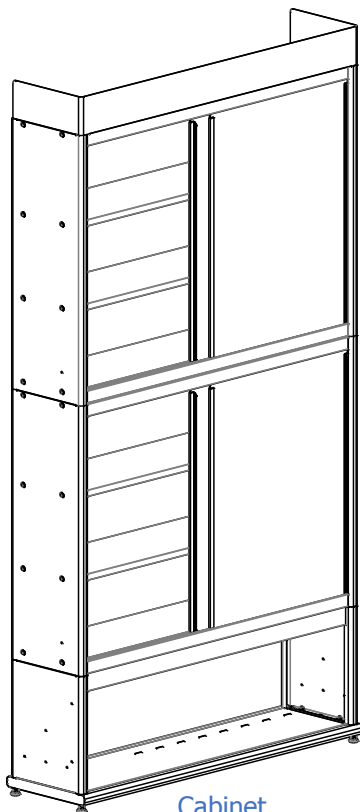
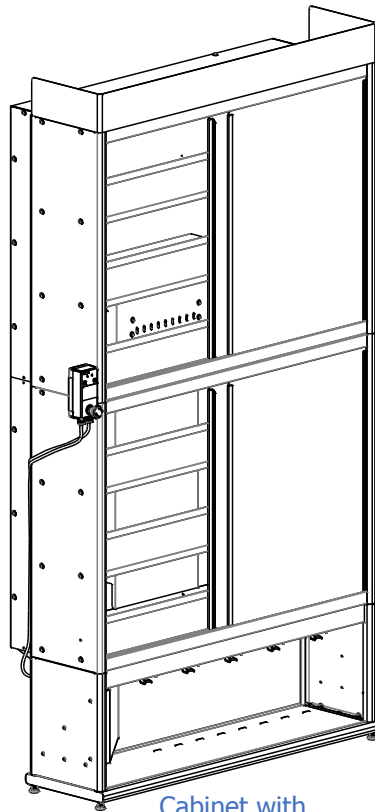


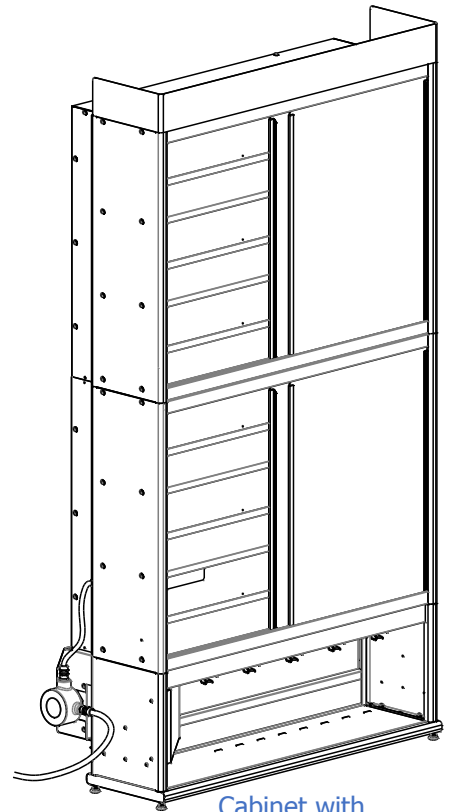
## Air System Cabinet



Cabinet  
not heated



Cabinet with  
standard heating



Cabinet with  
ATEX heating

## Use and maintenance handbook

## Index

|           |   |   |
|-----------|---|---|
| <b>1</b>  | <b>INFORMAZIONI GENERALI</b>  | ERRORE. IL SEGNA LIBRO NON È DEFINITO.        |
| 1.1       | IDENTIFICAZIONE DEL COSTRUTTORE   | <b>ERRORE. IL SEGNA LIBRO NON È DEFINITO.</b> |
| 1.2       | IDENTIFICAZIONE DEL PRODOTTO  | <b>ERRORE. IL SEGNA LIBRO NON È DEFINITO.</b> |
| 1.3       | DICHIARAZIONE CE (RIFERITA AI SISTEMI DI RISCALDAMENTO E AGITAZIONE)                      | 5   |
| 1.4       | NORME DI RIFERIMENTO  | <b>ERRORE. IL SEGNA LIBRO NON È DEFINITO.</b> |
| 1.5       | GARANZIA  | <b>ERRORE. IL SEGNA LIBRO NON È DEFINITO.</b> |
| <b>2</b>  | <b>DESCRIZIONE DELLA MACCHINA</b>   | ERRORE. IL SEGNA LIBRO NON È DEFINITO.        |
| 2.1       | KIT DI RISCALDAMENTO E AGITAZIONE   | <b>ERRORE. IL SEGNA LIBRO NON È DEFINITO.</b> |
| <b>3</b>  | <b>SICUREZZA</b>  | ERRORE. IL SEGNA LIBRO NON È DEFINITO.        |
| 3.1       | REGOLE DI SICUREZZA   | <b>ERRORE. IL SEGNA LIBRO NON È DEFINITO.</b> |
| 3.2       | IMPIANTO ELETTRICO DI ALIMENTAZIONE   | 8   |
| 3.3       | ZONE DI LAVORO  | 8   |
| 3.4       | RISCHI RESIDUI  | <b>ERRORE. IL SEGNA LIBRO NON È DEFINITO.</b> |
| 3.5       | SIMBOLOGIA RIPORTATA SULLA MACCHINA   | 10  |
| 3.6       | USO PREVISTO DELLA MACCHINA   | 10  |
| 3.7       | USO NON PREVISTO  | 10  |
| <b>4</b>  | <b>TRASPORTO E MOVIMENTAZIONE</b>   | <b>11</b>                                     |
| <b>5</b>  | <b>INSTALLAZIONE</b>  | <b>12</b>                                     |
| <b>6</b>  | <b>UTILIZZO</b>   | <b>19</b>                                     |
| 6.1       | SISTEMA DI RISCALDAMENTO STANDARD   | 19  |
| 6.2       | SISTEMA DI RISCALDAMENTO ATEX   | 19  |
| 6.3       | ISTRUZIONI D'USO E REGOLAZIONE QUADRO ELETTRONICO (VERSIONE CON IL MODULO DI AGITAZIONE)  | 20  |
| 6.4       | IMPOSTAZIONI PERSONALIZZATE TEMPI AGITAZIONE PAUSA (VERSIONE CON IL MODULO DI AGITAZIONE) | 21  |
| 6.5       | CARICO/SCARICO DEI BARATTOLI (VERSIONE CON IL MODULO DI AGITAZIONE)                       | 23  |
| <b>7</b>  | <b>MANUTENZIONE</b>   | ERRORE. IL SEGNA LIBRO NON È DEFINITO.        |
| 7.1       | MANUTENZIONE ORDINARIA  | 24  |
| 7.2       | PERIODI DI NON UTILIZZO   | 24  |
| <b>8</b>  | <b>DIAGNOSI</b>   | ERRORE. IL SEGNA LIBRO NON È DEFINITO.        |
| 8.1       | MODULO DI AGITAZIONE  | 25  |
| 8.2       | RISCALDAMENTO STANDARD  | 25  |
| 8.3       | RISCALDAMENTO ATEX  | 26  |
| <b>9</b>  | <b>SPECIFICHE</b>   | ERRORE. IL SEGNA LIBRO NON È DEFINITO.        |
| <b>10</b> | <b>SCHEMI ELETTRICI</b>   | <b>28</b>                                     |
| 10.1      | CABLAGGIO QUADRO TERMOSTATO   | 28  |



10.2 CABLAGGIO QUADRO TEMPORIZZATO AGITAZIONE

**ERRORE. IL SEGNALIBRO NON È DEFINITO.**

## **11 SMALTIMENTO**

ERRORE. IL SEGNALIBRO NON È DEFINITO.

## **12 RICAMBI**

ERRORE. IL SEGNALIBRO NON È DEFINITO.

## 1 GENERAL INFORMATION

### 1.1 Manufacturer identification

TECMEC S.r.l.

Località Faustina, 63

20080 Albairate (MI) – Italy

Tel: +39 02 9469871

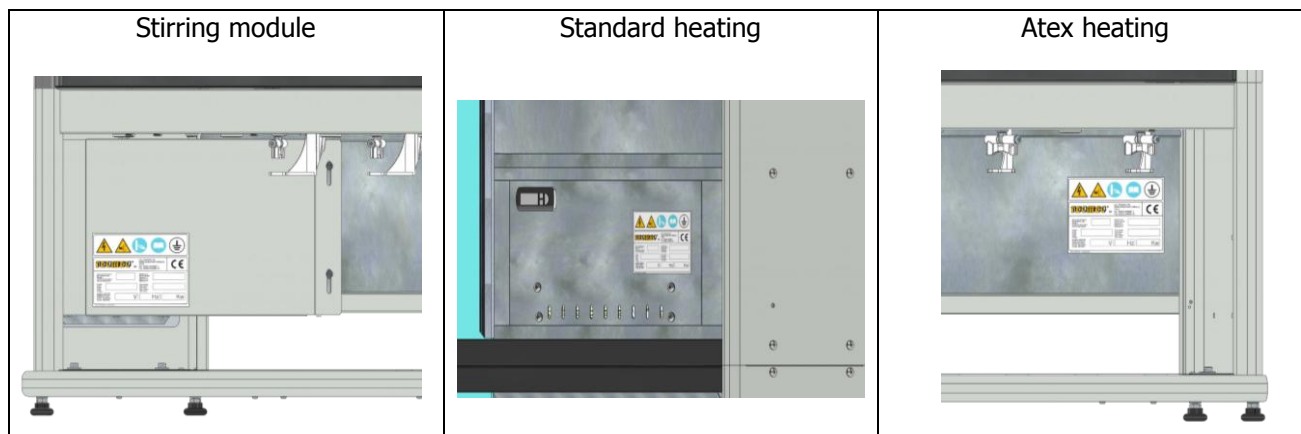
Fax: +39 02 94698741

e-mail: tecmec@tecmec.com

web: www.tecmec.com



### 1.2 Product identification

The identification labels are located on the stirring and heating systems of cabinet, in particular they are on the motor protection of stirring module, on the standard heater protection and on right side of ATEX heater.



The identification label shows the following data:

- Simbology on prescriptions of security and health
- Manufacturer information
- CE Mark
- Year of construction
- Serial number
- Code
- Type motor
- Electrical features

|   |  |  |  |    |
|---|--|--|--|----|
|                           |  |  |  |    |
|  Srl                      |  |  | Loc. Faustina, 63<br>20080 ALBAIRATE (Milano)<br>ITALY<br>Tel. 0039.2.946987.1<br>Fax 0039.2.946987.41 |    |
| Anno di costruzione<br>Manufacture year<br>Baujahr<br>Année de fabrication<br>Año de fabricación              |  |  | Matricola N°<br>Serial number<br>Matrikel N°<br>Matricule N°<br>Matricula N°                           |    |
| Codice<br>Code<br>Kodex<br>Code<br>Código   |  |  | Tipo motore<br>Type motor<br>Typ motor<br>Type moteur<br>Tipo motor                                    |    |
| Caratter. elettriche<br>Electrical features<br>Elektrische daten<br>Caract. électriques<br>Caract. eléctricas |  |  | V  | Hz |
|   |  |  | Kw   |    |

### 1.3 CE Declaration (For heating and stirring systems)



**DICHIARAZIONE DI CONFORMITÀ "CE" - "CE" CONFORMITY DECLARATION  
CERTIFICAT DE CONFORMITÉ "CE" - DECLARACIÓN DE CONFORMIDAD "CE"  
"CE" ÜBEREINSTIMMUNGSERKLÄRUNG**

Si dichiara che i macchinari di nostra fornitura si intendono progettati e costruiti in conformità ai requisiti essenziali di sicurezza e salute dettati dalla Direttiva Europea sulla Sicurezza delle Macchine. Rammentiamo che la presente dichiarazione perde validità in caso di modifiche sui macchinari eseguite senza il nostro consenso.

It is hereby certified that the equipments we supply are designed and manufactured according to the safety and welfare essential requirements prescribed by the European Directive on Machines Safety. We remind that the present declaration loses validity in case of modifications on machinery carried out without our consent.

Nous déclarons que la machine de notre fourniture spécifiée ci-dessous a été conçue et construite en conformité aux normes essentielles de santé et de sécurité requises par la Directive Européenne pour la Sécurité des Machines. Cette déclaration perd sa validité au cas où la machine aurait subi des modifications sans notre autorisation.

Se declara que las máquinas de nuestro suministro han sido proyectadas y construidas en conformidad con los requisitos esenciales de seguridad y salud dictadas por la Norma europea sobre la Seguridad de Máquinas. Recordamos que la presente declaración pierde validez en caso de modificaciones sobre las máquinas ejecutadas sin nuestro consentimiento.

Es ist hier erklärt, daß die von uns hergestellten Maschinen in Übereinstimmung mit den wesentlichen Sicherheits- und Gesundheitserfordernissen nach der Europäischen Richtlinie über die Maschinensicherheit geplant und aufgebaut sind. Wir erinnern Sie daran, daß die vorliegende Erklärung ihre Gültigkeit im Fall von Änderungen auf die Maschinen verliert, die ohne unsere Zustimmung gemacht werden.

*Identificazione del fabbricante, Manufacturer identification, Identification du fabricant, Identificación del fabricante, Identifikation der Hersteller:*

**TECMEC S.r.l. - Località Faustina, 63 - 20080 Albairate (MI) Italy**

**Tel. +3902946987.1 - Fax +3902946987.41 - E-mail [tecmec@tecmec.com](mailto:tecmec@tecmec.com) - <http://www.tecmec.com>**

*Identificazione della macchina, Machine identification, Identification de la machine, Identificación de la máquina, Identifikation der Maschine:*

Codice, Code, Código, Maschinennummer: **: 012734**

Descrizione, Description, Descripción, Schilderung: **: KIT RISCALDAMENTO STANDARD**

Matricola, Serial number, Numéro de série, Número de serie, Seriennummer: **: SNxxxxxx**

Anno di costruzione, Year of manufacture, Année de construction, Baujahr, Fecha: **: 20xx**

*Direttive di riferimento, Reference directives, Directives de référence, Directivas de referencia, Angewandte Normen:*

**2006/42/CE (machine - machines - máquinas - Maschinen)**

**2014/35/UE (bassa tensione - low tension - basse tension - baja tension - Niederspannung)**

**2014/30/UE (compatibilità elettromagnetica - electromagnetic compatibility - compatibilité électromagnétique - compatibilidad electromagnética - elektromagnetische Verträglichkeit)**

*Norme applicate, Applied regulations, Normes appliquées, Normas aplicadas, Angewandte Anweisungen:*

**UNI EN ISO 12100:2010 (sicurezza del macchinario - safety of machinery - sécurité des machines - seguridad de las máquinas - Sicherheit von Maschinen)**

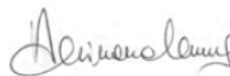
**CEI EN 60204-1 (equipaggiamenti elettrici - electrical equipments - équipements électriques - equipos eléctricos - Elektrische Geräte)**

*Persona autorizzata a costruire il fascicolo tecnico, Person authorized to compile the technical file, Personne autorisée à constituer le dossier technique, Persona autorizada para elaborar el expediente técnico, Autorisierte Person zur Erstellung der technischen Dokumentation*

**TECMEC S.r.l.**

*Luogo e data, Place and date, Lieu et date, Lugar y fecha, Ort und Datum*

**Albairate, 09/02/2018**



*Il legale rappresentante  
The legal representative*  
**Laura Desinano**



## **1.4 Reference standards**

|                       |   |
|-----------------------|---|
| 2006/42/CE            | Machine Directive                               |
| 2014/35/UE            | Low tension Directive                           |
| 2014/30/UE            | Electromagnetic compatibility                   |
| 2015/34/UE            | ATEX Directive                                  |
| UNI EN ISO 12100:2010 | Machinery Safety – general principles of design |
| CEI EN 60204-1        | Electrical equipment of machines                |

## **1.5 Warranty**

The warranty includes free replacement or repair of components with manufacturing defects.

For the warranty conditions see the document on the CD-rom supplied with the product.

The warranty excludes damages caused by transport, not observance of the manual instructions, operations of unauthorized personnel or for reasons not caused by the manufacturer.

## 2 DESCRIPTION OF THE MACHINE

The Cabinet is an equipment designed to professional application.

The Cabinet is designed to storage of colorant pastes contained in suitable containers.

Are available kits for standard or ATEX heating, that allow the conservation of colorant pastes in range of temperature between 16°-20°C

On cabinet is available a stirring module, that allow to place up to five 3L cans (or 0,5-1L with adapter).

### 2.1 Heating and stirring kits

The cabinet is provided in not heated versione and without stirring system.

Are available separately: the heating systems, the stirring and the adapter for 0,5-1L cans.

| Heating system |                      |
|----------------|----------------------|
| <i>Code</i>    | <i>Description</i>   |
| 012734         | STANDARD HEATING KIT |
| 012735         | ATEX HEATING KIT     |

| Stirring module |                    |
|-----------------|--------------------|
| <i>Codice</i>   | <i>Description</i> |
| 012736          | STIRRING MODULE    |
| 012514          | ADAPTOR            |

## **3 SAFETY**

### **3.1 Safety rules**

The cabinet must be included in the assessment of company risk and requires the applicable laws on safety at work to be complied.

To ensure the highest possible degree of safety in the correct use of the machine, all measures deemed necessary in the design, construction, testing and installation have been adopted.

**For a proper use, the cabinet have to be used by trained personnel, in order to avoid accidents or injury to person, or and things.**

The components used are in accordance with the applicable standards.

The cabinet must be located in a special tank / container, suitable to contain any accidental products leaks.

**To avoid that the equipment have instability issues, it's necessary to verify both the perfect leveling of the feets locaded in the bottom part of the structure and the fixing to the wall, as per the assembly instructions.**

### **3.2 Work environment requirements**

The floor has to be regular and flat to minimize the vibrations.

The floor must be able to bear the weight of 500 Kg.

The environment must have the correct illumination as request from current legislation in work environment.

To use the machine properly, the room temperature should be between 5° and 40°C, colorants used permitting.

### **3.3 Electric power system**

Given the installation place, for the heated and/or stirring version, the requirements to be implemented before placing the tecmec equipment are as follow:

- The power supply have to be provided by a control panel on the wall, placed near the cabinet.
- The maximum power are: 0,18Kw for stirring module, 0,5Kw for standard heating and 0,75Kw for ATEX heating (add the maximum power in relation to the configuration of cabinet).
- The section of each conductor mustn't be less than 1.5 mm<sup>2</sup>.
- The power line must be equipped of a efficient ground connection and complies with the requirements set by current standards.
- The supply panel have to be composed with a differential switch (IΔn=0,03A) with voltage and phases compatible with power supply of machine (single phase).

To ensure a complete safe operation for the operator and the equipment, it's very important, during the assembly of the electrical panel, to use the above mentioned type of switch, due to the fact that the switch will have a protective function against possible direct or accidentals voltage hazard down to ground.

It's important to make the necessary assessment of the site, and follow the applicable regulations for the characteristics of the electrical system, to ensure that they are not a cause of accidents or injuries.

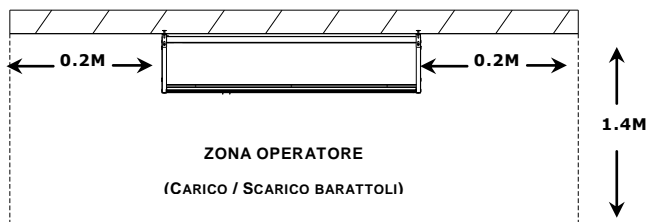


### 3.4 Working zones

The cabinet doesn't have particular dangers, but there are zones where accessibility to the operator is prohibited, these are the maintenance and dangerous zones.

- Operator zone

The zone near to the cabinet where the operator can stand.



- Maintenance and dangerous zones

They are those zones where the operator mustn't intervene, in these zones only qualified personnel must access and for ATEX version only qualified personnel in potentially explosive environments.

| MAINTENANCE AND DANGEROUS ZONES        |   |   |
|--|---|---|
| Description of zone                    | Allowed operation                                       | Dangers                                       |
| Stirring motor zone                    | Repairs by qualified personnel                          | Moving parts and equipment in voltage.        |
| Standard heating panel                 | Repairs by qualified personnel                          | Equipment in voltage.                         |
| Explosion-proof housing of ATEX heater | Repairs by qualified personnel to operate in ATEX areas | Equipment in voltage and danger of explosion. |
| ATEX thermostat                        | Repairs by qualified personnel to operate in ATEX areas | Equipment in voltage and danger of explosion. |

### 3.5 Residual risks

In spite of the precautions adopted in the design of the equipment, to ensure safe use there may be reasonably foreseeable situation for which it is only been possible to reduce the risk without completely eliminating it.





| Risk  | Precaution   |
|---|--|
| During the stirring cycle, the fans are moving and could cause injuries to the hands.<br>(on shelf is applied the danger symbol "Moving parts") | Use protective gloves and don't put the hands during the stirring under the shelf. |

|   |   |
|---|---|
| Accidental liquid spill inside the cabinet. | Disconnect immediately the equipment from the main electrical line, remove the liquid by using proper products. |
|---|---|

**The cabinet is designed for the storage and/or stirring of colorant pastes of various types.**

**Before to their use, follow the instructions, warnings and safety instruction on each individual can/package, and on the data sheet issued by the producer.**

### 3.6 Symbols shown on the equipment

|   |   |
|---|---|
|    | Danger electrical hazard.<br>Is forbidden to carry out work on the equipment under voltage.<br>Is forbidden to operate on the electrical system without authorizations.   |
|    | Danger parts in movement below stirring shelf.<br>It is forbidden load and unload cans from stirring shelf when the machine is running.<br>It is forbidden put the hands below stirring shelf when the machine is running.<br>It is forbidden wear clothing (as necktie or scarf) that can wrap around in the moving parts. |
|   | It is mandatory to read carefully the instruction manual, before any operation on the equipment.  |
|  | It is mandatory to provide the grounding of the electrical system.  |

### 3.7 Intended use of the equipment

The unique features of this equipment are to store, to stir and to heat (If one or both systems are installed) the colorant pastes contained in suitable containers/cans.

### 3.8 Non intended use

Any other use of this equipment that are not described in this manual are considered improper and therefore prohibited.

In particular it is forbidden:

- It is forbidden heat or stir products that are not colorant pastes.
- Any kind of manumission or unauthorized intervention on the electrical system.
- The access to the motor zone and to thermostat control panel by unauthorized personnel, and in any case when the equipment is connected to the main electrical line.
- It is forbidden remove motor protection except for maintenance by unauthorized personnel.

**In any case it is absolutely mandatory to remove the plug from the main electrical / power line before executing any kind of maintenance.**

## 4 TRANSPORT AND HANDLING

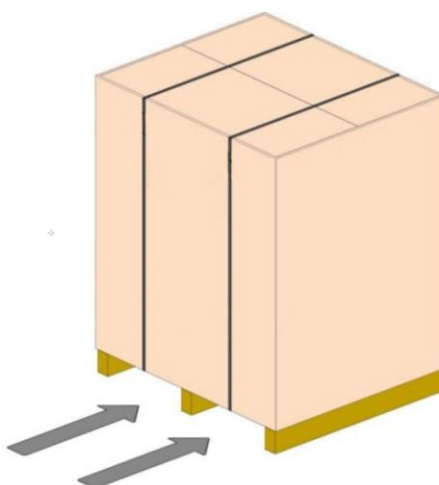
The cabinet is shipped in special cardboard boxes and transported on pallets for allow the transport with suitable lifting systems in relation to weight (see chapter 9).



Lifting systems

The lifting operation must be carried out with the maximum care and attention.

Do not remain under the machine or in the immediate vicinity of the machine while it is being raised.



Punti di sollevamento

Each box is labeled with: description, code, production order, weight and number of people for lift it.



In case of needs to move an operating equipment for short distances (same workplace) please follow the below points:

- Always operate by following the instruction provided by existing accident prevention regulation.
- Remove all colorants from shelves and place them in a appropriated place.
- Unscrew the nuts that secure the cabinet to the wall.
- Disassemble the cabinet upper module so as to split the cabinet in two parts.
- Lay down the two parts on pallets so as to avoid the fall during the transport.
- Move the pallets with appropriated means (pallet jack or forklift) to the new destination place.
- Reassembly the two cabinet parts and fix it on wall using the dowels.

For obvious safety reason is **forbidden** to move the assembled equipment.

**For movement over long distance, the equipment MUST be packed and secured on pallets, as when it was delivered.**

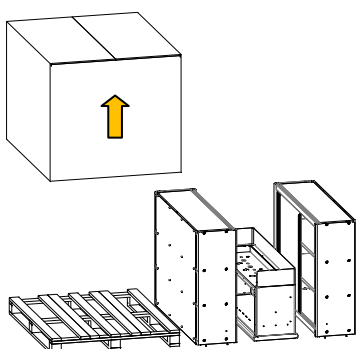
## 5 INSTALLAZIONE

### WARNING

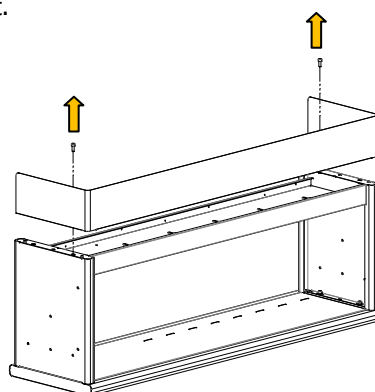
**Consider the size and weights of the various components that will be moved.**

**Is fundamental constraint that the below mentioned installation steps are carried out by least two people with safety gloves and shoes.**

1. Remove the cardboard box and place the three modules on the floor.



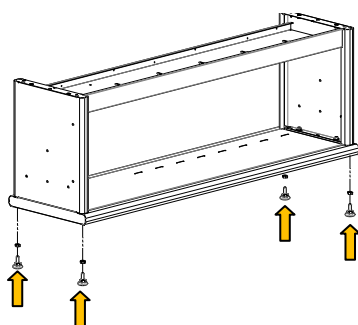
2. Remove the screws that fix upper frontal to the base and remove it.



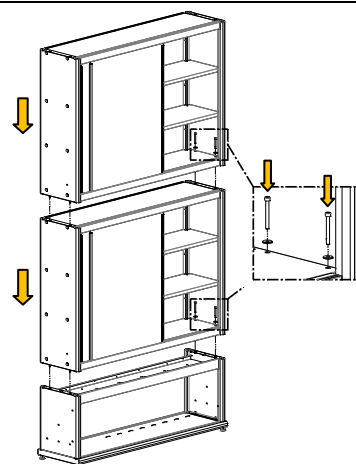
3. Screw the four feet on the base with the corresponding M8 nuts.

(If the cabinet is with stirring system, use the base with stirring separately packaged).

4. Put the base near the installation place, leave about 1M from the wall for facilitate next steps.



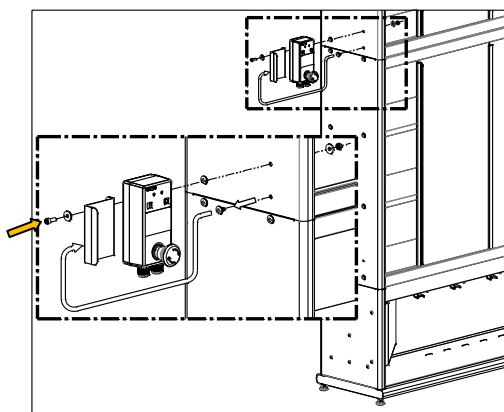
5. Overlap the first module to the base end use four M6x55 screws with corresponding washers for fixing it.



6. Overlap the second module fix it to the first using four M6x55 screws with corresponding washers.

### (Only for stirring version)

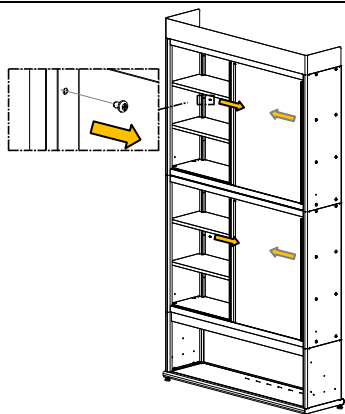
7. Remove the self-tapping screw shown in figure.
8. Fix the command panel with plate to the cabinet left side, use the removed screw and a M6x16 screw with corresponding washers and M6 nut.



The steps here below are for installation of the standard and ATEX heating systems, if the cabinet is non-heating jump to step 44

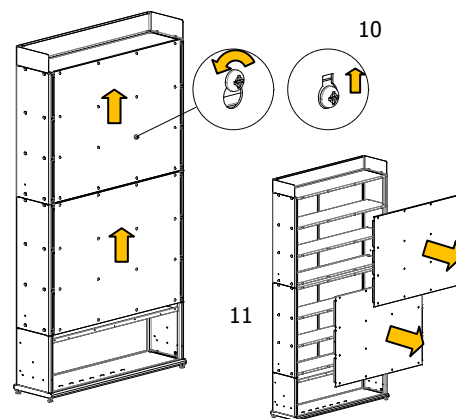
### Standard heating

9. Remove the four internal screws of the rear panels.

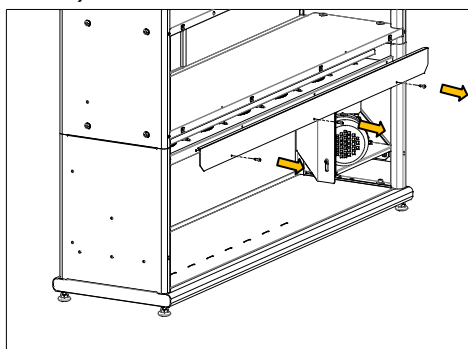


10. Loosen the screws that lock the rear panels.

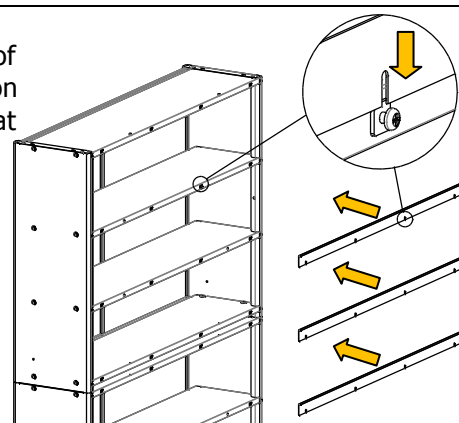
11. Lift the back panels and remove them.



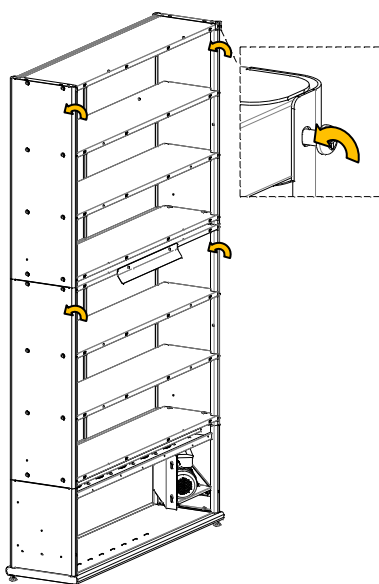
12. Unscrew the three screws and remove the stirring shelf protection (if the agitation option is provided).



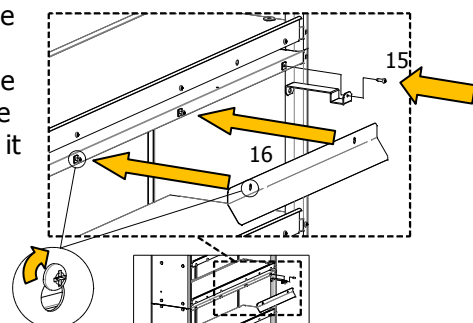
13. Insert the slotted holes of the six sides on the screws that before fixed the rear panels.



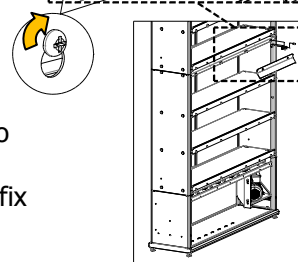
14. Loosen few millimeter the four screws on the cabinet sides.



15. Fix the probe holder removing the screw before and reusing it for fix the holder.



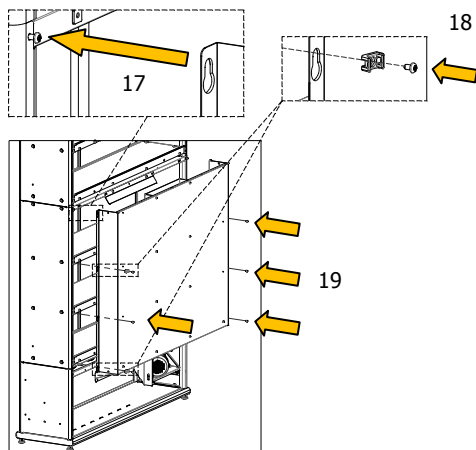
16. Hook the metal protection to the central screws and fix it.



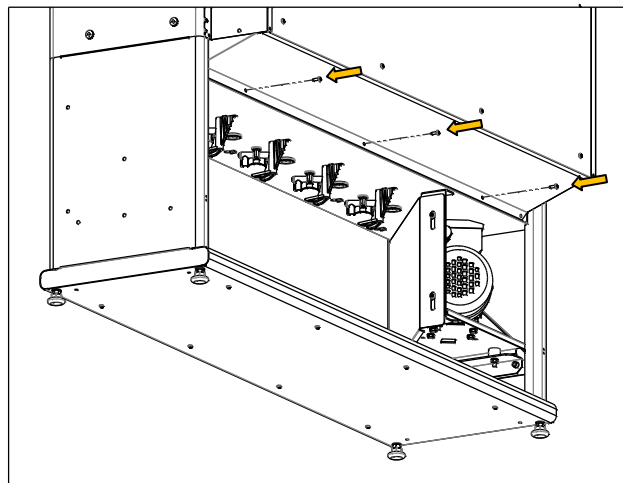
17. Hook the panel with duct to the lower screws of cabinet.

18. Fix the two ties cable base with two Ø3.9x13 screw on side of power cable.

19. Put the others four Ø3.9x13 screws for fixing of the panel.

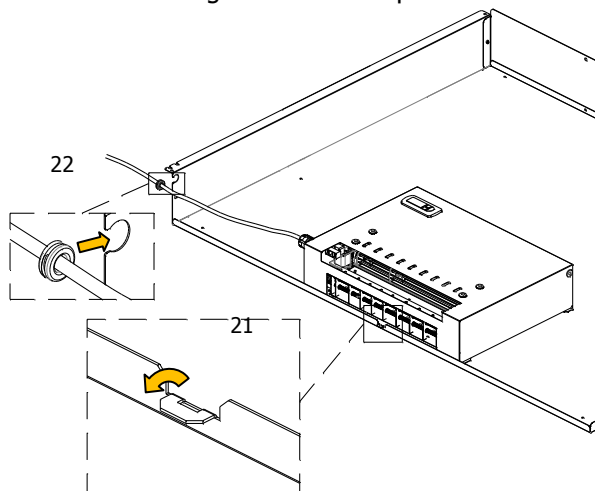


20. Fix the bottom of panel with three Ø3.9x13 screws.



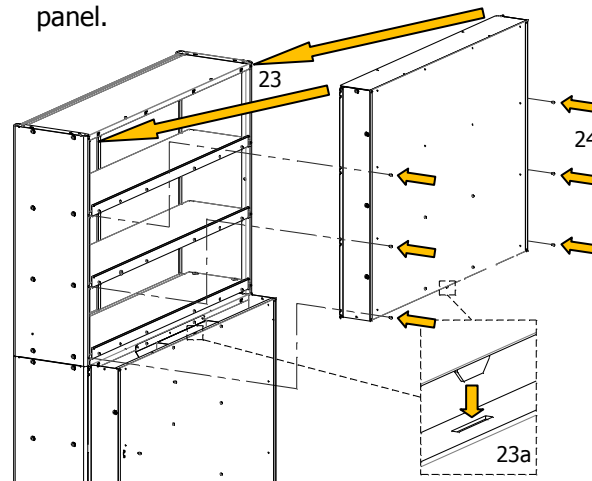
21. Bend the metal tab to 90 degrees.

22. Put the cable grommet in the panel hole.

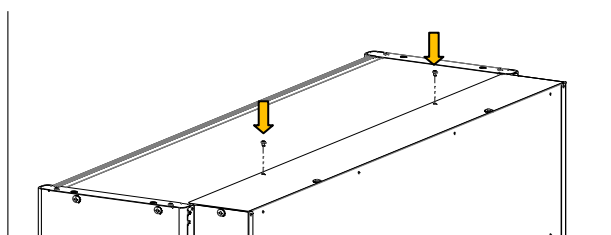


23. Hook the panel with thermostat to the upper screws of cabinet. Pay attention not to crush the probe cable and to insert the metal tab in the lower panel slot (23a).

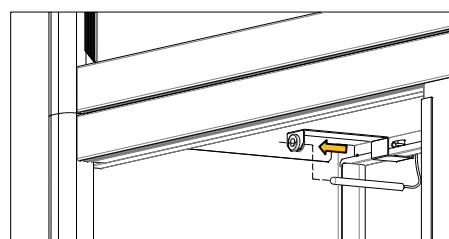
24. Put the others six Ø3.9x13 screws for fixing of the panel.



25. Fix the upper of panel with two Ø3.9x6.5 screws.



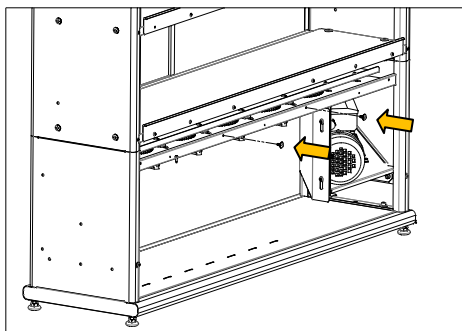
26. Insert the probe in holder below the central shelf.



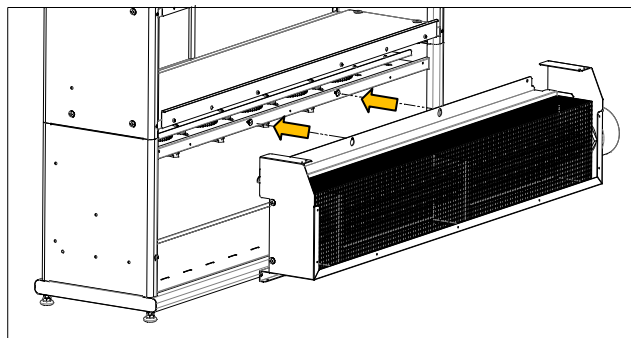
### ATEX heating

**Run the steps 9-10-11-12-13-14 in common with the standard heating.**

27. Insert two Ø4.8x9.5 black screws in central holes in the shelf of lower module, keep 3-4 mm between the screw head and the shelf.

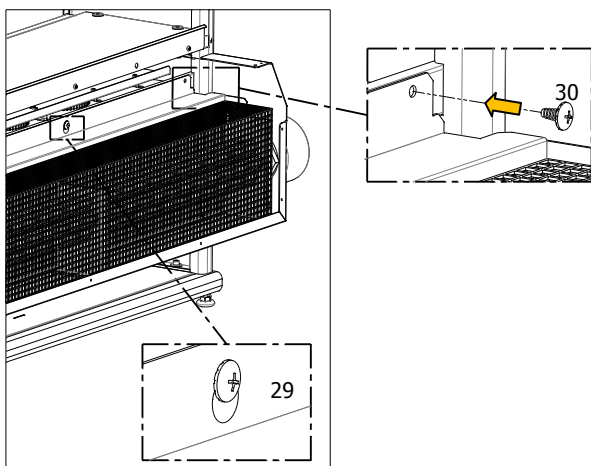


28. Hook the heater to lower module.

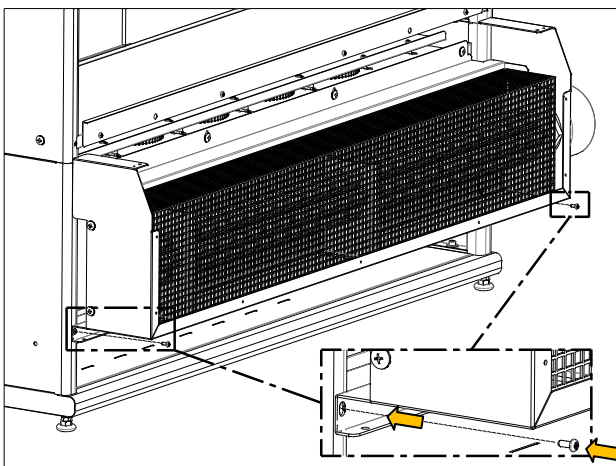


29. Check the hooking correct of heater.

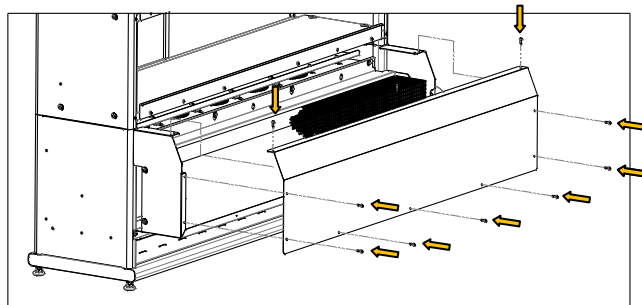
30. Insert two Ø4.8x9.5 side screws and tighten all screw.



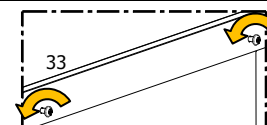
31. Fix the heater to module using two Ø3.9x13 screws.



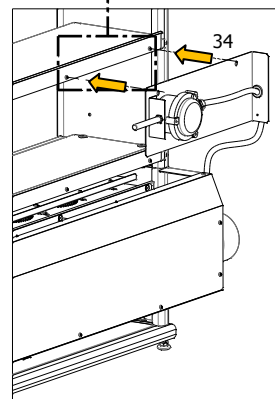
32. Assemble the rear cover of heater using nine Ø3.9x13 screws.



33. Loosen at some millimeter the two screws on the right of second shelf.



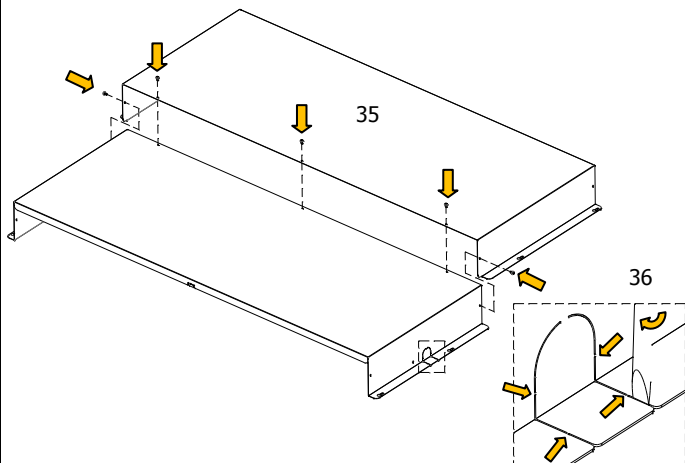
34. Hook the thermostat plate and tighten the two screws.





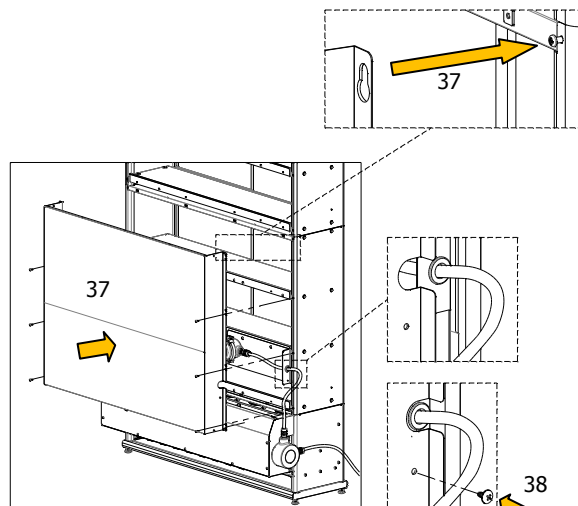
35. Assemble the lower panel using five Ø3.9x6.5 screws.

36. Remove the side closing putting a screwdriver in the slot and turn it for break the four joints. Then bend the closing more times for break the bigger joint.

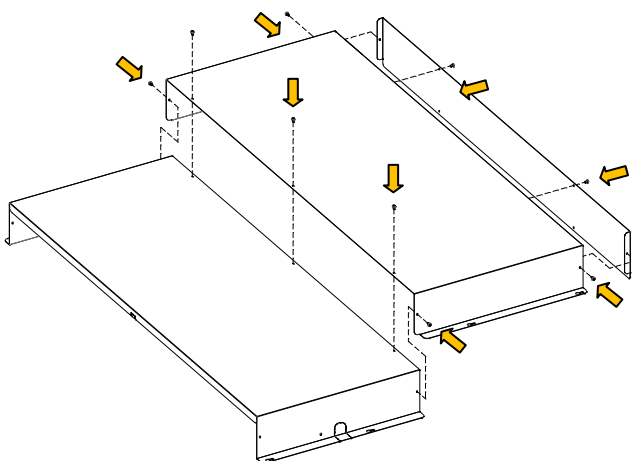


37. Hook the panel to the lower screws of cabinet and fix it with six Ø3.9x13 screws.

38. Fix the thermostat plate using a Ø4.8x9.5 black screw.



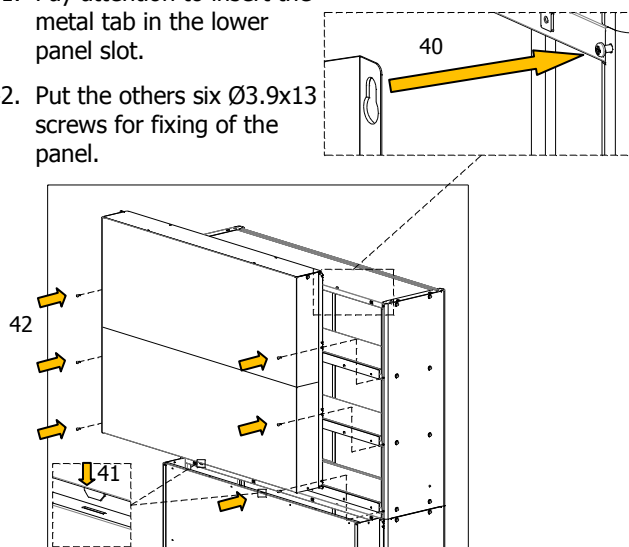
39. Assemble the upper panel using nine Ø3.9x6.5 screws.



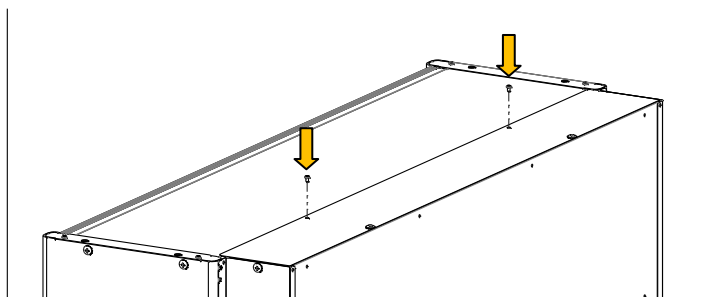
40. Hook the panel to the upper screws of cabinet.

41. Pay attention to insert the metal tab in the lower panel slot.

42. Put the others six Ø3.9x13 screws for fixing of the panel.

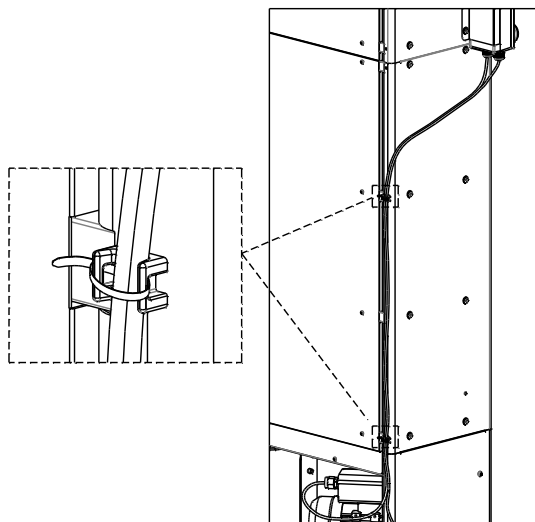


43. Fix the upper of panel with two Ø3.9x6.5 screws.

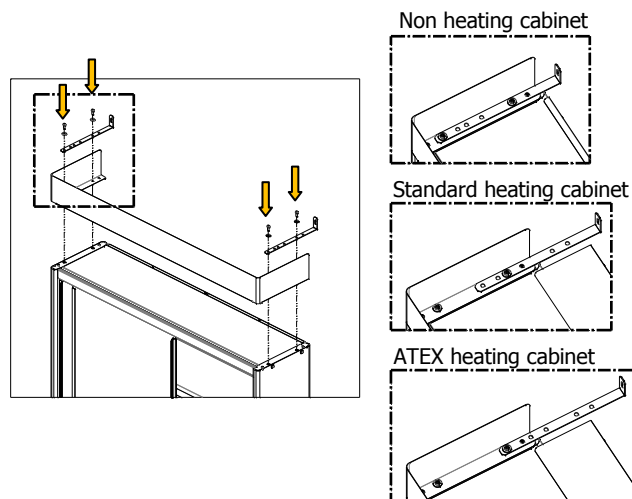


### Final step for all versions

44. If the cabinet is equipped with a stirring module or standard heating, fix the cables with the cable ties on cabinet left side.



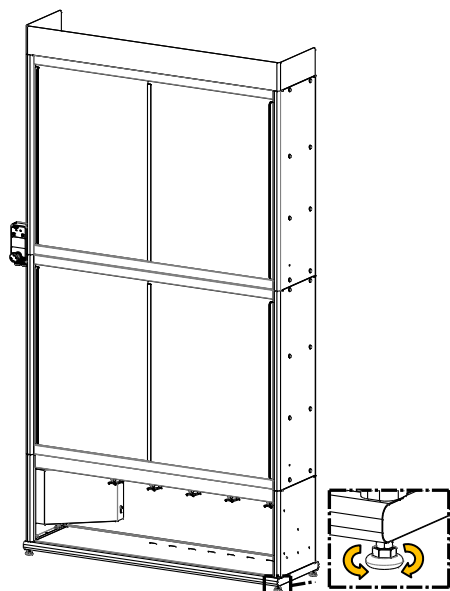
45. Place the upper frontal on the cabinet and fix the wall mounting brackets using 4 screws M6x16 and washer.



46. Place the cabinet against the wall and adjust the feet for levelling the cabinet (use spirit-level).

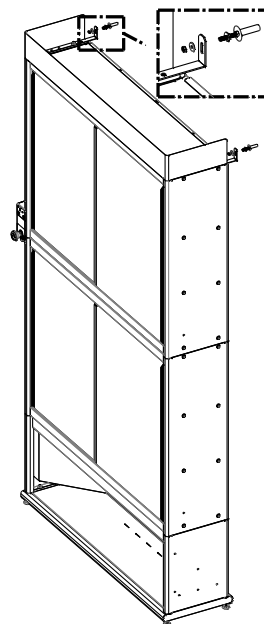
47. Lock the feet tightening the nuts.

**(Not executing this operation may cause noise and not perfect closing of doors.)**



48. Fix the cabinet to the wall using supplied dowels.

**Not executing this operation may cause risk to operator.**




## **6 USE**

### **6.1 Standard heating system**

The cabinet heating system operates through a tangential fan with resistance, both controlled by a digital thermostat that detects the temperature in inside the cabinet thank to a sensor under a shelf.

Once the temperature have reached the set point (factory setting to 19°C) the thermostat will cut the power supply to the fan and resistance until the temperature drops 0,5°C below the set point.

On thermostat display during the heating fase shows the symbol  .

**NOTE:** To change the temperature set point contact the Service Department in Tecmec.

**NOTE:** it's recommended leave the cabinet switched on at the end of the day to maintain a constant temperature of the products inside the cabinet.

### **6.2 ATEX heating system**

The cabinet heating system operates through a thermo convector controlled by a thermostat (explosion proof both) that detects the temperature in inside the cabinet thank to a sensor under a shelf.

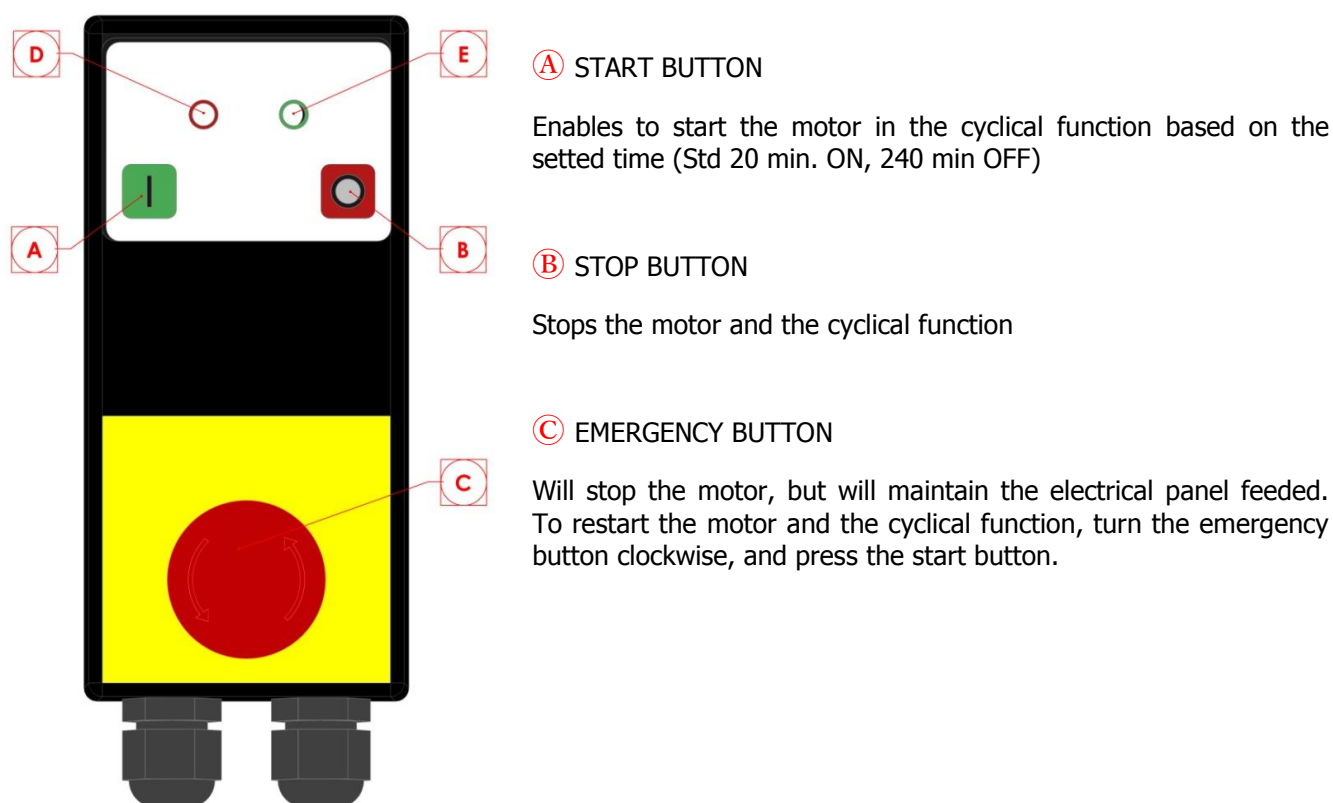
Once the temperature have reached the set point (factory setting to 19°C) the thermostat will cut the power supply to thermo convector until the temperature drops 2°C below the set point.

**NOTE:** To change the temperature set point contact the Service Department in Tecmec.

**NOTE:** it's recommended leave the cabinet switched on at the end of the day to maintain a constant temperature of the products inside the cabinet.

### 6.3 Operation instruction and electrical panel settings (Version with stirring module)

The stirring shelf is controlled by a electrical panel with internal CPU, that will generate the signal / input to the agitation motor. The control panel is located in the right shoulder of the machine.



| INDICATIONS |                                    |  |
|-------------|------------------------------------|--|
| Led         | Mode                               | Meaning  |
| <b>E</b>    | Green Led fixed light              | Dispenser powered (tension present)                    |
| <b>D+E</b>  | Red Led flashing and Green Led off | Motor on, agitation phase active                       |
| <b>D+E</b>  | Red and Green Led fixed light      | Cycle mode active (agitation motor off ready to start) |

#### Note:

**To restart the motor during the pause period, press the red STOP button, wait a few seconds and press the green START button.**

In cause of power outage, the cabinet is able to restore its correct operation in total autonomy only for the heating system.

For the stirring shelf, check the cause of the fault and restore the security status. Reactivate the stirring cycle pressing the start button in order to always ensure a good homogenization of the product.

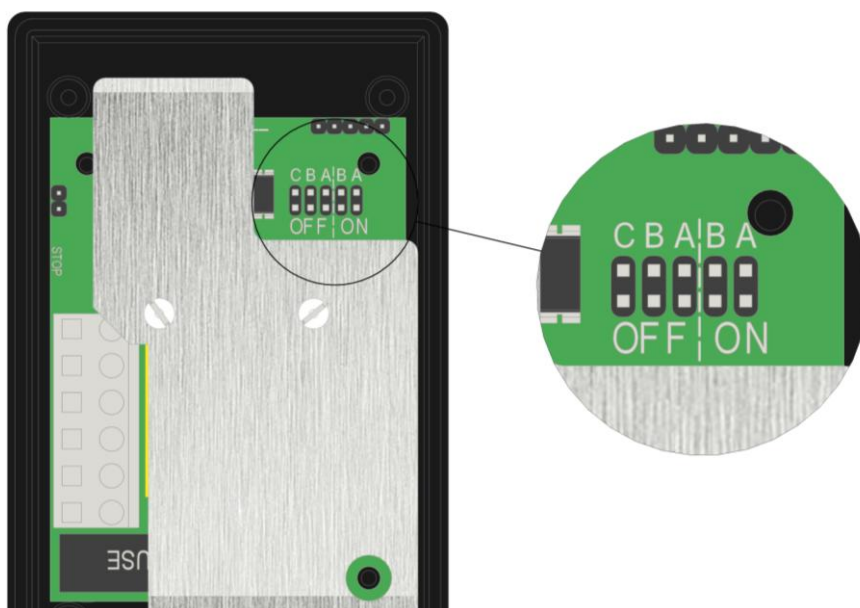
If not, contact the Customer Service Tecmec.








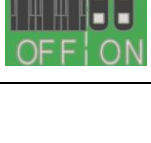
## 6.4 Customized agitation and pause settings (Version with stirring module)



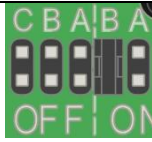

The factory setting (012245) is set as follow: **20** minutes agitation **240** minutes pause.

If necessary, you can change these settings by doing the following:

- disconnect the machine from the power line
- remove the frame from the bracket
- remove the cover of the panel by unscrewing the 4 rear screws
- following the table below, close the desired contacts with jumpers of the area shown in the figure



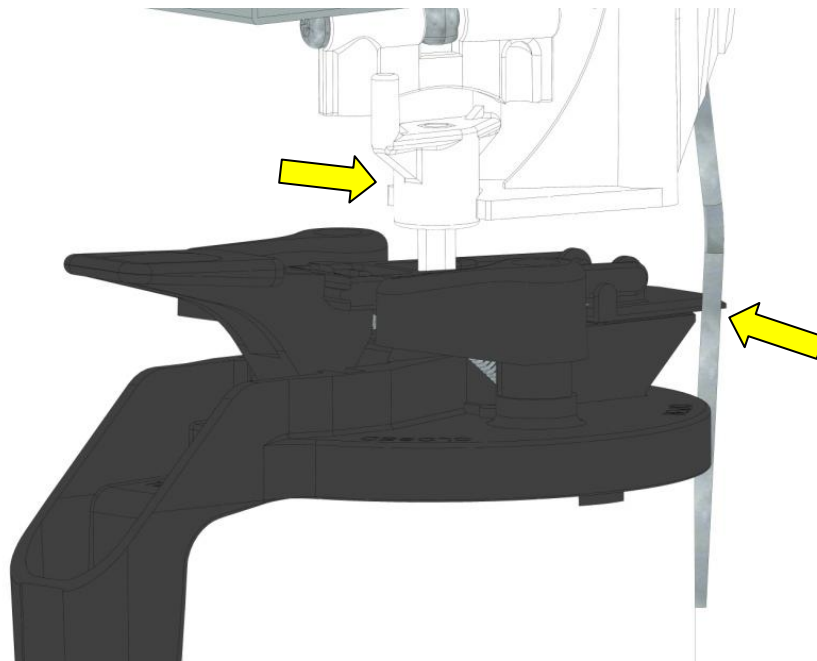
| Pause time (min.) |   |                 |
|-------------------|---|-----------------|
| 60 min.           |    | No jumper       |
| 120 min.          |    | Jumper on C     |
| 180 min.          |    | Jumper on B     |
| 240 min.          |    | Jumper on B+C   |
| 300 min.          |   | Jumper on A     |
| 360 min.          |  | Jumper on A+C   |
| 420 min.          |  | Jumper on A+B   |
| 480 min.          |  | Jumper on A+B+C |

| Shaking time (min.) |   |               |
|---------------------|---|---------------|
| 10 min.             |  | No jumper     |
| 15 min.             |  | Jumper on A   |
| 20 min.             |  | Jumper on B   |
| 25 min.             |  | Jumper on A+B |

## 6.5 Loading and unloading of cans (Version with stirring module)

Add or remove the cans from the respective location only when the machined is turned off.

When placing the can make sure that the lid is properly positioned. The reference point are 2: the spout against the anti rotation "nail", and the fork against the reference points.



## **7 MAINTENANCE**

### **7.1 Ordinary maintenance**

As all the Tecmec products, in order to extend the "life time", the cabinet needs a few precautions:

- check every morning that the green led of panel and the display of thermostat are turned on;
- check that all cans are placed properly on the shelves;
- check that all lids of cans are placed properly in the stirring zone;
- in case of leaks, disconnect the machine from electric line and clean immediately the zone with suitable product using appropriate protections;
- leave the machine in operating mode at night and in the weekend to maintain the products ready to them use;
- remember to close the sliding doors after each load and unload operation;
- check the correct function of thermostat, observing the turning on of the corresponding led on display (only for standard heating version);
- check each month the correct function of emergency button.

Follow the below steps:

- I. press the emergency button in any operating mode
- II. check that the leds on panel are turned off and the motor (in case of stirring) has stopped.
- III. confirmed the functioning of the emergency button, restore the correct functioning of the cabinet pressing the green button of cycle start.

For any other question or doubts please contact the service department in Tecmec.

### **7.2 Non use periods**

In case that the equipment will be switched off, due to a prolonged period of non-use (long holidays or summer holidays), all the cans have to be removed from the cabinet, and store them in a appropriate place.

For restart of work, reposition the cans inside the cabinet and manual stir the cans with stirring lids before repositione on stirring module.



## 8 TROUBLESHOOTING

### 8.1 Stirring module

| Problem  | Possible cause  | Possible solution   |
|--|---|---|
| The motor is turning, but the electrical panel is switched off.        | No power.   | Verify that the power cord is connected and intact.   |
|  | The internal thermal protection of the motor have been activated. | Unplug the unit, wait an hour before connecting again, verify the functioning. If not working change the motor. |
|  | Emergency button pressed.   | Release the button, and press the start button.   |
| The electrical panel is not working in all or in some of the buttons.  | Possibile tension overload.                                       | Remove the power plug, wait a couple of minutes before reinsert the plug, and operate the equipment.            |
|  | Failure on the electrical panel.                                  | Replace the electrical panel.   |
| The motor is turning, but does not transmit the rotation to the shelf. | Feather key missing or broken on the reducer shaft.               | Replace /insert the feather key.  |
|  | Transmission joint broken or unhooked.                            | Verify the connection between the joints.   |
| Noise machine.   | Machine not correctly positioned.                                 | Adjust the feet.  |
|  | The feets are not adjusted correctly.                             |   |
| The panel is on, but the motor is not working.                         | Fuse blown.   | Change fuse.  |

### 8.2 Standard heating

| Problem   | Possible cause   | Possible solution   |
|---|--|---|
| The setted temperature is not reached in the cabinet. | The resistance doesn't heat.                                 | Contact the service Dep. in Tecmec.   |
|   | There is a heat dispersion.                                  | Verify the proper sliding doors closing.                                    |
|   | The room temperature where the cabinet is placed is too low. | Place the cabinet in enviroment with a temperature above 5°C.               |
| The thermostat display doesn't turn on.               | Cavo di alimentazione scollegato o interrotto.               | Controllare il cavo che sia integro e collegato alla rete di alimentazione. |
|   | Termostato non funzionante.                                  | Contattare il servizio di Assistenza Tecmec.                                |

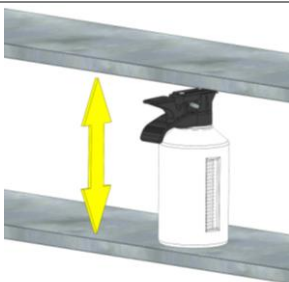
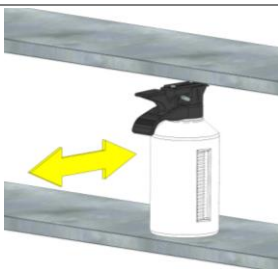



### 8.3 ATEX heating

| Problem   | Possible cause  | Possible solution  |
|---|---|--|
| The setted temperature is not reached in the cabinet. | The thermo convector doesn't work.                              | Contattare il servizio di Assistenza Tecmec.                       |
|   | E' presente una dispersione di calore.                          | Controllare la chiusura delle porte scorrevoli.                    |
|   | La temperatura del locale ove è posto l'armadio è troppo bassa. | Posizionare l'Armadio in ambienti con temperatura superiore a 5°C. |

## 9 TECHNICAL FEATURES

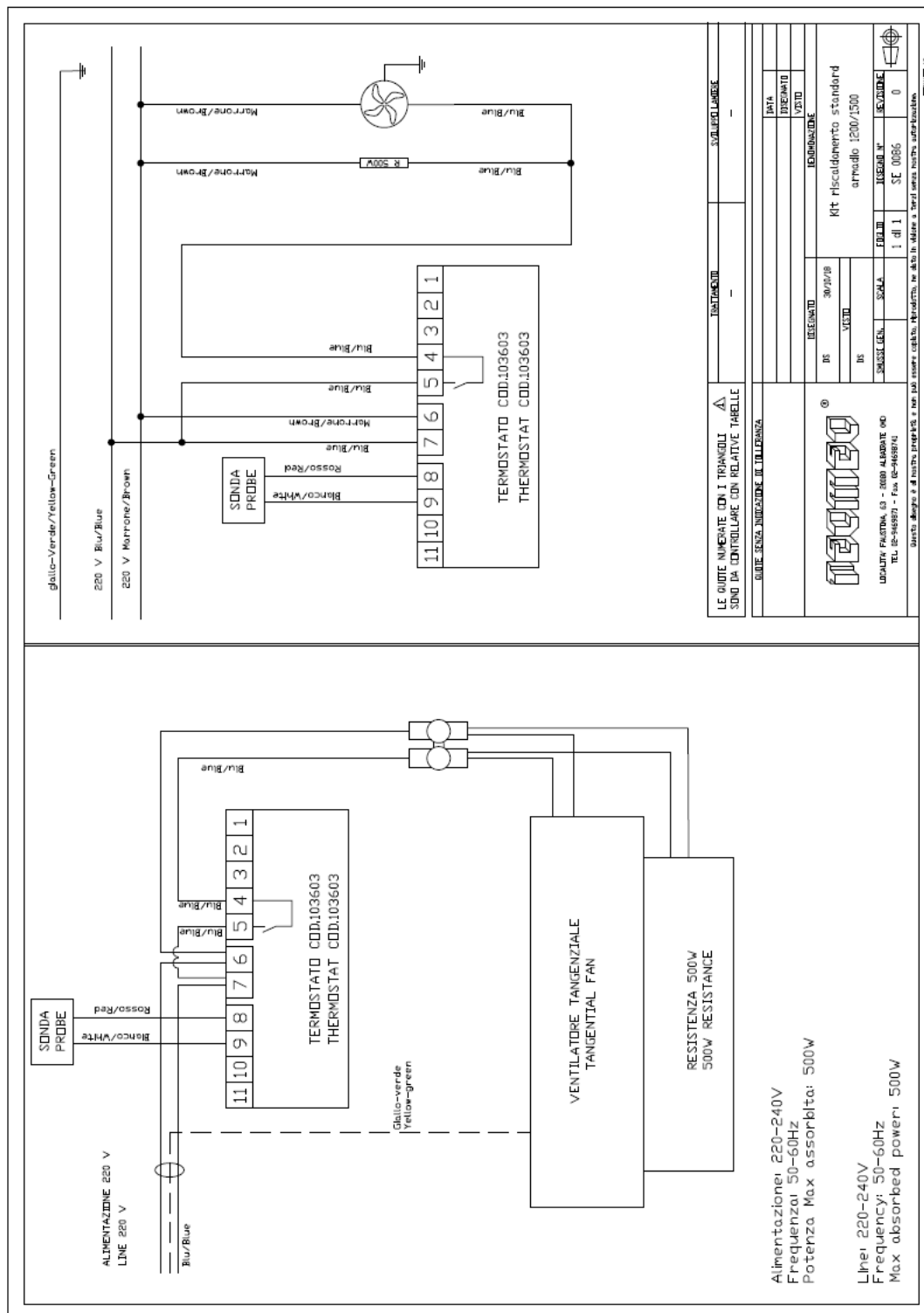
| Feature                                   |  | Value                    | U.M. |
|---|--|--------------------------|------|
| Non heated cabinet dimensions             | Height x Width x Depth<br>(width with the stirring module) | 2225 x 1180 (1250) x 330 | mm   |
| Heated cabinet dimensions (standard)      | Height x Width x Depth<br>(width with the stirring module) | 2225 x 1180 (1250) x 425 | mm   |
| Heated cabinet dimensions (ATEX)          | Altezza x Larghezza x Profondità                           | 2225 x 1260 x 465        | mm   |
| Weight                                    | Net  | 70                       | Kg   |
|   | Gross  | 85                       | Kg   |
| Operating temperature                     |  | 5÷40                     | °C   |
| Power supply                              |  | 220 ±15%                 | V    |
| Setting temperature of thermostat         |  | 15÷25                    | °C   |
| Frequency                                 |  | 50 (60)                  | Hz   |
| N° Phase                                  |  | 1Ph+N+ground             |      |
| Maximum Absorbed Power – stirring module  |  | 0,18                     | kW   |
| Maximum Absorbed Power – standard heating |  | 0,5                      | kW   |
| Maximum Absorbed Power – ATEX heating     |  | 0.75                     | kW   |

| Storage                |  |     |    |
|------------------------|--|-----|----|
| Height between shelves |  | 245 | mm |
| Depth of shelves       |  | 265 | mm |

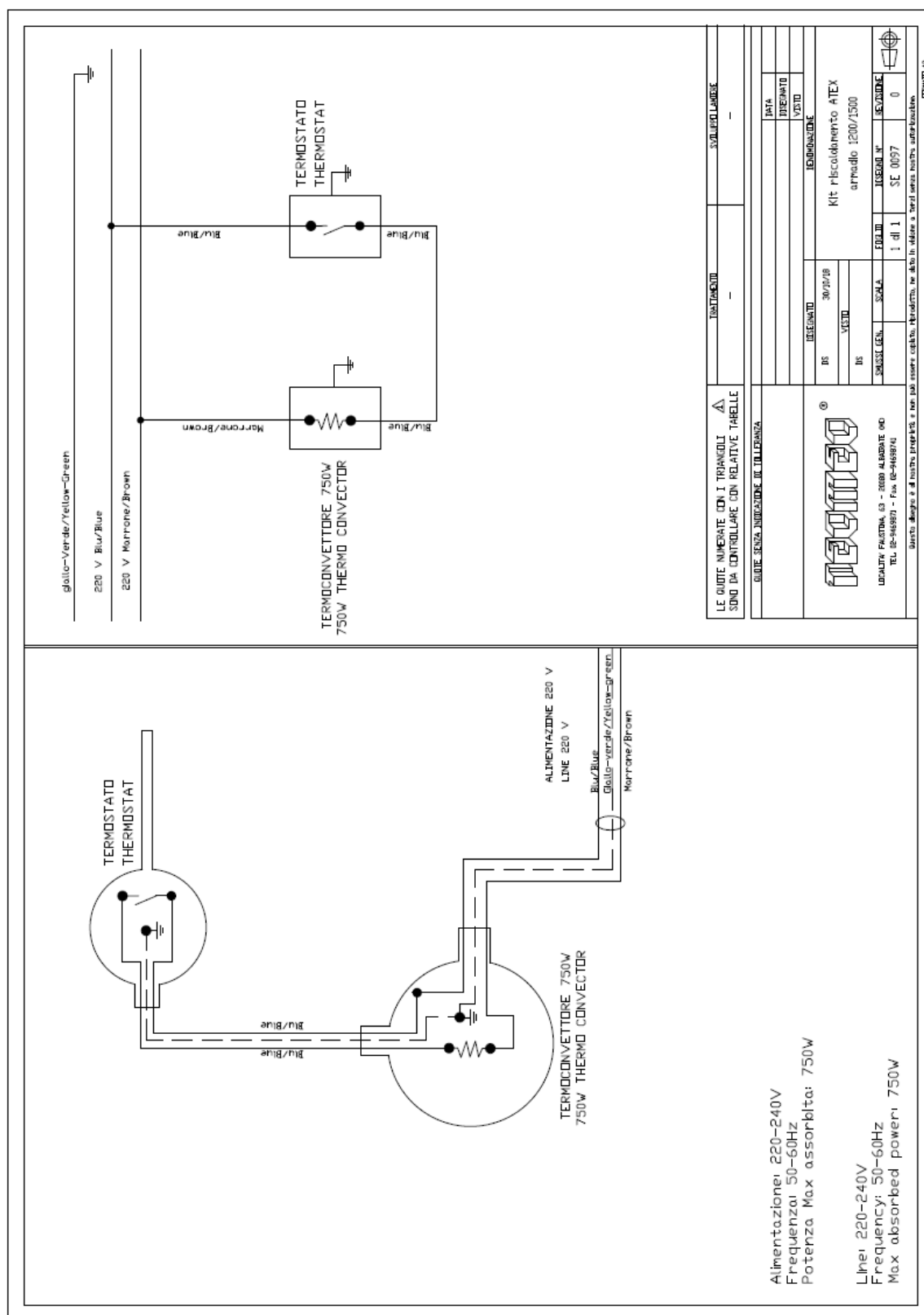
| Stirring module   |              |
|---|--------------|
|  | max 5 x 3.5L |

## 10 SCHEMI ELETTRICI

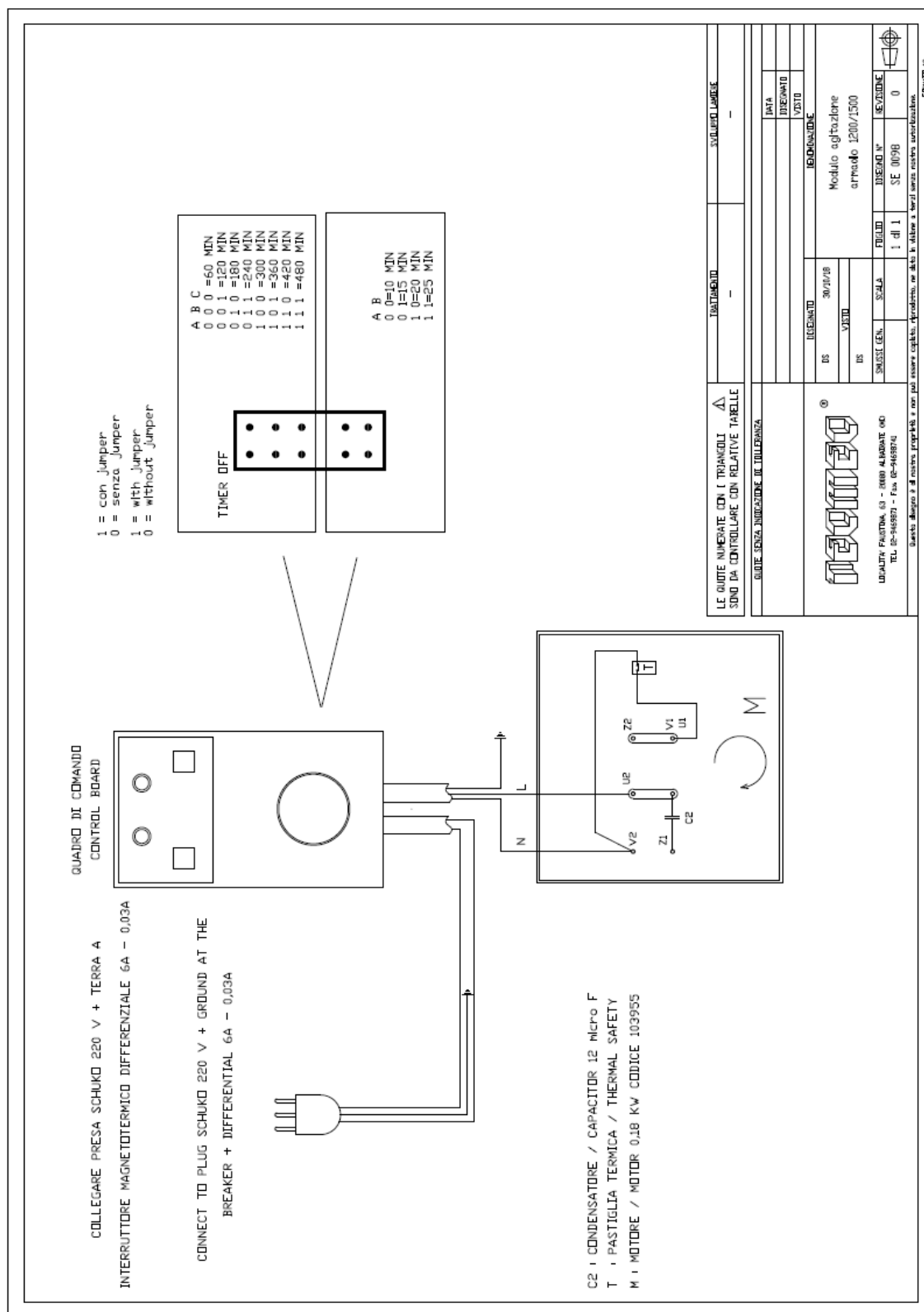
### 10.1 Standard heating



## 10.2 Atex Heating



### 10.3 Standard stirring module



## **11 DISPOSAL**

Before starting any operation, disconnect the power cable.

This machine can't be disposed as domestic waste.

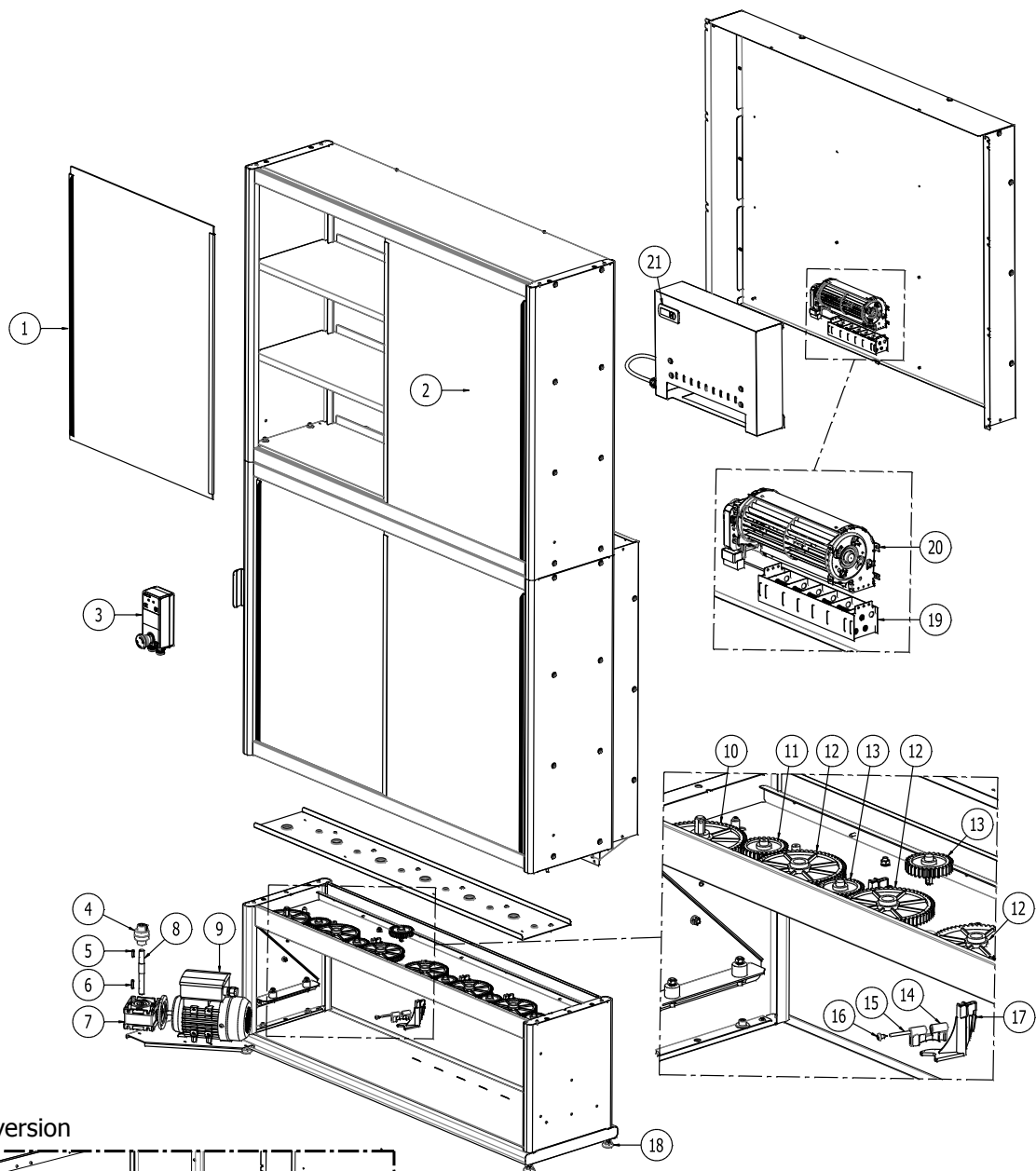
For its disposal, disassemble the parts of machine, separating them for type (e.g.: rubber parts, lubricants, solvents, paints, aluminium, ferrous material, etc.).

Dispose the parts following the regarding applicable laws. These standards can require written communications or requests for permission to responsible entities.

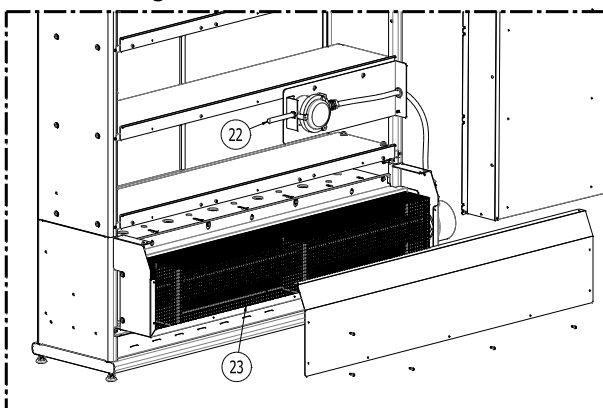
The accidentally leaked paints from cans and the products used for cleaning (e.g. paper/rags) must be disposed following the regarding current standards as their dispersion causes damage to people and environment.

For the disposal of colorants, or parts of machine contaminated by them, see to the safety data sheets of the respective products.

## 12 SPARE PARTS



ATEX heating version





| Pos. | Code       | Description                               |
|------|------------|---|
| 1    | 012738     | LEFT DOOR – CABINET 1200                  |
| 2    | 012739     | RIGHT DOOR – CABINET 1200                 |
| 3    | 012245     | ELECTRONIC PANEL (CYCLIC) 20 ON / 240 OFF |
|      | 012245-M15 | TIMER 15MIN. ON                           |
| 4    | 017312     | COUPLING Ø14/HEX.12                       |
| 5    | 102179     | 5x5x20 PARALLEL KEY                       |
| 6    | 100297     | 5x5x25 PARALLEL KEY                       |
| 7    | 103957     | REDUCER 1:50                              |
| 8    | 009205     | REDUCER SHAFT                             |
| 9    | 103955     | 0.18KW MOTOR                              |
| 10   | 015584     | Ø120 GEAR WITH HEX. SHAFT                 |
| 11   | 001213     | IDEL GEAR Ø60                             |
| 12   | 008202     | IDEL GEAR Ø120                            |
| 13   | 001212     | Ø60 GEAR WITH HEX. SHAFT                  |
| 14   | 008912     | HH FAN                                    |
| 15   | 001218     | PIN                                       |
| 16   | 101348     | SELF-TAPPING SCREW Ø4.8X9.5               |
| 17   | 008911     | HH POSITIONER                             |
| 18   | 103771     | ADJUSTABLE FOOT                           |
| 19   | 104043     | RESISTANCE 3C 2*500W PT135                |
| 20   | 104042     | TANGENTIAL FAN TFA001-S7                  |
| 21   | 020001     | THERMOSTAT                                |
| 22   | 104044     | THERMOSTAT TAI 0-40°C (ATEX)              |
| 23   | 104045     | THERMO CONVECTOR RAEX 0,75/1/3 (ATEX)     |