Backfeed Kit for Galaxy PW 2nd Gen

Installation

EPWOPT015, EPWOPT016

Latest updates are available on the Schneider Electric website

6/2025

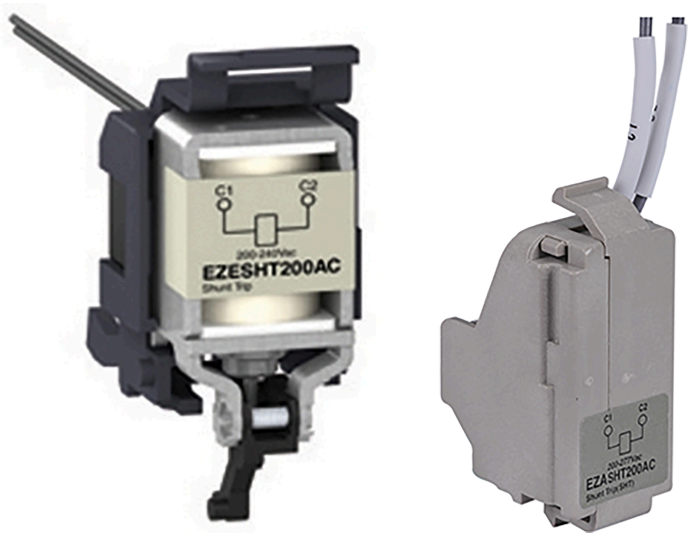

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Table of Contents

Important Safety Instructions — SAVE THESE INSTRUCTIONS

Read these instructions carefully and look at the equipment to become familiar with it before trying to install, operate, service or maintain it. The following safety messages may appear throughout this manual or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.

The addition of this symbol to a “Danger” or “Warning” safety message indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages with this symbol to avoid possible injury or death.

⚠DANGER

DANGER indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

Failure to follow these instructions will result in death or serious injury.

⚠WARNING

WARNING indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

⚠CAUTION

CAUTION indicates a hazardous situation which, if not avoided, **could result in** minor or moderate injury.

Failure to follow these instructions can result in injury or equipment damage.

NOTICE

NOTICE is used to address practices not related to physical injury. The safety alert symbol shall not be used with this type of safety message.

Failure to follow these instructions can result in equipment damage.

Please Note

Electrical equipment should only be installed, operated, serviced, and maintained by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction, installation, and operation of electrical equipment and has received safety training to recognize and avoid the hazards involved.

Per IEC 62040-1: "Uninterruptible power systems (UPS) -- Part 1: Safety Requirements," this equipment, including battery access, must be inspected, installed and maintained by a skilled person.

The skilled person is a person with relevant education and experience to enable him or her to perceive risks and to avoid hazards which the equipment can create (reference IEC 62040-1, section 3.102).

Safety Precautions

⚠⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Read all instructions in the installation manual before installing or working on this product.

Failure to follow these instructions will result in death or serious injury.

⚠⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Do not install the product until all construction work has been completed and the installation room has been cleaned.

Failure to follow these instructions will result in death or serious injury.

⚠⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

The product must be installed according to the specifications and requirements as defined by Schneider Electric. It concerns in particular the external and internal protections (upstream breakers, battery breakers, cabling, etc.) and environmental requirements. No responsibility is assumed by Schneider Electric if these requirements are not respected.

Failure to follow these instructions will result in death or serious injury.

⚠⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

The UPS system must be installed according to local and national regulations. Install the UPS system according to:

- IEC 60364 (including 60364–4–41- protection against electric shock, 60364–4–42 - protection against thermal effect, and 60364–4–43 - protection against overcurrent), **or**
- NEC NFPA 70, **or**
- Canadian Electrical Code (C22.1, Part 1)

depending on which one of the standards apply in your local area.

Failure to follow these instructions will result in death or serious injury.

⚠⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Install the product in a temperature controlled indoor environment free of conductive contaminants and humidity.
- Install the product on a non-flammable, level and solid surface (e.g. concrete) that can support the weight of the system.

Failure to follow these instructions will result in death or serious injury.

⚠⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

The product is not designed for and must therefore not be installed in the following unusual operating environments:

- Damaging fumes
- Explosive mixtures of dust or gases, corrosive gases, or conductive or radiant heat from other sources
- Moisture, abrasive dust, steam or in an excessively damp environment
- Fungus, insects, vermin
- Salt-laden air or contaminated cooling refrigerant
- Pollution degree higher than 2 according to IEC 60664-1
- Exposure to abnormal vibrations, shocks, and tilting
- Exposure to direct sunlight, heat sources, or strong electromagnetic fields

Failure to follow these instructions will result in death or serious injury.

⚠⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Do not drill or cut holes for cables or conduits with the gland plates installed and do not drill or cut holes in close proximity to the UPS system.

Failure to follow these instructions will result in death or serious injury.

⚠⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Do not make mechanical changes to the product (including removal of cabinet parts or drilling/cutting of holes) that are not described in the installation manual.

Failure to follow these instructions will result in death or serious injury.

NOTICE

RISK OF OVERHEATING

Respect the space requirements around the product and do not cover the ventilation openings when the product is in operation.

Failure to follow these instructions can result in equipment damage.

Electrical Safety

This manual contains important safety instructions that should be followed during the installation and maintenance of the UPS system.

⚠⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Electrical equipment must be installed, operated, serviced, and maintained only by qualified personnel.
- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices.
- Disconnection devices for AC and DC must be provided by others, be readily accessible, and the function of the disconnect device marked for its function.
- Turn off all power supplying the UPS system before working on or inside the equipment.
- Before working on the UPS system, check for hazardous voltage between all terminals including the protective earth.
- The UPS contains an internal energy source. Hazardous voltage can be present even when disconnected from the mains supply. Before installing or servicing the UPS system, ensure that the units are OFF and that mains and batteries are disconnected. Wait five minutes before opening the UPS to allow the capacitors to discharge.
- The UPS must be properly earthed/grounded and due to a high leakage current, the earthing/grounding conductor must be connected first.

Failure to follow these instructions will result in death or serious injury.

Model List

Commercial reference	Description
EPWOPT015	Backfeed kit for Galaxy PW 2nd Gen 10 to 30 kVA
EPWOPT016	Backfeed kit for Galaxy PW 2nd Gen 10 to 120 kVA

Applicable Products

UPS commercial reference	UPS description	Applicable backfeed kit for unit input breaker UIB	Applicable backfeed kit for static switch input breaker SSIB
EPWUPS10KU6PTS	Galaxy PW 2nd Gen UPS 10 kVA 3:1, 220 VAC 6P, 220 VDC	EPWOPT015	EPWOPT015
EPWUPS20KU6PTS	Galaxy PW 2nd Gen UPS 20 kVA 3:1, 220 VAC 6P, 220 VDC	EPWOPT015	EPWOPT015
EPWUPS30KU6PTS	Galaxy PW 2nd Gen UPS 30 kVA 3:1, 220 VAC 6P, 220 VDC	EPWOPT015	EPWOPT016
EPWUPS40KU12PTS	Galaxy PW 2nd Gen UPS 40 kVA 3:1, 220 VAC 12P, 220 VDC	EPWOPT016	EPWOPT016
EPWUPS10KH6PS	Galaxy PW 2nd Gen 10 kVA 3:3 UPS 380 VAC 6P 384VDC	EPWOPT015	EPWOPT015
EPWUPS20KH6PS	Galaxy PW 2nd Gen 20 kVA 3:3 UPS 380 VAC 6P 384VDC	EPWOPT015	EPWOPT015
EPWUPS30KH6PS	Galaxy PW 2nd Gen 30 kVA 3:3 UPS 380 VAC 6P 384VDC	EPWOPT015	EPWOPT015
EPWUPS40KH6PS	Galaxy PW 2nd Gen 40 kVA 3:3 UPS 380 VAC 6P 384VDC	EPWOPT016	EPWOPT016
EPWUPS60KH6PS	Galaxy PW 2nd Gen 60 kVA 3:3 UPS 380 VAC 6P 384VDC	EPWOPT016	EPWOPT016
EPWUPS80KH6PS	Galaxy PW 2nd Gen 80 kVA 3:3 UPS 380 VAC 6P 384VDC	EPWOPT016	EPWOPT016
EPWUPS100KH12PS	Galaxy PW 2nd Gen 100 kVA 3:3 UPS 380 VAC 12P 384VDC	EPWOPT016	EPWOPT016
EPWUPS120KH12PS	Galaxy PW 2nd Gen 120 kVA 3:3 UPS 380 VAC 12P 384VDC	EPWOPT016	EPWOPT016
EPWUPS10KU12PTS	Galaxy PW 2nd Gen UPS 10 kVA 3:1, 220 VAC 12P, 220 VDC	EPWOPT015	EPWOPT015
EPWUPS20KU12PTS	Galaxy PW 2nd Gen UPS 20 kVA 3:1, 220 VAC 12P, 220 VDC	EPWOPT015	EPWOPT015
EPWUPS30KU12PTS	Galaxy PW 2nd Gen UPS 30 kVA 3:1, 220 VAC 12P, 220 VDC	EPWOPT015	EPWOPT016
EPWUPS10KU6PS	Galaxy PW 2nd Gen 10 kVA 3:1 UPS 220 VAC 6P, 384VDC	EPWOPT015	EPWOPT016
EPWUPS20KU6PS	Galaxy PW 2nd Gen 20 kVA 3:1 UPS 220 VAC 6P 384VDC	EPWOPT015	EPWOPT016
EPWUPS30KU6PS	Galaxy PW 2nd Gen 30 kVA 3:1 UPS 220 VAC 6P 384VDC	EPWOPT015	EPWOPT016
EPWUPS40KU6PS	Galaxy PW 2nd Gen 40 kVA 3:1 UPS 220 VAC 6P 384VDC	EPWOPT016	EPWOPT016

Specifications

Torque Specifications

Bolt size	Torque
M2	0.3 Nm
M3	1 Nm
M4	2.5 Nm
M8	12 Nm

Installation Procedure for Installing the Backfeed Kit on the Unit Input Breaker UIB

1. Select the correct backfeed kit according to Applicable Products, page 10.
2. Install the Backfeed Kit EPWOPT015/EPWOPT016 on the Unit Input Breaker UIB, page 14.
3. Configure the Backfeed Protection Settings for the Unit Input Breaker UIB on the UPS Display, page 28.

Installation Procedure for Installing the Backfeed Kit on the Static Switch Input Breaker SSIB

1. Select the correct backfeed kit according to Applicable Products, page 10.
2. Install the Backfeed Kit EPWOPT015/EPWOPT016 on the Static Switch Input Breaker SSIB, page 21.
3. Configure the Backfeed Protection Settings for the Static Switch Input Breaker SSIB on the UPS Display, page 31.

Install the Backfeed Kit EPWOPT015/EPWOPT016 on the Unit Input Breaker UIB

⚠⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

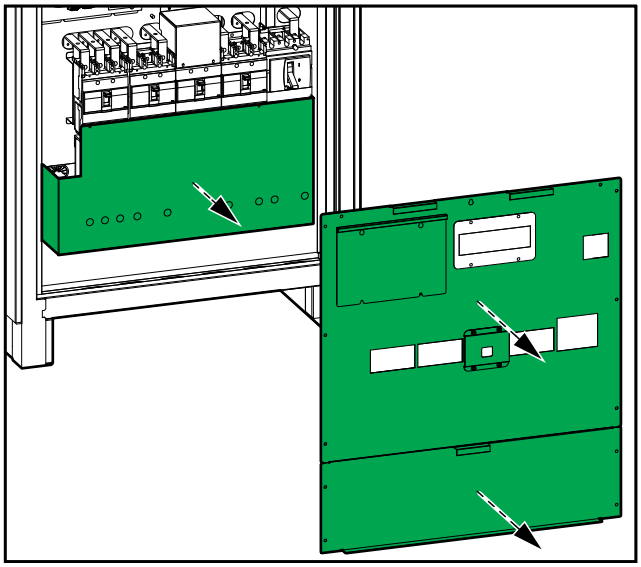
Turn the UPS system completely OFF before starting this procedure. Wait five minutes before opening the UPS to allow the capacitors to discharge.

Failure to follow these instructions will result in death or serious injury.

NOTE: EPWOPT015 and EPWOPT016 only differ in size. The installation procedure for EPWOPT015 and EPWOPT016 is the same. The following procedure illustrates the installation procedure using EPWOPT015 as an example.

1. Turn the UPS completely off.
2. Lockout/Tagout the UPS battery breaker and UPS static switch input breaker SSIB in the OFF (open) position.
3. Remove the indicated protection covers from the UPS.

   NOTE: Protection covers vary for different UPS models. The following illustration uses the Galaxy PW 2nd Gen 10-40 kVA 3:1 220 VDC UPS as an example.



4. Measure for and verify ABSENCE of voltage on each input/bypass/output busbar before continuing.

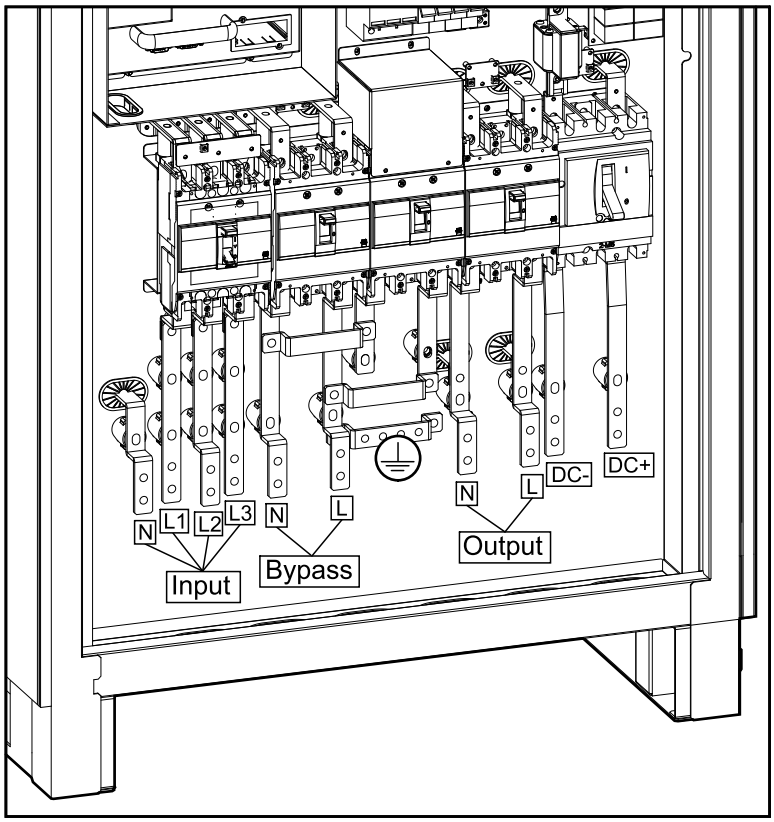
⚠⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

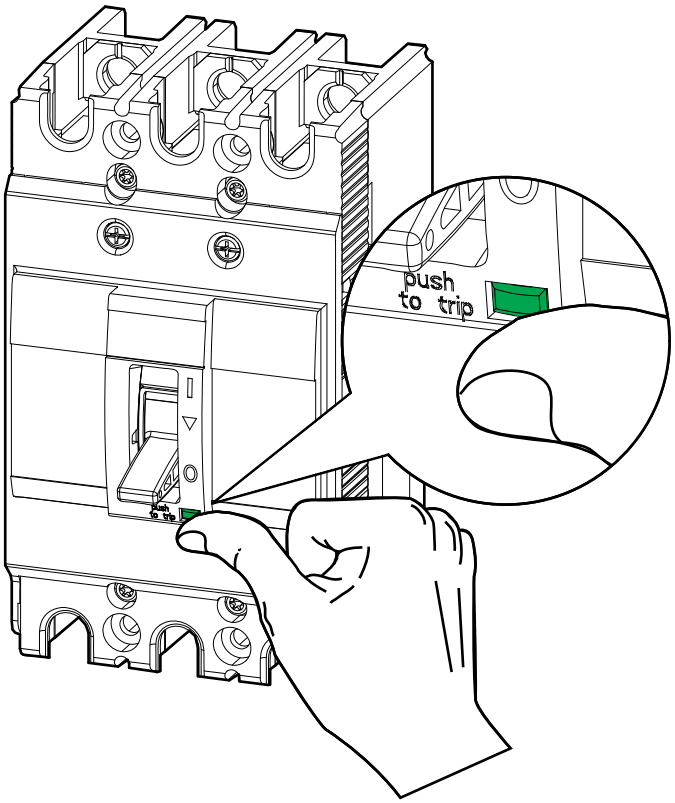
Measure for and verify ABSENCE of voltage on each input/bypass/output busbar before continuing.

Failure to follow these instructions will result in death or serious injury.

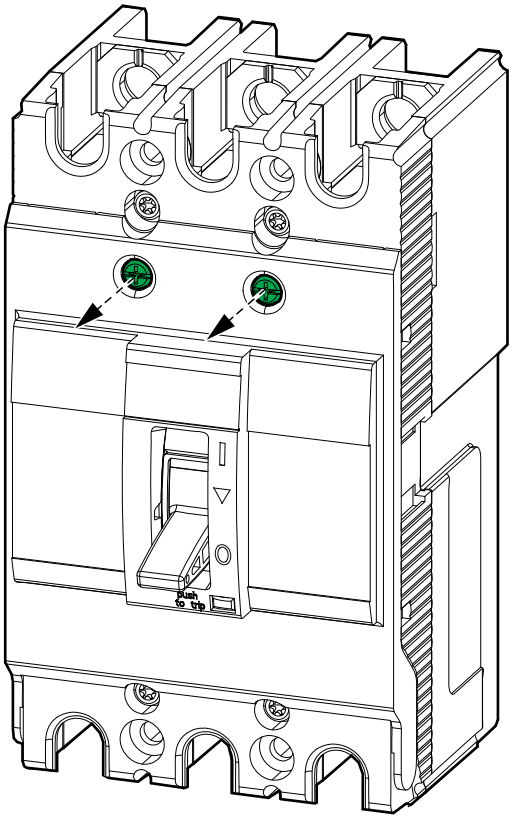
NOTE: The position of the input/bypass/output busbar varies. The following illustration uses the Galaxy PW 2nd Gen 10-40 kVA 3:1 220 VDC UPS as an example.



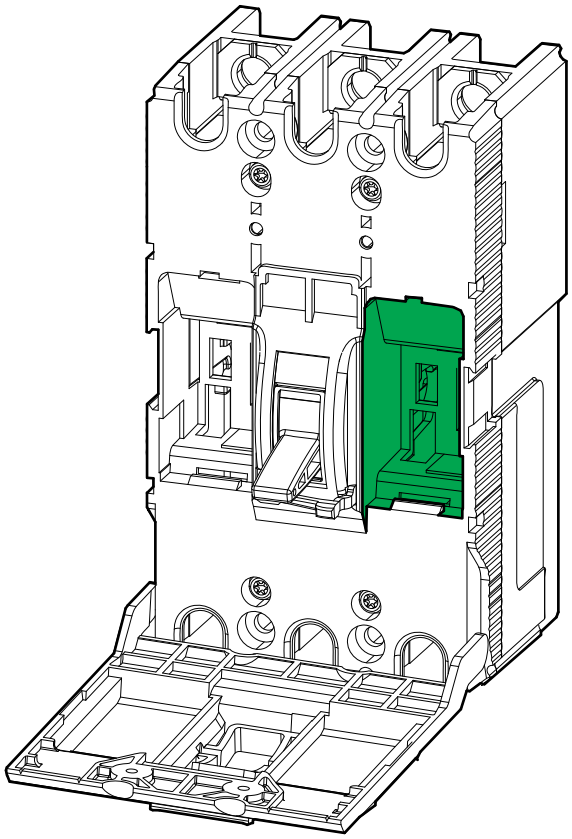
5. On the unit input breaker UIB, push the button to set the unit input breaker UIB from the OFF (open) position to the Trip position.



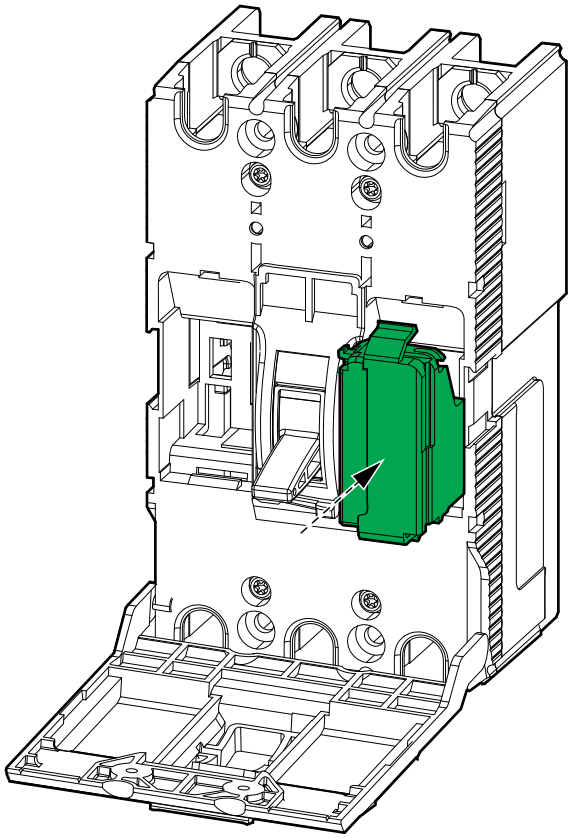
6. Remove the indicated screws.



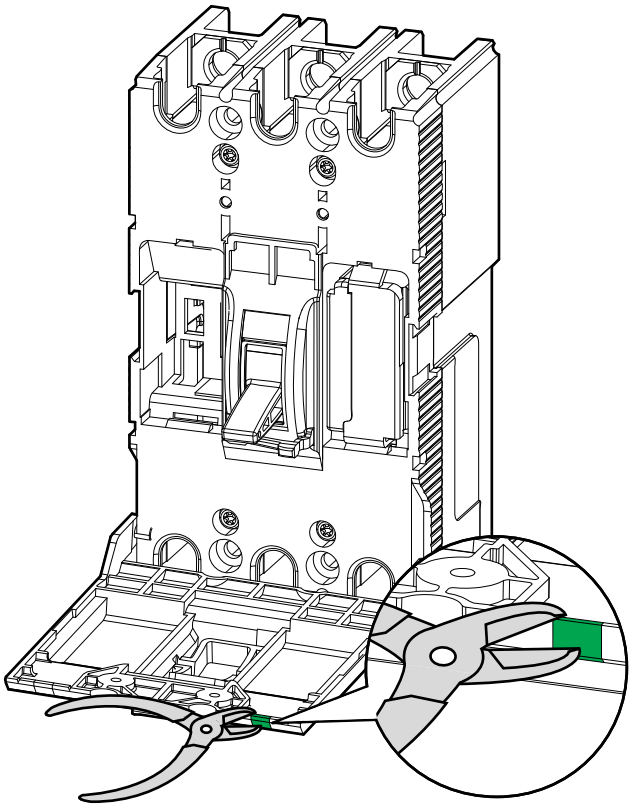
7. Open the unit input breaker UIB cover. The backfeed kit will be installed in the marked position.



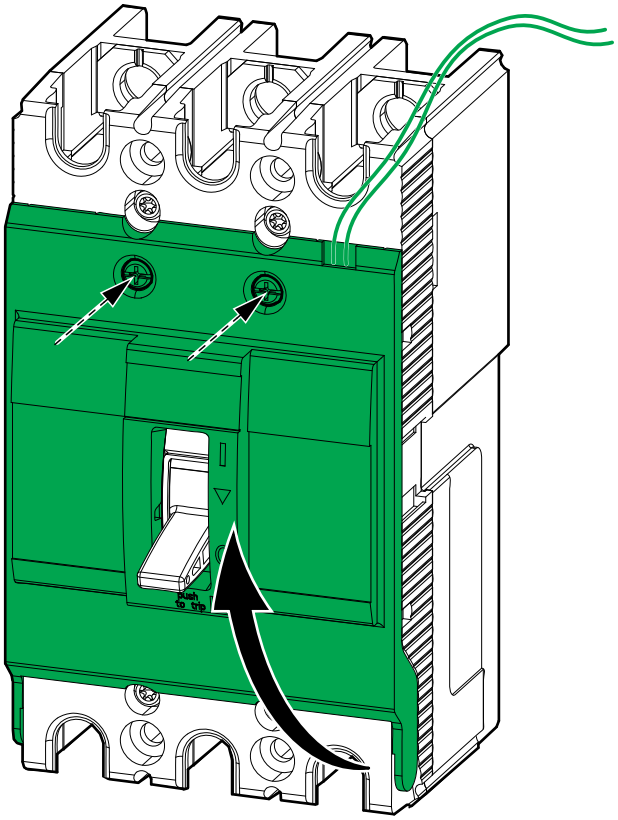
8. Push the backfeed kit EPWOPT015 into position.



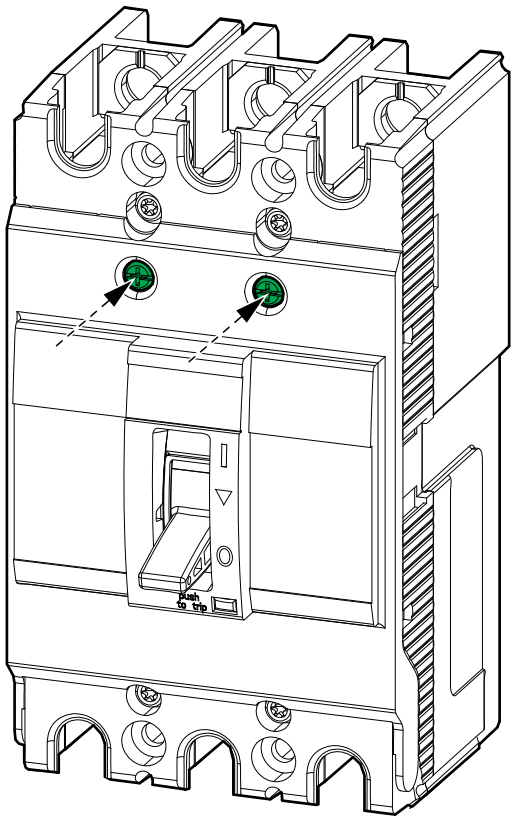
9. Make a notch in the top of the unit input breaker UIB cover for the backfeed shunt trip cables.



10. Close the unit input breaker UIB cover. Route the backfeed shunt trip cables through the top notch.



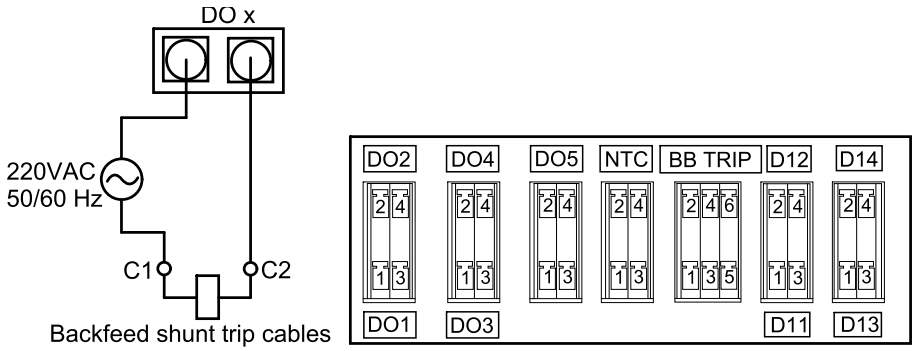
11. Tighten the indicated screws and torque to 1 Nm.



12. Lockout/Tagout the unit input breaker UIB in the OFF (open) position.

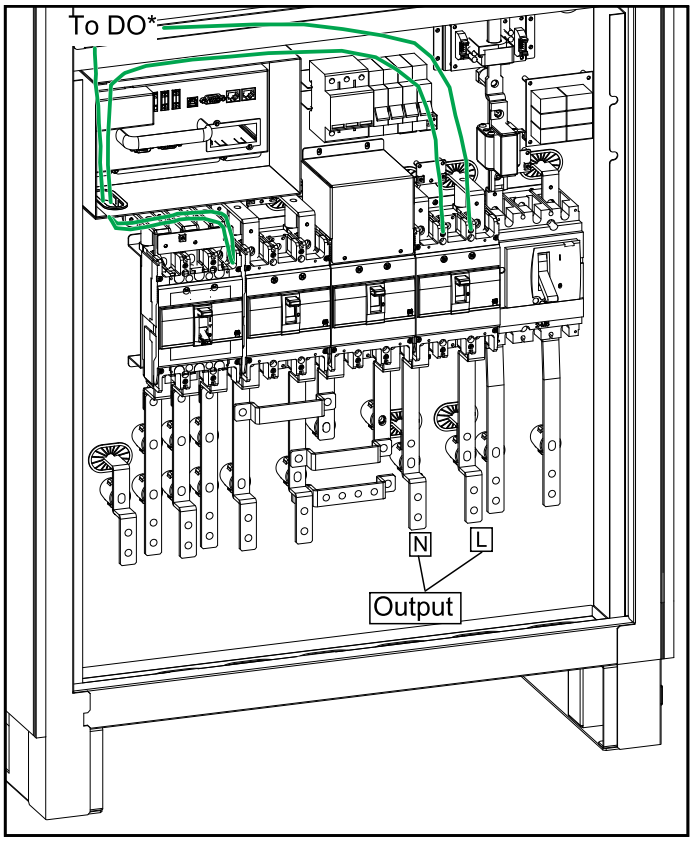
13. Connect the backfeed shunt trip cables to the terminal blocks DO* in the UPS controller section according to the following diagram. See the UPS installation manual for cable routing details. Note the DO position that is connected, which will be used in Configure the Backfeed Protection Settings for the Unit Input Breaker UIB on the UPS Display, page 28.

    NOTE: The operation voltage for the backfeed shunt trip cables is 220 VAC 50 Hz or 60 Hz.



14. Route the backfeed shunt trip cables along the post cables reliefs and into the bottom brush plates to the output busbars (L, N).

    NOTE: The position of the output busbars varies. The following illustration uses the Galaxy PW 2nd Gen 10-40 kVA 3:1 220 VDC UPS as an example.



15. Connect the backfeed shunt trip cables to the output busbars (L, N) according to the UPS installation manual.

16. Continue to the static switch input breaker SSIB installation, if relevant (Install the Backfeed Kit EPWOPT015/EPWOPT016 on the Static Switch Input Breaker SSIB, page 21) or reinstall the protection covers.

Install the Backfeed Kit EPWOPT015/EPWOPT016 on the Static Switch Input Breaker SSIB

⚠⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

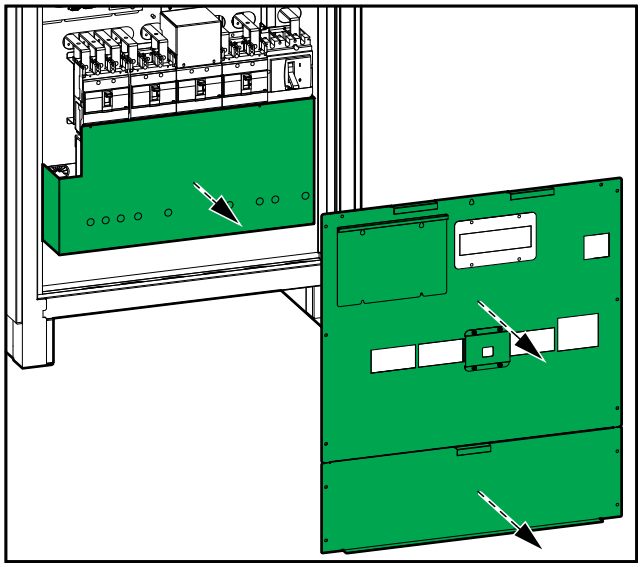
Turn the UPS system completely OFF before starting this procedure. Wait five minutes before opening the UPS to allow the capacitors to discharge.

Failure to follow these instructions will result in death or serious injury.

NOTE: EPWOPT015 and EPWOPT016 only differ in size. The installation procedure for EPWOPT015 and EPWOPT016 is the same. The following procedure illustrates the installation procedure using EPWOPT015 as an example.

1. Turn the UPS completely off.
2. Lockout/Tagout the UPS battery breaker and the unit input breaker UIB in the OFF (open) position.
3. Remove the indicated protection covers from the UPS.

   NOTE: Protection covers vary for different UPS models. The following illustration uses the Galaxy PW 2nd Gen 10-40 kVA 3:1 220 VDC UPS as an example.



4. Measure for and verify ABSENCE of voltage on each input/bypass/output busbar before continuing.

⚠⚠DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Measure for and verify ABSENCE of voltage on each input/bypass/output busbar before continuing.

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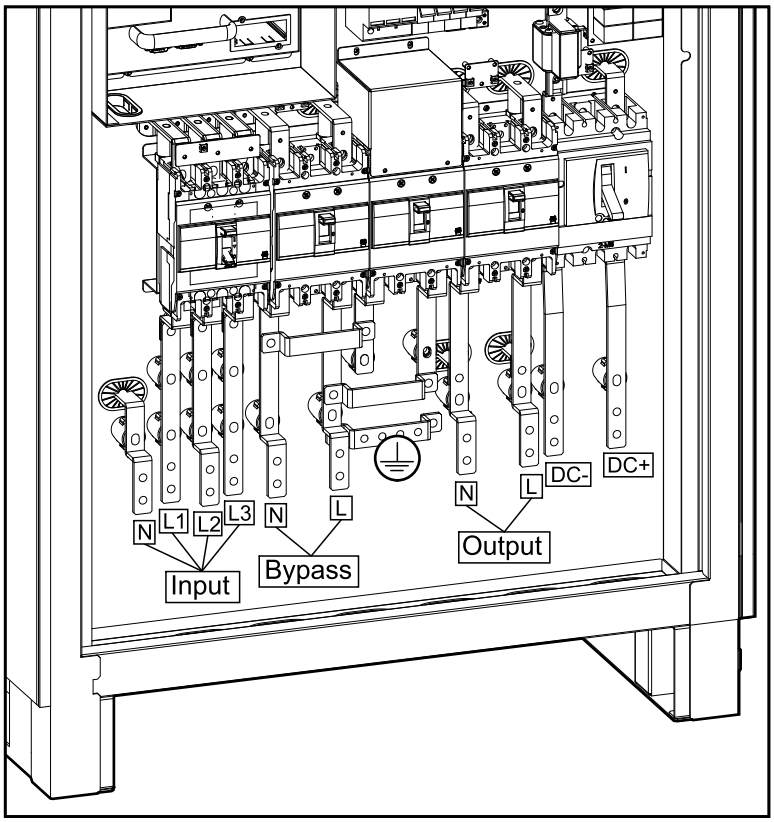
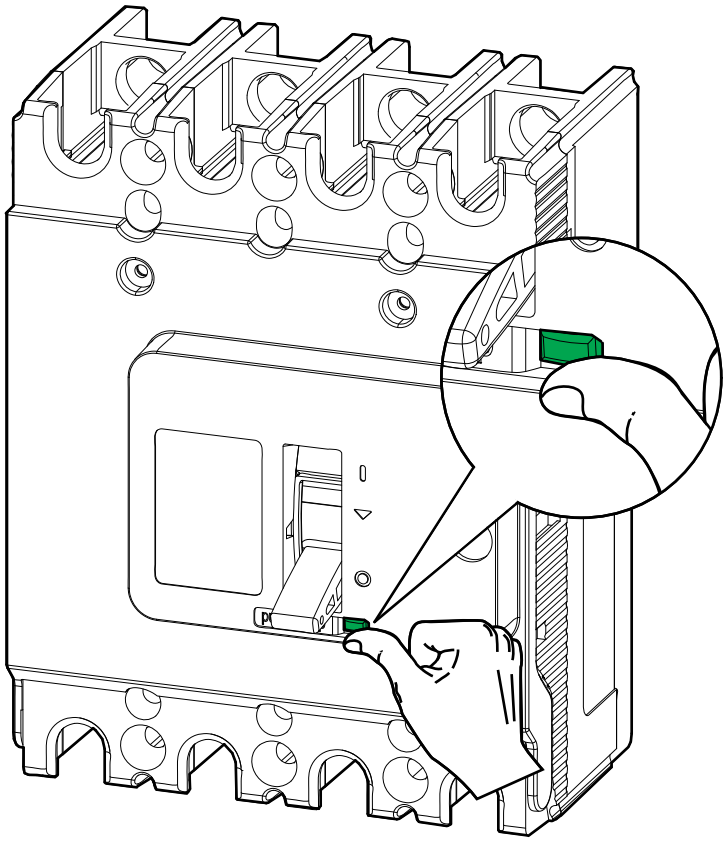
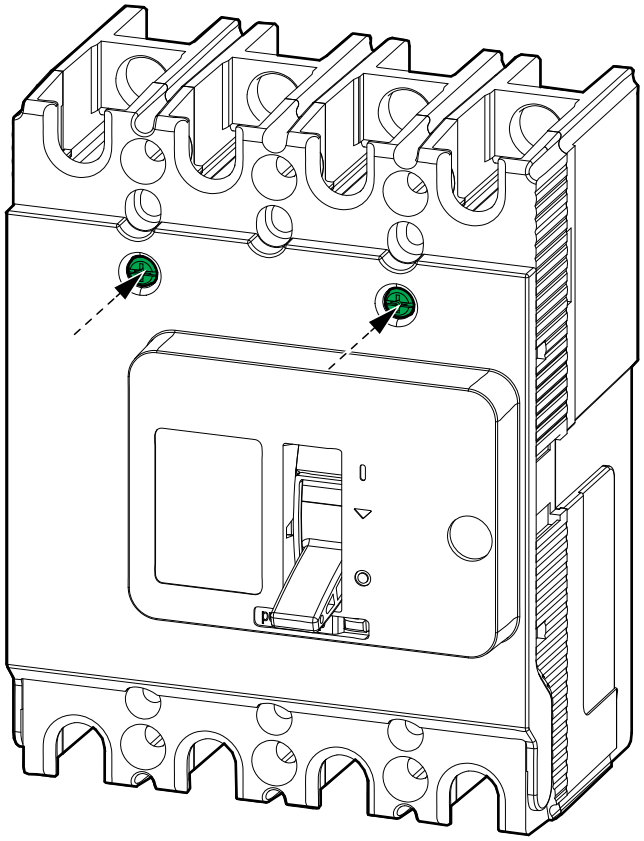
NOTE: The position of the input/bypass/output busbar varies. The following illustration uses the Galaxy PW 2nd Gen 10-40 kVA 3:1 220 VDC UPS as an example.



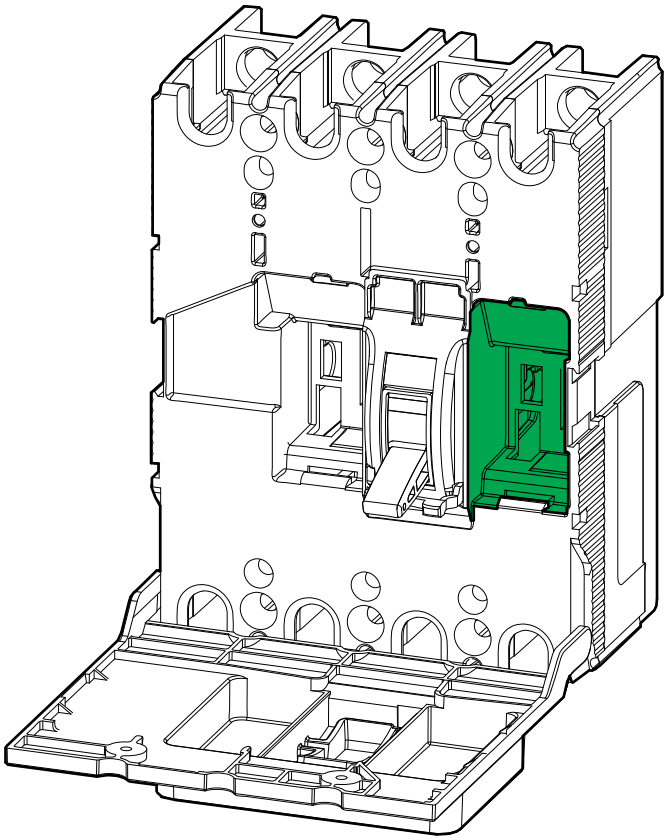
5. On the static switch input breaker SSIB, push the button to set the static switch input breaker SSIB from the OFF (open) position to the Trip position.



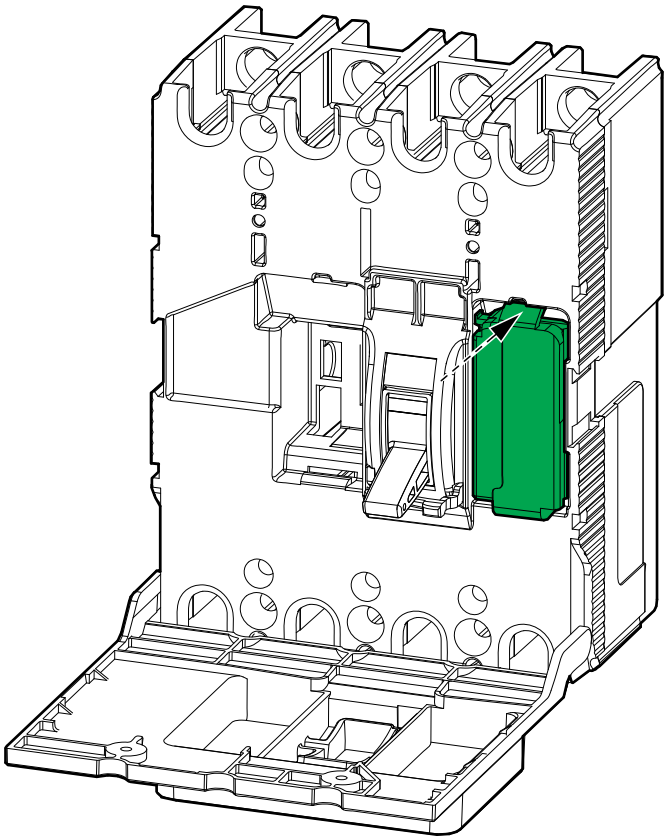
6. Remove the indicated screws.



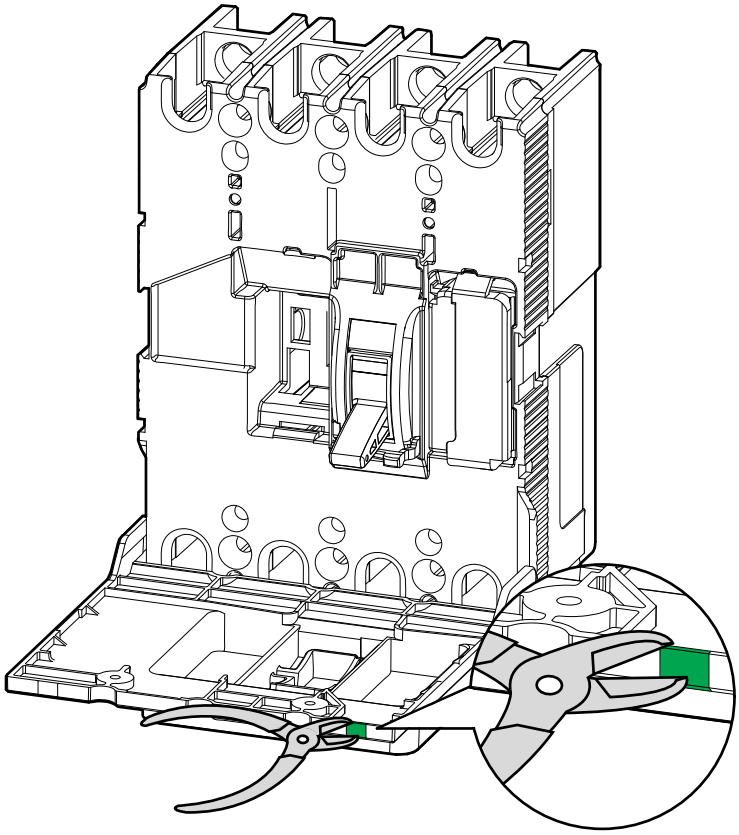
7. Open the static switch input breaker SSIB cover. The backfeed kit will be installed in the marked position.



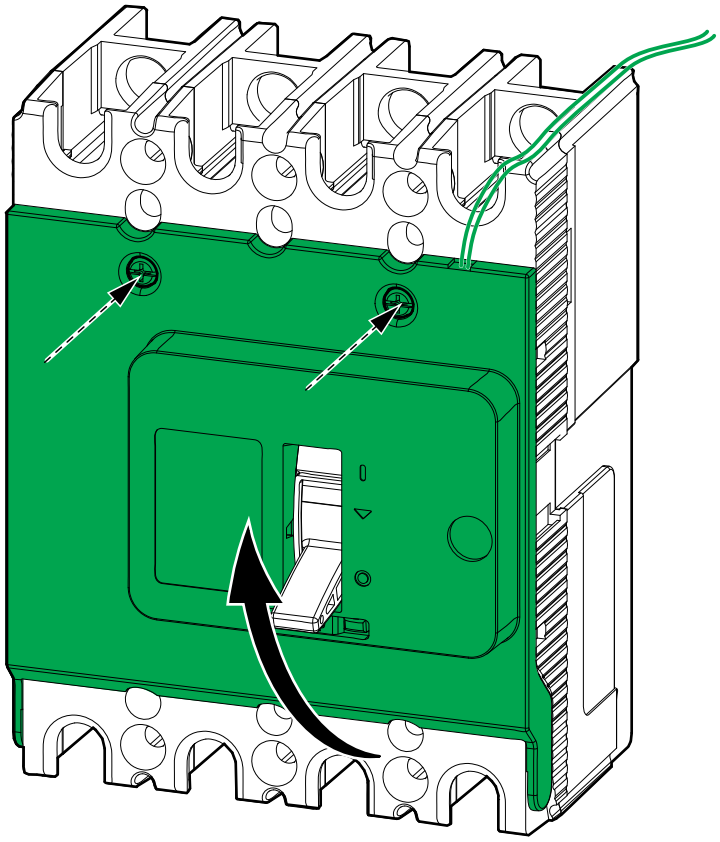
8. Push the backfeed kit EPWOPT015 into position.



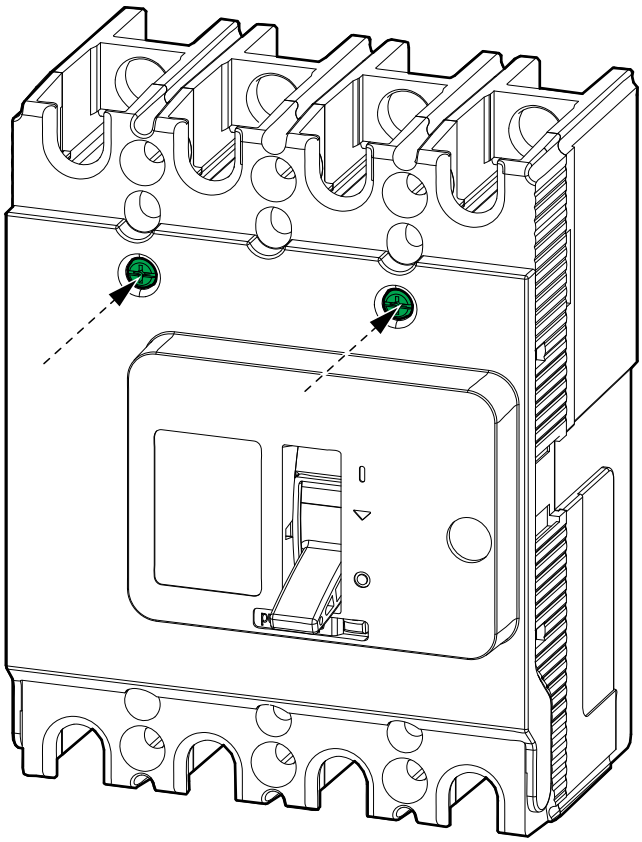
9. Make a notch in the top of the static switch input breaker SSIB cover for the backfeed shunt trip cables.



10. Close the static switch input breaker SSIB cover. Route the backfeed shunt trip cables through the top notch.



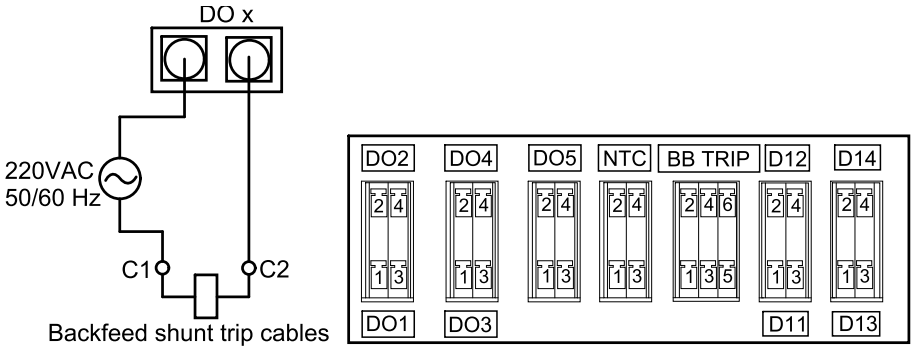
11. Tighten the indicated screws and torque to 1 Nm.



12. Lockout/Tagout the UPS static switch input breaker SSIB in the OFF (open) position.

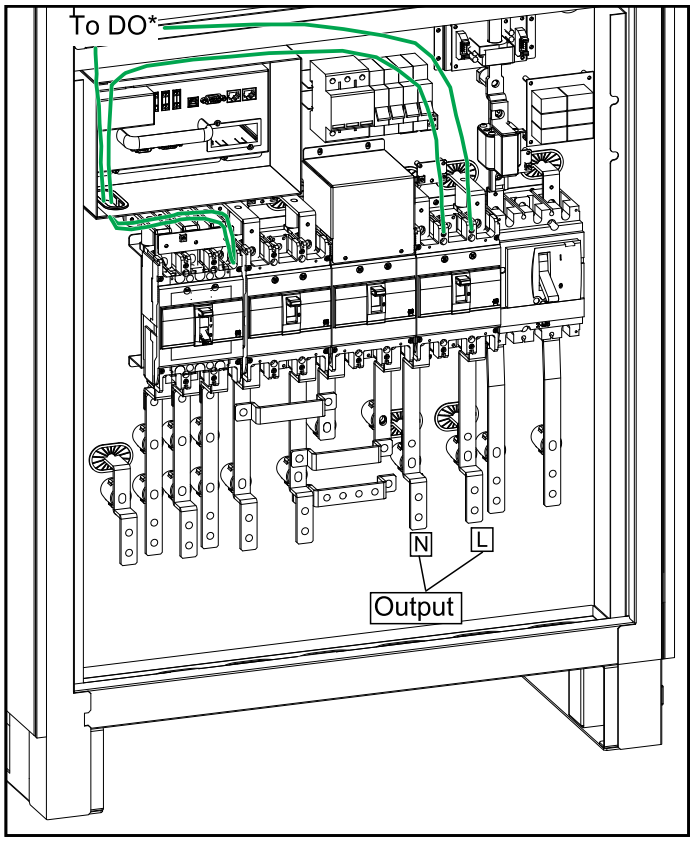
13. Connect the backfeed shunt trip cables to the terminal blocks DO* in the UPS controller section according to the following diagram. See the UPS installation manual for cable routing details. Note the DO position that is connected, which will be used in Configure the Backfeed Protection Settings for the Static Switch Input Breaker SSIB on the UPS Display, page 31.

    NOTE: The operation voltage for the backfeed shunt trip cables is 220 VAC 50 Hz or 60 Hz.



14. Route the backfeed shunt trip cables along the post cables reliefs and into the bottom brush plates to the output busbars (L, N) .

    NOTE: The position of the output busbars varies. The following illustration uses the Galaxy PW 2nd Gen 10-40 kVA 3:1 220 VDC UPS as an example.



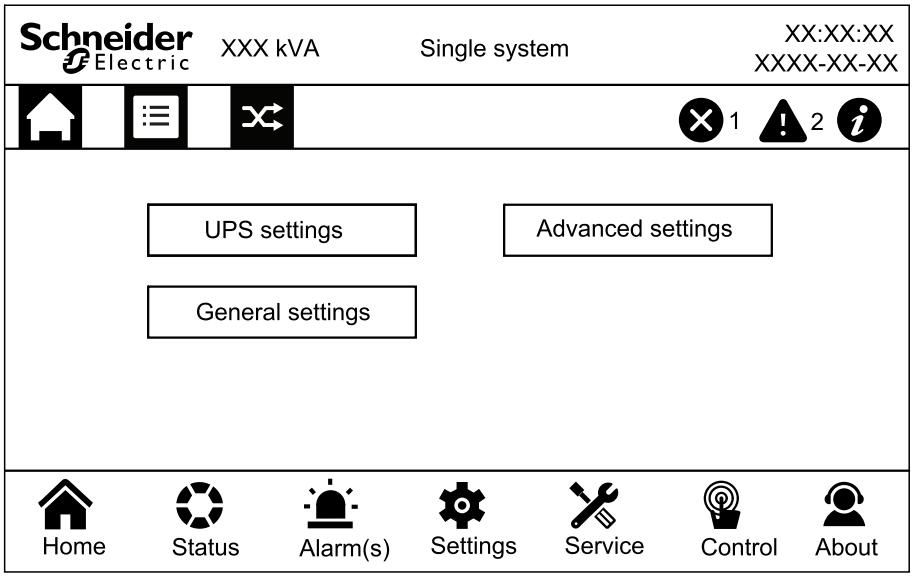
15. Connect the backfeed shunt trip cables to the output busbars (L, N) according to the UPS installation manual.

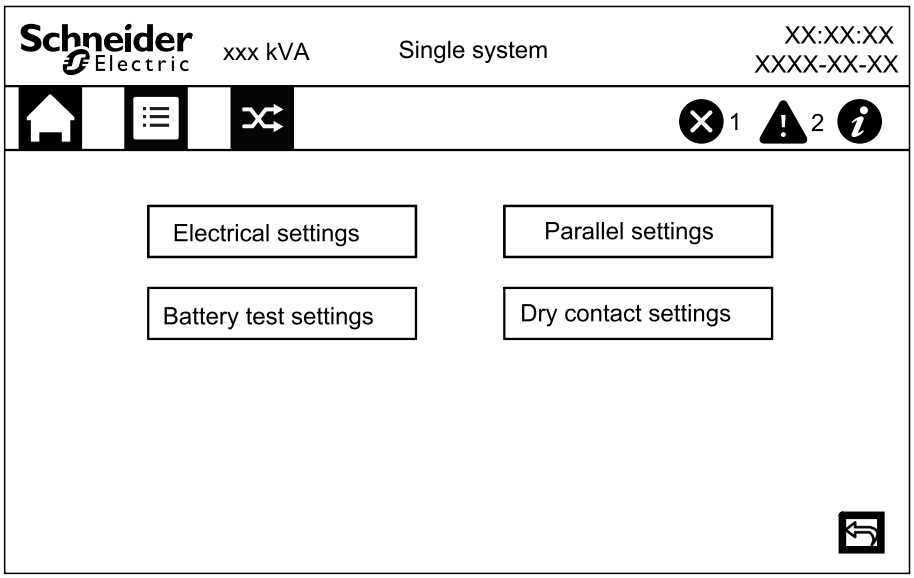
16. Reinstall the protection covers.

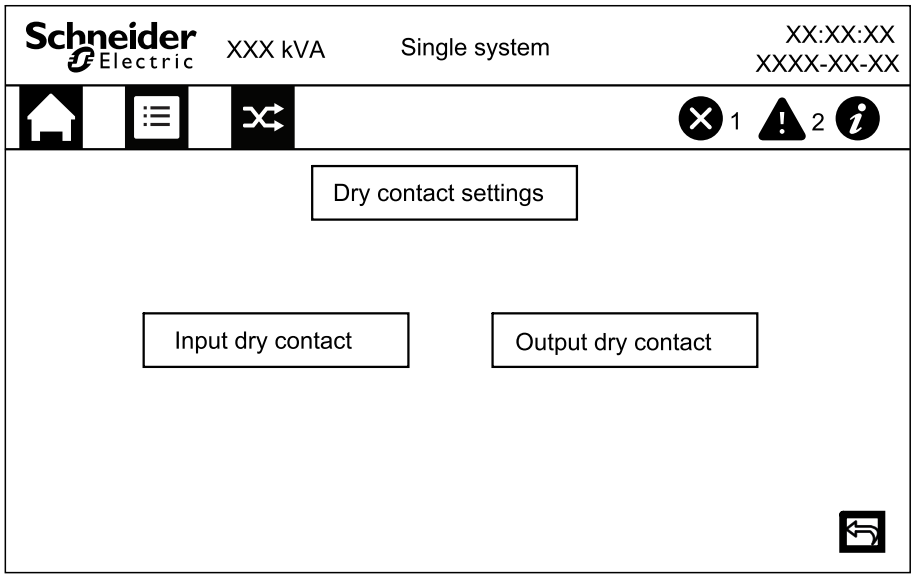
Configure the Backfeed Protection Settings for the Unit Input Breaker UIB on the UPS Display

1. From the main menu of the UPS display, select **Settings > Advanced settings > Dry contact settings > Output dry contact**.

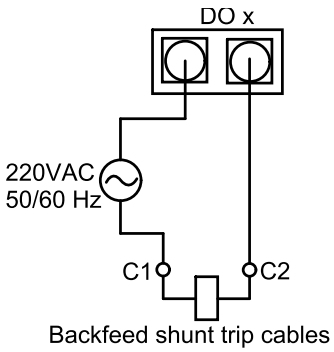
   NOTE: The **Settings** menu requires administrator login to access. The default password is ‘000000’.

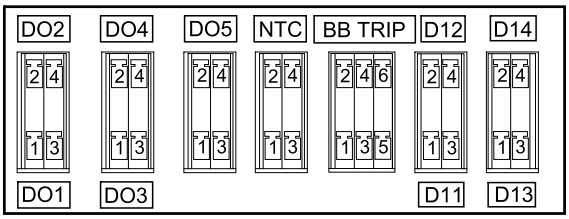


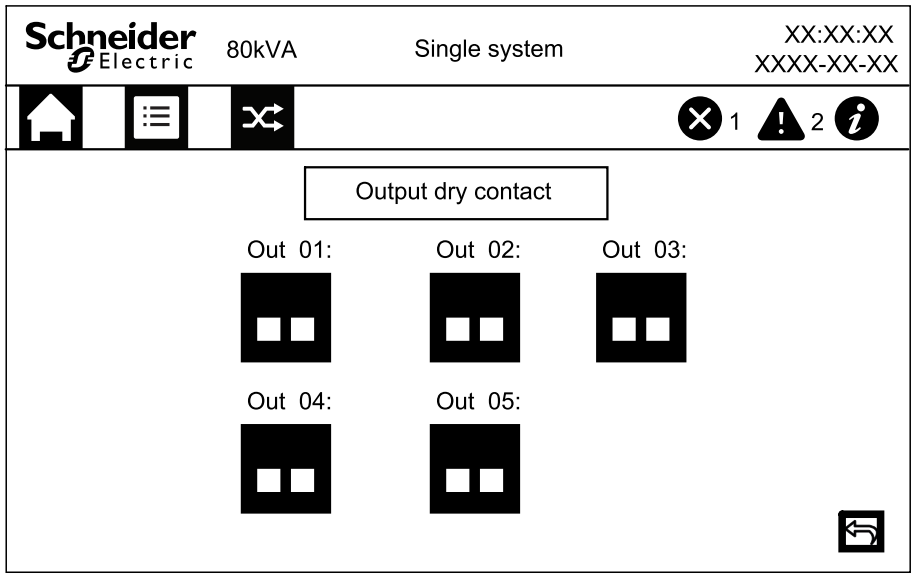




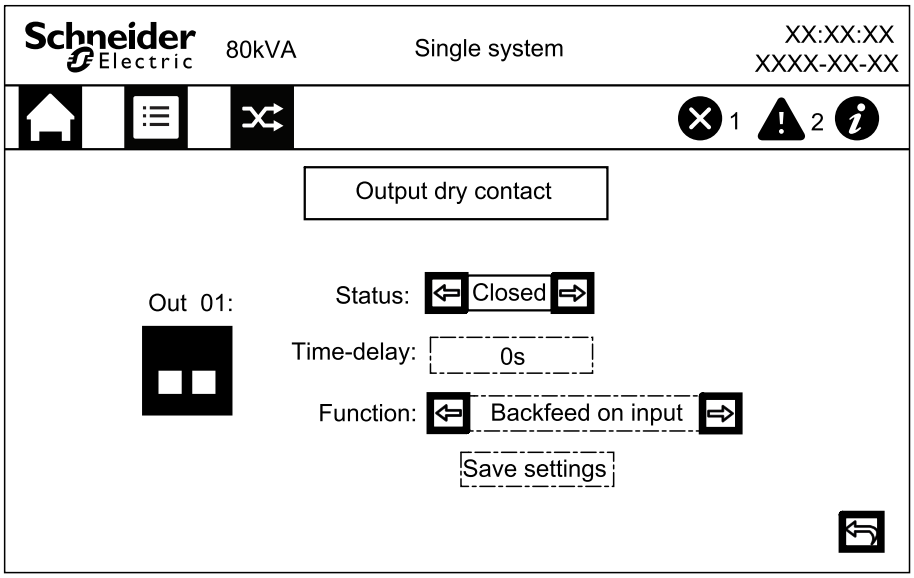
2. Select the output dry contact for configuration that you connected the backfeed shunt trip cables to during installation.



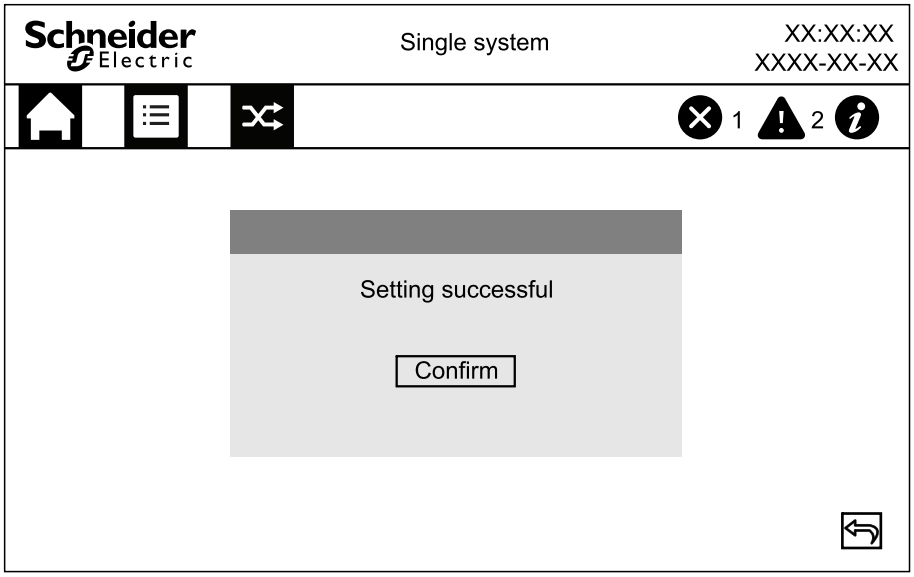




3. Set the **Status** of the output dry contact to **Closed** and the **Function** to **Backfeed on input**.



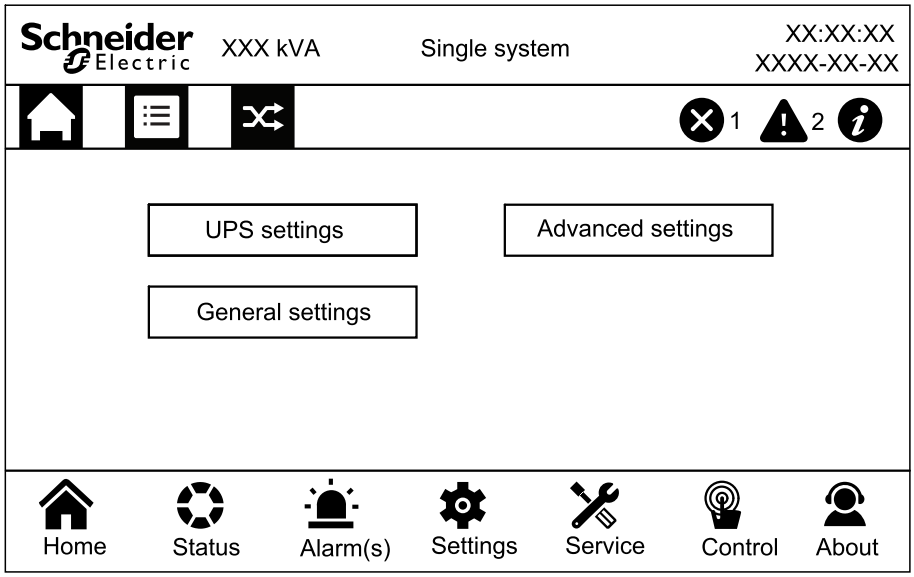
4. Tap **Confirm** to save your settings.

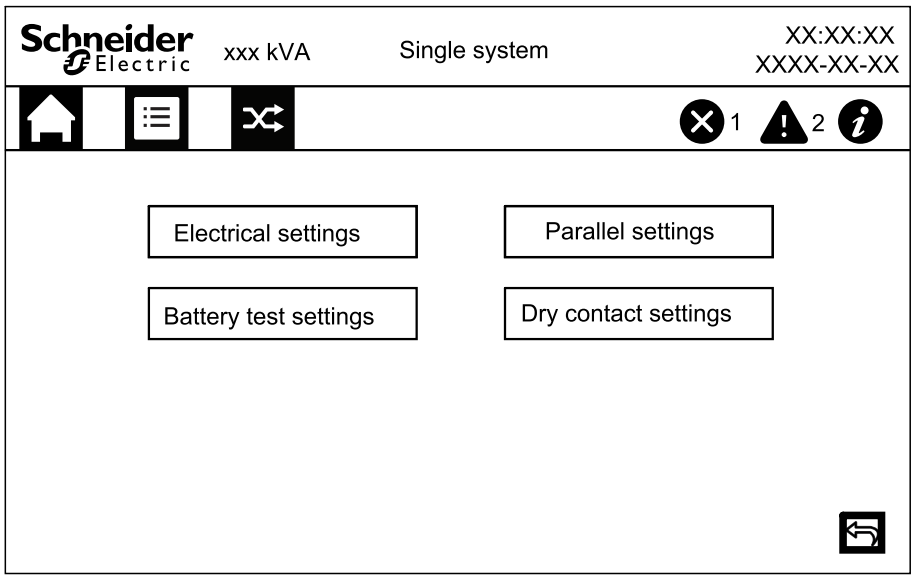


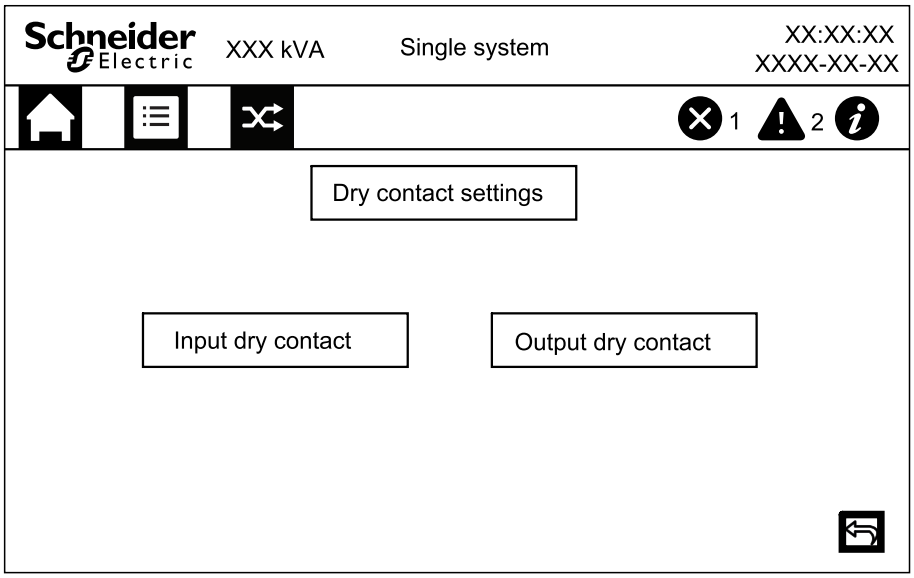
Configure the Backfeed Protection Settings for the Static Switch Input Breaker SSIB on the UPS Display

1. Start up the UPS - follow the instructions in the UPS operation manual.
2. From the main menu of the UPS display, select **Settings > Advanced settings > Dry contact settings > Output dry contact**.

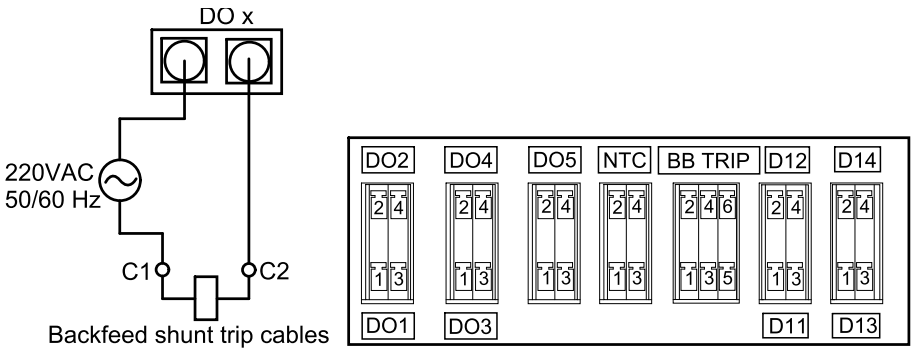
   NOTE: The **Settings** menu requires administrator login to access. The default password is ‘000000’.

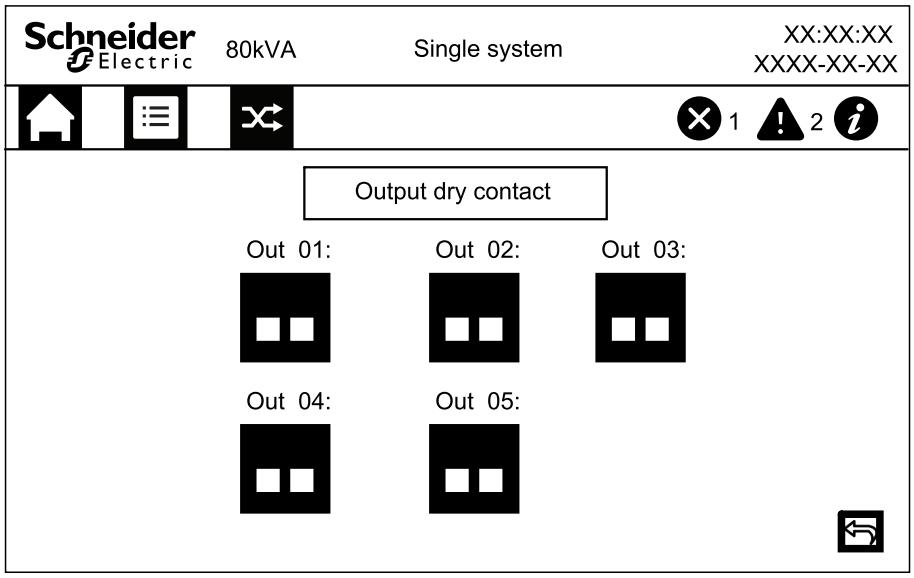




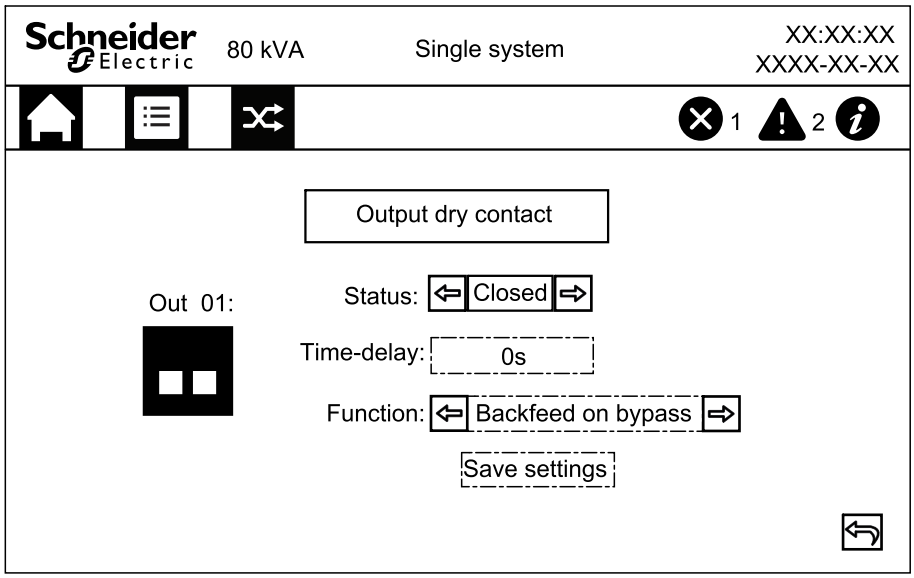


3. Select the output dry contact for configuration that you connected the backfeed shunt trip cables to during installation.

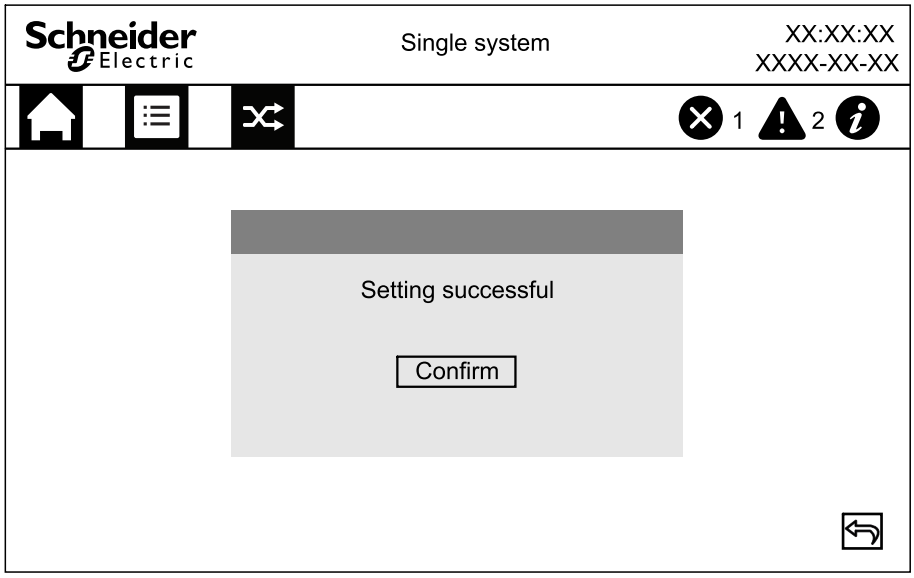




4. Set the **Status** of the output dry contact to **Closed** and the **Function** to **Backfeed on bypass**.



5. Tap **Confirm** to save your settings.



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As standards, specifications, and design change from time to time, please ask for confirmation of the information given in this publication.

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