



# AC Surge Protection Device Installation / Replacement in Three Phase Inverters with Synergy Technology P/N: SEXXK-XXXXIXXXX

This document describes how to install or replace the AC Surge Protection Device (SPD) in a three phase inverter with Synergy technology.

## Kit Contents

- Five AC SPD Boards
- Spare screws

## Required Tools

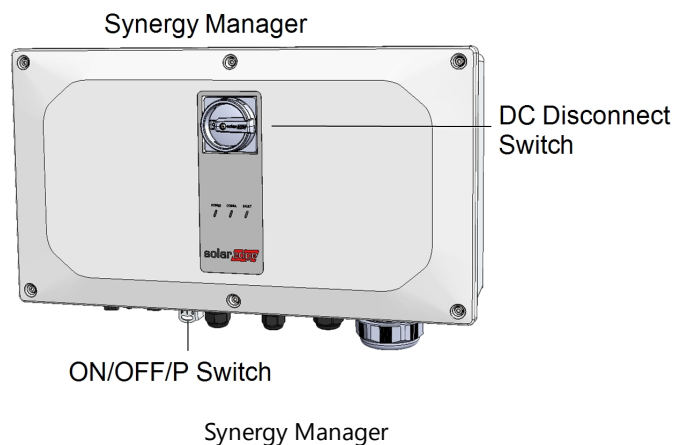
- Torque 5mm hex screwdriver
- Torque Phillips screwdriver
- Torque ratchet wrench screwdriver with Phillips bit set

## Removing the Inverter Cover

If the inverter cover is not already removed, use the following procedure for cover removal.

→ To remove 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.
3. Disconnect AC to the inverter by turning OFF the circuit breakers on the power distribution panel.
4. Release the six Allen screws securing the cover of the DC Disconnect Switch and remove the cover.

### CAUTION!

When removing the inverter 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.



### ATTENTION!

*Lors du retrait du couvercle, assurez-vous de ne pas endommager les composants internes. SolarEdge ne peut être tenue pour responsable des composants endommagés à la suite d'une imprudence dans le retrait du couvercle.*

## Replacing the AC SPD

→ To remove the AC SPD Board:

1. Disconnect the plug of the communication cable from the AC SPD Board.

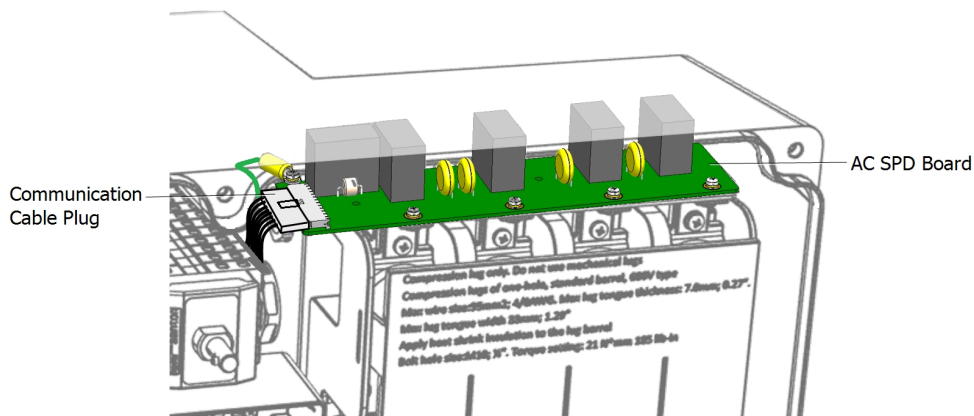


Figure 1: Disconnecting the Plug of the Communication Cable of AC SPD Board

2. Remove the four screws securing the AC SPD Board to the AC conductors and slightly pull out the AC SPD Board from within the enclosure.

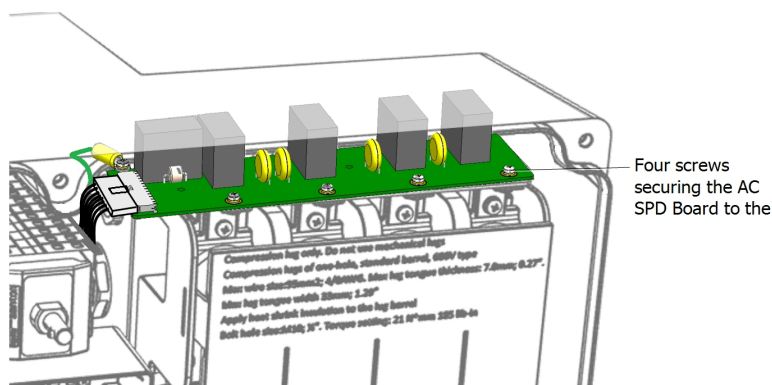


Figure 2: Disconnecting the AC SPD Board From the AC Conductors

2. Remove the screw securing the ground wire to the AC SPD Board and remove the Board.

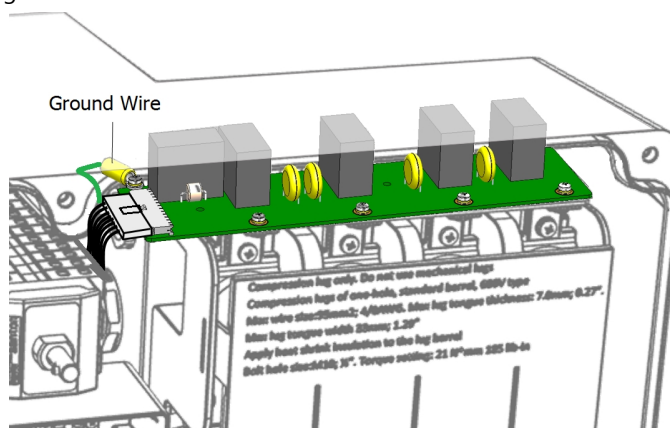


Figure 3: AC SPD Board Removal

→ To Install the provided AC SPD Board:

1. Connect the ground wire to the provided AC SPD Board and fasten the lug screw with a torque of 2.6 N\*m (1.91 lb\*ft).
2. Position the provided AC SPD Board on the AC conductors and fasten the four screws with a torque of 2.6 N\*m (1.91 lb\*ft).
3. Connect the plug of the communication cable to the AC SPD Board.
4. Close the Synergy Manager cover and fasten the six Allen screws with a torque of 3.5 N\*m (2.6 lb\*ft).