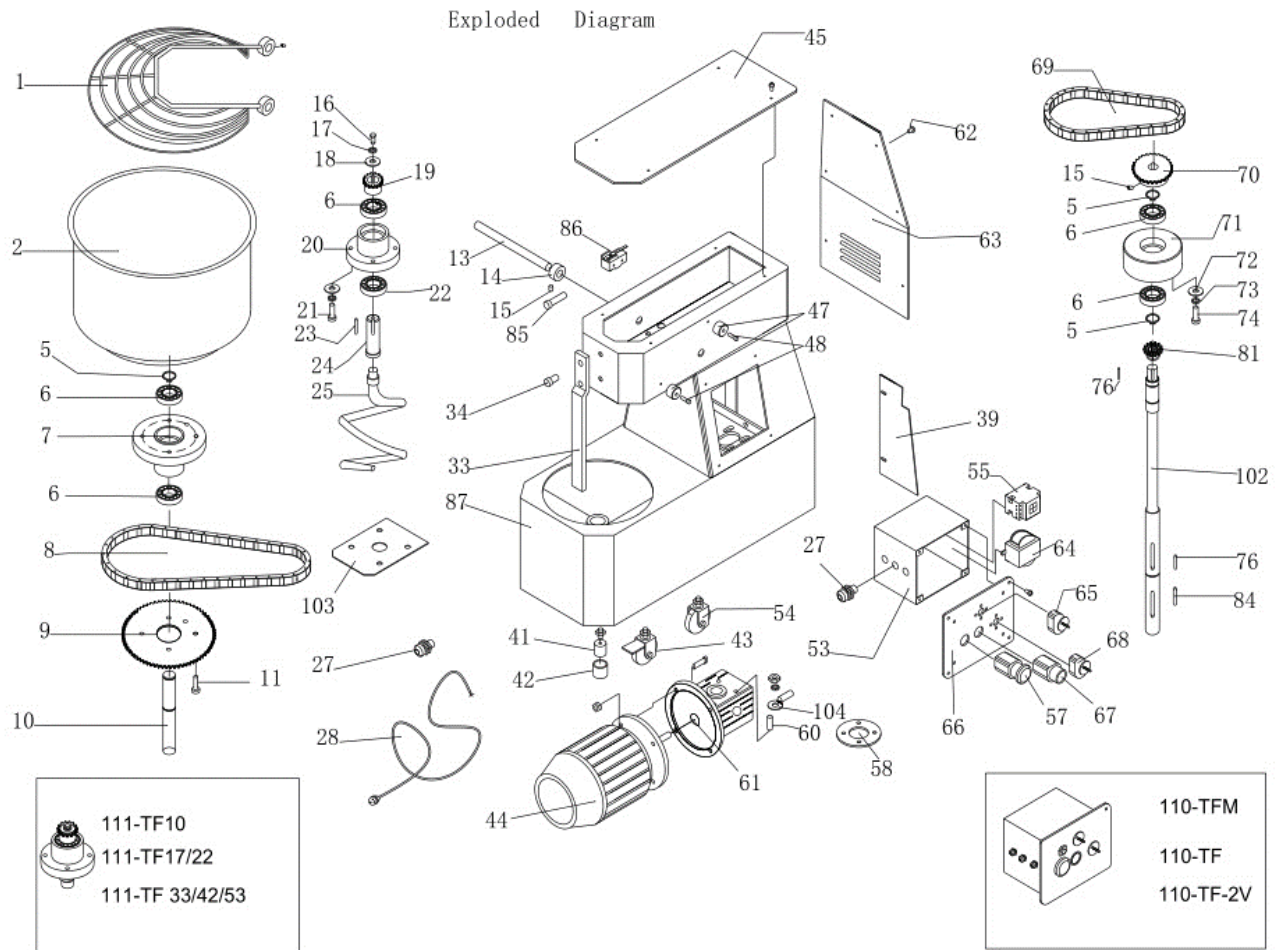


### PK 50-2V



- SS = Micro switch
- M = Motor
- QS = Main switch
- T = Transformer
- KM = Connection
- PT = Timer
- SB1 = Start button
- SB2 = Stop button

**EXPLODED VIEW DRAWING**



## EXPLODED VIEW DRAWING – LEGEND

1	Guard grille PK 25	Schutzgitter PK 25
2	Bowl / mixing bowl PK 25	Kessel / Rührschüssel PK 25
5	Retaining ring	Seegerring
6	Ball bearing 6205 ZZ	Kugellager 6205 ZZ
7	Bearing block for bowl mount	Lagerblock f.Kesselaufnahme
8	Bottom chain for bowl drive	Kette unten f.Kesselantrieb
9	Sprocket Z72 for bowl drive PK 25	Kettenrad Z72 f.Kesselantrieb PK 25
10	Axle pin for bowl drive	Achsbolzen f.Kesselantrieb
11	Screw for bowl fastening	Schraube f. Kesselbefestigung
13	Guard grille shaft	Schutzgitterachse
14	Switch ring for safety switch	Schaltring f.Sicherheitsschalter
15	Grub screw M8x10	Madenschraube M8x10
16	Screw M8x25	Schraube M8x25
17	Spring washer M8	Federring M8
18	Washer M8	U-Scheibe M8
19	Gear Z15 on dough hook PK 25	Zahnrad Z15 am Knethaken PK 25
20	Bearing block for dough hook PK 25	Lagerblock f.Knethaken PK 25
21	Screw M8x30, spring washer, washer	Schraube M8x30,Federring,U-Scheibe
22	Ball bearing 6205 ZZ	Kugellager 6205 ZZ
23	Key 6x6x20	Achскеil 6x6x20
24	Dough hook mount PK 25	Knethakenaufnahme PK 25
25	Dough hook PK 25	Knethaken PK 25
27	Strain relief	Zugentlastung
28	Power supply cable	Zuleitung
33	Dough breaker PK 25	Teigbrecher PK 25
34	Screw M10x25	Schraube M10x25
39	Finger guard	Fingerschutz
41	Foot bolt	Fußbolzen
42	Rubber foot	Gummifuß
43	Swivel caster with brake	Gelenkrolle m.Bremse
44	Motor PK 25	Motor Pk 25
45	Lid	Deckel
47	Guard grille stop	Schutzgitteranschlag
48	Stop fastening screws	Anschlagbefestigungsschrauben
53	Control box housing	Schaltkasten-Gehäuse
54	Swivel caster without brake	Gelenkrolle o.Bremse
55	Contactora	Schalterschütz
57	Emergency stop switch	Not-Ausschalter
58	Compensation ring for gearbox mounting	Ausgleichsring zur Getriebebefestigung
60	Stud bolt, washer, spring washer, nut	Gewindebolzen.U-Scheibe,Federring,Mutter
61	Gearbox PK 25	Getriebe PK 25
62	Screw M5x8	Schraube M5x 8
63	Rear panel	Rückwand
64	Transformer PK 25 / 50	Trafo PK 25 / 50
65	Main switch PK 25 / 50	Hauptschalter PK 25 / 50
66	Control panel / mounting plate	Bedienblende / Montageplatte

67	Start button PK 25 / 50	Starttaste PK 25 / 50
68	Timer PK 25 / 50	Timer PK 25 / 50
69	Top chain for hook drive PK 25	Kette oben f.Hakenantrieb PK 25
70	Gear Z29 top for hook drive	Zahnrad Z29 oben f.Hakenantrieb
71	Bearing block drive shaft PK 25 / 50	Lagerblock Antriebsachse PK 25 / 50
72	Washer M10	U-Scheibe M10
73	Spring washer M10	Federring M10
74	Screw M10x25	Schraube M10x25
76	Key	Achskeil
81	Gear Z16 bottom for bowl drive	Zahnrad Z16 unten f.Kesselantrieb
84	Key 6x6x20	Achskeil 6x6x20
85	Allen screw M8x60	Inbusschraube M8x 60
86	Safety switch / limit switch	Sicherheitsschalter / Endschalter
87	Housing	Gehäuse
102	Drive shaft PK 25	Antriebswelle PK 25
103	Cover / bearing housing	Abdeckung / Lagerschutz



## PACKAGING DISPOSAL



Please separate the packaging materials accordingly and take them to the appropriate collection points for recycling and environmental protection.

## DEVICE DISPOSAL



Once the appliance has reached the end of its life, please dispose of it properly at a designated collection point for electrical devices.  
Electrical appliances do not belong in household waste.  
Your local authority can provide information on the locations and opening hours of disposal sites.  
This is the only way to ensure that old appliances are disposed of and recycled correctly.  
Thank you!

**Made in P.R.C for:**