

**AB12/T-L • TR12/S • GR12/S • TR12/C • AB12/AT
• TR12/TS • AB22/AE • TR22/C • TR22/TE**



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MEAT MINCER AND GRATER

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ANNEXES

Unger mincing set assembly diagram
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Electrical wiring diagram

Purpose of this manual

This manual has been written by the Manufacturer to make an integral part of the machine standard equipment. During the design and construction phases, special care has been devoted to any aspects which might endanger the safety and health of the people interacting with the machine. In addition to the applicable safety legislation, all “good construction practice” rules have been adopted. The purpose of these information notes is to make machine users aware that special care should be applied to prevent any risks. The biggest asset to this end, however, is precaution. Safety is also the responsibility of all the operators who interact with the machine. Keep this manual in a suitable place, where it can be conveniently reached for consultation. In order to highlight some parts of the text, the following symbols have been used:

 **DANGER – CAUTION:** it indicates hazards likely to cause severe injury ; caution is requested.


 **INFORMATION:** technical indications of special interest.

This manual comes with the following annexes:

- a guarantee certificate containing the guarantee conditions prescribed by the Manufacturer.
- documents certifying compliance with the applicable safety and personal health legislation in force.

To request After-sales service, submit inquiries or order spare parts, contact your Authorised dealer.

Manufacturer and machine Identification

Manufacturer Identification	Serial Nr	Manufactured	CE	Mark of Compliance	
Serial number	Model			Year of construction	
Machine model	V	~			W
Specifications	Hz	IP			Kg

Machine description

Combined mincer - grater:

The combined mincer-grater is a professional machine designed for processing meat and cheese for mass catering purposes (restaurants, hotels, community centres, butcher's shops, refectories, etc.). By using the mincer with a series of different mincing plates, different kinds of minced meat can be obtained. The grater can process products such as seasoned cheese, biscuits, dry bread, dried fruit, etc. The range includes 4 different models:

AB12/T (mod.12 basic version with round hopper)

AB12/L (mod.12 deluxe version with rectangular hopper and larger trays)

AB12/AT (mod.12 version with completely removable mincer set and round hopper)

AB22/AE (mod.22 version with completely removable mincer set and round hopper)

The machine has an easy-to-clean aluminium and stainless steel structure.

The machine's safety devices conform to European Directives.

Mincer:

The mincer is a professional machine designed for processing meat for mass catering purposes (restaurants, hotels, community centres, butchers, collective refectories). The application of different mincer plates makes it possible to obtain various types of minced meat.

The range includes 5 models:

TR12/S (mod.12 basic version with round hopper)

TR12/TS (mod.12 version with completely removable mincer set and round hopper)

TR12/C (mod.12 version with completely removable mincer set and stainless steel housing)

TR22/TE (mod.22 version with completely removable mincer set and round hopper)

TR22/C (mod.22 version with completely removable mincer set and stainless steel housing)

The machine has an easy-to-clean aluminium and stainless steel structure.

The machine's safety devices conform to European Directives.

Grater:

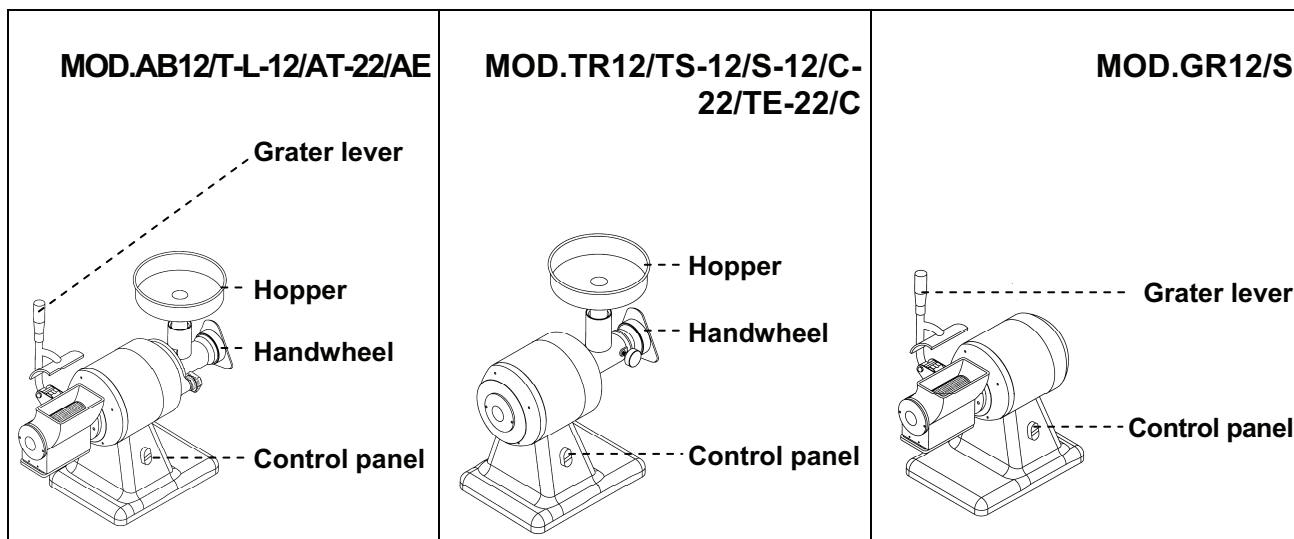
The grater is a professional machine designed for processing cheese for mass catering purposes (restaurants, hotels, community centres, butchers, refectories, etc.). The grater can process products such as: seasoned cheeses, biscuits, dry bread, dry fruit, etc.

The range is composed of 1 model:

GR12/S (mod.12 basic version with stainless steel roller)

The machine has an easy-to-clean aluminium and stainless steel structure.

The machine's safety devices conform to European Directives.

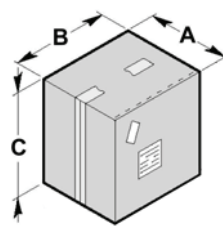
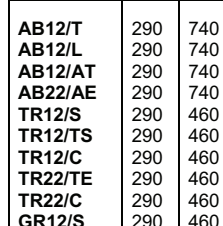
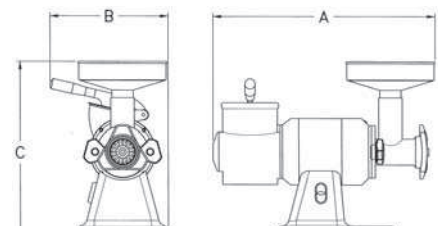
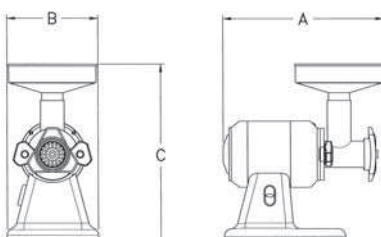
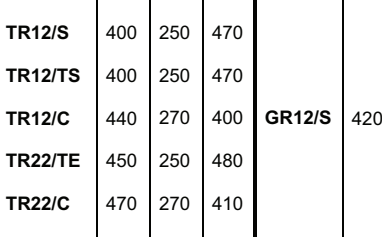
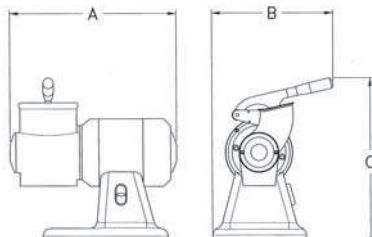


Specifications

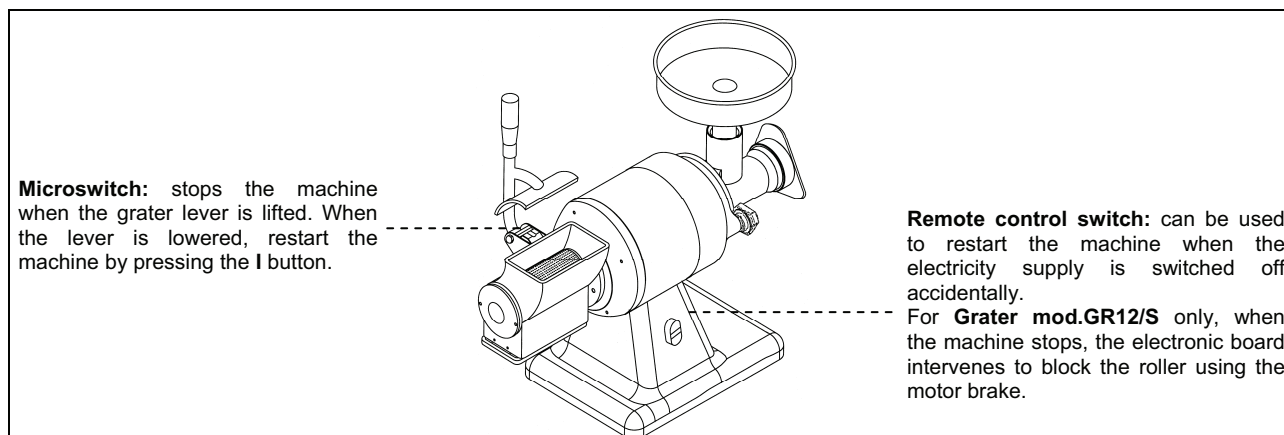
Description	Unit of measure	AB12/T	AB12/L	AB12/AT	AB22/AE
Electric power input	V Hz Ph	230V 50Hz 1Ph 230/400V 50Hz 3Ph			
Power	kW (HP)	0.75 (1)	0.75 (1)	0.75 (1)	1.1 (1.5)
Mincer output	kg	160	160	160	300
Grater output	kg	40	40	40	40
Net weight	kg	22	23	26	27
Packaged weight	kg	26	27	30	31
Noise		< 70 dB(A)			
Installation		On the table			

Description	Unit of measure	TR12/S	TR12/TS	TR12/C	TR22/TE	TR22/C	GR12/S
Electric power input	V Hz Ph	230V 50Hz 1Ph 230/400V 50Hz 3Ph					
Power	kW (HP)	0.75 (1)	0.75 (1)	0.75 (1)	1.1 (1.5)	1.1 (1.5)	0.75 (1)
Mincer output	kg	160	160	160	300	300	/
Grater output	kg	/	/	/	/	/	40
Net weight	kg	20	20	22	24	26	17
Packaged weight	kg	22	22	24	26	28	19
Noise		< 70 dB(A)					
Installation		On the table					

Overall dimensions


	mm.	A	B	C		mm.	A	B	C	
	AB12/T	290	740	460		AB12/T	670	300	460	
	AB12/L	290	740	460		AB12/L	750	320	400	
	AB12/AT	290	740	460		AB12/AT	580	350	470	
	AB22/AE	290	740	460		AB22/AE	630	350	480	
	TR12/S	290	460	460						
	TR12/TS	290	460	460						
	TR12/C	290	460	460						
	TR22/TE	290	460	460						
	TR22/C	290	460	460						
	GR12/S	290	460	460						
	mm.	A	B	C		mm.	A	B	C	
	TR12/S	400	250	470						
	TR12/TS	400	250	470						
	TR12/C	440	270	400		GR12/S	420	300	420	
	TR22/TE	450	250	480						
	TR22/C	470	270	410						

Safety devices



Safety information

- It is of the greatest importance to carefully read this manual before carrying out installation and use operations. Consistent compliance with the instructions contained in this manual will guarantee personal and machine safety.
- Do not tamper with the safety devices for any reason.
- We recommend that industrial safety regulations issued nationally by the appointed organisms be strictly respected.
- The manufacturer declines all responsibility for injuries to persons or damages to property, resulting from failure to comply with these safety rules.
- Correct machine setting, lighting and workshop cleanness are pre-conditions for personal safety.
- Do not expose the machine to atmospheric agents.
- The machine connection and start-up should only be executed by skilled engineers.
- Check that the plant mains ratings correspond to the specifications printed on the machine data plate.
- Make sure that the machine is connected to a grounding system.
- The work area around the machine should always be kept clean and dry.
- Wear the work attire prescribed by the industrial accident-prevention regulations.
- This machine should always be used for its recommended uses ; any other use is deemed improper and therefore dangerous.
- Check the suitability and weight of the products to work ; do not overload the machine to exceed its capacity.
- It is forbidden to introduce any objects, tools or hands in the dangerous parts.
- Keep the machine out of children' s reach.
- Unplug the machine from the mains when not in use.
- In the event of breakdowns and/or malfunctioning, do not carry out any repair yourselves, apply to your Authorised dealer.
- Order original spare parts only.
- Before carrying out machine cleaning, unplug it from the power mains.
- Do not clean with high-pressure water jets.



⚠ DANGER – CAUTION: Using plates with hole diameters over 8mm and with total thickness under 5 mm is strictly prohibited.

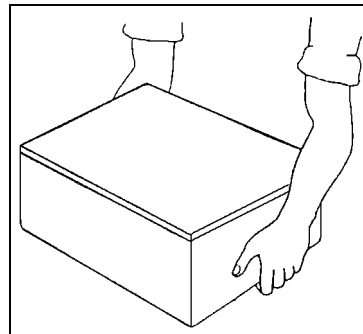
Should wear cause plate thickness to drop under 5 mm, we recommend you replace it. The manufacturer is not liable for any personal or property damages due to failure to observe these instructions.

INSTALLATION 2

Packing and unpacking

The machine will come packaged in a carton with foamed polyester inserts to guarantee perfect safety during transport.

- Handle the carton in compliance with the instructions.
- Open the carton and make sure that all components are intact. Keep the carton for any future machine removal.
- Lift the machine according to the instructions and place it in its selected setting for installation.



Installation area

The selected machine work setting must be sufficiently lit and have an electric power outlet. The worktop must be sufficiently large, perfectly level and dry. The machine should be installed in non-explosive environments. In any case, installation should be carried out by taking into account any applicable industrial safety regulations in force.

Environmental Condition Table

Descriptions	Values
Working temperature	0÷35 °C (32÷95 °F)
Storage temperature	-15 to +65 °C (from -6.8 to +149 °F)
Relative humidity	Maximum 80% at an ambient temperature of 20 °C Maximum 50% at an ambient temperature of 20÷60 °C
Ambient dust	Lower than 0.03 g/m ³

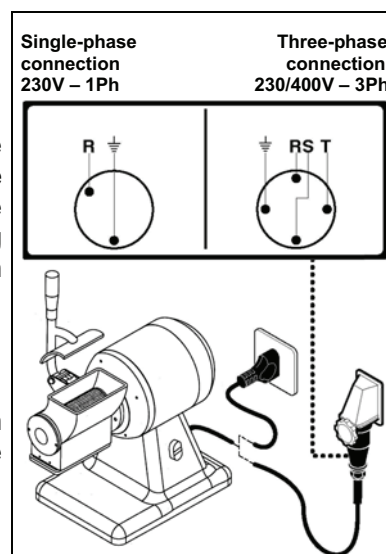
Electric connection

⚠ DANGER – CAUTION: Electric connection to the power mains should be executed by skilled engineers.

Check for the perfect efficiency of the plant grounding system. Make sure that the line voltage (**V**) and frequency (**Hz**) correspond to the machine ratings (refer to the machine identification plate and wiring diagram). The machine comes equipped with an electric cable to which a multipolar plug should be connected. Plug the machine into a main wall switch with differential.

Three-phase connection

Start the machine for just a few seconds and check that the beater turns in the right direction. If this is not the case, disconnect power and exchange two of the three phase wires in the plug.



OPERATION AND CLEANING 3

Control descriptions

1) Start button "I"

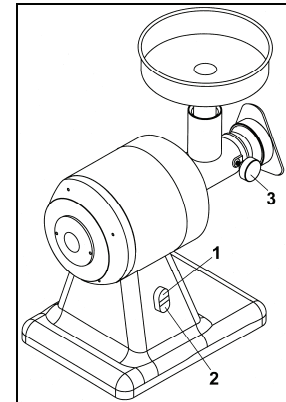
Push the button to start up the machine. In the combined and grater versions, start-up is only enabled when the grater lever is lowered.

2) Stop button "0"

Press the button to stop the machine.

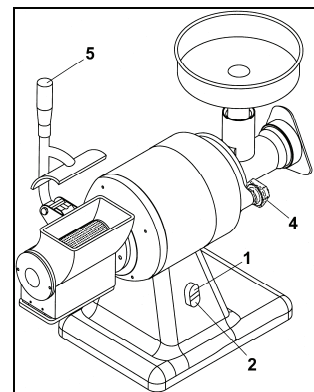
3) Mincer filler knob (mod.AB12/T-L - TR12/S only)

Turn the knob to block (clockwise) or unblock (anti-clockwise) the mincer filler. Do not start the machine until the mincer filler is blocked.



4) Mincer body blocking knobs (mod.AB12/AT – AB22/AE – TR12/TS – TR12/C – TR22/TE – TR22/C only)

Screw down the knobs to block or screw off to unblock the mincer body.



5) Grater lever (mod.AB12/T-L-AT – AB22/AE – GR12/S only)

Press the lever down to grate the product to be processed.

6) Forward gear button (mod.AB22/AE – TR22/TE – TR22/C only)

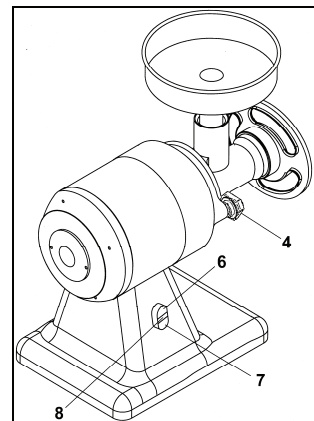
Press the button to start the machine. In the combined versions, start-up is only enabled when the grater lever is lowered.

7) Reverse gear button (mod.AB22/AE – TR22/TE – TR22/C only)

Press the button to invert the direction of machine rotation. In combined versions, start-up is only enabled when the grater lever is lowered.

8) Stop button (mod.AB22/AE – TR22/TE – TR22/C only)

Press the button to stop the machine.



Using the grater

- In combined mincer-grater models, remove the mincer set before using the grater.
- Lift the grater lever and place the product to be processed inside the grater mouth.
- Lower the grater lever and press the start button "I" (the machine will only start if the grater lever is lowered).
- Gradually press the lever until the product is finished.
- At the end of processing lift the lever and introduce more product into the grater mouth; lower the lever once more and press start button "I" (the machine will only start if the grater lever is lowered).
- In order to stop the machine, press the stop button "0" or lift the grater lever.
- At the end of the work cycle, grate a piece of hard bread or use the appropriate brush to clean the roller.

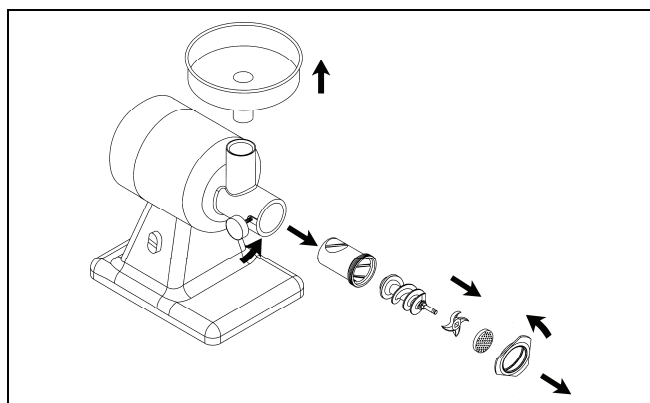
Using the mincer

- In combined grater-mincer versions, lower the grater lever.
- Tighten the filler knob in the versions mod.AB12/T-L - TR12/S.
- Tighten the mincer body-blocking knobs in versions mod.AB12/AT – AB22/AE – TR12/TS – TR12/C – TR22/TE – TR22/C.
- Tighten the handwheel on the output mouth of the mincer without blocking.
- Start-up the machine by pressing start button “I” (in combined models start-up is only possible if the grater lever is lowered).
- Place the product inside the upper mincer mouth and press it down using the pestle supplied.
- At the end of the work session press the stop button “0”.
- At the end of the work cycle remove the mincer set and wash using suitable detergents in hot water or in the dishwasher.

Dismantling the mincer set

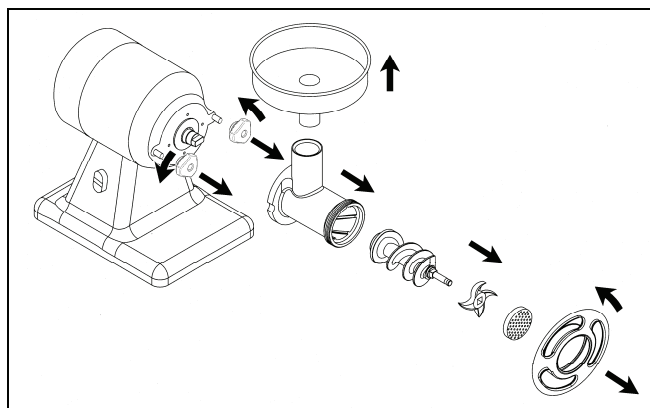
Mod.AB12/T-L – TR12/S:

- Remove the hopper from the upper mouth.
- Rotate the handwheel anti-clockwise.
- Extract:
 - the mincing plate;
 - the blade;
 - and the volute, in sequence
- Unscrew the filler knob by turning anti-clockwise and extract the mincer filler.
- Perform operations in reverse order to reassemble the mincer group.



Mod.AB12/AT - AB22/AE – TR12/TS – TR12/C – TR22/TE – TR22/C:

- Remove the hopper from the upper mouth.
- Turn the handwheel anti-clockwise.
- Extract
 - the mincing plate;
 - the blade;
 - and the volute in sequence
- Unscrew the filler knobs and extract the mincer filler .
- Perform operations in reverse order to reassemble mincer group.



i INFORMATION: Prior to each work cycle ensure that the removable parts are properly fixed to the machine.

Recommendations for use

The completely extractable mincing set on the versions AB12/AT-AB22/AE-TR12/TS-TR12/C-TR22/TE-TR22/C, permits the user to place it in refrigerators and other similar devices, even when it contains residual product. This feature makes it possible to use the mincer at different times of the day without having to wash and clean the various components after use, in conformity with hygiene laws currently in force.

End-of-day cleaning

- At the end of the working day remove the plug from the power socket.
- Clean thoroughly using neutral products.
- Wash the outer part of the machine using a damp sponge.
- Do not use steel wool or abrasive pads.
- Dismantle the mincer set and wash using suitable detergents in hot water or in the dishwasher.

Long periods of inactivity

If the machine is to be left idle for long periods of time, turn off the main wall switch, thoroughly clean the machine and cover it with a sheet to protect it from dust.

TROUBLESHOOTING RECYCLING 4

Foreword

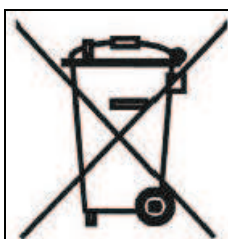
In the event of breakdowns or malfunctioning, turn off the main wall switch and contact your local Dealer's After-sales service. Do not disassemble any internal machine parts.

The Manufacturer declines all responsibility for any tampering !

Troubles, causes and remedies

Trouble	Cause	Remedy
The machine will not start	Main switch is off	Turn the main switch on to "I"
	No voltage input to power line	Apply to your local Dealer's After-sale service
	Logic board protective fuse is blown	Apply to your local Dealer's After-sale service

Disposal and recycling



The markings illustrated here (barred garbage bin), on the utensil data plate, indicates that at the end of its working life, the utensil must be disposed of and recycled according to European Directive. The Directive provides for the separate collection of electric and electronic equipment by a collection system called RAEE. Upon purchasing a new utensil, the user must not dispose of the utensil as urban waste but must return it, in a one-to-one exchange, to the dealer or distributor. The dealer may dispose of the utensil following the procedures set by the RAEE collection system. In the event the user disposes of the utensil without purchasing a new one, in Italy contact the manufacturer who will provide suitable information on machine disposal at the collection centre closest to the user. Users who do not reside in Italy must contact the Ministry of the Environment in their countries who will provide information necessary for correct disposal. Failure to observe the disposal procedure may cause harmful effects on the environment and people. Therefore, total or partial illicit utensil disposal by users is punishable by local authorities.