

**Electrical connections**

L	Live connection
H	Hot
N	Neutral
PG	Ground
Fuse	4 Amp
G1	Group 1 Thermostats
G2	Group 2 Thermostats
CO	Change Over (Heat/Cool)

**These instructions apply to the SALUS model stated above.**

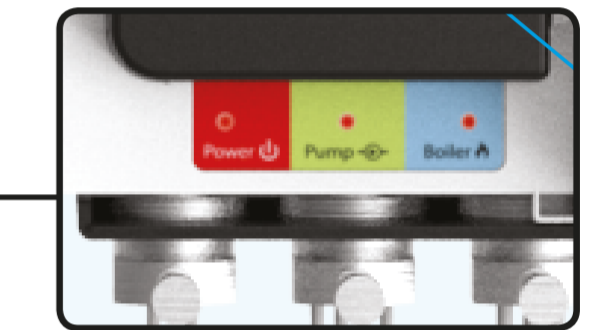
**Warning**  
This product must be fitted by a competent person, and installation must comply with the guidance, standards and regulations applicable to the country or state where the product is installed. Failure to comply with the requirements of the relevant guidance, standards and regulations could lead to injury, death or prosecution.

**Warning**  
Always isolate the AC main supply before installing or working on any components that require 120 V AC 60Hz supply.  
The ground terminals on the AKL08RF are for ground connections only. These terminals provide no earth protection.

Remove the white plate in order to reach the power cord terminals for 120VAC supply.



Loosen the wire connectors and insert wires for the power, boiler and pump. Install wires in their respective locations. Tighten the wire connectors to secure the wires. See section 8 for more info.



**INFORMATION**  
The wire connectors used for securing the wires are sold separately.

**INFORMATION**  
If you are mounting the Zone Wiring Center on a stud wall, extra support may be required.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

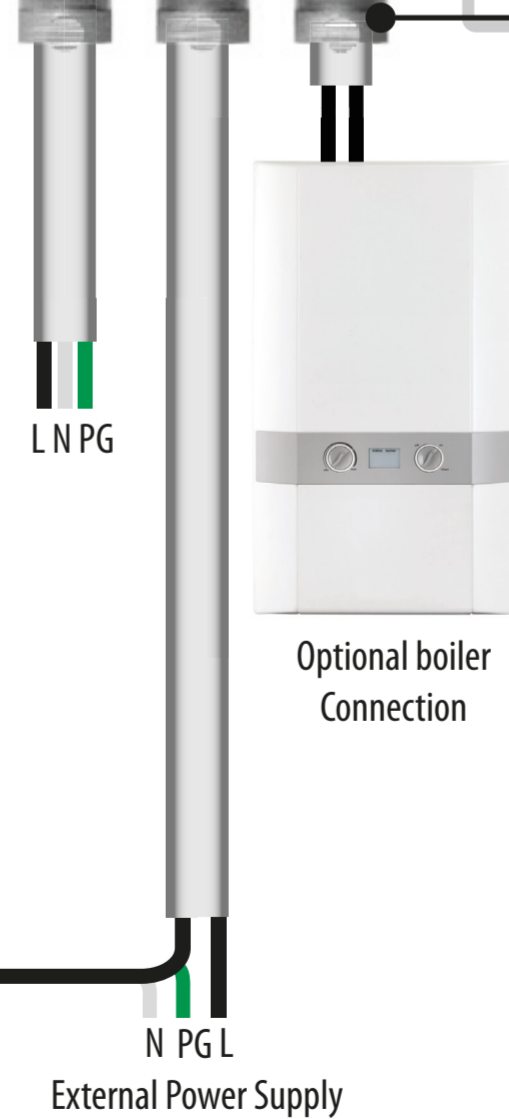
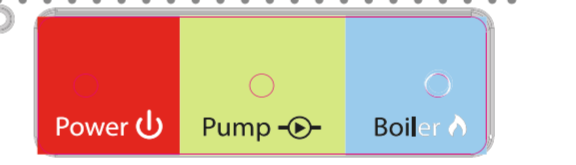
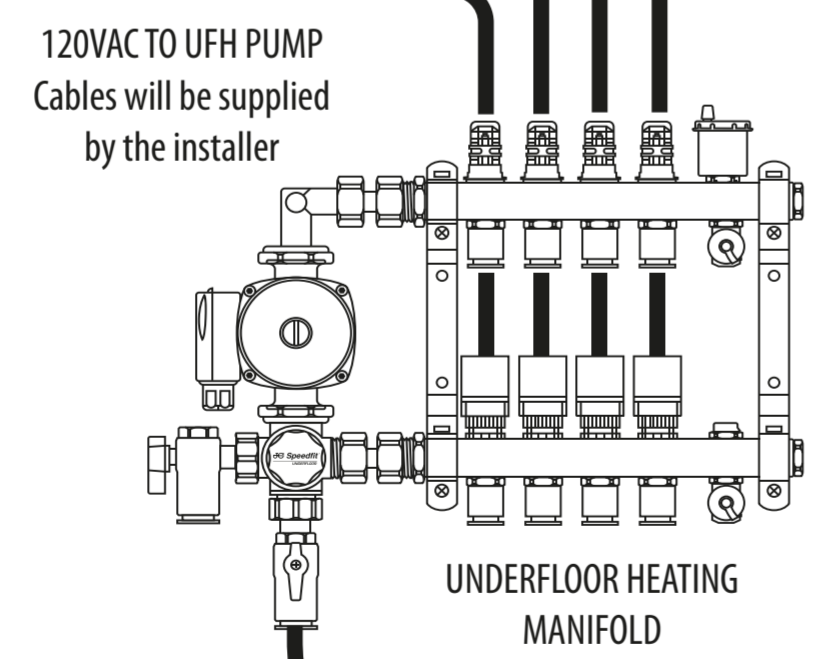
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:  
(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:  
(1) This device may not cause interference; and  
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.  
L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.



For PDF Installation guide go to [www.salusna.com](http://www.salusna.com)

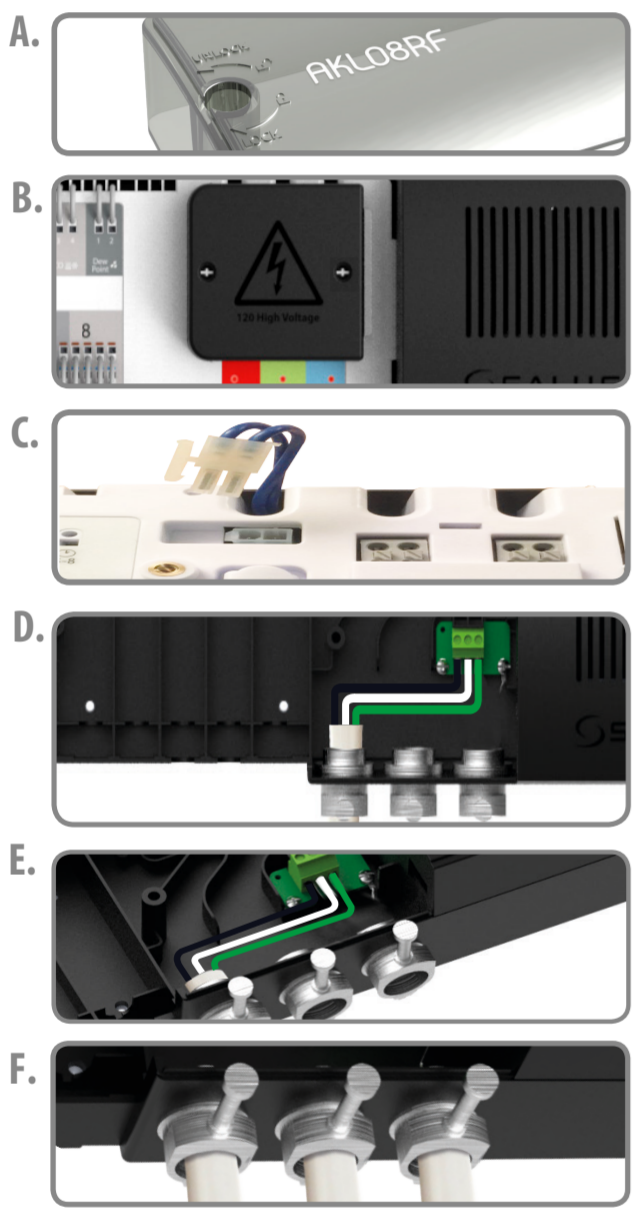


# Installing and Connecting the AKL08RF Zigbee Wiring Centre

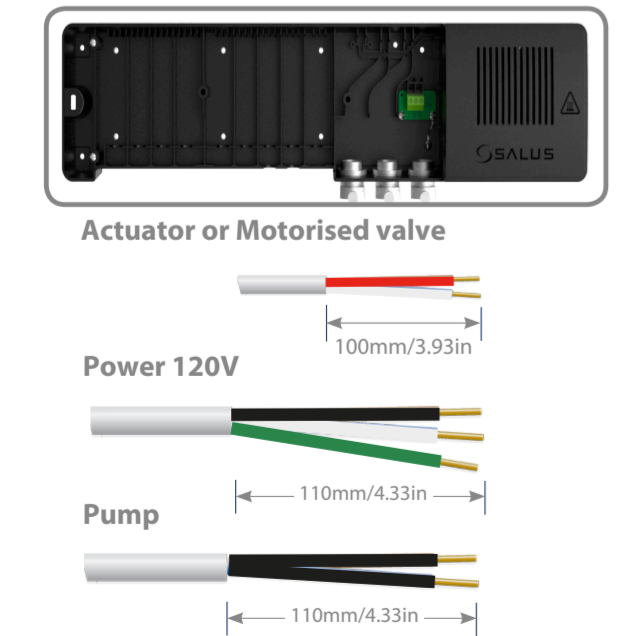
Use the AKL08RF zone wiring centre to simply and safely connect thermostats and corresponding thermal actuators or motorised valves. The AKL08RF connects to the wireless network through the AC10RF coordinator or the Universal Gateway SG888ZBWH. **One coordinator can support up to nine wiring centres, which means that if you buy more than one wiring centre, you will only need one of the included coordinators. Keep the other coordinators in a safe place as spares. If you are using the Universal Gateway SG888ZBWH please remove the AC10RF coordinator from your system.** Install the AKL08RF only in dry and closed interior rooms. Relative air humidity in the room may not exceed 95%. Clean the AKL08RF only with a dry and soft cloth. Do not use solvents or aggressive cleaning agents.



- 1 A. Remove the plastic cover by turning the screw 90° to the Unlock position.
- B. Remove the High voltage cover.
- C. Detach the 24V supply connection .
- D. Remove the white terminal for access to the power cord connections.
- E. Insert wires for the Power, Pump and Boiler and fasten securely.
- F. Use the proper wire connectors (purchased separately) for a 120VAC power supply system. After placing the wires through the wire connectors, secure them by tightening the screws.



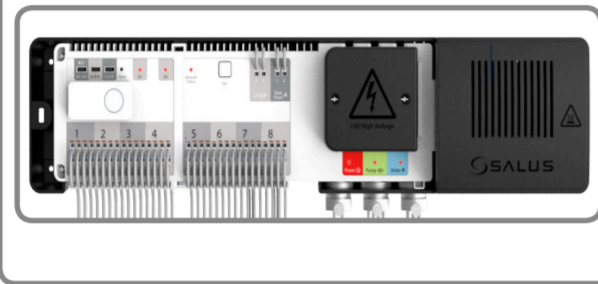
- 2 Attach the back of the AKL08RF to the wall or in a suitable location.



- 3 **Connect your wiring center to a 120VAC supply**

Connect the wires to the correct terminals.

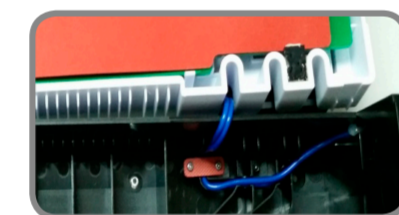
**Warning**  
 Use the powercord connections that are suitable for your system.



- 4 Clip in the terminals for boiler and pump connection. Press the terminal button, insert the cable and release the button.

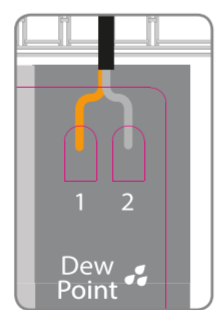


Ensure the Pump and Boiler wires are placed in their respective grooves in the back plate.

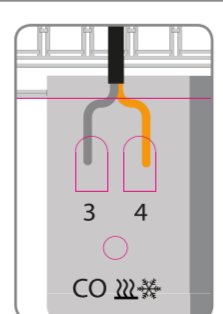


**i** Make sure to put the wires through the grooves.

- 5 Push in the Dew Point wires in the AKL08RF for a dry contact humidity sensing.

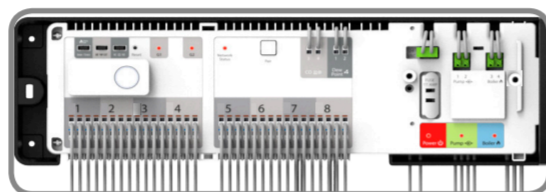


- 6 Push in the CO wires for dry contact heating/cooling switching. An open switch is for heating (red LED). A closed switch is for cooling (blue LED).



- Heating mode
- Cooling mode

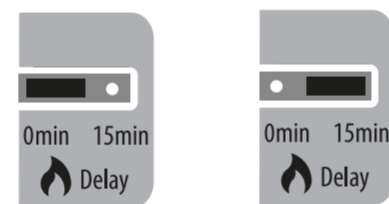
- 7
  - Bend and place the wires into their correct positions.
  - Reattach the 24V supply connection.
  - Bend and place the wires into the round holes at the bottom of the AKL08RF for actuators/motorised valves. You can add up to 4 actuators or motorised valves for each zone.
  - Reattach the white cover to the wiring center and secure it with two screws.



- 8 Set the boiler delay, wireless, and thermal actuator jumpers.

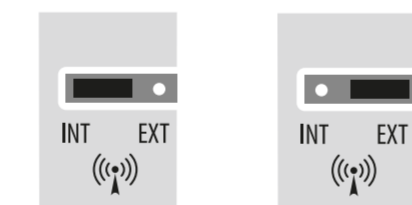
### Jumper Settings/Positions for Pump/Boiler On/Off Delay

The pump/boiler on delay and the pump off delay are fixed 3 minutes in the software and at 0 in the terminal. The default setting for the boiler off delay is also 0 minutes, but can be changed to 15 minutes. To do this, carefully remove the jumper and re-insert it in the other position as shown below:



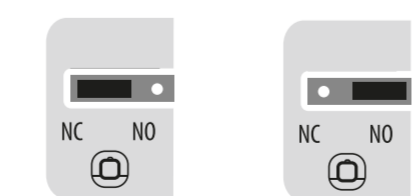
### Wireless

The default setting for the wireless connection is internal (INT). If the external antennae A8RFA is used change this setting (EXT). Carefully remove the jumper and re-insert it in the other position as shown below:



### Type of Actuator

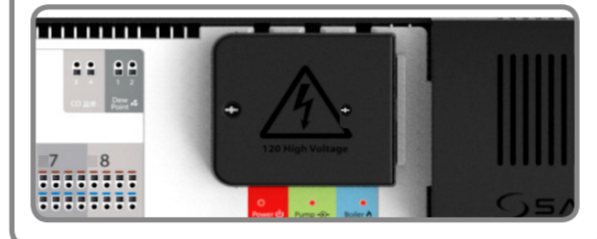
The default setting for the type of actuator is normally closed (NC). To change this setting to normally open (NO), carefully remove the jumper and re-insert it in the other position as shown below. **Note** that the actuator setting and thermostat setting must be the same.



- 9 Make sure there is the correct fuse (4 Amp).



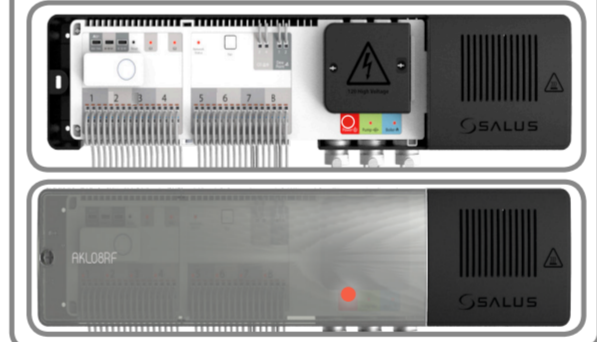
- 10 Re-attach the High voltage cover and secure it with two screws.



- 11 If you are not using the SG888ZBWH Gateway then plug in the AC10RF coordinator.



- 12 Re-attach the plastic cover. Turn the screw in the lock position. Switch on main power supply to the unit. The red LED comes on.



- 13 If you need to install the optional external antenna and have set the wireless jumpers to EXT:

- a. Disconnect power.
- b. Remove the protective cap from the antenna connection on the **button** of the AKL08RF.
- c. Screw the antenna into the AKL08RF.
- d. Reconnect power. The AKL08RF will now use the external antenna and not the internal antenna.



**i** The antenna (A8RFA) for AKL08RF is sold separately.

### LED indications

Name	Colour	Meaning
Power	●	AKL08RF is supplied with 120V power
G1	●	Wireless network activity on group 1 thermostats
G2	●	Wireless network activity on group 2 thermostats
Network Status	●	AKL08RF is waiting to pair
	●	AKL08RF is connected to the wireless network
Zone 1 actuators	●	Demand from group 1, zone 1 thermostat: actuator open
Zone 2 actuators	●	Demand from group 1, zone 2 thermostat: actuator open
Zone 3 actuators	●	Demand from group 1, zone 3 thermostat: actuator open
Zone 4 actuators	●	Demand from group 1, zone 4 thermostat: actuator open
Zone 5 actuators	●	Demand from group 2, zone 1 thermostat: actuator open
Zone 6 actuators	●	Demand from group 2, zone 2 thermostat: actuator open
Zone 7 actuators	●	Demand from group 2, zone 3 thermostat: actuator open
Zone 8 actuators	●	Demand from group 2, zone 4 thermostat: actuator open
Pump	●	Pump on
Boiler	●	Boiler on
CO	●	Heating Mode
	●	Cooling Mode

### Coordinator

#### Connecting the AKL08RF (s) to the ZigBee Wireless Network

1. On powering up the AKL08RF, all actuator LEDs light up green then go off, then the Network Status LED flashes green.
2. Press and hold the button on the coordinator for five seconds. The button flashes red to indicate the coordinator is ready to pair. The Network Status LED on the AKL08RF goes steady green when connected.
3. Repeat the process for every AKL08RF in the system. Note that one coordinator can support up to nine AKL08RFs.
4. To identify your AKL08RF (WC) number press Pair for one second. The LED on the zone number lights green: Zone 1 = WC-1, Zone 2 = WC-2, and so on. The Network Status LED is used to identify WC-9.
5. To pair your Salus thermostats, see your thermostat manual.
6. Press the coordinator button for five seconds until the LED flashes steady red.

**Note:** To restore the AKL08RF back to factory default settings at any time, using a suitable tool, press the Reset button to the left of the pair button.

#### Checking the System Configuration and Communication

- Press and hold the coordinator button for one second. All devices connected to the system flash. To stop checking, press and hold the coordinator button again for one second.
- Press and hold the Pair button on the WC for five seconds. All devices connected to the AKL08RF will flash. To stop checking, press and hold the Pair button again for five seconds.

#### Deleting all Devices from the Wireless Network

- To delete all devices connected to the network, press and hold the coordinator button for 15 seconds. The colour of the button changes from red to amber.
- To delete all devices connected to the AKL08RF, press and hold the pair button on the AKL08RF for 15 seconds. The G1 and G2 LEDs turn from flashing red to solid red then go off.

**Note:** After all devices have been deleted from the wireless network, they will need to be reinstalled. Refer to the instruction manuals.

### Universal Gateway

#### Connecting the AKL08RF (s) to the ZigBee Wireless Network

1. On powering up the AKL08RF, all actuator LEDs light up green then go off, then the Network Status LED flashes green.
2. Remove the coordinator, access the Wise.ly App and add your AKL08RF. When in Pairing Mode, the Universal Gateway will start flashing red. The Network Status LED on the AKL08RF goes steady green when connected.
3. Repeat the process for every AKL08RF in the system. Note that one Universal Gateway can support up to 100 devices (thermostats, ARV's, etc.).
4. To identify your AKL08RF (WC) number press Pair for one second. The LED on the zone number lights green: Zone 1 = WC-1, Zone 2 = WC-2, and so on. The Network Status LED is used to identify WC-9.
5. To pair your Salus thermostats, see your thermostat manual.
6. The Universal Gateway will turn solid blue automatically, once the pairing process is complete.

**Note:** To restore the AKL08RF back to factory default settings at any time, using a suitable tool, press the Reset button to the left of the pair button.

#### Checking the System Configuration and Communication

- Go to the Wise.ly App and press the Identify button. The device will start flashing. Stop the identify process by pressing the button from the App again.
- Press and hold the Pair button on the WC for five seconds. All devices connected to the AKL08RF will flash. To stop checking, press and hold the Pair button again for five seconds.

#### Deleting all Devices from the Wireless Network

- You can remove your devices from the Wise.ly App. Equipment, All equipment menu.
- To delete all devices connected to the AKL08RF, press and hold the pair button on the AKL08RF for 15 seconds. The G1 and G2 LEDs turn from flashing red to solid red then go off.

**Note:** After all devices have been deleted from the wireless network, they will need to be reinstalled. Refer to the instruction manuals.