NÜVE SANAYİ MALZEMELERİ İMALAT VE TİCARET A.Ş.

FN 300 - FN 400 - FN 500

DRY HEAT STERILIZERS/OVENS

USER'S MANUAL

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WARRANTY CERTIFICATE

1. Nüve warrants that the equipment delivered is free from defects during material and workmanship. This warranty is provided for a period of two years. The warranty period begins from the delivery date.

2. Warranty does not apply to parts normally consumed during operation or general maintenance or any adjustments described in the operating instructions provided with the equipment.

3. Nüve does not accept any liability in the case where the goods are not used in accordance with their proper intent.

4. The warranty may not be claimed for damages occurred during the shipment, for damages resulting from improper handling or use, the defects in maintenance, negligence, bad functioning of auxiliary equipment, in the case of force majeure or accident and incorrect power supply.

5. In the event of failure, Nüve shall be under no liability for any injury, or any loss or damage as the result of the failure other than the guarantee conditions.

- **BEFORE OPERATING THE INSTRUMENT THIS MANUAL SHOULD BE READ CAREFULLY.**

- **THE VALIDITY OF THE GUARANTEE IS SUBJECT TO THE OBSERVATION OF THE INSTRUCTIONS AND PRECAUTIONS DESCRIBED IN THIS MANUAL.**

- **INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF NÜVE. IT MAY NOT BE DUPLICATED OR DISTRIBUTED WITHOUT PERMISSION.**

Dear Nüve User,

We would like to take this opportunity to thank you for preferring this Nüve product. Please read the operating instructions carefully and keep them handy for future reference.

Please detain the packing material until you see that the unit is in good condition and it is operating properly. If an external or internal damage is observed, contact the transportation company immediately and report the damage. According to ICC regulations, this responsibility belongs to the customer.

While you are operating the instrument please;

- obey all the warning labels,
- do not remove the warning labels,
- do not operate damaged instrument,
- do not operate the instrument with a damaged cable,
- do not move the instrument during operation.

In case of a problem contact your Nüve agent for an authorized service or maintenance.

The validity of the guarantee is subject to compliance with the instructions and precautions described in this manual.

Nüve reserves the right to improve or change the design of its products without any obligation to modify previously manufactured products.

Lifetime of the device is 10 years.

PLEASE REGISTER ONLINE TO VALIDATE WARRANTY:
To register your warranty online, please visit our web page **www.nuve.com.tr** and fill in **Warranty Registration Form.**

ELECTROMAGNETIC COMPATIBILITY DECLARATION

Guidance and Manufacturer's Declaration – Electromagnetic Emissions		
FN series are intended for use in the electromagnetic environment specified below. The customer or the user of this FN series should assure that it is used in such environment.		
Emissions test	**Compliance**	**Electromagnetic Environment - Guidance**
RF Emissions CISPR 11	Group 1	The FN series uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF Emissions CISPR 11	Class B	The FN series are suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic Emissions IEC 61000-3-2	Class A	
Voltage fluctuations/flicker emissions IEC 61000-3-3	Compliance	

Guidance and Manufacturer's Declaration – Electromagnetic Immunity			
FN series are intended for use in the electromagnetic environment specified below. The customer or the user of this nebuliser should assure that it is used in such environment.			
Immunity Test	**IEC 60101-1 Test Level**	**Compliance Level**	**Electromagnetic Environment – Guidance**
Electrostatic discharge (ESD) IEC 61000-4-2	±4 kV contact ±8 kV air	±4 kV contact ±8 kV air	Floor should be wood, concrete, or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30 %.
Electrical fast transient/burst IEC 61000-4-4	±2 kV for power supply lines ±1 kV for input/output lines	±2 kV for power supply lines ±1 kV for input/output lines	Mains power quality should be that of a typical commercial and/or hospital environment.
Surge	±1 kV line to	±1 kV line to line	Mains power quality should be that

IEC 61000-4-5	line ±2 kV line to earth	±2 kV line to earth	of a typical commercial and/or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply IEC 61000-4-11	<0 % UT (>100 % dip in UT) for 1 cycle	<0 % UT (>100 % dip in UT) for 1 cycle	Mains power quality should be that of a typical commercial and/or hospital environment.
	40 % UT (60 % dip in UT) for 10 cycles	40 % UT (60 % dip in UT) for 10 cycles	
	70 % UT (30 % dip in UT) for 25 cycles	70 % UT (30 % dip in UT) for 25 cycles	
	<0 % UT (100 % dip in UT) for 5 sec.	<0 % UT (100 % dip in UT) for 5 sec.	
Power frequency (50/ 60 Hz) magnetic field IEC 61000-4-8	30 A/m	30 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
NOTE: U_T is the A.C. mains voltage prior to application of the test level.			

Guidance and Manufacturer's Declaration – Electromagnetic Immunity			
FN series are intended for use in the electromagnetic environment specified below. The customers or the users of this nebuliser should assure that it is used in such environment.			
Immunity Test	**IEC 60101-1 Test Level**	**Compliance Level**	**Electromagnetic Environment – Guidance**
			Portable and mobile RF communications equipment should be used no closer to any part of the FN series devices' including cables, than the recommended separation distance calculated from the equation appropriate to the frequency of the transmitter. Recommend separation distance:
Conducted	3 V_{rms} 150 kHz	3 V_{rms}	d=1.2 √P 150 KHz to 80 MHz

RF IEC 61000-4-6	to 80 Mhz		
Radiated RF IEC 61000-4-3	10 V_m 80 MHz to 1 GHz	10 V/m	d=1.2 √P 80 MHz to 800 MHz
Radiated RF IEC 61000-4-3	3 V_m 1.4 GHz to 2 GHz	3 V/m	d=1.2 √P 80 MHz to 800 MHz
Radiated RF IEC 61000-4-3	1 V_m 2 GHz to 2.7 GHz	1 V/m	d=2.3 √P 800 MHz to 2.7 GHz
			Field strengths from fixed RF transmitters as determined by an electromagnetic site survey,[a] should be less than the compliance level in each frequency range.[b] Interference may occur in the vicinity of equipment marked with the following symbol: 
NOTE 1: At 80 MHz and 800 MHz, the higher frequency range applies.			
NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.			
a Field strengths from fixed transmitters, such as base stations for radio (cellular/ cordless) telephones and land mobile radio, AM and FM radio broadcast, and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the FN series are used exceeds the applicable RF compliance level above, the FN series should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the FN series.			
[b] Over the frequency range 150 kHz to 80MHz, field strengths should be less than 3 V/m.			

Recommended separation distance between portable and mobile RF communications equipment and the FN series			
FN series are intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customers or the users of these FN series can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the FN series as recommended below, according to the maximum output power of the communications equipment.			
Output Power of Transmitter in Watt	**Separation distance according to frequency of transmitter in Output Power of meter**		
	80 MHz - 1 GHz $d = 1,2 \sqrt{P}$	1.4 GHz - 2 GHz $d = 1.2 \sqrt{P}$	2 GHz - 2.7 GHz $d = 2.33 \sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.37	0.37	0.74
1	1.2	1.17	2.33
10	3.79	3.69	7.37
100	11.67	11.67	23.33
For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.			
NOTE 1: At 80MHz and 800MHz, the separation distance for the higher frequency range applies			
NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.			

TABLE OF THE CONTENTS

SECTION 1

INTRODUCTION

1.1 USE AND FUNCTION

The FN Series Dry Heat Sterilizers/Ovens are designed to sterilize metal and glass materials and heat or dry samples in laboratories. They offer excellent sterilization, drying and heating conditions. Glass, metal and other materials can be sterilized in FN Series Dry Heat Sterilizers.

They maintain temperatures between 70°C and 250°C and keep the temperature stable within the given tolerances.

FN 300/400/500 Dry Heat Sterilizers/Ovens provide homogeneous temperature distribution by means of the sheet heaters placed onto three outer surfaces of the useful volume.

The insulation of the Dry Heat Sterilizers/Ovens not only provides economical working conditions but also helps to achieve the excellent homogeneity.

The FN series Dry Heat Sterilizers/Ovens provide precise operation conditions with the PID microprocessor controlled system and with the timer. Adjustable safety thermostat offers an additional safety.

Microprocessor control system will shut down the temperature sensor and in case of malfunctions that may occur in the control system, alarm system will be activated and the user is warned visually and audibly. The study data are recorded in the memory and can be transferred to external USB memory. At the same time, unauthorized persons have been blocked permission to change parameters with improved password menu.

The FN series dry heat sterilizer/ovens are manufactured according to the following standards,

ISO 9001:2015, ISO 13485:2016, EN ISO 14971, EN 61010-1, EN 61326-1, EN 60601-1-6, EN 62304, EN 62366-1, EN 61000-6-3, EN 61010-2-040, EN ISO 15223-1, EN 50419.
This device is in compliance with WEEE Regulation.

Do not operate the instrument for purposes other than main purpose.

The instrument is only to be used by authorized people after the user's manual has been read carefully. Only technical personnel can handle the product in case of a breakdown.

SECTION 2

TECHNICAL SPECIFICATIONS

2.1 TECHNICAL SPECIFICATIONS TABLE

	FN 300	FN 400	FN 500
Temperature Range	70°C / 250°C		
Temperature Sensor	Fe-Const		
Control System	N-Prime™		
Temperature set & display sensitivity	1°C		
Temperature variation(100°C-150°C)	±2°C		
Temperature fluctuation	±1°C		
Thermostat Working Accuracy	±1°C		
Timer	1 minute + 99.9 hours / Hold Position		
Program Delay Time	1 minute + 99.9 hours / not delay		
No of shelves (standard/max.)	2/6	2/7	2/10
Safety Thermostat	Gas expansion thermostat (50°C-300°C)		
Power Rating	500 W	800 W	1600 W
Power Supply	230V, 50/60 Hz		
Memory	3000 data*		
Volume (liters)	22	44	120
Internal Material	Anodic-oxidated aluminum	Anodic-oxidated aluminum	Anodic-oxidated aluminum
External Material	Epoxy-polyester painted steel		
Internal Dimensions (wxdxh) mm	300x240x300	420x320x360	500x480x500
External Dimensions (wxdxh) mm	555x380x460	705x475x540	785x630x680
Packing Dimensions (wxdxh)mm	650x470x550	790x580x615	870x740x860
Net/Packed weight	24 / 29	37 / 43	55 / 65

***Shows the number of lines for each work done. Temperature, time and if there is error code consist of 1 line.**

2.2 OPTIONAL ACCESSORIES

- **R 01 014** Al. shelf for FN 300
- **R 01 136** Mesh type shelf for FN 400
- **R 01 135** Mesh type shelf for FN 500
- **K 23 031** Shelf carrier for FN 300
- **K 23 047** Shelf carrier for FN 400
- **K 23 046** Shelf carrier for FN 500

Note: 2 pcs. Shelf carrier should be ordered for each shelf.

Factory installed optional accessories

FN XXX (WF): Optional wi-fi connection on the device

2.3 GENERAL PRESENTATION

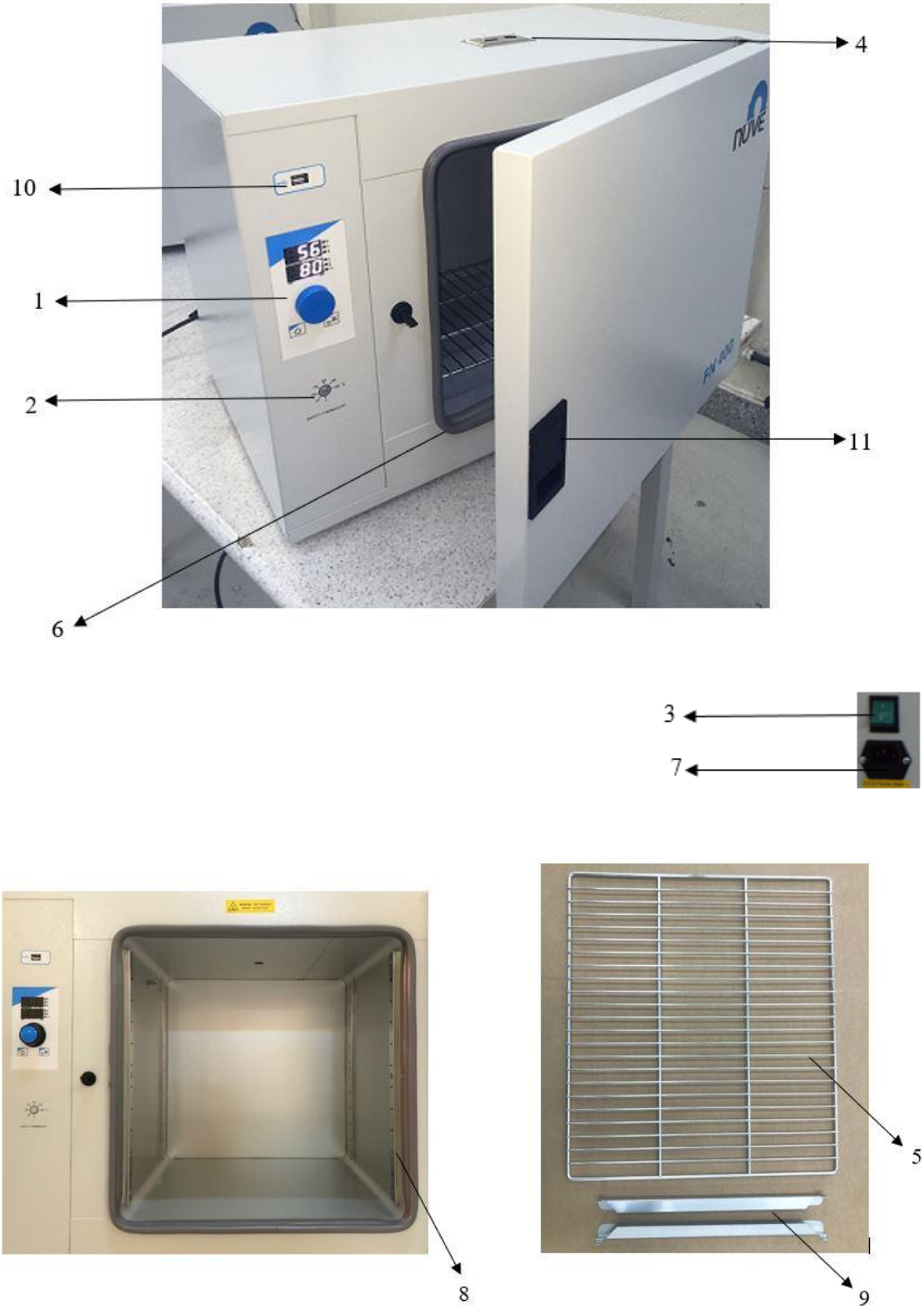


Figure 1: Inner side of FN 500

1. Control panel
2. Safety thermostat
3. On / Off switch
4. Ventilation hole
5. Shelf
6. Chamber gasket
7.Mains supply inlet and the fuses
8. Shelf carrier holder
9. Shelf carrier
10. Input USB
11. Door handle

SECTION 3

INSTALLATION PROCEDURE

3.1 LIFTING AND TRANSPORT

Because of the heavy weight of the Dry Heat Sterilizer/Oven, all lifting and transport must be carried out using proper handling equipment. The Dry Heat Sterilizer/Oven must be supported from underneath and never turned over.

3.2 UNPACKING

Remove the packing cardboard box and the second nylon packing around the Dry Heat Sterilizer. The below written are provided with the instrument, please check them;

- User's manual
- 1 piece electrical cable
- 2 pieces of shelves
- 1 pieces of warranty
- 1 pieces of shelf carriers

3.3 POSITIONING

- Check that no damage has occurred during transport.
- Lift the dry heat sterilizer/oven underneath and carry it to its place carefully.
- Balance the Dry Heat Sterilizer/Oven on the four pedestals. If necessary, provide stable standing by adjusting the pedestal heights.
- Insert the shelf carriers and then the shelves.

Check the followings,

- The proposed site is suitable for users,
- The dry heat sterilizer/oven does not occupy the utilisation space of others or damage them.

3.4 ENVIRONMENTAL CONDITIONS

Please pay special attention to the followings,

At most 70% of the surface area of the shelves should be used in order to obtain a uniform temperature distribution.

- Indoor use only
- Temperature from 5°C to 40°C
- Humidity level %80 up to 22°C
- Maximum height 2000m.
- Temperature range for maximum performance: 15ºC / 25ºC

3.5 MAINS SUPPLY

- The dry heat sterilizer/oven requires 230, 50 / 60 Hz.
- Please make sure that the supplied mains matches the required power ratings. If no, provide an extra line to support.
- Always plug the Dry Heat Sterilizer/Oven to properly earthed sockets.
- A supply fitted with a circuit breaker should be used for protection against indirect contact in case of an insulation fault.

3.5.1 Prior to Operation

Check the followings,

- The instrument should only be used by authorized and trained staff after the instruction manual has been read carefully. Only authorized technical staff can handle the product in case of a failure.
- Make sure that the safety thermostat is adjusted to the temperature which is higher than the set temperature.
- Liquids are not heated in sealed containers.
- The boiling points of the samples are higher than the set temperature.
- The freezing points of the samples are lower than the set temperature.
- The liquids which may expand during heating do not overflow from their containers.
- The set temperature does not destroy the structure of the samples.
- The vapours and gases which are generated during the operation are not harmful to human health or flammable or explosive.
- The instruments, which will be dried up and heated, should not be combustible and explosive, especially please kindly check that.

IF MENTIONED WARNINGS ARE NOT CONSIDERED, NUVE WILL NOT BE RESPONSIBLE FROM THEIR RESULTS.

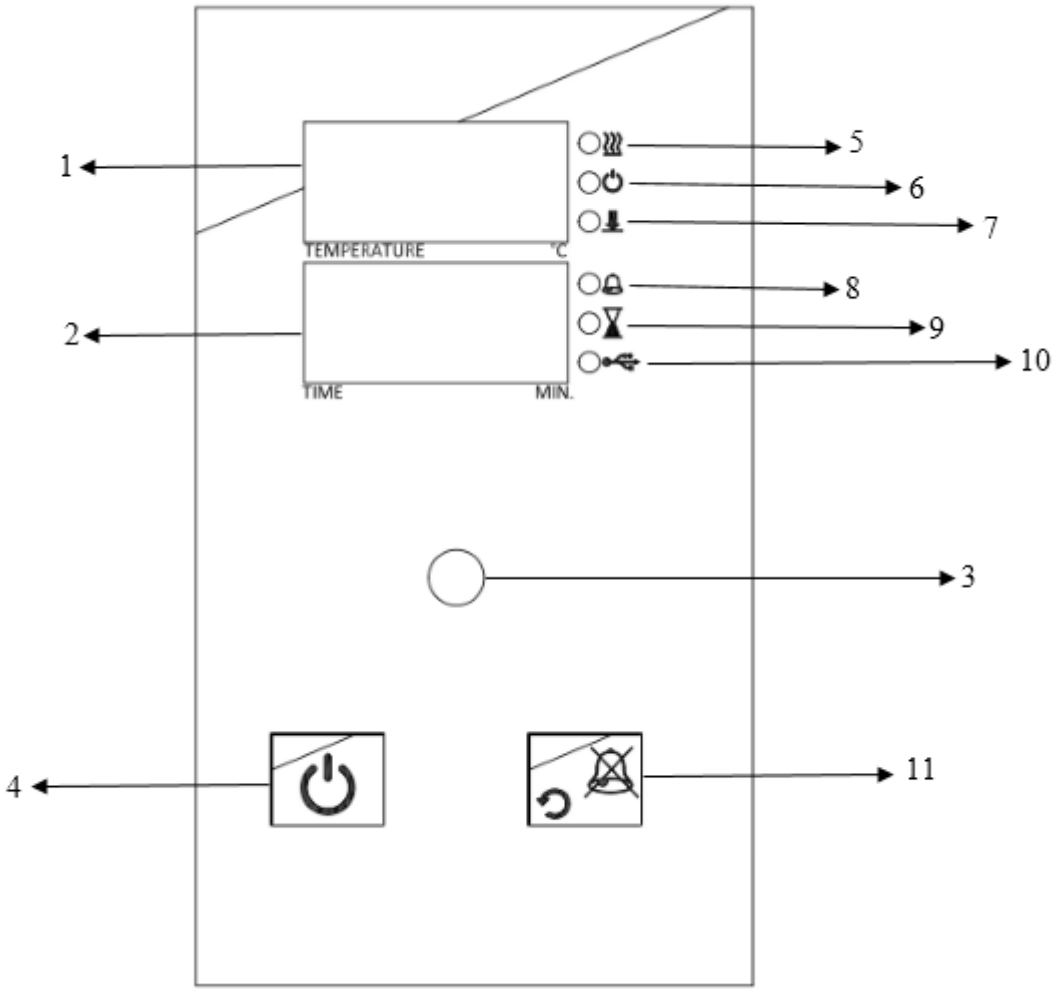
SECTION 4

OPERATING PRINCIPLES

4.1 SWITCHING ON

- Push on/off switch.
- See that the microprocessor control system activates.
- Learn the functıon of the control and display panel(Section 4.2).
- Section 4.3 and section 4.4, according to the program will run and run please.

4.2 CONTROL PANEL



1. Temperature display
2. Time display
3. Encoder button
4. Start / Stop button
5. Heating led
6. “Operating the program” led
7. Data transfer led
8. Alarm led
9. “End of the program” led
10. Usb led
11. Back / Alarm mute button

4.2.1 Explanations and Functions for Display and Control Panel

01-Temperature Display
This display shows
Sterilization chamber temperature during “stand-by” and during the operation,
During program preparation, the temperature setting values or the alarm setting values,
Failure codes,
EoF warning when power is interrupted,
The set temperature values and alarm values.

02-Time Display
This display shows the values set for time during program preparation. Also; this display shows he time values in the control of the settings.

03-Encoder Button
The encoder button has two physical movements. The button turn clockwise and anticlockwise to increase or decrease the temperature and time values of the program. Also, the button press for select / confirm.

04-Start / Stop Button
Used button to start the device to operating at set values or to stop the operation.

05-Heating Led
The led is “on” during heating, it indicates that the heating process is carried out.

06-“Operating The Program” Led
A led indicating that the program is running as soon as the device is started.

07-Data Transfer Led
The led indicates that the records are transferred in the memory or the file is transferred during software update.

08-Alarm Led
This led flashes when there is a warning or error on the device.

09-“End of The Program” Led
It is a warning led that indicates that the running program is finished.

10-Usb Led
This led is on when connected to a USB external memory.

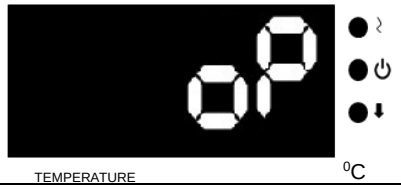
☞	The device supports up to **8 GB** of external memory.

11-Back / Alarm Mute Button
This button is used to silence audible alarms in case of error and cancel the changes in the menu.

4.3 PREPARATION OF USER SETTINGS

The device has a password protected menu. The password is set to “0” when the device first starts. Follow the below steps to change the password, update current date / time information and access the operator's menu where other settings are made.

	Wait by pressing the encoder button.

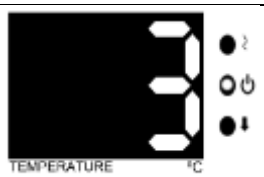
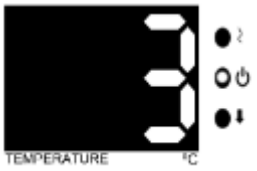
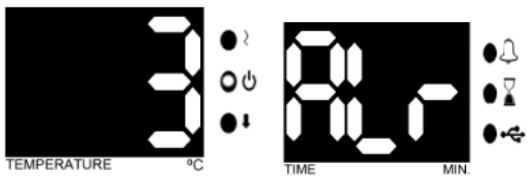
	Lift your hand when you see "oP" on the temperature display and again press the encoder button. If the device has a menu protection password, password screen “oPS” will come on the temperature display.
	You enter the set password to turn the encoder button right and left. (The password will not be asked if the device is newly installed.) Confirm the password by pressing the encoder button. Observe that the parameter numbers on the temperature display change with each pressing the encoder button. For operator menu parameter descriptions (see section 4.3.1). You can set the parameter values by turning the encoder button right or left on time display.
	Again press the encoder button and confirm the set value. Press the back button to return the work screen.

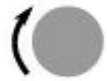
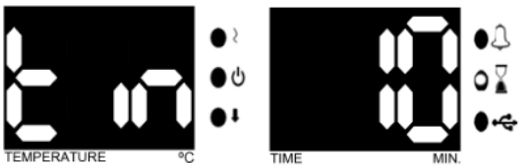
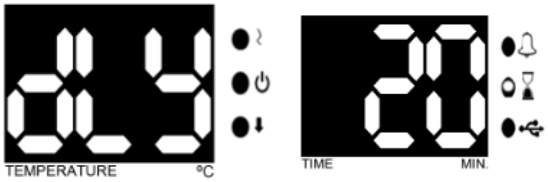
4.3.1 oP Operator Menu Parameters

1: Recording Period: This time is recording period of temperature and error information.
2: Lid Alarm Time: Not used for all FN models.
3: Lid Alarm Range: Not used for all FN models.
4: Timer Set Band: When the read temperature reaches the "Set Temperature - TIMER SET BAND" value, the time starts counting backwards.
5: Buzzer ON/OFF: The alarm sound on/off 0: OFF 1: ON
6: Date Setting - Year: Two digits are displayed the year information of date. If updating is necessary, change.
7: Date Setting - Month: The month information of date is displayed. If updating is necessary, change.
8: Date Setting - Day: The day information of date is displayed. If updating is necessary, change.
9: Time Setting - Hour: The hour information of time is displayed. If updating is necessary, change.
A: Time Setting - Minute: The minute information of time is displayed. If updating is necessary, change.
B: Time Setting – Second: The second information of time is displayed. If updating is necessary, change.
C: Date / Time Update: 0: No change 1: Update date / time according to the entered values. The entered values are considered as current Date / Time information when 5, 6, 7, 8, 9, A parameters are changed and B parameter is set to 1.
D: Wi-fi On/Off*: Wifi connevtion On/Off 0: OFF, 1: ON
E: Wi-fi Smart Configuration On/Off*: To set up a new wifi network connection 0: OFF, 1: ON
D: Password:** The password used to enter the operator parameters. This password used when you want to change the set values. No password if 0 is selected.
***Optionally
****On standard devices without Wi-fi, the Password parameter is “D”.

4.4 PROGRAMMING SUMMARY

Follow the below steps to set and save the values.

	Push the encoder button
	By pushing the encoder button select SET menu.
	See that “Operating the program” led in the temperature display, again push the encoder button.
	See the parameter flashing on the temperature display.
	By turning the encoder button set operating temperature value.
	Push the encoder button and save set value.
	See the “ALr” in the time display. See the parameter flashing on the temperature display.
	By turning the encoder button set operating Set alarm value. If the temperature is out of Set alarm value, audible and visual alarm will be activated.
	Push the encoder button and save set value.

	Turn the encoder button to the right.
	See that “End of the program” led flashes in the time display, again push the encoder button.
	See the “t ın” in the temperature display. See the parameter flashing on the time display.
	By turning the encoder button set operating time value (01 minute to 99 hours 54 minutes or Hold).
	Push the encoder button and save set value. See 'dLY' in the temperature display.
	By turning the encoder button set operating delay time value. If 'Off' is selected, heating will start without delay. If any numerical value is selected; After pressing Start, it starts heating after the set delay time (01 minute to 99 hours 54 minutes).
	Push the encoder button and save set value.
	Push ‘the start button’ and start the program.

NOTE:	In order to display the set values during the operation, push the encoder button once. The values set on the temperature display and the time display of the device will appear for 5 seconds.
NOTE:	When the chamber temperature is outside the set alarms value (SET ALr value) after reaching the set temperature, the audible and visual alarm is activated!

WARNİNG!!

NOTE: During the operation of the program, the time starts to count up after the instrument has reached to the set temperature.

4.5 COMPLETION OF THE WORK

- See that the program is over. After the completion of the program, “End” will appear on the device display and the “End of the program” led will be active.
- Take the samples out. Be careful while handling the samples after the operation as they can be hot.
- Wipe the chamber surface if needed when the chamber is cold enough.
- You may leave the incubator at stand-by position or switch it off.
- Operating records are transferred to the usb port attached a USB memory.

NOTE :	The usb led and the data transfer led on the control panel turn on during transfer of data in memory and the transfer process starts automatically. Do not remove external memory from usb port without the data transfer led turn off and the audible alarm finished.

NOTE :	Records are transferred to external memory when external memory is connected to the Usb port. For get the records without program ending, Usb memory, hold down the "Mute" button for 3 seconds until "Data Transfer Led" lights up, then remove from Usb port.

ATTENTION !!!

If the unit is in START position in case of the open door, it will keep operating and the heaters will be over-heated. Besides, the heaters and other components may be defected. Please be careful.

The samples may be hot after the operation, please be careful while handling them!!

Do not connect any electronic devices other than USB Memory to the device USB port! This may disrupt the main card.

4.6 WI-FI SETTINGS

The following sequence is followed to make a Wifi connection to the device:

- Open Wi-Fi broadcast
- Download N-Mobile application and sign in (Android or IOS)
- The device is created by selecting the desired device under the opened project and entering the MAC and serial number.
- The phone is connected to the Wi-Fi
- Set parameters D and E to 1 in the operator parameters
- Enter Wi-Fi Configuration from the settings page in the N-Mobile application to check the SSID of the Wi-Fi broadcast that is turned on and confirm by typing the password.
- For checking Wi-Fi and NuveControl connections, press the mute button in the temperature display screen, 1 number should next to J and C letters.

SECTION 5

PERIODIC MAINTENANCE AND CLEANING

5.1 PERIODIC MAINTENANCE

- For temperature verification, measure temperature inside the device with an external sensor once a year.
- It is recommended to repeat the electrical safety test when change in any electrical component of the device.
- Once a month, the gasket surface should be cleaned with a damp cloth.
- Please contact to Nüve agent for an authorised service or maintenance.

5.2 CLEANING

- After unplugging the equipment and the equipment is at the room temperature, wipe down the chamber to remove any undesirable effects of the operation, for example spillage.
- You may use a soft brush to clean the chamber.
- For the external body, you may use a piece of cloth. Mild detergent use is recommended to remove difficult dust and dirt.
- Protect your chamber against rust coming from outside.

PLEASE BE AWARE OF THE UNDESİRABLE EFFECTS OF THE CHEMİCALS AND BE CAREFUL WHİLE APPLYİNG THEM.

SECTION 6

DISPOSAL MANAGEMENT CONCEPT

The currently valid local regulations governing disposal must be observed. It is in the responsibility of the user to arrange proper disposal of the individual components.
Applicable local regulations for disposal have to be carefully observed.
The instruments and electronic accessories (without batteries, power packs etc.) must be disposed off according to the regulations for the disposal of electronic components.
Batteries, power packs and similar power source have to be dismounted from electric/electronic parts and disposed off in accordance with applicable local regulations.

SECTION 7

TROUBLESHOOTING

If the Dry Heat Sterilizer/Oven does not operate, check the followings,

- The on/off switch is on,
- The plug is plugged-in properly,
- The plug is not defective,
- The mains supply is present,
- The fuse of the installation on which the plug is mounted is not defective

The incubator does not heat, check the followings,

- The program is started,
- The safety thermostat is adjusted higher than set temperature.

7.1 ERROR CODES EXPLANATIONS

Er1
The temperature sensor endings are broken. The error code flashes on the temperature display and an audible alarm sounds.

Er2
An electronic failure occurs in the microprocessor. The error code flashes on the temperature display and an audible alarm sounds.

Er3
The temperature sensor measures a temperature higher than 147°C.The error code is shown on the temperature display and an audible alarm sounds.

Er4
The temperature sensor endings are connected in reverse. The error code flashes on the temperature display and an audible alarm sounds.

EoF
This error code appears if any probable power cut causes when the sterilization phase “EoF” flashes and the audible alarm sounds on the temperature display.

IN CASE OF ANY ERROR, THE PROGRAM İS STOPPED AUTOMATİCALLY AND İMMEDİATELY.

PLEASE CONTACT TO AN AUTHORIZED NUVE AGENT TO SEEK TECHNICAL HELP IF AN ERROR OCCURS.

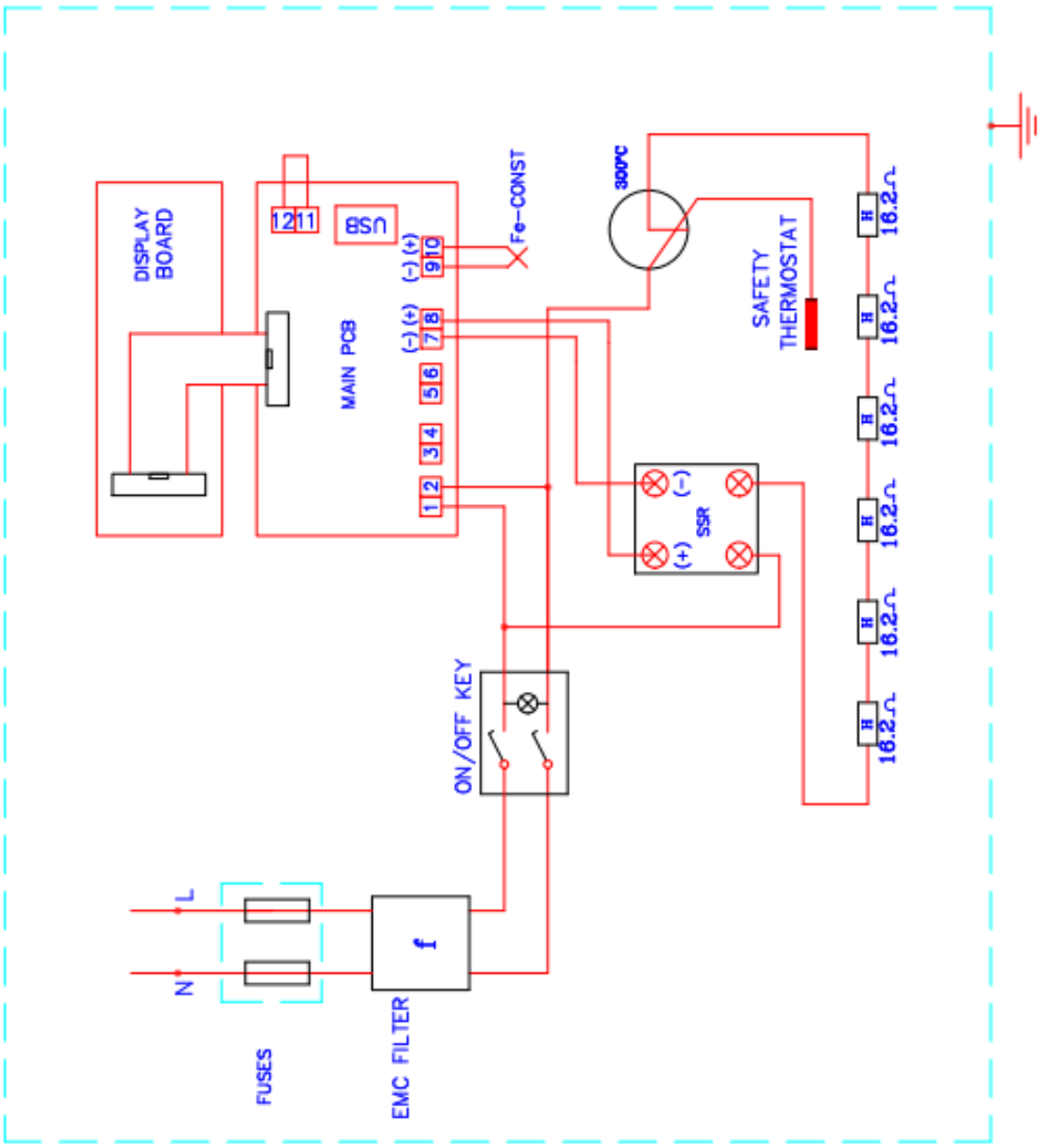
7.2 FUSE REPLACEMENT

The fuses shall always be replaced by authorized and trained personnel by Nüve.

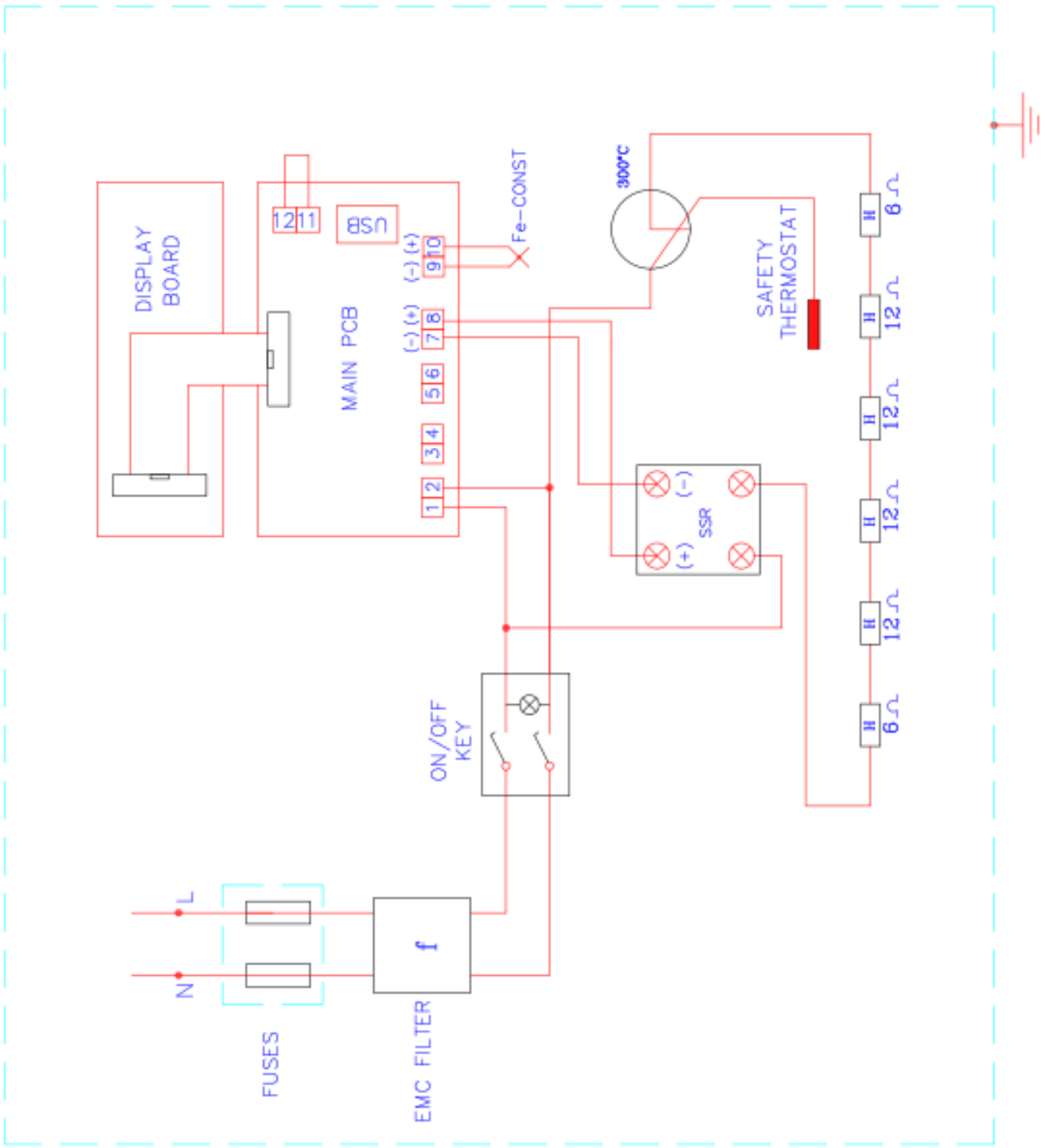
SECTION 8

ELECTRICAL CIRCUIT DIAGRAMS

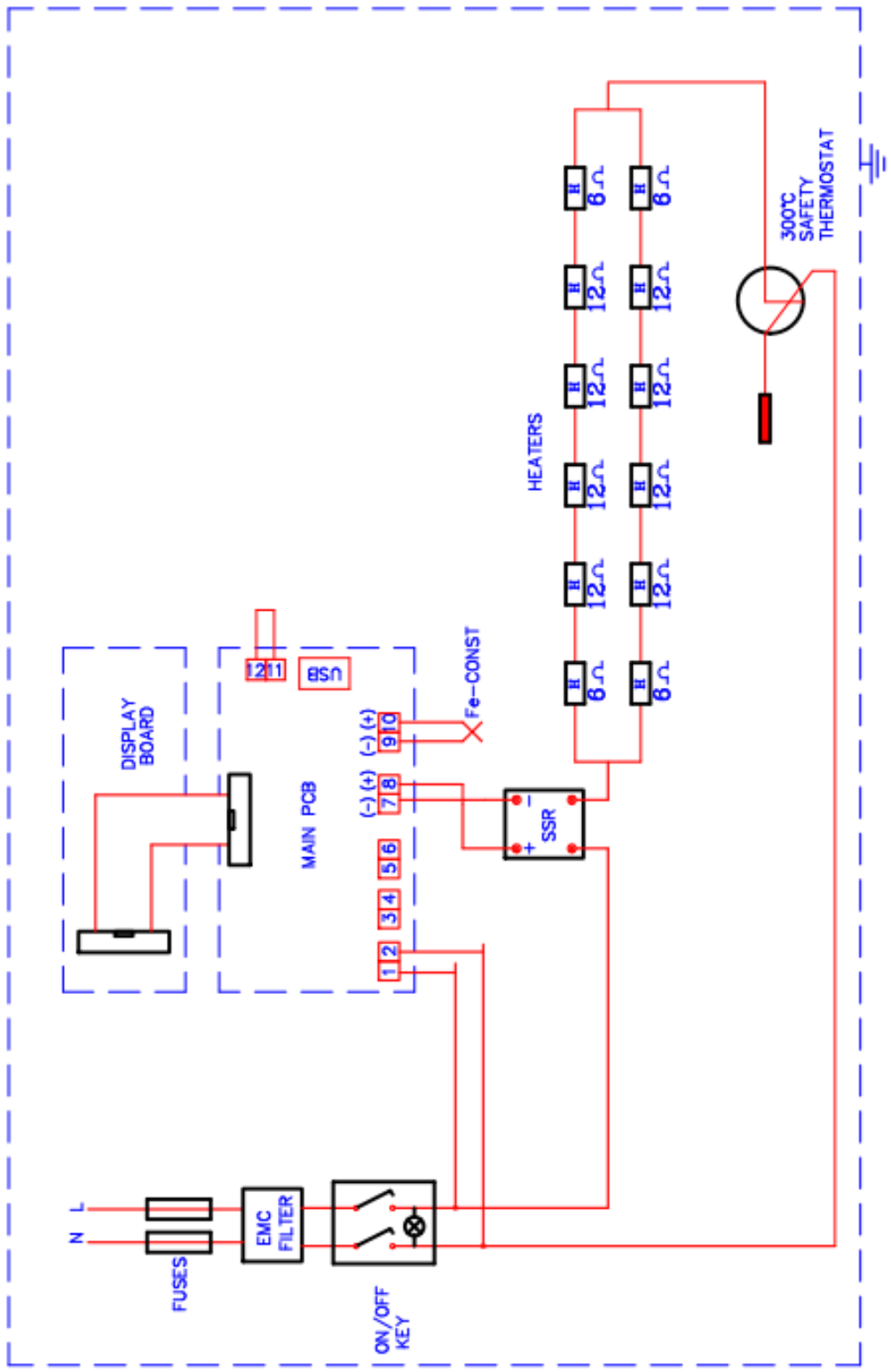
8.1. FN 300 ELECTRICAL CIRCUIT DIAGRAMS



8.2. FN 400 ELECTRICAL CIRCUIT DIAGRAMS



8.3. FN 500 ELECTRICAL CIRCUIT DIAGRAMS



SECTION 9

SYMBOLS AND LABEL

	Symbol in the operating instructions: Attention, general hazard area. This symbol refers to safety relevant warnings and indicates possibly dangerous situations.The non-adherence to these warnings can lead to material damage and injury to personal.
	**Notified Body:** KIWA Belgelendirme Hizmetleri A.Ş. (İTOSB) İstanbul Tuzla Organize Sanayi Bölgesi Tepeören Mevkii 34597 Tuzla- İstanbul / TURKEY
	Symbol in the operating instructions: This symbol refers to important circumstances.
	To identify the manufacturer of a product.
	To indicate the date on which a product was manufactured.
	This product is subject to the directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE) of the European Parliament and of the EU Council of Ministers.
	Before operating the instrument this manual should be read carefully.

Labels on the product:

FN 300
FUSE (2×3A)

FN 400
FUSE (2×4A)

FN 500
FUSE (2×10A)

Earthed Socket