



**IMPORTANT: READ CAREFULLY BEFORE USE. KEEP FOR FUTURE REFERENCE.**

**Notice to Installer:**

This document contains important information about the installation, operation and safe use of this product – this information **must** be read before the installation and start-up of this product. **Once the product has been installed this document must be given to the owner/operator of this equipment.**

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**PRODUCT CONFORMITY INFORMATION**

This product complies with:







**EMC Regulations 2016 S.I. 2016:1091 / EMC Directive 2006/95/EC**


**Electrical Equipment (Safety) Regulations 2016 S.I. 2016:1101 / Low Voltage Directive 2014/35/EU**

**The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 S.I. 2012:3032 /  
Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) Directive 2011/65/EC**


## SAFETY NOTICES


### TO AVOID POSSIBLE HARM, READ AND FOLLOW THESE INSTRUCTIONS

 <b>DANGER</b>	<p>This notice signifies a hazard with a HIGH level of risk which, if not avoided, WILL result in death or serious injury.</p>	 <b>WARNING</b>	<p>This notice signifies a hazard with a MEDIUM level of risk which, if not avoided, COULD result in death or serious injury.</p>
 <b>DANGER</b>	<p>This notice signifies an ELECTRICAL hazard with a HIGH level of risk which, if not avoided, WILL result in death or serious injury.</p>	 <b>WARNING</b>	<p>This notice signifies An ELECTRICAL hazard with a MEDIUM level of risk which, if not avoided, COULD result in death or serious injury.</p>
 <b>CAUTION</b>	<p>This notice signifies a hazard with a LOW level of risk which, if not avoided, COULD result in minor or moderate injury.</p>	 <b>NOTICE</b>	<p>This notice signifies a potential risk of damage to the product or property.</p>

**WARNING**  This equipment must be installed by qualified persons only. Improper installation and servicing can create electrical hazards which could result in property damage, serious injury or death. Improper installation will void the warranty.

**WARNING**  A qualified electrician must carry out all electrical wiring in accordance with local electrical regulations.

**WARNING**  During operation, the electrical parts of the product are live. Before actioning any work on this product be certain that the electrical source is switched off and isolated. Always isolate the power supply before removing the housing cover.

**WARNING**  This product must be earthed

**WARNING!** This product must not be changed or modified in any way. Doing so both introduces significant safety hazards and voids the warranty.

**WARNING!** Do not permit children to play with this product. This product should not be used by children in any way.

## Before you install

- Check your components and their power requirements.
- Check the plantroom health, if the system is taking in air, has no flow or high pressure the problem will need to be rectified before installing SmartPool.
- Consult an electrician if a larger power supply is needed.
- Check wifi signal, if it is weak or not available the customer will need to purchase a wifi booster.
- Make sure smartpool can be sited inside the plantroom.

## What can SmartPool control?

SmartPool can control the following: (please consult an electrician if needed)

- Circ pump (230Vac 9Amps max)
- Uv or Ozone (230Vac 5Amps max)
- Light (aux1) (230Vac 9Amps max)
- Chl pump (230Vac 9Amps max)
- Acid pump (230Vac 9Amps max)
- Heater- normally used as switch- inline from external thermostat (230Vac 9Amps max)
- Automatic cover contacts (30Vdc 2Amps max)
- Swim Jets (using aux relay 1or 2) (230Vac 9Amps max)
- Exterior lights (using aux relay 1or 2) (230Vac 9Amps max)
- Water features (using aux relay 1or 2) (230Vac 9Amps max)
- Sauna (using aux 3 (30Vdc 2Amps max) to switch a heavy load relay)
- Steamroom (using aux 3 (30Vdc 2Amps max) to switch a heavy load relay)

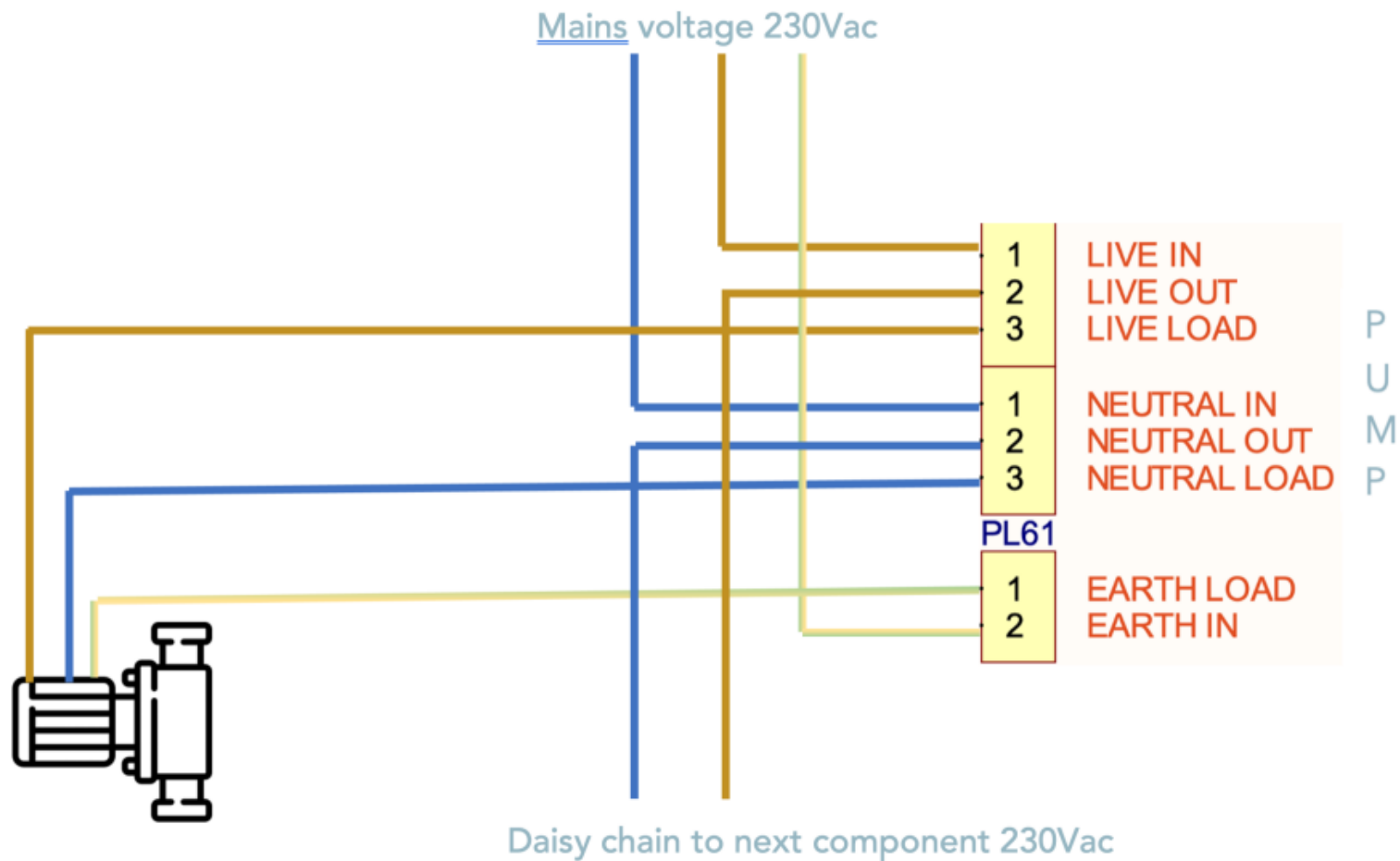
## How does SmartPool control components?

SmartPool has designated relays for (list below) and 3 Aux relays for other components, you can edit the name tags and use the aux relays for what ever is needed, just double check the max power for each relay in wiring diagrams (page:5-13).

- Circ pump (230Vac 9Amps max)
- Uv or Ozone (230Vac 5Amps max)
- Light (aux1) (230Vac 9Amps max)
- Chl pump (230Vac 9Amps max)
- Acid pump (230Vac 9Amps max)
- Heater- normally used as switch (230Vac 9Amps max)
- Automatic cover contacts (30Vdc 2Amps max)

# Wiring diagrams: Circ pump

(230Vac 9Amps max)

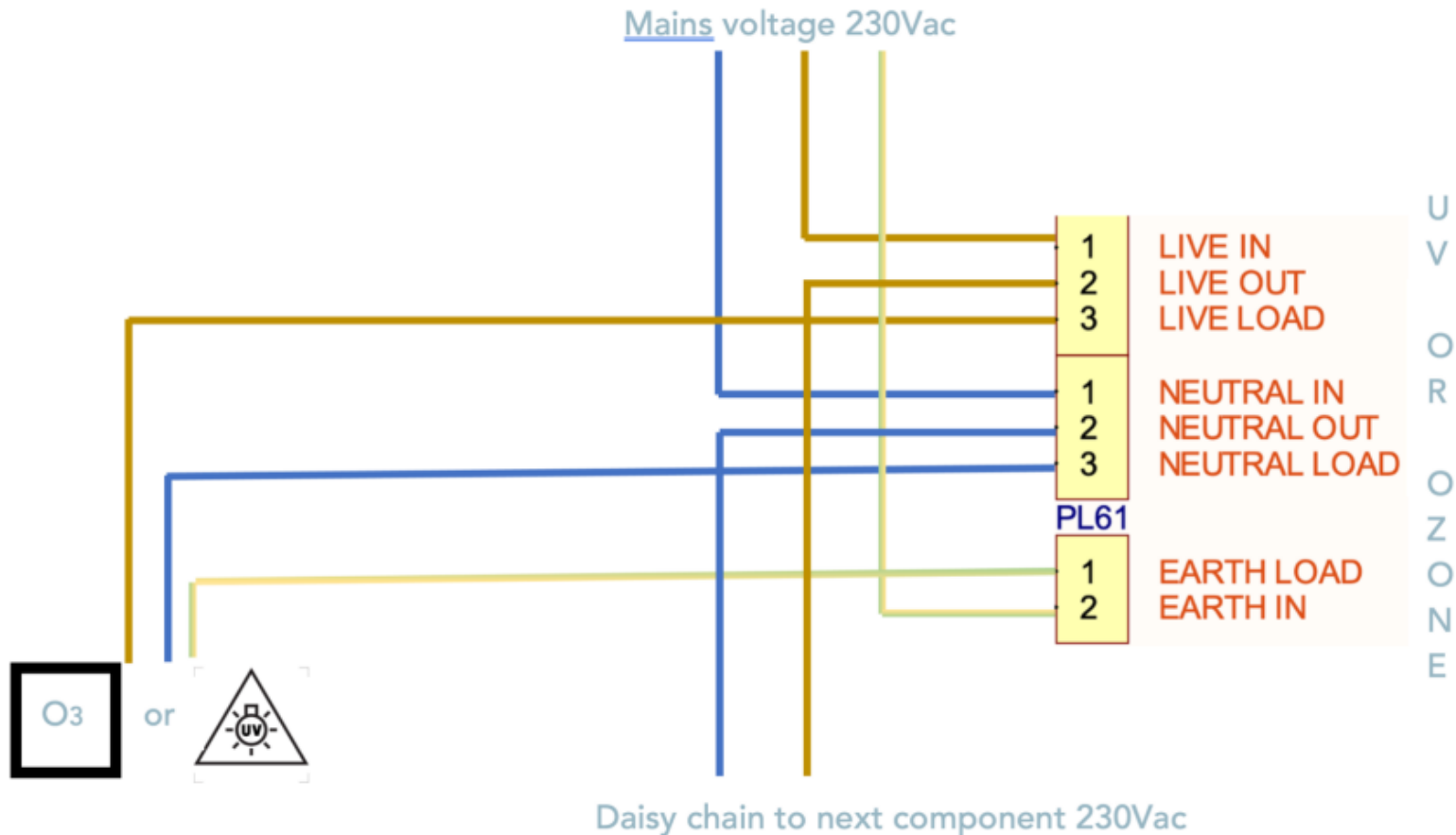


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## Wiring diagrams: UV or ozone

(230Vac 9Amps max)



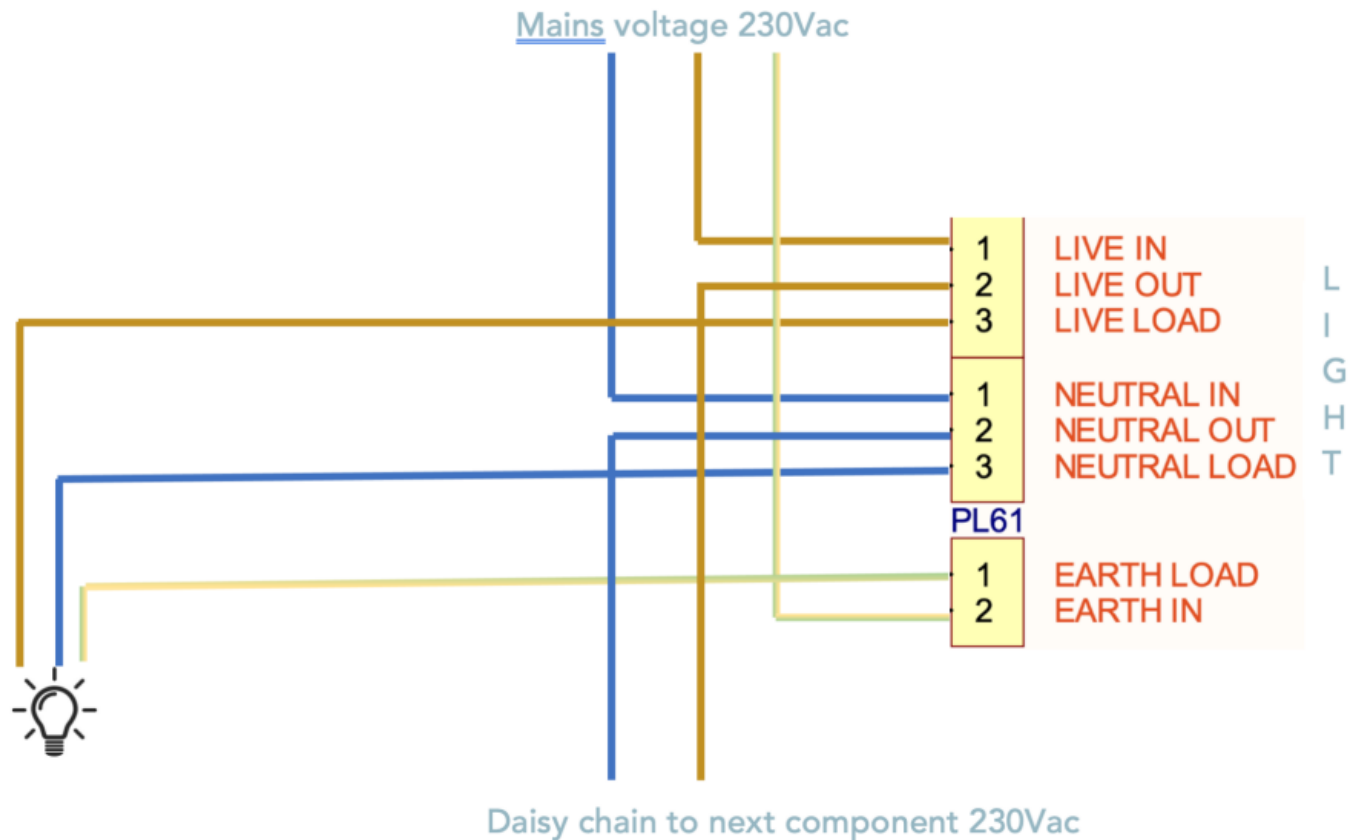


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## Wiring diagrams: Pool Light (mains to transformer)

(230Vac 9Amps max)

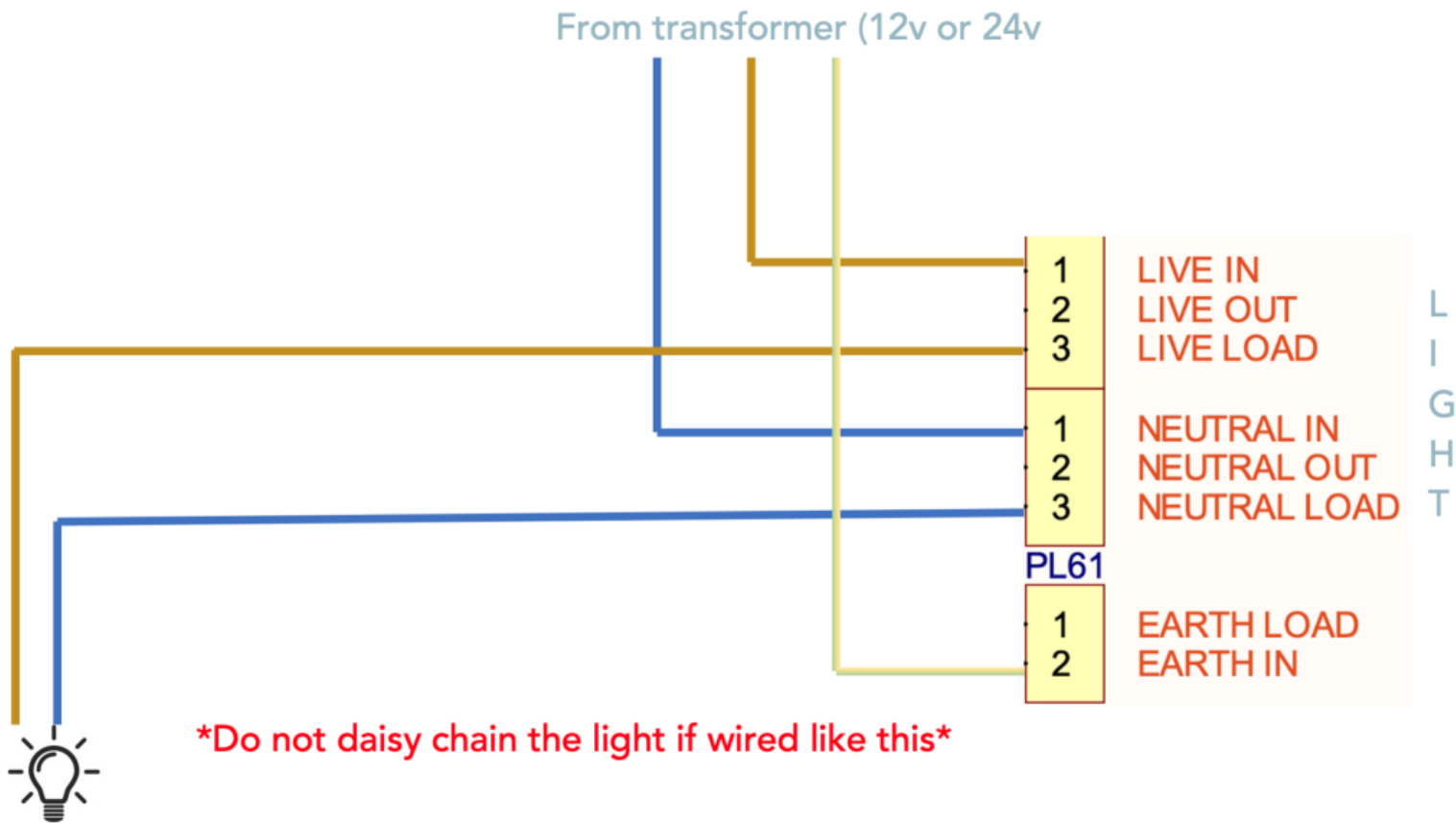


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## Wiring diagrams: Pool Light (transformer to lights)

(230Vac 9Amps max)

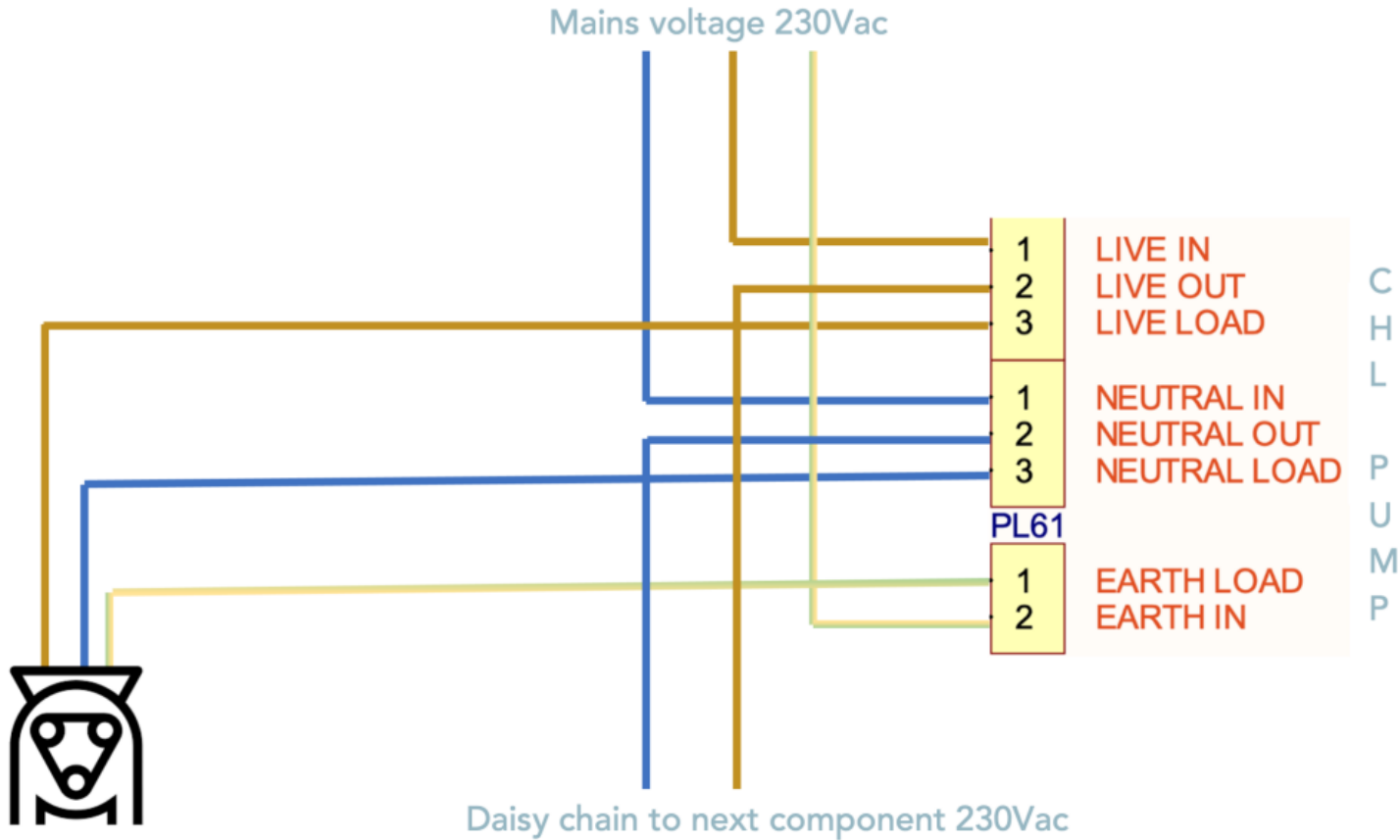


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# Wiring diagrams: CHI Pump

(230Vac 9Amps max)

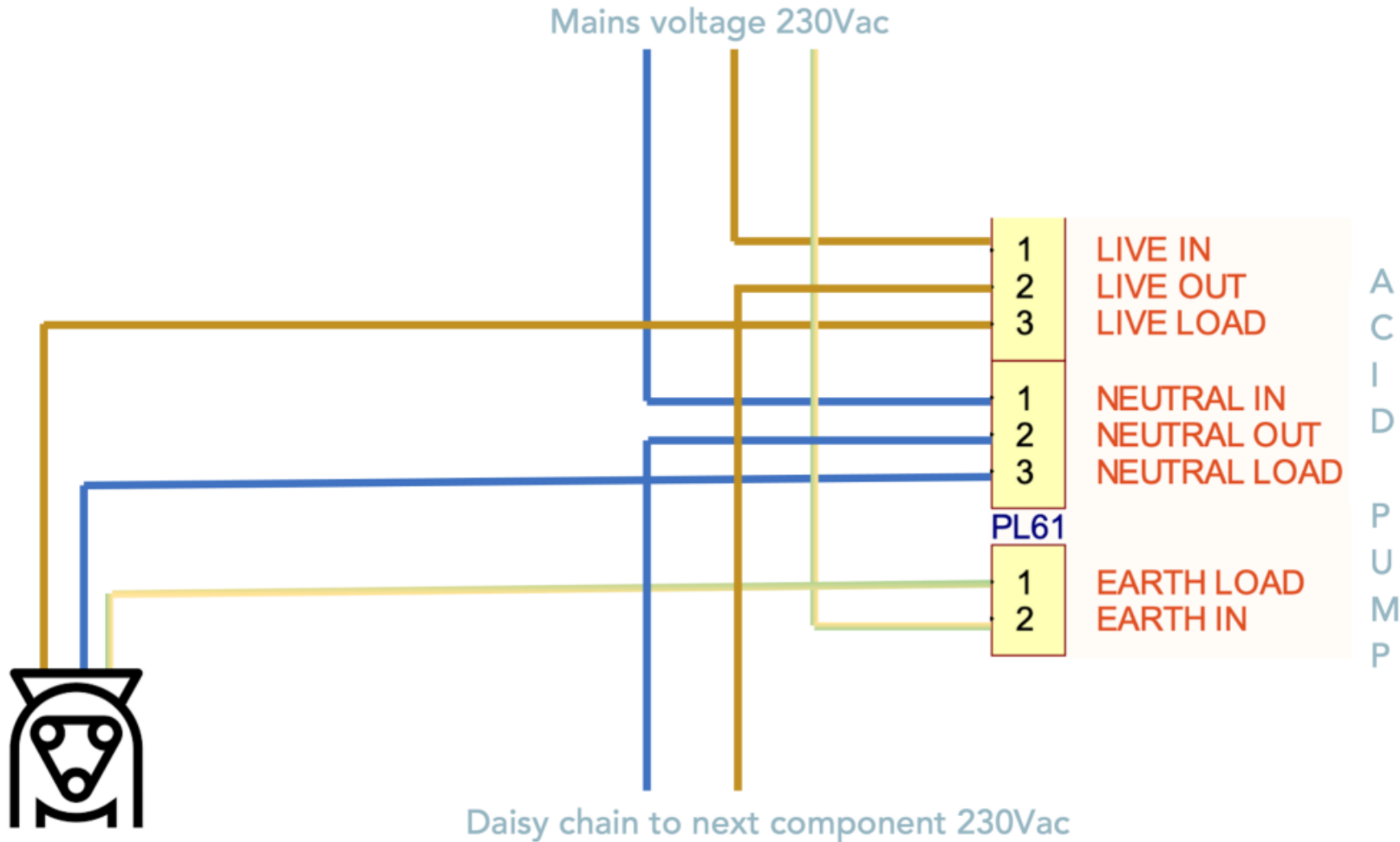


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# Wiring diagrams: Acid Pump

(230Vac 9Amps max)



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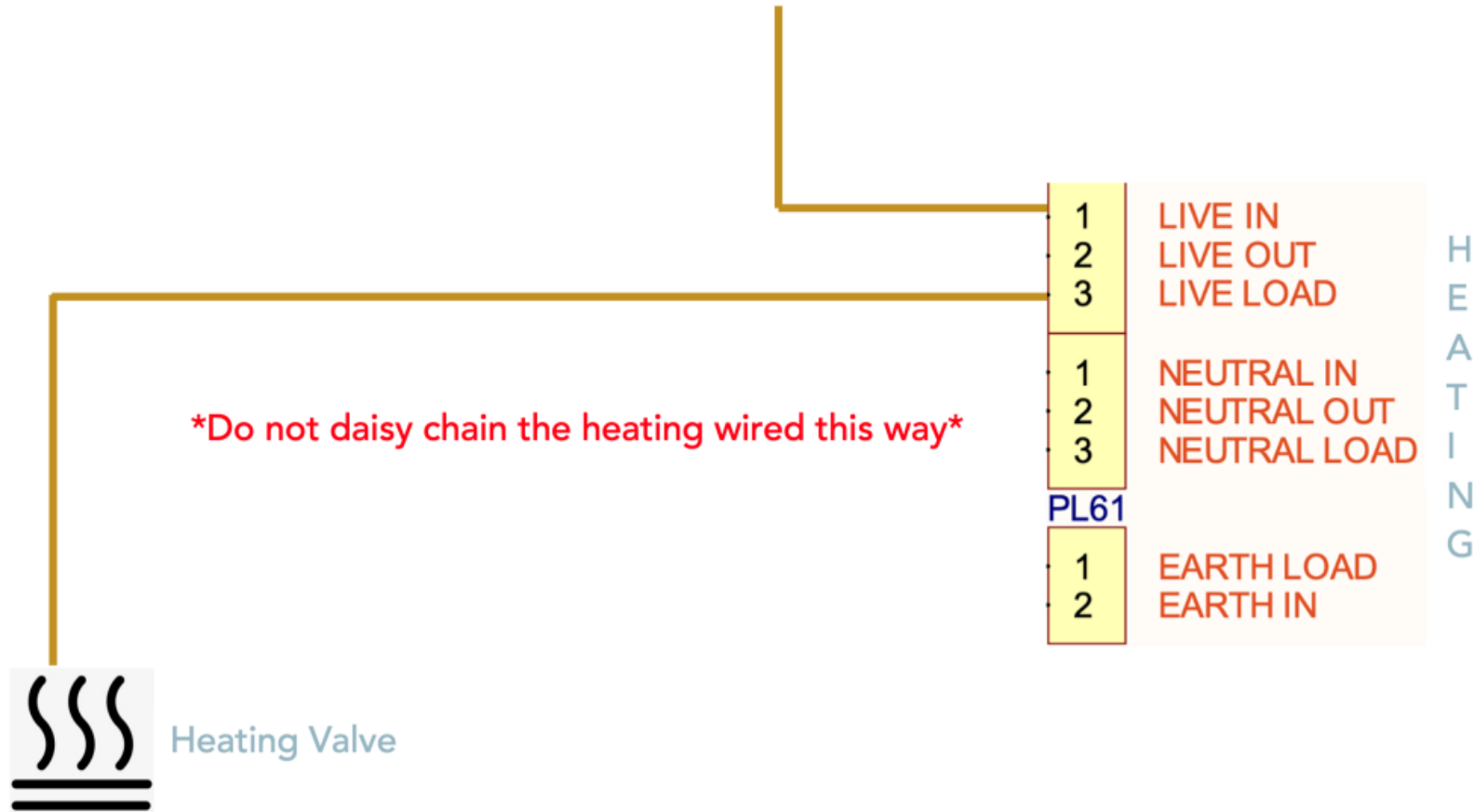
**WARNING** ⚠ A qualified electrician must carry out all electrical wiring in accordance with local electrical regulations.

# Wiring diagrams: Heating (heat exchanger)

(230Vac 9Amps max) Boiler/Solar ect

\*tip- make sure you use the power from the boiler, a different power source may make the RCD trip\*

The heater relay is **ONLY** used with a boiler system with a heat exchanger, **DO NOT** use it to power a air source heatpump or any heater rated over 9 AMPS.



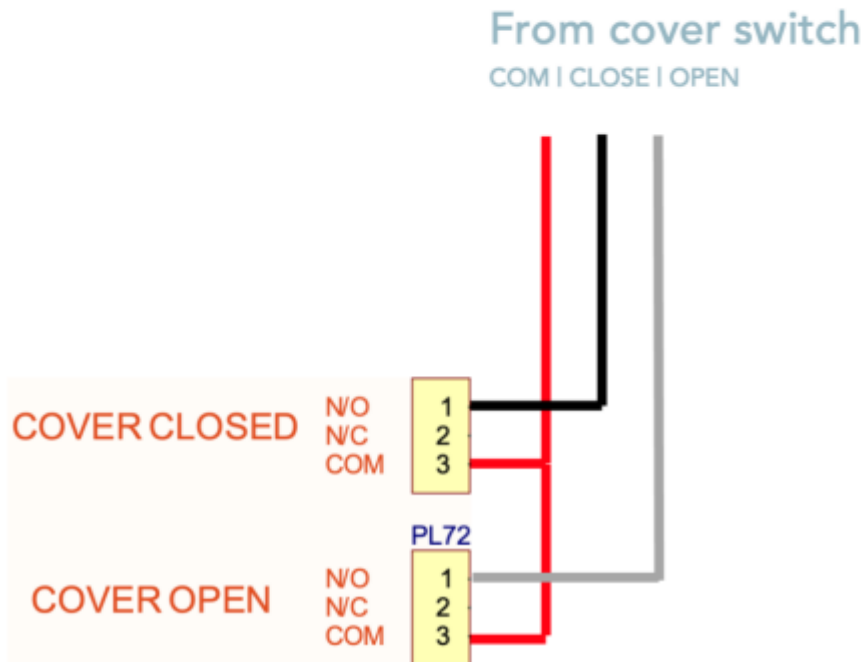
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# Wiring diagrams: Cover Control

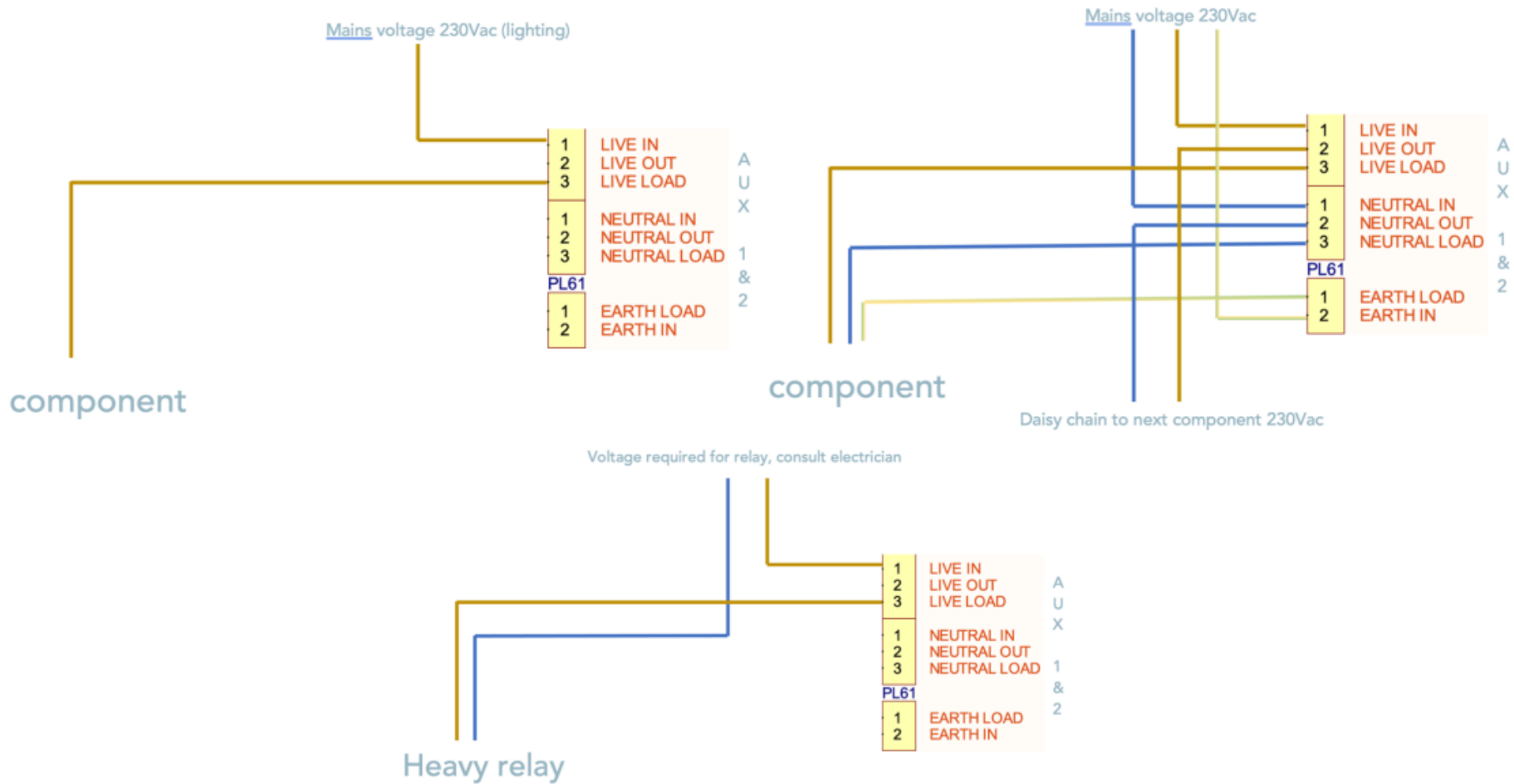
(30Vdc 2Amps max)

\*Tip- if the cover goes the wrong way after install swap the red and grey wires\*  
Smartpool will only open the pool cover due to safety concerns.



# Wiring diagrams: Aux 2 & 3

(230Vac 9Amps max)



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# Sensor wiring

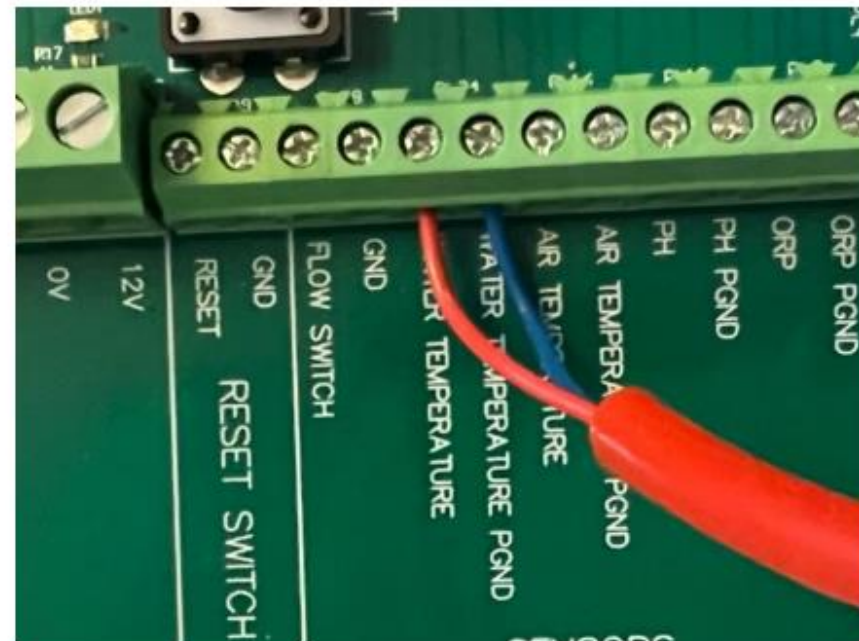
All sensors along this part of the PCB will wire into the sensor or switch as labelled then the other wire into the GND or PGND to the right of it.

**\*Do not wire into another sensor or switches GND or PGND.**

Flow switch (does not matter what way round the wires go)



Water temp sensor (does not matter what way round the wires go)





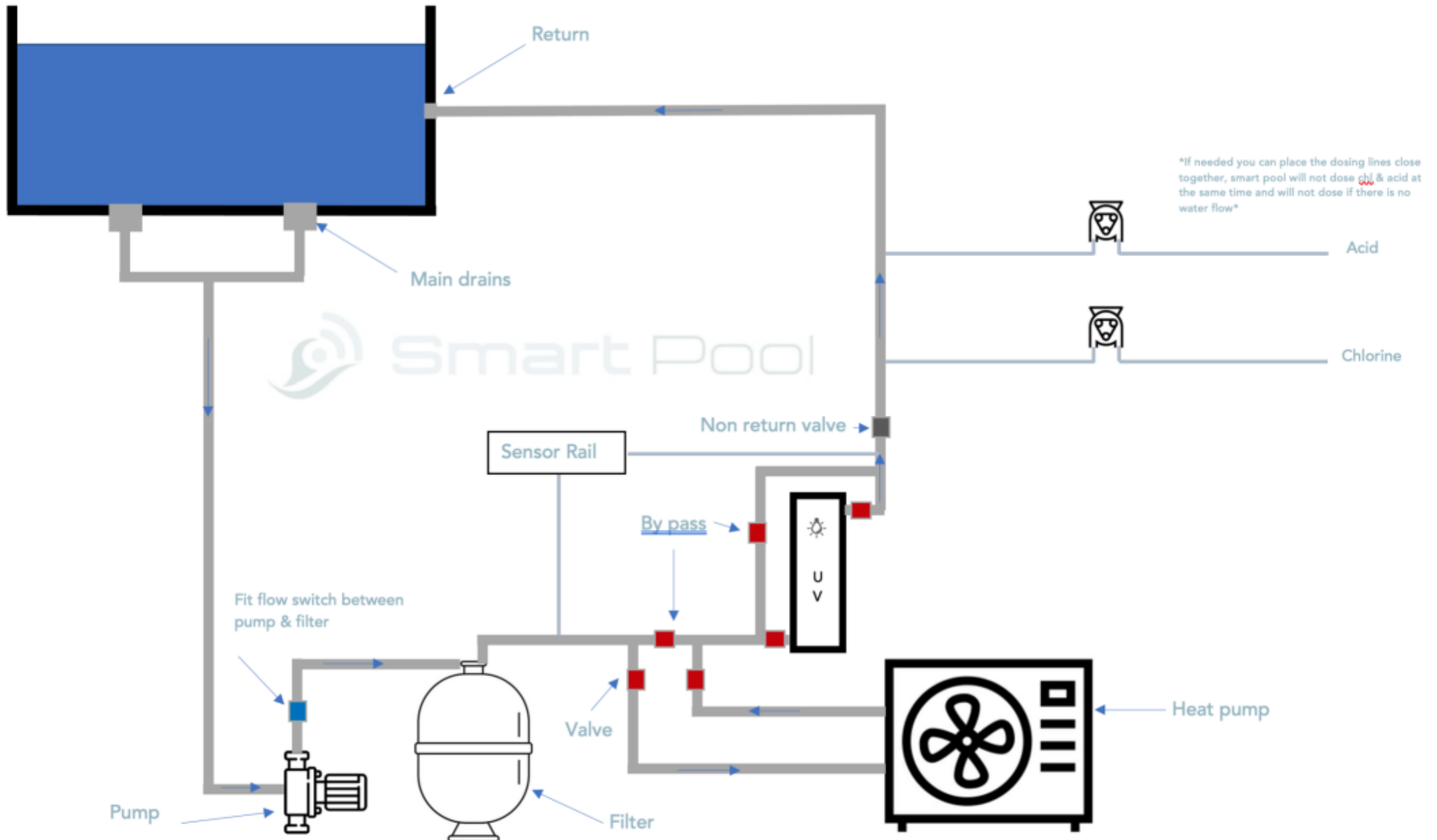
# Sensor wiring

**PH** & **ORP** sensors, plug these into the connectors located at the bottom of the box, they are labelled but make sure the connectors are locked in place. You will need to turn this on in the settings.

## Pressure sensor:

This Connection is on the outside of the box, you can use the extension cable if needed. You will need to turn this on in the settings.

# Filtration Diagram



## Start up

Please refer to the instruction manual if this is your first time setting up smart pool, you can scan here for quick access-

If you have set up smartpool before power smartpool on once installed, wait a few minutes and then 'smartpool' will appear in your Wifi search, connect to 'smartpool'.

Wait 30 seconds then scan the code below to start smartpool straight away, or enter this URL (<http://smartpoolhub.local:7777/sps>) in your browser on your phone.

Quick setup scan here



# Problem Solving

**WARNING** ⚠ During operation, the electrical parts of the product are live. Before actioning any work on this product be certain that the electrical source is switched off and isolated. Always isolate the power supply before removing the housing cover.

For more problem solving and up to date information visit our website <https://www.smartpoolsystems.co.uk/faq> or scan here to head straight there.



- **SmartPool tripping MCB breaker when running:**

This will mean there is too much power going through the MCB, for example if you have a 16amp MCB and smartpool is running multiple pumps rated close or over 16amps total it will trip the power supply.

Solution= consult an electrician and upgrade your MCB along with making sure the cable and jumper cables are suitable for the current draw. (reread the power rating of the relays above)

- **SmartPool tripping RCD breaker when running:**

This will mean there is a earth or neutral fault, double check all wiring for arcing (naked wires to close to each other).

If your wiring is correct unwire each component one by one and turn it on after each one has been removed, this is using process of elimination to find the cause, most likely it will be a pump with a burnt out motor or a capacitor that has failed and is making contact with the pump body.

- **SmartPool has lights on but isn't showing a WIFI signal.**

Press and hold the reset button on the side of the box for 10 seconds.

Wait 3 mins after the reset for wifi to show.

- **SmartPool is giving inaccurate readings on the chemical sensors.**

Make sure you havnt got the sensor cable cable tied or near any other wires, electromagnetic fields from mains voltage wires can cause bad readings.

- **Error no flow.**

Check you have installed the flow switch the correct way round, if you have done this check you have wired the flow switch in the correct terminal.

Check your pump is working and you have flow with no air in the system.

If this doesn't work get a small piece of wire and short the flow switch terminals and turn the pump on, if you get a flow reading then there is an issue with the flow switch.

- **Dosing pump has stopped working.**

The injector may need removing and cleaning, the easiest test is to remove the suction from the chlorine container, remove the injector pipe, put the injector pipe in a clean bucket, fill up a jug with clean water and put the suction end in the jug, run the pump and see if it draws the water, if it doesn't then a new peristaltic tube will need replacing, if it does then fit the pipe back on to the injector, run the pump again and see if the water level goes down in the jug, if it does then all it is working, if it doesn't then the injector will need cleaning.

- **I wired smartpool incorrectly and it will not turn on.**

Smartpool does have various protection for this but depending on what was done it may cause the unit to fail, check the fuse on the circuit board (do this by removing the fuse and doing a continuity test). If it is the fuse then replace it and try again, if the fuse is good and the unit is not powering on after incorrect wiring take a picture of the wiring and contact the supplier for further instructions.

- **I don't have a sensor reading.**

Check your wiring is correct and you have the correct sensors in the correct sockets, if all correct take the sensors out of the rail and put them into fresh water, reread the sensors, if working the chlorine in the pool may be too high, do a manual test to check. If this doesn't work then contact your supplier.

#### END OF LIFE



Once expired, this product should not be disposed of via general waste, but through a regulated waste disposal and recycling centre – please consult your local authority for full advice.

SmartPool Systems LTD

Website: [www.smartpoolsystems.co.uk](http://www.smartpoolsystems.co.uk)

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