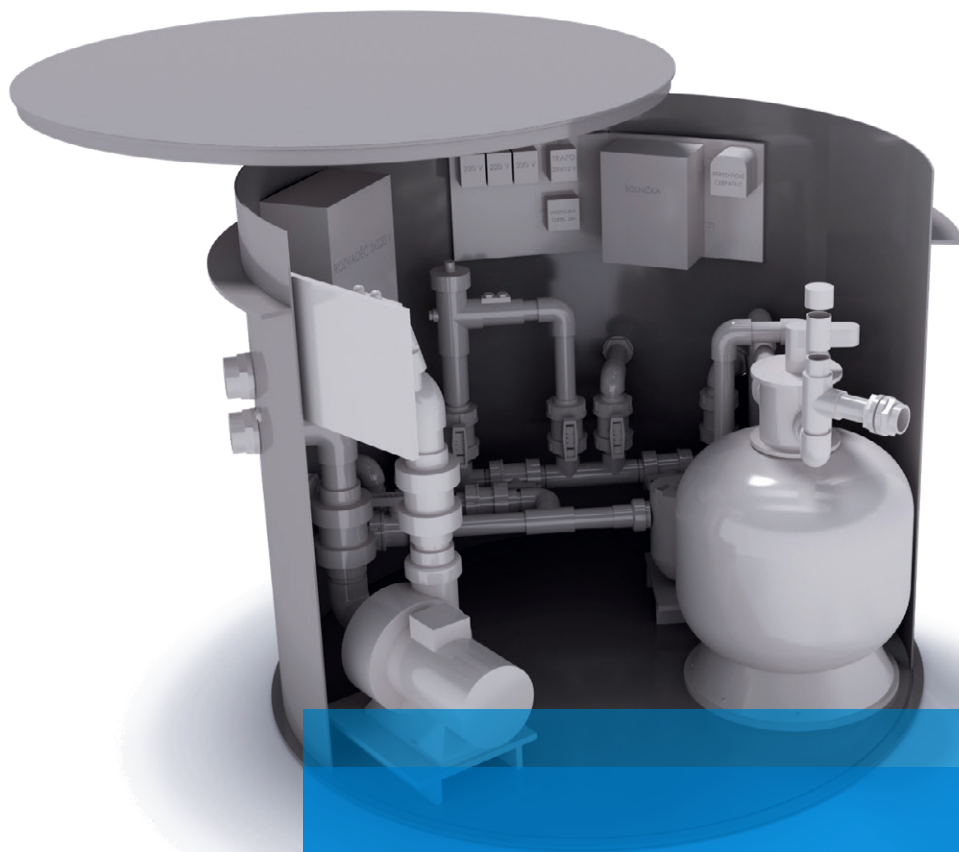


Building preparations



Electrical wiring

Verze: 27. 02. 2024 / Revize: 27. 02. 2024
L. V.



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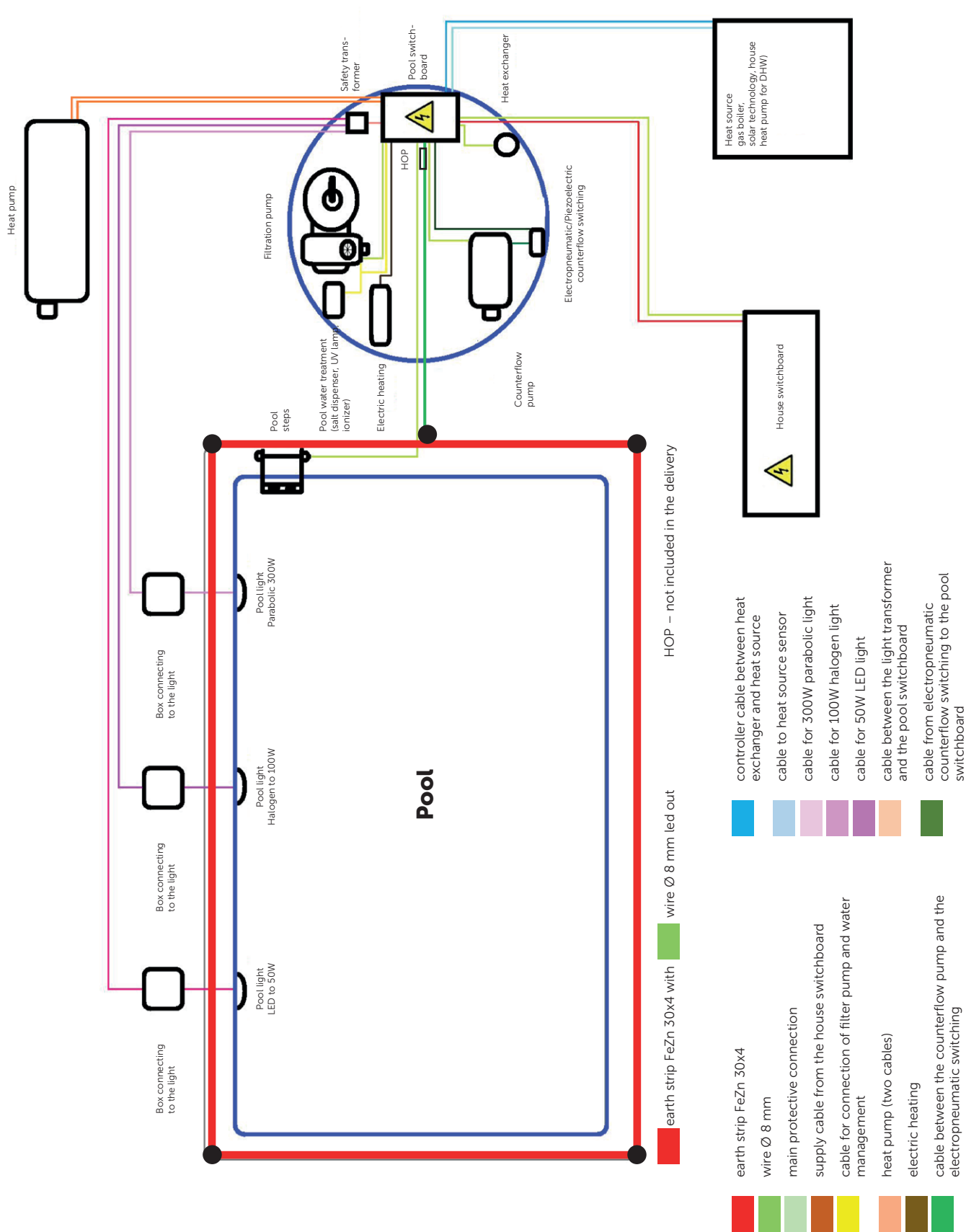
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If you need any additional information, please do not hesitate to contact our customer helpline. We are here for you.

Customer helpline: 477 07 07 11
www.ALBIXON.com

Situational plan

2.



Filtration; XHPFD(PLUS) 60–140 thermal pump without counterflow

- CYKY 3 J x 4 + CY 6 ZŽ supply cable (main protective connection, hereinafter "HOP") including current protector with residual current 30 mA
- 20A/1/B supply cable circuit breaker
- 25A/3/B main house circuit breaker

Filtration; XHPFD(PLUS) 60–140 thermal pump with counterflow

- CYKY 5 J x 4 + CY 6 ZŽ supply cable (main protective connection, hereinafter "HOP") including current protector with residual current 30 mA
- 20A/3/B supply cable circuit breaker
- 25A/3/B main house circuit breaker

Filtration; XHPFD(PLUS) 160–200tri thermal pump with counterflow

- CYKY 5 J x 6 + CY 6 ZŽ supply cable ("HOP") including current protector with residual current 30 mA
- 25A/3/B supply cable circuit breaker
- 32A/3/B main house circuit breaker

Filtration; XHPFDPLUS 200 thermal pump with counterflow

- CYKY 5 J x 6 + CY 6 ZŽ supply cable ("HOP") including current protector with residual current 30 mA
- 40A/3/B supply cable circuit breaker
- 50A/3/B main house circuit breaker

The listed cross-sections of the supply cables are recommended for a distance of up to 25 m between the pool and house distributor. If the distance is greater, the cross-section of the supply cable must be increased accordingly.

The supply cable from the house switchboard to the technology shaft must be provided by the customer before the ordered components are delivered. The supplier does not provide the connection of the supply cable from the house switchboard to the technology shaft. The supply cable must be revised for the connection to the technology shaft. The supplier does not perform the revision of the supply cable. In order to be able to connect the supply cable to the pool technology distributor, it must have a length of at least 1.5 M at the point of connection.

Counterflow pump cables

- CYSY 5 J x 1.5 cable from the counterflow pump to the electropneumatic switching
- CYA 6 ZŽ cable for HOP of the counterflow pumps
- CYKY 5 J x 2.5 cable from the electropneumatic switching of counterflow to the pool switchboard
- 10A/3/C circuit breaker in the pool switchboard

Cables for the filtration pump without pool water treatment (salt dispenser, UV lamp, ionizer)

- CYKY 3 J x 1.5 cable from the filtration pump to the pool switchboard
- 4A/1/C circuit breaker in the pool switchboard

Cables for the filtration pump with pool water treatment (salt dispenser, UV lamp, ionizer)

- CYKY 3 J x 1.5 cable from the filtration pump and the pool water treatment to the pool switchboard
- 6A/1/C circuit breaker in the pool switchboard

Cables for pool lights

- CYKY 3 J x 2.5 cable between light up to 50W and transformer for lights
- CYKY 2 J x 4 cable between light up to 100W and transformer for lights
- CYKY 2 J x 6 cable between light up to 300W and transformer for lights
- the circuit breaker in the pool switchboard for the light transformer is to be determined according to the final sum of the values (W) of the lights

Cables for the heat pump XHPFD(PLUS) 60–140

- CYKY 3 J x 2.5 cable between heat pump and pool switchboard
- 20A/1/C circuit breaker in pool switchboard

Cables for the heat pump XHPFD(PLUS) 160

- CYKY 3 J x 4 cable between heat pump and pool switchboard
- 20A/1/C circuit breaker in pool switchboard

Cables for the heat pump XHPFDPLUS 200

- CYKY 3 J x 6 cable between heat pump and pool switchboard
- 32A/1/C circuit breaker in pool switchboard

Installation requires modification of the wiring of the Albixon technological shaft/wall switchboard, we recommend an individual consultation with an electrician.

Cables for the heat pump XHPFDPLUS 200 tri

- CYKY 5 J x 2,5 cable between heat pump and pool switchboard
- 16A/1/C circuit breaker in pool switchboard

Installation requires modification of the wiring of the Albixon technological shaft/wall switchboard, we recommend an individual consultation with an electrician.

Cables for heat exchanger

The cable to the temperature sensor between the pool switchboard and the heat source is provided by the heat source manufacturer. The control cable to the heat source is CYKY 5 J x 1.5.

The heat exchanger must be connected to the main protective connection (HOP).

Cables for electric heating

- CYSY 5 J x 2.5 cable for 3kW heating and 10A/3/B circuit breaker in pool switchboard
- CYSY 5 J x 2.5 cable for 6kW heating and 16A/3/B circuit breaker in pool switchboard
- CYSY 5 J x 2.5 cable for 9kW heating and 20A/3/B circuit breaker in pool switchboard
- CYSY 5 J x 2.5 cable for 12kW heating and 25A/3/B circuit breaker in pool switchboard
- CYSY 5 J x 4 cable for 15kW heating and 32A/3/B circuit breaker in pool switchboard
- CYSY 5 J x 6 cable for 18kW heating and 32A/3/B circuit breaker in pool switchboard

Metal parts

In pool technology, all metal parts must be connected to HOP CYA 6 or CY 6 ZŽ

Metal pool steps and other metal components

When installing metal steps and other metal components, the connection to the HOP CYA or CY 6 ZŽ must be made, however always according to the relevant instructions for the given accessory.

SAFETY RECOMMENDATIONS

We recommend protecting the power supply circuit of the pool technology with a trip coil with a probe, which disconnects the power supply circuit when the shaft is flooded with water (up to max. 10 cm).

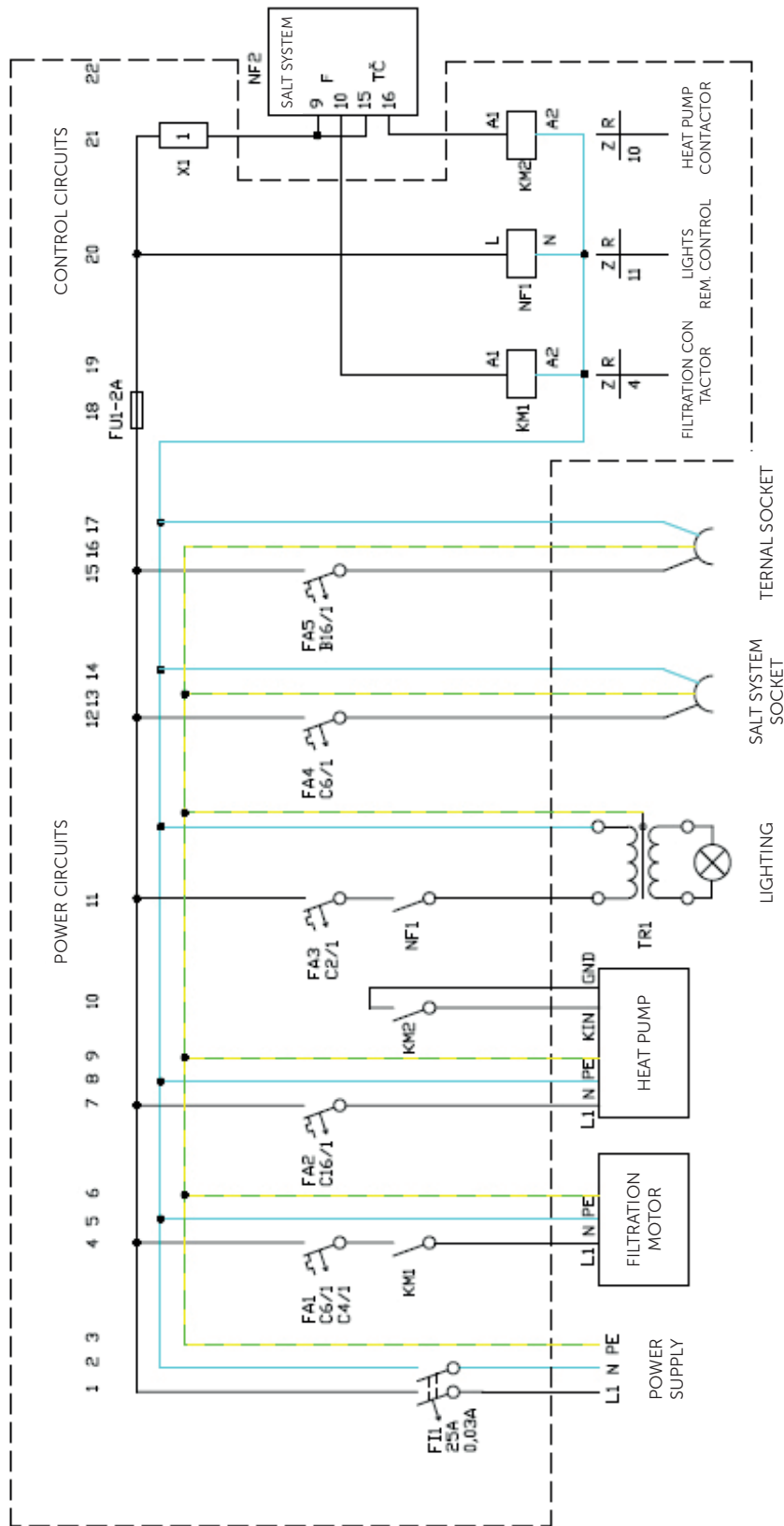
Notes

During the preparation for construction, do not forget to consider the potential future development of your pool and technology. If there are power cables or other networks leading to the pool, also consider laying network cables for better connectivity of your technology, or you can make the necessary preparations for a heat exchanger, automatic filler, and other accessories, the installation of which would otherwise mean interference with your garden. If you are uncertain about whether or not you intend to expand your pool as suggested above but do not wish to leave anything to chance, bring at least one additional sleeve protector to the pool for a potential future use of these networks.

The rating of the current protector of the pool switchboard (FI1) should correspond to the circuit breaker on the supply cable on your home's switchboard.

4.

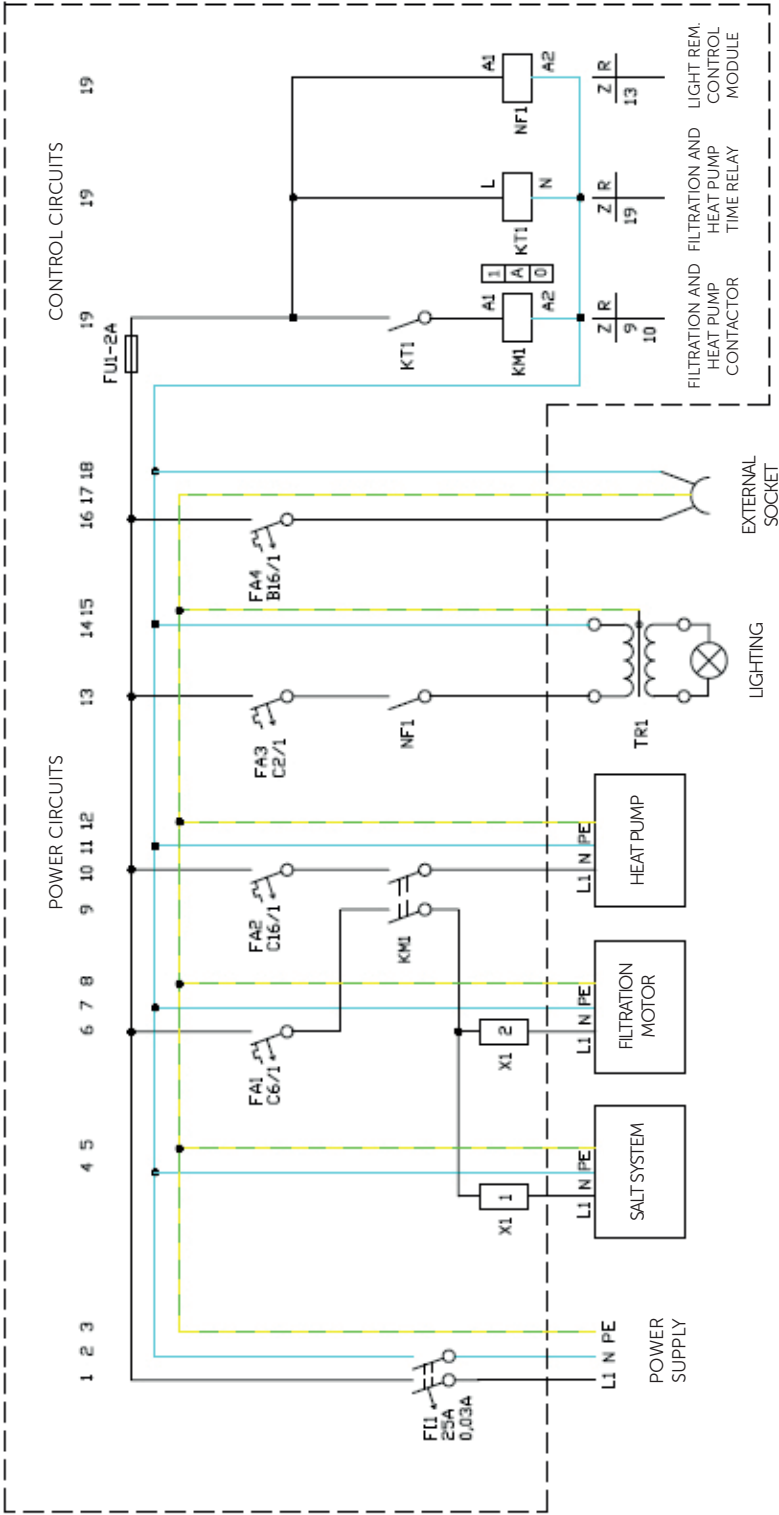
Wiring



Device with programmed SALT SYSTEM

- Key
- FI1 - circuit breaker 25/4/0.03
 - FA1 - filtration circuit breaker according to pump output C6/1, C4/1
 - KM1 - filtration contactor
 - FA2 - heat pump circuit breaker C16/1
 - KM2 - heat pump contactor
 - FA3 - counterflow circuit breaker C2/1
 - FA4 - lighting transformer circuit breaker C6/1
 - TR1 - safety transformer 230V/12V
 - FU1 - fuse insert 2A
 - NF1 - light remote control
 - NF2 - salt system control unit
 - FA5 - socket breaker - salt system B16/1
 - XI-1 salt system power supply terminal

Drawn by: Jiří Ungr	Date: September 20, 2016	Title: Switchboard AO-2-E	
Reviewed by: Jindřich Sobotka	Date: September 22, 2016		
Approved by: Daniel Rychvalský	Date: September 23, 2016	Type: F/SD/TČ/P/NaCl	
ALBIXON a. s.		Number of sheets: 1	Sheet no.: 1
Updated:	March 3, 2020		



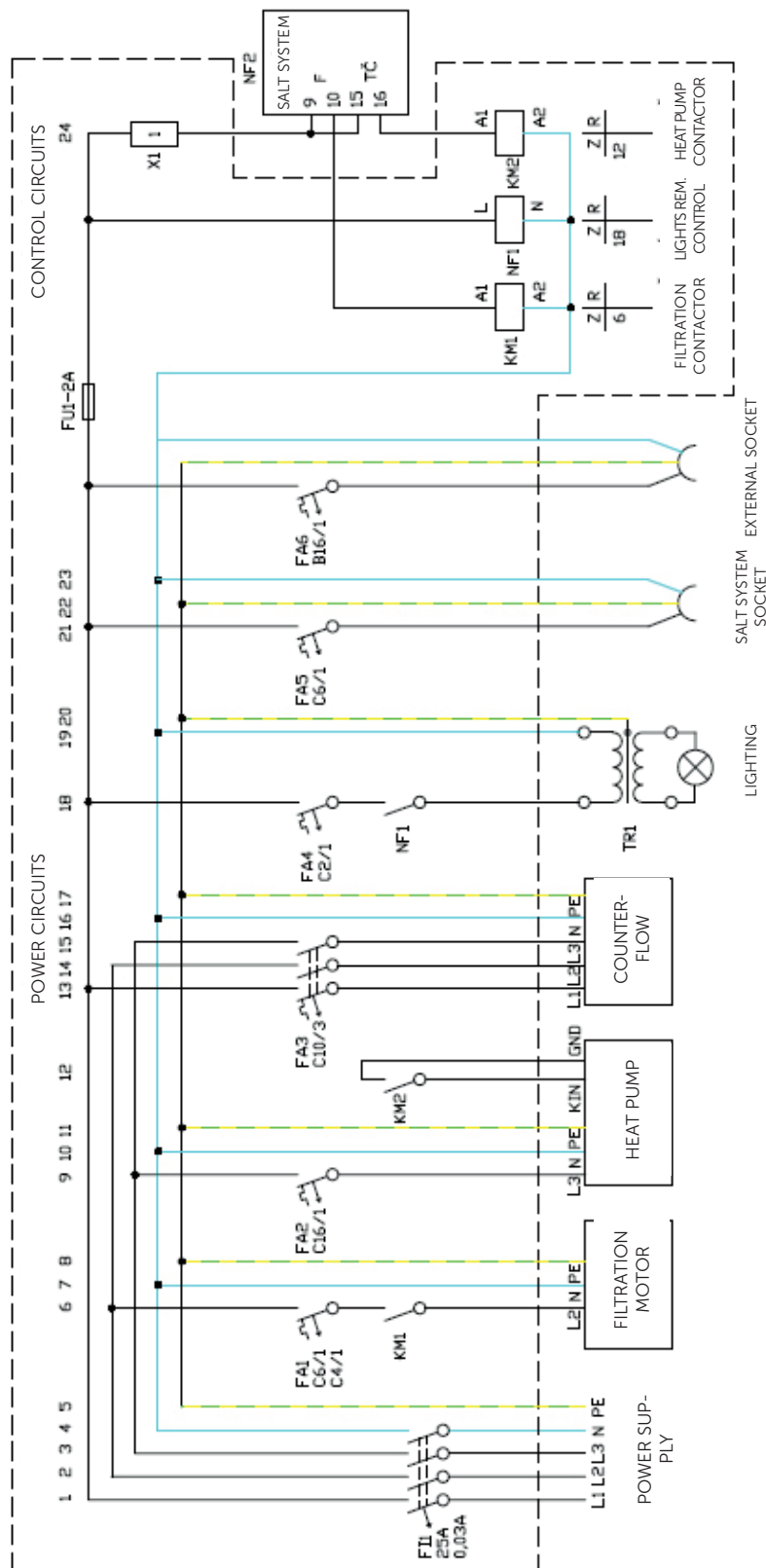
Key

- F1 - circuit breaker 25/2/0.03
- FA1 - filtration circuit breaker according to pump output C6/1
- KM1 - salt system and filtration contactor
- FA2 - heat pump circuit breaker C16/1
- FA3 - lighting transformer circuit breaker C2/1
- FA4 - external socket breaker B16/1
- TR1 - safety transformer 230V/12V
- FU1 - fuse insert 2A
- KT1 - filtration and heat pump timing relay
- NF1 - light remote control
- XL1 - salt system power supply terminal
- XL2 - filtration motor power supply terminal

Drawn by: Jiří Ungr	Date: September 22, 2016	Title: Switchboard AO-1 a	
Reviewed by: Jindřich Sobotka	Date: September 25, 2016		
Approved by: Daniel Rychvalský	Date: September 26, 2016	Type: F/SD/TČ/P/NaCl	
ALBIXON a. s.		Number of sheets: 1	Sheet no.: 1
Updated:	March 4, 2020		

4.

Wiring

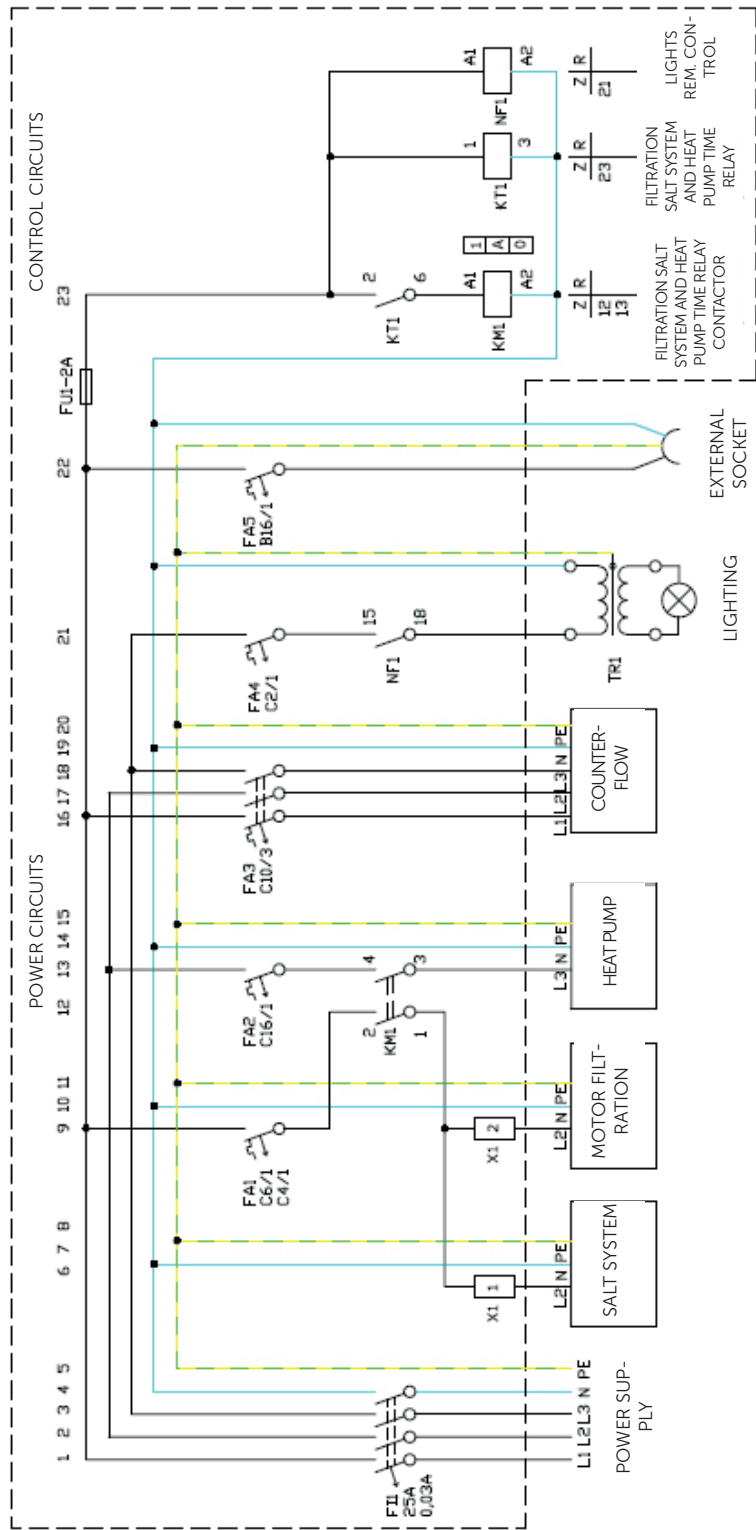


Device with programmed SALT SYSTEM

Key

- FI1 - circuit breaker 25/4/0.03
- FA1 - filtration circuit breaker according to pump output C6/1, C4/1
- KM1 - filtration contactor
- FA2 - heat pump circuit breaker C16/1
- FA3 - counterflow circuit breaker C10/3
- KM2 - heat pump contactor
- FA4 - lighting transformer circuit breaker C2/1
- FA5 - socket breaker - salt system C6/1
- TR1 - safety transformer 230V/12V
- NF1 - fuse insert 2A
- NF2 - light remote control
- NF2 - salt system control unit
- FA6 - external socket breaker B16/1
- XI-1 salt system power supply terminal

Drawn by: Jiri Ungr	Date: September 20, 2016	Title: Switchboard AO-2-D	
Reviewed by: Jindřich Sobotka	Date: September 22, 2016		
Approved by: Daniel Rychvalský	Date: September 23, 2016	Type: F/SD/TČ/P/NaCl	
ALBIXON a. s.		Number of sheets: 1	Sheet no.: 1
Updated:	March 3, 2020		



- Key
- FI1 - circuit breaker 25/4/0.03
 - FA1 - filtration circuit breaker according to pump output C6/1, C4/1
 - KM1 - filtration, salt system and heat pump contactor
 - FA2 - heat pump circuit breaker C16/1
 - FA3 - counterflow circuit breaker C10/3
 - FA4 - lighting transformer circuit breaker C2/1
 - TR1 - safety transformer 230V/12V
 - FA5 - external socket breaker B16/1
 - FU1 - fuse insert 2A
 - KM1 - filtration, salt system and heat pump contactor
 - KT1 - salt system, filtration and heat pump relay timer
 - NF1 - light remote control
 - X1-1 salt system power supply terminal
 - X1-2 filtration motor power supply terminal

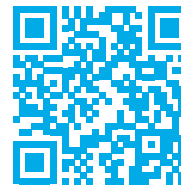
Drawn by: Jiří Ungl	Date: September 20, 2016	Title: Switchboard AO-2-C	
Reviewed by: Jindřich Sobotka	Date: September 22, 2016		
Approved by: Daniel Rychvalský	Date: September 23, 2016	Type: F/SD/TČ/P/NaCl	
ALBIXON a.s.		Number of sheets: 1	Sheet no.: 1
Updated:	March 5, 2020		

Notes

For further detailed information, see:

1. General Terms and Conditions

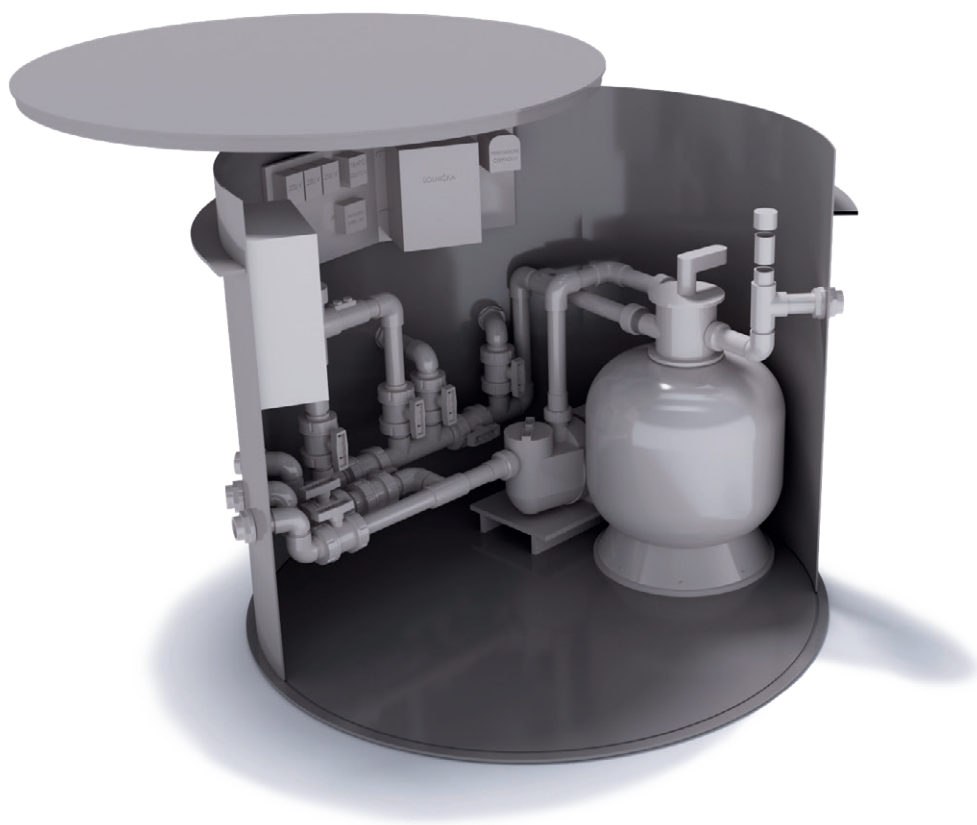
■ <https://www.albixon.cz/vsp>



2. Warranty Claim Rules

■ <https://www.albixon.cz/reklamacni-rad/>





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