FRANKLINWH

FranklinWH Main Load Relay Installation Guide

aGate X, SKU: AGT-R1V2-US; AGT-R1V3-US
Main Load Relay, SKU: ACCY-MRV2-US

Aug 12, 2025

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Please read this document carefully to ensure the best reliability of the product and your warranty eligibility. For further information about the warranty, please refer to the ***FranklinWH Limited Warranty***.

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Please read this document carefully before installing or using the FranklinWH equipment. Failure to follow any instructions or warnings in this document may result in damage to the equipment, personal electric shock, severe injury, or even death.

Product Information

This document applies only to the following products: aGate X and the FranklinWH Main Load Relay.

FranklinWH Energy Storage Inc. (FranklinWH) reserves the right to make any improvements to the product, and the contents in this document shall be subject to updates without further notification.

All images and pictures provided in this Manual are only for demonstration purposes and may differ in detail from the product, based on the product version.

Feedback

If you have any questions or comments, please send us an email at: *service@franklinwh.com*

Disposal of Scrapped Products

Scrapped products (including their internal chemicals and electrical materials) should not be disposed of with household waste. Please refer to your local laws and regulations regarding disposal.

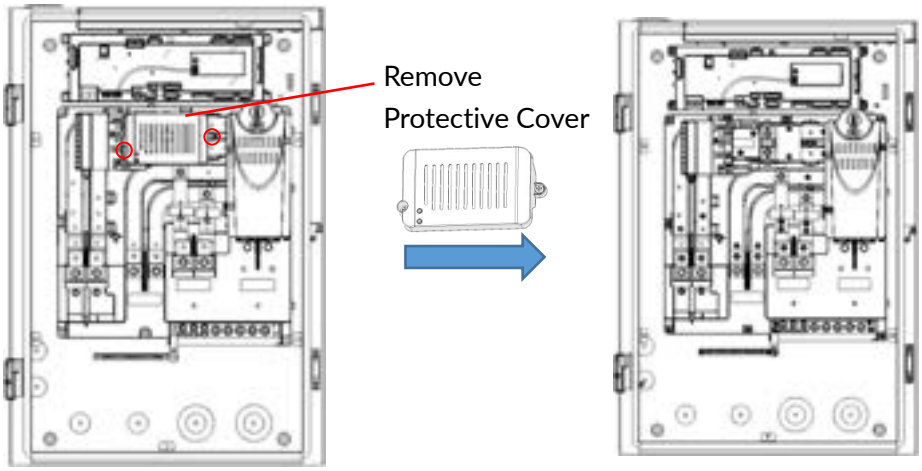
Overview

Installing the Main Load Relay ensures a more reliable FranklinWH black start, improving the stability and reliability of household electricity. When the system is in sleep mode, the grid is down, and the aPower battery is depleted, but sunlight is present, the system will attempt a black start, reactivating the system to supply home energy. The relay shuts down power to the loads to focus on recharging the battery to a set level – thus enhancing the system's black start success rate.

Main Load Relay Installation

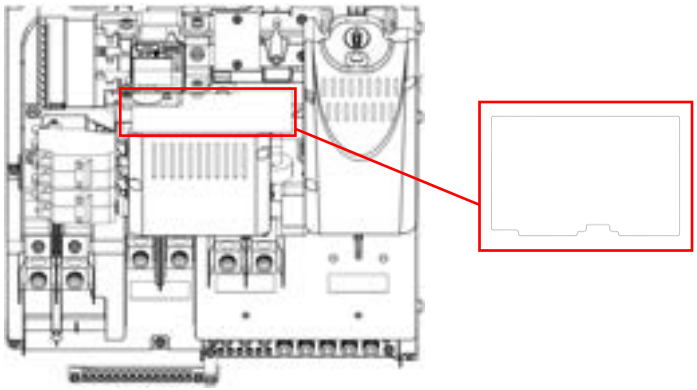
Before installation, make sure all breakers in the aGate and all switches connected to the aGate are disconnected. Use a multimeter to check the voltages at both input and output terminals of aGate are zero (0).

a) Use a Phillips head screwdriver to loosen the two M5 captive screws on the protective cover. Remove the protective cover and safely store it.



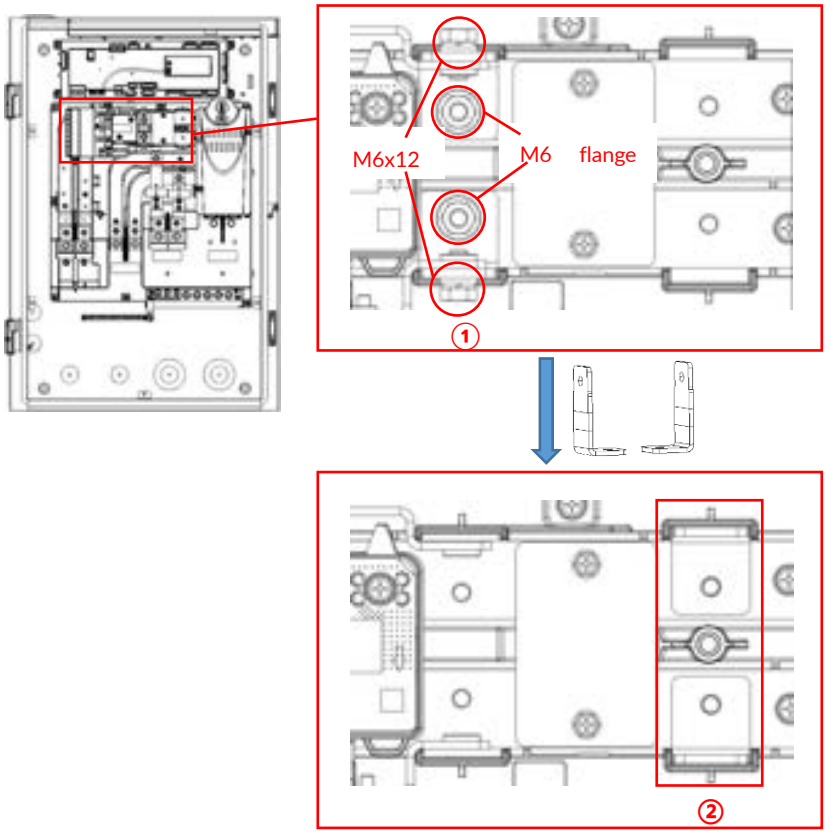
b) If the Smart Circuits Module has been installed, it is necessary to place the white insulating plate shipped with the module into the gap as shown in the figure. This prevents the screws from falling into the Smart Circuit Module during installation, which could damage the components. Remove the plate after installation is complete.

* If there is no Smart Circuits Module, ignore this step.

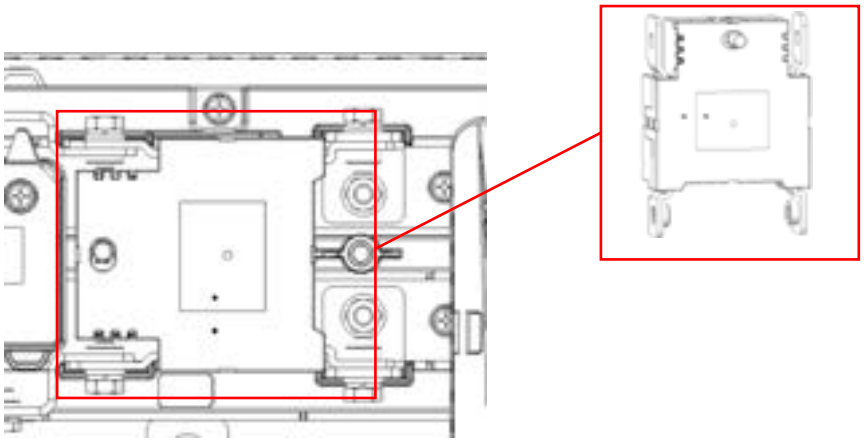


c) At position 1, use a 10 mm socket wrench to loosen the two M6 flange nuts, then use a 10 mm rachet wrench to remove the two M6x12 screws and detach the copper plates.

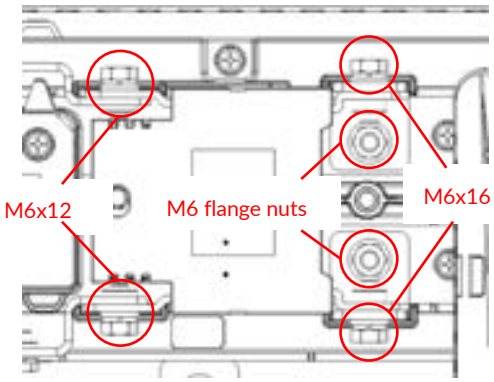
At position 2, place the copper plates and hold them steady.



d) Align all mounting holes and position the Main Load Relay as depicted in the diagram, ensuring that the white handle is facing forward.

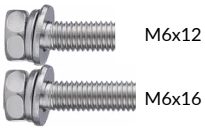


e) Use the 10 mm ratchet wrench to secure the two M6x12 and two M6x16 screws. Tighten the two M6 flange nuts with a 10 mm socket wrench. Ensure that all screws are tightened to the recommended torque.

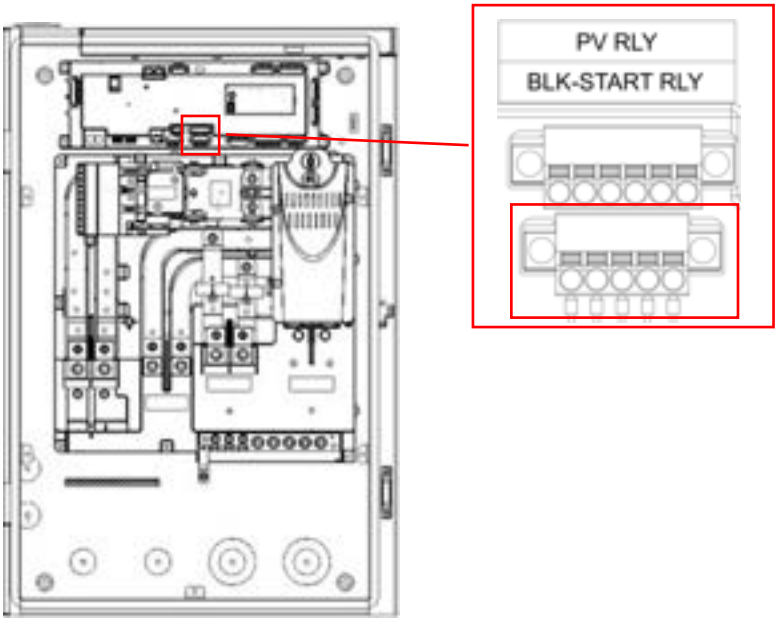


WARNING:

Use the correct screws to avoid any damage to the relay. Incorrect usage may result in equipment damage.



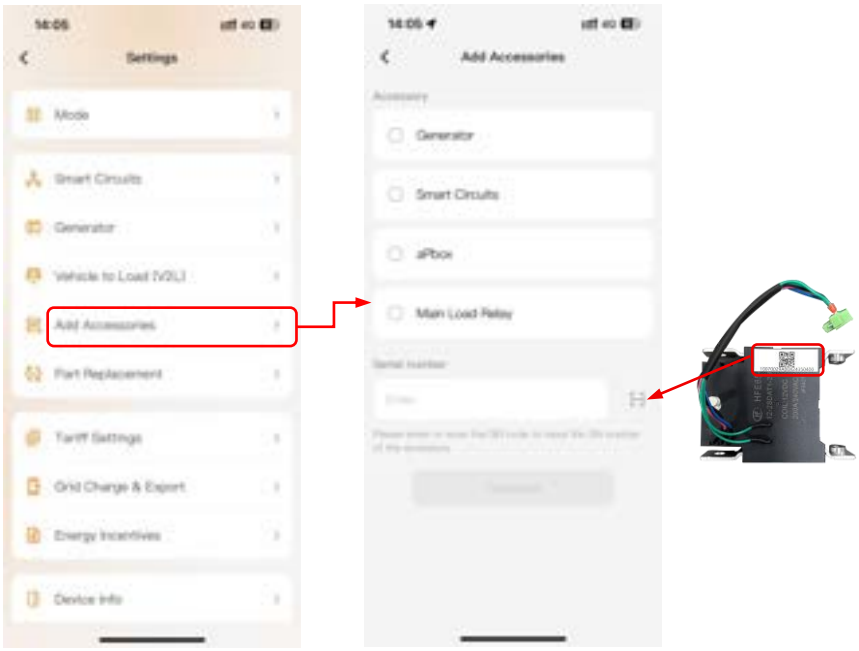
f) Insert the Main Load Relay cable into the BLK-START RLY connector on the EMS module.



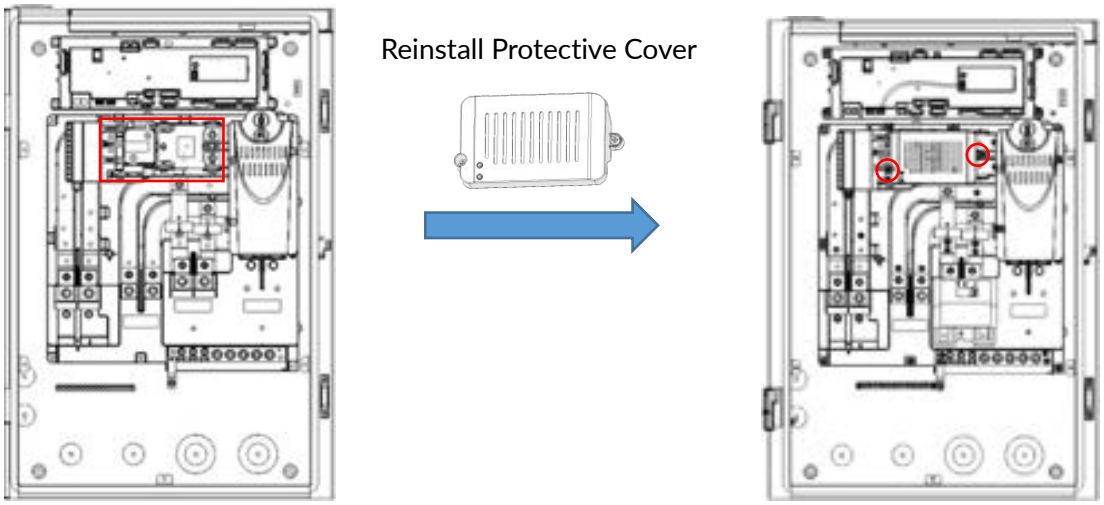
Configure the Main Load Relay using the FranklinWH App

After system installation and wiring, login to the FranklinWH App on the installer account and navigate to the **Settings** screen.

1. Tap **Add Accessories**.
2. Select **Main Load Relay**.
3. Enter the serial number or scan the QR code on the Main Load Relay. Tap **Complete**.



4. Re-install the protective cover and fasten the two M5 captive screws using a Phillips head screwdriver.



For more information, refer to ***FranklinWH Commissioning Guide***.