



VAN BERKEL INTERNATIONAL

REFRIGERATED MEAT MINCER

RM 22E - RM 32E



USER MANUAL

1 MANUAL USE

1.1. As read the Manual

This instruction handbook contain the information and a safety specification set up on the meat mincer and also the operate instruction ordinary and extraordinary for can permit to use at best the refrigerated meat mincer (later nominated also machine)

Ours refrigerated meat mincer is realised in the models **STATIC** and **VENTILATED**

MEAT MINCER RM 22E CE STATIC

MEAT MINCER RM 22E CE VENTILATED

MEAT MINCER RM 32E CE STATIC

MEAT MINCER RM 32E CE VENTILATED

This manual descript all the models (which presented a lot of parts similar) and in each chapitre descript the characteristics that differentiate the various models.

The machine descript must be utilised in accordance at what is specified in this manual.

On recommanded to read this manual before to install or utilise and make the most attention at message in the squaring.

The respect of norms and recommandations consent safe employ and appropriate intervention.

In case of discrepance between how descript and the machine the operator must inform the biulder before to use it.

The instruction handbook must be delivered at operator in charge to use and at a person that do a periodic maintenance of machine.

The instruction handbook must be placed in accessible place for swift consultation.

The meat mincer can be subject a improvement and can set up differents particulars from this represent but don't compromise the explanation report in this manual.

1.2. Refresher the handbook

Maintain the manual always up to date. All the annotation, addition or modification must be insert in the memorandum.

1.3. Manual index

1	MANUAL USE	pag. 2
1.1.	As read the manual	pag. 2
1.2.	Refresher normal handbook	pag. 2
1.3.	Manual index	pag. 3-4
2	GENERAL INFORMATION	pag. 5
2.1.	Builder	pag. 5
2.2.	Technical Assistance	pag. 5
2.3.	Responsability	pag. 5
2.4.	Security	pag. 5
2.4.1.	Installation	pag. 6
2.4.2.	Attention for operator	pag. 6
2.4.3.	Program maintenance	pag. 6
2.4.4.	Staff in charge	pag. 6
2.4.5.	Principal manners of operation	pag. 7
2.4.6.	List of symbol utilised and avertissement	pag. 8
2.4.7.	Safety regulations	pag. 8-9
3	MEAT MINCER DESCRIPTION	pag. 10
3.1.	General description	pag. 10
3.2.	Technical scheda	pag. 11
3.3.	Utilisation	pag. 11
3.4.	Mistake foreseeable and incorrect behaviour	pag. 12
3.5.	Incorrect utilisation and contra-indication	pag. 12
4	TRANSPORT AND PACKING	pag. 12
4.1.	Delivery	pag. 12
4.2.	Transport and packing opening	pag. 12
4.3.	Waste disposal	pag. 12
5	INSTALLATION	pag. 13
5.1.	Environmental conditions	pag. 13
5.2.	Necessary espace for operation	pag. 13
5.3.	Installation and assembling	pag. 14
5.4.	Installation rules	pag. 14
5.5.	Condensate discharge	pag. 14
5.6.	Outfit	pag. 14
6	UTILISATION	pag. 14
6.1.	Attention	pag. 14
6.2.	Security description	pag. 15
6.3.	Plan trick	pag. 15
6.4.	Warning label	pag. 15
6.5.	Signals controls	pag. 16
6.6.	Start stop	pag. 17
6.7.	Electric stop	pag. 17



7	MEAT MINCER UTILISATION	pag. 17
7.1.	Starting	pag. 17
7.2.	Line-up	pag. 18
7.3.	Ordinary maintenance	pag. 18
7.4.	Assembling and disassembling body inlet	pag. 18
7.5.	Assembling and disassembling body inlet	pag. 18
7.6.	Assembling hunger system	pag. 18
7.7.	Cleaning	pag. 19
7.8.	Temperature Regulation	pag. 19
8	HAMBURGER UNIT UTILISATION	pag. 19
9	MAINTENANCE AND REPARATION	pag. 20
9.1.	Extraordinary maintenance	pag. 20
9.2.	Estimate maintenance	pag. 20
9.3.	Refrigerator installation maintenance	pag. 20
9.4.	Oil compressor check	pag. 21
9.5.	Oil gear box check	pag. 21
9.6.	Diagnostic	pag. 22
9.7.	Spare parts	pag. 23
10	ELIMINATION	pag. 23
10.1.	Elimination principals parts	pag. 23
11	ATTACHMENT	pag. 23
	Declaration conformity CE	pag. 24
	Table	
Table 1	Topographic With Label	pag. 25
Table 2	Topographic With Security	pag. 26
Table 3	Topographic Instrument Panel	pag. 27
Table 4	Topographic Assembling Body Inlet	pag. 28
	Electric schema	pag. 29-30-31
	Drawing spare parts RM 22E and RM 32E STATIC	pag. 32
	Description drawing spare parts RM 22E and RM 32E STATIC	pag. 33-34
	Drawing refrigerator spare parts RM 22E and RM 32E STATIC	pag. 35
	Description refrigerator spare parts M 22E and RM 32E STATIC	pag. 36
	Spare parts drawing RM 22E - RM 32E VENTILATED	pag. 37
	Description spare parts drawing M 22E-RM 32E VENTILATED	pag. 38-39
	Drawing refrigerator spare parts M 22E-RM 32E VENTILATED	pag. 40
	Description refrigerator spare parts M 22E-RM 32E VENTILATED	pag. 41
	Garanty	pag. 42

2 GENERAL INFORMATION

2.1. *builder*

VAN BERKEL INTERNATIONAL S.r.l.

Via Ugo Foscolo, 22

Oggiona S. Stefano 21040 (VA)

TEL. +39 0331 214311

Type REFRIGERATED MEAT MINCER RM 22E or RM 32E

Model REFRIGERATED CE RM 22E STATIC

REFRIGERATED CE RM 32E STATIC

REFRIGERATED CE RM 22E VENTILATED

REFRIGERATED CE RM 32E VENTILATED

2.2 *Technical assistance*

The ordinary and extraordinary maintenance must be do in accordance with the instruction contained in this manual. For all the case not report in this manual please contact directly the seller or the builder and specify always

- ◆ Model
- ◆ Type
- ◆ Serial number
- ◆ Construction

2.3. *Responsability*

The instruction must be read with attention, in particular the meat mincer assistance must be do with original spare parts, and modification do without any autorisation ABO company decline all responsibility for security of people and the faulty utilise of meat mincer. The label builder placed on meat mincer don't must be erase.

2.4. *Security*

This chapitre descript the security measure and precautionary measure for operator.

2.4.1. *Installation*

Instruction for installation please read chapitre 5

2.4.2. Attention for operator

The operator must have a responsibility to diffuse at all operators the content of this manual mostly for security: The operator must be provided at training staff for the best utilisation and maintenance.

2.4.3. Program maintenance

For correct use of meat mincer must be respected the manual instructions, cleaning and ordinary maintenance, and the relative indication for precautionary and corrective maintenance reported at chapitre 9.2. in this manual.

2.4.4. Staff in charge

Description for operator

OPERATOR Person that use the meat mincer

- ◆ Utilisation start stop
- ◆ Cleaning and operating
- ◆ Normal intervention

MECHANICAL OPERATOR Can operate in all conditions and at all protection level can act with disconnect protection. Can do any regulation repair mechanical but don't operate on electric installation.

- ◆ Reparation
- ◆ Clear intervention
- ◆ Precautionary maintenance with substitution parts..

ELECTRIC OPERATOR Can operate in all functioning conditions and at all protection level. Can do any repair regulation of electric installation also in presence of tension.

REFRIGERATOR OPERATOR Can operate exclusively on refrigerated installation (compressor unit, condenser cooling and discharge conduit.) in all operations conditions. Can act with disconnected protections exclusively refrigerated plant: can effect any repairs-regulations also in presence of tension. Can provide at threading refrigerated gas.

2.4.5. Principal manners of operation

Conduction

Right prescription :	Security connected all guard fixed
Forbidden prescription	Security disconnected disassembled guard
Type and no. in charge	One operator
Residual risk	Nothing

Extraordinary Maintenance (mechanical intervention)

Right prescription	Disconnection plug ,all guard fixed
Forbidden prescription	Operator not qualified
Type and no in charge	One mechanical operator
Residual risk	Nothing

Extraordinary Maintenance (electric intervention)

Right prescription	Disconnection plug, guard protection fixed
Forbidden prescription	Operator not qualified
Probable prescription	Electric connection not disconnected some guard fixed
Type and no in charge	Electric mechanical
Residual risk for right prescription	Nothing
Residual risk for probable prescription	Danger to entangle, crushing, cutting wounding on the mobile parts, without protection. Danger of death from electric shock for tension in all the electric parts.

Refrigerated installation maintenance

Right prescription	Disconnection plug and disconnection electric lines, all guard fixed
Forbidden prescription	Operator not qualified
Probable prescription	Electric feeding not sectionned guard (referring refrigerated installation) disassembled
Type and no in charge	One refrigerated operator
Residual risk for probable prescription	Scald danger for contact with hot parts. Danger to entangle, crushing, cutting, wounding on the mobile parts without protection, cutting and wounding with fan wheel danger of death from electric shock for tension in all the electrics parts

ATTENTION !!!!

The right prescript must be maintain in any possible condition

The probable prescript that have risk but are important for consent the maintenance staff, that being qualified is conscious of risks and of the necessity to limite them.

2.4.6. Symbol and directions list

Symbols used as adhesives on the meat mincer in order to point out the risks during the use and maintenance are described in the chapter 6.2.2.

In this handbook the informations remarkable for safety are given inside of suitable squares with the inscription “ATTENTION”

ATTENTION !!!!

This inscription intend to draw reader's attention on dangerous area or situation

2.4.7. *Safety Regulations*

Here are indicated the precautions to observe during the use of the meat mincer very important for safety.

General regulations:

- ◆ Do not allow at not authorised staff to use the meat mincer
- ◆ Arrange a large surface of work, seeing the operative space that must be free from obstacles, clean, dry and lit up.
- ◆ During the use is recommended to avoid distractions (for example speaking with other person)
- ◆ In case of block during the use, for the clearing use only the tools equipped (in case of doubts stop the machine and call the builder or the seller.
- ◆ Do not use the meat mincer when in breakdown and inform the person responsible for the maintenance of any irregularity of operation
- ◆ Care about clothes for staff that use the machine: Keep sleeves good closed around the wrists and however do not wear garments with dangling parts such as ties, scarfs, unbuttoned jackets or teared dress, unlaced or with zipper open, gather the long hair and do not wear Jewellery
- ◆ Prohibition to tamper safety devices
- ◆ Prohibition to use the machine with safety devices disconnected or fixed guards not installed
- ◆ Prohibition to leave the meat mincer with guards disassembled
- ◆ Prohibition to make modifications so to adjust devices or objects not foreseen from manufacturer
- ◆ The boxes that contain electric parts must always remain closed
- ◆ do not approach heat source with high temperature to the machine

Safety regulations for maintenance:

- ◆ Maintenance operation to be executed with the type and number of operators prescribed
- ◆ Particularly the maintenance of refrigeration plant must be executed only from a technician in refrigeration
- ◆ After each maintenance or regulation make sure that do not remain tools or others between movable parts, in order to avoid damages to the machine and or accidents to the staff
- ◆ Do not insert fingers in the articulated opening of the machine
- ◆ Do not use petrol or inflammable solvent as detergent, but only substances suitable for food use (not inflammable and not toxic)
- ◆ Do not use compressed air for cleaning particulars; when is not possible to use other methods it is necessary to protect oneself with glasses, with lateral guards and to limit pressure till a maximum of 2 bar (0,2 mpa)
- ◆ Do not use flames for lighting during maintenance or check



- ♦ Before each operation on electric parts, verify that the machine has been disconnected from the electric current, take off the person (generally unconscious) from the parts under tension. Disconnect the machine from the electric line, if this take too much time, move the person with insulating materials such as wood stick or pvc fabric or leather.

ATTENTION !!!!

Danger of fulguration

This help is dangerous: touch the person fulgurated means to be remain fulgurated.

3.1. General description

Our meat mincer have a normal dimension and is realised in stainless steel AISI 304

Type	REFRIGERATED RM 22E REFRIGERATED RM 32E
Models	REFRIGERATED RM 22E CE STATIC REFRIGERATED RM 32E CE STATIC REFRIGERATED RM 22E CE VENTILATED REFRIGERATED RM 32E CE VENTILATED

The principals parts are for all models:

- ◆ Structure with little foot
- ◆ Meat inlet head 52 mm
- ◆ Inlet hight mm. 120
- ◆ Motor group with gear riduction
- ◆ Refrigerated system
- ◆ Control panel

The different between the model are the distribution of the cold

The ventilated model give cold forced to fan wheel in the interieur of glass placed in front of the meat mincer where on put the hamburger unit, and also have a allocation of cold air on the hopper plate.

All the models have a predisposition to “hunger” system or “entreprise”

The hole hopper at grinding group permit the introduction of pieces meat just at dimension of 52 mm. diameter

The meat must be cut and boned for permit the easy passage across the hole hopper with the aid of peste.

The pestle must be used for facilitate the feeding (in the case of second passage) for meat grinding

The meat that is inside the archimedean screw is feeding for the mouvement of the meat mincer.

Don't utilise the pestle for facilitate the operation

The archimedean screw must carry the meat in continuation

The archimedean screw turn in opposite direction only with press button.

In all the models the body is very easy for introduction

3.2. Technical scheda

Dimensions

REFRIGERATED RM 22E

HEIGHT	CM. 63
WIDTH	CM. 35
LENGTH	CM. 43
WEIGHT	CM. 59

REFRIGERATED RM 32E

CM. 63
CM. 35
CM. 43
CM. 66

Characteristics electric installation

REFRIGERATED RM 22E

Power absorbed	Kw. 1,5
Tension	220/380 volt
Frequency	50 hz
System	Threephase+earth +neutral
Auxiliare tension	24 VAC
Insulation category	class 2 group c
Protection electronic card	IP 65

REFRIGERATED RM 32E

Kw. 2,5
220/380 volt
50 hz
24 VAC
class 2 group C
IP 65

Characteristics refrigerated installation

Refrigerated pression	12bar/55° c (condensation temperature)
Refrigerated gas	R 134/A
Temperature interior middle	2-4° C

Performance

Volume hopper	4 liter
---------------	---------

Noise

Inferior at 70 DBA

3.3. Utilisation

This meat mincer descript is a professional utilisation and is exclusively destined at grinding meat
 The refrigeration resolve the problem of fast augmentation of batteric flora
 The meat mincer must operate in a good environmental condition descript in this manual.

3.4. Mistake foreseeable and incorrect behaviour

For evitate error or mistake is necessary that the staff operators must be advertise at perfection the protectives devices applied on the meat mincer and described in this manual.

and in particular:

- ◆ Don't use the meat mincer for cut meats with bones, frozen products or products no food.
- ◆ Don't introduce in the meat mincer object with big dimension in the inlet for evitate locking
- ◆ Don't utilise the meat mincer for use outside the grinding of meat.

3.6. Incorrect utilisation and contra-indication

Every use different from what declared, not understood from this manual is "not admit".

4 TRANSPORT AND PACKING

4.1. Supply condition

Ours meat mincer in case of expedition are packed in strong carton box and are supply with:

- ◆ Conformity declaration CE
- ◆ Operating instruction and maintenance handbook

4.2. Transport and packing opening

When the box containing the meat mincer is collected it is necessary to make sure that is not present anomaly and that it has not damages during the transport.

If yes inform immediatly the carrier and compile within 3 days a complete report and set it to

carrier. The goods travel at the customer's risk.

4.3. Waste disposal

The components of packing (cardboard,plastic,strap, eventual pallet) are assimilable at urban waste materials, and so can be waste without any difficult.

In the case of the meat mincer is installed in State with particulars laws it must be eliminated according to rules in force in that particular state.

5 INSTALLATION

5.1. Environmental condition

The meat mincer during the installation must be placed on a support plane that it is suitable for the dimension of meat mincer.

A support plane must be large, smooth and dry, stable and positioned at a height proportionate at operator height

TEMPERATURE

Minimum temperature 0°

Maximum temperature 30°

ATTENTION !!!!

The refrigerated meat mincer have parts in pression : evitate temperature different from those prescribed

DAMPNESS RELATIVE

Inferieur at 90% (without condense)

LIGHTING

The light in working place is very important for security people. For calculate the lighting: lux:lux = 1lm/mq

The minimum lighting is aprox 200 lux. For can guarantee the correct perception of panel control.

The maximum lighting: for evitate dazling to operator.

ATMOSPHERE WITH RISK OF EXPLOSION AND FIRE

The meat mincer is not predispose for work in rooms with explosive atmosphere or fire risk.

5.2. Necessary espace for operation

The choice of place and spac for use the meat mincer is important for the quality of work. The room must be lighting and aired.

The conditions environmental and operative do not constitute obstacle for access at panel control

must be guarantee the operative of meat mincer considerate also the activity of maintenance.

5.3. Installation and assemblage



The meat mincer during the installation must be placed on a support plane that is suitable for the dimension of meat mincer.

A support plane must be large, smooth and dry and stable and positioned at a height proportionate at operator height.

Verify that where must be placed the meat mincer don't have any free flames.

Don't overturn the meat mincer if should happen, leave the meat mincer in vertical position, for 4

hours before to start.

In otherwise should be verify damages (**NOT GUARANTEE**)

5.4. *Installation rules*

The security for electric hazard are realised in conformity at EN 60204 rules.

Predispose the current line with 5 POLE plug

When the power restored after a power interruption or when a contact in an interlock switch is remade the meat mincer shall not automatically start if operator does not press the on switch.

When you connect the meat mincer verify:

- ◆ The voltage and frequency must correspond at motor plate on meat mincer,
- ◆ The current line must be provided with earth plant.

ATTENTION !!!!

Is forbidden the connection at the electric line without the earth connection

Before to connect the meat mincer at current line make sure that the voltage characteristics correspond to those of motor, and the meat mincer must be connected at a current collector that it is as laid down by law.

Before to connect definitively the meat mincer at current three-phase check the sense of rotation the archimedean screw must rotate in anti-clock wise.

5.5. *Condensate discharge*

The condensate product is conveyed with utilisation of drain pipe and deposite in the little container placed under the machine.

5.6. *Outfit*

The dotation of meat mincer are:

- ◆ The pestle

6 UTILISATION

6.1. *Attention*

Before to connect the meat mincer must be sure of understanding this manual, for more information please contact directly the builder.

The conductor and maintenance operator must possess the specify competence request in this manual.

6.2. *Description*

ATTENTION !!!!

ALL SECURITY DEVICE NEVER TAMPER

6.3. *Plan trick*

- ◆ Dimension upper tray and alimentation hole diameter 52 height, 120 mm. from the archimedean screw that prevent the access at archimedean screw in conformity at D.L. 547/55 and 1972
- ◆ Plate with dimension hole inferior at 8 mm. for exitate the access at knife conformity EN 294
- ◆ Microswitch for the stop ventilation in the cover plexiglass inferior and also for hamburger unit.
- ◆ Guide pin for ventilation in the cover plexi-glass and in the hamburger unit.
- ◆ Reinforced security pin isolated shock resistant.
- ◆ Stainless steel materials for food use
- ◆ Geometric configuration in case of loss evitate the oil flow (transmission by gear) at meat passage (separated channel)
- ◆ Simple structure for agevolute the easy cleaning in any parts of meat mincer
- ◆ Thermostat on control panel for controle the temperature and compressor stop.
- ◆ Insulating material for cold pipes (protective covering thermo-insulating)
- ◆ Fairing that evitate access at refrigerated component
- ◆ All the electric parts are closed in the boxes fixed with fillister head screw.

6.4. *Warning labels*

In conformity with rule CEE 89/392 and its emendations, there have been arranged following warning labels:

- ◆ In the point of access of electric wire
- ◆ On the meat mincer in position good visible, prescription for dimension of plate holes.

ATTENTION !!!!

Prohibition to use plates with holes above 8 mm. diameter

Is absolutely necessary to know meaning of warning labels and maintain readable message. In case of deterioration of these labels these must be immediatly replaced preventing the use of the machine without these.

It is recommended to respect notices of the labels.



6.5. *Start-stop*

Pressing pushbutton “ON” of general switch the machine is predisposed to start. Grinding and refrigeration can be started in way independant with switch 1.0. FRIGO start refrigeration system.

With switch START MEAT MINCER .

For switching off the machine, press pushbutton OFF of general switch.

When on the meat mincer is assembled the hamburger machine, start and stop of hamburger machine are automatic when the machine is predisposed with push-button of meat mincer in position “ON” and with consent of pushbutton for hamburger machine.

ATTENTION !!!!

It is recommended for ventilated meat mincer, to keep always closed glass when the machine is not used

6.6. *Signals and control*

Drive or signals	colour	denomination	function-effect
START-STOP BUTTON DIGITAL			
General switch 0-1 a two position	OFF BLACK ON WHITE	GENERAL	In position 0 stop the machine in position 1 start the machine at starting
Switch ON-OFF on two position	1 WHITE O BLACK	REFRIGERATION	In pos. O stop the refrigeration in pos. 1 start the refrigeration
Button STOP Working button Reversible button	BLACK WHITE ⇐⇐ WHITE ⇒	MEAT MINCER	In pos. STOP the meat mincer stop. In pos. ⇐ start the meat mincer In pos. ⇒ reverse the rotation of archimedean screw after 5 seconds
Hamburger unit two position instable	1 WHITE O BLACK	HAMBURGER UNIT	Start the hamburger device
Digital display and setting Key board		THERMOSTAT	Make the set of temperature and display the value

6.7. *Electric stop*

For stop the current line disconnect the plug to current collector.
In case is necessary is possible to use this system for emergency stop.

7 MEAT MINCER UTILISATION

7.1. *Starting*

ATTENTION !!!!

Generic danger

Before to start verify that all the protection fixed and mobile are in correct position, verify the efficiency of security device, trying.

- ◆ Start the refrigeration button
- ◆ Verify the interior temperature value between + 03° and + 07° (the digital display indicate the refrigeration temperature.
- ◆ Start the button for working meat mincer.
- ◆ Evitate to connect or disconnect frequently the refrigeration installation.
- ◆ Between the connect and disconnect is correct to pass some minutes.

7.2. *Starting*

Before to connect the meat mincer execute all the operations necessary for the control et regulation before the starting.

ATTENTION !!!!

Is forbidden effect regulation during the meat mincer operation. All the regulations must be effected with stop meat mincer and with current line get out.

7.3. *Ordinary maintenance*

For respect the long utilisation of meat mincer the operator must do the cleaning and ordinary maintenance.

7.4. *Assembling and disassembling body inlet*

Lift the hopper for release the entrance body (only for ventilated 22 and 32)
For montage (body worm conveyor) make:

- ◆ Take the body worm conveyour and thread them in the exactly seat.
- ◆ Keep the hole charge in the high, rotate left the body; place lay it perfectly opposite the ring nut (see table 4)
- ◆ Verify that the body don't rotate in any sense
- ◆ Block the knob (see table 4)
- ◆ For the disassembled operate in opposite direction

7.5. *Assembling and disassembling body inlet*

For assembling the archimedean screw:

- ◆ Keep the archimedean screw
- ◆ Insert in the body archimedean screw just at when is insert in the pin that transmit the rotation mouvement.
- ◆ For disassembling operate in opposite direction

7.6 *Assembling cutting system*

ENTERPRISE system

For the montage operate:

- ◆ Insert the knife on the pivot with board placed on the archimedean screw
- ◆ Controle on the knife the cutting parts must be turn at exterior
- ◆ Instal the plate (with the pipe plate at exterior)
- ◆ The knife and the plate must be at contact
- ◆ Insert the ring nut

7.7. *Cleaning*

The meat mincer must be cleaning:



- ◆ After any use or every day must be do the cleaning and enlevate the pieces of meat that rest inside during the work
- ◆ The exterior cleaning is necessary, because the meat mincer is in a laboratory where is important to have a good cleaning for the laboratory and for machinery.

For the exterior parts (framework) used only a humid cloth and alimentary detergent

For interior cleaning:

- ◆ Unscrew the ring nut
- ◆ Unscrew the archimedean screw body, archimedean screw plat and knife
- ◆ Clean the parts enleveted
- ◆ For clean the superior cover put them in vertical
- ◆ For replace the body operate in opposite way
- ◆ The capacitormust be cleaning every week
- ◆ For cleaning use only specify detergent for food use

ATTENTION !!!!

Before to clean the meat mincer verify the disconnection at current line
Don't use water spout for cleaning

ATTENTION !!!!

environmental danger

Before to put inside the refrigerating gas in the circuit the refrigerator operator must be assure that the circuit is hermetically closed.

7.8. *Temperature regulation*

The pre-established temperature is indicated on digital thermoregulator

The refrigeration group start and stop when arrived at the pre-established temperature and start again when the interior temperature is higher than the pre-established temperature

The temperature probe is placed inside in a case positioned on the grinding group

8 UTILISATION HAMBURGER UNIT

This accessory in optional at meat mincer is a device for prepare a hamburger mince ready for cooking.

The weight for the hamburger portion is adjustable to 80 at 160 grams aprox.

The use and utilisation of hamburger unit are descript in another manual specify in dotation with hamburger.

9 MAINTENANCE AND REPARATION

9.1. *Extraordinary maintenance*



The extraordinary maintenance must be made to service assistance, for accidental break or for substitution parts.

ATTENTION !!!!!

Before to effect any reparation assure that the current line is disconnected.
Any electric reparation must be do to personal qualified (electric mechanical)

9.2. Estimate maintenance

The periodic maintenance and a perfect use are essential for guarantee the functionality and life time of meat mincer

The intervention at interval described are for mechanical maintenance.

OPERATION	PERIODICITY
<i>For mechanical maintenance</i>	
Verify general state	any 500 hours operation
Verify efficiency fan (ventilator)	any 500 hours operation
Cleaning surface air cooled heat exchanger (refreshing battery)	any 500 hours operation
Verify leak refrigerated gas at interior tunnel	any 500 hours operation
Cleaning capacitor	any week
<i>For refrigerated mechanical</i>	
Verify general state of refrigerated installation	every 12 months
Controlle state unit of condensation	every 12 months
Verify level gas refrigerated	every 12 months

9.3. Refrigerator installation maintenance

For have the maximum of security and trust and for keep the maximum rendering of refrigeration group
is important that the maintenance intervention are effected with costancy.

- ◆ Maintain always clean the surface of air-cooled meat exchanger (evaporator and capacitor),
in particularity the capacitor car subject at heap of dirt.
Controlle that the drain pipe of water and condensate is not block up.
Controlle that any object don't obstruct the air circulation.
- ◆ After 12 months of functioning controle the level of refrigerated gas, in case of necessity
controle the existence of waste (to eliminate with improvement the connection locking or with weldin.

ATTENTION !!!!!

The refrigerated gas R134 A is dangerous for pollution, predispose all the precautions necessary for evitate the dispersion in the air.



9.4. Oil compressor check

The compressor is ermetic and the oil don't be replaced or joint.
Oil type SUN ISO 36

9.5. Oil gear box check

The reducer is closed and is not request assistance:

The control oil level and eventually a joint must be effected only in the case if are trail. of oil.under the meat mincer.

The substitution oil in the gear box must be do only in a case of gear substitution.

The oil gear box contain mineral oil.

9.6. Diagnostic

This table report the most principlas problems as verified during the working functioning.

DISADVANTAGE	CAUSES	REMEDY
<i>The motor don't turn and</i>	<i>Verify that the meat</i>	<i>Connect at current</i>



archimedeascrew don't start mincer is connect at current line line

Verify that for static version is pushed the hamburger button

Disconnect the hamburgerbutton

The archimedeascrew don't turn

Presence of foreign body in the filling canal

Enlevate foreign body with inversion turn

Noisy operation of archimedeascrew Excessive bloc of ring nut

Loose the ring nut

The refrigeration temperature don't go down When have start a meat mincer wasn't in vertical position

Stop the meat mincer and wait 4 hours before to start it

The meat mincer is installed with the side of capacitor too near at another machines or near at wall that don't have a good circulation of air

Installed the machine in another place

Not cold

Inactive compressor

Repair

Ventilator inactive

Repair

Frost on evaporator

Defrost the evaporator stopping the meat mincer

Clogging piping circulation air

Repair

Loss in refrigeration circuit

Intervention refrigeration mechanical

Oil below the meat mincer

Probable leak seal in the gear box

Reparation seal cover gear box

Leak oil in the chamber situated grinding group

Probable leak of bi-angular bearing on transmission shaft

Substitution of bi-angular bearing and verify level oil

9.7. Spare parts

The meat mincer is marked with year of construction and model evidencing on identification little plate.

IMPORTANT !!!

For have a urgently delivery spare parts is necessary that in the order specify always:

- ◆ Model meat mincer
- ◆ Serial number
- ◆ Description spare parts
- ◆ Quantity

10 ELIMINATION

10.1. *Elimination principal parts*

For eliminated all the parts is depende to State at State. Make attention for the parts:

Plastic parts

Electric wires

Caoutchouc parts

Oil lubricated

Refrigerated oil

11 ATTACHMENT

Declaration conformity CE

TABLE

TABLE	1	Topographic with label
TABLE	2	Topographic with security
TABLE	3	Topographic instrument panel
TABLE	4	Topographic assembling body inlet
Electric schema		
Spare parts drawing RM 22E and RM 32E STATIC		
Description spare parts RM 22E AND RM 32E STATIC		
Drawing refrigerator spare parts RM 22E and RM 32E STATIC		
Description refrigerator spare parts RM 22E and RM 32E STATIC		
Spare parts drawing RM 22E and RM 32E VENTILATED		
Description spare parts drawing RM 22E and RM 32E VENTILATED		
Drawing refrigerator spare parts RM 22E and RM 32E VENTILATED		
Description refrigerator spare parts RM 22E and RM 32E VENTILATED		

DECLARATION OF CONFORMITY
DECLARATION DE CONFORMITE'

CE
CE



WERKSCHESCHEINIGUNG **CE**
DICHIARAZIONE DI CONFORMITA' **CE**
DECLARACION DE CONFORMIDAD **CE**

Declares that the machine listed in boxes 1 and 2 complies with the essential requirements of the directive 89/392,91/368, 93/44 93/68, and the corresponding standards indicated in the box 3

1

Nous déclarons que la machine désignée dans les cadres 1 et 2 est conforme aux exigences essentielles de la directive 89/392 91/368, 93/44 93/68 et aux normes correspondantes indiquées dans le cadre 3

Hiermit wird bescheinigt,dass die in den Kastchen 1 und 2 bezeichnete Maschine den wesentlichen Anforderung der Richtlinie 89/392, 91/368, 93/44, 93/68 und den im Kastchen 3 angegeben Normen entspricht.

2

Dichiarasi la macchina descritta ai quadri 1 e 2 conformi alle esigenze essenziali della direttiva 89/392, 91/368 , 93/44, 93/68 ed alle norme corrispondenti quali indicate al quadro 3

Declara que la maquina designada en los cuadros 1 y 2 esta conforme a las exigencias esenciales de la directiva 89/392, 91/368, 93/44, 93/68 y la normas correspondientes indicadas en el cuadro 3

3 Standard –Norme-Norm-Norma
EN 292-1 EN 292-2
EN 294 EN 418
EN 60204-1 DPR73./23 CEE
DIR 89/336 CEE

TABLE 1

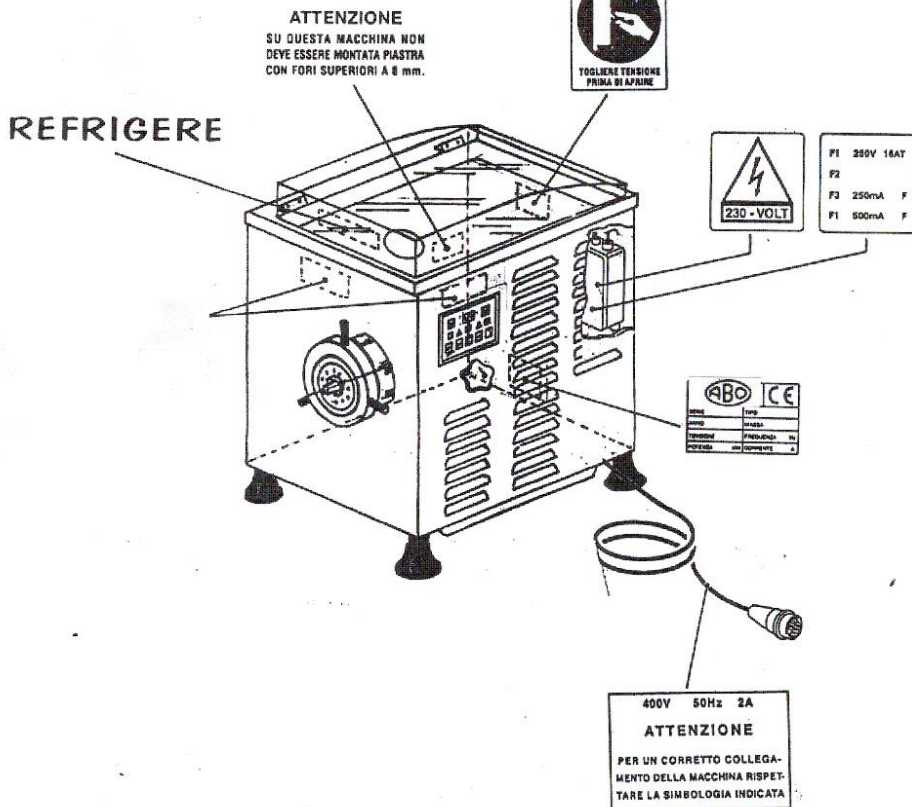


TABLE 2

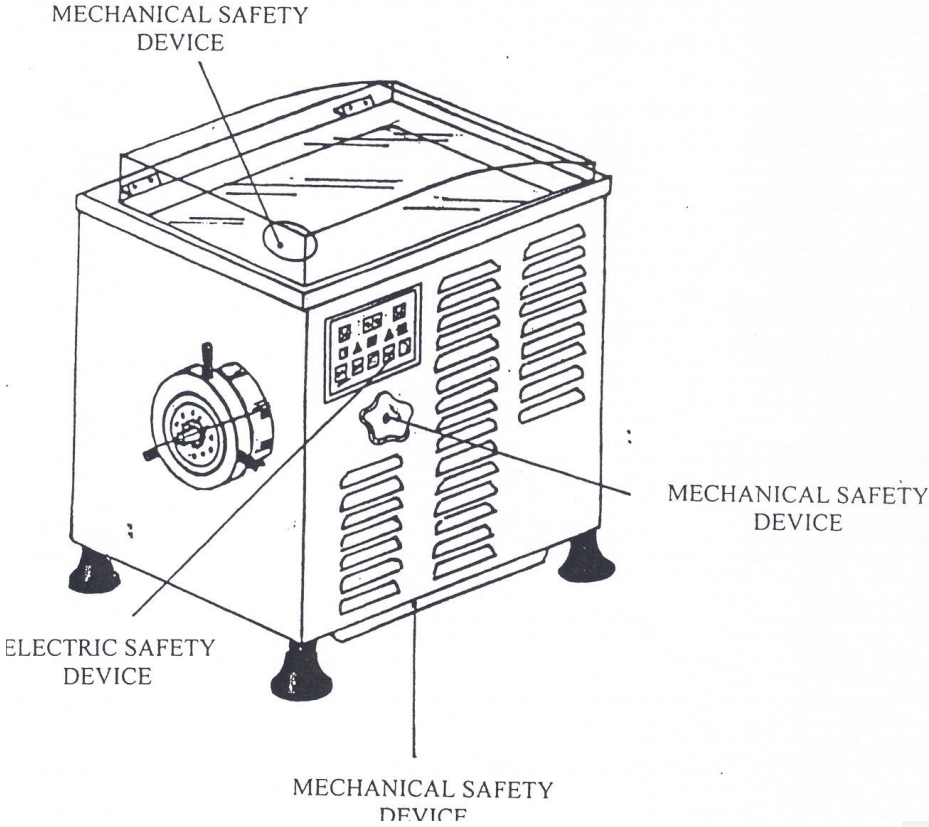


TABLE 3

ON – OFF HAMBURGER
MACHINE

THERMOSTAT

ON – OFF REFRIGERATION

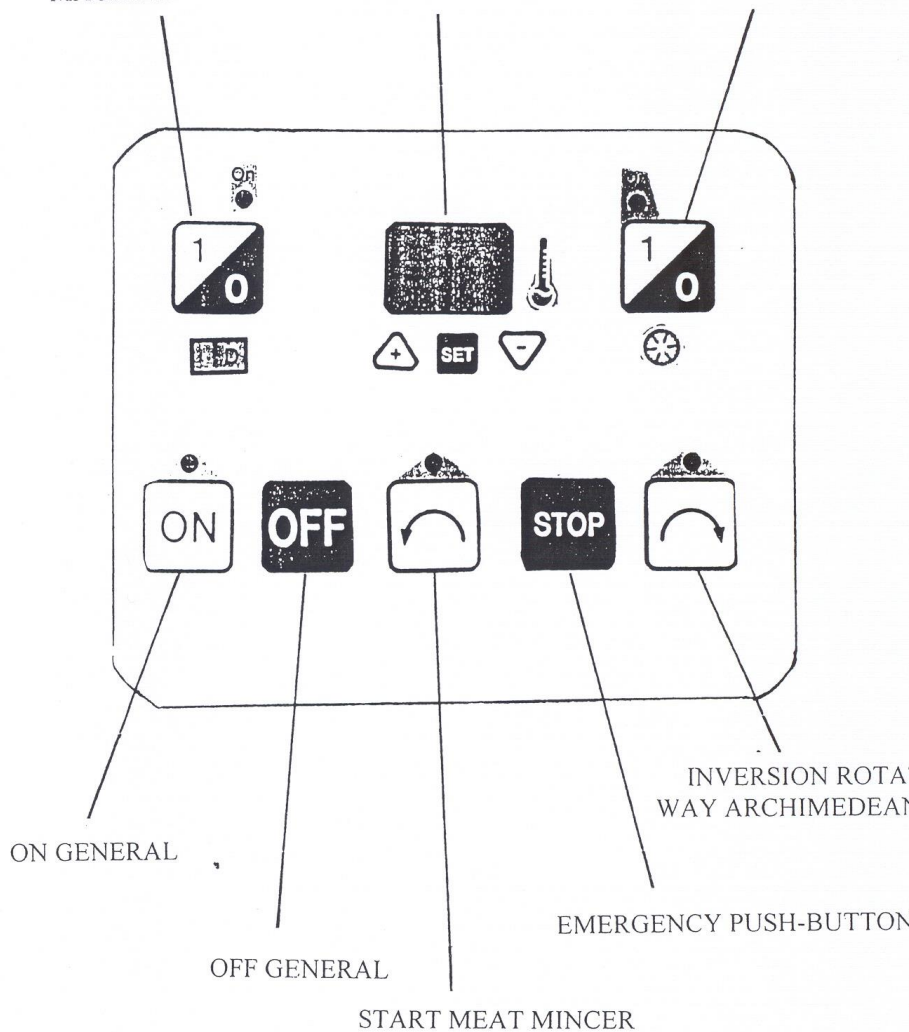
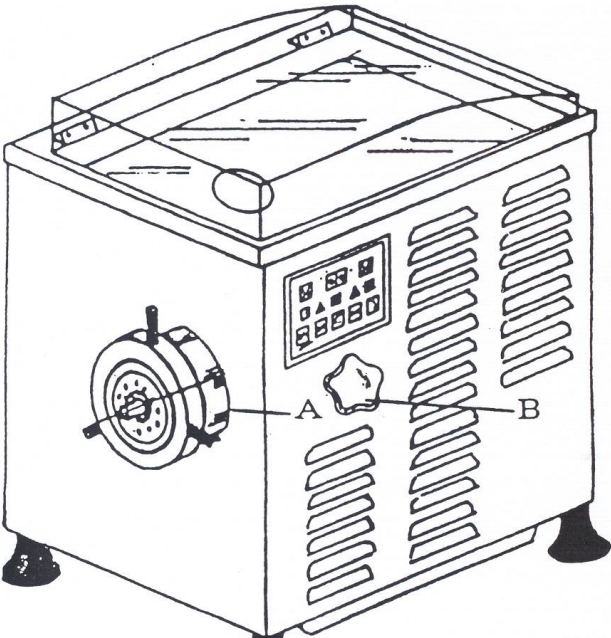


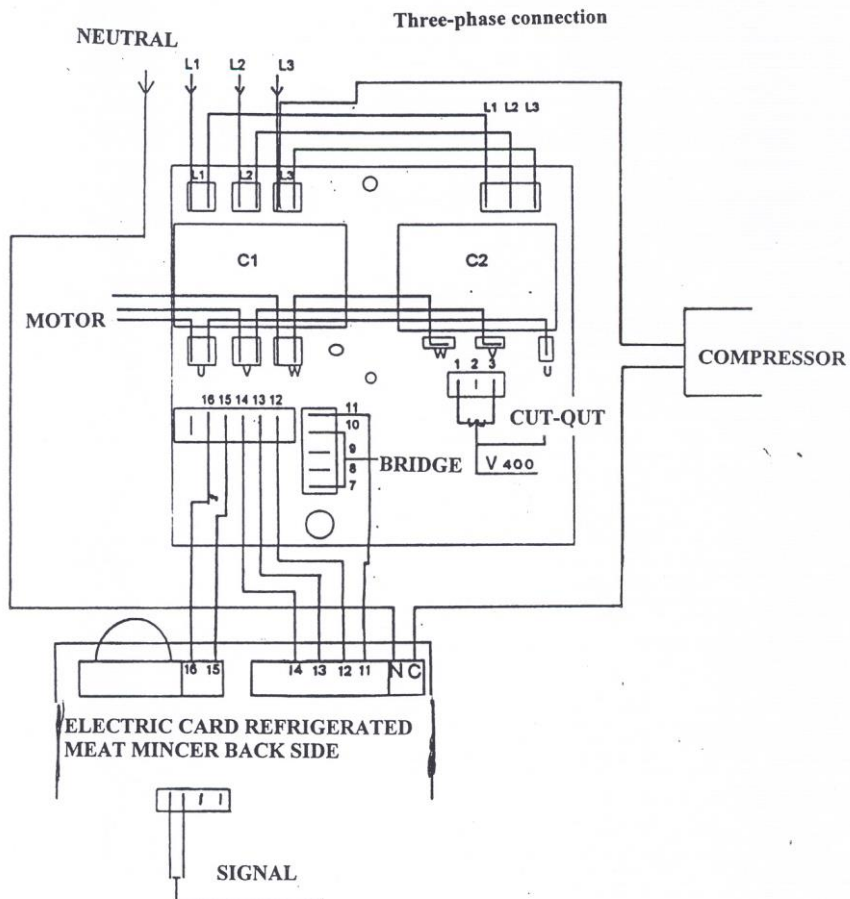


TABLE 4



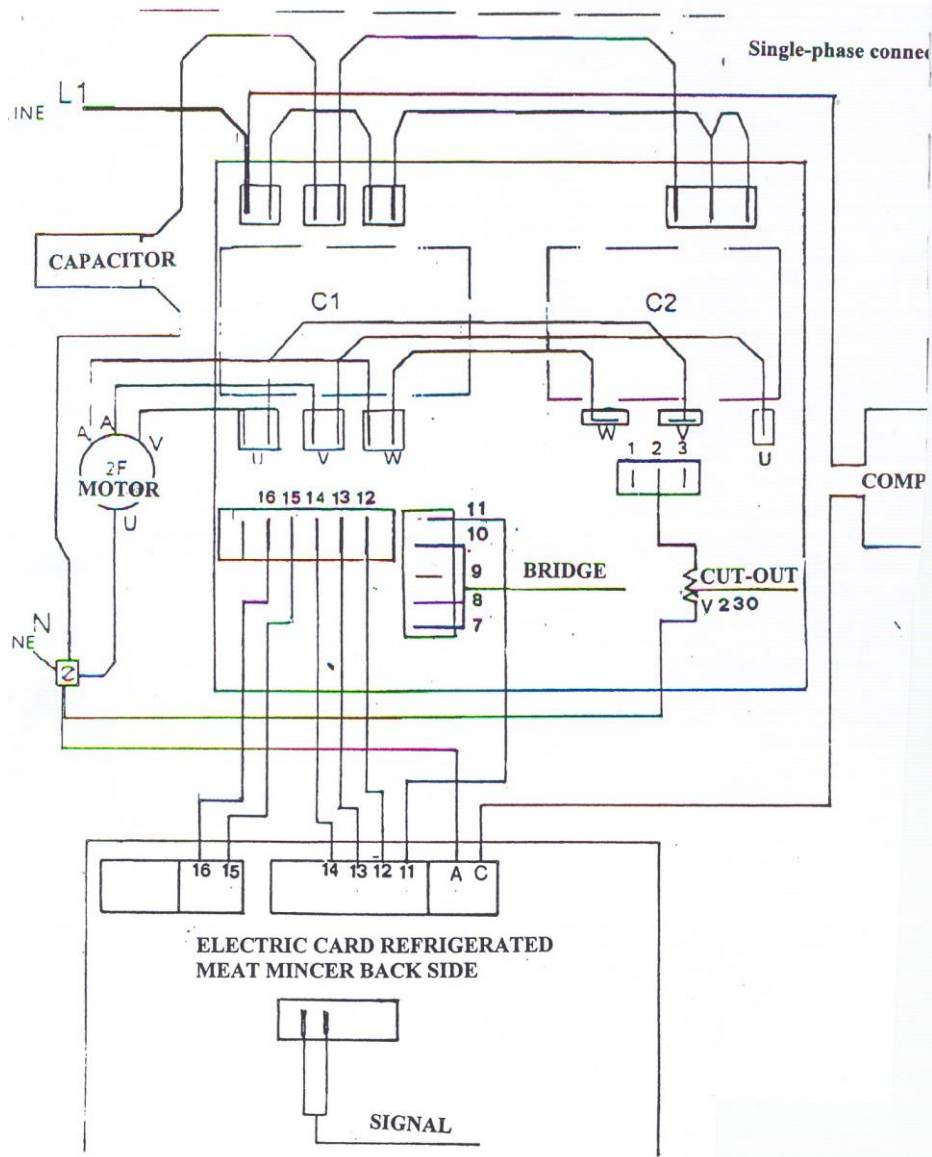
ELECTRIC SCHEMA THREE-PHASE

ELECTRONIC CARD MOD.TG99IT REFRIGERATED MEAT MINCER STATIC





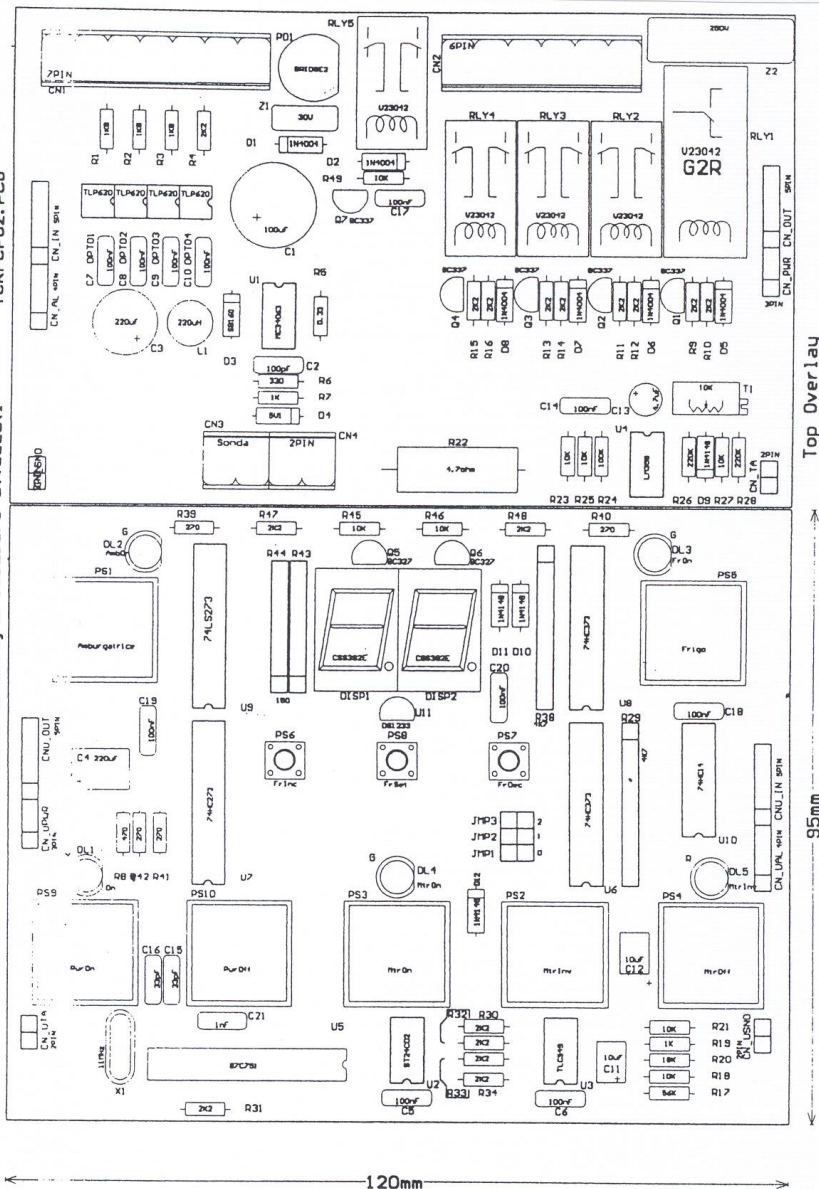
ELECTRIC SCHEMA MONO-PHASE

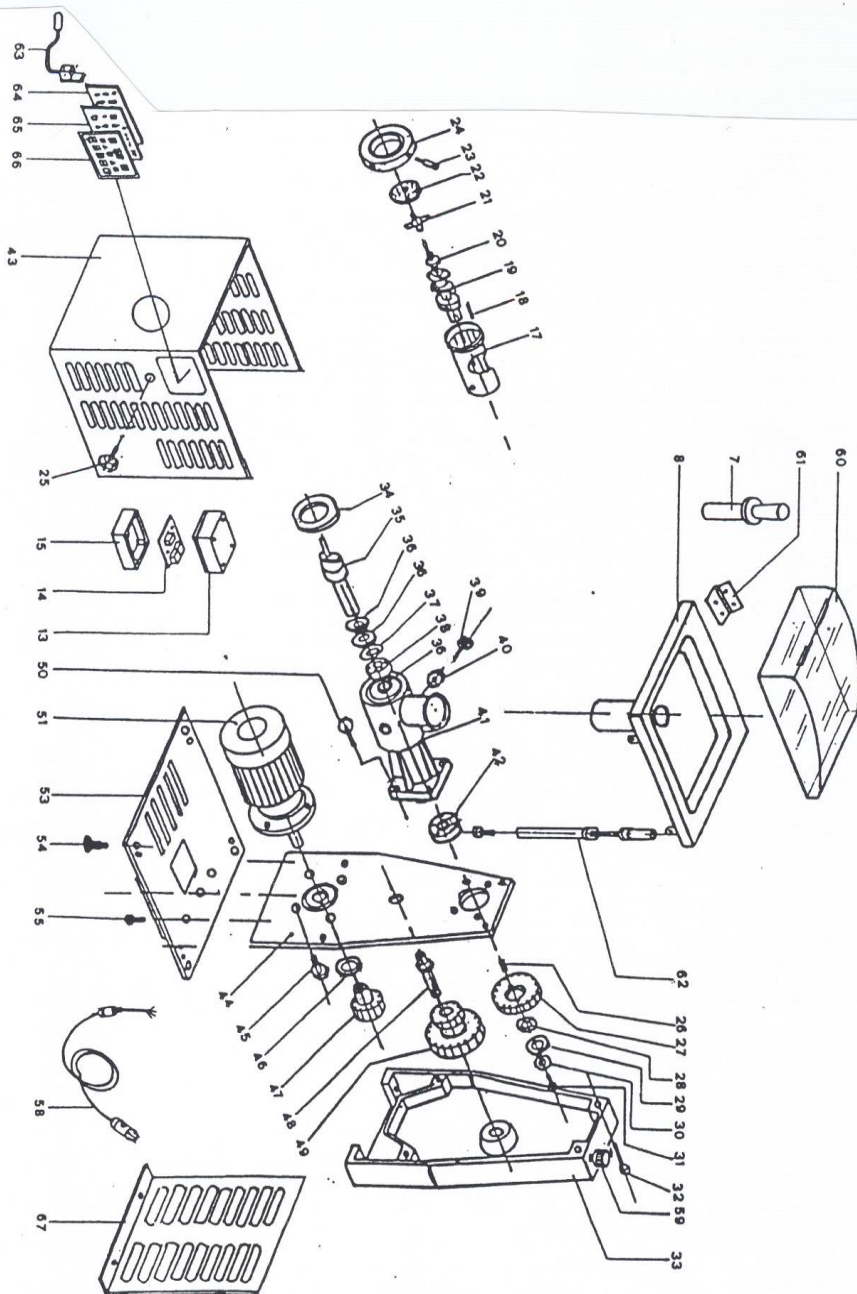


ELECTRIC SCHEMA

TCRCPU2.PCB

Fare scoring e lasciare attaccati



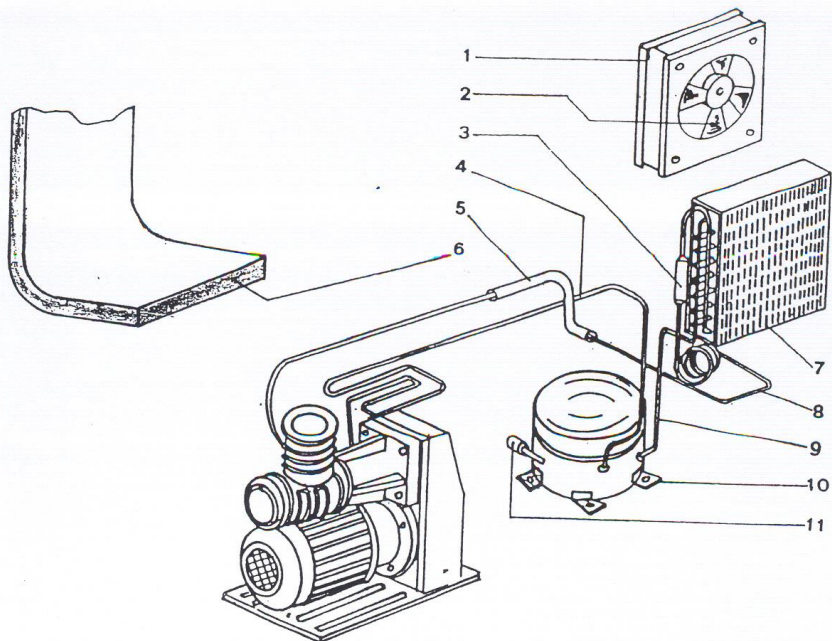


DESCRIPTION SPARE PARTS DRAWING RM 22E and RM 32E STATIC

NUMBER	DESCRIPTION
7	PESTLE
8	HOPPER
13	ELECTRIC BOX COVER
14	AUXILIARY ELECTRIC CARD
15	ELECTRIC BOX
17	INLET
18	STOP PIN
19	WORM (ARCHIMEDEAN SCREW)
20	PIVOT WITH BOARD
21	KNIFE
22	PLATE
23	HANDWHEEL HANDLE
24	HANDWHEEL
25	INLET BLOCKING HANDLE
26	KEY
27	GEAR
28	FAN WASHER
29	WASHER
30	FAN WASHER
31	SCREW TE
32	SCREW TE
33	CASING
34	RING NUT
35	CENTRAL PIVOT
36	RING
37	WASHER
38	BEARING
39	SCREW TE
40	NUT
41	BODY
42	BEARING
43	COVERNG
44	BACK
45	SCREW M8
46	RING
47	PINION GEAR
48	CENTRAL PIVOT
49	GEAR PAIN
50	SCREW TCI
51	MOTOR
53	BASE
54	LITTLE FOOT
55	SCREW BACK FIXING
58	ELECTRIC PLUG WITH WIRE
59	BREATHER STOPPER AT VALVE
60	PLEXIGLASS COVER



61	HINGE
62	ADJUSTABLE COLUMN
63	THERMOSTAT PROBE
64	PRINCIPAL CARD
65	CONTROL CARD
66	CONTROL PANEL
67	BACK CASING





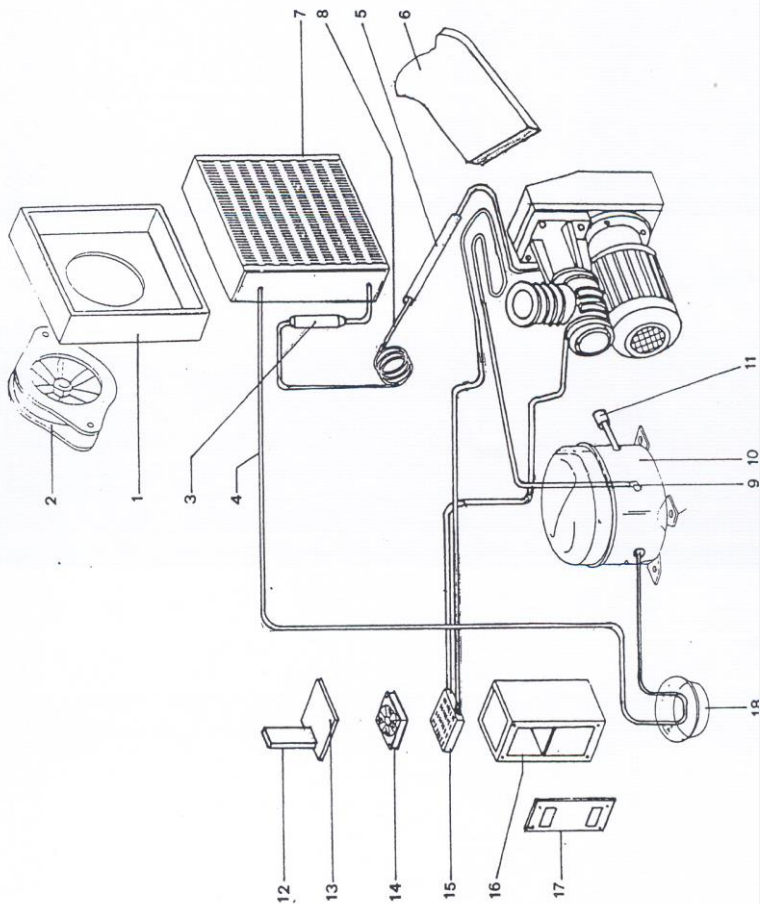
DESCRIPTION REFRIGERATOR PARTS STATIC

1	SUPPORT FAN WHEEL
2	FAN WHEEL
3	FILTER
4	ROUND PIPE
5	NON CONDUCTOR
6	NON CONDUCTOR
7	CAPACITOR
8	CAPILLARY
9	PIPE GO
10	COMPRESSOR
11	VALVE
12	NON CONDUCTOR



NUMBER	DESCRIPTION
7	PESTLE
8	HOPPER
13	ELECTRIC BOX COVER
14	AUXILIARY ELECTRIC CARD
15	ELECTRIC BOX
17	INLET
18	STOP PIN
19	WORM (ARCHIMEDEAN SCREW)
20	PIVOT WITH BOARD
21	KNIFE
22	PLATE
23	HANDWHEEL HANDLE
24	HANDWHEEL
25	INLET BLOCKING HANDLE
26	KEY
27	GEAR
28	FAN WASHER
29	WASHER
30	FAN WASHER
31	SCREW TE
32	SCREW TE
33	CASING
34	RING NUT
35	CENTRAL PIVOT
36	RING
37	WASHER
38	BEARING
39	SCREW TE
40	NUT
41	BODY
42	BEARING
43	COVERNG
44	BACK
45	SCREW M8
46	RING
47	PINION GEAR
48	CENTRAL PIVOT
49	GEAR PAIN
50	SCREW TCI
51	MOTOR
53	BASE
54	LITTLE FOOT
55	SCREW BACK FIXING
58	ELECTRIC PLUG WITH WIRE
59	BREATHER STOPPER AT VALVE
60	PLEXIGLASS COVER
61	HINGE

62	ADJUSTABLE COLUMN
63	THERMOSTAT PROBE
64	PRINCIPAL CARD
65	CONTROL CARD
66	CONTROL PANEL
67	BACK CASING
68	EXTRACTABLE HOPPER
69	TRANSPARENT GLASS
70	MICRO SUPPORT
71	MICROSWITCH
72	HAMBURGER MACHINE POSITION
73	GLASS HANDLE
74	MAGNETO
75	HINGE



1	SUPPORT FAN WHEEL
2	FAN WHEEL
3	FILTER
4	ROUND PIPE
5	NON CONDUCTOR
6	NON CONDUCTOR
7	CAPACITOR
8	CAPILLARY
9	PIPE GO
10	COMPRESSOR
11	VALVE
12	PIPE HOPPER VENTILATION
13	COVER OF CONVEY APPLIANCE
14	FAN WHEEL
15	CAPACITOR
16	VENTILATION BOX
17	PANEL
18	CONDENSATE BASIN



Terms of guarantee

The appliance is guaranteed 12 months except the electric parts and electronic parts. The guarantee provides for the free replacement of all those parts which are of defective manufacture.

MOREOVER THE GUARANTEE IS NOT VALID IN THE FOLLOWING CASES:

- ◆ Tampering with or damage to the machine due to incorrect use
- ◆ Use of appliance which does not accord with the information and advice in the manual
- ◆ Damage caused by a working environment unsuitable to the appliance and by phenomena not dependent on its normal functioning (incorrect voltage and frequency rating of mains)
- ◆ Repairs made by individuals or centres not authorised by the manufacturing company

**ATTENTION NEVER UTILIZE FOR CLEANING WATER SPOUT , STEAM JET OR NEBULIZED WATER
DECLINE IMMEDIATELY THE GUARANTEE**

The costs and risks involved in transit are not at the purchaser's expense



A series of 18 horizontal lines spanning the width of the page, providing a space for handwritten notes or a signature.



Van Berkel International S.r.l.
via Ugo Foscolo, 22
21040 Oggiona S. Stefano (VA) - ITALY
T +39 0331 214311
info@berkelinternational.com
www.theberkelworld.com