# SCA Sauna heater Manual

Executive standard : GB4706.31-2013



AC CONTRACTOR LC1-D2510 APPLIED IN 9-18KW SAUNA HEATER
AC CONTRACTOR LC1-D1810APPLIED IN 3-9KW SAUNA HEATER
Notice: Each heaters must be standard with leakage protection switch.

Warning: Please read this manual carefully before use if any changes are made without notice

#### Sauna heater installation:

According to Figure 1 and Table 1, or the dimensions on the brand of sauna stove, install the sauna stove on the wall with the equipped screw red.

- -The furnace can also be installed in an alcove with a minimum height of 1900MM (Figure 1C).
- -The wall behind a stove cannot be covered with asbestos cement, asbestos board or flammable materials. Because the covering will cause the wall material to exceed the allowable temperature limit.
- -Use qualified materials for walls and ceilings.

# Safety fence:

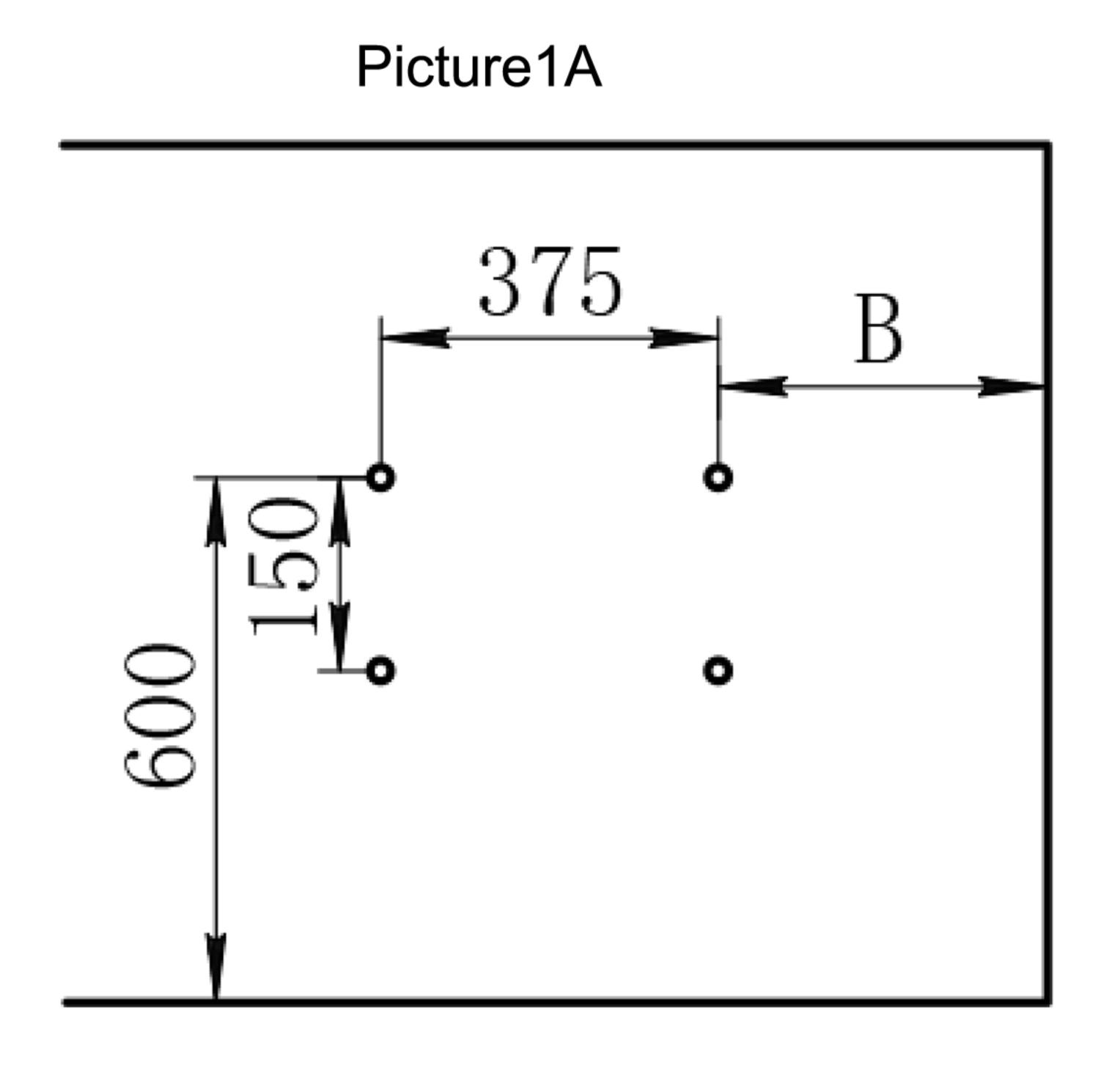
If you want to install a safety fence around the furnace, please follow the dimensions shown in Figure 5.

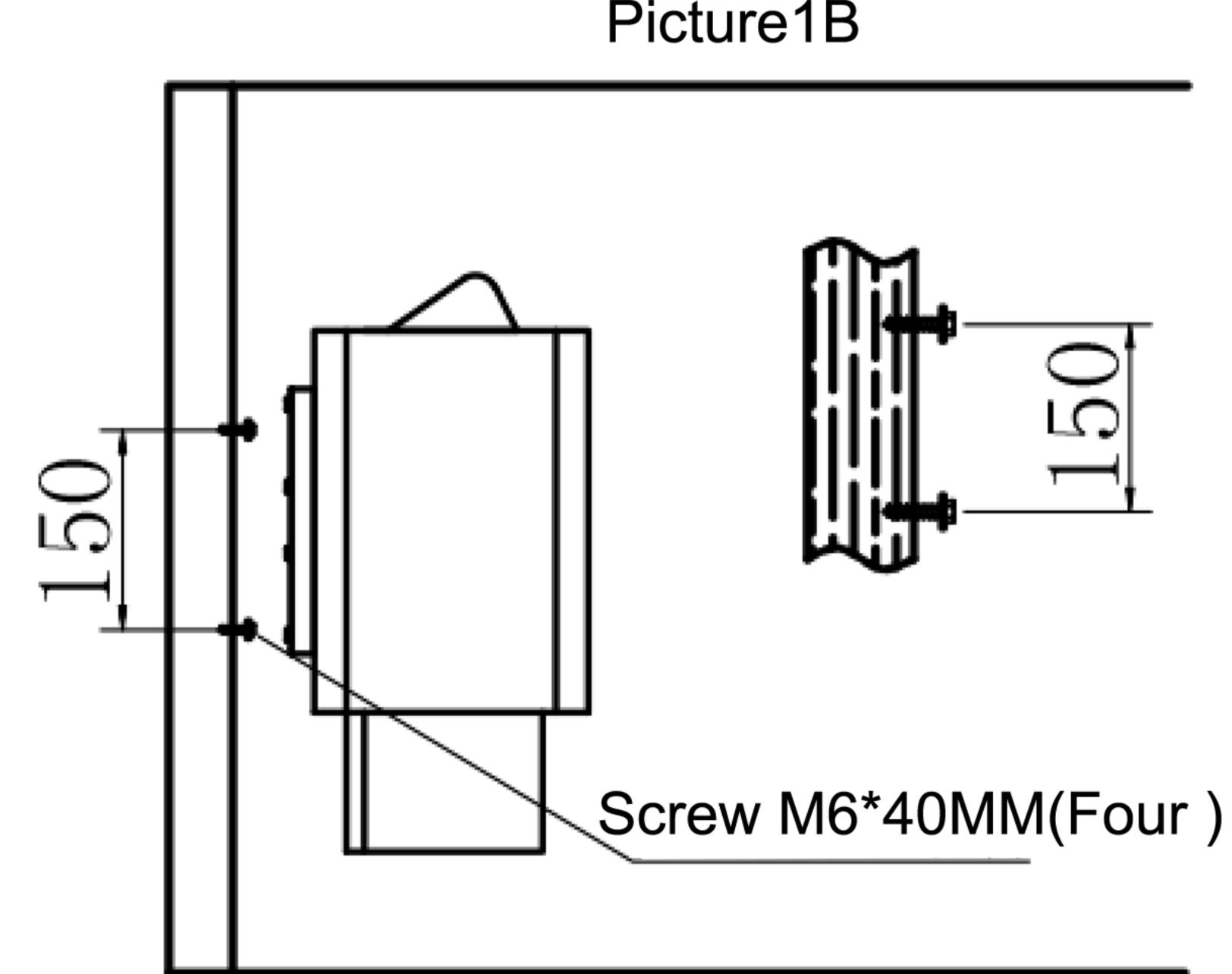
The connection of the power cord must be completed by a professional electrician and comply with current regulations. Use REVE rubber insulated cables (or similar) to connect to the main power supply of the furnace (see table).

The connection box of the furnace is equipped with wiring terminals (refer to the wiring terminals in the circuit diagram in Figure 6). The cross section of the connecting wire is the same as that of the sauna heater power wire (see table). The junction box in the sauna room must be sealed, splash-proof, and have a moisture condensation hole with a diameter of 7mm. The center of the box shall not be 500mmo higher than the ground.

#### Sauna stone:

The sauna stone may be dusty, so we recommend to rinse it before putting it in the stone warehouse. The largest stone is placed at the bottom, and it should not be too tight when placed, and pay attention to leaving a ventilated space. The stone must be replaced when it starts to peel to avoid damage to the sauna heater. The diameter of the stone is generally 3-8 cm.





### Internal control furnace temperature control:

The thermostat can control the temperature in an ideal state (Figure 2). According to the size of the sauna room, the sauna heater can reach the set temperature after 30-60 minutes. The three-phase thermostat can ensure that the sauna room maintains a uniform and comfortable temperature.

#### Switch:

The power switch is the main power switch of the sauna heater. The user must turn off the power switch when leaving the sauna.

#### Ventilation:

In order to make the sauna as comfortable as possible, the sauna room must have good ventilation. It is best to drill an air hole in the wall panel near the bottom of the sauna heater to let the air in. The diameter of the air inlet should be at least 6 cm. The air outlet is best on the wall opposite to the air inlet, and the farther away from the air inlet, the better. The diameter of the air outlet should be twice the diameter of the air inlet, and it should be as far away as possible from the ground and below the upper seat.

Note: The upper part should be tight.Leave a gap of 3 mm between the screw head and the wal

Table 1

Sauna	Distance (mm)							
heater	A	С	D					
3KW	50	280	80					
4.5KW	80	280	100					
6KW	100	280	150					
8KW	130	300	200					
9KW	130	300	200					

Figure 1C

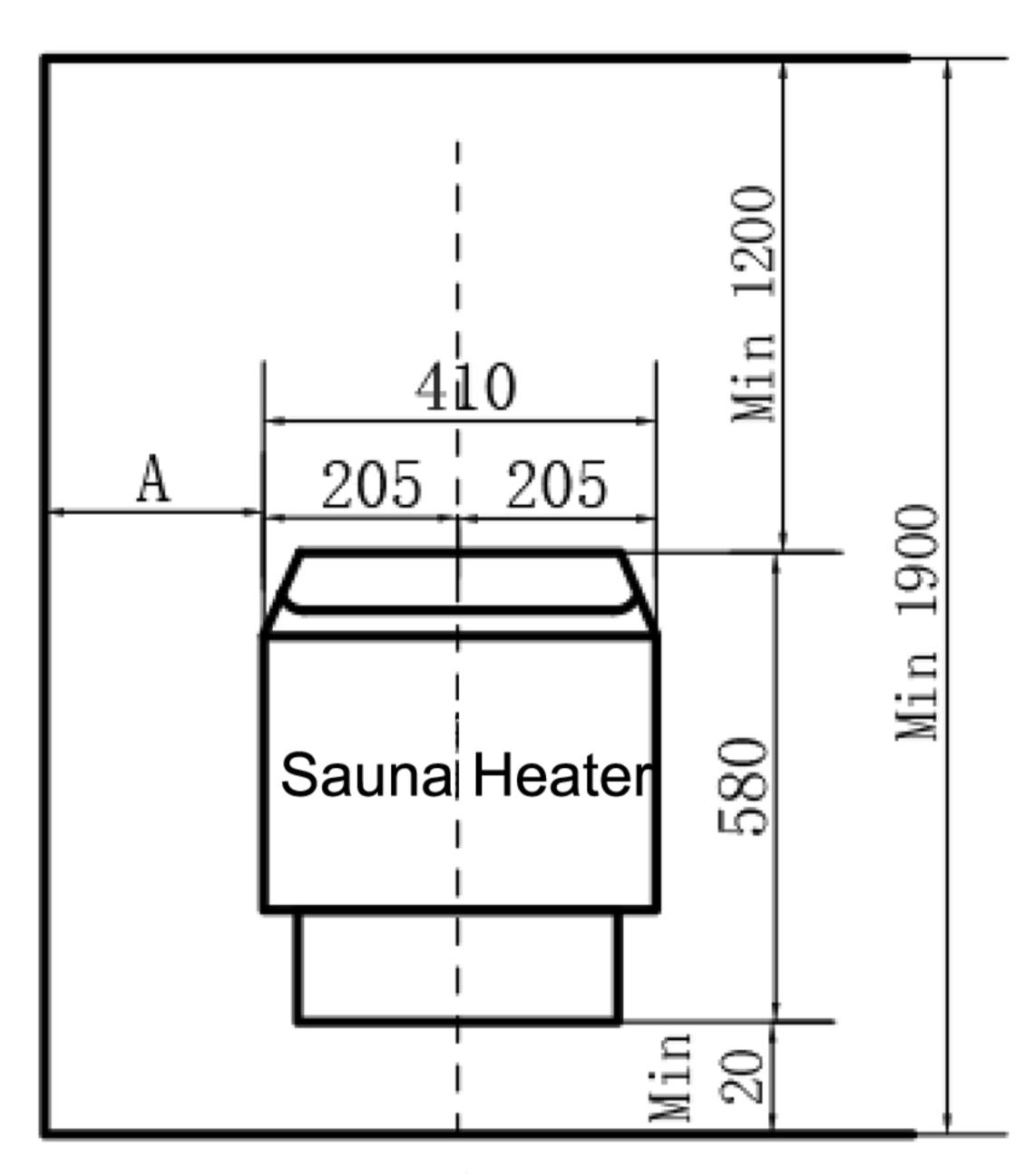


Figure 1D

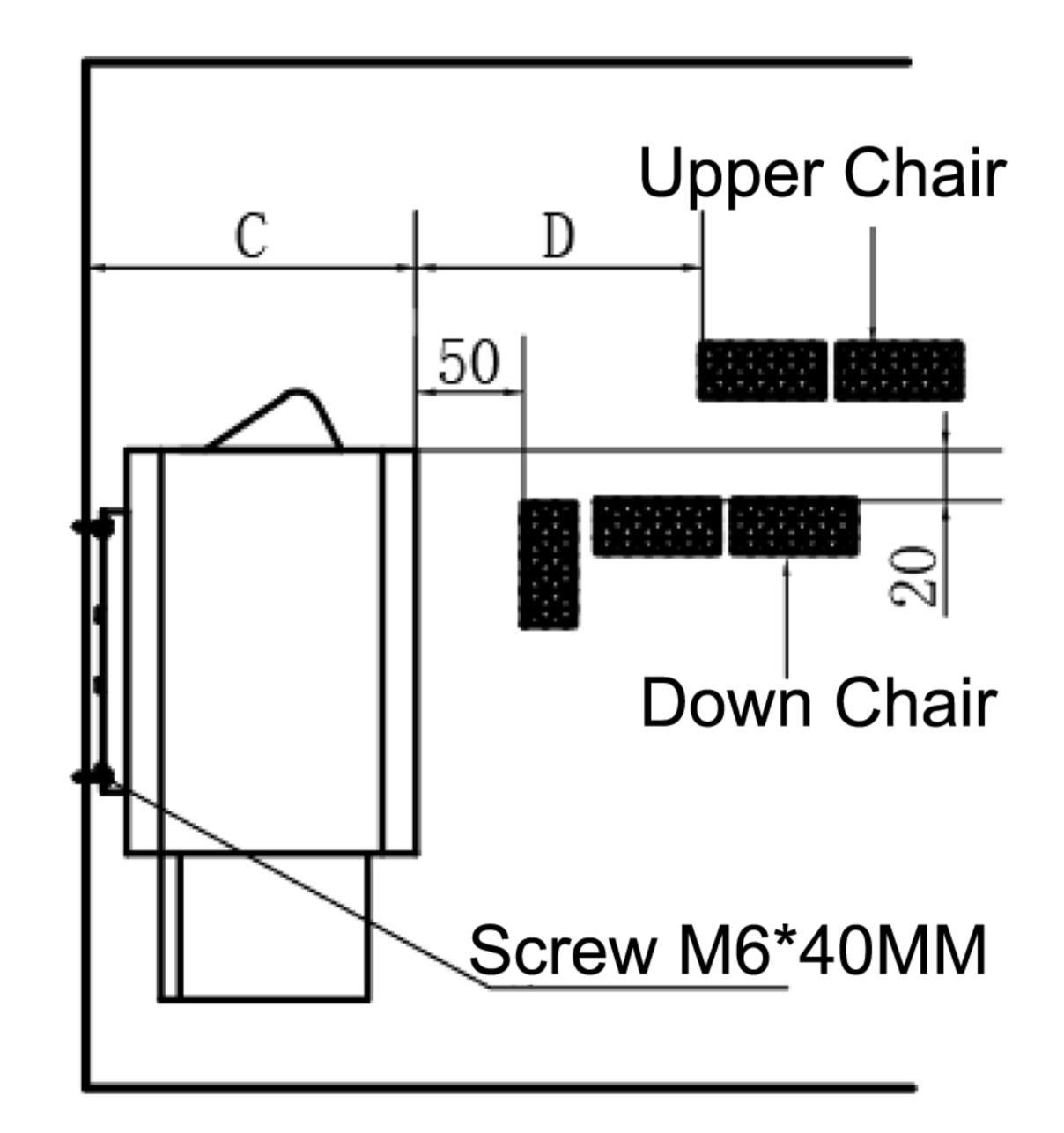
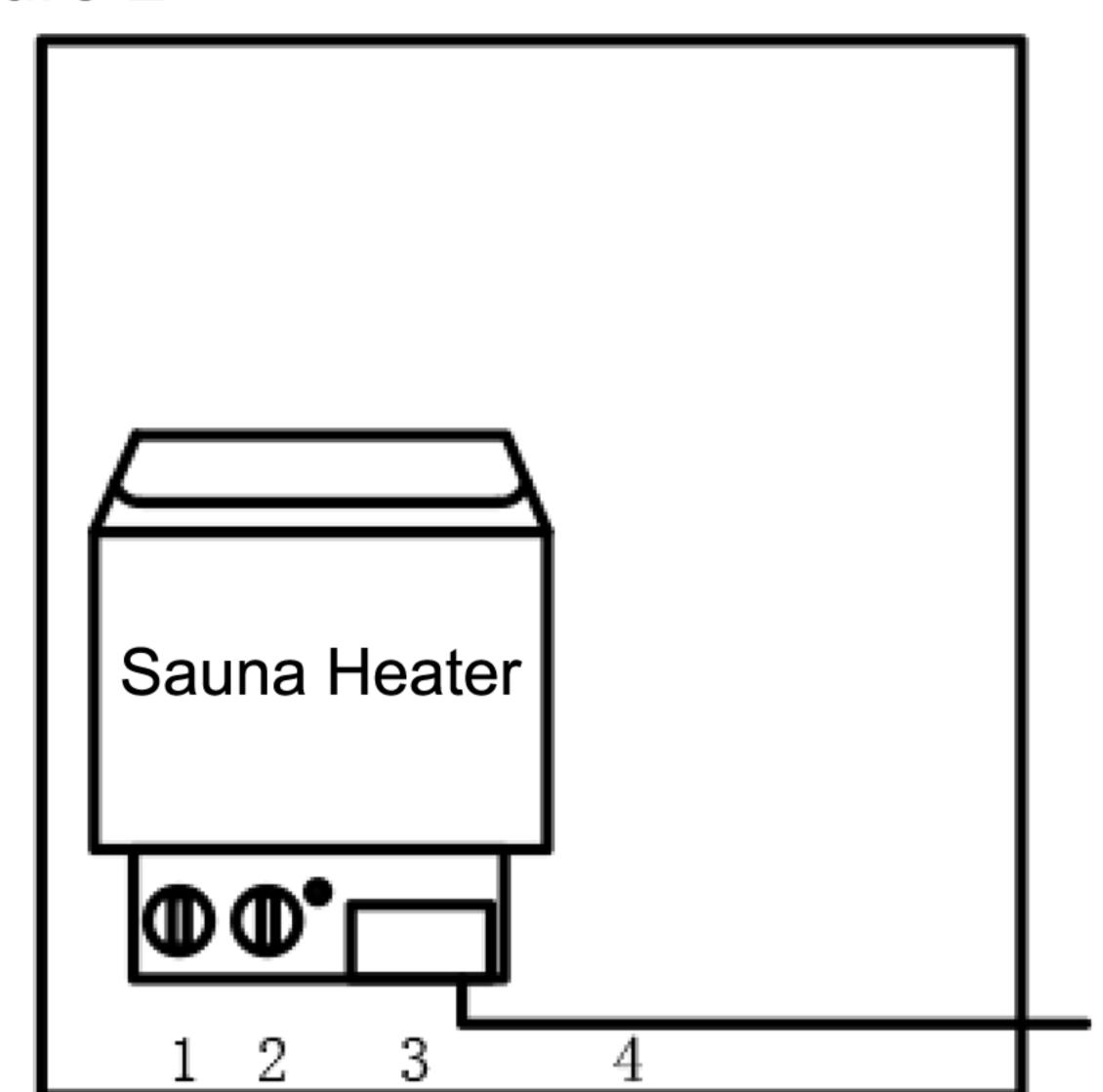


Table 2

Sauna		Sauna room				Shortest	Connection			
heater Power type	Volume m³		Height	Side	The distance of the	Ceiling	Ground	380V	220V	
		Mini	Max	CM	СМ	shelf above the ground 500mm	СМ	СМ	mm²	mm²
SCA30	3KW	2	4	190	5	5	110	18	5*1.5	3 <b>*</b> 2. 5
SCA45	4. 5KW	3	6	190	8	8	110	18	5 <b>*</b> 1. 5	3*6
SCA60	6KW	5	9	190	10	15	110	18	5*1.5	3*10
SCA80	8KW	8	12	190	13	20	110	18	5 <b>*</b> 2. 5	3*10
SCA90	9KW	9	13	190	13	20	110	18	5 <b>*</b> 2. 5	3*10

Figure 2



- 1.Time controller
- 2. Thermostat
- 3. Junction box
- 4. Power cord

Figure 4

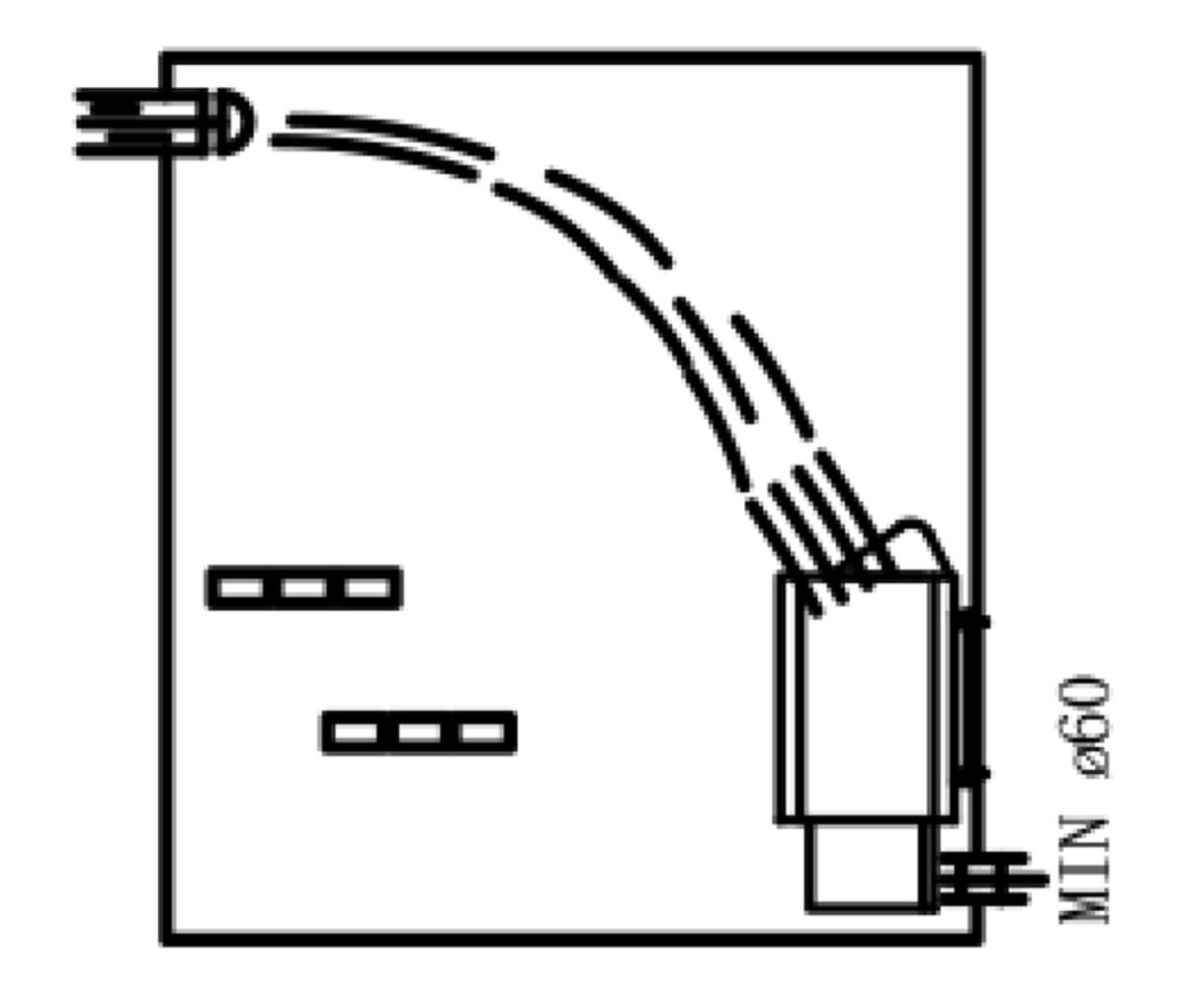


Figure 5

MIN 50MM
50MM

Figure 3

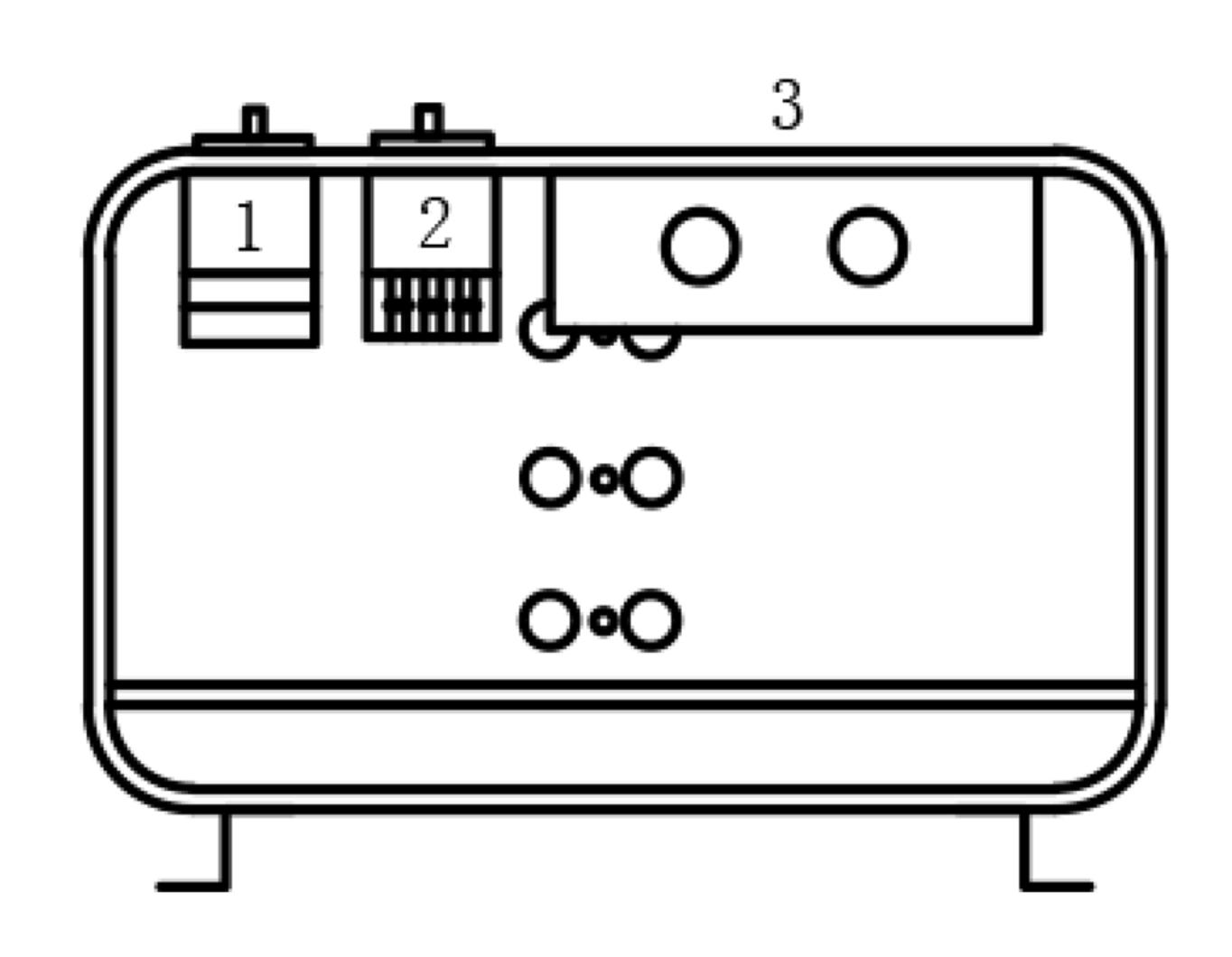
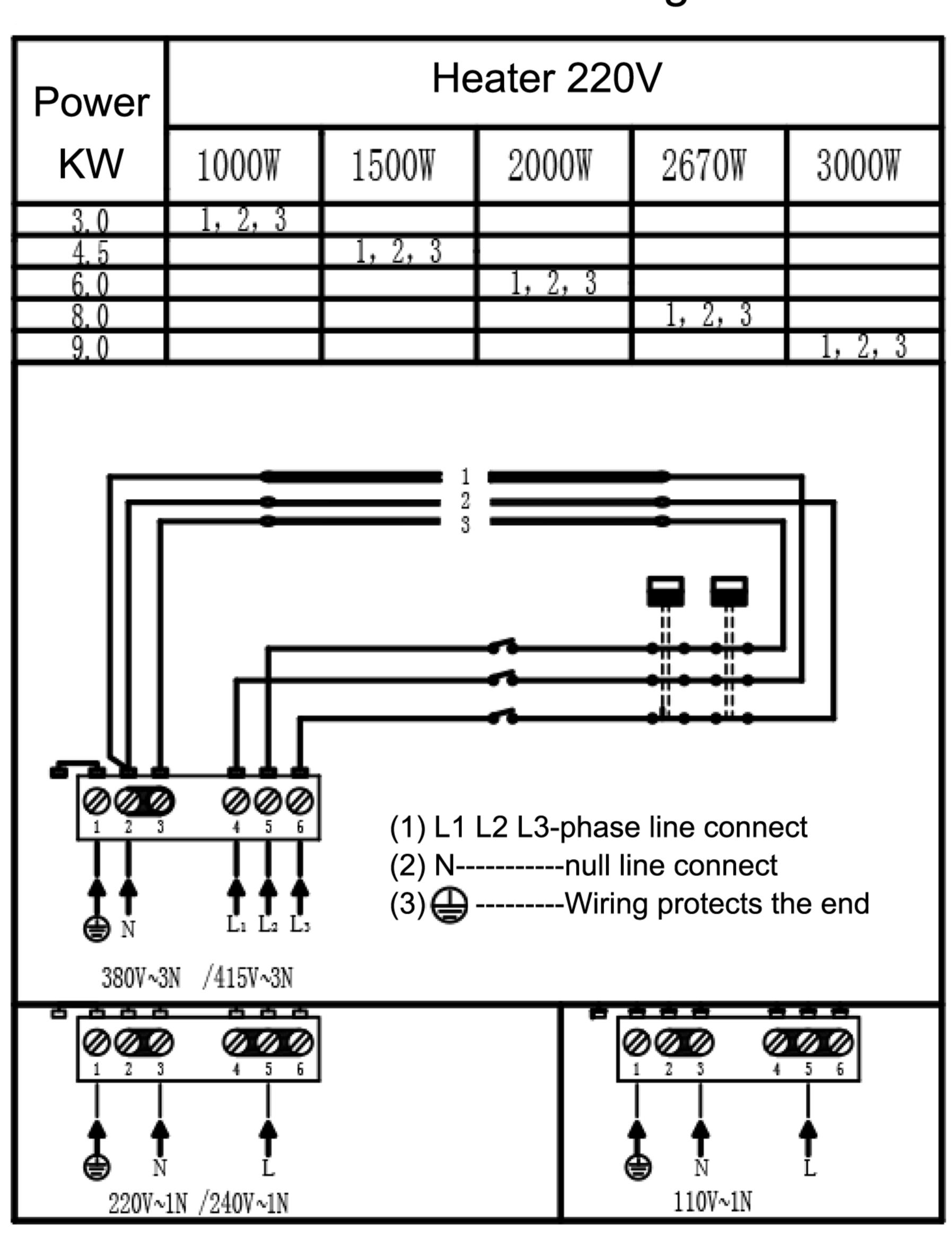


Figure 6

#### Internal control circuit diagram



# Installation instructions for external control sauna heaters

Figure 1C

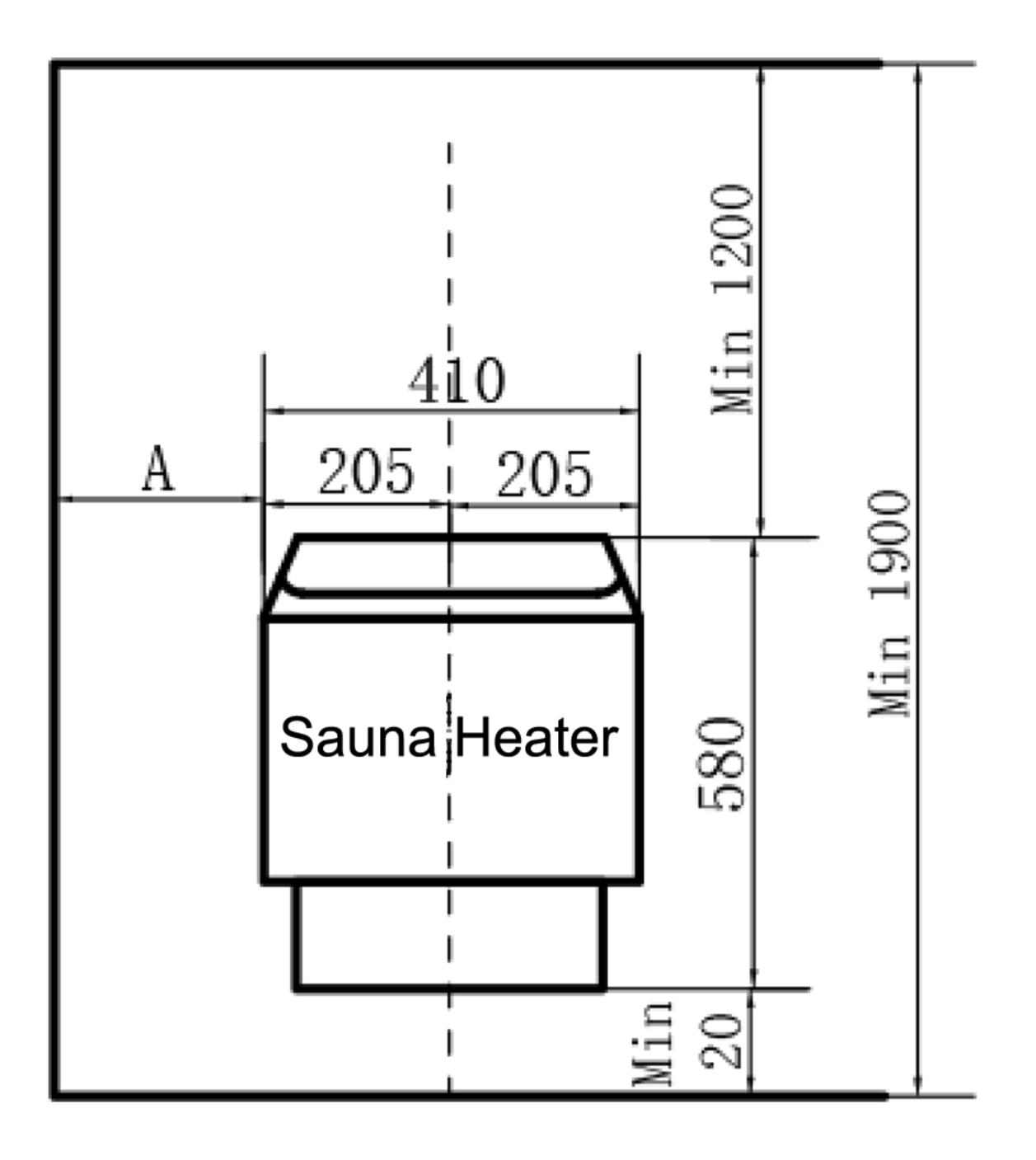


Figure 1D

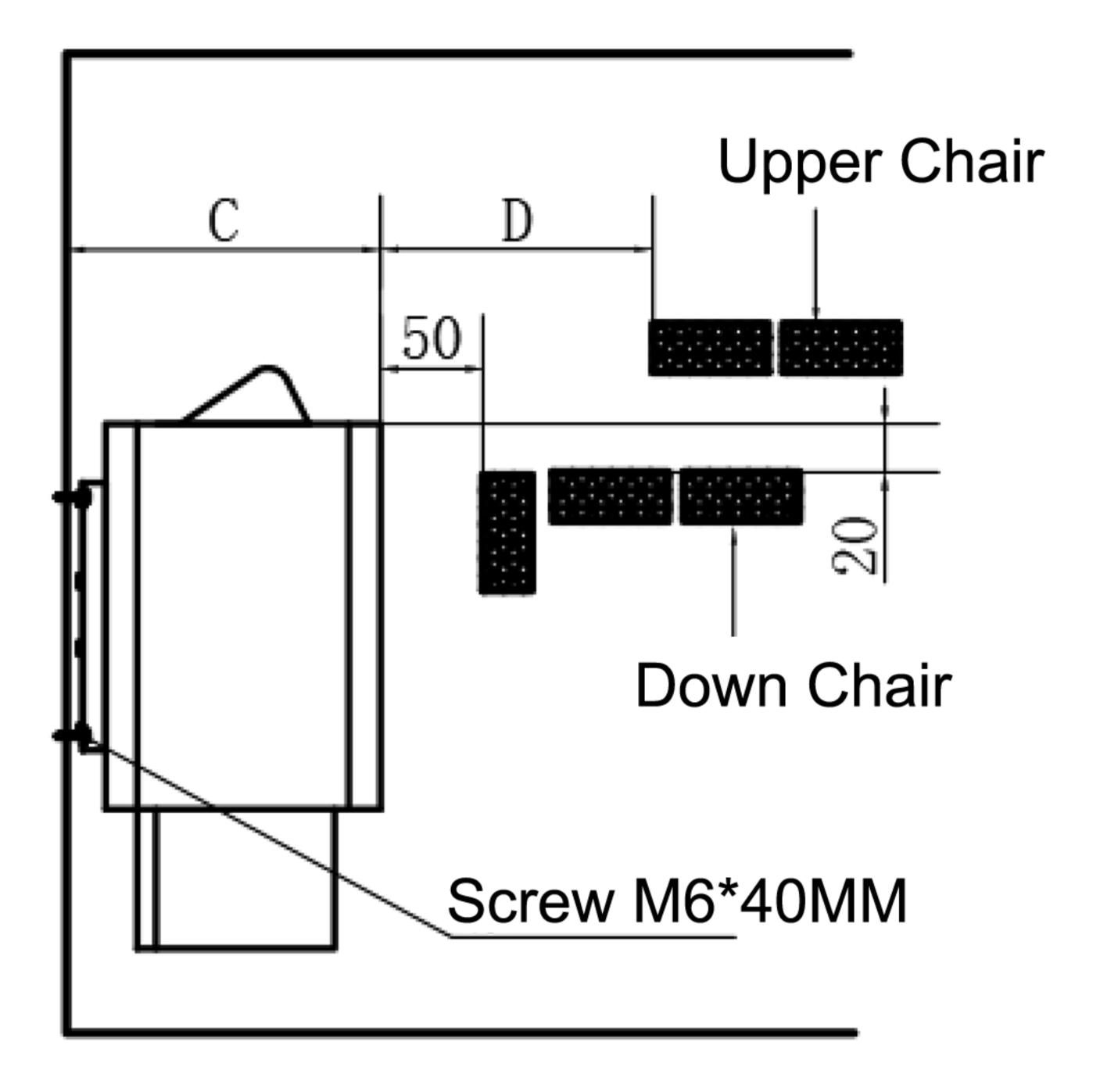


Table 1

Sauna heater	Distance (mm)							
	A	C	D					
3KW	50	280	80					
4. 5KW	80	280	100					
6KW	100	280	150					
8KW	130	300	200					
9KW	130	300	200					

Note: For products of different models, please refer to the parameters marked on the nameplate installed on the product itself for installation.

# External control sauna heater power connection

- (1) Connect the three-phase wires of the power supply to L1, L2, L3± of the power input end of the controller respectively; The neutral wire is connected to the "N" of the input terminal, and the protective ground wire is connected to the "blue".
- (2) Use temperature-resistant wires to connect the power output end of the controller and the input end of the sauna heater to the best. Attached to the drawings on the back page.

#### Place sauna stones

After installing the sauna heater and controller, place an appropriate amount of sauna stone (10-15kg) on the sauna heater.

#### Precautions

The internal temperature of the sauna stove is very high, so high-quality sauna stones must be used. After the temperature difference stone is heated and watered by the stove, it is easy to burst and damage the electric heating tube, or it is easy to oxidize and hinder the heat circulation of the stove, causing damage to the sauna stove.

# Warranty conditions

- 1. The external controller is guaranteed for one year.
- 2. The main body of the sauna heater is guaranteed for one year.
- 3. Warranty will not be provided under the following circumstances:
- (1) Install or disassemble the internal structure by non-professionals.
- (2) Power supply voltage fluctuation range>±10%0
- (3) Inferior stones are placed (used) on the sauna stove.
- (4) Do not install according to the installation dimensions in the manual.

## Warning

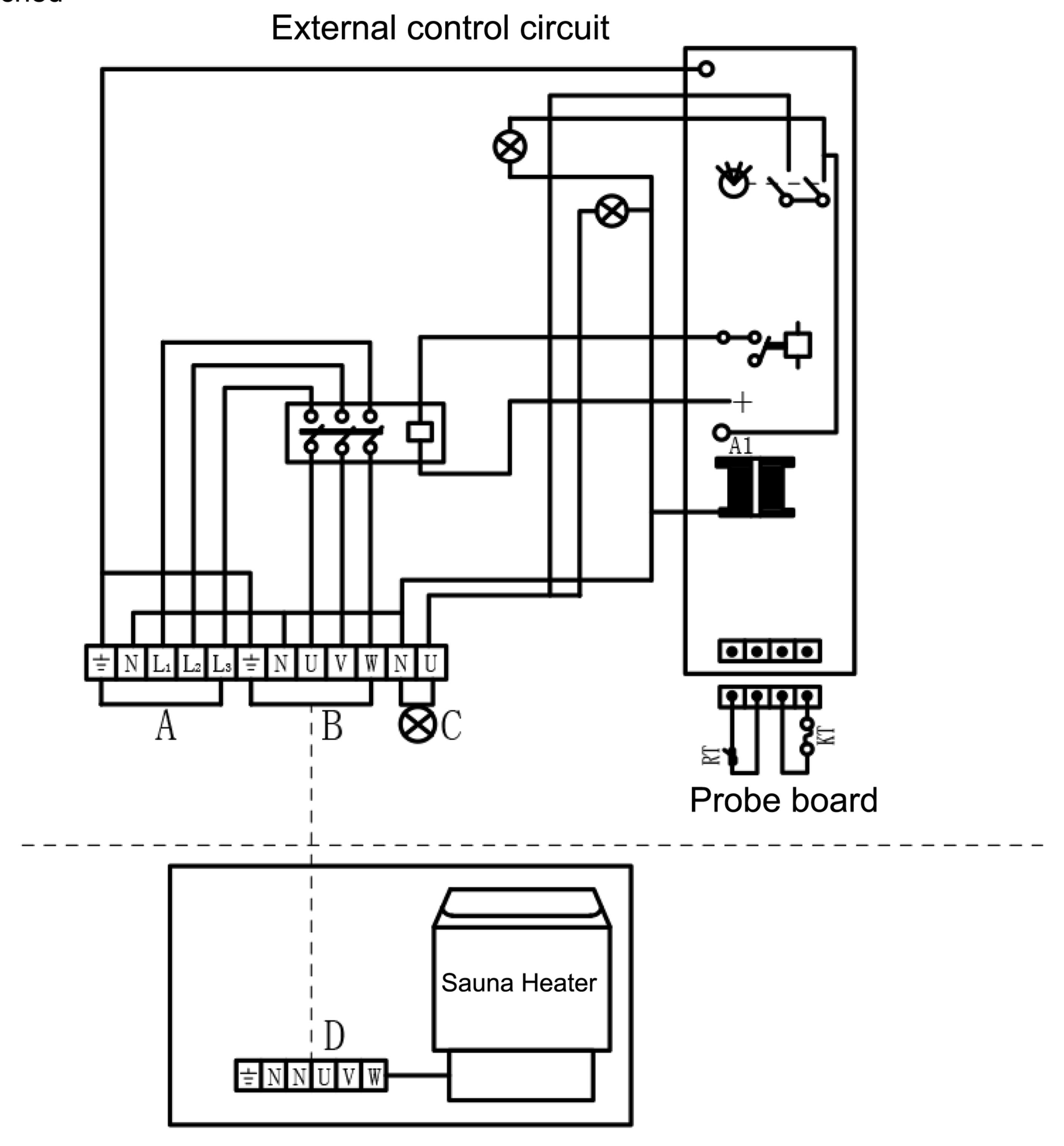
- 1. Danger of electric shock-Consumers are not allowed to repair sauna heaters by themselves. In order to avoid the danger of electric shock, qualified personnel should be responsible for installation and related maintenance.
- 2. Sauna baths should not exceed half an hour. A sauna bath for too long may cause rapid heartbeat, slight heart discomfort, weakness or dizziness. If the above symptoms occur, please stop the sauna immediately.
- 3. Sauna bathing may cause tension for bathers, and it is not recommended to use sauna bathing:

A pregnant woman B heart disease C hypertension

D circulatory system disease E after drinking F Edible drugs

G diabetes H feel unwell

- 4. Children must go to the sauna with recognized accompaniment.
- 5.Burn hazard: due to the high temperature, please do not touch or return it during the heating process



Three-phase wiring diagram	-	Ν	$L_1$	L2	L3		N	U	V	W	Ν	L
Single-phase wiring diagram	411		N	L		-1	N		U			

- A. Power input (220V/380V/50HZ)
- B. Power output
- C. Lighting power output
- D. Sauna heater power input