

Replacement of MC4 Connectors of Synergy Unit in Three Phase Inverters with Synergy Technology

This manual explains how to replace the MC4 connectors of the Synergy Unit in Three Phase Inverters with Synergy Technology.

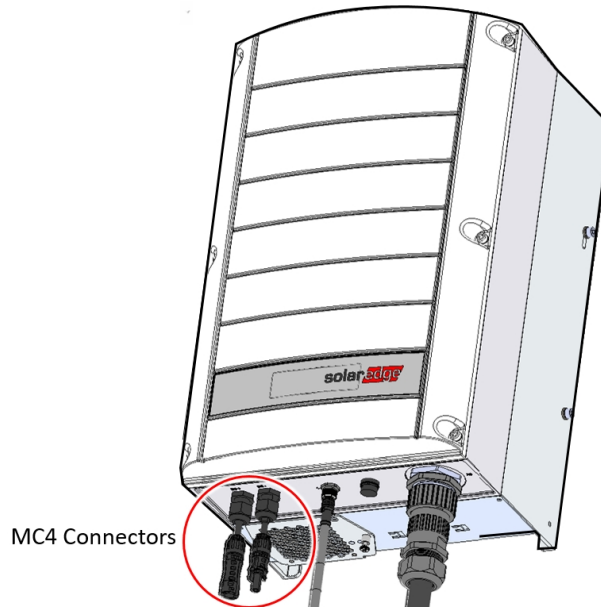


Figure 1: MC4 Connections of the Synergy Unit

Kit Contents

- One pair of MC4 connectors

Required Tools

- 5mm hex key
- Torque Phillips screwdriver
- 3mm flat-blade screwdriver
- 17 mm (11/16 inch) torque wrench

Removing the Inverter Cover

1. Turn the ON/OFF/P Switch of the Synergy Manager to OFF (0). Wait for five minutes for the DC Voltage inside the inverter to drop to a safe level before proceeding to the next step.

WARNING!



The inverter cover must be opened only after switching the inverter ON/OFF/P switch located at the bottom of the inverter to OFF. This disables the DC Voltage inside the inverter. Wait five minutes before opening the cover. Otherwise, there is a risk of electric shock from energy stored in the capacitors.

AVERTISSEMENT!

Ne pas ouvrir le couvercle de l'onduleur avant d'avoir coupé l'interrupteur situé en dessous de l'onduleur. Cela supprime les tensions CC et CA de l'onduleur. Attendre cinq minutes avant d'ouvrir le couvercle. Sinon, il y a un risque de choc électrique provenant de l'énergie stockée dans le condensateur

2. Turn OFF the DC Disconnect Switch on the Synergy Manager. (This step is only applicable for Synergy Manager with ON/OFF/P Switch)
3. Disconnect the AC to the inverter by turning OFF the circuit breakers on the distribution panel.
4. Remove the Allen screws that secure the inverter cover of the Synergy Unit and carefully pull-out the cover.

CAUTION!

When removing the cover, make sure not to damage the internal components. SolarEdge will not be held responsible for any components damaged as a result of incautious cover removal.

MC4 Connectors Replacement

1. Disconnect the MC4 connector of the + DC and -DC wires connected to the Synergy Unit.

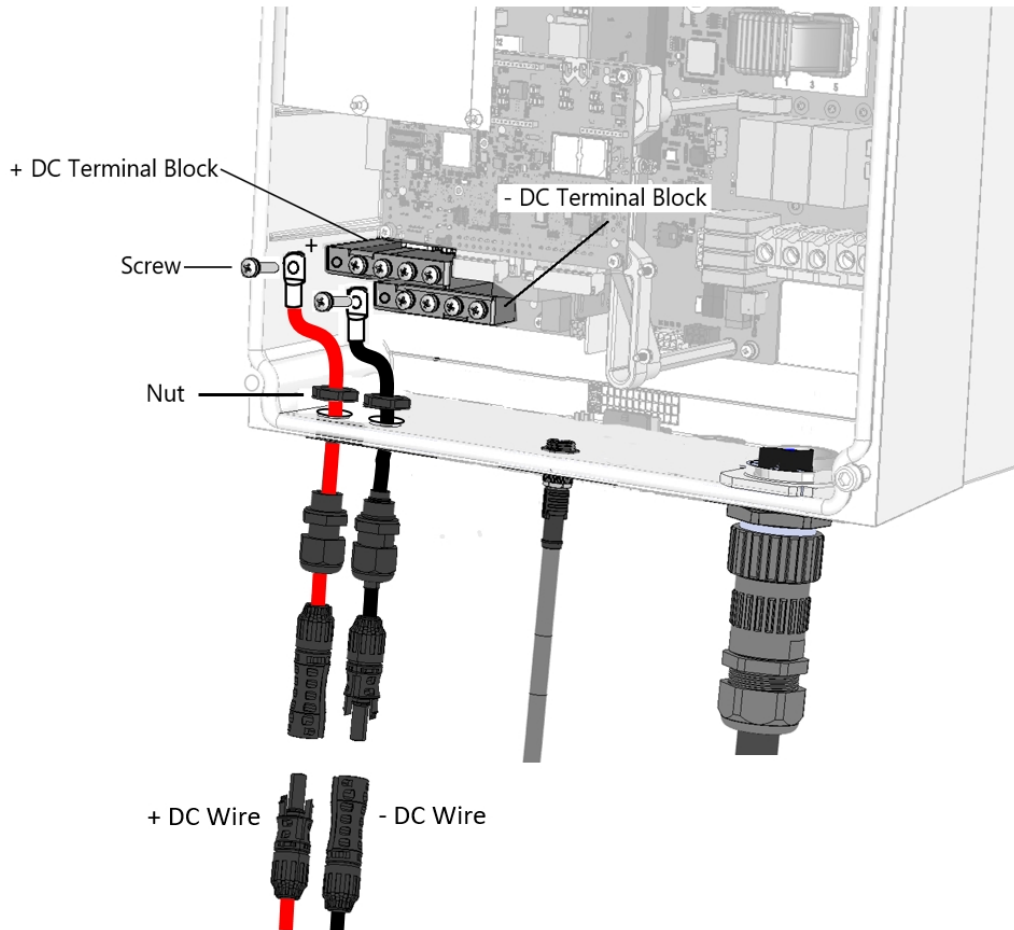


Figure 2: Replacement of MC4 Connectors

2. Release the screws that secure the wires of the + DC and -DC to the terminal blocks. Keep the screws for re-connecting the replacement MC4 connector.
3. Release the nuts that fasten the MC4 connectors to the housing of the Synergy Unit and remove the connectors.
4. Install the replacement MC4 connectors and fasten the nuts with torque of 0.7 N*m / 6.2 lb*in.

**NOTE**

Make sure to insert the + DC wire on the left hole and the - DC wire on the right hole (see *Figure 2*).

5. Insert the + DC and -DC wires of the MC4 connectors into the + DC and -DC terminal blocks and fasten the screws to a torque of .

**NOTE**

Make sure to connect the + DC and -DC wires of the replacement connectors to the corresponding + DC and -DC terminal blocks (see *Figure 2*).

6. Gently pull each wire connected to the terminal block to make sure it is properly secured.
7. Close the inverter cover and fasten the six Allen screws with a torque of 3.5 N*m (30 lb*in).