

# Urchin system set-up

07.03.2024

# Protocols:

## Urchin care protocol:

<https://paper.dropbox.com/doc/Urchin-care-protocol--CSQY4KTy0BViFu4WQIEyTkOWAQ-Oj0cwVqwbTZvbXFvoXfF0>

OR pdf version:

[https://cpetak.github.io/Urchin\\_care\\_protocol.pdf](https://cpetak.github.io/Urchin_care_protocol.pdf)

## Filter changing protocol for the RO system:

<https://paper.dropbox.com/doc/Filter-changes--CSSCr00WUgtRAuw0XYFiMrRAQ-c8SO9pDzZdrgeWXFpJmrY>

OR pdf version:

[https://cpetak.github.io/Filter\\_changes.pdf](https://cpetak.github.io/Filter_changes.pdf)

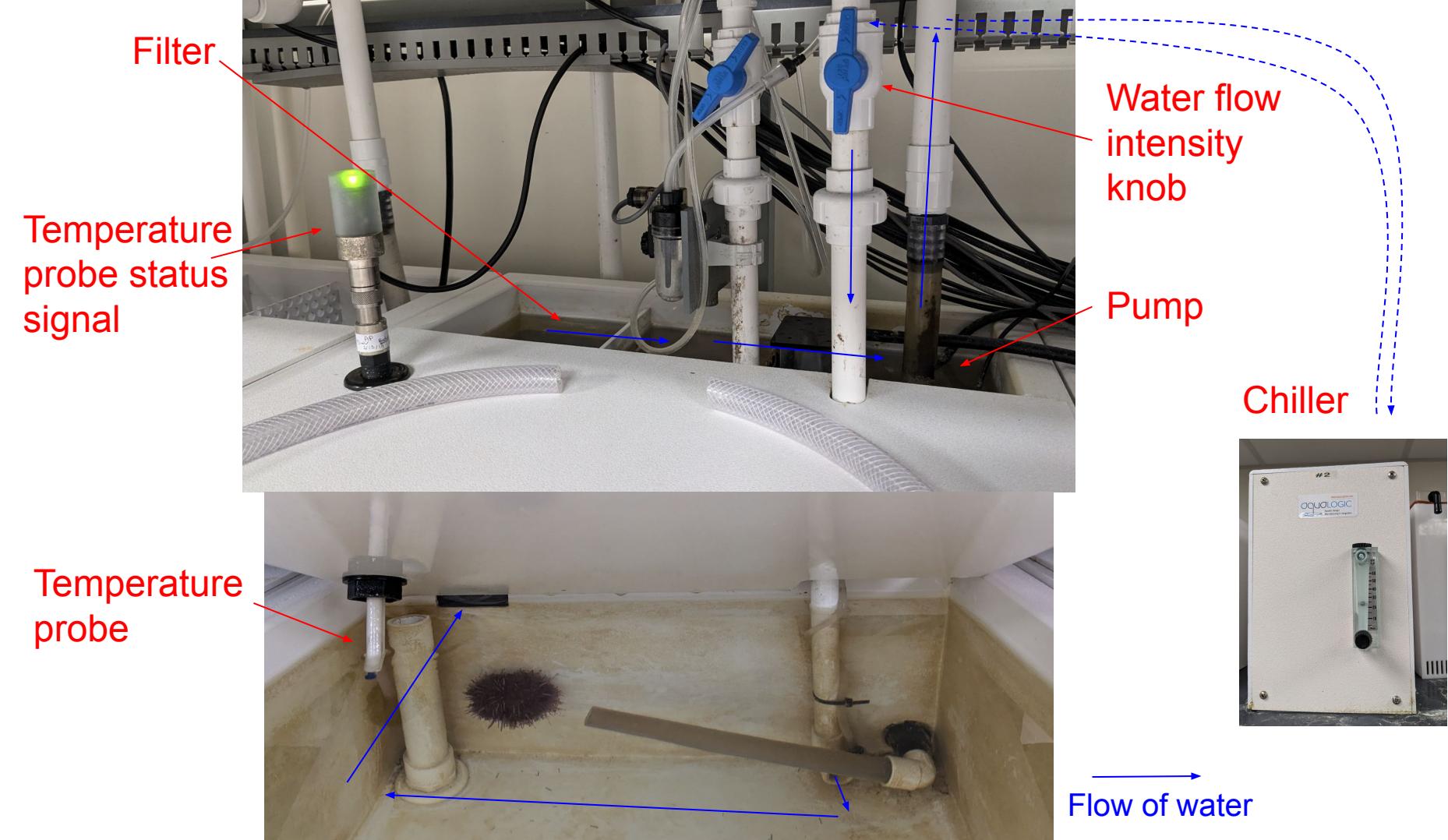
Bucket  
for dirty  
water



Bin to make fresh  
artificial sea water in



Used to get the  
clean water into the  
tanks



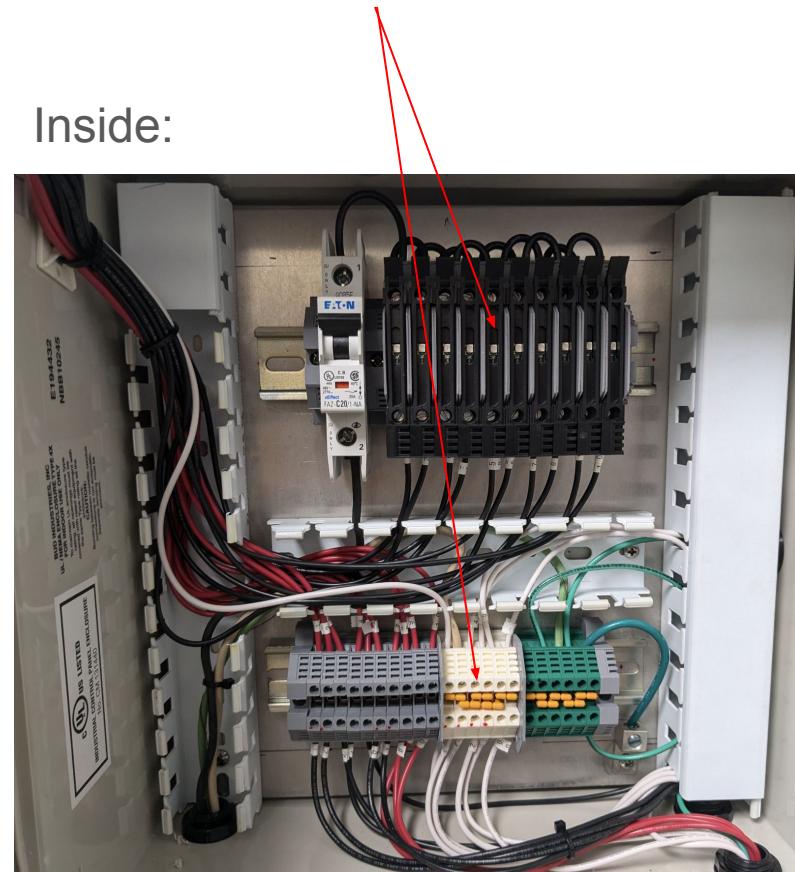
Tip: if pump not working, check if fuse needs to be replaced.

# Pump switches

Outside:

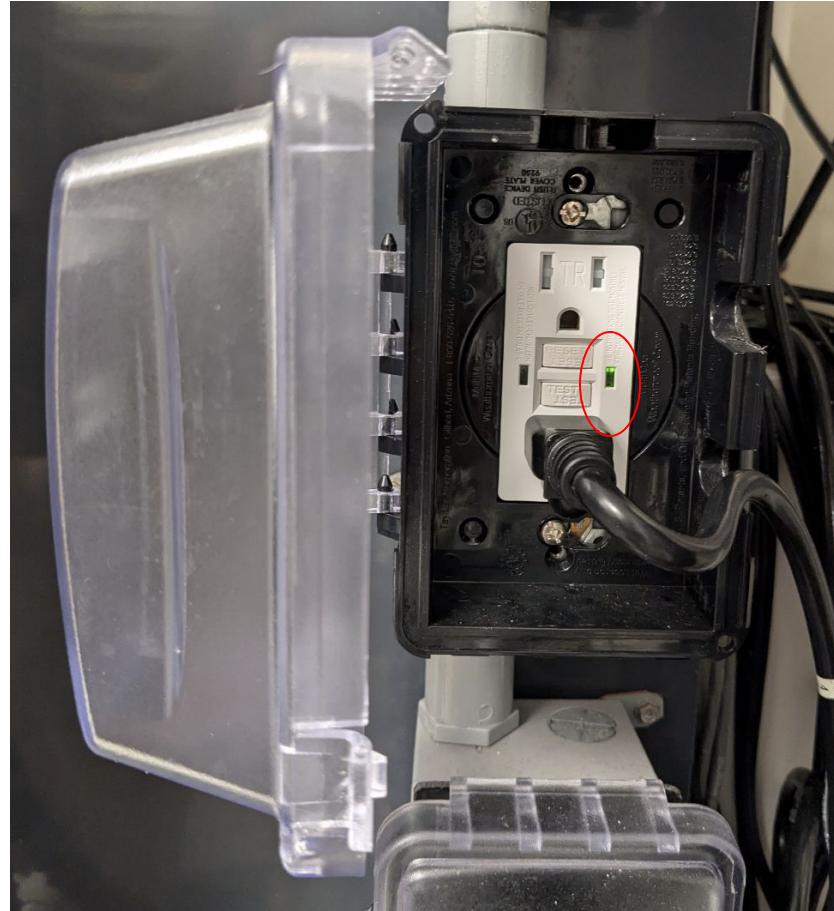


Inside:



## Cont. prev slide

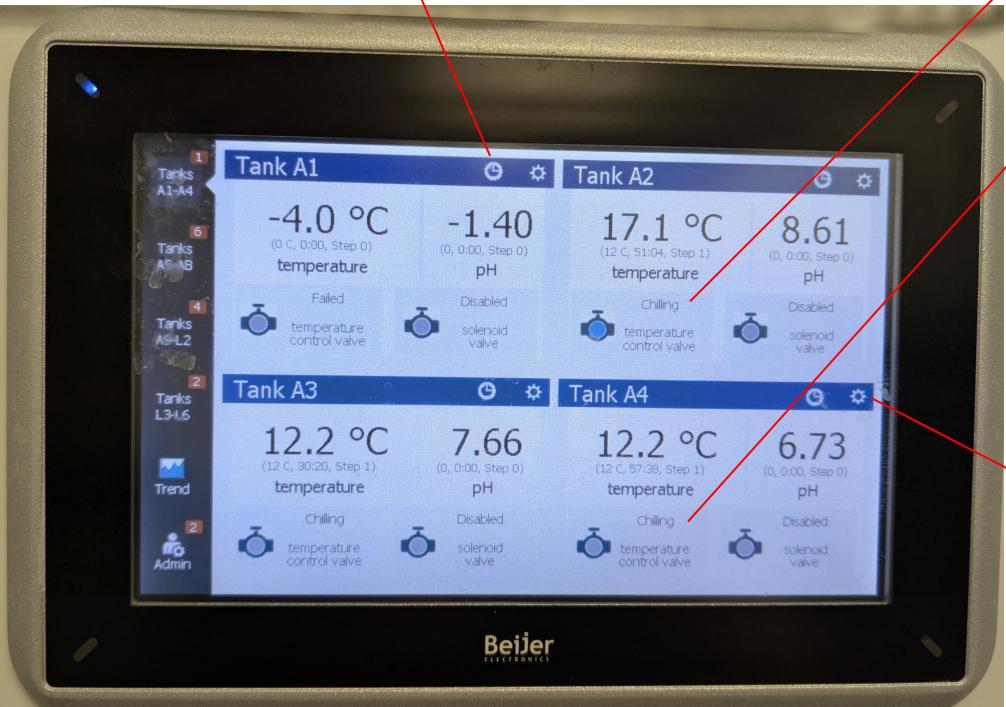
Tip: Alternatively, check that light is green. Try to push Reset if it's red. If that doesn't work, you'll likely need to replace the white part of the plug.



# The computer

Tip: To modify settings, you will need to log in.  
Username: Administrator, password: urchins

Time setting for the chill cycle  
(next slide).



Chilling is on, actively chilling.

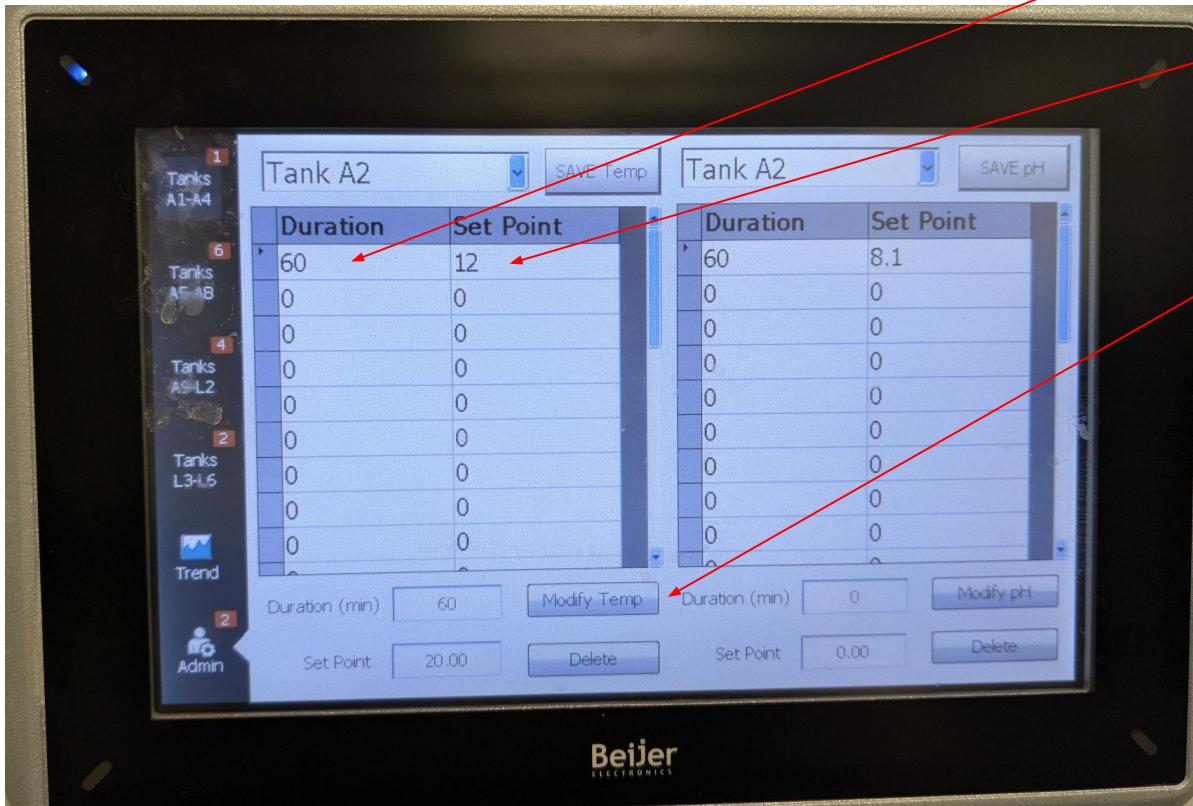
Chilling is on, not chilling right now  
as the current temperature is correct.

If it says Failed/Disabled instead of  
Chilling: see later slide about the  
settings window.

Settings window for that tank.

Note: Be patient! The system is slow! Give it  
plenty of time before you conclude that your  
click didn't register.

# Time setting for chill cycle



Duration in minutes

Temperature in Celsius

Click to change duration settings.

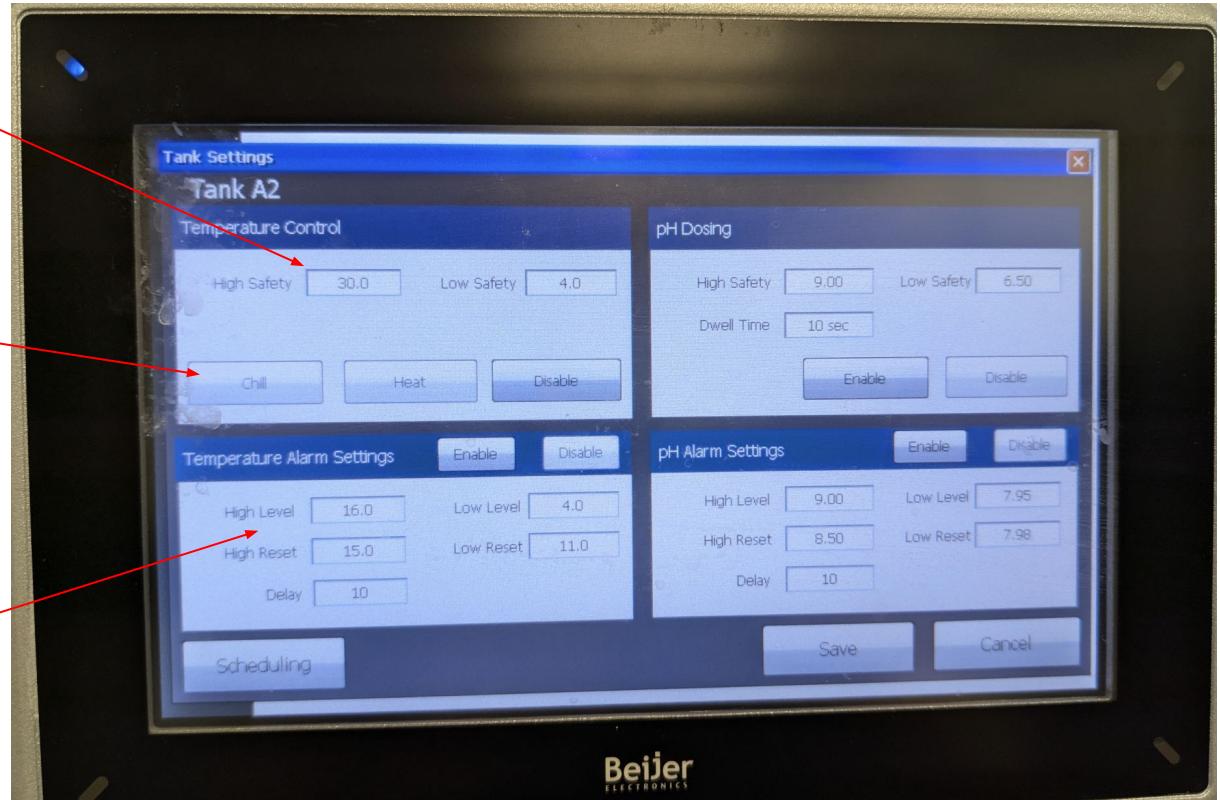
Image shows 12C for all time (there is 1 cycle, repeated over and over again).

# Settings window for specific tank

System will be disabled beyond these limits.

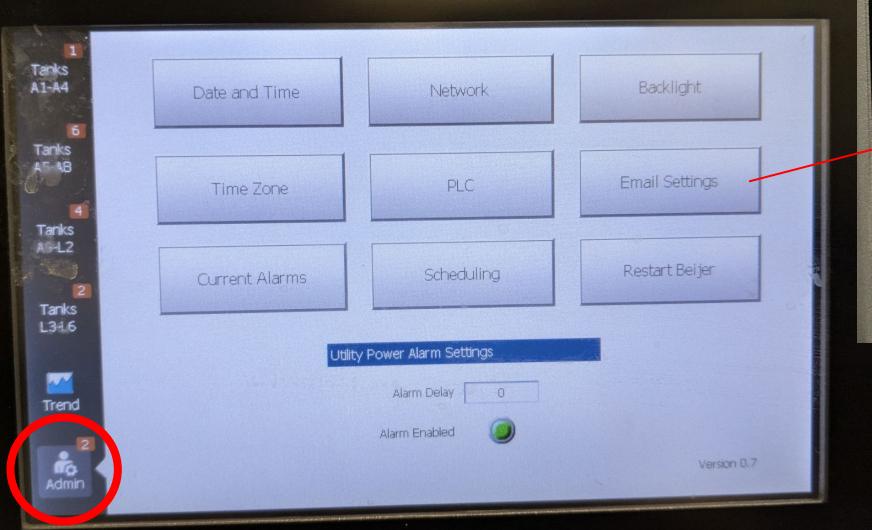
If home screen shows Failed/Disabled, try clicking Chill (or first Disable, then Chill to restart in case of an error)

Email alarm settings, max and min temperature at which alarm is triggered.

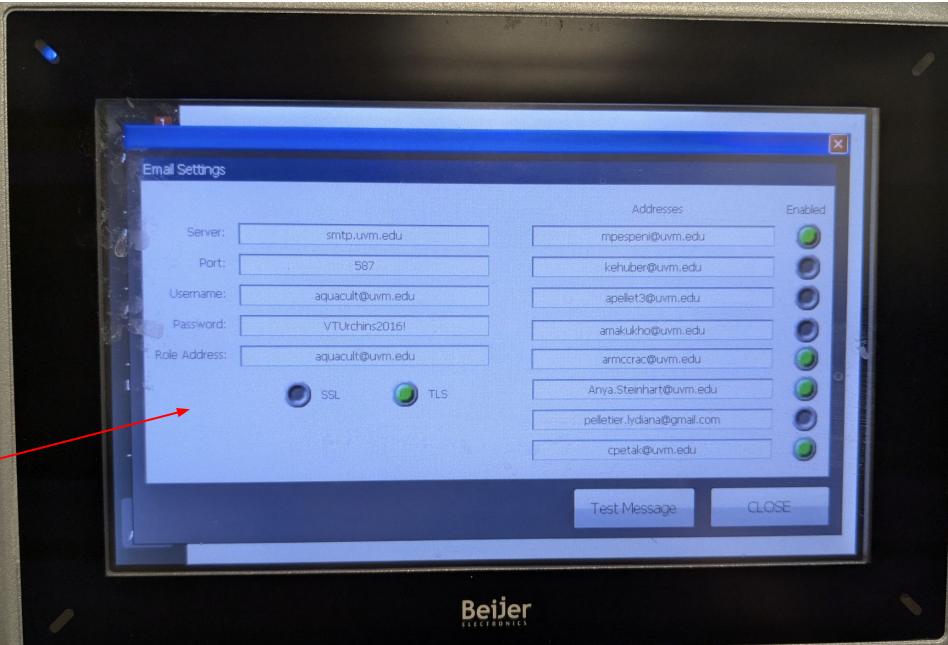


# Adding email address to alarm system

1.

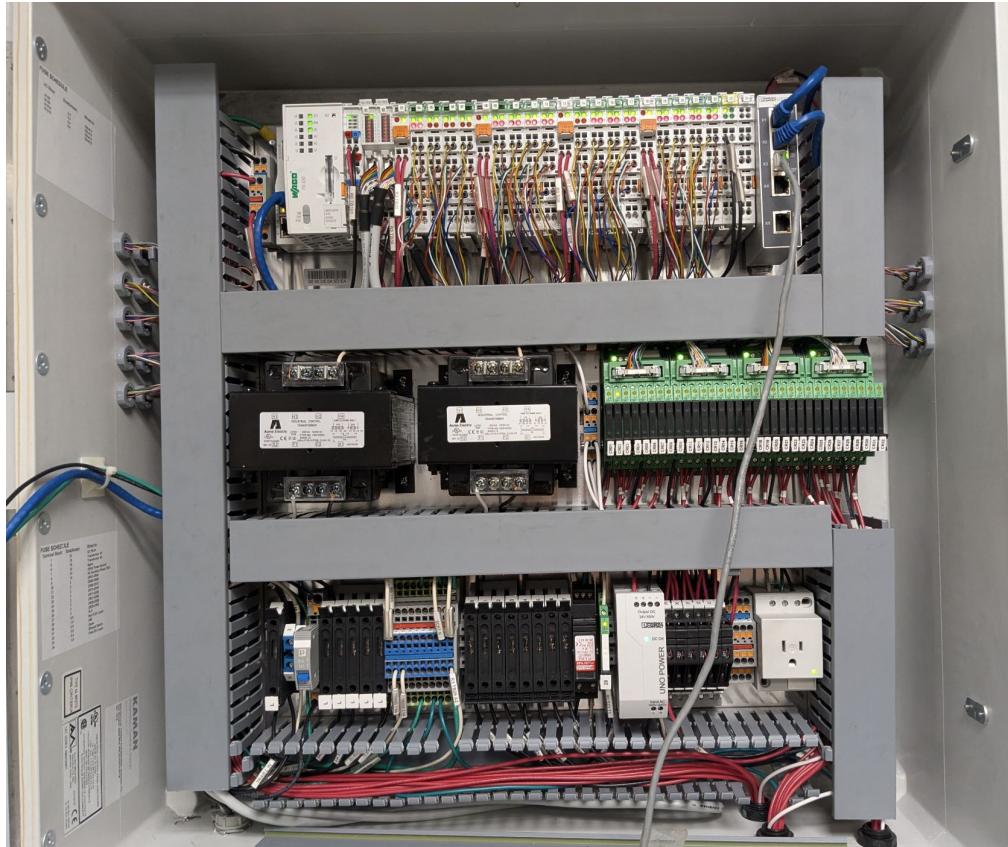


2.

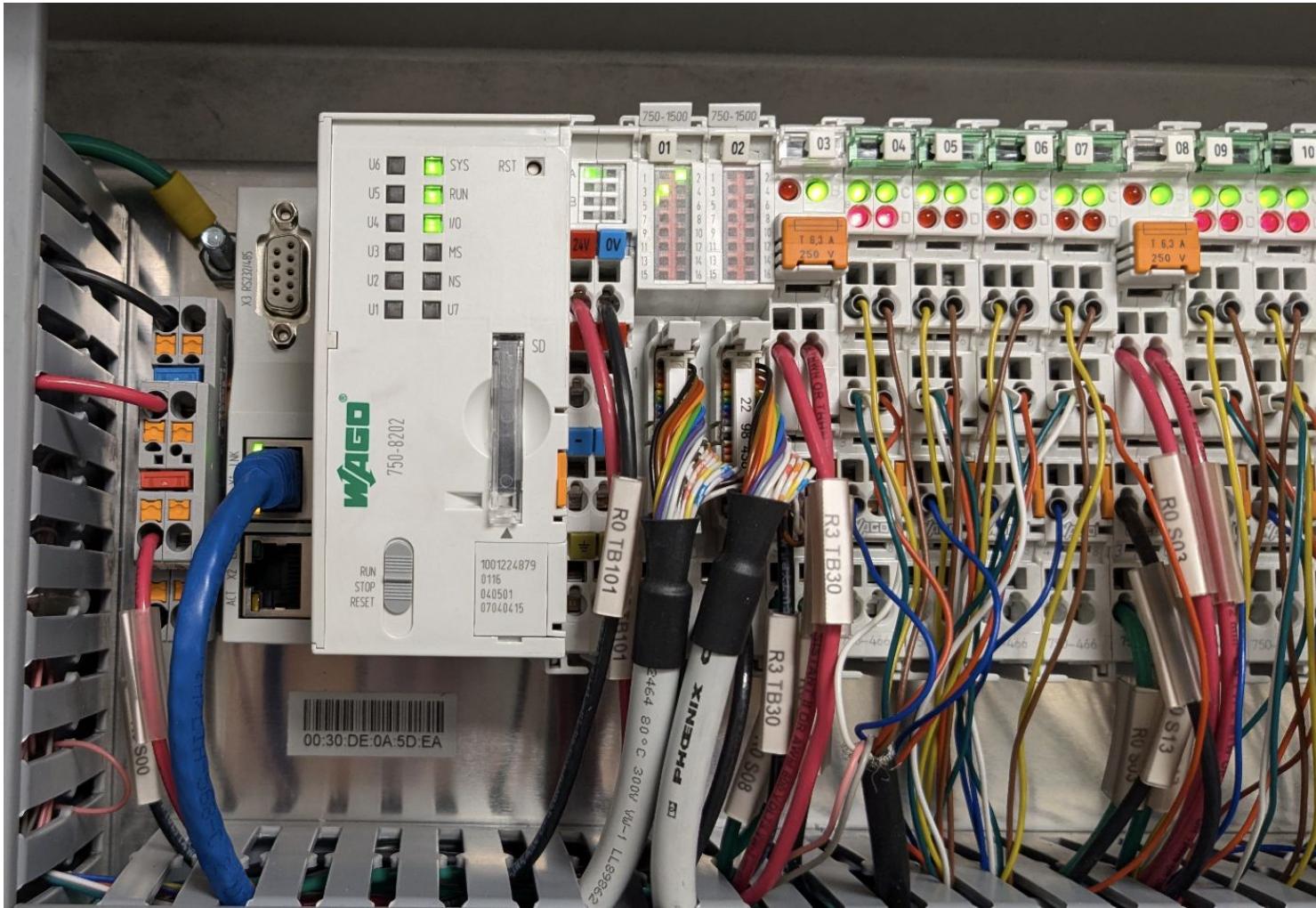


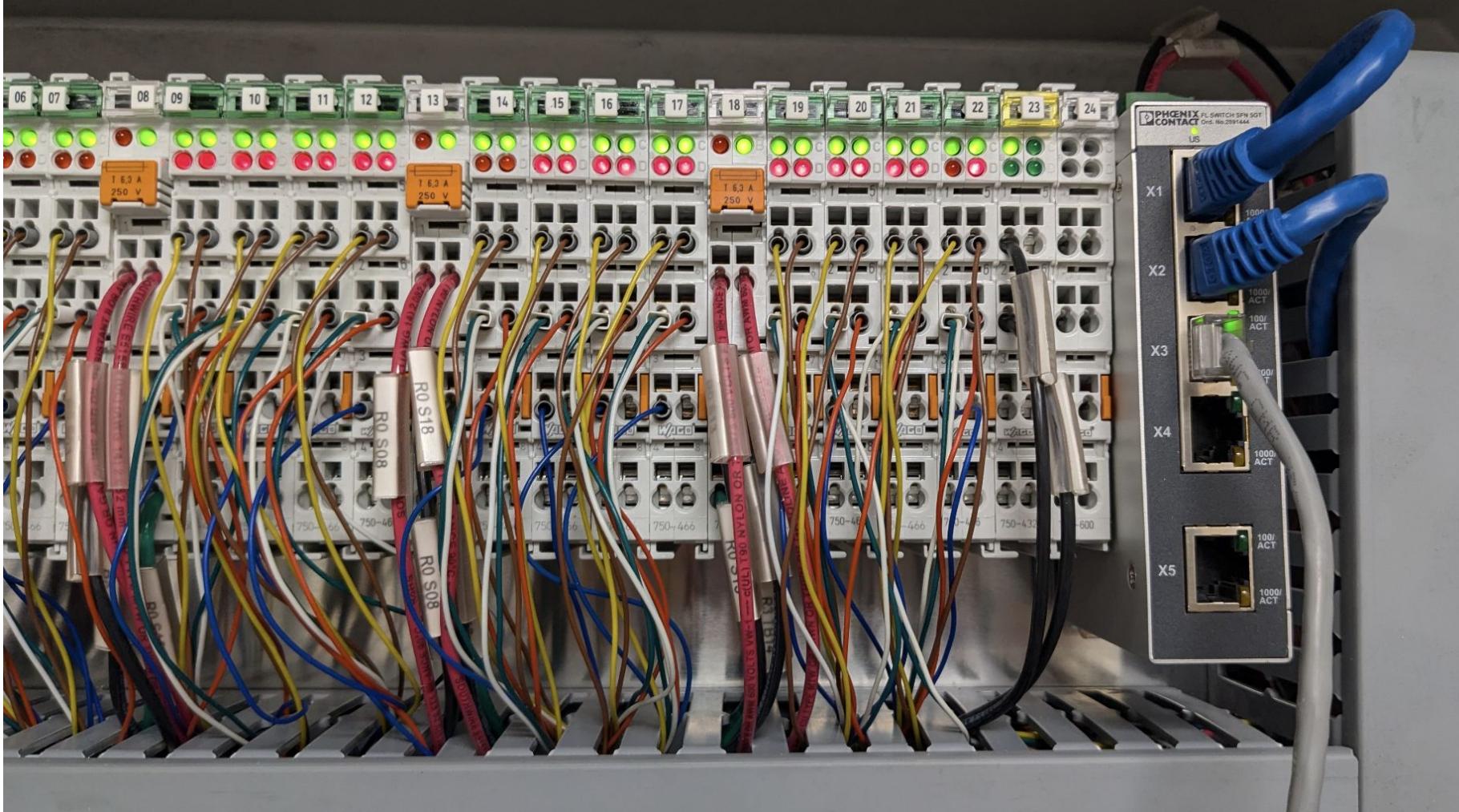
# The brain of the computer

For reference during troubleshooting, this is what the inside should look like



Magnified on  
next slides





**H1** **H3** **H2** **H4**  
INDUSTRIAL CONTROL  
TRANSFORMER

Acme Electric



MADE IN CHINA

REV. 00 X2

LISTED  
508B  
250 VA 50/60 Hz  
TYPE NO. CE010250  
SERIES CE

INSULATION SYSTEM CLASS 105

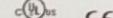
F1

F2

USE CU WIRE ONLY  
120 240  
H1 H3 H2 H4 H1 H3 H2 H4  
H1 H2 H3 H4 H1 H2 H3 H4  
X2 X1 A50-702429

**H1** **H3** **H2** **H4**  
INDUSTRIAL CONTROL  
TRANSFORMER

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REV. 00 X2

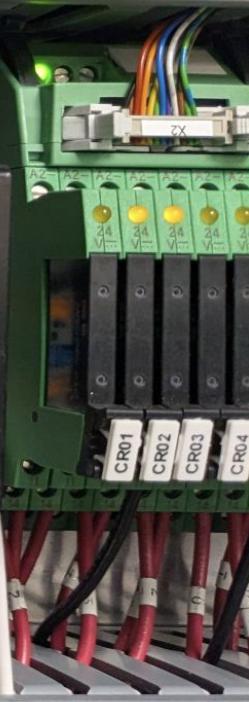
LISTED  
508B  
250 VA 50/60 Hz  
TYPE NO. CE010250  
SERIES CE

INSULATION SYSTEM CLASS 105

F1

F2

USE CU WIRE ONLY  
120 240  
H1 H3 H2 H4 H1 H3 H2 H4  
H1 H2 H3 H4 H1 H2 H3 H4  
X2 X1 A50-702429







UNO POWER

Output DC  
24V 60W

PHOENIX CONTACT

DC OK

Input AC  
100V-240V

