

# C136 - C137 - C138



## USE AND MAINTENANCE MANUAL

-Series-	
AGG.2014	
<b>C 136</b>	<b>04</b>
<b>C137</b>	<b>04</b>
<b>C138</b>	<b>04</b>



## IMPORTANT

We recommend that you read this manual fully and carefully before using your appliance.

It is in your interest to pay special attention to the warnings marked as follows:



Failure to comply with this signal causes very serious risks for health, death, and medium and long term permanent damage.



Failure to comply with this signal can cause very serious risks for health, death, and medium and long term permanent damage.



Failure to comply with this signal can cause injuries or damage to the machine.



Comply with these warnings for your machine to work properly and/or to be serviced correctly.



The machine can perform at best only through compliance with these warnings.

We congratulate you for having chosen to purchase a **FRIGOMAT** machine.

This manual, supplied together with the machine, must be considered an integral and essential part and must be delivered to the final user. Before carrying out any operations, we recommend studying these instructions carefully. Only by reading them carefully can you obtain the maximum performance from your machine. The following pages carry all of the indications required to perform installation, operation, adjustments and routine maintenance correctly. FRIGOMAT S.r.l. reserves the right to carry out the modifications it deems necessary to improve its product or the technical manual without prior warning, inserting the variations in the subsequent editions.

Total or partial reproduction, adaptation or translations of this manual without prior written consent by FRIGOMAT S.r.l is prohibited.

The machine is covered by warranty according to the terms illustrated in the "WARRANTY CARD" supplied. It must be duly filled in and returned to:

**FRIGOMAT s.r.l., via 1° Maggio, 28 26862 GUARDAMIGLIO (LODI) – ITALY**

Please write the serial number of your machine in the field below.

Serial number

Dealer's stamp

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## 1. TRANSPORTATION, HANDLING AND STORAGE.

### 1.1 PRELIMINARY INSPECTION AND STORAGE

The machine is transported at the risk and peril of the customer. If you notice any damage to the packaging, immediately inform the carrier.

Inform the carrier immediately after opening the package if the machine is damaged even if a few days after delivery.

It is always preferable to accept goods SUBJECT TO CLEARANCE.

The appliance must be handled with care; it can be damaged by falls and blows even without exterior damages.

Storage temperature must be between 0° and + 50°C, and humidity between 30 and 95% with no dew.

Once the appliance has been unpacked, the packaging must be kept in a dry place out of the reach of children. If stored properly, it can be reused if the machine is moved.

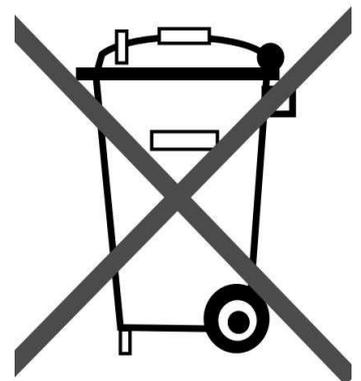
### 1.2 DIMENSIONS AND WEIGHTS OF PACKAGED MACHINES

MODEL	CRATE		BOX PALLET	
	MEASUREMENTS (CM)	WEIGHT N-G (KG)	MEASUREMENTS (CM)	WEIGHT N-G (KG)
<b>C138</b>	103 x 63 x h. 147	380-420	103 x 63 x h. 142	380-405
<b>C137</b>	103 x 63 x h.147	370-430	103 x 63 x h.142	370-395
<b>C136</b>	95 x 57 x h.147	310-360	95 x 57 x h.142	310-3C136

### 1.3 INDICATIONS FOR DECOMMISSIONING

The machine contains electrical and/or electronic materials and can contain fluids and/or oil. If it must be decommissioned or disposed of, comply with the Standards in force in the Country where it is used.

Even packaging materials (crates or boxes) must be divided by type and disposed of in compliance with Standards in force in the Country where it is used when the machine is decommissioned.



## 2. MARKING AND GRAPHIC SIGNS

The machine is provided with an identification plate and several pictograms. They must be known along with the manual to guarantee safe use.



### Machine data plate

The adhesive plate applied on the rear enables to identify the model. It includes the following indications: Name and address of the manufacturer; machine model and version; serial number; nominal electrical features; type and weight of gas used; year of manufacture.

### Indication

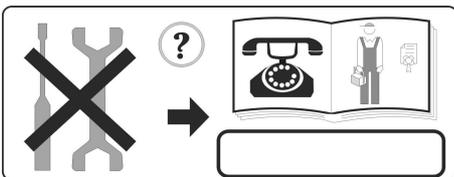
*Lifting equipment attachment points:*



This plate indicates the points where the lifting hooks must be placed in order to carry out this operation safely. Use a Phillips screwdriver Unscrew the two side panels of the machine and position the lifting equipment in the relevant points, making sure that they cannot accidentally slip off during lifting operations.

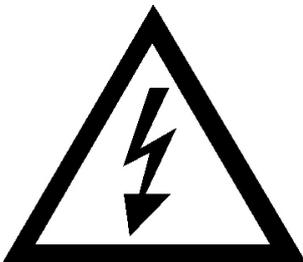
### Attention!

*Maintenance reserved for qualified personnel.* This plate applied on the rear panel prohibits extraordinary maintenance and/or repairs to any one but authorised personnel, whose address is indicated in the space provided.



### Attention!

*High voltage inside; electrocution hazard.*



This plate is applied on the cover of the electrical box and warns the operator that it must not be removed for any reason whatsoever, thus avoiding the danger of electrocution which could be fatal. In this case also, maintenance of internal components is reserved for qualified personnel.

### 3. GENERAL SAFETY STANDARDS



Strictly comply with the general Safety and Accident-prevention Standards listed hereafter:

- Use of the machine is reserved for personnel in good health, responsible and appropriately trained regarding allowed use and risks present.
- Use of the machine is reserved for operators who have read, understood and taken in all that is included in this manual.
- It is forbidden to remove or tamper with the safety systems installed on the machine.
- While the appliance is operating, it is mandatory to check that dangerous situations for persons do not occur. Should these conditions transpire, stop the appliance immediately.
- When you have finished working with the machine, it is mandatory to cut power by acting on the master switch.
- When unusual noise or anomalous functioning is perceived, it is mandatory to immediately stop operations in progress and to search for the cause of these irregularities. If in doubt, avoid improper operations by contacting the manufacturer's after-sales service.
- Any tampering or modification of the machine automatically entails the immediate termination of the warranty and relieves the manufacturer of all and any liability for direct or indirect damage caused.
- It is mandatory to check that the place where the machine is installed is ventilated and correctly illuminated. The surface where the appliance is installed must be solid, flat and levelled.
- During loading, unloading and handling operations, it is mandatory to use equipment with a capacity adequate for the mass (weight) of the machine, using hoisting devices and accessories with features and state of use suitable for the purpose.
- Use only FRIGOMAT original spare parts when performing maintenance. The manufacturer will not be held liable for damage caused by use of non-original spare parts. Use of non-original spare parts entails automatic termination of the warranty.
- It is mandatory to position the machine far away from equipment which emits electromagnetic radiation which could cause the circuit boards to malfunction.
- If fire-prevention equipment is necessary use types which are compatible with the presence of voltage on board.
- It is forbidden to wear long and loose apparel, ties, jewellery, scarves or similar clothing which could get caught in the moving parts of the machine.
- Hair must be tied back and shirt-sleeves tight.

## 4. INSTALLATION

### 4.1 USE

Appliance suitable for the thermal processing of food mixtures for ice cream products and bakery products, for batch freezing of ice cream mixtures and slush production, according to use allowed by Law.

### 4.2 WORKING LIMITS

Do not use the machine with inconstant power supplies or +/- 10% beyond the value indicated on the plate or with the power cable damaged;

Do not use the machine in explosive atmospheres;

Do not wash the machine with high-pressure water jets or with harmful substances;

Never aim the water flow of the shower head towards the side panels.

Do not expose the machine to excessive heat or humidity;

Do not use unbalanced mixtures and/or amounts which do not comply with the specifications carried on the packs.



Use not expressly indicated in this manual is to be considered improper and therefore must be strictly avoided.

The manufacturer will not be held liable for direct or indirect harm to persons or animals or damage to objects caused by improper use of the machine.

### 4.3 NOISE

#### SOUND EMISSION LEVEL EXPRESSED IN DECIBELS (measurement method A)

As foreseen by Machinery Directive 89/392 EN 23741 Standard  
(A-weighted equivalent continuous sound pressure level)

MODEL	LEVEL (A)	MODEL	LEVEL (A)
C138	< = 68 dB (A)	C137	< = 68 dB (A)
C138	< = 68 dB (A)		

### 4.4 SUPPLIED WITH MACHINE

- 
- Ice cream extraction spatula
- Complete scrapers
- Centring pin for beater
- Brush
- Gasket extractor
- O-ring kit
- Rubber seal
- FRIGOMAT lubricant
- Use and maintenance manual
- Declaration of conformity
- Warranty certificate
-

#### 4.5 ACTIVATION (INTENDED FOR QUALIFIED PERSONNEL)



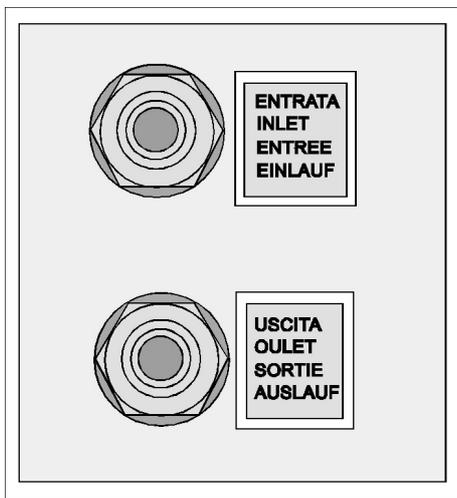
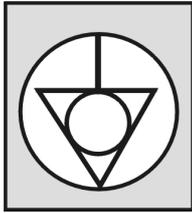
FRIGOMAT declines all and any liability for damage caused by failure to comply with the following indications. This lack of compliance causes the warranty to terminate.

Connection of the machine to the water mains must be performed in compliance with national regulations of the Country where the machine is installed.

To commission the machine, bring it to the place of use, checking what is requested for its installation:

- 1. Electrical power supply 3 phases + neutral + earth (5 wires);**
- 2. Cold water mains supply (13° - 20°C);**
- 3. Condensation water drain.**

- Make sure the appliance is positioned on a solid, stable, flat and levelled surface.
- Block the machine by acting on the relevant brake lever on the rear wheels.
- Leave at least 10 cm between the machine and the walls or other obstacles.
- Check the exact correspondence between the voltage and power of the mains compared to the values carried on the data plate applied on the rear panel;
- Connect the machine to the electrical power supply system. Install a omnipolar master switch upstream the appliance with minimum contact opening of 3 mm of adequate power, with a fuse and circuit breaker protective system. Use an approved interlocking plug to allow only the open circuit to connect and disconnect.
- The cable must be well laid, without being rolled-up or overlapped. It must not be exposed to blows or tampering. It must not be in the vicinity of liquids or water and heat sources. It must not be damaged in any way. If so, before connecting the machine to the mains, have it replaced by qualified personnel with another having a 5G4 H07RN-F (400 V version), 5G6 H07RN-F (220 V / 3 version) cross-section.
- For safety purposes, make sure the earthing system to which the machine plug is connected is compliant with standards and perfectly efficient.



- If needed, carry out an equipotential bonding, using the screw placed on the rear of the machine below the frame and marked with the symbol shown to the left.
- Make sure that the cold water supply line intended for condensation has pressure values between 1 and 3 BAR and temperature between 13° and 20°C.
- Connect the cold water supply pipe intended for condensation onto the machine inlet as shown in the figure. Use a Ø1/2" fitting and place a gate valve in the operator's reach.
- Connect the condensation water drain pipe onto the machine outlet as shown in the figure, using a Ø1/2" fitting.
- Always use new pipes suitable for hot water and for pressure up to 10 bar both for delivery and draining. Never use worn or consumed piping. Use suitable DIN 3017 hose clamps.
- The drain pipe must have an inclination of at least 3 cm for each meter of length.
- After having connected the water inlet and outlet pipes, with the machine stopped, open the cut-off cock and make sure that water does not leak from the drain.
- Turn off the master switch and press the AUTOMATIC button on the batch freezer control panel to check the following:

**1. Motor rotation direction.**

The machine is equipped with a sophisticated electronic system which is able to automatically detect if the beater motor rotation direction of the batch freezer is the correct one (anti-clockwise).

If the phases are inverted in the plug, after a few seconds of operating in production mode, the machine stops and the display shows the relative alarm message. To connect the phases properly cut the power and invert the two phase wires in the plug.



## 2. Condensation pressure

With the machine in production mode, After a few seconds condensation water must come out of the drain pipe at a temperature of about C136°C. If this is not the case, the pressure switch valve shown in the figure must be adjusted.



Three-phase machines are powered with three-phase + neutral lines: be careful never to connect the phase lines with neutral. FRIGOMAT will not be held liable for damage to the machine deriving from non-compliance with this rule.

- Press the **STOP** button to stop the machine .
- Operating temperature should be between 15° and C136°C.
- Humidity should be between 30 and 60%.



FRIGOMAT s.r.l. will not be held liable for personal harm and/or damage to objects deriving from incorrect installation and/or by failure to comply with work Accident-prevention Standards. Never intervene on the machine with your hands, neither during normal operating cycles or during cleaning and maintenance, without first having stopped the machine by pressing the STOP button and having turned off the master switch. Never clean the appliance using a high-pressure water jet. Never shut the water cut-off cock while the machine is running. Be careful never to damage the power cable. If so, have it replaced.

Machines with water cooling which are left in places at a temperature below or close to 0°C, must first have all the water drained from the condenser.

## 5. SAFETY DEVICES

**Limbs shearing-prevention safety device (batch freezer):** Implemented by means of a safety circuit compliant with the European directive, it intervenes when the door is opened and/or when the safety grid on the hopper is lifted, temporarily switching the machine to STOP mode.

**Limbs shearing-prevention safety device (heater):** Implemented by means of a safety circuit compliant with the European directive, it intervenes when the lid is opened, temporarily switching the machine to STOP mode.

**Motor overheating safety device:** Implemented by means of automatic reset thermal relays; they protect the machine's beater motors from overloads, by signalling the relative alarm message on the display, emitting an intermittent acoustic signal and enabling to reset directly from the push button control panel.

**Semi-hermetic compressor motor overheating safety device:** Implemented by means of an automatic reset thermal relay; it protects the machine compressor motor operation from overloads, by signalling the relative alarm message on the display, emitting an intermittent acoustic signal and enabling to reset directly from the push button control panel.

**Chiller circuit over-pressure safety device:** implemented by the approved automatic-restoration safety pressure switch; it protects the integrity of the chiller circuit from overpressure.

**Heat elements safety device:** implemented by means of safety thermostat; it protects the heat element from overheating, by signalling the relative alarm message on the display, emitting an intermittent acoustic signal and allowing restore directly from the push button control panel.

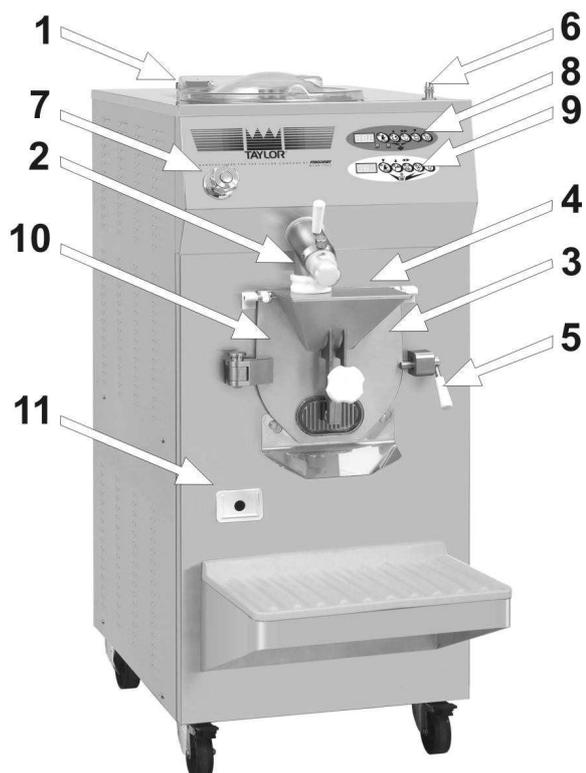
**Protection against short circuit of auxiliary utilities:** Implemented by fuses which intervene on the logic unit or auxiliary power supply in the event of short-circuits.

**SELV safety circuit:** the push button control panel is powered at low voltage by means of an approved dual-insulation safety transformer, protected against short circuits by fuses.

**Bain-marie fluid level safety device:** implemented by a conductivity probe inside the tank which signals alarm on the display and coupled with an intermittent acoustic signal if the fluid level is insufficient.

## 6. OPERATION

### 6.1 MACHINE



**1. Tank lid**

Closes the tank during the processing phases. It can be easily removed for cleaning.

**2. Tap**

Allows removing the product from the heater with the possibility of pouring it straight into the underlying batch freezing cylinder.

**3. Door**

Closes the cylinder during the processing phases.

**4. Safety grid**

Allows the operator to load the product safely. The cover keeps the mixture from coming into contact with dust.

**5. Door blocking handle**

Seals the door with the lever lowered.

**6. Water shower head**

Equipped with an extractable hose pipe, enables the operator to wash the machine.

**7. Water tap**

Opens or closes the shower head water.

**8. Heater control panel**

Allows to select the work programs for the heater.

**9. Batch freezer control panel**

Allows to select the work programs for the batch freezer.

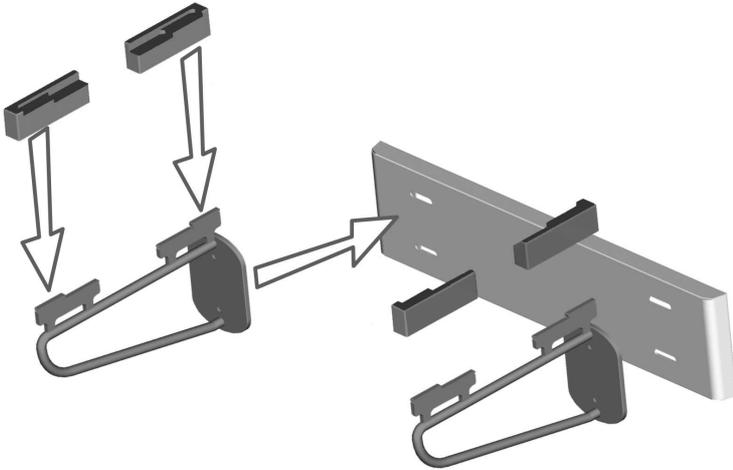
**10. Dispenser disk**

Used when extracting ice cream and emptying water to clean the cylinder.

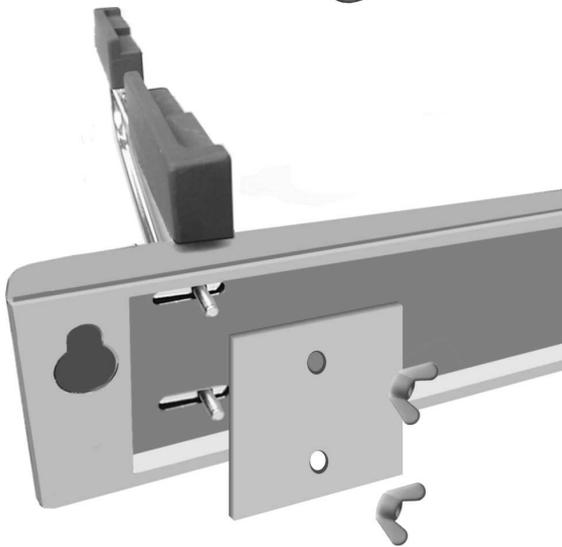
**11. Drip drawer**

Collects leakage of liquid from the cylinder gland follower.

## ASSEMBLY AND ADJUSTMENT OF THE TUB SUPPORT (optional)



Assemble the two steel shelves on the support as described in figure. Pay attention to the up-down direction referring to the fixing slots on the back of the support. Position the rubber buffers on the seats as shown in figure.



Position the two sheet steel shims and tighten the 4 wing nuts without fastening them.



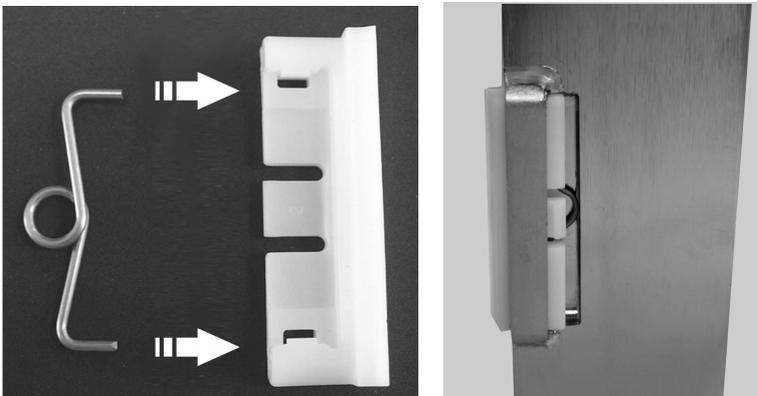
Position the tub in the corresponding seat obtained through the rubber buffers. Adjust the position of the steel shelves making them slide on the support. When the tub is sufficiently held by the supports, remove the machine support and fasten the ring nuts on the back.

## HEATER BEATER ASSEMBLY



Attach the mobile scrapers to the steel structure of the beater. Make sure they are orientated correctly, perfectly mobile and that the thrust springs are positioned correctly in their seats. Insert the complete beater into the tank and carefully check that every part is correctly positioned as illustrated in the figure.

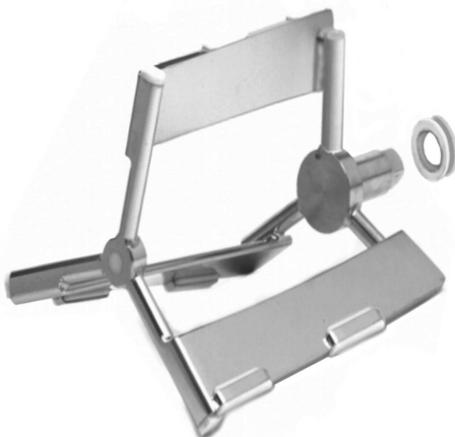
## BATCH FREEZER BEATER ASSEMBLY



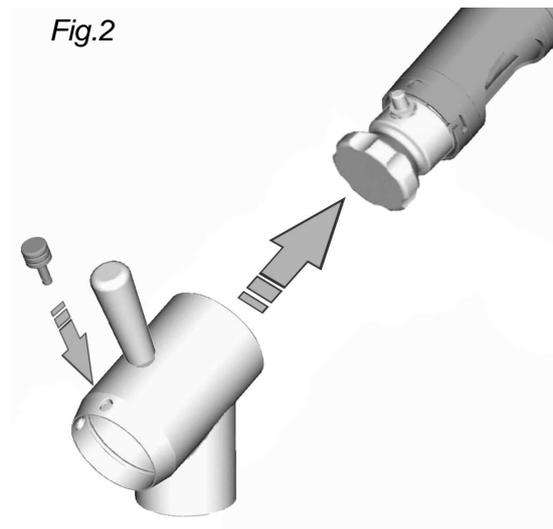
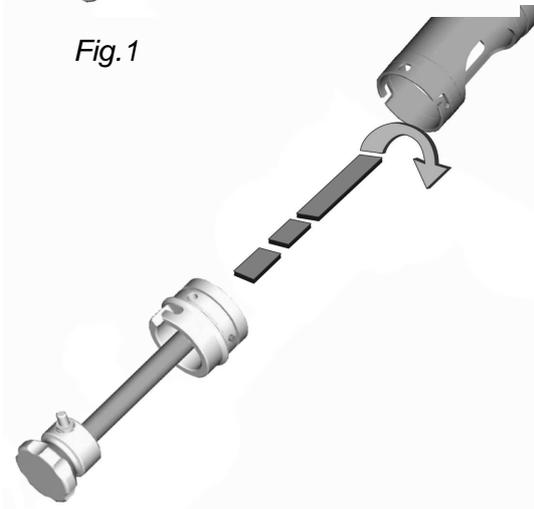
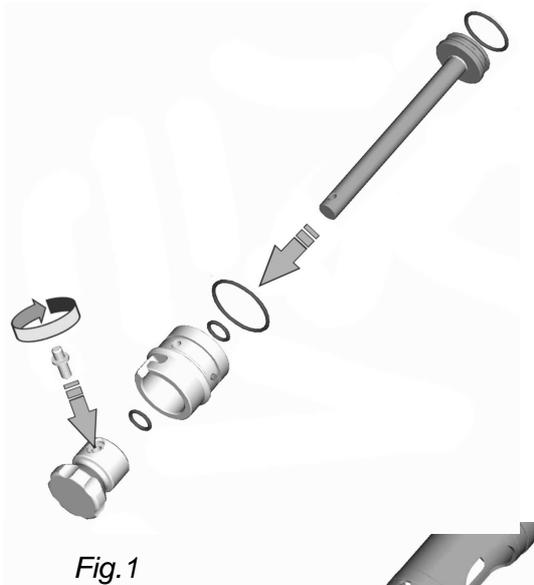
Insert the metallic springs in the seats of the scrapers.

Insert the scrapers in the containing pockets being careful to verify the assembly is carried out as in figure.

Manually verify that the scraper is correctly inserted inside the beater and free to slide in the seat. Verified at the spring pushes the scraper with force towards the outside.



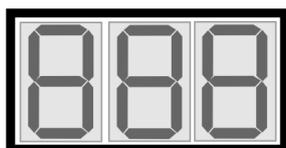
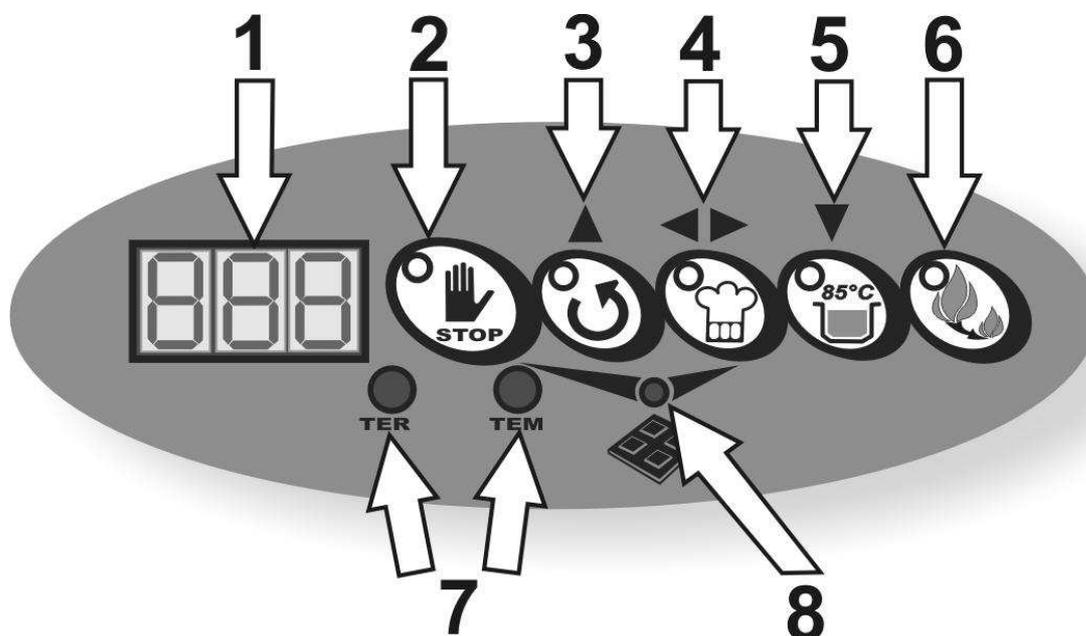
Insert the seal gasket placed on the drive shaft of the beater push it up to the stop.



## TAP ASSEMBLY

- Insert the O-ring gasket into the plastic bottom and lubricate it using the Frigomat lubricant supplied.
- Insert the piston into the bottom as illustrated in the figure.
- Position the piston knob onto the rod and tighten the steel pin. Check that the piston runs easily in the seat (fig. 1).
- Assemble the O-rings or all tap components and lubricate them using the Frigomat lubricant supplied.
- Insert the piston in the machine tap duct and turn the bottom by a few degrees up to the block position (fig. 2).
- Insert the tap body and turn it to the vertical position.
- Insert the locking pin (fig. 3).

## 6.2 HEATER CONTROL PANEL



### 1. DISPLAY

Displays the information relative to work programs and allowed adjustments.



### 2. STOP

In whatever operating phase the machine is in, pressing the STOP key stops the machine and cancels the function in progress.



### 3. AGITAZIONE (MIXING)/UP (▲)

This button has 2 functions:

1. With the machine at *STOP*, by pressing the STIRRING key, the beater motor starts up and the LED turns on.  
With the machine at *SEMI-AUTOMATIC* and *AUTOMATIC 85°*, by pressing the STIRRING key, the functioning progress interrupts, the machine changes to mixing only and the LED turns on.
2. With the machine in programming, by pressing the UP (▲) key it is possible to increase the value of the selected parameter.



#### 4. SEMI-AUTOMATIC/CONFIRM (◀▶)

This button has 4 functions:

1. Whatever the function in progress, the pressing the SEMI-AUTOMATIC key, access is gained to the programming of the semi-automatic thermal processing cycle, were it possible to program the maximum temperature of the product in tank and time for which said temperature will be kept constant.
2. With the machine in programming, by pressing the CONFIRM (◀▶) key it is possible to confirm the value of the selected parameter.
3. With the machine in *SEMI-AUTOMATIC*, by keeping the SEMI-AUTOMATIC pressed for at least 3", the instantaneous temperature of the bain-marie fluid is temporarily shown on display.
4. With the machine in *SEMI-AUTOMATIC*, by keeping the SEMI-AUTOMATIC pressed for at least 10", access is gained to the control mode of the bain-marie fluid programming (only for qualified personnel).



#### 5. AUTOMATIC 85°/ DOWN (▼)

This button has 4 functions:

1. Whatever the function in progress, by pressing the AUTOMATIC 85° key, the key LED switches on and starts the automatic heating cycle at 85°C with successive maintenance.
2. During programming, by pressing the DOWN (▼) key it is possible to reduce the value of the selected parameter.
3. With the machine in *AUTOMATIC 85°*, by keeping the AUTOMATIC 85° pressed for at least 3", the instantaneous temperature of the bain-marie fluid is temporarily shown on display.
4. With the machine in *AUTOMATIC 85°*, by keeping the *AUTOMATIC 85°* pressed for at least 10", access is gained to the control mode of the bain-marie fluid programming (only for qualified personnel).

#### 6. SLOW FLAME

In whatever operating phase the machine is in, pressing the SLOW FLAME key turns on the key's LED and the thermostat control temperature of the bain-marie system automatically switches from 120°C to 90°C.



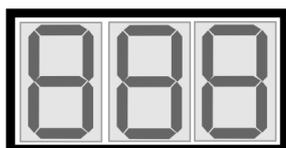
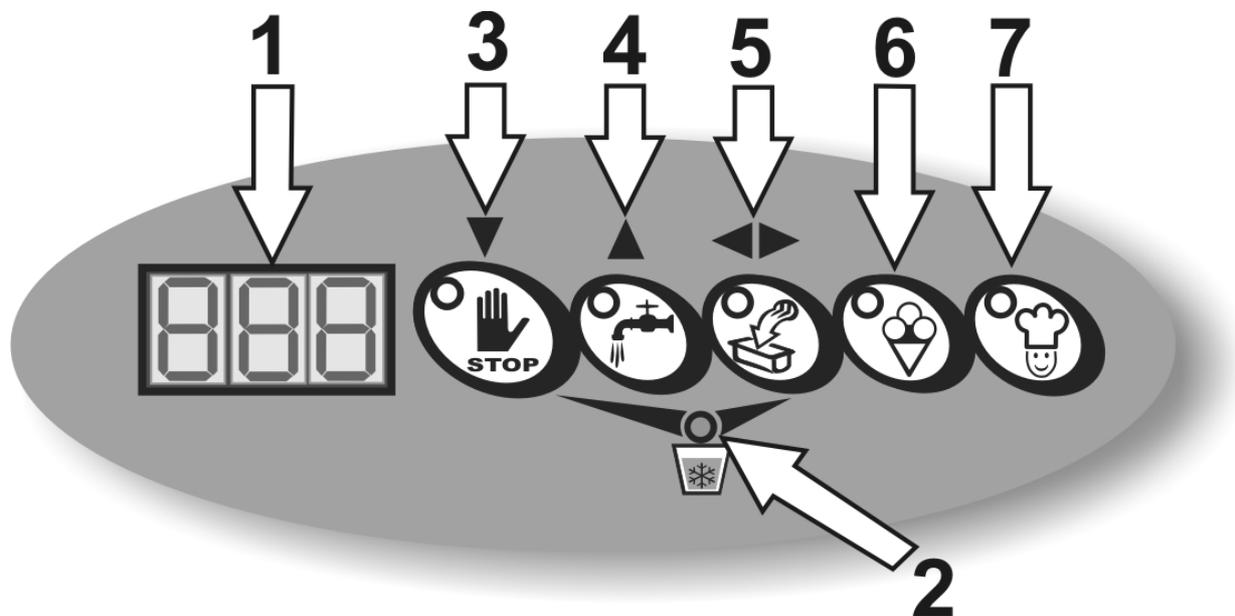
#### 7. LED TER - TEM

The LED switches on to signal any system anomalies.

#### 8. CHOCOLATE LED

The LED switches on during execution of the CHOCOLATE cycle to confirm the heating mode with glycol at low temperature.

### 6.3 BATCH FREEZER CONTROL PANEL



#### 1. DISPLAY

Displays the information relative to work programs and allowed adjustments.



#### 2. SLUSH LED

The LED switches on when a slush production program is selected.



#### 3. STOP/DOWN (▼)

This button has 2 functions:

1. In whatever operating phase the machine is in, pressing the STOP key stops the machine and cancels the function in progress.  
Do not stop the machine when the ice cream is close to its maximum consistency, neither during the automatic or semi-automatic cycles. This precaution lengthens the life of the transmission belts and of the beater motor.
2. With the machine in the SEMI-AUTOMATIC program, by pressing the DOWN key it is possible to reduce the value of the selected parameter.



#### 4. MIXING/UP (▲)

This button has 2 functions:

1. With the machine at STOP, pressing the MIXING key only starts the beater motor at low speed. During any other operative phase, pressing the MIXING key keeps the beater motor running at low speed and stops the compressor. Press the STOP key to stop mixing.
2. With the machine in the SEMI-AUTOMATIC program, by pressing the UP key it is possible to increase the value of the selected parameter.



#### 5. EXTRACTION/CONFIRM (◀▶)

This button has 2 functions:

1. With the machine at STOP, pressing the EXTRACTION key starts the beater motor at low speed. After a delay of a few seconds, it automatically switches into high speed. During any other operating phase of the machine, pressing the EXTRACTION key switches the beater motor from low speed to high speed after a delay of a few seconds and disables the compressor. With the machine in extraction mode, by pressing and holding the EXTRACTION key again for a few seconds, the compressor is enabled for 15" and the display shows the message E-C ("cold extraction" function).
2. With the machine in the SEMI-AUTOMATIC program, by pressing the CONFIRM key it is possible to confirm the value of the selected parameter.



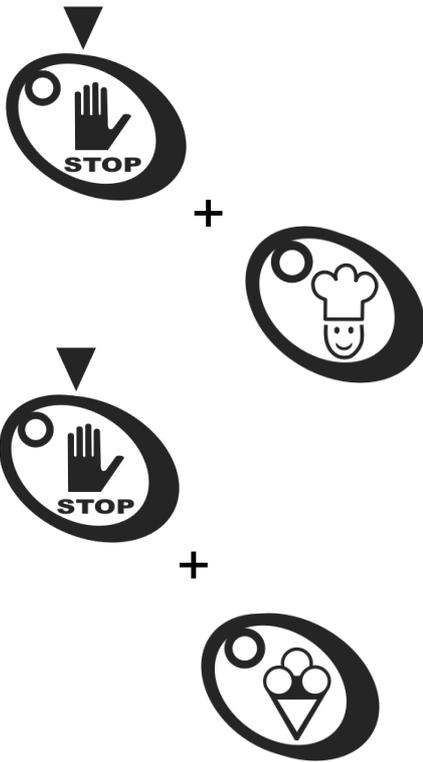
#### 6. AUTOMATIC CYCLE

In any operational phase of the machine, by pressing the AUTOMATIC key the automatic production cycle starts that enables to reach the best possible compromise between batch freezing time and ice cream consistency, regardless of the type of mixture used, provided that they are within the minimum and maximum capacity of the appliance.



#### 7. SEMI-AUTOMATIC CYCLE

In any operational phase of the machine, by pressing the SEMI-AUTOMATIC key one accesses the semi-automatic production cycle with consistency control, which enables the operator to manually select the desired level of ice cream consistency, in relation to the type of mixture used, , provided that it is within the minimum and maximum capacity of the appliance.



### **NORMAL SLUSH (GR1)**

With the machine at STOP, pressing the STOP and SEMI-AUTOMATIC keys at the same time one accesses the normal slush cycle with consistency control, which enables the operator to manually select the desired level of consistency, in relation to the type of mixture used.

In the normal slush program mixing is continuous.

### **COFFEE SLUSH**

With the machine at STOP, pressing the STOP and AUTOMATIC keys at the same time one accesses the slush cycle with time control, which enables the operator to manually select the ideal processing level in relation to the type of mixture used.

In the coffee slush program, mixing is cyclical.

## 6.4 THERMAL PROCESSING OF MIXTURES

After having installed the machine in compliance with the instructions of chapter 3 and having accurately washed and sanitised it, according to the instructions contained in chapter 7, proceed as follows to start thermal processing:



- Make sure the master switch is closed and that the machine is powered correctly.
- Make sure the dispenser tap is closed and that the tank beater is assembled correctly.
- Lift the cover and pour the ingredients in the tank, strictly observing the minimum and maximum amounts admitted per cycle and carried on the following table:

MODEL	MIN (LITRES)	MAX (LITRES)
C138	3	10
C137	2,5	8
C136	2	6



Failure to comply with the minimum and maximum load values can entail machine malfunctioning and even breakage.

- Lower the lid and select the wanted work cycle, referring to the instructions in the successive paragraphs.



## 6.4.1 AUTOMATIC CYCLE 85°C

Fig.1

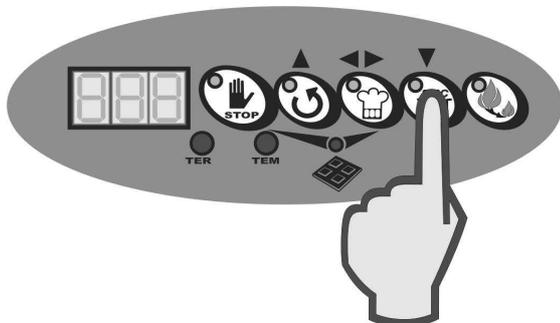


Fig.2



Fig.3

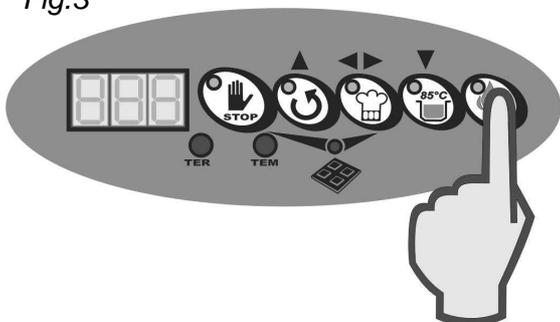
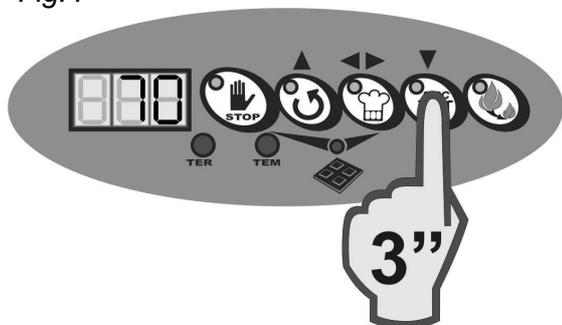


Fig.4



- Press the 85° AUTOMATIC key to start the automatic heating cycle at 85°C. The key LED such as on and the instantaneous temperature of the product in tank during the entire processing cycle is shown on display (fig.1-2).
- When a few minutes have elapsed and the temperature of 85°C is reached, the display flashes and the buzzer sounds intermittently, to inform the operator that the boiling mixture can be removed. If this is not possible right away, the beater will keep on mixing and the electrical heat element will hold the mixture at the correct temperature, thus starting the PRESERVATION phase without limits of time.
- During the preservation phase, the temperature of the product in tank flashes on the display.
- It is possible to go to the product extraction phase at any time.



If the mixture contains ingredients which could alter own organoleptic features with tank temperatures too high (120°), select the SLOW FLAME function to reduce the fluid temperature of the bain-marie system to 98°C (Fig.3).

In this case, heating times could lengthen: this is normal and does not constitute an anomaly.



At any moment, it is possible to verify the instantaneous temperature value of the bain-marie fluid by keeping the 85° AUTOMATIC key pressed for a least 3" (Fig.4). This value will be displayed for about 10".

## 6.4.2 SEMI-AUTOMATIC CYCLE

Fig.1

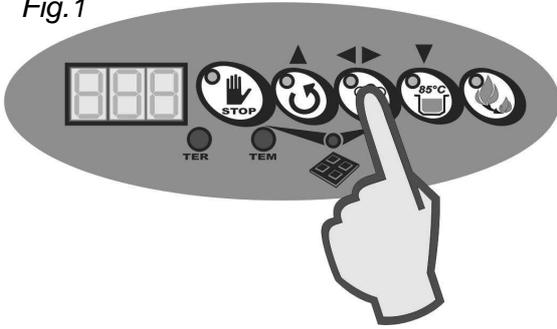


Fig.2

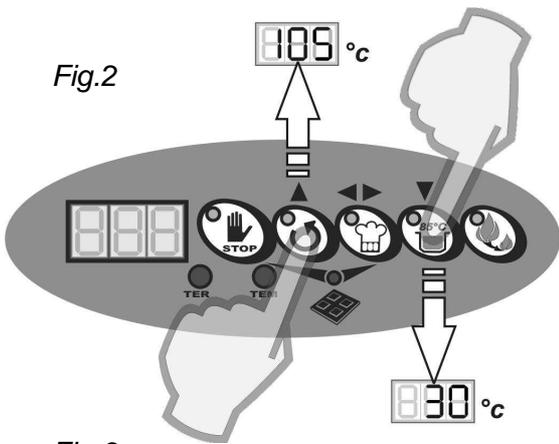


Fig.3

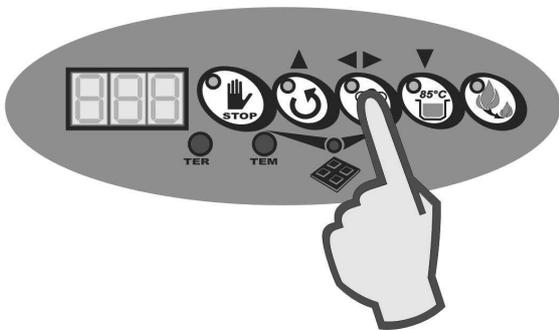
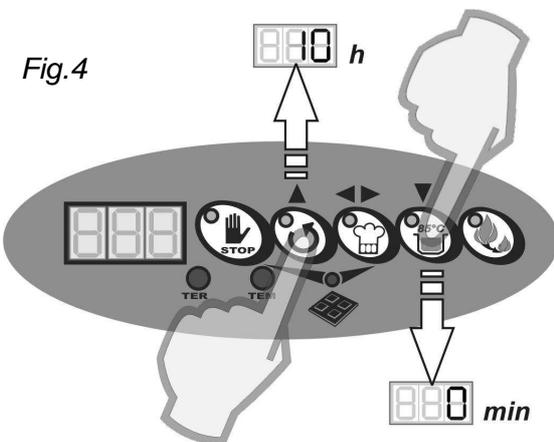


Fig.4



- Press the SEMI-AUTOMATIC key to select the semi-automatic thermal treatment cycle with temperature and stand-by time control (Fig. 1).
- The LEDs of the UP (▲), Confirm (◀▶) and DOWN (▼) keys start flashing and the numbers relative to the set of temperature to be configured, between 30 and 105°C, appear on the display: press the “UP (▲)” and “DOWN (▼)” keys to increase or decrease this value (Fig. 2). Once the wanted value is reached, press the CONFIRM (◀▶) key to memorise the made programming (Fig. 3).



The maximum programmable temperature value is equal to 105°C but not all mixtures and not all quantities can reach such a high temperature value.

- After programming of the temperature set to be reached, select the time during which this temperature is kept constant. The LEDs of the UP (▲), Confirm (◀▶) and DOWN (▼) keys start flashing and the numbers relative to the set of time to be configured, between 0' and 10' hours, appear on the display: press the “UP (▲)” and “DOWN (▼)” keys to increase or decrease this value (Fig. 4). Once the wanted value is reached, press the CONFIRM (◀▶) key to memorise the made programming and start the processing cycle (Fig. 3).

**ATTENTION**

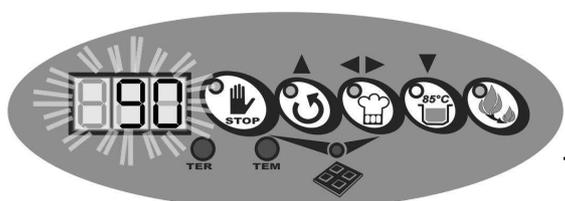
Fig.1



By selecting heating temperatures between 65° and 85°C, the machine automatically calculates the stand-by time required to guarantee absolute product hygiene.

This time value can be modified at any time, but it is strongly advised against as products with excessively high bacterial loads may be obtained.

Fig.2

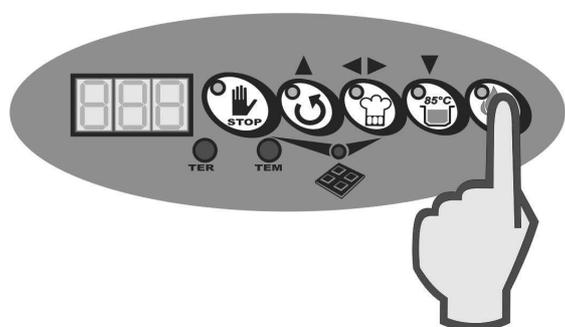


- Once the programmed temperature is reached and any standby time has passed, the display flashes and the buzzer sounds intermittently, to inform the operator that it is possible to extract the mixture (Fig.1). If this is not possible right away, the beater will keep on mixing and the electrical heat element will hold the mixture at the correct temperature, thus starting the PRESERVATION phase without limits of time.

- During the preservation phase, in addition to any programs downtime time, the temperature of the product in tank flashes on the display (Fig.2).

- It is possible to go to the product extraction phase at any time.

Fig.3

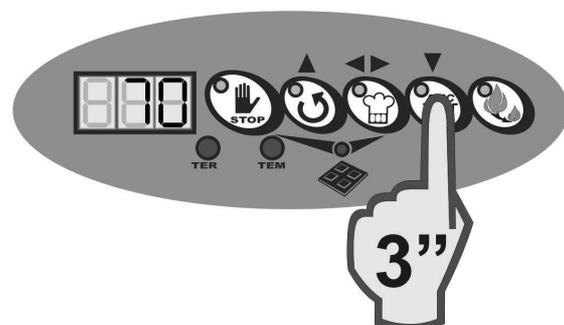


**SUGGESTION**

If the programmed heating temperature is below 93°C and it is considered that the mixture contains ingredients which could alter own organoleptic features with tank temperatures too high (120°), select the SLOW FLAME function to reduce the fluid temperature of the bain-marie system to 98°C (Fig.3).

In this case, heating times could lengthen: this is normal and does not constitute an anomaly.

Fig.4



**SUGGESTION**

At any moment, it is possible to verify the instantaneous temperature value of the bain-marie fluid by keeping the SEMI-AUTOMATIC (Fig.4) key pressed for a least 3". This value will be displayed for about 10".

### 6.4.3 CHOCOLATE CYCLE

Fig.1

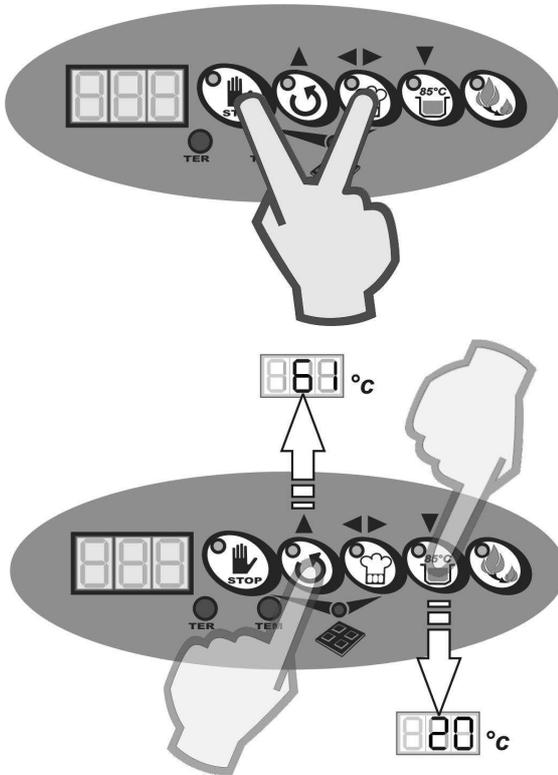


Fig.3

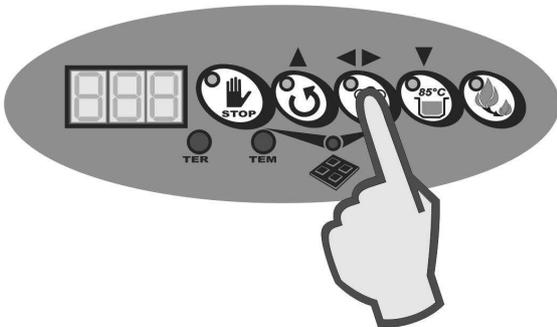
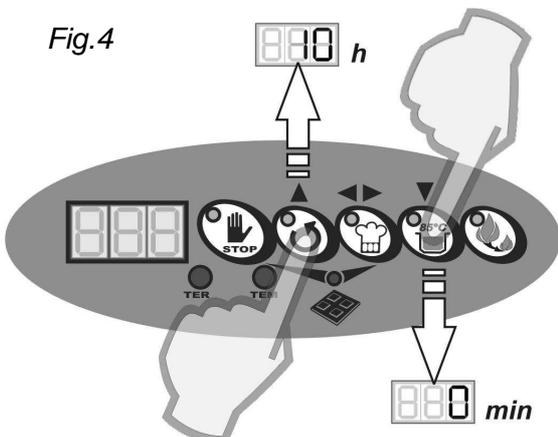


Fig.4



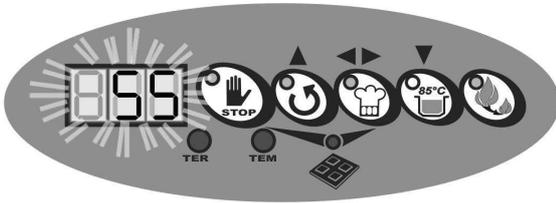
- Simultaneously press the STOP and SEMI-AUTOMATIC key to select the semi-automatic cycle, optimised for mounting the chocolate pieces (Fig. 1).
- The LEDs of the UP (▲), Confirm (◀▶) and DOWN (▼) keys start flashing, the Chocolate LED switches on and the numbers relative to the set of temperature to be configured, between 20 and 61□, appear on the display: press the “UP (▲)” and “DOWN (▼)” keys to increase or decrease this value (Fig. 2). Once the wanted value is reached, press the CONFIRM (◀▶) key to memorise the made programming (Fig. 3).



In the CHOCOLATE cycle the thermostat control temperature of the bain-marie fluid (glycol) is programmed at 66°C. The maximum heating temperature of the product cannot be set on values above 61°C.

- After programming of the temperature set to be reached, select the standby time necessary to guarantee the complete melting of the full product mass in time. The LEDs of the UP (▲), Confirm (◀▶) and DOWN (▼) keys switch on and the numbers relative to the set of time to be configured, between 0' and 10' hours, appear on the display: press the “UP (▲)” and “DOWN (▼)” keys to increase or decrease this value (Fig. 4). Once the wanted value is reached, press the CONFIRM (◀▶) key to memorise the made programming and start the processing cycle (Fig. 3).

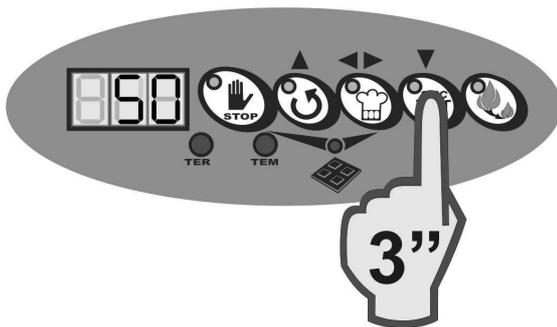
Fig.1



- Once the programmed temperature is reached and any standby time has passed, the display flashes and the buzzer sounds intermittently, to inform the operator that it is possible to extract the product (Fig.1). If this is not possible right away, the beater will keep on mixing and the electrical heat element will hold the product at the correct temperature, thus starting the PRESERVATION phase without limits of time.
- During the preservation phase, in addition to any programs downtime time, the temperature of the product in tank flashes on the display.
- It is possible to go to the product extraction phase at any time.



Fig.2



The function SLOW FLAME in the CHOCOLATE cycle is disabled.



At any moment, it is possible to verify the instantaneous temperature value of the bain-marie fluid by keeping the SEMI-AUTOMATIC (Fig.2) key pressed for a least 3". This value will be displayed for about 10".

## 6.4.4 SLOW FLAME

Frigomat multi-function "TWIN" machines are equipped with a sophisticated bain-marie heating system. This technology consists in yielding heat to the mixture in the tank indirectly through an exchange fluid (glycol).

The fluid temperature of the bain-marie system (glycol) is programmed by Frigomat at 120°C. This temperature value is adequate for the treating most of the mixtures and also guarantees short heating times with maximum cooking temperature of the product up to 105°C.

However some recipes, due to the presence of very delicate ingredients, may degenerate with excessive temperatures of the tank.

To reduce these risks, it is possible, when necessary, to activate the "SLOW FLAME" function that reduces the fluid temperature of bain-marie below 100°C. To activate this function refer to the following notes:

### 1. SLOW FLAME ENABLING IN 85° AUTOMATIC CYCLE

Fig.1

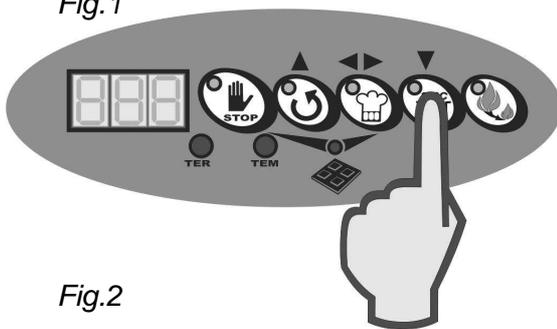
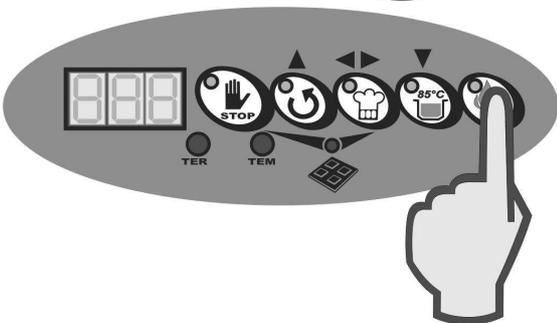


Fig.2



- Pour the ingredients in machine and start the 85° AUTOMATIC cycle (Fig.1) as described in par. 6.4.1.
- Press the SLOW FLAME key to enable the reduction function of the bain-marie fluid temperature below 100°C (Fig. 2). The key LED switches on to confirm the correct programming.

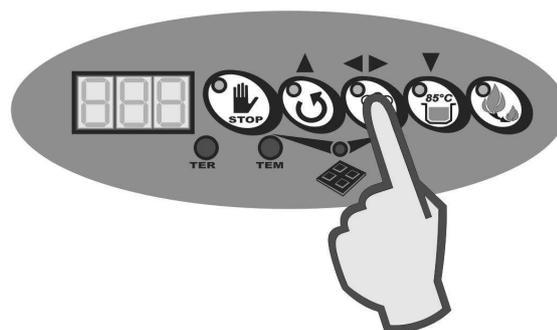


By activating the SLOW FLAME function the heating times may extend: this is normal and does not constitute an anomaly.

- At any moment, to restore the bain-marie fluid (glycol) at the temperature of 120°, press the SLOW FLAME key again and verify the LED is off.

### 2. SLOW FLAME ENABLING IN SEMI-AUTOMATIC CYCLE

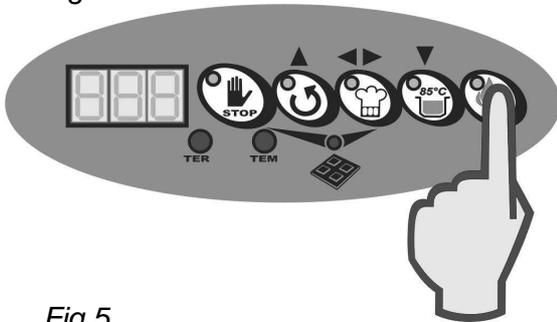
Fig.3



- Pour the ingredients in machine and start the SEMI-AUTOMATIC cycle (Fig.3) as described in par. 6.4.2.
- Press the SLOW FLAME key to enable the reduction function of the bain-marie fluid temperature below 100°C (Fig. 4). The key LED switches on to confirm the correct programming.



Fig.4



If the temperature selected by the user during programming exceeds 93°C, the SLOW FLAME function will not be accepted: the maximum admitted temperature in slow flame running (93°) will flash on the display, alternative display of 3 horizontal dashes (---) and after a few seconds, will automatically disable the SLOW FLAME function (Fig.5-6).

Fig.5



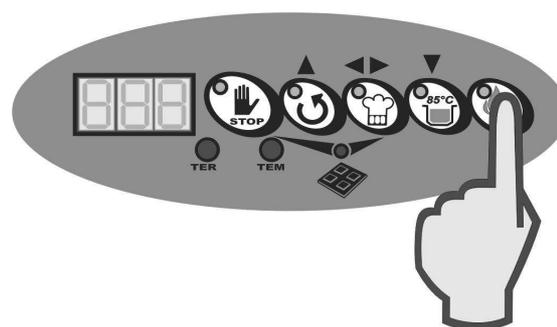
If the SLOW FLAME function is enabled before programming of the semi-automatic cycle, upon programming the range of selectable temperatures automatically reduces to between 30 and 93°C.

Fig.6



By activating the SLOW FLAME function the heating times may extend: this is normal and does not constitute an anomaly.

Fig.7



At any moment, to restore the bain-marie fluid (glycol) at the temperature of 120°, press the SLOW FLAME key again and verify the LED is off (Fig.7).

## 6.5 EXTRACTION OF BOILING MIXTURES

### 6.5.1 TRANSFER INTO BATCH FREEZING CYLINDER

Fig.1

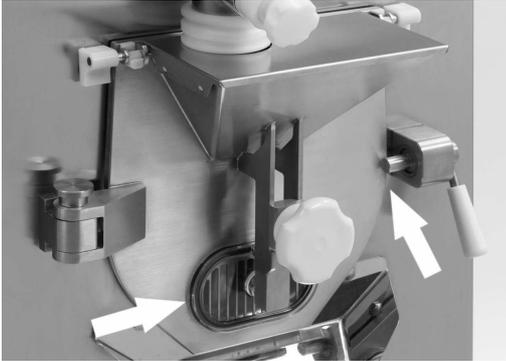


Fig.2



Fig.3



To transfer the mixture from the upper heater vessel directly into the underlying batch freezing cylinder, refer to the following procedure:

- Make sure that the amount of product you wish to pour from into the batch freezing cylinder respects the prescribed maximum and minimum values for each model (see chap. 6.4).
- Make sure that the gate valve of cold water for machine condensation is open.
- Make sure the beater and rubber seal of the batch freezer are in seat and assembled correctly.
- Check that the batch freezer door dispenser disk is assembled properly and in closed position (Fig. 1).
- Make sure the heater tap is in the upright position to allow the product to flow directly into the hopper of the underlying batch freezer door (Fig.2).  
If not, extract the blocking pin from its seat, turn the tap body to the upright position and reposition the pin.



In case of transferring the boiling mixture of the batch freezer with the door open, the lifted dispenser disk or tap turned in diagonal position, the user may be seriously scalded.

- Make sure that the hopper cover is in place (Fig.3).



The hopper lid prevents the operator being scalded by boiling mixture splashes. Never remove the hopper lid during transfer operations.

Fig.4



- Check that the plastic sleeve is correctly lowered and perfectly in contact with the metal hopper lid (Fig.4).
- If the product to be poured is fluid (e.g.: ice cream mixture), ensure to have mounted the flow reducer ring inside the tap (Fig.5).



In the presence of liquid mixtures, always use the flow reducer ring to avoid that, during transfer operation, the product completely floods the hopper by coming out of the upper lid. Leakage from the hopper could scald the operator!

Fig.5



- Regardless of the function in progress, press the STIRRING key on the control panel of the heater (Fig.6).



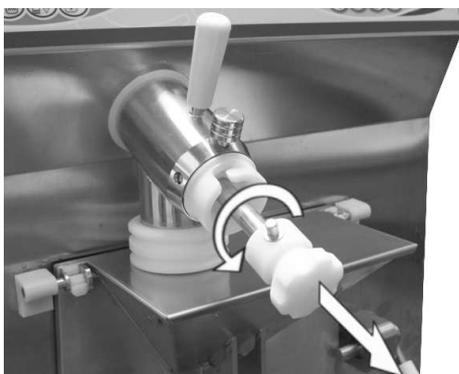
To quickly and completely remove the product from inside the vessel, it is always necessary that the beater be functioning.

Fig.6



- To begin the transfer, turn the knob of the piston to the released position and pull it slowly towards you (Fig.7).

Fig.7



Pull piston slowly to avoid filling the hopper of the batch freezer door to the maximum, thus avoiding risking the product leaking from the hopper itself. Leakage from the hopper could scald the operator!

Fig.8



- Select the wanted work program from the batch freezer push button control panel.
- When all the product has been transferred and the heater vessel is empty, push the tap piston to the closed position and turn it to block it.
- Press "STOP" on the heater control panel (Fig.8).

## 6.5.2 TRANSFER INTO SEPARATE CONTAINER

Fig.1



Fig.2



Fig.3



Fig.4

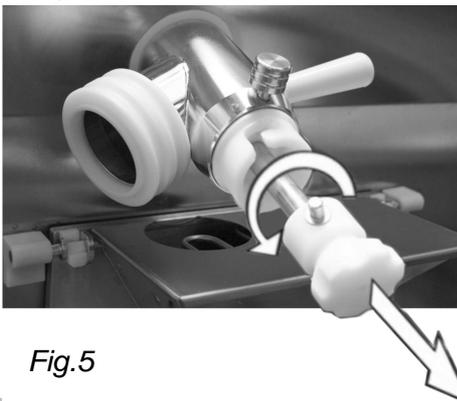


Fig.5



If you wish to transfer the product from the heater vessel to an external container, do as follows:

- Ensure the amount of product to be transferred is compatible with the useful capacity of the container of destination.
- Make sure the heater tap is in the diagonal position to allow the product to flow directly into the container you wish to use. If not, extract the blocking pin from its seat, turn the tap body to the diagonal position and reposition the pin (Fig.1-2)
- Regardless of the function in progress, press the STIRRING key on the control panel of the heater (Fig.3).



To quickly and completely remove the product from inside the vessel, it is always necessary that the beater be functioning.

- To begin the transfer, turn the knob of the piston to the released position and pull it slowly towards you (Fig.4).



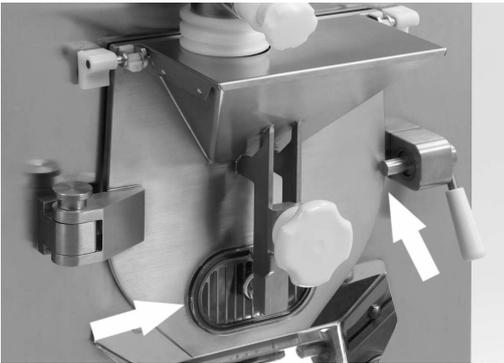
Pay the utmost attention during transfer of boiling mixtures; handle the tap piston with extreme care, use suitable containers and take all possible precautions to reduce the risk of injuries, even serious, due to contact with boiling product.

- When all the product has been transferred in the container and the heater vessel is empty, push the piston to the closed position and turn it to block it.
- Press "STOP" on the heater control panel (Fig.5).

## 6.6 ICE CREAM AND SLUSH PRODUCTION

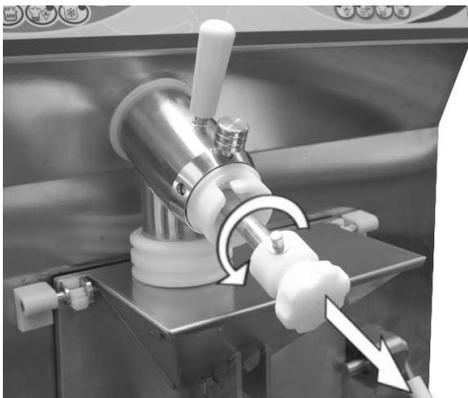
After having installed the machine in compliance with the instructions of chapter 3 and having accurately washed and sanitised it, according to the instructions contained in chapter 7, proceed as follows to start ice cream making:

Fig.1



- Make sure that the gate valve of cold water for condensation is open.
- Make sure the master switch is closed and that the machine is powered correctly.
- Check that the door dispenser disk is assembled properly and in closed position (Fig. 1).
- Transfer the mixture from the upper heater (Fig.2) (see par. 6.4.1) or pour it directly into the loading hopper (Fig.3), scrupulously respecting the minimum and maximum amounts admitted per cycle and reported in the following table:

Fig.2



MODEL	MIN (LITRES)	MAX (LITRES)
C138	3	10
C137	2,5	8
C136	2	6



Fig.3



Failure to comply with the minimum and maximum load values can entail machine malfunctioning and even breakage.

Minimum loads of mixture may entail the premature wear of the scrapers.

- Reposition the hopper lid in its place to prevent that, during processing, dust and other impurities may come into contact with the product (Fig.4).

Fig.4



### 6.6.1 AUTOMATIC CYCLE

Fig.1

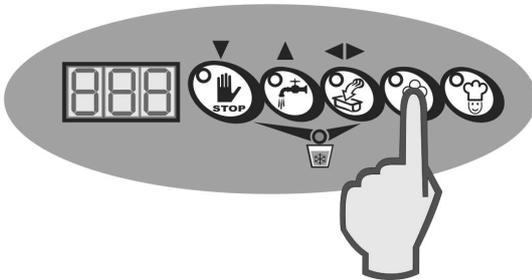


Fig.2

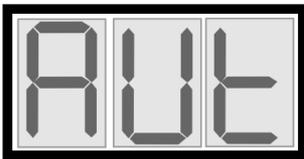


Fig.3

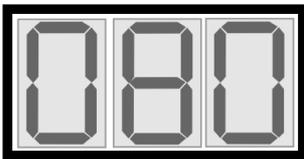


Fig.4



Fig.5



- Press the AUTOMATIC key to start the automatic batch freezing cycle (Fig. 1).
- The AUT message is viewed on the display for a few seconds to confirm the automatic cycle has been selected (Fig. 2); subsequently, during batch freezing, the instantaneous consistency numerical value is displayed.(Fig. 3).
- After a few minutes and once the best possible compromise between batch freezing time and consistency has been reached, depending on the type and amount of mixture introduced, an intermittent acoustic signal warns the operator that it is possible to extract the ice cream (Fig. 4). If this should not be immediately possible, the machine will automatically see to maintain the ice cream over time without changing its consistency any further.
- During the maintenance phases of the reached consistency setting, the indicator of the AUTOMATIC key flashes (Fig.5).
- It is possible to go to the product extraction phase at any time.

### 6.6.2 SEMI – AUTOMATIC CYCLE WITH CONSISTENCY CONTROL. (only for experts)

Fig.1

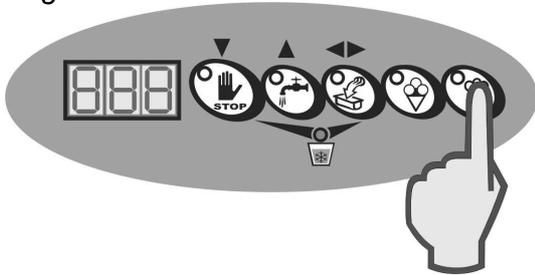


Fig.2

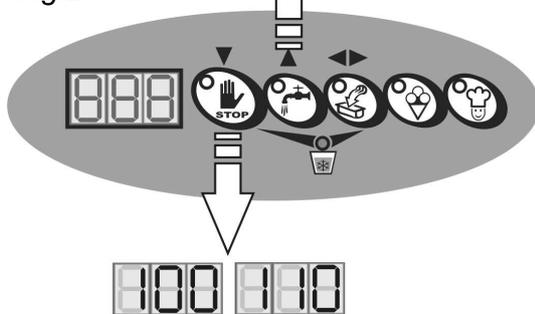


Fig.3

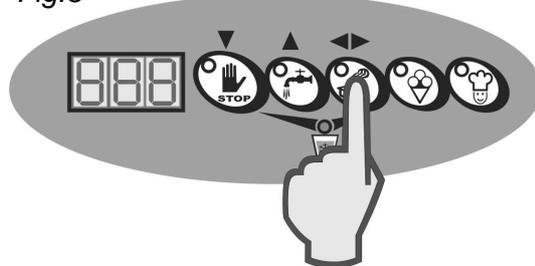


Fig.4

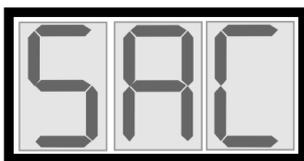


Fig.5

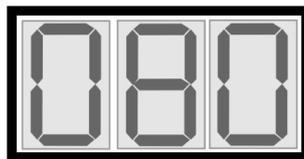
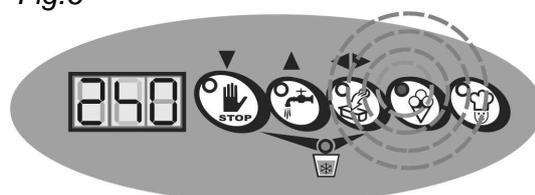


Fig.6



- Press the SEMI-AUTOMATIC key to select the semi-automatic batch freezing cycle with consistency control (Fig. 1).
- The LEDs of the UP (▲), Confirm (◀▶) and DOWN (▼) keys light up and the numbers relative to the consistency setting to be configured, expressed by a numerical value between 60 and 250, appear on the display: press the “UP (▲)” and “DOWN (▼)” keys to increase or decrease this value (Fig. 2). Higher consistencies correspond to high numbers, lower consistencies correspond to low numbers.



The maximum programmable consistency value is equal to 250 numbers but not all mixtures and not all quantities can reach such a high consistency value.

For a reduced amount of mixture it is recommended to not select consistency numbers close to 250.

- Subsequently, press the Confirm (◀▶) key to start a new batch freezing cycle (Fig.3).
- The SAC message is viewed on the display for a few seconds to confirm the semi-automatic cycle has been selected (Fig. 4); subsequently, during batch freezing, the instantaneous consistency numerical value is displayed.(Fig. 5).
- After a few minutes and once the consistency level selected during the programming phase has been reached, an intermittent acoustic signal warns the operator that it is possible to extract the ice cream (Fig. 6). If this should not be immediately possible, the machine will automatically see to maintain the ice cream over time without changing its consistency any further.

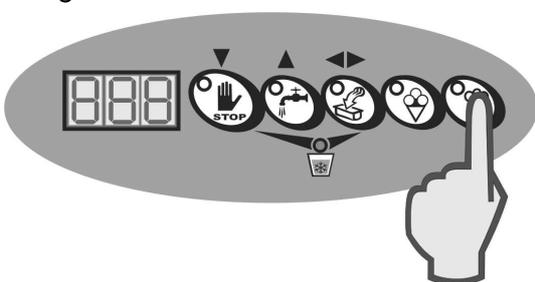
Fig.7



- During the maintenance phases of the reached consistency setting, the indicator of the SEMI-AUTOMATIC key flashes (Fig.7).
- It is possible to go to the product extraction phase at any time.

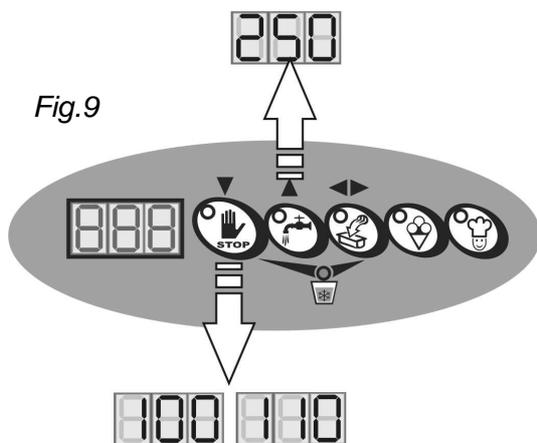


Fig.8



- In order to correct any initial programming errors, during the execution of the semi-automatic cycle it is always possible to vary the consistency setting via the following procedure:
- With the cycle in progress, press the SEMI-AUTOMATIC (Fig. 8) key again.
- The LEDs of the UP (▲), CONFIRM (◀▶) and DOWN (▼) keys light up and the numbers relative to the previously configured consistency setting appear on the display. Press the UP (▲) and DOWN (▼) keys to correct the value (Fig.9).
- Press the CONFIRM key (◀▶) to validate the new data and exit programming (Fig. 10).

Fig.9



The semi-automatic batch freezing cycle is recommended for experts only because it requires full awareness of machine operation in relation to balancing the mixture one intends to process.

Fig.10

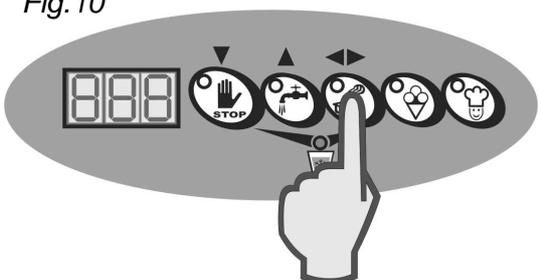


Fig.1

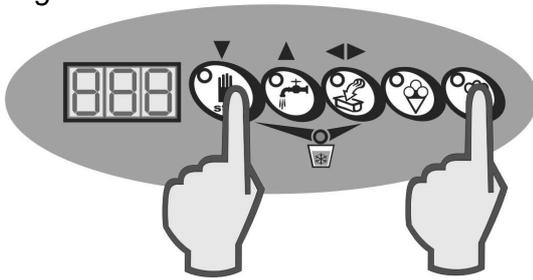


Fig.2

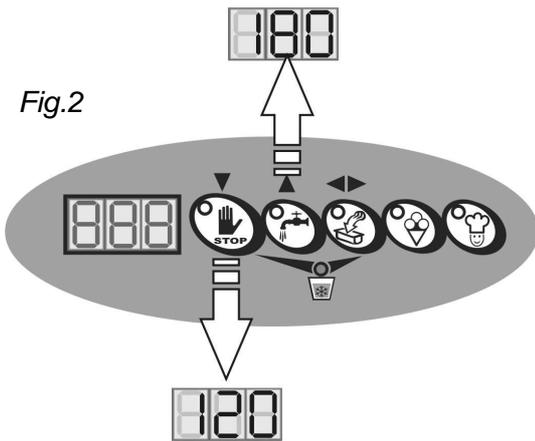


Fig.3

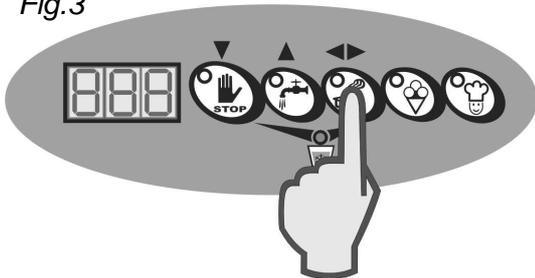


Fig.4

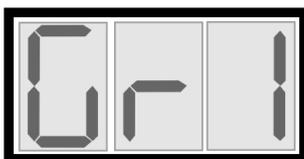


Fig.5

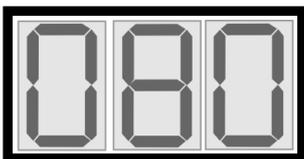


Fig.6



### 6.6.3 SLUSH

- With the machine at STOP, press the STOP and SEMI-AUTOMATIC keys at the same time to access the slush production program with consistency control and continuous mixing (Fig. 1).
- The SLUSH LED switches on to signal that one has accessed the SLUSH mode.
- The LEDs of the UP (▲), Confirm (◄►) and DOWN (▼) keys light up and the numbers relative to the consistency setting to be configured, expressed by a numerical value between 120 and 180, appear on the display: press the UP (▲) and DOWN (▼) keys to increase or decrease the value (Fig.2). Higher consistencies correspond to high numbers, lower consistencies correspond to low numbers.



The maximum programmable consistency value is equal to 180 numbers but not all mixtures and not all quantities can reach such a high consistency value.

For a reduced amount of mixture it is recommended to not select consistency numbers close to 180.

- Subsequently, press the Confirm (◄►) key to start a new slush production cycle (Fig.3).
- The GR1 message is viewed on the display for a few seconds to confirm the slush cycle has been selected (Fig. 4); subsequently, during production, the instantaneous consistency numerical value is displayed.(Fig. 5).
- After a few minutes and once the consistency level selected during the programming phase has been reached, an intermittent acoustic signal warns the operator that it is possible to extract the product (Fig.6). If this should not be immediately possible, the machine will automatically see to maintain the product over time without changing its consistency any further.
- During the maintenance phases of the reached consistency setting, the indicator of the SEMI-AUTOMATIC key flashes (Fig.7).

Fig.7

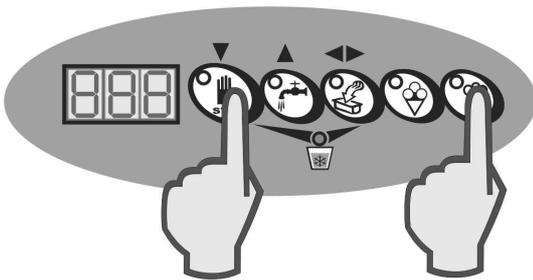


- It is possible to go to the product extraction phase at any time.



In order to correct any initial programming errors, during the execution of the SLUSH cycle it is always possible to vary the consistency setting via the following procedure:

Fig.8



- With the cycle in progress, press the STOP and - AUTOMATIC keys again (Fig. 8).
- The LEDs of the UP (▲), CONFIRM (◀▶) and DOWN (▼) keys light up and the numbers relative to the previously configured consistency setting appear on the display. Press the UP (▲) and DOWN (▼) keys to correct the value.
- Press the CONFIRM key (◀▶) to validate the new data and exit programming (Fig. 9).

Fig.9

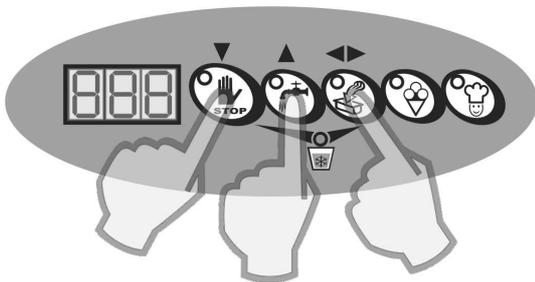


Fig.1

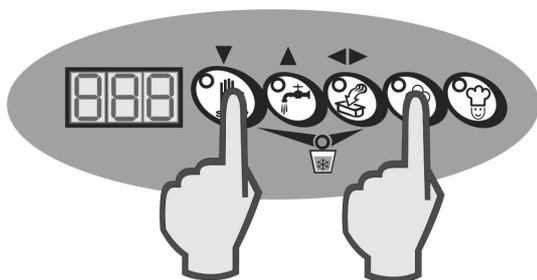


Fig.2

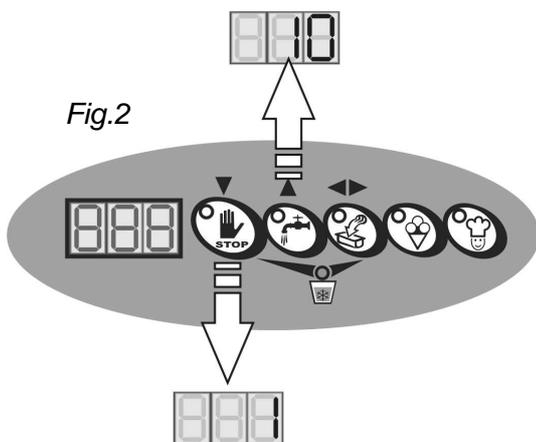


Fig.3

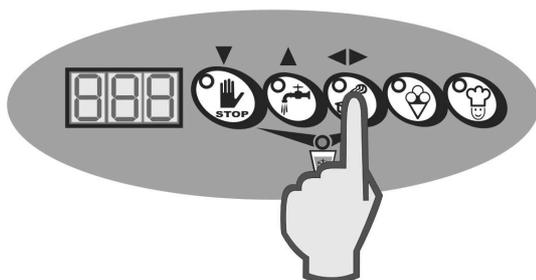


Fig.4



#### 6.6.4 COFFEE SLUSH

- With the machine at STOP, press the STOP and AUTOMATIC keys at the same time to access the slush production program with time control and cyclical mixing (Fig. 1).
- The SLUSH LED switches on to signal that one has accessed the SLUSH mode.
- The LEDs of the UP (▲), Confirm (◀▶) and DOWN (▼) keys light up and the numbers relative to the time setting to be configured, expressed in minutes and between 1' and 10', appear on the display. Press the UP (▲) and DOWN (▼) keys to increase or decrease the value (Fig. 2). High processing times correspond to higher consistencies, low times correspond to lower consistencies



The maximum programmable time value is equal to 10 minutes but not all mixtures and not all quantities can reach such a high consistency value.

For low amounts of mixture do not select time in excess of 3-5 minutes.

- Subsequently, press the Confirm (◀▶) key to start a new slush production cycle (Fig. 3).
- During the production cycle, the compressor always keeps running, whilst the beater will operate in cyclic mode to reduce the incorporation of air in the mixture.
- After the programmed time has elapsed, the compressor stops and an intermittent acoustic signal warns the operator that it is possible to extract the product (Fig. 4).



The COFFEE SLUSH program does not envisage the automatic preservation of the product at the end of the production cycle.

Fig.5

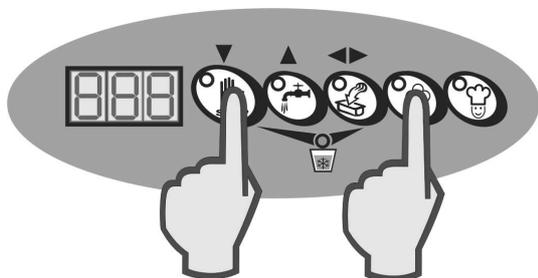
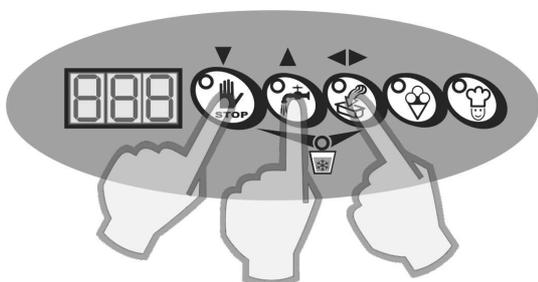


Fig.6

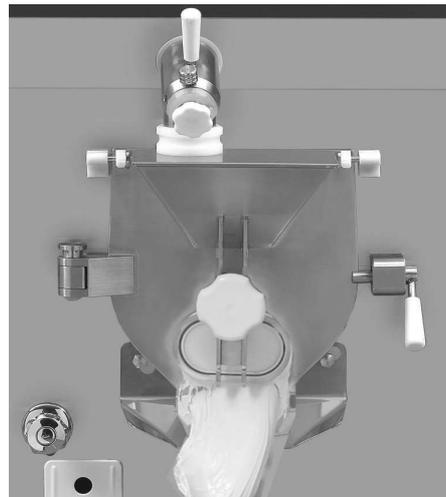


**SUGGESTION**

In order to correct any initial programming errors, during the execution of the COFFEE SLUSH cycle it is always possible to vary the time setting via the following procedure:

- With the cycle in progress, press the STOP and AUTOMATIC keys again (Fig. 5).
- The LEDs of the UP (▲), CONFIRM (◀▶) and DOWN (▼) keys light up and the numbers relative to the previously configured time setting appear on the display. Press the UP (▲) and DOWN (▼) keys to correct the value.

Press the CONFIRM key (◀▶) to validate the new data and exit programming (Fig. 5).



## 6.7 EXTRACTION

To extract the product at the end of a productive cycle, refer to the following instructions:

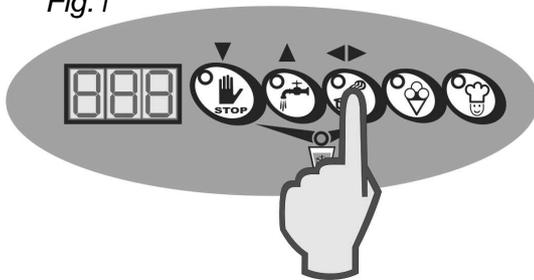
- Position a cold and clean tub of adequate capacity on the front shelf of the machine.
- Check that the production cycle has ended.
- Unscrew the plastic knob at the centre of the door by about half a turn.
- Press the knob to detach the dispenser disk from the door surface and subsequently pull it upwards.
- When the product starts coming out of the door safety grid, press the EXTRACTION key to select high speed and disable the compressor in order to prevent ice from forming on the cylinder walls in the emptying phase (Fig.1).



Mixtures with high content of sugar and fat, to maintain the quality of the product unaltered during the high speed extraction phase, it is recommended to enable the "Cold extraction" function. To enable this function one must press the EXTRACTION key again when extraction has already begun.

With the "Cold extraction" function enabled the display shows the message E-C (Fig.2).

Fig.1

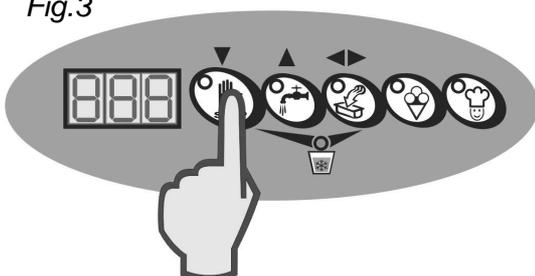


- When all the product has come out of the door, press the STOP key to stop the machine and re-close the dispenser disk (Fig.3).

Fig.2



Fig.3



## 7. MAINTENANCE

### 7.1 ROUTINE MAINTENANCE (INTENDED FOR USER)

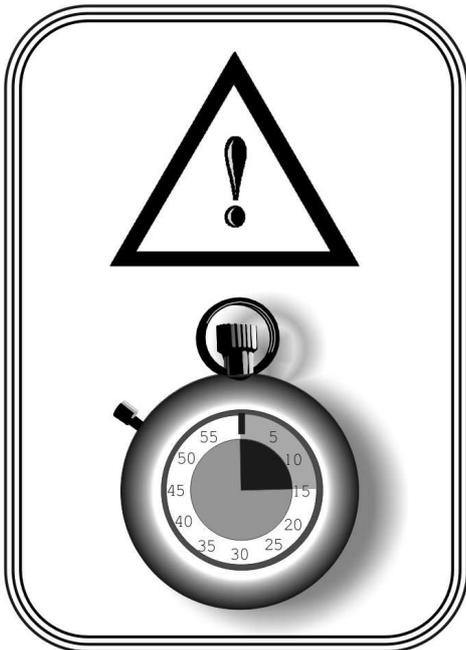


The fats present in the ice cream mixtures are ideal fields for the proliferation of bacterial loads and mould. To eliminate this serious problem, all the parts which come into contact with the product must be thoroughly washed and sanitized by careful procedures and using suitable sanitizing products. The stainless and plastic materials used on our machines, in fact, comply with the strictest international provisions and their special shape facilitates their washing. However this is not enough to prevent the formation of mould and bacteria caused by insufficient or incorrect cleaning.

FRIGOMAT recommends thoroughly washing and sanitizing the parts in direct contact with the product after each work shift and in compliance with hygienic standards in force in the Country where the machine is installed.

To correctly clean your machine, refer to the following operations:

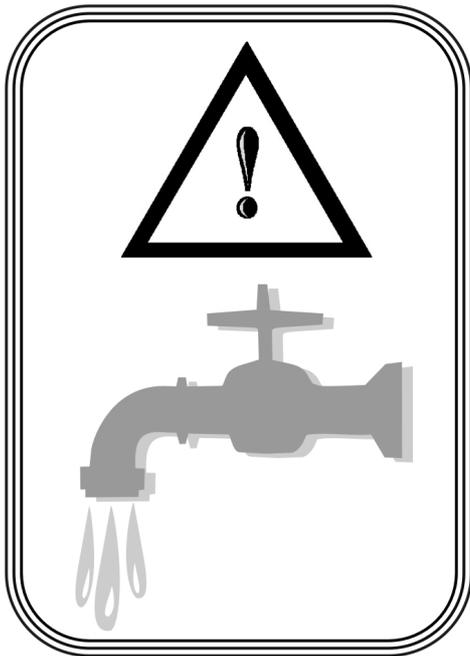
#### 7.1.1 HEATER WASHING PREWASHING



- Pour the maximum admitted load of warm (approximately 50°C) drinking water into the tank.
- Press the MIXING key to start the beater motor. Let it run for about 3'. Open the dispenser tap and drain all the wash water. Repeat the procedure until the water coming out is clear and clean.
- Pour the maximum load admitted of cleanser/sanitizer into the tank.
- Press the STIRRING button to start the beater motor. Let it run for about 15'. Open the dispenser tap and drain the sanitizer.

We suggest using the following sanitising solution:

**Ecolab P3 Topax-san**  
(4% dilution = 200 ml).



- Pour the maximum admitted load of cold drinking water into the tub to rinse the surfaces which were just treated with the sanitizer.
- Drain the rinse water and turn the machine off.
- When pre-washing is over, all the removable parts in contact with the product must be disassembled and sanitized in a separate tub.

### SANITIZING REMOVABLE PARTS

#### PREPARATION OF WASHING TUB

- Wash your hands well and/or wear disposable gloves.
- Fill a clean tub with a sufficient amount of drinking water at approximately 50°C and the sanitizer.
- Prepare the supplied brush and the OR disassembly

We suggest using the following sanitising solution:

#### **Ecolab P3 Topax-san**

(4% dilution = 200 ml every 5 litres of water).

device and immerse them in the solution.

#### REMOVING AND CLEANING COVER

- Pull the hinge pins off and remove the cover, holding it with both hands.

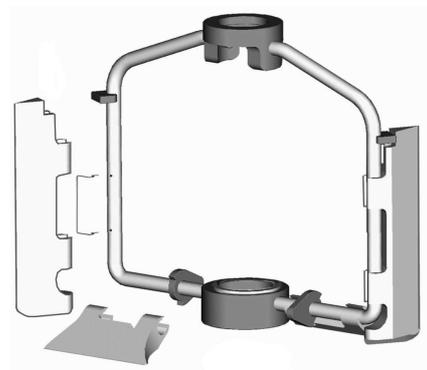
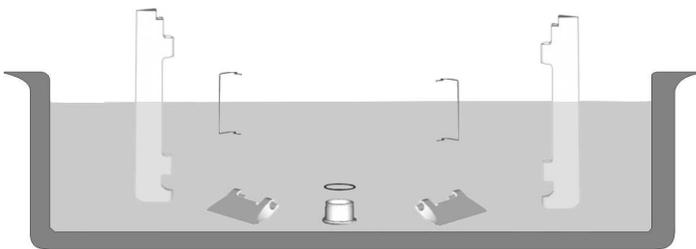
Emerge the previously disassembled components into the tub with the sanitizer and brush the surfaces with care. Pay special attention to the surfaces in direct contact with the product.





### REMOVING AND CLEANING BEATER

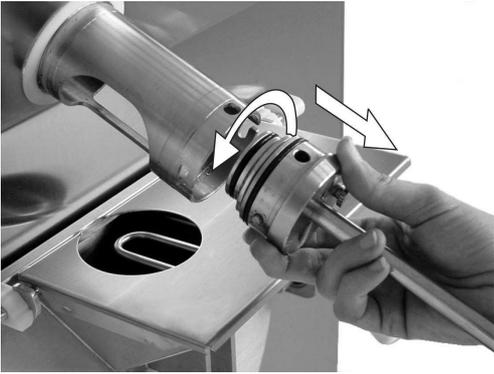
- Turn the beater a few degrees anti-clockwise by hand until the release position and then pull it upwards. Remove the O-ring remaining on the transmission shaft of the heater vessel.
- Remove the scrapers, the thrust springs and pull the bottom bushing downwards.
- Place the previously disassembled components into the tub with the sanitizer and brush the surfaces with care. Pay particular attention to the scrapers.



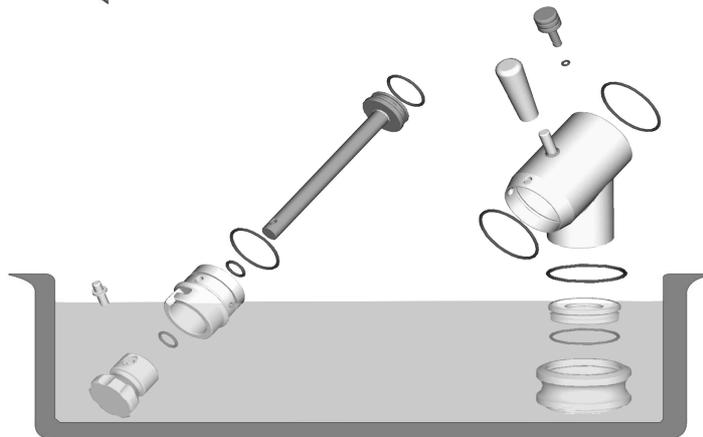
### REMOVING AND CLEANING THE TAP

- Remove the locking pin.
- Pull the tap body towards you and pull it completely off the piping. Remove the sealing O-rings.





- Turn the knob of the piston to unblock it and pull it towards you.
- Turn the bottom of the tap a few degrees to release it and pull it towards you. Unscrew the steel piston pin and disassemble all the parts of the piston. Remove all the O-rings.
- Immerse the previously disassembled components into the tub with the sanitizer and brush the surfaces with care. Pay special attention to the inner duct of the tap, to the holes and seats of the OR.



All the disassembled parts must remain soaking in the **Ecolab P3 Topax-san** sanitizer (4% dilution) for at least 15' before they are rinsed with plenty of cold drinking water.

### SANITIZING FIXED PARTS

While the removable parts soak in the sanitizer inside the tub, proceed sanitizing the fixed parts of the machine:

#### SANITIZING THE TUB

- Immerse a disposable paper cloth in the sanitising liquid.
- Pass the cloth over all the surfaces of the tub and fixed transmission shaft.
- Pass the cloth over the outer edge of the tub until reaching the surfaces of the cover and front panel.
- Use the brush previously emerged in the sanitizer to thoroughly clean the drain duct which connects the tank to the tap.





- Never use any type of solvents and/or thinners to preserve the plastic parts and gaskets during washing.
- Chemical sanitizing products must be used in compliance with standards in force and with the utmost caution.
- During sanitizing operations, do not touch parts with tissues, sponges, rags or any other non-sterile material.



### **RINSING AND DRYING**

- Wash your hands well and/or wear disposable latex gloves.
- Remove from the sanitising tank all the components which were previously disassembled, brushed and immersed.
- Rinse them with plenty of cold drinking water, making sure to remove all possible leftover sanitising solution.
- Place the rinsed components on a clean table and let them dry in the air.



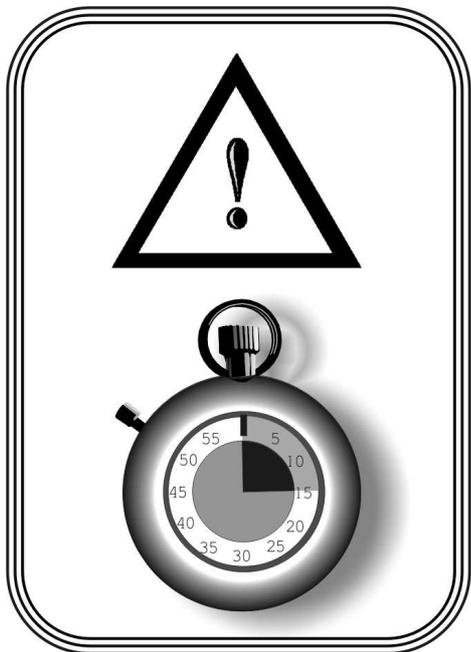
DO NOT use rags, sponges or anything else to dry the components. Make sure no dust or other impurities come into contact with the sanitized surfaces while they are drying.



- Use the flexible shower head supplied with the machine to rinse the fixed parts of the same, which were previously treated with the sanitizer (tank, drain duct, etc.).
- When all the components are dry, put them back onto the machine, making sure the gaskets are in good conditions.

## 7.1.2 BATCH FREEZER WASHING

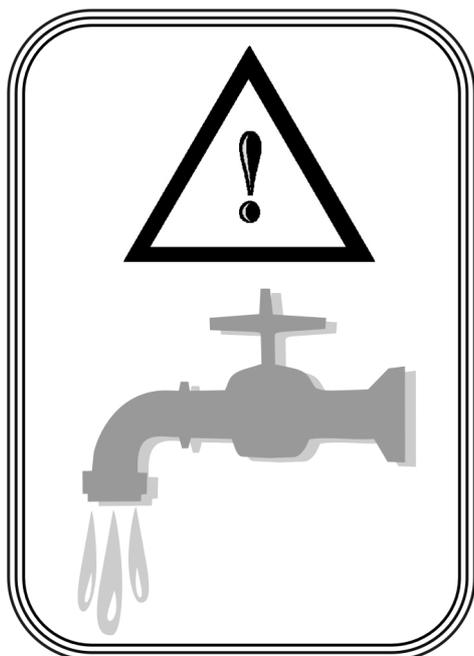
### PREWASHING



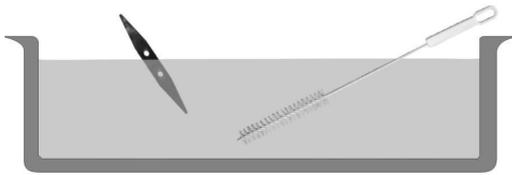
- Pour the maximum admitted load of warm (approximately 50°C) drinking water into the machine.
- Press the MIXING button to start the beater motor. Let it run for about 3 min: Open the dispenser disk to drain all the wash water. Repeat the procedure until the water coming out is clear and clean.
- Pour the maximum load admitted of cleansing/sanitising solution into the machine.
- Press the MIXING button in order to start the beater motor and let it run for about 15'. Open the dispenser disk to drain all the sanitising solution.

We suggest using the following sanitising solution:

**Ecolab P3 Topax-san**  
(4% dilution = 200 ml).



- Pour the maximum admitted load of cold drinking water into the machine to rinse the surfaces which were just treated with the sanitiser.
- Drain the rinse water and turn the machine off.
- When pre-washing is over, all the removable parts in contact with the product must be disassembled and sanitized in a separate tub.
-



## SANITIZING REMOVABLE PARTS

### PREPARATION OF WASHING TUB

- Wash your hands well and/or wear disposable gloves.
- Fill a clean tub with a sufficient amount of drinking water at approximately 50°C and the sanitizer.
- Prepare the supplied brush and the OR disassembly

We suggest using the following sanitising solution:

### **Ecolab P3 Topax-san**

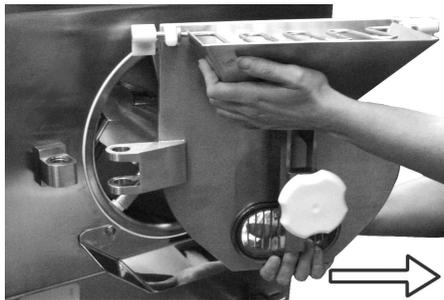
(4% dilution = 200 ml every 5 litres of water).

device and immerse them in the solution.



### REMOVING AND CLEANING THE DOOR

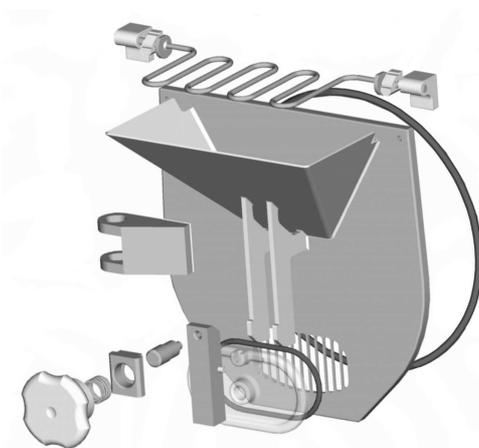
- Lift the blocking lever and open the door by rotating it to the left.
- Pull the hinge pin upwards and remove the door, holding it with both hands.

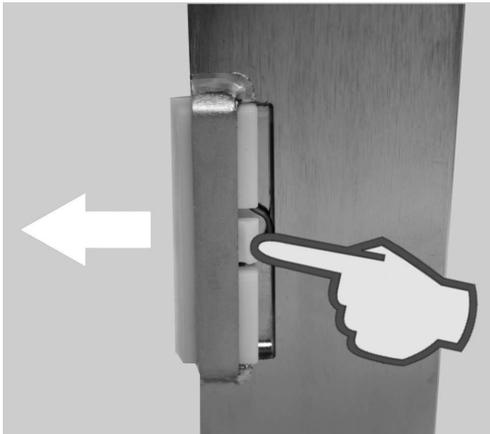


Handle the door with great care: because of its great weight, should it fall, it could cause injuries to staff and damages to things.

- Rest the door on a clean work surface and disassemble its parts:
  1. Remove the plastic lid from the hopper.
  2. Unscrew and remove the plastic knob.
  3. Remove the steel guide controlling the dispenser disk from the guides.
  4. Remove the spring.
  5. Remove the dispenser disk.
  6. Use the OR disassembly device to remove the 2 OR gaskets from their place.
- Immerse the previously disassembled components into the tub with the sanitising solution and brush the surfaces with care. Pay special attention to the safety grid and gaskets.

### REMOVING AND CLEANING BEATER





- Pull the beater towards you to remove it from the batch freezing cylinder.
- Recover the seal gasket placed on the back of the beater.
- Remove the scrapers from the beater by pressing firmly on the small fixing tooth.
- Remove the metallic springs from the scrapers.
- Immerse the previously disassembled components into the tub with the sanitising solution and brush the surfaces with care. Pay special attention to the seats of the scrapers and metallic springs.



All the disassembled parts must remain soaking in the **Ecolab P3 Topax-san** sanitizer (4% dilution) for at least 15' before they are rinsed with plenty of cold drinking water.



#### **SANITIZING FIXED PARTS**

While the removable parts soak in the sanitizer inside the tub, proceed sanitizing the fixed parts of the machine:

#### **SANITISING THE CYLINDER**

- Immerse a disposable paper cloth in the sanitising liquid.
- Pass the cloth over all the cylinder surfaces.
- Also pass the cloth over the outer edge of the cylinder until reaching the surfaces of the front panel and funnel.



- Never use any type of solvents and/or thinners to preserve the plastic parts and gaskets during washing.
- Chemical sanitizing products must be used in compliance with standards in force and with the utmost caution.
- During sanitizing operations, do not touch parts with tissues, sponges, rags or any other non-sterile material.



## RINSING AND DRYING

- Wash your hands well and/or wear disposable latex gloves.
- Remove from the sanitising tank all the components which were previously disassembled, brushed and immersed.
- Rinse them with plenty of cold drinking water, making sure to remove all possible leftover sanitising solution.
- Place the rinsed components on a clean table and let them dry in the air.



DO NOT use rags, sponges or anything else to dry the components. Make sure no dust or other impurities come into contact with the sanitized surfaces while they are drying.

- Also carefully rinse the fixed parts of the machine which were treated with the sanitizing solution (cylinder, funnel, etc.)
- When all the components are dry, put them back onto the machine making sure the gaskets and scrapers are in good conditions.

## 7.2 EXTRAORDINARY MAINTENANCE (INTENDED FOR QUALIFIED PERSONNEL)



These operations are reserved exclusively for authorised qualified personnel. FRIGOMAT S.r.l. will not be held liable for damage to objects or harm to persons which occur due to failure to comply with the above.

### 7.2.1 HEATER MEB<sup>2</sup> BOARD PROGRAMMING

Refer to the following instructions to program the circuit board:

Fig.1

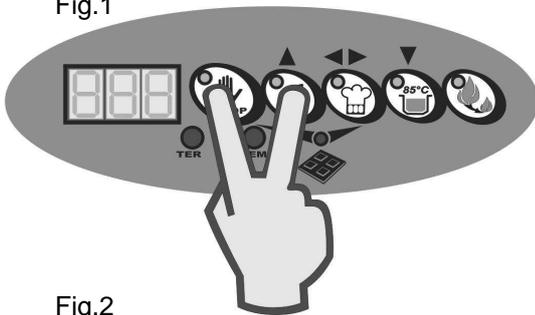


Fig.2

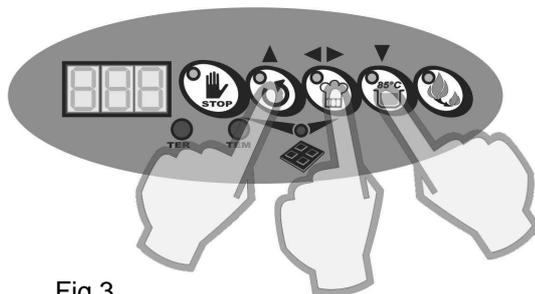


Fig.3

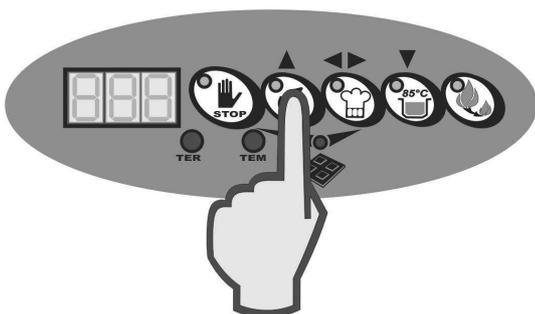
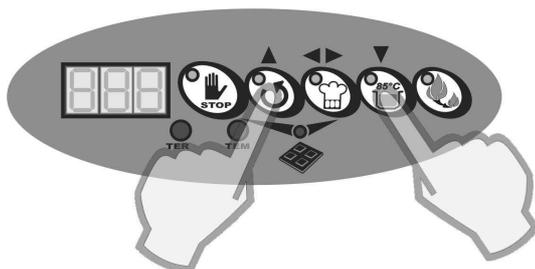


Fig.4



1. Ensure the lid is assembled in machine and in closing position.
2. Power the machine.
3. With the machine at STOP, press the “**STOP**” and “**MIXING**” keys simultaneously and release them only after the password identification screen appears (fig.1).
4. Press the “**MIXING**” (▲), “**85° AUTOMATIC**” (▼) and “**SEMIAUTOMATIC**” (◀▶) keys to enter the password and then confirm it (fig.2). If you do not know the password, contact the Frigomat assistance service.
5. When the password has been accepted, the screen accesses the list of programming steps directly. The first programming step *P01* is selected automatically
6. If you do not wish to change the value of the selected step, press “**MIXING**” (▲) to directly access the following step (Fig. 3).
7. If, instead, you wish to change the selected step, press “**SEMI-AUTOMATIC**” (◀▶) to access the parameters relative to the same step, and subsequently press “**MIXING**” (▲) “**85°AUTOMATIC**” (▼) to increase or decrease the value (fig.4). Subsequently, press the “**SEMI-AUTOMATIC**” (◀▶)” key to confirm the data.
8. To exit programming and save the changed press the “**STOP**” key.

"MEB2" BOARD PROGRAMMING TABLE (**)					
P	DESCRIPTION	MIN	MAX	C136-37-38	STEP
P1	Model Selection	1	2	1	1= C136-37-38 2= MIX 8
P2	Tank probe correction (TEV)	-10°	+10°	*	0,5°C
P3	Probe correction fluid (TEF)	-10°	+10°	*	0,5°C
P4	Tank overtemperature compensation when TEV>40°C	-10°	+10°	*	0,5°C
P5	TEF Control Lim. in SEMI-AUTOMATIC	30°	130°	120°	1°C
P6	TEF Control Lim. in 85° AUTOMATIC	30°	130°	120°	1°C
P7	TEF Control Lim. in SLOW FLAME	30°	130°	98°	1°C
P8	TEF Control Lim. in CHOCOLATE	30°	130°	66°	1°C
P9	TEF lim. control hysteresis	1°	10°	1°	1°C
P10	Temperature indication on display	0	1	1	0=°F 1=°C

(\*) These parameters vary for each unit and variant.

(\*\*) The parameters may vary depending on the software version or customisation. It is always possible to refer to the test inspection board supplied with the machine.

## 7.2.2 OMEGA<sup>2</sup> BATCH FREEZER BOARD PROGRAMMING

Refer to the following instructions to program the circuit board:

Fig.1

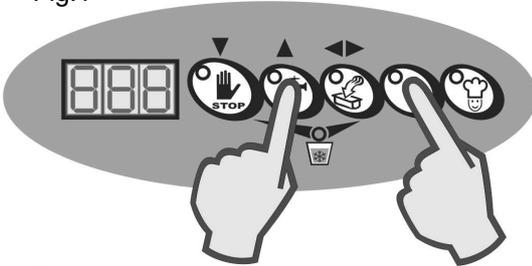


Fig.2

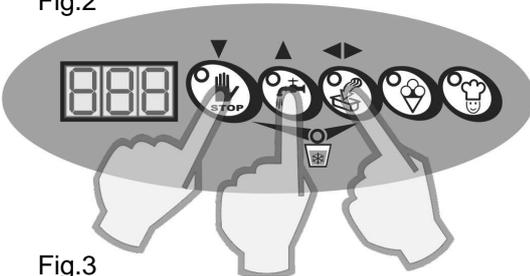


Fig.3



Fig.4

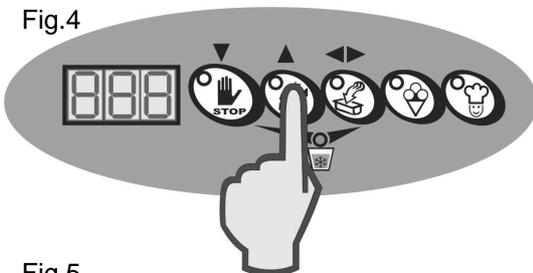


Fig.5

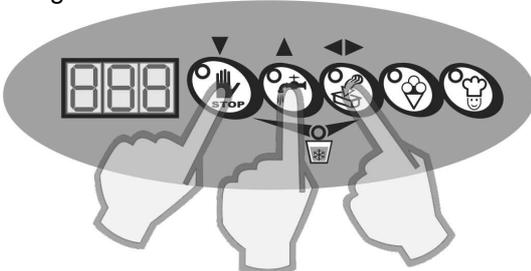
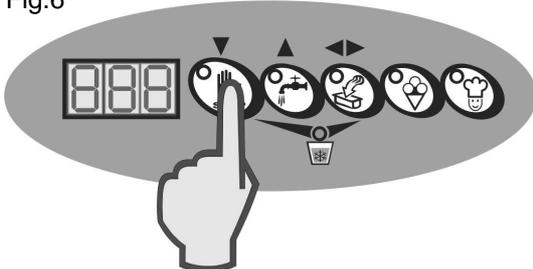


Fig.6



1. Make sure that the door is closed and the safety grid is lowered.
2. Power the machine.
3. With the machine at STOP, press “**MIXING**” and “**AUTOMATIC**” simultaneously and release them only after the password identification screen appears (Fig. 1).
4. Press the “**MIXING**” (▲), “**AUTOMATIC**” and “**EXTRACTION**” (◀▶)” keys simultaneously to type in the password and then confirm it.(Fig. 2). If you do not know the password, contact the Frigomat assistance service.
5. When the password has been accepted, the screen accesses the list of programming steps directly. The first programming step *P1* is selected automatically and flashes (Fig.3).
6. If you do not wish to change the value of the selected step, press “**MIXING**” (▲) to directly access the following step (Fig. 4).
7. If, instead, you wish to change the selected step, press “**EXTRACTION**” (◀▶)” to access the parameters relative to the same step, and subsequently press “**MIXING**” (▲)” or “**AUTOMATIC**” to increase or decrease the value. Subsequently, press the “**EXTRACTION**” (◀▶)” key to confirm the data (Fig.5).
8. To exit programming and save the changes press the “**STOP**” key (Fig. 6).

**“OMEGA<sup>2</sup>” BOARD PROGRAMMING TABLE(\*\*)**

<b>P</b>	<b>DESCRIPTION</b>	<b>MIN</b>	<b>MAX</b>	<b>C136</b>	<b>C137</b>	<b>C138</b>	<b>STEP</b>
P1	Machine model	0	7	0	1	2	
P2	Slush coefficient	1,0	4,0	2,2	3	2,2	1
P3	Consistency hysteresis (%of setting)	1	50	10	10	10	1
P4	Voltage and frequency selection	0	2	*	*	*	0= 115-230/50-60/1 1= 400-440/50-60/3 2= 220/230/50-60/3 (without neutral)
P5	Sampling 1 SET OK (AUTO cycle minimum threshold)	50	200	130	130	130	1
P6	Sampling 1 Time (AUTO cycle)	0	22	10	10	10	4,5,6,7,8,9,10,11,12,13,1 4,15,16,17,18,20,22 sec.
P7	Sampling 2 SET OK (AUTO cycle average threshold)	50	200	180	180	180	1
P8	Sampling 2 Time (AUTO cycle)	0	22	4	4	4	4,5,6,7,8,9,10,11,12,13,1 4,15,16,17,18,20,22 sec.
P9	<i>Not active</i>						
P10	<i>Not active</i>						
P11	<i>Not active</i>						
P12	<i>Not active</i>						
P13	Compressor in extraction ON time	0	2	2	2	2	0= 5 sec 1= 10 sec 2= 15 sec 3= 20 sec
P14	Beater ON time in Cyclic Slush mode	1	10	1	1	1	1 sec
P15	<i>Not active</i>						

"OMEGA2" BOARD PROGRAMMING TABLE(**) (continues)							
P	DESCRIPTION	MIN	MAX	C136	C137	C138	STEP
P16	<i>Not active</i>						
P17	<i>Not active</i>						
P18	Batch freezing Time-Out alarm	0	1	0	0	0	0= 035 min 1= 20 min
P19	Numbers indication filter	0	1	0	0	0	0= Off 1= On
P20	Push button control panel selection	0	1	0	0	0	0= TITAN 1= C136-37-38
P21	<i>Not present</i>						
P22	Consistency Voltmeter correction	0	2	2	2	2	= Off 1= On V/mainsV 2= On V/mainsV x coefficient

(\*) These parameters vary for each unit and variant.

(\*\*) The parameters may vary depending on the software version or customisation. It is always possible to refer to the test inspection board supplied with the machine.

### CONSISTENCY CALIBRATION ON OMEGA BOARD

The Frigomat combined machines of the TWIN series are equipped with an electronic board provided with a sophisticated microprocessor able to control the consistency of the ice cream by acquiring different parameters, among which the value of absorption of the beater motor. During the batch freezing cycle the display of the machine indicates the value in numbers from 30 to 250, directly proportional to the hardness of ice cream. Each machine is tested and calibrated by FRIGOMAT with a mixture with standard features at an absorption value of the beater motor referred to 240 numbers of hardness. This value is shown on the test sheet that accompanies the machine (see test sheet at the following entry: BEATER AMPERE @SET240); normally this calibration is able to satisfy a very wide range of applications.



For any special requirement you can however vary the consistency value of the batch freezer: this operation should be carried out only by authorised technical personnel in possession of a clamp-type ammeter or capacity wattmeter and sufficient accuracy.

Refer to the following instructions to calibrate the consistency:

1. Disconnect the machine and remove the right side panel. Subsequently remove the cover of the electrical box.

2. Locate the cable that passes through the current transformer (identified with L1 - see electrical diagram) and connect the clamp-type ammeter. This way you can measure the absorption of the beater motor.
3. Fill the cylinder with ice cream mixture in the maximum amounts admitted for each model.
4. Power the machine.
5. Press the **"SEMI-AUTOMATIC"** key, set the amperometric control with SETTING at 240 numbers and confirm the data by pressing **"EXTRACTION"** (◀▶). The machine starts.
6. With the machine running, simultaneously press and hold the **"MIXING"** and **"AUTOMATIC"** keys. This way you enter *"Calibration"* mode, the **"MIXING"** (▲), **"AUTOMATIC"** and **"EXTRACTION"** (◀▶) keys light up and the display indicates the numerical value of the consistency that gradually increases as batch freezing proceeds.
7. Pressing the **"MIXING"** (▲) and **"AUTOMATIC"** keys you can increase and decrease this number to set.
8. When you reach the desired consistency that corresponds to a certain value in ampere indicated on the clamp-type ammeter, press **"MIXING"** (▲) and **"AUTOMATIC"** until number 240 appears on the display.
9. Press the **"EXTRACTION"** (◀▶) key to memorise the setting.

CONSISTENCY VALUES @ SET 240 400/50/3

<i>Consistency</i>	<i>C136</i>	<i>C137</i>	<i>C138</i>	-	-
Ampere	6,3	9,0	9,6		
Watt	2500	3600	3800		

CONSISTENCY VALUES @ SET 240,220/60/3

<i>Consistency</i>	<i>C136</i>	<i>C137</i>	<i>C138</i>	-	
Ampere	11	14	15		
Watt	2600	4000	4200		

## 8. TROUBLESHOOTING INSTRUCTIONS

### 8.1 MANAGEMENT OF HEATER ALARMS

MESSAGE	DESCRIPTION	REMEDIES
<b>EME</b>	Absent or lifted. The buzzer emits an intermittent acoustic signal.	Make sure that the lid is assembled and lowered properly.
<b>TER</b>	A motor circuit breaker or the transformer fuse has intervened. The buzzer emits an intermittent acoustic signal.	Wait a few minutes and then press STOP to restore machine operation. If the alarm continues, contact the technician.
<b>DIS</b>	Communication between the board and the display interrupted.	Contact the technician.
<b>L F</b>	The level of the glycol is insufficient. The buzzer emits an intermittent acoustic signal.	Contact the technician to check the level of the glycol in the tank and to see if the circuit leaks.
<b>TEv Int</b>	The tank probe is interrupted. The buzzer emits an intermittent acoustic signal.	Contact the technician to check and replace the faulty probe.
<b>TEv cor</b>	The tank probe is in short-circuit. The buzzer emits an intermittent acoustic signal.	Contact the technician to check and replace the faulty probe.
<b>TEf Int</b>	The fluid probe is interrupted. The buzzer emits an intermittent acoustic signal.	Contact the technician to check and replace the faulty probe.
<b>TEf cor</b>	The fluid probe is in short-circuit. The buzzer emits an intermittent acoustic signal.	Contact the technician to check and replace the faulty probe.

## 8.2 MANAGEMENT OF BATCH FREEZER ALARMS

MESSAGE	DESCRIPTION	REMEDIES
<b>EME</b>	The door is open and/or the safety grid is lifted. The led flashes and the buzzer emits an intermittent acoustic signal.	Make sure that the door is assembled and closed properly. Check that the safety grid is lowered.
<b>TER</b>	A motor circuit breaker has intervened or the transformer fuse breakdown. The led flashes and the buzzer emits an intermittent acoustic signal.	Wait a few minutes and then press STOP to restore machine operation. If the alarm continues, contact the technician.
<b>L23</b>	L2-L3 phases inverted in the plug.	Contact the technician to invert the phases in the plug.
<b>F-N</b>	The phases and neutral of the electronic card power supply are inverted.	Contact the technician to invert the phases and the neutral of the electronic card power supply.
<b>T-A</b>	Current Transformer breakdown.	Contact the technician.
<b>End</b>	Batch freezing time-out alarm.	In the semi-automatic cycle, select lower consistency levels. Check that the amount of product is within the minimum and maximum admitted limits and that it is balanced properly. If the alarm continues, contact the technician.

### 8.3 HEATER TROUBLESHOOTING

PROBLEM	PROBABLE CAUSES	REMEDIES
The machine does not start (STOP button off).	Master switch open.	Close the switch.
	Electrical anomaly.	Contact the technician.
	Fuses blown.	Contact the technician.
The machine works regularly but the heating times are long.	SLOW FLAME function active.	Verify that the Slow Flame function is disabled (key LED off).
	Product insufficient.	Work with at least 1/2 the maximum amount of the product foreseen for each TWIN model.
	Missing, worn or incorrectly mounted beater scrapers.	Verify that the scrapers are correctly mounted, in good state and that the relative thrust springs are in seat.
	Missing or incorrectly assembled hopper lid.	Ensure the hopper lid is correctly positioned on the lid to prevent steam escaping.
	Faulty resistance or fluid pump.	Contact the technician.
The machine does not reach temperatures over 100□ quickly in heating mode.	Hopper lid assembled incorrectly	Make sure that the hopper lid prevents steam escaping.
	Product insufficient.	Work with at least 1/2 the maximum amount of the product foreseen for each C136-37-38 model.
During functioning the machine becomes noisy and the beater stops.	The belt slips.	Contact the technician to check the belts tension and possibly replace it.
Temperatures above 93°C cannot be selected in semi-automatic programming.	SLOW FLAME function active.	Verify that the Slow Flame function is disabled (key LED off).

## 8.4 BATCH FREEZER TROUBLESHOOTING

PROBLEM	PROBABLE CAUSES	REMEDIES
The machine does not start (STOP button off).	Master switch open.	Close the switch.
	Electrical anomaly.	Contact the technician.
	Fuses blown.	Contact the technician.
The machine works intermittently during cooling.	Air-cooled machines: air condenser dirty or fan faulty.	Clean the condenser with a brush, check functioning of the fan and the installation conditions on page.
	Water-cooled machines: no condensation water.	Make sure there is water in the water system to which the machine is connected. Check the pipes and cocks.
The machine works properly but the product is too firm.	Unbalanced mixture or too little introduced.	Check that the amount of mixture introduced is correct and that it is balanced properly.
	Work program selection incorrect.	Select a suitable work program for the product one wishes to achieve.
The machine works properly but the product is not firm enough.	Unbalanced mixture or too much introduced.	Check that the amount of mixture introduced is correct and that it is balanced properly.
	Work program selection incorrect.	Select a suitable work program for the product one wishes to achieve.
	Beater scrapers worn.	Check them and replace if necessary.
	Insufficient condensation.	Check the installation conditions and that the temperature where the machine is installed does not exceed 35°C.
	Refrigeration system anomaly.	Contact the technician.
During batch freezing the machine becomes noisy and the beater stops.	The belts slip.	Contact the technician to check the belts tension and possibly replace them.
During product extraction the machine becomes noisy.	Excessive hardening of the product.	Make sure you have pressed the "Estrazione" ("Extraction") key before emptying the cylinder.
Presence of liquid ice cream in the drip drawer.	Beater gasket absent or worn.	Check the presence of the gasket and that it is not excessively worn.



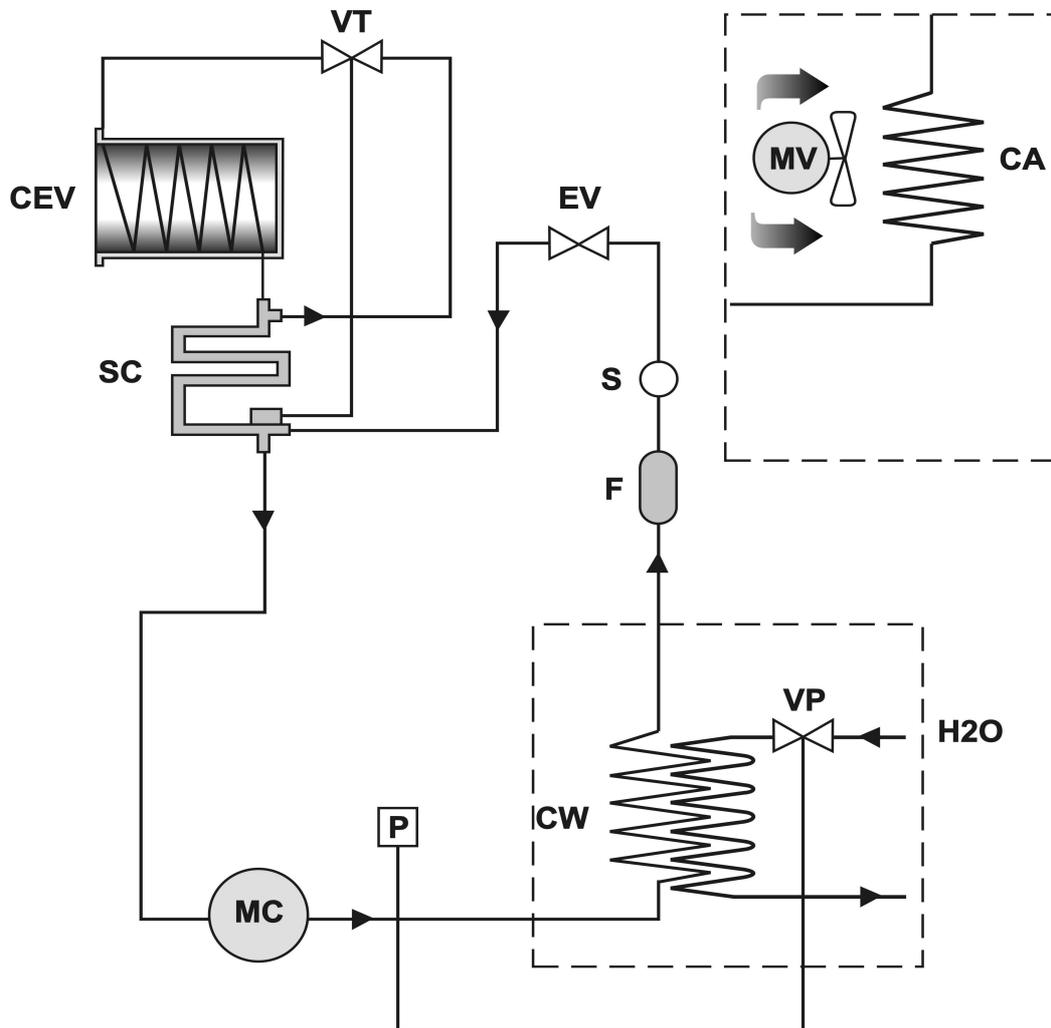
## 9 APPENDICI / APPENDICES / ANNEXES / ANHANG / APENDICES

### 9.1 Dati tecnici / Machine specifications / Caractéristiques techniques / Technische Daten / Datos Tecnicos

Modello Model Modell Modale Modelo	Alimentazione Current Stromart Tension Tensión	Condensazione Cooling Kühlung Condensation Condensación	Potenza Power Nennleistung Puissance Potencia	Gas R404	Altezza Height Höhe Hauteur Altura	Larghezz a Width Breite Largeur Anchura	Profondità Dept Tiefe Profondeur Profundidad	Peso Weight Gewicht Poids Peso
		<b>A* - W**</b>	<b>(kw)</b>	<b>(kg)</b>	<b>(cm)</b>	<b>(cm)</b>	<b>(cm)</b>	<b>(kg)</b>
<b>C136</b>	400/50/3	W	9	0,950	138	55	70+33	310
	220/60/3	W	9,8	0,950				
<b>C137</b>	400/50/3	W	10,5	1,100	138	60	77+33	370
	220/60/3	W	11,5	1,100				
<b>C138</b>	400/50/3	W	12	1,300	138	60	77+33	380
	220/60/3	W	13,5	1,300				

\*\* Acqua – Water – Wasser – Eau – Agua

## 9.2 Refrigerant circuit diagram



<b>VP</b>	<b>CW</b>	<b>EV</b>	<b>F</b>
Valvola pressostatica Water valve Soupape pressostatique Druckventil Valvula presostatica	Condensatore ad acqua Water condensor Condensation à eau Wasserkondensierung Condensaciòn a agua	Elettrovalvola gas Gas electro valve Vanne électrique gas Gas Elektroventil Valvula electrica gas	Filtro Filter Filtre Filter Filtro
<b>S</b>	<b>VT</b>	<b>CEV</b>	<b>SC</b>
Spia liquido Led fluid Led fluid Led Kuhlmittel Mirilla fluido	Valvola termostatica Thermostatic valve Vanne thermostatique Thermostatisches ventil Valvula termostatica	Cilindro evaporatore Evaporator cylinder Evaporateur cylindre Zylinder-Verdampfer Evaporador cilindro	Scambiatore Heat exchanger Echangeur de chaleur Wärmeaustauscher Cambiador de calor
<b>CA</b>	<b>MV</b>	<b>MC</b>	<b>P</b>
Condensatore ad aria Air condensor Condensation à air Luftkondensierung Condensaciòn a aire	Motoventilatore Fan motor Moteur ventilateur Ventilatormotor Motor ventilador	Compressore Compressor Compresseur Kompressor Compresor	Pressostato Pressostat Pressostat Pressostat Pressostato

### **9.3 IMPIANTO ELETTRICO / ELECTRIC SYSTEM / GROUPE ELECTRIQUE / ELEKTRISCHE ANLAGE / INSTALACION ELECTRICA**

Lo schema elettrico funzionale ed il lay-out del box elettrico, specifico per ogni modello, è collocato sulla parte esterna del coperchio del box stesso.

The functional wiring diagram and the electric box lay-out, different for each model are located on the box cover.

Le schéma électrique de fonctionnement et le lay-out de la boîte électrique, spécifique pour chaque modèle, se trouve sur la partie extérieure du couvercle de cette boîte.

Das Elektroschema und das Lay-out der Elektro-Box ist auf dem Deckel der selben Außen angebracht und ist für jedes Modell spezifisch bezogen.

El esquema eléctrico funcional y el lay-out de la caja eléctrica, específico para cada modelo, se halla en la parte externa de la tapa de la caja misma.

## 9.4 RICAMBI / SPARE PARTS / PIECES DETACHEES / ERSATZTEILE / REPUESTOS

Per la richiesta delle parti di ricambio, si raccomanda di indicare sempre il numero di codice relativo e la denominazione riportata sulla legenda di ciascuna tavola. Si raccomanda inoltre di comunicare sempre il modello ed il numero di matricola della macchina, nonché le caratteristiche della stessa (voltaggio, frequenza e fasi), facilitando in tal modo l'identificazione del particolare. Per ordinare la componentistica di ricambio del compressore indicare sempre anche il modello specificato sulla targhetta del motore. In caso di sostituzione di pezzi, richiedere solo ricambi ORIGINALI FRIGOMAT ad un concessionario o ad un Rivenditore Autorizzato. FRIGOMAT declina ogni responsabilità per danni a persone e/o cose derivanti dall'utilizzo di ricambi non originali.

For spare parts ordering, always mention the corresponding code number and the name reported on each table caption. It is also recommended to always mention the machine model and the serial number as well as the technical data (voltage, frequency and phases), to make the identification of the component easier. To order spare parts for the compressor, always mention the model specified on the motor nameplate. In case it is necessary to replace a component, always ask a distributor or an authorized retailer for ORIGINAL spare parts. FRIGOMAT declines any liability for damages to people and/or things due to employment of non-original spare parts.

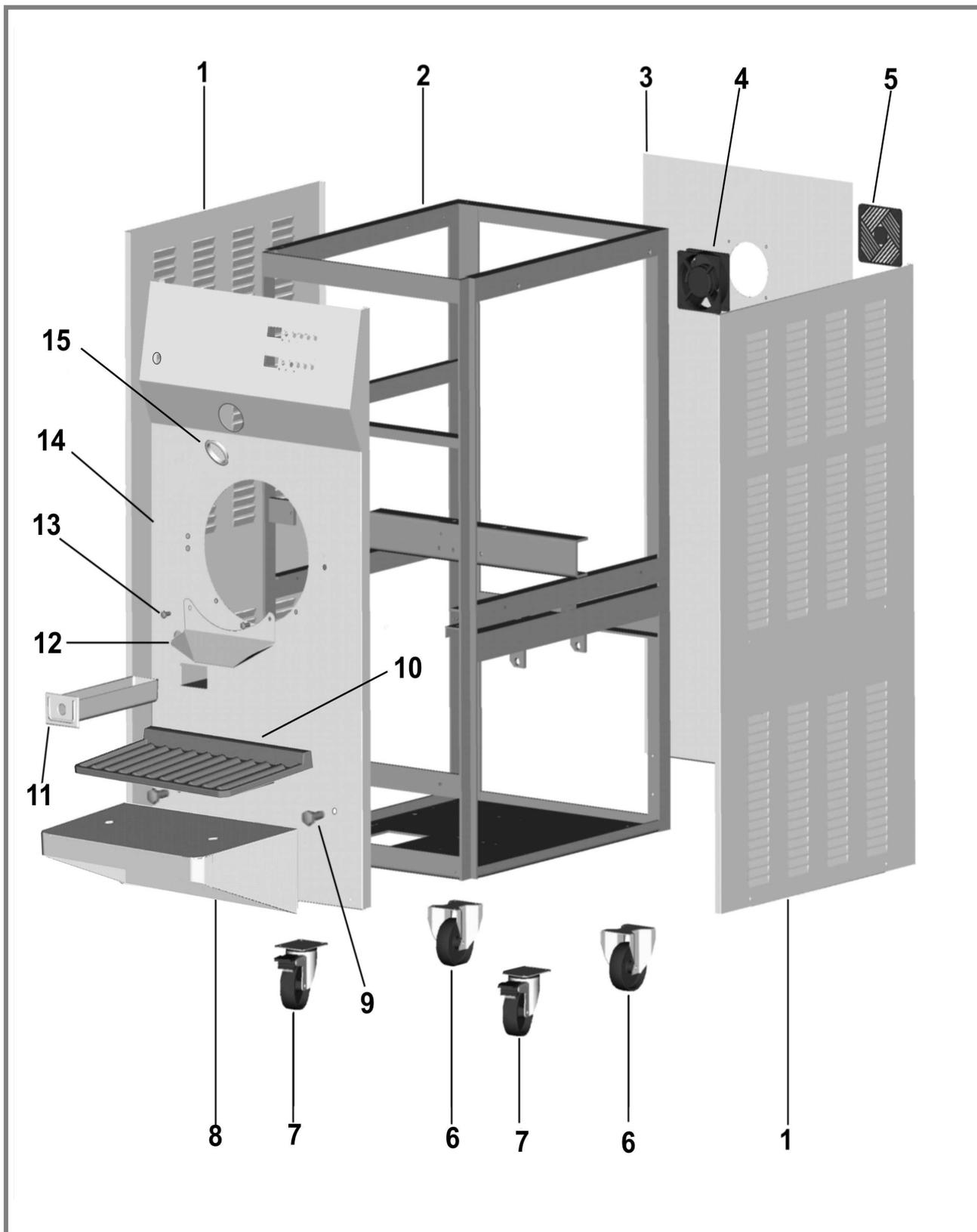
En cas de demande de pièces détachées, l'on recommande vivement d'indiquer le numéro de code correspondant et la description figurant sur la légende de chaque tableau. L'on recommande aussi de communiquer le modèle et le numéro d'immatriculation de la machine, ainsi que ses caractéristiques (voltagage, fréquence et phases), afin de faciliter l'identification de la pièce. Pour commander les composants de rechange du compresseur, il faut également indiquer le modèle qui est spécifié sur la plaque d'identification du moteur. En cas de remplacement de pièces, demander uniquement des pièces détachées ORIGINALES FRIGOMAT en vous adressant à un concessionnaire ou à un Revendeur Autorisé. FRIGOMAT décline toute responsabilité en cas de dommages aux personnes ou aux choses qui dériveraient de l'utilisation de pièces détachées non originales.

Für die Anfrage von Ersatzteilen raten wir Ihnen, immer die Kodenummer und die entsprechende Benennung einer jeden Tafel mitzuteilen. Wir raten weiterhin, immer das Modell und die Seriennummer der Maschine mitzuteilen als auch die Maschineneigenschaften (Voltleistung, Frequenz und Phasen), um die Erkennung von Besonderheiten zu vereinfachen. Um Ersatzteile des Kompressors zu bestellen, muß man auch das direkte Modell angeben, welches auf dem Motorschild verzeichnet ist. Im Austauschfall von Teilen nur Originalteilen der Firma Frigomat beim Konzessionär oder autorisiertem Wiederverkäufer anfragen. Die Firma FRIGOMAT ist von jeglichem Schadensersatz an Personen u/o Gegenständen entbunden, die auf den Einsatz von nicht originalen Ersatzteilen zurückzuführen sind.

Para la petición de las partes de recambio, se recomienda indicar siempre el número de código relativo y la denominación indicada en la leyenda de cada tabla. Además, se recomienda comunicar siempre el modelo y el número de matrícula de la máquina, así como las características de la misma (voltaje, frecuencia y fases), facilitando de esta manera la identificación de la parte. Para pedir los componentes de recambio del compresor indicar siempre también el modelo especificado en al placa del motor. En caso de sustitución de piezas, pedir sólo recambios ORIGINALES FRIGOMAT a un concesionario o a un Revendedor Autorizado. FRIGOMAT declina cualquier responsabilidad por daños a personas y/o cosas derivados del uso de recambios no originales.

**C136-37-38 s04**

**Tav.1**



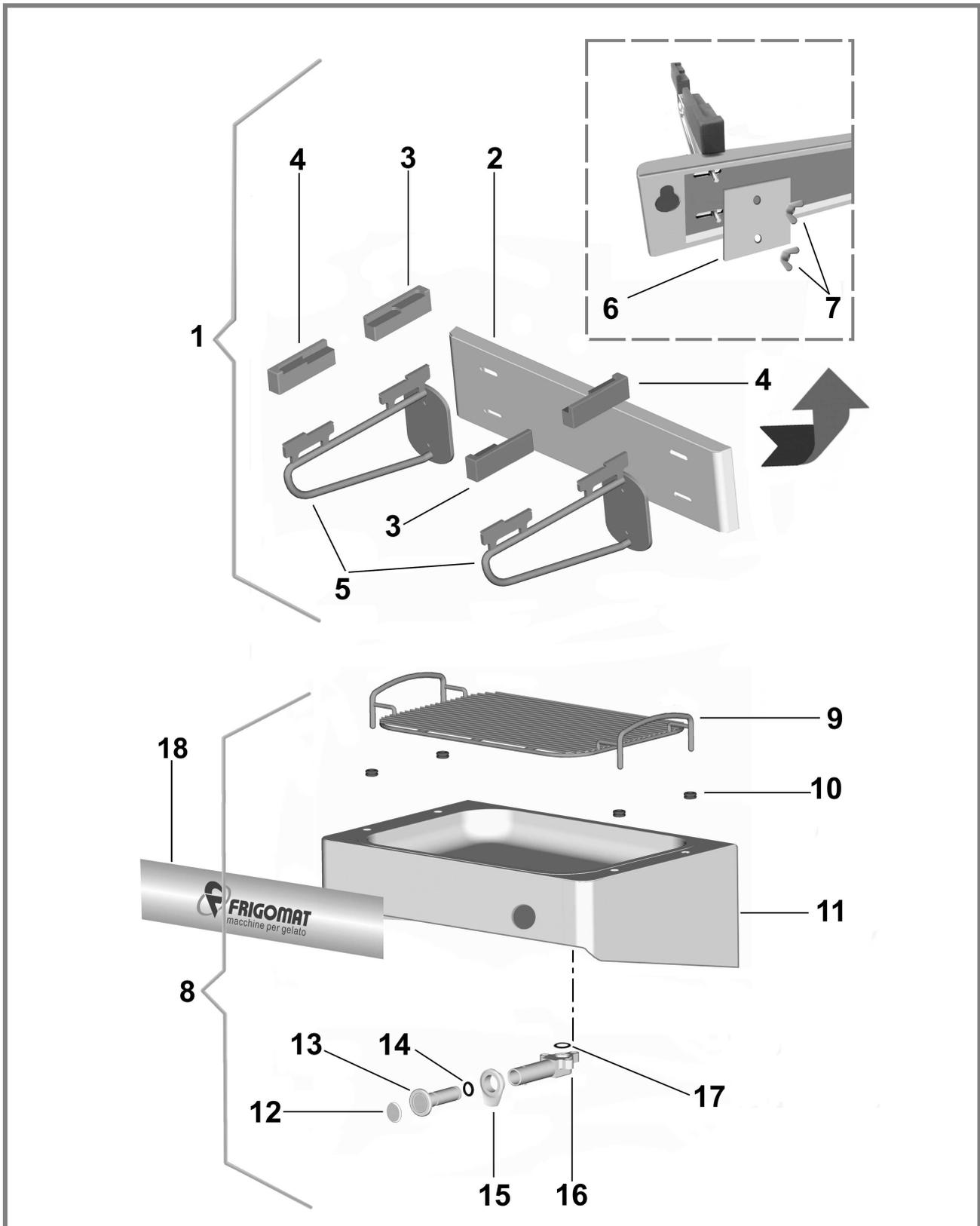
## C136-37-38 s04

## Tav.1

P.	COD.	Mod.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	<b>A02.38175</b>	<b>C136</b>	Pannello laterale	Side panel	Panneau lat.	Seitenblechl	Panel lateral
1	<b>A02.38176</b>	<b>C137-C138</b>	Pannello laterale	Side panel	Panneau lat.	Seitenblechl	Panel lateral
2	<b>A01.38945</b>	<b>C136</b>	Telaio	Frame	Châssis	Gestell	Armazón
2	<b>A01.38941</b>	<b>C137-C138</b>	Telaio	Frame	Châssis	Gestell	Armazón
3	<b>A02.38950</b>	<b>C136</b>	Pannello posteriore	Back panel	Panneau postérieur	Hinteres Blech	Panel posterior
3	<b>A02.38949</b>	<b>C137-C138</b>	Pannello posteriore	Back panel	Panneau postérieur	Hinteres Blech	Panel posterior
4	<b>B01.340</b>	<b>C136-37-38</b>	Ventilatore	Fan	Ventilateur	Ventilator	Ventilador
5	<b>B03.38574</b>	<b>C136-37-38</b>	Griglia ventilatore	grid	grille	das Gitter	parilla
6	<b>F02.014</b>	<b>C136-37-38</b>	Ruota fissa	Fixed wheel	Roue fixe	Festes Laufrad	Rueda fija
7	<b>F02.013</b>	<b>C136-37-38</b>	Ruota Girevole	Revolving wheel	Roue pivotante	Schwenkbares Laufrad	Rueda giratoria
8	<b>A03.41420</b>	<b>C136-37-38</b>	Balconcino	Rest	Support	Buegel	Repisa
9	<b>B09.060</b>	<b>C136-37-38</b>	Borchia balconcino	Stud for rest	Ecrou pour support	Buegelbolzen	Remache
10	<b>P25.41419</b>	<b>C136-37-38</b>	Tappetino	Rubber matting	Tapis de caoutchouc	Gummimatte	tapecito
11	<b>P19.37193</b>	<b>C136-37-38</b>	Cassetto Sgocciolatoio	Drip tray	Recueille-gouttes	Tropfblech	Recogedor de gotas
12	<b>C06.047</b>	<b>C136-37-38</b>	Bavagliola	Funnel	Etonnoir	Trichter	Embuto
13	<b>B09.197</b>	<b>C136-37-38</b>	Vite bavagliola	Tunnel screw	Vis etonnoir	Trichterschraube	Tornillo embuto
14	<b>A02.38754</b>	<b>C136</b>	Pannello anteriore	Front panel	Panneau antérieur	Frontblech	Panel anterior
14	<b>A02.38753</b>	<b>C137-C138</b>	Pannello anteriore	Front panel	Panneau antérieur	Frontblech	Panel anterior
15	<b>P19.38080</b>	<b>C136-37-38</b>	Flangia rubinetto	Flange	Bride	Flansch	Brida

**C136-37-38 s04 (OPTIONAL)**

**Tav.2**



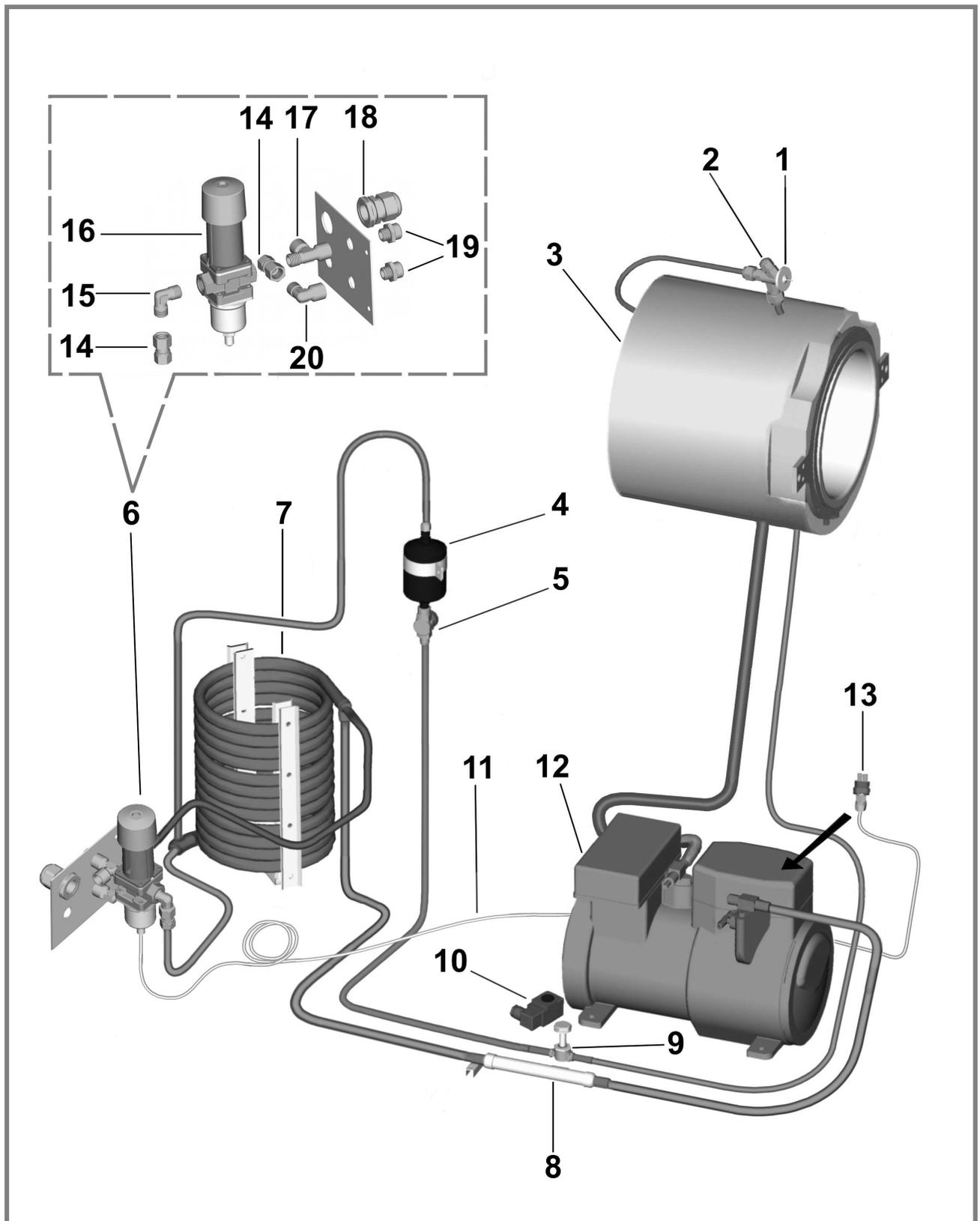
## C136-37-38 s04 (OPTIONAL)

## Tav.2

P.	COD.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	<b>Z22.38835</b>	Assieme completo mensole	Pan holding assy	Appuie bac compl.	Becken-Abstellsystem kompl.	Apoyo cubeta completo
2	<b>B50.38828</b>	Supporto mensole	Pan support	Support bac	Beckenhalter	Apoyo cubeta
3	<b>P01.38833</b>	Fermo vasca "A"	Pan fixing "A"	Ferme-bac "A"	Becken-Halter "A"	Retén-cuba "A"
4	<b>P01.38834</b>	Fermo vasca "B"	Pan fixing "B"	Ferme-bac "B"	Becken-Halter "B"	Retén-cuba "B"
5	<b>Z22.38832</b>	Mensola	Shelf	Console	Ablage	Ménsula
6	<b>A03.38964</b>	Piastra fissaggio mensole	Shelf fixing	Fixage console	Ablage-Fixierung	Fixaje Mensula
7	<b>V14.0001</b>	Dado ad alette	Nut	Ecrou	Mutter	Tuerca
8	<b>Z22.38826</b>	Assieme balconcino	Compl. Drip tray	Egoittoir compl	Kompl. Tropfblech	Recogegotas compl.
9	<b>Z22.38823</b>	Griglia balconcino	Grate	Grille com	Gitter	Rejilla
10	<b>D06.157</b>	Pressacavo	Cable grip	Presse-fils	Kabelhalter	Sujeta-cables
11	<b>B50.38794</b>	Balconcino	Rest	Support	Buegel	Repisa
12	<b>C05.165</b>	Disco	Disc	Disque	Scheibe	Disco
13	<b>P19.35274</b>	Tappo di tenuta	Plug seal	Bouchon	Abdichtungsverschluss	Tapon
14	<b>P10.077</b>	OR 119	OR 119	OR 119	OR 119	OR 119
15	<b>P19.C1362 73</b>	Salvagocce ABS	Dip protection	Protège-goutte ABS	Tropfenschutz ABS	Proteccone de gotas ABS
16	<b>P17.35275</b>	Canotto scarico	Drain pipe	Tuyau d'évacuation	Abflußrohr	Tubo de descarga
17	<b>P10.040</b>	OR 2081	OR 2081	OR 2081	OR 2081	OR 2081
18	<b>M02.39786</b>	Etichetta balconcino	Rest label	Etiquette support	Kleber Buegel	Etiqueta repisa

**C136-37-38 s04**

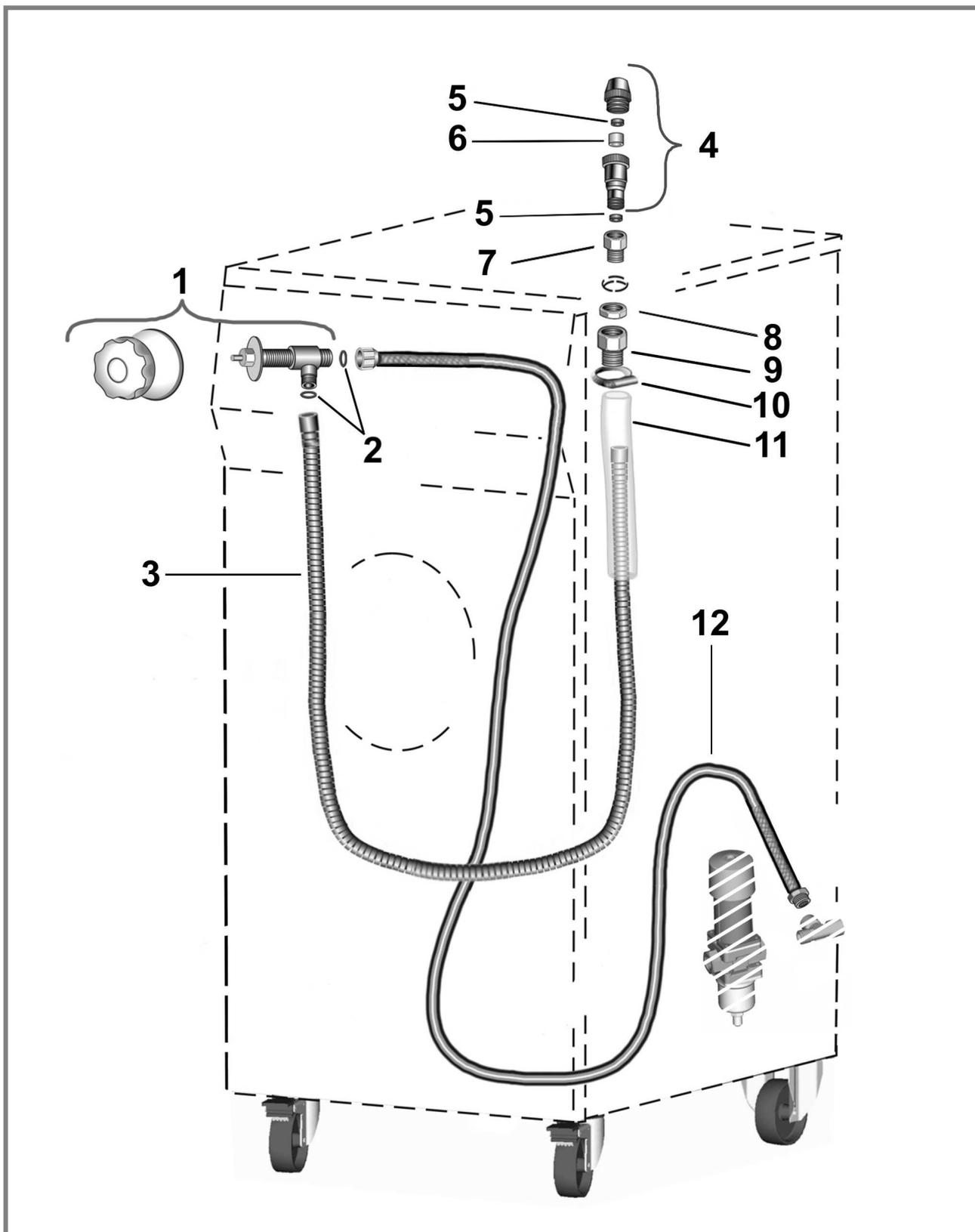
**Tav.3**



## C136-37-38 s04

## Tav.3

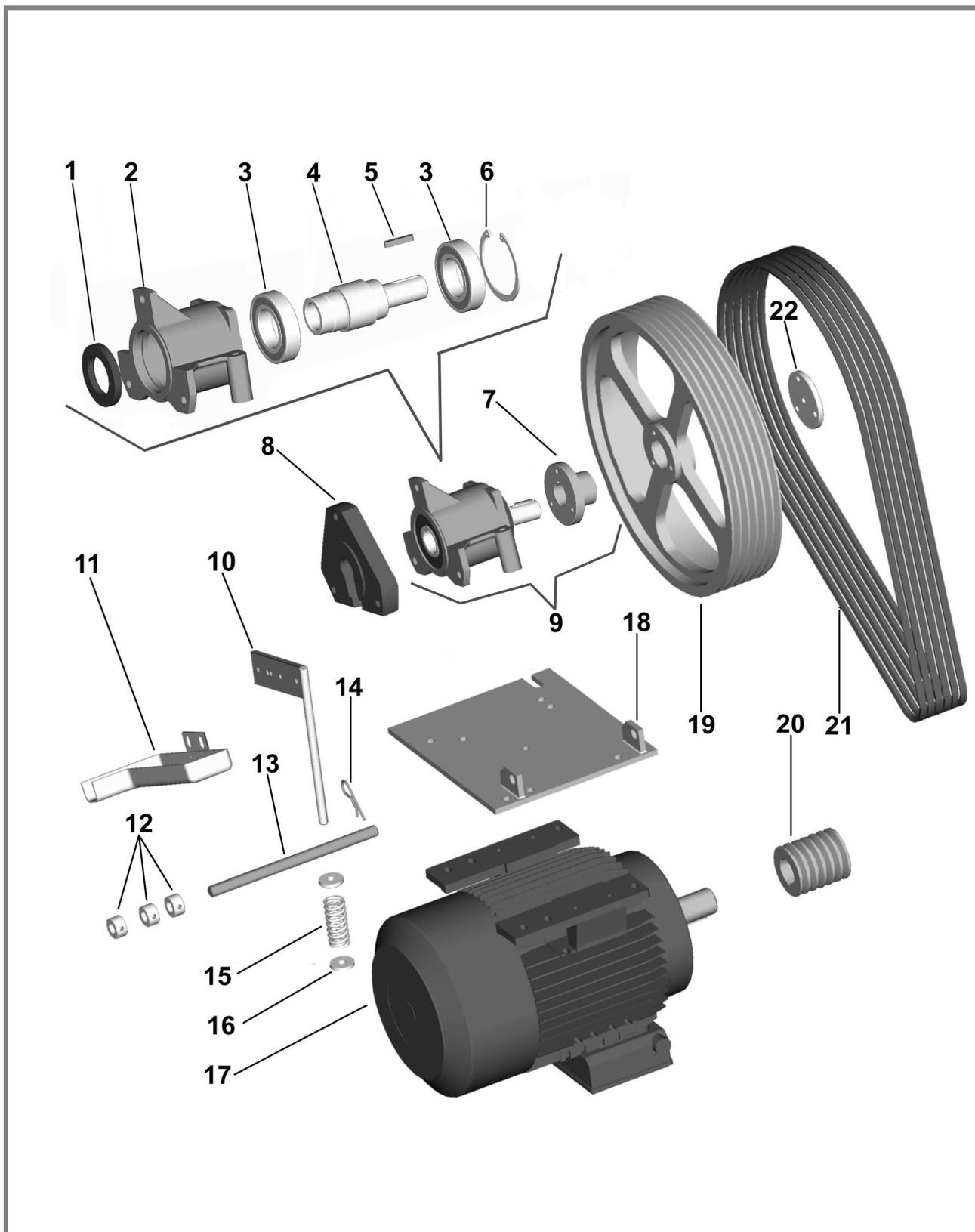
P.	COD.	Mod.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	A02.193	C136-37-38	Valvola termostatica	Thermostatic valve	Soupape thermostatique	Thermostatisches Ventil	Válvula termostática
2	A02.169	C136	Orificio per valvola termostatica	Orifice for thermostatic valve	Orifice soupape thermostatique	Öffnung für thermost. Ventil	Orificio válvula termostática
2	A02.170	C137-C138	Orificio per valvola termostatica	Orifice for thermostatic valve	Orifice soupape thermostatique	Öffnung für thermost. Ventil	Orificio válvula termostática
3	A06.151	C136	Gruppo isolamento	Insulation unit	Groupe isolant	Isolationsgruppe	Grupo aislamiento
	Z56.38683	C137	Gruppo isolamento	Insulation unit	Groupe isolant	Isolationsgruppe	Grupo aislamiento
	A06.121	C138	Gruppo isolamento	Insulation unit	Groupe isolant	Isolationsgruppe	Grupo aislamiento
4	B04.35032	C136-37-38	Filtro	Filter	Filtre	Filter	Filtro
5	A07.046	C136-37-38	Spia liquido	Liquid sight glass	Témoin pour liquide	Flüssigkeitskontrollampe	Testigo líquido
6	Z71.39545	C136-37-38	Gruppo valvola pressostatica	Pressare valve assy	Groupe soupape pressostatique	Druckventil kompl.	Válvula presostática
7	A03.090	C136	Condensatore ad acqua	Water condenser	Condensateur á eau	Wasserkondensator	Condensador de agua
	A03.091	C137-C138	Condensatore ad acqua	Water condenser	Condensateur á eau	Wasserkondensator	Condensador de agua
8	R09.001.02	C136-37-38	Antivibrante	Vibration damper	Antivibratoire	Schwingungs-dämpfer	Antivibrante
9	A02.152	C136-37-38	Elettrovalvola	Solenoid valve	Electrovanne	Elektroventil	Electroválvula
10	A02.154	C136-37-38	Bobina elettrovalvola	Solenoid valve coil	Bobine électrovanne	Spule Elektroventil	Bobina electroválvula
11	T50.016	C136-37-38	Capillare valvola pressostatica	Capillary tube for water valve	Capillaire soupape thermostatique	Kapillares Druckventil	Capilar válvula presostática
12	B01.39010	C136	Compressore 400/50/3	Compressor 400/50/3	Compresseur 400/50/3	Kompressor 400/50/3	Compresor 400/50/3
	B01.39009	C136	Compressore 220/60/3	Compressor 220/60/3	Compresseur 220/60/3	Kompressor 220/60/3	Compresor 220/60/3
	B01.38782	C137	Compressore 400/50/3	Compressor 400/50/3	Compresseur 400/50/3	Kompressor 400/50/3	Compresor 400/50/3
	B01.39125	C137	Compressore 220/60/3	Compressor 220/60/3	Compresseur 220/60/3	Kompressor 220/60/3	Compresor 220/60/3
	B01.39008	C138	Compressore 400/50/3	Compressor 400/50/3	Compresseur 400/50/3	Kompressor 400/50/3	Compresor 400/50/3
	B01.39007	C138	Compressore 220/60/3	Compressor 220/60/3	Compresseur 220/60/3	Kompressor 220/60/3	Compresor 220/60/3
13	A02.140	C136-37-38	Pressostato	Pressure switch	Pressostat	Druckwächter	Presóstato
14	R02.114	C136-37-38	Raccordo bicono F/F 10/8x3/8" Gas	Double-taper F/F 10/8x3/8" Gas	Raccord bi-conique F/F 10/8x3/8" Gas	Anschlußstück zweikegelig F/F	Unión bicono F/F 10/8x3/8" Gas
15	R03.019	C136-37-38	Gomito M-M 3/8" Gas	Elbow M-M 3/8" Gas	Coude M-M 3/8" Gas	M-Bogen-M 3/8" Gas	Codo M-M 3/8" Gas
16	A02.061	C136-37-38	Valvola pressostatica	Water valve	Soupape pressostatique	Druckventil	Válvula presostática
17	R05.009	C136-37-38	Raccordo a T F/F/M 3/8" Gas	Tee-joint F/F/M 3/8" Gas	Raccord en T F/F/M 3/8" Gas	T Anschlußstück F/F/M 3/8" Gas	Unión en T F/F/M 3/8" Gas
18	E09.37287	C136-37-38	Pressacavo	Cable grip	Presse-fils	Kabelhalter	Sujeta-cables
19	R02.113	C136-37-38	Nipplo ridotto 1/2"x3/8" Gas	Reduced nipple 1/2"x3/8" Gas	Raccord fileté réduit 1/2"x 3/8" Gas	Verkleinerter Nippel 1/2"x3/8" Gas	Niple reducido 1/2"x3/8" Gas
20	R03.058	C136-37-38	Gomito 90° M/F 3/8" Gas	Elbow 90° M/F 3/8" Gas	Coude 90° M/F 3/8" Gas	Bogen 90° M/F 3/8" Gas	Codo 90° M/F 3/8" Gas



## C136-37-38 s04

## Tav.4

P.	COD.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	<b>A10.007</b>	Rubinetto	Cock	Robinet	Ausgabehahn	Grifo
2	<b>P06.085</b>	Guarnizione	Basket	Joint	Dichtung	Guarnición
3	<b>A10.013</b>	Tubo doccia	Shower hose	Tuyau douchette	Duschschlauch	Tubo ducha
4	<b>A10.003</b>	Terminale per doccia	Shower terminal	Terminal de douche	Duschenteil	Terminal ducha
5	<b>P06.011</b>	Guarnizione per flessibile	Hose gasket	Joint pour flexible	Schlauchdichtung	Guarnición flexible
6	<b>P06.030.02</b>	Guarnizione per terminale	Terminal gasket	Joint terminal	Dichtung für Endanschluß	Guarnición terminal
7	<b>A10.005</b>	Manicotto doccia	Sleeve for shower	Manchon pour douchette	Muffe f. Dusche	Manguito por ducha
8	<b>V13.037</b>	Dado esagonale 1/2"	Hexagon nut 1/2"	Ecrou hexagonal 1/2"	Sechskantmutter 1/2"	Dado exagonal 1/2"
9	<b>R02.018</b>	Manicotto 1/2"-3/4"	Sleeve 1/2"-3/4"	Manchon 1/2"-3/4"	Muffe 1/2"-3/4"	Manguito 1/2"-3/4"
10	<b>B13.017</b>	Fascetta 23-C136/9	Clamp 23-C136/9	Bague 23-C136/9	Klemme 23-C136/9	Abrazadera 23-C136/9
11	<b>S03.37087</b>	Tubo acrilico	acrylic tube	tube acrylique	Acrylröhre	tubo de acrílico
12	<b>H05.39814</b>	Tubo flessibile L.1750 3/8M-1/2F	Flexible tube L.1750 3/8M-1/2F	Tuyau flexible L.1750 3/8M-1/2F	Schlauch L.1750 3/8M-1/2F	Tubo flexible L.1750 3/8M-1/2F

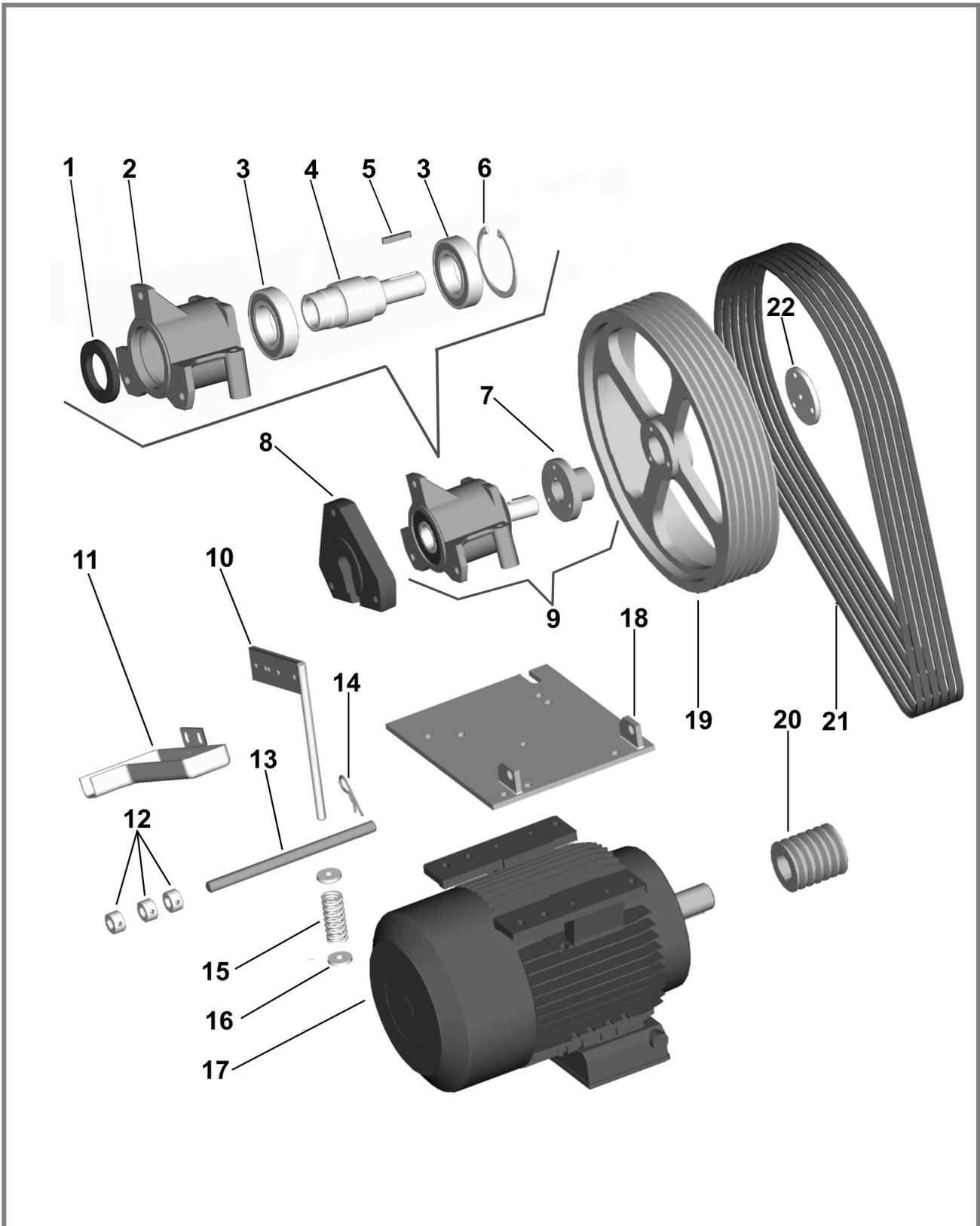


**C136-37-38 s04 400/50/3**
**Tav.5**

P.	COD.	Mod.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	<b>P11.043</b>	<b>C136-37-38</b>	Anello di tenuta	Seal Ring	Joint	Dichtung	Arandela de sujeccion
2	<b>B04.120</b>	<b>C136-37-38</b>	Corpo supporto	Body	Corp du support	Gehäuse	Cuerpo soporte
3	<b>B14.007</b>	<b>C136-37-38</b>	Cuscinetto	Bearing	Galet	Kugellager	Cojinete
4	<b>B04.106</b>	<b>C136-37-38</b>	Perno condotto	Driven pin	Axe	Bolzen	Pernio canal
5	<b>B04.131</b>	<b>C136-37-38</b>	Chiavetta	Key	Clavette	Keil	Chaveta
6	<b>V17.37933</b>	<b>C136-37-38</b>	Seeger DI90	Seegerring DI90	Seeger DI90	Seegerring DI90	Seeger DI90
7	<b>B02.055</b>	<b>C136-37-38</b>	Mozzo puleggia	Hub	Moyeu	Nabe	Eje pulea
8	<b>B10.235</b>	<b>C136-37-38</b>	Guarnizione post.	Termic trap	Joint postérieur	Hintere Abdichtung	Guarnición post.
9	<b>B04.122</b>	<b>C136-37-38</b>	Assieme supporto	Support assy	Support compl.	Kompl. Halter	Conjunto soporte
10	<b>F03.228</b>	<b>C136-37-38</b>	Staffa tirante	Bolt	Tige	Bride	Estafa tirante
11	<b>A04.38770</b>	<b>C136</b>	Sgocciolatoio	Drip tray	Recueille-gouttes	Tropfblech	Recogedor
	<b>A04.38948</b>	<b>C137-C138</b>	Sgocciolatoio	Drip tray	Recueille-gouttes	Tropfblech	Recogedor
12	<b>B10.236</b>	<b>C136-37-38</b>	Boccola	Bush	Douille	Buchse	Hebilla
13	<b>L21.38182</b>	<b>C136</b>	Perno piastra	Stud - Pin	Goujon - Axe	Bolzen	Perno
	<b>L21.37520</b>	<b>C137-C138</b>	Perno piastra	Stud - Pin	Goujon - Axe	Bolzen	Perno
14	<b>V14.071.02</b>	<b>C136-37-38</b>	Copiglia sagomata	Split pin	Goupille	Splinte	Chaveta moldurado
15	<b>B11.026</b>	<b>C136-37-38</b>	Molla	Spring	Ressort	Feder	Muelle
16	<b>P04.095</b>	<b>C136-37-38</b>	Rondella in gomma	Rubber washer	Ecrou en caoutchouc	Gummi-Scheibe	Arandela en goma
17	<b>B01.343</b>	<b>C136</b>	Motore mescolatore 400/50/3	Beater motor 400/50/3	Moteur mélangeur 400/50/3	Rührmotor 400/50/3	Motor agitador 400/50/3
	<b>B01.342</b>	<b>C137-C138</b>	Motore mescolatore 400/50/3	Beater motor 400/50/3	Moteur mélangeur 400/50/3	Rührmotor 400/50/3	Motor agitador 400/50/3
18	<b>A04.38942</b>	<b>C136-37-38</b>	Piastra motore	Support plate	Support du moteur	Motorhalter	Brida motor
19	<b>L06.38864</b>	<b>C136-45</b>	Puleggia condotta	Driven pulley	Poulie conduite	Geführte Rolle	Pulea conducta
	<b>L06.38865</b>	<b>C138</b>	Puleggia condotta	Driven pulley	Poulie conduite	Geführte Rolle	Pulea conducta
20	<b>B02.008</b>	<b>C136</b>	Puleggia motore 400/50/3	Driving pulley 400/50/3	Poulie de conduite 400/50/3	Führungsrolle 400/50/3	Pulea conductora 400/50/3
	<b>B02.017</b>	<b>C137-C138</b>	Puleggia motore 400/50/3	Driving pulley 400/50/3	Poulie de conduite 400/50/3	Führungsrolle 400/50/3	Pulea conductora 400/50/3
21	<b>P10.38822</b>	<b>C136-37-38</b>	Cinghia	Belt	Courroie	Riemen	Correa
22	<b>B02.051</b>	<b>C136-37-38</b>	Piattello pul.cond.	Driven pulley plate	Plat de poulie	Scheibe fuer Rolle	Platito polea

**C136-37-38 s04 220/60/3**

**Tav.6**

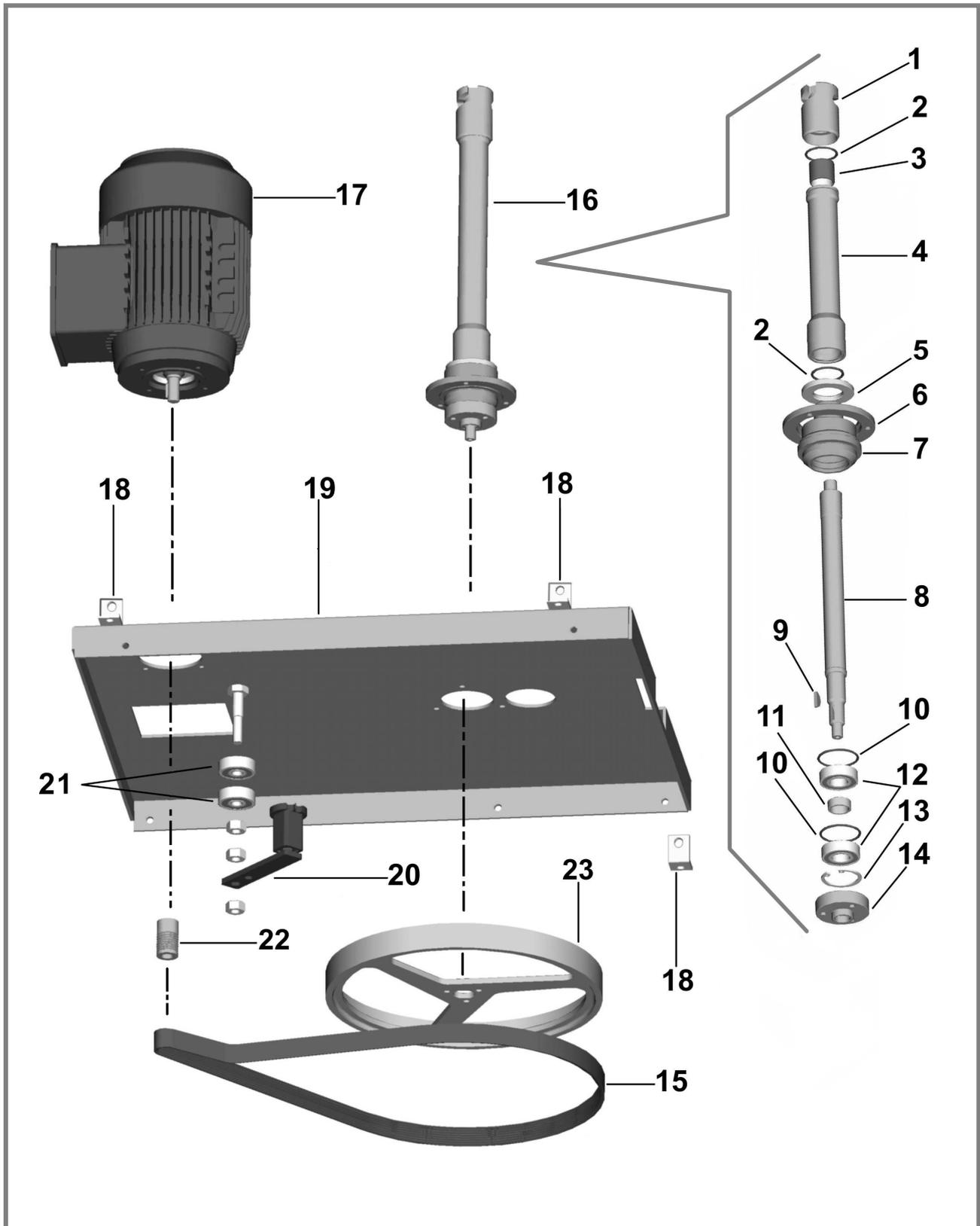


**C136-37-38 s04 220/60/3**
**Tav.6**

P.	COD.	Mod.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	<b>P11.043</b>	<b>C136-37-38</b>	Anello di tenuta	Seal Ring	Joint	Dichtung	Arandela de sujeccion
2	<b>B04.120</b>	<b>C136-37-38</b>	Corpo supporto	Body	Corp du support	Gehäuse	Cuerpo soporte
3	<b>B14.007</b>	<b>C136-37-38</b>	Cuscinetto	Bearing	Galet	Kugellager	Cojinete
4	<b>B04.106</b>	<b>C136-37-38</b>	Perno condotto	Driven pin	Axe	Bolzen	Pernio canal
5	<b>B04.131</b>	<b>C136-37-38</b>	Chiavetta	Key	Clavette	Keil	Chaveta
6	<b>V17.37933</b>	<b>C136-37-38</b>	Seeger DI90	Seegerring DI90	Seeger DI90	Seegerring DI90	Seeger DI90
7	<b>B02.055</b>	<b>C136-37-38</b>	Mozzo puleggia	Hub	Moyeu	Nabe	Eje pulea
8	<b>B10.235</b>	<b>C136-37-38</b>	Guarnizione post.	Termic trap	Joint postérieur	Hintere Abdichtung	Guarnición post.
9	<b>B04.122</b>	<b>C136-37-38</b>	Assieme supporto	Support assy	Support compl.	Kompl. Halter	Conjunto soporte
10	<b>F03.228</b>	<b>C136-37-38</b>	Staffa tirante	Bolt	Tige	Bride	Estafa tirante
11	<b>A04.38770</b>	<b>C136</b>	Sgocciolatoio	Drip tray	Recueille-gouttes	Tropfblech	Recogedor
	<b>A04.38948</b>	<b>C137-C138</b>	Sgocciolatoio	Drip tray	Recueille-gouttes	Tropfblech	Recogedor
12	<b>B10.236</b>	<b>C136-37-38</b>	Boccola	Bush	Douille	Buchse	Hebilla
13	<b>L21.38182</b>	<b>C136</b>	Perno piastra	Stud - Pin	Goujon - Axe	Bolzen	Perno
	<b>L21.37520</b>	<b>C137-C138</b>	Perno piastra	Stud - Pin	Goujon - Axe	Bolzen	Perno
14	<b>V14.071.02</b>	<b>C136-37-38</b>	Copiglia sagomata	Split pin	Goupille	Splinte	Chaveta moldurado
15	<b>B11.026</b>	<b>C136-37-38</b>	Molla	Spring	Ressort	Feder	Muelle
16	<b>P04.095</b>	<b>C136-37-38</b>	Rondella in gomma	Rubber washer	Ecrou en caoutchouc	Gummi-Scheibe	Arandela en goma
17	<b>E01.39880</b>	<b>C136</b>	Motore mescolatore 220/60/3	Beater motor 220/60/3	Moteur mélangeur 220/60/3	Rührmotor 220/60/3	Motor agitador 220/60/3
	<b>E01.39879</b>	<b>C137-C138</b>	Motore mescolatore 220/60/3	Beater motor 220/60/3	Moteur mélangeur 220/60/3	Rührmotor 220/60/3	Motor agitador 220/60/3
18	<b>A04.38942</b>	<b>C136-37-38</b>	Piastra motore	Support plate	Support du moteur	Motorhalter	Brida motor
19	<b>L06.38864</b>	<b>C136-45</b>	Puleggia condotta	Driven pulley	Poulie conduite	Geführte Rolle	Pulea conducta
	<b>L06.38865</b>	<b>C138</b>	Puleggia condotta	Driven pulley	Poulie conduite	Geführte Rolle	Pulea conducta
20	<b>B02.082</b>	<b>C136</b>	Puleggia motore 220/60/3	Driving pulley 220/60/3	Poulie de conduite 220/60/3	Führungsrolle 220/60/3	Pulea conductora 220/60/3
	<b>B02.142</b>	<b>C137-C138</b>	Puleggia motore 220/60/3	Driving pulley 220/60/3	Poulie de conduite 220/60/3	Führungsrolle 220/60/3	Pulea conductora 220/60/3
21	<b>P01.033</b>	<b>C136-37-38</b>	Cinghia	Belt	Courroie	Riemen	Correa
22	<b>B02.051</b>	<b>C136-37-38</b>	Piattello pul.cond.	Driven pulley plate	Plat de poulie	Scheibe fuer Rolle	Platito polea

**C136-37-38 s04**

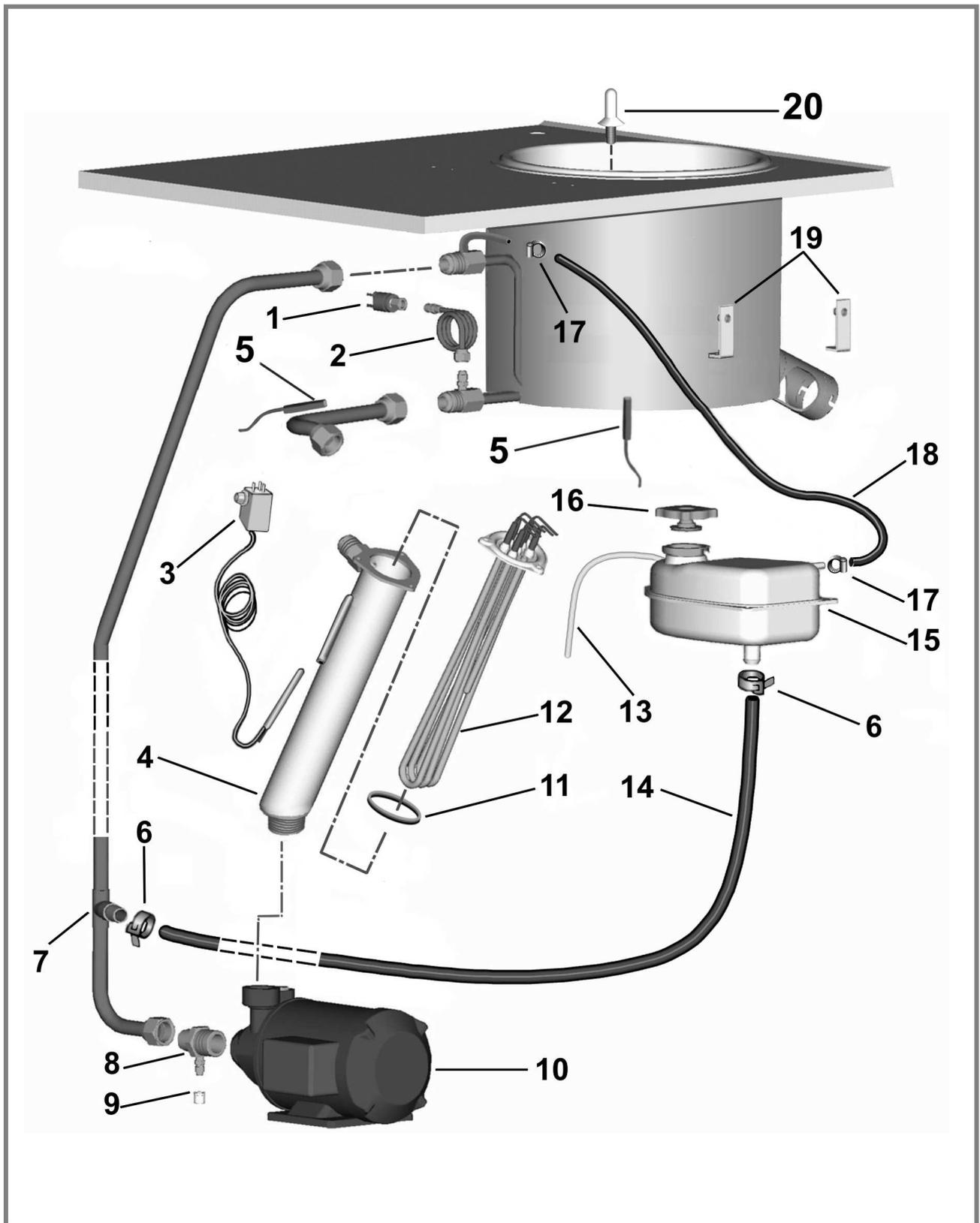
**Tav.7**



## C136-37-38 s04

## Tav.7

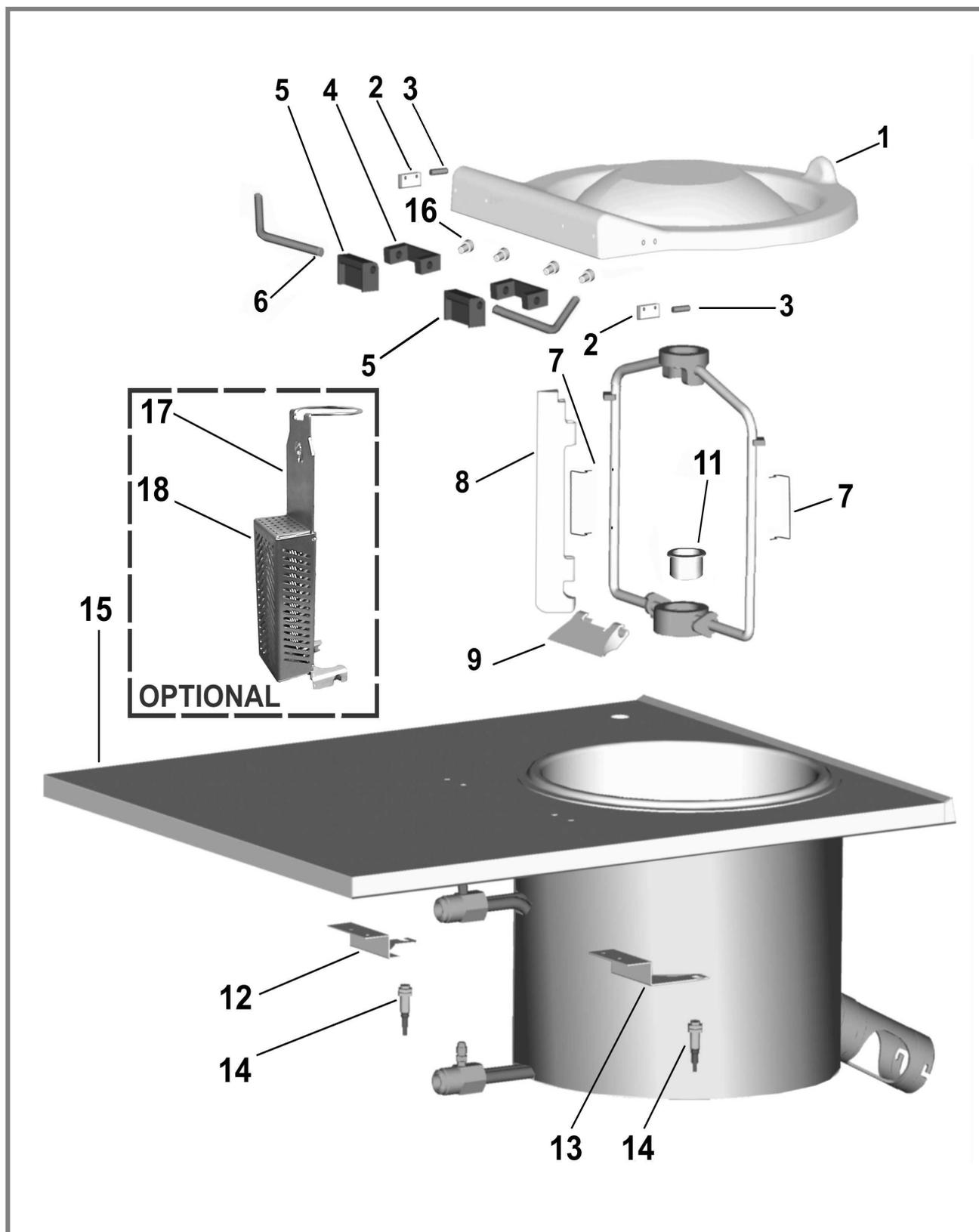
P.	COD.	Mod.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	<b>L21.38086</b>	<b>C136-37-38</b>	Testa di trascinamento	Entraining head	Tête d'entraînement	Drehkopf	Cabeza de arrastro
2	<b>P10.037</b>	<b>C136-37-38</b>	OR 2106	OR 2106	OR 2106	OR 2106	OR 2106
3	<b>A11.38184</b>	<b>C136-37-38</b>	Bussola	Bush/sleeve	Douille	Buchse/Huelse	Aguja
4	<b>L21.38067</b>	<b>C136-37-38</b>	Canotto	Sleeve - Transmission tube	Tube	Röhrchen - Huelse	Tubo
5	<b>P21.38062</b>	<b>C136-37-38</b>	Trappola termica	Insulating support	Support isolé	Isolierter-Kopf	Soporte aislato
6	<b>L21.38376</b>	<b>C136-37-38</b>	Flangia per supporto	Flange	Bride	Flansch	Brida
7	<b>L21.38059</b>	<b>C136-37-38</b>	Supporto trasmissione	Drive bearing	Support de transmission	Antrieblager	suporte transmision
8	<b>L21.38068</b>	<b>C136-37-38</b>	Albero trasmissione	Drive snaft	Arbre de la trasmission	Getriebevelle	Eje de transmision
9	<b>V18.38069</b>	<b>C136-37-38</b>	Chiavetta	Key	Clavette	Keil	Chaveta
10	<b>P10.014</b>	<b>C136-37-38</b>	OR 2137	OR 2137	OR 2137	OR 2137	OR 2137
11	<b>L21.38060</b>	<b>C136-37-38</b>	Distanziale cuscinetti	Spacer - Tube - Shim	Entretoise - Bague - Rondelle	Zwischenteil - Scheibe	Distanciador
12	<b>B14.036</b>	<b>C136-37-38</b>	Cuscinetto	Bearing	Galet	Kugellager	Cojinete
13	<b>V14.072</b>	<b>C136-37-38</b>	Seeger DI90	Seegerring DI90	Seeger DI90	Seegerring DI90	Seeger DI90
14	<b>L21.38063</b>	<b>C136-37-38</b>	Flangia	Flange	Bride	Flansch	Brida
15	<b>P10.38199</b>	<b>C136</b>	Cinghia poly V	Belt poly V	Courroie poly V	Riemen poly V	Correa poly V
	<b>P10.38187</b>	<b>C137-C138</b>	Cinghia poly V	Belt poly V	Courroie poly V	Riemen poly V	Correa poly V
16	<b>Z75.38070</b>	<b>C136-37-38</b>	Assieme trasmissione	Drive assy	Transmission complète	Kompl. Antrieb	transmision compl.
17	<b>E01.38186</b>	<b>C136-37-38</b>	Motore mescolatore 400/50/3	Mixer motor 400/50/3	Moteur mélangeur 400/50/3	Rühmotor 400/50/3	Motor mezclador 400/50/3
	<b>E01.38466</b>	<b>C136-37-38</b>	Motore mescolatore 220/60/3	Mixer motor 220/60/3	Moteur mélangeur 220/60/3	Rühmotor 220/60/3	Motor mezclador 220/60/3
18	<b>A04.38074</b>	<b>C136-37-38</b>	Staffa fissaggio	Fixing bracket	Branche de fixation	Fixierstaffel	Molde fijage
19	<b>A01.38168</b>	<b>C136</b>	Piastra bollitore	Support plate	Support du cuiseur	Kocherhalter	plancha calentador
	<b>A01.38972</b>	<b>C137</b>	Piastra bollitore	Support plate	Support du cuiseur	Kocherhalter	plancha calentador
	<b>A01.38008</b>	<b>C138</b>	Piastra bollitore	Support plate	Support du cuiseur	Kocherhalter	plancha calentador
20	<b>B65.37494</b>	<b>C136-37-38</b>	Tendicinghia	Belt tightener	Galopin de tension	Riemenspanner	Saporte correa
21	<b>A11.37495</b>	<b>C136-37-38</b>	Cuscinetto	Bearing	Galet	Kugellager - Rolle - Lager	Cojinete
22	<b>L06.38072</b>	<b>C136-37-38</b>	Puleggia motore	Driving pulley	Poulie de conduite	Riemenscheibe	Polea conductora
23	<b>L06.38064</b>	<b>C136-37-38</b>	Puleggia condotta	Driven pulley	Poulie conduite	Geführte Rolle	Polea conducta



**C136-37-38 s04**
**Tav.8**

P.	COD.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1*	<b>B11.38505</b>	Pressostato	Pressure switch	Pressostat	Druckwächter	Presóstató
2*	<b>Z96.35507</b>	Assieme tubo pressostato	Pressure switch pipe assembly	Groupe tuyau pressostat	Rohr u. Druckwächter zusammen	Grupo tubo presóstató
3	<b>B11.37013</b>	Termostato	Thermostat	Thermostat	Thermostat	Termostato
4	<b>Z78.39054</b>	Riscaldatore	Heater	Réchauffeur	Heizung - Heizkoerper	Calentador
5	<b>E05.38215</b>	Sonda temperatura	Temperature probe	Sonde température	Temperatursonde	Sonda temperatura
6	<b>B13.128</b>	Fascetta FBS 29/12	Clamp FBS 29/12	Collier FBS 29/12	Faschette FBS 29/12	Abrazadera FBS 29/12
7	<b>R06.007</b>	Tee	tee-joint	Tee	Tee	Tee
8	<b>R02.101 + R02.031</b>	Riduzione M/M 1"- 3/4 SAE + Attacco carica	Adaptor M/M 1"- 3/4 SAE + Charge coupling	Réducteur M/M 1"- 3/4 SAE + Attelage charge	Reduzierstk. M/M 1"- 3/4 SAE + Einfuellanschluss	Adaptador M/M 1"- 3/4 SAE + Conexión carga
9	<b>R02.032</b>	Cappuccio	Cap	Capuchon	Anschlusskappe	Caperuza
10	<b>E01.38333</b>	Pompa fluido 230-400/50/3	Fluid pump 230-400/50/3	Pompe fluide 230-400/50/3	Flüssigkeitspumpe 230-400/50/3	Bomba fluido 230-400/50/3
	<b>E01.39878</b>	Pompa fluido 220/60/3	Fluid pump 220/60/3	Pompe fluide 220/60/3	Flüssigkeitspumpe 220/60/3	Bomba fluido 220/60/3
11	<b>P10.128</b>	OR 6225	OR 6225	OR 6225	OR 6225	OR 6225
12	<b>D08.034.01</b>	Resistenza	Resistance	Résistance	Widerstand-Heizkoerper	Resistencia
13	<b>T10.090</b>	Tubo sfiato	Drain pipe	Tuyau d'échappement	Überlaufrohr	Tubo de desfogue
14	<b>T10.095</b>	Tubo 18X28,5	Tube 18X28,5	Tuyau 18X28,5	Netzrohr 18X28,5	Tubo 18X28,5
15	<b>Z61.36354</b>	Serbatoio fluido compl.	Additional fluid tank	Réservoir de fluide compl.	Kompl. Flüssigkeitsbehälter	Contenedor fluido compl.
16	<b>P03.194</b>	Tappo serbatoio fluido	Fluid tank plug	Bouchon du réservoir fluide	Verschluss Flüssigkeitsbehälter	Tapón depósito fluido
17	<b>G03.38492</b>	Fascetta 10/19	Clamp 10/19	Collier 10/19	Faschette 10/19	Abrazadera 10/19
18	<b>S03.38506</b>	Tubo retinato	Meshed tube	Tuyau armé	Netzrohr	Tubo armado
19	<b>A23.38372</b>	Staffa supporto serbatoio	Fluid tank bracket	Branche réservoir fluide	Staffel für Flüssigkeitsbehälter	Molde contenedor fluido
20	<b>L23.38073</b>	Portabulbo	Bulb holder	Porte-cuvette	Haltewulst	Portabola

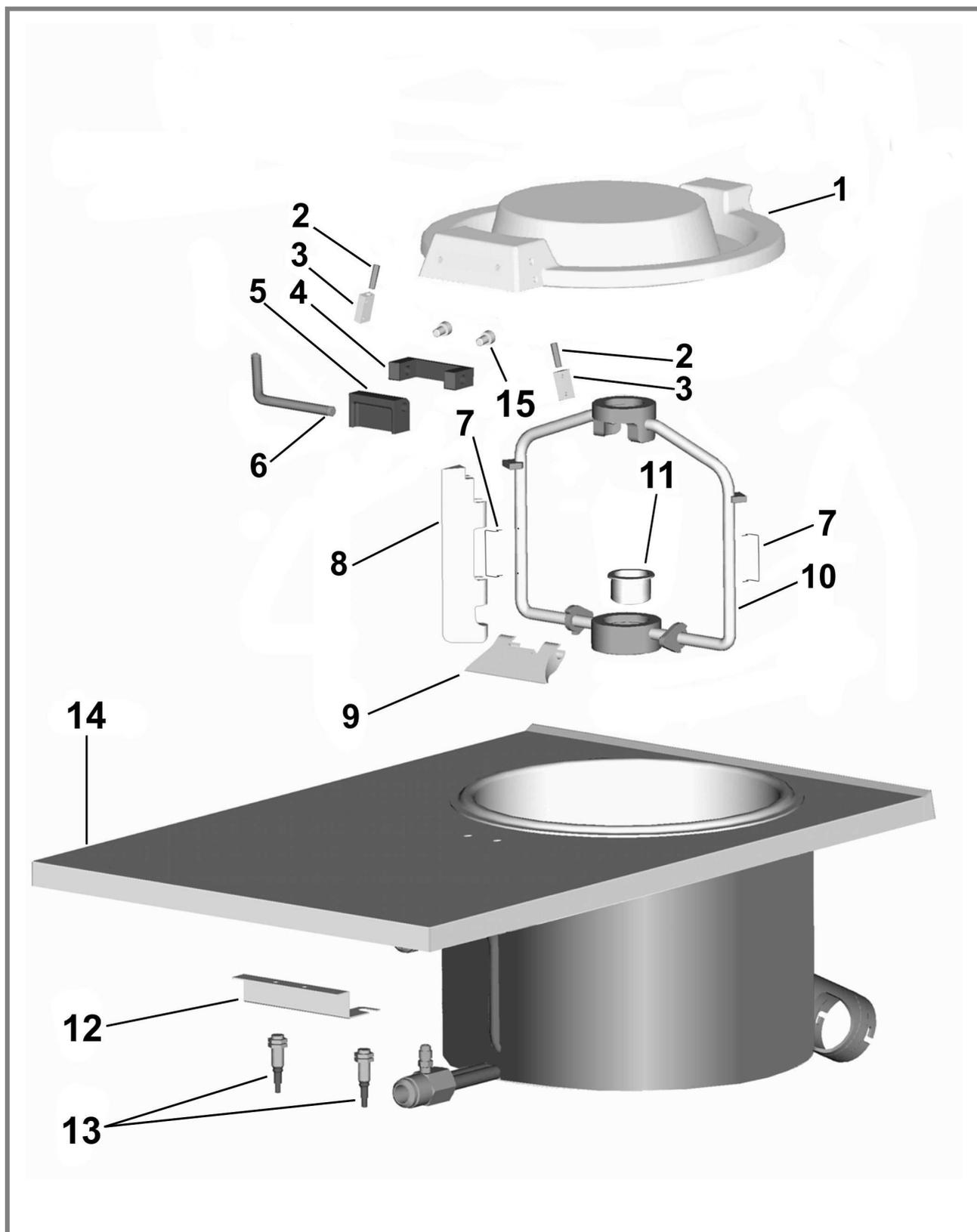
(\*) Solo per alcune versioni 220/60/3



## C138 s04

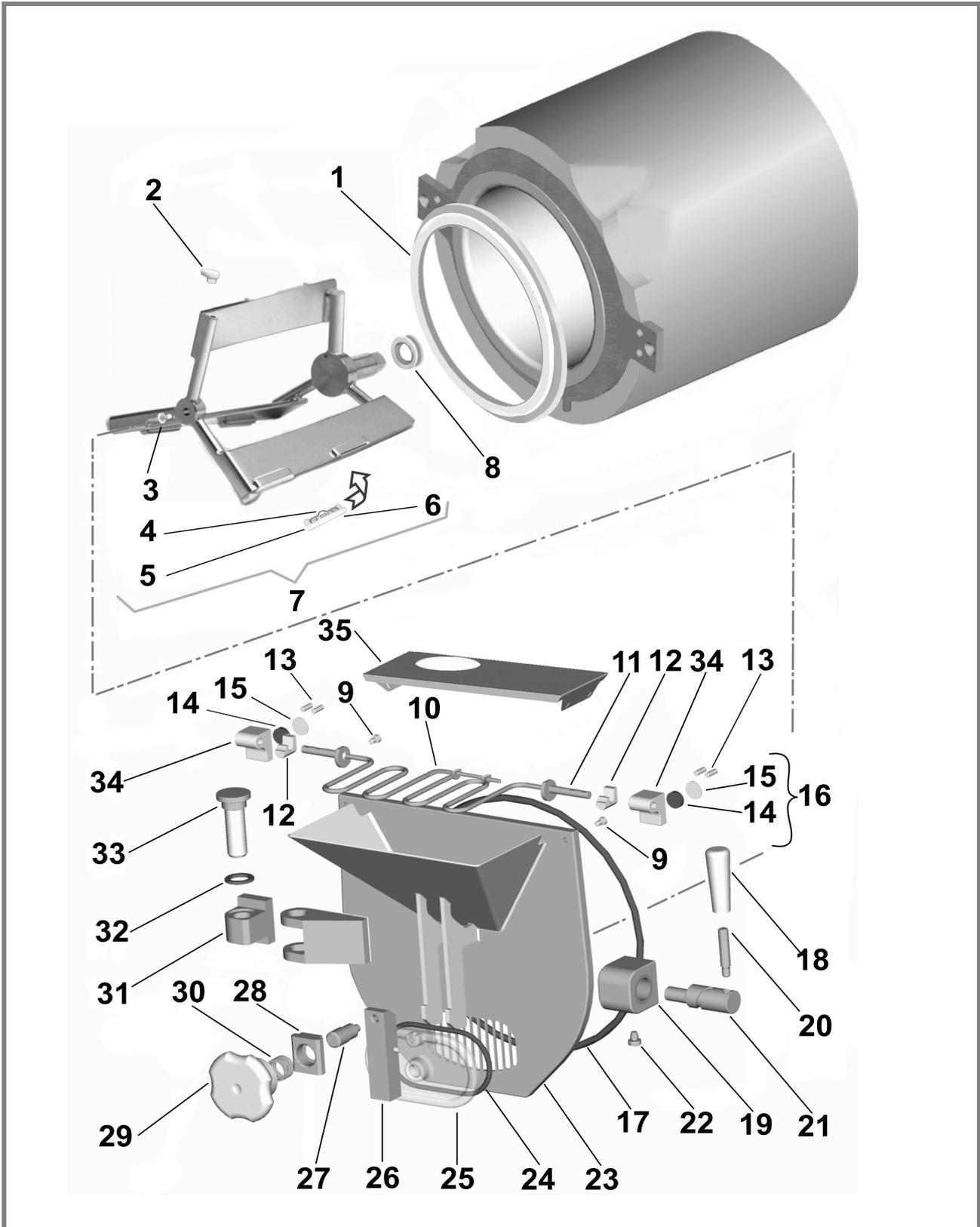
## Tav.9

P.	COD.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	<b>B65.38563</b>	Coperchio	Cover	Couvercle	Deckel	Tapa
2	<b>P20.38398</b>	Tassello portamagnete	Magnet holding boss	Tampon porte-aimant	Magnethaltedübel	Espiga portaimán
3	<b>E07.37991</b>	Magnete	Magnet	Aimant	Magnet	Imán
4	<b>B15.038</b>	Cerniera mobile	Moving hinge	Fermeoir mobile	Bewegliches Scharnier	Bisagra móvil
5	<b>B15.037</b>	Cerniera fissa	Fixed hinge	Fermeoir fixe	Festes Scharnier	Bisagra fija
6	<b>L19.37042</b>	Perno cerniera	Hinge pin	Axe goujon de charnière	Scharnierbolzen	Perno para bisagra
7	<b>A10.39980</b>	Molla	Spring	Ressort	Feder	Muelle
8	<b>P18.38146</b>	Pattino parete bollitore	Side Scraper	Racleur latéral	Schaber (Seite)	patino lateral calentador
9	<b>P18.38153</b>	Pattino fondo bollitore	Bottom scraper	Racleur inférieur	Schaber (unten)	patino fondo calentador
10	<b>B65.3818</b>	Agitatore bollitore	Mixer	Brasseur	Rührwerk	Agitador
11	<b>P11.38185</b>	Boccola	Bush - Bushing	Douille	Buchse	Anillo
12	<b>A04.38451</b>	Staffa porta micro DX	Micro-holding bracket DX	Patte porte-micro DX	Mikrohaltebuegel DX	Molde micro DX
13	<b>A04.38394</b>	Staffa porta micro SX	Micro-holding bracket SX	Patte porte-micro SX	Mikrohaltebuegel SX	Molde micro SX
14	<b>D05.141</b>	Contatto magnetico (REED)	Magnetic contact (REED)	Contact magnétique (REED)	Magnetkontakt (REED)	Contacto magnético (REED)
15	<b>Z56.38057</b>	Gruppo isolamento bollitore	Insulation unit	Groupe isolant	Isolationsgruppe	Grupo aislamiento
16	<b>B09.215</b>	Vite cerniera	Screw for hinge	Vis fermeoir	Scharnierschraube	Tornillo bisagra
17	<b>A18.38565</b>	Staffa porta aromi	Flavor bracket	Brides aromes	Aromas Fixierstaffel	Estribo aromas
18	<b>A18.38566</b>	Cassetto porta aromi	Flavor drip tray	Eguttoir aromes	Aroma-Tropfblech	Recogegotas aromas



**C136-C137 s04**
**Tav.10**

P.	COD.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	<b>B65.38564</b>	Coperchio	Cover	Couvercle	Deckel	Tapa
2	<b>E07.37991</b>	Magnete	Magnet	Aimant	Magnet	Imán
3	<b>P20.38398</b>	Tassello portamagnete	Magnet holding boss	Tampon porte-aimant	Magnethaltedübel	Espiga portaimán
4	<b>B15.038</b>	Cerniera mobile	Moving hinge	Fermeoir mobile	Bewegliches Scharnier	Bisagra móvil
5	<b>B15.037</b>	Cerniera fissa	Fixed hinge	Fermeoir fixe	Festes Scharnier	Bisagra fija
6	<b>L19.37042</b>	Perno cerniera	Hinge pin	Axe goujon de charnière	Scharnierbolzen	Perno para bisagra
7	<b>A10.39980</b>	Molla	Spring	Ressort	Feder	Muelle
8	<b>P18.38146</b>	Pattino parete bollitore	Side Scraper	Racleur latéral	Schaber (Seite)	patino lateral calentador
9	<b>P18.38129</b>	Pattino fondo bollitore	Bottom scraper	Racleur inférieur	Schaber (unten)	patino fondo calentador
10	<b>B65.38144</b>	Agitatore bollitore	Mixer	Brasseur	Rührwerk	Agitador
11	<b>P11.38185</b>	Boccola	Bush - Bushing	Douille	Buchse	Anillo
12	<b>A04.38397</b>	Staffa porta micro	Micro-holding bracket	Patte porte-micro	Mikrohaltebuegel	Molde micro
13	<b>D05.141</b>	Contatto magnetico (REED)	Magnetic contact (REED)	Contact magnétique (REED)	Magnetkontakt (REED)	Contacto magnético (REED)
14	<b>Z56.38161</b>	Gruppo isolamento bollitore TWIN C136	Insulation unit TWIN C136	Groupe isolant TWIN C136	Isolationsgruppe TWIN C136	Grupo aislamiento TWIN C136
	<b>Z56.38971</b>	Gruppo isolamento bollitore TWIN 45	Insulation unit TWIN 45	Groupe isolant TWIN 45	Isolationsgruppe TWIN 45	Grupo aislamiento TWIN 45
15	<b>B09.215</b>	Vite cerniera	Screw for hinge	Vis fermeoir	Scharnierschraube	Tornillo bisagra



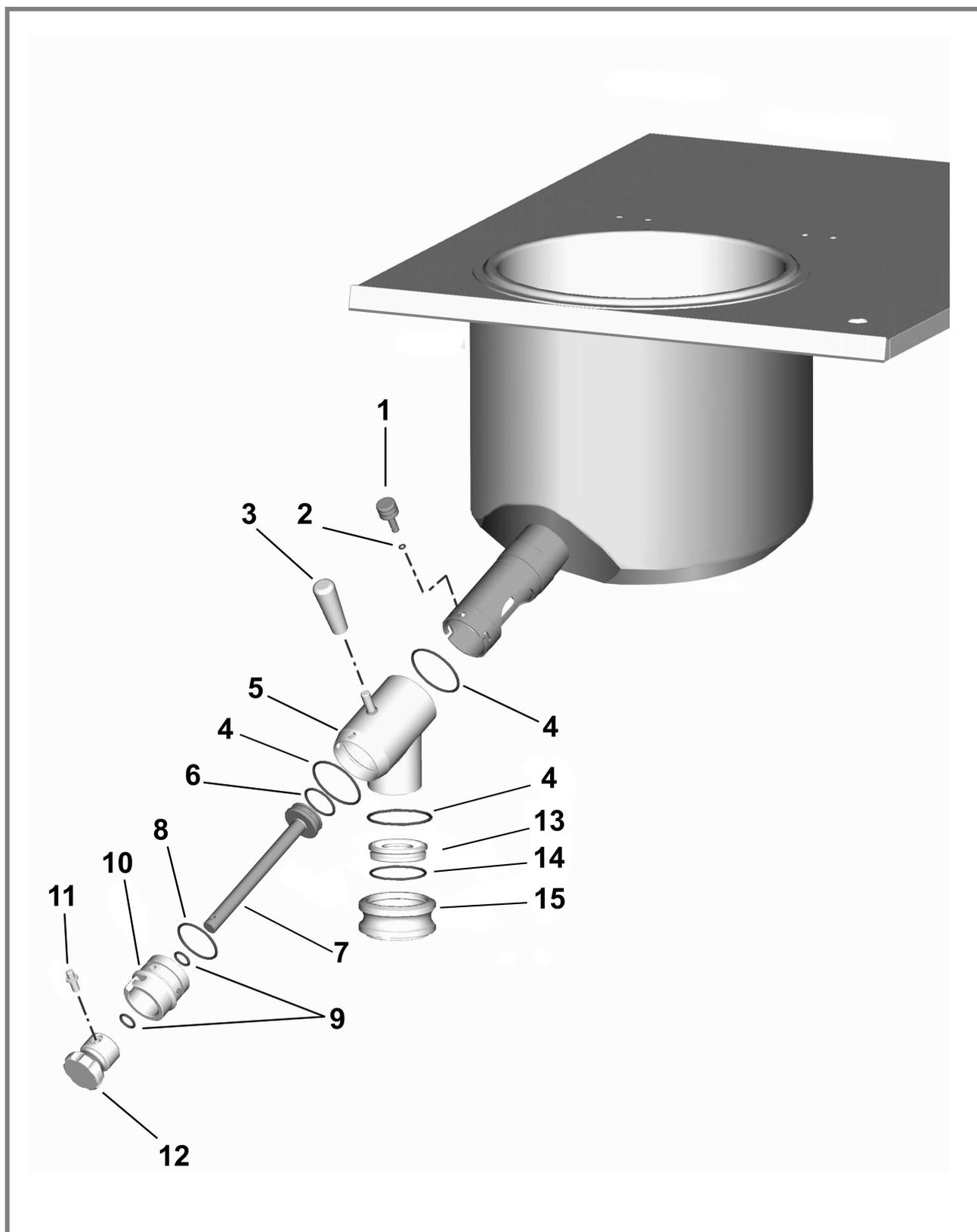
## C136-37-38 s04

## Tav.11

P.	COD.	Mod.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	<b>P03.120.01</b>	<b>C136-37-38</b>	Isolante anteriore	Front insulator	Isolant antérieur	Vorderes-Isolationselement	Aslante anterior
2	<b>P18.37146</b>	<b>C136-37-38</b>	Tappo centratura	Centering boss	Centrage	Duebel	Tapon de cierre
3	<b>P18.37144</b>	<b>C136-37-38</b>	Inserto centrale	Central insert	Bouchon	Einsatz	Injerto central
4	<b>A10.38854</b>	<b>C136-37-38</b>	Molla per pattino	Scraper spring	Ressort râclette	Schaber-Feder	Patines-muella
5	<b>P18.38853</b>	<b>C136-37-38</b>	Aletta lavorata	Scraper	Râclette	Schaber	Patines
6	<b>Z69.39012</b>	<b>C136-37-38</b>	Aletta+molla	Scraper+spring	Ressort+râclette	Schaber+Feder	Patines+muella
7	<b>Z70.38855</b>	<b>C136</b>	Agitatore completo	Beater assy	Agitateur compl.	Rührwerk	Agidador
	<b>Z70.38858</b>	<b>C137</b>	Agitatore completo	Beater assy	Agitateur compl.	Rührwerk	Agidador
	<b>Z70.38850</b>	<b>C138</b>	Agitatore completo	Beater assy	Agitateur compl.	Rührwerk	Agidador
8	<b>P12.005</b>	<b>C136-37-38</b>	Premistoppa	Stuffing nut	Presse-étoupe	Stopfbüchse	Prensaestopa
9	<b>V04.37386</b>	<b>C136-37-38</b>	Vite fissaggio bottone	Fixing screw	Vis de fixation	Befestigungsschraube	Tornillo
10	<b>B61.38613</b>	<b>C136-37-38</b>	Griglia di sicurezza SX	Grate assy SX	Grille compl. SX	Kompl. Bitter SX	Rejilla SX
11	<b>B61.38609</b>	<b>C136-37-38</b>	Griglia di sicurezza DX	Grate assy DX	Grille compl. DX	Kompl. Bitter DX	Rejilla DX
12	<b>P19.38615</b>	<b>C136-37-38</b>	Supporto griglia	Grate bracket	Support de grille	Gitterhalter	Soporte rejilla
13	<b>V08.031</b>	<b>C136-37-38</b>	Grano	Grain	Grain	Stift	Tornillo
14	<b>D05.142</b>	<b>C136-37-38</b>	Magnete	Magnet	Aimant	Magnet	Imán
15	<b>C05.159</b>	<b>C136-37-38</b>	Dischetto	Small disk	Petit disque	Scheibe	disco
16	<b>Z82.38447</b>	<b>C136-37-38</b>	Assieme portamagnete	Magnet assy	Aimant complet	Kompl. Magnet	portaiman
17	<b>P10.120</b>	<b>C136-37-38</b>	Guarnizione	Door seal	Joint	Dichtung	Guarnición puerta
18	<b>P02.155</b>	<b>C136-37-38</b>	Maniglia leva portello	Lever handle	Poignée	Griff	Manija de bloqueo puerta
19	<b>B08.045</b>	<b>C136-37-38</b>	Blocchetto eccentrico	Block assy	Cale compl.	Block	Grupo bloque excentrico
20	<b>B08.056</b>	<b>C136-37-38</b>	Leva eccentrico	Eccentric lever	Poignée de came	Nochengriff	Leva para excentrica
21	<b>B08.080</b>	<b>C136-37-38</b>	Eccentrico chiusura portello	Door closing cam	Came de fermeture porte	Nochentürversluß	Excentrico de cierre puerta
22	<b>B09.114</b>	<b>C136-37-38</b>	Vite fissaggio eccentrico	Fixing screw	Vis de fixation	Befestigungsschraube	Tornillo por excentrico
23	<b>Z84.37161</b>	<b>C136-37-38</b>	Assieme portello	Door assy	Porte compl.	Kompl. Tür	Grupo puerta
24	<b>P10.130</b>	<b>C136-37-38</b>	Guarnizione piattello	Door seal	Joint de porte	Türdichtung	Guarnición por platina de cierre
25	<b>P19.37143</b>	<b>C136-37-38</b>	Portello erogazione	Door assy	Porte compl.	Kompl. Tür	Platina de cierre
26	<b>B08.075</b>	<b>C136-37-38</b>	Corsoio	Slider	Coulisse	Gleitstein	Corredizo
27	<b>B09.214</b>	<b>C136-37-38</b>	Perno di guida	Driving pin	Axe de conduite	Führungsring	Pierno
28	<b>B08.076</b>	<b>C136-37-38</b>	Fodero molla	Spring sleeve	Corp du ressort	Gehäuse	Vaina muelle
29	<b>P02.201</b>	<b>C136-37-38</b>	Pomolo portello	Lever handle	Poignée	Griff	Pomo
30	<b>B11.057</b>	<b>C136-37-38</b>	Molla	Spring	Ressort	Feder	Muelle
31	<b>B08.048</b>	<b>C136-37-38</b>	Blocchetto cerniera	Hinge block	Cale de charnière	Scharnierblock	Soporto bisagra
32	<b>B08.085</b>	<b>C136-37-38</b>	Rondella	Washer	Rondelle	Scheibe	Arandela
33	<b>B08.061</b>	<b>C136-37-38</b>	Perno cerniera	Pin for hinge	Goujon pour fermoir	Scharnierstift	Perno bisagra
34	<b>P02.167.01</b>	<b>C136-37-38</b>	Supporto magnete	Magnet support	Support	Magnet-Halter	Soporte imán
35	<b>A19.38055</b>	<b>C136-37-38</b>	Copri tramoggia	Hopper cover	Couvercle	Einfülltrichtergitter	Tapa tolva

**C136-37-38 s04**

**Tav.12**

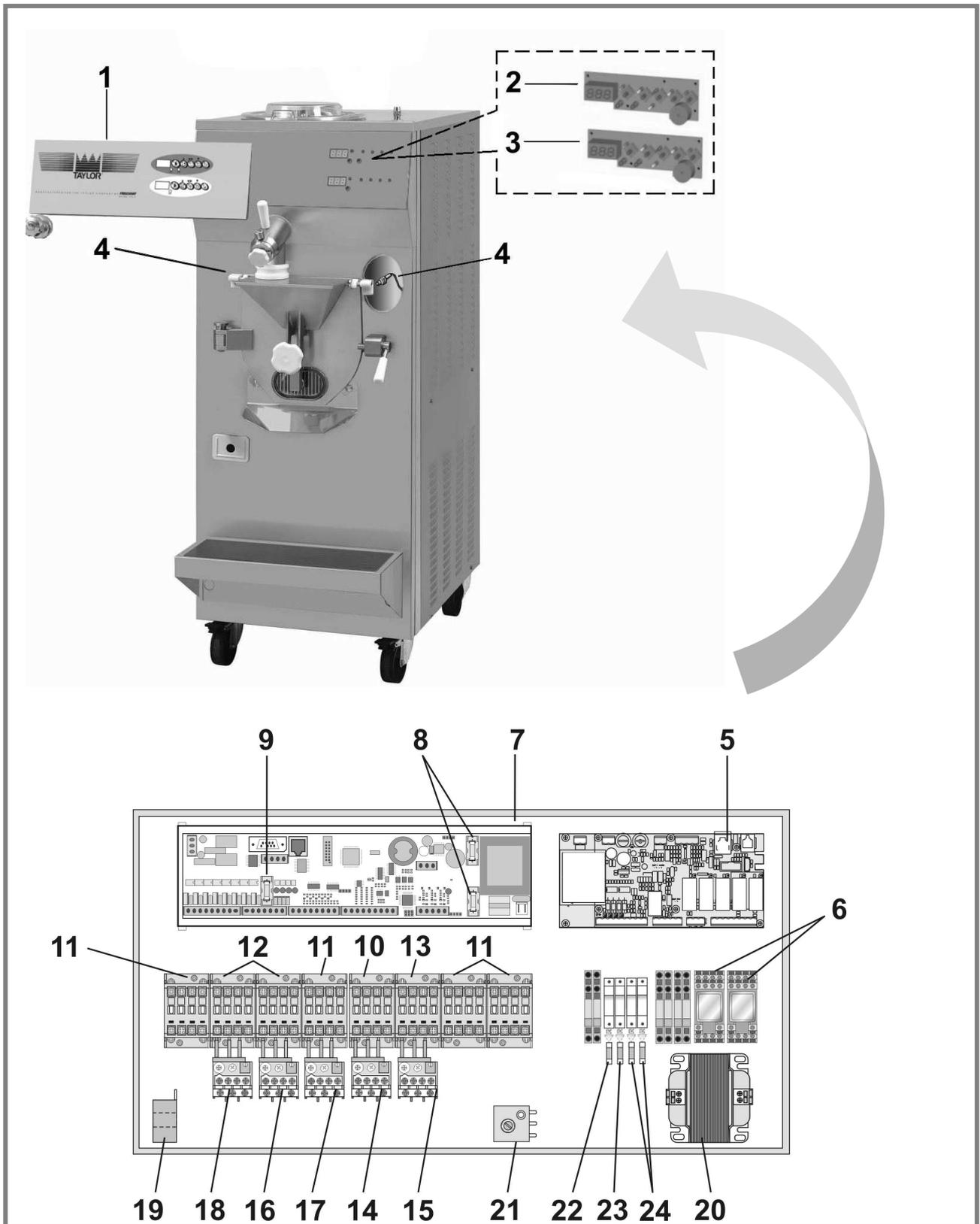


**C136-37-38 s04**
**Tav.12**

P.	COD.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	<b>L19.38015</b>	Spina per rubinetto	Pin	Bondon	Stift	Colada
2	<b>P10.017</b>	OR 2018	OR 2018	OR 2018	OR 2018	OR 2018
3	<b>P02.155</b>	Maniglia	Lever	Poignée	Griff	Manija
4	<b>P02.38195</b>	OR 3237	OR 3237	OR 3237	OR 3237	OR 3237
5	<b>Z82.38951</b>	Rubinetto	Tap	Robinet	Zapfhahn	Grifo
6	<b>P02.38196</b>	OR 3143	OR 3143	OR 3143	OR 3143	OR 3143
7	<b>Z82.39489</b>	Pistone	Piston pump	Piston	Kolben	Piston
8	<b>P02.38197</b>	OR 3193	OR 3193	OR 3193	OR 3193	OR 3193
9	<b>P10.070</b>	OR 121	OR 121	OR 121	OR 121	OR 121
10	<b>Z82.39486</b>	Fondello rubinetto	Tap bottom	Fond robinet	Boden Zapfhahn	Fondo grifo
11	<b>L19.39484</b>	Spina	Pin	Bondon	Stift	Colada
12	<b>P19.39483</b>	Pomello	Knob	Pommeau	Handgriff	Pomito
13	<b>P19.39491</b>	Riduzione manicotto	Sleeve adaptor	Réducteur manchon	Reduzierstk.	Adaptador manguito
14	<b>P10.049</b>	OR 3200	OR 3200	OR 3200	OR 3200	OR 3200
15	<b>P19.39490</b>	Manicotto	Sleeve	Manchon	Muffe f. Ablaufrohr	Manguito

**C136-37-38 s04 400/50/3**

**Tav.13**

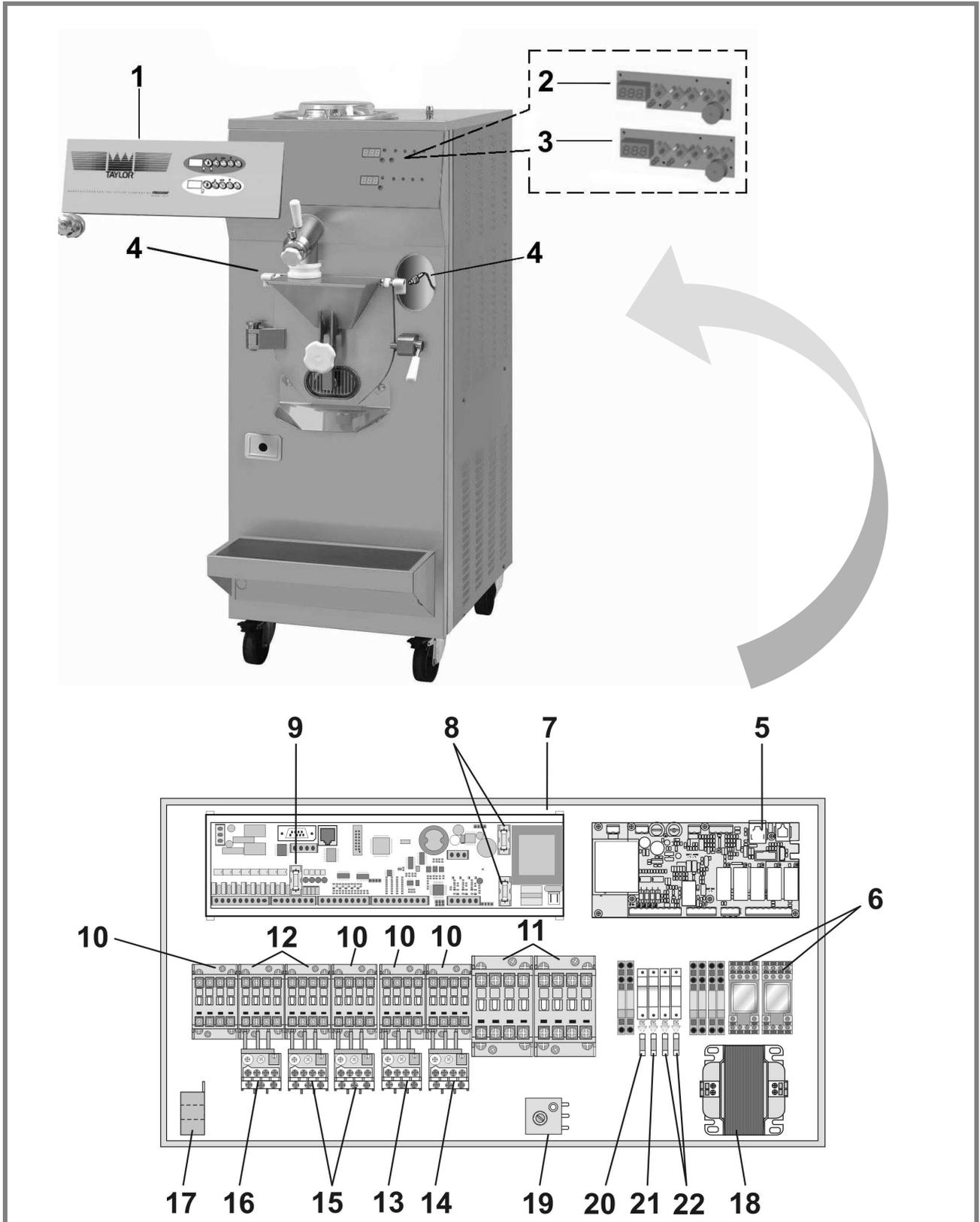


**C136-37-38 s04 400/50/3**
**Tav.13**

P.	COD.	Mod.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	M02.40538	C136	Etichetta anteriore	Front label	Etiquette antérieure	Frontkleber	Etiqueta anterior
	-	C137-C138	Etichetta anteriore	Front label	Etiquette antérieure	Frontkleber	Etiqueta anterior
2	E15.40826	C136-37-38	Scheda pulsantiera bollitore	Pushbutton card (cooker)	Carte du tableau poussoirs (cuiseur)	Tastenfeldkarte (Kocher)	tarjeta pulsadores calentador
3	E15.40824	C136-37-38	Scheda pulsantiera mantecatore	Pushbutton card (batch freezer)	Carte du tableau poussoirs (turbine)	Tastenfeldkarte (Speiseeismaschine)	tarjeta pulsadores mantecadora
-	E13.38654	C136-37-38	Cavo scheda pulsantiera bollitore	Wiring pushbutton panel card (cooker)	Cable carte du tableau de commandev	Tastenkarte-Kabel (Kocher)	Cable tarjeta caja pulsadores calentador
4	D05.141	C136-37-38	Reed	Reed	Reed	Reed	Reed
5	E15.40831	C136-37-38	Scheda comando MEB <sup>2</sup> bollitore	Control card MEB <sup>2</sup>	Carte de commande MEB <sup>2</sup>	Bedienungskarte MEB <sup>2</sup>	Tarjeta de mando MEB <sup>2</sup>
6	E08.37283	C136-37-38	Relè	Relay	Relais	Relais	Conectador
7	E15.40521	C136-37-38	Scheda comando mantecatore OMG <sup>2</sup>	Control card OMG <sup>2</sup>	Carte de commande OMG <sup>2</sup>	Bedienungskarte OMG <sup>2</sup>	Tarjeta de mando OMG <sup>2</sup>
8	E08.38486	C136-37-38	Fusibile 50 m.A	Fuse 50 m.A	Fusible 50 m.A	Sicherung 50 m.A	Fusibile 50 m.A
9	E09.39143	C136-37-38	Fusibile 5x20 T 4A	Fuse 5x20 T 4A	Fusible 5x20 T 4A	Sicherung 5x20 T 4A	Fusibile 5x20 T 4A
10	D02.061	C136-37-38	Teleruttore A12 30 10 24V	Remote control switch A12 30 10 24V	Télerupteur A12 30 10 24V	Fernschalter A12 30 10 24V	Telerruptor A12 30 10 24V
11	D02.063	C136-37-38	Teleruttore A16 30 10	Remote control switch A16 30 10	Télerupteur A16 30 10	Fernschalter A16 30 10	Telerruptor A16 30 10
12	E08.35303	C136-37-38	Teleruttore A16 30 01	Remote control switch A16 30 01	Télerupteur A16 30 01	Fernschalter A16 30 01	Telerruptor A16 30 01
13	D02.066	C136-37-38	Teleruttore A12 30 10 220V	Remote control switch A12 30 10 220V	Télerupteur A12 30 10 220V	Fernschalter A12 30 10 220V	Telerruptor A12 30 10 220V
14	D03.171	C136-37-38	Termica Range 0,63-1	Overload Range 0,63-1	Thermique Range 0,63-1	Thermoschutz Range 0,63-1	Termal Range 0,63-1
15	D03.183	C136-37-38	Termica Range 1-1,4	Overload Range 1-1,4	Thermique Range 1-1,4	Thermoschutz Range 1-1,4	Termal Range 1-1,4
16	D03.162	C136	Termica Range 6-8,5	Overload Range 6-8,5	Thermique Range 6-8,5	Thermoschutz Range 6-8,5	Termal Range 6-8,5
	D03.165	C137-C138	Termica Range 10-14	Overload Range 10-14	Thermique Range 10-14	Thermoschutz Range 10-14	Termal Range 10-14
17	D03.164	C136	Termica Range 7,5-11	Overload Range 7,5-11	Thermique Range 7,5-11	Thermoschutz Range 7,5-11	Termal Range 7,5-11
	D03.165	C137-C138	Termica Range 10-14	Overload Range 10-14	Thermique Range 10-14	Thermoschutz Range 10-14	Termal Range 10-14
18	D03.162	C136	Termica Range 6-8,5	Overload Range 6-8,5	Thermique Range 6-8,5	Thermoschutz Range 6-8,5	Termal Range 6-8,5
	D03.164	C137-C138	Termica Range 7,5-11	Overload Range 7,5-11	Thermique Range 7,5-11	Thermoschutz Range 7,5-11	Termal Range 7,5-11
19	D03.157	C136-37-38	Trasformatore amperometrico	AMP Transformer	Transformateur AMP	Amp Transformator	Transformador amp
20	E08.37452	C136-37-38	Trasformatore	Transformer	Transformateur	Transformator	Transformador
21	B11.37013	C136-37-38	Termostato	Thermostat	Thermostat	Thermostat	Termostato
22	E08.39700	C136-37-38	Fusibile 5X20 T 6A	Fuse 5X20 T 6A	Fusible 5X20 T 6A	Sicherung 5X20 T 6A	Fusibile 5X20 T 6A
23	E08.40275	C136-37-38	Fusibile 10X38 T 2 A	Fuse 10X38 T 2A	Fusible 10X38 T 2A	Sicherung 10X38 T 2A	Fusibile 10X38 T 2A
24	E08.37453	C136-37-38	Fusibile 5X20 T 160 mA	Fuse 5X20 T 160 mA	Fusible 5X20 T 160 mA	Sicherung 5X20 T 160 mA	Fusibile 5X20 T 160 mA

**C136-37-38 s04 220/60/3**

**Tav.14**



**C136-37-38 s04 220/60/3**
**Tav.14**

P.	COD.	Mod.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	M02.40538	C136	Etichetta anteriore	Front label	Etiquette antérieure	Frontkleber	Etiqueta anterior
	-	C137-C138	Etichetta anteriore	Front label	Etiquette antérieure	Frontkleber	Etiqueta anterior
2	E15.40826	C136-37-38	Scheda pulsantiera bollitore	Pushbutton card (cooker)	Carte du tableau poussoirs (cuiser)	Tastenfeldkarte (Kocher)	tarjeta pulsadores calentador
3	E15.40824	C136-37-38	Scheda pulsantiera mantecatore	Pushbutton card (batch freezer)	Carte du tableau poussoirs (turbine)	Tastenfeldkarte (Speiseeismaschine)	tarjeta pulsadores mantecadora
-	E13.38654	C136-37-38	Cavo scheda pulsantiera bollitore	Wiring pushbutton panel card (cooker)	Cable carte du tableau de commandev	Tastenkarte-Kabel (Kocher)	Cable tarjeta caja pulsadores calentador
4	D05.141	C136-37-38	Reed	Reed	Reed	Reed	Reed
5	E15.40831	C136-37-38	Scheda comando MEB <sup>2</sup> bollitore	Control card MEB <sup>2</sup>	Carte de commande MEB <sup>2</sup>	Bedienungskarte MEB <sup>2</sup>	Tarjeta de mando MEB <sup>2</sup>
6	E08.37283	C136-37-38	Relè	Relay	Relais	Relais	Conectador
7	E15.40521	C136-37-38	Scheda comando mantecatore OMG <sup>2</sup>	Control card OMG <sup>2</sup>	Carte de commande OMG <sup>2</sup>	Bedienungskarte OMG <sup>2</sup>	Tarjeta de mando OMG <sup>2</sup>
8	E08.38486	C136-37-38	Fusibile 50 m.A	Fuse 50 m.A	Fusible 50 m.A	Sicherung 50 m.A	Fusibile 50 m.A
9	E09.39143	C136-37-38	Fusibile 5x20 T 4A	Fuse 5x20 T 4A	Fusible 5x20 T 4A	Sicherung 5x20 T 4A	Fusibile 5x20 T 4A
10	D02.063	C136-37-38	Teleruttore A16 30 10	Remote control switch A16 30 10	Télerupteur A16 30 10	Fernschalter A16 30 10	Telerruptor A16 30 10
11	D02.068	C136-37-38	Teleruttore A26 30 10 24V	Remote control switch A26 30 10 24V	Télerupteur A26 30 10 24V	Fernschalter A26 30 10 24V	Telerruptor A26 30 10 24V
12	E08.35303	C136-37-38	Teleruttore A16 30 01	Remote control switch A16 30 01	Télerupteur A16 30 01	Fernschalter A16 30 01	Telerruptor A16 30 01
13	D03.172	C136-37-38	Termica Range 1,3-1,8	Overload Range 1,3-1,8	Thermique Range 1,3-1,8	Thermoschutz Range 1,3-1,8	Termal Range 1,3-1,8
14	D03.173	C136-37-38	Termica Range 2,2-3,1	Overload Range 2,2-3,1	Thermique Range 2,2-3,1	Thermoschutz Range 2,2-3,1	Termal Range 2,2-3,1
15	D03.165	C136	Termica Range 10-14	Overload Range 10-14	Thermique Range 10-14	Thermoschutz Range 10-14	Termal Range 10-14
	D03.174	C137-C138	Termica Range 18-25	Overload Range 18-25	Thermique Range 18-25	Thermoschutz Range 18-25	Termal Range 18-25
16	D03.168	C136	Termica Range 13-19	Overload Range 13-19	Thermique Range 13-19	Thermoschutz Range 13-19	Termal Range 13-19
	D03.174	C137-C138	Termica Range 18-25	Overload Range 18-25	Thermique Range 18-25	Thermoschutz Range 18-25	Termal Range 18-25
17	D03.157	C136-37-38	Trasformatore amperometrico	AMP Transformer	Transformateur AMP	Amp Transformator	Transformador amp
18	E08.37452	C136-37-38	Trasformatore	Transformer	Transformateur	Transformator	Transformador
19	B11.37013	C136-37-38	Termostato	Thermostat	Thermostat	Thermostat	Termostato
20	E08.39700	C136-37-38	Fusibile 5X20 T 6A	Fuse 5X20 T 6A	Fusible 5X20 T 6A	Sicherung 5X20 T 6A	Fusibile 5X20 T 6A
21	E08.40275	C136-37-38	Fusibile 10X38 T2 A	Fuse 10X38 T 2A	Fusible 10X38 T 2A	Sicherung 10X38 T 2A	Fusibile 10X38 T 2A
22	E08.37453	C136-37-38	Fusibile 5X20 T 160 mA	Fuse 5X20 T 160 mA	Fusible 5X20 T 160 mA	Sicherung 5X20 T 160 mA	Fusibile 5X20 T 160 mA







Azienda Certificata  
UNI EN ISO 9001:2000

Numero Certificato  
50 100 5650

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