

Electric **MAG** series

Spit-roast rotisserie







Dear client,

You have just acquired a DOREGRILL MAG electric rotisserie.

Thank you for choosing our equipment, whose reliability, handling and presentation, have been refined for over 60 years.

Always at the forefront of progress in its specialty, DOREGRILL offers you rotisseries in which we put all our know-how to best meet your expectations, combining confort and safety of use.

You will also find in our range a choice of display cases that you can associate with your rotisserie.

In order to familiarize yourself as soon as possible with your new equipment, and to make the best use of it, we invite you to read this user manual carefully. It will allow you to exploit all its capabilities and extend its life.

In a constant effort to satisfy your requirements regarding our products, our technical team remains at your disposal to guide you in their installation and start-up, and to answer all your questions and suggestions.

Feel free to contact us or visit our website: WWW.1515DESIGN.COM

1515 DESIGN 405 North Oak Stree, Inglewood, CA 90302 Tel: 310.671.0345 - Fax: 310.680.2879 Email: info@1515design.com

In the interest of a constant improvement of our products, we reserve the right to make any changes related to their technical, funtional or aesthetic characteristics.



1 GENERAL INFORMATION

1.1 Marking

This equipment complies with the applicable European directives. Therefore, the CE logo appears on the nameplate and a declaration of conformity is attached to this manual.

- Manufacturer's name and address
- CE marking
- Equipment model
- Electrical power

- Serial number
- Electrical voltage and frequency
- Year of manufacture

=dorégrill	
BREVETS D)ÉPOSÉS
MODEL:	
N° DE SERIE:	
KW:	
TENSION:	
FREQUENCE:	
ANNEE:	
DOREGRILL SAS BP 52 PA du Moulin, 12 r Tél: +33 (012 40 63 80 00 - doregril	ue Du Moulin - 44880 SAUTRON - FRANCE CE A X 🐼 🚱

Fig. 1- (Nameplate)

This plate is attached to the left side of the rotisserie at the bottom of the technical chest closure panel.

1.2 Importance of the manual

This manual is intended to provide installers and users of DOREGRILL equipment with all the necessary information for its optimal use, to extend its lifespan through regular and proper maintenance, to address minor incidents and breakdowns that often do not require the intervention of a specialist, and to prevent any risk of injury to its users by adhering to the warnings and recommendations.

The time and attention devoted to reading this manual will be well rewarded with the knowledge gained, and it will help avoid potential, sometimes irreparable, damage.

As an integral part of our rotisseries, this manual, applicable to the electric models **MAG 4**, **MAG 6**, and **MAG 8**, should be readily available to its operators. The manufacturer is not responsible for any potential harm to individuals, animals, or property resulting from improper use of the equipment or the failure to follow the rules outlined in this manual.

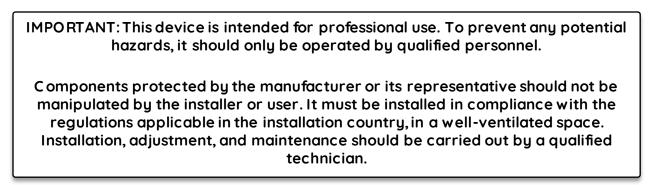


1.3 Reserved rights

The rights reserved for this technical manual," *User Manual for Electric MAG Series Rotisseries*" remain the property of the manufacturer. No part of this manual may be reproduced and distributed without the written permission of the manufacturer.

1.4 General precautions

This device is not intended for use by individuals (including children) whose physical, sensory, or mental capabilities are reduced, or by individuals lacking the necessary experience or knowledge, unless they have received supervision or instructions on the safe use of the device from a person responsible for their safety.



To avoid the risk of serious burns, this device MUST be placed against a wall or the storefront of the shop. The back of the Rotisserie does not visually indicate its function and the potential danger associated with extreme temperatures.

If it is not possible to position the machine along the wall, the user must take all necessary measures to protect passersby from any potential risk of contact with the Rotisserie (safety barrier, insulating wall, etc.).



2 TRANSPORT AND HANDLING

2.1 Transport and delivery

Our rotisseries are set, tested, and inspected in our workshops. They are carefully packaged to ensure their safe arrival at the destination.

They are delivered on a pallet, securely strapped and wrapped in film. The device is protected by cardboard packaging, bubble wrap, polystyrene, and foam corner protectors to safeguard the corners and withstand normal transport conditions.

Once the equipment is unpacked, ensure that it has not been damaged during transportation. In the event of any damage, it must be documented and reported in the presence of the carrier. Any remarks noted on the Delivery Note must be followed up with a letter sent by Registered Mail to the carrier and the retailer, within 48 hours of receiving the equipment.

2.2 Unpacking and handling

During unpacking, avoid puncturing the bubble wrap protection with any object that could damage a component of your equipment.

The device can be moved on flat surfaces using its wheels. If the device needs to be lifted, a forklift should be used to pass beneath it.



3 TECHNICAL DESCRIPTION

3.1 General description

The electric MAG models are mounted on wheeled carts, two of which are equipped with brakes.

The rotisseries consist of the following components (Fig. 2):

- Structure: base <u>1</u>, ceiling <u>2</u>, enameled vertical walls <u>3</u>, brushed stainless steel side panels <u>4</u>.

- A removable technical housing with tool access <u>5</u>, containing the technical components (motors and heating elements).

- Infrared shielded heating elements $\underline{\mathbf{6}}.$

- Removable enameled bottom trays **<u>7</u>** for easy cleaning.

- Depth-adjustable spits <u>8</u>, each driven directly by an independent electric gear motor with a hollow and flared output tip <u>9</u> for easy spit insertion. These motors are heat-shielded with a gasket to prevent thermal bridging.

- A spit holder located on the side opposite the motors **10**, which is removable for cleaning.

- Two tempered glass doors **<u>11</u>** on hinges, protecting the cooking area.

- In the lower part, a stainless steel sauce tray equipped with a drain plug, accessible even with the doors closed **12**.

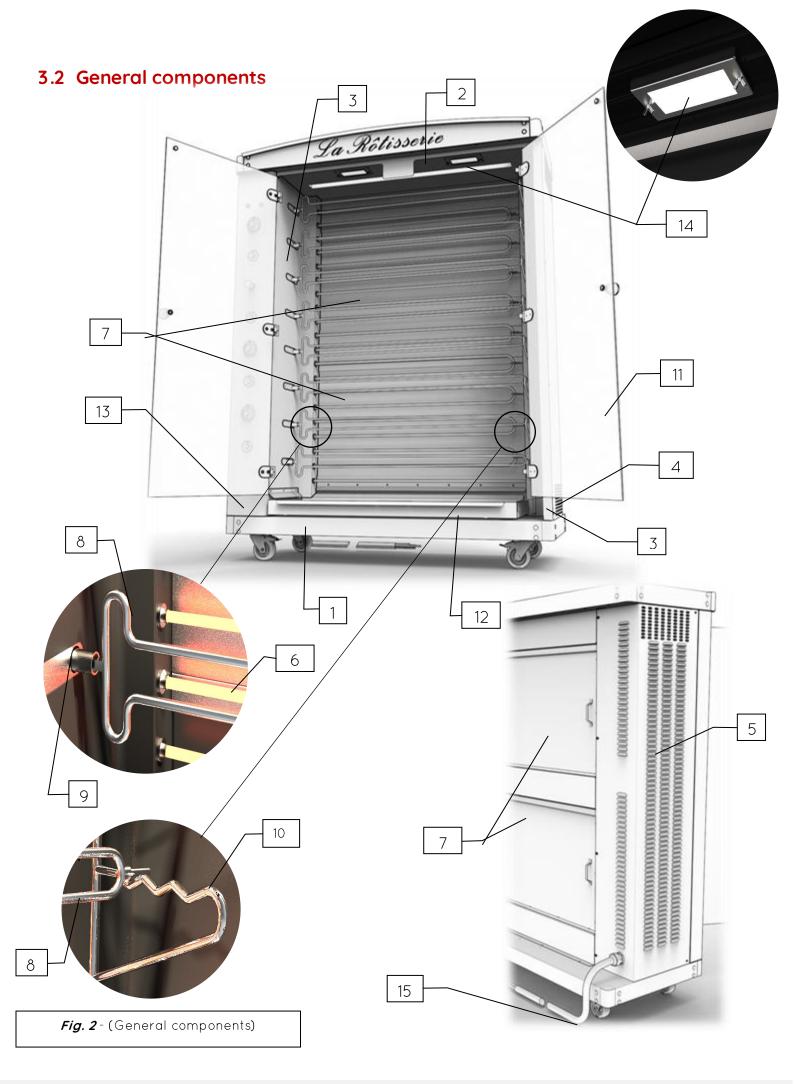
- A control panel 13 (Fig. 3).

- Two quartz lamp projectors **<u>14</u>** recessed into the rotisserie's ceiling, providing powerful lighting. They are sealed with a gasket and protected by tempered glass screens.

- At the rear, a high-power three-phase electrical cable without a plug 15:

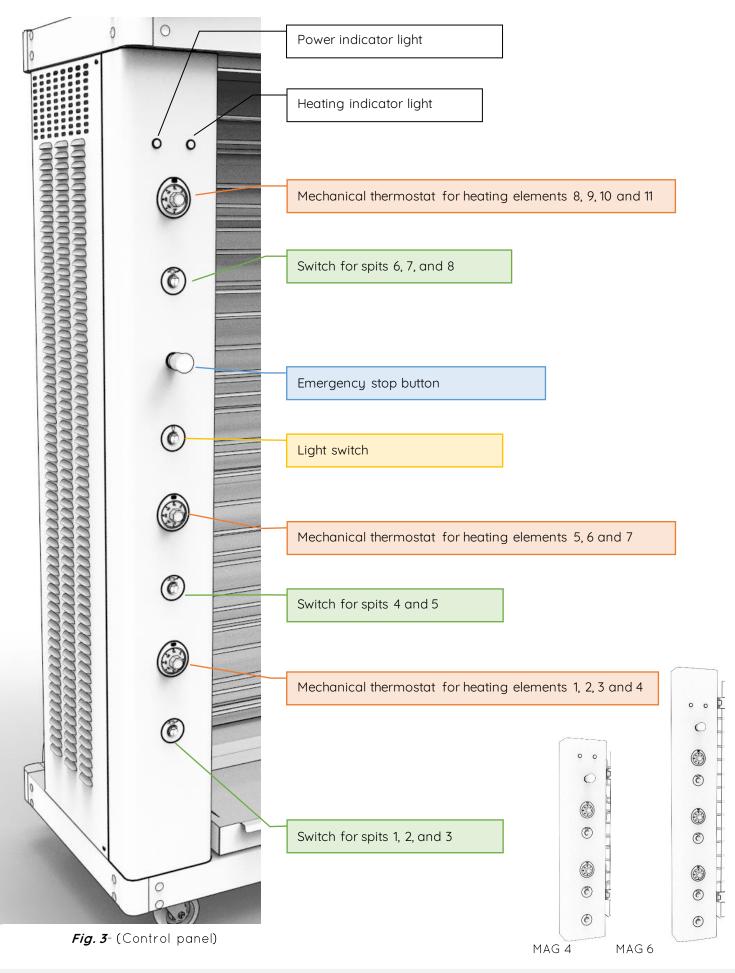
MAG 8 : 5G16 MAG 6 : 5G10 MAG 4 : 5G4







3.3 Control panel



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3.4 Rotisserie dimensions

Please refer to chapter 8, "Technical Specifications."

3.5 Technical specifications

Please refer to chapter 8, "Technical Specifications."

3.6 Intended use

Our rotisseries are intended for cooking meats and poultry prepared in the context of hot food and catering departments for food industry professionals.

3.7 Electrical diagram

Please refer to chapter 11, "Illustrated Composition Table."



4 SETUP

4.1 General instructions

The installation of the rotisseries in question (positioning and connection) must be carried out imperatively by authorized personnel, possessing the technical and professional skills required to perform this installation in compliance with the standards in force in the country where this equipment is used.

Please refer to Chapter 9, "Installation"



5 USE

5.1 Controls

5.1.1 Ignition of the heating elements

The electric MAG is equipped with shielded infrared heating elements, allowing for the cooking of 8, 6, or 4 spits depending on the model (MAG 8, MAG 6, and MAG 4).

To ignite the heating elements, turn the thermostat dial clockwise to the desired temperature. The maximum temperature is 300°C. The heating indicator light (orange) indicates that the heating elements are operational.

5.1.2 Turn off the heating elements

Turn the thermostat dial to 0.

5.1.3 Switches for the spit motors

They control three spits at the top and three at the bottom, as well as two spits in the middle that rotate in the opposite direction from each other: The spits on the even levels rotate in one direction, while those on the odd levels rotate in the opposite direction. This is done to allow the cooking of large poultry without the risk of the rotation mechanism getting jammed.

Engaging the spit rotation : Flip the switch upwards (position 1). **Stopping the rotation of the spits :** Flip the switch downwards (position 0).

You have the option, of course, to work with all the spits or to use the appliance partially. To do so, you can operate (See section 3.3):

The <u>3 bottom spits</u> (heating elements 1, 2, 3, and 4) :

- Use the lower controls,
- Set the thermostat to 300 or lower as needed,
- Activate the motor switch,
- The orange indicator light indicates that the heating elements are heating up.

The <u>2 middle spits</u> (heating elements 5, 6, and 7) :

- Proceed in the same manner with the thermostat and the middle switch.

The <u>3 top spits</u> (heating elements 8, 9, 10, and 11) :

- Follow the same process with the thermostat and the top switch.







This switch should only be used to immediately interrupt the operation of various electrical functions of the rotisserie (spit rotation, ambient lighting, etc.).

To act, simply press the switch.

Do not forget, when the incident is resolved, to pull on the head of the switch to reactivate the rotisserie.

5.1.5 Installation and Adjustment of the Spits

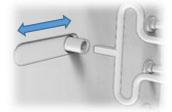
The spits, independent from each other, are adjustable in depth. The maximum weight on each motor is 20 kg. Don't forget to adjust them parallel to the heating elements using the 3 positions on the spit holder.

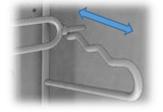
Placement: First, insert the drive square of the spit into the flared end of the gear motor, and if necessary, rotate it slightly to ensure proper operation.

Then, place the round part, or pivot, located at the other end, on the spit holder.

Adjusting the spits on the motor side: To adjust their positioning, simply slide the tip of each of the gear motors within the slots.

Adjusting the spits on the support side: The spit holder, with 3 stop notches at each level, positions the pivot of each spit on the desired notch.











5.2 Implementation

The implementation of the Electric MAG rotisseries requires certain precautions to ensure their safe use.

IMPORTANT: Ensure that the protection of the electrical circuit is sufficient and complies with standard NF C 15-100, which requires a dedicated circuit for high-power appliances and protection by an appropriate differential device.

5.2.1 Preparation

Before starting the rotisserie, ensure it is electrically connected, either directly to a junction box or through an appropriate power outlet, matching the power requirements of the specific electric MAG model:

Three-phase CEE industrial socket 3P+N+T x 63A IP67 for MAG 8 and MAG 6 electric models.

Three-phase "Plexo" type socket 3P+N+T 32A IP67 for the MAG 4 electric model.

In the case of a mobile rotisserie, don't forget to engage the front wheel brakes after connecting the appliance to a three-phase power outlet, which must have a proper grounding connection. Fill the water tray to half its capacity and maintain this level during cooking.

IMPORTANT: Never use or insert aluminum foil in the rotisserie.





5.2.2 Cooking

It is recommended to pierce the poultry before roasting to improve tenderness and browning.

Place each of the prepared spits as previously described (§ 5.1.4).

Adjust the spits in depth based on the size of the poultry to be roasted and the desired cooking speed. Activate the drive motors for the bottom spits by flipping the corresponding switches.

To prevent grease splatters and ensure the proper functioning of the rotisserie, the glass doors must be closed during cooking.

Plan for a cooking time of 60 minutes for a 1.2 kg poultry. However, this duration may vary depending on external weather conditions, the quality, and the size of the item being roasted.

At the end of cooking, stop the motors corresponding to the spits and remove them, starting with the support side, then extract them from the drive ends.

IMPORTANT: When only a few spits are in use, always prefer the top ones.

6 MAINTENANCE

6.1 Daily After Cooking

- Empty the sauce drawer for cleaning

- Disassemble the spits and place them in a large container with water and an appropriate detergent

- Apply a grease-destroying product to the interior walls of the appliance (sides, bottom, and ceiling) :

- Either with a brush (liquid)
- Or using a spray (aerosol)
- Or an oven cleaning product

The same product can be used for cleaning the glass.

- Avoid, as much as possible, any product splatter on the heating elements

6.2 Weekly Cleaning

In addition to the previous operations :

- Disassemble and clean the two bottom trays
- Clean their slides
- Disassemble the spit holder for thorough degreasing
- Clean the top of the rotisserie
- Wipe all external surfaces of the rotisserie with rubbing alcohol

6.3 End-of-Season (or Semi-Annual) Cleaning

This cleaning should be performed by a qualified maintenance service :

- Inspection of the inside of the technical housing
- Wiping down the motors
- Verification of the sliding systems

- Cleaning of various electrical components such as gear motors, fans, indicator lights, switches, etc.

IMPORTANT:

- Never use a high-pressure cleaner.
- Only use food-safe, "special oven cleaning" maintenance products.
- Don't forget to wipe down the shielded heating elements at the bottom of the appliance before restarting it if there is a product cleaning solution splatter.
- Do not use aluminum foil.
- Ensure that the juice tray is half-filled and maintain the level during cooking. REMINDER:

Current legislation mandates cleaning the exhaust hoods and extraction systems once every 6 months.



EN

7 CAUSES OF GLASS BREAKAGE IN TOUGHENED GLASS

7.1 Thermal shock

There cannot be a temperature difference of more than 80°C between two specific points on the glass. When this happens, the breaking point is reached and the glass can shatter instantly.

Example: cleaning a hot glass with a cold sponge.

7.2 Impact on the glass

When an accidental blow is struck on a toughened glass, specifically on the edge or corner of it, a very small piece of glass, sometimes only the size of a pinhead, can come loose.

As a result, the **molecular balance** of the glass is disrupted. Glass breakage becomes inevitable, whether it happens within an hour or days later.

Such impacts can occur during unpacking of the material, or when the user accidentally hits one of the accessories (swing, swing support axis, cooking ladder...) on the edge of the glass while installing it.

7.3 Handling

Frequent and haphazard movements (such as taking the rotisserie out onto the sidewalk every day) prematurely weaken the glass surfaces.

IMPORTANT: Glass, whether tempered or not, is a fragile material that must be handled with care. Sensitive to impacts, glass cannot break on its own, without one of the aforementioned causes.



8 TECHNICAL SPECIFICATIONS

		MAG 4	MAG 6	MAG 8
	DIMENSIONS			
Overall length		1470 MM	1470 MM	1470 MM
Overall depth		670 MM	670 MM	670 MM
Height of the rotisserie		1120 MM	1483 MM	1973 MM
Height of the rotisserie	on the stand/trolley	1973 MM	1973 MM	1973 MM
Empty weight		130 KG	190 KG	230 KG
Maximum load to be re	spected.	40 KG	60 KG	
	TECHNICAL COMPO	NENTS		
Spits	Number	4	6	8
5pit5	Length usable	1100 MM	1100 MM	1100 MM
Drive motor	Number	4	6	8
	Power	30 W	30 W	30 W
Infrared heating	Number	6	8	11
element	Total power	19.6 KW	28.4 KW	39.2 KW
	Number	2	2	2
Ambient lamp		230V /	230V /	230V /
	Voltage / Power	300W	300W	300W
Lauran ay sitah	Number	1	1	1
Lamp switch	Voltage / Amperage	230 V / 10 A	230 V / 10 A	230 V / 10 A
	Number	2	3	3
Motor switches	Voltage / Amperage	230 V / 10 A	232 V / 10 A	232 V / 10 A
Dower indicator light	Number	2	2	2
Power indicator light	Voltage / Power	230 V / 1 W	232 V / 1 W	232 V / 1 W
	Section	5G4²	5G10²	5G16²
Power cable	Fiche : 3 Phases + Neutral + Earth	No	No	No
	CAPACITY	1		I
Capacity in number of poultry (according to size)		24/28	36/42	48/56
	TOTAL CONSUMP	TION		·
Nominal heating power	•	19.6 KW	28.4 KW	39.2 KW
Total electrical consumption with lighting		20.3 KWh	29.18 KWh	40.04 KWh
Amperage		29.3 A	42.12 A	57.8 A



Resistance numbers	Power ratings for MAG 4	Power ratings for MAG 6	Power ratings for MAG 8
1(Down)	2 000 W	2 000 W	2 000 W
2	6 400 W	6 400 W	6 400 W
3	10 000 W	10 800 W	10 800 W
4	13 600 W	14 400 W	14 400 W
5	17 600 W	18 800 W	18 000 W
6	19 600 W	22 400 W	22 000 W
7		26 400 W	25 600 W
8		28 400 W	29 200 W
9			33 200 W
10			37 200 W
11 (Up)			39 200 W



9 INSTALLATION

9.1 General instructions

The installation of the rotisseries as an object (positioning and connection) must be carried out by an authorized professional with the technical and professional skills required to perform this installation in compliance with the standards in force in the country of use of this equipment.

> IMPORTANT : Le système de désenfumage avec tourelle d'extraction est obligatoire pour tout appareil d'une puissance supérieure à 20 kW.

9.2 Placement

Unpack the rotisserie, spits, and accessories. Install the rotisserie away from any combustible materials (wood, plastics, etc.). In case of proximity to such materials, they must be protected with insulating materials.

9.3 Electrical connection

The connection must be 400V 3 Phase + 1 Neutral + 1 Earth / 50Hz Three-Phase with grounding and protected by a 63A or 32A fuse, depending on the electric MAG model, after ensuring that there are no wiring errors *(such as phase and neutral reversal, for example)*. Refer to the electrical standards in force in the country of use of the appliance.

Verify that the mains voltage corresponds to the specifications indicated on the nameplate located at the bottom on the left side of the appliance.

IMPORTANT: The manufacturer of the rotisserie cannot be held responsible in the event of an accident resulting from a lack of grounding or incorrect grounding.

9.4 Vapour extraction

If the rotisserie is used indoors, it must be installed under an extraction hood that meets the minimum specifications indicated below *(using the standardized dimensions immediately above)*. DOREGRILL can provide you, upon request and as an option, with the appropriate hood to meet your needs.

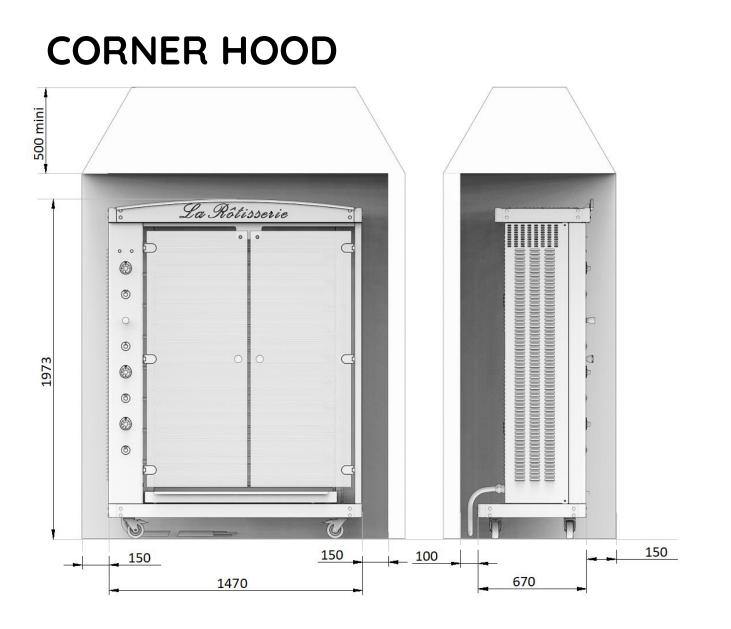
IMPORTANT: Maintain a minimum air gap of 100 mm at the back and on the sides of the rotisserie to ensure proper ventilation and protect neighboring appliances or walls.

The duct, whether vertical or horizontal, will terminate on the roof or through a wall, as appropriate, with a backflow prevention flap at the outlet. It is recommended that the outlet be as direct as possible and that the number of bends be kept to a minimum to avoid pressure losses.

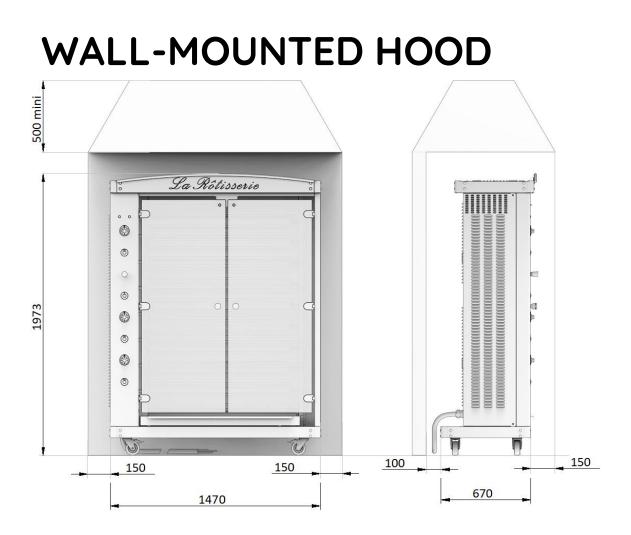


IMPORTANT: Maintain a minimum air gap of 100 mm at the back and on the sides of the rotisserie to ensure proper ventilation and protect neighboring appliances or walls.

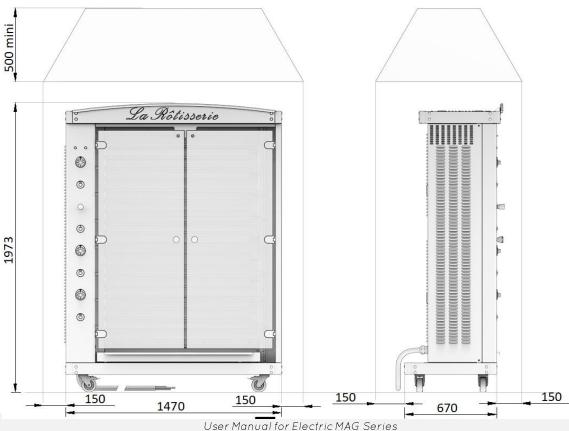
IMPORTANT: It is strictly prohibited to place dishes or any other object on top of the rotisserie or obstruct the exhaust chimney and ventilation areas in any way.







CENTRAL HOOD



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Any repairs on your device should be carried out by a qualified professional.

10.1 Fault finding

This section is intended to list the main breakdowns that any user may encounter, provide possible causes, and offer ways to remedy them without external intervention.

DEFECTS OBSERVED	POSSIBLE CAUSES	REMEDIES TO BE APPLIED
Electrical Circuit		
Voltage indicator light off	- Nonexistent power supply	- Plug the power cord into the outlet. Reset the circuit breaker and change the device's protective fuse. If the problem persists, contact your installer.
	- Defective indicator light	- Change the light bulb
An ambient lamp is off	- Defective light bulb - Faulty electrical connection	- Change the light bulb - Call the installer
	- Defective switch	- Call the installer
All ambient lamps are off	- Faulty electrical connection - Defective switch	- Call the installer - Call the installer
One spit is not rotating	- Faulty motor - Faulty electrical connection	} Call the installer
Several or all of the spits are not rotating	- Defective switch - Faulty electrical connection	Call the installer
The spits are not rotating, and the ambient lamps are off	- The "Emergency Stop" switch is stuck - Faulty electrical connection	- Pull the head of the emergency switch - Call the installer
One or more heating elements are not heating or are no longer heating	- Cut filament	- Call the installer



10.2 Specific repairs

10.2.1 Changing a Light Bulb

This operation can be performed by the user.

- Disconnect the electrical power supply to the rotisserie.

- Unscrew the wingnut *(butterfly nut)* and the washer. Slide and remove the glass screen.

- Remove the burnt-out light bulb and replace it with an identical model. When handling it, never touch it with bare fingers; always use clean paper or a cloth. The slightest trace of fingerprints or grease can make the bulb unusable.

- If cleanliness is in doubt, clean it with alcohol and a soft cloth.

- Reinstall the glass screen by sliding it into the clamp. Then, put the washer on the screw and screw and tighten the wingnut moderately to avoid breaking the glass plate.

10.2.2 Opening the Technical Compartment

The technical compartment is located on the left side of the rotisserie, behind the control panel. It provides access to and allows for the repair of various electrical components.

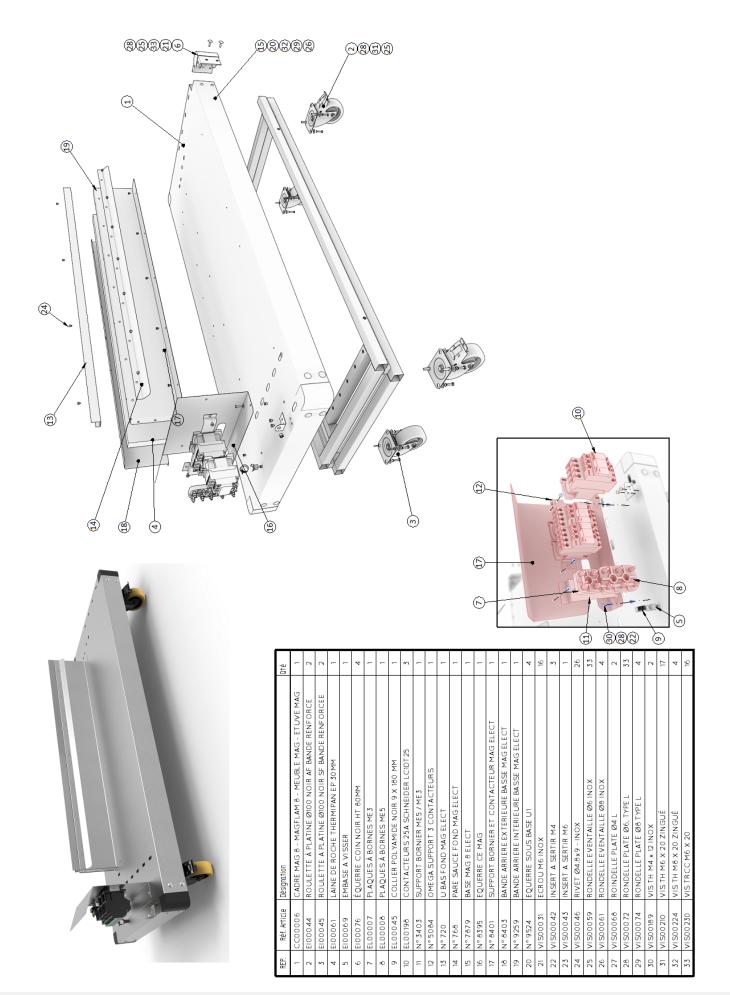
This operation should only be carried out by qualified personnel.

Before opening the compartment, disconnect the electrical power located at the back of the rotisserie. Using a screwdriver, loosen the various screws that hold the outer panel and remove it. When the intervention is complete, reassemble this panel and tighten the screws securely.



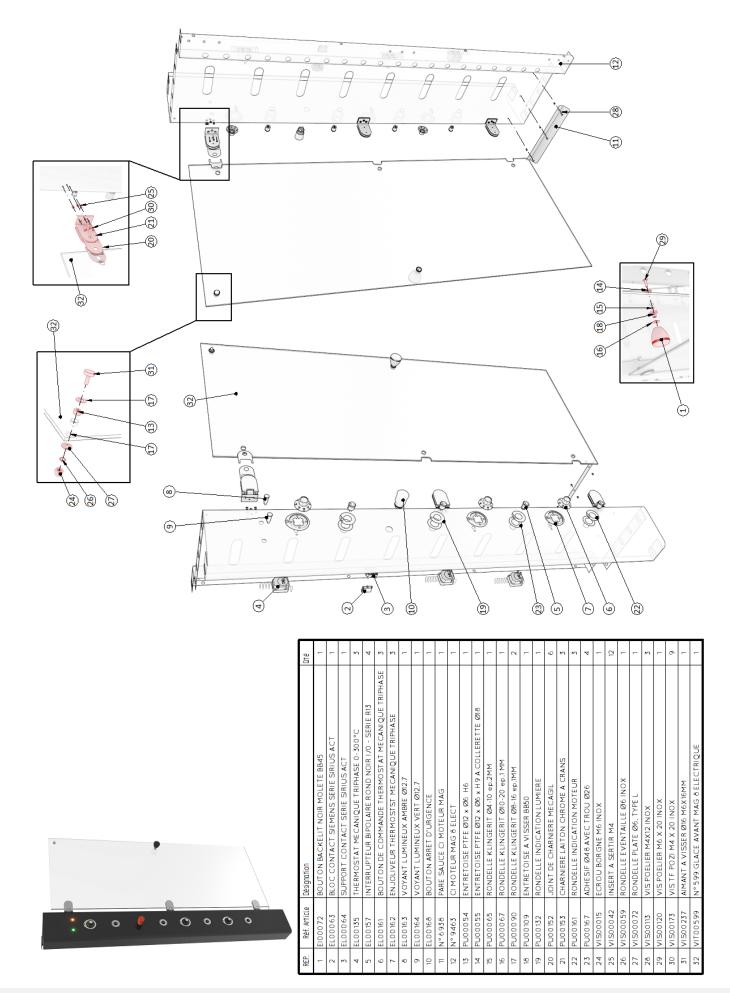


11.1 Base



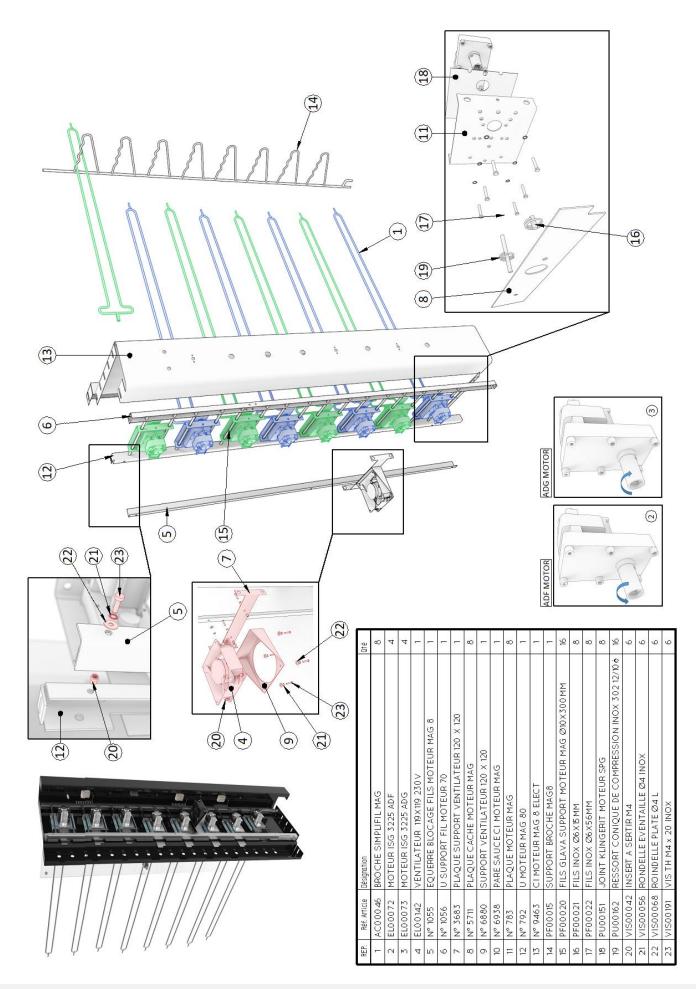


11.2 Control Panel and Door





11.3 Drive System



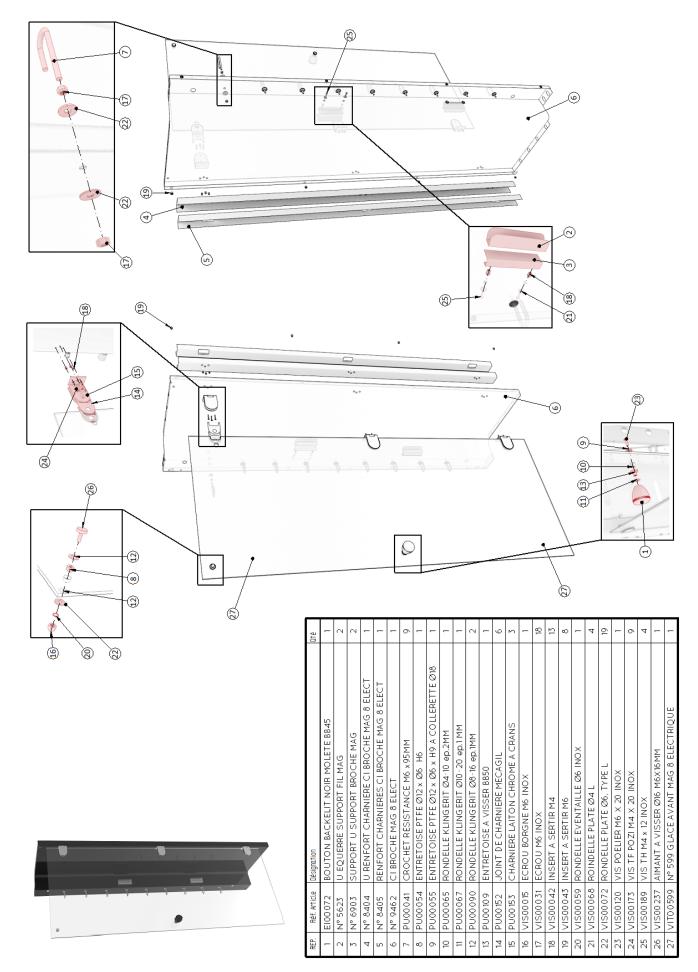


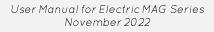
11.4 Heating Elements

	Mag 6 Mag 4	2000 W 2000	4400 W 4400 W 3600 W	3600 W 3600	4400 W	7 3600 W 2000 W	4000	2000 W			
	Mag ô	2000 W	4400 W 4400 W	3600 W	3600 W	4000 W	3600 W	3600 W	4000 W	4000 W	2000 W
		<u>1(bas)</u>	N M	4	5	6		Ø	6	10	
						Décianation	RÉSISTANCE RE	PÉRISTANCE RECITEIQUE 2000 V	PÉOLOTIANCE EPINGLE MAG DOR 4000 W	RESISTANCE EPINGLE MAG DUR 3000 W	RESISTANCE EPINGLE MAG DOR 4400 W
$\Theta \otimes \Theta \otimes$						Ref Article	FI 00124		FLUUIUU	ELUUIUO	ELUUIU



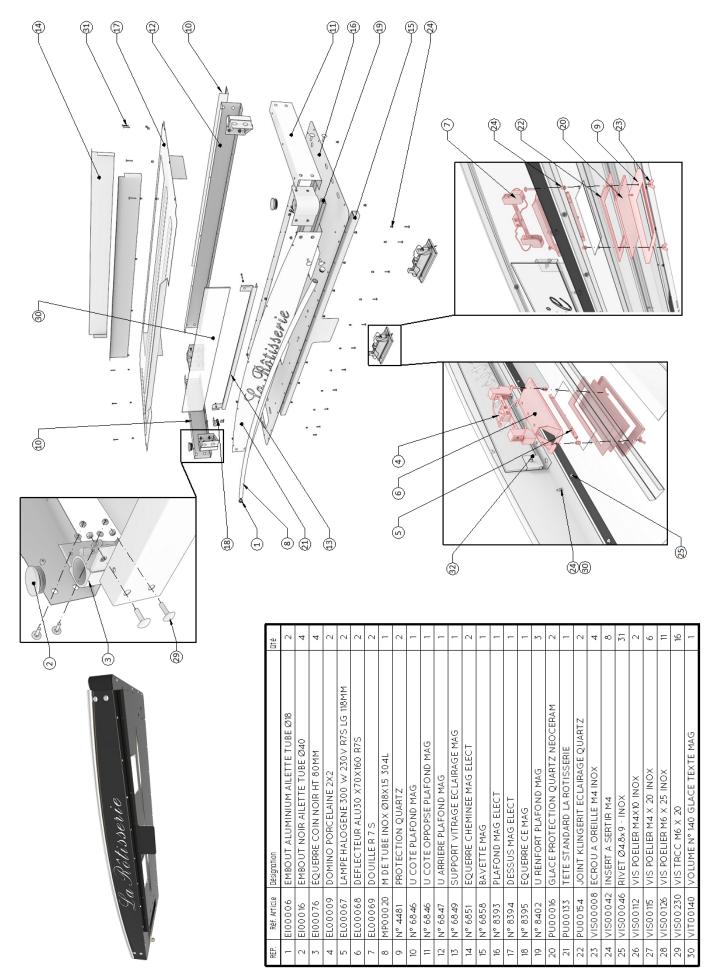
11.5 Spits Side





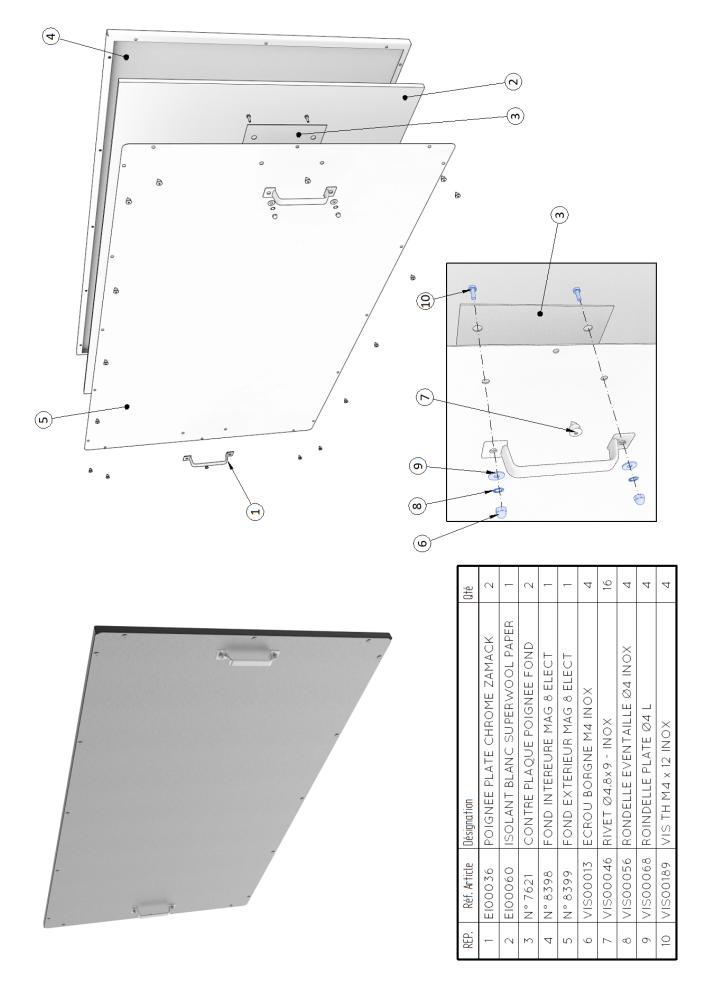


11.6 Ceiling





11.7 Back panel

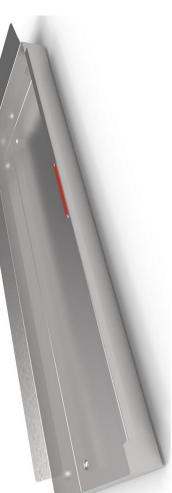






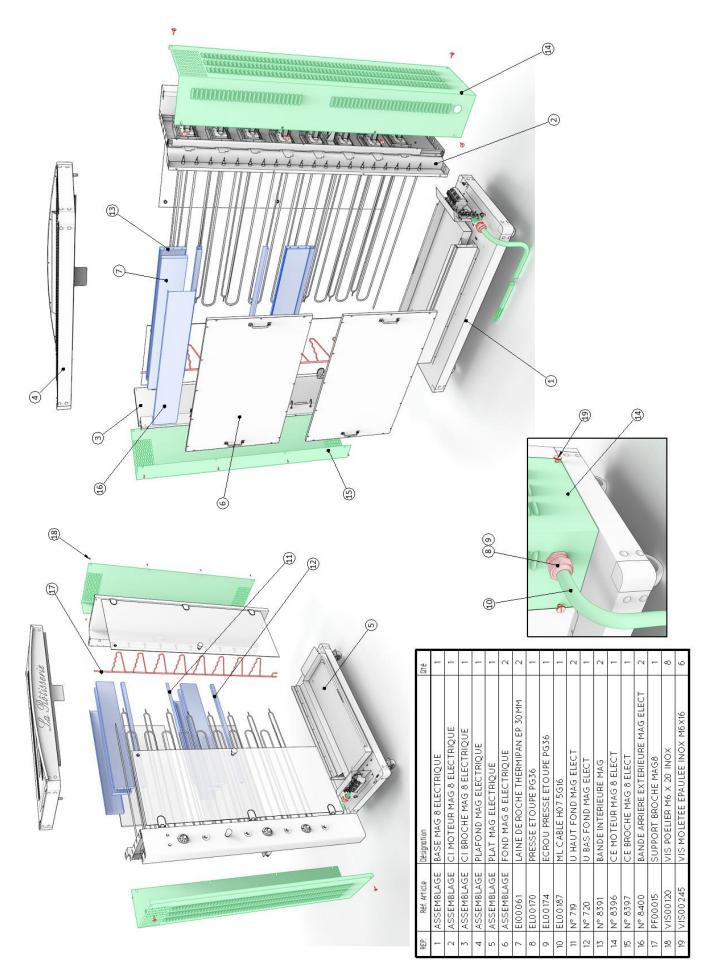
11.8 Gravy Tray





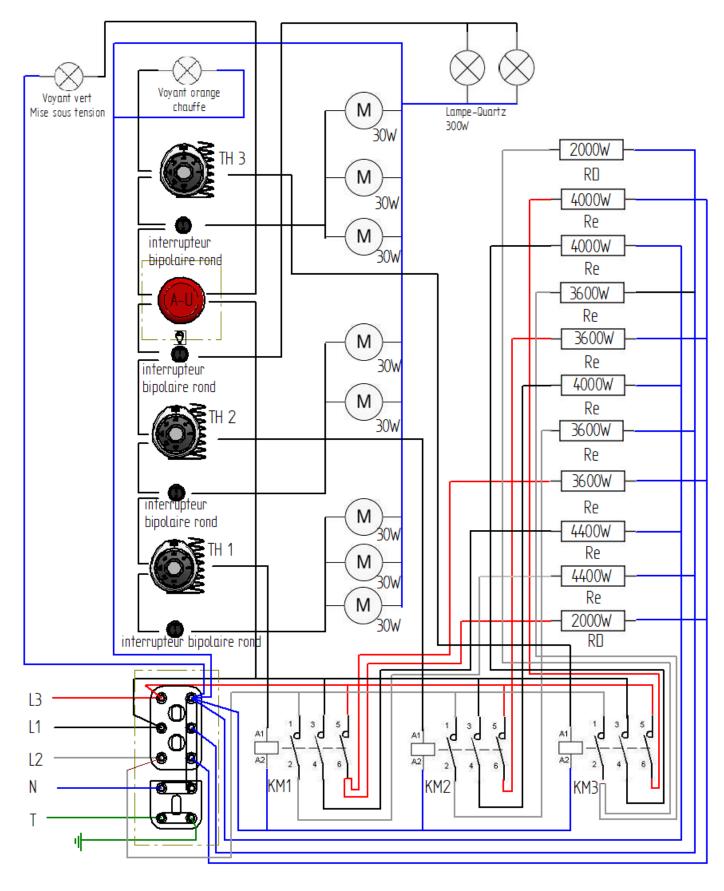


11.9 Cover





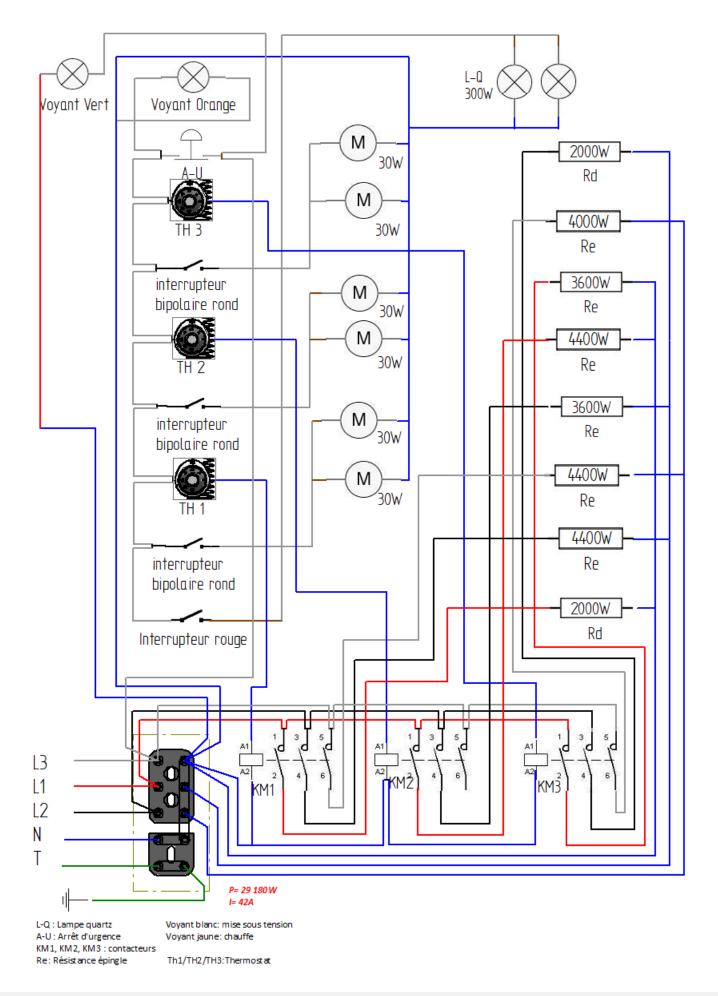
11.10 Electrical Diagram MAG 8



KM1, KM2, KM3 : contacteurs Re : Résistance épingle RD : Résistance droite TH1/TH2/TH3:Thermostat P=40.04Kw I=57.8A Câble: 5G16²



11.11 Electrical Diagram MAG 6

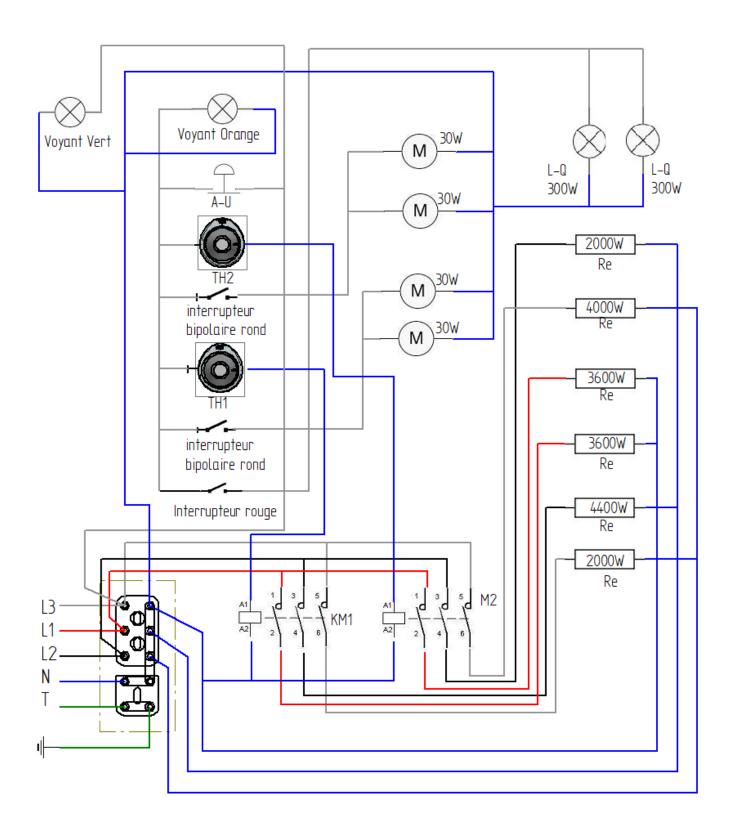


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11.12 Electrical Diagram MAG 4

L-Q : Lampe quartz A-U : Arrêt d'urgence KM1, KM2 : contacteurs Re : Résistances épingle Voyant blanc : Voyant de mise sous tension Voyant jaune : Voyant de chauffe TH1, TH2 : Thermostat mono 0 à 300° P= 20300W I= 29,3A





12 ACCESSORIES







MA00148 MAG 4 warming cabinet



MA00151 MAG 6 Storage cabinet



MA00150 MAG 4 Storage cabinet















DOREGRILL USA/CANADA 405 N. Oak Street Inglewood, CA 90302 Toll free : 888-671-0360 Tel : 310-680-2879 Sales : info@1515design.com Customer Service & Parts : contact@1515design.com Website : www.1515design.com

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