

Series FCU-EXT-POW

Installation instructions

Extension Power Unit

FCU-EXT-POW-9000

FCU-EXT-POW-18000

FCU-EXT-POW-24000

FASEL GmbH
Germany

1 Safety and danger instructions



NOTE!

Before commissioning the FCU-EXT-POW is necessarily to read the installation instruction for the FCUxxxx carefully and completely. Here are especially note the safety and danger instructions that apply also for the FCU-EXT-POW.

2 Technical data

2.1 General information

Designation	Unit	Type		
		POW-9000	POW-18000	POW-24000
Dimensions basic device (Height x Width x Depth)	[mm]	247 x 285 x 86,5		
Voltage supply	[V AC / Hz]	see nameplate		
Max. power	[kW / AC1]	3 x 3	3 x 6	3 x 8
Ambient temperature	[°C]	0 to +40		
Rel. humidity	[% r.F.]	max.80 % r. humidity, non-condensing		
Storing temperature	[°C]	-10 to +60		
Rel. humidity, storage	[% r.F.]	max.80 % r. humidity, non-condensing		
Insulation type	[-]	see nameplate		

Table 1: Technical data – General informations

2.2 Liability limitation

There are the same conditions as for the control unit FCUxxxx

3 Safety

3.1 Intended use

The FASEL power unit of the series FCU-EXT-POW are exclusively meant for operation of saunas and infrared cabins. The power units are permitted for operation in houses and commercial facilities.

Intended use

**WARNING!****Danger if not used correctly**

Any improper use of the power unit can lead to dangerous situations.

Therefore:

- Use the power unit correctly.
- Operate the power unit only within the permissible room temperature and moisture range.
- All the specifications in the operating manual and the installation manual must be strictly adhered to.

Claims of any type due to damages caused by improper use will not be accepted. Only the user is responsible for damages caused by improper use.

3.2 Modifications and alterations

There are the same conditions as for the control unit FCUxxxx

3.3 Demands on technical personnel

There are the same conditions as for the control unit FCUxxxx

4 Identification

4.1 Nameplate

The nameplate is located on the control unit on the left side:

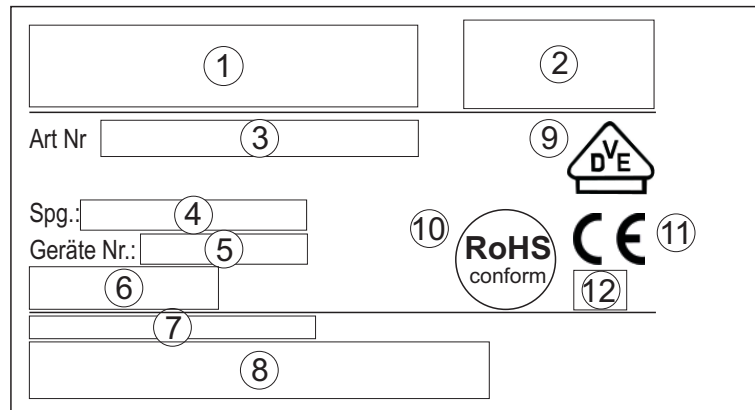


Fig.1 Control unit nameplate

- 1 Type designation
- 2 Company logo
- 3 Article number
- 4 Voltage and max. power
- 5 Device number
- 6 Barcode
- 7-8 Barcode article number
- 8 VDE mark (for devices that are approved by VDE)
- 9 RoHS marking
- 10 CE mark
- 11 Protection category

5 Electrical connection

5.1 Safety

5.2 Checking the electrical connection

6 Commissioning

6.1 Safety instructions

6.2 Checks before the initial commissioning

6.3 Functional test of the sauna control device, the power unit and the electrical consumers

→ See installation instructions "Series FCUxxxx".

6.4 Electrical circuit diagram

Table 1:

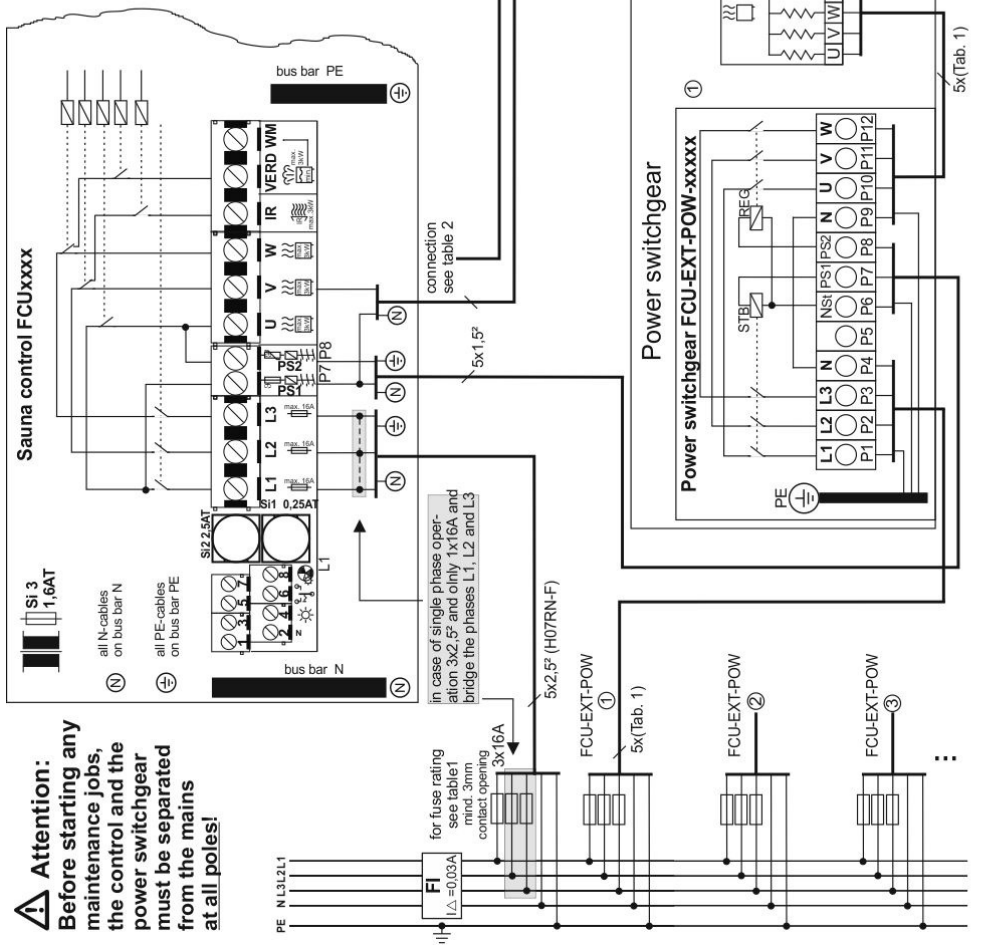
Heater power at 230/400V	Min. cross section connection line (Cu)	Fuse
Up to 6,9 kW	5 x 1,5 ²	3 x 10 A
7,0 to 11,0 kW	5 x 2,5 ²	3 x 16 A
11,1 to 13,8 kW	5 x 4 ²	3 x 20 A
13,9 to 17,2 kW	5 x 6 ²	3 x 25 A
17,3 to 24,0 kW	5 x 10 ²	3 x 35 A

All details for symmetrical distribution of the 3 heating phases!
 Note: All the cables which lead to the cabin must be designed for a max. temperature of 150°C!
² in mm² All cross-sections are designed for copper cables! Increase in AL-lines cross-section accordingly! The cross section may be due to cable length. Routing or special provisions to increase!

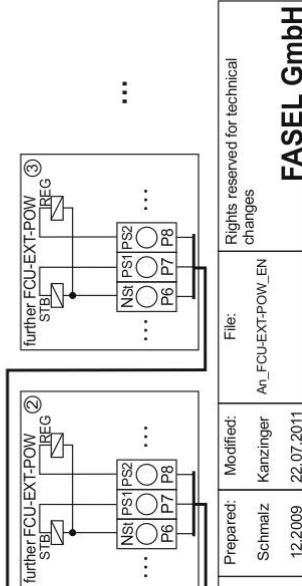
Table 2:

Connection of further FCU-EXT-POW following connections to be made for all the power units FCU-EXT-POW to FCUxxxx	
all "Nst" (Cl. no. P6)	N bus bar
all "PS1" (Cl. no. P7)	PS1
unit no.	finn. sauna / humid-sauna
② PS2 (Cl. no. P8)	Oven V
③ PS2 (Cl. no. P8)	Oven W
④ PS2 (Cl. no. P8)	Oven U

Note: when using multiple oven, then you have to install a safety temperature limiter (STB) over each oven. All STB must be connected in series. Only the oven sensor of the hottest oven is the one with the highest power, or at the same power, the one which is controlled by clamp „PS2“ or „Oven U“.



Attention: Before starting any maintenance jobs, the control and the power switchgear must be separated from the mains at all poles!



Connection diagram power switchgear FCU-EXT-POW-xxxx (quad)

Prepared: Schmalz 12.2009	Modified: Kanzinger 22.07.2011	File: An_FCUEXT-POW_EN	Rights reserved for technical changes
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Notes:

Address of the contractor/installer or the dealer of the
sauna unit: