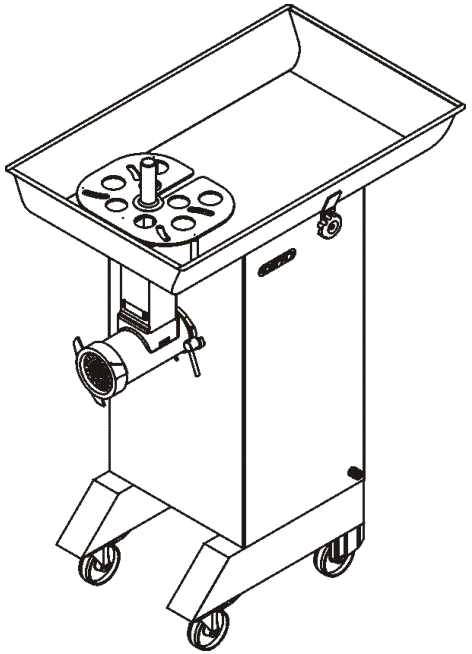
AUTHORISED DEALER

TC_32-42_IND Ed. 10.2017

TC 32 Hp 4
TC 42 Hp 5
TC 42 Hp 7

INDUSTRIAL MINCER



USE AND MAINTENANCE MANUAL

8 - Troubleshooting

8.1 - Problems, causes, solutions

Problems	Causes	Solutions
- The machine does not start	- The differential switch is on position “0”. - The outlet switch is on position "0" - The push-button “on” does not work. - The machine is not correctly installed with all protections and safety devices efficient and correctly fitted	- Turn the switch to position “I” - Turn the switch to position “I” - Call the technical service centre - Control all protections and safety devices
- The screw propeller does not turn in the sense indicated by the arrow (on three-phases model)	- The motor wires are inverted	- Call the technical service centre (dealer).
- The product is not minced correctly	- The plate and the knife are not tightened correctly - There is some rust on the plate and knife, they do not stick perfectly to each other (on the surface of the plate) - The feed opening is not installed correctly	- Tighten correctly the plates and knife - Replace the faulty plate and knife - Fix correctly the feeding opening

Index

English

6.3 - Use of the mincer

1 Make sure the feeding tension corresponds to the value reported on technical plate.
2 Lightly tighten the ring nut on the meatgrinder and put in a little meat, press the start pushbutton, making sure that the rotation direction of the propeller is counter-clockwise.
3 If the meat coming out is cut well then the nut has been sufficiently regulated; on the contrary, tighten the nut some more until reaching the perfect cut of the meat.
4 Stop the machine by pushing the stop pushbutton.
5 Remove collar ring. This operation does not require the use of additional tools (just your hands). Unscrew nuts
6 After thoroughly cleaning, first assemble the mouth and block it; these operations are necessary to assure that the machine runs correctly.
7 Now the propeller, the blade, the plate, and the nut can be reassembled.

7 - Maintenance

WARNINGS!
Any maintenance or cleaning operation of the mincer must be performed only if the machine is disconnected from the power supply.
The area where you perform maintenance operations must always be clean and dry.
Do not let unauthorised personnel to intervene on the machine.
Any parts, including the tool must be substituted by original spare parts.

7.1 - Lubrication

The machine does not require any lubrication.

7.2 - Cleaning of the machine

WARNINGS!
Before cleaning the machine, disconnect it from the power supply.
Never clean the machine with a water jet.
It is compulsory to use atoxic detergents, in respect with food hygiene regulations.

English

6 - Use of the machine

6.1 - Prescriptions

WARNINGS!

Only the authorized personnel can intervene on the machine.

Before using the machine, the operator must check that all the protections and safety devices are correctly installed and working. Otherwise stop the machine and call the person in charge of the maintenance.

The shape and volume of the product must be adequate to enter in the feeding opening, it must be pushed inside by means of the pestle ***NEVER DO IT WITH YOUR HANDS.***

6.2 - Installation of the exit opening and pestle.

The machine can be set up in three different meat-cutting groups:

A - Enterprise or normal

B - Half UNGER

C - Total UNGER

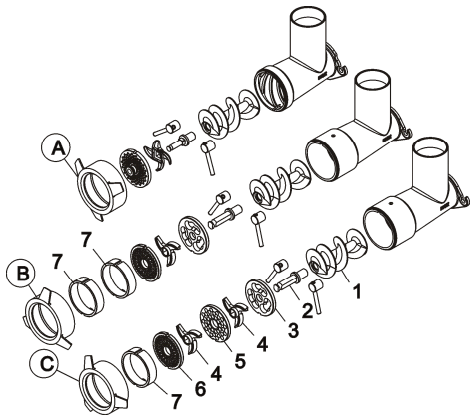
System -C- (**total UNGER**) consists of: a propeller "1" to transport the meet, a hammer mill plate "2", a first blade "3" and corresponding perforate plate "4", a second blade "5" with the final perforated plate "6", a spacer “7”

System -B- (**half UNGER**) replaces blade "5" and plate "4 with spacer "7".

System -A- (**Normal**) is the simplest method in that it is only composed of a transport propeller, a blade and an outlet plate.

It is not possible to assemble the plates from the groups -C- or -B- on models with grinding group -A-, instead the complete group must be changed.

Fig. 6.2.1



1 - Delivery and warranty

1.1 - Introduction

WARNINGS!

These symbols have been used to draw the reader’s attention to dangerous points and operations and to guarantee safety to the operator and the machine.

Do not use the machine if you have not understood the warnings completely

WARNINGS!

In some drawings of this manual the machine or parts of it are shown without the protective panels or casings in order to see the components better and to make it easier to understand.

Do not use the machine without all the necessary protections and carters correctly assembled.

It is prohibited to partially or fully reproduce the contents of this manual.

Any violation to copyright will lead to prosecution.

1.2 - Storage and use of this manual

This manual is meant to provide users with information and details about the transport, installation, use and maintenance of the machine. For this purpose, this manual has been provided with descriptions and drawings.

Before using the machine, carefully read this manual.

Keep this manual carefully and in an easy place to reach near the machine, to permit a quick consultation if necessary.

If the manual is damaged or lost, ask your dealer for a new copy or directly to the manufacturer.

In case the machine should be sold, inform the manufacturer with the new owner’s name and address.

The current specification of this manual corresponds to the present model, however, the manufacturer has the right to update its production and the relative manuals without updating former productions and manuals, except in specific cases.

In case of any doubts, address the nearest service centre or the manufacturer itself.

The manufacturer is continuously updating its product, therefore he will welcome any suggestions or ideas that could improve the machine or the manual.

The machine has been delivered to the user under the warranty conditions valid at the purchase. For any clarifications, consult your dealer.

English

1.3 - Warranty

For no reasons the user is authorized to tamper the machine. In case of any irregularity, he must call the manufacturer.
Any user or non authorized personnel that attempts to disassemble, modify or tamper any element of the machine will lead to the invalidity the warranty will be voided, in this case the manufacturer is not liable for eventual damages caused to people or things due to this tampering.

Furthermore, the manufacturer is not liable in the following cases:
- an incorrect installation;
- improper use of the machine by unskilled personnel;
- use of the machine not in accordance with the regulations of the country where it has been installed;
- insufficient or wrong maintenance;
- use of non original or specific spare parts;
- not following fully or partially instructions given.

1.4 - Description of the machine

This mincer is a simple, compact and highly performing machine.
- As it has to be used to mince foodstuff, the parts in contact with the product have been chosen to ensure the highest degree of hygiene. The structure is made of stainless steel.
- The hopper is made of polished stainless steel to ensure the highest degree of hygiene and to facilitate the cleaning.
- The tools are made of stainless steel to ensure high resistance and hygiene.
- The machine has a modern design, it is solid and made of aluminium with the structure made of stainless steel.
- The feed openings are stainless steel casting with the possibility to apply the total or partial UNGER system.
- The machine is equipped with a reverse rotation sense of the screw propeller by means of a selector .
- The feed opening lock is rigid to give a better cut and to increase the life of the plates and knives.
- The three-phases and single-phase motors are ventilated with the following advantages:
  - maximum efficiency and life of the motor;
  - increase of the working effectiveness due to less interruptions;
  - low heating level to keep meat fresh and unchanged.

1.5 - Use of the machine

The machine has been designed and manufactured to mince meat and foodstuff.
The mincer must be used in professional environment and the operators in charge of the machine must belong to this specific sector and he must have read and understood this manual. The machine must be used only if it is safely installed on a work table.
The pieces of meat must enter completely in the feed opening and they must not

5 - Start and stop

5.1 - Check the electrical connection

Connect the plug to the power supply;
Press the on push-button ("1" Fig. 3.1.1), and check the rotation sense of the tools (for the three-phase model 380). The rotation sense of the propeller screw must be anticlockwise. If the rotation sense is not correct, disconnect the machine from the power supply and call the after-sale service.
Note: *For the machines connected to a single-phase line, the rotation sense is set by the manufacturer.*

5.2 - Check the presence and efficiency of the protections and safety devices

1 - Product exit opening.
Check that the diameter of the holes of the product exit opening is smaller than 8 mm. If it is not, the user must install an adequate protection on the opening.
2 - Hands protection
The hopper must be equipped with hand protection.
3 - Stainless steel hopper.
The stainless steel hopper must be fixed correctly to the structure.

5.3 - Check the functioning of the stop push-button (fig. 5.3.1 - 5.3.2)

Connect the machine to the power supply and make it work:
- then press the stop push-button "0" Fig. 5.3.1. The machine has to stop.
- turn the switch to "0" position Fig. 5.3.2. The machine has to stop

5.4 - Start up of the machine (fig. 5.3.1 - 5.3.2)

STEEL CONTROLS
To start the machine, connect the plug in the power supply outlet and press push-button "on" "1" Fig. 5.3.1 and the machine starts

Fig. 5.3.1

SWITCH
To start the machine just turn the switch to "1" Fig. 5.3.2, after having correctly connected the plug to the electrical outlet and the machine will start.

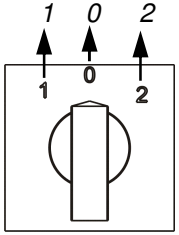


Fig. 5.3.2

5.5 - Stopping the machine (fig. 5.3.1 - 5.3.2)

PULSANTI INOX
To stop the machine, press stop push-button, "0" Fig. 5.3.1 and the machine stops.

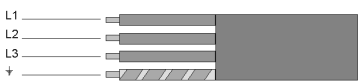
SWITCH
to stop the machine just turn the switch to "0" Fig.5.3.2 and the machine will stop.

English

4.4 - Electrical connection

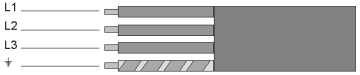
WARNINGS!
Check that the electrical power supply corresponds to the value indicated on the rating plate of the machine. All these interventions must be performed exclusively by skilled technicians authorized by the responsible.
Connect the machine to a line equipped with an efficient ground installation

4.4.1 - Three-phases machine 220 Volt-60Hz



The mincer is equipped with a power supply cord with section 4 x 16 AWG.
It is connected to a three-phase + earth plug.
Connect the cord to the three-phases power supply by interposing a differential-magnetothermic switch of 16 Ampere.

4.4.2 - Three-phases machine 380 Volt-60Hz



The mincer is equipped with a power supply cord with section 4 x 16 AWG.
It is connected to a three poles single-phase plug.
Connect the cord to the single-phase power supply by interposing a differential-magnetothermic switch of 16 Ampere.
For the installations with other voltages, consult the manufactuer.
If you need to lengthen the power supply cord, use a cord of the same section as the one provided by the manufacturer.

overflow the hopper.

1.6 - Improper uses

The machine must be used only for the specific purpose it has been manufactured for :
- **Do not** use the machine to mince foodstuff other than meat or similar products.
- **Do not** use the machine if all the safety devices are installed and function correctly to avoid any risk to be injured.
- **Do not** reach electrical elements if the machine has not been disconnected from the power supply: **there is a risk of electric shock**.
- **Do not** operate the machine with products that cannot completely enter the hopper.
- **Do not** wear clothes that do not respect safety regulation. Consult your employer to know the safety regulations in force and the accident prevention measures to adopt.
- **Do not** turn on the machine if it is broken.
- Before using the machine, make sure that any dangerous situations have been eliminated. If you notice any irregularity, immediately stop the machine and call the person responsible of the maintenance.
- **Do not** let unauthorised personnel intervene on the machine. If there is an accident due to electrical power supply, the first thing to do, is to remove the injured person from the conductor (he has probably lost his senses).
  This operation is dangerous. In this case the injured person is a conductor: to touch him means to be electrocuted.
  It is necessary to disconnect the machine from the power supply immediately, if this is not possible, remove the victim using insulating materials (wood or PVC, fabric, leather, etc.). It is necessary to call the medical assistance and hospitalise the patient immediately.

1.7 - Machine data

The description of the machine must be precise: "**Model**", "**Serial number**" and "**Manufacturing year**", this will make things easier for our service centre.
Communicate this data each time you contact this service.

Fill in the table of Fig. 1.7.1 with your machine data and use it as a memorandum:

Mincer model…….....
Serial number…….
Manufacturing year……...
Type……...

WARNINGS!
D*o not modify the indications of the rating plates.*

English

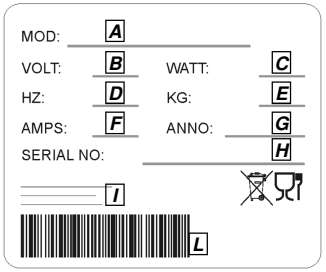


Fig. 1.7.1

A = machine model
B = motor frequency volt
C = motor power Watt
D = motor frequency Hz
E = machine weight kg
F = Ampere
G = month and year of production
H = serial number
I = manufacturer
L = Barcode

1.7.1 - Danger and warning plates (fig. 1.7.2)

WARNINGS!

Do not perform any intervention on the electric parts when the machine is connected to the power supply. There is a risk of electric shock.

Comply to the warning plates. The non respect of the warning plates can cause severe injuries.

Check that the warning plates are always installed and legible.

Otherwise install or replace them.

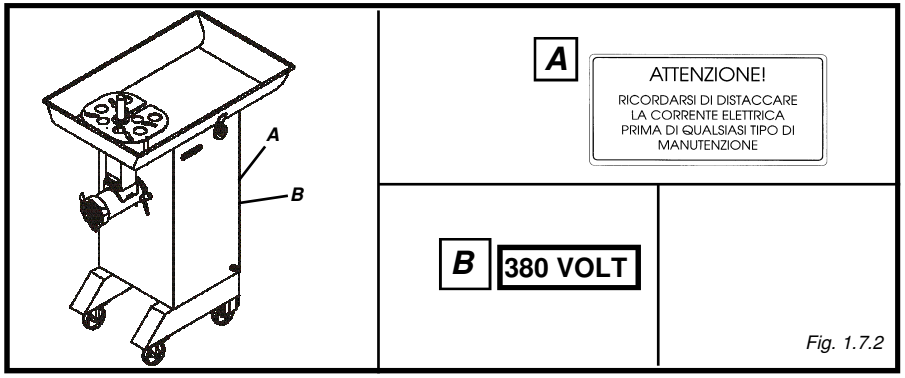


Fig. 1.7.2

2.4 - Noise level

The measurement of the noise level indicates that the value is lower than 70 dBA. On demand, the manufacturer can provide a copy of the noise level test.

4 - Testing, transport, delivery and installation

4.1 - Testing

Your machine has been tested on our site to ensure that it is in full standard working order.

4.2 - Delivery and installation of the machine

All the material delivered has been checked accurately before dispatching to the carrier. Unless there are particular agreements with the customer, or for expensive delivery, the machine is packed in card board boxes.

When the machine arrives, check the integrity of the package.

If the package has been damaged, sign the delivery note adding: “I accept with due reservations...” and indicate the reasons.

Open the package and if the material is really damaged, inform the carrier within three days from the delivery date indicated on the shipping documents.

4.3 - Installation

WARNINGS!

The area where you intend to install the machine must be horizontal and solid and the table must be adequate to support the machine safely.

Furthermore it is necessary to leave a free area around the machine considering the supporting dimensions. This makes things easier for the user to move while working and ensures access to the machine for maintenance purposes.

Install an adequate lighting around the machine to ensure good visibility to the operator of the mincer.

4.3.1 - Package disposal

The package material such as cardboard boxes, nylon, wood can be eliminated with urban solid waste; therefore they can be eliminated easily.

Nylon is a polluting material, if burned, it produces toxic smoke. Do not burn it and do not let it in the environment but eliminate it in compliance with the regulation in force. If the machine is delivered in countries where there are special regulations, eliminate the package in accordance with the regulation in force.

4.3.2 - Handling of the machine

WARNINGS!

Handle the machine carefully, avoiding any accidental shock which could damage it seriously. Machine is heavy, so it has to be moved by at least two people.

English

2.6.6 Head protection for use of plates with holes > 8 mm (Fig. 2.6.4)

This optional has not been subjected to NSF standard evaluation.

If plates with holes larger than 8 mm are used, fasten the protection onto the support installed on the front of the container. In this way, the protection will avoid all possible contact with the blades of the head knife.

Once you have finished grinding, simply remove the protection to facilitate cleaning of the machine. This protection is equipped with an interlocking device which, should the protection be improperly assembled or positioned, will prevent the machine from operating.

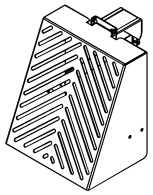
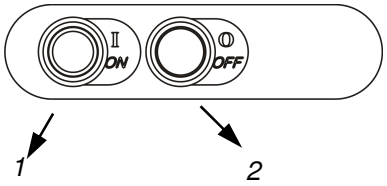


Fig. 2.6.4

3 - Controls and pilot lights

3.1 - List of the controls and pilot lights

Fig. 3.1.1



1 - Push-button "on"
- Press it to start the machine.

2 - Stop push-button
- Press it to stop the machine.

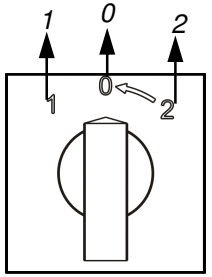


Fig. 3.1.2

0 - STOP POSITION
- the machine is off

1 - WORKING POSITION
- turn the switch to "1" to start the machine

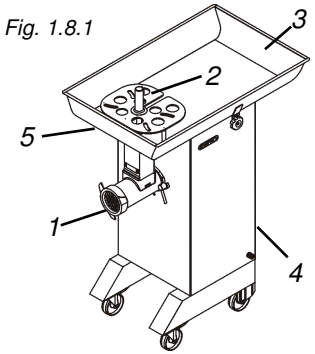
2 - PULSE REVERSE POSITION
- turn the switch to "2" to reverse by pulse the rotation of screw propeller

*1.*8 - Protections and safety devices

WARNINGS!

Before using the machine, make sure all the safety devices are installed and function correctly. At the beginning of each shift check the presence and position of the safety devices. If they are not correctly installed or if they are missing, call the maintenance operator.

Fig. 1.8.1



1. Meat exit, plate holes of less than 8 mm.
   In this case the fingers cannot enter the holes.
   On request, it is possible to install plates with outlet holes larger than 8 mm.
   In this case the user must provide a protection for this opening.
2. Hand protection.
   The hopper is equipped with a hand protection "2" Fig.1.8. complying with the Ministry of Labour and Social Security n° 66 of the 05.09.79.
3. Stainless steel hopper solidly fixed to the feeding opening
4. Protective device for electric elements.
   The lower part of the machine is closed by a protection which prohibits anything entering to the electrical elements placed inside.
5. Micro on the hopper
   In the lower part of the hopper, there is a magneto at the level of the safety sensor.

WARNINGS!

Do never tamper the safety devices.

1.9 - Working position

The correct operator's position to grant an excellent work is indicated in fig. 1.9.1.

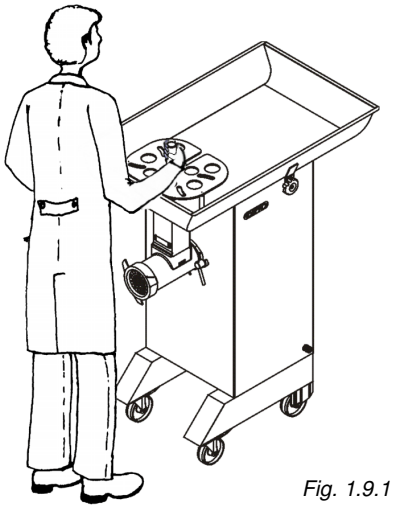


Fig. 1.9.1

English

2 - Technical features

2.1 - Main parts

This is a list of all the main parts of the machine illustrated in fig. 2.1.1 to make this manual easier to understand.

1. *Pestle-tool*
2. *Controls of the machine*
3. *Minced meat outlet opening*
4. *Loading hopper*
5. *Feed opening*

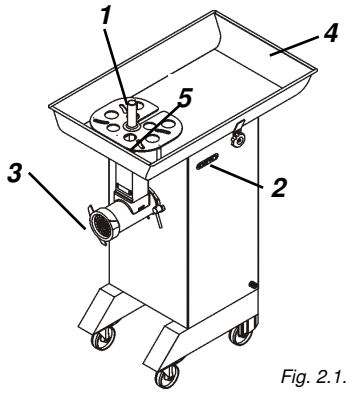
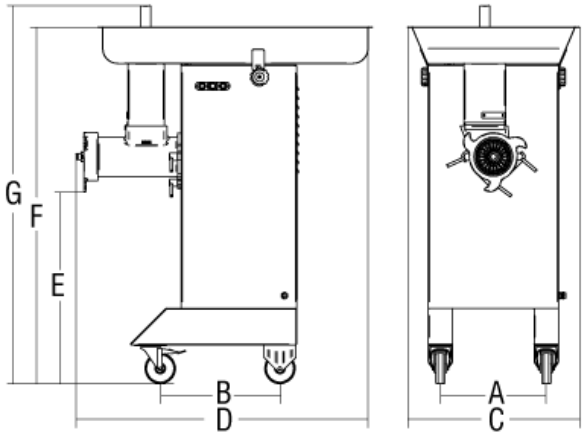


Fig. 2.1.1

	Motor	Power source	TC Output/h	Standard plate
	watt/hp		kg/h.	ø mm
TC 32 HP 4	3000/4	230-400V/60Hz	700	4,5
TC 42 HP 5	3680/5	230-400V/60Hz	800-1000	4,5
TC 42 HP 7	5250/7	230-400V/60Hz	1200-1800	4,5

2.2 - Technical data



2.3 - Dimensions and weight of the machine

Fig. 2.3.1

	A	B	C	D	E	F	G	Net weight
	mm	mm	mm	mm	mm	mm	mm	Kg
TC 32 HP 4	348	393	564	911/1022	230	1170	1240	90
TC 42 Hp 5	348	393	564	973/1022	180	1170	1240	112
TC 42 Hp 7	348	393	564	973/1022	180	1170	1240	112

2.6 - Optional

Before install the optional, disconnect the machine from the electrical supply.
Optional are intended for use only with machine of this manual.

2.6.1 Dirt protection:<u>This optional has not been subjected to NSF standard evaluation.</u>
Provides protection against squirts produced during grinding.

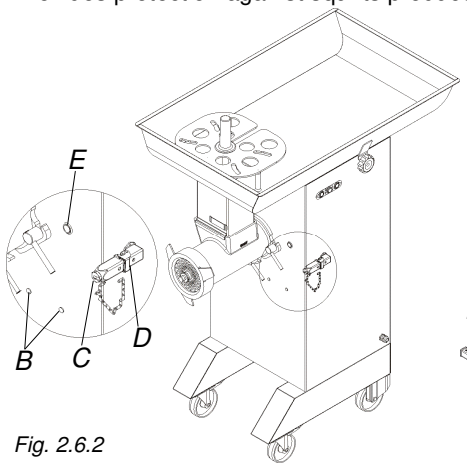


Fig. 2.6.2

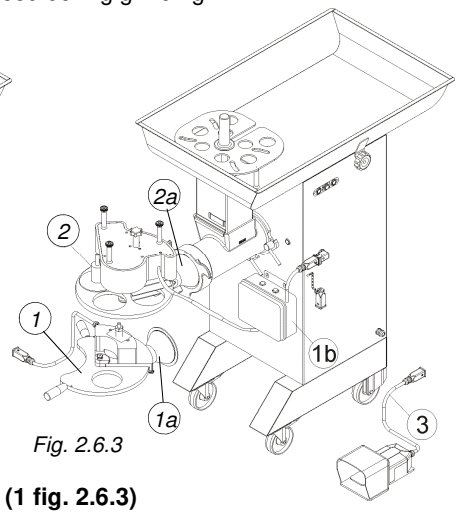


Fig. 2.6.3

2.6.2 Semi-automatic burger machine (1 fig. 2.6.3)
<u>This optional has not been subjected to NSF standard evaluation.</u>
The meat grinder can be supplied with a semi-automatic burger machine which is composed of:
- a part that is firmly fastened on the head by means of the head's ring nut (1a fig. 2.6.3);
- a male ILME connector coming out of the box that couples with its correspondent female (D fig. 2.6.2) present on the machine.

2.6.3 Automatic burger machine (2 fig. 2.6.3)
<u>This optional has not been subjected to UL and NSF standard evaluation.</u>
<u>The meat grinder can be supplied with an automatic burger machine which is composed of:</u>
- a part that is firmly fastened on the head by means of the head's ring nut (2a fig. 2.6.3);
- an electric box (1b fig. 6.6.3) fastened onto the machine with two pegs (B fig. 2.6.2);
- a male ILME connector coming out of the box that couples with its correspondent female (D fig. 2.6.2) present on the macchine.

2.6.4 Pedal control (3 fig. 2.6.3)
The meat grinder can be supplied with a pedal control which is composed of:
- Pedal
- a male ILME connector coming out of the box that couples with its correspondent female (D fig. 2.6.2) present on the machine.

PLEASE NOTE: Once the applications 2.6.3 - 2.6.4 - 2.6.5 have been connected as instructed above, you must press push-button E to enable them.
If the application is not used for 20 seconds, the push-button will have to be reactivated to start the accessory working again.
Once you are done using the accessory, to ensure standard machine operation, it is important to place cap C back in its seat as shown in figure 2.6.2.

2.5.4 - Three-phases electrical circuit diagram 220/60 TC 32-42 with pedal control

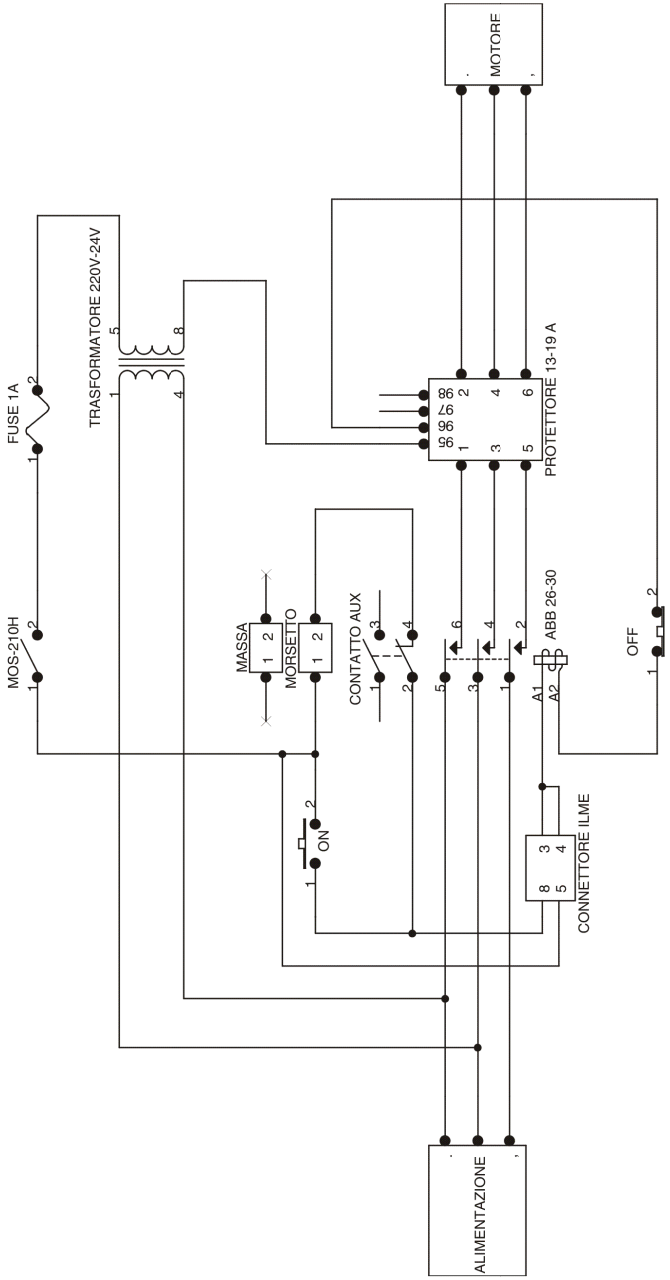


Fig. 2.5.4

2.5 - Electrical circuit diagrams

2.5.1 - Single-phase electrical circuit diagram 220/60 TC 32 –42

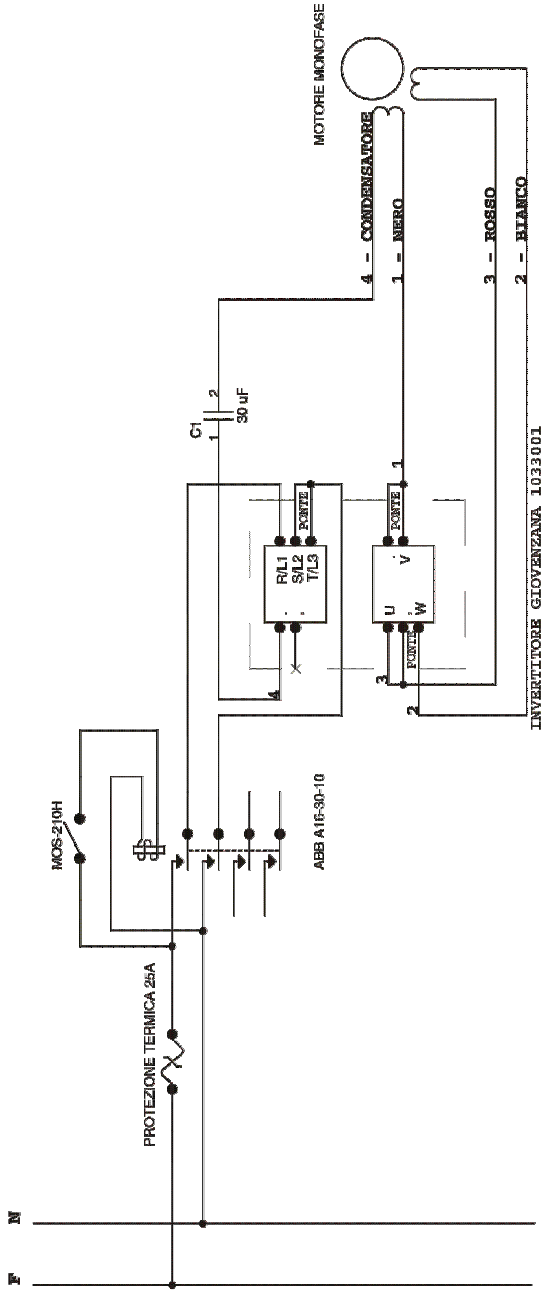


Fig. 2.5.1

2.5.2 - Three-phases electrical circuit diagram 220/60 TC 32-42 micro MOS-210

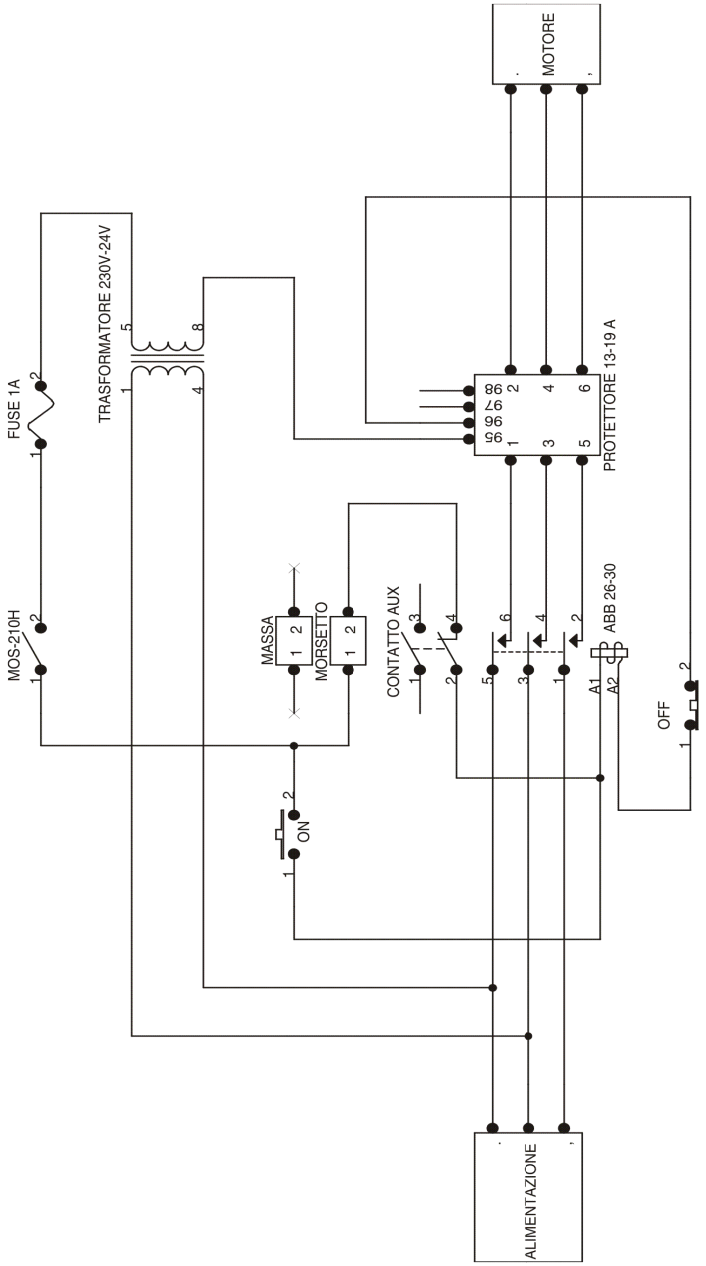


Fig. 2.5.2

2.5.3 - Three-phases electrical circuit diagram 400/60 TC 32-42 micro MOS-210

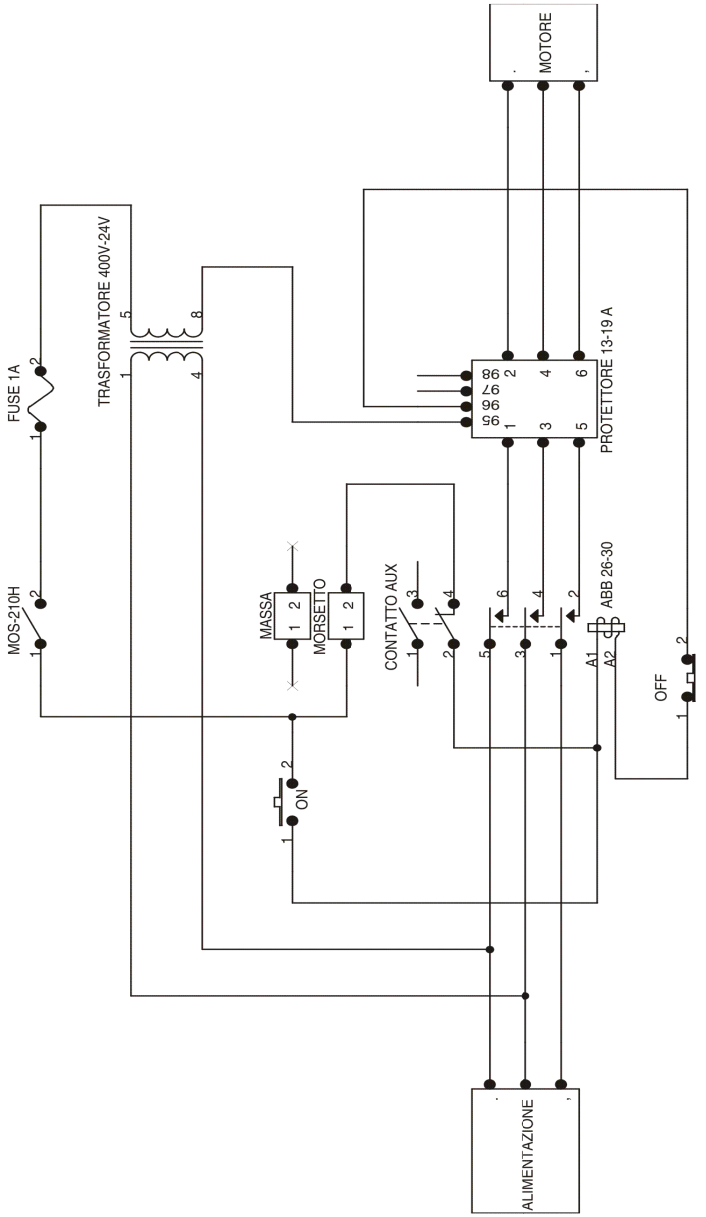


Fig. 2.5.3