



# Home Backup Interface

## Application note – main circuit breaker replacement

### Version 1.0

This application note provides detailed information on the compatible circuit breakers for use with SolarEdge Backup Interface units. It also outlines the step-by-step procedure for safely changing the main circuit breaker within the Backup Interface unit. This document is intended for qualified electricians and technicians who are familiar with SolarEdge systems and the necessary safety protocols.

This application note covers the following key areas:

- 1. Compatible Circuit Breakers:** A list of circuit breakers that are compatible with this SolarEdge Backup Interface unit.
- 2. Safety Precautions:** Essential safety guidelines to follow before, during, and after the replacement of the main circuit breaker to prevent accidents and ensure compliance with electrical standards.
- 3. Replacement Procedure:** A detailed, step-by-step guide on how to safely remove the existing main circuit breaker and install a new one in the Backup Interface unit.

### REQUIRED TOOLS

- Torque driver set, with M5 and M6 Allen bits
- PH2 screwdriver

### COMPATIBLE CIRCUIT BREAKERS

Amps	Part Number	Description - Eaton CSR 25 kAIC Breakers
100A	CCVH2100	Eaton Type CCV Tenant Main Circuit Breaker, 100 A, 25 kAIC, Two-pole, 120/240V, #2/0 AWG-300 kcmil Cu/Al, CCV, Type ECC unit enclosures
150A	CCVH2150	Eaton Type CCV Tenant Main Circuit Breaker, 150 A, 25 kAIC, Two-pole, 120/240V, #2/0 AWG-300 kcmil Cu/Al, CCV, Type ECC unit
175A	CCVH2175	Eaton Type CCV Tenant Main Circuit Breaker, 175 A, 25 kAIC, Two-pole, 120/240V, #2/0 AWG-300 kcmil Cu/Al, CCV, Type ECC unit enclosures
200A	CCVH2200	Eaton Type CCV Tenant Main Circuit Breaker, 200 A, 25 kAIC, Two-pole, 120/240V, #2/0 AWG-300 kcmil Cu/Al, CCV, Type ECC unit enclosures

Amps	Part Number	Description - Eaton CSR 10 kAIC Breakers
100A	CCV2100	Eaton Type CCV Tenant Main Circuit Breaker, 100 A, 10 kAIC, Two-pole, 120/240 V, #2/0 AWG-300 kcmil Cu/Al, CCV, Type ECC unit enclosures
150A	CCV2150	Eaton Type CCV Tenant Main Circuit Breaker, 150 A, 10 kAIC, Two-pole, 120/240 V, #2/0 AWG-300 kcmil Cu/Al, CCV, Type ECC unit enclosures
175A	CCV2175	Eaton Type CCV Tenant Main Circuit Breaker, 175 A, 10 kAIC, Two-pole, 120/240 V, #2/0 AWG-300 kcmil Cu/Al, CCV, Type ECC unit enclosures

## SAFETY REGULATIONS

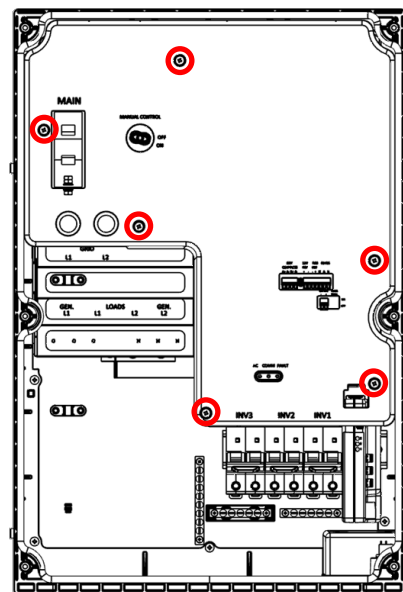
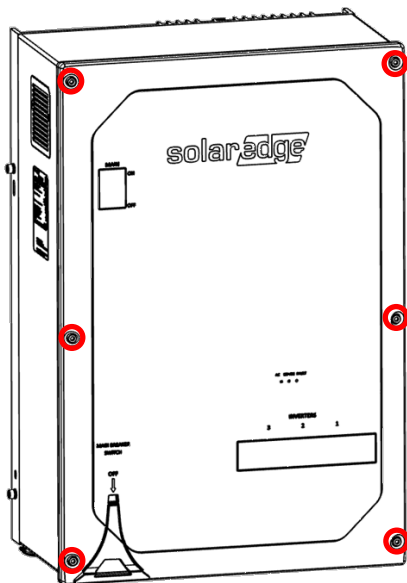
When working with electrical systems, it is crucial to adhere to the following safety regulations to ensure the safety of personnel and equipment:

- 1. Disconnect Power:** Always disconnect the power supply to the BUI before beginning any work on the unit to prevent electric shock.
- 2. Use Personal Protective Equipment (PPE):** Wear appropriate PPE, including insulated gloves, safety glasses, and protective clothing.
- 3. Follow Manufacturer Guidelines:** Adhere to all guidelines and instructions provided by SolarEdge and the circuit breaker manufacturer.
- 4. Verify Compatibility:** Ensure that the replacement circuit breaker is compatible with the Backup Interface unit and meets all specified requirements.
- 5. Inspect Equipment:** Before installation, inspect all equipment for damage or defects. Do not use damaged components.
- 6. Proper Tools:** Use the correct tools for the job to avoid damaging the equipment or causing injury.
- 7. Compliance with Local Codes:** Follow all local electrical codes and regulations, including obtaining any necessary permits.
- 8. Qualified Personnel:** Ensure that only qualified electricians or technicians perform the replacement procedure.

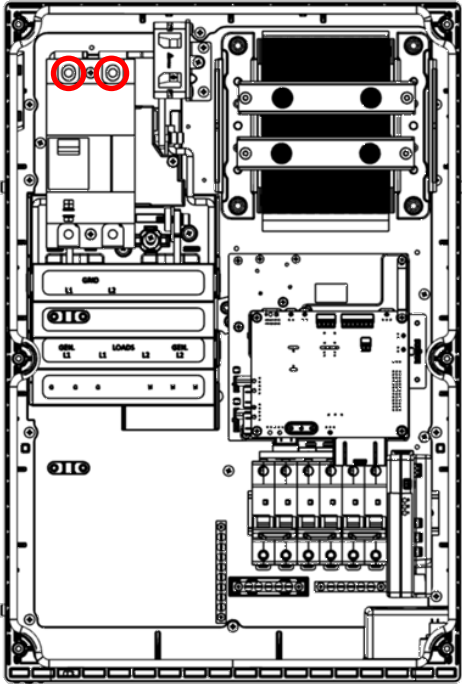
## REPLACEMENT PROCEDURE

1. Using a screwdriver with an M5 Allen bit, loosen the six screws on the BUI front cover and remove the cover. Note that the screws are captive.

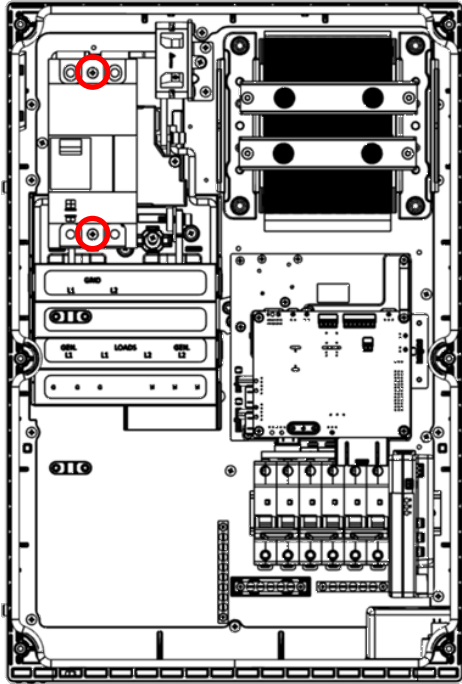
2. Using a PH2 screwdriver, remove the six screws on the BUI inner cover and remove the cover.



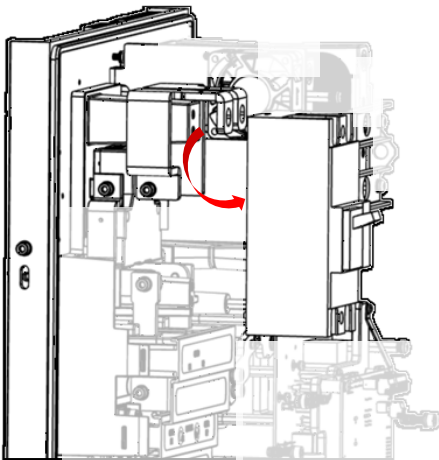
3. Using a screwdriver with an M6 Allen bit, remove the two screws to disconnect the power connection from the circuit breaker.



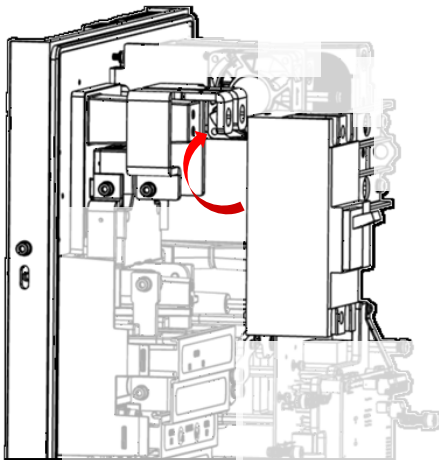
4. Using a PH2 screwdriver, remove the two screws holding the circuit breaker in place.



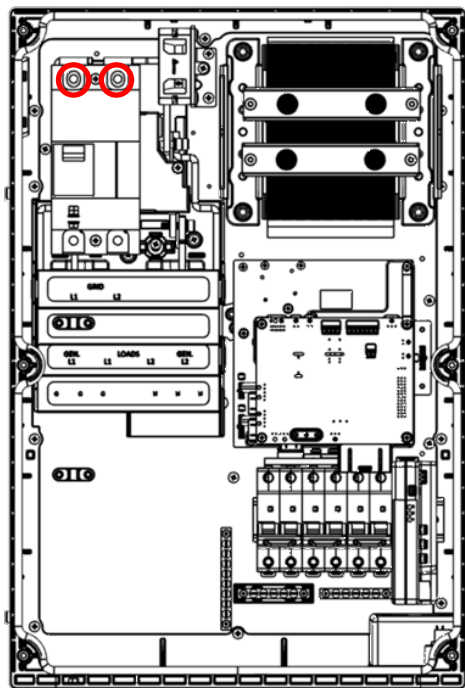
5. Remove the circuit breaker.



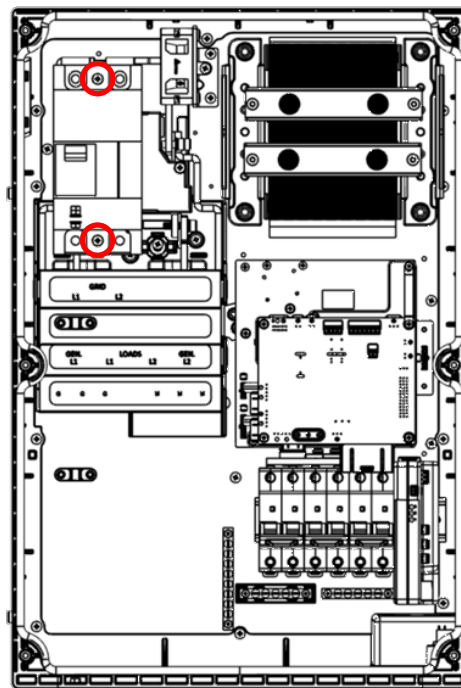
6. Insert the new circuit breaker. Slide it under the busbars.



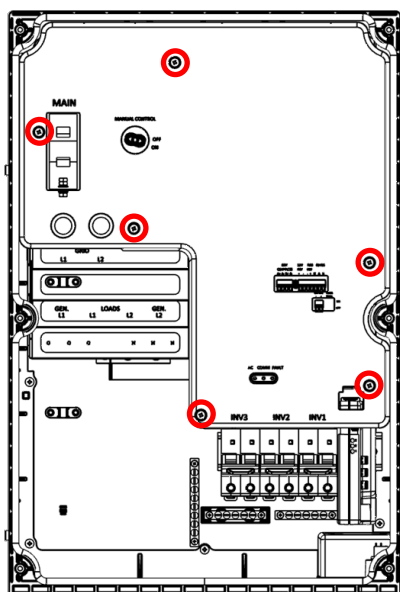
7. Using a screwdriver with an M6 Allen bit, insert the two M6 Allen-head screws in position and tighten them to a torque of 10.3 newton-meters (91 inch-pounds).



8. Using a PH2 screwdriver, insert the two screws holding the circuit breaker in place, and tighten them to a torque of 2.3 newton-meters (20.3 inch-pounds).

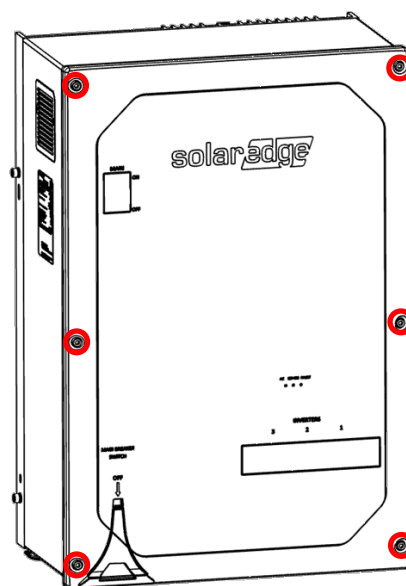


9. Set the inner cover in place, and using a PH2 screwdriver, tighten the six screws to a torque of 2.3 newton-meters (20.3 inch-pounds).



10. Set the outer cover in place, and using a screwdriver with an M5 Allen bit, tighten the six screws to a torque of 3 newton-meters (36.6 inch-pounds).

⚠ Ensure that the quick disconnect handle is correctly positioned with its cup over the circuit breaker lever.



Datasheet:  
<https://knowledge-center.solaredge.com/sites/kc/files/se-backup-interface-datasheet-na.pdf>

