

# Installation of AC Surge Protection Device in Three Phase Inverters

This document describes how to install the AC Surge Protection Device (SPD) in a Three Phase Inverter.

## Kit Contents

- 5 AC SPD boards
- 5 bags with installation parts. Each bag for single Installation in inverter with terminal block support (see *Figure 1*)
- 5 bags with installation parts. Each bag for single installation in inverter without terminal block support

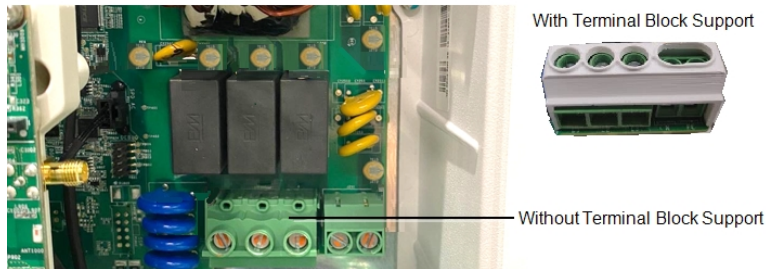


Figure 1: Inverter with / without terminal block support

## Required Tools

- 5 mm Allen torque wrench
- Torque Phillips screwdriver
- 3 mm flat screwdriver
- Smart-phone with SetApp mobile application installed

## 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 ON/OFF/P Switch of the inverter to OFF (0) and wait for five minutes for the DC voltage, inside the inverter, to drop to a safe value before preceding 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 ON/OFF switch of the DC Safety Unit (if applicable).
3. Disconnect AC to the inverter by turning OFF the circuit breakers on the distribution panel.
4. Release the six Allen screws holding the inverter cover 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.*

## Installing the AC SPD

→ To Install the AC SPD:

1. Locate the installation area of the AC SPD inside the inverter enclosure (see *Figure 2*).

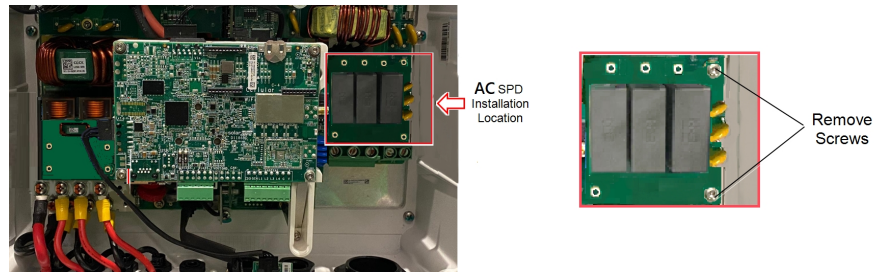


Figure 2: AC SPD installation location

2. Remove the two screws marked in *Figure 2*.
3. Position and secure the five long metal standoffs in the threaded holes on the power board (see *Figure 3*).

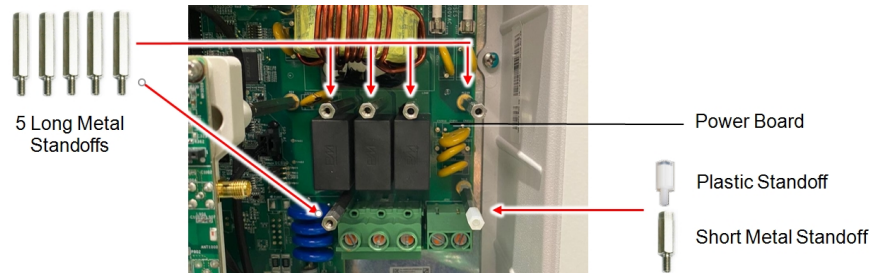


Figure 3: Position of standoffs on power board

4. Position and secure the short metal standoff in the threaded hole on the power board with a torque of 1.2 N\*m (10.6 lb\*in).
5. Secure the plastic standoff on top of the short metal standoff with a torque of 0.15 N\*m (1.3 lb\*in).
6. Connect the plugs of the power cable to the connectors on the power board and AC SPD (see *Figure 4*).

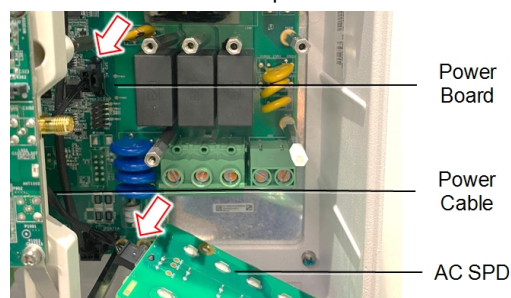


Figure 4: AC SPD power cable

7. Place the AC SPD on the standoffs and fasten the five screws of the five long metal standoffs with a torque of 1.3 N\*m (11.5 lb\*in).

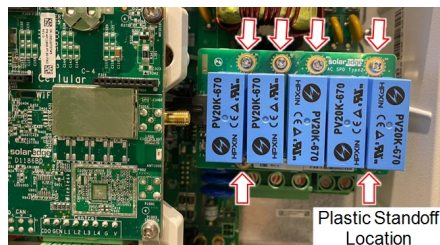


Figure 5: Securing the AC SPD on standoffs

8. Close the inverter cover and fasten the six Allen screws with a torque of 3.5 N\*m (30 lb\*in).
9. Turn ON the ON/OFF switch of the DC Safety Unit (if applicable).
10. Connect AC to the inverter by turning OFF the circuit breakers on the distribution panel.
11. Start the SetApp application from your mobile device and follow the on-screen instructions.
12. From the Commissioning screen of the SetApp application select: Maintenance - Surge Protection Device (SPD) - AC SPD - Enable.

## Configuring the AC SPD on the Inverter

→ To configure the AC SPD on the Inverter

1. Turn ON the ON/OFF switch of the DC Safety Unit (if applicable).
2. Connect AC to the inverter by turning ON the circuit breakers on the distribution panel.
3. Start the SetApp application on your mobile device and follow the on-screen instructions.
4. From the Commissioning screen of the SetApp application select: Maintenance → Surge Protection Device (SPD) → AC SPD → Enable.