

SALUS  SAUNAS



Salus SunCube Sauna

**OWNER'S MANUAL**

**WARNING!** Do not place anything combustible close to heater, above the heater, and on both sides of the heater. This includes but not limited to towels, lights, robe hooks, accessories, etc. Nothing should be on the same wall as your heater that is combustible.

SUNCUBE	<b>STATION INSTRUCTIONS</b> Electrical installation of the SUNCUBE Sauna	
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# SALUS SAUNAS

Set elements:

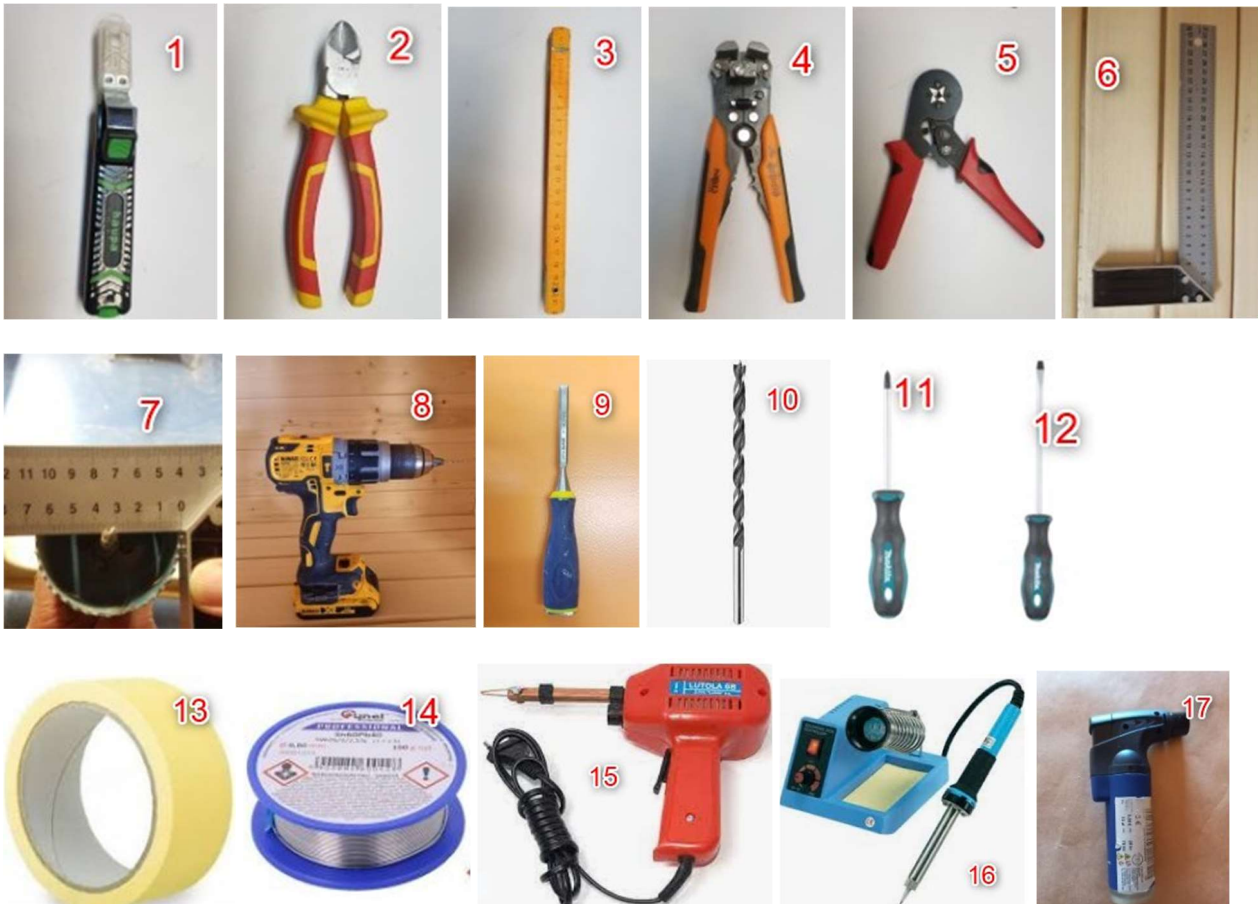




1	Set 1 self-extinguishing protective pipe phi 25, 330 cm wires: 2x 0.75 mm <sup>2</sup> , 400 cm – for SOS switch 2x 0.75 mm <sup>2</sup> , 470 cm – for HUUM door lock sensor 2x 0.75 mm <sup>2</sup> , 470 cm – for HUUM Wi-Fi controller 2x 1.50 mm <sup>2</sup> , 470 cm – for LED lighting	1A	Self-extinguishing protective pipe 1A phi 25, 70 cm
2	Self-extinguishing protective pipe phi 40, 100 cm	3	Set 3 Self-extinguishing protective pipe phi 20, 280 cm Wire 2x 0.75 mm <sup>2</sup> , 350 cm – for HUUM furnace temperature sensor
4	Set 4 self-extinguishing protective pipe phi 20, 330 cm wire 2x 0.75, 2, 400 cm – for LED lighting left side	5	Wire 5x 4.0 mm <sup>2</sup> , 200 cm – for furnace supply
6	Set 6 self-extinguishing protective pipe phi 20, 40 cm wire 2x 0.75 mm <sup>2</sup> , 90 cm – for alarm siren	7	Wire 2x 0.75, 40 cm – for LED right-side lighting
8	Wire 70 cm – for HUUM door opening detector	9	LED strip 316 cm – 2 pcs.
10	Wire for LED bar 15 cm – 2 pcs.	11	LED strip rubber plug – 4 pcs.
12	Wire end 0.75 mm <sup>2</sup> – 24 pcs. Wire end 4.00 mm <sup>2</sup> – 10 pcs. Wire end 1.50 mm <sup>2</sup> – 4 pcs.	13	WAGO connector "2" – 2 pcs. WAGO connector "3" – 1 pc.

14	Heat shrinkable clamp phi 5, length 40 mm – 8 pcs.	15	Screws for LED switch base and siren SOS phi 4, length 15 mm – 7 pcs. Screws for the base of the SOS switch phi 3.8, length 25 mm – 4 pcs. Screws for temperature sensor HUUM fi 2.8, length 15 mm – 2 pcs. Screws for HUUM controller phi 3, length 30 mm – 2 pcs.
16	Clamping band 20 cm	17	Box – 2 pcs.
18	SOS button base	19	SOS button
20	SOS siren	21	The base for the LED light switch
22	LED light switch	23	Junction box

**Tools needed:**





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1	Stripping tool for thick wires (up to 5x 4.0 mm <sup>2</sup> )	2	Wire pliers
3	Folding carpenter's meter	4	Wire stripper
5	Cable lug crimping tool	6	Measuring square
7	Wood hole saw 65 mm	8	Cordless drill
9	Chisel	10	Drill bits 2.5 mm, 5 mm, 10 mm
11	Phillips screwdriver	12	Flathead screwdriver
13	Paper tape	14	Soldering compound
15	Transformer soldering iron	16	Soldering iron
17	Glow lighter	18	PVB varnish
19	Wallpaper cutter	20	Universal silicone gun
21	Electrical tester	22	Multimeter
23	Electrical connection cube for testing the 5-track installation		

**List of activities:**

**I. PREPARATION OF PROTECTIVE PIPES AND HARNESSSES**

1. To prepare harness "1" – cut the wires according to the specifications below:  
2x 0.75 mm<sup>2</sup>, 400 cm – for the SOS switch  
2x 0.75 mm<sup>2</sup>, 470 cm – to door lock sensor HUUM  
4x 0.75 mm<sup>2</sup>, 470 cm – for HUUM Wi-Fi controller  
2x 1.50 mm<sup>2</sup>, 470 cm – for the LED lighting supply
2. Arrange and tape the wires as shown in the picture, then wrap them all around – this will make it easier to lead them through the protective pipe without any problems.



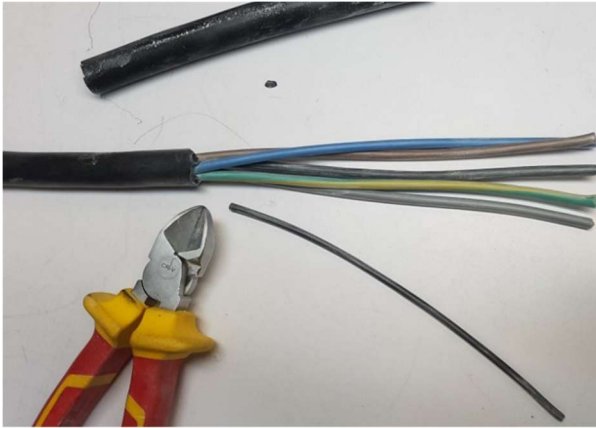
3. Run the harness through the wire and attach the protective pipe "1A". Leave the wire for the SOS button out of the "1A" wire.



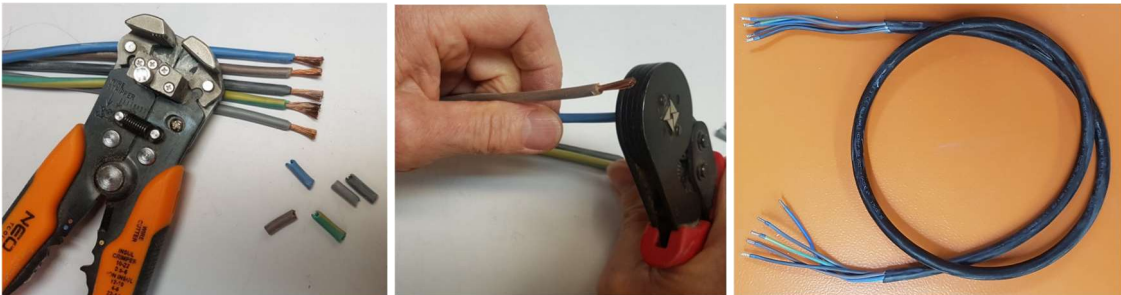
4. Insert wire 3 into the protective pipe "3".
5. Insert wire 4 into the protective pipe "4".
6. Prepare the furnace power cable "5". Measure 18 cm and, using a stripper, remove the insulation.



7. Cut the rubber core from the wire using pliers.



8. Use a wire stripper to remove the insulation from the wires, then use a crimping tool to fix the 4 mm<sup>2</sup> wire ends on both sides.



9. Insert wire 6 into the protective pipe 6.



10. Cut the 4 cm insulation of the LED strip on one side.



11. Cut the LED strip to the nearest soldering point.



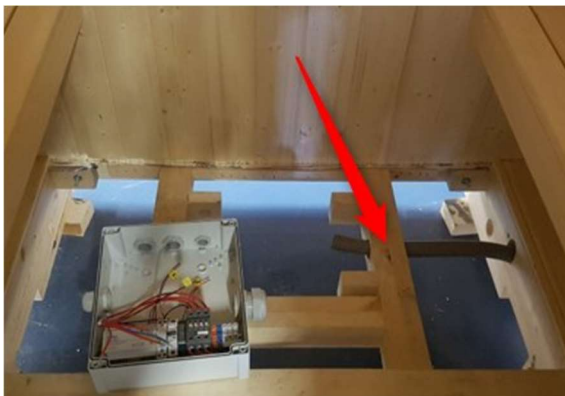
12. Solder the ends of the wire at the soldering points using a precision soldering iron. Add the wire with the black line to the "-".



13. Repeat the operation for the second LED strip.

## II. ARMING AND INSTALLATION OF THE BOX AND MAIN HARNESS "1" IN THE SAUNA

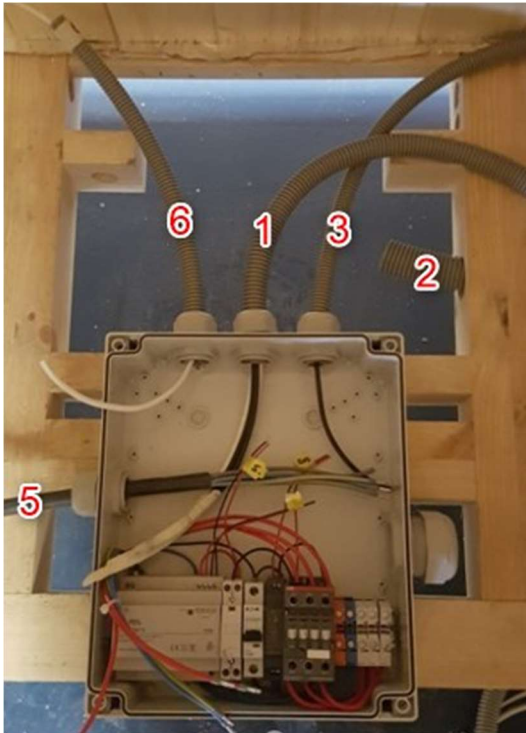
1. Insert protective pipe "2" in the place marked in the photo.





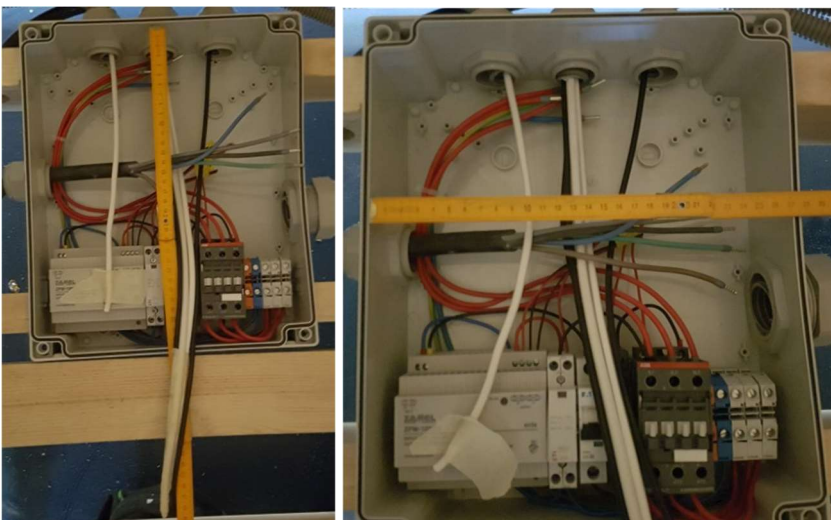
2. Install the wires in the protective pipes to the fuse box using the twist glands, starting from the left:

Protective pipe with wire "6"  
Protective pipe with harness "1"  
Protective pipe with wire "3"  
Furnace power wire 5

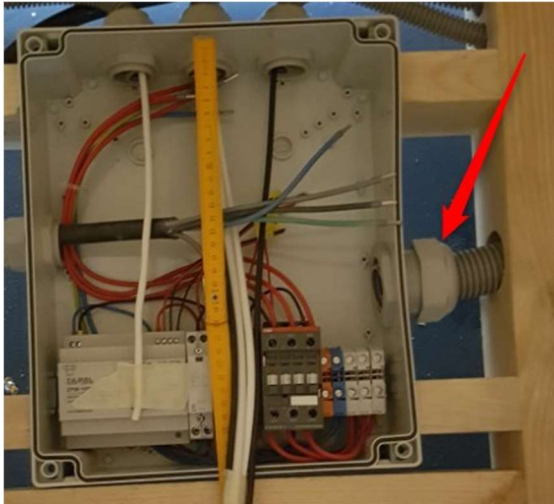


**NOTE: The wires should be routed out of the protective pipes in the box with an allowance as shown in the picture below:**

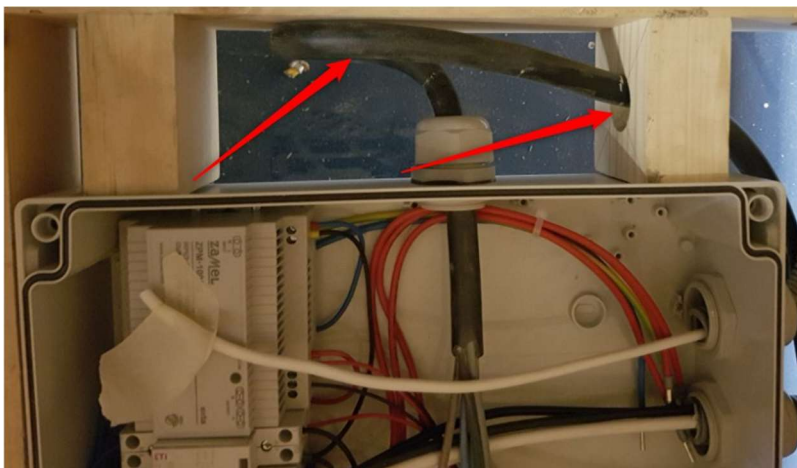
Harness "1" - 50 cm counting the inner top wall of the box  
Wire "3" – 50 cm counting from the inner top wall of the box  
Wire "6" – 30 cm counting from the inner top wall of the box  
Wire "5" – 25 cm counting from the inside left box wall 3



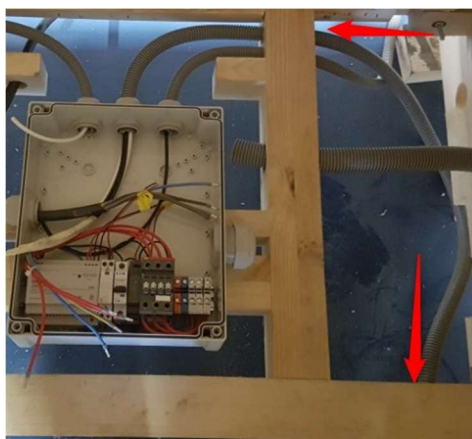
3. Insert the box from the mounting hole, connecting the protective pipe "2" using a torsion gland.



4. Feed wire "5" through the hole in the structure, leaving an allowance as shown in the picture below.



5. Remove the protective pipe "1A" and lead the protective pipe with bundle "1" in the marked holes in the sauna structure.

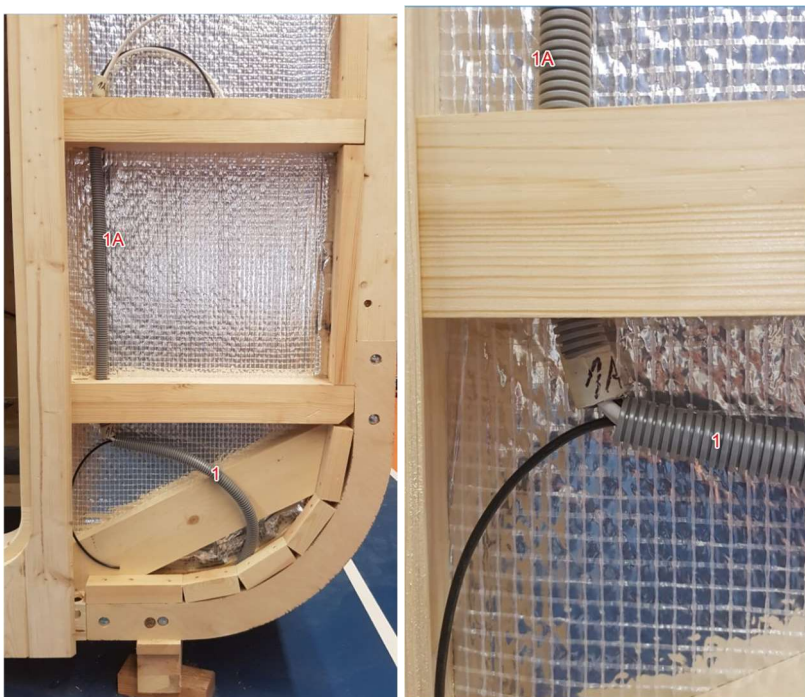




6. Feed the protective pipe with harness "1" through the vias in the structure as illustrated below.

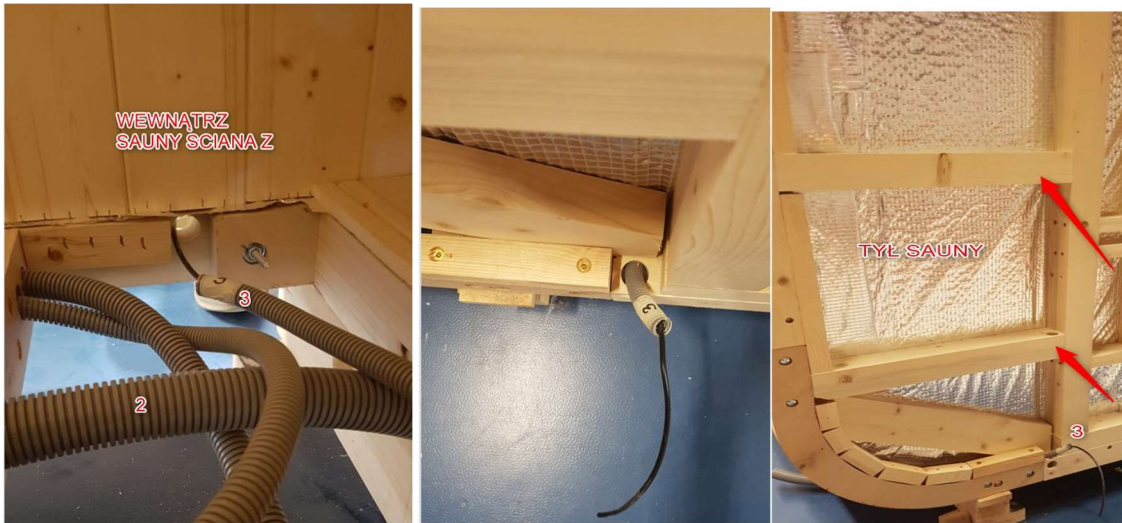


7. Insert protective pipe "1A", leaving the black wire from the harness (to the SOS button) below the beam.



### III. INSTALLATION OF THE "3" HUUM TEMPERATURE SENSOR

1. Insert protective pipe "3" into the hole in the structure and lead it outside, then put the pipe through the grommets in the structure and lead it up to the top of the sauna.



2. Attach the clamp and use it to secure the protective pipe "3".



3. Make a hole phi 10 mm from the inside for the cable entry: 30 cm from the side wall and 24 cm from the top, measured from the places shown in the picture.

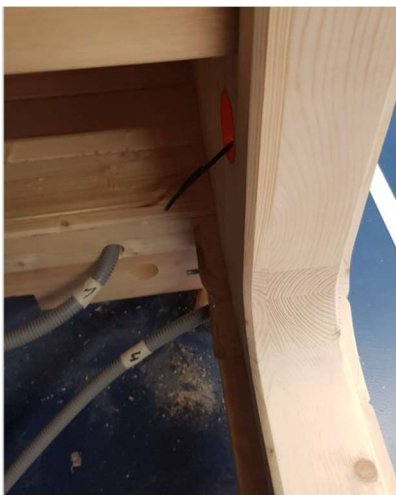


4. Pass the wire through and tie a loop on it to prevent it from slipping out during the installation of the wool and the external facade.



#### IV. LAYING OF LED LIGHT INSTALLATION "4"

1. Pull the protective pipe "4" inside the sauna structure under the threshold of the door opening and extend it evenly outwards on both sides.



2. Drill one phi 5 mm hole on each side at a 45-degree angle. Then widen it with a phi 10 drill bit.  
**NOTE:** The hole must be drilled precisely at a height of 44 cm from the bench seat and 14 cm from the edge of the door opening (it will be covered by the bench backrest).



3. Insert wire "4" in the left hole, wire "7" in the right hole, and end both with a loop.





## V. INSTALLATION OF SAUCE BOX + SWITCH INSTALLATION

1. Measure 13 cm from the door frame and 13 cm from the underside of the bench. Drill a hole for the SOS button box using a hole saw.



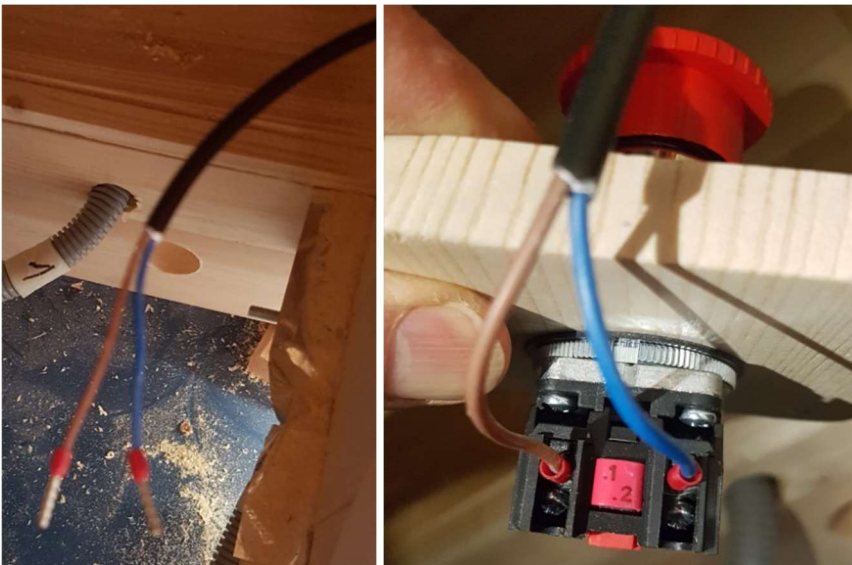
2. Insert the box into the hole, and run the black SOS cable from harness "1" to the box.



3. Mount the SOS button to the base, making sure the retaining ring is firmly tightened.



4. Tack the ends onto the cables and screw to the switch.  
**NOTE:** The wires should be screwed to the side marked in red (poles 1 and 2).



5. Drill four holes with a 2.5 mm drill bit so that the base is mounted horizontally, then using four stainless steel screws phi 3.8 mm, length 25 mm, tighten the base to the sauna paneling.





## VI. INSTALLATION OF THE LIGHT SWITCH BOX

1. Measure the location of the hole for the box so that it is in the middle of the second vertical paneling board (IMPORTANT) at a height of 56 cm from the underside of the bench. Pre-drill, then use a chisel to deflect a piece of the framing board, then deepen the hole and again using the chisel remove the piece of board.



2. Insert the box and feed the harness cables "1" into it, using the protective pipe "1A" and "4".



## VII. DRILLING THE HOLES FOR WIRE "8" OF THE DOOR OPENING DETECTOR HUUM

1. Make a hole with a drill phi 6 mm in the door frame at a height of 72 cm from the threshold of the door opening at an angle so that it comes out on the other side behind the door frame.



2. Insert wire "8" into the box.



## VIII. ASSEMBLY AND CONNECTION OF LED INSTALLATION (RIGHT AND LEFT SIDE)

1. Put heat shrink tubing over both wires of the right LED harness "4", then connect the wires from the LED strip to the wire from the harness and solder them together using a transformer soldering iron.



2. Using a cigarette lighter, secure the wire connections.



3. Glue the ends of the LED strip on both sides using universal silicone.



4. Hide the wire under the paneling. To do this, pull back the bench backrest (mounted on 2 working nails – once the installation is in place, the bench backrest is nailed down according to the bench and backrest installation instructions).



5. Lay the LED strip along the bench backrest.



6. Repeat the above steps for the left side, connecting to wire '7'.

## IX. PREPARATION AND INSTALLATION OF THE ALARM SIREN

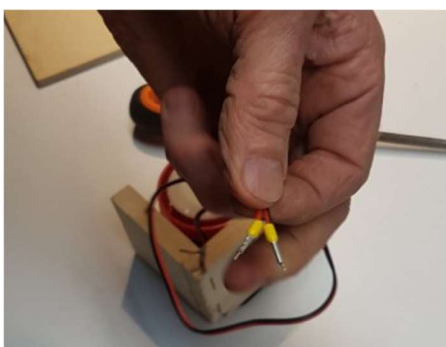
1. Cut a 6 cm wide piece from the phi 110 pipe. Then make an undercut for the siren wire.



2. Make a U-profile from the boards to fit the cut piece of pipe.



3. Crimp 0.75 mm<sup>2</sup> cable lugs onto the siren wires.



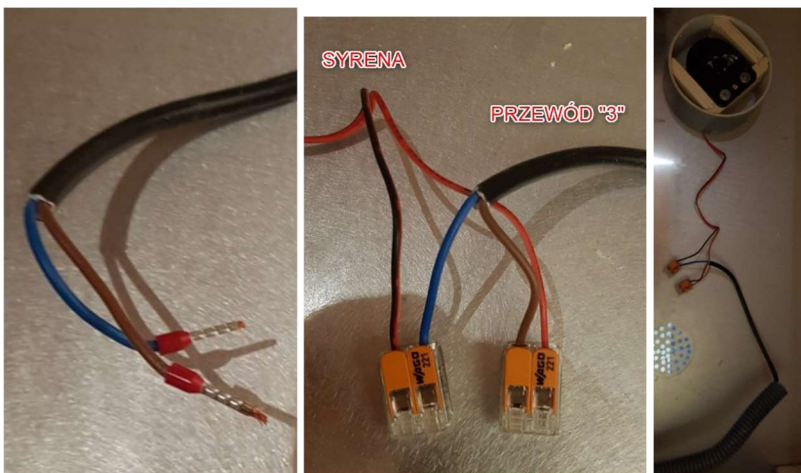
4. Fix the siren to the U-profile with screws phi 4 mm, length 15 mm.



5. Fit double WAGO connectors on each wire.



6. Fit 0.75 mm<sup>2</sup> cable lugs on wire "3". Then connect the wires from the siren to the harness with WAGO connectors according to the colors in the picture.



7. Screw the siren to the structure with a screw phi 4 mm, length 15 mm, and place the wires.



8. Twist the wooden U-profile and lay the wires.

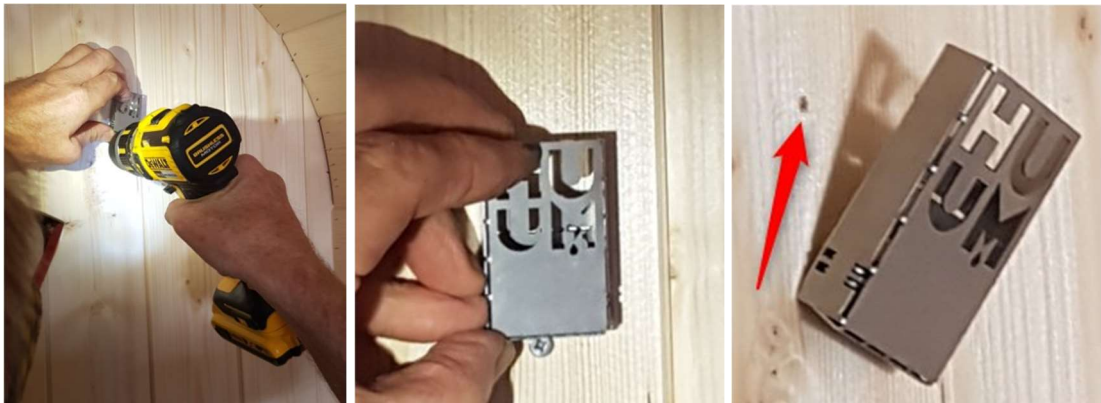


## X. INSTALLATION OF THE HUUM TEMPERATURE SENSOR

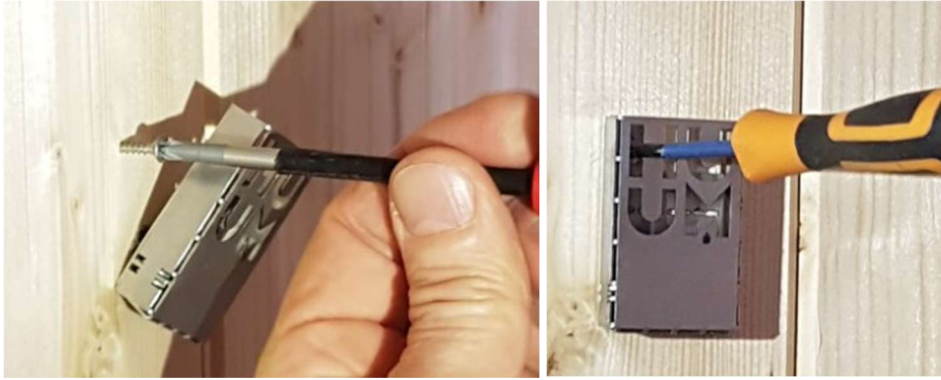
1. Solder the ends of the wires to make it easier to attach them to the sensor. Using a small screwdriver, screw them onto the sensor mounts.



2. Drill a hole using a drill phi 2.5, then screw in the bottom mounting screw. Slide the sensor onto the screw. Once it is level, drill a second hole.



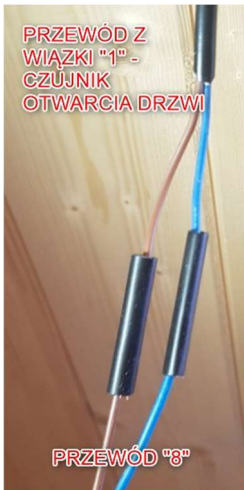
3. Pre-screw the bolt into the hole and insert the sensor, then tighten the bolt through the "H" hole.



4. Check that the sensor is horizontal, level it if necessary.

## XI. INSTALLATION OF THE HUUM DOOR OPENING SENSOR

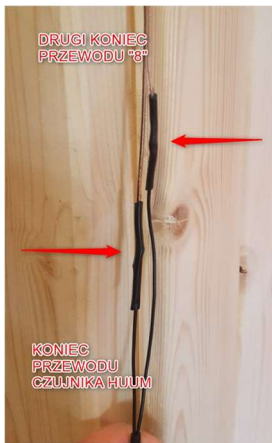
1. Put heat shrink tubing on the connection wire of the door opening sensor from harness "1" (2x 0.75 mm<sup>2</sup>), then solder it to the sensor wire "8" routed through the mounting hole of the box to the door frame.
2. Tuck the wire into the mounting hole on the box.  
**NOTE:** The wire should be tucked outside the box.



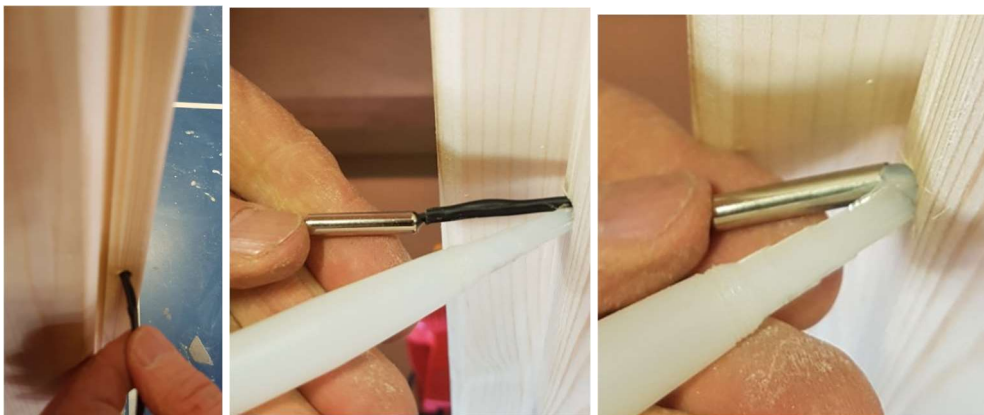
3. Put a shrink wrap on the sensor wire.



4. Connect the other end of the "8" wire to the supplied HUUM sensor by applying heat shrink bands and soldering as shown in the photo below. This will allow the wire to pass through the narrow opening.



5. Insert the wire into the hole from which the "8" wire protrudes, and lubricate the end of the sensor with universal mounting silicone, spreading it over the sensor. Press it into the mounting hole and clean off any excess silicone.



6. Secure the insertion point (position) with paper tape and leave it to dry for 24 h.





## XII. MOUNTING THE WI-FI HUUM CONTROLLER

1. Crimp the cable lugs on the wires to the controller and screw the wires according to the diagram below to the HUUM controller:  
Connector 1 – brown wire  
Connector 2 – ash wire  
Connector 3 – green-yellow wire  
Connector 4 – black



2. Check the attachment of the wires to the sensor, and tighten the fixing screws if necessary. Secure the contacts with PVB varnish.

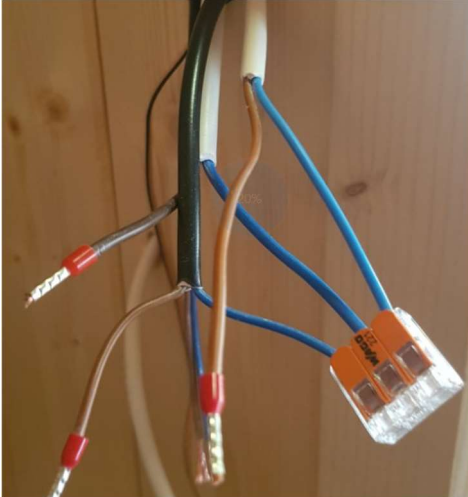


3. When dry, push the wire into the paneling. Remove the round cap, level the controller, and drill the holes using a 2.5 mm drill bit. Then, using two stainless steel screws phi 3 mm, length 30 mm, fasten the controller to the paneling and attach the round cap.

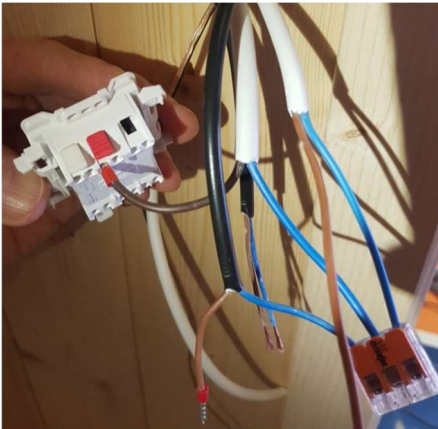


### XIII. CONNECTION OF THE INSTALLATION IN THE BOX AND MOUNTING OF THE LED LIGHT SWITCH

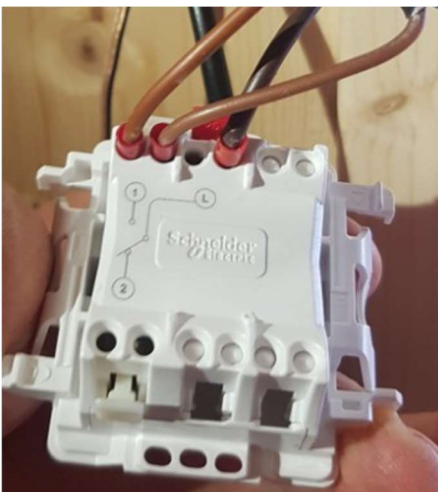
1. Attach the cable lugs to:
  - a) Power wire from harness "1" (2x 1.5 mm<sup>2</sup>)
  - b) LED wire left "4"
  - c) LED wire right "7"
2. Use WAGO connector "3" to connect the "-" wires.



3. Connect the phase from the power wire to the red terminal.



4. Connect the remaining wires to the white terminal.



5. Using a 3.5 mm drill bit, ream the holes in the base of the switch.



6. Pass the switch with the connected LED light wires through the hole in the base.



7. Evenly fit the base to the paneling and drill the screw holes using the same drill bit and screw the base using black screws phi 4 mm and 15 mm long.



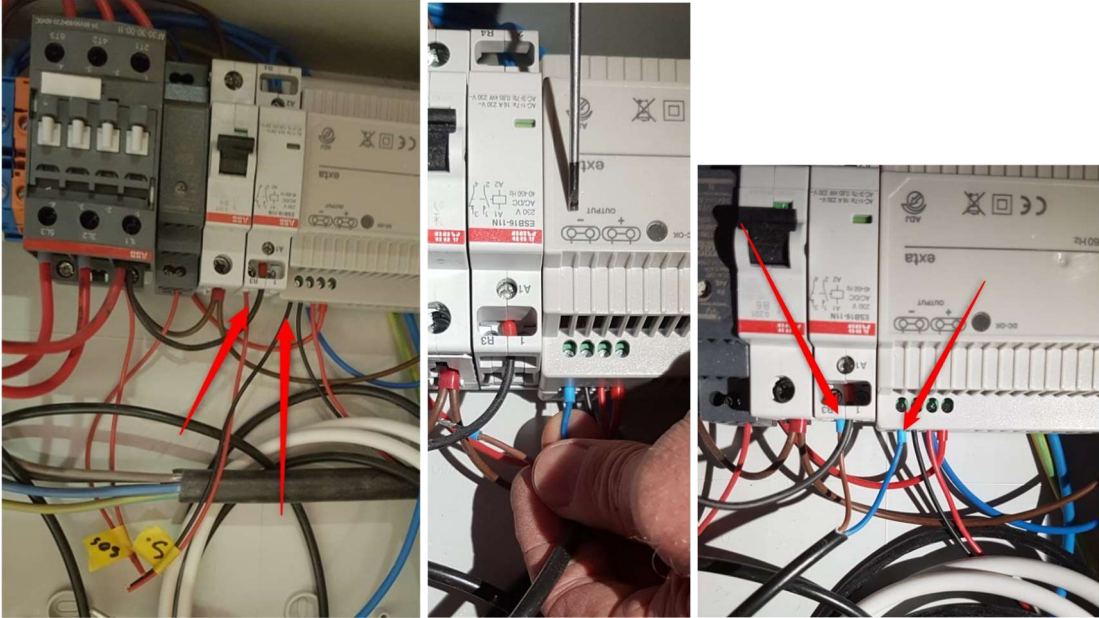
8. Insert the seal and keys.



#### XIV. INSTALLATION IN A BOX

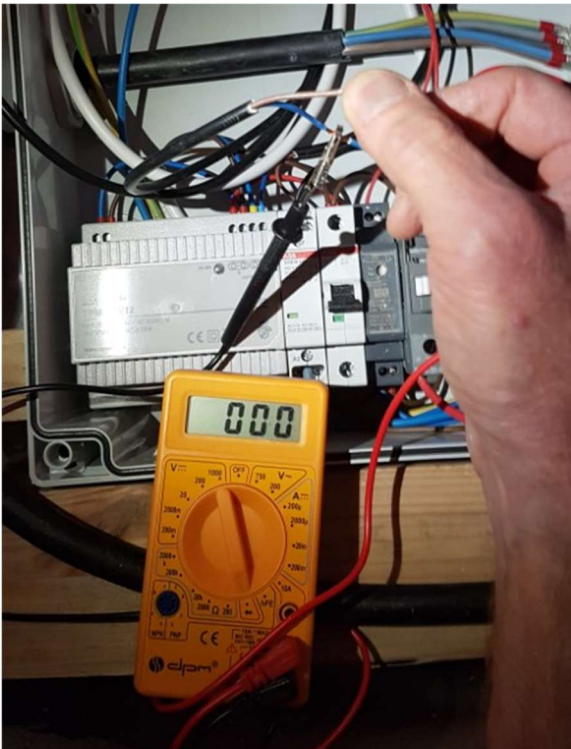
##### A. Connection of SOS siren installation

1. Fit cable lugs onto the wire.
2. Find the wire marked "S" in the box, and insert the wires in its place according to the pictures below.

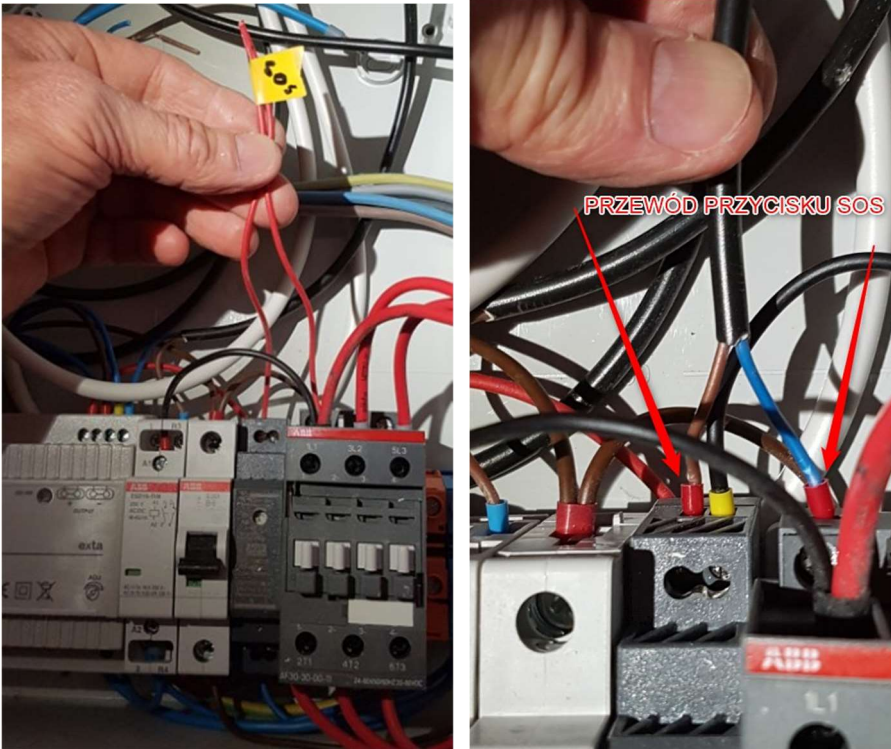


##### B. Connection of SOS button installation

1. Identify the wire from harness "1" 2x 0.75 mm<sup>2</sup> to the SOS switch. To do this, switch on the SOS switch and check with a multimeter that there is a transition on the wire.

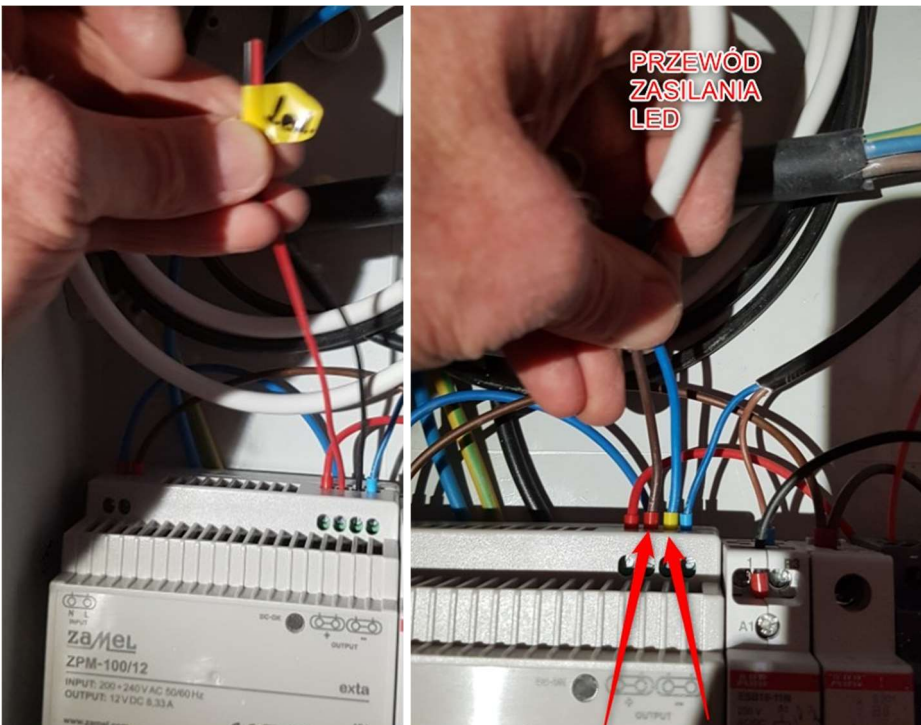


2. Once you have identified the wire, fit the cable lugs.
3. Find the wire marked "SOS" in the box, and insert the wires in its place as shown in the photos below.



### C. Connecting the power supply for the LED strips

1. Fit the 2x 1.5 mm<sup>2</sup> wires from harness "1" with cable lugs.
2. Find the wire marked "LED" in the box, and insert the wires in its place.

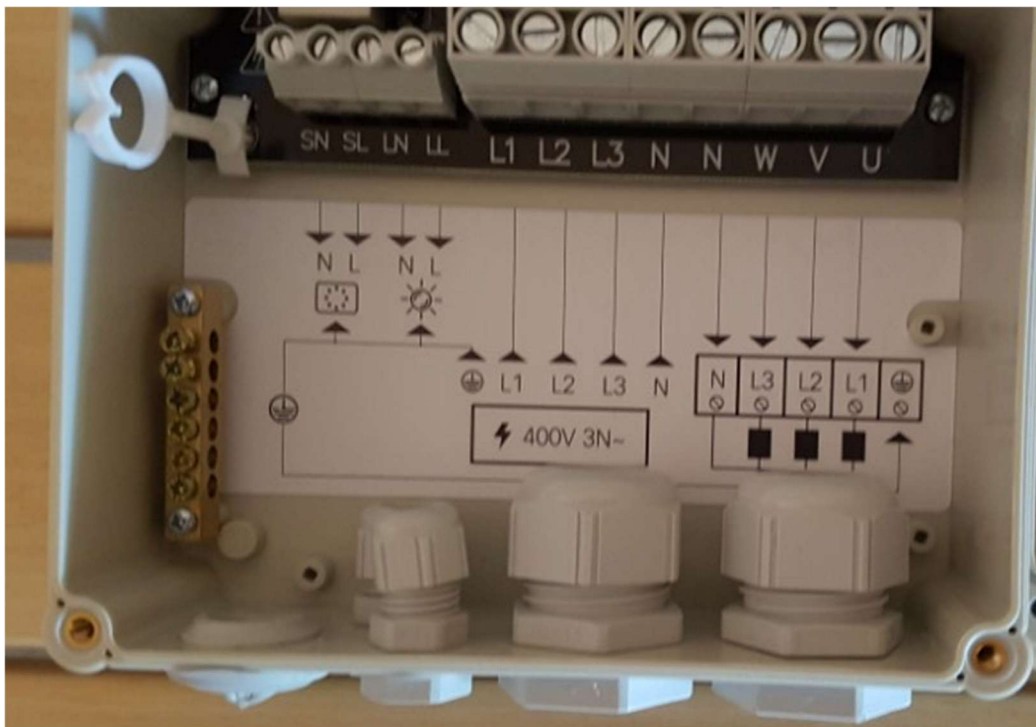


### D. Preparation of the HUMM control unit and its connection to the installation

1. Remove the screws securing the cover of the control unit, and prepare only the components shown in the photo for assembly. The rest is unnecessary.



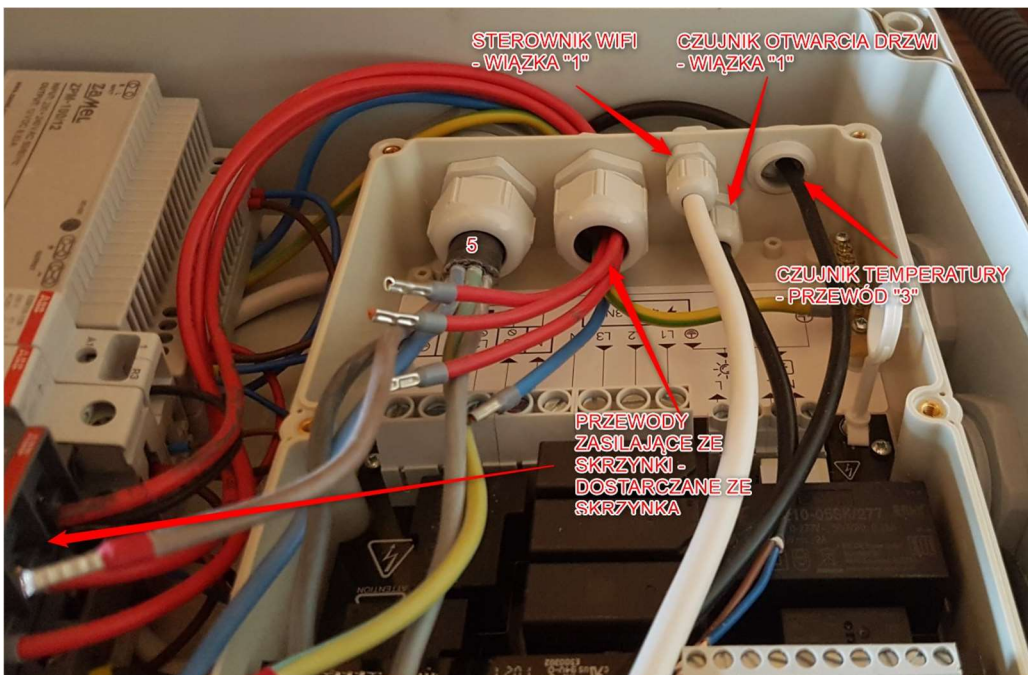
2. Assemble the torsion glands and rubber glands as shown in the photo.



3. Remove the two screws so that there is clearance for the wire. Tighten the others (including the silver mounting screws) so that they are not loose.

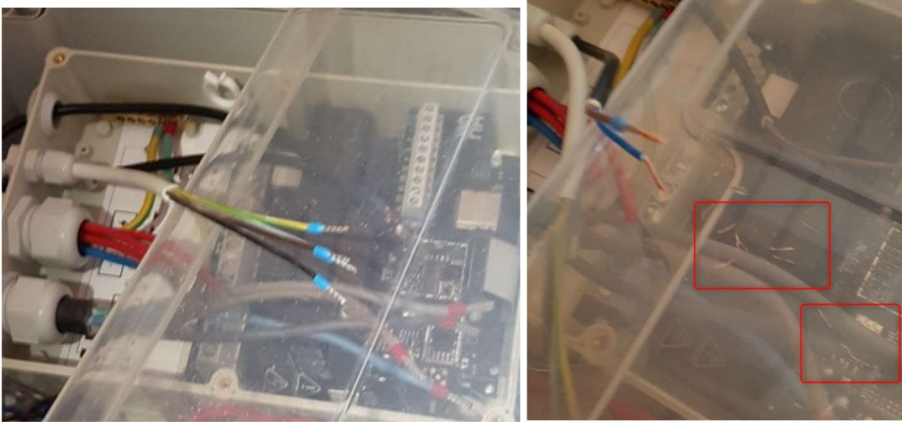


4. Feed the cables into the control unit through the glands in the following order:
  - a) Wire "5" to the furnace supply through the first large choke.
  - b) Wire from harness "1" to the door-opening sensor through the small gland at the bottom
  - c) Wire from harness "1" to the Wi-Fi controller via the small choke from above
  - d) Wire from harness "3" to temperature sensor through rubber gland

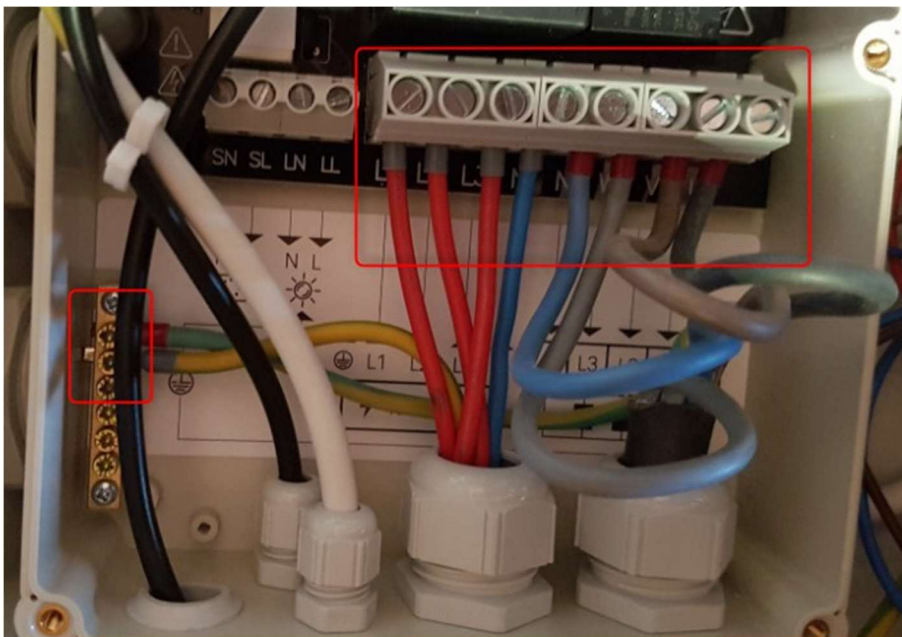


5. Attach the cable lugs to the wires.
 

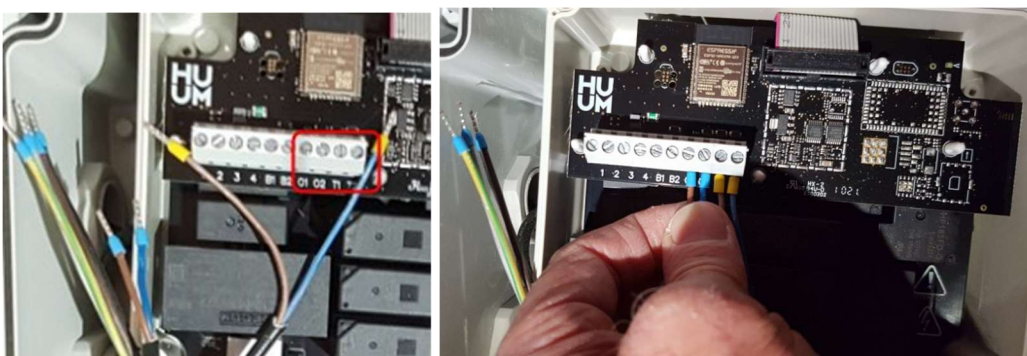
**NOTE:** Place a tray under the area where the cable lugs and shear wires are inserted to prevent copper shear debris from entering the control unit.



6. Connect the power and earth wires from the box and wire "5".



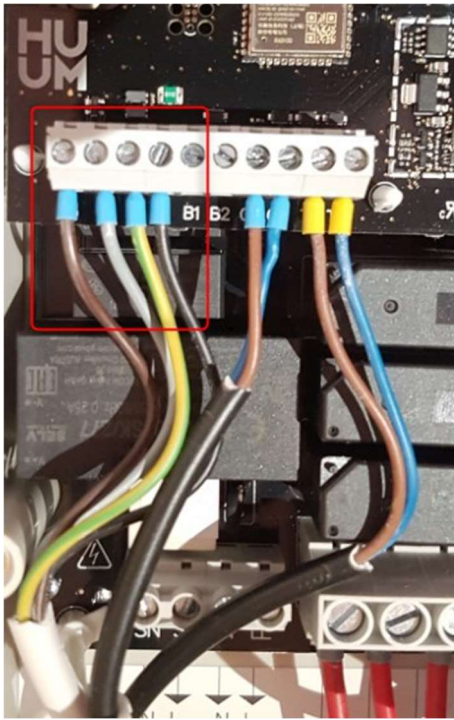
7. Connect the temperature sensor wire: T1 and T2 and the door opening wire: O1 and O2 according to the diagram in the photo.



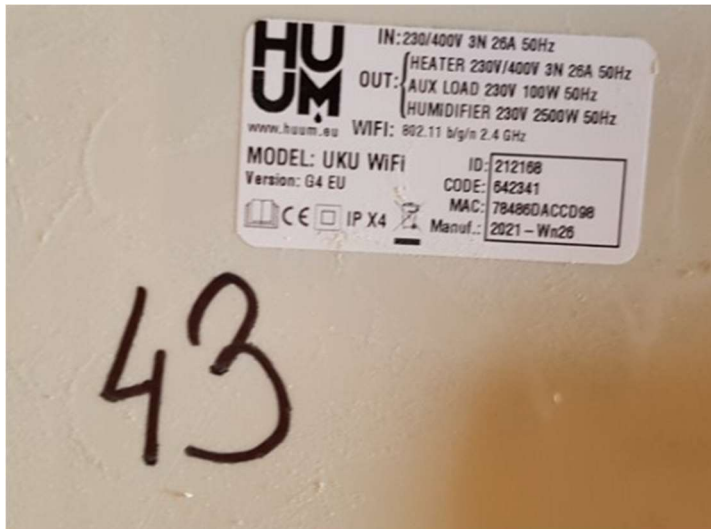
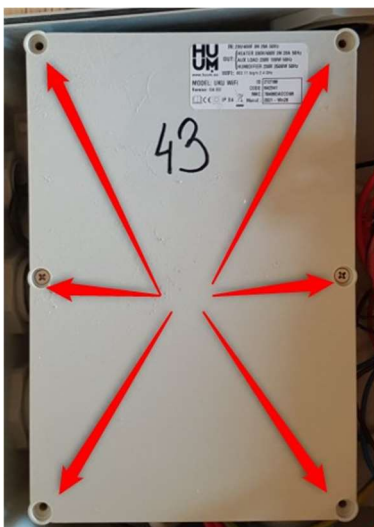
8. Connect the wire to the Wi-Fi controller, according to the diagram in the photo (cable colors):

- Connector 1 – brown
- Connector 2 – grey
- Connector 3 – green-yellow
- Connector 4 – black



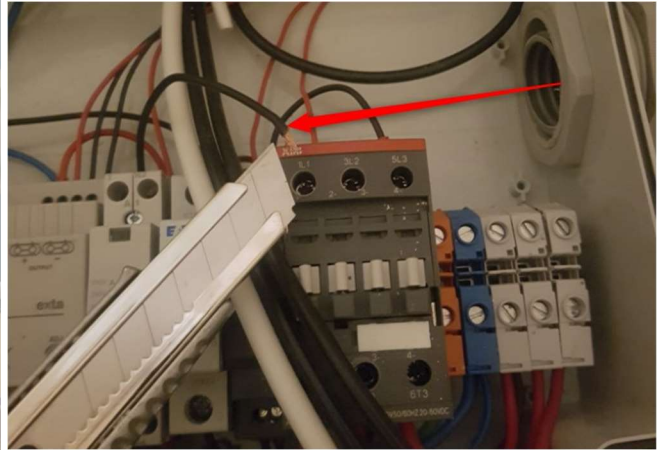
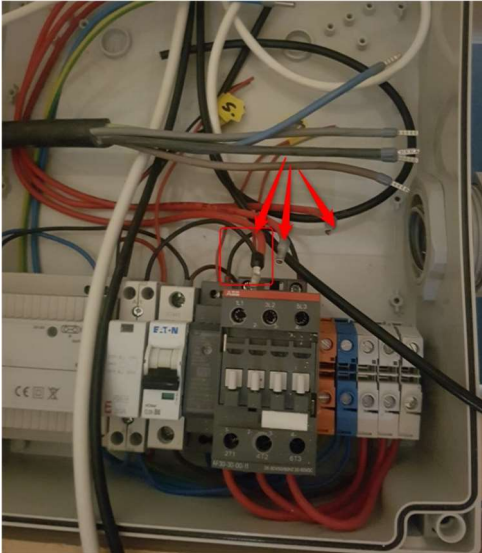


9. Check all wire connections to the control panel. If necessary, tighten the wire fixing with a screwdriver.
10. Replace the cover and fasten it with the screws provided. Write the sauna's serial number on the cover with a marker and take a photo of the label. Send the photo to: [radoslaw.wojcik@suncubesauna.com](mailto:radoslaw.wojcik@suncubesauna.com)



### E. Connecting the HARVIA furnace installation

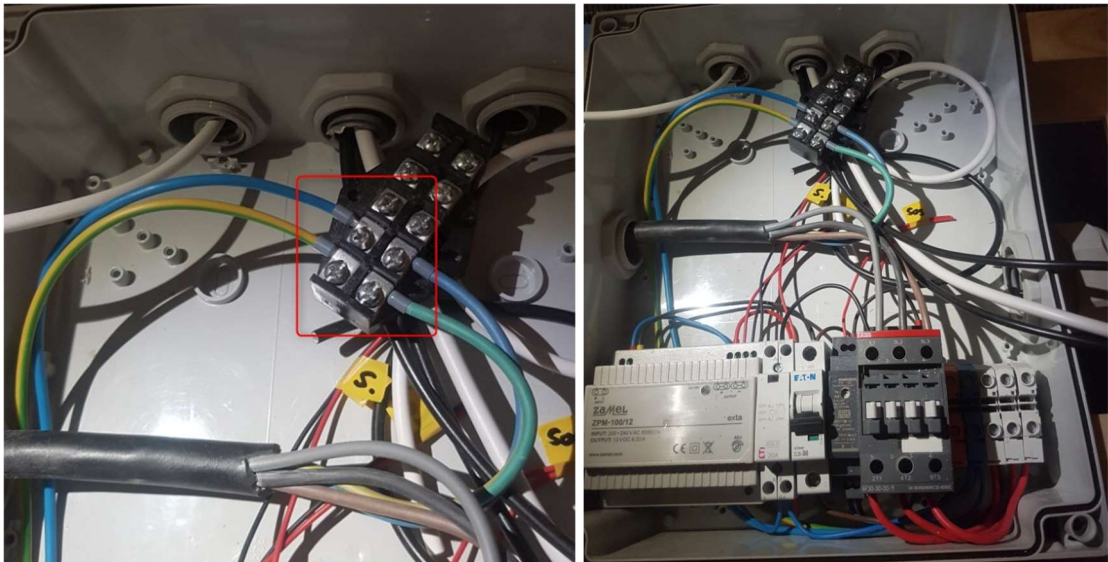
1. Remove the red cables from the contactor. One of them is bridged to the black wire, cut it off, and put a cable lug on it.



2. Connect the phase wires to the contactor in place of the wires you removed, remember to insert the black wire from the photo above.



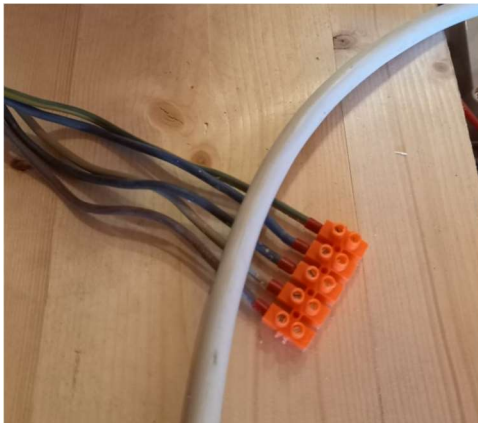
3. Using the 400 V junction block, connect the wires from the box to the wires from cable "5" (blue and green).



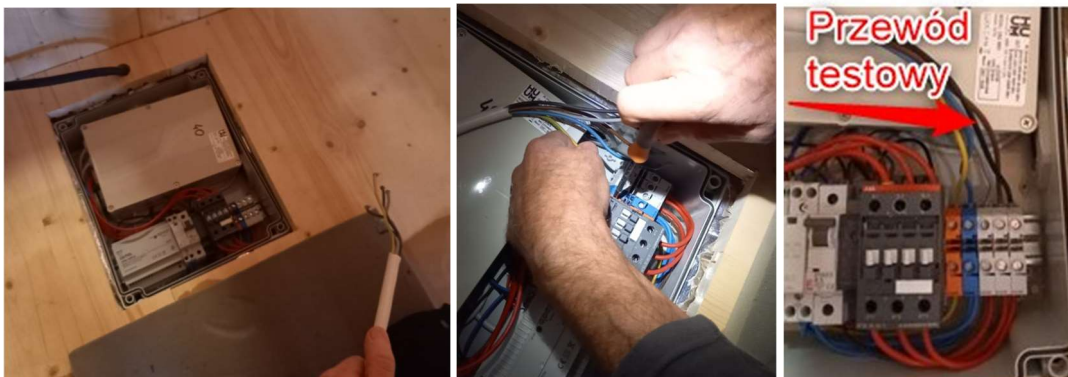
4. Connect the siren, SOS button, and LED light supply analogously to the HUUM installation – see section XIV points A, B, and C.

#### XV. FINAL TEST OF THE ELECTRICAL INSTALLATION CONNECTIONS

1. Screw on the furnace wire terminals "5" for voltage test purposes.



2. Connect the 400 V power (test) wire to the wiring in the box.  
**NOTE:** Make sure there is no current flowing in the wire before connecting.
3. Screw the wires into the junction box. Switch on the power supply.



- Using the light switch, check the operation of the LED bench backlight.



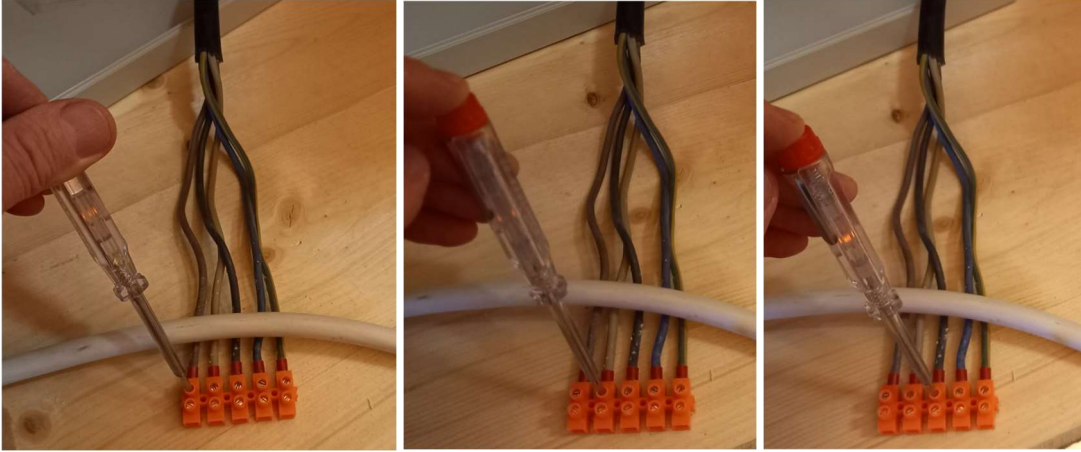
- Unlock and press the SOS button – make sure you can hear the emergency siren.
- Heat the air with a lighter around the HUMM temperature sensor to verify its operation. The temperature shown on the display should increase when heated.



- Check the operation of the door closure sensor. The display will go out "DOOR OPEN" when the door is closed.
- Check the operation of the furnace installation "5", to do this press the round button.  
**NOTE:** The door must be closed to perform the test.



9. Check the phase on the three wires (brown, grey, black) of harness "5" using a tester.



10. Disconnect the power supply to the 400 V mains cable.
11. Remove the cube from the installation.
12. Close the box and turn the cover with the screws provided.



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