

SolarEdge Home Hub three-phase inverter MC4 connector replacement - Support kit manual

This manual describes the procedure for replacing MC4 connectors on the Home Hub three-phase inverter PN: FLD-3PH-48B-MC4.

Revision history

Version 1.0, June 2024 - Initial release

Kit contents

Five (5) MC4 connectors

Required tools

- 4mm hex bit
- 3mm flat screwdriver
- PH2 Philips screwdriver
- 17mm ($\frac{11}{16}$ inch) wrench
- Torque wrench
- Cable tie

Before you begin

- 1. Set the P/1/0 switch to "0" (OFF).
- 2. Disconnect AC power to the inverter by turning OFF the main circuit breaker and wait at least five minutes for the DC Voltage inside the inverter to drop to a safe level.
- 3. Disconnect power between the battery and the inverter by turning off the Battery circuit breaker.



WARNING

Make sure to turn off the inverter and battery AC circuit breakers, as well as the battery power switch.

Remove the inverter cover

- 1. Using the 4mm Allen wrench, remove the screws holding the inverter cover in place.
- 2. Carefully pull the cover away horizontally before lowering it.



CAUTION

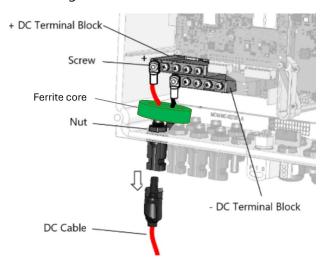
While removing the cover, make sure not to damage the internal components of the inverter. SolarEdge cannot be held responsible for components damaged in these cases.

Remove the damaged MC4 connector

- 1. Disconnect the incoming DC cable from the affected MC4 connector.
- 2. Cut the cable tie holding the DC cables together.

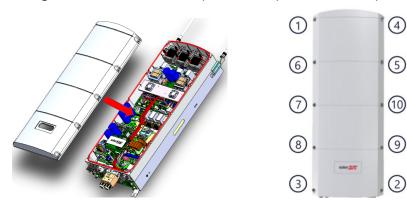


- 3. Using a PH2 Philips screwdriver, remove the screw holding the DC+ (or DC-) cable on the DC terminal block. Retain the screw.
- 4. Using a 17mm ($\frac{11}{16}$ inch) wrench, completely loosen the nut holding the damaged MC4 connector to the inverter skirt.
- 5. Pull the damaged MC4 connector out of the inverter skirt, while feeding the DC cable through the ferrite core. Retain the 17mm nut for reuse.



Insert and fasten the new MC4 connector

- 1. Feed the DC cable through the inverter skirt and then through the 17mm nut.
- 2. Feed the cable through the ferrite core.
- 3. Hand tighten the nut and then, using the 17mm torque wrench, fully tighten the nut to a torque of 0.7N·m (6.2lbf·in).
- 4. Using a Phillips screwdriver and the screw previously removed, reattach the DC cable to its terminal on the DC terminal block.
- 5. Attach a new cable tie to the DC cables.
- 6. Insert the mating DC cable into the new MC4 connector.
- 7. Using a 4mm Allen wrench, reinstall the inverter cover.
- 8. Tighten the screws in the specified sequence to a torque of 4N·m (35.4lbf·in).



Turn on the inverter

- 1. Turn on the inverter and the battery AC circuit breakers.
- 2. Set the inverter P/1/0 switch to 1 (ON).
- 3. Turn ON the battery.