

READ AND SAVE THESE INSTRUCTIONS

INSTALLATION MANUAL

SPA control unit
Condair **Delta SPA Control Box**

Humidification, Dehumidification
and Evaporative Cooling

 **condair**

Thank you for choosing Condair

Installation date (MM/DD/YYYY):

Commissioning date (MM/DD/YYYY):

Site:

Model:

Serial number:

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1 Introduction

1.1 To the very beginning

We thank you for having purchased the **Condair Delta SPA Control Box**.

The Condair Delta SPA Control Box incorporates the latest technical advances and meets all recognized safety standards. Nevertheless, improper use of the Condair Delta SPA Control Box may result in danger to the user or third parties and/or damage to property.

To ensure a safe, proper, and economical operation of the Condair Delta SPA Control Box, please observe and comply with all information and safety instructions contained in the present documentation as well as in the separate documentations of the components used together with the Condair Delta SPA Control Box.

If you have questions after reading this documentation, please contact your Condair representative. They will be glad to assist you.

1.2 Notes on the installation manual

Limitation

The subject of this installation manual is the Condair Delta SPA Control Box in its different versions. The various options and accessories are only described insofar as is necessary for proper operation of the equipment. Further information on options and accessories can be obtained in their respective instructions.

This installation manual is restricted to the **installation** of the Condair Delta SPA Control Box and is meant for **well trained specialists being sufficiently qualified for their respective work**.

This installation manual is supplemented by various separate items of documentation (operation manual, spare parts list, etc.), which are included in the delivery as well. Where necessary, appropriate cross-references are made to these publications in the installation manual.

Symbols used in this manual



CAUTION!

The catchword "CAUTION" used in conjunction with the caution symbol in the circle designates notes in this installation manual that, if neglected, may cause **damage and/or malfunction of the unit or damage to property**.



WARNING!

The catchword "WARNING" used in conjunction with the general caution symbol designates safety and danger notes in this installation manual that, if neglected, may cause **injury to persons**.



DANGER!

The catchword "DANGER" used in conjunction with the general caution symbol designates safety and danger notes in this installation manual that, if neglected, may lead to **severe injury or even death of persons**.

Safekeeping

Please safeguard this installation manual in a safe place, where it can be immediately accessed. If the equipment changes hands, the documentation must be passed on to the new operator.

If the documentation gets misplaced, please contact your Condair representative.

Language versions

This installation manual is available in other languages. Please contact your Condair representative for information.

2 For your safety

General

Every person, who is in charge of the installation work on the Condair Delta SPA Control Box must have read and understood this installation manual and the Condair Delta SPA Control Box operation manual before carrying out any work.

Knowing and understanding the contents of this installation manual as well as the operation manual of the Condair Delta SPA Control is a basic requirement for protecting personnel against any kind of danger, to prevent faulty operation, and to operate the unit safely and correctly.

All icons, signs and markings applied to the Condair Delta SPA Control Box must be observed and kept in readable state.

Qualification of personnel

All installation work described in this installation manual **may only be carried out by specialists who are well trained and adequately qualified and are authorised by the customer.**

For safety and warranty reasons any action beyond the scope of this manual must be carried out only by qualified personnel authorised by Condair Group AG.

It is assumed that all persons working with the Condair Delta SPA Control Box are familiar and comply with the appropriate regulations on work safety and the prevention of accidents.

Intended use

The Condair Delta SPA Control Box is intended exclusively for the control of steam showers, steam baths, caldariums, Rasul, Fin sauna, Bio sauna and corresponding dual cabin applications according to the information contained in this installation manual and in the SPA control software operation manual within the specified operating conditions. Any other type of application, without the written consent of Condair Group AG, is considered as not conforming with the intended purpose and may lead to the Condair Delta SPA Control Box becoming dangerous and will void any warranty.

Operation of the equipment in the intended manner requires **that all the information contained in this installation manual and in the SPA control software operation manual are observed (in particular all safety instructions)**.

Danger that may arise from the Condair Delta SPA Control Box



DANGER!

Danger of electric shock!

The Condair Delta SPA Control Box is mains powered. Live parts may be exposed when the unit is open. Touching live parts may cause severe injury or danger to life.

Prevention: The Condair Delta SPA Control Box must be connected to the mains only after all mounting and installation work has been completed, all installations have been checked for correct workmanship and the unit is closed and properly locked.

Preventing unsafe operation

All persons working with the Condair Delta SPA Control Box are obliged to report any alterations to the unit that may affect safety to the owner without delay and to **secure the Condair Delta SPA Control Box against accidental power-up.**

Prohibited modifications to the unit

No modifications must be undertaken on the Condair Delta SPA Control Box without the express written consent of Condair.

For the replacement of defective components use exclusively **original accessories and spare parts** available from your Condair representative.

3 Product Overview

3.1 Application overview of the Condair Delta SPA Control Box

The Condair Delta SPA Control Box is available in different versions for different applications in the SPA sector.

Application	Description	Control of the cabin climate	Accessories												
			Light 1 (Cleaning or color light)	Light 2 (Cleaning or color light)	Light		Ventilation		Duftstoff		Additional relays		Shower		Heating
Steam bath	Steam bath cabin supplied with steam from a steam generator. The humidity in the steam cabin is almost 100%. The heat is generated by the supplied steam and the optional bench heating in the cabin.	Temperature control up to 50 °C	x	x	x	x	x	x	(x)	x	-	(x)	-	-	-
Caldarium	Steam cabin supplied with steam from a steam generator. The humidity in the cabin is almost 70%. The heat is generated by the wall heating and the bench heating in the cabin.	Humidity control up to 80% rh	x	x	x	x	x	x	-	-	-	x	x	-	-
Rasul	Steam cabin supplied with steam from a steam generator. The humidity in the cabin is almost 70%. The heat is generated by the wall heating and the bench heating in the cabin.	Humidity control up to 80% rh	x	x	x	x	x	-	-	-	x	x	x	-	-
Fin sauna	Sauna cabin with sauna heater. The heat in the sauna cabin is generated by the sauna heater.	Temperature control up to 110 °C	x	x	x	x	-	-	x	x	-	-	-	-	-
Bio sauna	Sauna cabin with sauna heater and steam. The heat in the sauna cabin is generated by the sauna heater. The steam is generated via a water reservoir integrated in the sauna heater or an external steam generator.	Temperature and humidity control	x	x	x	x	x	x	x	x	-	-	-	-	x
Dual cabin (Small)	Dual cabin with steam bath and Fin sauna. Both cabins can be controlled via a single SPA Display.	Steam bath temperature control up to 50 °C	x	x	-	x	x	-	x	-	-	-	-	-	-
		Fin sauna temperature control up to 110 °C	x	x	-	x	-	-	x	-	-	-	-	-	-
Dual cabin (medium)	Dual cabin with two arbitrarily selectable cabin types. Both cabins can be controlled via a single SPA Display.	Cabin 1	Any single cabin (e.g., steam bath, see above)												
		Cabin 2	Any single cabin (z.B. Bio sauna, see above)												

3.2 Versions of the Condair Delta SPA Control Box

Application / Cabin type	Hardware equipment Condair Delta SPA Control Box	Steam generation / Steam generator	Sauna heating
Steam bath without bench heating	Condair Delta SPA Control Box with standard equipment	Steam generator (Condair Sigma, Condair Omega Pro, etc.)	—
	Condair Delta SPA Control Box with standard equipment	Condair Omega with Omega Control	—
Steam bath with bench heating	Condair Delta SPA Control Box with equipment for bench heating	Steam generator (Condair Sigma, Condair Omega Pro, etc.)	—
	Condair Delta SPA Control Box with equipment for bench heating	Condair Omega with Omega Control	—
Caldarium	Condair Delta SPA Control Box with equipment for bench and heating	Steam generator (Condair Sigma, Condair Omega Pro, etc.)	—
	Condair Delta SPA Control Box with equipment for bench and heating	Condair Omega with Omega Control	—
Rasul	Condair Delta SPA Control Box with equipment for bench and heating	Steam generator (Condair Sigma, Condair Omega Pro, etc.)	—
	Condair Delta SPA Control Box with equipment for bench and heating	Condair Omega with Omega Control	—
Fin sauna	Condair Delta SPA Control Box with equipment for Fin sauna	—	Third-party sauna heater (heat power is switched directly via SPA Control)
	Condair Delta SPA Control Box with standard equipment	—	Third-party sauna heater (sauna heater controlled by analog signal)
Bio sauna	Condair Delta SPA Control Box with equipment for Fin sauna	Steam generator (max. 2 kW evaporative power, e.g. Condair Omega 2 kg/h, with Omega Control)	Third-party sauna heater (heat power is switched directly via SPA Control)
	Condair Delta SPA Control Box with equipment for Bio sauna	Steam generation via an integrated water reservoir in the sauna heater	Third-party sauna with integrated water reservoir (heat power is switched directly via SPA Control)
	Condair Delta SPA Control Box with standard equipment	Steam generator (max. 2 kW evaporative power, e.g. Condair Omega 2 kg/h, with Omega Control)	Third-party sauna heater (sauna heater controlled by analog signal)
Dual cabin small (steam bath & sauna)	Condair Delta SPA Control Box with equipment for Fin sauna	Steam generator (Condair Sigma, Condair Omega Pro, etc.)	Third-party sauna heater (heat power is switched directly via SPA Control)
	Condair Delta SPA Control Box with standard equipment	Steam generator (Condair Sigma, Condair Omega Pro, etc.)	Third-party sauna heater (sauna heater controlled by analog signal)
	Condair Delta SPA Control Box with equipment for Fin sauna	Condair Omega with Omega Control	Third-party sauna heater (heat power is switched directly via SPA Control)
	Condair Delta SPA Control Box with standard equipment	Condair Omega with Omega Control	Third-party sauna heater (sauna heater controlled by analog signal)
Dual cabin medium		Two single cabins can be combined as desired. See the corresponding settings in the list above or in the manual for the Condair Omega steam generator.	

3.3 System / application overviews

The following chapters contain the corresponding system / application overviews. The following symbols are used in these system overviews.

	Fan 1 / 2 (Control of supply or exhaust fan)		On/Off button SPA operation
	Light 1 / 2 (Control of cleaning or color light)		Steam (Steam generated by an external steam generator or the integrated water reservoir of the Bio sauna)
	Heating 1 / 2 (e.g. control of sauna heater, bench heating, etc.)		Shower (Control of the cabin shower for Rasul application)
	Fragrance 1 / 2 (Control of fragrance pump 1 / 2)		Speaker (Control of music)
	Temperature sensor (Measurement of cabin temperature, bench temperature, etc.)		Power supply
	Humidity sensor (Measurement of cabin humidity)		Water supply steam generator
	Door contact		Water drain steam generator

3.3.1 Condair Delta SPA Control Box for steam bath application

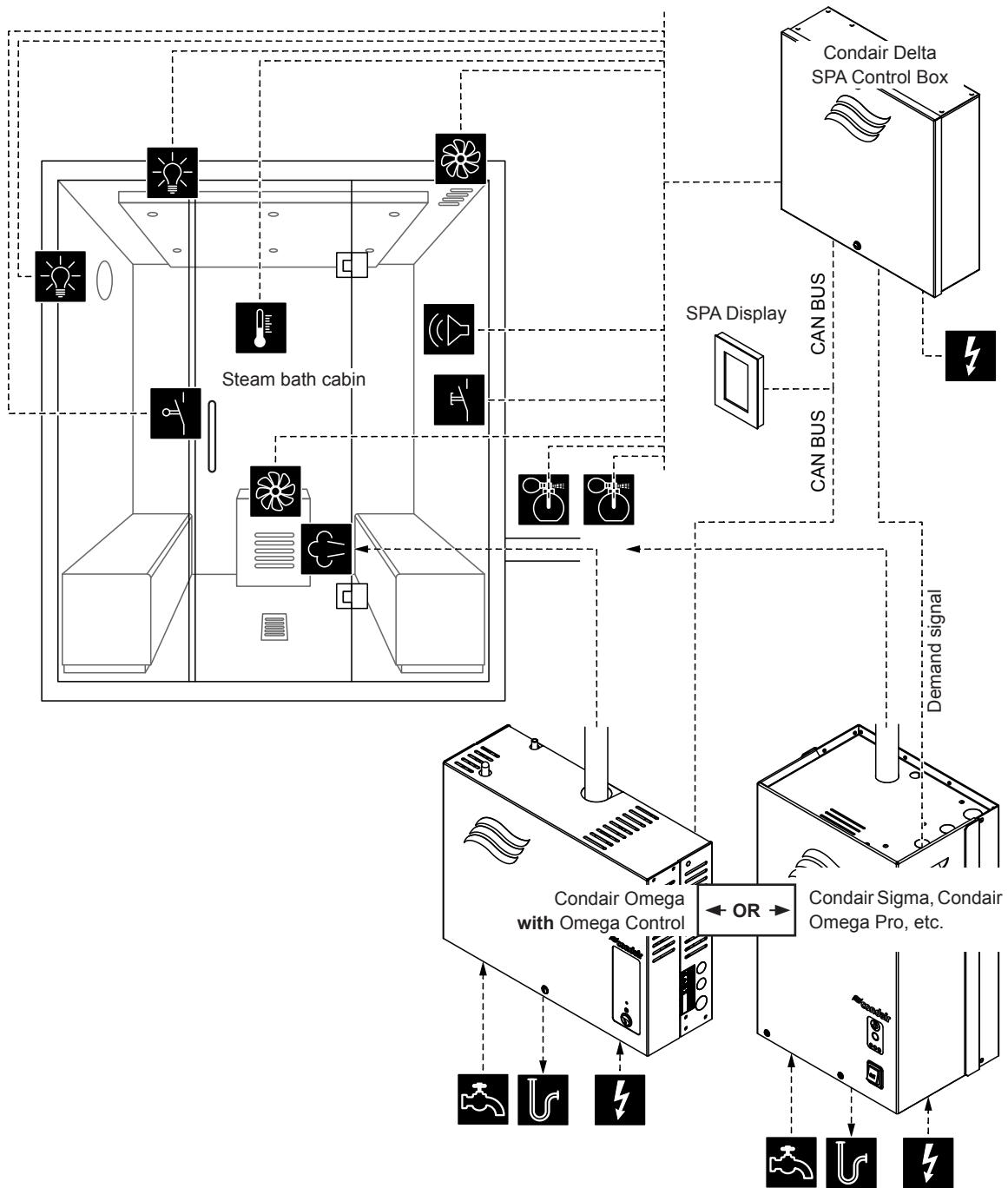


Fig. 1: Condair Delta SPA Control Box for steam bath application

3.3.2 Condair Delta SPA Control Box for steam bath application with optional bench heating

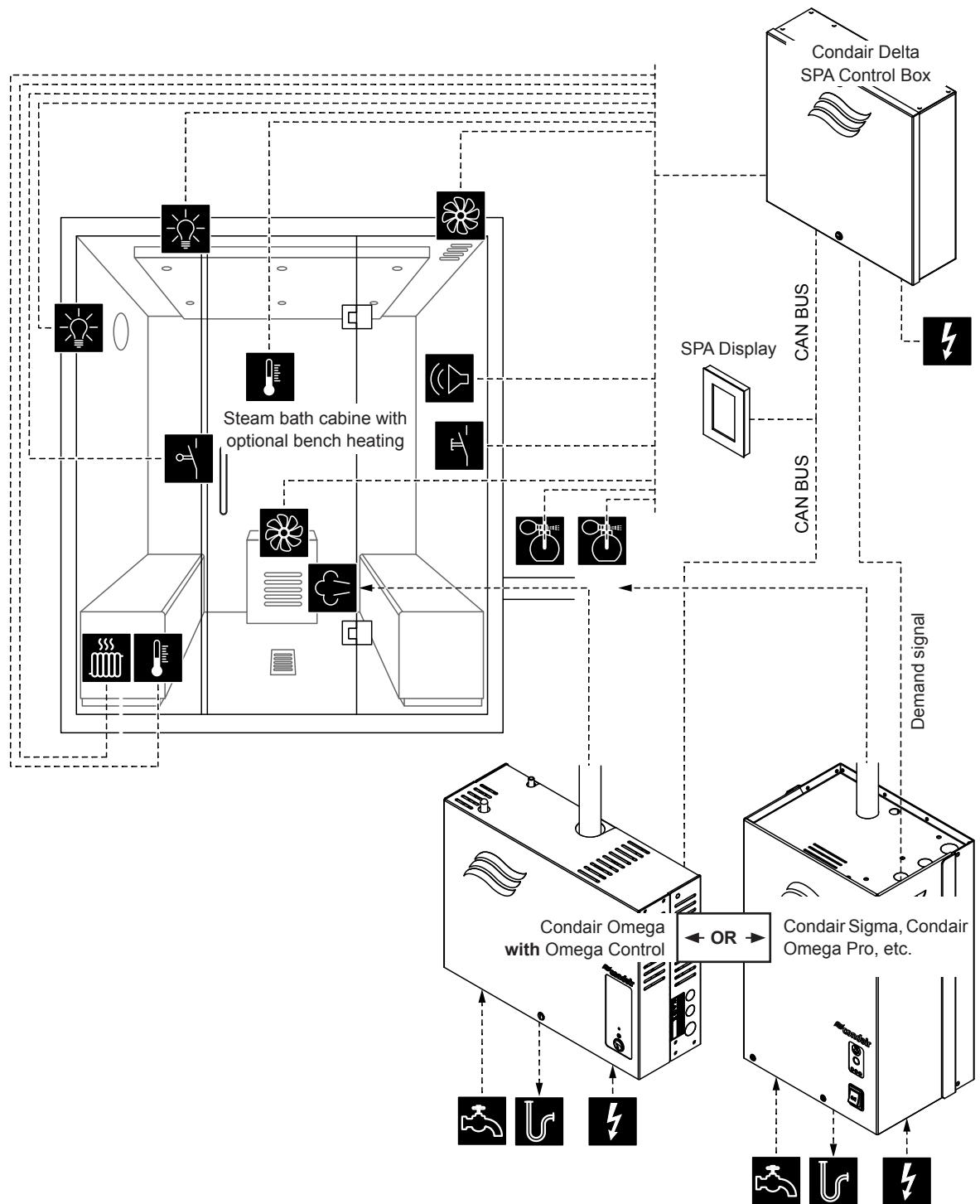


Fig. 2: Condair Delta SPA Control Box for steam bath application with optional bench heating

3.3.3 Condair Delta SPA Control Box for Caldarium application

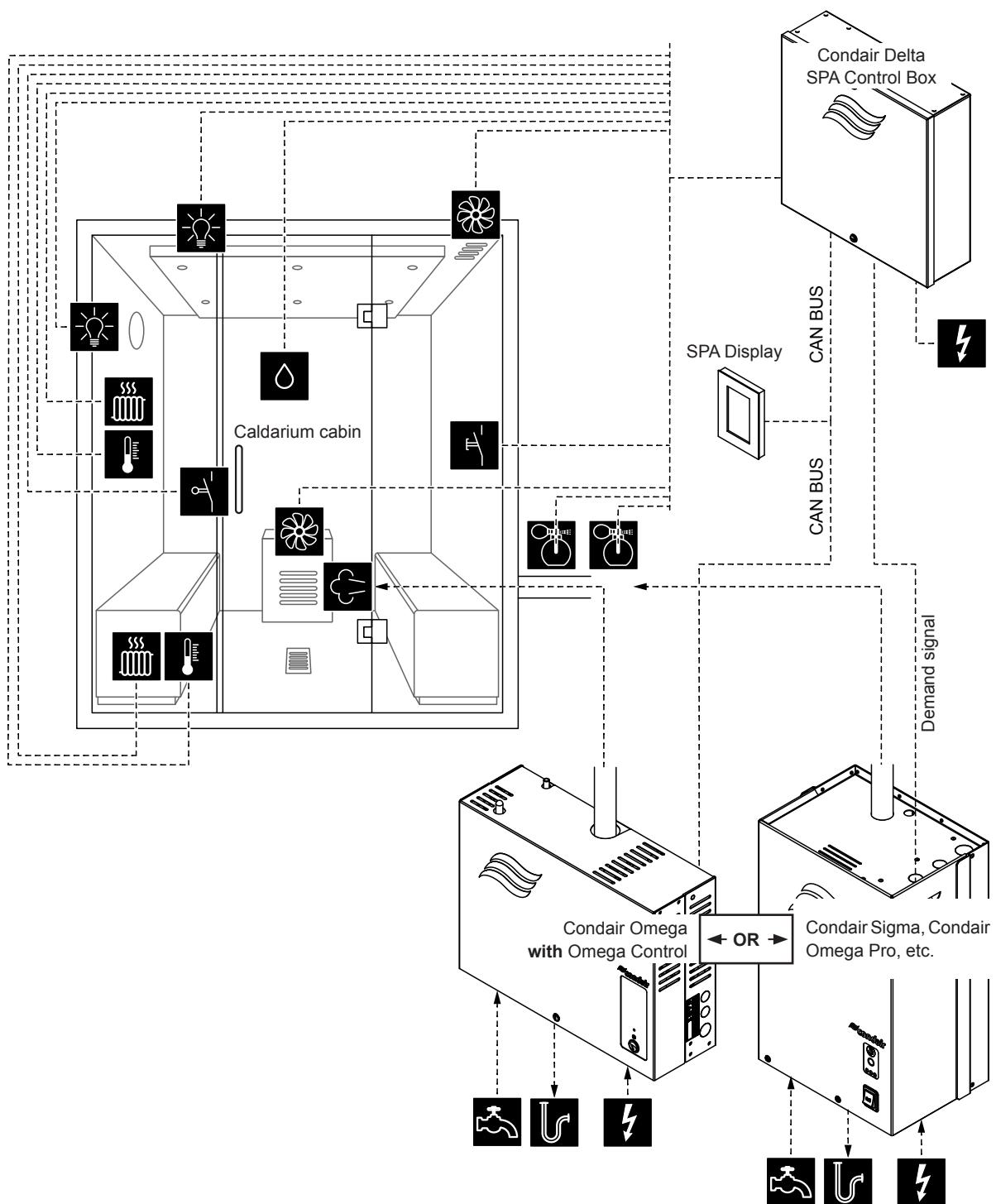


Fig. 3: Condair Delta SPA Control Box for Caldarium application

3.3.4 Condair Delta SPA Control Box for Rasul application

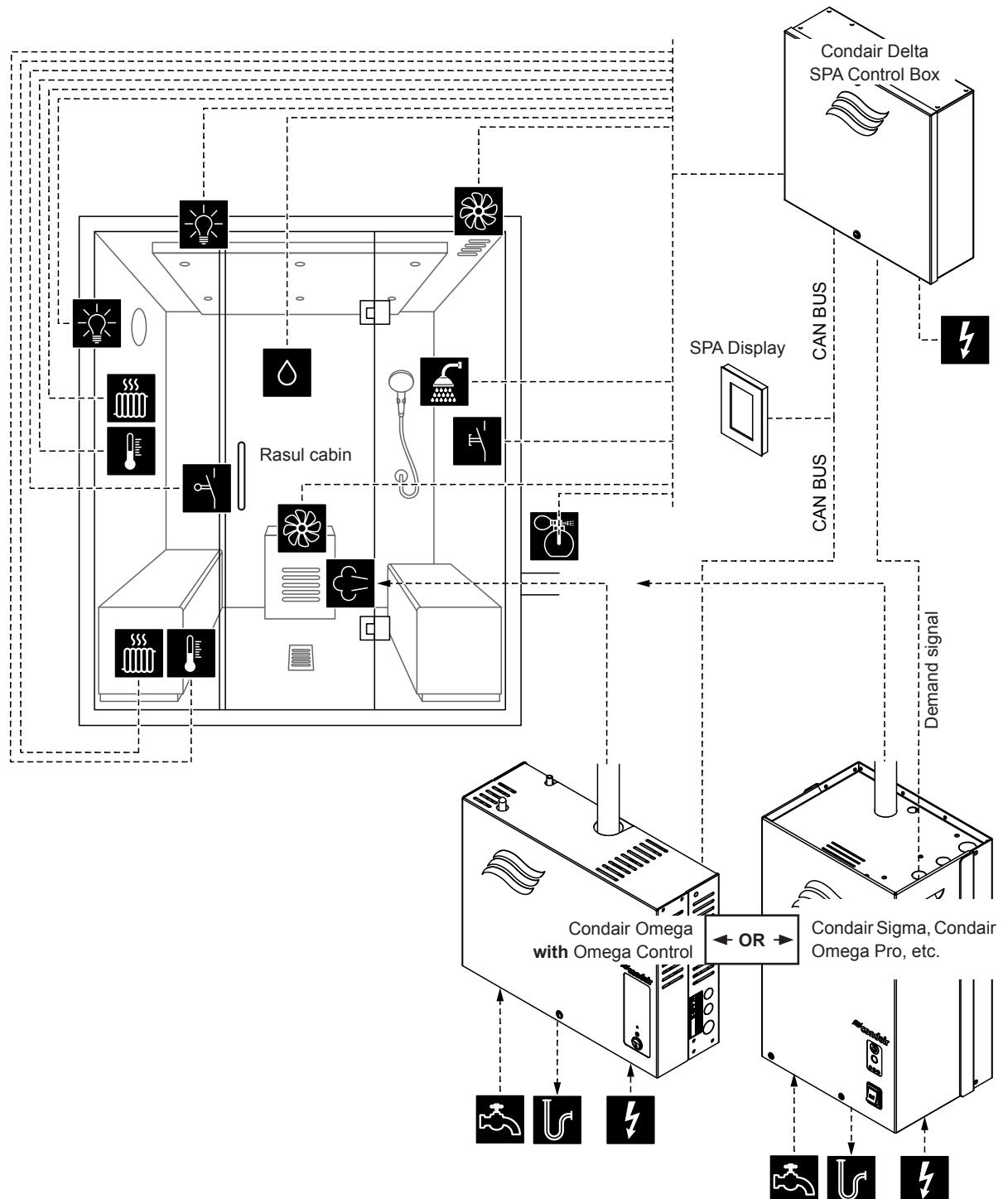


Fig. 4: Condair Delta SPA Control Box for Rasul application

3.3.5 Condair Delta SPA Control Box for Bio sauna application with integrated water reservoir

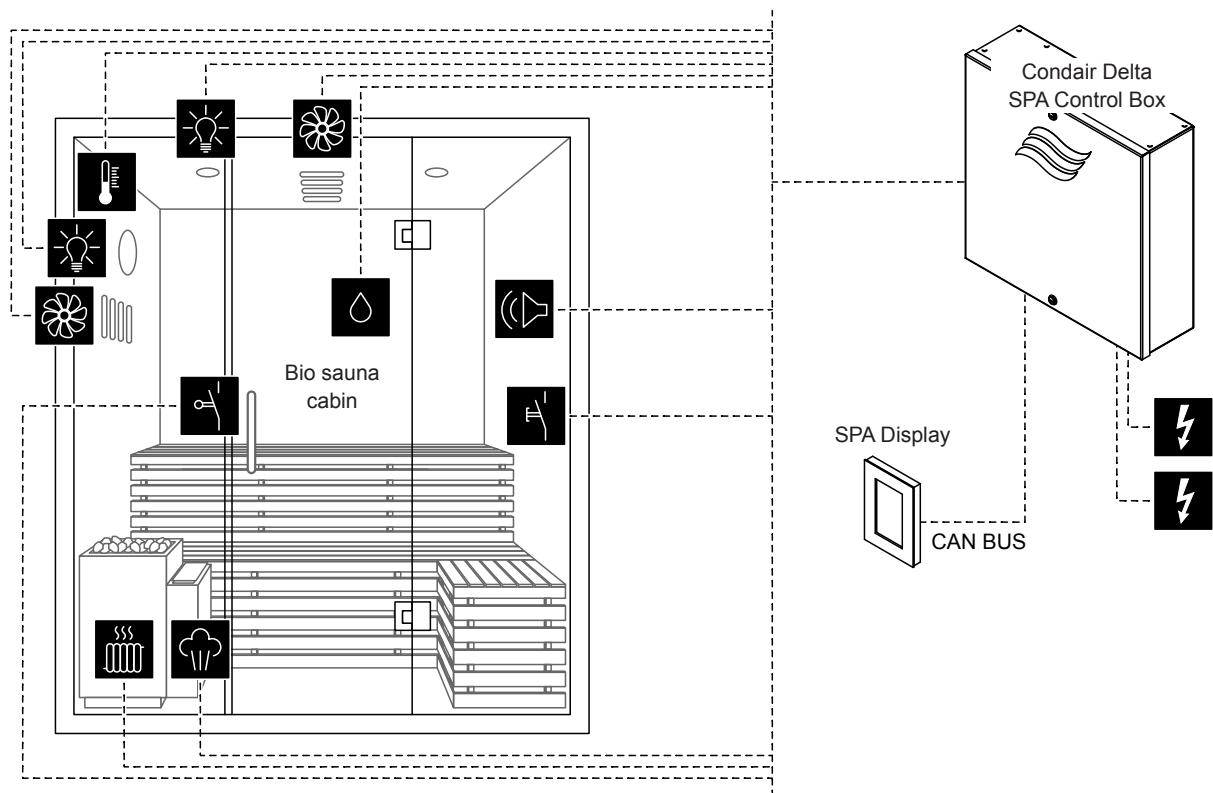


Fig. 5: Condair Delta SPA Control Box for Bio sauna application with integrated water reservoir

3.3.6 Condair Delta SPA Control Box for Bio sauna application with external steam generator

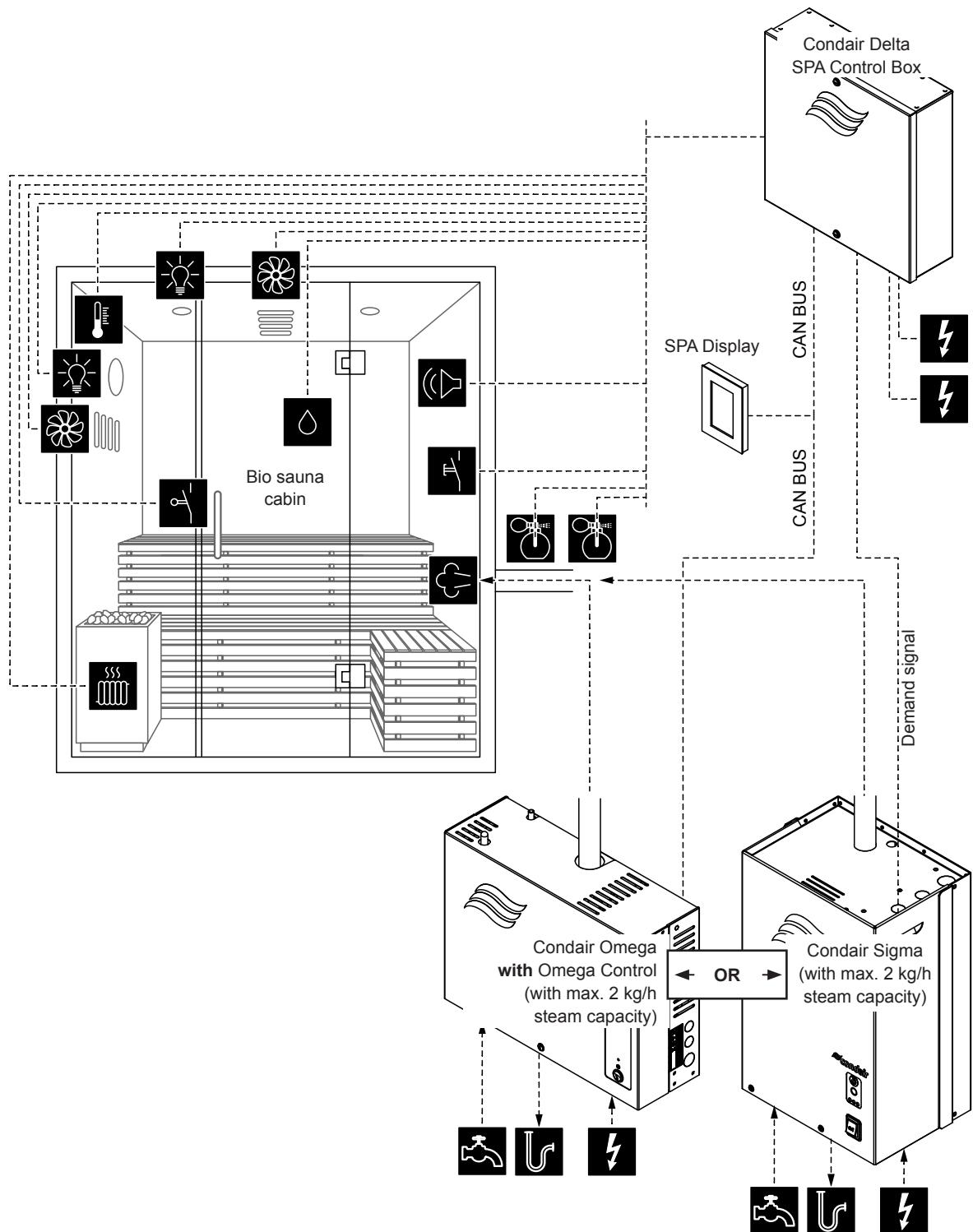


Fig. 6: Condair Delta SPA Control Box for Bio sauna application with external steam generator

3.3.7 Condair Delta SPA Control Box for Fin sauna application

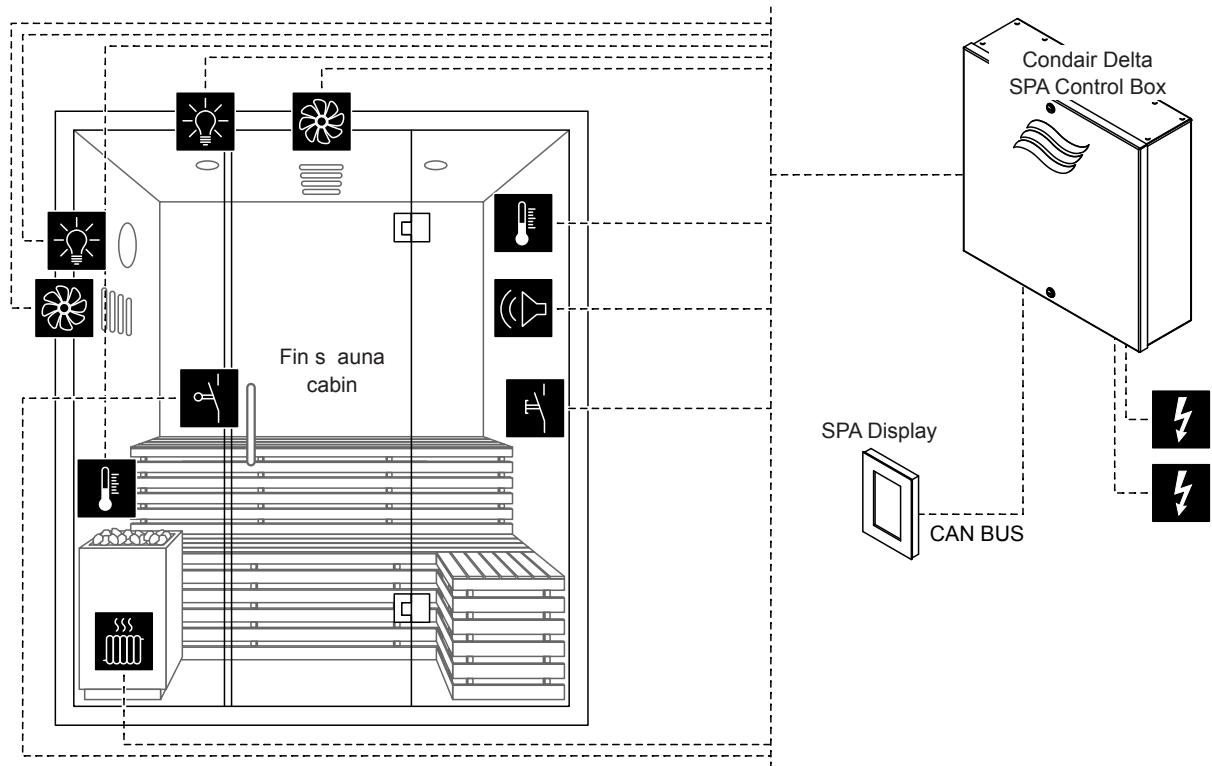


Fig. 7: Condair Delta SPA Control Box for Fin sauna application

3.3.8 Condair Delta SPA Control Box for dual cabin applications for small size cabins

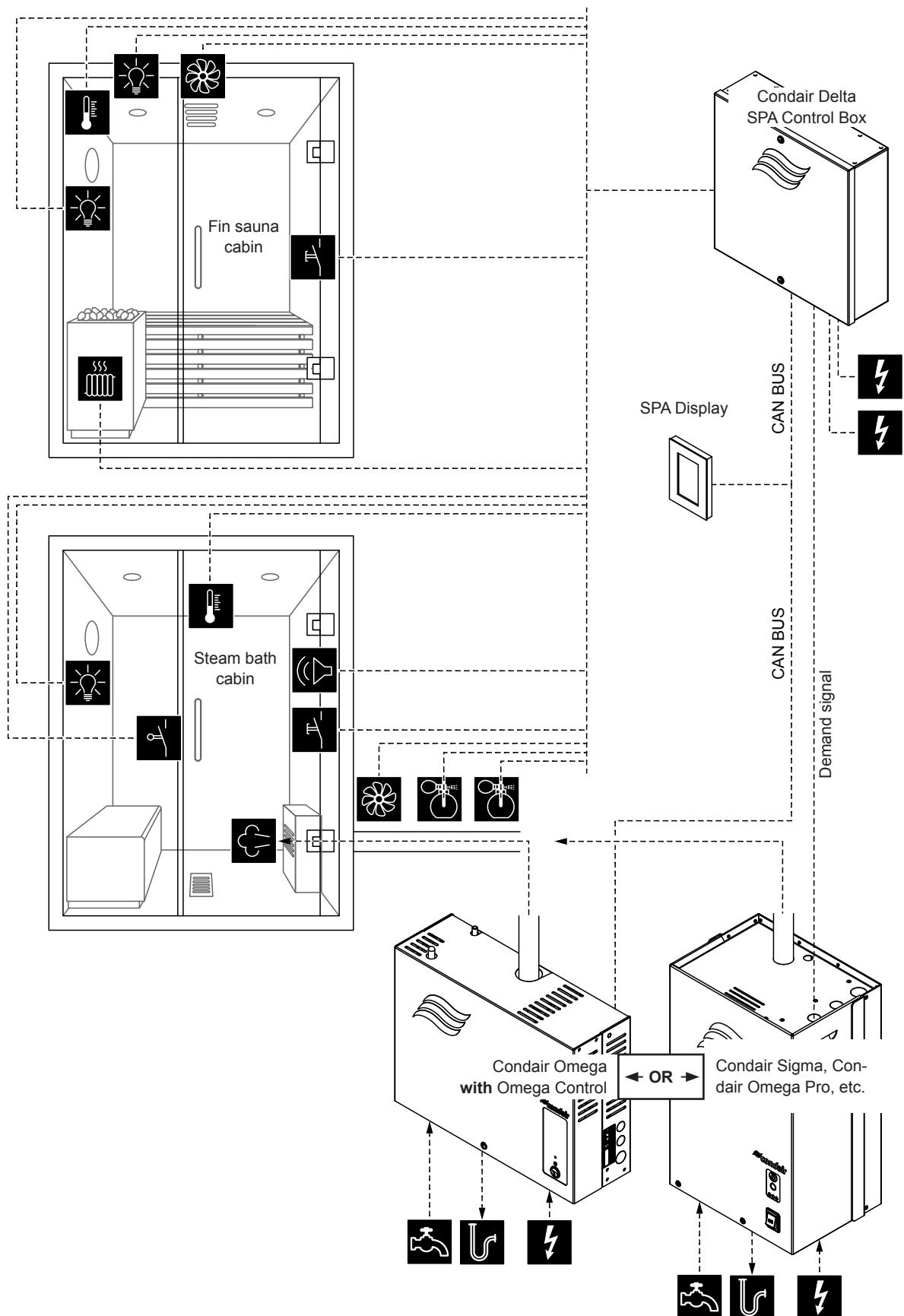


Fig. 8: Condair Delta SPA Control Box for dual cabin applications for small size cabins

3.3.9 Condair Delta SPA Control Box and Condair Omega with SPA Control for dual cabin applications for medium size cabins

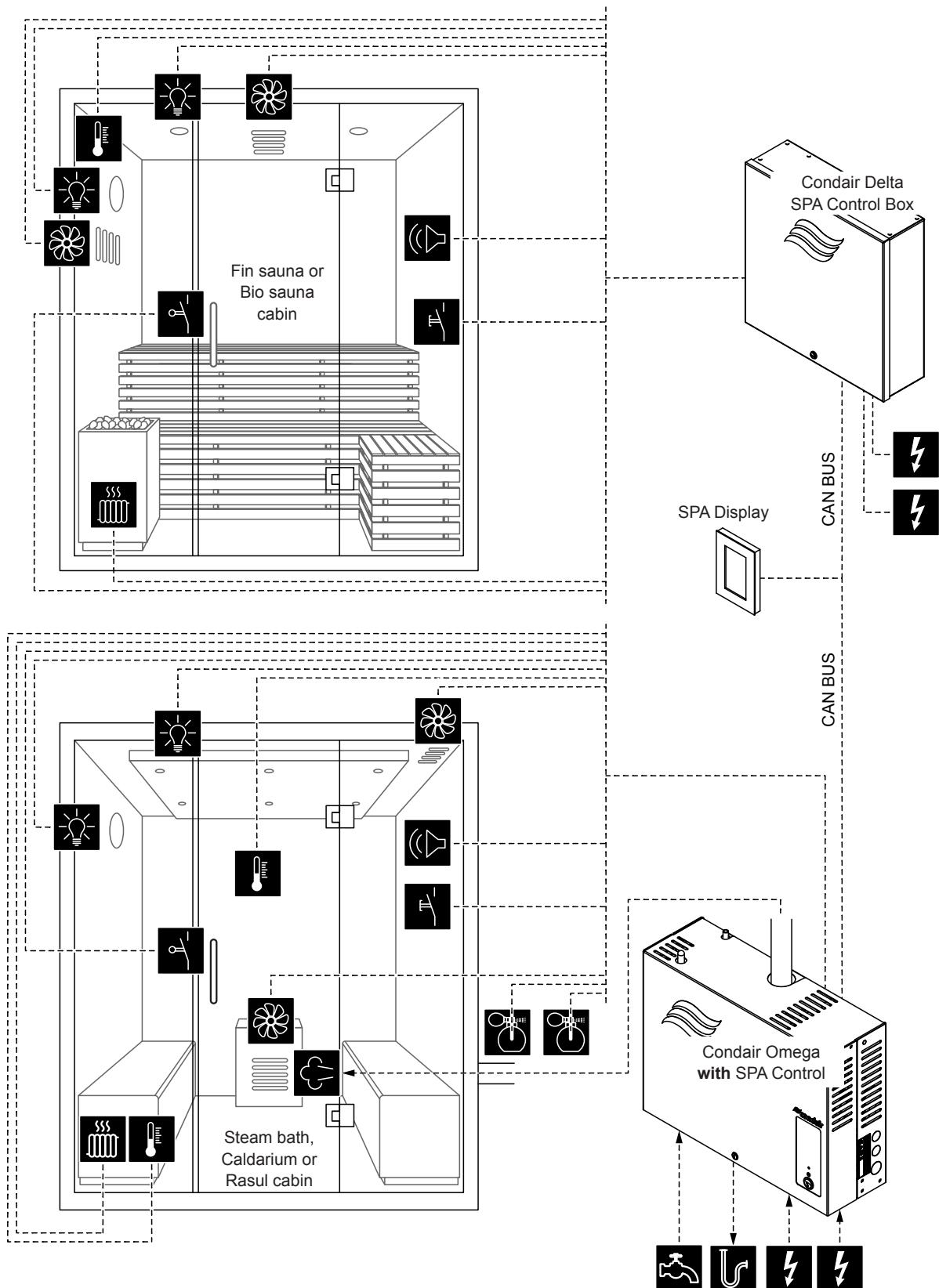


Fig. 9: Condair Delta SPA Control Box and Condair Omega with SPA Control Board for dual cabin applications for medium size cabins

3.4 Identification of the unit

The identification of the unit is found on the rating plate:

	Type designation	Serial number (7 digits)	Month/Year
Sauna voltage (with variants Fin sauna and Bio sauna only)	Condair Group AG, Gwattstrasse 17, 8808 Pfäffikon SZ, Switzerland		
Control voltage	Type: Condair Delta SPA Control	Serial No.: XXXXXXX	10.18
Equipment variant	Sauna voltage: 400V/3~/50...60Hz	Sauna power: 9.0kW 15.0A	
Field with certification symbols	Control voltage: 230V/1~/ 50...60Hz	Control power: max. 1kW 10A	
	Variant: Fin sauna	Option: -	
	CE		
		Engineered in Switzerland, Made in Germany	

Power consumption sauna (with variants Fin sauna und Bio sauna only)

Power consumption control

Option (Trafo, if applicable)

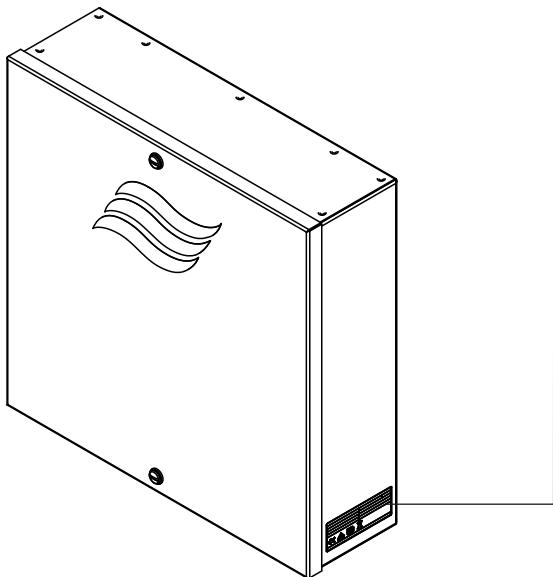


Fig. 10: Location of the rating plate

3.5 Options

Transformer for Condair Delta SPA Control Box

Transformer for 24 V power supply light and 15 V, 18 V or 24 V power supply 3-stage fan.

3.6 Accessories

A separate product documentation is available for accessories for the Condair Delta SPA Control Box and for SPA applications. Please contact your Condair representative.

4 Inspecting the delivery / Storage and Transportation

4.1 Delivery

4.1.1 Standard delivery

The standard delivery includes:

- Condair Delta SPA Control Box including fixing set, installation manual (this document) and operation manual SPA Control and spare parts list, packaged in cardboard box.

Unit type	Dimensions packaging (L x W x D)	Transport weight
Condair Delta SPA Control Box	428 mm x 427 mm x 172 mm	6,0 kg (with option Trafo: 8.2 kg)

- Ordered options with operating instructions according [chapter 3.5](#), built in or packed separately.
- Ordered accessories with operating instructions packed separately.

4.2 Inspecting the delivery

After receiving:

- Inspect shipping box(es) for damage.
Any damages of the shipping box(es) must be reported to the shipping company without delay.
- Check packing slip to ensure all parts has been delivered.
All material shortages are to be reported to your Condair supplier within 48 hours after receipt of the goods. Condair Group AG assumes no responsibility for any material shortages beyond this period.
- Unpack the parts/components and check for any damage.
If parts/components are damaged, notify the shipping company immediately.
- Check whether the components are suitable for installation on your site according to the unit data stated on the rating plate.

4.3 Storage and Transportation

Storing

Until installation store the Condair Delta SPA Control Box Pro in its original packaging in a protected area meeting the following requirements:

- Room temperature: 5 ... 40 °C
- Room humidity: 10 ... 75 %rh

Transportation

For optimum protection always transport the unit and components in their original packaging and use appropriate lifting/transporting devices.



WARNING!

It is the customer's responsibility to ensure that operators are trained in handling goods and that the operators comply with the appropriate regulations on work safety and the prevention of accidents.

Packaging

Keep the original packaging of the components for later use.

In case you wish to dispose of the packaging, observe the local regulations on waste disposal. Please recycle packaging where possible.

5 Mounting and installation work

5.1 Important notes on mounting and installation work

Qualification of personnel

All mounting and installation work must be carried out only by **well qualified specialists authorised by the owner**. It is the owner's responsibility to verify proper qualification of the personnel.

The electrical installations may only be carried out by a trained electrician.

General notes

Strictly observe and comply with all information and safety instructions in the present installation manual as well as in the documentations for the components (steam generator, sensors, fans, etc.), which are installed and used together with the Condair Delta SPA Control Box.

Observe and comply with all local regulations dealing with water, steam and electrical installations.

Safety

Some installation work requires removal of the unit cover of the Condair Delta SPA Control Box. Please note the following:



DANGER!

Danger of electric shock!

The Condair Delta SPA Control Box is mains powered. Live parts may be exposed when the unit is open. Touching live parts may cause severe injury or danger to life.

Prevention: The Condair Delta SPA Control Box must be connected to the mains only after all mounting and installation work has been completed, all installations have been checked for correct workmanship and the unit is closed and properly locked.



CAUTION!

The electronic components inside the Condair Delta SPA Control Box and inside the steam generator are very sensitive to electrostatic discharge.

Prevention: To protect these components against damage caused by electrostatic discharge (ESD protection) appropriate measures must be taken when the unit(s) is/are open for installation work.

5.2 Mounting the Condair Delta SPA Control Box

5.2.1 Notes on locating the unit

For the positioning of the Condair Delta SPA Control Box the following points must be observed and adhered to:

- The Condair Delta SPA Control Box is designed for wall-mounting in protected interiors. Make sure that the construction (wall, pillar, floor-mounted console, etc.) to which the Condair Delta SPA Control Box is to be mounted, offers a **sufficiently high load-bearing capacity** (take notice of the weight information), and is suitable for the installation.
- Install the Condair Delta SPA Control Box in such a manner that it is **freely accessible** with sufficient space available for installation and operation purposes.
- The Condair Delta SPA Control Box is **IPx4** protected. Nevertheless, care should be taken to ensure that the device is protected from splash water at the installation site and that the permissible ambient conditions are complied with.
- The Condair Delta SPA Control Box must not be installed in potentially explosive environments or inside the SPA cabin.
- When mounting the Condair Delta SPA Control Box use **only the mounting materials supplied with the unit**. If mounting with the materials supplied is not possible in your particular case, select a method of mounting that is of similar stability.
- The Condair Delta SPA Control Box is designed for installation and operation within buildings (admissible temperature range 5...40 °C).

5.2.2 Mounting the Condair Delta SPA Control Box

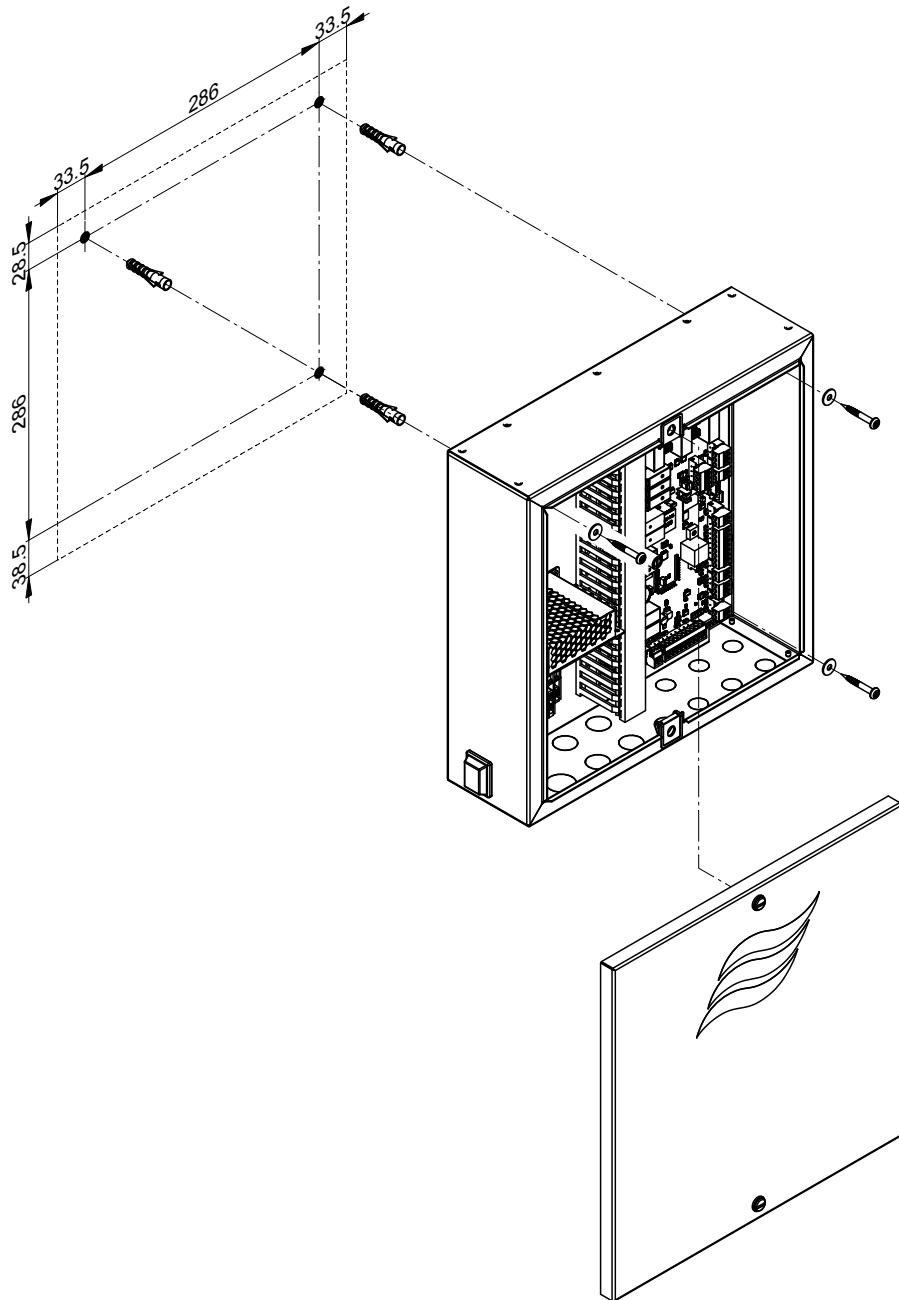


Fig. 11: Mounting the Condair Delta SPA Control Box

Procedure

1. Mark the three attachment points at the desired position with the help of a spirit level. Then, drill holes diameter: 10 mm, depth: 50 mm.
2. Insert the supplied plastic plugs.
3. Unlock the retaining screw of the unit cover, then remove the unit cover.
4. Fix the Condair Delta SPA Control Box to the wall using the supplied screws and washers, align horizontally with a spirit level and tighten the screws.
Important: Make sure that the washers are mounted underneath the screw heads.
5. Reattach the unit cover and lock it with the screws and gaskets.
Important: Make sure the gaskets are located underneath the screw heads.

5.2.3 Inspecting the installed unit

Check the following points:

- Is the Condair Delta SPA Control Box installed in the correct place (see [chapter 5.2.1](#))?
- Is the supporting surface stable enough?
- Is the Condair Delta SPA Control Box correctly aligned, vertically and horizontally?
- Is the Condair Delta SPA Control Box properly secured (see [chapter 5.2.2](#))?
- Has the unit cover been relocated and correctly fixed with the two screws and gaskets?

5.3 Electric installation

5.3.1 Notes on electrical installation



DANGER! Danger of electric shock

The Condair Delta SPA Control Box is mains powered. Live parts may be exposed when the unit is open. Touching live parts may cause severe injury or danger to life.

Prevention: The Condair Delta SPA Control Box unit must be connected to the mains only after all mounting and installation work has been completed, all installations have been checked for correct workmanship and the unit is closed and properly locked.



CAUTION!

The electronic components inside the Condair Delta SPA Control Box are very sensitive to electrostatic discharge. Before carrying out installations work inside the unit, appropriate measures must be taken to protect the electronic components against damage caused by electrostatic discharge (ESD protection).



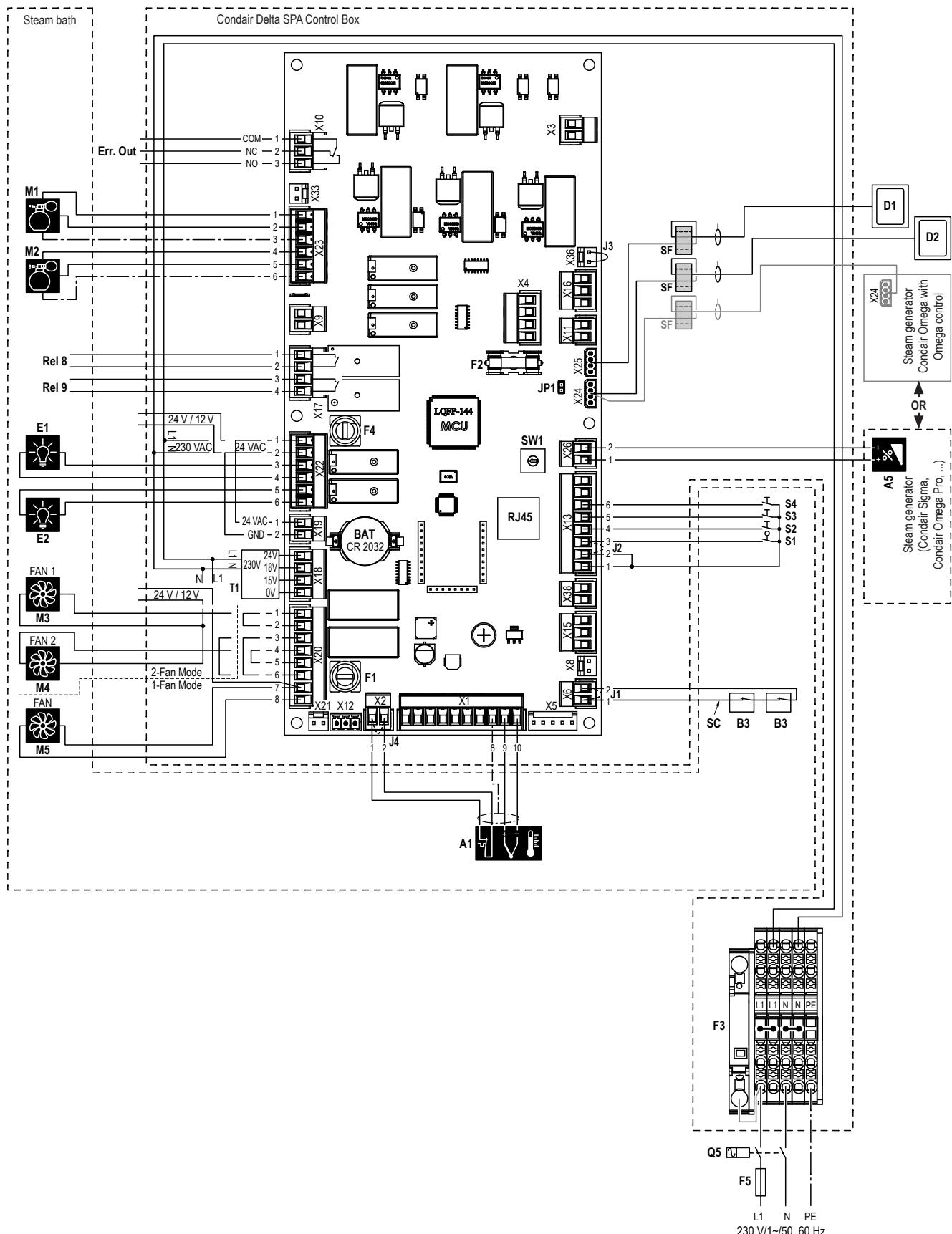
WARNING!

For public saunas without heating time limit, a warning light in the room of the supervisor must be installed, which indicates when the sauna heater is on.

- All work concerning the electrical installation must be performed only by **skilled and qualified technical personnel (e.g. electrician with appropriate training) authorised by the owner**. It is the owner's responsibility to verify proper qualification of the personnel.
- The electrical installation must be carried out according to the corresponding wiring diagram (see [chapter 5.3.2](#)), the notes on electrical installation as well as the applicable local regulations. All information given in the wiring diagram and additional notes regarding the electrical installation work must be followed and observed.
- All cables must be lead into the unit, via appropriate cable glands with strain relief (supplied by others). Make sure that the cable glands with splash-water protection are used and that they are watertight.
- Make sure the cables are adequately fixed, do not rub on any components or become a tripping hazard.
- Observe and maintain maximum cable length and required cross section per wire according to local regulations.
- Only use heat-resistant cables designed for a temperature of at least 150 °C to connect the accessory components in the cabin.
- The mains supply voltage(s) must match the respective voltage(s) stated in the corresponding wiring diagram (see [chapter 5.3.2](#)).
- Make sure that the maximum permissible loads are not exceeded (see [chapter 5.3.4](#)).
- For the installation of accessory components, please observe the information in the corresponding documentation supplied by the respective manufacturer.

5.3.2 Wiring diagrams

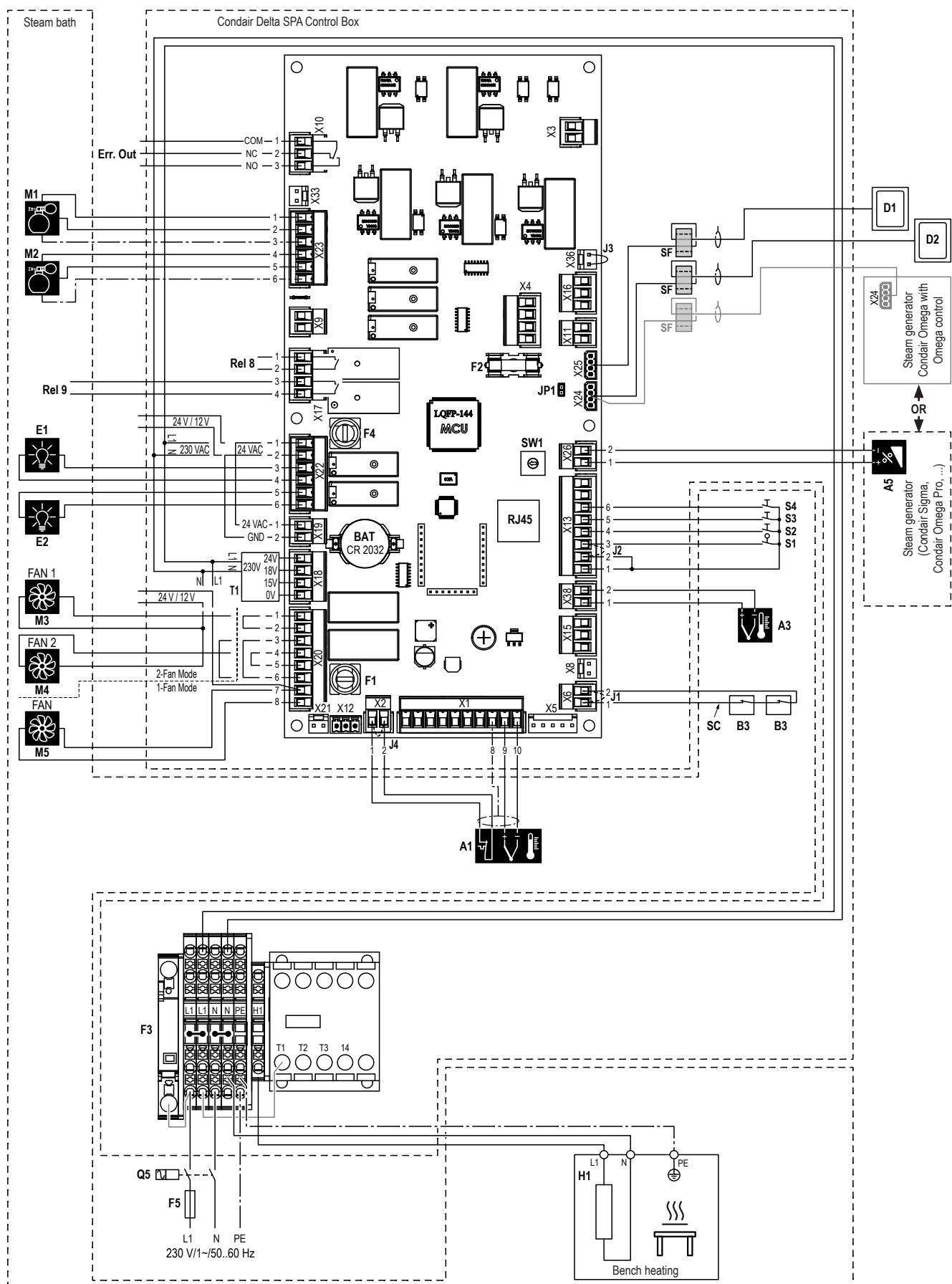
5.3.2.1 Wiring diagram Condair Delta SPA Control box for steam bath application



Legend wiring diagram Condair Delta SPA Control box for steam bath application

Symbol	Description	Remarks	Technical details
A1	Temperature sensor with integrated overtemperature switch	Detecting of the cabin temperature	KTY, PT100, PT1000
A5	Demand signal for external steam generator		0-10 V
B3	Safety devices (e.g. emergency stop)		
BAT	Backup battery SPA control board		CR2032, Lithium 3V
D1 / D2	External SPA display(s)	See notes in chapter 5.3.3.21	
E1	Light 1	Configurable as cleaning or color light	Maximum load: 250 V, 0.5A
E2	Light 2	Configurable as cleaning or color light	Maximum load: 250 V, 0.5A
Err.Out	Fault output		
F1	Microfuse fans		4 A, slow acting
F2	Microfuse 24 VDC external		1 A, slow acting
F3	Internal fuse terminal power supply		1.6 A, slow acting
F4	Microfuse light		1 A, slow acting
F5	External fuse power supply 230 V/1~/50..60 Hz		10 A, fast acting
J1	Cable bridge	Connect cable bridge to terminal block "X6", if no safety devices are connected to terminal block "X6".	
J2	Cable bridge	Connect cable bridge to terminals 2 and 3 of terminal block "X2", if no door switch is connected.	
J3	Cable bridge	Do not remove!	
J4	Cable bridge	Connect cable bridge to terminal block "X2", if no overtemperature switch is connected.	
JP1	Terminating resistor CAN BUS	Remove jumper, if both CAN BUS connectors are used.	
M1	Fragrance pump 1	 DANGER: 230 V output!	Maximum load: 250 V, 0.25A
M2	Fragrance pump 2	 DANGER: 230 V output!	Maximum load: 250 V, 0.25A
M3	Fan 1 (single-stage)	Control of supply and exhaust fan (configurable)	Maximum load: 250 V, 2 A
M4	Fan 2 (single-stage)	Control of supply and exhaust fan (configurable)	Maximum load: 250 V, 2 A
M5	Fan (three-stage)	Control of three stage fan	Maximum load: 250 V, 4 A
RJ45	Network connector	Network connector for the upload of software updates	
Rel 8	Potential-free relay contact	Function freely configurable	Maximum load: 250 V, 10A
Rel 9	Potential-free relay contact	Function freely configurable	Maximum load: 250 V, 10A
SC	Safety loop		
SF	Ferrite CAN BUS		
SW1	Rotary switch unit address	See notes in chapter 5.3.3.21	
S1	Door switch		
S2	Start-/Stop button		
S3	Light 1 button		
S4	Light 2 / Steam blast button		
T1	Transforer (option)	Power supply for three stage fan and 24 VAC light	
Q5	External main switch (all-pole disconnection) power supply		

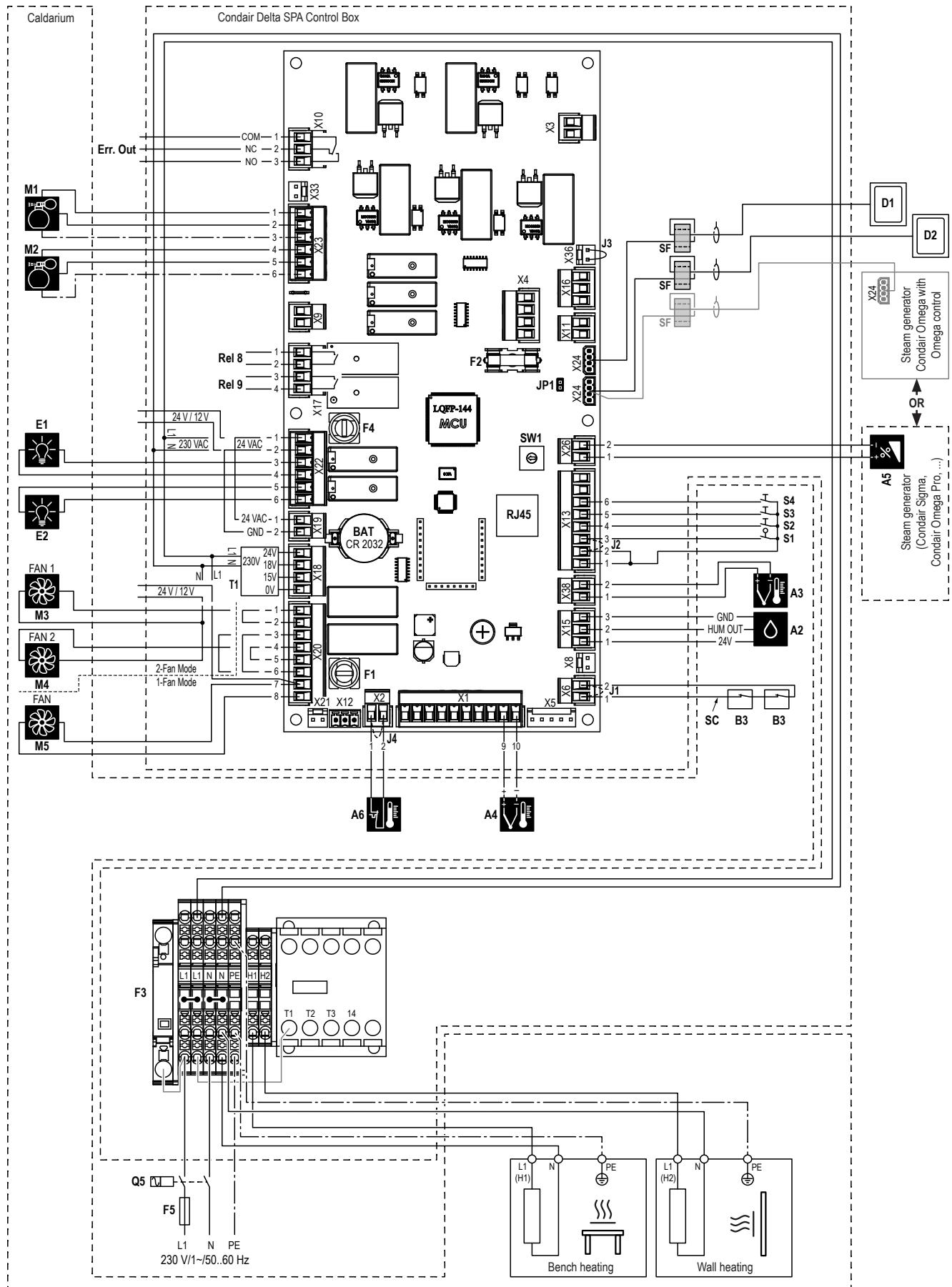
5.3.2.2 Wiring diagram Condair Delta SPA Control Box for steam bath application with optional bench heating



Legend wiring diagram Condair Delta SPA Control box for steam bath application with optional bench heating

Symbol	Description	Remarks	Technical details
A1	Temperature sensor with integrated over-temperature switch	Detecting of the cabin temperature	KTY, PT100, PT1000
A3	Temperature sensor bench heating	Detecting of the bench temperature	KTY, PT100, PT1000
A5	Demand signal for external steam generator		0-10 V
B3	Safety devices (e.g. emergency stop)		
BAT	Backup battery SPA control board		CR2032, Lithium 3V
D1 / D2	External SPA display(s)	See notes in chapter 5.3.3.21	
E1	Light 1	Configurable as cleaning or color light	Maximum load: 250 V, 0.5A
E2	Light 2	Configurable as cleaning or color light	Maximum load: 250 V, 0.5A
Err.Out	Fault output		
F1	Microfuse fans		4 A, slow acting
F2	Microfuse 24 VDC external		1 A, slow acting
F3	Fuse terminal		1.6 A, slow acting
F4	Microfuse light		1 A, slow acting
F5	External fuse power supply 230 V/1~/50..60 Hz		16 A, fast acting
H1	Bench heating	 Observe safety notes in chapter 5.3.3.14!	Maximum load: 2 kW
J1	Cable bridge	Connect cable bridge to terminal block "X6", if no safety devices are connected to terminal block "X6".	
J2	Cable bridge	Connect cable bridge to terminals 2 and 3 of terminal block "X2", if no door switch is connected.	
J3	Cable bridge	Do not remove!	
J4	Cable bridge	Connect cable bridge to terminal block "X2", if no overtemperature switch is connected.	
JP1	Terminating resistor CAN BUS	Remove jumper, if both CAN BUS connectors are used.	
M1	Fragrance pump 1	 DANGER: 230 V output!	Maximum load: 250 V, 0.25A
M2	Fragrance pump 2	 DANGER: 230 V output!	Maximum load: 250 V, 0.25A
M3	Fan 1 (single-stage)	Control of supply and exhaust fan (configurable)	Maximum load: 250 V, 2 A
M4	Fan 2 (single-stage)	Control of supply and exhaust fan (configurable)	Maximum load: 250 V, 2 A
M5	Fan (three-stage)	Control of three stage fan	Maximum load: 250 V, 4 A
RJ45	Network connector	Network connector for the upload of software updates	
Rel 8	Potential-free relay contact	Used for the control of the bench heating	Maximum load: 250 V, 10A
Rel 9	Potential-free relay contact	Function freely configurable	Maximum load: 250 V, 10A
SC	Safety loop		
SF	Ferrite CAN BUS		
SW1	Rotary switch unit address	See notes in chapter 5.3.3.21	
S1	Door switch		
S2	Start/Stop button		
S3	Light 1 button		
S4	Light 2 / Steam blast button		
T1	Transformer (option)	Power supply for three stage fan and 24 VAC light	
Q5	External main switch (all-pole disconnection) power supply		

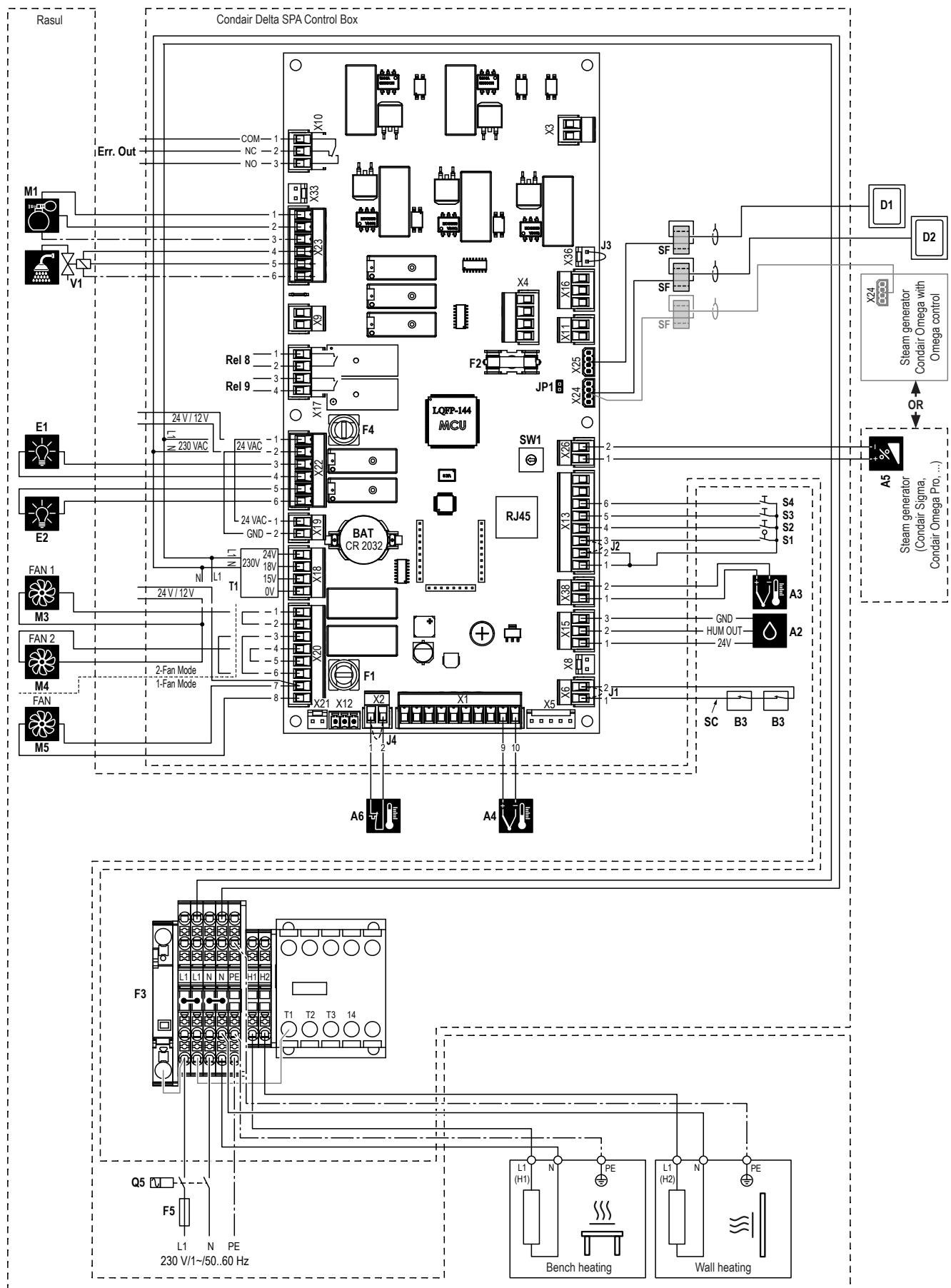
5.3.2.3 Wiring diagram Condair Delta SPA Control Box for caldarium application with bench and wall heating



Legend wiring diagram Condair Delta SPA Control box for caldarium application with bench and wall heating

Symbol	Description	Remarks	Technical details
A2	Humidity sensor	Caldarium	
A3	Temperature sensor bench heating	Detecting of the bench temperature for the control of bench heating	KTY, PT100, PT1000
A4	Temperature sensor wall heating	Detecting of the wall temperature for the control of wall heating	KTY, PT100, PT1000
A5	Demand signal for external steam generator		0-10 V
A6	Cabin overtemperature switch		
B3	Safety devices (e.g. emergency stop)		
BAT	Backup battery SPA control board		CR2032, Lithium 3V
D1 / D2	External SPA display(s)	See notes in chapter 5.3.3.21	
E1	Light 1	Configurable as cleaning or color light	Maximum load: 250 V, 0.5A
E2	Light 2	Configurable as cleaning or color light	Maximum load: 250 V, 0.5A
Err.Out	Fault output		
F1	Microfuse fans		4 A, slow acting
F2	Microfuse 24 VDC external		1 A, slow acting
F3	Fuse terminal		1.6 A, slow acting
F4	Microfuse light		1 A, slow acting
F5	External fuse power supply 230 V/1~/50..60 Hz		16 A, fast acting
H1	Bench heating	 Observe safety notes in chapter 5.3.3.15!	Maximum load: 1 kW
H2	Wall heating	 Observe safety notes in chapter 5.3.3.15!	Maximum load: 1 kW
J1	Cable bridge	Connect cable bridge to terminal block "X6", if no safety devices are connected to terminal block "X6".	
J2	Cable bridge	Connect cable bridge to terminals 2 and 3 of terminal block "X2", if no door switch is connected.	
J3	Cable bridge	Do not remove!	
J4	Cable bridge	Connect cable bridge to terminal block "X2", if no overtemperature switch "A6".	
JP1	Terminating resistor CAN BUS	Remove jumper, if both CAN BUS connectors are used.	
M1	Fragrance pump 1	 DANGER: 230 V output!	Maximum load: 250 V, 0.25A
M2	Fragrance pump 2	 DANGER: 230 V output!	Maximum load: 250 V, 0.25A
M3	Fan 1 (single-stage)	Control of supply and exhaust fan (configurable)	Maximum load: 250 V, 2 A
M4	Fan 2 (single-stage)	Control of supply and exhaust fan (configurable)	Maximum load: 250 V, 2 A
M5	Fan (three-stage)	Control of three stage fan	Maximum load: 250 V, 4 A
RJ45	Network connector	Network connector for the upload of software updates	
Rel 8	Potential-free relay contact	Used for the control of the bench heating	Maximum load: 250 V, 10A
Rel 9	Potential-free relay contact	Used for the control of the wall heating	Maximum load: 250 V, 10A
SC	Safety loop		
SF	Ferrite CAN BUS		
SW1	Rotary switch unit address	See notes in chapter 5.3.3.21	
S1	Door switch		
S2	Start-/Stop button		
S3	Light 1 button		
S4	Light 2 / Steam blast button		
T1	Transformer (option)	Power supply for three stage fan and 24 VAC light	
Q5	External main switch (all-pole disconnection) power supply		

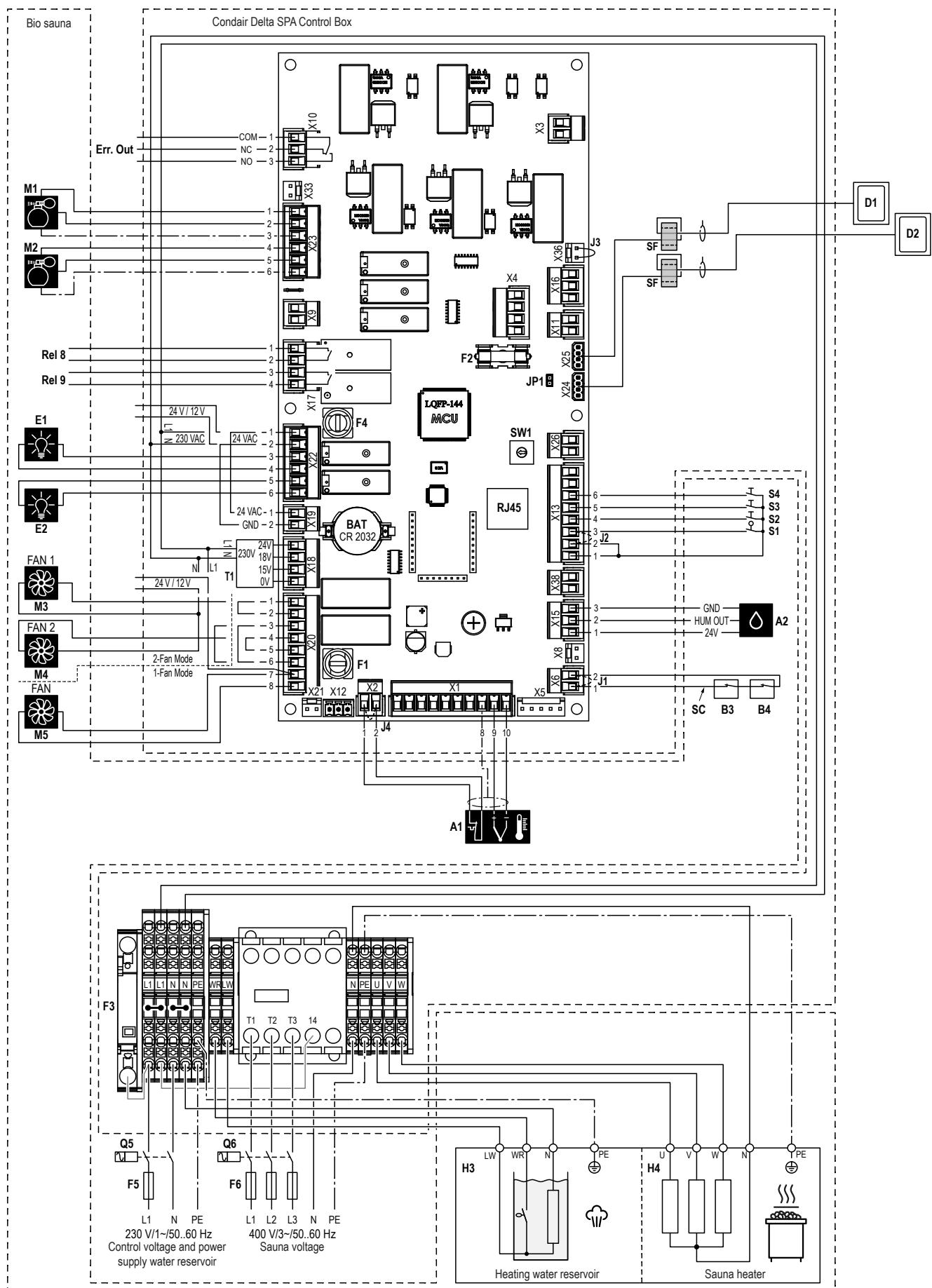
5.3.2.4 Wiring diagram Condair Delta SPA Control Box for Rasul application with bench and wall heating



Legend wiring diagram Condair Delta SPA Control box for Rasul application with bench and wall heating

Symbol	Description	Remarks	Technical details
A2	Humidity sensor	Rasul	
A3	Temperature sensor bench heating	Detecting of the bench temperature for the control of bench heating	KTY, PT100, PT1000
A4	Temperature sensor wall heating	Detecting of the wall temperature for the control of wall heating	KTY, PT100, PT1000
A5	Demand signal for external steam generator		0-10 V
A6	Cabin overtemperature switch		
B3	Safety devices (e.g. emergency stop)		
BAT	Backup battery SPA control board		CR2032, Lithium 3V
D1 / D2	External SPA display(s)	See notes in chapter 5.3.3.21	
E1	Light 1	Configurable as cleaning or color light	Maximum load: 250 V, 0.5A
E2	Light 2	Configurable as cleaning or color light	Maximum load: 250 V, 0.5A
Err.Out	Fault output		
F1	Microfuse fans		4 A, slow acting
F2	Microfuse 24 VDC external		1 A, slow acting
F3	Fuse terminal		1.6 A, slow acting
F4	Microfuse light		1 A, slow acting
F5	External fuse power supply 230 V/1~/50..60 Hz		16 A, fast acting
H1	Bench heating	 Observe safety notes in chapter 5.3.3.15!	Maximum load: 1 kW
H2	Wall heating	 Observe safety notes in chapter 5.3.3.15!	Maximum load: 1 kW
J1	Cable bridge	Connect cable bridge to terminal block "X6", if no safety devices are connected to terminal block "X6".	
J2	Cable bridge	Connect cable bridge to terminals 2 and 3 of terminal block "X2", if no door switch is connected.	
J3	Cable bridge	Do not remove!	
J4	Cable bridge	Connect cable bridge to terminal block "X2", if no overtemperature switch "A6".	
JP1	Terminating resistor CAN BUS	Remove jumper, if both CAN BUS connectors are used.	
M1	Fragrance pump 1	 DANGER: 230 V output!	Maximum load: 250 V, 0.25A
M3	Fan 1 (single-stage)	Control of supply and exhaust fan (configurable)	Maximum load: 250 V, 2 A
M4	Fan 2 (single-stage)	Control of supply and exhaust fan (configurable)	Maximum load: 250 V, 2 A
M5	Fan (three-stage)	Control of three stage fan	Maximum load: 250 V, 4 A
RJ45	Network connector	Network connector for the upload of software updates	
Rel 8	Potential-free relay contact	Used for the control of the bench heating	Maximum load: 250 V, 10A
Rel 9	Potential-free relay contact	Used for the control of the wall heating	Maximum load: 250 V, 10A
SC	Safety loop		
SF	Ferrite CAN BUS		
SW1	Rotary switch unit address	See notes in chapter 5.3.3.21	
S1	Door switch		
S2	Start-/Stop button		
S3	Light 1 button		
S4	Light 2 / Steam blast button		
T1	Transformer (option)	Power supply for three stage fan and 24 VAC light	
Q5	External main switch (all-pole disconnection) power supply		
V1	Valve cabin shower	 DANGER: 230 V output!	Maximum load: 250 V, 0.25A

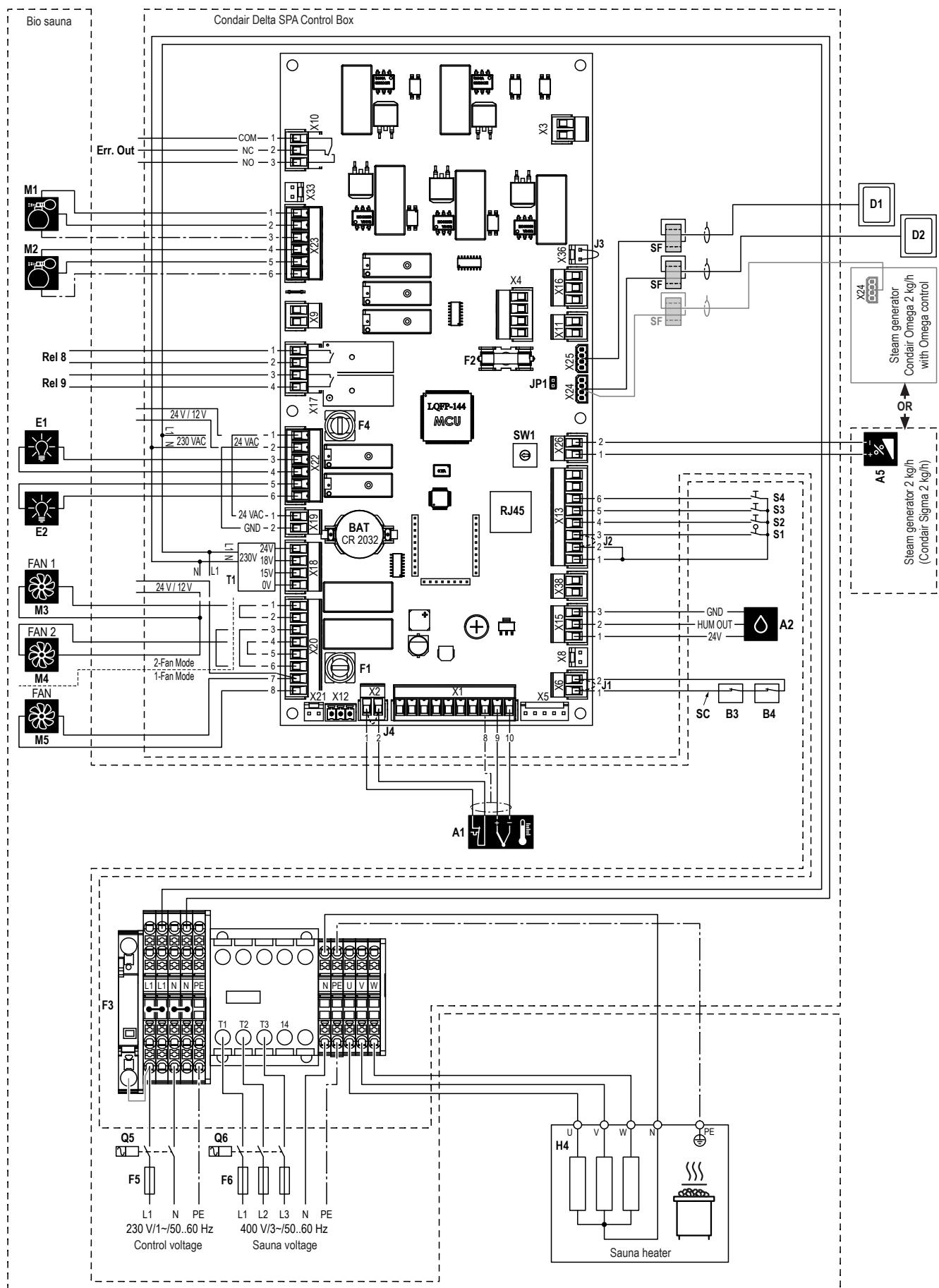
5.3.2.5 Wiring diagram Condair Delta SPA Control Box for Bio sauna application with integrated water reservoir



Legend wiring diagram Condair Delta SPA Control box for Bio sauna application with integrated water reservoir

Symbol	Description	Remarks	Technical details
A1	Temperature sensor with integrated over-temperature switch	Detecting of the cabin temperature	KTY, PT100, PT1000
A2	Humidity sensor	Bio sauna	
B3	Safety devices (e.g. emergency stop)		
B4	Safety device sauna heating	e.g. switch protection cover sauna heater	
BAT	Backup battery SPA control board		CR2032, Lithium 3V
D1 / D2	External SPA display(s)	See notes in chapter 5.3.3.21	
E1	Light 1	Configurable as cleaning or color light	Maximum load: 250 V, 0.5A
E2	Light 2	Configurable as cleaning or color light	Maximum load: 250 V, 0.5A
Err.Out	Fault output		
F1	Microfuse fans		4 A, slow acting
F2	Microfuse 24 VDC external		1 A, slow acting
F3	Fuse terminal		1.6 A, slow acting
F4	Microfuse light		1 A, slow acting
F5	External fuse power supply 230 V/1~/50..60 Hz		10 A, fast acting
F6	External fuse 400 V/3~/50..60 Hz power supply		16 A, fast acting
H3	Heating water reservoir for steam generation		Maximum load: 2 kW
H4	Sauna heater	 Observe safety notes in chapter 5.3.3.16!	Maximum load: 9 kW
J1	Cable bridge	Connect cable bridge to terminal block "X6", if no safety devices are connected to terminal block "X6".	
J2	Cable bridge	Connect cable bridge to terminals 2 and 3 of terminal block "X2", if no door switch is connected.	
J3	Cable bridge	Do not remove!	
J4	Cable bridge	Connect cable bridge to terminal block "X2", if no overtemperature switch is connected.	
JP1	Terminating resistor CAN BUS	Remove jumper, if both CAN BUS connectors are used.	
M1	Fragrance pump 1	 DANGER: 230 V output!	Maximum load: 250 V, 0.25A
M2	Fragrance pump 2	 DANGER: 230 V output!	Maximum load: 250 V, 0.25A
M3	Fan 1 (single-stage)	Control of supply and exhaust fan (configurable)	Maximum load: 250 V, 2 A
M4	Fan 2 (single-stage)	Control of supply and exhaust fan (configurable)	Maximum load: 250 V, 2 A
M5	Fan (three-stage)	Control of three stage fan	Maximum load: 250 V, 4 A
RJ45	Network connector	Network connector for the upload of software updates	
Rel 8	Potential-free relay contact	Function freely configurable	Maximum load: 250 V, 10A
Rel 9	Potential-free relay contact	Function freely configurable	Maximum load: 250 V, 10A
SC	Safety loop		
SF	Ferrite CAN BUS		
SW1	Rotary switch unit address	See notes in chapter 5.3.3.21	
S1	Door switch		
S2	Start-/Stop button		
S3	Light 1 button		
S4	Light 2 / Steam blast button		
T1	Transformer (option)	Power supply for three stage fan and 24 VAC light	
Q5	External main switch (all-pole disconnection) power supply		
Q6	External main switch (all-pole disconnection) power supply		

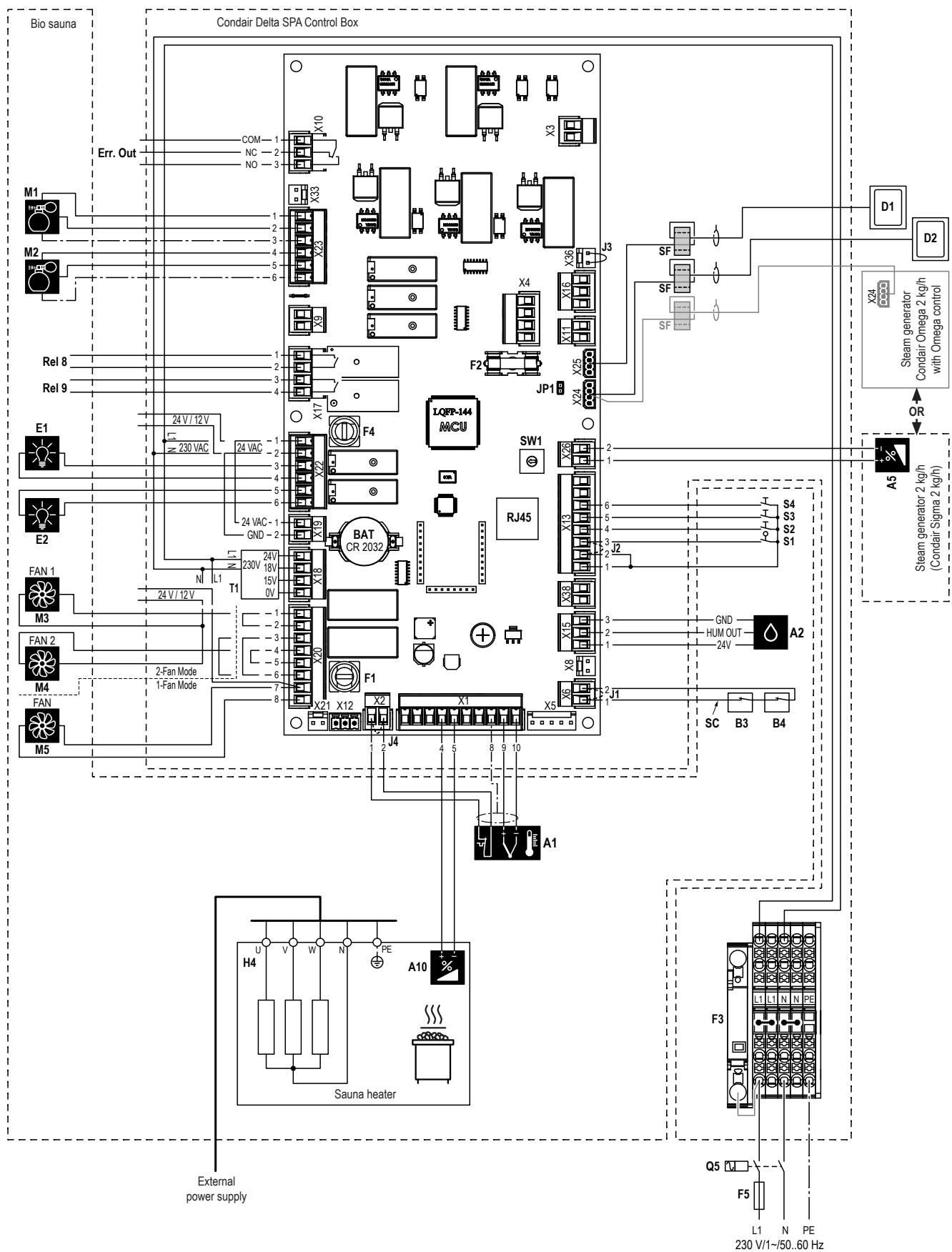
5.3.2.6 Wiring diagram Condair Delta SPA Control Box for Bio sauna application with an external steam generator with max. 2 kg/h steam capacity



Legend wiring diagram Condair Delta SPA Control box for Bio sauna application with an external steam generator with max. 2 kg/h steam capacity

Symbol	Description	Remarks	Technical details
A1	Temperature sensor with integrated over-temperature switch	Detecting of the cabin temperature	KTY, PT100, PT1000
A2	Humidity sensor	Bio sauna	
A5	Demand signal for external steam generator		0-10 V
B3	Safety devices (e.g. emergency stop)		
B4	Safety device sauna heating	e.g. switch protection cover sauna heater	
BAT	Backup battery SPA control board		CR2032, Lithium 3V
D1 / D2	External SPA display(s)	See notes in chapter 5.3.3.21	
E1	Light 1	Configurable as cleaning or color light	Maximum load: 250 V, 0.5A
E2	Light 2	Configurable as cleaning or color light	Maximum load: 250 V, 0.5A
Err.Out	Fault output		
F1	Microfuse fans		4 A, slow acting
F2	Microfuse 24 VDC external		1 A, slow acting
F3	Fuse terminal		1.6 A, slow acting
F4	Microfuse light		1 A, slow acting
F5	External fuse power supply 230 V/1~/50..60 Hz		10 A, fast acting
F6	External fuse 400 V/3~/50..60 Hz power supply		16 A, fast acting
H4	Sauna heater	 Observe safety notes in chapter 5.3.3.17!	Maximum load: 9 kW
J1	Cable bridge	Connect cable bridge to terminal block "X6", if no safety devices are connected to terminal block "X6".	
J2	Cable bridge	Connect cable bridge to terminals 2 and 3 of terminal block "X2", if no door switch is connected.	
J3	Cable bridge	Do not remove!	
J4	Cable bridge	Connect cable bridge to terminal block "X2", if no overtemperature switch is connected.	
JP1	Terminating resistor CAN BUS	Remove jumper, if both CAN BUS connectors are used.	
M1	Fragrance pump 1	 DANGER: 230 V output!	Maximum load: 250 V, 0.25A
M2	Fragrance pump 2	 DANGER: 230 V output!	Maximum load: 250 V, 0.25A
M3	Fan 1 (single-stage)	Control of supply and exhaust fan (configurable)	Maximum load: 250 V, 2 A
M4	Fan 2 (single-stage)	Control of supply and exhaust fan (configurable)	Maximum load: 250 V, 2 A
M5	Fan (three-stage)	Control of three stage fan	Maximum load: 250 V, 4 A
RJ45	Network connector	Network connector for the upload of software updates	
Rel 8	Potential-free relay contact	Function freely configurable	Maximum load: 250 V, 10A
Rel 9	Potential-free relay contact	Function freely configurable	Maximum load: 250 V, 10A
SC	Safety loop		
SF	Ferrite CAN BUS		
SW1	Rotary switch unit address	See notes in chapter 5.3.3.21	
S1	Door switch		
S2	Start-/Stop button		
S3	Light 1 button		
S4	Light 2 / Steam blast button		
T1	Transformer (option)	Power supply for three stage fan and 24 VAC light	
Q5	External main switch (all-pole disconnection) power supply		
Q6	External main switch (all-pole disconnection) power supply		

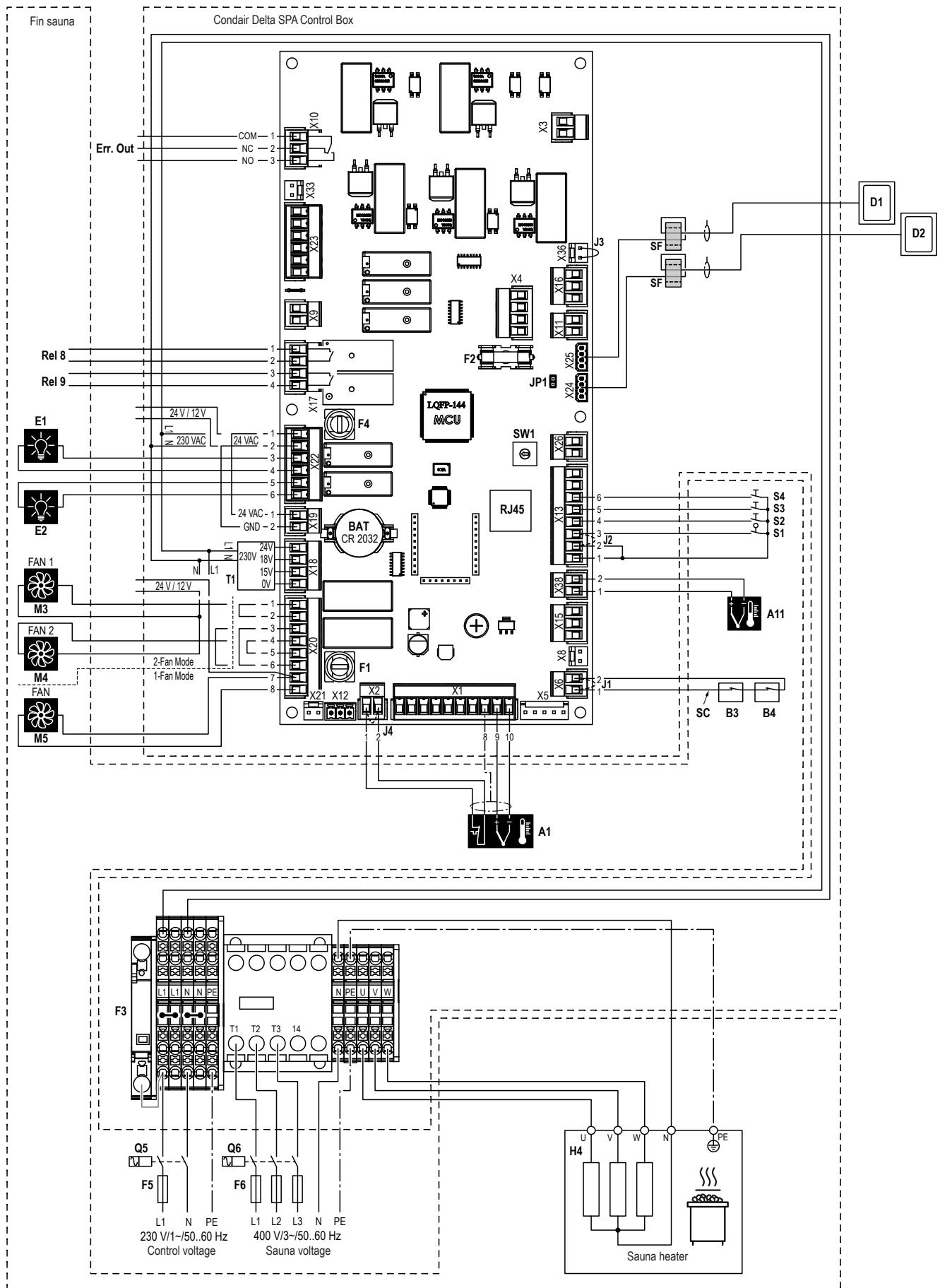
5.3.2.7 Wiring diagram Condair Delta SPA Control Box for Bio sauna application with demand control of an externally powered sauna heater



Legend wiring diagram Condair Delta SPA Control box for Bio sauna application with demand control of an externally powered sauna heater

Symbol	Description	Remarks	Technical details
A1	Temperature sensor with integrated over-temperature switch	Detecting of the cabin temperature	KTY, PT100, PT1000
A2	Humidity sensor	Bio sauna	
A5	Demand signal for external steam generator		0-10 V
A10	Demand signal sauna heater	Demand signal for the control of the heating of the externally powered sauna heater	0-10 V
B3	Safety devices (e.g. emergency stop)		
B4	Safety device sauna heating	e.g. switch protection cover sauna heater	
BAT	Backup battery SPA control board		CR2032, Lithium 3V
D1 / D2	External SPA display(s)	See notes in chapter 5.3.3.21	
E1	Light 1	Configurable as cleaning or color light	Maximum load: 250 V, 0.5A
E2	Light 2	Configurable as cleaning or color light	Maximum load: 250 V, 0.5A
Err.Out	Fault output		
F1	Microfuse fans		4 A, slow acting
F2	Microfuse 24 VDC external		1 A, slow acting
F3	Fuse terminal		1.6 A, slow acting
F4	Microfuse light		1 A, slow acting
F5	External fuse power supply 230 V/1~/50..60 Hz		10 A, fast acting
H4	Sauna heater	 Observe safety notes in chapter 5.3.3.17!	Maximum load: 9 kW
J1	Cable bridge	Connect cable bridge to terminal block "X6", if no safety devices are connected to terminal block "X6".	
J2	Cable bridge	Connect cable bridge to terminals 2 and 3 of terminal block "X2", if no door switch is connected.	
J3	Cable bridge	Do not remove!	
J4	Cable bridge	Connect cable bridge to terminal block "X2", if no overtemperature switch is connected.	
JP1	Terminating resistor CAN BUS	Remove jumper, if both CAN BUS connectors are used.	
M1	Fragrance pump 1	 DANGER: 230 V output!	Maximum load: 250 V, 0.25A
M2	Fragrance pump 2	 DANGER: 230 V output!	Maximum load: 250 V, 0.25A
M3	Fan 1 (single-stage)	Control of supply and exhaust fan (configurable)	Maximum load: 250 V, 2 A
M4	Fan 2 (single-stage)	Control of supply and exhaust fan (configurable)	Maximum load: 250 V, 2 A
M5	Fan (three-stage)	Control of three stage fan	Maximum load: 250 V, 4 A
RJ45	Network connector	Network connector for the upload of software updates	
Rel 8	Potential-free relay contact	Function freely configurable	Maximum load: 250 V, 10A
Rel 9	Potential-free relay contact	Function freely configurable	Maximum load: 250 V, 10A
SC	Safety loop		
SF	Ferrite CAN BUS		
SW1	Rotary switch unit address	See notes in chapter 5.3.3.21	
S1	Door switch		
S2	Start-/Stop button		
S3	Light 1 button		
S4	Light 2 / Steam blast button		
T1	Transformer (option)	Power supply for three stage fan and 24 VAC light	
Q5	External main switch (all-pole disconnection) power supply		

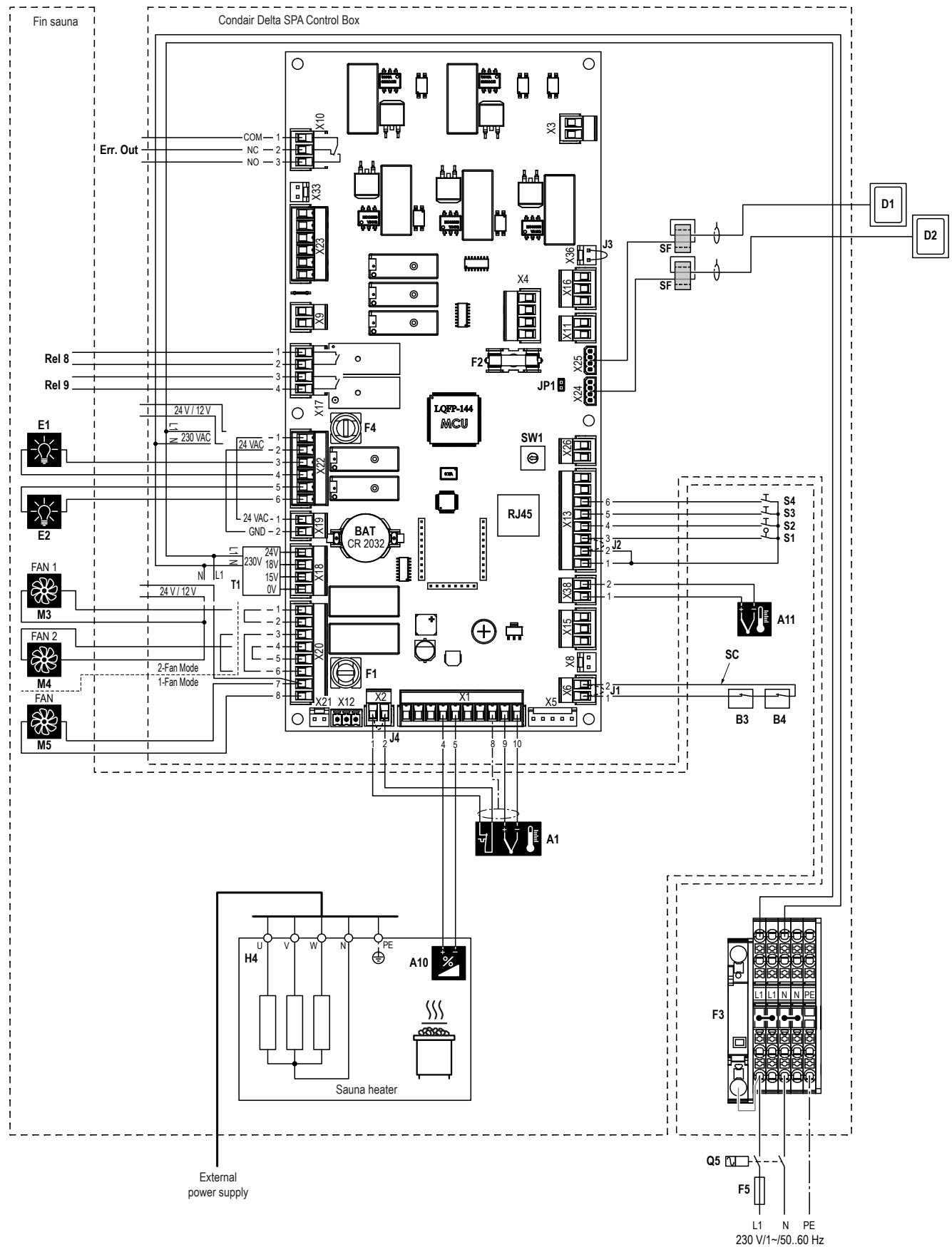
5.3.2.8 Wiring diagram Condair Delta SPA Control Box for Fin sauna application



Legend wiring diagram Condair Delta SPA Control box for Fin sauna application

Symbol	Description	Remarks	Technical details
A1	Temperature sensor with integrated over-temperature switch	Detecting of the cabin temperature	KTY, PT100, PT1000
A11	Temperature sensor sauna heater	Detecting of the sauna heater temperature	KTY, PT100, PT1000
B3	Safety devices (e.g. emergency stop)		
B4	Safety device sauna heating	e.g. switch protection cover sauna heater	
BAT	Backup battery SPA control board		CR2032, Lithium 3V
D1 / D2	External SPA display(s)	See notes in chapter 5.3.3.21	
E1	Light 1	Configurable as cleaning or color light	Maximum load: 250 V, 0.5A
E2	Light 2	Configurable as cleaning or color light	Maximum load: 250 V, 0.5A
Err.Out	Fault output		
F1	Microfuse fans		4 A, slow acting
F2	Microfuse 24 VDC external		1 A, slow acting
F3	Fuse terminal		1.6 A, slow acting
F4	Microfuse light		1 A, slow acting
F5	External fuse power supply 230 V/1~/50..60 Hz		10 A, fast acting
F6	External fuse 400 V/3~/50..60 Hz power supply		16 A, fast acting
H4	Sauna heater	 Observe safety notes in chapter 5.3.3.17!	Maximum load: 9 kW
J1	Cable bridge	Connect cable bridge to terminal block "X6", if no safety devices are connected to terminal block "X6".	
J2	Cable bridge	Connect cable bridge to terminals 2 and 3 of terminal block "X2", if no door switch is connected.	
J3	Cable bridge	Do not remove!	
J4	Cable bridge	Connect cable bridge to terminal block "X2", if no overtemperature switch is connected.	
JP1	Terminating resistor CAN BUS	Remove jumper, if both CAN BUS connectors are used.	
M3	Fan 1 (single-stage)	Control of supply and exhaust fan (configurable)	Maximum load: 250 V, 2 A
M4	Fan 2 (single-stage)	Control of supply and exhaust fan (configurable)	Maximum load: 250 V, 2 A
M5	Fan (three-stage)	Control of three stage fan	Maximum load: 250 V, 4 A
RJ45	Network connector	Network connector for the upload of software updates	
Rel 8	Potential-free relay contact	Function freely configurable	Maximum load: 250 V, 10A
Rel 9	Potential-free relay contact	Function freely configurable	Maximum load: 250 V, 10A
SC	Safety loop		
SF	Ferrite CAN BUS		
SW1	Rotary switch unit address	See notes in chapter 5.3.3.21	
S1	Door switch		
S2	Start-/Stop button		
S3	Light 1 button		
S4	Light 2 button		
T1	Transforer (option)	Power supply for three stage fan and 24 VAC light	
Q5	External main switch (all-pole disconnection) power supply		
Q6	External main switch (all-pole disconnection) power supply		

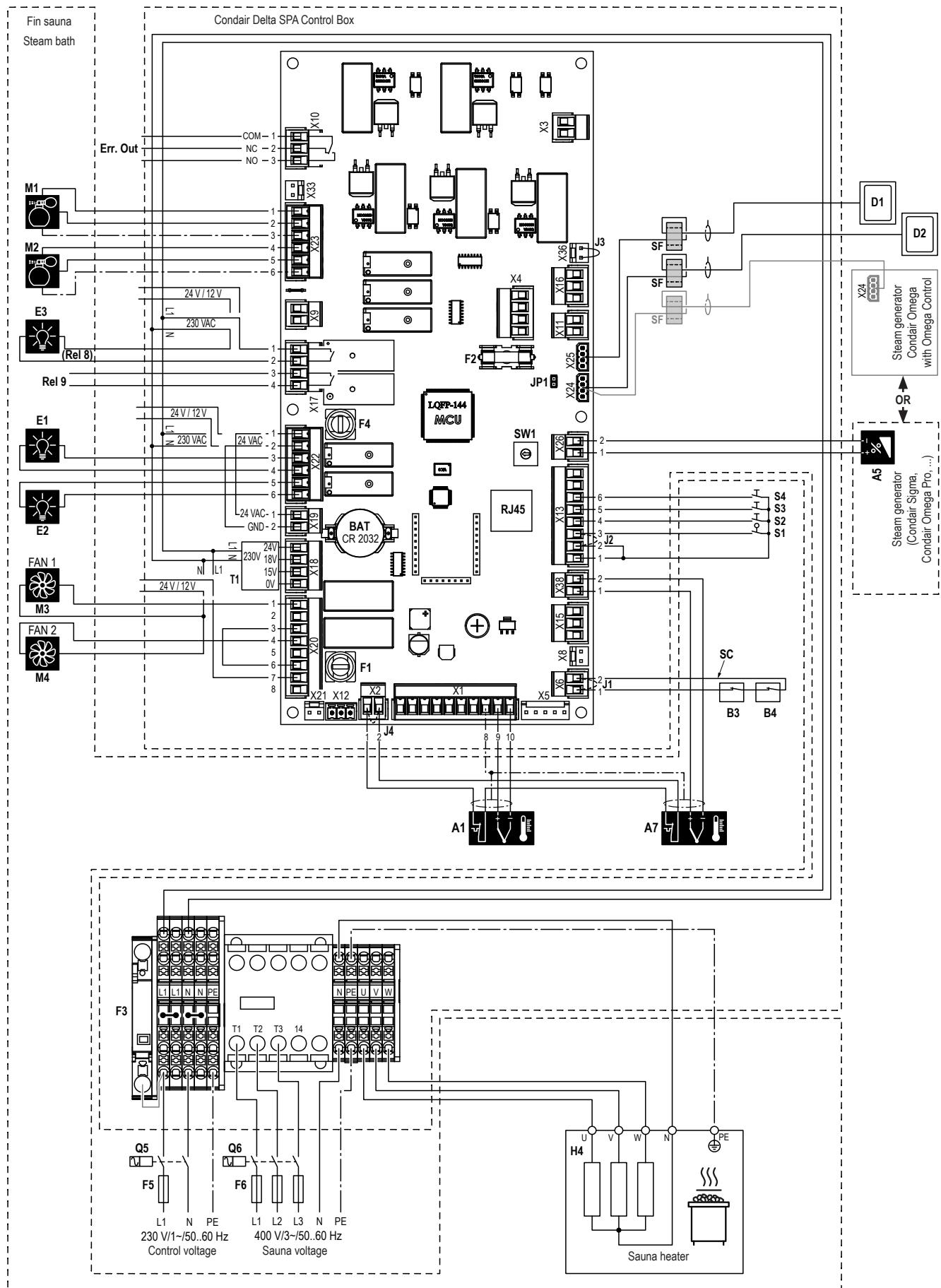
5.3.2.9 Wiring diagram Condair Delta SPA Control Box for Fin sauna application with demand control of an externally powered sauna heater



Legend wiring diagram Condair Delta SPA Control box for Fin sauna application with demand control of an externally powered sauna heater

Symbol	Description	Remarks	Technical details
A1	Temperature sensor with integrated over-temperature switch	Detecting of the cabin temperature	KTY, PT100, PT1000
A10	Demand signal sauna heater	Demand signal for the control of the heating of the externally powered sauna heater	0-10 V
A11	Temperature sensor sauna heater	Detecting of the sauna heater temperature	KTY, PT100, PT1000
B3	Safety devices (e.g. emergency stop)		
B4	Safety device sauna heating	e.g. switch protection cover sauna heater	
BAT	Backup battery SPA control board		CR2032, Lithium 3V
D1 / D2	External SPA display(s)	See notes in chapter 5.3.3.21	
E1	Light 1	Configurable as cleaning or color light	Maximum load: 250 V, 0.5A
E2	Light 2	Configurable as cleaning or color light	Maximum load: 250 V, 0.5A
Err.Out	Fault output		
F1	Microfuse fans		4 A, slow acting
F2	Microfuse 24 VDC external		1 A, slow acting
F3	Fuse terminal		1.6 A, slow acting
F4	Microfuse light		1 A, slow acting
F5	External fuse power supply 230 V/1~/50..60 Hz		10 A, fast acting
H4	Sauna heater	 Observe safety notes in chapter 5.3.3.17!	Maximum load: 9 kW
J1	Cable bridge	Connect cable bridge to terminal block "X6", if no safety devices are connected to terminal block "X6".	
J2	Cable bridge	Connect cable bridge to terminals 2 and 3 of terminal block "X2", if no door switch is connected.	
J3	Cable bridge	Do not remove!	
J4	Cable bridge	Connect cable bridge to terminal block "X2", if no overtemperature switch is connected.	
JP1	Terminating resistor CAN BUS	Remove jumper, if both CAN BUS connectors are used.	
M3	Fan 1 (single-stage)	Control of supply and exhaust fan (configurable)	Maximum load: 250 V, 2 A
M4	Fan 2 (single-stage)	Control of supply and exhaust fan (configurable)	Maximum load: 250 V, 2 A
M5	Fan (three-stage)	Control of three stage fan	Maximum load: 250 V, 4 A
RJ45	Network connector	Network connector for the upload of software updates	
Rel 8	Potential-free relay contact	Function freely configurable	Maximum load: 250 V, 10A
Rel 9	Potential-free relay contact	Function freely configurable	Maximum load: 250 V, 10A
SC	Safety loop		
SF	Ferrite CAN BUS		
SW1	Rotary switch unit address	See notes in chapter 5.3.3.21	
S1	Door switch		
S2	Start-/Stop button		
S3	Light 1 button		
S4	Light 2 button		
T1	Transformer (option)	Power supply for three stage fan and 24 VAC light	
Q5	External main switch (all-pole disconnection) power supply		

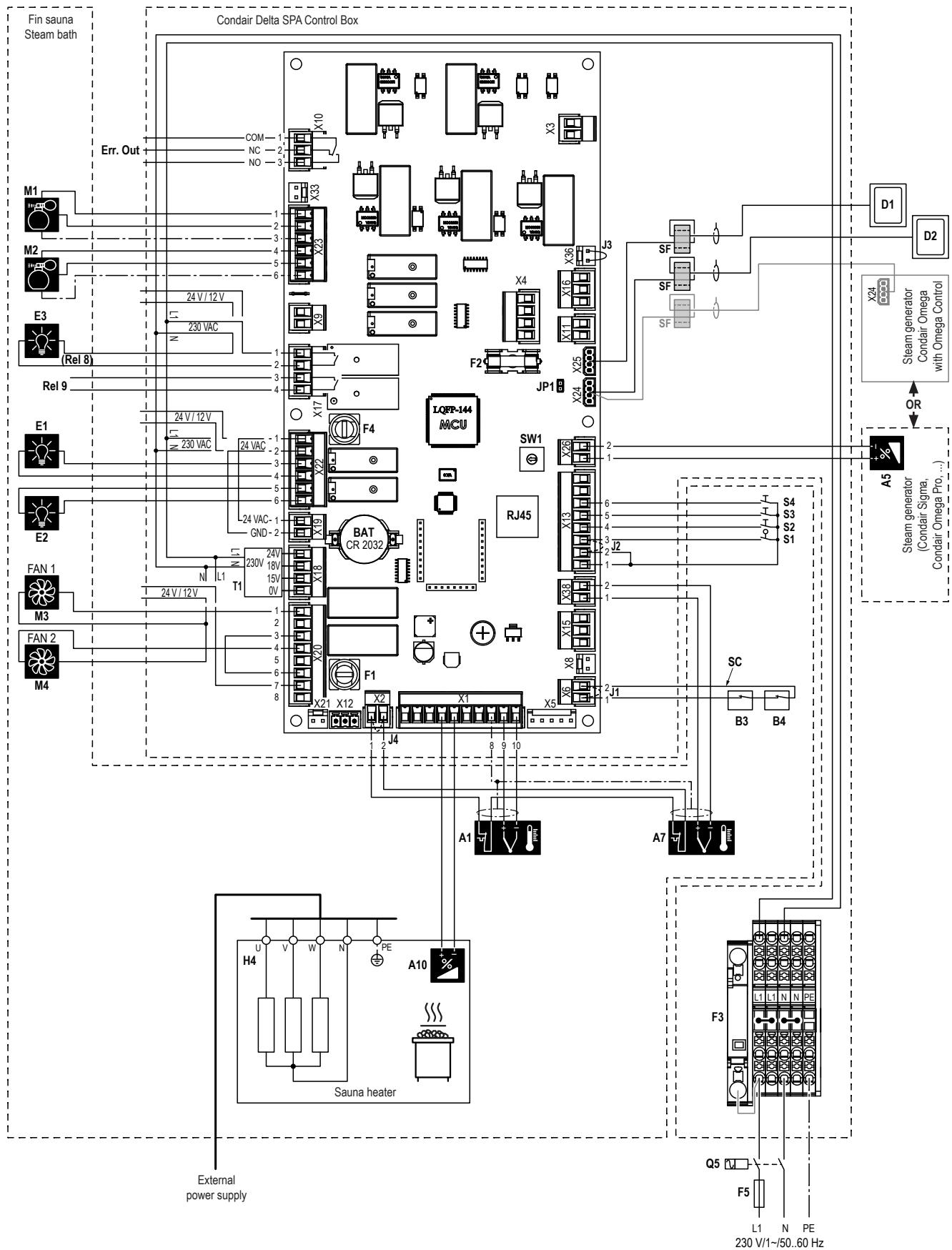
5.3.2.10 Wiring diagram Condair Delta SPA Control Box for dual cabin application (Fin sauna / steam bath), sauna heating controlled internally



Legend wiring diagram Condair Delta SPA Control box for dual cabin application (Fin sauna / steam bath), sauna heating controlled internally

Symbol	Description	Remarks	Technical details
A1	Temperature sensor with integrated over-temperature switch	Cabin temperature sensor with integrated overtemperature switch for steam bath cabin	KTY, PT100, PT1000
A7	Temperature sensor with integrated over-temperature switch	Cabin temperature sensor with integrated overtemperature switch for sauna cabin	KTY, PT100, PT1000
A5	Demand signal for external steam generator		0-10 V
B3	Safety devices (e.g. emergency stop)		
B4	Safety device sauna heating	e.g. switch protection cover sauna heater	
BAT	Backup battery SPA control board		CR2032, Lithium 3V
D1 / D2	External SPA display(s)	See notes in chapter 5.3.3.21	
E1	Light 1	Combined cleaning light (can be configured for one of the two cabins). Light 1 can be controlled via button "S3" or via the SPA display.	Maximum load: 250 V, 0.5A
E2	Light 2	Color light steam bath cabin	Maximum load: 250 V, 0.5A
E3 (Rel 8)	Light 3	Color light sauna cabin	Maximum load: 250 V, 10A
Err.Out	Fault output		
F1	Microfuse fans		4 A, slow acting
F2	Microfuse 24 VDC external		1 A, slow acting
F3	Fuse terminal		1.6 A, slow acting
F4	Microfuse light		1 A, slow acting
F5	External fuse power supply 230 V/1~/50..60 Hz		32 A, fast acting
F6	External fuse 400 V/3~/50..60 Hz power supply		16 A, fast acting
H4	Sauna heater	 Observe safety notes in chapter 5.3.3.17!	Maximum load: 9 kW
J1	Cable bridge	Connect cable bridge to terminal block "X6", if no safety devices are connected to terminal block "X6".	
J2	Cable bridge	Connect cable bridge to terminals 2 and 3 of terminal block "X2", if no door switch is connected.	
J4	Cable bridge	Connect cable bridge to terminal block "X2", if no overtemperature switch is connected.	
JP1	Terminating resistor CAN BUS	Remove jumper, if both CAN BUS connectors are used.	
M1	Fragrance pump 1	 DANGER: 230 V output!	Maximum load: 250 V, 0.25A
M2	Fragrance pump 2	 DANGER: 230 V output!	Maximum load: 250 V, 0.25A
M3	Fan 1 (single-stage)	Control of supply and exhaust fan (configurable)	Maximum load: 250 V, 2 A
M4	Fan 2 (single-stage)	Control of supply and exhaust fan (configurable)	Maximum load: 250 V, 2 A
Rel 9	Potential-free relay contact	The potential free contact can be used for one of the two cabins.	Maximum load: 250 V, 10A
RJ45	Network connector	Network connector for the upload of software updates	
SC	Safety loop		
SF	Ferrite CAN BUS		
SW1	Rotary switch unit address	Always set to Pos. "0"	
S1	Door switch	Door switch Steam bath cabin	
S2	Start-/Stop button	Start-/Stop button Steam bath cabin	
S3	Light 1 button	Light 1 button for combined cleaning light	
S4	Start-/Stop button	Start-/Stop button for sauna cabin	
Q5	External main switch (all-pole disconnection) power supply		
Q6	External main switch (all-pole disconnection) power supply		

5.3.2.11 Wiring diagram Condair Delta SPA Control Box for dual cabin application (Fin sauna / Steam bath), sauna heater externally powered

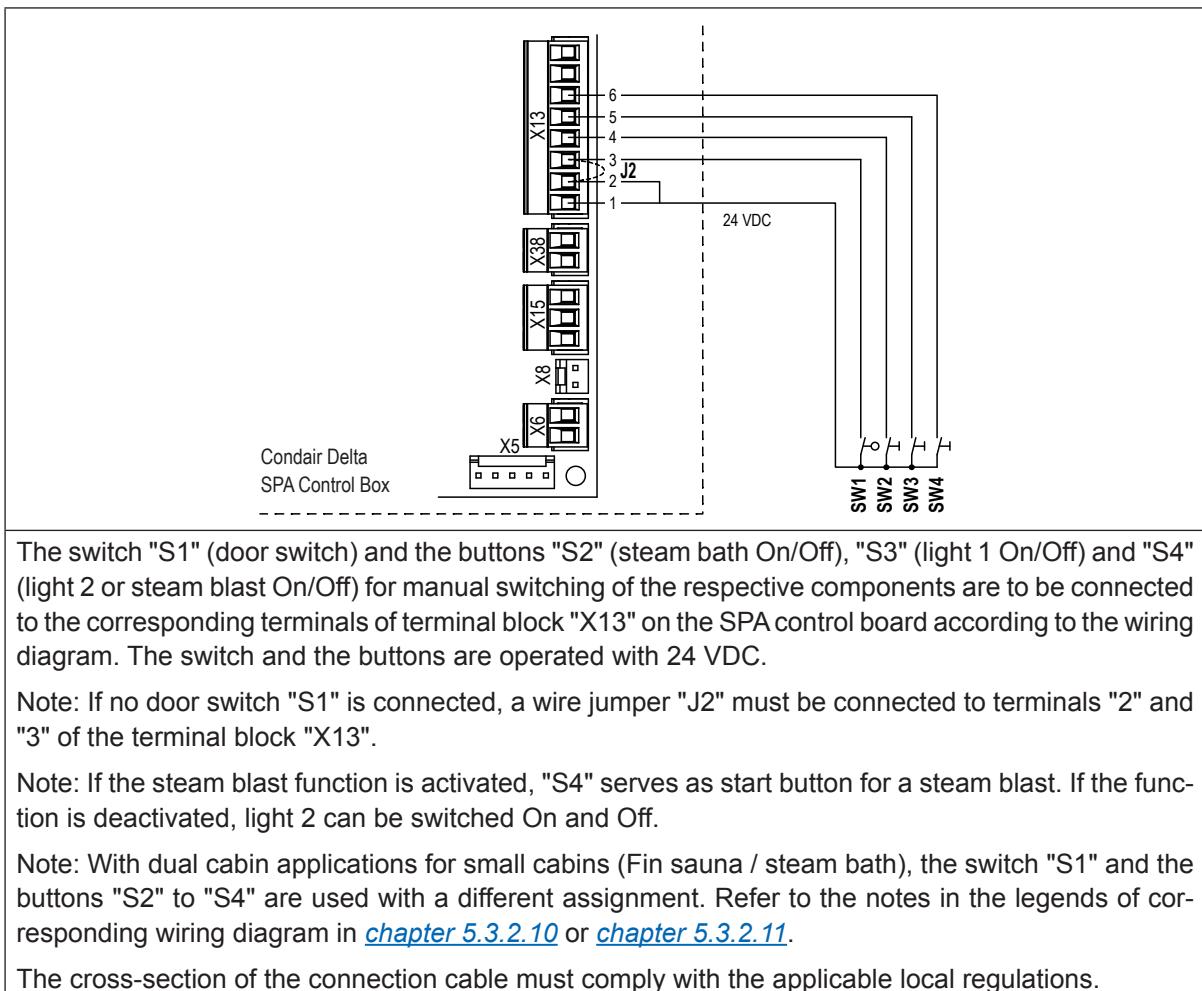


Legend wiring diagram Condair Delta SPA Control Box for dual cabin application (Fin sauna / Steam bath), sauna heater externally powered

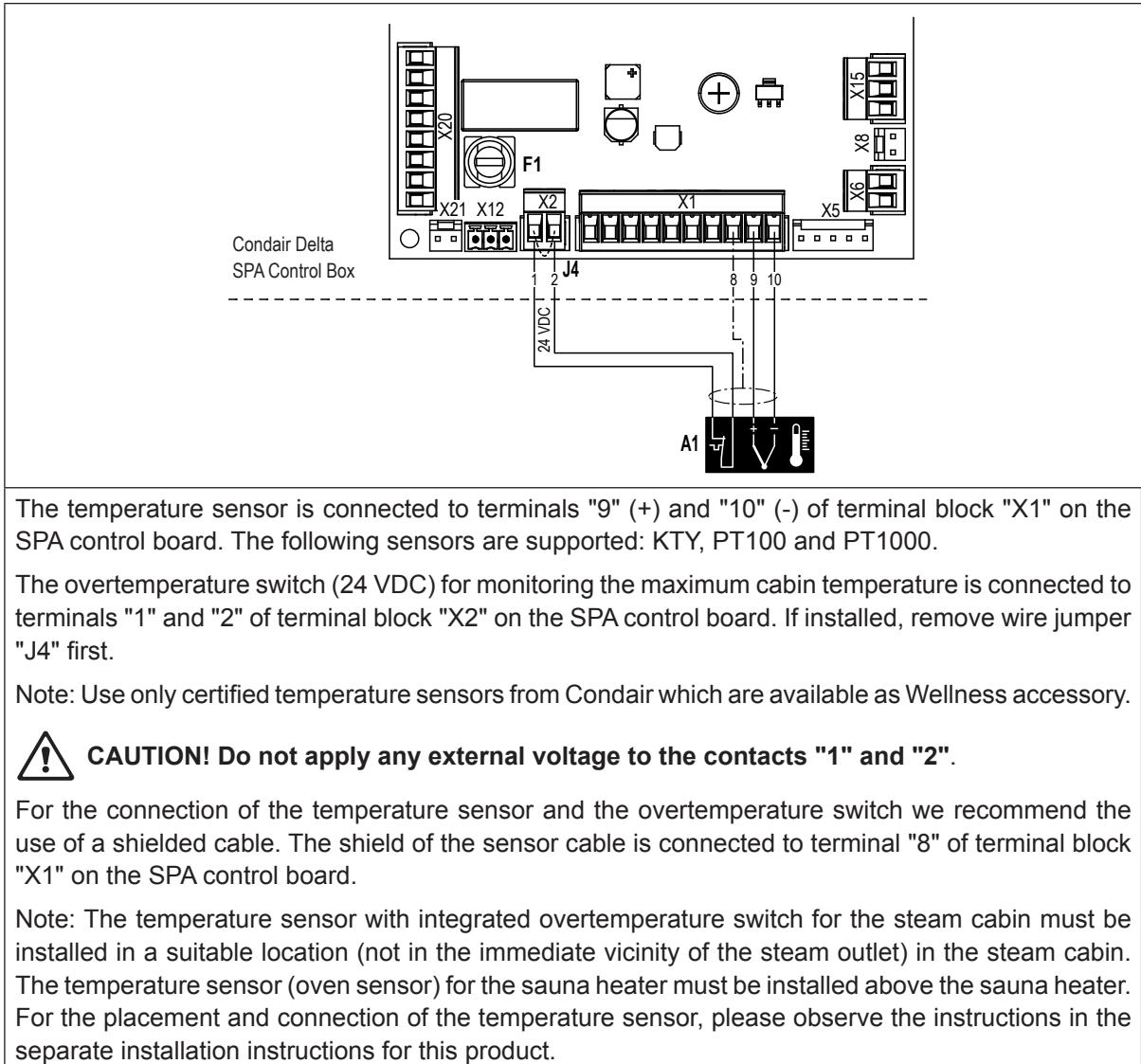
Symbol	Description	Remarks	Technical details
A1	Temperature sensor with integrated over-temperature switch	Cabin temperature sensor with integrated overtemperature switch for steam bath cabin	KTY, PT100, PT1000
A7	Temperature sensor with integrated over-temperature switch	Cabin temperature sensor with integrated overtemperature switch for sauna cabin	KTY, PT100, PT1000
A5	Demand signal for external steam generator		0-10 V
A10	Demand signal sauna heater	Demand signal for the control of the heating of the externally powered sauna heater	0-10 V
B3	Safety devices (e.g. emergency stop)		
B4	Safety device sauna heating	e.g. switch protection cover sauna heater	
BAT	Backup battery SPA control board		CR2032, Lithium 3V
D1 / D2	External SPA display(s)	See notes in chapter 5.3.3.21	
E1	Light 1	Combined cleaning light (can be configured for one of the two cabins). Light 1 can be controlled via button "S3" or via the SPA display.	Maximum load: 250 V, 0.5A
E2	Light 2	Color light steam bath cabin	Maximum load: 250 V, 0.5A
E3 (Rel 8)	Light 3	Color light sauna cabin	Maximum load: 250 V, 10A
Err.Out	Fault output		
F1	Microfuse fans		4 A, slow acting
F2	Microfuse 24 VDC external		1 A, slow acting
F3	Fuse terminal		1.6 A, slow acting
F4	Microfuse light		1 A, slow acting
F5	External fuse power supply 230 V/1~/50..60 Hz		32 A, fast acting
F6	External fuse 400 V/3~/50..60 Hz power supply		16 A, fast acting
J1	Cable bridge	Connect cable bridge to terminal block "X6", if no safety devices are connected to terminal block "X6".	
J2	Cable bridge	Connect cable bridge to terminals 2 and 3 of terminal block "X2", if no door switch is connected.	
J4	Cable bridge	Connect cable bridge to terminal block "X2", if no overtemperature switch is connected.	
JP1	Terminating resistor CAN BUS	Remove jumper, if both CAN BUS connectors are used.	
M1	Fragrance pump 1	 DANGER: 230 V output!	Maximum load: 250 V, 0.25A
M2	Fragrance pump 2	 DANGER: 230 V output!	Maximum load: 250 V, 0.25A
M3	Fan 1 (single-stage)	Control of supply and exhaust fan (configurable)	Maximum load: 250 V, 2 A
M4	Fan 2 (single-stage)	Control of supply and exhaust fan (configurable)	Maximum load: 250 V, 2 A
Rel 9	Potential-free relay contact	The potential free contact can be used for one of the two cabins.	Maximum load: 250 V, 10A
RJ45	Network connector	Network connector for the upload of software updates	
SC	Safety loop		
SF	Ferrite CAN BUS		
SW1	Rotary switch unit address	Always set to Pos. "0"	
S1	Door switch	Door switch Steam bath cabin	
S2	Start-/Stop button	Start-/Stop button Steam bath cabin	
S3	Light 1 button	Light 1 button for combined cleaning light	
S4	Start-/Stop button	Start-/Stop button for sauna cabin	
Q5	External main switch (all-pole disconnection) power supply		

5.3.3 Installation work external connections

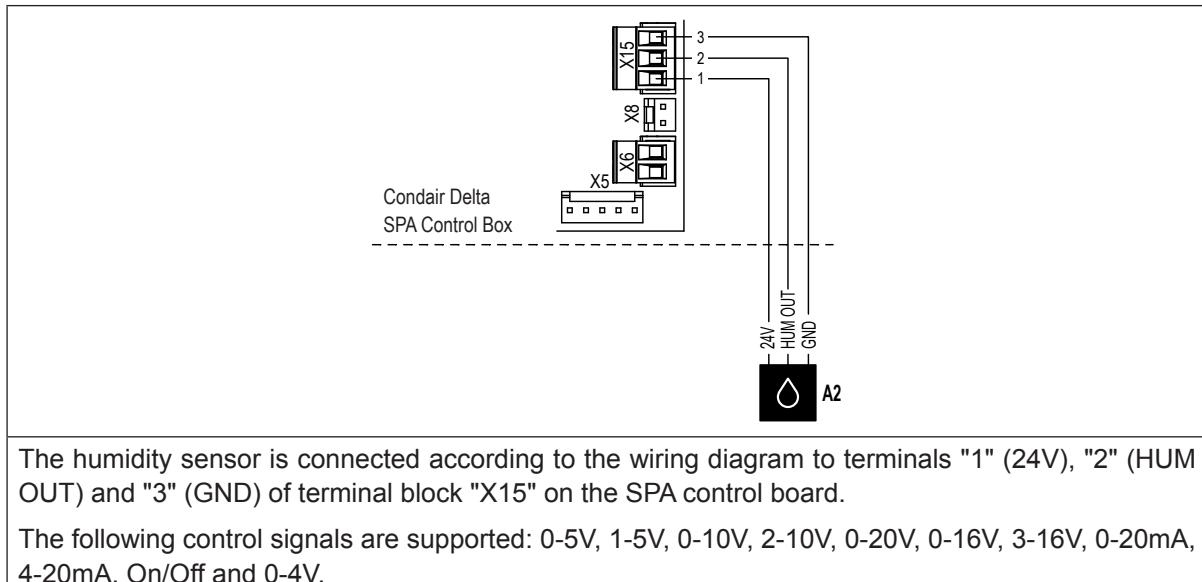
5.3.3.1 Connection of switch "S1" and buttons "S2" to "S4"



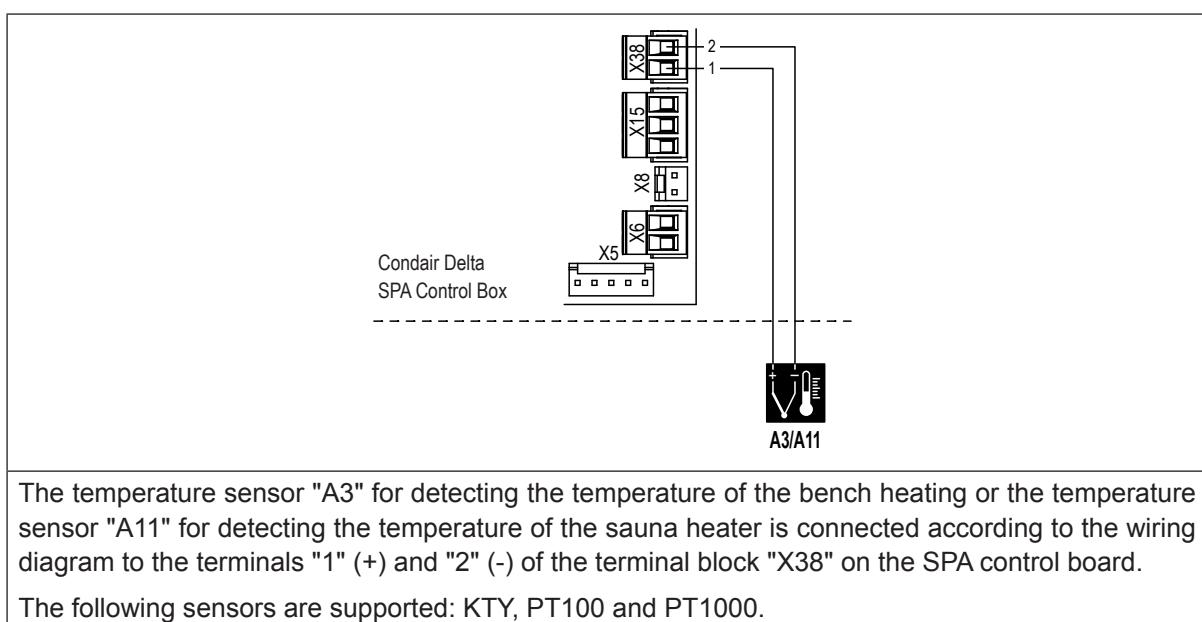
5.3.3.2 Connection of the temperature sensor "A1" for monitoring the cabin temperature



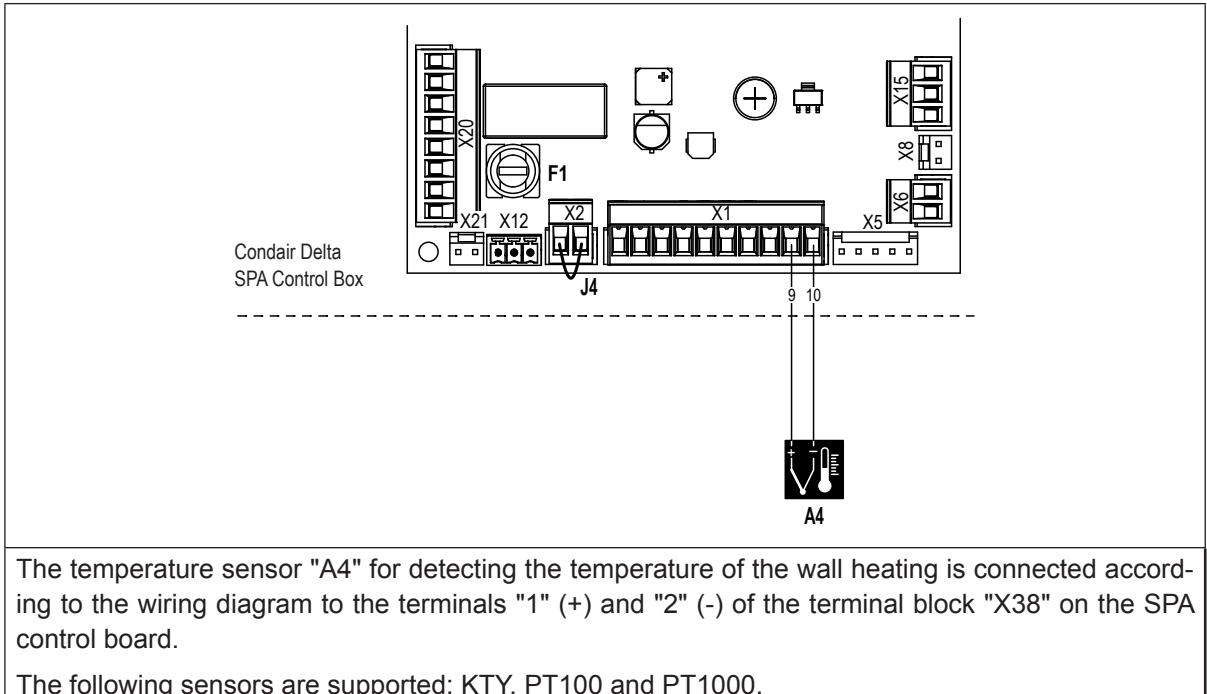
5.3.3.3 Connection of the humidity sensor "A2"



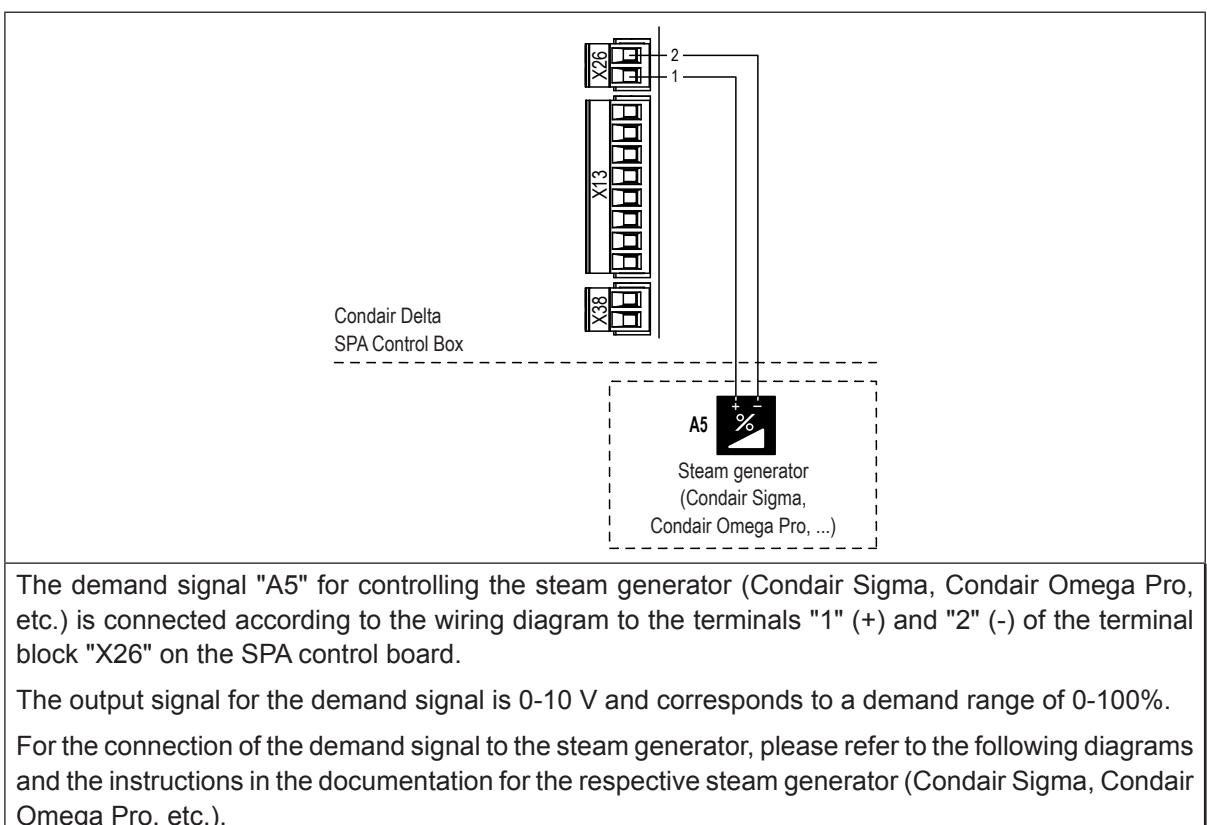
5.3.3.4 Connection of the temperature sensor "A3" of the bench heating or the temperature sensor "A11" for the sauna heater temperature measurement

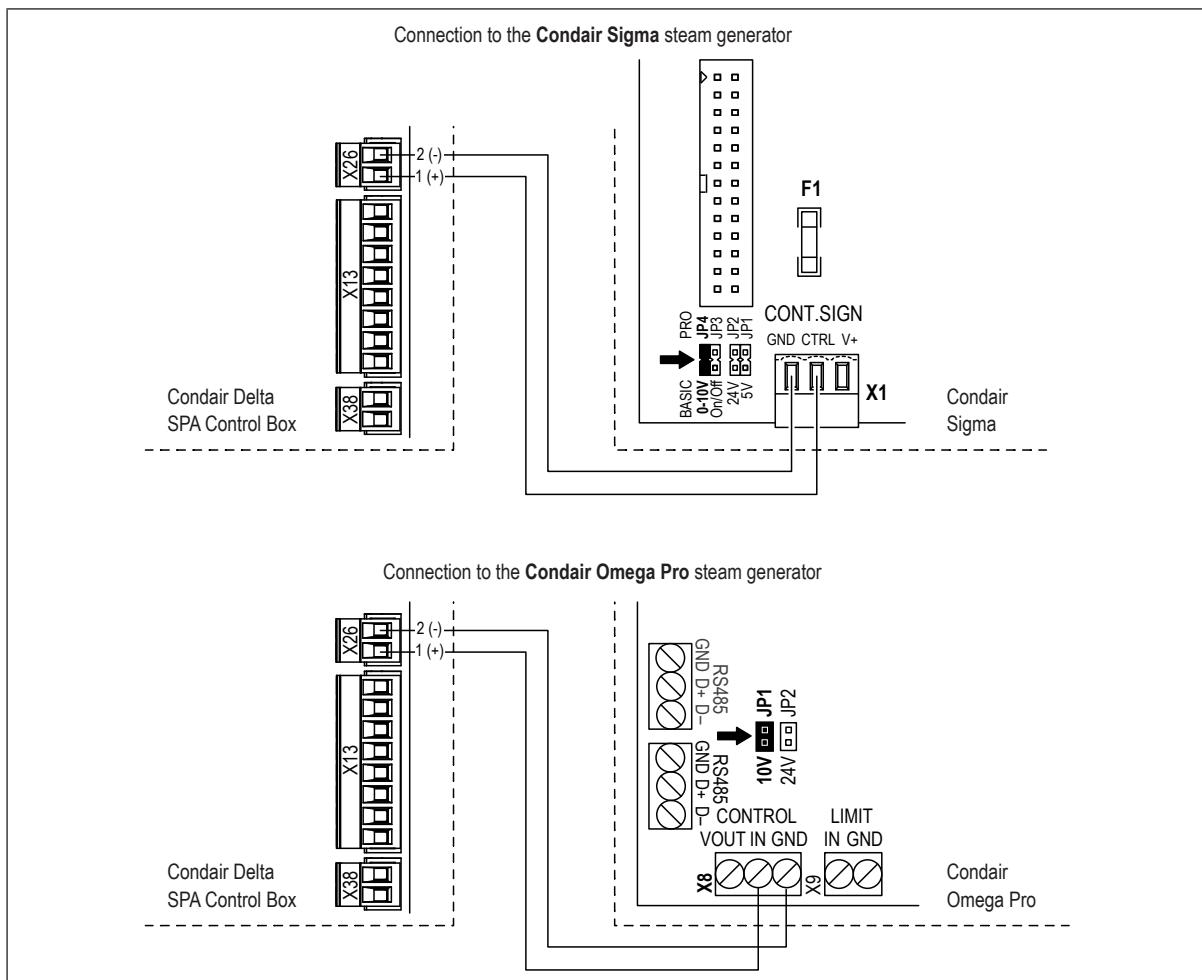


5.3.3.5 Connection of the temperature sensor "A4" of the wall heating

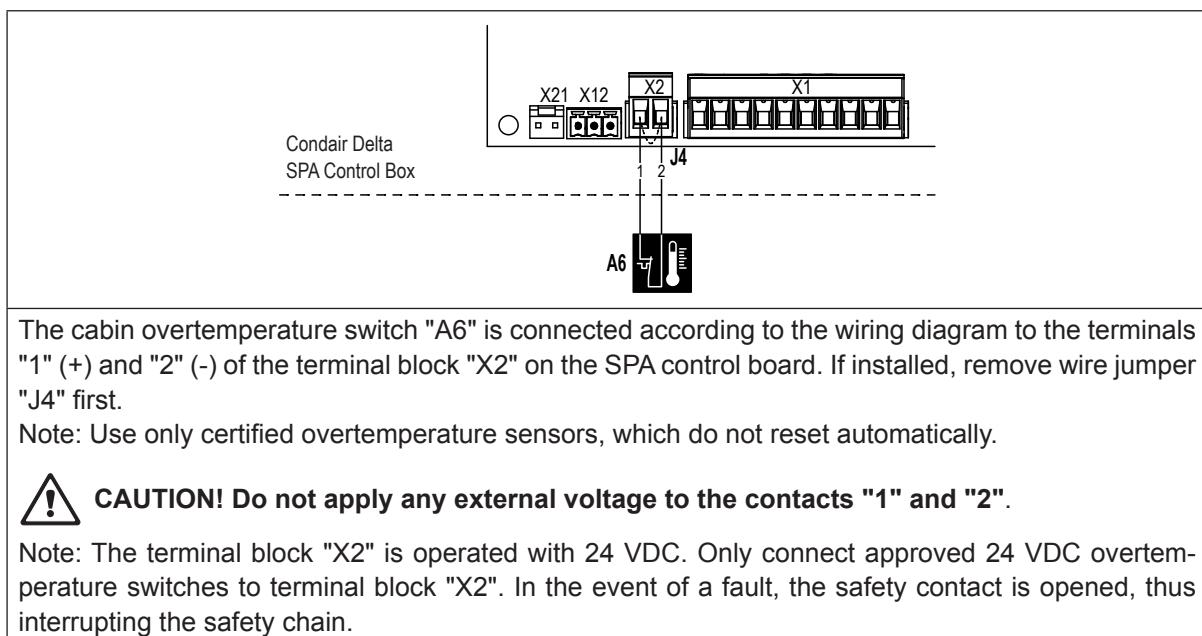


5.3.3.6 Connection of the demand signal "A5" for controlling the steam generator

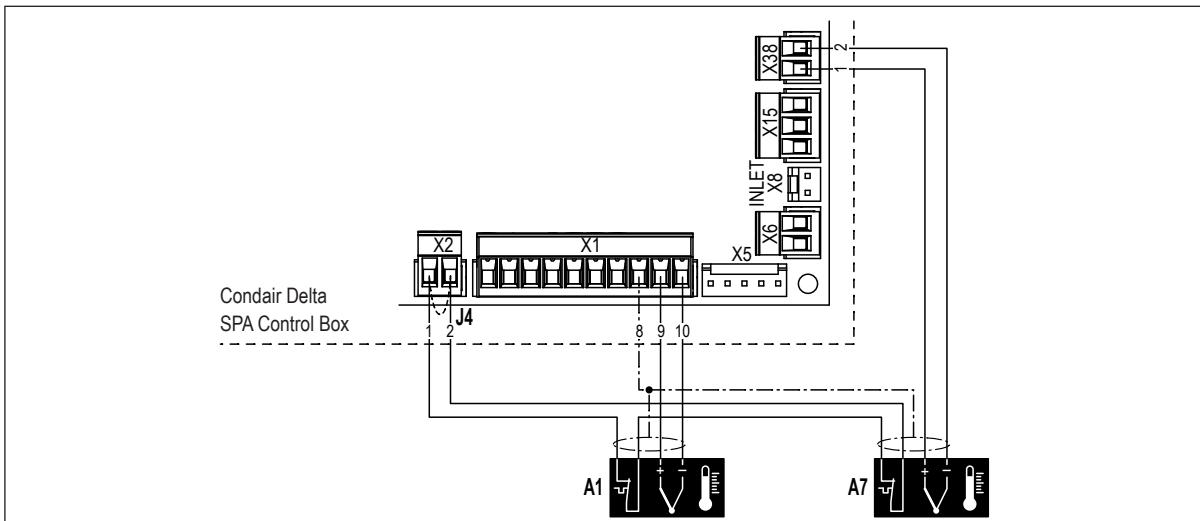




5.3.3.7 Connection of the cabin overtemperature switch "A6"



5.3.3.8 Connection of the temperature sensors "A1" and "A7" for the temperature control of small cabins for dual cabin application



The temperature sensors "A1" and "A7" are connected according to the wiring diagram to the terminals "9" (+) and "10" (-) of the terminal block "X1" on the SPA control board.

The following sensors are supported: KTY, PT100 and PT1000.

The overtemperature switches (24 VDC) for monitoring the maximum cabin temperatures are connected to terminals "1" and "2" of terminal block "X2" on the SPA control board. If installed, remove wire jumper "J4" first.

Note: Use only certified temperature sensors from Condair which are available as Wellness accessory.



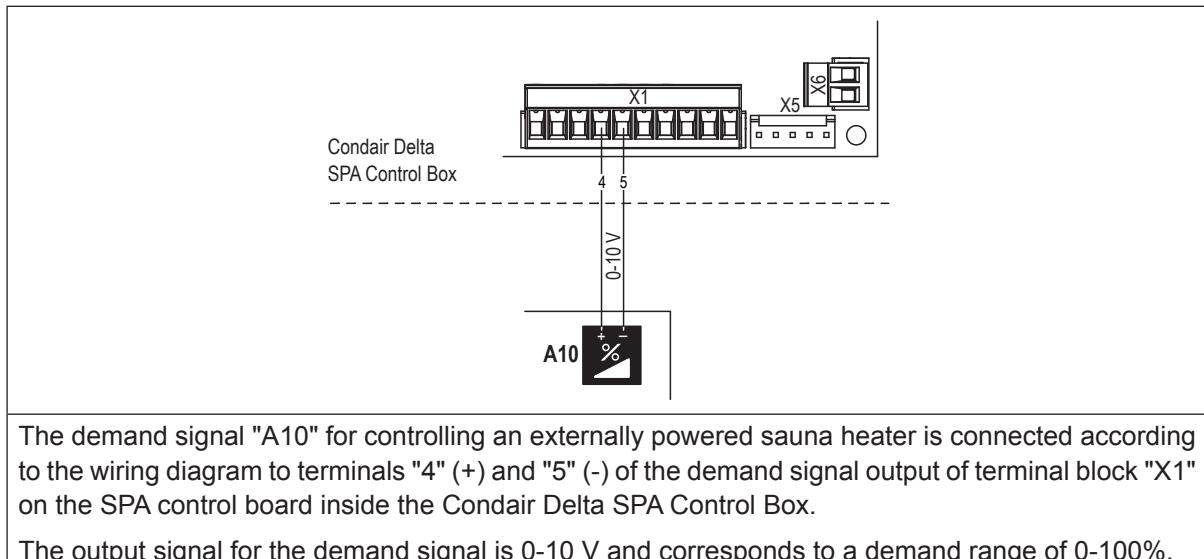
CAUTION! Do not apply any external voltage to the contacts "1" and "2".

For the connection of the temperature sensors and the overtemperature switches we recommend the use of shielded cables. The shields of the sensor cables are connected to terminal "8" of terminal block "X1" on the SPA control board.

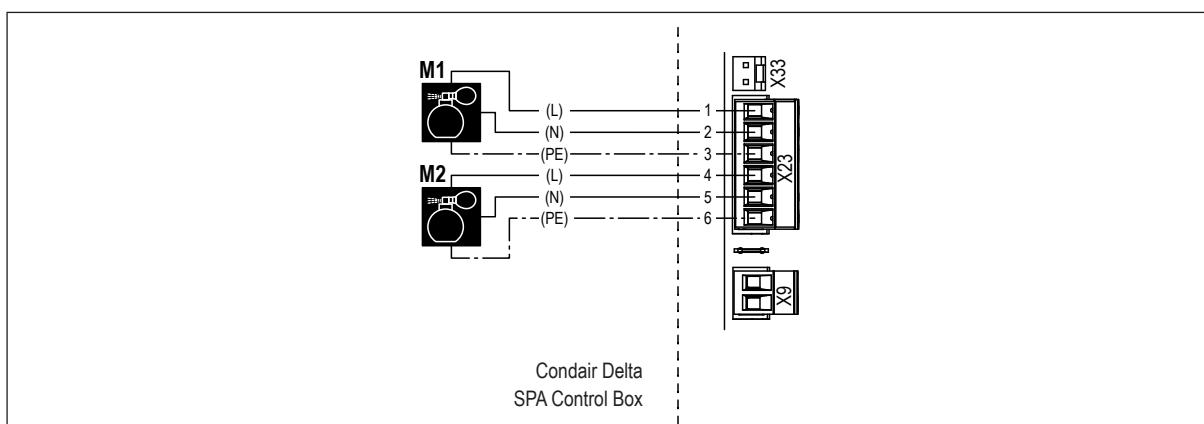
Note: The temperature sensor for the steam cabin must be installed in a suitable location (not in the immediate vicinity of the steam outlet or the sauna heater) in the steam cabin. The temperature sensor (oven sensor) for the sauna must be installed above the sauna heater.

For the placement and connection of the temperature sensors, please observe the instructions in the separate installation instructions for the corresponding product.

5.3.3.9 Connection of the demand signal "A10" for controlling the heating of an externally powered sauna heater



5.3.3.10 Connection of fragrance pumps "M1" and "M2" (230 VAC)



The fragrance pumps "M1" and "M2" are connected according to the electrical diagram to the corresponding terminals of the terminal block "X23" on the SPA control board inside the Condair Delta SPA Control Box.

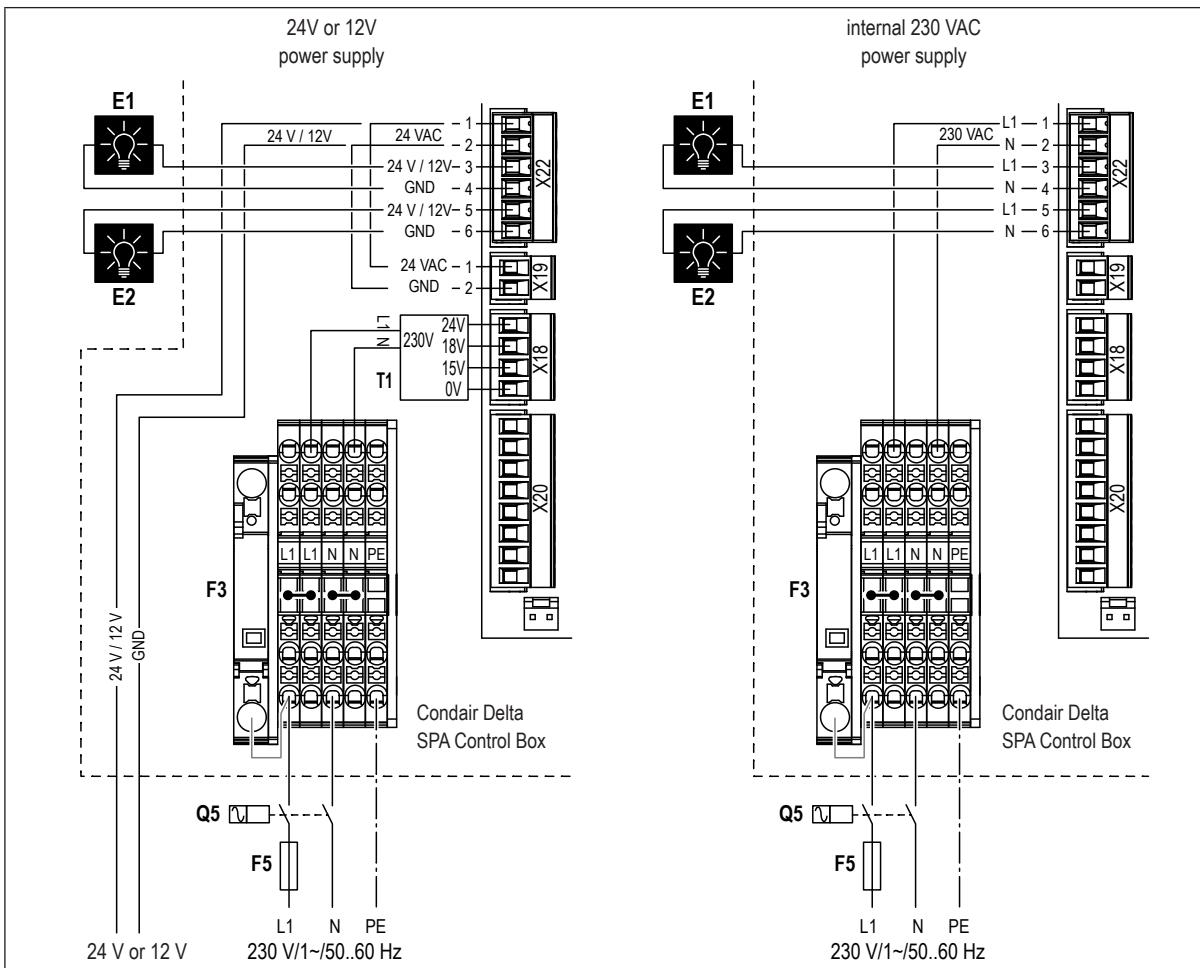


DANGER: The output voltage of the terminals is 230 VAC!

The cross-section of the connecting cables must comply with the applicable local regulations.

The maximum load is: 250 V, 0.25 A

5.3.3.11 Connecting the cabin light "E1" and "E2"



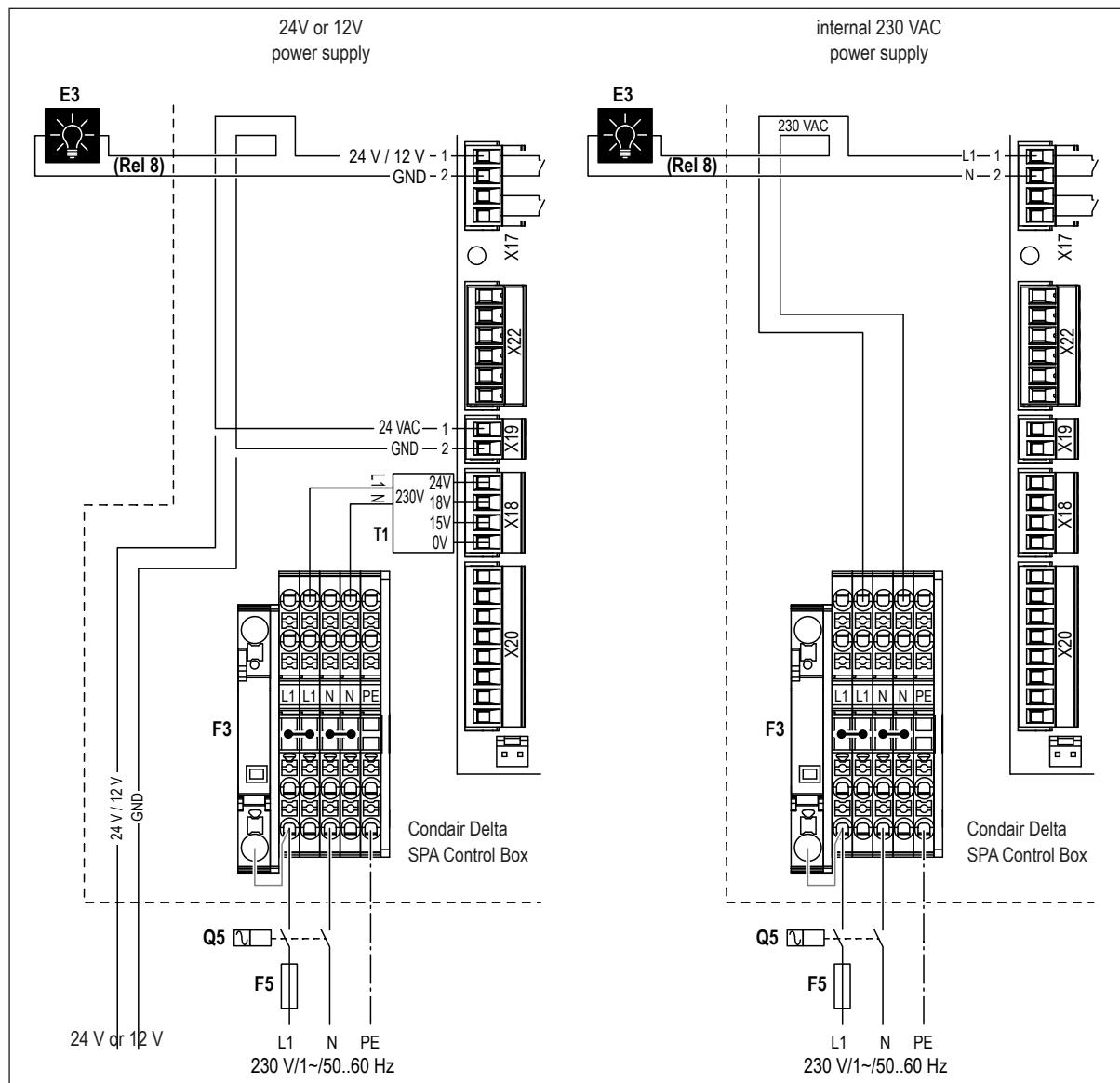
The cabin light "E1" (light 1) and "E2" (light 2) are connected according to the wiring diagram to the corresponding terminals of terminal block "X22" on the SPA control board inside the Condair Delta SPA Control Box. Depending on the lamps used, the cabin light is supplied either via the internal 230 VAC supply or via the 24 VAC supply from the optional transformer T1.

Note: If a different supply voltage is required (for example 12 V), an external power supply can be connected to terminals "1" and "2" of terminal block "X22".

The cross-section of the connecting cables must comply with the applicable local regulations.

The maximum load is: 250 V, 0.5 A

5.3.3.12 Connection of color light "E3" for the sauna cabin for dual cabin application of small cabins



The color light "E3" for the sauna cabin for dual cabin applications for small cabins is connected according to the electrical diagram to the corresponding terminals of the terminal block "X17" on the SPA control board inside the Condair Delta SPA Control Box.

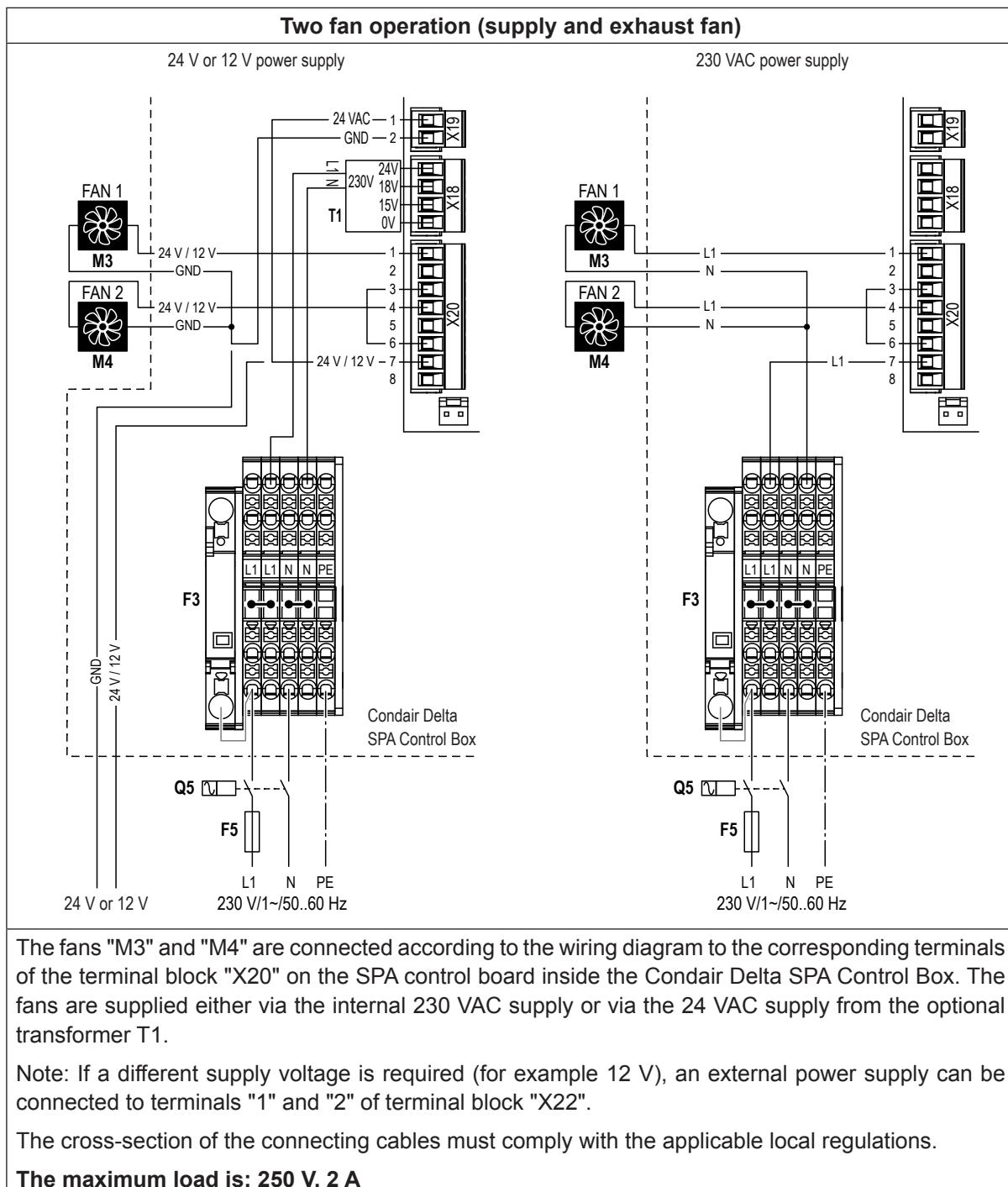
Depending on the lamps used, the color light is supplied either via the internal 230 VAC supply or via the 24 VAC supply from the optional transformer T1.

Note: If a different supply voltage is required (for example 12 V), an external power supply can be connected to terminals "1" and "2" of terminal block "X22".

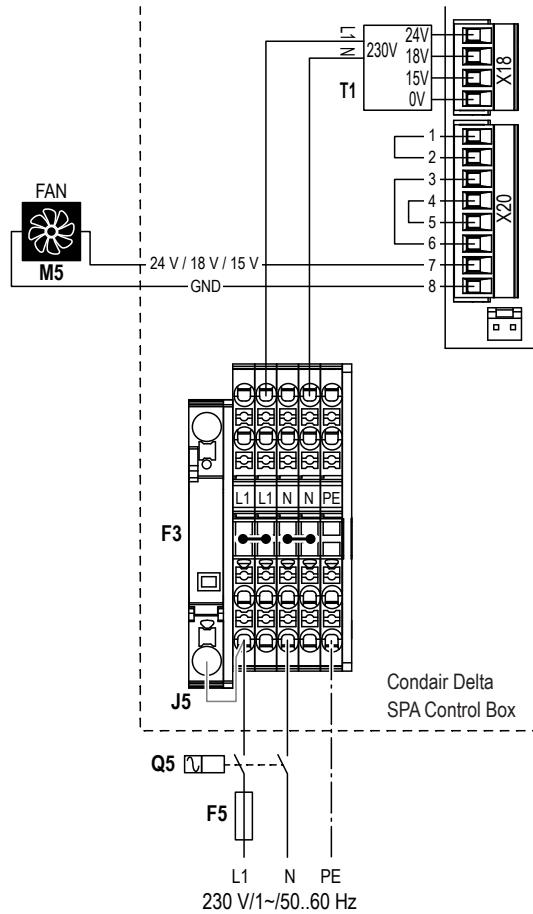
The cross-section of the connecting cables must comply with the applicable local regulations.

The maximum load is: 250 V, 0.5 A

5.3.3.13 Connection of the fans "M3"/"M4" (two fan operation) and M5 (single fan operation)



Single fan operation (three-stage fan)



The three-stage fan "M5" and the corresponding cable bridges are connected according to the wiring diagram to the corresponding terminals of terminal block "X20" on the SPA board in the Condair Delta SPA Control Box.

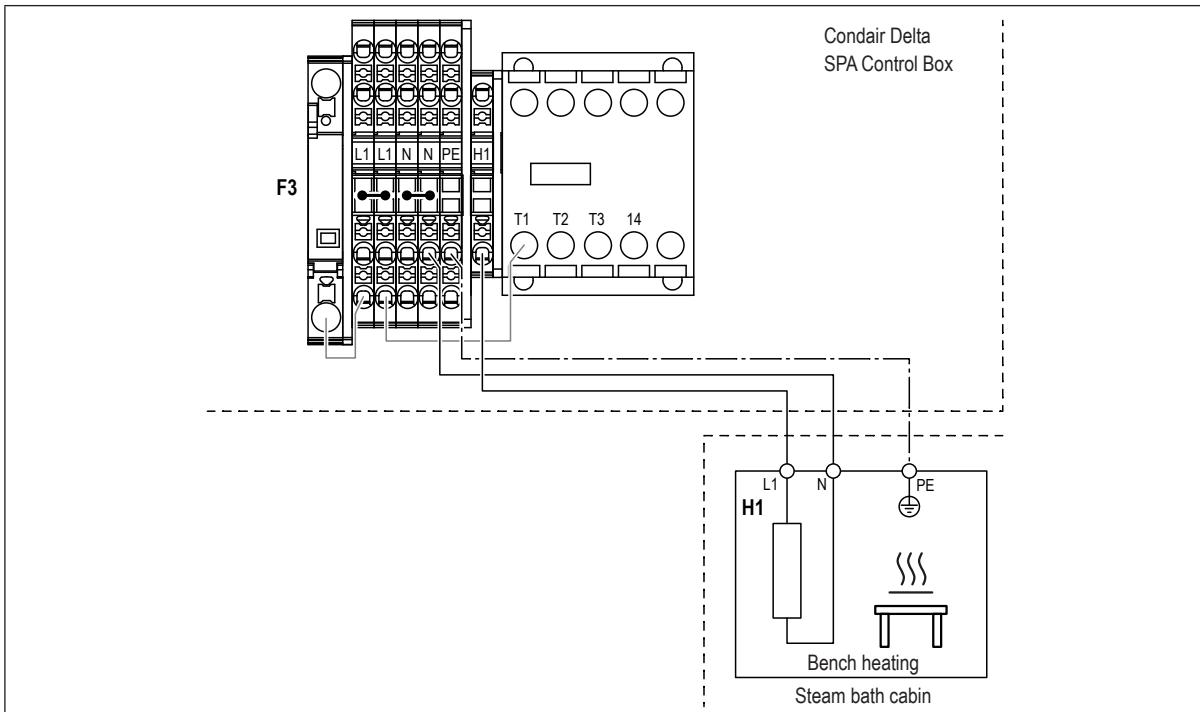
Important: Make sure that cable bridges are connected correctly.

The 15 V, 18 V or 24 V power supply of the fan is provided via the optional transformer "T1" which is connected to terminal block "X18" accordingly.

The cross-section of the connecting cables must comply with the applicable local regulations.

The maximum load is: 250 V, 4 A

5.3.3.14 Connection of the optional bench heating for steam bath application



The bench heating "H1" ("L1", "N" and "PE") is connected according to the electrical diagram with a three-pole cable to the corresponding plug-in terminals inside the Condair Delta SPA Control Box.

Connecting the cables to the plug-in terminals: Insert the stripped cable ends into the opening as far as they will go.

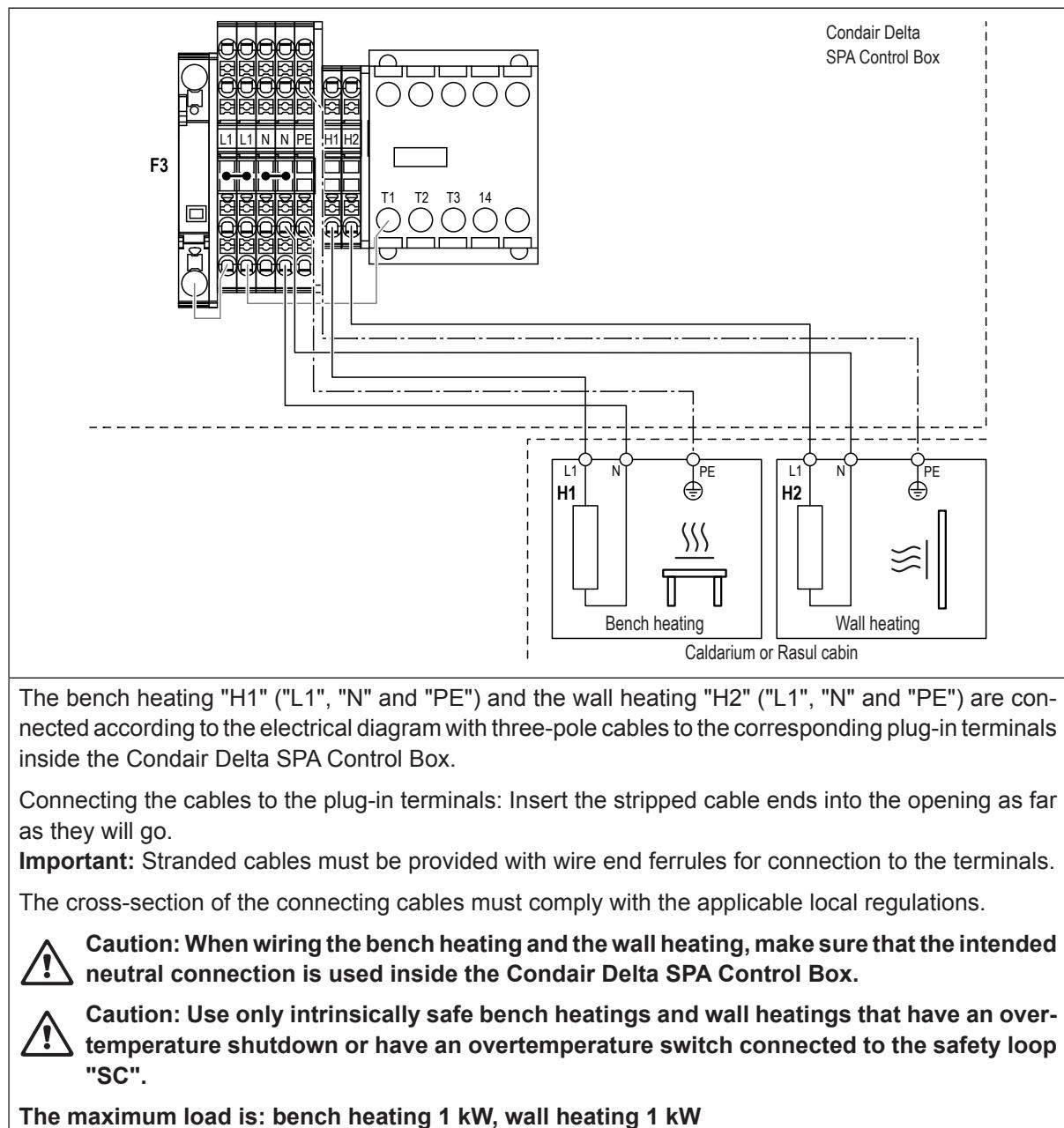
Important: Stranded cables must be provided with wire end ferrules for connection to the terminals.

Caution: When wiring the bench heating, make sure that the intended neutral connection is used inside the Condair Delta SPA Control Box.

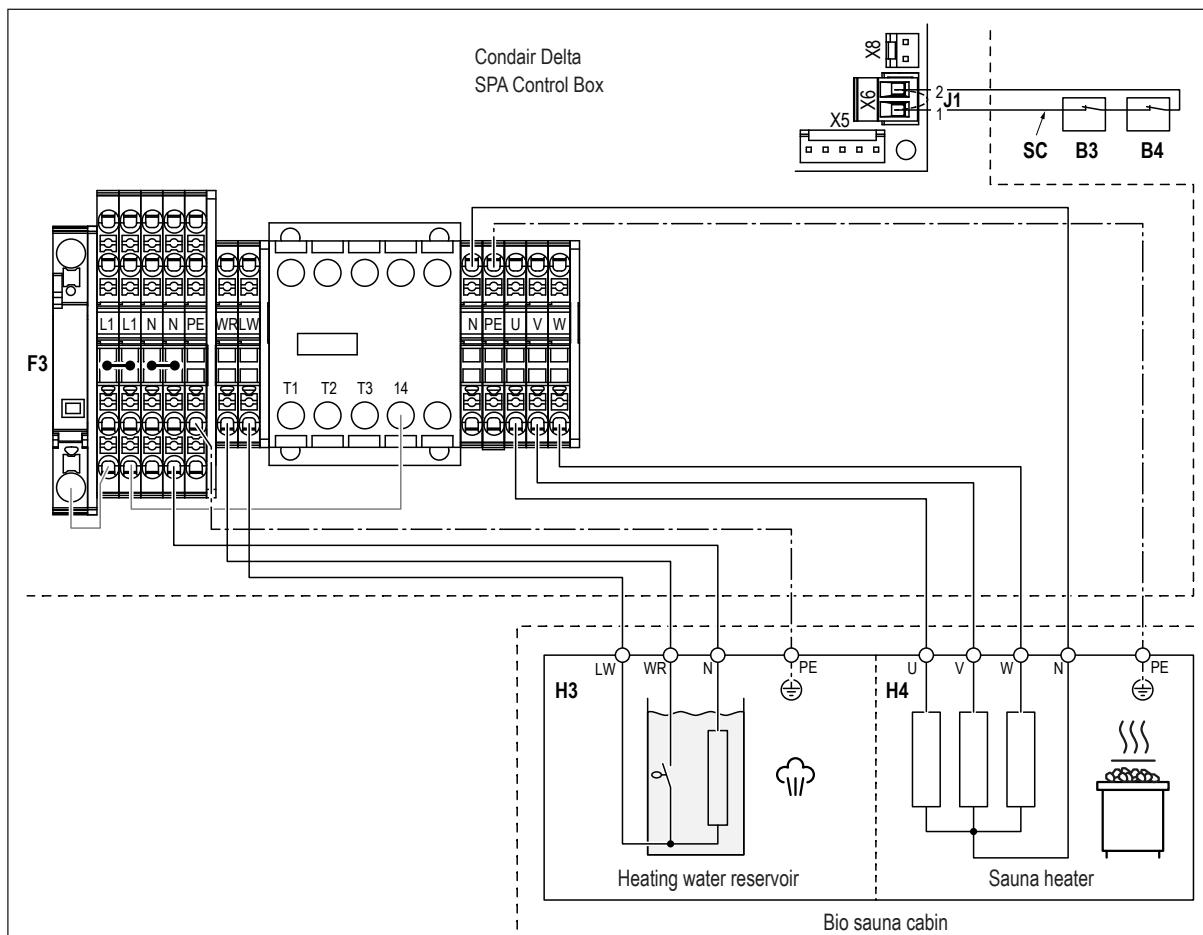
Caution: Use only intrinsically safe bench heatings that have an overtemperature shutdown or have an overtemperature switch connected to the safety loop "SC".

The maximum load is: Bench heating 2 kW

5.3.3.15 Connection of the bench heating and the wall heating for caldarium and Rasul application



5.3.3.16 Connection of the heating of the water reservoir and the sauna heater for Bio sauna application



The heater "H3" of the water reservoir ("LW", "WR", "N" and "PE") and the sauna heater "H4" ("U", "V", "W", "N" and "PE") are connected according to the wiring diagram to the corresponding plug-in terminals inside the Condair Delta SPA Control Box with a four-pin or five-pin cable, respectively.

Note: For the connection of the sauna heater and the water reservoir, please observe the instructions in the documentation supplied by the manufacturer.

Connecting the cables to the plug-in terminals: Insert the stripped cable ends into the opening as far as they will go.

Important: Stranded cables must be provided with wire end ferrules for connection to the terminals.

The cross-section of the connecting cables must comply with the applicable local regulations.



Caution Fire hazard: When wiring the heating of the sauna heater, make sure that the intended neutral conductor terminal is used in the Condair Delta SPA Control Box.



Caution: The sauna heater must be equipped with a certified safety system (e.g. a protective cover) to avoid switching the sauna heater on in an unsafe condition (e.g. towel on heater). This security device ("B4") must be connected to the security loop "SC".

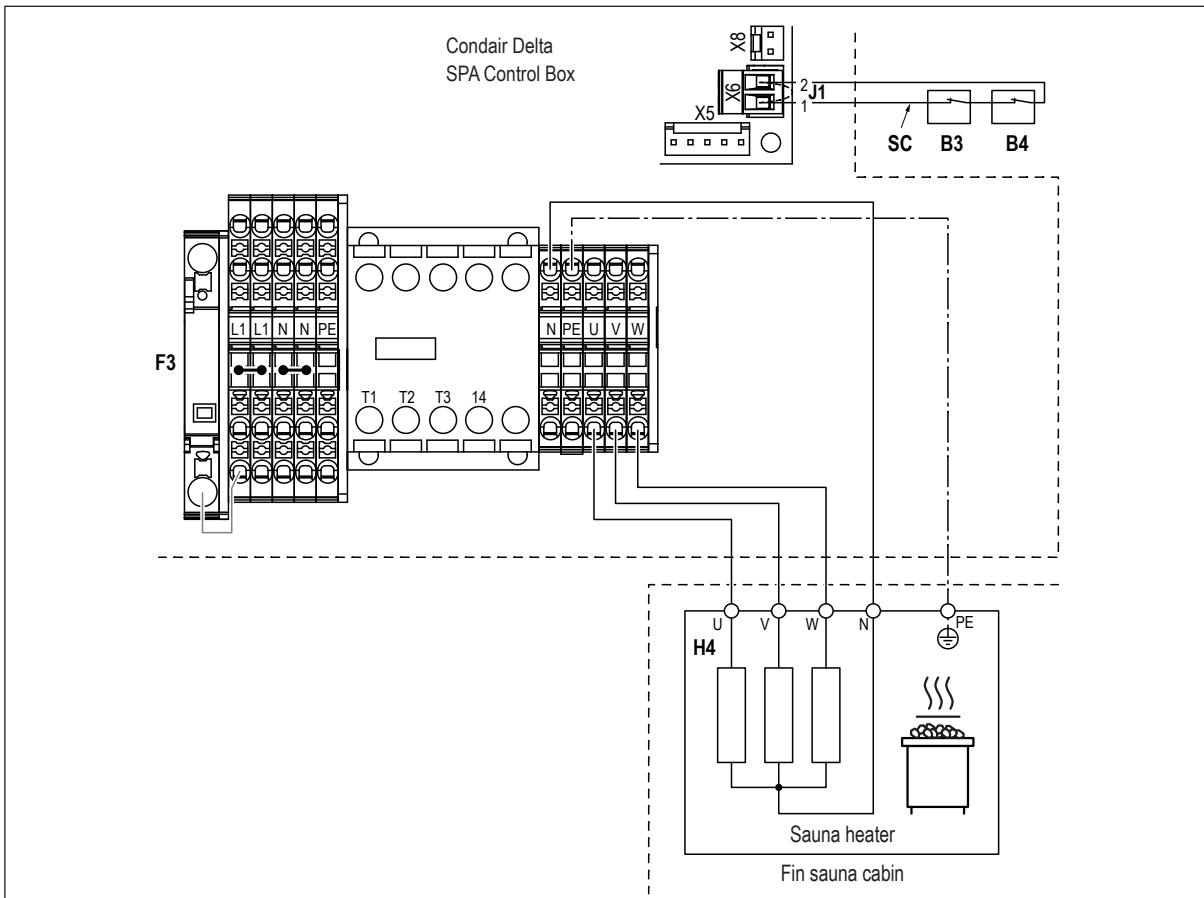
The maximum load is: Heating water reservoir 2 kW, Sauna heater 9 kW

Maximum power according to EN 60335-2-53

Attention: The maximum power consumption according to EN 60335-53 listed in the following table must be observed!

Cabin size [m³]	Power consumption sauna heater [kW]	Power consumption vaporizer [kW]
3-5	3	0.75
6-8	6	1.5
9-14	9	2

5.3.3.17 Connection of the sauna heater for Bio sauna application with external steam generator and Fin sauna application



The sauna heater "H4" ("U", "V", "W", "N" and "PE") is connected according to the electrical diagram with a five-pin cable to the corresponding plug-in terminals inside the Condair Delta SPA Control Box. Note: For the connection of the sauna heater, please observe the instructions in the documentation supplied by the manufacturer.

Connecting the cables to the plug-in terminals: Insert the stripped cable ends into the opening as far as they will go.

Important: Stranded cables must be provided with wire end ferrules for connection to the terminals.

The cross-section of the connecting cable must comply with the applicable local regulations.



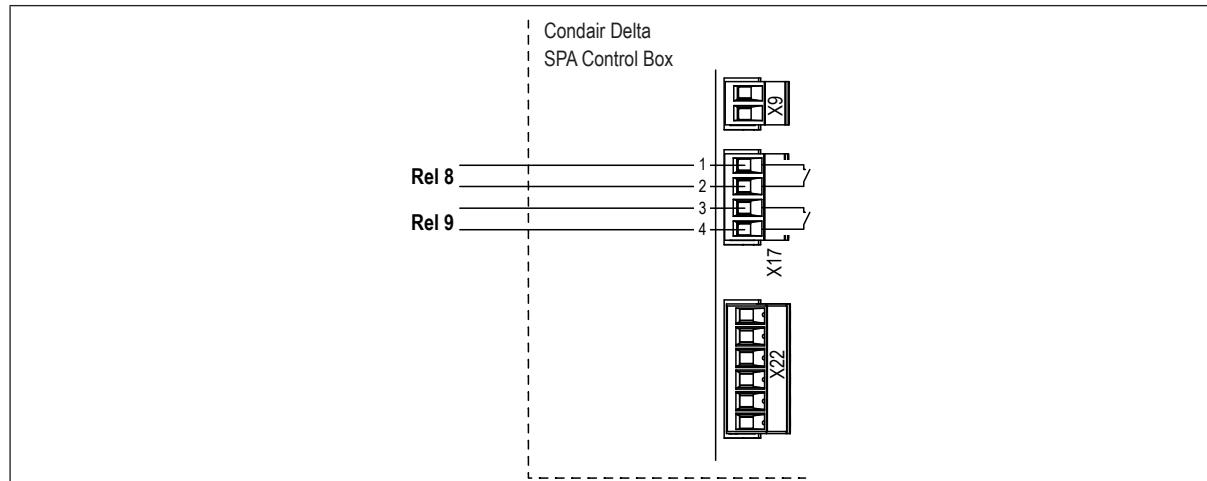
Caution Fire hazard: When wiring the heating of the sauna heater, make sure that the intended neutral conductor terminal is used inside the Condair Delta SPA Control Box.



Caution: The sauna heater must be equipped with a certified safety system (e.g. a protective cover) to avoid switching the sauna heater on in an unsafe condition (e.g. towel on heater). This security device ("B4") must be connected to the security loop "SC".

The maximum load is: Sauna heater 9 kW

5.3.3.18 Connection of the relays "Rel 8" and "Rel 9"



The potential-free relay contacts "Rel 8" and "Rel 9" are used to control components (e.g. loudspeakers, additional light) in the SPA cabin. These components are connected according to the wiring diagram to terminals "1" and "2" ("Rel 8") or "3" and "4" ("Rel 9") of terminal block "X17" inside the Condair Delta SPA Control Box.

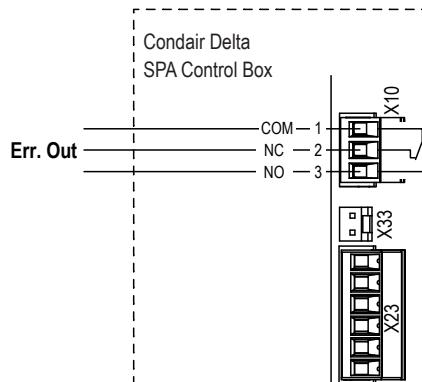
The cross-section of the connecting cables must comply with the applicable local regulations.

The maximum load is: 250 V, 10 A

Notes:

- For the Caldarium and Rasul applications, the relay contacts "Rel 8" and "Rel 9" are used to control the bench heating and wall heating.
- For the steam bath application, the relay contact "Rel 8" is used to control the optional bench heating.
- For dual cabin application for small cabins, the relay contact "Rel 8" is used to control the color light ("E3") of the sauna cabin.
- For steam bath, Caldarium, Rasul and Bio sauna applications, one of the relay contacts "Rel 8" or "Rel 9" can be used to control a display indicating an active steam blast. However, it may be necessary to forego another function for this.
- The function of the relay contacts is programmable via the SPA control software.

5.3.3.19 Connection of the fault output "Err. Out"



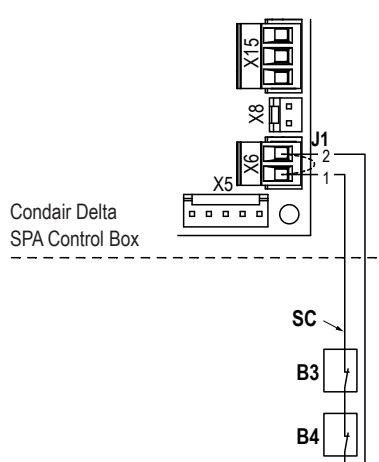
The potential-free "Err. Out" contact can be used for error signaling to external devices. In normal operation (no errors present) the contact between 1-3 is closed. In the event of a fault (a warning is not considered an error), the contact between 1-2 is closed.

Note: When the device is switched off, the contact is in the idle position between 1-2.

The cross-section of the connecting cables must comply with the applicable local regulations.

The maximum contact load is: 250 V, 3 A

5.3.3.20 Connection of external safety chain



The potential-free contacts of external monitoring devices "B3" (e.g. emergency stop) and "B4" (safety device sauna heater) of the external safety chain "SC" are connected according to the wiring diagram in series (if more than one monitoring device is connected) to the terminals of terminal block "X6" to the SPA control board inside the Condair Delta SPA Control Box.

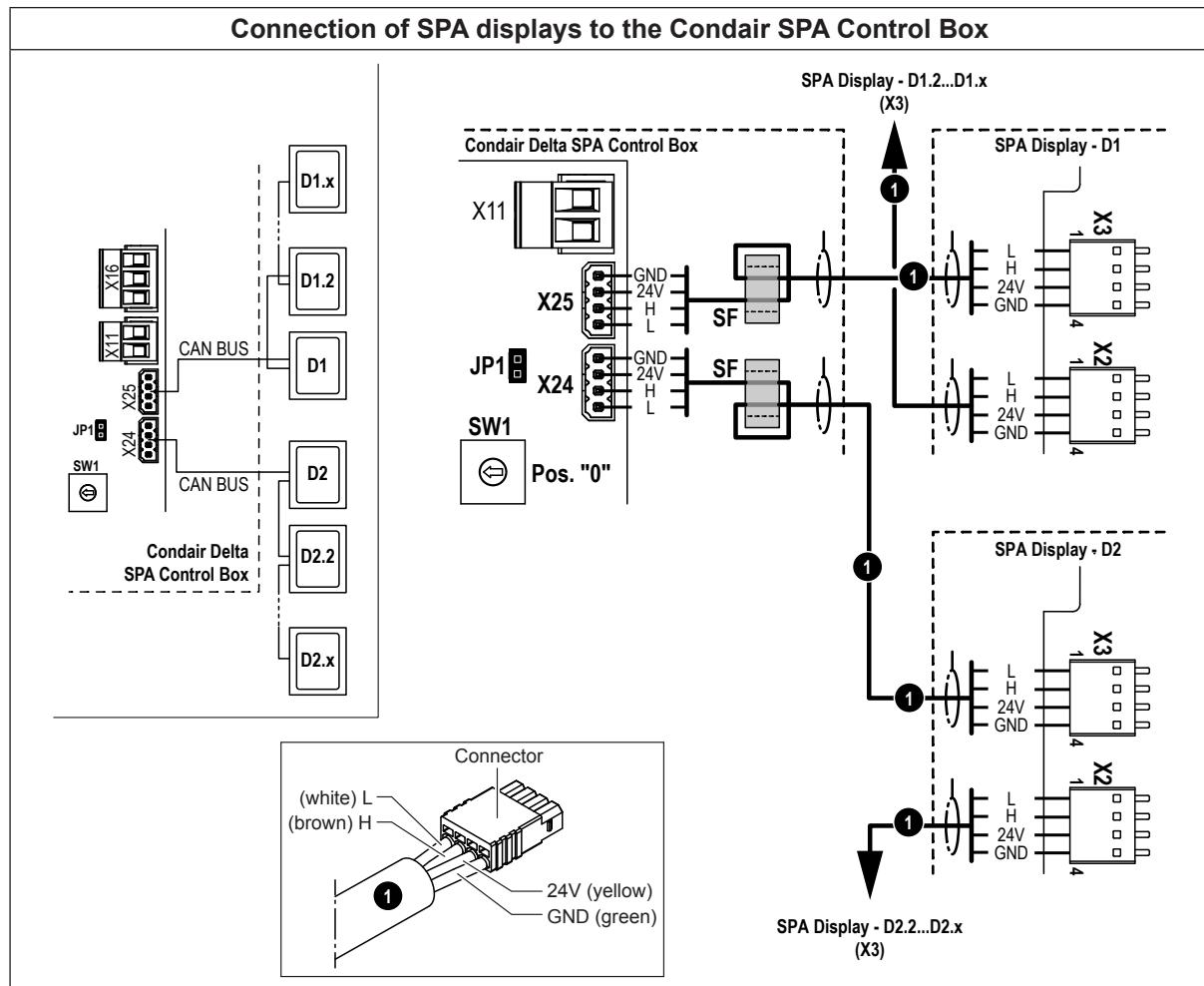
Note: If no monitoring devices are connected to the terminals of terminal block "X6", a wire jumper "J1" must be connected to the terminals.

The safety chain is operated with 24 VDC. In the event of a fault, the safety contact is opened, thus interrupting the safety chain. Use only approved 24 VDC safety devices.



CAUTION! Do not apply any external voltage via the contacts of the external monitoring devices "B3" and "B4" to terminal "X6"!

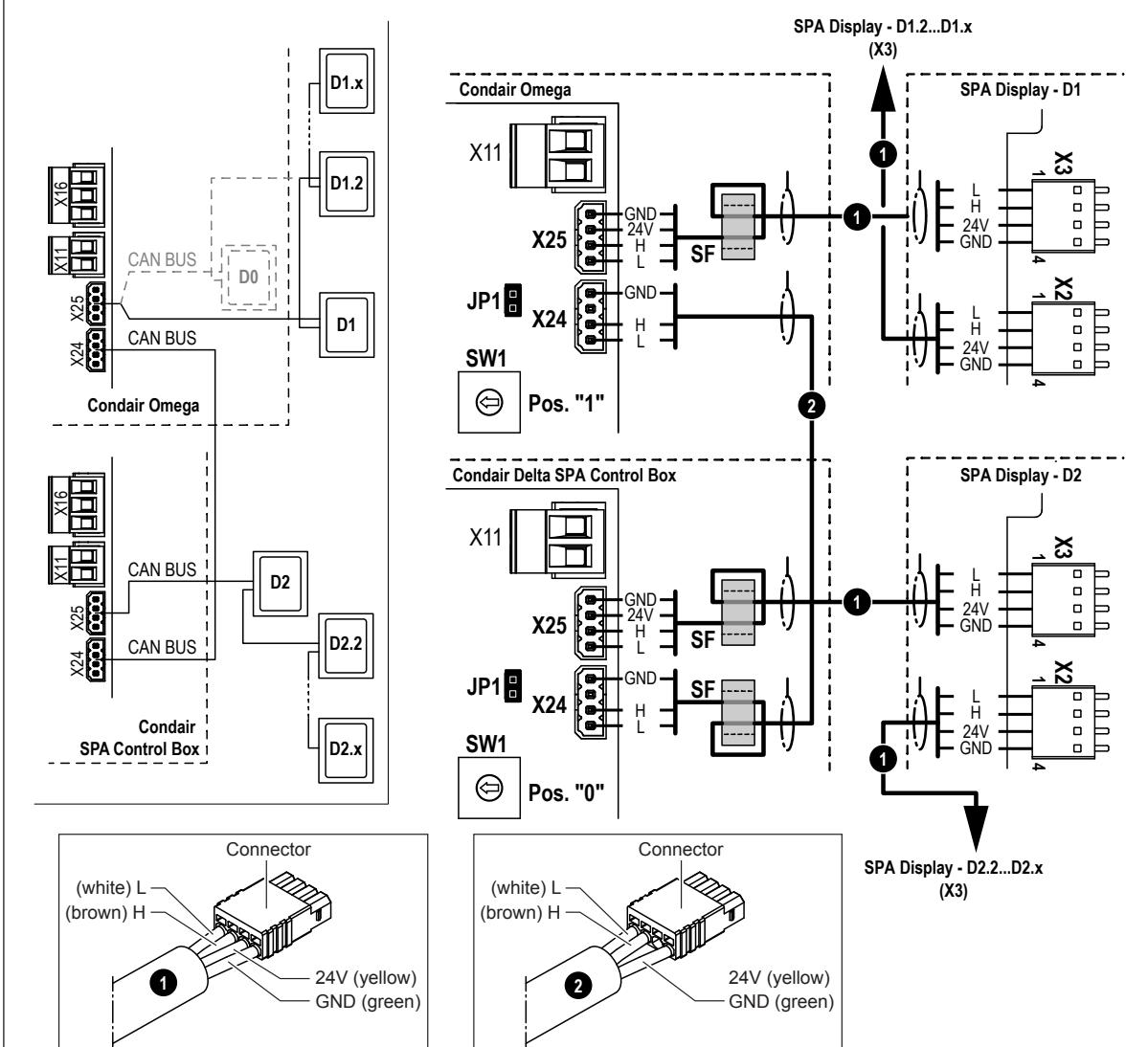
5.3.3.21 Connecting the external SPA display(s) (accessory)



The external SPA displays "D1" and "D2" available as accessories are connected according to the electrical diagram to the CAN BUS connectors "X25" or "X24" via a CAN BUS cable (see above). Both SPA displays "D1" (or "D0") and "D2" can be connected to additional SPA displays (total 8 SPA displays) via the CAN BUS. Detailed instructions can be found in the separate manual supplied with the external SPA displays.

Important: If displays are connected to both CAN BUS ports ("X25" and "X24") of the SPA control board of the Condair Delta SPA Control Box, the jumper "JP1" (terminating resistor) on the SPA control board must be removed (see wiring diagrams in [chapter 5.3.2](#)).

**Connection of the SPA displays to the
Condair SPA Control Box in combination with Condair Omega**



If a Condair Omega is used in combination with a Condair Delta SPA Control Box, the CAN BUS connector "X24" of the Condair Delta SPA Control Box must be connected via a CAN BUS cable without "24 V" conductor (cable No. 2) to the CAN BUS connector "X24" inside the control compartment of the Condair Omega.

The external SPA displays "D1" and "D2", which are available as accessories, are connected according to the connection diagram (see above) via a CAN BUS cable (cable no. 1) to the CAN BUS connector "X25" in the Condair Delta SPA Control Box or Condair Omega, respectively.

To both SPA displays "D1" (or "D0") and "D2" additional SPA displays (total 8 SPA displays) can be connected via the CAN BUS. Detailed instructions can be found in the separate manual supplied with the external SPA displays.

Note: With the Condair Omega with integrated SPA display "X0" (option) the display is connected ex works to the CAN BUS connection "X25".

Important: If displays are connected to both CAN BUS ports ("X25" and "X24") of the SPA control board of the the Condair Omega or the Condair Delta SPA Control Box, the jumper "JP1" (terminating resistor) on the SPA control board must be removed (see wiring diagrams in [chapter 5.3.2](#)).

Important: If a Condair Delta SPA Control Box is used in combination with a Condair Omega, the rotary switch "SW1" on the SPA control board of the Condair Delta SPA Control Box must be set to position "0" and the one on the SPA control board of the Condair Omega to position "1".

Connecting the CAN BUS cable

1. Lead the CAN BUS cable(s) (4-wire, shielded, 0.34 mm² per strand) via cable glands from below into the control compartment of the Condair Omega or into the Condair Delta SPA Control Box.
2. Guide the CAN BUS cable(s) in a loop through the ferrite ring(s) as shown in [Fig. 14](#).
3. Cut the CAN BUS cable(s) to length. Prepare the cable end(s) as shown in [Fig. 13](#) (SPA Display connection) or [Fig. 12](#) (connection cable Condair Delta SPA Control Box to Condair Omega), then connect the prepared cable ends to the the CAN BUS connectors.

Important: On the CAN BUS cable between the Condair Delta SPA Control Box ("X24") and the Condair Omega ("X24") the 24V conductor must be cut off not be connected to the CAN BUS connector, otherwise the system may not function properly.

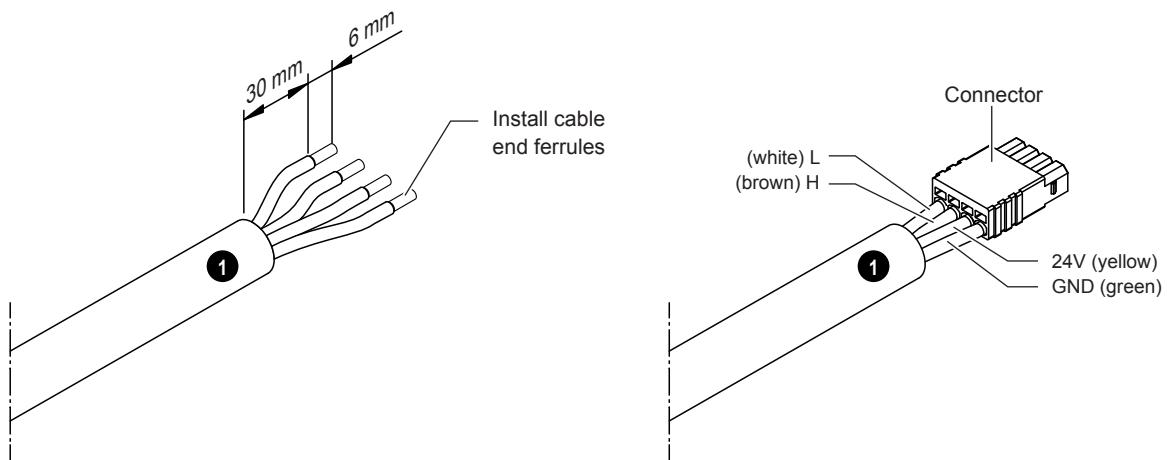


Fig. 12: Prepare CAN BUS cable for SPA Display connection

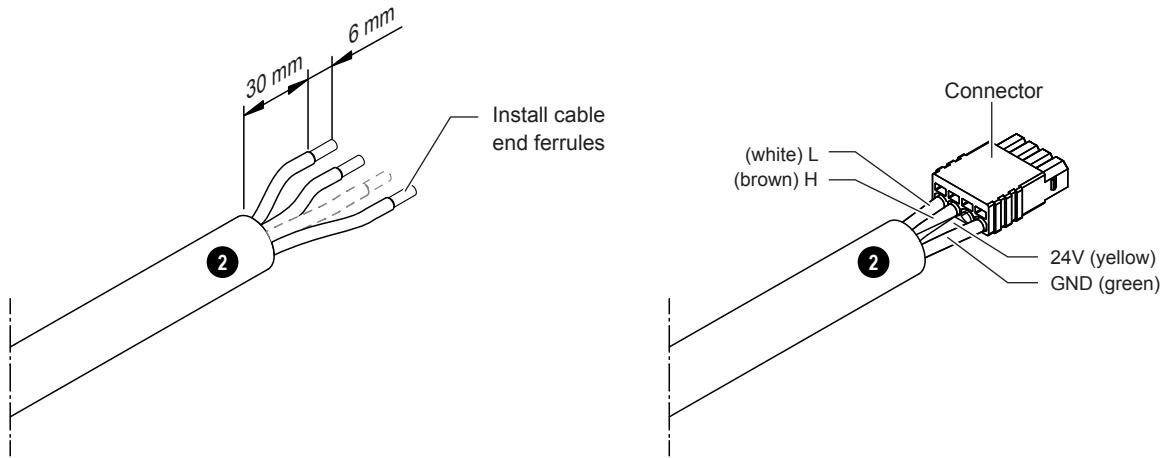


Fig. 13: Prepare CAN BUS cable for the connection between Condair Delta SPA Control Box and Condair Omega

4. Connect the prepared CAN BUS cable(s) to the corresponding connectors "X25" and/or "X24" on the control board of the Condair Omega according to the applicable diagram in this chapter.

5. Free the shielding of the CAN BUS cable(s) by removing the insulation at the appropriate position. Then, pinch the freed shielding of the CAN BUS cable(s) into the clamp holder(s) on the right side of the Condair Delta SPA Control Box or in the bottom of the Condair Omega housing, respectively.

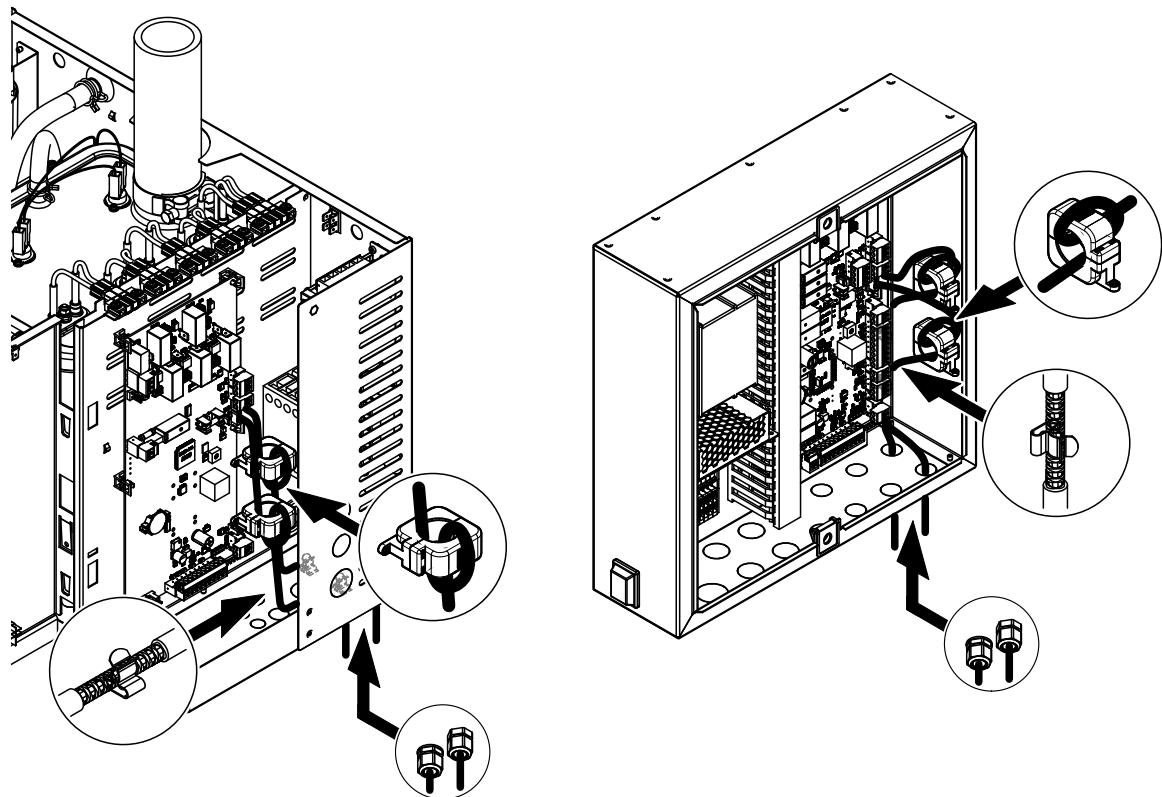
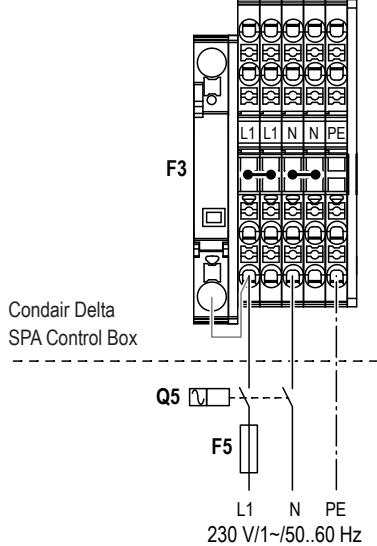
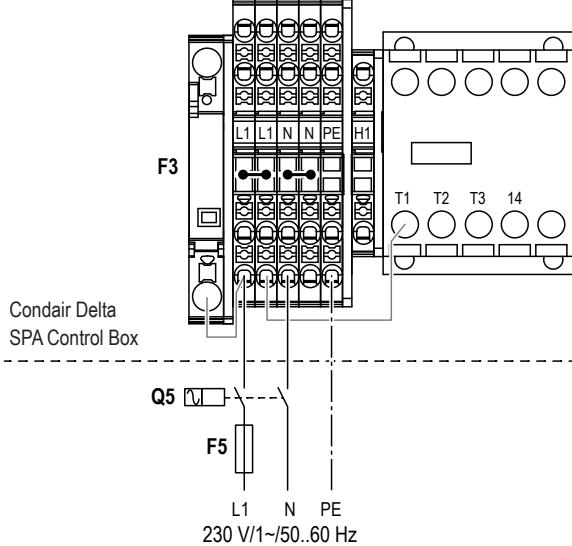


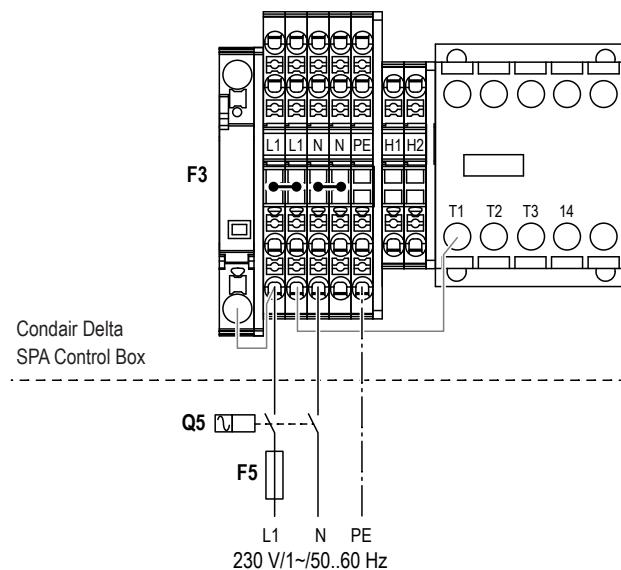
Fig. 14: *Leading the cable through the ferrite ring and secure the cable shield in the clamp holder*

5.3.3.22 Power supplies

Power supply Condair Delta SPA Control Box for steam bath application	
Klemmenauslegung Standardversion	Klemmenauslegung Bench heating
 <p>Condair Delta SPA Control Box</p> <p>F3</p> <p>Q5</p> <p>F5</p> <p>L1 N PE</p> <p>230 V/1~/50..60 Hz</p>	 <p>Condair Delta SPA Control Box</p> <p>F3</p> <p>Q5</p> <p>F5</p> <p>L1 N PE</p> <p>230 V/1~/50..60 Hz</p> <p>T1 T2 T3 14</p>
<p>The 230 V/1~/50..60Hz power supply ("L1", "N" and "PE") for the Condair Delta SPA Control Box for steam bath application is connected according to wiring diagram to the corresponding plug-in terminals ("L1", "N" and "PE") inside the Condair Delta SPA Control Box.</p> <p>Connecting the cables to the plug-in terminals: Insert the stripped cable ends into the opening as far as they will go.</p> <p>Important: Stranded cables must be provided with wire end ferrules for connection to the terminals.</p> <p>The installation of the fuses "F5" (without bench heating: 10 A, fast acting, with bench heating: 16 A, fast acting) and the electrical isolator "Q5" (all pole disconnecting device with a minimum contact clearance of 3 mm, supplied by others) in the mains supply line are mandatory.</p> <p>The electrical isolator must be mounted in direct proximity of the Condair Delta PSA Control Box (max. distance 1 m) and must be easily accessible.</p>	
<p> CAUTION! Make sure that the local mains voltage corresponds to the voltage value of 230 V/1~/50..60Hz stated on the wiring diagram. Otherwise, do not connect the Condair Delta SPA Control Box.</p> <p>The cable cross-section of the mains cable must comply with the applicable local regulations.</p>	

Power supply Condair Delta SPA Control Box for Caldarium and Rasul application

Terminal layout
bench and wall heating



The 230 V/1~/50..60Hz power supply ("L1", "N" and "PE") for the Condair Delta SPA Control Box and the bench and wall heating for Caldarium and Rasul applications is connected according to wiring diagram to the corresponding plug-in terminals ("L1", "N" and "PE") inside the Condair Delta SPA Control Box.

Connecting the cables to the plug-in terminals: Insert the stripped cable ends into the opening as far as they will go.

Important: Stranded cables must be provided with wire end ferrules for connection to the terminals.

The installation of the **fuses "F5" (16 A, fast acting)** and the **electrical isolator "Q5"** (all pole disconnecting device with a minimum contact clearance of 3 mm, supplied by others) in the mains supply line are mandatory.

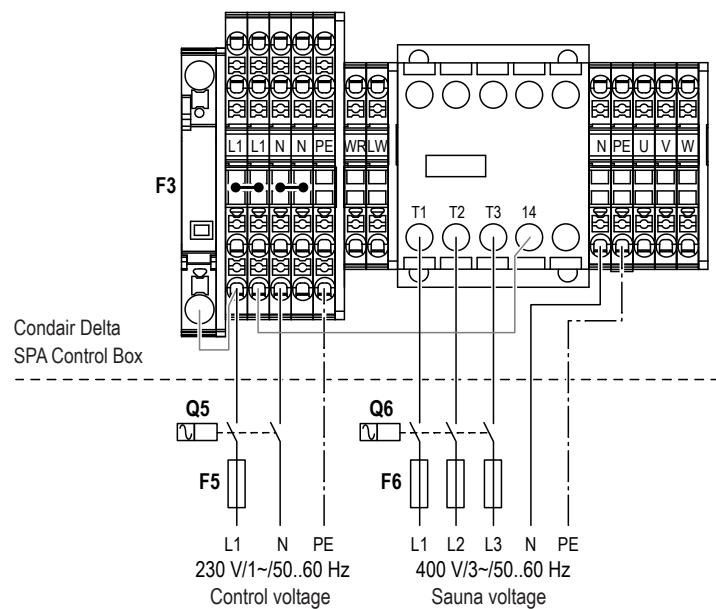
The electrical isolator must be mounted in direct proximity of the Condair Delta PSA Control Box (max. distance 1 m) and must be easily accessible.



CAUTION! Make sure that the local mains voltage corresponds to the voltage value of 230 V/1~/50..60Hz stated on the wiring diagram. 230 V/1~/50..60Hz übereinstimmt. Otherwise, do not connect the Condair Delta SPA Control Box.

The cable cross-section of the mains cable must comply with the applicable local regulations.

Power supply Condair Delta SPA Control box for bio sauna application with integrated heating control for the water reservoir and the sauna heater



The 230 V/1~/50..60Hz power supply ("L1", "N" and "PE") for the control of the accessories and for the heating of the water reservoir (control voltage) is connected according to wiring diagram to the corresponding plug-in terminals ("L1", "N" and "PE") inside the Condair Delta SPA Control Box.

The 400 V/3~/50..60Hz power supply ("L1", "L2", "L3", "N" and "PE") for the sauna heater (sauna voltage) is connected according to wiring diagram to the corresponding plug-in terminals of the contactor ("T1", "T2" and "T3") to the corresponding plug-in terminals ("N" and "PE") on the right side of the contactor inside the Condair Delta SPA Control Box.

Connecting the cables to the plug-in terminals: Insert the stripped cable ends into the opening as far as they will go.

Important: Stranded cables must be provided with wire end ferrules for connection to the terminals.

The installation of the **fuses "F5" (16 A, fast acting)** and **"F6" (16 A, fast acting)** as well as of the **electrical isolators "Q5" and "Q6"** (all pole disconnecting devices with a minimum contact clearance of 3 mm, supplied by others) in the mains supply line are mandatory.

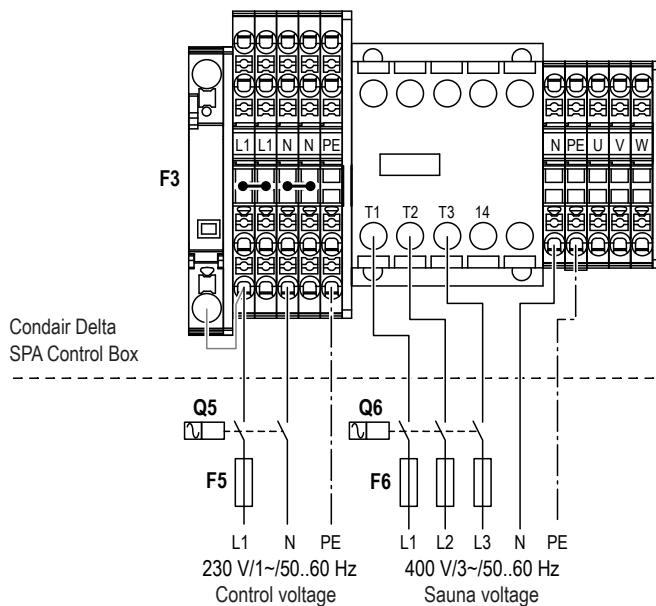
The electrical isolators must be mounted in direct proximity of the Condair Delta SPA Control Box (max. distance 1 m) and must be easily accessible.



CAUTION! Make sure that the local mains voltage corresponds to the voltage values of 230 V/1~/50..60Hz and 400 V/3~/50..60Hz stated on the wiring diagram. Otherwise, do not connect the Condair Delta SPA Control Box.

The cable cross-section of the mains cable must comply with the applicable local regulations.

Power supply Condair Delta SPA Control Box for Bio sauna application with external steam generator, Fin sauna application and dual cabin application for small cabins (fin sauna/steam bath)



The 230 V/1~/50..60Hz power supply ("L1", "N" and "PE") for the control of the accessories (control voltage) is connected according to wiring diagram to the corresponding plug-in terminals ("L1", "N" and "PE") inside the Condair Delta SPA Control Box.

The 400 V/3~/50..60Hz power supply ("L1", "L2", "L3", "N" and "PE") for the sauna heater (sauna voltage) is connected according to wiring diagram to the corresponding plug-in terminals of the contactor ("T1", "T2" and "T3") to the corresponding plug-in terminals ("N" and "PE") on the right side of the contactor inside the Condair Delta SPA Control Box.

Connecting the cables to the plug-in terminals: Insert the stripped cable ends into the opening as far as they will go.

Important: Stranded cables must be provided with wire end ferrules for connection to the terminals.

The installation of the **fuses "F5" (10 A, fast acting) and "F6" (16 A, fast acting)** as well as of the **electrical isolators "Q5" and "Q6"** (all pole disconnecting devices with a minimum contact clearance of 3 mm, supplied by others) in the mains supply line are mandatory.

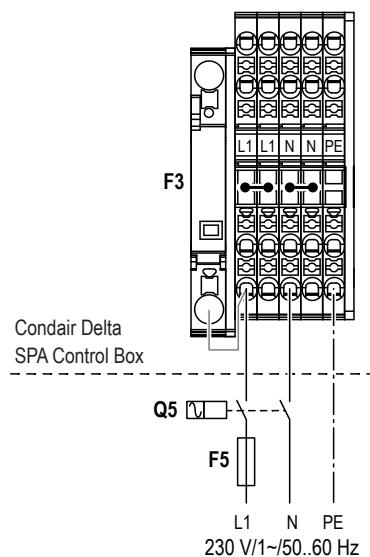
The electrical isolators must be mounted in direct proximity of the Condair Delta SPA Control Box (max. distance 1 m) and must be easily accessible.



CAUTION! Make sure that the local mains voltage corresponds to the voltage values of 230 V/1~/50..60Hz and 400 V/3~/50..60Hz stated on the wiring diagram. Otherwise, do not connect the Condair Delta SPA Control Box.

The cable cross-section of the mains cable must comply with the applicable local regulations.

Power supply Condair Delta SPA Control Box for Bio sauna and Fin sauna application with demand control of an externally powered sauna heater



The 230 V/1~/50..60Hz power supply ("L1", "N" and "PE") for the Condair Delta SPA Control Box is connected according to wiring diagram to the corresponding plug-in terminals ("L1", "N" and "PE") inside the Condair Delta SPA Control Box.

Connecting the cables to the plug-in terminals: Insert the stripped cable ends into the opening as far as they will go.

Important: Stranded cables must be provided with wire end ferrules for connection to the terminals.

The installation of the **fuse "F5" (10 A, fast acting)** **electrical isolator "Q5"** (all pole disconnecting device with a minimum contact clearance of 3 mm, supplied by others) in the mains supply line are mandatory.

The electrical isolator must be mounted in direct proximity of the Condair Delta PSA Control Box (max. distance 1 m) and must be easily accessible.



CAUTION! Make sure that the local mains voltage corresponds to the voltage value of 230 V/1~/50..60Hz stated on the wiring diagram. Otherwise, do not connect the Condair Delta SPA Control Box.

The cable cross-section of the mains cable must comply with the applicable local regulations.

5.3.4 Connection data accessories

Maximum power consumption accessories for Condair Delta SPA Control Box

Application	Accessories															
	Light	Ventilation	Fragrance	Additional relay	Shower	Heating										
Cleaning light (Light 1)	Supply air fan (Fan 1)	Exhaust fan (Fan 2)	Fragrance 1 (Pump 1)	Fragrance 2 (Pump 2)	Music, ... (Rel 8)	Music, ... (Rel 9)	Shower (Pump 2)	Bench heating (Rel 8)	Wall heating (Rel 9)	Water reservoir						
Steam bath	max. 1 kW				-	max. 2 kW		-								
Caldarium	max. 1 kW				-	max. 1 kW		max. 1 kW								
Rasul	max. 1 kW				max. 1 kW		max. 1 kW									
Fin sauna	max. 1 kW		-		-		-									
Bio Sauna	max. 1 kW		-		-		-		max. 2 kW							
Dual cabin (small)	max. 1 kW				-	-		-								
Dual cabin (medium)	Depending on the single cabin used (see above)															
	Depending on the single cabin used (see above)															

Connection data accessories

Application	Hardware variant	Control voltage accessories	Control power accessories max. in kW	Cable cross section supply line in mm ²	Fuse F5 fast acting in A
Steam bath	SPA Control with standard equipment	230 V/1~/50...60 Hz	1	1,5	10
Steam bath with bench heating	SPA Control with equipment for Bench heating		3	2,5	16
Caldarium	SPA Control with equipment for Bench and wall heating		3	2,5	16
Rasul	SPA Control with equipment for Bench and wall heating		3	2,5	16
Fin sauna	SPA Control with equipment for Fin sauna		1	1,5	10
	SPA Control with standard equipment		1	1,5	10
Bio Sauna	SPA Control with equipment for Bio sauna		3	2,5	16
	SPA Control with equipment for Fin sauna		1	1,5	10
	SPA Control with standard equipment		1	1,5	10
Dual cabin (small)	SPA Control with equipment for Fin sauna		1	1,5	10
	SPA Control with standard equipment		1	1,5	10

Connection data sauna

Application	Hardware variant	Sauna voltage	Sauna power consumption max. in kW	Cable cross section supply line in mm ²	Fuses F6 fast acting in A
Steam bath	SPA Control with standard equipment	-	-	-	-
Steam bath with bench heating	SPA Control with equipment for Bench heating	-	-	-	-
Caldarium	SPA Control with equipment for Bench and wall heating	-	-	-	-
Rasul	SPA Control with equipment for Bench and wall heating	-	-	-	-
Fin sauna	SPA Control with equipment for Fin sauna	400 V/3~/50...60 Hz	9 kW	2,5	16
	SPA Control with standard equipment	-	-	-	-
Bio Sauna	SPA Control with equipment for Bio sauna	400 V/3~/50...60 Hz	9 kW	2,5	16
	SPA Control with equipment for Fin sauna	400 V/3~/50...60 Hz	9 kW	2,5	16
	SPA Control with standard equipment	-	-	-	-
Dual cabin (small)	SPA Control with equipment for Fin sauna	400 V/3~/50...60 Hz	9 kW	2,5	16
	SPA Control with standard equipment	-	-	-	-

5.3.5 Inspecting the electrical installation

Check the following points:

- Does/do the supply voltage(s) for the respective SPA application meet the specifications in the corresponding wiring diagram and is/are the power supply/supplies and is/are the power supply/supplies connected in accordance with the wiring diagram?
- Is/are the power supply/supplies correctly fused (fuse values "F5" and "F6" see wiring diagrams in [chapter 5.3.2](#))?
- Is/are the electrical isolator(s) "Q5" or "Q5" and "Q6", respectively installed in the power supply line?
- Are all components correctly connected according to the wiring diagram?
- Are all connecting cables fastened?
- Are the connecting cables free of tension (passed through cable glands?)
- Have splash-proof cable glands been used?
- Does the electric installation meet the applicable local regulations for electric installations?
- Is a approved safety device (e.g. protective cover) attached to the sauna heater and is the corresponding safety device connected in series via the safety loop "SC"?
- Have intrinsically safe bench and wall heatings been used or has a corresponding overtemperature switch been integrated in series into the safety loop "SC"?
- Have the maximum capacities for the cabin volume used not been exceeded?
- Have the maximum power consumptions for the accessories been complied with (see [chapter 5.3.4](#))?
- Is the housing cover relocated and locked with the two screws and gaskets?

6 Appendix

6.1 Dimensions of the Condair Delta SPA Control Box

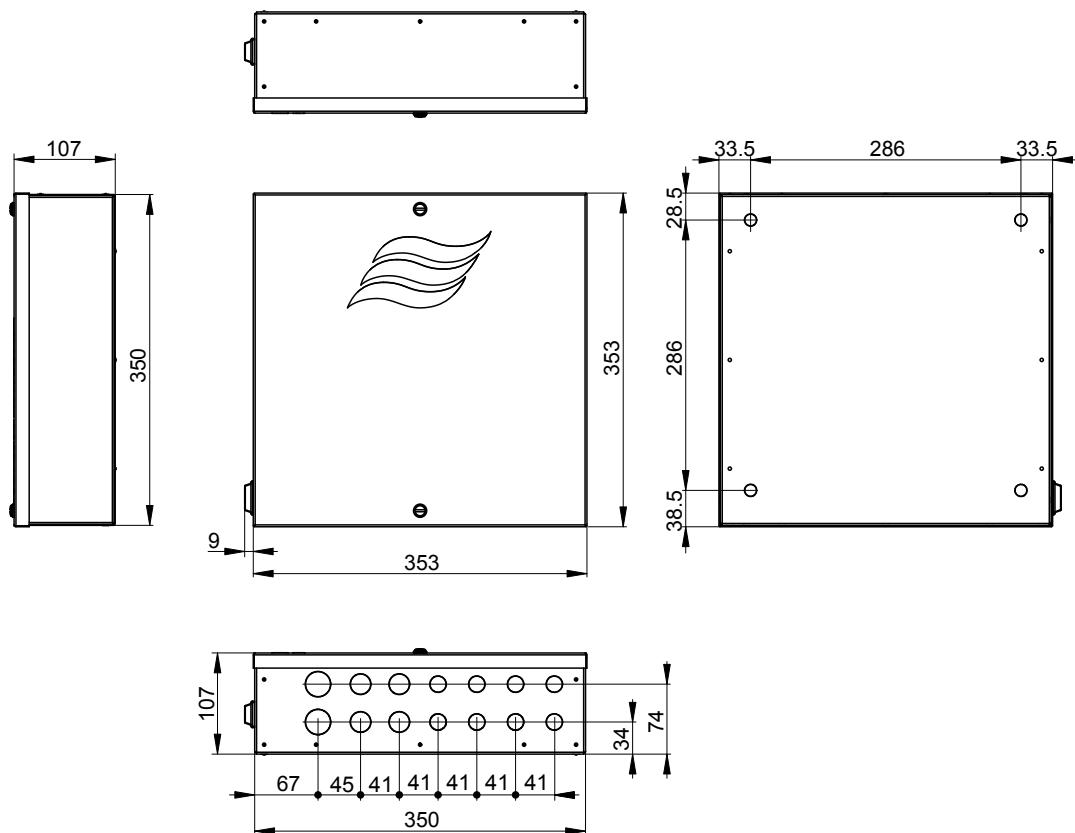


Fig. 15: Dimensions of the Condair Delta SPA Control Box (dimensions in mm)

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