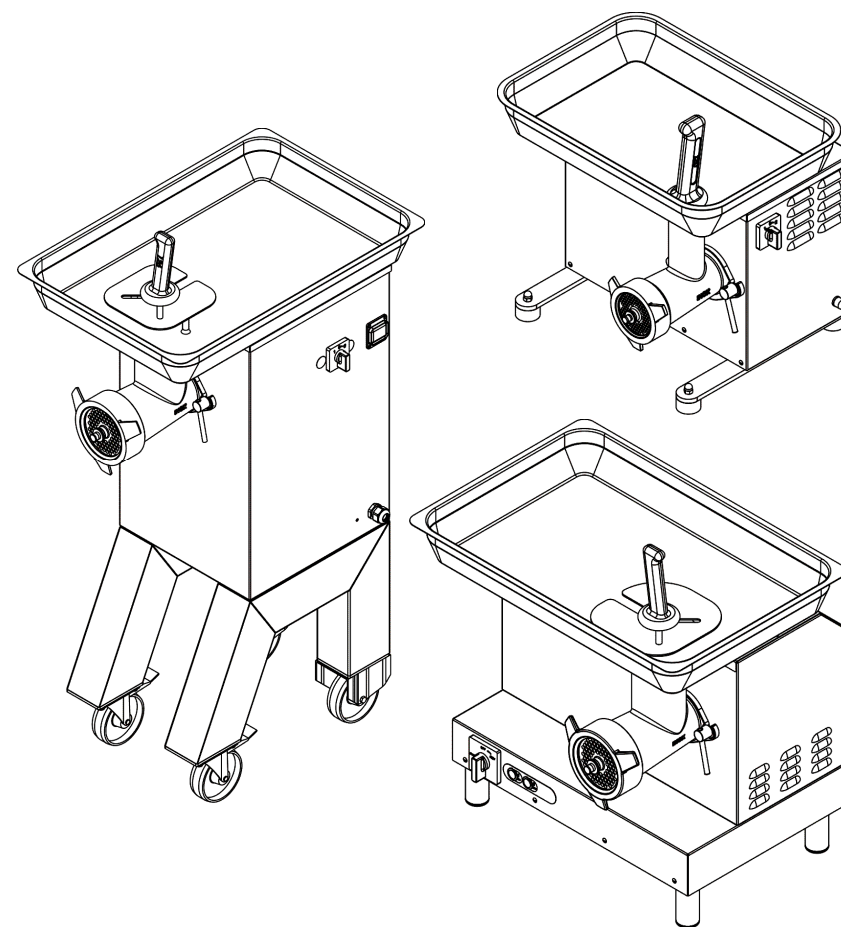


TC 22 UL
TC 32 UL

MINCER



**AUTHORISED
DEALER**

Ed. 05/2022

USER AND MAINTENANCE MANUAL

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8.1 - Malfunctions: causes and remedies

Malfunctions

- 1 The machine does not start.
- 2 The rotor turns in the opposite direction to that indicated by the arrow (three-phase model).
- 3 The product is not minced correctly.

Causes

- 1 The residual current circuit breaker is set to "0".
 - 1 The plug switch is set to "0".
 - 1 The thermal cut-out has activated.
 - 1 The start button does not work.
 - 1 Check that all the safety devices are mounted and present.
-
- 2 Invert the live wire on the plug – refer to Paragraph 4.4.
-
- 3 The plate and knife are not properly tightened.
 - 3 There are scratches on the plate or knife not perfectly attached (on the plate bed).
 - 3 Loose ring nut.

Remedies

- 1 Shift the switch to "I".
 - 1 Shift the switch to "I".
 - 1 Press and/or shift the safety device to "I".
 - 1 Contact the technical assistance service.
 - 1 Check the safety devices.
-
- 2 Contact the technical assistance service.
-
- 3 Tighten the plate and knife properly.
 - 3 Replace the defective plate and knife set.
 - 3 Tighten the ring nut properly.

7 - Maintenance

7.1 - Safety instructions

WARNING!

Maintenance and cleaning must always be carried out with the machine at a standstill and disconnected from the mains power supply.

Always keep the maintenance zone clean and dry.

Do not allow unauthorised persons to intervene on the machine.

Any parts and tools must be replaced using original spare parts at authorised workshops, or directly by the manufacturer.

7.2 - Lubrication

The machine does not require any lubrication.

7.3 - Cleaning the machine

WARNING!

Disconnect the machine from the power line before cleaning it.

Do not clean the machine using a water jet.

Only use non-toxic detergents specifically formulated for cleaning components used with foodstuffs.

The plates and knives are made of AISI 430 grade steel, therefore rust may form if they are left immersed or wet.

We suggest drying them after they are washed.

5.4.3 *Machine jog reversal TC 32 Banco*

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6. Using the machine

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8.1 *Malfunctions: causes and remedies*

1 - Delivery and warranty

1.1 - Foreword

WARNING!

The symbols used in this manual draw the reader's attention to points and operations that are hazardous to the operator's personal safety or that risk damaging the machine. Do not use the machine unless you have read and properly understood these notes.

WARNING!

For reasons of clarity, some of the illustrations appearing in this manual represent the machine or parts of the latter with its panels or guards removed.

Never use the machine in this condition; only use it when it is fully equipped with the guards and in good working order.

The manufacturer forbids the reproduction, even partial, of this manual or the use of its contents for purposes other than those expressly allowed.

Any breach in this regard shall be punishable by law.

1.2 - Storing and using this manual

This manual uses text and illustrations to familiarise users with the machine and explain the instructions and essential criteria for its transport, handling, use and maintenance. Read this manual carefully before using the machine.

Store this manual with care near the machine so that it can be readily available for future reference.

If the manual is lost or damaged, you can request a copy from your dealer or directly from the manufacturer.

If the machine is transferred to a new owner, the latter's identification and contact details must be notified to the manufacturer.

The manual reflects the state of knowledge at the time of sale of the machine, and cannot be considered inadequate in the light of more recent experience and updates.

The manufacturer reserves the right to update the products and manuals without being obliged to update previous products and manuals, except in exceptional circumstances.

In case of doubt, contact your local service centre or the manufacturer.

The manufacturer is committed to continuously improving its products.

For this reason, the manufacturer welcomes any reports or proposals geared towards improving the machine and/or the manual. The machine is delivered to the customer with the warranty conditions applicable at the time of sale.

Please contact your dealer for any further information.

1.3 - Warranty

The user is not authorised to tamper with the machine in any way. Contact the manufacturer if you encounter any anomalies.

Any attempt to dismantle, modify or tamper with any part of the machine by the user or unauthorised personnel will immediately void the manufacturer of any liability for damages deriving from such action.

The manufacturer is also relieved of all liability for the consequences of:

- incorrect installation;
- improper use of the machine by inadequately trained personnel;
- use of the machine in breach of local regulations;

6 - Using the machine

6.1 - Safety instructions

WARNING!

Only authorised personnel may intervene on the machine.

Before using the machine, the operator must ensure that all guards are in place and that the safety devices are present and working efficiently.

If this is not the case, switch the machine off and contact the maintenance supervisor.

The product to be minced must fit into the loading mouth and must be pressed down with the aid of the pusher (pestle). **NEVER PUSH THE PRODUCT WITH YOUR HANDS.**

6.2 - Configuring the extrusion mouth

The machine can be configured with three different meat cutting sets:

A - Enterprise or normal

B - UNGER partial

C - UNGER total

- System C (UNGER total) is made up of: one rotor "1" for feeding the meat, one mincing plate "2", a first knife "3" and relative perforated plate "4", a second knife "5" with the final perforated plate "6", one spacer "7".

- System B (UNGER partial) replaces the knife "5" and the plate "4" with the spacer "7".

- System A (Normal) is the simplest method as it only comprises the feeding rotor, a knife and an extrusion plate.

It is not possible to mount plates belonging to sets C or B on models with mincing set A, but the entire set must be changed.

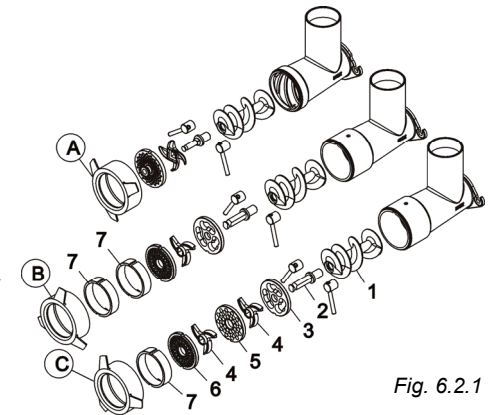


Fig. 6.2.1

6.3 - Using the mincer

- 1 Verify that the supply voltage matches the value shown on the rating plate. The voltage indicator must be switched on to indicate the connection to the mains power supply.
- 2 Slightly tighten the mincer's ring nut then add some meat and press the run button, making sure that the machine rotates in the same direction indicated by the arrow (anti-clockwise).
- 3 If the meat leaving the machine is well cut, the ring nut is properly adjusted; if not, tighten it further until obtaining perfectly cut meat.
- 4 Stop the machine by pressing the stop button.
- 5 No tool is required to loosen the ring nut; simply loosen the mouth locking nuts to free the ring nut so that it can be easily removed.
- 6 After thoroughly cleaning the machine, mount the mouth while making sure that it is properly positioned then lock it with the locking nuts.
- 7 It is now possible to mount the rotor, knife, plate and ring nut.

5.3 - Verify, start, reverse and stop the machine on TC 22 e TC 32 Pavimento

5.3.1 - Verification of the efficiency of the emergency stop button (Figs. 5.3.1 - 5.3.2)

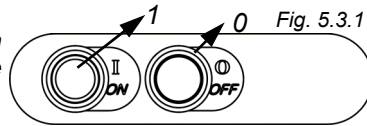
With the machine connected to the mains electricity and the tools moving:

- Press the stop button "0", Fig. 5.3.1; The machine must stop.
- Alternatively, switch the button to position "0", Fig. 5.3.2. The machine must stop.

5.3.2 - Machine start-up (Figs. 5.3.1 - 5.3.2)

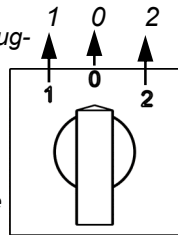
STAINLESS STEEL BUTTONS

To start the machine, simply press the run button "1" (Fig. 5.3.1), after plugging the cord properly into the power socket, and the machine will start.



SWITCH

To start the machine, simply switch the button to "1" (Fig. 5.3.2), after plugging the cord properly into the power socket, and the machine will start.



5.3.3 - Machine shutdown (Figs. 5.3.1 - 5.3.2)

STAINLESS STEEL BUTTONS

To stop the machine, simply press the stop button "0" (Fig. 5.3.1) and the machine will stop.

SWITCH

To stop the machine, simply switch the button to "0" (Fig. 5.3.2) and the machine will stop.

5.4 - Verify, start, reverse and stop the machine on TC 32 Banco

5.4.1 - Verification of the efficiency of the emergency stop button TC 32 Banco (fig. 3.2.1)

With the machine connected to the electricity and the accessory tool moving, press the stop button (5). The machine must stop.

5.4.2 - Machine start-up TC 32 Banco (Fig. 3.2.1)

To start the machine, press the button (4) and turn the switch to meat grinding mode (1) Fig. 3.2.1 after having correctly plugged the cable into the power socket: the machine will start. If the switch is set to OFF the machine will not start.

5.4.3 - Machine jog reversal TC 32 Banco (Fig. 3.2.1)

To reverse the meat grinder screw in jog mode, simply press the button (4) and keep the switch turned with one hand towards the reversal position (2) Fig. 3.2.1 after having correctly plugged the cable into the power socket: the machine will start. If the switch is set to OFF the machine will not start.

5.4.4 - Machine shutdown TC 32 Banco (Fig. 3.2.1)

To stop the machine, press the stop button "5" Fig. 3.2.1.

- lack of or negligent maintenance;
- use of non-original spare parts, not specified for the model in question;
- total or partial failure to follow the instructions.

1.4 - Machine description

The mincer you have purchased is a straightforward, compact machine guaranteeing powerful operation and high performances.

- Since it must be used to mince food products, all components that can come into contact with the product have been carefully chosen to guarantee the utmost hygiene. The casing is made of stainless steel.
- The hopper is made of stainless steel to guarantee maximum hygiene and facilitate cleaning operations.
- The tools are made of stainless steel to ensure longer durability and maximum hygiene.
- Sturdy machines with modern lines, made of aluminium alloy and with stainless steel body.
- Die-cast stainless steel extrusion mouths with the possibility of mounting the full or partial UNGER system.
- The rotation direction of the worm can be switched by means of a selector.
- Rigid locking of the mouth to improve meat cutting and extend the service life of mincing plates and cross knives.
- Three-phase and single-phase ventilated motors offering the following advantages:
 - extremely constant performance and motor duration;
 - longer actual work time thanks to fewer interruptions;
 - low level of heating so that the meat stays constantly fresh and unaltered.

The models appearing in this manual are manufactured in conformity to the **UL 763, CSA C22.2, NSF8 standards** and subsequent amendments.

If any accident occurs, the manufacturer shall not be held liable if the machine has been modified, tampered with, had its safety guards removed or is used for purposes other than the intended use specified by the manufacturer.

1.5 - Intended use

The machine is designed and built to mince meat and similar products.

It must be used in a professional setting by qualified operators who have read and understood this manual. Use the machine exclusively when it is securely placed on a solid worktable.

The meat must not be too large so that it does not fit completely into the loading mouth; it must not come out of the hopper.

1.6 - Improper use

The machine must only be used for its intended purposes; in particular:

- **Do not** use the machine for mincing food products other than meat and similar.
- **Do not** use the machine unless it has been properly installed with all its guards in good working order and correctly fitted, to prevent the risk of serious injury.
- **Do not** access any of the electrical components without having first disconnected the machine from the mains power supply: **risk of electric shock.**
- Do not process products that are too large to be fully contained in the loading hopper.
- Do not wear clothing that fails to comply with the accident-prevention regulations. Consult your employer for information on the applicable safety regulations and personal

protective equipment to be worn.

- **Do not** start the machine when it malfunctions.
- Before using the machine, make sure that any potentially hazardous conditions have been adequately eliminated. If you notice anything unusual in its operation, shut down the machine and inform the maintenance supervisors.
- **Do not** allow unauthorised personnel to intervene on the machine.

In case of injury caused by electric shock, the first thing to do is to detach the injured person from live conductors (as the person will probably be unconscious).

his operation is highly dangerous.

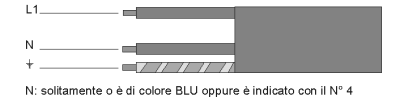
The injured person in this situation is a conductor: touching him/her would give you an electric shock.

It is advisable to disconnect the contacts directly from the line's power supply valve; should this not be possible, move the victim away using insulating material (wooden or PVC sticks, fabric, leather, etc.). First-aid medical assistance should be requested promptly and the injured person should be taken to hospital.

supply line by installing a 16 A residual current circuit breaker in between.

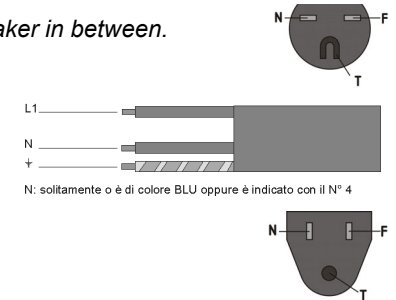
4.4.2 - 230 V-60 Hz single-phase machine

In this configuration, the machine is supplied with a power cord with 3 x 14 AWG gauge. This cord is connected to a single-phase plug with three pins. Attach the cord to the 230 V-60 Hz single-phase power supply line by installing a 16 A residual current circuit breaker in between.



4.4.3 - 120 V-60 Hz single-phase machine

In this configuration, the machine is supplied with a power cord with 3 x 14 AWG gauge. This cord is connected to a single-phase plug with three pins. Attach the cord to the 120 V-60 Hz single-phase power supply line by installing a 16 A residual current circuit breaker in between.



Consult the manufacturer for configurations differing from those mentioned above. If the power cord must be extended, use a cord of the same gauge as the original cord installed by the manufacturer.

5 - Start-up and shutdown

5.1 - Verification of the correct electrical connection

Plug the cord into the power socket;

Press the run button ("1", Fig. 3.1.1), while checking the rotation direction of the tools (in the three-phase version).

The rotation direction of the rotor must match the direction shown by the arrow ("C", Fig. 1.7.2) – anti-clockwise.

If it turns in the opposite direction, disconnect the machine from the power supply and contact our nearest dealer.

Note:

In machines connected to a single-phase line and specifically designed for this system, the rotation direction will be defined directly by the manufacturer.

5.2 - Verification of the presence and efficiency of guards and safety devices

1 - Extruding mouth.

Check that the holes in the extruding mouth have a diameter below 8 mm.

2 - Hand protection device.

The hopper must have the hand protection device fitted.

3 - Stainless steel hopper.

The stainless steel hopper is joined to the loading mouth.

4 - Factory testing, shipping, delivery and installation

4.1 - Factory testing

The machine you have purchased has been tested at our plants to verify its correct operation and proper adjustment. The tests were conducted using materials similar to those processed by the user.

4.2 - Delivery and handling

All shipped material is carefully checked prior to being handed over to the shipping agent. Unless otherwise agreed with the customer, the machine is wrapped in nylon and strapped to the pallet. It is then covered with cardboard, which is also strapped to the pallet. When you receive the machine, check the condition of its packaging. If you notice any damages to the packaging, sign the delivery note with the following wording: "Goods accepted with reservation..." and the reason.

If you notice any damage to the machine's components after opening the package, report it to the shipping agent within three days from the date shown on the documents.

4.3 - Installation

WARNING!

The installation zone must be level and solid, while the surface on which the machine rests must provide stable and safe support. Moreover, the machine must be placed where there is ample space around it. This will ensure greater manoeuvrability during the work phases and easy access on subsequent maintenance operations. Provide adequate lighting around the machine to ensure good visibility for the operator using it.

- Remove the cellophane wrapping and any other packaging.

4.3.1 - Disposal of packaging

The packaging materials (cardboard, nylon, wood, etc.) can be regarded as solid urban waste. As a result, they can be disposed of freely. Nylon is a polluting substance that releases toxic fumes when burnt. Do not burn or dump it, but dispose of it according to the law. If the machine is delivered to a country where special regulations apply, dispose of the packaging accordingly.

4.3.2 - Handling the machine

WARNING!

Take care when handling the machine: dropping it accidentally can seriously damage it. To avoid muscle injuries, lift the machine by flexing your legs.

4.4 - Electrical connections

WARNING!

Check that the power supply line has the same specifications as those reported on the machine's rating plate. Every intervention must be carried out solely by specialised personnel expressly authorised by the relevant supervisor. Make the connection to a power line equipped with an efficient earthing socket.

4.4.1 - 230 V-60 Hz three-phase machine

In these configurations, the machine is supplied with a power cord with 4 x 16 AWG gauge.

This cord is connected to a three-phase plug with three pins + earth. Attach the cord to the three-phase power



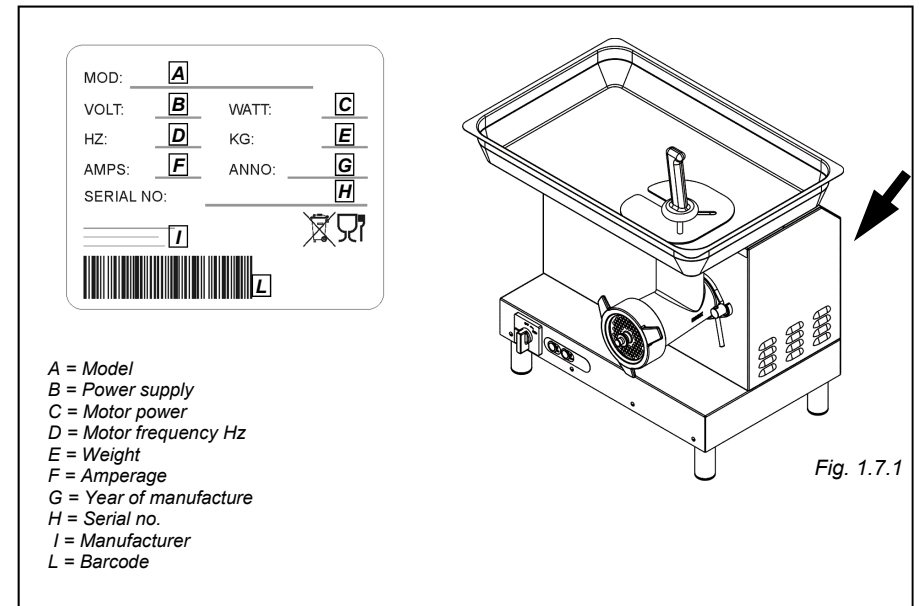
1.7 - Specific equipment details

Citing the "Model", "Serial number" and "year of manufacture" of the machine will help our technical assistance service to respond to your requests rapidly and effectively. We recommend citing the model of the machine and its serial number whenever you contact the technical assistance service.

This information appears on the rating plate shown in Fig. 1.7.1.

As a reminder, we suggest writing the data of the machine you have purchased in the table below:

Meat grinder model
Serial number.....
Year built
Type.....



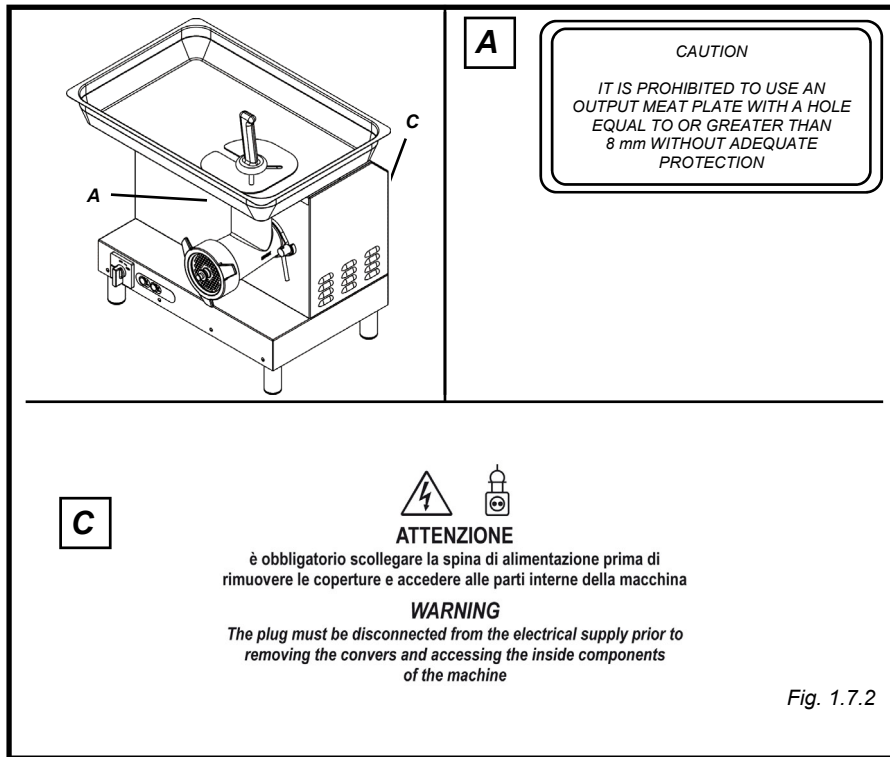
WARNING!

Do not alter the data on the plate for any reason.

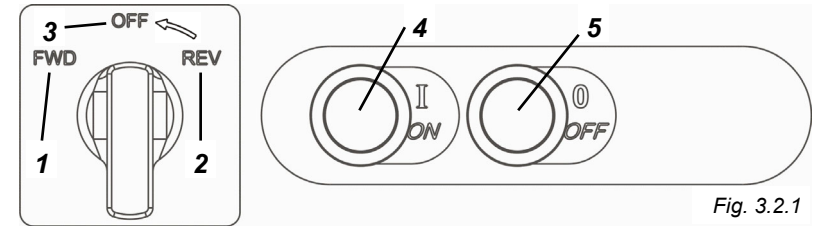
1.7.1 - Warning and danger signs (Fig. 1.7.2)

WARNING!

Do not intervene on the electrical components when the machine is connected to the mains power supply. You risk getting an electric shock. **Observe the warnings signalled by the signs. Failure to do so could lead to personal injury.** Make sure that the signs are always present and legible. If they are not, apply or replace them.



3.2 - List of controls and indicators (TC 32 BANCO)



1 - Switch positioned to meat grinding mode (FWD)

This position sets the machine to meat grinding mode; the screw rotates clockwise and conveys the product towards the knife and plate for being minced.

Switch to this position only after pressing button REF. 4.

2 - Switch turned to jog mode reversal position (REV)

While keeping the switch locked in this position with the hand, the screw turns anti-clockwise and releases the worm from any grinding residues.

Switch to this position only after pressing button REF. 4.

3 - Switch positioned to motor switch off mode (OFF)

In this position, the motor switches off and the machine stops

CAUTION: The electricity line is still active

4 - "ON" button

This button must be pressed to power the machine.

If the switch is set to OFF the machine will not start.

5 - Stop button

Stop the machine completely by removing the power supply.

CAUTION!

the machine is equipped with a forced ventilation system (fan) controlled by a bimetallic switch connected to the motor. When the motor reaches 60 C, the fan starts autonomously and continues operating until the motor temperature drops down to 40°C.

3 - Controls and indicators

3.1 - List of controls and indicators (TC 22 e TC 32 PAVIMENTO)

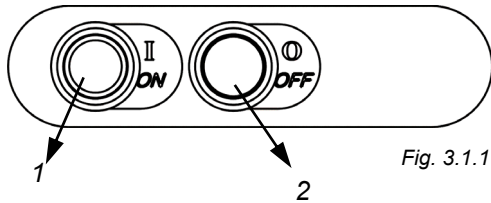


Fig. 3.1.1

- 1 Run button**
Press to start the machine.
- 2 Stop button**
Press to stop the machine.

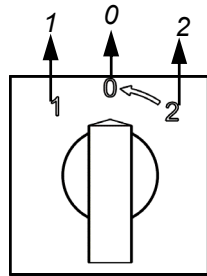


Fig. 3.1.2

- 0 Stop position**
The machine is off.
- 1 Run position**
Switch to 1 to start the machine.
- 2 Jog mode inversion position**
Switch to 2 to invert the direction of rotation of the pulse worm.

1.8 - Guards and safety devices

WARNING!

Before using the machine, make sure that its safety devices are properly positioned and in good working order.

Check that they are present and work properly at the start of each shift. If not, notify the maintenance supervisor.

1. Extrusion mouth of the product, with 8 mm holes on the lower mincing plate. This prevents users from introducing their fingers inside the mouth.
2. Stainless steel hopper rigidly secured to the loading mouth.

3. Mouth locking nut.

For the meat mincer to work properly, the mouth must be tightly fastened with this element.

4. Hand protection device. In the model shown, the hopper has protection "2" (Fig. 1.8.1) rigidly secured, in accordance with Circular Letter no. 66 of the (Italian) Ministry of Labour and Social Security dated 5 September 1979.

The smaller models do not need this protection due to the small size of their loading mouth.

5. Thermal cut-out. It intervenes when the current draw of the motor exceeds 15 amperes.
6. Sensor detecting the presence of the hopper. Model TC 32 with removable hopper mounts a sensor that detects the presence of the hopper.

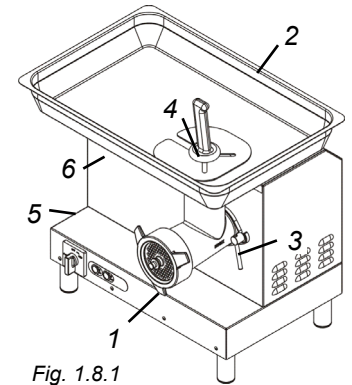


Fig. 1.8.1

1.8.1 - Locking the extrusion mouth (TC 22 - 32)

Correct use:

To operate the machine correctly and obtain precise mincing, all mincers must have the mouth rigidly locked.

It is important to observe the following procedure to prevent imprecise assembly:

1. Insert the mouth, make sure that it is in the correct position and lock it with the locking nuts.
2. Insert the mincing worm.
3. Insert the cross knife and mincing plate.
4. Check that the cross knife is mounted with the blade facing the mincing plate.
5. Screw on the ring nut and tighten it slightly.

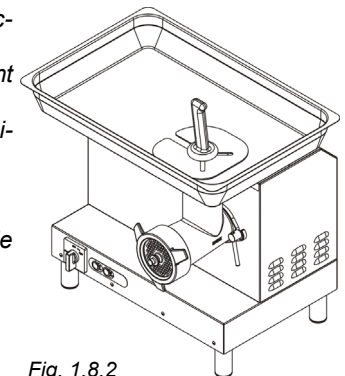


Fig. 1.8.2

1.9 - Work position

To optimise work with the mincer, the operator should assume the position shown in Fig. 1.9.1.

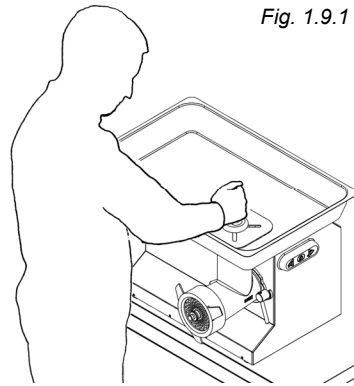


Fig. 1.9.1

2 - Technical specifications

2.1 - Main parts

To aid comprehension of the manual, the main components of the machine are listed below and shown in Fig. 2.1.1.

1. Pestle
2. Casing
3. Machine controls
4. Feet
5. Extruding mouth of the minced meat
6. Loading hopper
7. Loading mouth

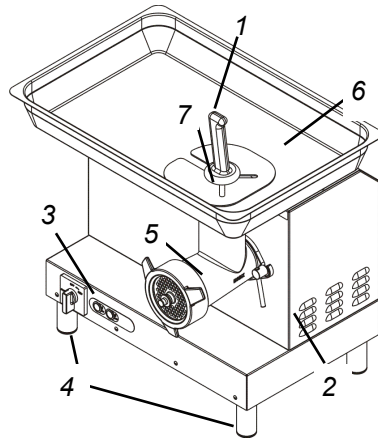
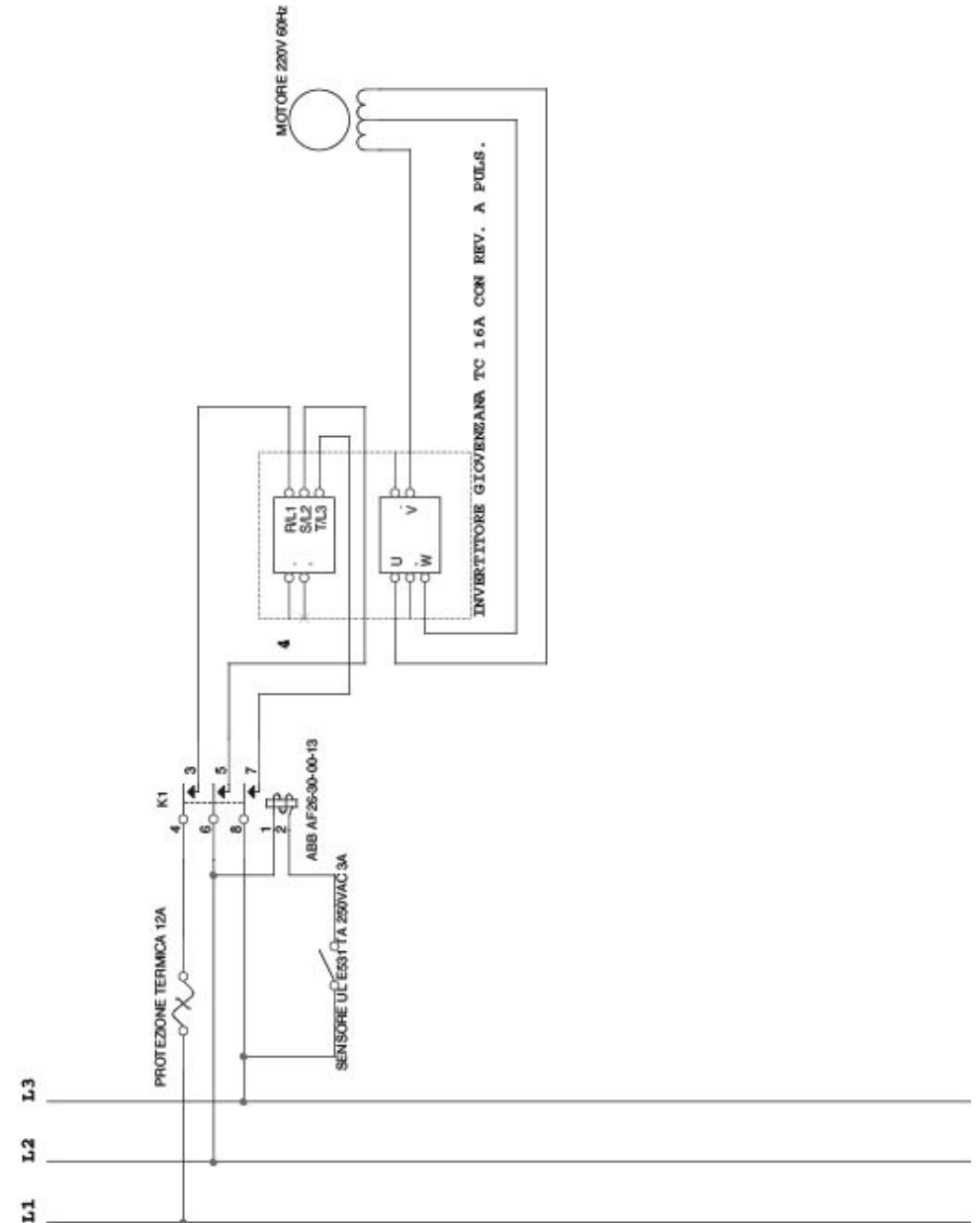
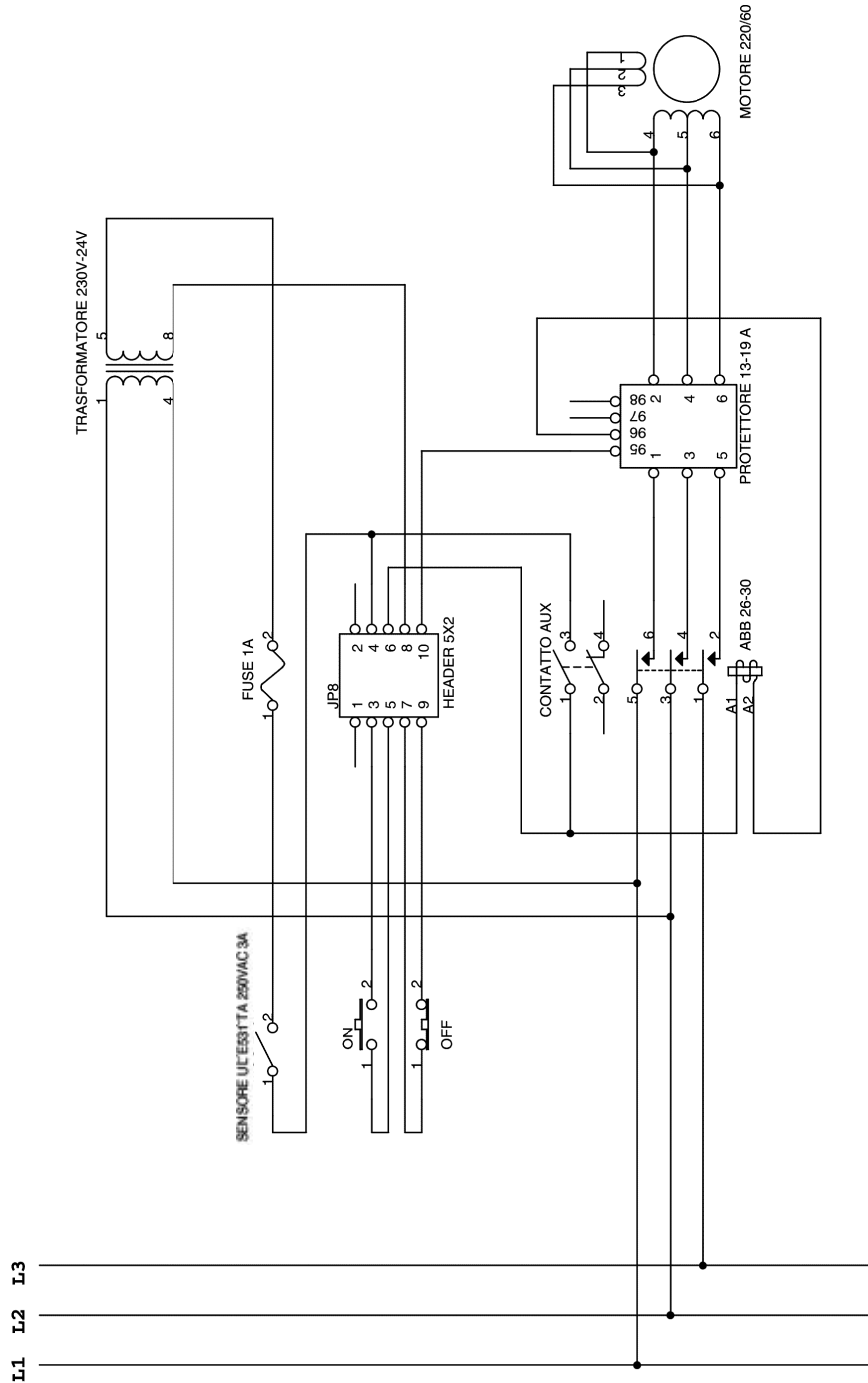


Fig. 2.1.1

2.4.4 - TC 32 USA 230/60 THREE-PHASE inverter



2.4.3 - TC 32 USA 230/60 THREE-PHASE stainless steel buttons



2.2 - Technical specifications

	Motor	Power source	Output	Standard plate
	watt/hp		kg/h.	ø mm
TC 22 BANCO	1050/1,5	120V/60Hz	300	4,5
TC 32 BANCO	1870/2,5	230V/60Hz	500	4,5
TC 32 PAVIMENTO	900/1,2	230V/60Hz TF	500	4,5

2.3 - Machine dimensions and weight

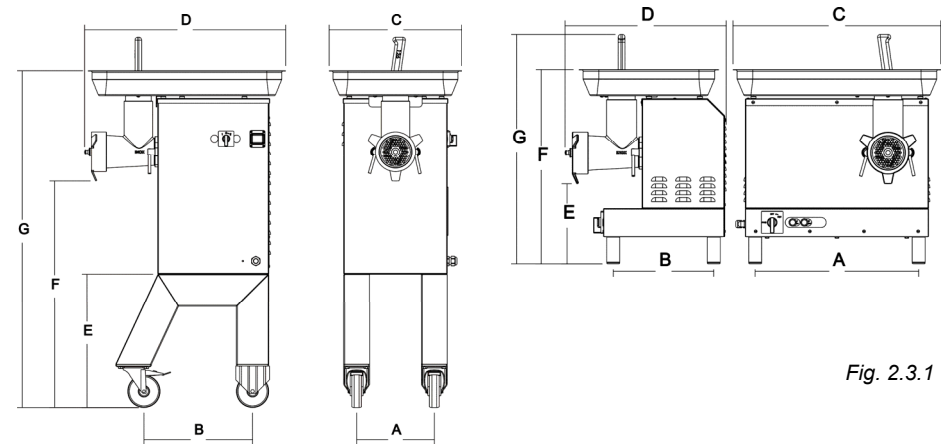
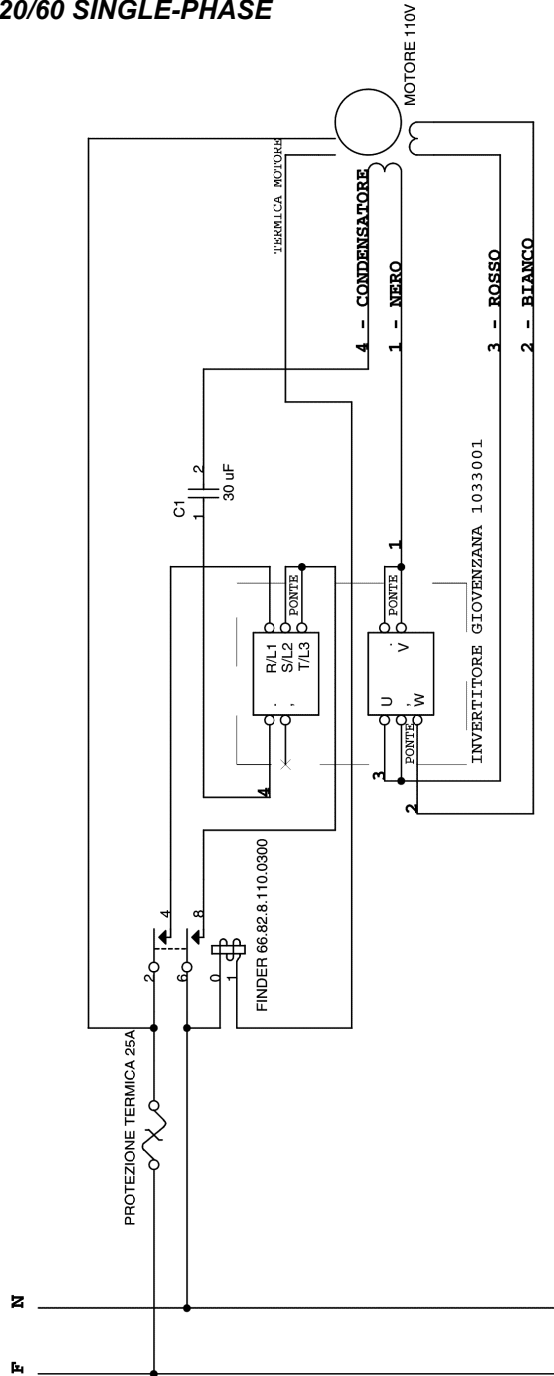


Fig. 2.3.1

	A	B	C	D	E	F	G	Net weight
	mm	mm	mm	mm	mm	mm	mm	kg
TC22 BANCO	367	330	500	456	120	430	510	32
TC32 BANCO	480	295	610	473	234	570	673	38
TC32 PAVIMENTO	240	335	410	620	412	700	1146	51

2.4 - Wiring diagrams

2.4.1 - TC 22 - 120/60 SINGLE-PHASE



2.4.2 - TC 32 BANCO 230/60 SINGLE-PHASE

