

# SENOVEN<sup>®</sup>

CE



SEN 150-EPI



SEN 300-EPI



SEN 450-EPI

## TWO SIDED ELECTRIC GRILLS USER & MAINTENANCE MANUAL

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**MODEL:**

**SERIAL NUMBER:**

**SALE DATE:**

Sold at the above date **SEN 150-EPI TWO SIDED ELECTRIC GRILL-1 PLATEN, SEN 300-EPI TWO SIDED ELECTRIC GRILL-2 PLATEN, SEN 300-1EPI TWO SIDED ELECTRIC GRILL-1 PLATEN, SEN 450-2EPI TWO SIDED ELECTRIC GRILL-2 PLATEN** and **SEN 450-EPI TWO SIDED ELECTRIC GRILL-3 PLATEN** are guaranteed against production failures for **1 Year** by **ŞENGÜN MAKİNA İNŞAAT ve KIRTASIYE SAN. TİC. LTD. ŞTİ.**

**Warranty Terms;**

- Warranty terms start after the product delivery for 1 year.
- Recommended daily working time is 10 hours. The extend of warranty is evaluated by year or by working hours.
- If the documents don't have purchasing date or confirmation from the seller on it, they are invalid. You have to show the warranty certificate to benefit from the warranty.
- The warranty is valid if the setup progresses and maintenance processes are done according to the user manual and maintenance manual.
- Detection the location of the defects, and elimination of the problems are responsibilities of the **ŞENGÜN MAKİNA...**
- Warranty terms are valid for only the device that bought with this warranty certificate. You can't claim any rights or compensation for the other devices.
- If the information which includes type, model and serial numbers of the machine is changed or deleted, the warranty eliminates.
- If material, worker or assembly defects appear, the defects will be repaired free by **ŞENGÜN MAKİNA** in the product warranty period (Transportation costs are not included).
- Failures should be only repaired by **ŞENGÜN MAKİNA's** personal. The intervention of unauthorized person, will cause the cancellation the appliance of warranty.
- Installation has to be done by **ŞENGÜN MAKİNA's** personal. If usage place changes, customer must give information to **ŞENGÜN MAKİNA.**
- In the event of failure service must be informed.
- The failures and damages given by external factors are not covered by the warranty terms.
- During the warranty period, if any problem or defect occurs, the repairing time will be added to warranty period . The repair time is up to 20 working days.
- Istanbul courts are competent in case of dispute.

**AUTHORIZED PERSON**

**STAMP –SIGNATURE**

Dear User,

As Senoven, registered brand of Şengün Makina, we have been producing the best products for more than 30 years with our experience. We proudly serve our products to over 80 countries. The best materials and international standards meet in the same production line for our customers. To get the best experience with your machine, please read this manual very carefully, and please make sure you read all the warnings, cautions, and suggestions before calling our technical services. Thank you for choosing us.

- Please read the manual carefully before installing the machine.
- The machine will be out of warranty if you operate the machine without reading the manual.
- Please read the manual carefully that gives you information of the installation. Please provide proper electric wiring according to legal regulations before our authorized service team arrive to set your machine up. For information you can not understand, ask your nearest authorized service
- Please note that if the technical service personnel, who is arrived for installation or repair, is being kept, the hourly rate and expenses will be billed to you.

### **Responsibilities of the Purchaser Company**

Responsibilities of the purchaser company is written above;

- To see that the electric and gas services for the oven are installed in accordance with the manufacturers specification.
- Installing the oven and placing it as suggested in the catalogue.
- To see that the electric services are connected properly by a qualified installer of your choice.



**CAUTION:** This manual contains important safety, installation and operating instructions. All operators **have to** read this manual thoroughly before installing, operating or servicing this equipment. Incorrect installation, incorrect adjustment, incorrect maintenance, incorrect replacement may cause damage to the machine, serious injury or even death.



**CAUTION:** Care must be taken to comply with all basic safety practices during machine installation and service activities.



**CAUTION: NEVER** use the machine unless it is properly grounded.



**CAUTION:** Authorized service personnel should take off all metal jewelry, rings, and watches before working on electrical equipment.



**CAUTION:** The main power supplies to the of equipment must be unplugged before any repair operations are performed. Failure to follow this instruction may result in electric shock or personal injury from dangerous moving parts.



**CAUTION:** This machine has many sharp edges that can cause serious injury.



**CAUTION:** This machine is designed for indoor use only.



**CAUTION:** It is strongly recommended that the personnel who are responsible for the operation and cleaning of the machine are must be properly trained and review these procedures to ensure that there is no misunderstanding about what needs to be done.



**CAUTION: DO NOT** use cold water or ice to cool the upper plate or the lower cooking surface.



**CAUTION:** This machine is not intended for use by children or weak adults. Weak people can only use this machine under the supervision of a responsible adult after taking safety precautions. Make sure that children do not play with the machine.



**CAUTION:** Incorrect installation, adjustment, modification, or maintenance can cause machine damage, injury, or death. Do not use or put the machine into service without reading the installation, cleaning and maintenance instructions.



**CAUTION:** For your safety, do not store or keep gas, petrol or any flammable substance near the machine.

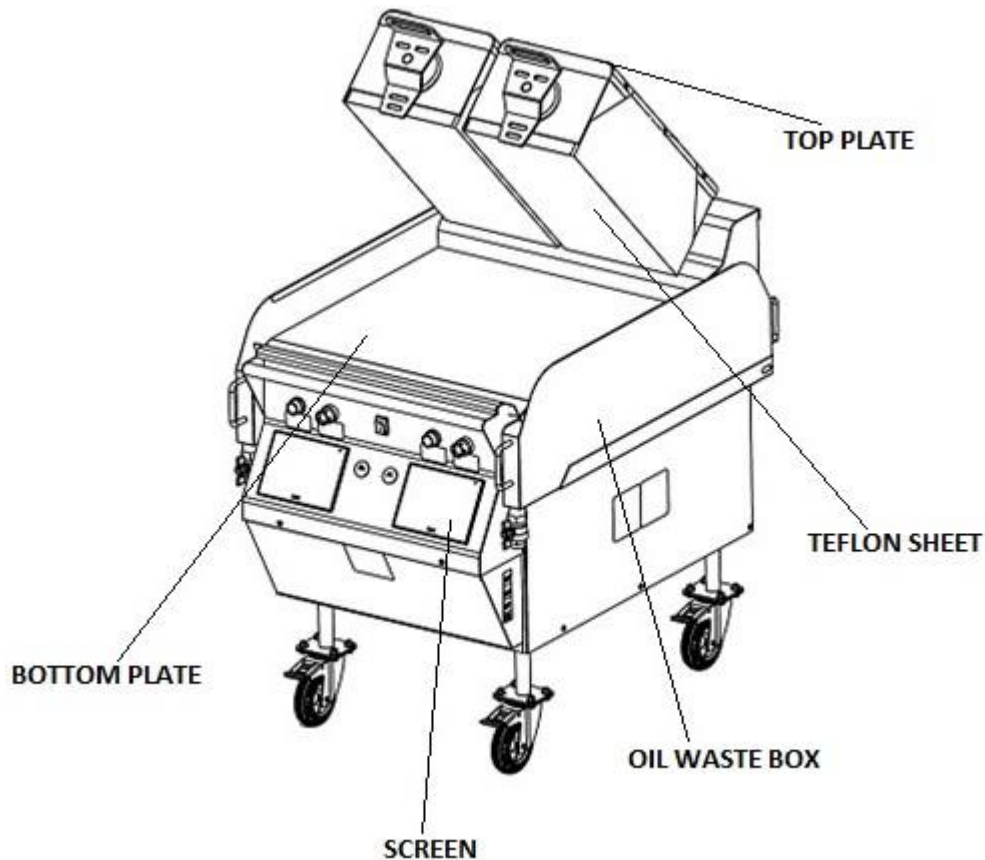


**CAUTION:** If the power cable is damaged, do not plug in the machine. Contact technical service immediately or call an experienced electrician.



**CAUTION: DO NOT** try to cook the product which will be cooked, with flammable materials such as paper. Such attempts may cause a fire.

#### 4.1 Description of Body Components



#### 4.2 Control with Microprocessor

The machine is controlled by a programmable microprocessor. The microprocessor controls all the functions of the machine. The bottom and top plate, and the cooking duration of the machine can be adjustable via microprocessor.

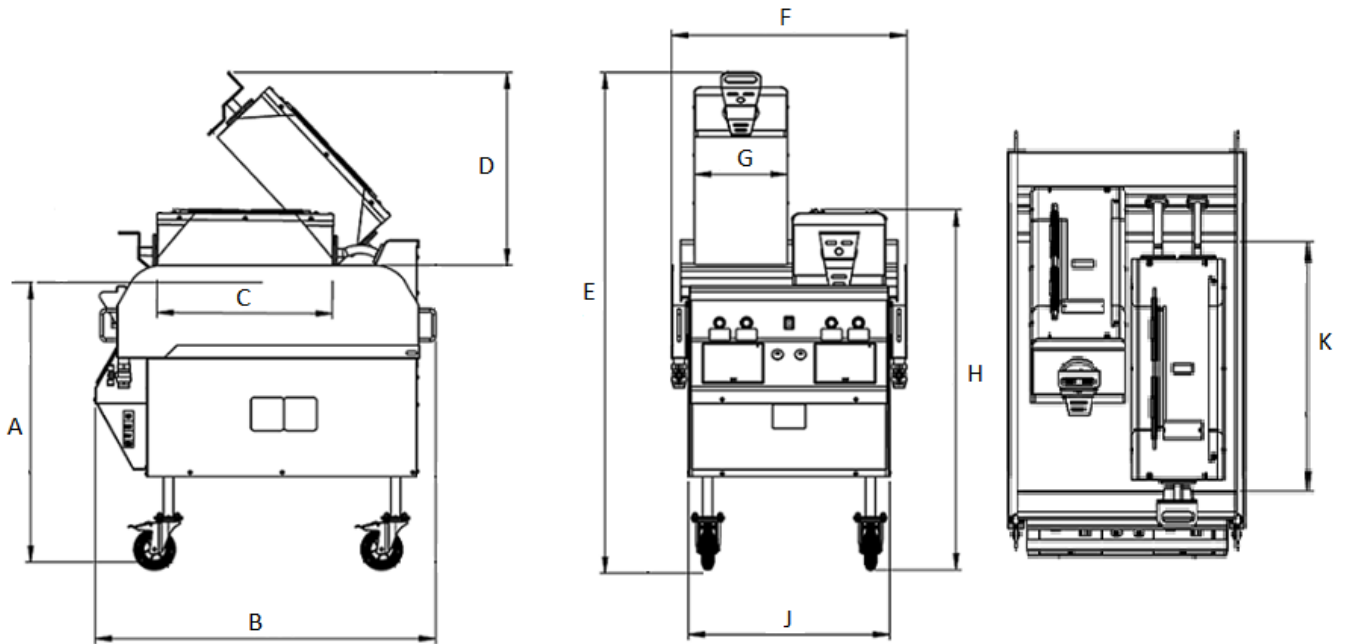
The machine can cook products from 0 mm to 25 mm. The machine has a service mode that helps service technicians. With the program memory feature in the machine, the products are cooked at the same standard and rapidly.

#### 4.3 General Information

- Information which is located at the following pages will guide you at installation of the machine.
- First of all, machine should be carefully inspected for any visible damage.
- Before the installation, determine a safety place for machine.

## SECTION 4 | GRILL DESCRIPTION

### 4.4 Dimensions



| GRILL MODEL         | A   | B    | C   | D   | E    | F    | G   | H    | J   | K   | GRILL WEIGHT |
|---------------------|-----|------|-----|-----|------|------|-----|------|-----|-----|--------------|
| <b>SEN 150-EPI</b>  | 850 | 1025 | 534 | 615 | 1545 | 410  | 280 | 1080 | 388 | 610 | 191 Kg       |
| <b>SEN 300-EPI</b>  | 850 | 1035 | 534 | 615 | 1545 | 715  | 280 | 1080 | 611 | 610 | 306 Kg       |
| <b>SEN 300-1EPI</b> | 850 | 1035 | 534 | 615 | 1545 | 715  | 280 | 1080 | 611 | 610 | 256 Kg       |
| <b>SEN 450-EPI</b>  | 850 | 1035 | 534 | 615 | 1545 | 1020 | 280 | 1080 | 915 | 610 | 420 Kg       |
| <b>SEN 450-2EPI</b> | 850 | 1035 | 534 | 615 | 1545 | 1020 | 280 | 1080 | 915 | 610 | 370 Kg       |

*(Dimensions are written in mm.)*



**4.5 Electrical and Technical Specifications Table**

**Important Note:** Electrical input connections must be connected according to the order in the input terminals.

(Phase, Phase – Neutral, Neutral – Grounding, Grounding)

**NOTE:** Specifications can change or be changed. The data above is provided for informational purposes only.

**NOTE:** The conditions above must be met in order for the machine assembly process to be carried out smoothly and quickly.. We hope that you will understand, we wish you good work.

**SEN 150-EPI**

| Voltage          | Phase | N | T | Cable Cross Section | kW   | Amps |     |     |
|------------------|-------|---|---|---------------------|------|------|-----|-----|
|                  |       |   |   |                     |      | L1   | L2  | L3  |
| 400V<br>50/60 Hz | 3     | 1 | 1 | 4 mm <sup>2</sup>   | 9 kW | 11A  | 11A | 11A |

**Electrical Supply:** Three Phase, 400 VAC, 50/60 Hz / 14 Amps: 1 Neutral, 1 Grounding

**SEN 300-EPI**

| Voltage          | Phase | N | T | Cable Cross Section | kW      | Amps |     |     |
|------------------|-------|---|---|---------------------|---------|------|-----|-----|
|                  |       |   |   |                     |         | L1   | L2  | L3  |
| 400V<br>50/60 Hz | 3     | 1 | 1 | 4 mm <sup>2</sup>   | 17,2 kW | 25A  | 25A | 25A |

**Electrical Supply:** Three Phase, 400 VAC, 50/60 Hz / 25 Amps: 1 Neutral, 1 Grounding

**SECTION 4 | GRILL DESCRIPTION**

**SEN 300-1EPI**

| Voltage          | Phase | N | T | Cable Cross Section | kW    | Amps |     |     |
|------------------|-------|---|---|---------------------|-------|------|-----|-----|
|                  |       |   |   |                     |       | L1   | L2  | L3  |
| 400V<br>50/60 Hz | 3     | 1 | 1 | 4 mm <sup>2</sup>   | 15 kW | 23A  | 19A | 23A |

**Electrical Supply:** Three Phase, 400 VAC, 50/60 Hz / 23 Amps: 1 Neutral, 1 Grounding

**SEN 450-EPI**

| Voltage          | Phase | N | T | Cable Cross Section | kW    | Amps |     |     |
|------------------|-------|---|---|---------------------|-------|------|-----|-----|
|                  |       |   |   |                     |       | L1   | L2  | L3  |
| 400V<br>50/60 Hz | 3     | 1 | 1 | 4 mm <sup>2</sup>   | 26 kW | 37A  | 37A | 37A |

**Electrical Supply:** Three Phase, 400 VAC, 50/60 Hz / 37 Amps: 1 Neutral, 1 Grounding

**SEN 450-2EPI**

| Voltage          | Phase | N | T | Cable Cross Section | kW      | Amps |     |     |
|------------------|-------|---|---|---------------------|---------|------|-----|-----|
|                  |       |   |   |                     |         | L1   | L2  | L3  |
| 400V<br>50/60 Hz | 3     | 1 | 1 | 6 mm <sup>2</sup>   | 23,5 kW | 37A  | 37A | 30A |

**Electrical Supply:** Three Phase, 400 VAC, 50/60 Hz / 37 Amps: 1 Neutral, 1 Grounding

#### 4.6 Requirements for Electrical Installation

- 3 x 25 amps in the electrical panel (K AUTOMAT) – Fuse **(SEN 150-EPI)**
- 3 x 40 amps in the electrical panel (K AUTOMAT) – Fuse **(SEN 300-EPI, SEN 300-1EPI)**
- 3 x 50 amps in the electrical panel (K AUTOMAT) – Fuse **(SEN 450-EPI, SEN 450-2EPI)**
- The cross section of the cable is 4 mm<sup>2</sup>. (TTR Cable – 3 Phase / 1 Neutral / 1 Ground) **(SEN 150-EPI, SEN 300-EPI, SEN 300-1EPI)**
- The cross section of the cable is 6 mm<sup>2</sup>. (TTR Cable – 3 Phase / 1 Neutral / 1 Ground) **(SEN 450-EPI, SEN 450-2EPI)**
- The ground connection must be solid. **(ALL GRILLS)**
- If the voltages are lower or higher than the standart, a protected voltage regulator should be installed. **(ALL GRILLS)**

**NOTE:** *The above conditions must be met in order for the machine assembly process to be carried out smoothly and quickly. We hope that you will understand, we wish you good work.*

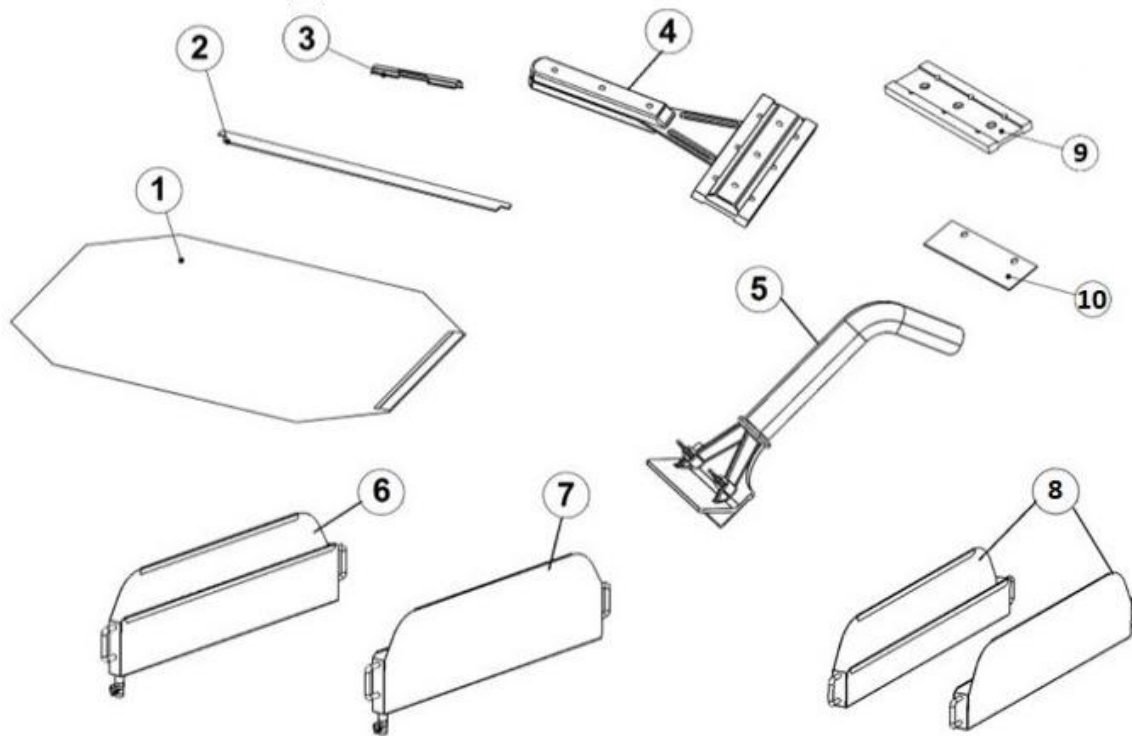
## SECTION 4 | GRILL DESCRIPTION

### 4.7 Technical Specifications

| Technical Details  | SEN 150-EPI         | SEN 300-EPI         | SEN 300-1EPI        | SEN 450-EPI         | SEN 450-2EPI        |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|
| <b>Product Cooking Area:</b>   | 0,15 m <sup>2</sup> | 0,30 m <sup>2</sup> | 0,15 m <sup>2</sup> | 0,45 m <sup>2</sup> | 0,30 m <sup>2</sup> |
| <b>Bottom Plate Heating Area:</b>                                    | 0,20 m <sup>2</sup> | 0,40 m <sup>2</sup> | 0,40 m <sup>2</sup> | 0,60 m <sup>2</sup> | 0,60 m <sup>2</sup> |
| <b>Net Grill Weight:</b>   | 191 Kg              | 306 Kg              | 256 Kg              | 420 Kg              | 370 Kg              |
| <b>Gross Weight:</b>   | 214 Kg              | 338 Kg              | 288 Kg              | 464 Kg              | 414 Kg              |
| <b>Warm-up Time:</b>   | 30 min              | 45 min              | 45 min              | 60 min              | 60 min              |
| <b>Adjustable Temperature Range<br/>(Top Plate Temperatures):</b>    | 66°C-232°C          | 66°C-232°C          | 66°C-232°C          | 66°C-232°C          | 66°C-232°C          |
| <b>Adjustable Temperature Range<br/>(Bottom Plate Temperatures):</b> | 66°C-204°C          | 66°C-204°C          | 66°C-204°C          | 66°C-204°C          | 66°C-204°C          |
| <b>Electrical Current:</b>   | 14A                 | 25A                 | 23A                 | 37A                 | 37A                 |
| <b>Average Consumption kW:</b>                                       | 9 kW                | 17,2 kW             | 15 kW               | 26 kW               | 23,5 kW             |
| <b>Adjustable Cooking Time:</b>                                      | 1 sec–999 sec       | 1 sec–999 sec       | 1 sec–999 sec       | 1 sec–999 sec       | 1 sec–999 sec       |
| <b>Top Plate Material:</b>   | Aluminium           | Aluminium           | Aluminium           | Aluminium           | Aluminium           |
| <b>Bottom Plate Material:</b>  | Steel               | Steel               | Steel               | Steel               | Steel               |
| <b>Outer Body Steel:</b>   | Stainless Steel     | Stainless Steel     | Stainless Steel     | Stainless Steel     | Stainless Steel     |
| <b>Power Supply:</b>   | Electricity         | Electricity         | Electricity         | Electricity         | Electricity         |

## SECTION 4 | GRILL DESCRIPTION

### 4.8 Accessories



| NO | SPARE PART CODE | SPARE PART DESCRIPTION | QTY. (SEN 150-EPI) | QTY. (SEN 300-EPI) | QTY. (SEN 300-1EPI) | QTY. (SEN 450-EPI) | QTY. (SEN 450-2EPI) |
|----|-----------------|------------------------|--------------------|--------------------|---------------------|--------------------|---------------------|
| 1  | 010071          | TEFLON SHEET           | 2                  | 4                  | 2                   | 6                  | 4                   |
| 2  | 010036          | TEFLON SHEET HANGER    | 1                  | 2                  | 1                   | 3                  | 2                   |
| 3  | 010047          | CLIP RELEASE MATERIAL  | 2                  | 4                  | 2                   | 6                  | 4                   |
| 4  | 00656M          | GRILL WIPER            | 1                  | 1                  | 1                   | 1                  | 1                   |
| 5  | 00657M          | GRILL SCRAPER          | 1                  | 1                  | 1                   | 1                  | 1                   |
| 6  | 00637M          | OIL WASTE BOX (LEFT)   | N/A                | 1                  | 1                   | 1                  | 1                   |
| 7  | 00636M          | OIL WASTE BOX (RIGHT)  | N/A                | 1                  | 1                   | 1                  | 1                   |
| 8  | 00655M          | OIL WASTE BOX          | 2                  | N/A                | N/A                 | N/A                | N/A                 |
| 9  | 010259          | WIPER                  | 1                  | 1                  | 1                   | 1                  | 1                   |
| 10 | 010232          | SCRAPER SHEET          | 1                  | 1                  | 1                   | 1                  | 1                   |

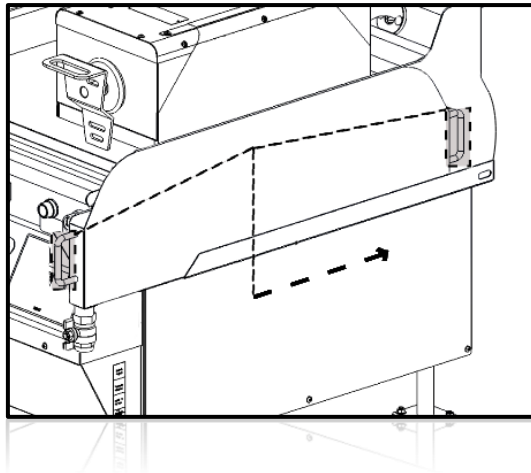
### 5.1 Daily Operations

Before operating the machine, teflons must be installed on the top plates. Teflons should be reversed and rotated daily.

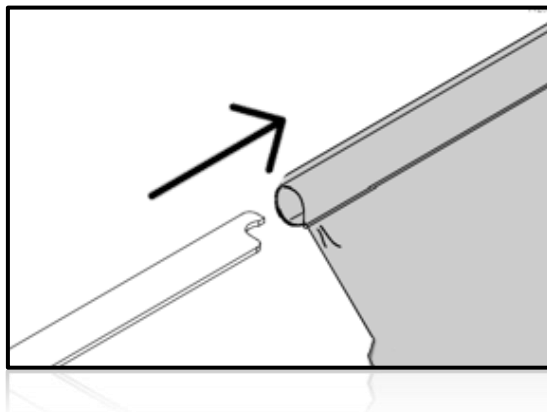


**CAUTION:** Make sure the plates is cold before installing or removing the teflons.

1) The oil waste pan is placed on the sides of the machine by holding from handholds with burn-proof gloves as in the picture.

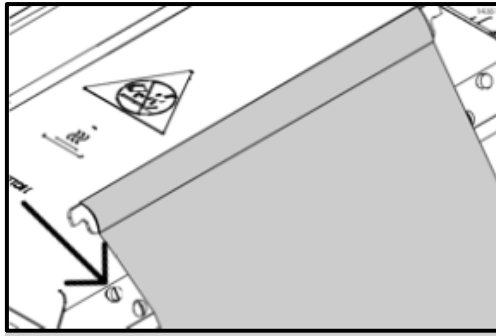


2) Insert the teflon hanger sheet into the teflon slot.

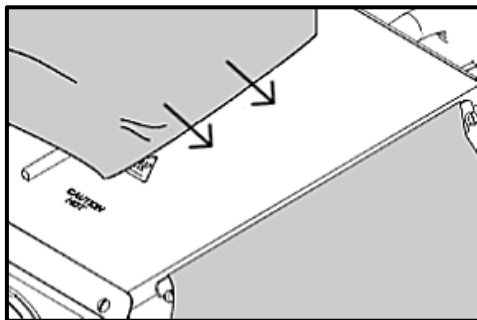


## SECTION 5 | ASSEMBLY AND PROGRAMMING

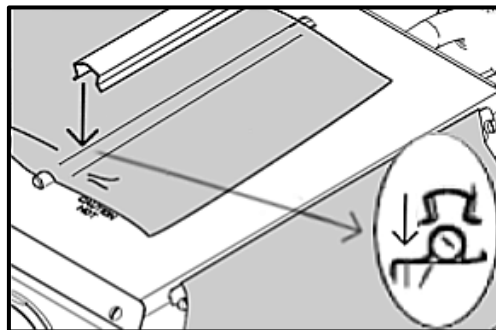
3) Attach the teflon hanger plate to the bolts on the plate.



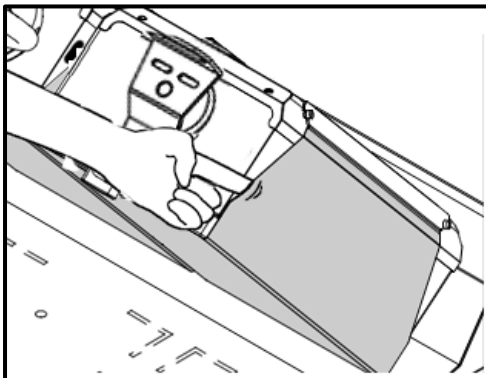
4) Hold the uncurled side of the teflon, pull the tape slowly and tightly and wrap it centered around the top plate.



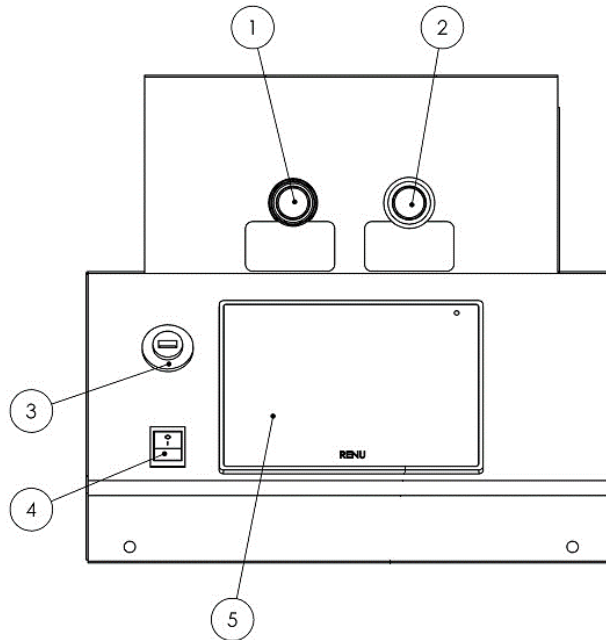
5) Place the teflon on the compression sheet and clamp the tape with the tape clamping plate



6) Check the tensity of the teflon.



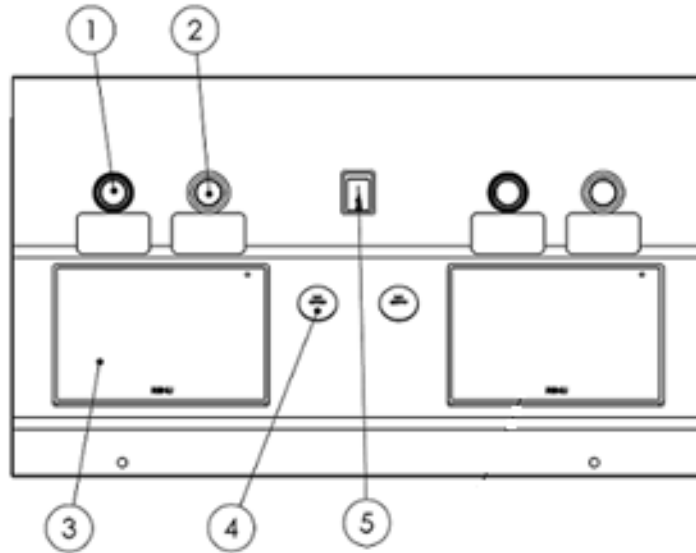
5.2 Warning for User



| NO | SPARE PART CODE | SPARE PART DESCRIPTION    | QTY. (SEN 150-EPI) |
|----|-----------------|---------------------------|--------------------|
| 1  | 010129          | TOP PLATE LIFTING BUTTON  | 1                  |
| 2  | 010148          | TOP PLATE LOWERING BUTTON | 1                  |
| 3  | 010274          | FITTING                   | 1                  |
| 4  | 010271          | ON/OFF BUTTON             | 1                  |
| 5  | 010128-DELTA    | SCREEN                    | 1                  |

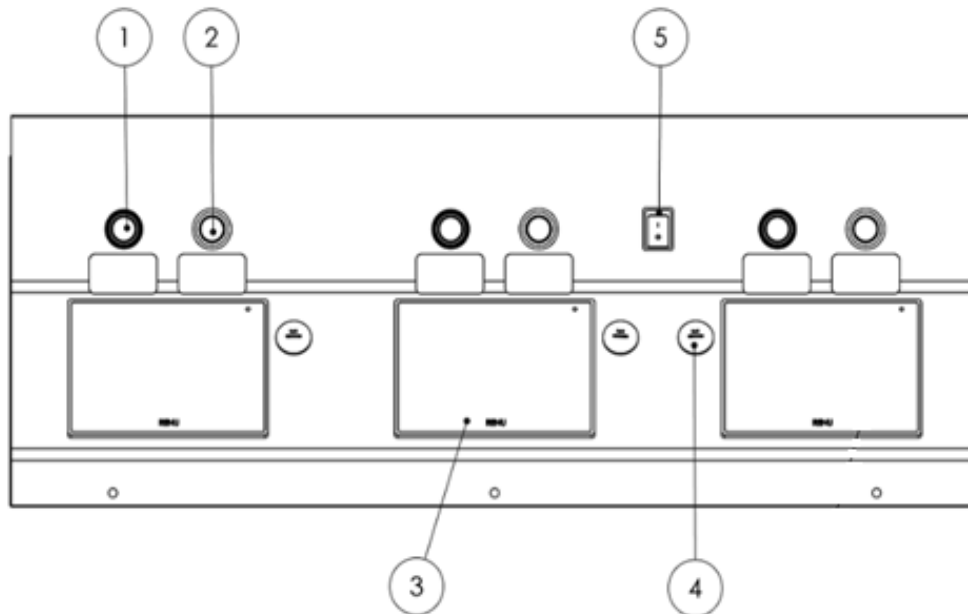


## SECTION 5 | ASSEMBLY AND PROGRAMMING



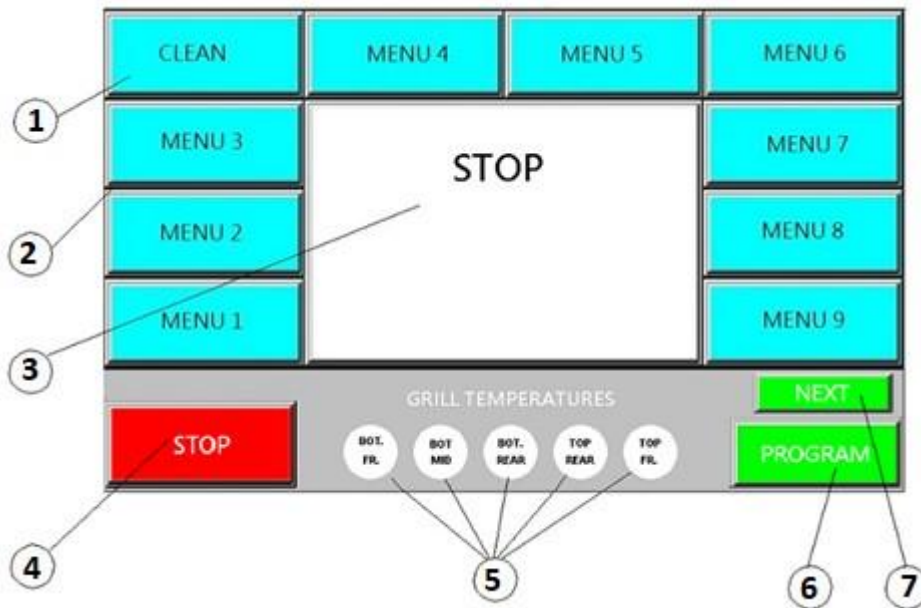
| NO | SPARE PART CODE | SPARE PART DESCRIPTION    | QTY. (SEN 300-EPI) | QTY. (SEN 300-1EPI) |
|----|-----------------|---------------------------|--------------------|---------------------|
| 1  | 010129          | TOP PLATE LIFTING BUTTON  | 2                  | 2                   |
| 2  | 010148          | TOP PLATE LOWERING BUTTON | 2                  | 2                   |
| 3  | 010128-DELTA    | SCREEN                    | 2                  | 2                   |
| 4  | 010274          | FITTING                   | 2                  | 2                   |
| 5  | 010271          | ON/OFF BUTTON             | 1                  | 1                   |

SECTION 5 | ASSEMBLY AND PROGRAMMING



| NO | SPARE PART CODE | SPARE PART DESCRIPTION    | QTY. (SEN 450-EPI) | QTY. (SEN 450-2EPI) |
|----|-----------------|---------------------------|--------------------|---------------------|
| 1  | 010129          | TOP PLATE LIFTING BUTTON  | 3                  | 3                   |
| 2  | 010148          | TOP PLATE LOWERING BUTTON | 3                  | 3                   |
| 3  | 010128-DELTA    | SCREEN                    | 3                  | 3                   |
| 4  | 010274          | FITTING                   | 3                  | 3                   |
| 5  | 010271          | ON/OFF BUTTON             | 1                  | 1                   |

## SECTION 5 | ASSEMBLY AND PROGRAMMING



| NO | MENU DESCRIPTION (ALL GRILLS) |
|----|-------------------------------|
| 1  | CLEANING MODE                 |
| 2  | MENU SELECTION KEYS           |
| 3  | FUNCTION SCREEN               |
| 4  | TEMPERATURE START-STOP        |
| 5  | TEMPERATURE INDICATOR LIGHTS  |
| 6  | PROGRAM SETTINGS              |
| 7  | NEXT PAGE                     |

### 5.3 Programming

All functions of the grills are controlled by microprocessor. To operate the grill properly, it must be pre-programmed. Programming is explained step by step on the following pages.

When the machine is started for the first time, **SENOVEN** logo appears on the screen. It automatically switches to the cooking page when the screen is touched or after 10 seconds. The display comes in the “**STOP**” position.

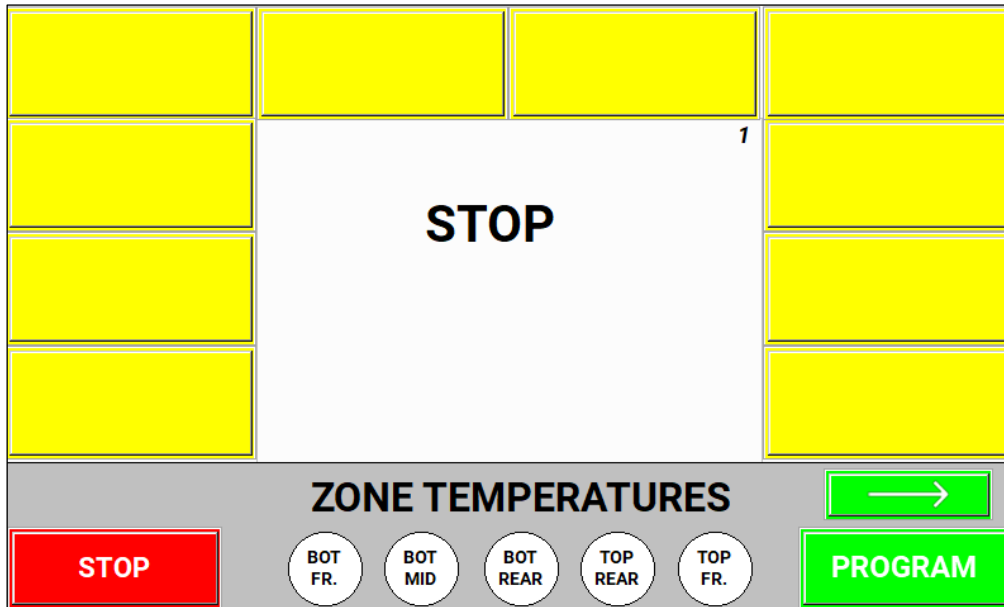


produced by ŞENGÜN MAKİNA Ltd.

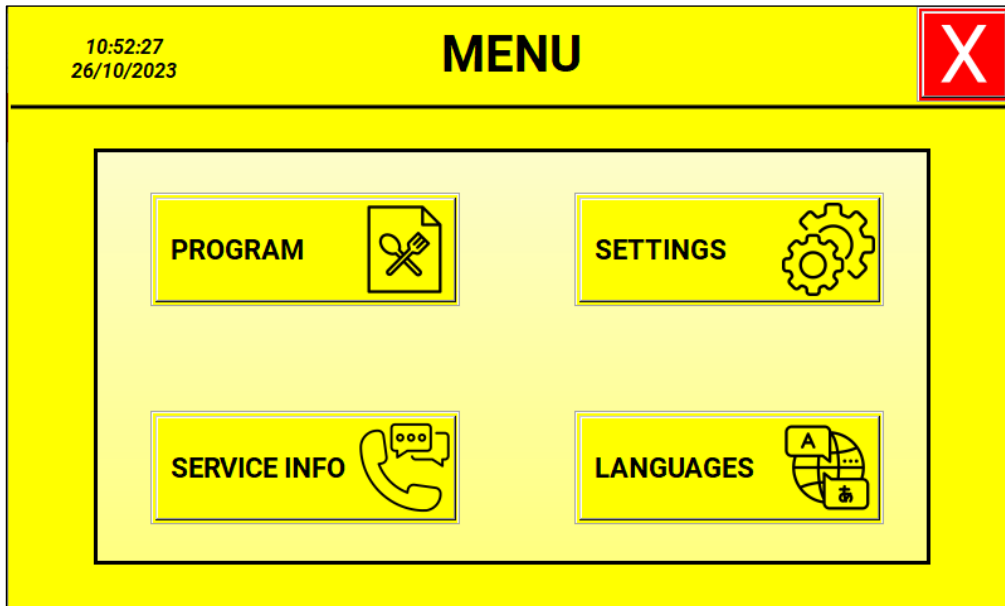
### 5.4 Electric Grill Machine Interface

#### 5.4.1 Programming Menu

After the Logo, **COOKING PAGE** appears on the screen. The cooking page is the page where the cooking functions of the grill are performed and the created cooking programs are run. Do the steps mentioned at the bottom to create cooking programs;

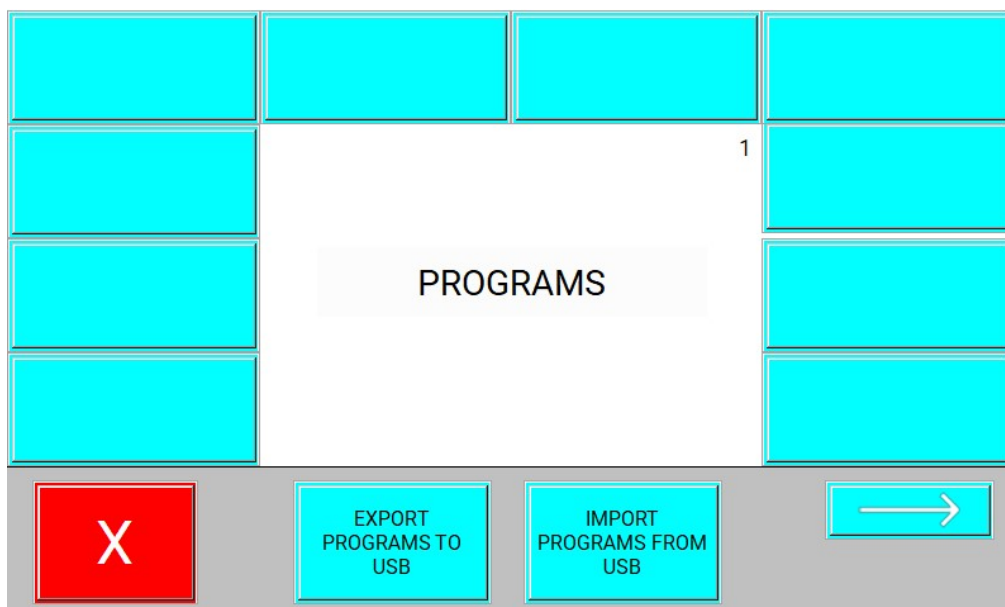


If you press PROGRAM button while the grill is in STOP mode, you will see the main menu.



Press the **PROGRAM MENU** button from the main menu. Then, enter the password “5555” to the keyboard and press **ENTER**.

When you press the **PROGRAM MENU** button, you will see the program pages. From this page, via pressing the menu button that you want to edit, you can access information about that menu. You can change the pages via arrows.



When you press the menu button, **PROGRAM** page will open.

**PROGRAM PAGE**

X

CLAM MODE

TOP TEMPERATURE **66 °C**

BOT TEMPERATURE **66 °C**

FUNCTION **REMOVE IN**

TIME **20 Sec**

ALARM **ACTIVE**

GAP **0.0 mm**

PROGRAM PASSIVE

The information about the selected menu can be seen from the program page. In this page;

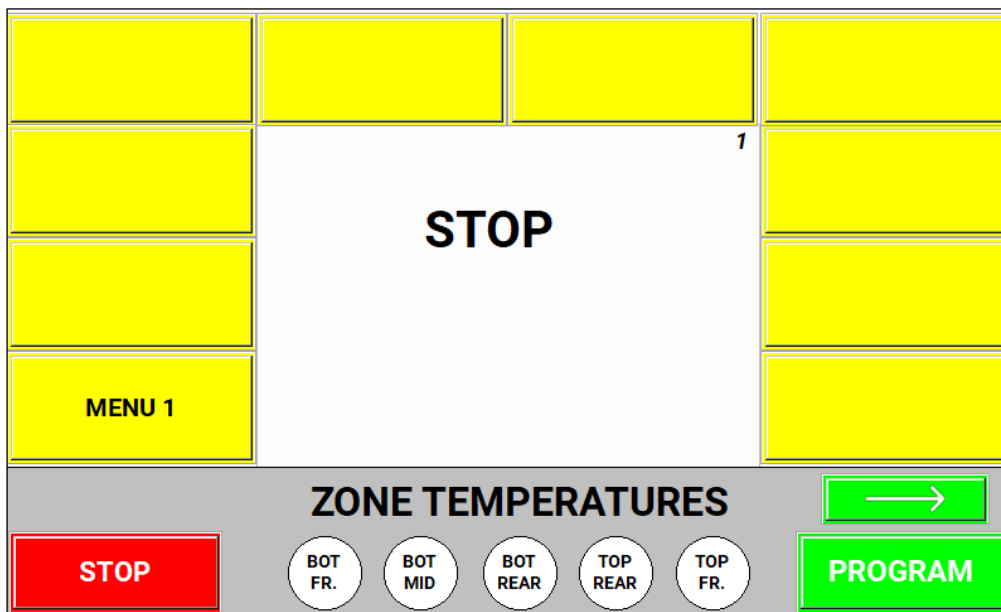
- The program that you want to edit, will be shown without a name. You can rename it from the upper empty box. ***If you don't rename the program, it won't be saved to the working program page.***
- In the program page (except for step timings) all changes will require a password. After you enter the password which is "1626" you will be able to change all the variables. ***If you close the program page, to enter again, you will have to enter the password "1626" again.***
- You can adjust the top plates' temperature from the **TOP TEMPERATURE** button, and from the **BOTTOM TEMPERATURE** button, you can adjust the bottom plates' temperatures. ***NOTE: You can adjust the top plates' temperature between 66°C - 232°C, and bottom plates' temperature between 66°C - 204°C.***
- By pressing the steps' buttons you can add or you can remove the steps. If you see the REMOVE text and press it, you can add another step. If you want to delete the step that you add, you can delete it by pressing the same button. You can activate-deactivate the alarms which are belonged to the steps by pressing on them.
- The durations of the cooking are shown under the TIME box. You can enter between 0-999 seconds. **The step at the bottom is always the last step of the program and the duration of the last step is accepted as whole program's duration.** When a step or steps are added, their duration will be added too. However, the durations of the other steps will not be added to the total duration.

## SECTION 5 | ASSEMBLY AND PROGRAMMING

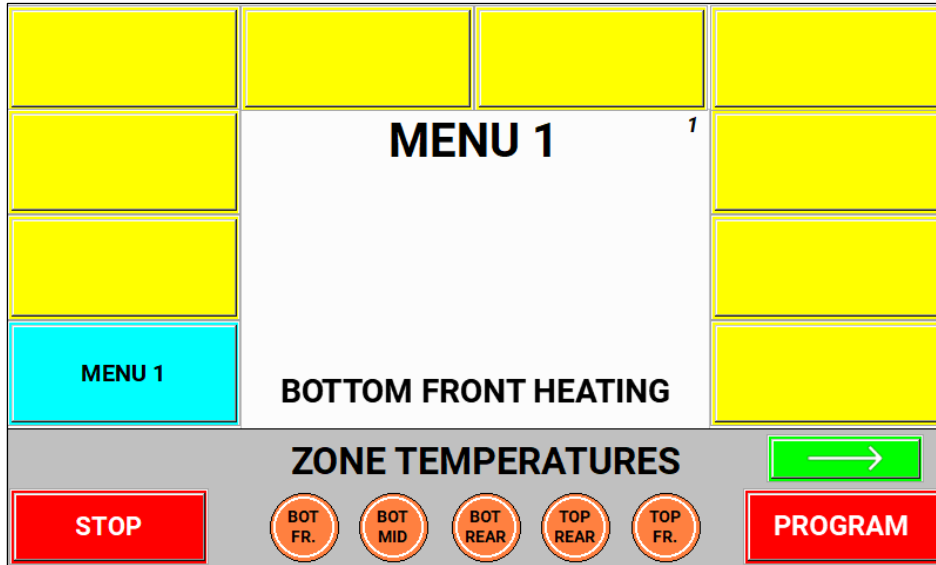
- With the PROGRAM ACTIVE button, you can make programs active of passive (If the program is passive, you won't be able to see it in **cooking menu**.)
- You can change FLAT MODE and CLAM MODE by pressing the mode changing button which is located at right top of the screen. After this selection, the plates will be activated-deactivated. When FLAT MODE is activated, the upper plates will be PASSIVE, and they will not move. After the FLAT MODE is activated, the button will be green and you will see FLAT MODE text. If you activate the CLAM MODE the machine will work normally, and the button will be yellow.
- The gap values can be entered in millimeters to the space under the GAP header.
- The information that you've entered will be saved automatically.

### 5.4.2 Cooking Page

The cooking page is the page where the grill is controlled. You can choose the menu you want from this page.



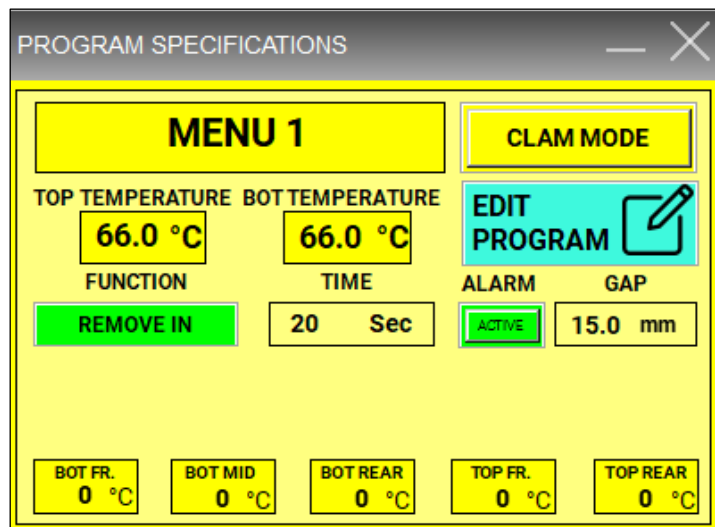
When the grill is first operated, it will be in STOP mode. To start any program, just press the menu buttons. As soon as you press the menu button, you grill will start heating. After the grill starts heating, you will see indicators as **TOP-MID HEATING** etc. And also there are coloured buttons which are belonged to the grill's areas.



These indicators represents 5 different area of the grill. When the grill is not heated the buttons are white. As soon as the heating process start, the buttons will turn into orange. If the area reaches the desired temperature, the button will be green. If the area's temperature exceed the desired temperature, the button will be red. To close the heating elements press STOP button for 2 seconds.

### 5.4.3 Product Information Page

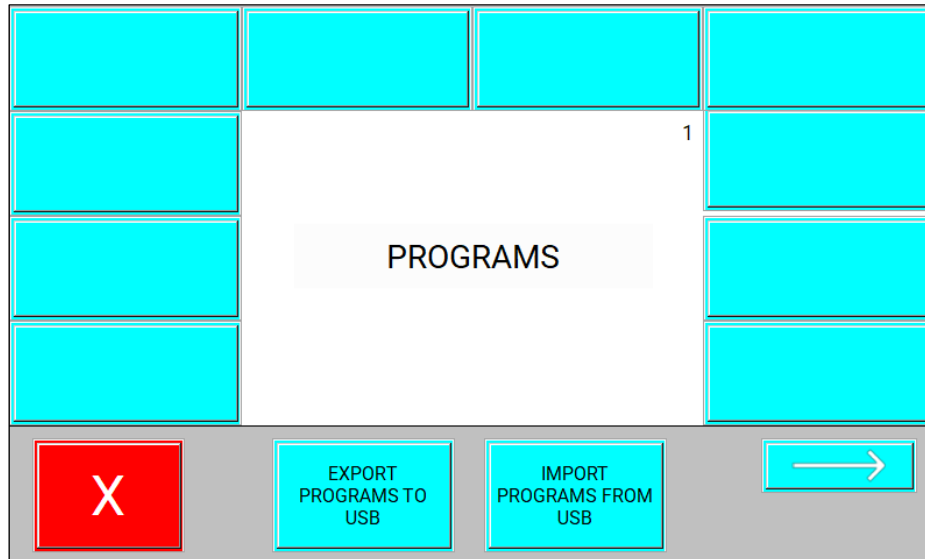
The values which are entered can be seen instantly while operating. To see this information, you should press the menu button for 3 seconds. After this 3 seconds, the PRODUCT INFORMATION SCREEN will pop-up. In this page by pressing "edit program" button, you can open program edit page.



On this page, when the menu is clicked, the information is displayed, showing the current temperature values.



#### 5.4.4 Transferring the Programs from the Screen to USB and from USB to the Screen



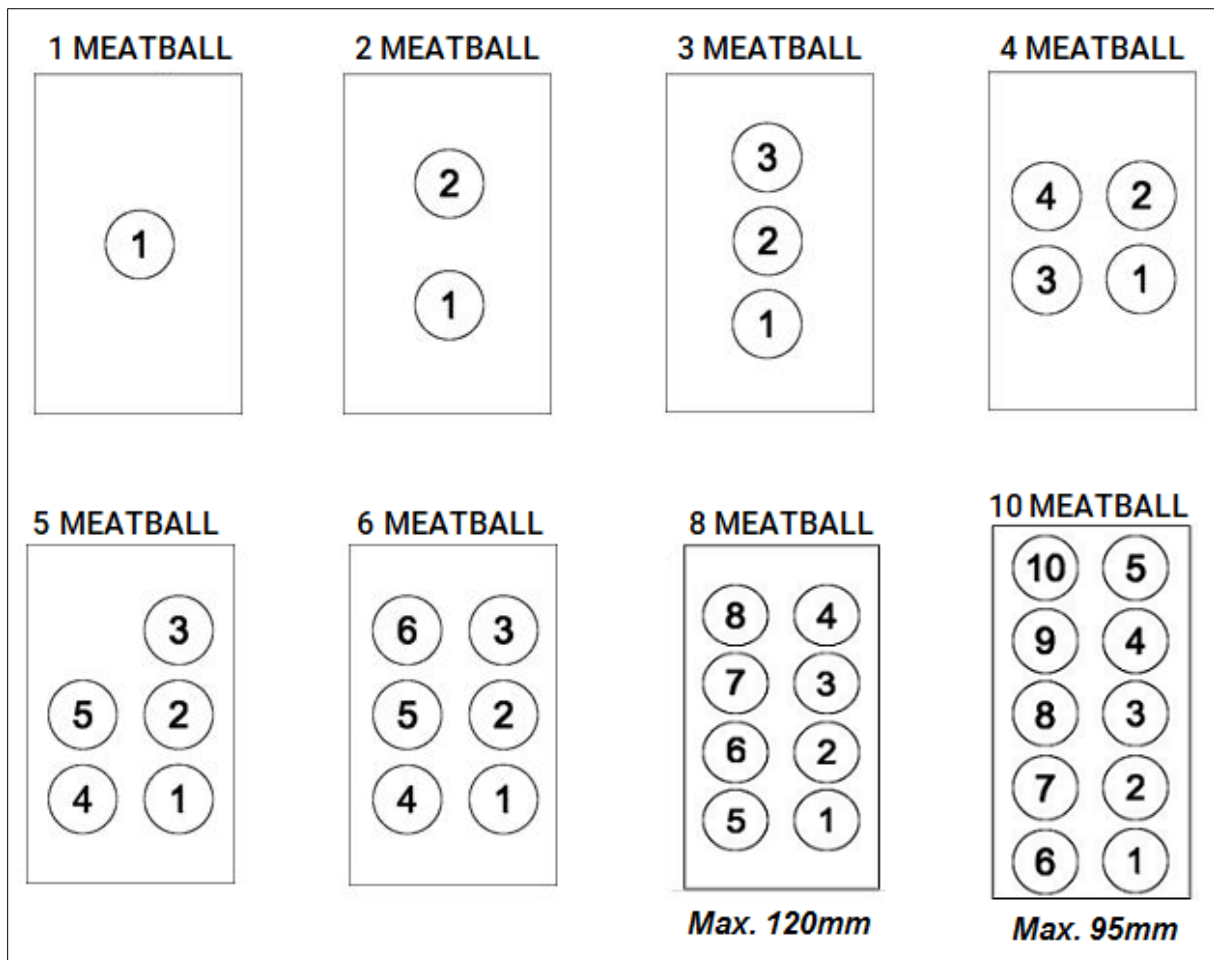
First you should remove the lid and insert the USB to the machine. Then you have to go to PROGRAM PAGE. In this page, you will see EXPORT THE PROGRAMS FROM USB. To do the import progress, from the same page, you have to press IMPORT THE PROGRAMS TO USB.

### 5.5 Meatball Placement

The procedures below for placing meat products on the machine must be followed. Meat should be placed front to back on the bottom plate's surface. When cooking is complete, the top plate lifts.

**Note:**

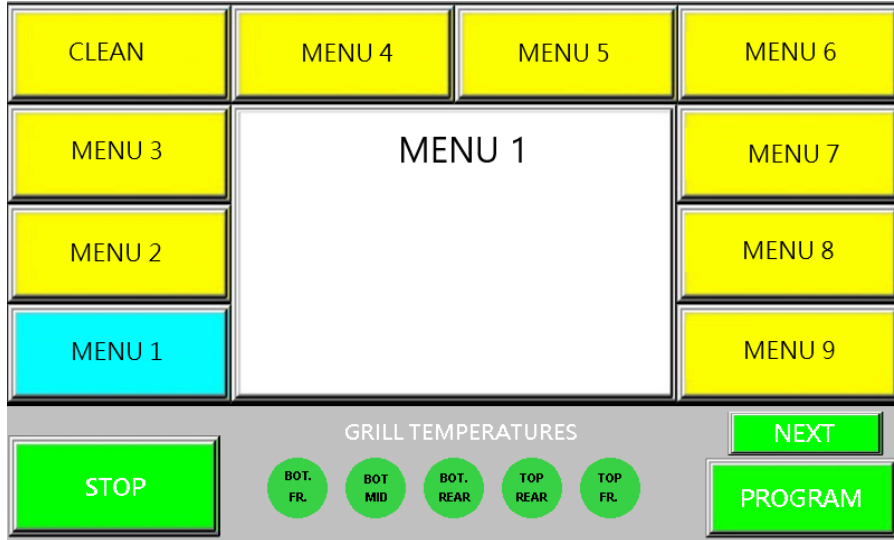
- It is very important that all meatballs should be removed from the bottom plate surface in the order they were placed before cooking.
- Meatballs should be removed immediately after the top plate is returned back to the OPENED position.
- Meatballs are usually placed twice on the bottom plate from front to back and from right to left. The order in which the meatballs are removed is shown in the diagrams with the number shown in the middle of each meatball.



5.6 Working Principle

Step 1

Select the menu to run first. When the heater zones are ready, the indicators at the bottom of the screen will glow green. If the grills are ready, you can place the products from front to back.

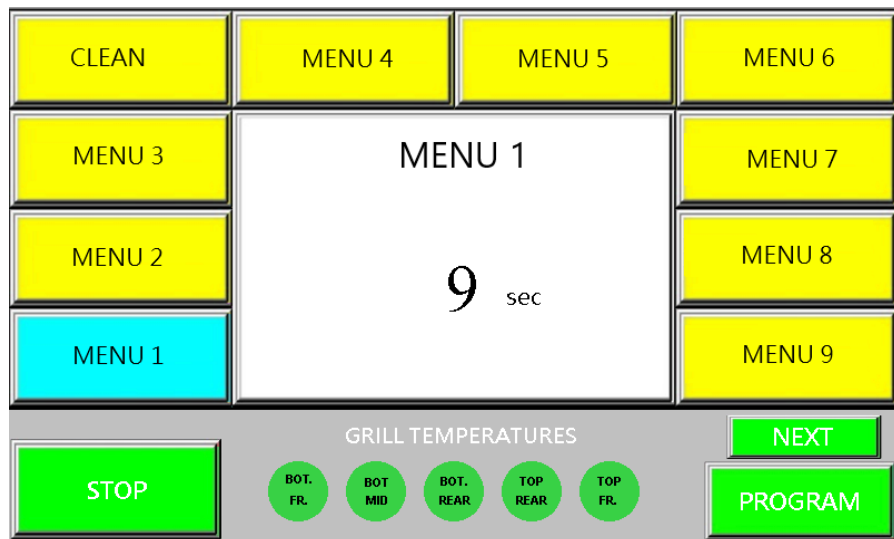


Step 2

Press the LOWERING(physical button) button once.

Step 3

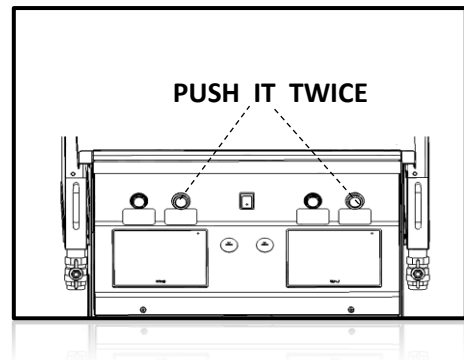
When the top plate moves to the valid gap, it will start counting on the screen. At the end of the time, the plate will be lifted automatically.



**NOTE:** Press the Lifting button once to cancel the operation. The transaction will be canceled automatically.

### 5.7 Standby Mode

When the heater zones are empty and the product is not cooked, the machine can be put into standby mode. To put it into standby mode, push the Lowering button twice. The top plate automatically lowers and enters standby mode.



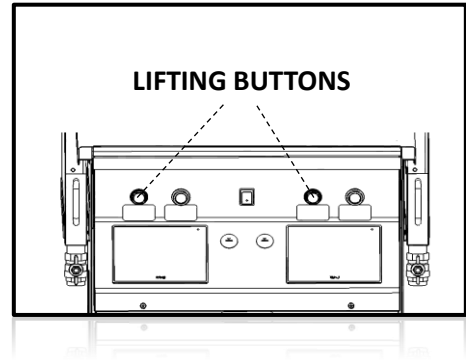
### 5.8 Daily Cleaning

#### 5.8.1 Warnings

- Be careful when cleaning, plates can be hot.
- Do not try to manually lift the top plate. Press the lifting button to turn it on.
- Do not touch the teflon with sharp objects.
- If there is a torn in the cooking area of the teflon, it will cause the products to stick to the aluminum plate.
- Do not put the teflon under other equipment.
- Do not keep the teflon under hot water and do not keep it in hot water.
- Use the teflon by turning the other surface daily.
- Clean the teflon at least 4 times per hour during peak periods.

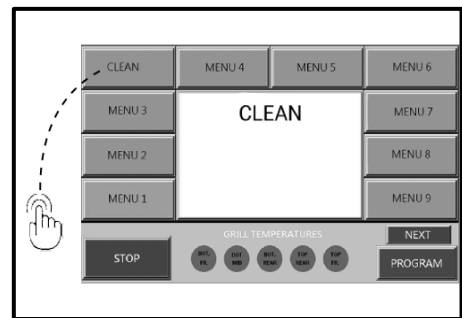
**Step 1**

Top plate gets into the open position with the **LIFTING BUTTON**.



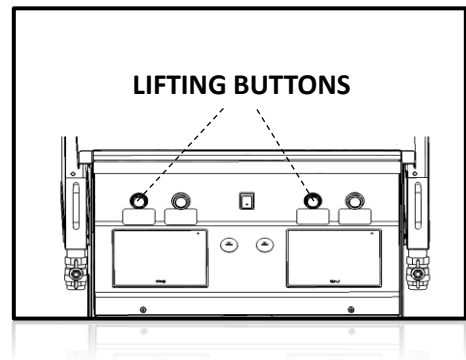
**Step 2**

Push the **CLEAN** button on the top left of the screen.  
When the heater zones are ready, the indicators at the bottom turn green.



**Step 3**

Press the **LIFTING BUTTON** to cancel the operation.



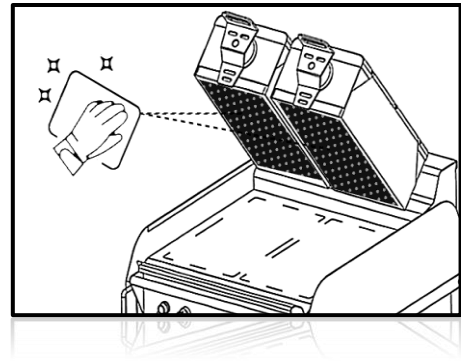
**Step 4**

Wear heat resistant gloves.



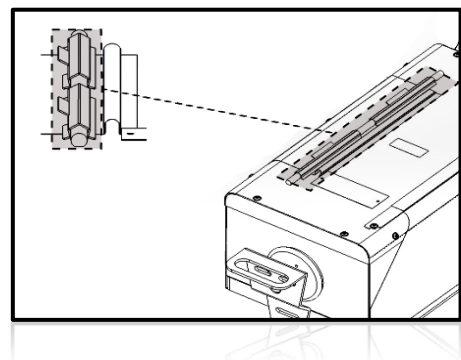
**Step 5**

Wipe the exposed surfaces of the teflon with a clean, disinfectant-soaked and a clean cloth to be used only for grill cleaning.



**Step 6**

Remove the teflon by removing the compression sheet. Take these items to the sink to be washed and rinsed.

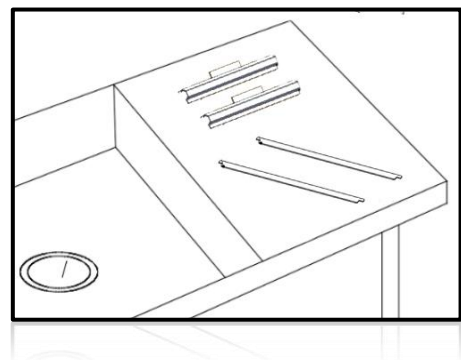


**Step 7**

Repeat steps 1 through 6 in the other top plate.

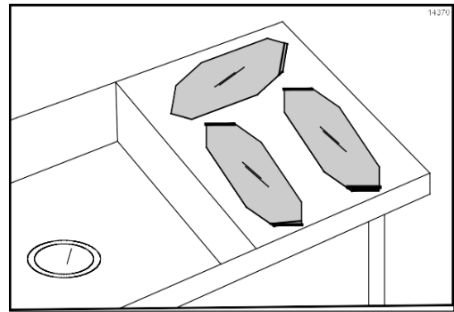
**Step 8**

Wash and rinse the compression sheets and hanger sheet in the sink. Set it aside to use.



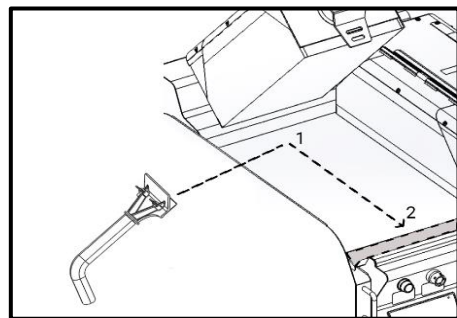
**Step 9**

Lay the teflon on a clean, flat surface next to the sink until the cleaning is done. Do not fold or crumple with sharp objects.



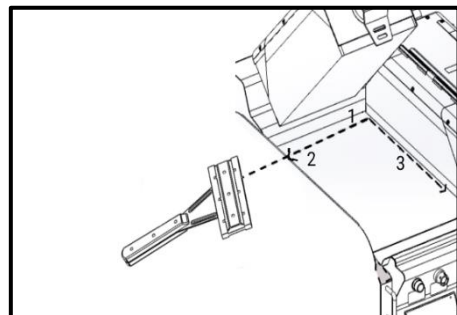
**Step 10**

Scrape the bottom plate surface from front to back with the grill scraper.



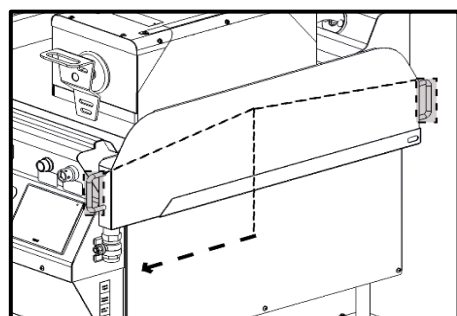
**Step 11**

Use the squeegee to push the residual oil into the oil waste boxes.



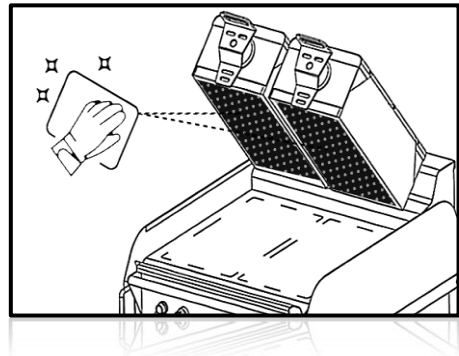
**Step 12**

Remove, drain and reinstall the oil waste boxes.



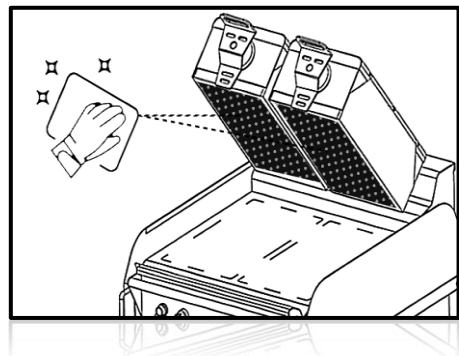
**Step 13**

Clean the surfaces, fronts and sides of the plates with a clean cloth soaked with disinfectant, which will only be used for grill cleaning.



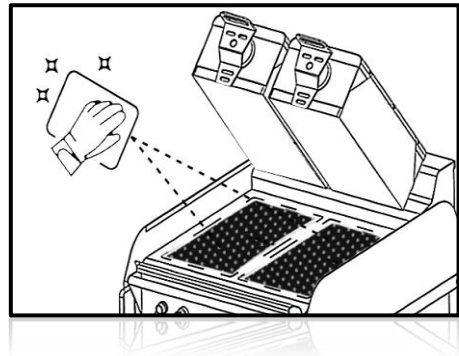
**Step 14**

Rinse the plate cooking surfaces with a clean, disinfectant-soaked cloth used only for grill cleaning.



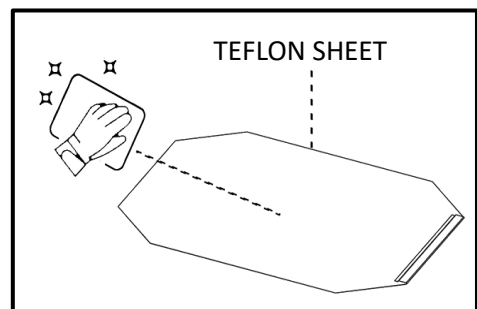
**Step 15**

Pour a small amount of warm water on a cloth used for grill cleaning and wipe the bottom plate surface until all residues are removed.



**Step 16**

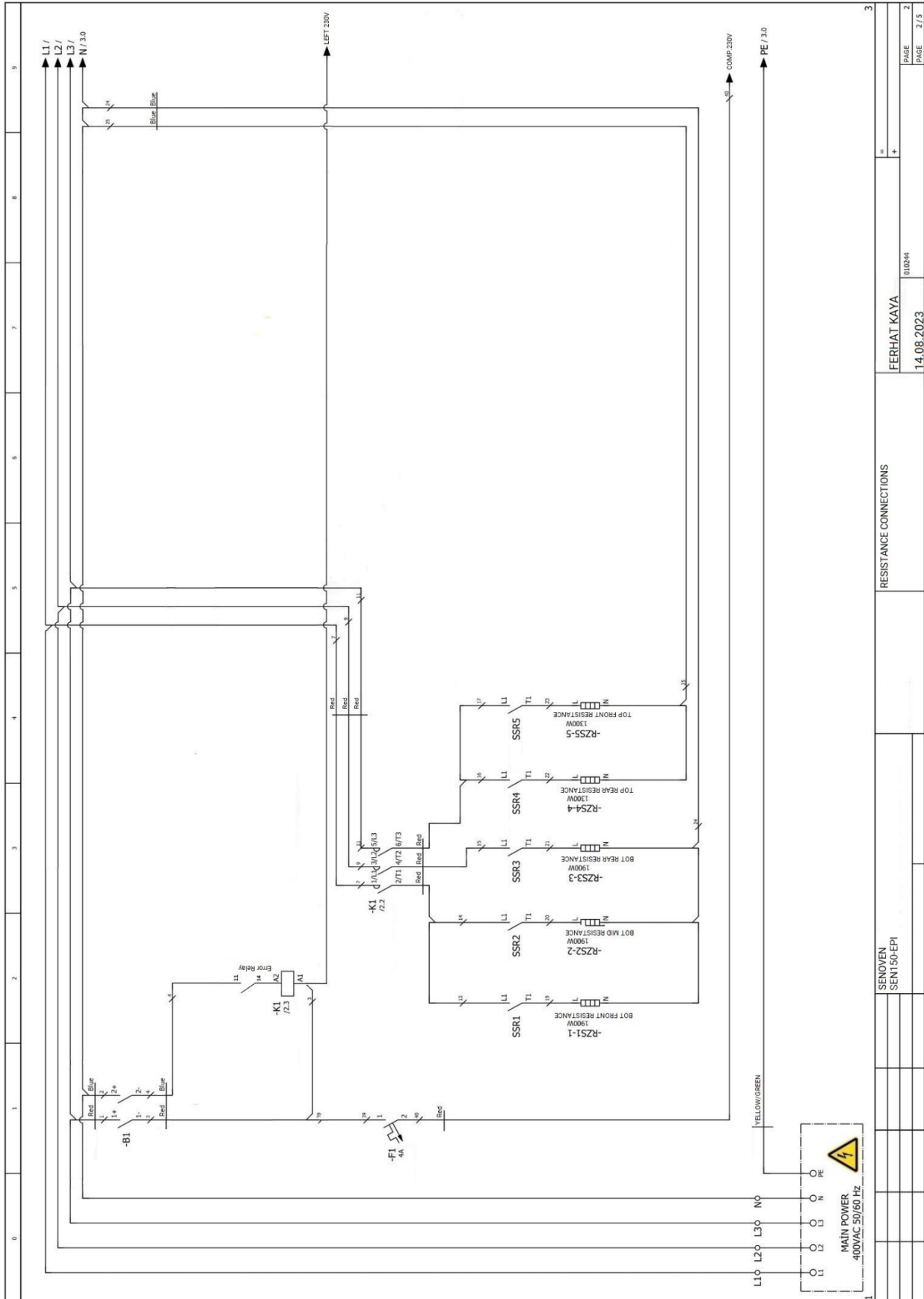
Rinse both sides of the teflon with a clean, disinfectant-soaked cloth used for grill cleaning only.





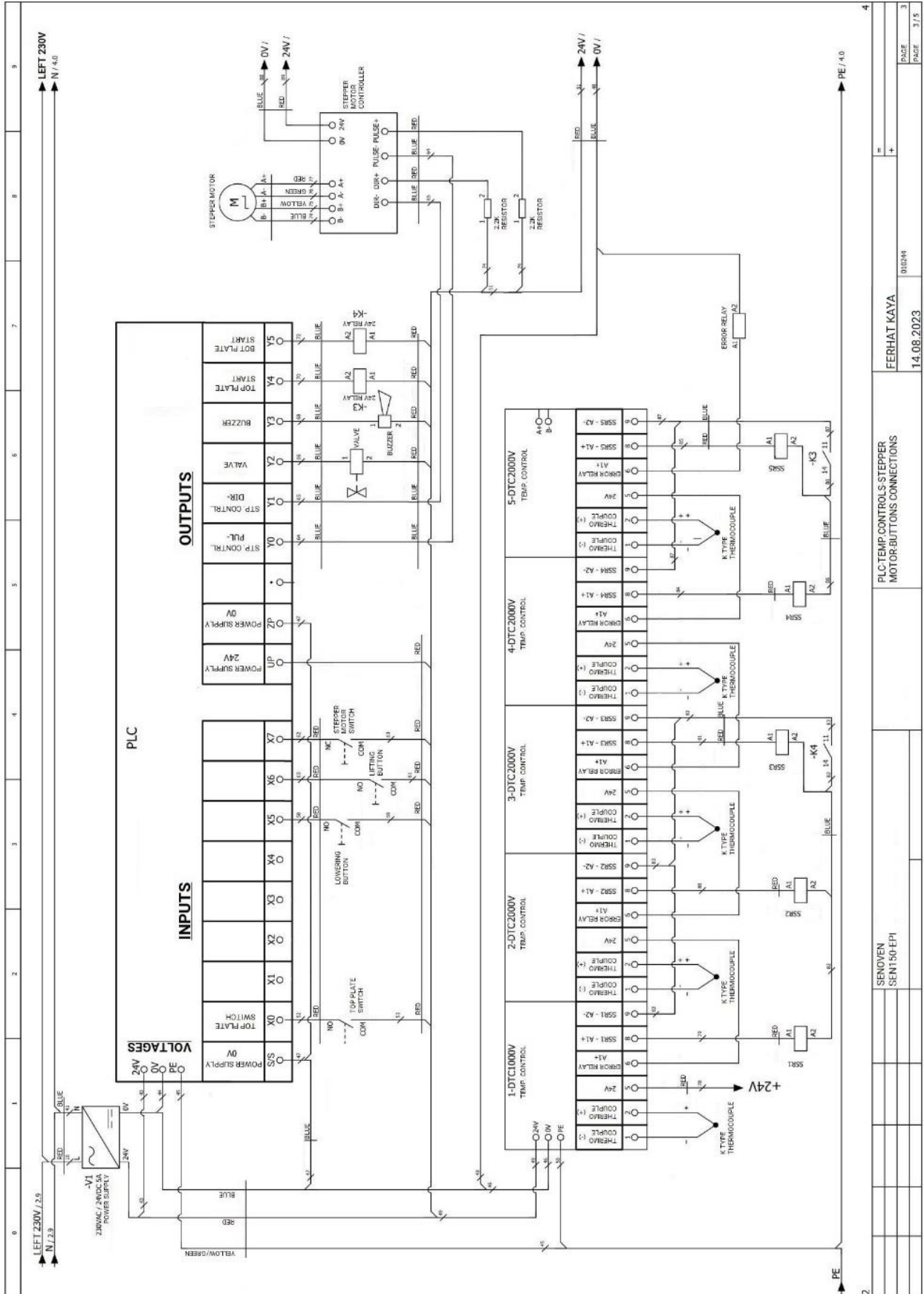
**SECTION 6 | ELECTRICAL DIAGRAM**

**SEN 150-EPI**



SECTION 6 | ELECTRICAL DIAGRAM

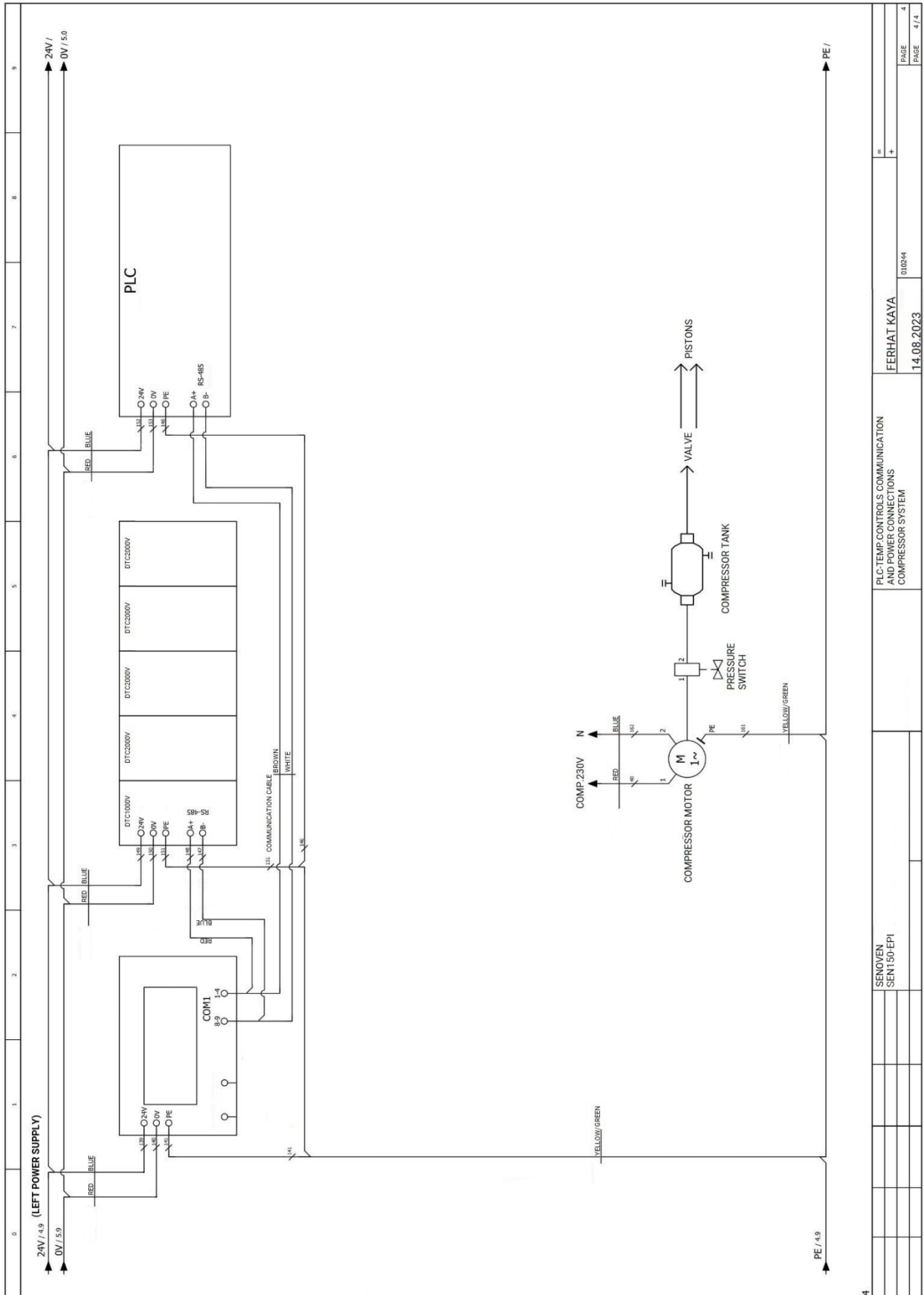
SEN 150-EPI



|   |             |  |             |        |            |   |     |
|---|-------------|--|-------------|--------|------------|---|-----|
| 2 | SEN 150-EPI | PLC TEMP CONTROLS- STEPPER MOTOR-BUTTONS CONNECTIONS | FERHAT KAYA | 010244 | 14.08.2023 | 3 | 3/5 |
|---|-------------|--|-------------|--------|------------|---|-----|

**SECTION 6 | ELECTRICAL DIAGRAM**

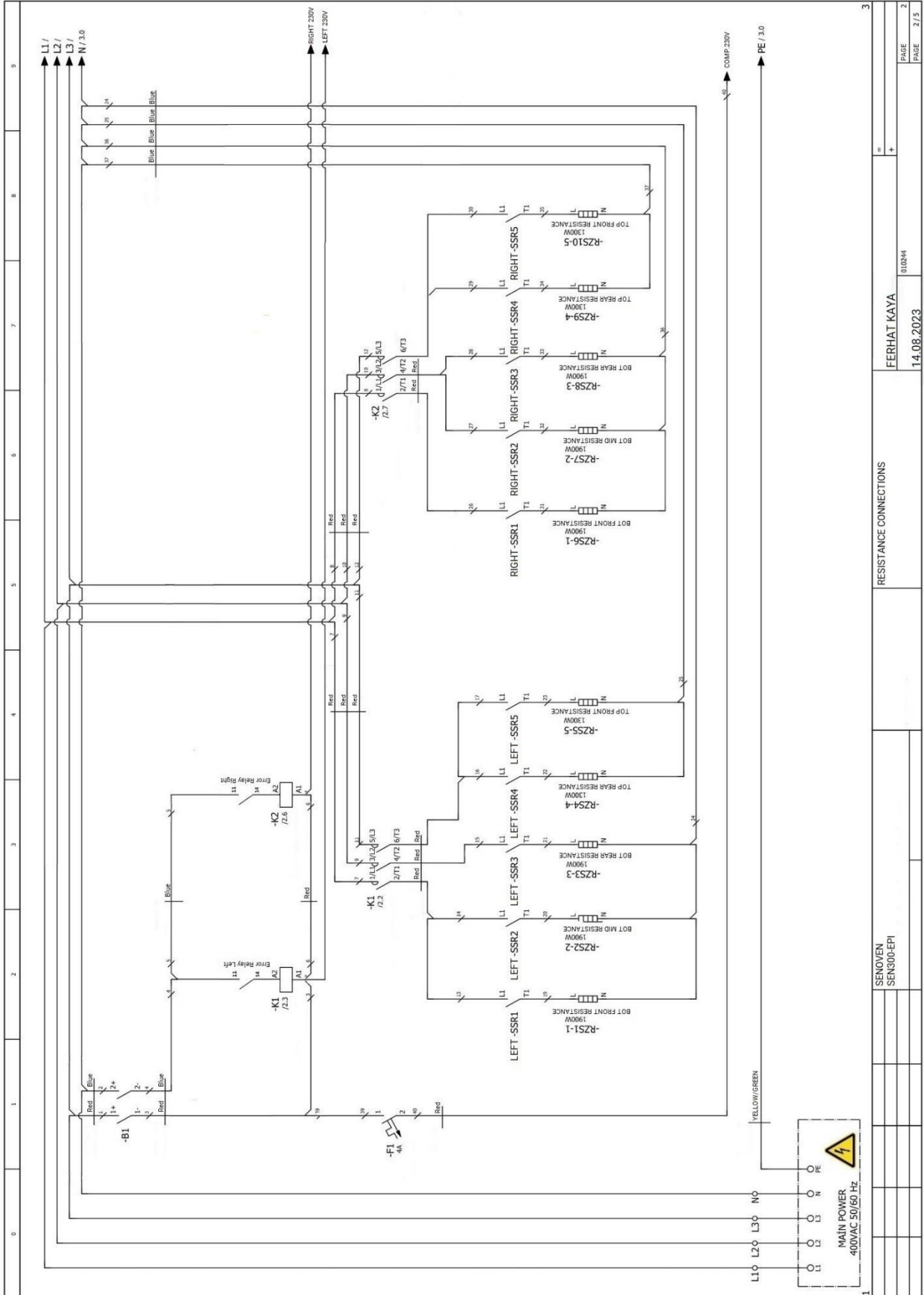
**SEN 150-EPI**



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| 4 | SEN01VEN<br>SEN150-EPI | PLC-TEMP CONTROLS COMMUNICATION<br>AND OPERATIONS<br>COMPRESSOR SYSTEM | FERHAT KAYA | 0102/4      | PAGE<br>4 |
|   |                        |  | 14.08.2023  | PAGE<br>4/3 |           |

SECTION 6 | ELECTRICAL DIAGRAM

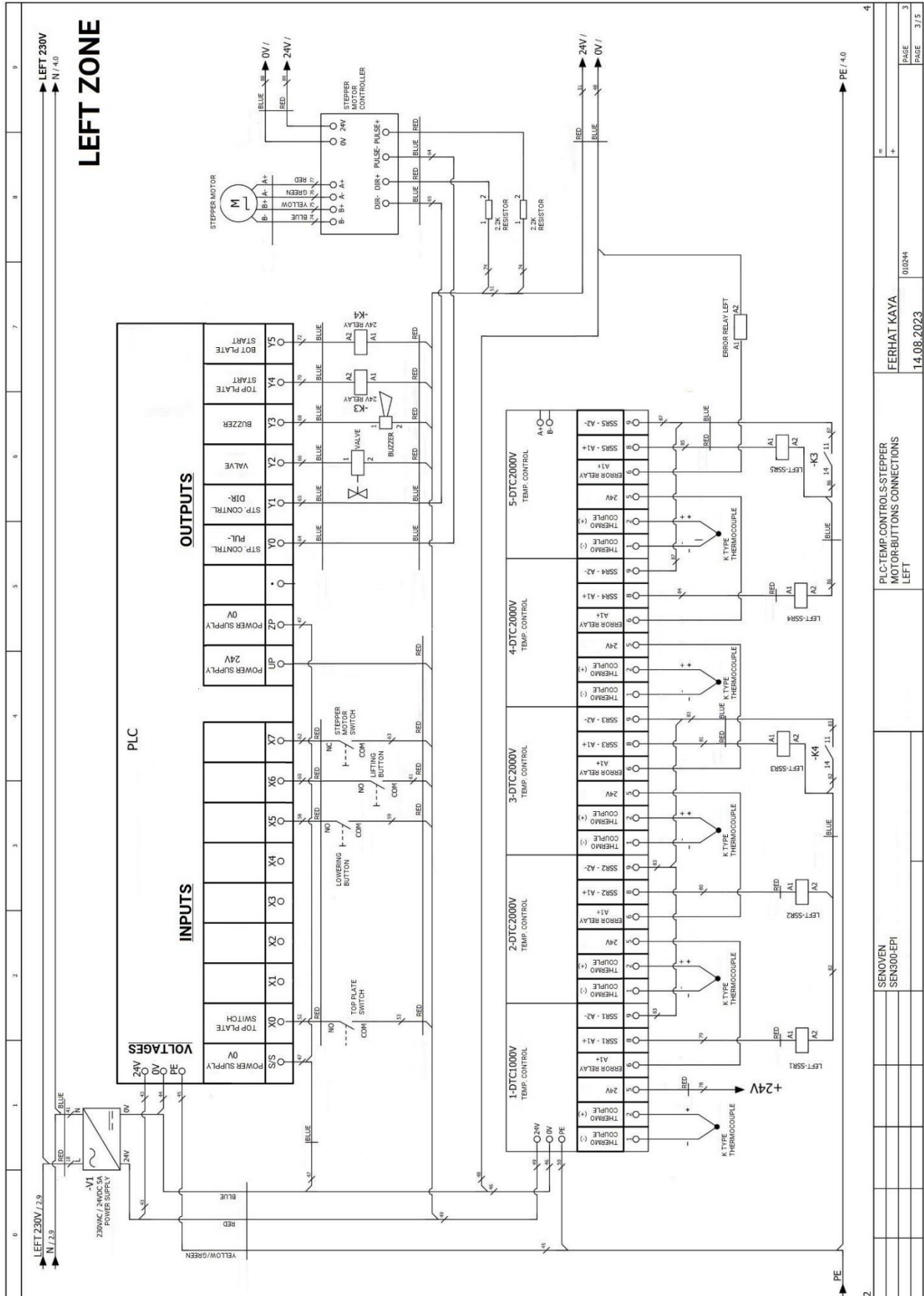
SEN 300-EPI



|             |  |                        |  |             |  |            |  |
|-------------|--|------------------------|--|-------------|--|------------|--|
| SEN 300-EPI |  | RESISTANCE CONNECTIONS |  | FERHAT KAYA |  | 010044     |  |
| SENNOVEN    |  |                        |  |             |  | 14.08.2023 |  |
| SEN300-EPI  |  |                        |  |             |  | PAGE 2     |  |
|             |  |                        |  |             |  | PAGE 2 / 5 |  |

SECTION 6 | ELECTRICAL DIAGRAM

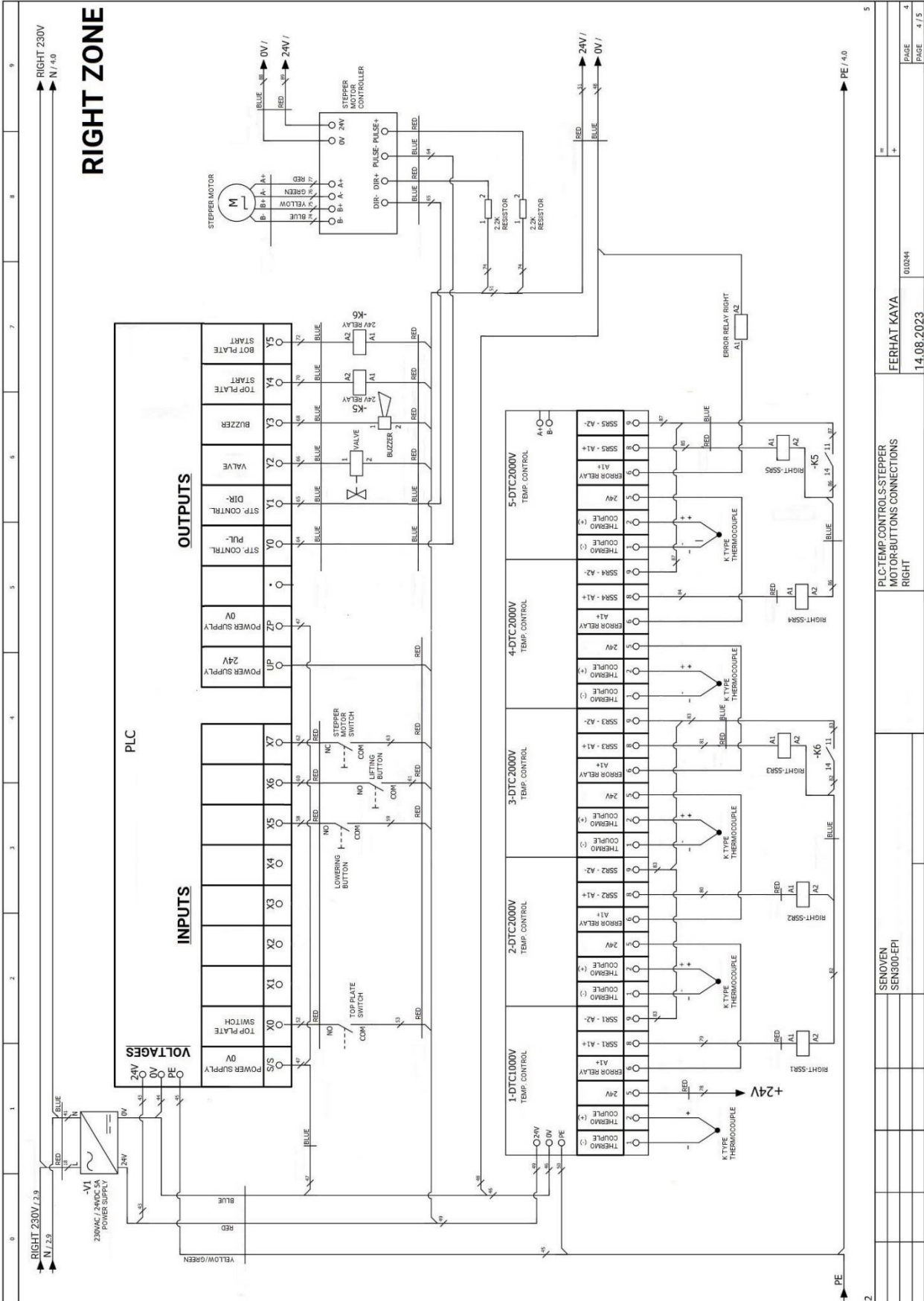
SEN 300-EPI



|   |                         |   |             |        |            |   |              |
|---|-------------------------|---|-------------|--------|------------|---|--------------|
| 2 | SEN/ENVEN<br>SEN300-EPI | PLC TEMP CONTROLS, STEPPER<br>MOTOR/BUTTONS CONNECTIONS<br>LEFT | FERHAT KAYA | 010284 | 14.08.2023 | 3 | PAGE<br>PAGE |
| 3 |                         |   |             |        |            | 3 | 3 / 5        |

SECTION 6 | ELECTRICAL DIAGRAM

SEN 300-EPI

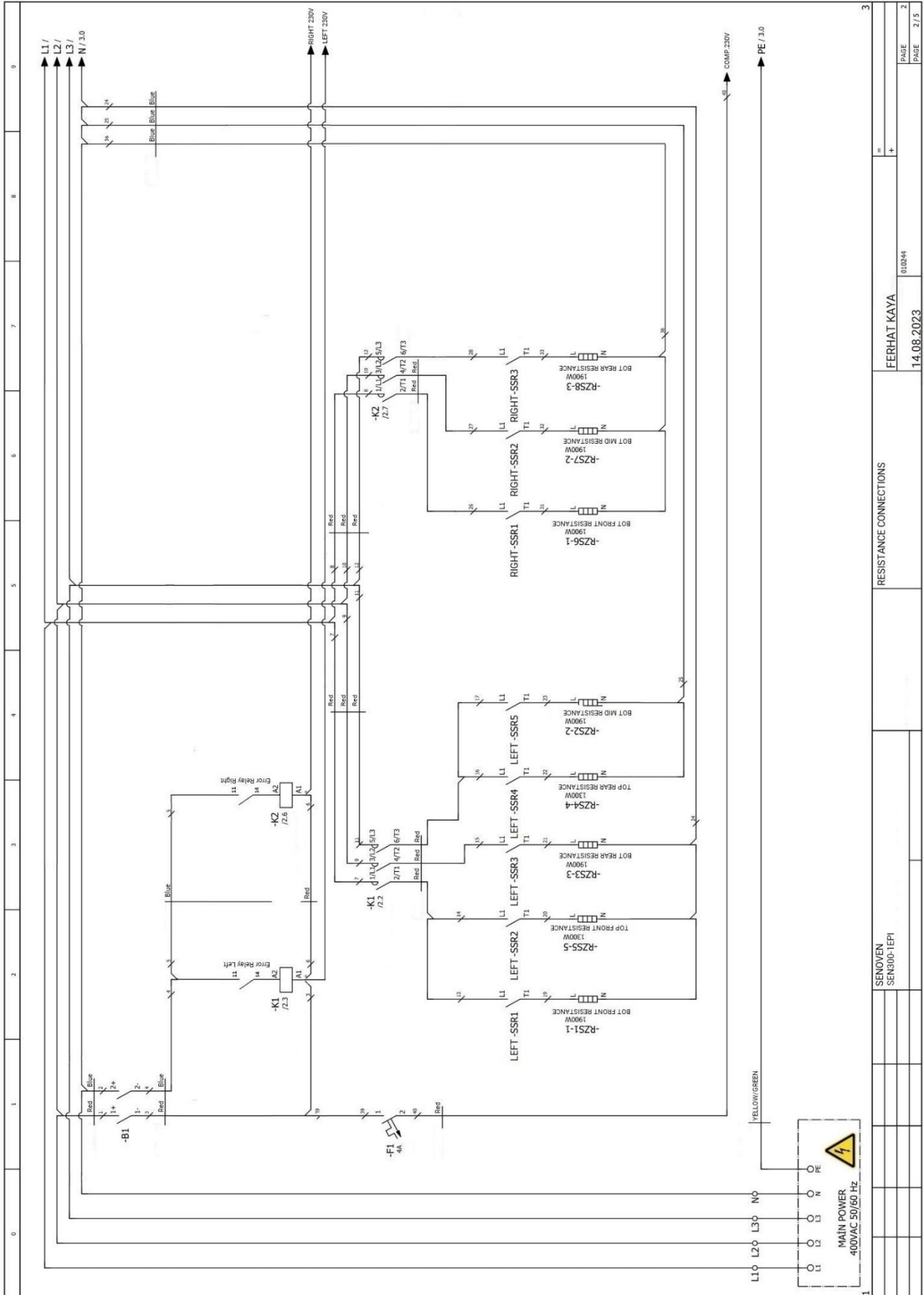


|   |                        |   |             |        |            |       |
|---|------------------------|---|-------------|--------|------------|-------|
| 2 | SENJOVEN<br>SEN300-EPI | PLC-TEMP CONTROL, STEPPER<br>MOTOR/BUTTONS CONNECTIONS<br>RIGHT | FERHAT KAYA | 010304 | 14.08.2023 | 4     |
| 3 |                        |   |             |        |            | 4     |
| 4 |                        |   |             |        |            | 4 / 5 |
| 5 |                        |   |             |        |            |       |



SECTION 6 | ELECTRICAL DIAGRAM

SEN 300-1EPI

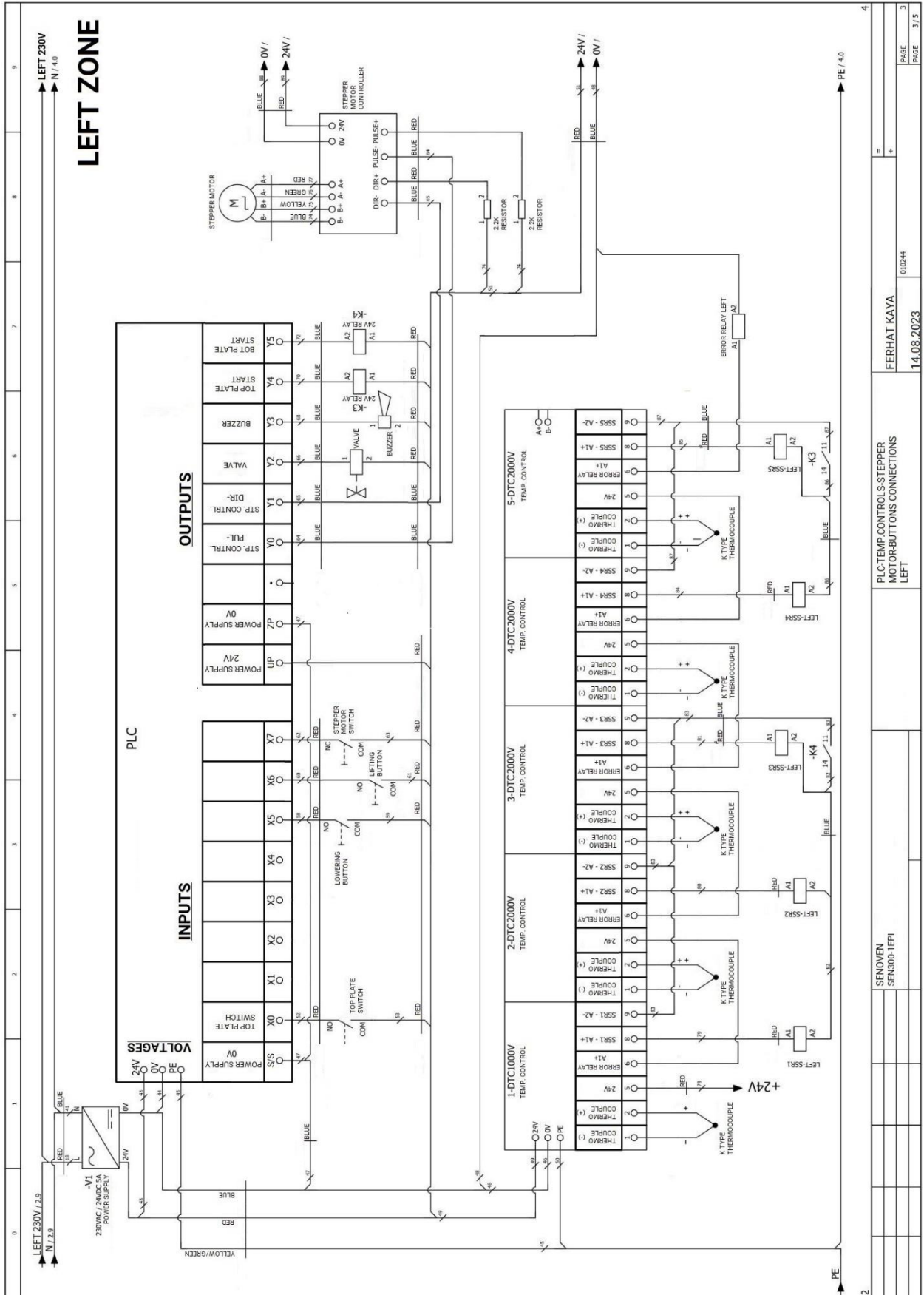


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|--------------|------------------------|-------------|------------|-----------|
| SEN 300-1EPI | RESISTANCE CONNECTIONS | FERHAT KAYA | 010244     | PAGE 2    |
|              |                        |             | 14.08.2023 | PAGE 2/15 |



SECTION 6 | ELECTRICAL DIAGRAM

SEN 300-1EPI



|   |             |             |             |
|---|-------------|-------------|-------------|
| 2 | SEN300-1EPI | SEN300-1EPI | SEN300-1EPI |
| 3 | SEN300-1EPI | SEN300-1EPI | SEN300-1EPI |
| 4 | SEN300-1EPI | SEN300-1EPI | SEN300-1EPI |

PLC-TEMP CONTROLS-STEPPER MOTOR-BUTTONS CONNECTIONS LEFT

FERHAT KAYA

010244

14.08.2023

PE / 4.0

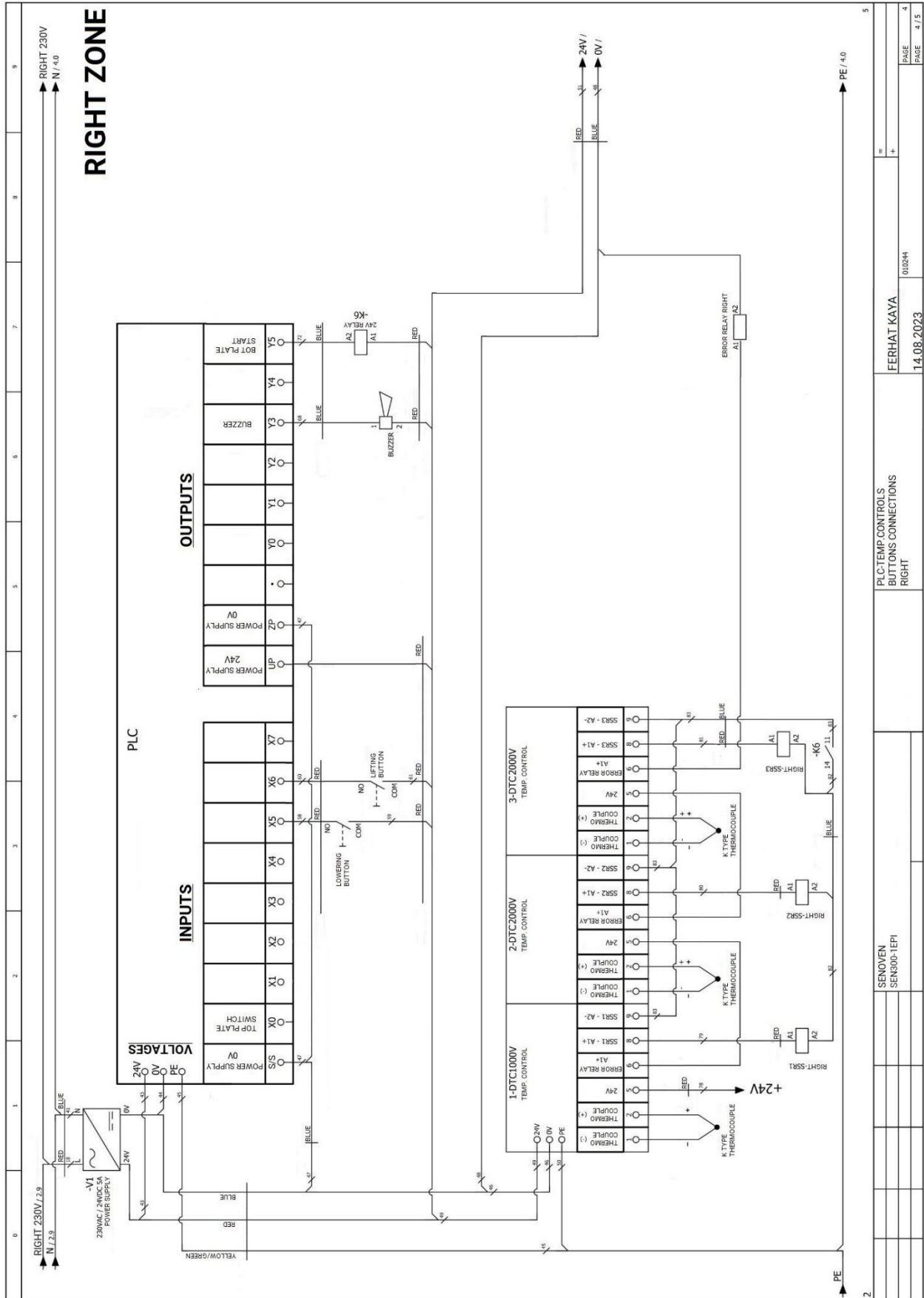
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SECTION 6 | ELECTRICAL DIAGRAM

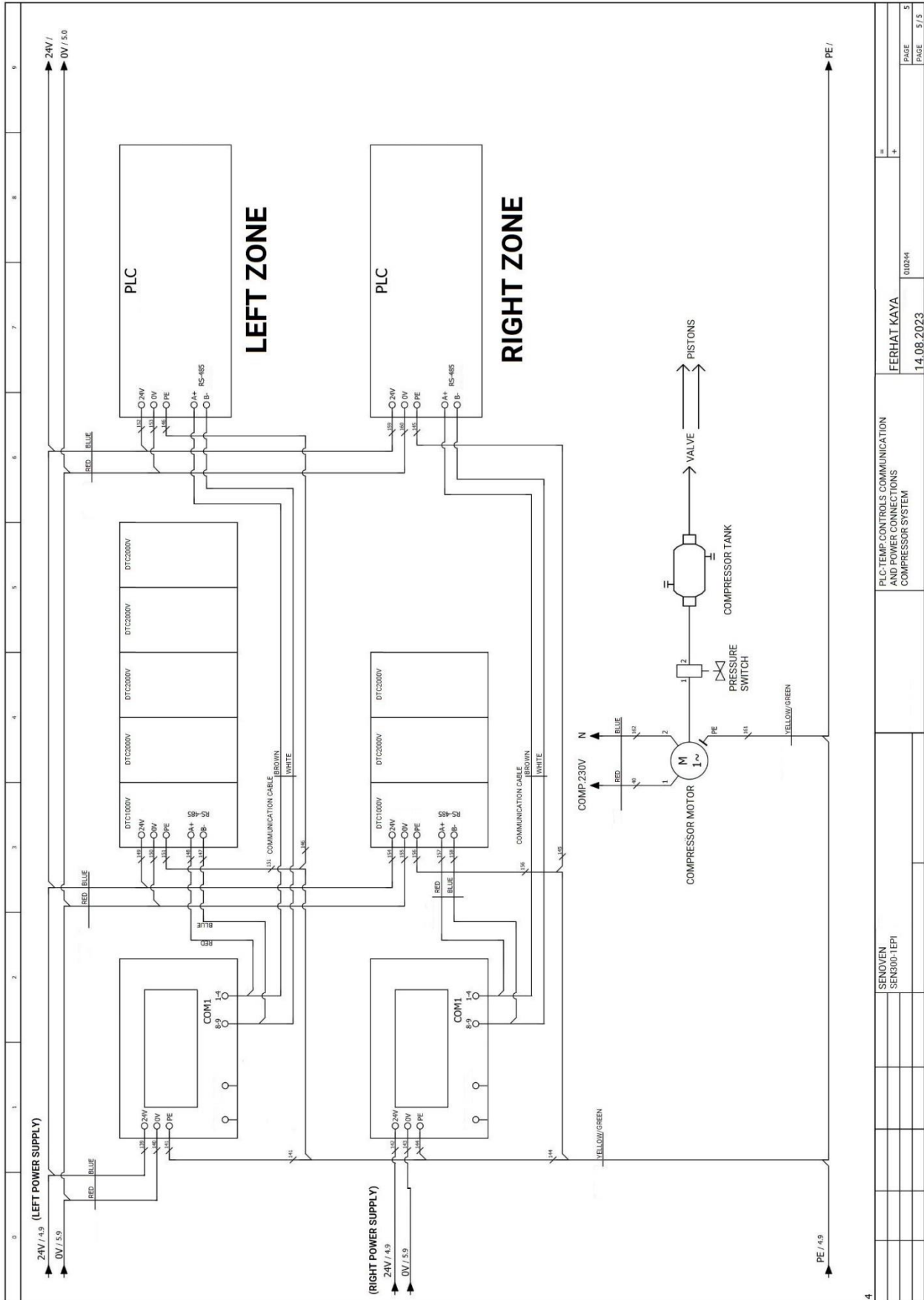
SEN 300-1EPI



|   |             |   |             |        |            |
|---|-------------|---|-------------|--------|------------|
| 2 | SEN300-1EPI | PLC-TEMP-CONTROLS<br>BUTTONS CONNECTIONS<br>RIGHT | FERHAT KAYA | 010244 | PAGE 4     |
| 3 |             |   |             |        | PAGE 4 / 5 |
| 4 |             |   |             |        |            |
| 5 |             |   |             |        |            |

SECTION 6 | ELECTRICAL DIAGRAM

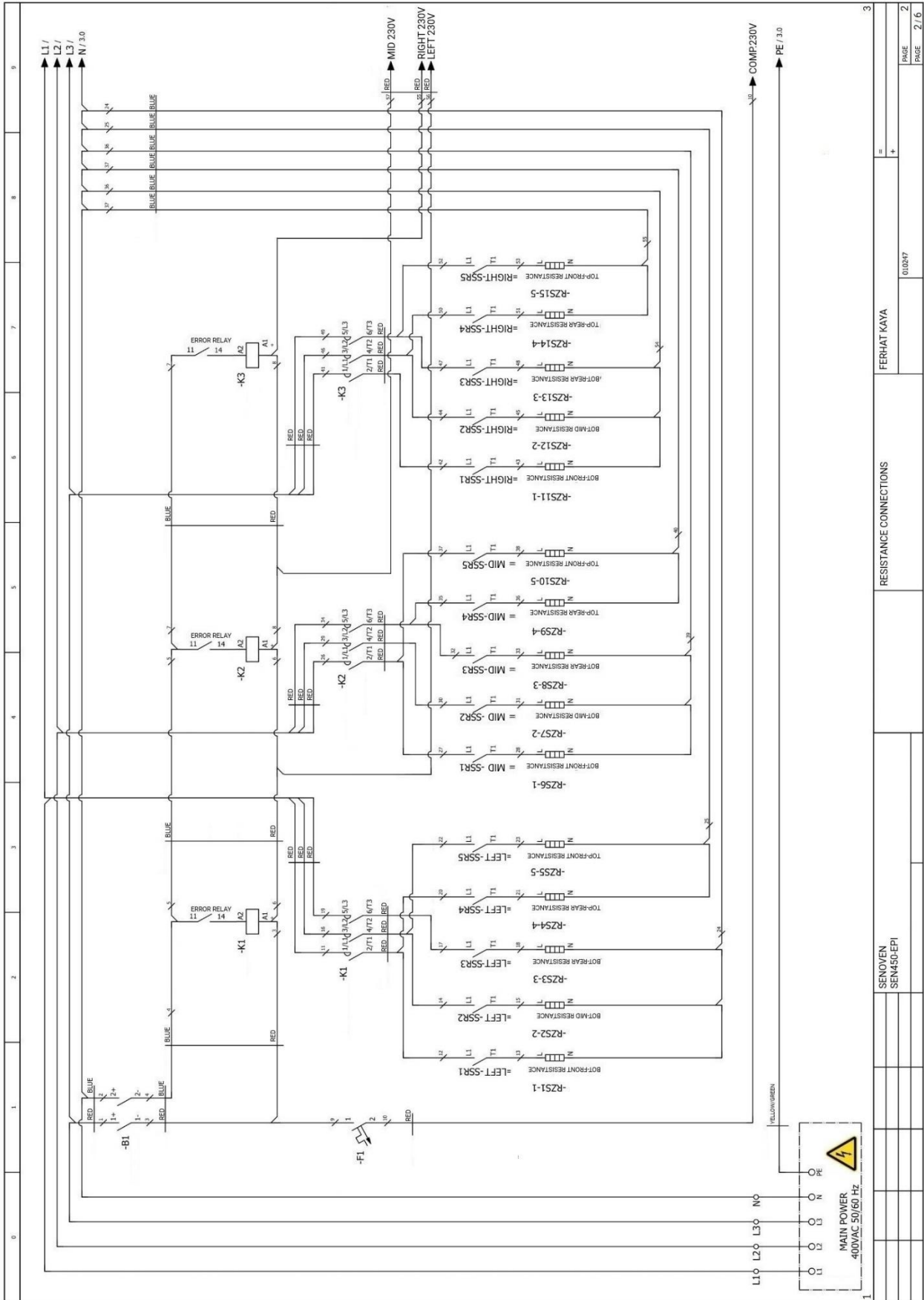
SEN 300-1EPI



|   |              |  |             |            |            |
|---|--------------|--|-------------|------------|------------|
| 4 | SEN 300-1EPI | PLC-TEMP. CONTROLS COMMUNICATION AND POWER CONNECTIONS COMPRESSOR SYSTEM | FERHAT KAYA | 010244     | PAGE 5     |
|   |              |  |             | 14.08.2023 | PAGE 5 / 5 |

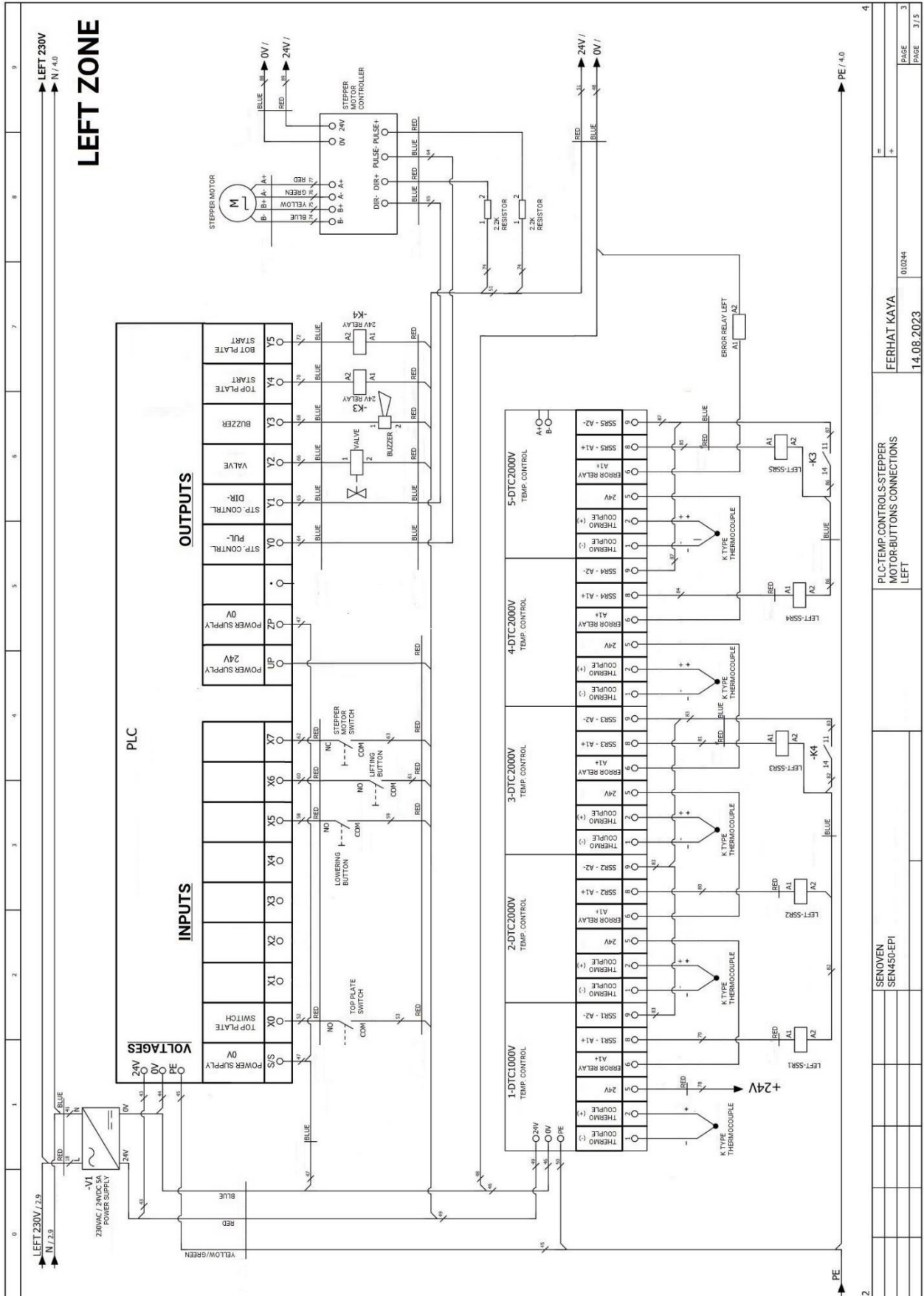
**SECTION 6 | ELECTRICAL DIAGRAM**

**SEN 450-EPI**



SECTION 6 | ELECTRICAL DIAGRAM

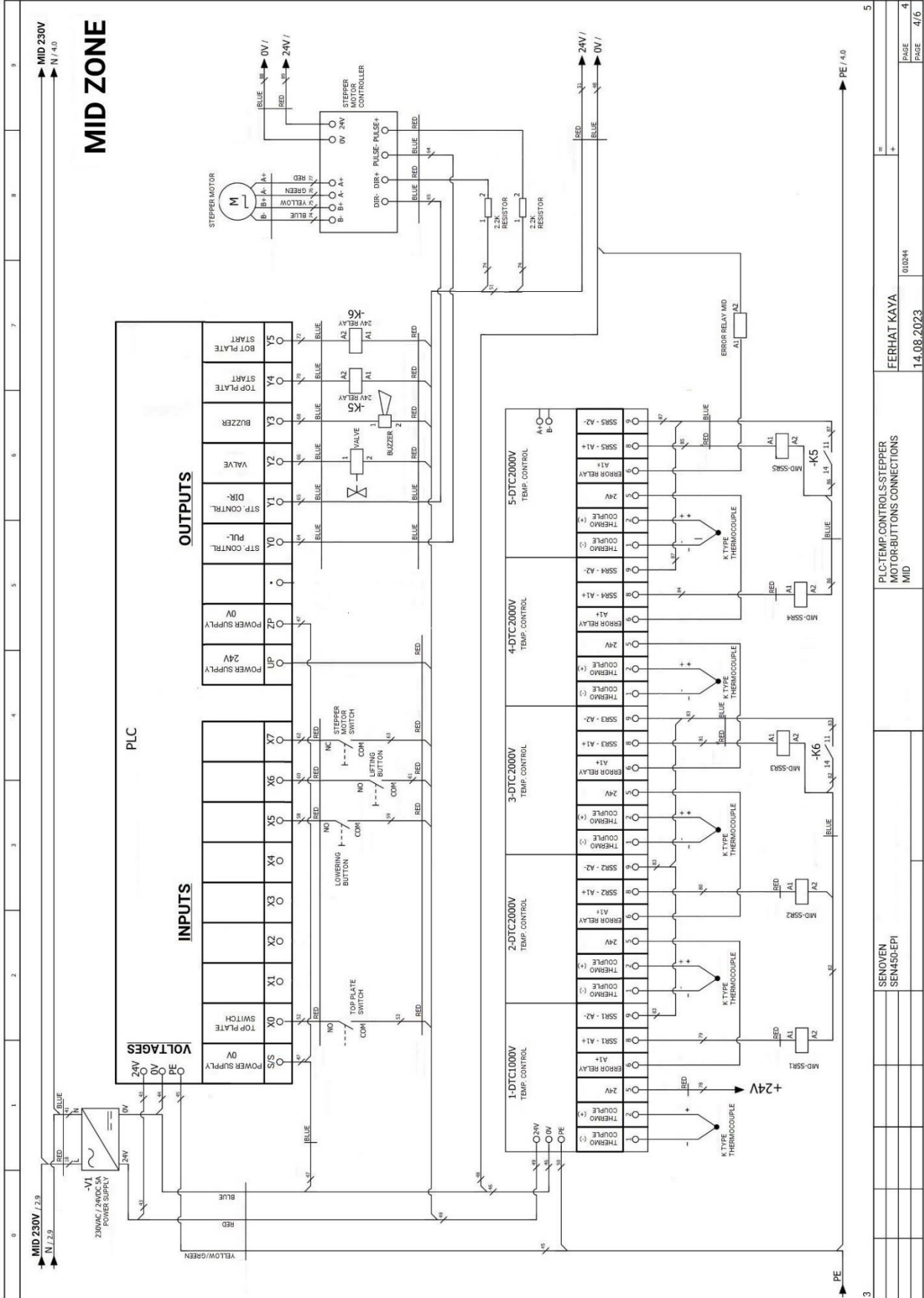
SEN 450-EPI



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|---|---|---|--------|------------|
| 4 | + | FERHAT KAYA   | 010044 | 14.08.2023 |
| 3 | + | PIC-TEMP CONTROL-STEPPER MOTOR BUTTONS CONNECTIONS LEFT |        |            |
| 2 | + | SENOVEN SEN450-EPI                                      |        |            |

SECTION 6 | ELECTRICAL DIAGRAM

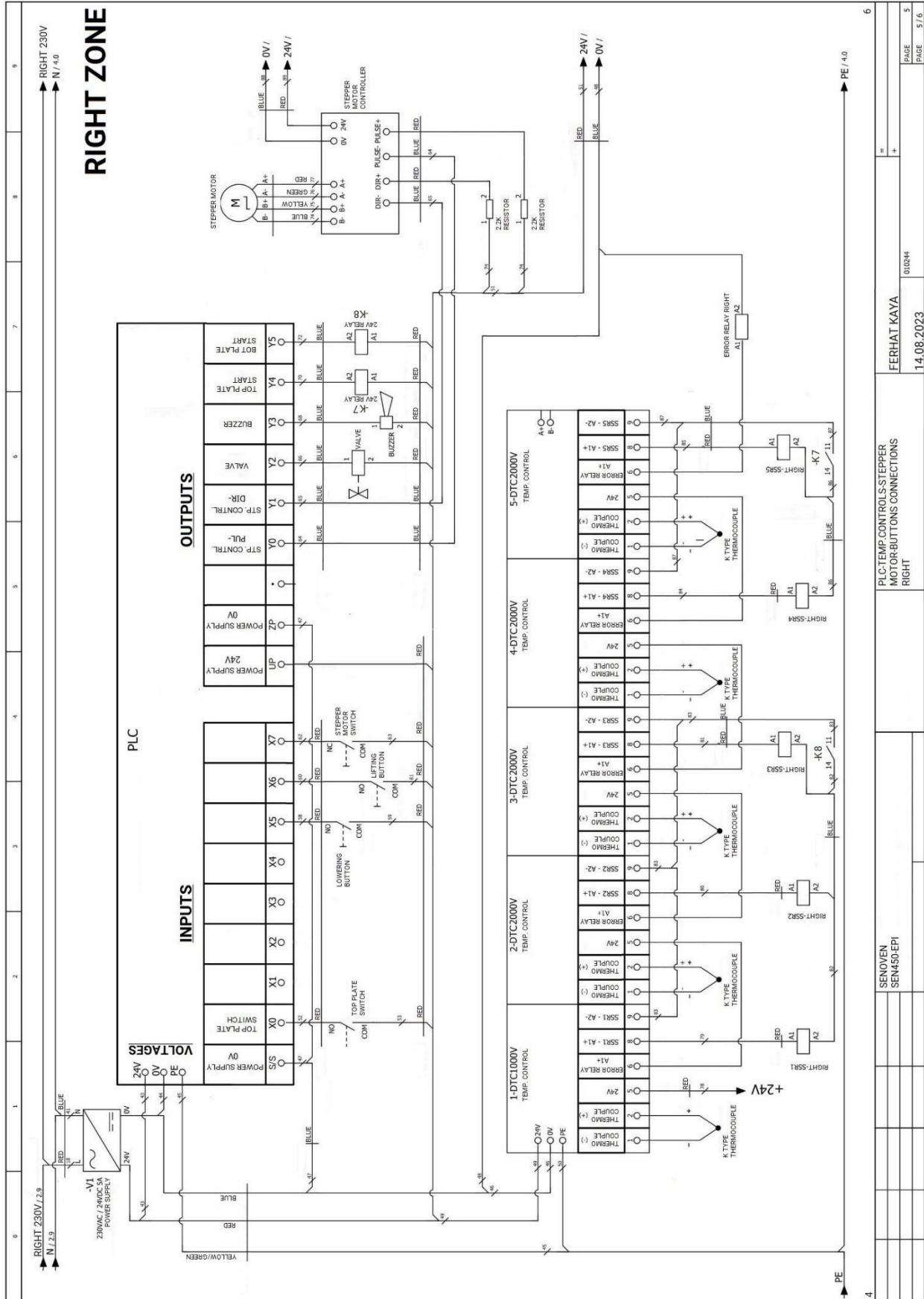
SEN 450-EPI



|   |             |   |             |          |      |
|---|-------------|---|-------------|----------|------|
| 3 | SEN 450-EPI | PLC-TEMP CONTROLS-STEPPER MOTOR-BUTTONS CONNECTIONS | FERHAT KAYA | 01.02.24 | 4    |
| 4 | SEN 450-EPI | MID   | 14.08.2023  | 4/16     | 4/16 |

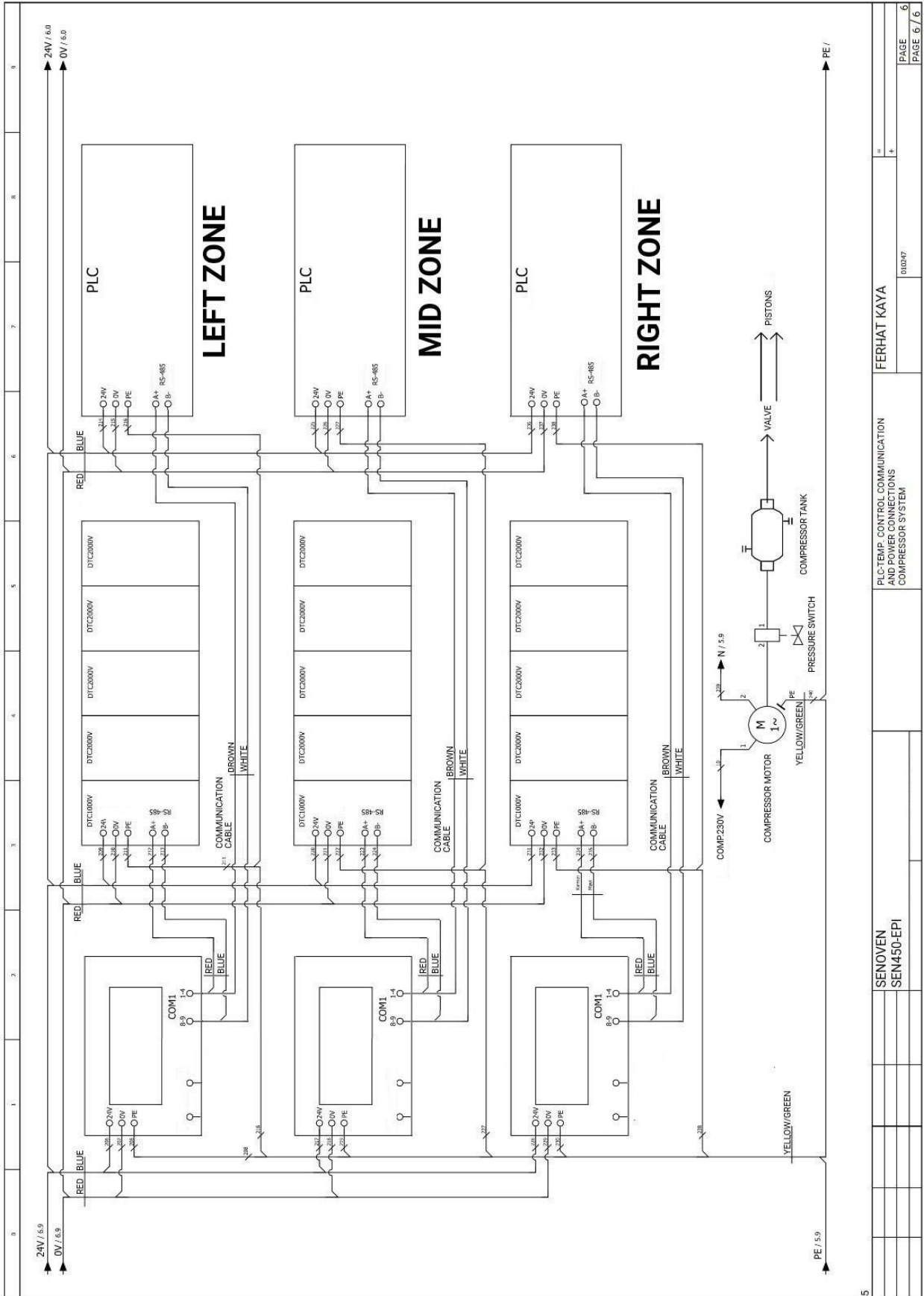
SECTION 6 | ELECTRICAL DIAGRAM

SEN 450-EPI



|   |                        |   |                         |            |            |
|---|------------------------|---|-------------------------|------------|------------|
| 4 | SENNOVEN<br>SEN450-EPI | PLC-TEMP CONTROLS-STEPPER<br>MOTOR-BUTTONS CONNECTIONS<br>RIGHT | FERHAT KAYA<br>01.02.44 | 14.08.2023 | PAGE 5 / 6 |
|---|------------------------|---|-------------------------|------------|------------|

SEN 450-EPI

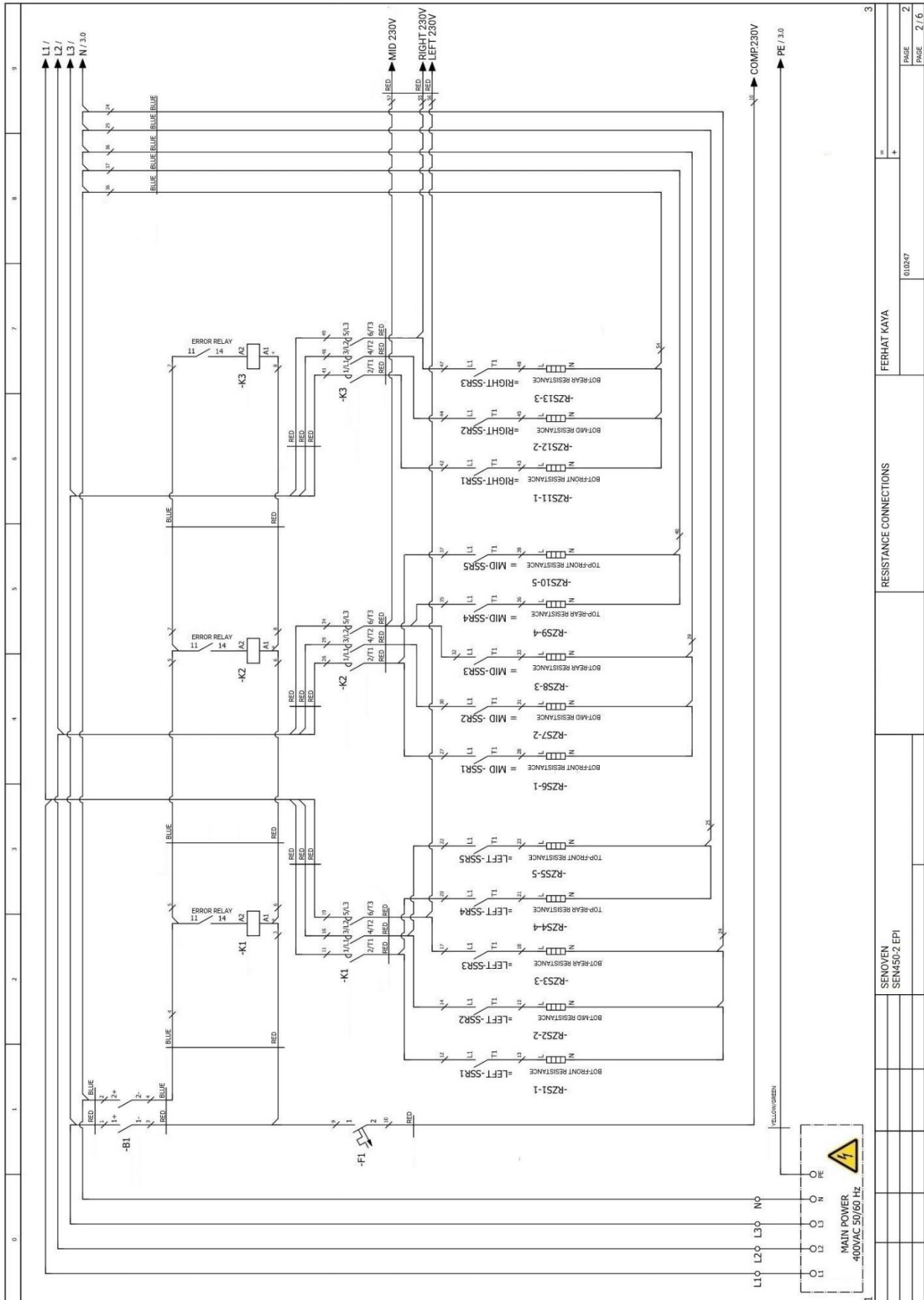


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|---|------------|---|-------------|---------|------------|
| 5 | SEN450-EPI | PLC-TEMP. CONTROL COMMUNICATION AND POWER CONNECTIONS COMPRESSOR SYSTEM | FERHAT KAYA | 0103/47 | 6          |
|   |            |   |             |         | PAGE 6 / 6 |



SECTION 6 | ELECTRICAL DIAGRAM

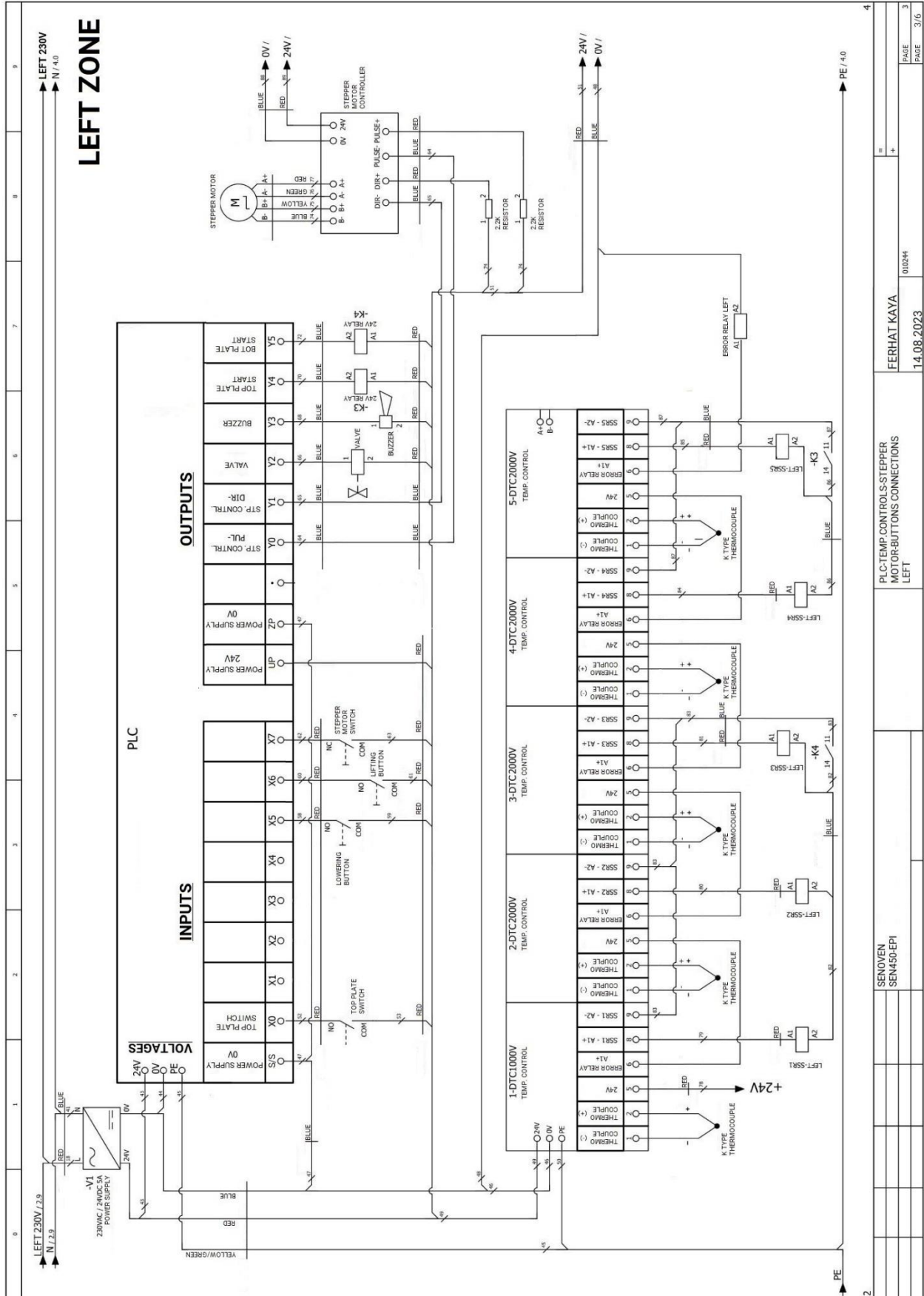
SEN 450-2EPI



|                        |  |             |             |
|------------------------|--|-------------|-------------|
| SEN 450-2EPI           |  | FERHAT KAYA |             |
| RESISTANCE CONNECTIONS |  | 01/04/07    |             |
| SEN 450-2EPI           |  | PAGE 2      | PAGE 2 / 16 |

SECTION 6 | ELECTRICAL DIAGRAM

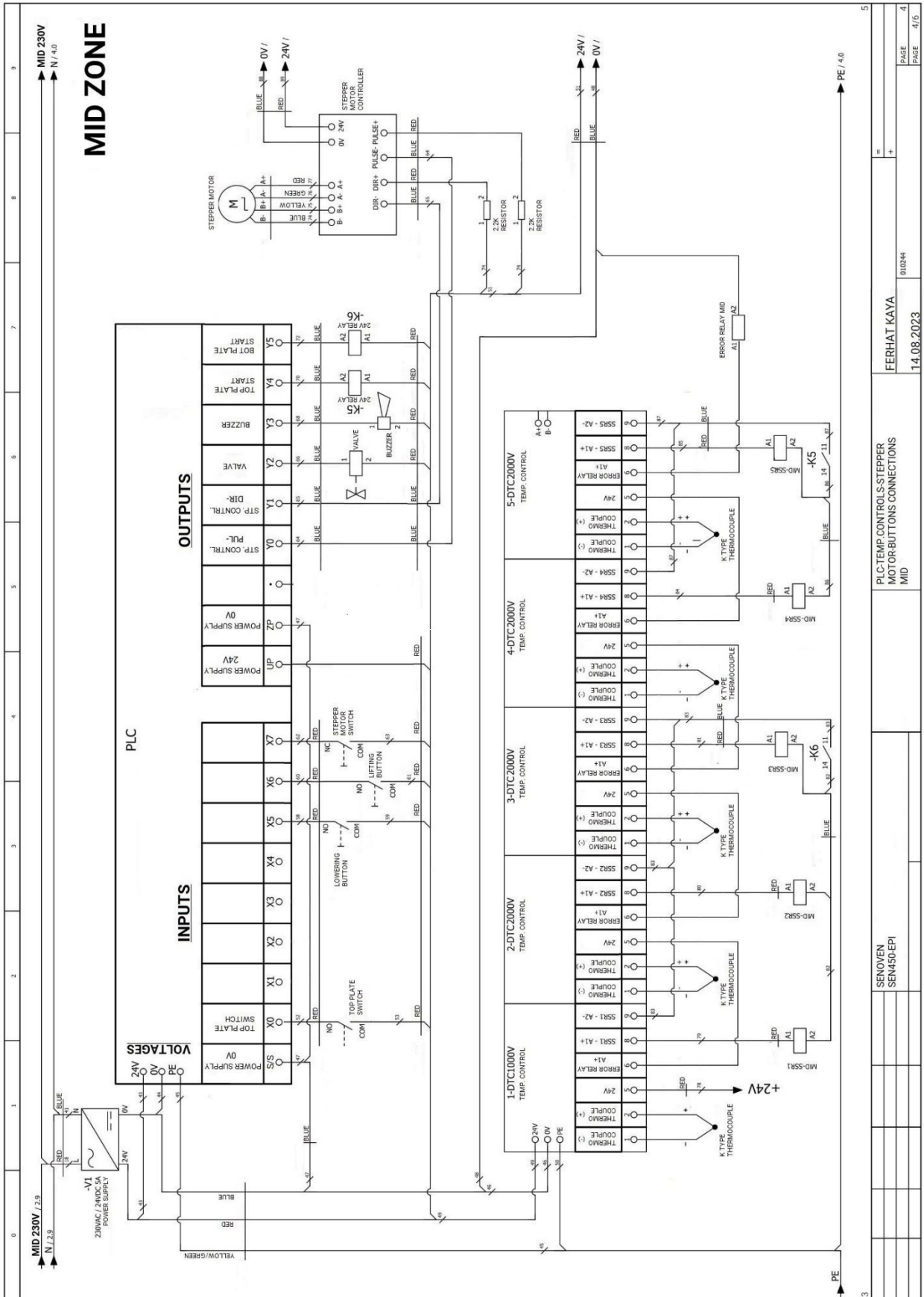
SEN 450-2EPI



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|---|--------------|--|-------------|----------|-----------|
| 2 | SEN 450-2EPI | PLC-TEMP CONTROLS-STEPPER MOTOR-BUTTONS CONNECTIONS LEFT | FERHAT KAYA | 01.02.44 | PAGE 3    |
| 3 |              |  |             |          | PAGE 3    |
| 4 |              |  |             |          | PAGE 3/16 |

SECTION 6 | ELECTRICAL DIAGRAM

SEN 450-2EPI

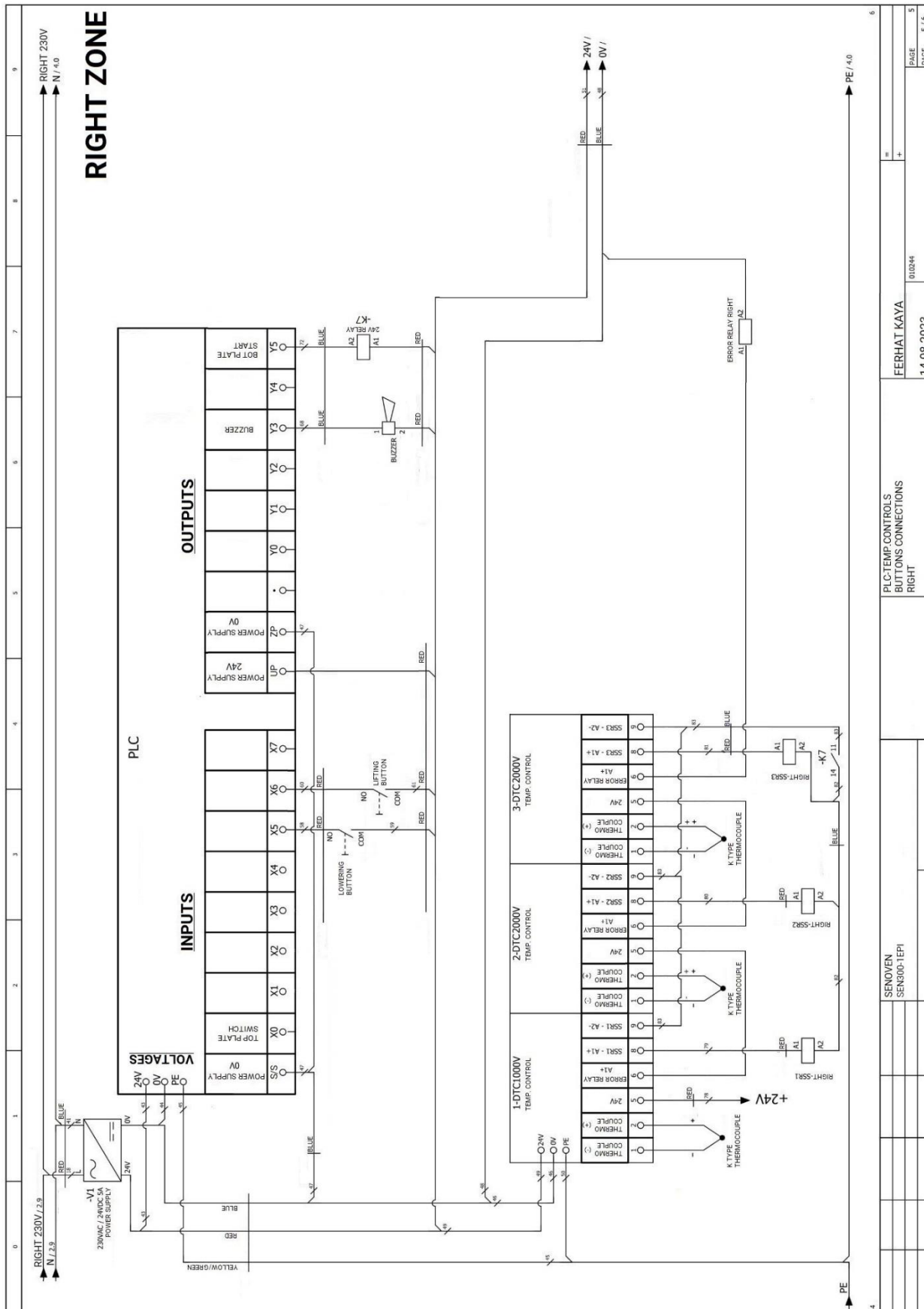


MID ZONE

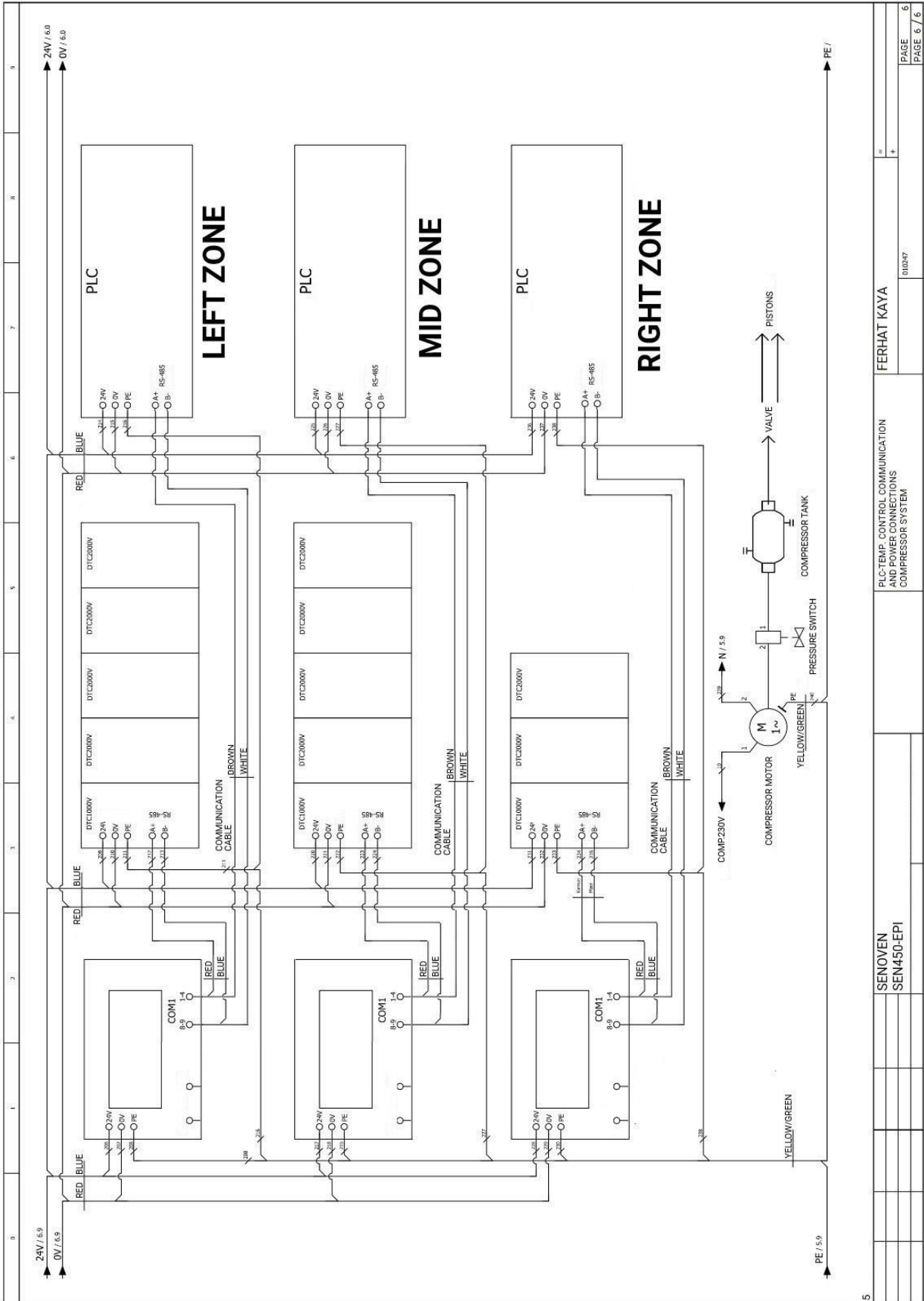
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|---|------------|---|-------------|----------|------------|------|
| 3 | SEN450-EPI | PLC-TEMP CONTROLS-STEPPER MOTOR-BUTTONS CONNECTIONS MID | FERHAT KAYA | 01.02.24 | 14.08.2023 | 4/10 |
| 4 |            |   |             |          |            |      |
| 5 |            |   |             |          |            |      |

# SECTION 6 | ELECTRICAL DIAGRAM

## SEN 450-2EPI



SEN 450-2EPI



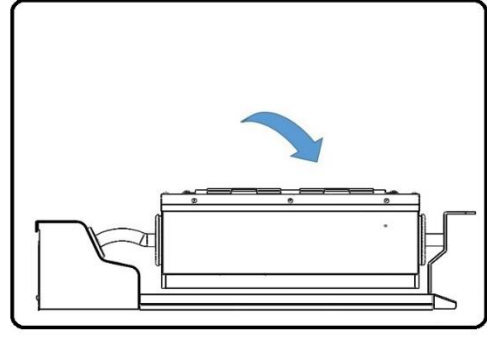
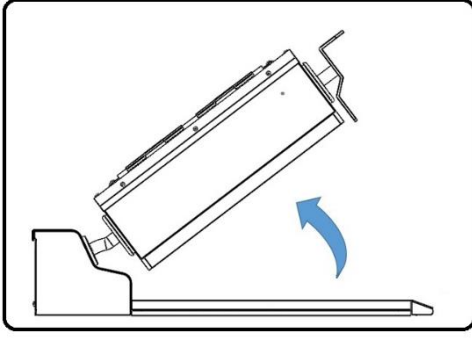
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|---|--------------|---|-------------|--------|------------|
| 5 | SEN 450-2EPI | PLC-TEMP. CONTROL COMMUNICATION AND POWER CONNECTIONS COMPRESSOR SYSTEM | FERHAT KAYA | 010047 | PAGE 6 / 6 |
|---|--------------|---|-------------|--------|------------|

## SECTION 7 | SOLVING PROBLEMS

| PROBLEMS  | CAUSES   | SOLUTIONS  |
|---|--|--|
| Zone 1 Temperature High<br>Zone 2-3 Temperature High<br>Zone 4 Temperature High<br>Zone 5 Temperature High                | <ul style="list-style-type: none"> <li>- Grill temperature has exceeded the maximum level.</li> </ul>  | Close the grill. Wait for a certain time to cooldown and start it again. If the same problem occurs again, call the service.                             |
| Zone Sensor 1 Broken.<br>Zone Sensor 2 Broken.<br>Zone Sensor 3 Broken.<br>Zone Sensor 4 Broken.<br>Zone Sensor 5 Broken. | <ul style="list-style-type: none"> <li>- Temperature reader thermocouples may be faulty or broken.</li> </ul>  | Check inputs 1 and 2's cables' connection on the heat cards which is located on the front panel. If the problem is not resolved, call technical service. |
| Upper grill did not fit.  | <ul style="list-style-type: none"> <li>- The upper grill may not be fully seated.</li> <li>- Rear switch might be faulty.</li> <li>- Air valve might be faulty.</li> <li>- Pistons may be faulty.</li> </ul> | Make sure the upper grill is fully seated. If it is not seated and the problem continues, call the service.  |
| Top grill manually removed.   | <ul style="list-style-type: none"> <li>- Top grill manually removed.</li> </ul>  | Disable the valve by pressing the lift button.   |
| Top grill manually lowered  | <ul style="list-style-type: none"> <li>- Top grill manually lowered.</li> </ul>  | Activate the valve by pressing the lowering button.  |
| "Extremely Hot" at the bottom of the screen.  | <ul style="list-style-type: none"> <li>- Current temperature has exceeded set temperature.</li> </ul>  | Turn off the heaters. Wait for grills to cool until the set temperature.   |
| On/Off button does not work.  | <ul style="list-style-type: none"> <li>- The cables that connected to the button might be disconnected.</li> <li>- Contactor might be broken.</li> </ul>   | Remove front panel and check cable connection. If problem still continues, call service.   |
| Top grill does not go to desired space.   | <ul style="list-style-type: none"> <li>- Top grill adjustment might be distorted.</li> <li>- Step motor might be failed.</li> </ul>  | Restart the machine. After restarting, the grill will turn back to its base settings. If still not fixed, call the technical service.                    |
| Does not enter standby mode.  | <ul style="list-style-type: none"> <li>- The grills may not be heated.</li> <li>- The system might be bugged.</li> </ul>   | If the grills have not reached the target temperature of the selected menu, restart the machine.   |
| Unable to initiate the grills.  | <ul style="list-style-type: none"> <li>- It could be a system error.</li> <li>- The cables might be damaged.</li> </ul>  | Close the program by pressing the stop button. Then run the program again. If it is not fixed, restart the machine.                                      |
| Grills not heating.   | <ul style="list-style-type: none"> <li>- May not be initialized.</li> <li>- Relays may not be receiving signal.</li> </ul>   | Restart the machine. If the problem still continues, call the technical Service.   |
| Does not lowering/lift  | <ul style="list-style-type: none"> <li>- It could be a system error.</li> <li>- The cables might be damaged.</li> </ul>  | Restart the machine, If the problem still continues call the technical service.  |


### 7.1 Calling Technical Service

If the machine does not start or stops working, check if the automatic fuse is working. If the automatic fuse is working but your machine doesn't, you can call the "Authorized Technical Service" now. The contact number of the Technical Service is written on the information plate on the front of the machine. If you cannot see the authorized technical service contact number on the machine, call the company to learn about the nearest technical service.

**WARNING :**

**UNPLUG BEFORE  
STARTING REPAIR.**  
Maintenance work inside  
the grill can only be  
carried out by authorized  
service staff.





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|                                  |                                    |
|----------------------------------|------------------------------------|
| ÜRETİM YILI / Production Year    | 2021                               |
| SERİ NO/ Serial Number           | 0001                               |
| ÜRÜN ADI / Product Name          | ELEKTRİKLİ IZGARA / ELECTRIC GRILL |
| MODEL/Model                      | SEN 300                            |
| VOLT/ Voltage                    | 400 VAC / 3~ 1N 1PE /50-60Hz       |
| AKIM / Nominal Current           | 25 A                               |
| GÜÇ/ Power                       | 17,2 KW                            |
| ÇALIŞMA BASINCI/WORKING PRESSURE | 3 - 5 BAR                          |
| ÖLÇÜ / Dimension                 | 71,5 x 103,5 x 108 cm              |
| AĞIRLIK/ Weight                  | 306 KG                             |

Made in Turkey





**SENOVEN**<sup>®</sup>

YOUR EXPRESSWAY TO FLAVOR

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