

TKAZ

50-60-80-100

Manuale di installazione, uso e manutenzione
Manual for installation, use and maintenance
Manual de instalación, uso y manutención
Notice d'installation, d'utilisation et d'entretien
INSTALLATIONS-, BEDIENUNGS- UND INSTANDHALTUNGSHANDBUCH

INDEX

1. PRESENTATION	5
2. HOW TO USE THIS MANUAL	6
3. TECHNICAL SPECIFICATIONS	8
3.1. Identifying the product	8
3.2. Conformity to European directives.....	8
3.3. Use intended for the product	8
3.4. Technical Specifications	8
4. INSTALLATION	9
4.1. Checking on delivery	9
4.2. Choosing a place for installation.....	9
4.3. Moving the unit.....	10
4.4. Electrical Connection.....	10
5. FUNCTIONING AND USE	12
5.1. Safety devices	12
5.2. Electrical devices.....	12
5.3. Controls.....	12
5.4. Machine cycle.....	13
6. SAFETY WARNINGS	14
6.1. Prohibited actions and obligations towards the prevention of accidents.....	14
6.1.1. <i>Warnings for installers</i>	14
6.1.2. <i>Warnings for users</i>	14
6.1.3. <i>Warnings for the maintenance operator</i>	15
7. CLEANING	16
7.1. Maintenance and ordinary cleaning.....	16
8. MAINTENANCE	18
9. DECOMMISSIONING AND DEMOLITION	19

TECHNICAL ENCLOSURES

- A. Technical Specifications
- B. Wiring diagrams
- C. Exploded views

1. PRESENTATION

ERACLE are kneading machines with dipping arms in various dimensions and models conceived to meet a variety of client requirements.


The kneading machines with dipping arms Eracle have been designed and constructed to a high standard of quality and ease of maintenance so they last longer.


The construction of the machine has been undertaken with care: the use of stainless steel ensures extremely easy cleaning and a long working life to the product.


Manufacturer thanks you for the preference expressed in purchasing this product. We can confidently assure you that it is a good choice. Our company has been committed to the manufacture of quality products for many years. We do not believe in making compromises and use the best possible materials.


To get the best use out of your new kneading machines with dipping arms please read the information contained in this manual carefully.


2. HOW TO USE THIS MANUAL

 The paragraphs marked with this symbol contain indications essential to safety. They must all be read by installers, the end user and any employees that use the machine. Manufacturer does not assume any responsibility for damage or injury incurring as a result of ignoring the safety criteria outlined in these paragraphs.


 This symbol, applied to various points on the machine, serves to warn the user of the presence of a non-insulated “high voltage hazard” inside the machine’s casing there being enough power to constitute a fire risk or to electrocute a person.

 The paragraphs marked with this symbol contain important information to avoid causing damage to the machine. It is in the users own interests to read these paragraphs carefully.

 This symbol applied to various surfaces of the machine, shows that these can reach very high temperatures and should never be touched without taking the necessary precautions.

 It is recommended that this installation, instruction and service manual be kept in close proximity to the equipment so that it can be easily and quickly consulted. The manual must accompany the equipment if it is resold as it cannot be considered complete and safe without it.

Take note of the manual code and version shown on the back cover. In the event that this copy is lost or destroyed, you can order another using these

 This manual is made up of a number of chapters. They should be read in their entirety by both installers and service personnel as well as by the end user to ensure **safety of use** and to get the best results from this product.

Some useful indications for the consultation of each chapter are given below.

Chapter 3 contains the reference standards of the machine and directions for the proper use of the same.

Chapter 4 contains all the information needed to install the machine. These are mainly aimed at specialized personnel but should be read by the end user beforehand so as to predispose the environment where the machine will be operated for the installation.

Chapters 5 and 6 are intended for the user who has to learn how to use the machine. These serve as a guide to the essential operations of turning on, using and turning off of the machine under safe conditions.


Chapter 7 gives all the information necessary for the cleaning of the equipment: all those operations that must be carried out by the user to guarantee that it continues to function under safe, hygienic and sanitary conditions and continues to give the best results.

Chapter 8 gives directions for dismantling the machine.

The technical annexes contain features related to the specific model of machine and all values which may be necessary for the selection, installation and use. This chapter should be used as a point of reference to check that the way the owner intends to use it is in line with the way the machine has been designed to operate and ensure that and ensure that information concerning the precise value of a given measurement or tolerance of the equipment is available whenever necessary.

This chapter also provides a description of the electrical equipment that comes with the machine, the exploded of equipment and a list of spare parts, to facilitate order and replace any damaged parts.

 **These maintenance operations must be carried out by specialized personnel.**


 The Manufacturer reserves the right to update the production series and instruction manuals without the obligation to update the previous production series and previously issued instruction manuals.

3. TECHNICAL SPECIFICATIONS

3.1. Identifying the product

This manual refers to kneading machines with dipping arms **ERACLE 50-60-80-100**.

3.2. Conformity to European directives

The kneading machines with dipping arms **ERACLE** carry the  obligatory mark, that guaranteeing their conforming to the following European directives:

2014/35/CE low current directive;

2014/30/CE electromagnetic compatibility directive;


2006/42/CE machines directive;

2011/65/CE RoHS 2 directive;


Regulation 1935/2004/CE objects destined for coming into contact with food products.

3.3. Use intended for the product

ERACLE machine has been designed exclusively for use in food, with predominant intended use of pizzerias, bakeries....

 The use to which the product should be put as stated above and the configurations foreseen for this equipment are the only ones authorized by the Manufacturer. **Do not use these machines in any way other than that indicated in the instructions provided.**

The kneading machines with dipping arms **ERACLE** are conceived for **professional use in the foodservice industry by trained personnel.**


 The use intended is only valid for equipment which is in good structural, mechanical and electrical condition.


3.4. Technical Specifications

For technical specifications refer to the following technical annexes at the end of this manual:

- A. Technical Specifications
- B. Wiring diagrams
- C. Exploded views

4. INSTALLATION

 **ATTENTION!** These installation instructions are for the exclusive use of personnel qualified for the installation and maintenance of electrical equipment conceived for professional use in the foodservice industry and community catering operations. An installation carried out by unqualified persons could cause damage to the machine, to people, animals or property

 **ATTENTION!** Proceed with the installation according to those norms in force in the country where it is being carried out.

In addition, where it is necessary to carry out modifications or adaptations to the electrical systems of the building in which the machine will be installed, whoever carries out such modifications must certify that the work has been undertaken according to current “best practices”.

4.1. Checking on delivery

Unless otherwise agreed, the products are carefully packaged in a robust structure in wood and with a sheet of nylon bubble wrap giving protection against knocks and humidity during transport. These are consigned to the freight operator in the best of condition.

We recommend, however, that you to check the packaging on arrival for any signs of damage. If damage has occurred, have it noted on the receipt which must be signed by the driver.

Once the equipment has been unpacked, check that it has not suffered damage. Also check that all the disassembled parts are present.

In the event of damage to the equipment and/or missing parts, bear in mind that the freight operator can only accept claims within 15 days of delivery and that the manufacturer cannot be held responsible for damage incurred to its products during their delivery. We are however, available to assist you in presenting your claim.


 **In the event of damage do not try to use the equipment and consult with professionally qualified personnel.**

4.2. Choosing a place for installation

An effective, safe and long lasting functioning of the appliance also depends on the position in which it is installed. For this reason, it is advisable to carefully consider where to install the equipment before it is delivered.

Install the appliance in a dry and easily accessible place both to facilitate its use and to carry out cleaning and maintenance. The area around the equipment must be kept clear. It is particularly important to avoid obstructing the cooling outlets located on the sides of the machine.

 **The appliance must be installed at least 20 cm from the walls of the room or from other equipment.**


 A check must be made to ensure that the temperature and relative humidity never exceed the maximum and minimum values indicated in the specifications (Technical annexes) even when the machine or other machines in the room are functioning.

Exceeding these values especially the temperature or the maximum relative humidity can easily and unexpectedly damage electrical equipment creating hazardous situations.


4.3. Moving the unit


The appliance is supplied complete with all its parts in its own packaging closed and held together with straps.

The appliance must be offloaded from the transport vehicle using an appropriate moving equipment. Whilst it is being raised, avoid tugging or sudden movement. To transport the appliance to its place of installation use a wheeled trolley with an adequate weight capacity.


 Make sure that the lifting equipment has a lifting capacity superior to that of the weight of the load.

All responsibility for the lifting of loads rests with the person doing the lifting.

 In all circumstances, to avoid unpredictable movement, be aware of the equipment's centre of mass.

 **Take care that children do not play with the packaging materials (e.g., plastic sheeting and Styrofoam): suffocation danger!**

4.4. Electrical Connection

 Before making any connection, check that the specifications of the electrical supply to which the equipment must be connected, correspond to the specifications of the power supply required by the apparatus itself.

In compliance with the norms in force. **It is obligatory to connect the ground/earth cable (yellow-green) to an earthing system with the same dispersion capacity as the appliance itself. The efficiency of this system must be correctly verified according to the norms in force.**

The electrical socket must be easily accessible and must not require further location after the installation of the equipment. The distance between the equipment and the socket must be sufficient to avoid stretching the power cable. The power cable must never be trapped under the feet or wheels of the equipment.

 **If the Power cable is damaged it must be substituted by customer support or by a qualified service engineer so as to avoid any risk.**

The Manufacturer does not accept responsibility for damage caused by failure to observe the abovementioned norms.

5. FUNCTIONING AND USE

5.1. Safety devices

The safety devices consist of electrically interlocked protections.

The protection of the working area is obtained thanks to a mobile protection with an electrical block by means of a safety limit switch which interrupts the power supply once it has been activated. (Cut off of contacts).

5.2. Electrical devices

The controls consist of a main switch, a push-button I, a push-button II, a STOP push-button with block (restart from where it has stopped) and a warning light, Fig.5.1.

Both the components that work at the mains voltage and those of the 110 Volt auxiliary circuit are enclosed in a metal tin box (IP 55 protection rating). It is recommended not to obstruct the slots in the rear casing which serves to ventilate the engine and the rear parts.

5.3. Controls

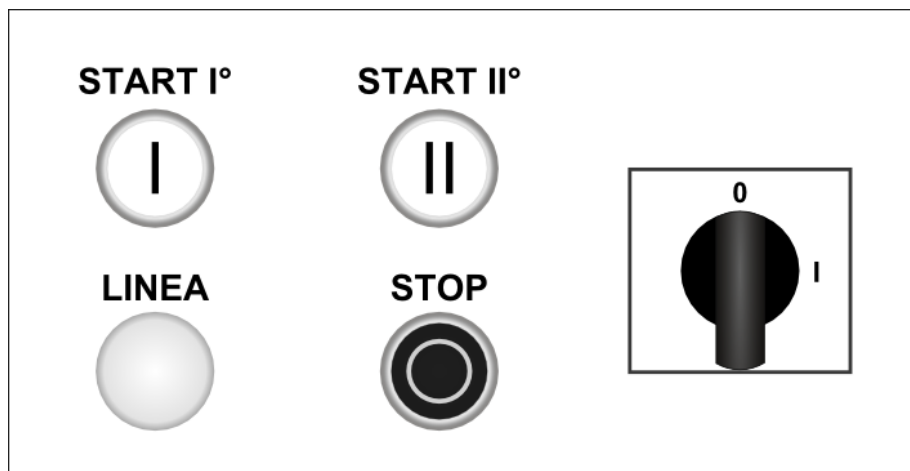


Fig. 5.1

START I°	First speed
START II°	Second speed
LINEA	Power supply light
STOP	Stop push-button
0/1	Main switch

5.4. Machine cycle

To work with the machine operate as follows:

1. Raise the guard and load the ingredients into the bowl.
2. Lower the protection, turn on the power supply with the main switch in position 1 (ON) and start the machine in 1st speed by pressing the START button I°.
3. Once the ingredients are amalgamated, stop the machine with the STOP button and restart the machine in 2nd speed by pressing the START II° button.
4. Once the machine has been used, press the STOP button and cut off power by setting the main switch to position 0 (OFF).

Any addition of ingredients during the work can be done without stopping the machine through the opening on the guard. If you want to examine the mixture you have to raise the protection and wait for the arms to stop completely.

Once the protection has been lowered, press the START I° or START II° speed button again.

Another way to stop the machine is given by the black Stop button.

6. SAFETY WARNINGS

6.1. Prohibited actions and obligations towards the prevention of accidents

 **Read the warnings listed in this chapter carefully. They give important indications concerning safety.**

It is forbidden to install accessories that do not conform with safety standards.

Have the appliance inspected regularly by a qualified technician to guarantee your safety.

6.1.1. *Warnings for installers*

Check that the preparation for housing the appliance conforms to the local National and European regulations.

- Follow all the indications in this manual
- Do not make any overhead electrical connections using provisional or non-insulated cabling.
- Check that this electrical equipment is efficiently earthed.
- Always use personal safety devices and other means of protection foreseen by the law.

6.1.2. *Warnings for users*


The environmental conditions of the place where the appliance is to be installed must have the following characteristics:


- the area must be dry;
- be distant from sources of heat or water;
- have adequate ventilation and illumination conforming to the norms of hygiene and safety foreseen by the laws in force;
- The floor must be level and compact to facilitate thorough cleaning;
- there must not be any obstacles of any kind in the immediate vicinity that could compromise the normal ventilation of the area;

Apart from this the user must:


- make sure that children do not come close to the equipment whilst it is functioning;
- observe the rules laid out in this manual;

- not use the machine inappropriately but stick scrupulously to the use for which it was designed;
- not remove or interfere with the equipment's safety mechanisms;
- keep the safety systems in good working order;
- carry out all working procedures with the utmost safety and calm;
- respect the instructions and warnings highlighted by the signs on the equipment. These signs are to prevent accidents and must always be perfectly legible. Whenever they are damaged or illegible it is obligatory to replace them by requesting the original part from the manufacturer;
- disconnect the electricity supply after the appliance has been used,
- before carrying out cleaning or maintenance.

 **ATTENTION! Whilst the machine is working it is forbidden to remove the safety protection seeing that its parts are moving. These could cause injury to hands.**


 In the case of fire do not use liquid extinguishing agents but only those in powder form

6.1.3. Warnings for the maintenance operator


 Disconnect the electricity supply before working on electrical or electronic parts or connections.


- Always use personal safety devices and other means of protection.
- Before beginning any maintenance operations make sure that the equipment has cooled down if it has just been used.
- Should one of the safety devices not work or not be set correctly the appliance must be considered out of order.

7. CLEANING


 **Cleaning should be carried out with the equipment turned off and at room temperature having taken the precaution of disconnecting the electricity supply.**

Weekly maintenance can be carried out by the equipment's operator given that they observe the safety procedures set out in this manual. A simple but regular and careful clearing guarantees efficient performance and the normal functioning of this equipment.


 Always use person protection gear and always use tools that are appropriate for maintenance.

 Do not direct jets of water onto the equipment for clearing as these can penetrate through to and damage the electrical system with the consequent risk of electrocution and the equipment starting up unexpectedly.

It is advisable to wash the various removable parts before food residues on them dry and go hard.

 Do not use abrasive tools (abrasive sponges, etc.) because these will cause the stainless steel and glass parts to become opaque and will, quite quickly, remove the protective layer of aluminum coated sheet steel, at which point it will start to rust.

 Do not use detergents containing chlorine.

 **After the maintenance operation or repair has been carried out, reinstall all physical protection and reactivate all safety devices before putting the machine back into service.**

7.1. Maintenance and ordinary cleaning

Every day: cleaning the bowl, kneading arms and areas near the work area.

Every week: complete cleaning of the machine in all parts.

Every two months: checking the tension of the belts, checking the regular functioning of the safety guard limit switch, checking the oil level by removing the upper casing (Fig.7.1).

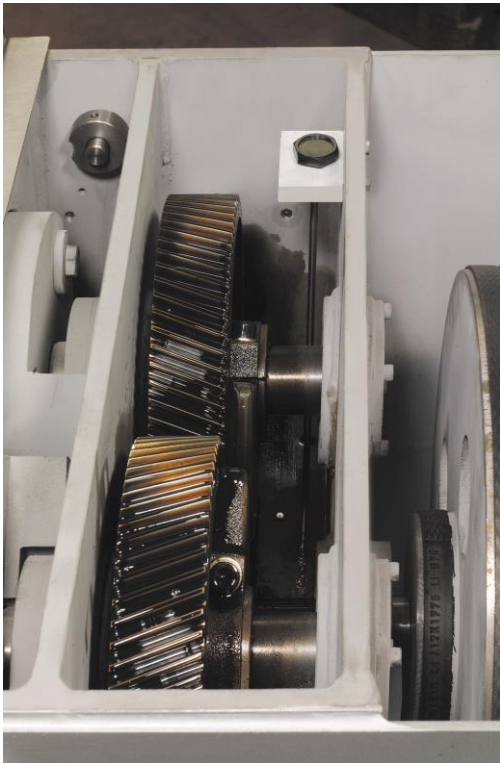


Fig. 7.1

8. MAINTENANCE

⚠ WARNING! These use and maintenance instructions are intended only for staff qualified for the installation and maintenance of electrical equipment. Maintenance by other persons may cause damage to the equipment, persons, animals or things.

⚠ In the majority of cases it is necessary to remove the fixed guards in order to carry out repairs and checks. This also renders the voltage cables accessible.

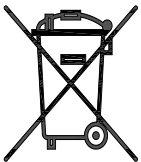
Before carrying out any maintenance operations check that the equipment's feed cable plug is disconnected from the switchboard. Put the plug in a place where the maintenance operator can easily ascertain that it has been disconnected during all of the work done with the guards removed.

9. DECOMMISSIONING AND DEMOLITION

Before proceeding with the decommissioning disconnect the electrical supplies to the equipment and any other connections there may be and then move the modules using suitable means such as: forklift trucks, hoists, and so on.

The machines are made up of the following materials: stainless steel, coated steel, glass, ceramic material, rock wool and electrical parts. For the purposes of demolition therefore the materials have to be separated in observance with the norms in force in the place where the machine is being dismantled.

In any case, do not dispose of these directly into the environment.



Separate collection. This product must not be disposed of with normal household waste. Local RAEE regulations may provide for separate collection of this kind of product.

ERACLE

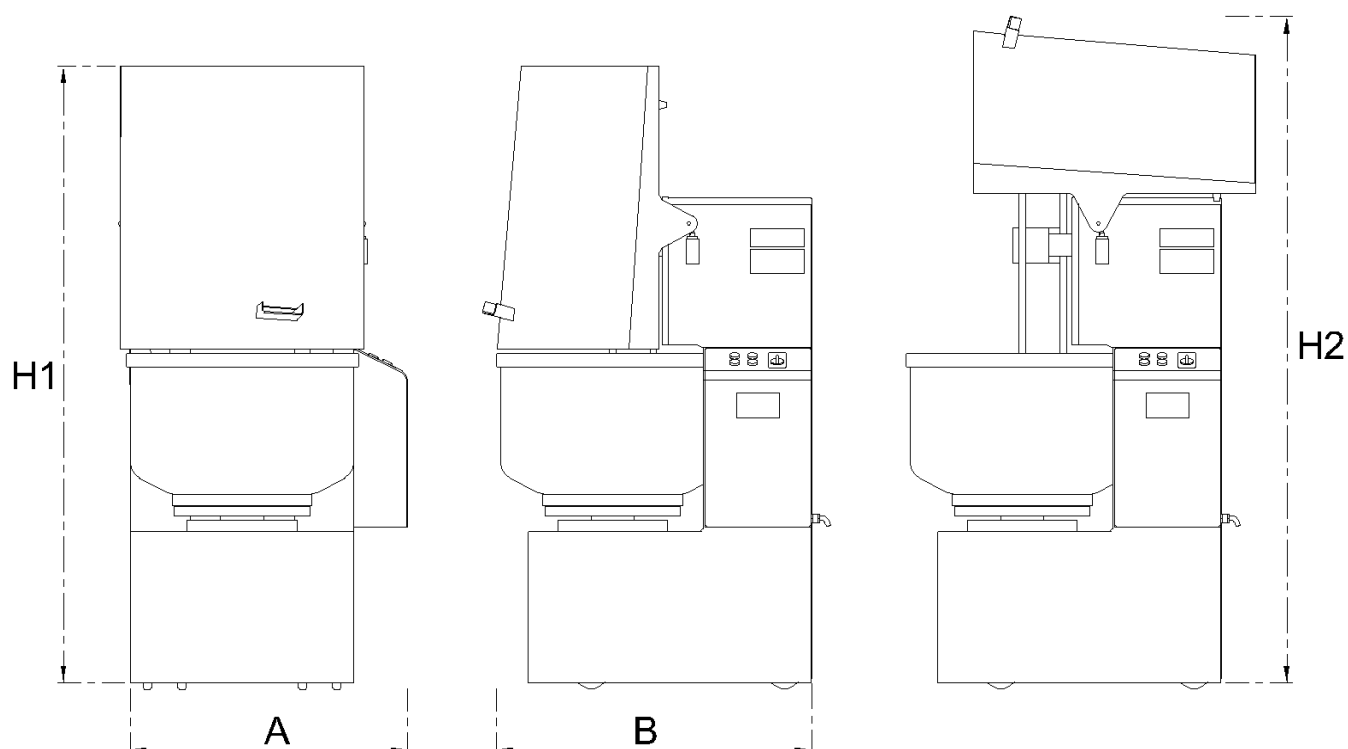
50-60-80-100

Allegati tecnici
Technical enclosures

A. Caratteristiche tecniche

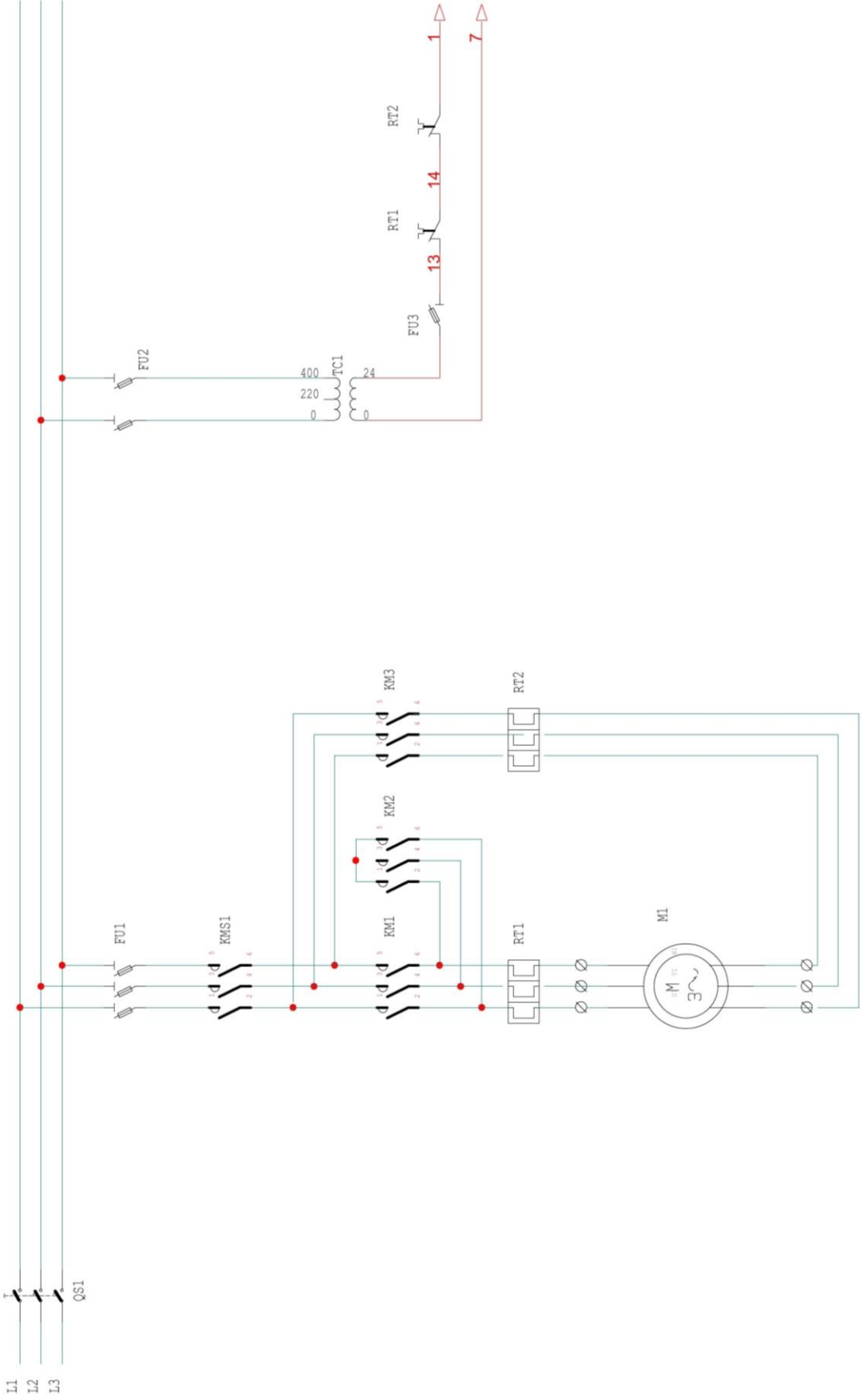
A. Technical specifications

ITALIANO	ENGLISH	TKAZ50	TKAZ60	TKAZ80	TKAZ100
Peso	Weight	400 kg	415 kg	625 kg	630 kg
Larghezza A	Width A	650 mm	650 mm	750 mm	750 mm
Profondità B	Depth B	770 mm	770 mm	900 mm	920 mm
Altezza H1	Height H1	1445 mm	1445 mm	1660 mm	1662 mm
Altezza H2	Height H2	1611 mm	1611 mm	1805 mm	
Dimensioni vasca	Bowl dimensions	Ø 540x330 mm	Ø 567x340 mm	Ø 655x410 mm	Ø 685x420 mm
Peso pasta	Pastry weight	50 Kg	60 Kg	80 Kg	100 Kg
% Acqua/farina	% Water/flour	40%			
N° velocità	N° speed	2	2	2	2
Bracciate 1°vel.	Arm 1st speed	42/min	42/min	42/min	42/min
Bracciate 2°vel.	Arm 2nd speed	62/min	62/min	62/min	62/min
Alimentazione elettrica	Electrical power	Trifase Three-Phase			
Tensione	Voltage	400 Vac			
Frequenza	Frequency	50 o 60 Hz			
Potenza elettrica tot	Total electrical power	1,1/1,5 kW	1,5/2,2 kW	1,8/3,1 kW	1,8/3,1 kW
Corrente a 400V	Current at 400V	4,2 A	5 A	7,2 A	7,2 A
Collegamento elettrico	Electrical connection	Cavo pentapolare senza spina - Plugless five lead cable			
Lunghezza cavo	Cable length	2 m			
Condizioni ambientali - Environment					
Temperatura	Temperature	0 – 40 °C			
Umidità massima	Maximum humidity	95% senza condensa without condensation			
Livello di rumore	Noise level	< 70 decibel			



B. Schema elettrico (400 Vac. ~ 3+N 50-60Hz)

B. Wiring diagram (400 Vac. ~ 3+N 50-60Hz)



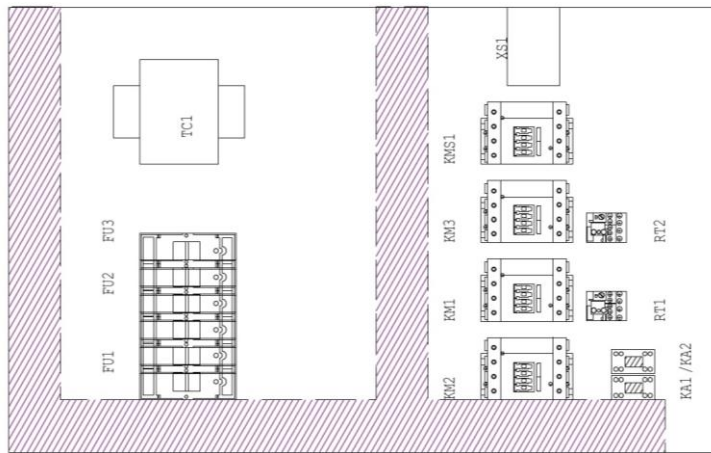
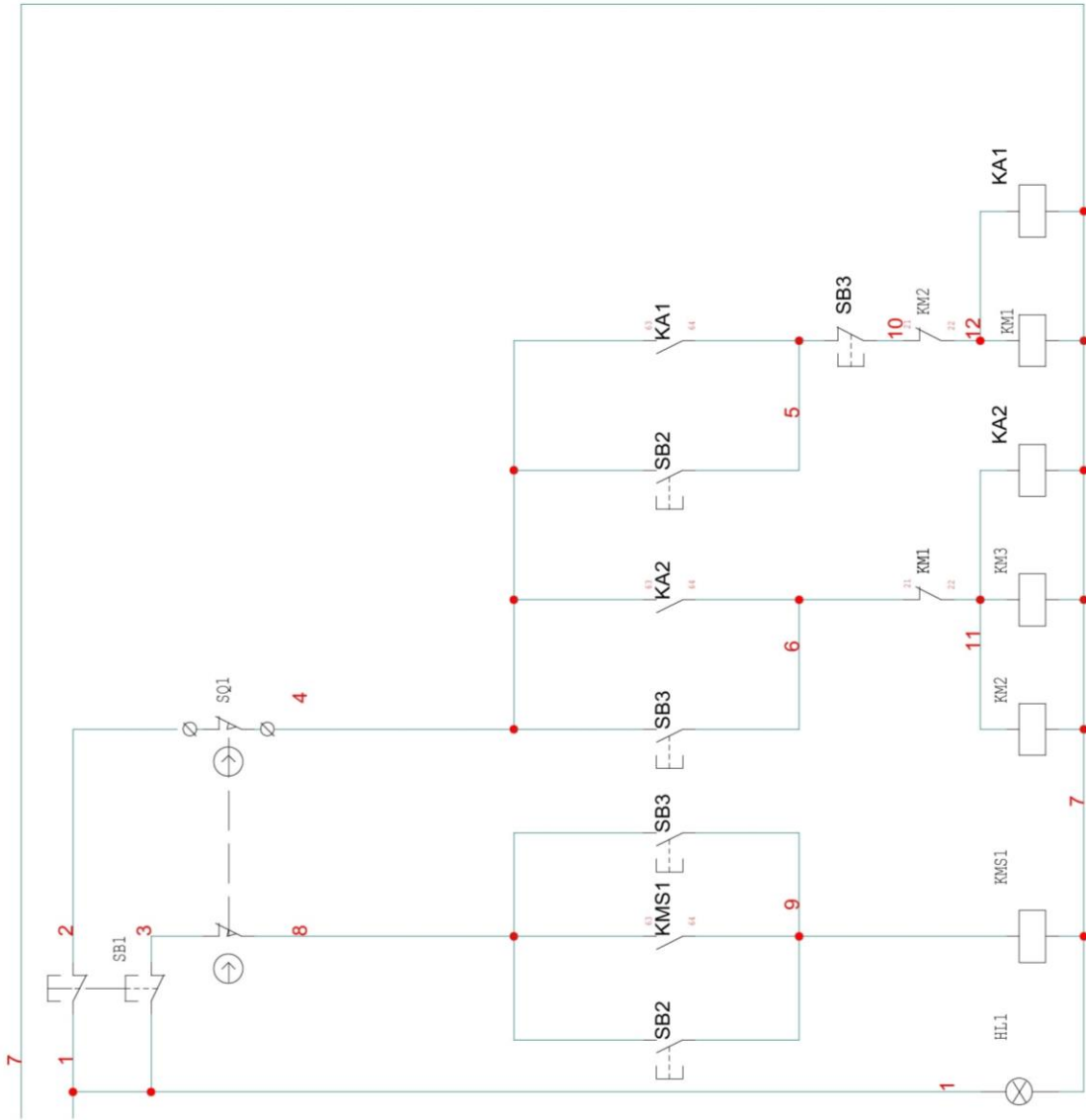
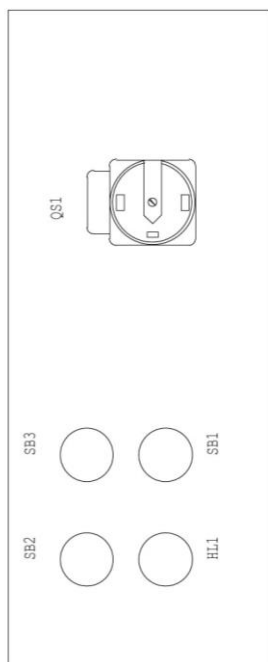


Tabella codici di riferimento componenti elettrici
List of electrical components parts

	DESCRIZIONE	DESCRIPTION
KM1	Contattore	Contactator
RT1	Termico	Automatic circuit breaker
KM2	Contattore	Contactator
KM3	Contattore	Contactator
RT2	Termico	Automatic circuit breaker
KMS1	Contattore	Contactator
SB1	Pulsante stop	Stop button
SB2	Pulsante marcia 1	Start 1 button
SB3	Pulsante marcia 2	Start 2 button
HL1	Spia rete	Power light
TC1	Trasformatore	Transormer
SQ1	Finecorsa	Micro-switch
QS1	Interruttore generale	Main switch
KA1	Relè	Relay
KA2	Relè	Relay
FU1	Portafusibile	Fuse holder
FU2	Portafusibile	Fuse holder
	Fusibile	Fuse

C. DISEGNI ESPLOSI ED ELENCO PARTI DI RICAMBIO

Per interventi complessi e nel caso di rotture vi preghiamo di contattarci. Comunque, allo scopo di semplificare la ricerca dei guasti e l'eventuale sostituzione delle parti danneggiate, diamo di seguito una lista delle parti di ricambio, i disegni esplosi e figure con i riferimenti a ciascuna delle parti elencate.

C. EXPLODED VIEWS AND LIST OF SPARE PARTS

For complicated maintenance works and in case of breakages we kindly ask you to contact us.

However, in order to simplify troubleshooting and possible replacement of damaged parts, we give below a list of spare parts, exploded drawings and figures with references to each party listed.

C. DIBUJOS TÉCNICOS Y LISTA DE REPUESTOS

Para interventos más complicados y en caso de rupturas, les rogamos contactarnos. En todo caso, con el fin de simplificar la búsqueda de las averías y la eventual sustitución de piezas dañadas, damos a continuación una lista de repuestos, los dibujos técnicos y figuras referentes a cada una de las piezas elencadas.

C. Dessins d'ensemble et liste des pièces de rechange

Nous vous prions de nous contacter en cas d'interventions plus complexes ou de ruptures. Toutefois, afin de simplifier la recherche des avaries et l'éventuelle substitution de pièces endommagées, vous trouverez ci-dessous une liste des pièces de rechange, les dessins d'ensemble et les figures avec les références de toutes les pièces indiquées.

C. EXPLOSIONSZEICHNUNGEN UND ERSATZTEILLISTE

BITTE SETZEN SIE SICH BEI UMFANGREICHEREN EINGRIFFEN BZW. BEI BRÜCHEN MIT UNS IN VERBINDUNG. UM DIE STÖRUNGSSUCHE UND DAS AUSWECHSELN VON EVENTUELL BESCHÄDIGTEN TEILEN ZU ERLEICHTERN, FÜHREN WIR NACHSTEHEND EINE ERSATZTEILLISTE UND DIE EXPLOSIONSZEICHNUNGEN MIT DEN BEZÜGEN DER AUFGEFÜHRTE TEILE AUF.

Tabella codici di riferimento corpo macchina
List of spare frame group

	DESCRIZIONE	DESCRIPTION
1	Albero vasca	Bowl shaft
2	Albero trasmissione	Trasmission shaft
3	Albero	Shaft
4	Telaio	Frame
5	Boccola	Bushing
6		Cover
7	Distanziale	Spacer
8	Perno	Pin
9	Perno ruote anteriori	Front wheel pin
10	Perno ruote posteriori	Rear Wheel Pin
11	Supporto	Bracket
12	Piatto	Plate
13	Supporto cuscinetto	Bearing support
14	Supporto	Bracket
15	Vasca	Bowl
16	Cuscinetto	Bearing
17	Giunto/manicotto	Coupling
18	Cinghia	Belt
19	Cinghia	Belt
20	Cuscinetto	Bearing
21	Anello filettato	Theaded ring
22	Chiavetta	Key
23	Ruota	Wheel
25	Cuscinetto a flangia	Flange bearing
26	Riduttore	Gearbox
27	Vite	Screw
28	Motore	Motor
29	Puleggia	Pulley
30	Puleggia	Pulley

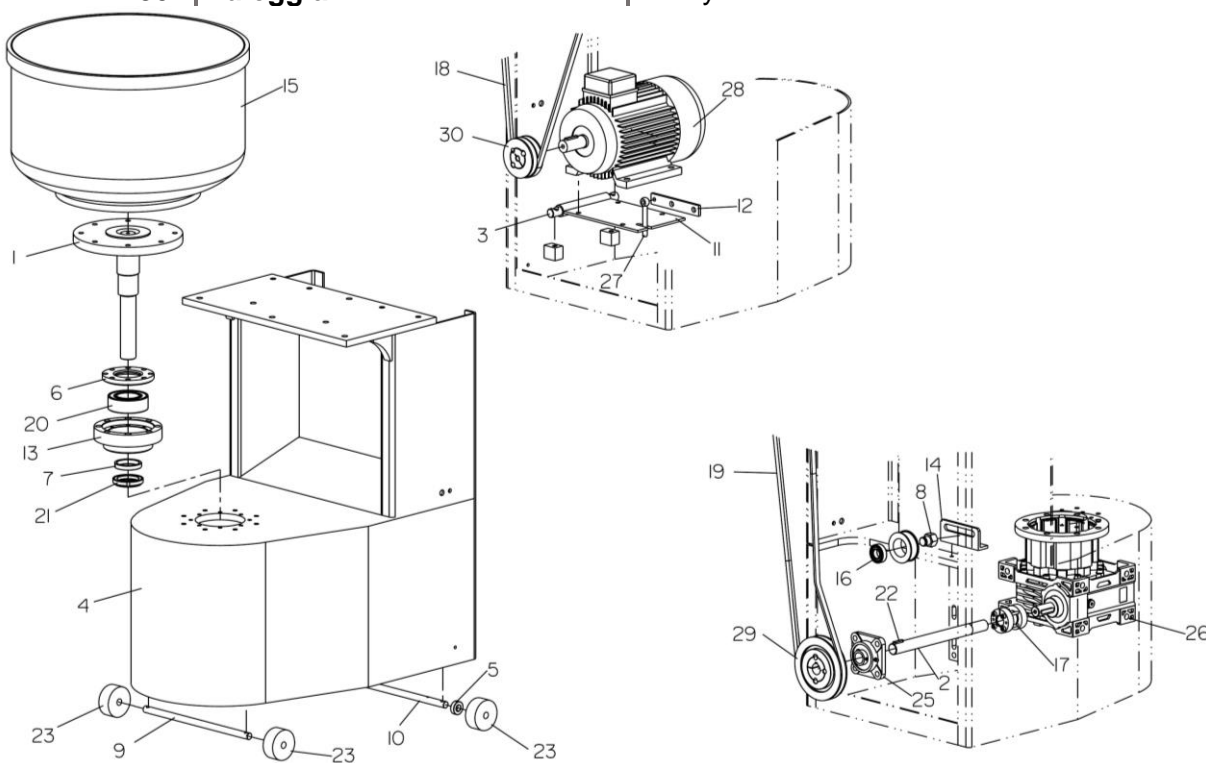


Tabella codici di riferimento gruppo bracci
List of spare arms group

	DESCRIZIONE	DESCRIPTION
1	Disco	Disk
2	Cuscinetto	Bearing
3	Albero	Shaft
4	Albero braccio sx	Arm shaft sx
5	Albero	Shaft
6	Albero braccio dx	Arm shaft dx
7	Braccio sx	Arm sx
8	Braccio dx	Arm dx
9	Distanziale	Spacer
10	Boccola	Bushing
11	Carter	Carter
12	Carter	Carter
13	Protezione	Cover
14	Protezione	Cover
15	Protezione	Cover
16	Protezione	Cover
17	Contrappeso	Counter weight
18	Distanziale	Spacer
19	Distanziale	Spacer
20	Distanziale	Spacer
21	Distanziale	Spacer
22	Ingranaggio dx	Gear dx
23	Ingranaggio sx	Gear sx
25	Carter	Carter
26	Carter	Carter
27	Puleggia	Pulley
28	Pignone riduttore	Pinion Gearbox
29	Cuscinetto	Bearing
30	Cuscinetto	Bearing
31	Cuscinetto	Bearing
32	Anello di tenuta	Sealing ring
33	Anello di tenuta	Sealing ring
34	OR	OR
35	Anello seeger	Seeger
36	Giunto/manicotto	Coupling
37	Giunto/manicotto	Coupling
38	Cuscinetto	Bearing

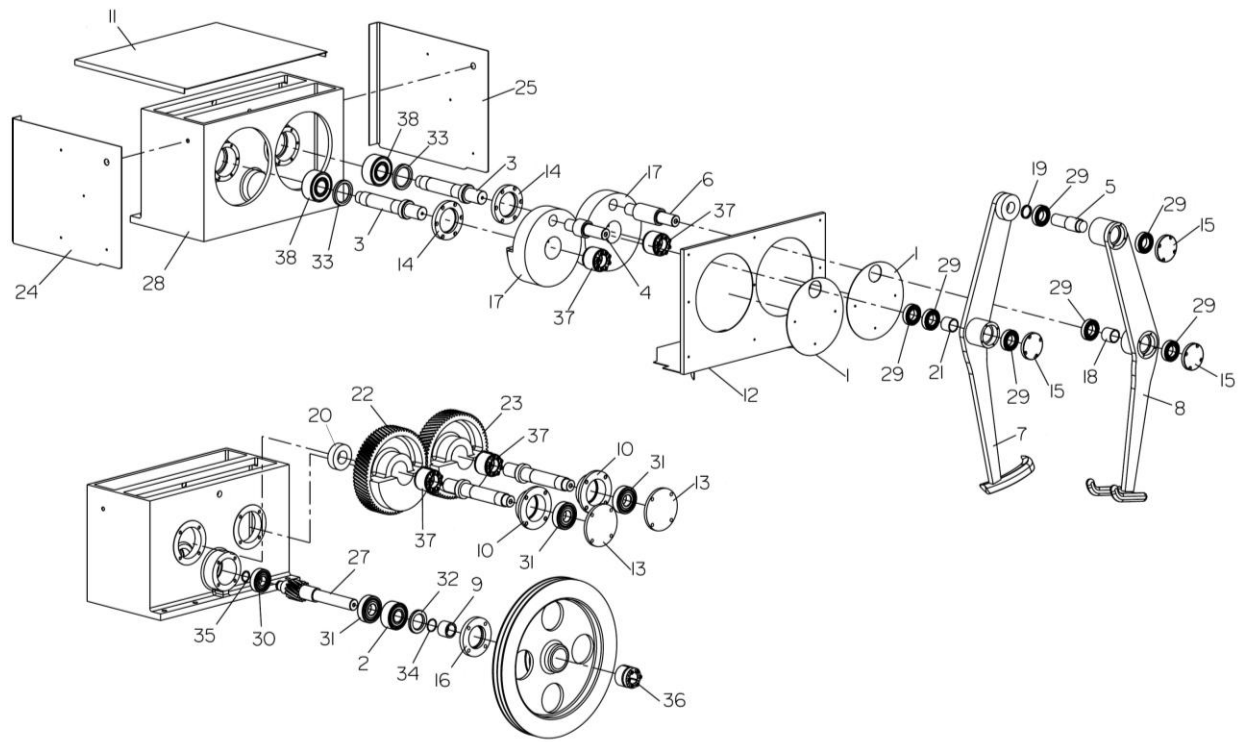


Tabella codici di riferimento gruppo protezione
List of spare carter group

	DESCRIZIONE	DESCRIPTION
1	Protezione posteriore	Rear cover
2	Profilo protezione	Frame cover
3	Protezione plexiglass	Plexiglass cover

