

C154 - C153 - C151

MANUALE D'USO E MANUTENZIONE OPERATING INSTRUCTION AND MAINTENANCE MANUAL DE USO Y MANTENIMIENTO

Serie

C154 02

C153 02

C151 02



ISTRUZIONI ORIGINALI
ORIGINAL INSTRUCTIONS
INSTRUCCIONES ORIGINALES

 **TAYLOR**® By  **FRIGOMAT**
ice cream machines



Azienda Certificata
UNI EN ISO 9001:2000

Numero Certificato
50 100 5650

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, inform the carrier immediately.

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 must be 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 used again if the machine is moved.

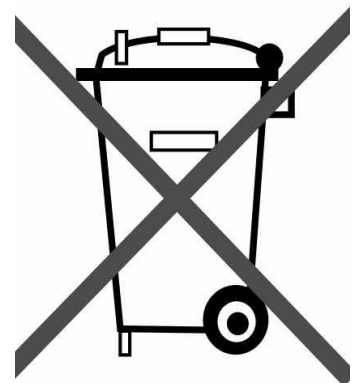
1.2 DIMENSIONS AND WEIGHTS OF PACKAGED MACHINES

MODEL	CRATE		BOX PALLET	
	MEASUREMENTS (CM)	WEIGHT N-G (KG)	MEASUREMENTS (CM)	WEIGHT N-G (KG)
C154	82 x 50 x 146	125-170	78 x 48 x 146	125-153
C153	82 x 50 x 146	130-185	78 x 48 x 146	130-158
C151	88 x 62 x 158	210-260	84 x 58 x 158	210-240

1.3 INDICATIONS FOR DECOMMISSIONING

The machine contains electrical and/or electronic materials and can contain fluids and/or oil. If it needs to 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 GRAPHICAL 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

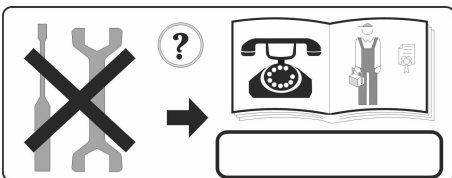
Lifting equipment attachment points:

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!

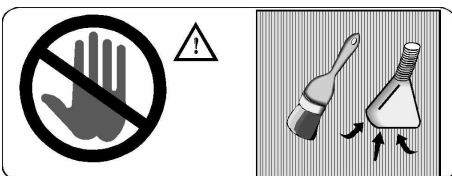
Maintenance reserved for qualified personnel. This plate applied on the rear panel prohibits extraordinary maintenance and/or repairs to any one but authorised personnel, whose address is indicated in the space provided.

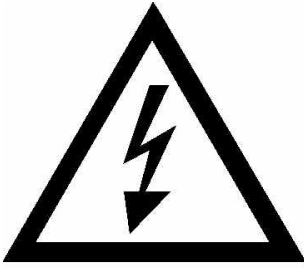


Attention!

Do not touch with your hands.

This plate applied on the rear panel of the machines with air cooling indicates that the heat exchanger can only be cleaned using a brush or suction device.





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 observe 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 only, who have read, understood and acknowledged 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 away from devices which can emit electromagnetic radiation, which could cause the electric parts 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 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;

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)
C154	< = 72 dB (A)	C153	< = 70 dB (A)
C151	< = 70 dB (A)		

4.4 SUPPLIED WITH MACHINE

-
- Ice cream extraction spatula
- Brush
- Gasket extractor
- O-ring kit
- FRIGOMAT lubricant
- Use and maintenance manual
- Declaration of conformity
- Warranty certificate
-

4.5 ACTIVATION



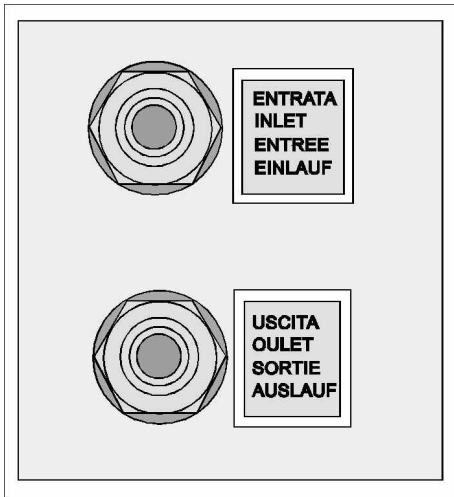
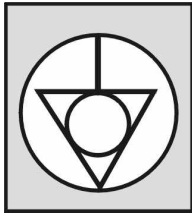
FRIGOMAT declines all and any liability for damage caused by failure to comply with the following indications. This lack of compliance causes the warranty to terminate.

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, take it to the place of use, checking that requested for its installation:

- 4. Electrical power supply 3 phases + neutral + earth (5 wires);**
- 5. Cold water mains supply (13° - 20°C, only water mod.);**
- 6. Condensate water drain (only water mod.).**

- 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 from the side panels and 30 cm from the rear panel between the machine and the walls or other obstacles. For machines with water condensation, the distance between the wall and the rear panel must be 10 cm.
- 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 an 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 is 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 (between 100 kPa and 300 kPa) and temperature between 13° and 20°C (water mod only).
- 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 within the operator's reach (water mode only).
- Connect the condensation water drain pipe onto the machine outlet as shown in the figure, using a Ø1/2" fitting (water mode only).
- 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 (water mode only).
- The drain pipe must have an inclination of at least 3 cm for each meter of length (water mode only).
- 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 (water mode only)..
- Now check the following:
 - 3. Beater motor rotation direction.**
Apply voltage to the machine, turn the selector to low speed and control that the beater rotates in an anti-clockwise direction. If this is not the case, exchange the phases in the plug. To connect the phases properly cut the power and invert the two phase wires in the plug.

4. Condensation pressure (water models only).

With the machine in production mode, after a few seconds condensation water must come out of the drain pipe at a temperature of about 35°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 35°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 nor during cleaning and maintenance, without first having stopped the machine by pressing the ON/OFF 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

Shearing-prevention safety device: Implemented by means of a safety circuit compliant with the European directive, it intervenes when the lid is opened and/or when the door is removed, temporarily switching the machine to STOP mode.

Beater motor overheating safety device: Implemented by means of an automatic integrated circuit breaker; it protects the machine beater motor operation from overloads.

Hermetic compressor motor overheating safety device: Implemented by means of an automatic reset thermal-current sensor; it protects the machine compressor motor operation from overloads. The protection device intervention determines the temporary stop of the compressor motor only.

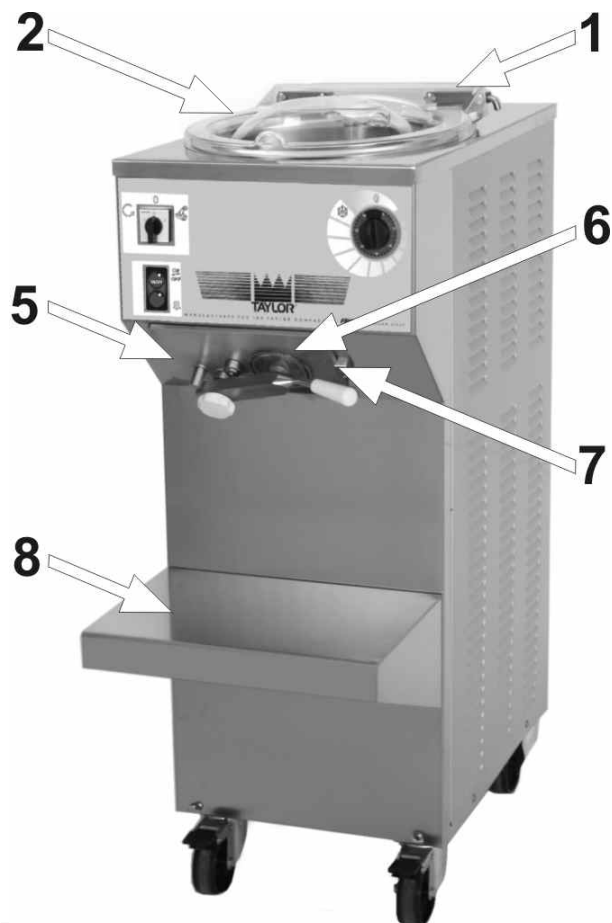
Semi-hermetic compressor motor overheating safety device: Implemented by means of an automatic reset circuit breaker-relay; it protects the machine compressor motor operation from overloads.

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.

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

6. OPERATION

6.1 MACHINE



2. Lid

Made in transparent material, it allows to follow the work phases in total safety.

2. Safety magnets

They intervene when the lid is opened or the door is removed by switching the machine to Stop.

3. Beater

Allows batch freezing of the ice-cream and its extraction at cycle end.

4. Scrapers

Realised in non-toxic plastic, they scrape the wall of the cylinder, guaranteeing a product that is always perfect. They can be easily removed for cleaning and replacement.

5. Extraction door

Closes the cylinder during the processing phases.

It can be easily removed for cleaning.

6. Dispenser disk

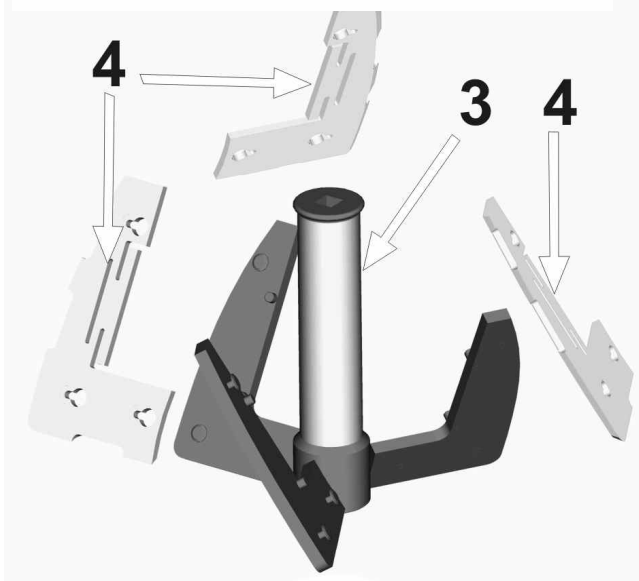
Used in the ice-cream extraction phase and can be removed for cleaning.

7.Attachment block

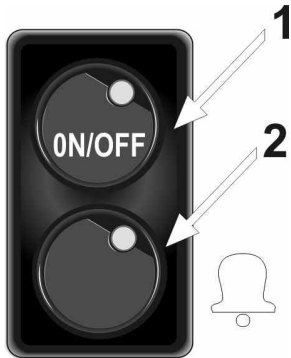
Holds the dispenser disk in the correct position.

8. Tub support

Supports the tub during extraction of the ice cream and can be adjusted in height.



6.2 CONTROL PANEL



1. ON/OFF key

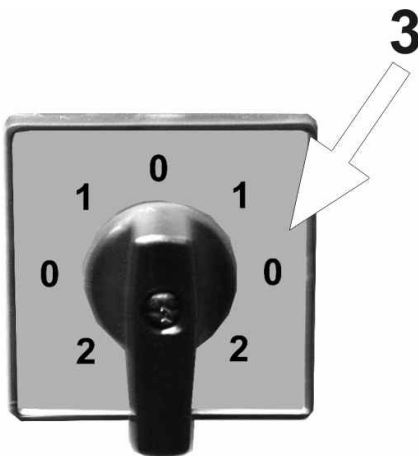
With grey LED, by pressing the ON/OFF key it switches the machine to ON and the LED turns green.

With green LED, by pressing the ON/OFF key it switches the machine to OFF and the LED turns grey.

2. BUZZER key

With grey LED, by pressing the BUZZER key, the acoustic warning is enabled at the end of the batch freezing cycle when the timer reaches 0'.

With green LED, by pressing the BUZZER key, the acoustic warning is excluded when the timer reaches 0'.



3. BEATER MOTOR SELECTOR SWITCH

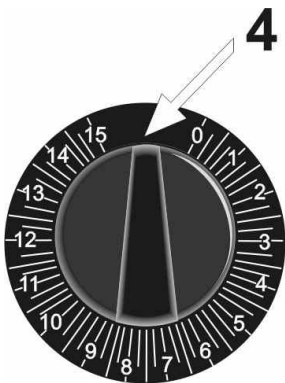
Selector set at 0: the beater motor stops

Selector on 1 to the LEFT: the low speed freezing is activated (anti-clockwise)

Selector on 2 to the LEFT: the high speed freezing is activated (compressor OFF)

Selector on 1 to the RIGHT: the low speed extraction is activated (clockwise)

Selector on 2 to the RIGHT: the high speed extraction is activated (compressor OFF)

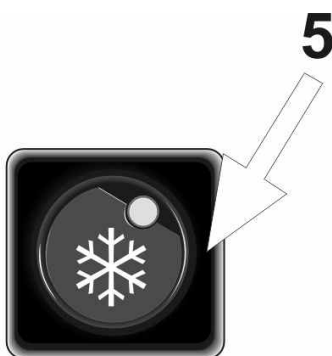


4. BATCH FREEZING TIMER

Using the batch freezing timer it is possible to set the production time and consequently, vary the consistency and the aspect of the product. The compressor is enabled automatically by turning the knob and the production phase is started.



To enable the compressor, the machine must first have been switched to ON and it must be checked that the key LED is green.

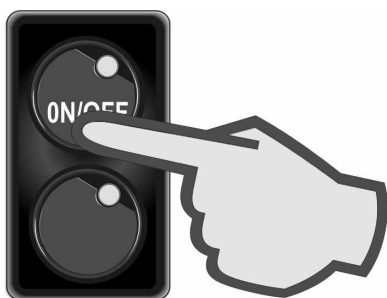


5. HIGH-LOW SPEED BUTTON (C151 only)

6. With grey LED, pressing the button, you enable the operation of the compressor and the LED turns green. With green LED pressing the button, disable the continuous working of the compressor and the LED turns grey.

6.3 ICE CREAM AND SLUSH PRODUCTION

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



- Make sure that the gate valve of cold water for condensation is open (water models only).
- 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.
- Check that the programs selector is at 0 and that the ON/OFF key LED is green.
- Lift the lid and pour the mixture into the batch freezing cylinder, strictly observing the minimum and maximum amounts admitted per cycle and stated in the following table:



MODEL	MIN (kg)	MAX (kg)
G20	3	4
G30	5	6,5
G60	8	12



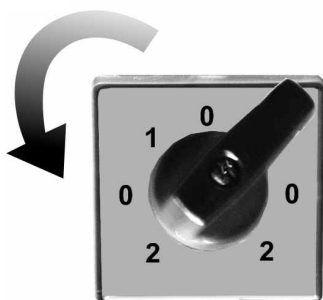
Failure to comply with the minimum and maximum load values can entail machine malfunctioning and even breakage.

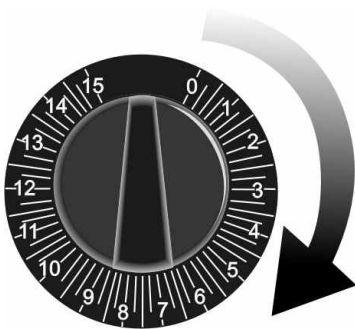
Minimum loads of mixture may entail the premature wear of the scrapers.

- Rotate the selector anti-clockwise on Pos. 1 to release the low speed freezing cycle.
- Rotate the selector anti-clockwise on Pos. 2 to release the high speed freezing. The compressor stops.



To prevent the mixture violently escaping from the cylinder, NEVER enable high speed in the batch freezing or extraction phases, with liquid or partially semi-solid product.





- Turn the batch freezing timer knob to the desired time. This operation enables compressor functioning and starts production.

Always remember to start the batch freezing time otherwise the production cycle cannot start.

- If the acoustic warning is to be given when the batch freezing time has expired, press the BUZZER key and make sure that the key LED is green.
- When the time set on the batch freezing timer has passed, the compressor stops and mixing continues. If the buzzer has been enabled it will emit the acoustic warning. If the consistency of the product is not that desired, a new time value can be set on the timer that guarantees a better consistency.



The residual batch freezing time can be increased or decreased by acting on the timer at any time.

6.4 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 and the timer is at position 0 for at least 30”.



This simple action can prolong the life span of the scrapers and safeguard the beater motor.

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- Pull the dispensing lever up to open the dispensing plate
- Rotate the selector clockwise on Pos.1 to release the low speed extraction.
- Rotate the selector clockwise on Pos.2 to release the high speed extraction. The compressor is OFF.
- After the extraction, rotate the selector onto 0, open the lid and remove the eventual product residues with a plastic spatula.

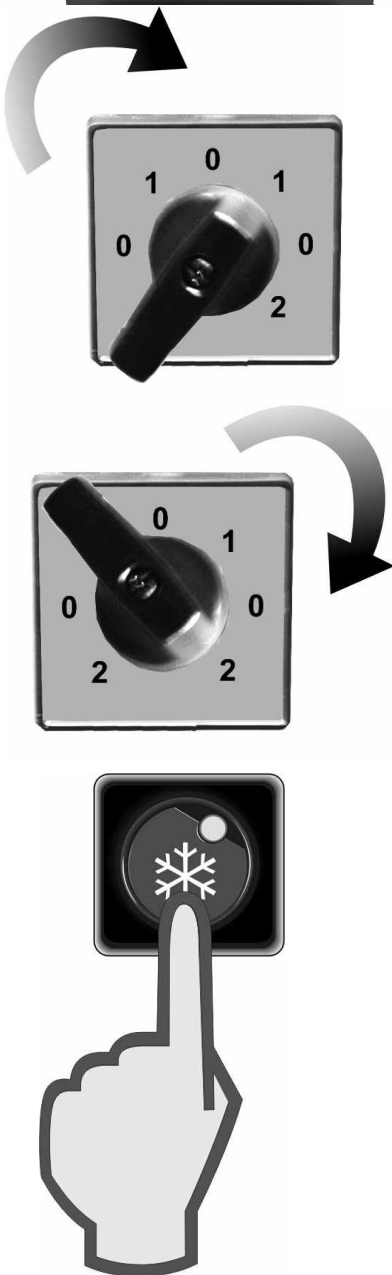
MODEL C151

- Pull the dispensing lever up to open the dispensing plate
- Rotate the selector clockwise on Pos.1 to release the low speed extraction.
- Rotate the selector clockwise on Pos.2 to release the high speed extraction. The compressor is OFF



During the extraction phase, by pushing the “continuous cod” button, it is possible to keep the compressor running in order to preserve the product at the correct consistency. However, the compressor must be switched off by acting on the timer, when about half of the product has already been extracted.

- When extraction has been completed, turn the selector switch to 0, open the lid and extract any residual product using a plastic spatula.



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.

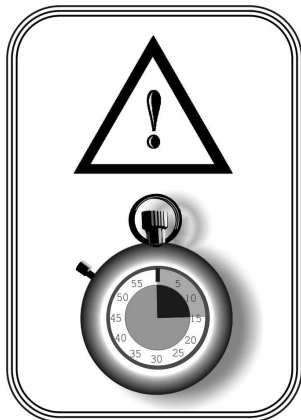
FRIGOMAT recommends thoroughly washing and sanitizing the parts in direct contact with the product after each work shift and in compliance with hygienic standards in force in the Country where the machine is installed.

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



PREWASHING

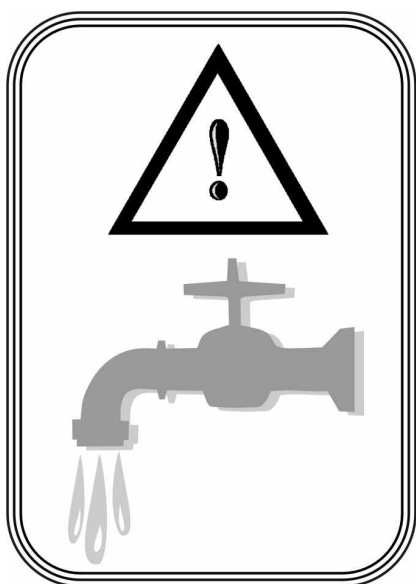
- Pour the maximum admitted load of warm (approximately 50°C) drinking water into the machine.
- Turn the selector switch to 1 and leave the beater to turn for about 1'. Open the dispenser disk and drain all the wash water. Repeat the procedure until the water coming out is clear and clean.
- Pour the maximum load admitted of cleansing/sanitizing solution into the machine.



We suggest using the following sanitizing solution:

Ecolab P3 Topax-san
(diluted at 4% = 200 ml).

- Turn the selector switch to 1 and leave the beater to turn for about 15'. Open the dispenser disk and drain the sanitizer.



- Pour the maximum admitted load of cold drinking water into the machine 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.
- Prepare the supplied brush and the OR disassembly device and place them in the solution.



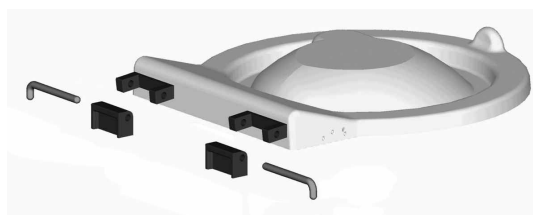
We suggest using the following sanitizing solution:

Ecolab P3 Topax-san

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

REMOVING AND CLEANING COVER

- Slide the hinge pins out and remove the lid.
- 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 THE DOOR

- Turn the dispenser disk to maximum opening position.
- Loosen the steel knob that fixes the door to the front panel of the machine.



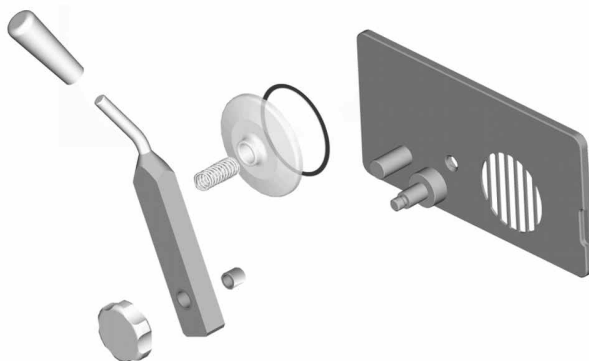
Handle the door with great care, supporting it with a hand while loosening the knob: because of its great weight, should it fall, it could cause injuries to staff and damages to objects.



- Rest the door on a clean work surface and disassemble its parts:
 - Loosen the plastic knob that blocks the dispenser disk arm.
 - Slide the arm from the pin.
 - Recover the dispenser disk and the relative thrust spring.
 - Remove the disk OR gasket.
 - Remove the OR gaskets positioned on the fixed pipe of the drain outlet.



- Immerse the previously disassembled components into the tub with the sanitizing solution and brush the surfaces with care. Pay special attention to the holes, slots and gasket seats.





REMOVING AND CLEANING BEATER

- Loosen the knob and remove the OR gasket.
- Slide the beater upwards and remove the scrapers.
- Remove the bush positioned in the lower part of the beater.
- Immerse the previously disassembled components into the tub with the sanitizer and brush the surfaces with care. Pay special attention to the inner part of the beater shaft and the scraper blade fixing pins.



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



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 CYLINDER

- Immerse a disposable paper cloth in the sanitizing liquid.
- Pass the cloth over all the batch freezing cylinder surfaces.
- Also pass the cloth over the visible internal and external surfaces of the drain pipe.
- Use the brush, previously immersed in the sanitizing solution, to clean the OR seats thoroughly, which are positioned on the drain pipe.
- Also pass the cloth over the outer edge of the cylinder until reaching the surfaces of the upper cover, front panel hook block and funnel.



SANITIZING DRIVE SHAFT

- Immerse a disposable paper cloth in the sanitizing liquid.
- Pass a cloth over the entire surface of the drive shaft positioned at the centre of the batch freezing cylinder. Pay particular attention to the drive gauge and the joint on the bottom with the base of the batch freezing cylinder.

RINSING AND DRYING



- Wash your hands well and/or wear disposable latex gloves.
- Remove all the components which were previously disassembled, brushed and immersed from the sanitizing tank.
- Rinse them with plenty of cold drinking water, making sure to remove all possible leftover sanitizing 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, drive shaft, etc.)
- When all the components are dry, put them back onto the machine making sure the gaskets and scrapers are in good condition.

8 TROUBLESHOOTING

PROBLEM	PROBABLE CAUSES	REMEDIES
The machine does not start (ON/OFF button active with green LED).	Master switch open.	Close the switch.
	Lid raised or not assembled.	Lower the lid and/or check that it is assembled correctly.
	No door.	Assemble the door on the machine.
	Incorrect power supply.	Check power supply.
	Selector switch at "0".	Turn the selector to position 1.
The compressor functions intermittently from the first batch freezing phases.	Air-cooled machines: air condenser dirty or fan faulty.	Clean the condenser with a brush and make sure the fan works properly.
	Water-cooled machines: no condensation water.	Make sure there is water in the water system to which the machine is connected. Check the cocks.
The batch freezing times lengthen and/or the ice-cream appears wet.	Slight condensation.	Check that there is at least 30 cm (mod. air) between the rear panel of the machine and the wall or other obstacles.
	High room temperature.	Check that the room temperature does not exceed 32°C.
	High liquid mixture temperature.	Maximum machine production is obtained with a liquid mixture at 4°C. Using mixtures at higher temperatures means that batch freezing times are lengthened: this is normal and does not constitute an anomaly.
	Worn scrapers.	Check wear and replace them if necessary.
	Refrigeration system anomaly.	Contact the technician.
	Unbalanced mixture or incorrect amount introduced.	Check that the amount of mixture introduced is correct and that it is balanced properly.
The product is too soft.	Insufficient batch freezing time.	Select a longer time on the timer.
The product is too hard.	Excessive batch freezing time.	Select a shorter time on the timer.
The machine becomes noisy during batch freezing.	Presence of ice on the cylinder wall.	The ice-cream is ready to be extracted.
		Check that the quantity introduced into the cylinder is not lower than the minimum allowed.
The machine does not extract the ice-cream.	The selector switch is not on position 2.	Turn the selector to position 2.
	The selector switch is on position 2 but the beater turns in the opposite direction.	Invert the phases in the plug. (Contact the technician).

9 APPENDICI / APPENDICES / ANNEXES / ANHANG / APENDICES

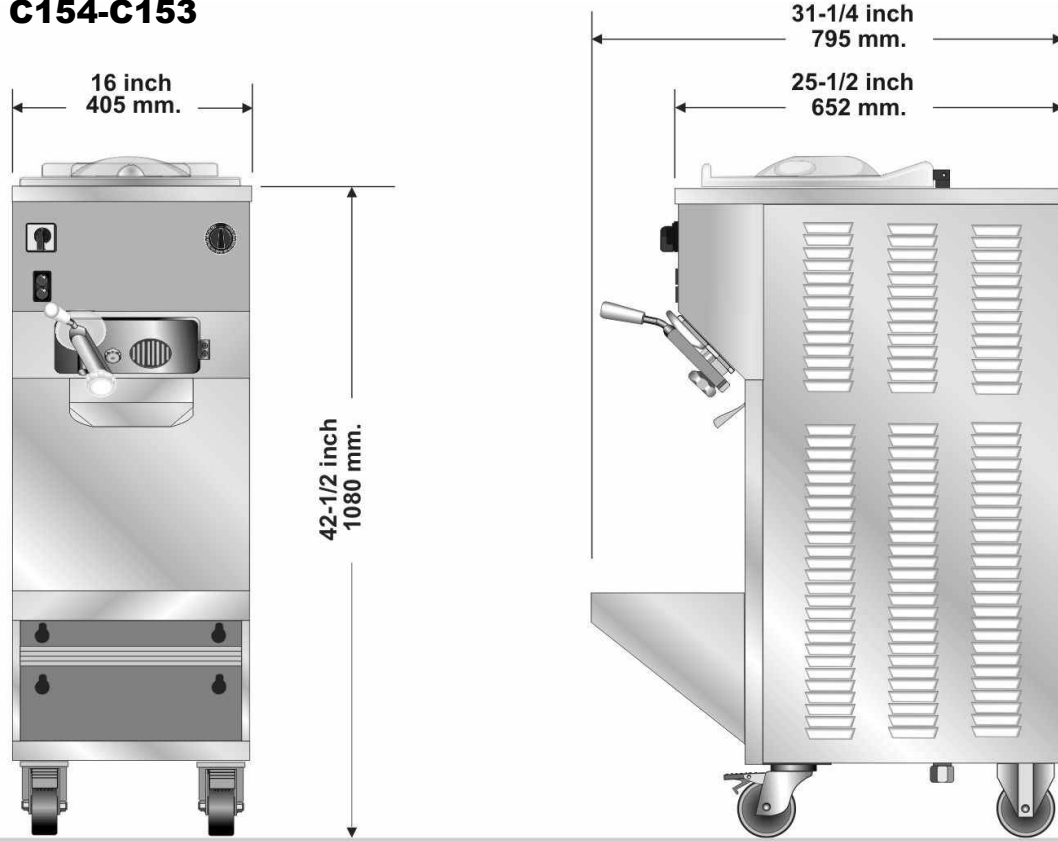
9.1 1 Dati tecnici / Machine specifications / Caractéristiques techniques / Technische Daten / Datos Tecnicos

Modello Model Modell Modale Modelo	Alimentazione Current Stromart Tension Tensiòn	Condensazione Cooling Kühlung Condensation Condensaciòn	Potenza Power Nennleistung Puissance Potencia	Gas R404	Altezza Height Höhe Hauteur Altura	Largh. Width Breite Largeur Anchura	Profondità Dept Tiefe Profondeur Profundidad	Peso Weight Gewicht Poids Peso
TITAN		A* - W**	(kw)	(kg)	(cm)	(cm)	(cm)	(kg)
C154	400/50/3	A	2,6	0,850	108	40,5	65+16	125
	220/60/3	A	2,8	0,850				
C153	400/50/3	A	3,6	0,900	108	40,5	65+16	130
		W	3,4	0,650				
	220/60/3	A	3,6	0,900				
		W	3,8	0,650				
C151	400/50/3	A	4,6	1,050	122	53	71	210
		W	4,4	0,950				
	220/60/3	A	4,6	1,050				
		W	4,8	0,950				

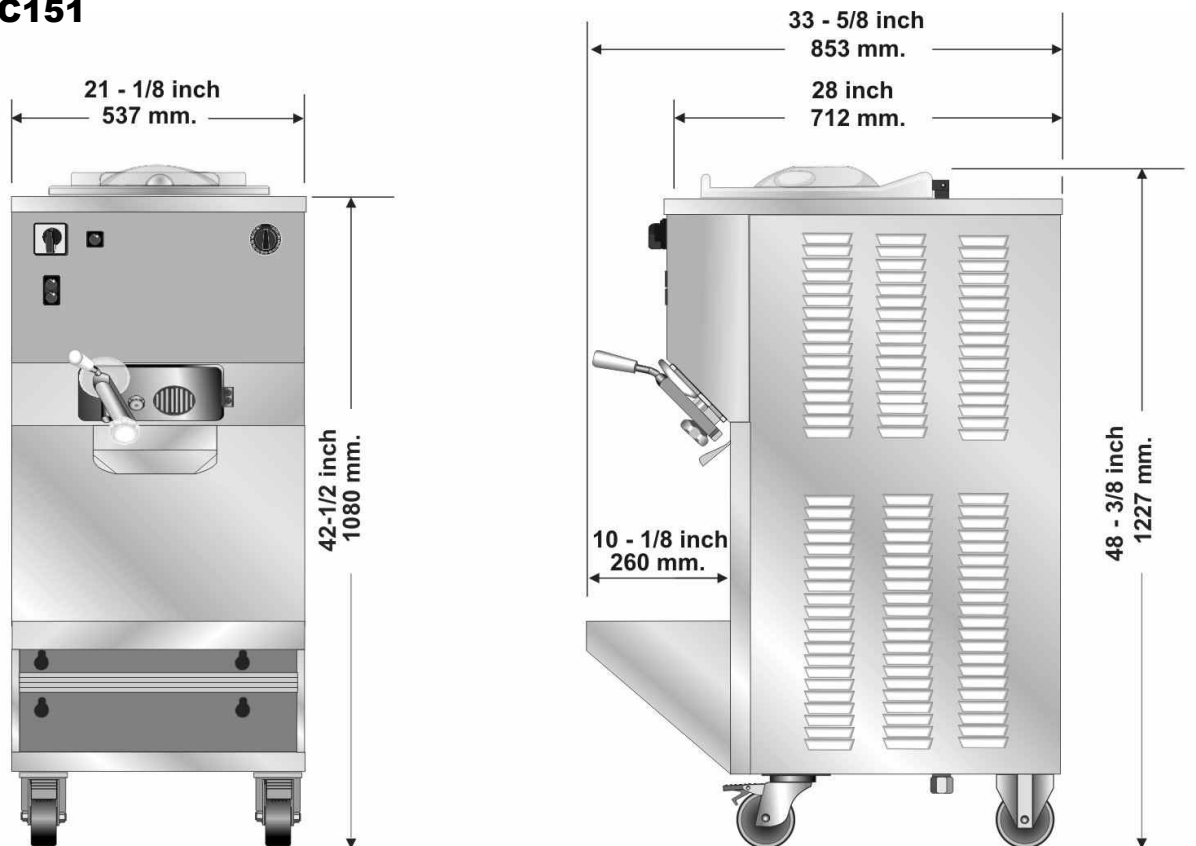
* Aria – Air – Luft – Aire – Aire

** Acqua – Water – Wasser – Eau – Agua

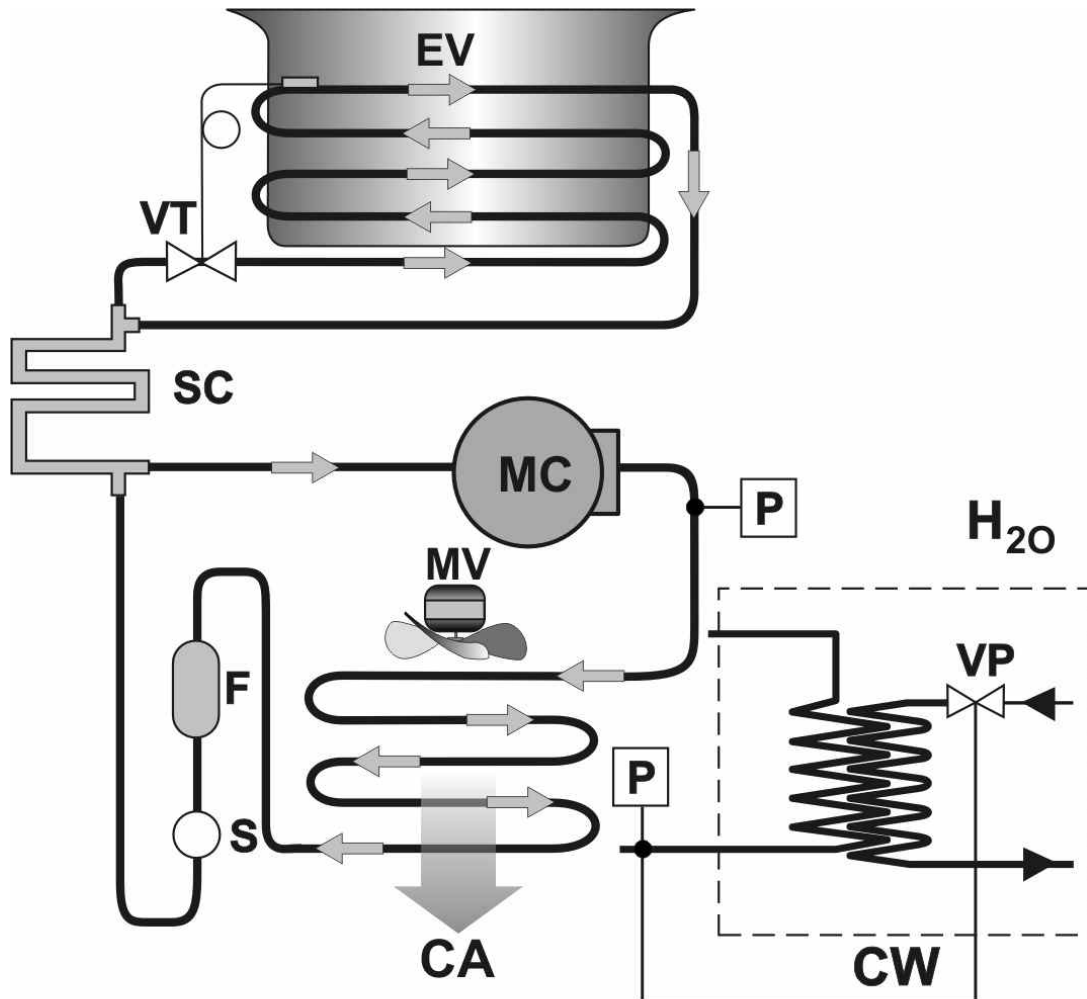
C154-C153



C151



9.2 Schema circuito frigorifero Refrigerant circuit diagram / Schéma du circuit frigorifique / Kühlnetzplan / Esquema circuito frigorifico



VP	CA	EV	S
Valvola pressostatica Water valve Soupape pressostatique Druckventil Valvula presostatica	Tubo capillare Capillary tube Tube capillaire Kapillarrohr Tubo capilar	Cilindro evaporatore Evaporator cylinder Evapoteur cylindre Zylinder-Verdampfer Evaporador cilindro	Spia liquido Led fluid Led fluid Led Kuhlmittel Mirilla fluido
MC	MV	CA	F
Compressore Compressor Compresseur Kompressor Compresor	Motoventilatore Fan motor Moteur ventilateur Ventilatormotor Motor ventilador	Condensatore ad aria Air condensator Condensation à air Luftkondensierung Condensación a aire	Filtro Filter Filtre Filter Filtro
P	VT	CW	SC
Pressostato Pressostat Pressostat Pressostat Presostato	Valvola termostatica Thermostatic valve Vanne thermostatique Thermostatisches ventil Valvula termostatica	Condensatore ad acqua Water condensator Condensation à eau Wasserkondensierung Condensación a agua	Scambiatore Heat exchanger Echangeur de chaleur Warmeauswechsler Cambiador de calor

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.

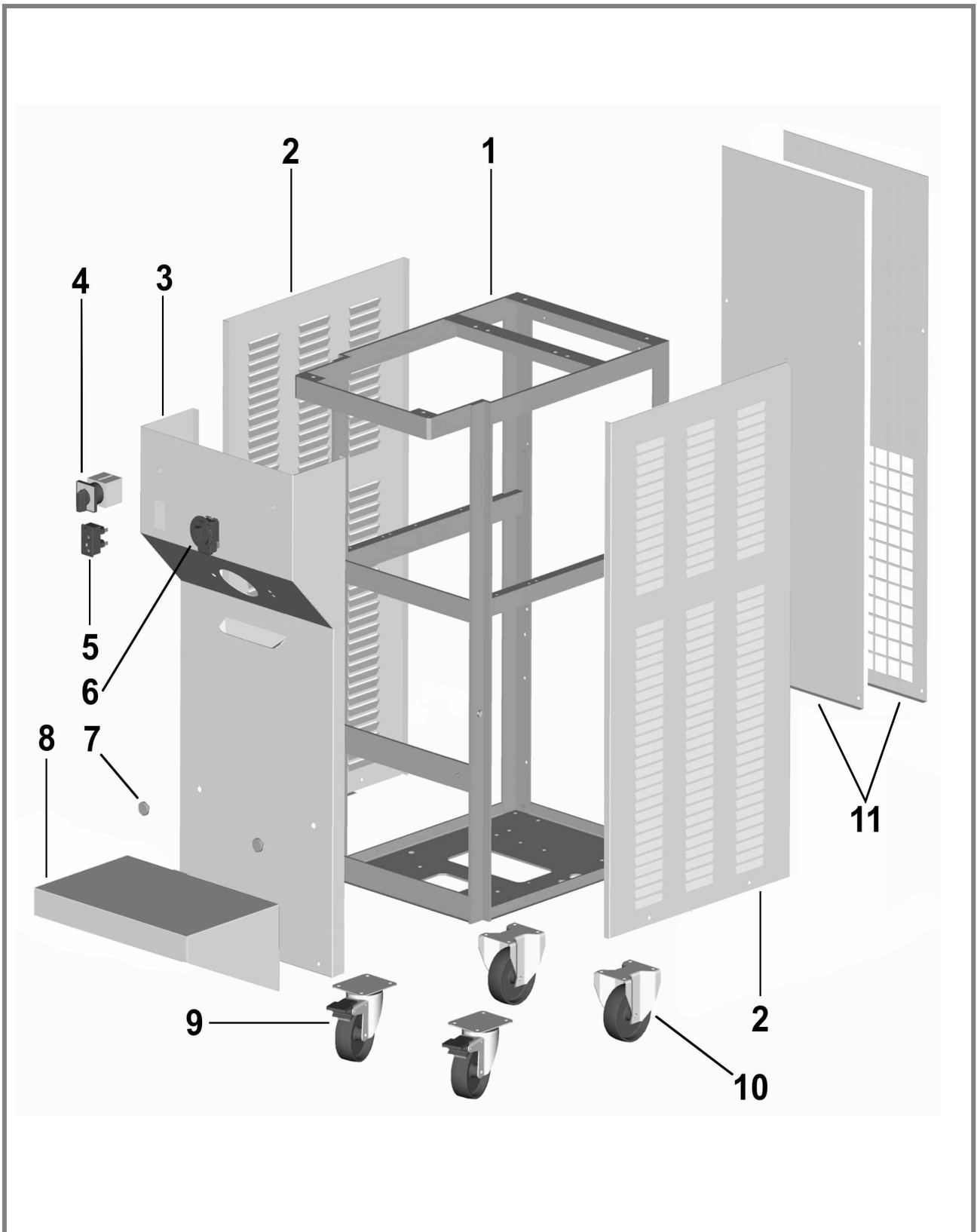
For spare parts ordering, always mention the corresponding code number and the name reported on each table caption. It is also recommended to always mention the machine model and the serial number as well as the technical data (voltage, frequency and phases), to make the identification of the component 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 (voltage, 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.

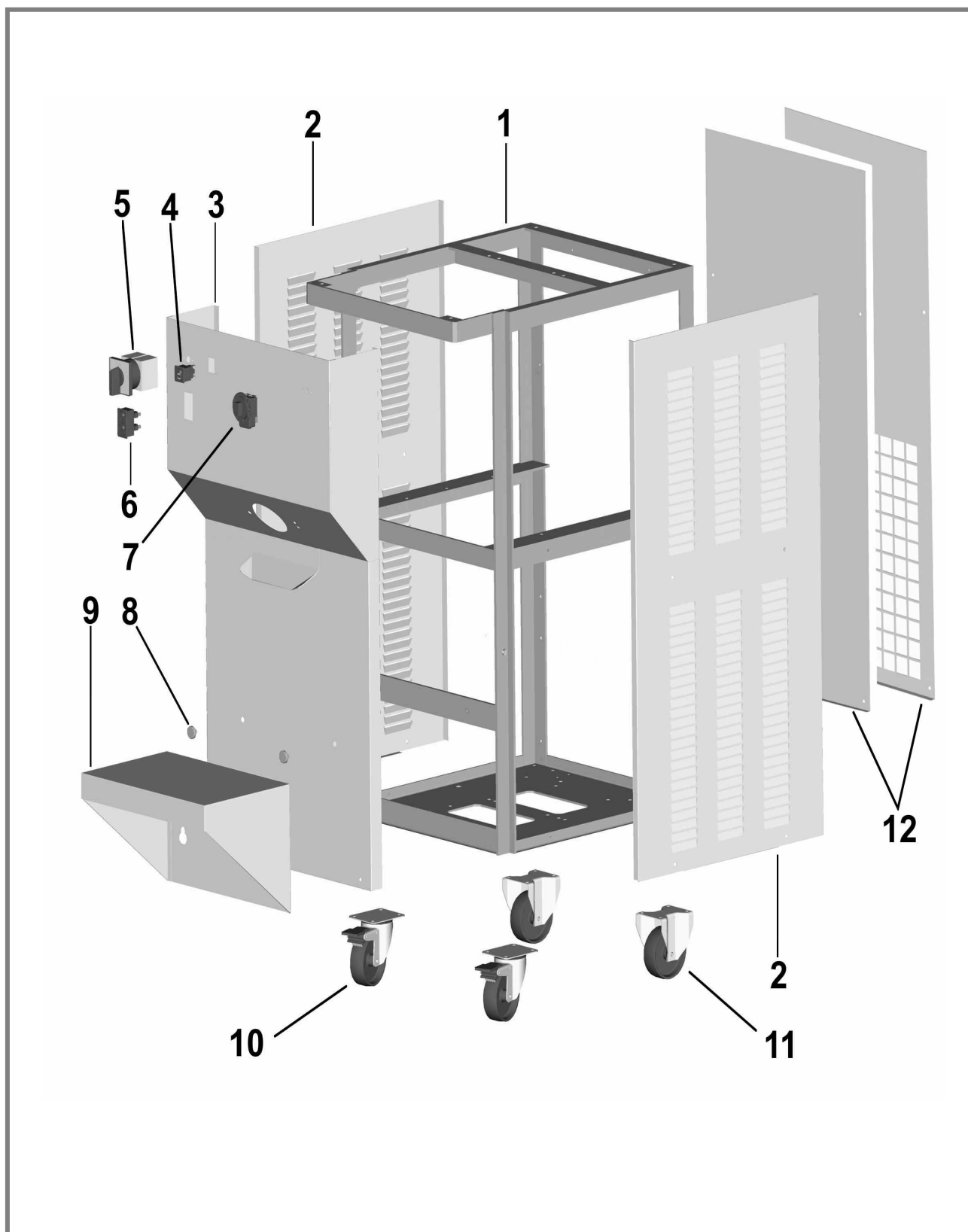
C154-C153 s02 Tav.1



C154-C153 s02 Tav.1

P.	COD.	Mod.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	A01.39790	C153-C154	Telaio	Frame	Châssis	Gestell	Armazón
2	A02.39825	C153-C154	Pannello laterale	Side panel	Panneau latéral	Seitenpaneel	Panel lateral.
3	A02.39795	C153-C154	Pannello anteriore	Front panel	Panneau antérieur	Vorderpaneel	Panel anterior
4	E07.41194	C153-C154	Commutatore	Switch	Basculer	Schalter	Conmutador
5	E07.39842	C153-C154	Gruppo pulsanti	Pushbuttons	Tastengruppe	Groupe boutons	Grupo pulsadores
6	E08.39908	C153-C154	Timer	FreezingTimer	Timer	Temporisateur	Temporizador
7	B09.060	C153-C154	Borchia balconcino	Stud for rest	Ecrou pour support	Buegelbolzen	Remache
8	A03.40189	C153-C154	Balconcino	Rest	Support	Buegel	Repisa
9	F02.013	C153-C154	Ruota Girevole	Revolving wheel	Roue pivotante	Schwenkbares Lauftrad	Rueda giratoria
10	F02.014	C153-C154	Ruota fissa	Fixed wheel	Roue fixe	Festes Lauftrad	Rueda fija
11	A02.39978	C153-C154	Pannello posteriore Aria	Back panel Air	Panneau postérieur Air	Hinteres Paneel Luft	Panel posterior Aire
	A02.39979	C153	Pannello posteriore Acqua	Back panel Water	Panneau postérieur Eau	Hinteres Paneel Wasser	Panel posterior Agua

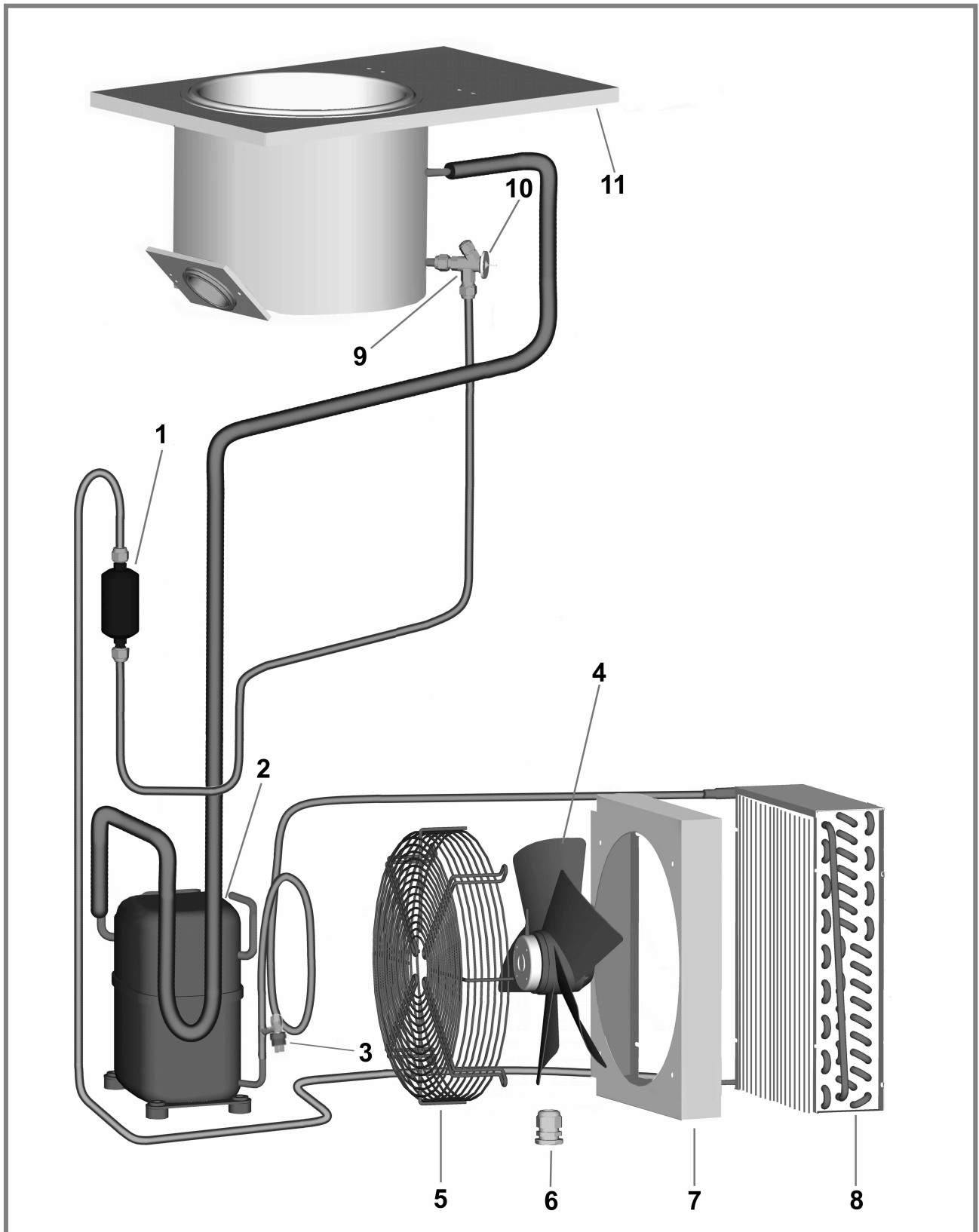
C151 s02 Tav.2



C151 s02 Tav.2

P.	COD.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	A01.40052	Telaio	Frame	Châssis	Gestell	Armazón
2	A02.40069	Pannello laterale	Side panel	Panneau latéral	Seitenpaneel	Panel lateral.
3	A02.40066	Pannello anteriore	Front panel	Panneau antérieur	Vorderpaneel	Panel anterior
4	E07.41210	Pulsante	Pushbuttons	Tasten	Boutons	Pulsadores
5	E07.41192	Commutatore	Switch	Basculer	Schalter	Conmutador
6	E07.39842	Gruppo pulsanti	Pushbuttons	Tastengruppe	Groupe boutons	Grupo pulsadores
7	E08.39908	Timer	FreezingTimer	Timer	Temporisateur	Temporizador
8	B09.060	Borchia balconcino	Stud for rest	Ecrou pour support	Buegelbolzen	Remache
9	A03.41115	Balconcino	Rest	Support	Buegel	Repisa
10	F02.013	Ruota Girevole	Revolving wheel	Roue pivotante	Schwenkbares Laufrad	Rueda giratoria
11	F02.014	Ruota fissa	Fixed wheel	Roue fixe	Festes Laufrad	Rueda fija
12	A02.40067	Pannello posteriore Aria	Back panel Air	Panneau postérieur Air	Hinteres Paneel Luft	Panel posterior Aire
	A02.40068	Pannello posteriore Acqua	Back panel Water	Panneau postérieur Eau	Hinteres Paneel Wasser	Panel posterior Agua

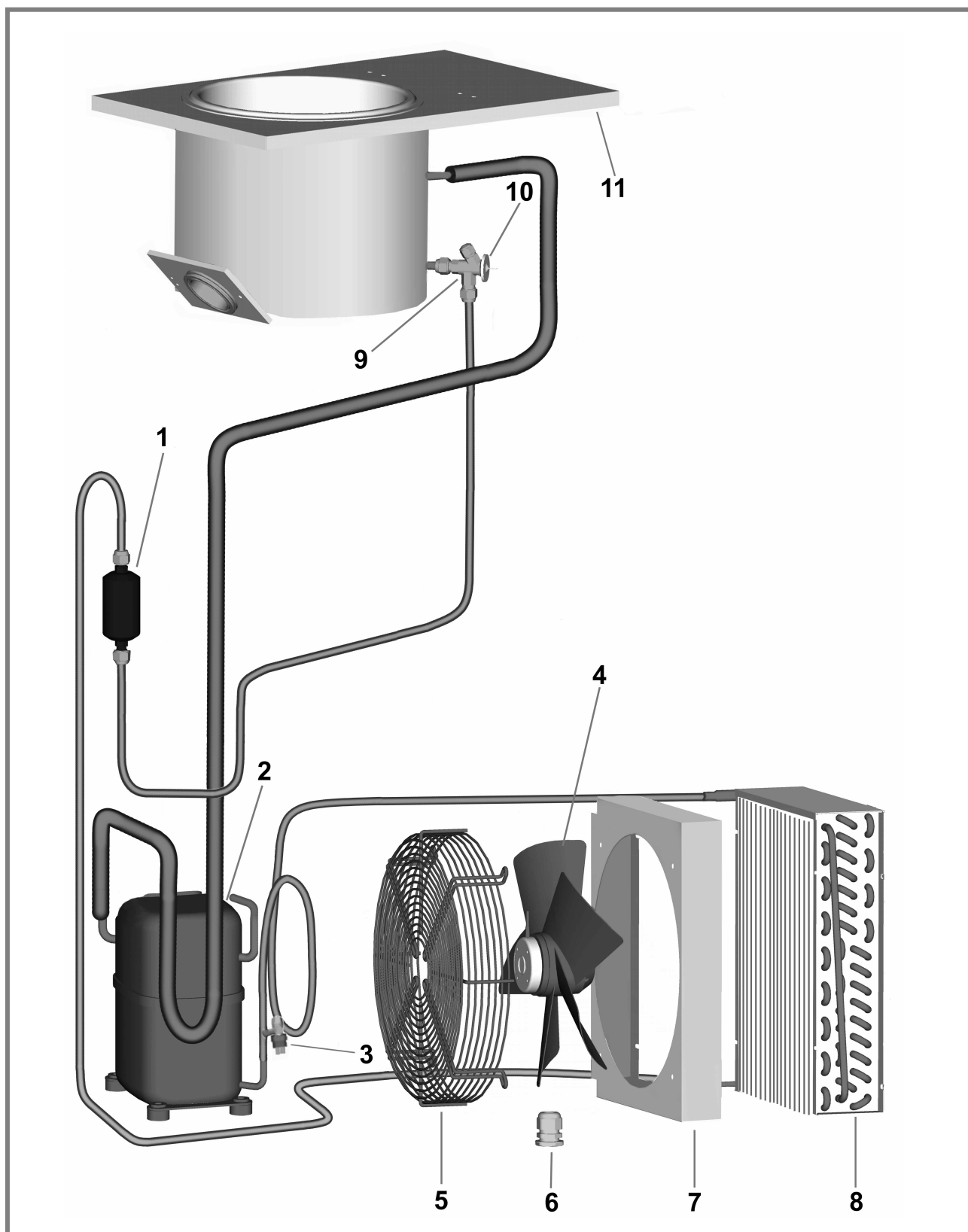
C154 A s02 Tav.3



C154 A s02 Tav.3

P.	COD.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	A07.032	Filtro	Filter	Filtre	Filter	Filtro
2	B01.37142	Compressore 400/50/3	Compressor 400/50/3	Compresseur 400/50/3	Kompressor 400/50/3	Compresor 400/50/3
	A01.236	Compressore 220/60/1	Compressor 220/60/1	Compresseur 220/60/1	Kompressor 220/60/1	Compresor 220/60/1
3	A02.140	Pressostato	Pressure switch	Pressostat	Druckwächter	Presóstato
4	E01.37038	Motore ventilatore	Fan motor	Moteur du ventilateur	Ventilatormotor	Motor ventilador
5	B12.104	Griglia	Grate	Grille	Gitter	Rejilla
6	D06.073	Pressacavo	Cable grip	Presse-fils	Kabelhalter	Sujeta-cables
7	A04.38873	Convogliatore	Conveyor	Convoyeur	Kühlerhaube - Gleiter	Transportador
8	B02.37254	Condensatore ad aria	Air condenser	Condensateur á air	Luftkondensator	Condensador aire
9	A02.190	Valvola termostatica	Thermostatic valve	Soupape thermostatique	Thermostatisches Ventil	Válvula termostática
10	B09.39089	Orificio per valvola termostatica	Orifice for thermostatic valve	Orifice suopape thermostatique	Öffnung für thermost. Ventil	Orificio válvula termostática
11	Z56.39848	Gruppo isolamento	Insulation unit	Groupe isolant	Isolationsgruppe	Grupo aislamiento

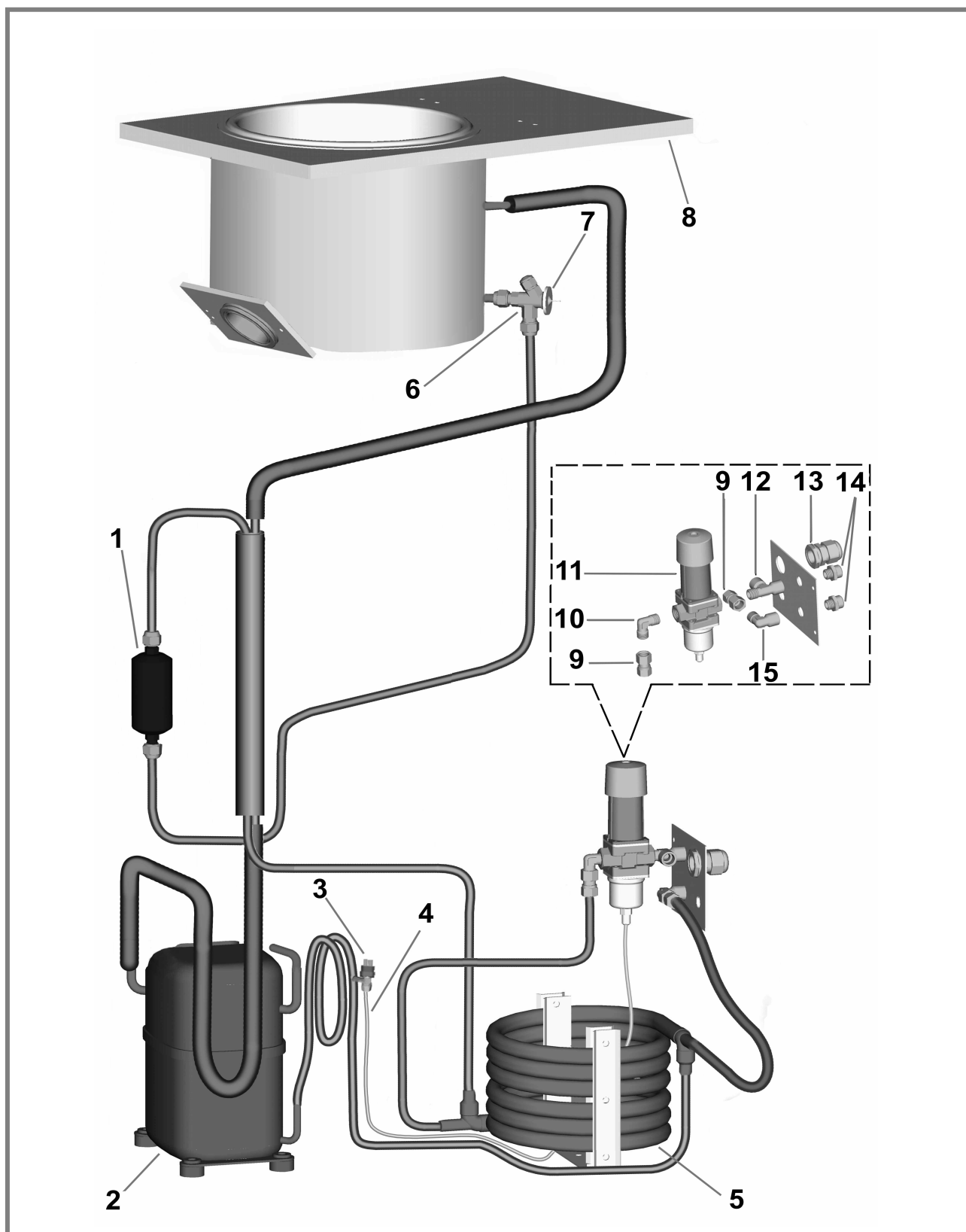
C153 A s02 Tav.4



C153 A s02 Tav.4

P.	COD.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	A07.032	Filtro	Filter	Filtre	Filter	Filtro
2	B01.39086	Compressore 400/50/3	Compressor 400/50/3	Compresseur 400/50/3	Kompressor 400/50/3	Compresor 400/50/3
	B01.39922	Compressore 220/60/3	Compressor 220/60/3	Compresseur 220/60/3	Kompressor 220/60/3	Compresor 220/60/3
	B01.38478	Compressore 380/60/3	Compressor 380/60/3	Compresseur 380/60/3	Kompressor 380/60/3	Compresor 380/60/3
3	A02.140	Pressostato	Pressure switch	Pressostat	Druckwächter	Presóstato
4	E01.37422	Motore ventilatore	Fan motor	Moteur du ventilateur	Ventilatormotor	Motor ventilador
5	B03.37449	Griglia	Grate	Grille	Gitter	Rejilla
6	D06.073	Pressacavo	Cable grip	Presse-fils	Kabelhalter	Sujeta-cables
7	A04.37313	Convogliatore	Conveyor	Convoyeur	Kühlerhaube - Gleiter	Transportador
8	B02.37254	Condensatore ad aria	Air condenser	Condensateur á air	Luftkondensator	Condensador aire
9	A02.190	Valvola termostatica	Thermostatic valve	Soupape thermostatique	Thermostatisches Ventil	Válvula termostática
10	B09.39409	Orificio per valvola termostatica	Orifice for thermostatic valve	Orifice suopape thermostatique	Öffnung für thermost. Ventil	Orificio válvula termostática
11	Z56.39771	Gruppo isolamento	Insulation unit	Groupe isolant	Isolationsgruppe	Grupo aislamiento

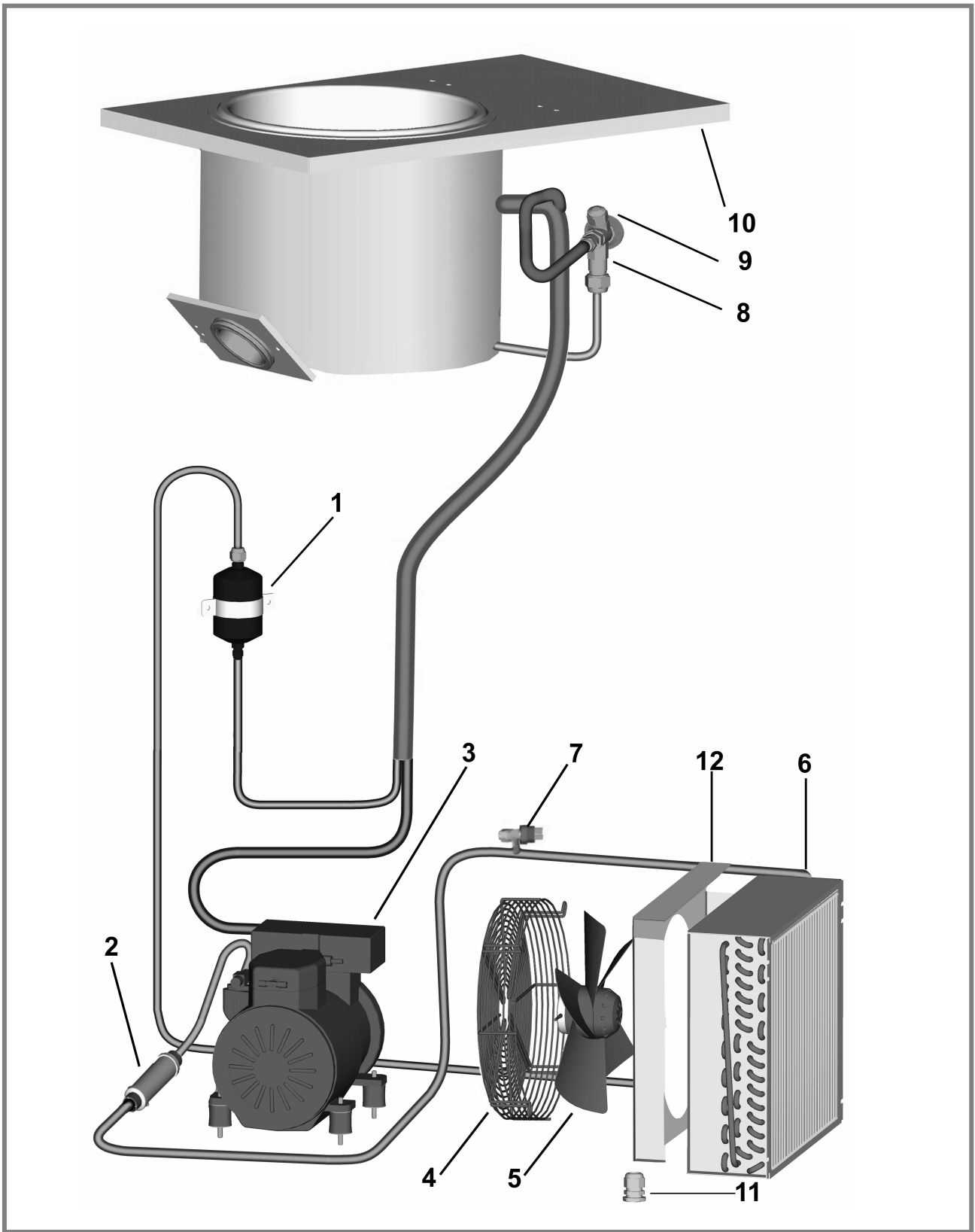
C153 W s02 Tav.5



C153 W s02 Tav.5

P.	COD.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	A07.032	Filtro	Filter	Filtre	Filter	Filtro
2	B01.39086	Compressore 400/50/3	Compressor 400/50/3	Compresseur 400/50/3	Kompressor 400/50/3	Compresor 400/50/3
	B01.39922	Compressore 220/60/3	Compressor 220/60/3	Compresseur 220/60/3	Kompressor 220/60/3	Compresor 220/60/3
	B01.38478	Compressore 380/60/3	Compressor 380/60/3	Compresseur 380/60/3	Kompressor 380/60/3	Compresor 380/60/3
3	A02.140	Pressostato	Pressure switch	Pressostat	Druckwächter	Presóstato
4	T50.016	Capillare valvola pressostatica	Capillary tube for water valve	Capillaire soupape thermostatique	Kapillares Druckventil	Capilar válvula presostática
5	A03.090	Condensatore ad acqua	Water condenser	Condensateur á eau	Wasserkondensator	Condensador de agua
6	A02.190	Valvola termostatica	Thermostatic valve	Soupape thermostatique	Thermostatisches Ventil	Válvula termostática
7	B09.39409	Orificio per valvola termostatica	Orifice for thermostatic valve	Orifice soupape thermostatique	Öffnung für thermost. Ventil	Orificio válvula termostática
8	Z56.39771	Gruppo isolamento	Insulation unit	Groupe isolant	Isolationsgruppe	Grupo aislamiento
9	R02.114	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
10	R03.019	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
11	A02.061	Valvola pressostatica	Water valve	Soupape pressostatique	Druckventil	Válvula presostática
12	R05.009	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
13	E09.37287	Pressacavo	Cable grip	Presse-fils	Kabelhalter	Sujeta-cables
14	R02.113	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
15	R03.058	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

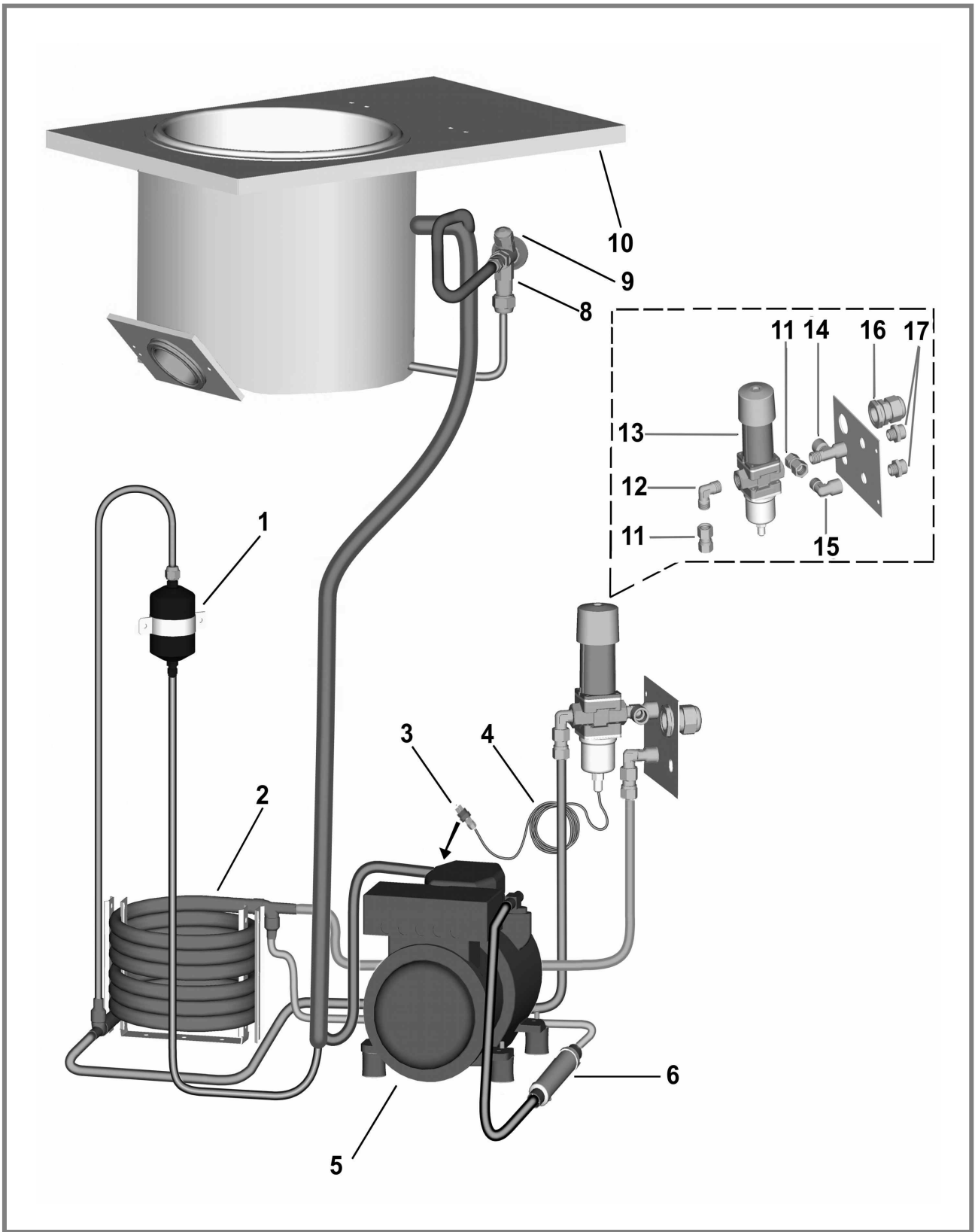
C151 A s02 Tav.6



C151 A s02 Tav.6

P.	COD.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	B04.35032	Filtro	Filter	Filtre	Filter	Filtro
2	R09.001.02	Antivibrante	Vibration damper	Antivibratoire	Schwingungs- dämpfer	Antivibrante
3	B01.39010	Compressore 400/50/3	Compressor 400/50/3	Compresseur 400/50/3	Kompressor 400/50/3	Compresor 400/50/3
	B01.39009	Compressore 220/60/3	Compressor 220/60/3	Compresseur 220/60/3	Kompressor 220/60/3	Compresor 220/60/3
4	B03.37449	Griglia	Grate	Grille	Gitter	Rejilla
5	E01.37422	Motore ventilatore	Fan motor	Moteur du ventilateur	Ventilatormotor	Motor ventilador
6	B02.41022	Condensatore ad aria	Air condenser	Condensateur á air	Luftkondensator	Condensador aire
7	A02.140	Pressostato	Pressure switch	Pressostat	Druckwächter	Presóstato
8	A02.190	Valvola termostatica	Thermostatic valve	Soupape thermostatique	Thermostatisches Ventil	Válvula termostática
9	B09.39410	Orificio per valvola termostatica	Orifice for thermostatic valve	Orifice suopape thermostatique	Öffnung für thermost. Ventil	Orificio válvula termostática
10	Z56.40059	Gruppo isolamento	Insulation unit	Groupe isolant	Isolationsgruppe	Grupo aislamiento
11	D06.073	Pressacavo	Cable grip	Presse-fils	Kabelhalter	Sujeta-cables
12	A04.41503	Convogliatore	Conveyor	Convoyeur	Kühlerhaube	Transportador

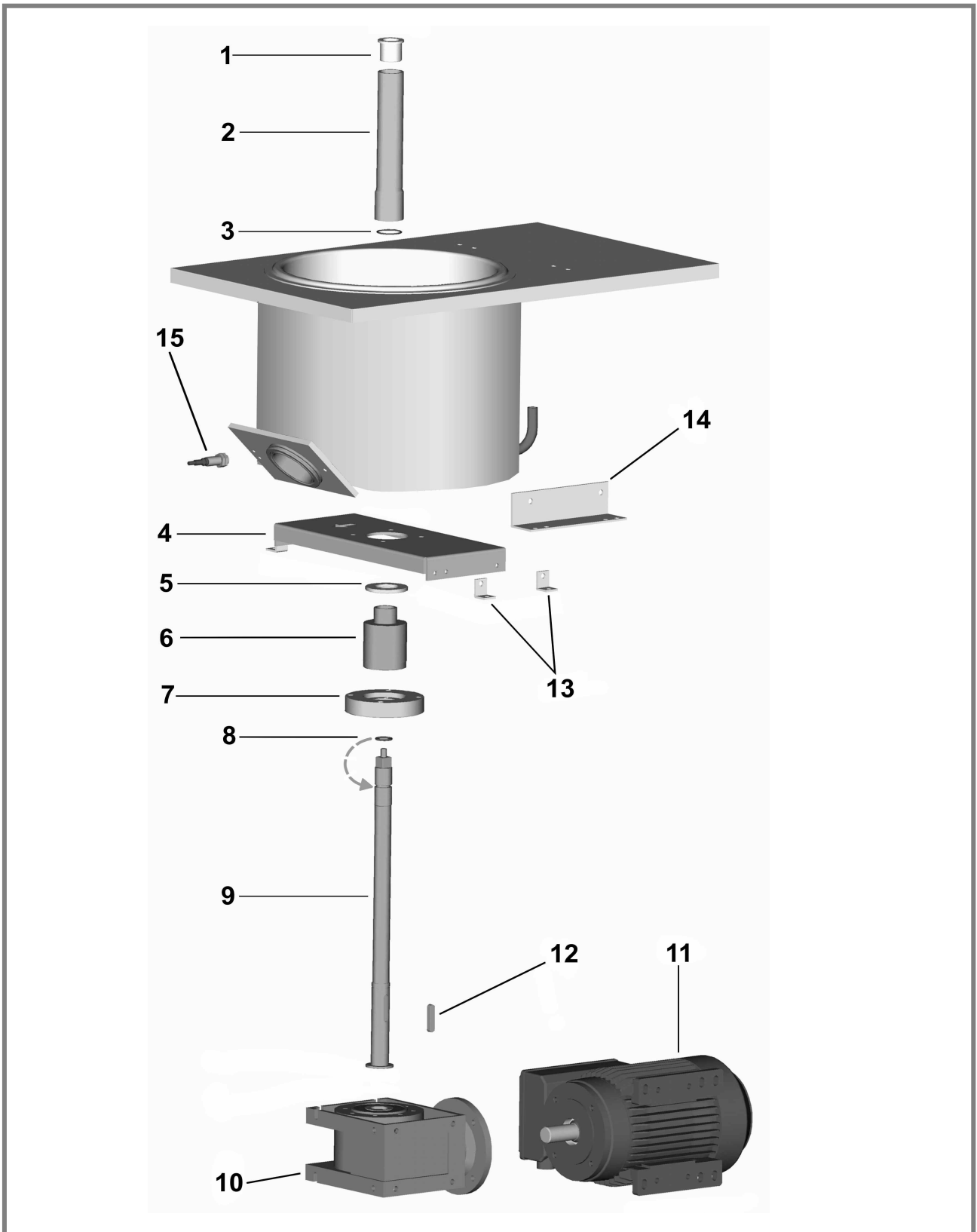
C151 W s02 Tav.7



C151 W s02 Tav.7

P.	COD.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	B04.35032	Filtro	Filter	Filtre	Filter	Filtro
2	A03.091	Condensatore ad acqua	Water condenser	Condensateur á eau	Wasserkondensator	Condensador de agua
3	A02.140	Pressostato	Pressure switch	Pressostat	Druckwächter	Presóstato
4	T50.016	Capillare valvola pressostatica	Capillary tube for water valve	Capillaire soupape thermostatique	Kapillares Druckventil	Capilar válvula presostática
5	B01.39010	Compressore 400/50/3	Compressor 400/50/3	Compresseur 400/50/3	Kompressor 400/50/3	Compresor 400/50/3
	B01.39009	Compressore 220/60/3	Compressor 220/60/3	Compresseur 220/60/3	Kompressor 220/60/3	Compresor 220/60/3
6	R09.001.02	Antivibrante	Vibration damper	Antivibratoire	Schwingungs-dämpfer	Antivibrante
7	Z71.40156	Gruppo valvola pressostatica	Pressare valve assy	Groupe soupape pressostatique	Druckventil kompl.	Válvula presostática
8	A02.190	Valvola termostatica	Thermostatic valve	Soupape thermostatique	Thermostatisches Ventil	Válvula termostática
9	B09.39410	Orificio per valvola termostatica	Orifice for thermostatic valve	Orifice soupape thermostatique	Öffnung für thermost. Ventil	Orificio válvula termostática
10	Z56.40059	Gruppo isolamento	Insulation unit	Groupe isolant	Isolationsgruppe	Grupo aislamiento
11	R02.114	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
12	R03.019	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
13	A02.061	Valvola pressostatica	Water valve	Soupape pressostatique	Druckventil	Válvula presostática
14	R05.009	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
15	R03.058	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
16	E09.37287	Pressacavo	Cable grip	Presse-fils	Kabelhalter	Sujeta-cables
17	R02.113	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

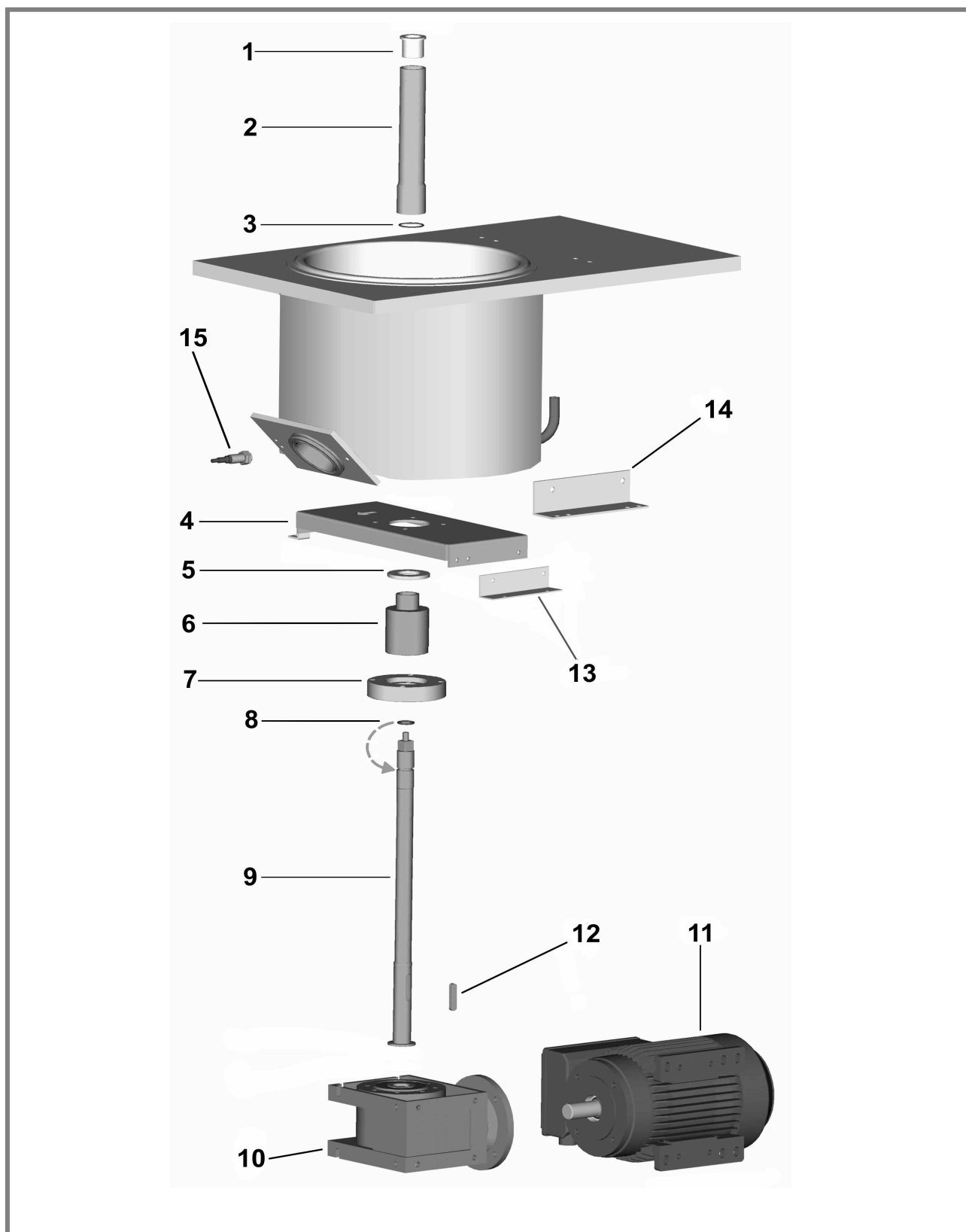
C154-C153 s02 Tav.8



C154-C153 s02 Tav.8

P.	COD.	MOD.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	P11.39974	C153-C154	Boccola	Bushing	Douille	Buchse	Anillo-Hebilla
2	L21.39800	C153-C154	Canotto trasmissione	Transmission tube	Rohr	Tube de transmission	Tubo de transmisión
3	P02.38065	C153-C154	OR 2125	OR 2125	OR 2125	OR 2125	OR 2125
4	A04.39798	C153-C154	Supporto trasmissione	Drive bearing	Support de transmission	Antrieblager	suporte transmision
5	P21.39796	C153-C154	Trappola termica	Insulating support	Support isolé	Isolierter-Kopf	Soporte aislato
6	L21.39894	C153-C154	Supporto	Support	Halter	Support	Soporte
7	L21.39797	C153-C154	Flangia	Flange	Bride	Flansch	Brida
8	P10.028	C153-C154	OR 3075	OR 3075	OR 3075	OR 3075	OR 3075
9	B50.39799	C153-C154	Albero trasmissione	Driving shaft	Übertragungswelle	Arbre de transmission	Eje transmisión
10	C05.39828	C153-C154	Riduttore per motore 50 hz	Reducer 50 hz	Réducteur 50 hz	Reduzierer 50 hz	Reductor 50 hz
	C05.39975	C153-C154	Riduttore per motore 60 hz	Reducer 60 hz	Réducteur 60 hz	Reduzierer 60 hz	Reductor 60 hz
11	E01.39914	C153	Motore agitatore 400/50/3	Beater motor 400/50/3	Rührwerkmotor 400/50/3	Moteur agitateur 400/50/3	Motor agitador 400/50/3
	E01.39829	C154	Motore agitatore 400/50/3	Beater motor 400/50/3	Rührwerkmotor 400/50/3	Moteur agitateur 400/50/3	Motor agitador 400/50/3
	E01.39976	C153	Motore agitatore 220/60/3	Beater motor 220/60/3	Rührwerkmotor 220/60/3	Moteur agitateur 220/60/3	Motor agitador 220/60/3
	E01.39920	C154	Motore agitatore 220/60/3	Beater motor 220/60/3	Rührwerkmotor 220/60/3	Moteur agitateur 220/60/3	Motor agitador 220/60/3
	E01.40350	C153	Motore agitatore 380/60/3	Beater motor 380/60/3	Rührwerkmotor 380/60/3	Moteur agitateur 380/60/3	Motor agitador 380/60/3
12	B04.131	20-30	Chiavetta	Key	Clavette	Keil	Chaveta
13	A04.39901	C153	Staffa fissaggio	Fixing bracket	Branche de fixation	Fixierstaffel	Molde fijaje
	A04.39902	C154	Staffa fissaggio	Fixing bracket	Branche de fixation	Fixierstaffel	Molde fijaje
14	A04.39911	C153	Piastra supporto motore motore	Support plate	Motorplatte	Plaque de support du moteur	Placa motor
	A04.39883	C154	Piastra supporto motore motore	Support plate	Motorplatte	Plaque de support du moteur	Placa motor
15	D05.072	C153-C154	Contatto magnetico (REED)	Magnetic contact (REED)	Contact magnétique (REED)	Magnetkontakt (REED)	Contacto magnético (REED)

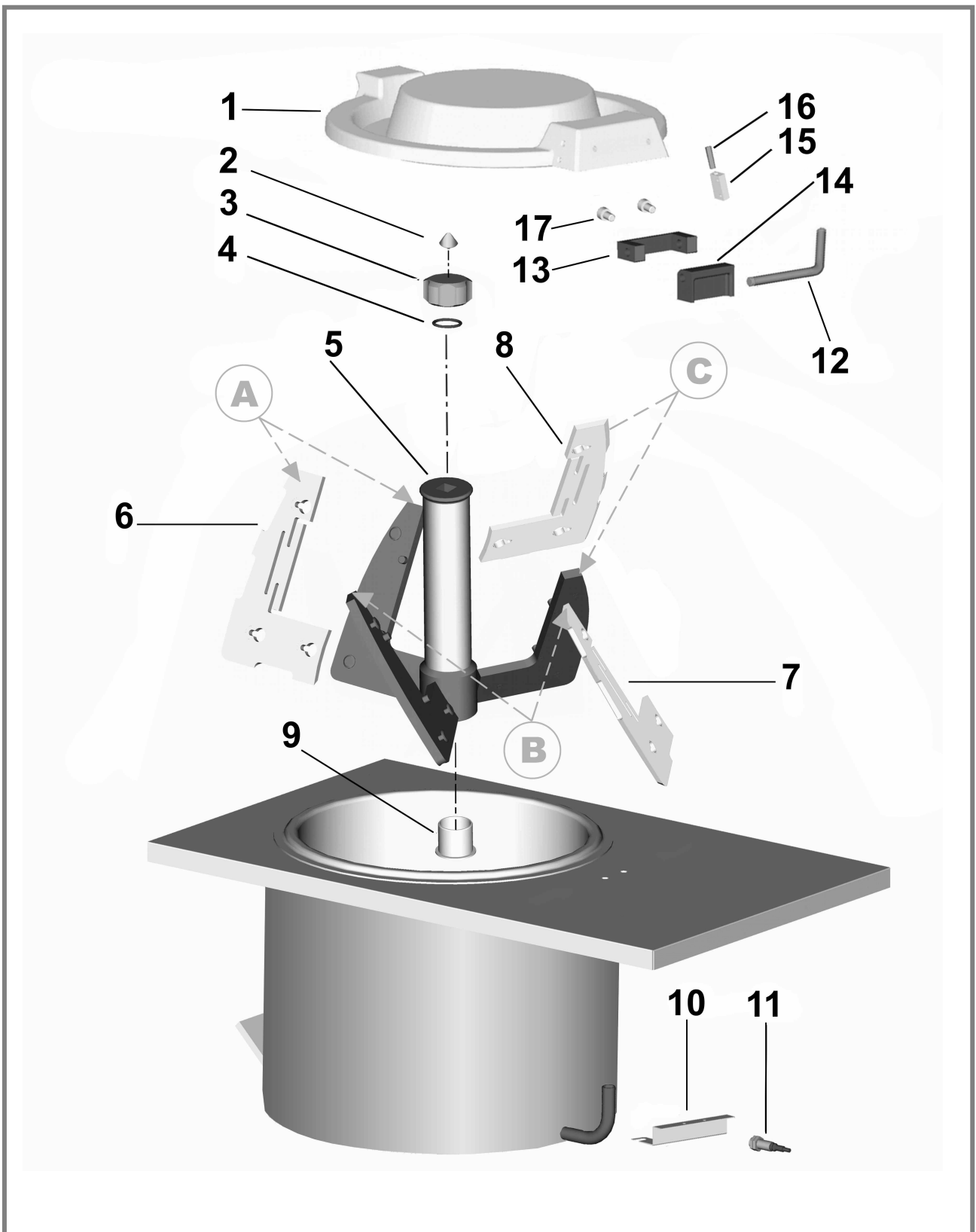
C151 s02 Tav.9



C151 s02 Tav.9

P.	COD.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	P11.40101	Boccola	Bushing	Douille	Buchse	Anillo-Hebilla
2	L21.40065	Canotto trasmissione	Transmission tube	Rohr	Tube de transmission	Tubo de transmisión
3	P10.134	OR 2150	OR 2150	OR 2150	OR 2150	OR 2150
4	A04.40060	Supporto trasmissione	Drive bearing	Support de transmission	Antrieblager	suporte transmisión
5	P21.40072	Trappola termica	Insulating support	Support isolé	Isolierter-Kopf	Soporte aislato
6	L21.40064	Supporto	Support	Halter	Support	Soporte
7	L21.40051	Flangia	Flange	Bride	Flansch	Brida
8	P02.40103	OR 130	OR 130	OR 130	OR 130	OR 130
9	B50.40062	Albero trasmissione	Driving shaft	Übertragungswelle	Arbre de transmission	Eje transmisión
10	C05.40106	Riduttore per motore 50 hz	Reducer 50 hz	Réducteur 50 hz	Reduzierer 50 hz	Reductor 50 hz
	C05.40123	Riduttore per motore 60 hz	Reducer 60 hz	Réducteur 60 hz	Reduzierer 60 hz	Reductor 60 hz
11	E01.40105	Motore agitatore 400/50/3	Beater motor 400/50/3	Rührwerkmotor 400/50/3	Moteur agitateur 400/50/3	Motor agitador 400/50/3
	E01.40124	Motore agitatore 220/60/3	Beater motor 220/60/3	Rührwerkmotor 220/60/3	Moteur agitateur 220/60/3	Motor agitador 220/60/3
12	B04.131	Chiavetta	Key	Clavette	Keil	Chaveta
13	A04.40128	Staffa fissaggio	Fixing bracket	Branche de fixation	Fixierstaffel	Molde fijaje
14	A04.40061	Piastra supporto motore motore	Support plate	Motorplatte	Plaque de support du moteur	Placa motor
15	D05.072	Contatto magnetico (REED)	Magnetic contact (REED)	Contact magnétique (REED)	Magnetkontakt (REED)	Contacto magnético (REED)

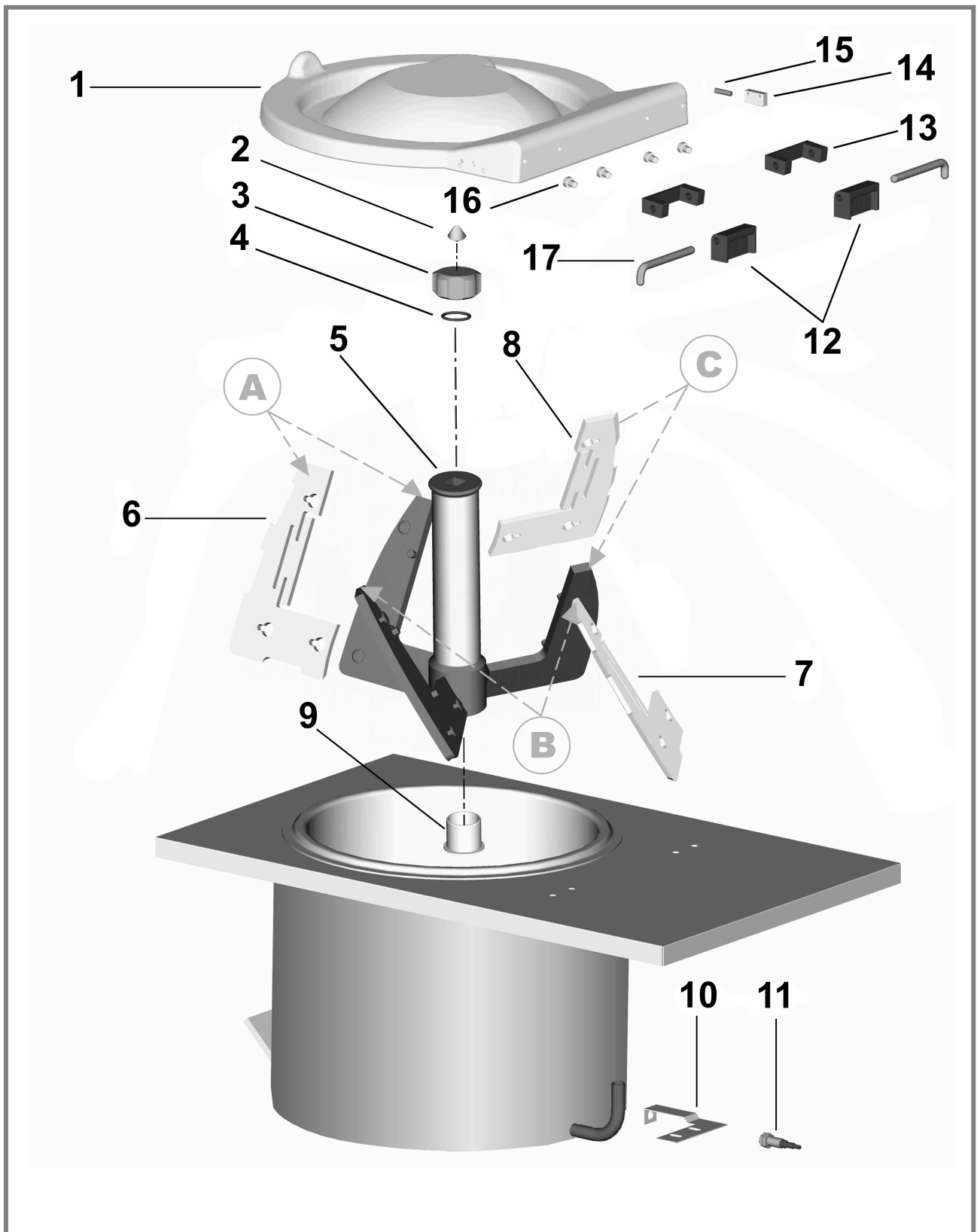
C154 s02 Tav.10



C154 s02 Tav.10

P.	COD.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	B65.38564	Coperchio	Cover	Deckel	Couvercle	Tapa
2	L18.40088	Terminale pomolo	Knob terminal	Knauf-Endteil	Terminale Bague	Terminal pomo
3	L18.39909	Pomolo agitatore	Knob agitator	Rührwerkknäuf	Bague agitateur	Pomo agitador
4	P10.045	OR 3100	OR 3100	OR 3100	OR 3100	OR 3100
5	B61.39854	Agitatore	Agitator	Rührwerk	Agitateur	Agitador
6	P18.39852	Pattino raschiante A	Scraper A	Schabeteil A	Patin raclant A	Patín rascador A
7	P18.39853	Pattino raschiante B	Scraper B	Schabeteil B	Patin raclant B	Patín rascador B
8	P18.39906	Pattino raschiante C	Scraper C	Schabeteil C	Patin raclant C	Patín rascador C
9	P11.39810	Boccola	Bushing	Douille	Buchse	Anillo-Hebilla
10	A04.38397	Staffa porta micro	Micro-holding bracket	Patte porte-micro	Mikrohaltebuegel	Molde micro
11	D05.141	Contatto magnetico	Magnetic contact	Contact magnétique	Magnetkontakt	Contacto magnético
12	L19.37042	Perno coperchio	Cover pin	Ausgabeöffnungs stift	Goujon couvercle	Perno tapa
13	B15.038	Cerniera mobile	Moving hinge	Fermeoir mobile	Bewegliches Scharnier	Bisagra móvil
14	B15.037	Cerniera fissa	Fixed hinge	Festes Scharnier	Fermeoir fixe	Bisagra fija
15	P20.38398	Tassello portamagnete	Magnet holding boss	Tampon porte- aimant	Magnethaltedübel	Espiga portaimán
16	E07.37991	Magnete	Magnet	Aimant	Magnet	Imán
17	B09.215	Vite cerniera	Screw for hinge	Vis fermeoir	Scharnierschraube	Tornillo bisagra

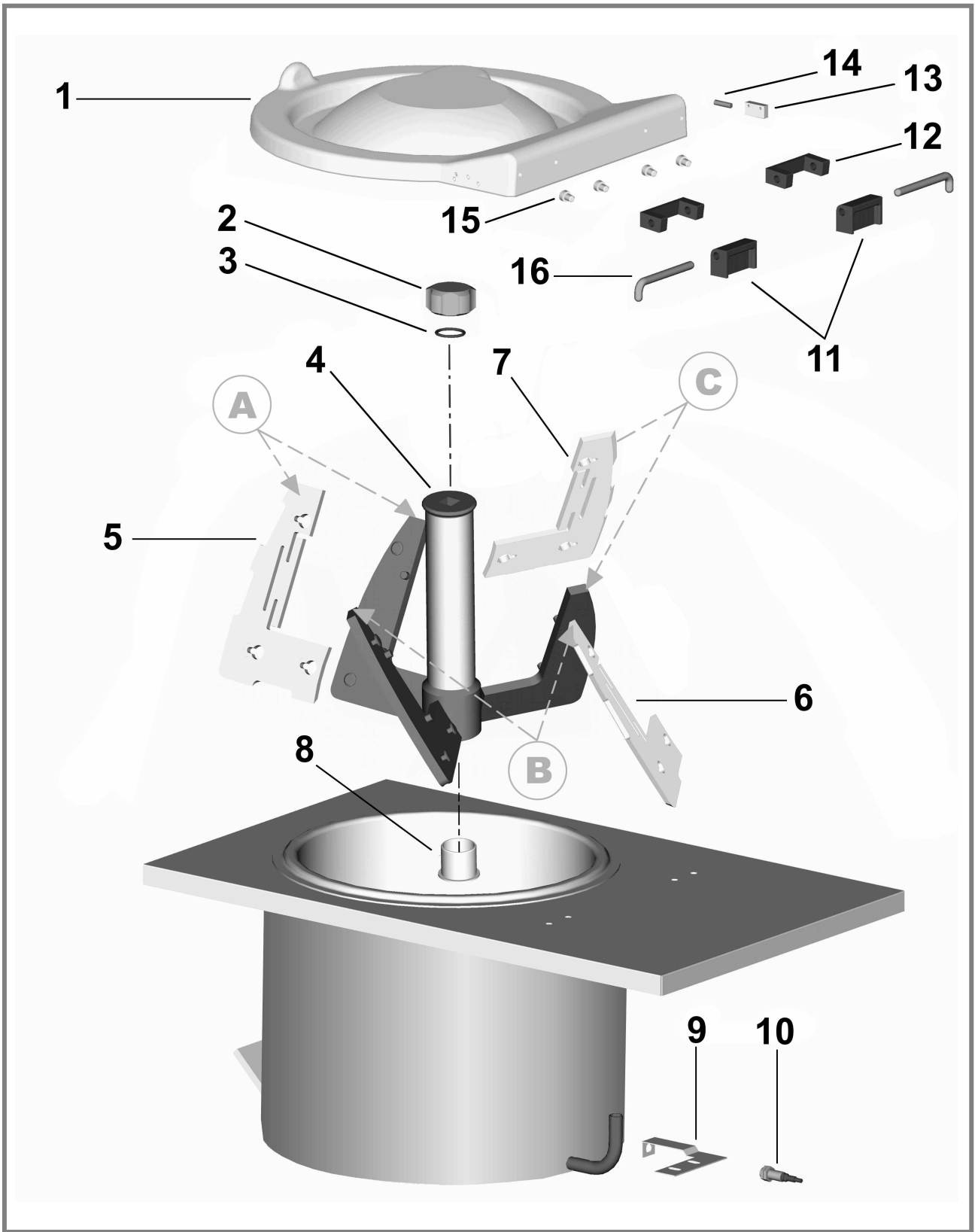
C153 s02 Tav.11



C153 s02 Tav.11

P.	COD.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	B65.38563	Coperchio	Cover	Deckel	Couvercle	Tapa
2	L18.40087	Terminale pomolo	Knob terminal	Knauf-Endteil	Terminale Bague	Terminal pomo
3	L18.39909	Pomolo agitatore	Knob agitator	Rührwerkknäuf	Bague agitateur	Pomo agitador
4	P10.045	OR 3100	OR 3100	OR 3100	OR 3100	OR 3100
5	B61.39806	Agitatore	Agitator	Rührwerk	Agitateur	Agitador
6	P18.39811	Pattino raschiante A	Scraper A	Schabeteil A	Patin raclant A	Patín rascador A
7	P18.39812	Pattino raschiante B	Scraper B	Schabeteil B	Patin raclant B	Patín rascador B
8	P18.39904	Pattino raschiante C	Scraper C	Schabeteil C	Patin raclant C	Patín rascador C
9	P11.39810	Boccola	Bushing	Douille	Buchse	Anillo-Hebilla
10	A04.37989	Staffa porta micro	Micro-holding bracket	Patte porte-micro	Mikrohaltebuegel	Molde micro
11	D05.141	Contatto magnetico	Magnetic contact	Contact magnétique	Magnetkontakt	Contacto magnético
12	B15.037	Cerniera fissa	Fixed hinge	Festes Scharnier	Fermeoir fixe	Bisagra fija
13	B15.038	Cerniera mobile	Moving hinge	Fermeoir mobile	Bewegliches Scharnier	Bisagra móvil
14	P20.38398	Tassello portamagnete	Magnet holding boss	Tampon porte- aimant	Magnethaltedübel	Espiga portaimán
15	E07.37991	Magnete	Magnet	Aimant	Magnet	Imán
16	B09.215	Vite cerniera	Screw for hinge	Vis fermeoir	Scharnierschraube	Tornillo bisagra
17	L19.37042	Perno coperchio	Cover pin	Ausgabeöffnungs stift	Goujon couvercle	Perno tapa

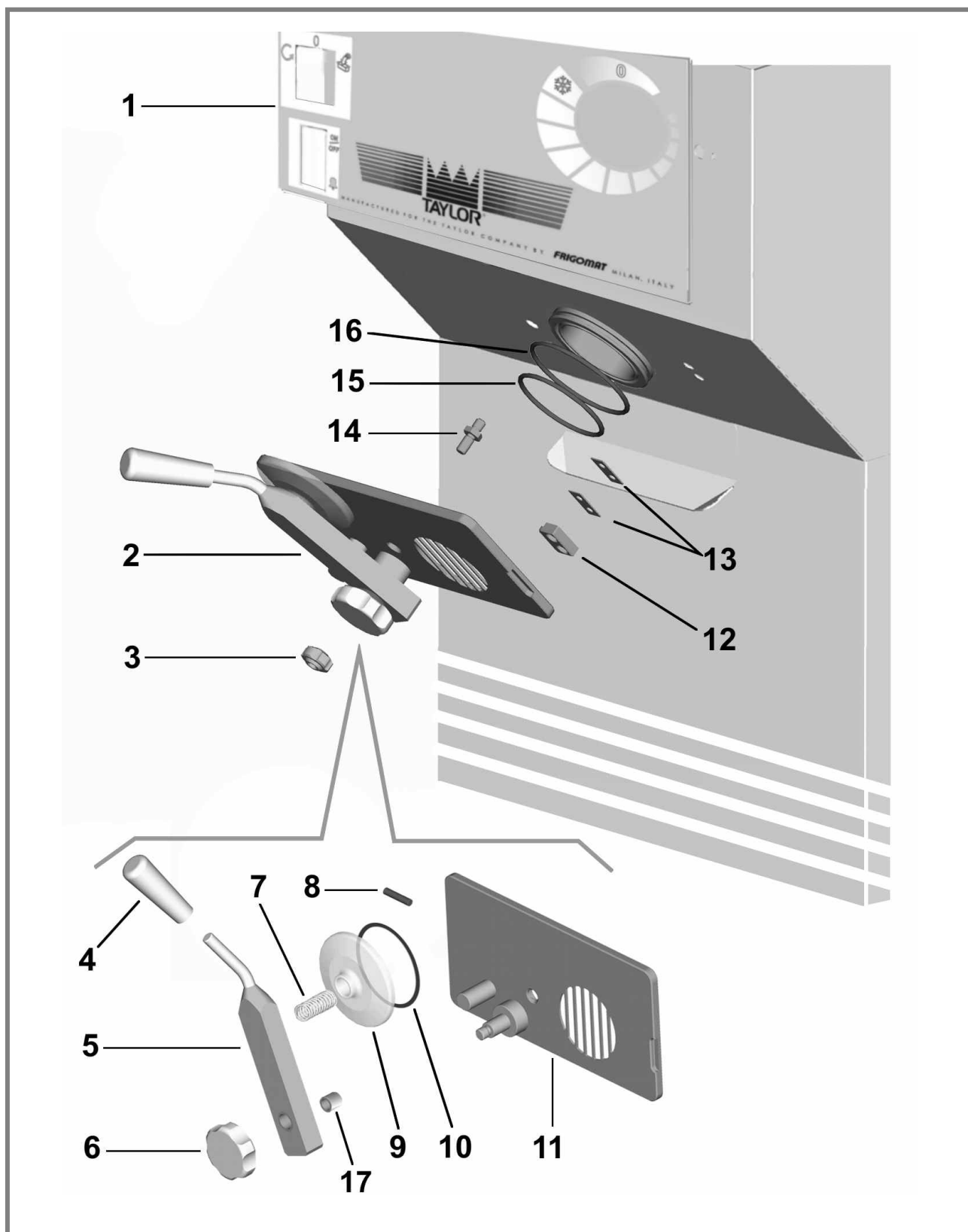
C151 s02 Tav.12



C151 s02 Tav.12

P.	COD.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	B65.38563	Coperchio	Cover	Deckel	Couvercle	Tapa
2	L18.39909	Pomolo agitatore	Knob agitator	Rührwerkknäuf	Bague agitateur	Pomo agitador
3	P10.045	OR 3100	OR 3100	OR 3100	OR 3100	OR 3100
4	B61.40080	Agitatore	Agitator	Rührwerk	Agitateur	Agitador
5	P18.40082	Pattino raschiante A	Scraper A	Schabeteil A	Patin raclant A	Patín rascador A
6	P18.40083	Pattino raschiante B	Scraper B	Schabeteil B	Patin raclant B	Patín rascador B
7	P18.40084	Pattino raschiante C	Scraper C	Schabeteil C	Patin raclant C	Patín rascador C
8	P11.40107	Boccola	Bushing	Douille	Buchse	Anillo-Hebilla
9	A04.37989	Staffa porta micro	Micro-holding bracket	Patte porte-micro	Mikrohaltebuegel	Molde micro
10	D05.141	Contatto magnetico	Magnetic contact	Contact magnétique	Magnetkontakt	Contacto magnético
11	B15.037	Cerniera fissa	Fixed hinge	Festes Scharnier	Fermeoir fixe	Bisagra fija
12	B15.038	Cerniera mobile	Moving hinge	Fermeoir mobile	Bewegliches Scharnier	Bisagra móvil
13	P20.38398	Tassello portamagnete	Magnet holding boss	Tampon porte- aimant	Magnethaltedübel	Espiga portaimán
14	E07.37991	Magnete	Magnet	Aimant	Magnet	Imán
15	B09.215	Vite cerniera	Screw for hinge	Vis fermeoir	Scharnierschraube	Tornillo bisagra
16	L19.37042	Perno coperchio	Cover pin	Ausgabeöffnungs stift	Goujon couvercle	Perno tapa

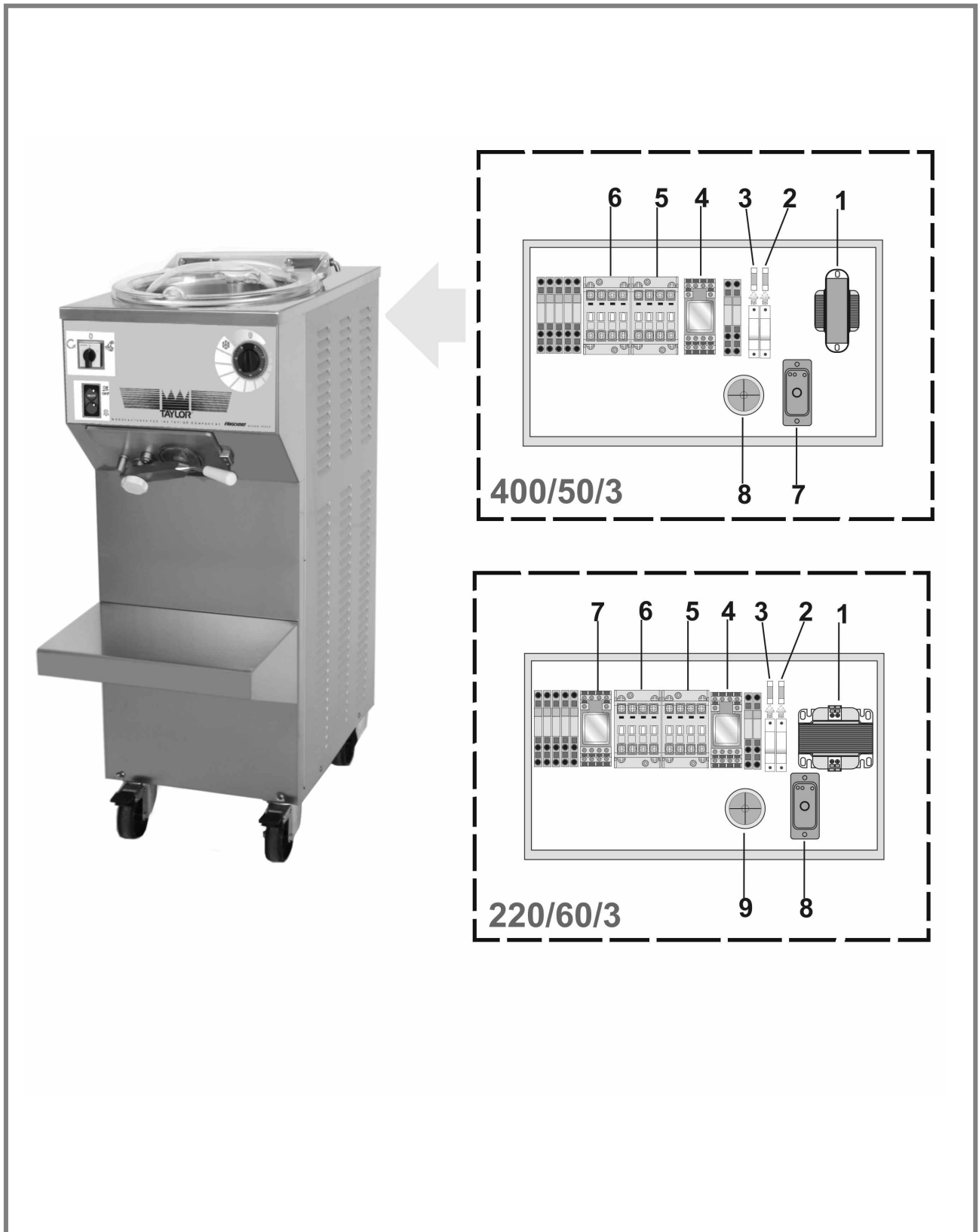
C154-C153-C151 s02 Tav.13



C154-C153-C151 s02 Tav.13

P.	COD.	Mod.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	M02.39977	C153-C154	Etichetta anteriore	Lower label	Vorderes Etikett	Étiquette antérieure	Etiqueta delantera
	M02.40284	C151	Etichetta anteriore	Lower label	Vorderes Etikett	Étiquette antérieure	Etiqueta delantera
2	Z85.39889	C151-53-54	Assieme portello	Door assy	Porte compl.	Kompl. Tür	Grupo puerta
3	L19.39821	C151-53-54	Pomolo	Knob	Pommeau	Griff	Pomo
4	P02.155	C151-53-54	Maniglia leva portello	Lever handle	Poignée	Griff	Manija de bloqueo puerta
5	Z82.39893	C151-53-54	Leva erogazione	Dispensing lever	Poignée du distributeur	Lieferungsgriff	Manija puerta suministradora
6	P02.176	C151-53-54	Pomello fissaggio	Knob	Pommeau	Griff	Pomo
7	B11.002	C151-53-54	Molla	Spring	Ressort	Feder	Muelle
8	E07.39036	C151-53-54	Magnete	Magnet	Aimant	Magnet	Imán
9	P19.37141	C151-53-54	Piattello chiusura erogazione	Dispensing door plug	Plat de fermeture	Verschluß	Platina de cierre
10	P10.129	C151-53-54	Guarnizione piattello	Door seal	Joint de porte	Türdichtung	Guarnición por platina de cierre
11	B50.39888	C151-53-54	Portello	Door	Porte.	Tür	Puerta
12	L19.39822	C151-53-54	Blocchetto chiusura portello	Door block	Bloc de fermeture porte	Türverschluß-block	Bloque cerradura puerta
13	A19.39817	C151-53-54	Spessore blocchetto	Shim	Epaisseur	Scheibe	Espesor
14	L19.39818	C151-53-54	Vite fissaggio portello	Door fixing screw	Vis fixation porte	Fronttür-Fixierschraube	Tornillo fijación puerta
15	P02.39844	C151-53-54	OR 173	OR 173	OR 173	OR 173	OR 173
16	P10.079	C151-53-54	OR 4325	OR 4325	OR 4325	OR 4325	OR 4325
17	B10.160.02	C151-53-54	Bronzina	Bushing	Douille en bronze	Bronzenbuchse	Casquillo

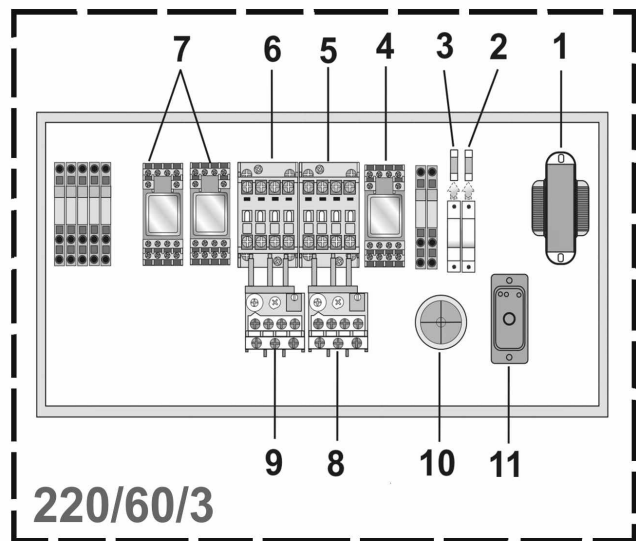
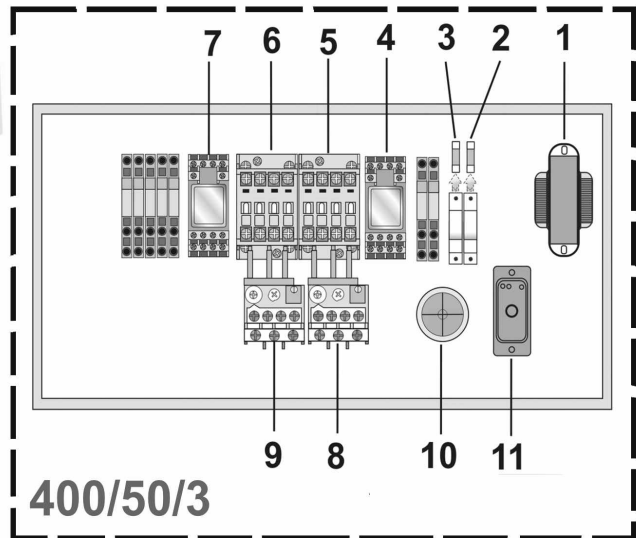
C154-C153 s02 Tav.14



C154-C153 s02 Tav.14

400/50/3						
P.	COD.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	E08.39839	Trasformatore	Transformer	Transformateur	Transformator	Transformador
2	E08.39130	Fusibile 50 mA	Fuse 50 mA	Fusible 50 mA	Sicherung 50 mA	Fusibile 50 mA
3	E08.39277	Fusibile 2,5 A	Fuse 2,5 A	Fusible 2,5 A	Sicherung 2,5 A	Fusibile 2,5 A
4	E08.37283	Relè	Relay	Relais	Relay	Rele
5	E08.39984	Teleruttore 230 V	Remote control switch 230 V	Télérupteur 230 V	Fernschalter 230 V	telerruptor 230 V
6	E08.39984	Teleruttore 230 V	Remote control switch 230 V	Télérupteur 230 V	Fernschalter 230 V	telerruptor 230 V
7	D05.081	Suoneria	Buzzer	Sonnerie	Läutwerke	Alarma
8	E06.37665	Condensatore motore ventilatore C153	Condensator fan motor C153	Condensateur moteur ventilateur C153	Kondensator für Ventilatormotor C153	Condensador por motor ventilador C153
	D04.198	Condensatore motore ventilatore C154	Condensator fan motor C154	Condensateur moteur ventilateur C154	Kondensator für Ventilatormotor C154	Condensador por motor ventilador C154
220/60/3						
P.	COD.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	E08.39839	Trasformatore	Transformer	Transformateur	Transformator	Transformador
2	E08.39130	Fusibile 50 mA	Fuse 50 mA	Fusible 50 mA	Sicherung 50 mA	Fusibile 50 mA
3	E08.39277	Fusibile 2,5 A	Fuse 2,5 A	Fusible 2,5 A	Sicherung 2,5 A	Fusibile 2,5 A
4	E08.37283	Relè	Relay	Relais	Relay	Rele
5	E08.40132	Teleruttore 230 V	Remote control switch 230 V	Télérupteur 230 V	Fernschalter 230 V	telerruptor 230 V
6	E08.40132	Teleruttore 230 V	Remote control switch 230 V	Télérupteur 230 V	Fernschalter 230 V	telerruptor 230 V
7	E08.37283	Relè	Relay	Relais	Relay	Rele
8	D05.081	Suoneria	Buzzer	Sonnerie	Läutwerke	Alarma
9	E06.37665	Condensatore motore ventilatore C153	Condensator fan motor C153	Condensateur moteur ventilateur C153	Kondensator für Ventilatormotor C153	Condensador por motor ventilador C153
	D04.198	Condensatore motore ventilatore C154	Condensator fan motor C154	Condensateur moteur ventilateur C154	Kondensator für Ventilatormotor C154	Condensador por motor ventilador C154

C151 s02 Tav.15



C151 s02 Tav.15

400/50/3						
P.	COD.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	E08.39839	Trasformatore	Transformer	Transformateur	Transformator	Transformador
2	E08.39130	Fusibile 50 mA	Fuse 50 mA	Fusible 50 mA	Sicherung 50 mA	Fusibile 50 mA
3	E08.39277	Fusibile 2,5 A	Fuse 2,5 A	Fusible 2,5 A	Sicherung 2,5 A	Fusibile 2,5 A
4	E08.37283	Relè	Relay	Relais	Relay	Rele
5	E08.40127	Teleruttore 230 V	Remote control switch 230 V	Télerupteur 230 V	Fernschalter 230 V	telerruptor 230 V
6	E08.40127	Teleruttore 230 V	Remote control switch 230 V	Télerupteur 230 V	Fernschalter 230 V	telerruptor 230 V
7	D03.105	Relè	Relay	Relais	Relay	Rele
8	D03.164	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
9	D03.165	Termica Range 10-14	Overload Range 10-14	Thermique Range 10-14	Thermoschutz Range 10-14	Termal Range 10-14
10	E06.37665	Condensatore motore ventilatore	Condensator fan motor	Condensateur moteur ventilateur	Kondensator für Ventilatormotor	Condensador por motor ventilador
11	D05.081	Suoneria	Buzzer	Sonnerie	Läutwerke	Alarma
220/60/3						
P.	COD.	DESCRIZIONE	DESCRIPTION	DESCRIPTION	BESCHREIBUNG	DESCRIPTION
1	E08.39839	Trasformatore	Transformer	Transformateur	Transformator	Transformador
2	E08.39130	Fusibile 50 mA	Fuse 50 mA	Fusible 50 mA	Sicherung 50 mA	Fusibile 50 mA
3	E08.39277	Fusibile 2,5 A	Fuse 2,5 A	Fusible 2,5 A	Sicherung 2,5 A	Fusibile 2,5 A
4	E08.37283	Relè	Relay	Relais	Relay	Rele
5	E08.40127	Teleruttore 230 V	Remote control switch 230 V	Télerupteur 230 V	Fernschalter 230 V	telerruptor 230 V
6	E08.40127	Teleruttore 230 V	Remote control switch 230 V	Télerupteur 230 V	Fernschalter 230 V	telerruptor 230 V
7	D03.105	Relè	Relay	Relais	Relay	Rele
8	D03.165	Termica Range 10-14	Overload Range 10-14	Thermique Range 10-14	Thermoschutz Range 10-14	Termal Range 10-14
9	D03.168	Termica Range 13-19	Overload Range 13-19	Thermique Range 13-19	Thermoschutz Range 13-19	Termal Range 13-19
10	E06.37665	Condensatore motore ventilatore	Condensator fan motor	Condensateur moteur ventilateur	Kondensator für Ventilatormotor	Condensador por motor ventilador
11	D05.081	Suoneria	Buzzer	Sonnerie	Läutwerke	Alarma





Azienda Certificata
UNI EN ISO 9001:2000

Numero Certificato
50 100 5650

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