

# Arach

CE

BAKERY *Line*

**ИНСТРУКЦИЯ ПО  
ЭКСПЛУАТАЦИИ  
USE AND MAINTENANCE MANUAL**



**MAC100  
ИЗМЕЛЬЧИТЕЛЬ СУХАРЕЙ  
BREAD GRINDER**

**СОДЕРЖАНИЕ**

Инструкции и шильдики	стр. 3
Гарантия-адреса – уровень шума-возможные риски	
Правильное и неправильное использование	стр. 5
Техническая информация - получение - электрическое подключение – описание машины - первый запуск и тестирование	стр. 6
Правильное использование - техническое обслуживание - утилизация машины	стр. 7
Электрическая схема	стр. 8

Перед использованием машины прочитайте данную инструкцию по эксплуатации для обеспечения собственной безопасности и для того, чтобы знать, как использовать машину. По любому вопросу, касающемуся инструкции по эксплуатации, пожалуйста, обращайтесь к фирме-производителю, сообщив название модели и серийный номер этого оборудования.

## ПРЕДУПРЕЖДЕНИЯ



**НЕ СНИМАЙТЕ ЗАЩИТНЫЕ  
(ПРЕДОХРАНИТЕЛЬНЫЕ) УСТРОЙСТВА**

**БУДЬТЕ ВНИМАТЕЛЬНЫ  
К РУКАМ**

**ОПАСНОСТЬ**

- 1 Не работайте с машиной в состоянии алкогольного опьянения, при употреблении медицинских препаратов или наркотических средств, которые могут воздействовать для Ваше физическое состояние.
- 2 Волосы и другие части тела должны находиться на большом расстоянии от вращающихся компонентов машины таких, как ремни и шестерни.
- 3 Сохраняйте знаки, предупреждающие об опасности, так же, как и те, что содержат информацию по безопасности в чистоте и порядке.

## ГРАФИЧЕСКИЕ СИМВОЛЫ, ИСПОЛЬЗУЕМЫЕ В ИНСТРУКЦИИ ПО ЭКСПЛУАТАЦИИ



Предупреждения, касающиеся выполнения операций (действий), связанных с риском, описанном в инструкции либо возможном.



Действия (операции), которые осуществляются только уполномоченными лицами (персоналом)



Действия (операции), которые могут осуществляться лицами, использующими машину, поскольку к ним не предъявляется особая квалификация.

## ШИЛЬДИКИ

Информация, касающаяся производства, регистрации, электрического подключения, веса и соответствия требованиям.



**Электрическое подключение.** Электрическое напряжение для заземления.



**Опасность**

Знаки, предупреждающие об опасности или запрещающие определенные действия (операции).



**БУДЬТЕ  
ВНИМАТЕЛЬНЫ  
К РУКАМ**



**НЕ СНИМАЙТЕ  
ЗАЩИТНЫЕ  
(ПРЕДОХРАНИТЕЛЬНЫЕ)  
УСТРОЙСТВА**

Модель  
Год  
Серийный номер  
Вес  
Напряжение, В  
Мощность, кВт  
Сила электрического тока, А

## Гарантия

Компания-производитель несет гарантийные обязательства 6 месяцев с момента даты поставки. Гарантия распространяется только на замену поврежденных частей. Электрические компоненты и двигатель не входят в гарантию. Все запросы о содействии осуществляются за счет клиента.

Серийный номер		Дата приобретения	
Название изделия		Адрес	
Дата монтажа		Монтаж произведен	

### **НАИМЕНОВАНИЕ И АДРЕС ПРОИЗВОДИТЕЛЯ**

### **ПРЕДСТАВИТЕЛЬ**

### **СЕРВИСНЫЙ ЦЕНТР**

### **УРОВЕНЬ ШУМА**

Средний уровень шума около рабочего места менее, чем 70 дцб.

### **ПРАВИЛЬНОЕ И НЕПРАВИЛЬНОЕ ИСПОЛЬЗОВАНИЕ**

Машина должна использоваться компетентными лицами и не должна устанавливаться в местах общего доступа. Запрещается применяться оборудование для каких-либо других целей, кроме выпечки продуктов для хлеба и кондитерских изделий.

### **ВОЗМОЖНЫЕ РИСКИ**

Машина была произведена в соответствии с требованиями по безопасности европейского Совета технических обществ (СЕI). Эксплуатация оборудования в ситуациях и в целях, непредусмотренных производителем может повлечь непредсказуемые риски. Запрещается менять механические и/или электрические устройства и части, изменять внутреннюю и внешнюю конструкцию машины, терять и развинчивать болты и шурупы.



*Когда машина работает, все крышки, картер двигателя, навесы и защитные устройства должны быть прикреплены надлежащим образом к соответствующим структурам (конструкциям) и должны быть исправны*

## ✓ ТЕХНИЧЕСКАЯ ИНФОРМАЦИЯ

Производительность в час	100-150 кг
Вес	26 кг
Габариты: ширина	370 мм
длина	300 мм
высота	900 мм
Мощность двигателя	0,75 кВт

## ✓ СООТВЕТСТВИЕ ТРЕБОВАНИЯМ (НОРМАТИВАМ)

Электрическая система соответствует нормативам EN 60204-1. Материалы, которые находятся в контакте с тестом, соответствуют нормативам Управления по контролю за продуктами и медикаментами (FDA). Оборудование было изготовлено в соответствии с директивой по машинам 89/392/СЕЕ и последующими изменениями 91/368/СЕЕ - 93/44/СЕЕ - 93/68/СЕЕ.

## СРЕДСТВА ЗАЩИТЫ (ПРЕДОХРАНИТЕЛЬНЫЕ СРЕДСТВА)

Во избежание каких-либо несчастных случаев внутри цилиндра для загрузки хлеба предусмотрены защитные крышки.

## ПЛУЧЕНИЕ

Упаковка машины на паллете дает возможность надежной сохранности оборудования на один год. Распакуйте машину и уведомите Вашего перевозчика о возможных повреждениях. О возможных повреждениях необходимо уведомить фирму-производителя незамедлительно.

## ЭЛЕКТРИЧЕСКОЕ ПОДКЛЮЧЕНИЕ



Электрическое подключение должно производиться только уполномоченными лицами.

Электрическая линия должна иметь такое же напряжение, как указано на шильдике оборудования. Электрическое питание осуществляется посредством селектора емкости, соответствующего мощности, требуемой машиной с вилкой на три фазы четырема контактами /е фазы+земля). Подсоедините контактные зажимы (клеммы) к панели.

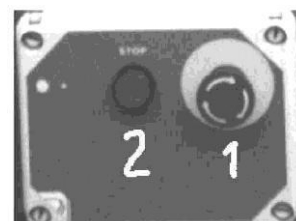
Электрическое подключение должно производиться в соответствии с требованиями, действующими в Вашей стране.

## ✓ ОПИСАНИЕ МАШИНЫ

Машины для измельчения хлеба была разработана только для сухого хлеба.

### КНОПКИ УПРАВЛЕНИЯ

- 1 КНОПКА АВАРИЙНОЙ ОСТАНОВКИ
- 2 КНОПКА ЗАПУСКА



## ✓ ПЕРВЫЙ ЗАПУСК И ТЕСТИРОВАНИЕ

Нажмите кнопку запуска – 2.

Ножи машины могут вращаться по часовой стрелке и против часовой стрелки.

### ТЕСТИРОВАНИЕ КНОПКИ АВАРИЙНОЙ ОСТАНОВКИ

Когда машина работает, нажмите кнопку аварийной остановки красного цвета. Оборудование должно остановиться. **Если этого не произошло, свяжитесь с фирмой-производителем.**



Для того, чтобы запустить машину снова, поверните **кнопку аварийно остановки** по часовой стрелке и нажмите кнопку запуска – **START**.

## ✓ ПРАВИЛЬНОЕ ИСПОЛЬЗОВАНИЕ

Машина была произведена для измельчения сухого хлеба в соответствии с методами (способами) и количеством, установленными фирмой-производителем. Подсоедините машину правильно. Нажмите кнопку запуска **START (2)**. Оборудование работает.

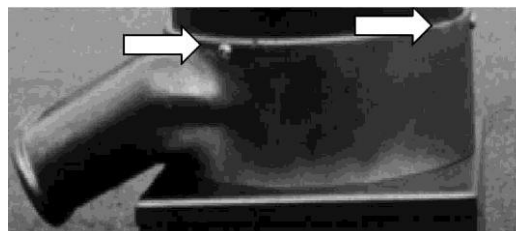
## ✓ ЗАМЕНА СИТА (РЕШЕТКИ) ДЛЯ ДВОЙНОГО УЛУЧШЕННОГО ПОМОЛА



Следующие операции (действия) должны производиться лицами, уполномоченными на проведение технического обслуживания и подключения к электроэнергии.

Любые действия должны производиться, когда машина отключена.

Открутите болты, указанные стрелками, и поверните на 180° внутреннее сито (решетку).



**В любой момент можно остановить машину, нажав кнопку аварийной остановки.** Чтобы снова запустить, поверните кнопку аварийной остановки по часовой стрелке и нажмите кнопку запуска – **START**.

## ✓ ЧИСТКА И ТЕХНИЧЕСКОЕ ОБСЛУЖИВАНИЕ



**ВСЕГДА РАБОТАЙТЕ С МАШИНОЙ, КОГДА ОНА ОТКЛЮЧЕНА** Остатки хлеба, которые застряли в машине для измельчения, нельзя вынимать, когда оборудование работает. **Нельзя мыть машину в посудомоечной машине или под потоком струй воды либо других продуктов.**



**ВОВРЕМЯ ТЕХНИЧЕСКОГО ОБСЛУЖИВАНИЯ МАШИНА НЕ ДОЛЖНА БЫТЬ ПОДКЛЮЧЕНА К ИСТОЧНИКУ ЭЛЕКТРИЧЕСКОГО ПИТАНИЯ.** Замена частей и ремонт электрических повреждений и т.д. должны производиться только уполномоченным персоналом.

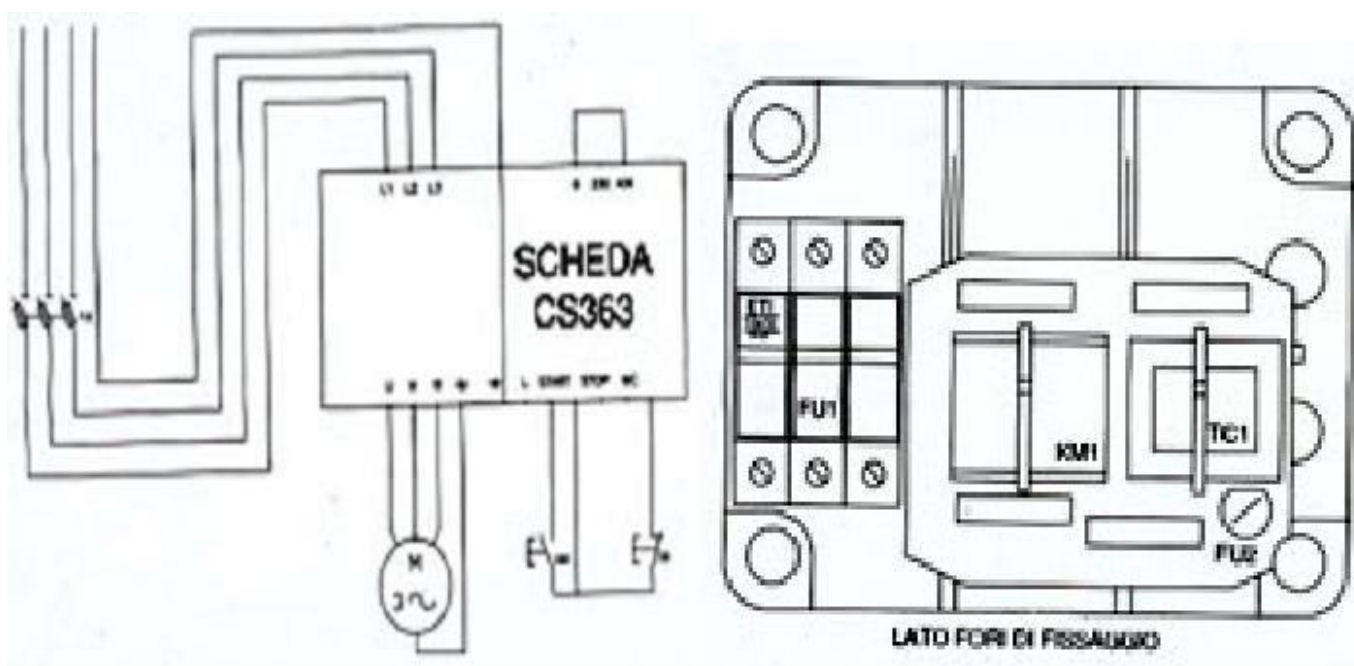


## УТИЛИЗАЦИЯ МАШИНЫ

Корпус машины изготовлен из нержавеющей стали, трубка выгрузки помолотого хлеба – из антикоррозийного алюминия, электрические компоненты произведены из пластика.

Для утилизации машину нужно разобрать на несколько частей разного происхождения для последующей доставки вместе с гидравлическими маслами и жирами в уполномоченные структуры.

### ЭЛЕКТРИЧЕСКАЯ СХЕМА





## ЗАВОДЫ ИЗГОТОВИТЕЛИ ЭЛЕКТРИЧЕСКИХ КОМПОНЕНТОВ МАС 100 V 400-3-50/50 Hz

КОД	ОПИСАНИЕ	ПРОИЗВОДИТЕЛЬ	МОДЕЛЬ	КОЛИЧЕСТВО
	CASSETTA box	GEWISS	GW44.207	1
FU1	PORTAFUSIBILITRIPOLARE держатель предохранителя	OMEGA	Q13803	1
	FUSIBILI предохранители (пробки)	OMEGA	10x38 6AGL	6
	CIRCUITO STAMPATO печатная схема	CAPOZZO	CS363	1
FU2	PORTAFUSTVJLJ UNIPOLARE держатель предохранителя	OMEGA	C1033	1
	FUSIBILI! предохранители (пробки)	OMEGA	5x20 2AF IN VETRO	2
TC1	TRASFORMATORE 8 va 0.230.400/0.24	TEFMA	TF223	1
11	TELERUTTORE выключатель удаленного контроля	A.B.B.	B7-30-10-P24VAC	1
	FASTON DA CIRCUITO STAMPATO	OMEGA	CC342	16
SB1	PULSANTE DI EMERGENZA кнопка аварийной остановки	TELEMECANIQUE	ZB4BS54	1
S82	CONTATTOCHIUSO плотный контакт	TELEMECANIQUE	ZB4BZ102	1
	PULSANTE DI MARCIA кнопка запуска	TELEMECANIQUE	ZB4BA3	1
	CONTATTOAPERTO разомкнутый контакт	TELEMECANIQUE	ZB4BZ101	1
	PRESSACAVONYLON нейлоновый кабель	OELMA	PG11 MAX	3
	DADONYLON нейлоновая муфта	JOELMA	PG11	2



## SUMMARY

<b>1</b>	<b>INTRODUCTION.....</b>	<b>12</b>
1.1	FOREWORD .....	12
1.2	INSTRUCTIONS AND GENERAL RECOMMENDATIONS.....	13
1.3	MAIN CASES WHEN THE COMPANY DECLINES LIABILITY.....	14
1.4	TERMINOLOGY .....	14
<b>2</b>	<b>FEATURES OF THE MACHINE .....</b>	<b>15</b>
2.1	INTENDED USE AND DESCRIPTION .....	15
2.2	TECHNICAL FEATURES.....	17
2.2.1	DIMENSIONS .....	17
2.3	OPTIONAL.....	17
2.4	COMMAND AND CONTROL DEVICES .....	18
2.5	IDENTIFICATION PLATE .....	18
<b>3</b>	<b>INSTALLATION AND USE .....</b>	<b>19</b>
3.1	RECOMMENDATIONS INHERENT THE PLACE OF INSTALLATION .....	19
3.2	INSTRUCTIONS FOR LIFTING, TRANSPORT AND POSITIONING .....	19
3.3	ELECTRIC CONNECTION .....	20
3.4	OPERATION AND USE.....	21
3.4.1	PRECAUTIONS AND PRELIMINARY CONTROLS .....	21
3.4.2	GENERAL INFORMATION FOR NORMAL USE .....	21
3.4.3	SWITCH-ON AND ENABLING OPERATION .....	21
3.4.4	SIEVE REPLACEMENT .....	21
3.4.5	BLADE REPLACEMENT .....	23
3.4.6	MAINTENANCE .....	23
3.5	FOREWORD .....	23
3.6	PERIODIC MAINTENANCE.....	24
3.7	POSSIBLE FAILURES AND/OR ANOMALIES .....	24
3.8	ELECTRIC MAINTENANCE .....	25
3.9	CLEANING OF THE MACHINE.....	25
3.10	PROLONGED SHUTDOWN OR EXCLUSION FROM SERVICE .....	25
<b>4</b>	<b>SAFETY.....</b>	<b>25</b>
4.1	FOREWORD .....	25
4.2	HAZARDS, SAFETY DEVICES AND RESIDUAL RISKS .....	26
4.2.1	HAZARDS AND RELATIVE RISKS THAT CHARACTERISE THE MACHINE.....	26
4.2.2	SAFETY DEVICES.....	26
4.2.3	VERIFICATION OF THE EFFICIENCY OF THE SAFETY DEVICES .....	28
4.2.4	RESIDUAL RISKS OF A MECHANICAL NATURE.....	28
4.2.5	RESIDUAL RISKS OF AN ELECTRICAL NATURE.....	28
4.3	INFORMATION REGARDING THE NOISE EMITTED FROM THE MACHINE .....	29
4.4	SAFETY SIGNS .....	29
<b>5</b>	<b>DISMANTLING .....</b>	<b>30</b>

**LIST OF SPARE PARTS**

**WIRING DIAGRAM**

# 1 INTRODUCTION

## 1.1 FOREWORD

**This use and maintenance instruction manual is intended for consultation by anyone assigned, engaged, authorised to use the machine**, where use means any phase of the life cycle of the same (from assembly and transport, to maintenance and finally dismantling). **It is also intended for the Employer, Managers and Supervisors of the company**; they must read it carefully and understand it fully, so that it can be used as a valid support for the execution of a part of the obligations that Laws and Standards in force attribute to them on the subject of health and safety in the work place. **The Employer** of the company where the machine is used, as well as Managers and Supervisors, must guarantee the operators, assigned to the different specific functions, suitable instruction and training (simple and understandable in relation to the level of insight, which can be reasonably expected of the persons involved) regarding its correct and safe use and the general and specific risks of the work place and/or the job. This manual can constitute a valid support for the execution of such a delicate task, even if, for obvious reasons, cannot be considered exhaustive as not strictly inherent to the machine itself.

**The manual is made up of several sections**, each with a precise purpose, and in particular:

- **Machine features;**
- **Installation and Use;**
- **Maintenance;**
- **Safety;**
- **Dismantling.**

The term **machine** will successively indicate the subject, for whose correct and safe use this manual is drawn-up and given to the purchaser.

Before carrying out any operation inherent the machine (transport, installation, connection, regulation, use, repair, parts replacement, dismantling, etc.), as well as before making the machine available for use, **carefully read** the general instructions and specifications contained in this manual and fully understand the aims and meanings in order to acquire the necessary knowledge for the good working order of the machine, for correct maintenance of its parts, for an adequate knowledge of the safety devices with which it is equipped, as well as the residual risks present and, therefore, for correct and safe use.

**Keep** this manual and attached document (drawings, layouts, etc.).

**In the event of loss or deterioration request a copy immediately** from the manufacturer, specifying the machine's identification data (year of manufacture, model, serial number, etc.).

*This manual reflects the state of the art existing at the time of introduction of the machine onto the market and cannot be considered inadequate simply because successively updated on the basis of new information or new technical solutions.*

The manufacturer can in no way be deemed liable for the suitability of the place where the machine is used, or for the support services, while giving some important guidelines for proper installation the appropriate section of this manual. The company reserves the right to update machines and manuals, without any obligation to update previously produced machines and/or manuals.

**This manual is an integral part of the machine and must accompany it** in the case of its transfer or assignment, for any reason.

**ATTENTION!** Before allowing start-up and use, ensure that the machine complies with the purchase order and is equipped with all the devices, especially safety devices, described in this manual as well as in the eventual commercial documentation.

**ATTENTION!** The machine is intended for grinding/grating dry bread, obtaining bread crumbs of various sizes, depending on the installed sieve.

The manufacturer cannot be deemed liable for any damage and/or injury to persons, animals and objects caused by incorrect use of the machine.

## 1.2 INSTRUCTIONS AND GENERAL RECOMMENDATIONS

The manufacturer declines all liability for damage/injury to persons, animals and objects caused by the failure to comply with the instructions contained in this manual and the following indications:

- **Do not tamper** with the protections and safety devices with which the machine is fitted;
- **Do not remove** the protections **or deactivate** the safety devices with which the machine is fitted;
- **Re-position** the guards **and re-activate** the safety devices as soon as the reasons for their temporary removal/deactivation have ceased;
- **Do not operate** the machine for uses and/or loads and/or with different methods from those indicated by the Manufacturer;
- **Carry out** daily checks of the safety devices and the general state of the machine;
- **Perform** thorough and adequate cleaning daily;
- **Adopt** suitable measures and precaution when performing cleaning, registrations and maintenance etc. so that the machine and its parts cannot be started by others, not even accidentally;
- **For work places, comply with the European Directives, Laws and Standards of the country where the machine is installed and made operational.**
- **Respect the limits of the climatic conditions** (see 2.2 TECHNICAL FEATURES paragraph) and those for use accepted
- **The Employer**, of the company where the machine is used, must guarantee the operators suitable instruction and training inherent the specific tasks, regarding its correct and safe use and the general and specific risks of the work place and/or the job; this manual can be a valid support, even if it cannot be considered exhaustive.

- **The person responsible for making the machine available to third parties for use** (e.g. owner/manager of the site, employer, etc.) must check that the machine is in good working order and integral in all parts and operations, especially regarding safety, and not allow their use whenever a control results negative, and putting it out of service, if necessary.
- When performing maintenance, cleaning operations, etc., **the operator must wear close-fitting garments** without loose parts; he must not wear shirts, jackets, open shirts, etc. nor jewellery (bracelets, necklaces, etc.), which can become attached to or entangled in projecting parts and, and if he/she has long hair, it must be fastened back under a cap.
- Whenever one or more parts must be replaced, **only use** original spare parts by requesting them from the manufacturer. If non-original spare parts are used, the manufacturer of the machine is deemed relieved from any liability for resulting damage/injury to persons, objects and/or animals.
- **Every arbitrary modification made to the machine, relieves the manufacturer from all liability for any damage/injury to persons, animals and/or objects.**

### 1.3 MAIN CASES WHEN THE COMPANY DECLINES LIABILITY

The manufacturer declines all liability for damage/injury to persons, animals or objects, as well as loss of production, following:

- **use of the machine not in compliance** with intended use or for products different from those expressly declared in this manual
- **installation not in compliance** with the methods given in this manual
- **execution of maintenance**, regulation, registration interventions, replacement of pieces, cleaning of the machine **by insufficiently trained and educated staff and, if envisioned, not suitably trained**, regarding the correct and safe execution of interventions
- **use of energies that are different** or not suitable with respect to that envisioned and the data given in this manual
- **lack of or poor**, or not carried out according to the methods stated here, **maintenance, cleaning, controls, etc.**
- **no or partial respect of the instructions** stated in this manual
- **voluntary modification** of the original features and supplies of the machine, without the manufacturer's formal authorisation,
- **damage caused by instruments, equipment, etc.**, applied to the machine, not supplied or however not envisioned or authorised by **the manufacturer**.
- **failure to comply with laws and standards in force** in the country where the machine is used
- **exceptional events and Acts of God** that do not depend on the manufacturer

### 1.4 TERMINOLOGY

For better understanding of this manual, below find the terms within the same:

**DEVELOPER, MANUFACTURER:** Manufacturer of the machine.

**CUSTOMER, CLIENT:** natural or legal person who has bought a new machine or under such conditions to consider it the same as it was from new (i.e. complete the original instructions and original CE Declaration of Conformity)

**OPERATOR:** person engaged to use the machine, where use means any normal phase of the machine life cycle.

**MACHINE:** the subject for which this manual is drawn-up and given to the purchaser for its correct and safe use.

**MACHINE USE:** the group of all operations that are or can be reasonably correlated with the machine during its entire lifespan in relation to its intended use explicitly declared in this manual.

**ROUTINE MAINTENANCE:** operations necessary for the good working order and the correct preservation of the machine, which due to its simplicity and insignificant danger does not require particular preparation or professionalism and can be performed by the operator.

**NON-ROUTINE MAINTENANCE:** operations necessary for the good working order and correct preservation of the machine, which due to complexity and/or danger require the intervention of specialised, expert, professionally prepared staff that have all technical knowledge and are aware of the Standards for the accurate execution of the jobs and in safety.

**HAZARDOUS AREA,** any area inside and/or in proximity of the machine where the presence of an exposed person constitutes a risk to the health and safety of said person.

**EXPOSED PERSON,** any person that is entirely or partly inside a hazardous area.

**ATTENTION:** communications of primary importance for the safety and health of the operator.

**IMPORTANT:** important communications to prevent damage to the machine and/or its parts.

## 2 FEATURES OF THE MACHINE

### 2.1 INTENDED USE AND DESCRIPTION

**The machine should be used by a trained operator and is intended for grinding/grating dry bread, obtaining bread crumbs of various sizes, depending on the installed sieve.**

**The machine can only be used** if it is in a stable position in the place of use.

**The machine can only be used in closed, sheltered rooms;** for no reason must the machine be used outdoors or in places exposed to atmospheric agents

**The machine should not be used** in sea environments (coast, ships, platforms etc.)

**It is prohibited to use the machine for purposes and/or products and/or using different methods than those described in this manual.**

**It is prohibited** to use the machine if the connections to the installation site service plants, envisioned in this manual, have not been made correctly.

**It is prohibited** to use the machine in environments characterised by the risk of fire and/or explosion and/or however incidents relevant to current laws, with high humidity and/or wet, with excess water vapour and/or oily vapours and/or dusts and the presence of corrosive substances and/or gases

**It is prohibited** to use the machine in the presence of anomalous vibrations or jerks

**For safety, hygiene, health and warranty reasons, it is prohibited to use the machine in any way that is different to that declared. Any different use, no matter how much it is not reasonably foreseeable, from that declared must be considered incorrect, non-compliant and not intended by the manufacturer, and as such, potentially dangerous to the health and safety of exposed persons, as well as for animals and/or objects.**

**IMPORTANT!** Before starting, using or allowing a machine to be used, the operator must read and understand the instructions and indications in this manual; consequently, when the machine is started, commissioned and used, the operator implicitly declares to assume all civil and penal liability for any damage/injury to persons, animals and objects, which should occur as a consequence of the failure to comply, even partially, with the same.

In addition to the support structure, every machine is made up from (Figure 1):

1. Electric engine
2. Electrical panel
3. Levelling foot
4. Discharge duct for grated bread
5. Dust seal gasket
6. Processed bread calibration sieve
7. Blades
8. Bread infeed hopper with internal safety guards
9. Red mushroom-shaped STOP / EMERGENCY button
10. Green START button
11. Hopper presence safety microswitch
12. Sieve blocking screw

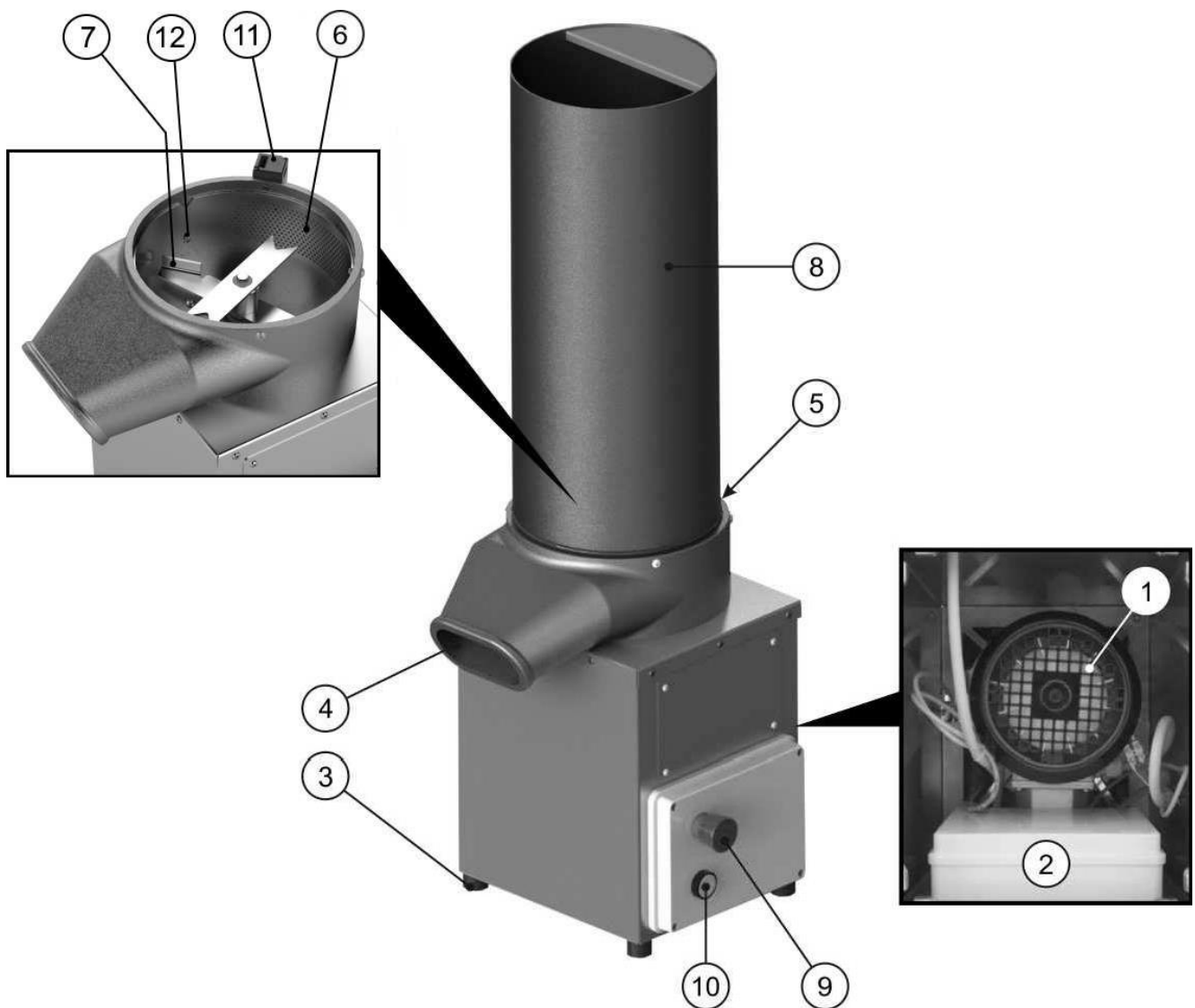


Figure 1



## 2.2 TECHNICAL FEATURES

	Format	MAC100
PRODUCTION PER HOUR	kg	80 ÷ 100
MASS	kg	23
INSTALLED POWER	kW	0.75
RATED VOLTAGE/FREQUENCY *Tolerance accepted: +/- 10%	V/Hz	400* / 50; 60
N° ELECTRIC PHASES	-	2 ~ + PE 3 ~ + PE
PROTECTION DEVICE INTERVENTION THRESHOLD	A	10
MIN/MAX ENVIRONMENT TEMPERATURE	°C	-5 / +40
MAXIMUM ENVIRONMENT RELATIVE HUMIDITY (CON T < 40 °C)	%	50
MAXIMUM ALTITUDE ABOVE SEA LEVEL	m	2000

### 2.2.1 DIMENSIONS

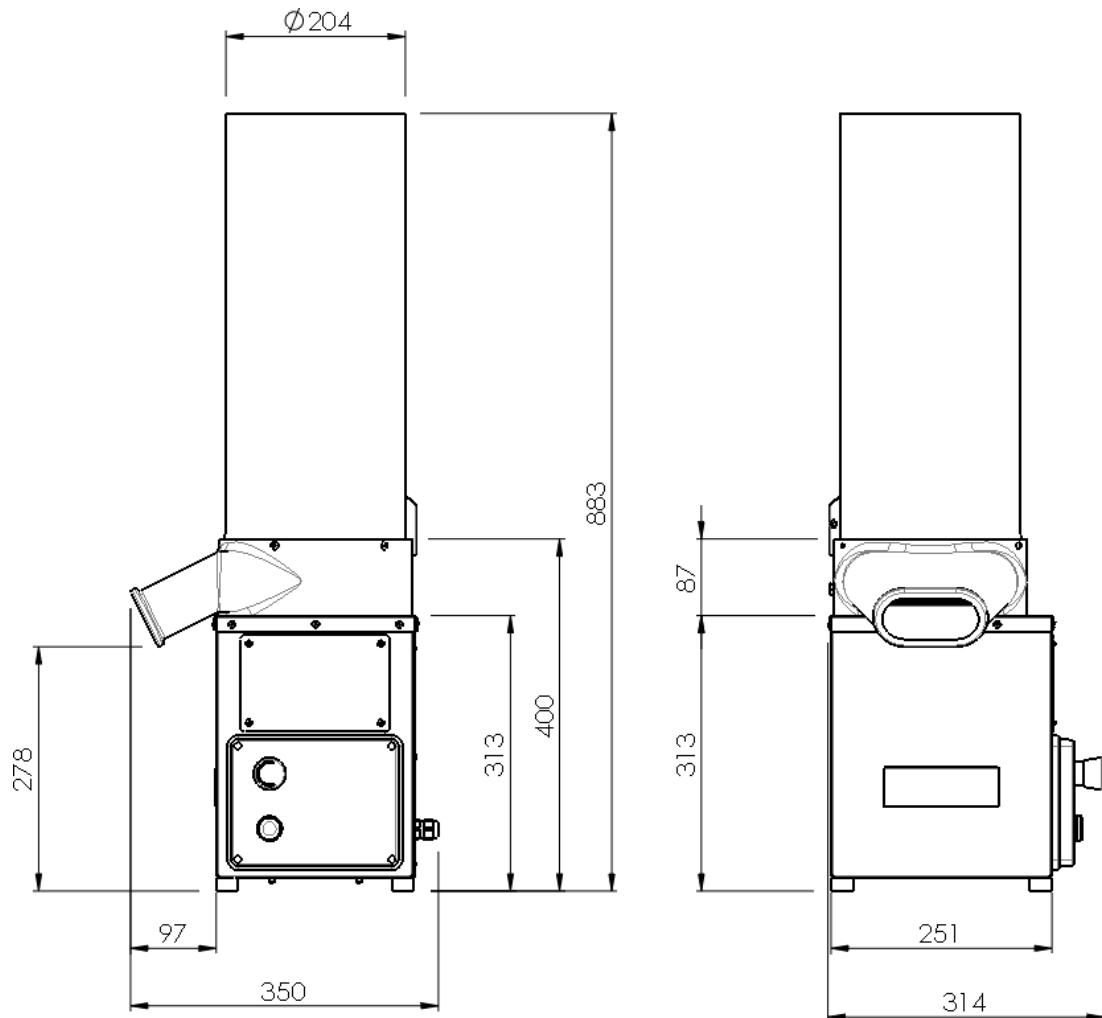


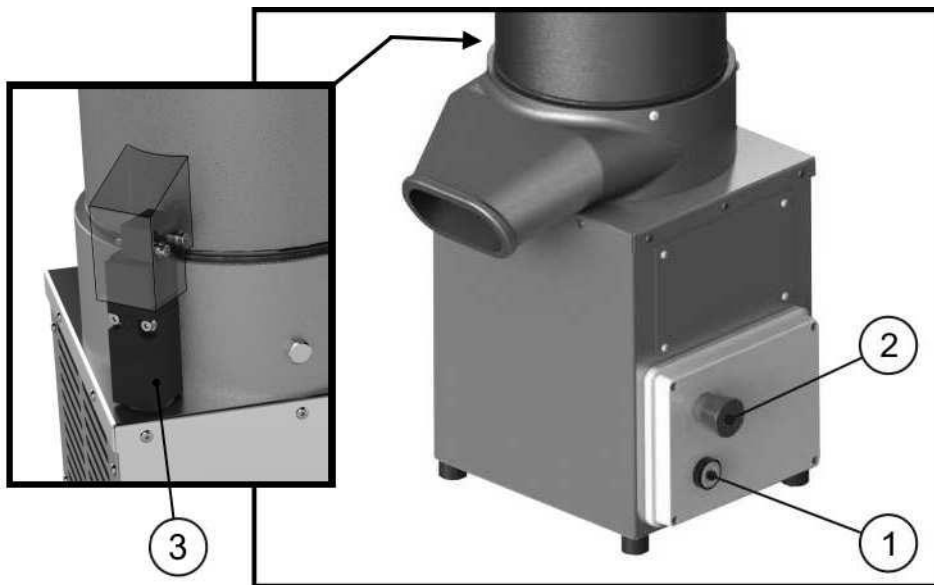
Figure 2

### 2.3 OPTIONAL

The machine is equipped with a sieve mesh size 3-4 (standard configuration), sieve meshes sizes 5-6, 6-7 and 8-10 are optional and can be delivered upon request.

## 2.4 COMMAND AND CONTROL DEVICES

With reference to the Figure 3, the machine has the following command and control devices:



**Figure 3**

- ref. 1 Green START button
- ref. 2 Red mushroom-shaped STOP / EMERGENCY button
- ref. 3 Hopper presence bayonet microswitch

## 2.5 IDENTIFICATION PLATE

The identification plate Figure 4 on which the CE mark, manufacturer's information, machine model, serial number, year of manufacture, mass and essential electrical data are given indelibly, is fixed onto the rear of the machine.

	
MODELLO / Model	<input type="text"/>
MATRICOLA / Serial Number	<input type="text"/>
ANNO COSTRUZIONE / Year	<input type="text"/> PESO / Weight <input type="text"/>
VOLTAGGIO / Voltage	<input type="text"/>
POTENZA / Power	<input type="text"/>
AMPERE / Ampere	<input type="text"/>
OPTIONAL / Optional	<input type="text"/>
<input type="text"/>	

**Figure 4**

### 3 INSTALLATION AND USE

#### 3.1 RECOMMENDATIONS INHERENT THE PLACE OF INSTALLATION

The room where the machine is to be installed must comply with Laws and Standards in force

#### 3.2 INSTRUCTIONS FOR LIFTING, TRANSPORT AND POSITIONING

The place where the machine will be kept and preserved and/or used must not only comply with Laws and Standards in force, but also provide maximum stability to the machine and ensure adequate protection from damage and atmospheric agents.

If the machine should not be used for a long time, it must be taken to a closed, dry place that is inaccessible to unauthorized persons, where it cannot be damaged and it must be protected with tarpaulins. The machine is shipped in a unique package, completely assembled. For shipping from the manufacturer's establishment, the machine is placed and fastened to a pallet and, if necessary or envisioned in the contract, in thick cardboard packaging (box) or wooden packaging (cage).

**When handling/transporting the machine, use every precaution to prevent or limit the occurrence of risks to persons or objects.**



**Figure 5**

Loading/unloading from the means of transport is normally performed by a lifting truck/transpallet with suitable capacity, whose arms are inserted in the relevant spaces on the base of the pallet. Unpack the machine; check its integrity; separate the materials by type (cardboard, plastic, wood, etc.) and put them into the relevant places for collection, accessible only to authorised staff, while waiting to be disposed of by specialised companies. Even the wooden joists and the pallet must be taken to a special collection centre.



**Respect for the environment is an obligation laid down by the Laws in force.**

Make sure that there is adequate space around the machine to work comfortably and perform correct and safe cleaning, regulations and/or maintenance. The machine should be placed on a flat, horizontal surface.

### 3.3 ELECTRIC CONNECTION

Make sure that the line voltage is equal to that declared by the machine manufacturer and indicated on the identification plate (see also par. ). 2.2). The connection to the work site electrical plant is made in compliance with current Laws and Standards with reference to data and instructions in this manual. The machine is delivered complete with cable with single-phase plug fitted with an earth pole (when envisioned). The electric connection must be made by a qualified technician.

**WARNING! Upstream from the power supply outlet, there must be a magnet-circuit breaker device with an opening distance of at least 3 mm, which ensures disconnection from the mains.**

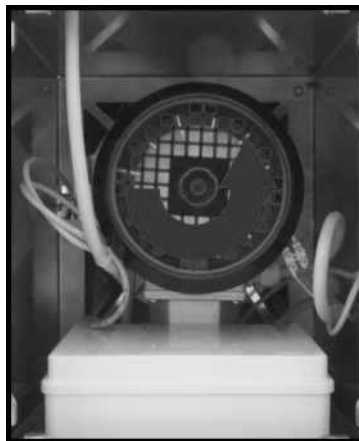
If the supply voltage fluctuates with intervals greater than the tolerance specified in the table (see par. 2.2) use a stabiliser unit



The manufacturer declines all liability if the earth plant is not present or does not comply with Standards.

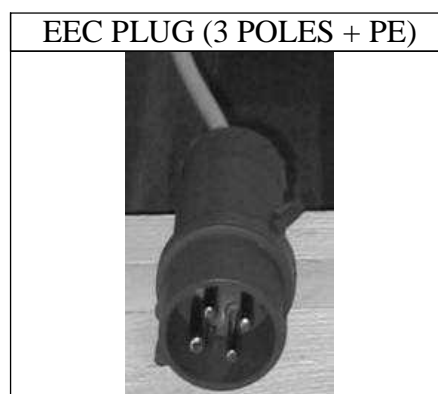
At first start-up, please check the proper connection of the phases, start the machine and make sure that the motor rotates clockwise (if the motor rotates in the opposite direction, it will not cause machine breakage but will generate greater turbulence of the material being processed).

Figure 6 indicates the correct motor rotation direction, seen from the lower side of the machine.



**Figure 6**

**WARNING:** if the motor rotates in the opposite direction, cut off the power supply to avoid any damage and reverse one phase of the plug.



**Figure 7**

### 3.4 OPERATION AND USE

#### **WARNING! VERY IMPORTANT!**

Without exception, the machine must be operated by **one person at a time**. The machine can only be used on the conditions indicated in par. . 2.1. **It is prohibited** for anyone, without the requisites stated in this manual, to perform any operation on/with the machine. These are conditions necessary, even if not sufficient, for safe use of the machine.

Who is legally responsible for the set-up of the machine to be used must ensure that the above is complied with.

#### 3.4.1 PRECAUTIONS AND PRELIMINARY CONTROLS

- At the start of every day and/or shift check that the safety devices are efficient, following the instructions given in par. 4.2.3

#### 3.4.2 GENERAL INFORMATION FOR NORMAL USE

Before using the machine, remember the following important concepts:

- At the end of the day or shift, switch the machine off and disconnect the electric power supply plug.
- During the machine operating cycle, the bread should be inserted only through the upper opening of the hopper ref. 8 Figure 1.

#### 3.4.3 SWITCH-ON AND ENABLING OPERATION

Before starting, ensure that the sieve that has been mounted is suitable for the processing.

- Ensure that the loading hopper is correctly blocked using the corresponding screws and that the safety microswitch has been activated
- Position the breadcrumbs collection tray under the discharge tube ref. 5 Figure 1
- Connect the power plug
- Ensure that the emergency push-button has been pressed; if not, reset it.
- Press the motor start push-button ref. 10 Figure 1. If the hopper microswitch has been activated and the emergency push-button has not been pressed, the blade will start rotating.
- Add the bread to be grated from the upper opening of the hopper; avoid adding bulky pieces that may get stuck between the inner bulkheads (accident prevention safety regulations)

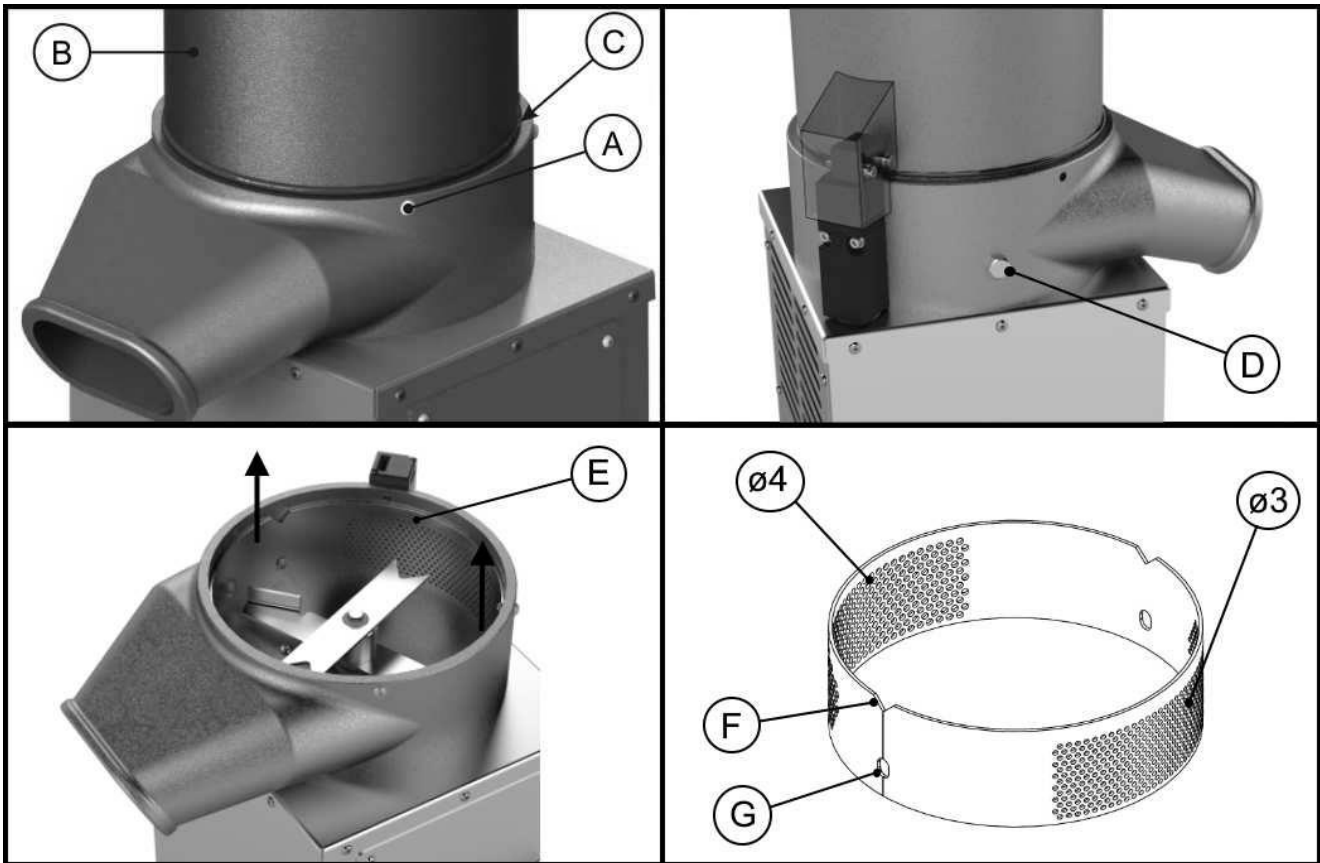
#### 3.4.4 SIEVE REPLACEMENT

To replace or change the sieve mesh, please follow the instructions below with respect to Figure 8:

- Disconnect the power supply plug;
- Unscrew and remove the screws ref. A so that you can remove the hopper ref. B;
- Remove the infeed hopper ref. B;
- Remove the screw ref. D which holds the sieve in position (no-rotation)
- Lift the sieve using both hands to remove it

**WARNING:** each sieve has two series of holes of different size, the machine is equipped with a standard 3 Diameter and 4 mm sieve mesh. Pay attention during assembly phase.

**WARNING:** to properly install the sieve, make sure that the arrow ref. E marked on the sieve is facing downwards.



**Figure 8**

For machine commissioning, please follow the instructions below with respect to Figure 8:

- Position the sieve with the desired perforated section facing the outfeed mouth and the indication arrows ref. F facing downward.
- Ensure that eyelet ref. G is in line with the sieve blocking hole ref. E.
- Position hopper ref. B in its housing, by inserting the fork into the microswitch.
- Push the seal ref. C until it touches the aluminium mouth.
- Tighten screws ref. A
- Connect the power plug

Now you can start the operating cycle as described in chapter 3.4.3.

### 3.4.5 BLADE REPLACEMENT

To replace a blade, please follow the instructions below:

- Disconnect the power supply plug;
- Remove hopper ref. B Figure 8, as illustrated in the previous chapter
- Unscrew the screw that blocks the sieve ref. D Figure 8
- Unscrew and remove the screw and the corresponding bush ref. H Figure 9
- Unscrew dowel ref. L Figure 9, by inserting the Allen wrench in the sieve blocking hole
- At this point, lift the blade ref. C to remove it and replace it

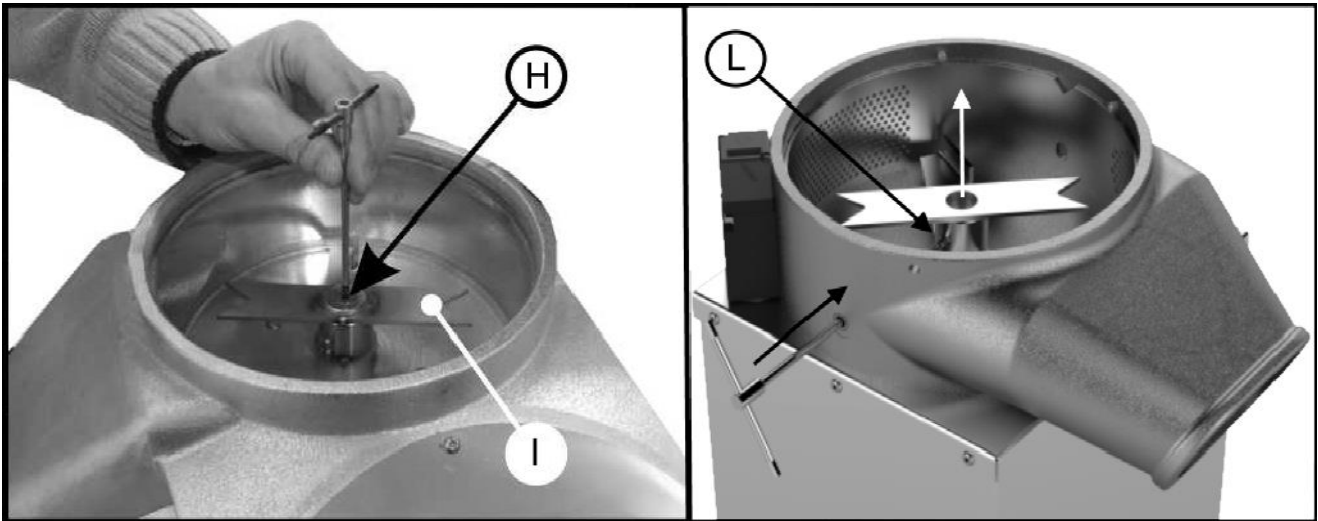


Figure 9

For machine commissioning, please follow the instructions below:

- To insert the blade, align the dowel hole with the hollow on the motor shaft
- Tighten dowel ref. L Figure 9
- Tighten the screw and the corresponding bush ref. H Figure 9
- Position and fasten the hopper ref. A Figure 9
- Position hopper ref. A Figure 8 and fasten it as described in the previous chapter
- Connect the power plug

Now you can start the operating cycle as described in chapter 3.4.3.

### 3.4.6 MAINTENANCE

### 3.5 FOREWORD

Through time, the machine may require maintenance interventions, which can be distinguished as:

- **Routine maintenance:** periodic or occasional operations, to keep the machine efficient and in good working order, which do not require the intervention of specialised staff with specific preparation of professionalism, which **can be carried out by no-specialised staff with a minimum of technical know-how regarding the machine** as long as the instructions given in this manual are scrupulously followed.
- **Non-routine maintenance:** periodic or occasional operations, to keep the machine efficient and in good working order, which require preparation and/or professionalism and/or specific skill; **they must be carried out by specialised staff** (where envisioned by the Standards in force), with the technical knowledge and awareness of Standards for perfect execution of the jobs.



**WARNING!** Every maintenance and/or cleaning operation, even simple, must be carried out only after having **disconnected the power supply plug**, to prevent the machine starting, unless envisioned differently in this manual.

**If, in order to perform an operation, a protection must be removed and/or a safety device disabled, take all necessary and possible measures so that others are not exposed to consequent risks.**

**Every protection must be re-positioned and blocked with all methods of fixing envisioned, and every safety device must be reactivated, as soon as the reasons for their removal/deactivation have ceased.**

### 3.6 PERIODIC MAINTENANCE

- **At the end of the day or shift, thoroughly clean the entire machine**, following the instructions in par. 3.9
- **At the start of the day or shift** check that the safety devices are integral and efficient, following the controls in par. 4.2.3

### 3.7 POSSIBLE FAILURES AND/OR ANOMALIES

We will indicate several anomalies that could occur during machine operation.

The consequent intervention must be carried out in compliance with the instructions, where present, and in all cases, **only after having switched the machine off and disconnected it from the electric power supply.**

Problem	Possible causes	Solutions
<b>The machine does not start</b>	• Mushroom-shape emergency button pressed	- Reset the mushroom-shape emergency/stop button ref. 13 Figure 1
	• No electric power supply voltage	- make sure the plug is inserted well into the socket <u>The problem is upstream from the machine</u> - check the protections of the electric line in the work place; restore if necessary
	• Protection fuses intervention	- Replace (par. 3.8; <b>electrical maintenance</b> )
<b>The machine starts but generates great turbulences</b>	• Wrong rotation direction	- Check the rotation direction as indicated in chapter 3.3
<b>The machine works irregularly</b>	• The holes of the sieve are completely or partially obstructed	- Clean the sieve
	• Bread clogged inside the hopper	- Insert smaller pieces in the hopper.
	• Check the wear-out of the blade	- Replace the blade as described in chapter 3.4.5



### 3.8 ELECTRIC MAINTENANCE



**Before accessing any part of the live machine, disconnect the plug from the electric power supply socket. The plug disconnected must remain constantly visible, so that the “machine not powered electrically” state can always be verified visually.**

Every intervention that directly and indirectly involves the machine's electric equipment, **must be carried out by specialised technical staff, professionally assigned, with technical know-how and awareness of the Standards for the perfect execution of the jobs and expressly engaged to perform these operations, and who must first read these manual entirely.**

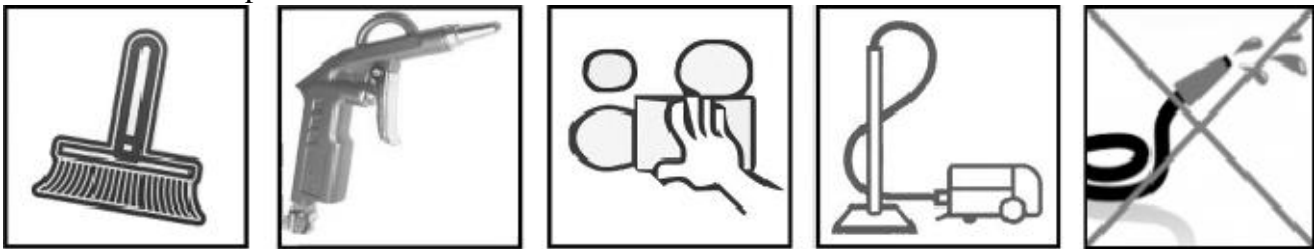
The wiring diagram is attached to the manual and is an integral part of the same.

The electric control board is on the rear of the machine

### 3.9 CLEANING OF THE MACHINE

**Before cleaning the machine, disconnect the power supply plug. The plug disconnected must remain constantly visible, so that the “machine not powered electrically” state can always be verified visually.**

To clean the machine entirely use a suction device with thin nozzle, also use brushes if necessary or short blows of compressed air to shift residues from areas that are difficult to reach.



#### **VERY IMPORTANT!**

Only use a non-abrasive sponge dampened in water to clean plastic parts  
Do not use **alcohol or aggressive detergents**, which could cause breakage.

### 3.10 PROLONGED SHUTDOWN OR EXCLUSION FROM SERVICE

In the event of a prolonged shutdown or exclusion from service, disconnect the machine from the power supply, clean it thoroughly entirely and cover it with clean, waterproof tarpaulin to protect it from environmental agents, dust, insects, rodents, etc. Take all necessary measures to avoid the risk of blows to the machine, tampering, damage, abuse, etc.

When it is put back into service, a careful preliminary examination is required to check integrity and operate as if it were commissioning.

## 4 SAFETY

### 4.1 FOREWORD

The description of the risks and the relative considerations, in this chapter, are based on:

- the awareness of normal conditions and the declared use of the machine
- on the assumption the machine is used professionally (even if only for maintenance, cleaning, etc.), the workers have been suitably trained and made aware of the specific and general risks existing in the workplace, in compliance with Laws and Standards in force, among other things.
- on the assumption that the professional user scrupulously follows the instructions directly on the machine.

**VERY IMPORTANT!**

Before commissioning the machine and/r allowing the use for which it is intended, the user must read and understand the instruction and indications in this manual; consequently, the person commissioning the machine and/or allowing its use implicitly declares to assume all civil and penal liability for damage/injury to persons, animals and objects, which should occur as a consequence of failure to comply, even partial, with the same.

**4.2 HAZARDS, SAFETY DEVICES AND RESIDUAL RISKS**

In compliance with the 2006/42/CE, clear and concise information about the hazards that characterise the machine and the corresponding risks are provided below, along with the measures taken to eliminate or reduce them. Where it has not been possible to eliminate a risk entirely, we provide information on the relative residual risk and any additional measures to be taken to limit the extent even more.

**4.2.1 HAZARDS AND RELATIVE RISKS THAT CHARACTERISE THE MACHINE**

The machine is characterised by hazards of the following natures:

**Mechanical**

- **Crushing, shearing, attachment, dragging** due to contact with moving mechanical parts

**Electrical**

- **Electrocution** due to direct or indirect contact with live parts or due to external factors that act on the electric equipment

The relative risks have been eliminated or reduced as much as possible and/or can be reduced even further by implementing the safety measures and devices described in the paragraphs

**4.2.2 SAFETY DEVICES**

- A. The size and shape of the discharge outlet is in compliance with Standard UNI EN ISO 13857:2008;
- B. Hopper fastening screws, they can be removed only by using a tool, in compliance with Standard UNI EN ISO 12100-01-2009;
- C. Mushroom-shape emergency button with locking system;
- D. Safety side walls placed inside the infeed hopper in compliance with Standard UNI EN ISO 13857:2008.
- E. Loading hopper presence bayonet microswitch

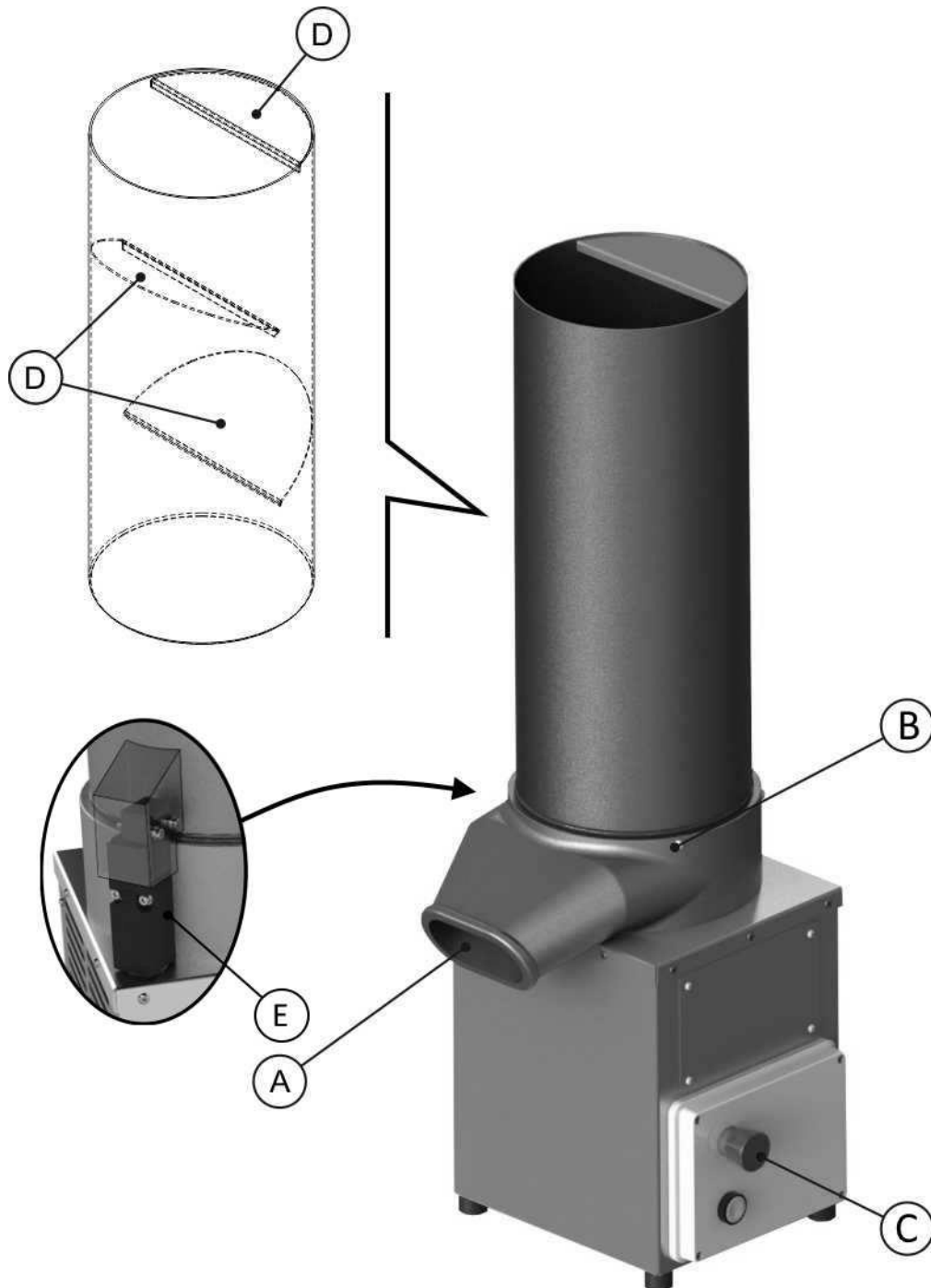


Figure 10

**ATTENTION**

It is prohibited to open and/or remove the protections and/or deactivate the safety devices, except for real requirements regarding the work and when all measures have been taken to highlight the presence of the consequent risks. Similar operations must be performed only and for the time strictly necessary and exclusively by expert, trained and expressly authorised staff. The safety devices must be re-activated and the protections re-positioned and fixed with all means supplied as soon as the reasons for their temporary deactivation/removal have ceased.

### 4.2.3 VERIFICATION OF THE EFFICIENCY OF THE SAFETY DEVICES

The checks mentioned in this paragraph, must be performed diligently every day by staff skilled in using the machine as well as being trained and instructed regarding the residual risks present. If only one of the checks should result negative, do not use the machine, or allow its use by third parties and request the intervention of a specialised and expert technician regarding the specific problem with in-depth know-how of the Safety Standards in force. With reference to the safety devices described in par. {REF} 4.2.2, and the relative considerations, the following checks must be performed at the start of every day and/or shift:

1. Visually check that the fixed guards are in excellent working order, without corrosion, dents, etc. and fixed with all means envisioned (screws)
2. Check that the accident-prevention rotating guard is installed correctly and not deformed; for safety reasons.

### 4.2.4 RESIDUAL RISKS OF A MECHANICAL NATURE

**IN THE EVENT OF MAINTENANCE** (handling, maintenance, cleaning, etc.), if the instructions in this manual are respected, **the machine is characterised by the following residual risks**, already described in the previous paragraphs and which are summarised here briefly:

**Risk of accidental entanglement of the fingers**, in the cracks, apertures, slots, etc. which become accessible when some parts are removed to allow maintenance.

In professional use of the machine, **all of the residual risks** described here, which are very few, **can be reduced even further if:**

- the employer provides the staff appointed with suitable information, instruction and training for the correct and safe use of the machine, on the basis of specific work procedures, which must be strictly respected.
- the operator scrupulously respects the indications provided by the employer and the instructions in this manual, he concentrates thoroughly on the work being performed and refrains from performing anomalous movements and/or actions.

### 4.2.5 RESIDUAL RISKS OF AN ELECTRICAL NATURE

The risk is linked to a possible accidental contact with live parts, e.g. when performing maintenance.

**ATTENTION!** Before removing/opening any guard or part, which would allow access to live parts (or however dangerous parts) and/or before starting any operation on parts powered electrically, the technician appointed must disconnect the plug from the socket and place said plug in a position where it can be viewed constantly; in this way, he can make sure that the machine is not powered electrically at all times. There are no reasonably foreseeable reasons why a technician should need to operate directly on live electrical parts.

The professionalism of the technicians called to perform these operations must be a sufficient guarantee against the risks in question; remember that every intervention of an electrical nature must only be performed by expert and professional staff that can carry out the job perfectly and who are aware of the legal provisions in force on the subject.

### 4.3 INFORMATION REGARDING THE NOISE EMITTED FROM THE MACHINE



On the basis of sound level measurements carried out on machines that are very similar regarding conformation and operation and with the same performance, carried out with Class 1 integrating sound level meter and microphone positioned in front of the machine in correspondence with the operator's position (approx. 200 mm horizontal distance from the front of the machine and at a height of 1.6 metres from the ground), the new machines, subject of this manual, operating empty and in normal conditions, issue a weighted equivalent continuous sound pressure level  $L_{Aeq}$ , lower than 70 dB(A), also taking a maximum error of + 2.0 dB(A) into consideration.

### 4.4 SAFETY SIGNS

The machine originally has the safety signs affixed, as shown in Figure 11:

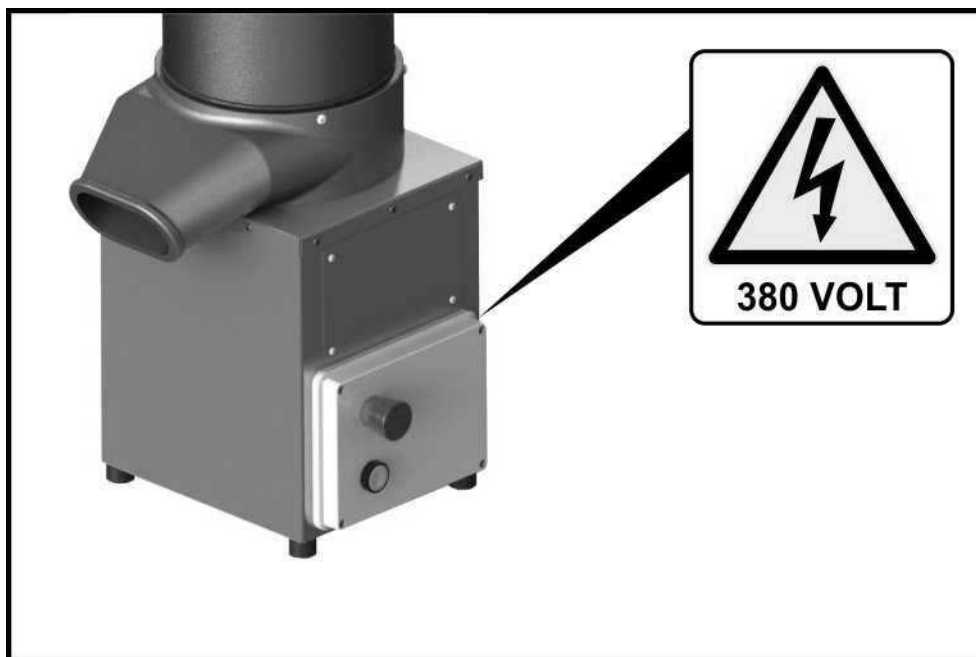


Figure 11

	Hazard, 380 Volt
--	------------------

Check the perfect preservation of the images and colours of the signs, at the slightest sign of decay replace immediately, inform the supervisor and/or manager straight away, who will take the appropriate steps.

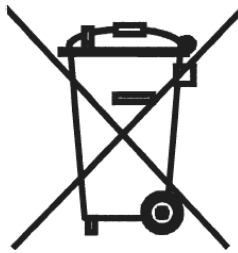
## 5 DISMANTLING

If the machine is to be dismantled, separate the various components by type of material and then dispose of them in compliance with the Laws in force. Extract any lubricants used, which must be disposed of separately.

Contact specialised companies in the waste disposal sector.

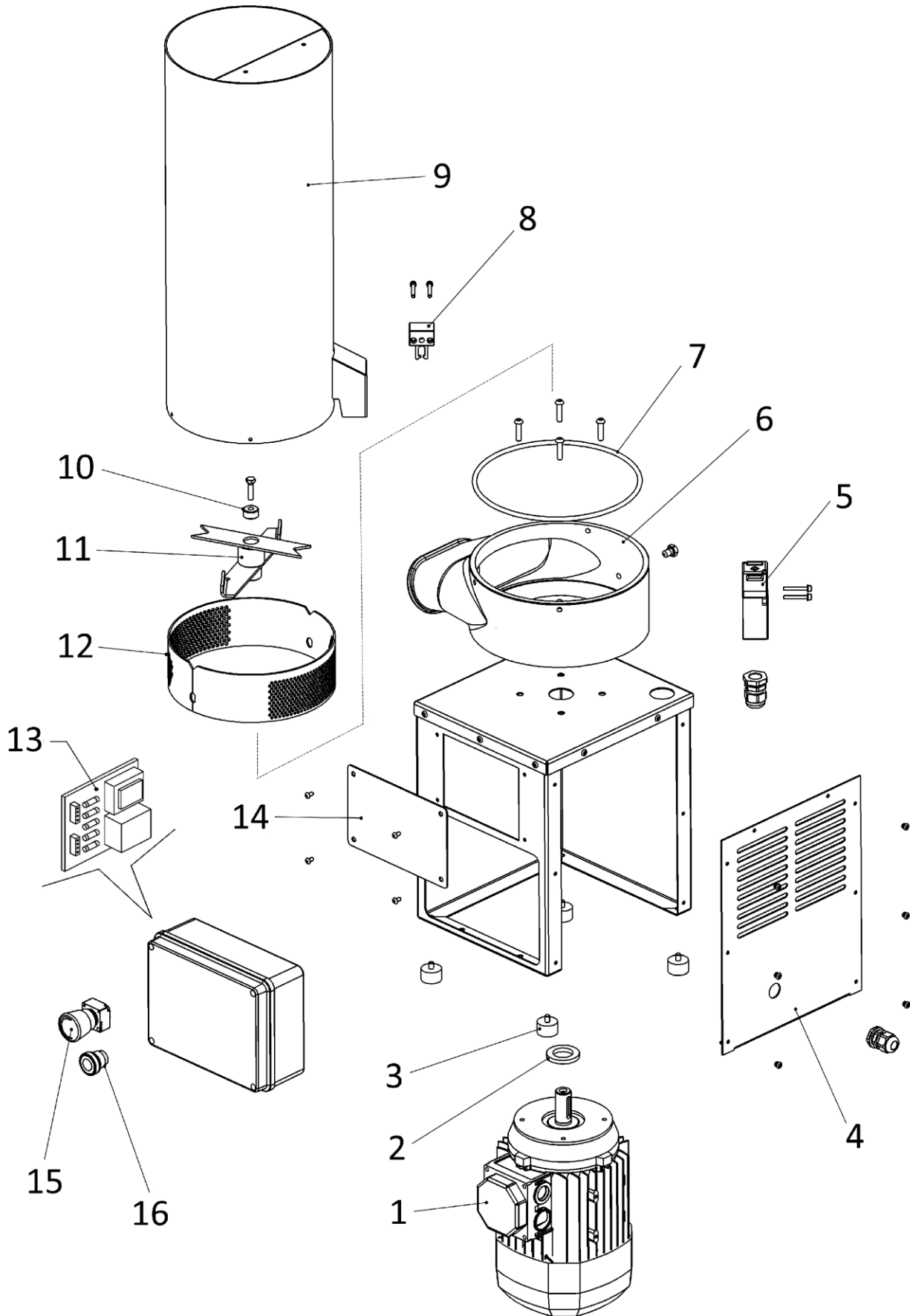
<b>Stainless steel:</b>	frame and closing crankcase and hopper
<b>Aluminium:</b>	machine body casting
<b>Plastic, rubber:</b>	seal, electrical box, levelling feet and some internal components.
<b>Various material:</b>	electric components, motors (copper windings).

The symbol on the equipment, and shown here, indicates that it should not be disposed of as normal municipal waste, but must be assigned separately to a collection centre specifically set-up for the treatment of WEEE, for the compliant treatment of electrical and/or electronic equipment.



Incorrect disposal or improper use of the equipment or parts of it could produce potentially negative and damaging effects on the environment and health of persons.

Macinapane - <b>Bread mill</b>	ELENCO PARTI DI RICAMBIO	ALLEGATO 1	
MAC 100	SPARE PARTS LIST	01/06/2016	Rev. B

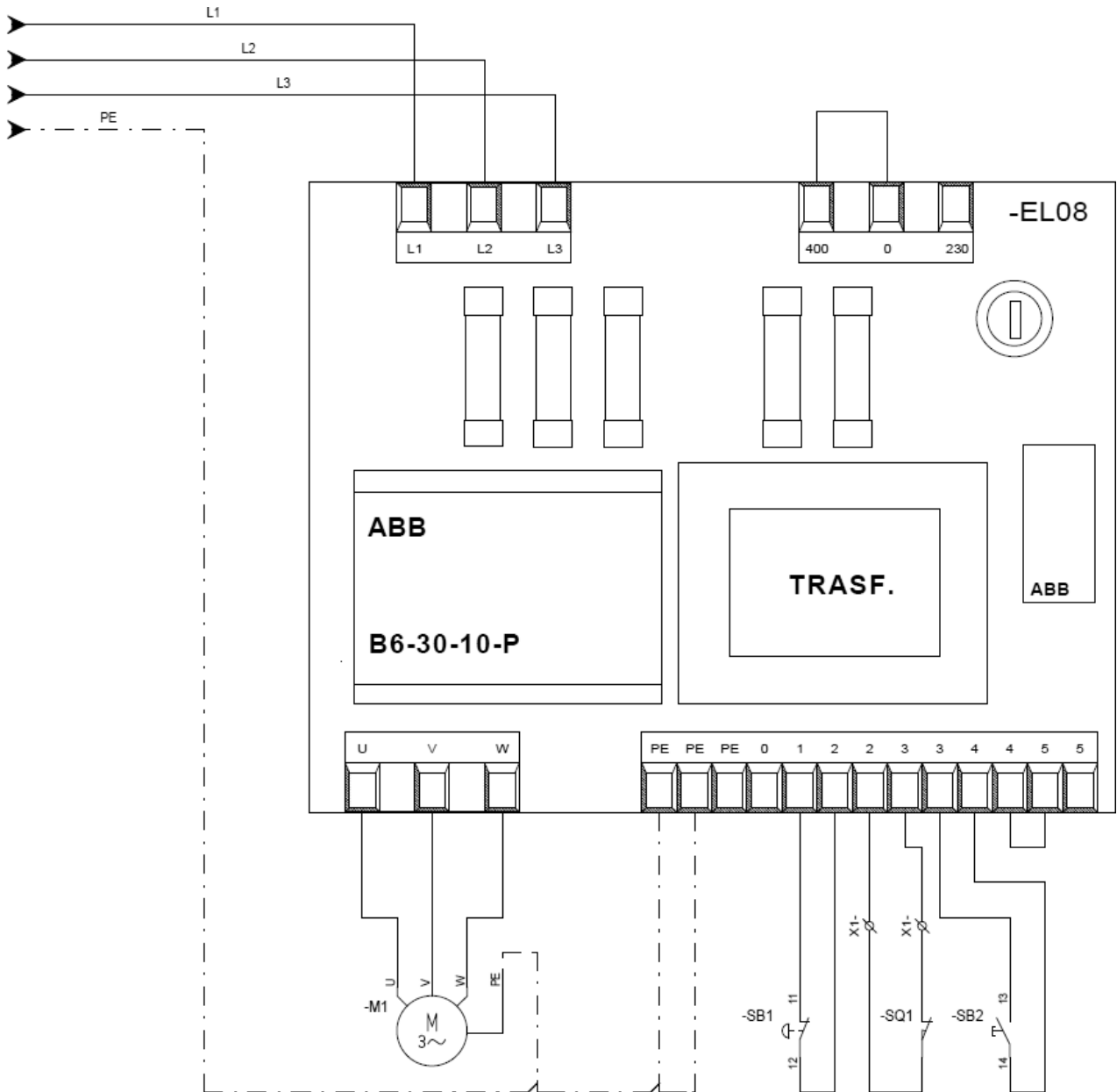


Macinapane - <b>Bread mill</b>	ELENCO PARTI DI RICAMBIO	ALLEGATO 1	
<b>MAC 100</b>	<b>SPARE PARTS LIST</b>	01/06/2016	Rev. B

POS.	COD.	DESCRIZIONE	DESCRIPTION
1	C00335	MOTORE ELETTRICO TRIFASE 400V 50HZ	<b>ELECTRIC MOTOR 3PH - 400V - 50HZ</b>
	C00336	MOTORE ELETTRICO MONOFASE 230V 50HZ	<b>ELECTRIC MOTOR 1PH -230V - 50HZ</b>
2	D03369	ANELLO DI TENUTA	<b>RING</b>
3	C00070	PIEDINO GOMMA	<b>RUBBER DUMPER</b>
4	D01453	CARTER ANTERIORE	<b>FRONT COVER</b>
5		MICROINTERRUPTORE	<b>MICROSWITCH</b>
6	D01462	BOCCA USCITA ALLUMINIO	<b>ALUMINUM OUTLET</b>
7	C00276	GUARNIZIONE	<b>WASHER</b>
8		ATTUATORE A FORCELLA	<b>ACTUATOR</b>
9	D01461	TUBO INOX INGRESSO PANE	<b>S/STEEL IN FEED TUBE</b>
10	D03632	BUSSOLA	<b>BUSH</b>
11	D03372	COLTELLI	<b>KNIVES</b>
12	D03360	SETACCIO Ø 3 – 4 mm	<b>SIFTER Ø 3 – 4 mm</b>
	D03550	SETACCIO Ø 5 – 6 mm	<b>SIFTER Ø 5 – 6 mm</b>
	D03538	SETACCIO Ø 6 – 7 mm	<b>SIFTER Ø 6 – 7 mm</b>
13	S00061	SCHEDA ELETTRONICA	<b>ELECTRONIC BOARD</b>
14	D01455	CHIUSURA LATERALE	<b>SIDE COVER</b>
15	S00055	PULSANTE DI EMERGENZA	<b>EMERGENCY BUTTON</b>
16	S00056	PULSANTE DI AVVIO	<b>START BUTTON</b>



Macinapane - Bread mill	SCHEMA ELETTRICO ELECTRIC DIAGRAM	ALLEGATO 2	
MAC100		15/11/2013	Rev. A



Macinapane - <b>Bread mill</b>	SCHEMA ELETTRICO ELECTRIC DIAGRAM	ALLEGATO 2	
<b>MAC100</b>		15/11/2013	Rev. A

Data emissione:19/02/2014 <b>Date of issue:19/02/2014</b>	
DESCRIZIONE/SPECIFICATION	TIPO/PART NUMBER
SCHEDA CONTROLLO / <b>ELECTRONIC CONTROL EL08</b>	EL08
PULSANTE EMERGENZA / <b>EMERGENCY BUTTON CGE P9XER4RAN</b>	SB1
CONTATTO / <b>CONTACT NC CGE P9B01VN</b>	SB1
PULSANTE NERO / <b>BLACK BUTTON CGE P9XNNG</b>	SB2
CONTATTO / <b>CONTACT NO CGE P9B10VN</b>	SB2
FUSIBILE / <b>FUSE 5X20 500mA</b>	FU1
FUSIBILE / <b>FUSE 6.3X32 16A</b>	FU2/3/4
FUSIBILE / <b>FUSE 6.3X32 500mA</b>	FU5/6

Garanzia

## EN – WARRANTY

### Warranty

- The seller guarantees that at the moment of dispatch the equipment is in perfect functional and aesthetic condition.
- The seller guarantees the equipment supplied for a time of 12 months for normal conditions of use and according to the product's technical specifications.
- During the warranty period, the seller undertakes at his discretion, to repair or replace parts found to be faulty but not to collect the equipment.
- The buyer must immediately report a wrong delivery or any defects found in the goods and send his reserves by fax, eTmail or registered letter, together with suitable documentation proving the reason for the complaint. When **7 days** have elapsed from receipt of the goods, the seller shall consider the supply approved by the buyer.
- A delay in payment or nonTpayment, even only of a part of what is due, suspends all rights to the warranty up until payment is settled, it being understood that the original expiry date of the warranty still remains.

### Warranty limitation and exclusions

- Parts subject to normal wear, damage to the paintwork, damage occurred during transport, damage caused by an incorrect assembly and/or installation, tampering by the buyer or third parties and goods without the seller's mark are not covered by the warranty.
- Except for proven hidden flaws, none of the electrical and electronic parts are covered by the warranty.
- The warranty will be void in case the equipment is used incorrectly, e.g., for applications which are different than the ones it has been projected for, or in case of an "abnormal" and prolonged use under stress(a "normal" use is an intermittent use on a working shift)
- Tampering of the equipment would void the warranty
- It is mandatory for all parts deemed faulty to be returned to the seller for replacing. Transport costs for returning the parts deemed faulty and for shipping parts covered by the warranty shall be borne by the buyer
- Costs borne by the buyer for replacing faulty parts will not be refunded, likewise any indirect damages caused by failures or malfunctions of the equipment

# Apach

## BAKERY *Line*

**Equip Group**

**125080 г.**

**Москва**

**Волоколамское шоссе, д.**

**2**

**+7 495 234 00 33**

**<http://equipgroup.ru/>**

**<http://bakeryline.apach.it/>**