



FABRYCKI FUTURE
ELECTRONIC SOLUTIONS

SAUNA EMERGENCY SHUTDOWN MODULE

Operation and assembly manual

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1. General information - service

This manual is intended to familiarise the user with the assembly and operation of a sauna emergency shutdown module.

The purpose of the module is to increase safety when using the sauna. Emergency shutdown of the sauna power supply will be implemented in the following situations:

- tripping of the thermal protection – temperature sensor supplied with the sauna controller has a built-in thermal fuse. If the limit temperature (140°C) inside the sauna is exceeded, the fuse will trip and, as a result, will disconnect the main power supply
- use of the safety button – emergency safety button allows for disconnecting sauna power supply manually by the operator or sauna users in an emergency situation

Emergency power off disconnects the main power line to the sauna controller, this means that all other components connected to the sauna controller will also shut down.

The module has outputs that allow the connection of additional external signalling (light, sound), which can be mounted in another room (reception, surveillance, etc.).

Failure to comply with the rules and instructions contained herein will release the product manufacturer from warranty.

Tripping the thermal fuse

If the emergency disconnection of the sauna power supply occurred due to the tripping of the thermal fuse, then it is absolutely necessary to first determine the cause of the failure, remove it and only in the next steps restart the power supply. All work and the replacement of the temperature sensor should be carried out by a person with electrical qualifications.

Power startup – replace the defective temperature sensor. Before restarting the power supply of the sauna, first it is necessary to first make sure that there is no danger to human health and life. Next, lift the lever of the disconnecter built inside the module.

Operation of the emergency stop button

Emergency power off – press the button to its limit, the button will snap into place and remain in that position.

Switching on the power supply – before restarting the power supply of the sauna, first make sure that there is no danger to human health and life. Turn the red part of the button as indicated by the arrow and pull it towards you. The button will snap into place and remains in that position. Next, lift the lever of the disconnecter built inside the module.

Switching on the disconnecter in the module

If it is not possible to switch on the disconnecter, then it is necessary to check whether any protection is operational (temperature sensor module, emergency stop button).

2. Safety



Before commissioning, be sure to read and follow the operating manual and safety instructions !



In this manual, this sign indicates all text concerning safety of the user. All users of the device need to be familiar with the contents of the operating manual.



Electrical device !



Fire risk !

SAFETY INSTRUCTIONS

- The device may be connected to the mains only by persons with the appropriate electrical qualifications.
- Use only original FFES parts !
- Unauthorised changes to the device are not permitted !
- The assembly of the unit should be carried out according to the assembly manual.
- Use the connection cables according to the instructions in the manual.
- Cables inside the cabin must be insulated with silicone !
- Before starting up the device, read the operating manual of the other devices connected to the module !
- The safety module and the components connected to it should be checked regularly for damage and correct operation.



Persons with limited physical and mental abilities, sensory impairments or with little experience and knowledge of operating the device (e.g. children) should operate the device only under the supervision of persons responsible for their safety.



Children must not be allowed to use or start up the device without the supervision of those responsible for their safety!

3. Installation

Before assembling and starting to use the device, you should:

- check the completeness of the equipment: control module, safety switch with assembly system, operation and assembly manual.
- make sure that the voltage of the module and other cooperating devices is correct.
- determine a suitable assembly location for the module - ensure access to the module for maintenance

3.1. Technical data

Sauna emergency shutdown module



Power voltage	3N~ 400V/50HZ or 1N~ 230V/50Hz
Maximum current capacity	63A
Cross-sections of power supply wires	in accordance with the stove manufacturer's guidelines
Operating temperature of the module	0 -60°C
External dimensions WxSxH [mm]	230x234x95
Degree of protection (IP)	IP40

Safety switch button

Shape of the head of the signalling component	Round
Drive component type	ratchet lock
Reset	Unlocking by rotation
Drive component sort	Red mushroom \varnothing 40 mm, unmarked
Contact type and configuration 2 NC	2 NC
Connectors - terminals	Screw terminals, $\leq 2 \times 1.5 \text{ mm}^2$ with cable end in accordance with EN/IEC 60947-1
	Screw terminals, $1 \times 0.34\dots 2 \times 2.5 \text{ mm}^2$ without cable end in accordance with EN/IEC 60947-1
Assembly of the device	Mounting hole - diameter: 30 mm
Mechanical durability	100000 cycles
Ambient air temperature for operation	from -25 to 70°C
Protection class against electric shock	Class II in accordance with IEC 60536
IP degree of protection	IP20 in accordance with IEC 60529 (rear)
	IP65 in accordance with IEC 60529 (front panel)
NEMA degree of protection	NEMA 12 in accordance with UL 50
	NEMA 3 in accordance with UL 50
Assembly plate dimensions	100 x 100 x 15 mm (Fig. 1)
Assembly method	Dedicated assembly kit (see 2.2)

Operation of the emergency stop button:

Emergency power off - press the button to its limit, the button will snap into place and remain in that position.

Switching on the power supply - before restarting the power supply of the sauna, first make sure that there is no danger to human health and life. Turn the red part of the button as indicated by the arrow and pull it towards you. The button will snap into place and remains in that position. Then lift the lever of the disconnecter built in the module box.

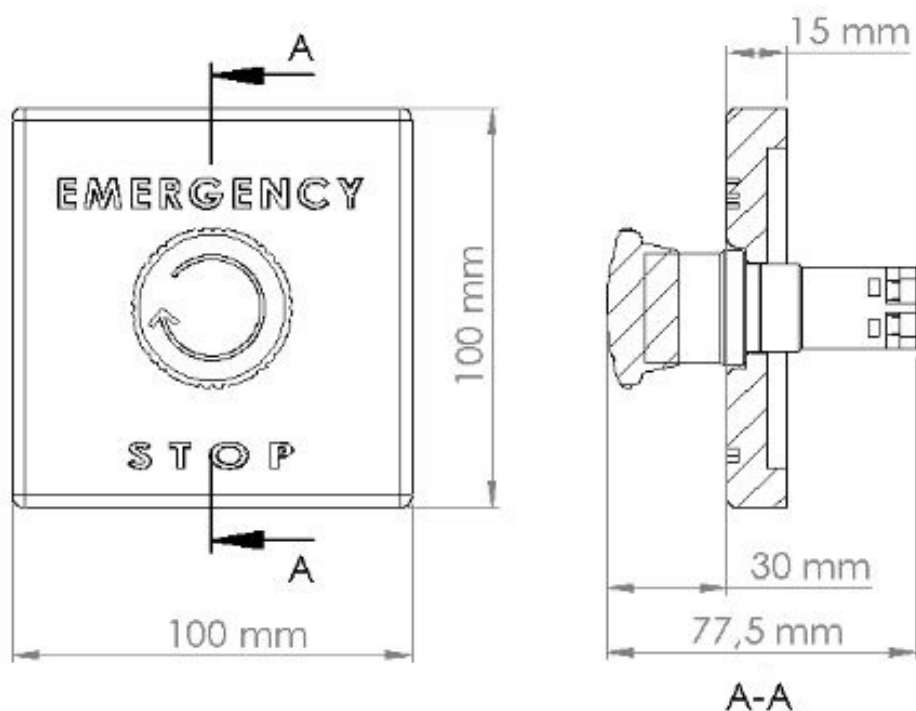


Fig.1 Technical drawing of the safety switch button together with the housing.

3.2. Assembly

The sauna emergency shutdown module should be installed in a place inaccessible to the public. Only sauna operators should have access to the unit.

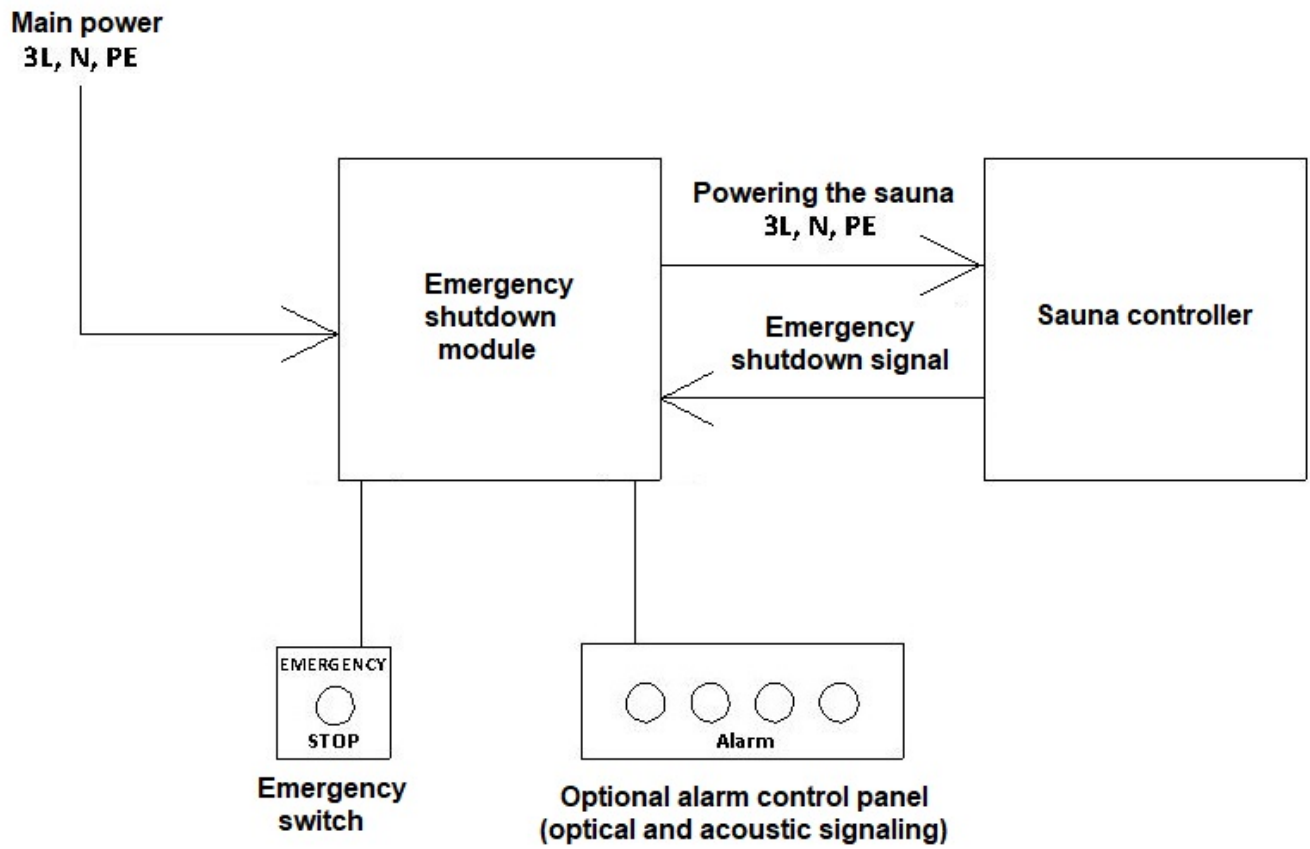
Protect from direct exposure to the weather.

Assembly of the safety switch button should be done according to instruction sheet No. 04/2022.

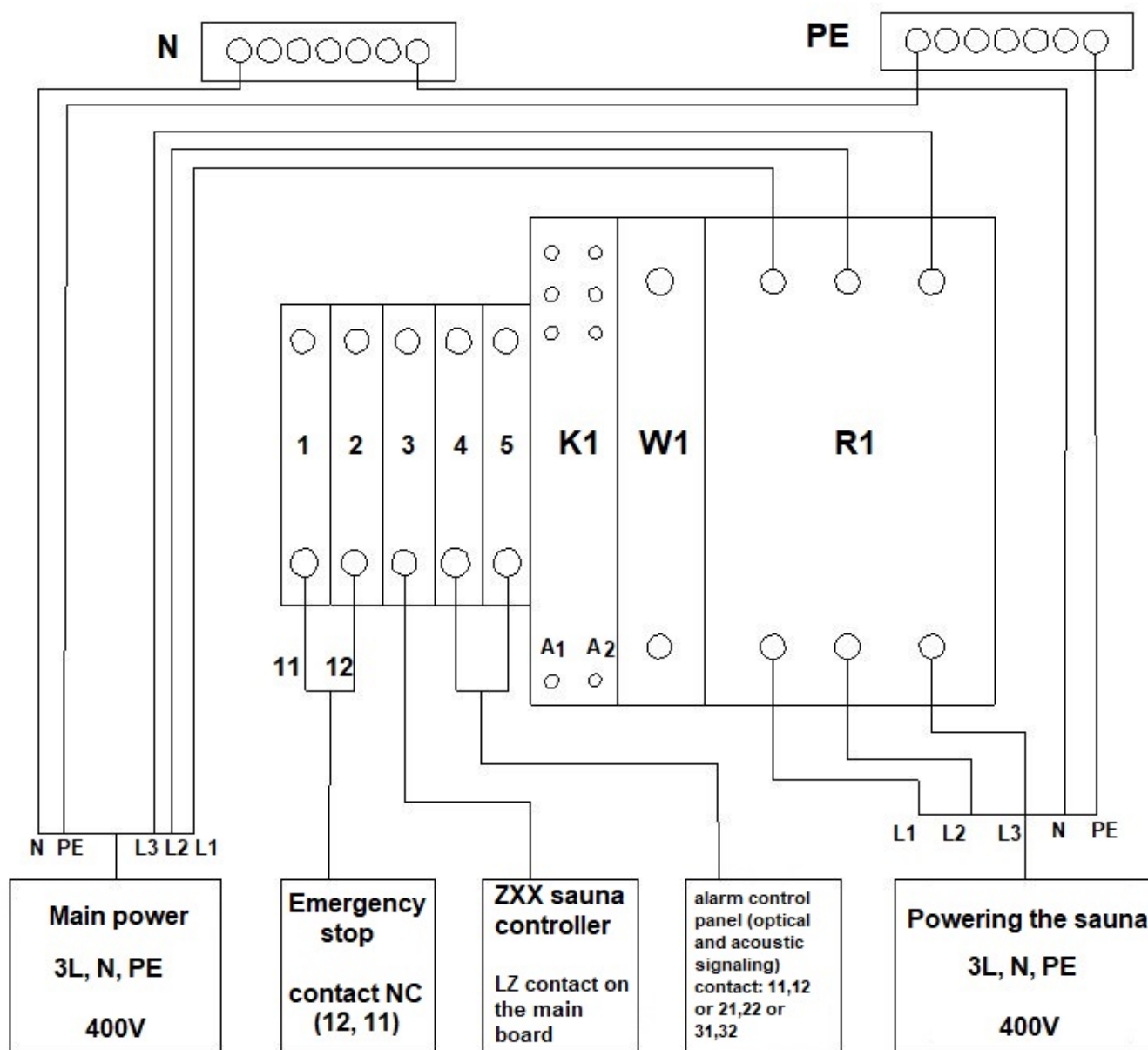
Carry out the electrical connections according to the wiring diagram, see [4.2](#).

4. Diagrams

4.1 Block diagram



4.2 Electrical diagram of the external connection



NOTE!



Care should be taken to connect the temperature sensor module (see sauna controller instructions). In order to be able to switch off the power supply to the sauna when the temperature fuse is tripped, all four contacts of the temperature sensor module (TG,TS,TD,TP) must be connected.

5. Instruction Sheet

Instruction Sheet

No. 04/2022


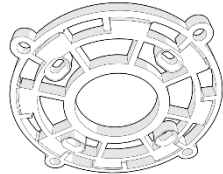

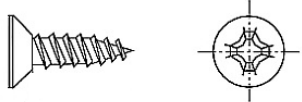
ASSEMBLY - SAFETY SWITCH BUTTON



1. Purpose of the sheet

The purpose of this sheet is to show the correct location and assembly of the safety switch button.

2. Summary of materials required for assembly

List of materials for assembly			
Item	Name	A m o u n t	Preview photo
1	Switch	1	
2	Mounting bracket (part A+B)	1	
3	Housing	1	
4	Assembly screw Ø3.5x9.5mm	8	

3. Switch placement

When assembling the safety switch, consider the following:

- Easy access, in a safe environment,
- location in the entrance/exit area,
- install the switch at a height of 100 cm from the floor, at a distance of min. 50 cm from heating devices (e.g. stove),

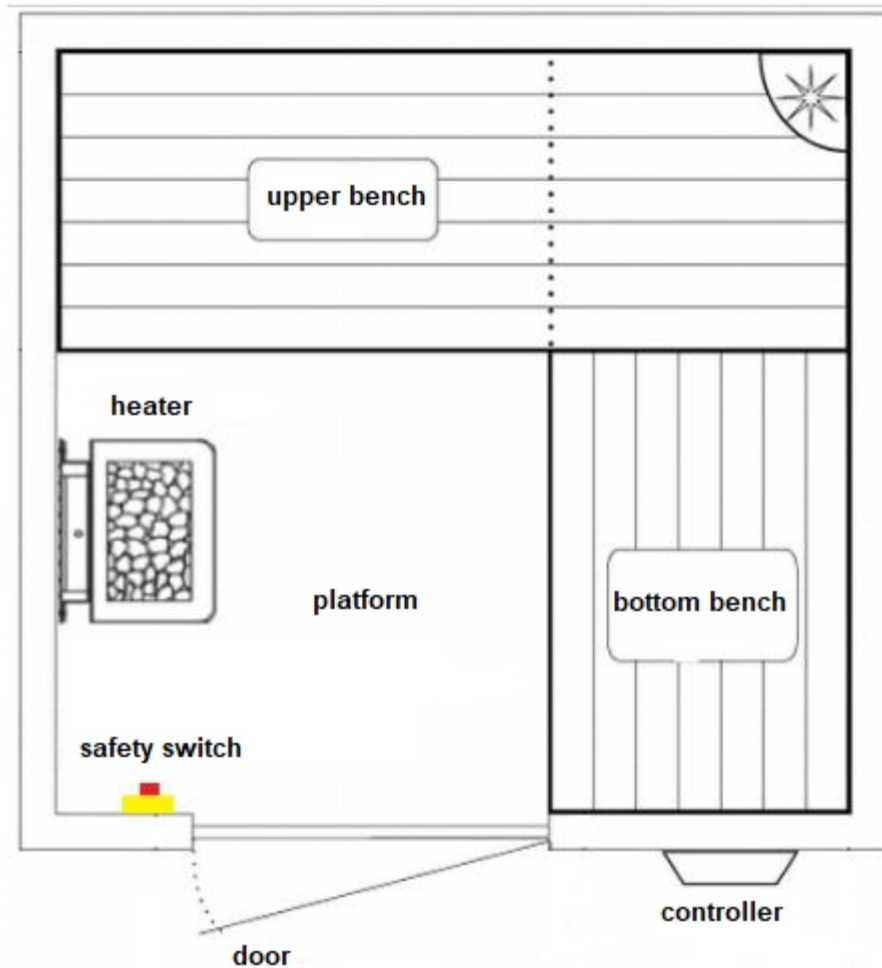
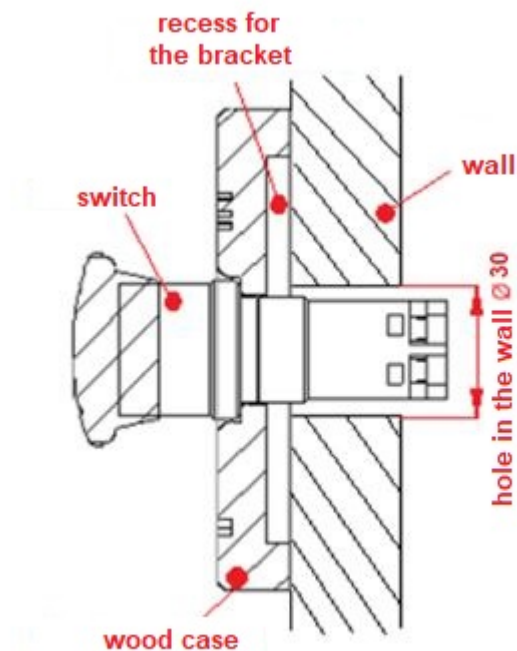
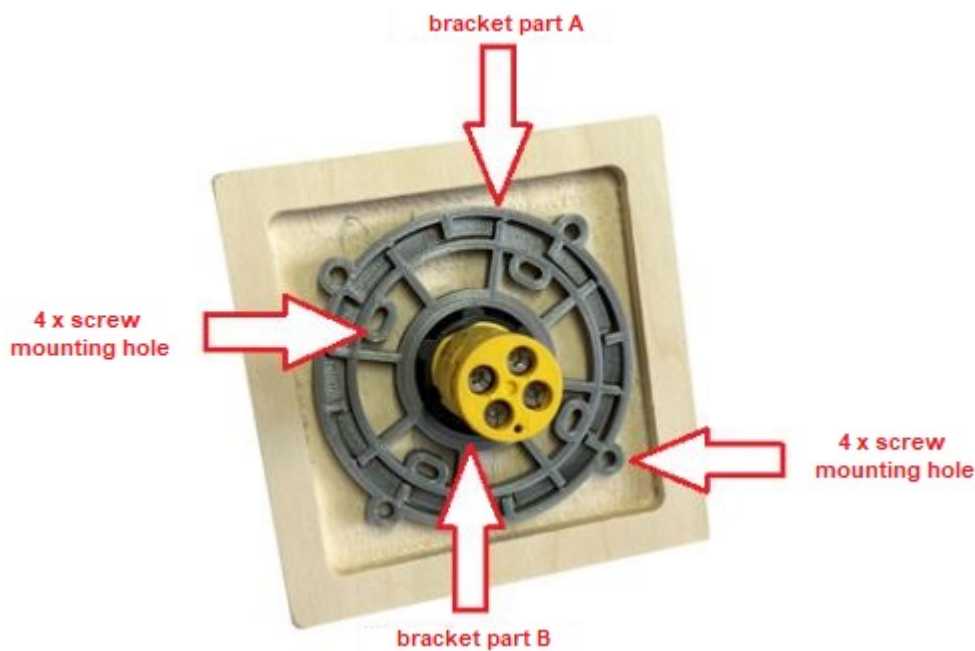


Fig. 2 Example of the position of the sauna safety switch.

4. Assembly of the switch



- A. Make a hole in the wall $\varnothing 30$ mm
- B. Mount the bracket-part A (in the axis of the hole-use the pre-assembled bracket from parts A+B for alignment) to the wall with screws (pos. 4 - 4 pcs);
- C. Mount the bracket - part B (in the axis of the hole) to the wooden housing with screws (item 4 - 4 pcs);



- D. Install the switch in the housing;
- E. Connect the signal cables;
- F. Apply the armed switch to the bracket A installed on the wall, then rotate until the latches engage (if necessary, make adjustments with the slotted holes part B).

6. Warranty terms

1. The warranty for the correct operation of the sauna emergency shutdown module, confirmed by the seal and signature of the installer/vendor, is given for the period of **18 months** from the date of purchase.
2. The warranty ceases to apply in the event of:
 - a) Breaking of warranty seals
 - b) Incorrect connection of the control module and components
 - c) Using components with higher power than recommended
 - d) Incorrect placement of the device and components
 - e) Not suitable operating conditions for the device and components.
3. A prerequisite for warranty consideration is a purchase document and a completed warranty card (located on the next page).
4. The scope and method of warranty repair shall be determined by the warrantor.
5. Depending on the agreement between the company responsible for the installation and the manufacturer, the product should be delivered to the manufacturer, the company responsible for the installation.
6. Repair time can not take more than 14 days from the date of delivery of the product, for repairs at the customer's premises, the defect is removed the same day.
7. Complaints should be submitted to the address of the company responsible for the installation or directly to the manufacturer:

FFES sp. j.

Al. Powstańców Wielkopolskich 26; 85-090 Bydgoszcz; Poland

e-mail: sales@ffes.pl

8. If the request proves to be unfounded, the costs associated with the arrival of the service technician shall be borne by the requester.

WARRANTY CARD

Sauna emergency shutdown module

Date	Description	Stamp and signature of service technician	User's signature
	Installation of the sauna emergency shutdown module, in accordance with the rules of the manual.		



The FFES emergency sauna shutdown module is an electronic device, as such, according to the rules of the European Union, it cannot be disposed of with other municipal waste. Such a product should be returned to a special WEEE collection point.