

Installation of DC Surge Protection Device in Three Phase Inverters

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

Kit Contents

- 5 DC SPD boards
- 5 bags with installation parts - each bag for single Installation

Required Tools

- 5 mm hex key
- Torque Phillips screwdriver
- 3 mm flat screwdriver
- 3 mm torque socket driver wrench (long and narrow socket)
- 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 the 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.
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 DC SPD Board

1. Locate the installation area of the DC SPD inside the inverter enclosure (see Figure 1).

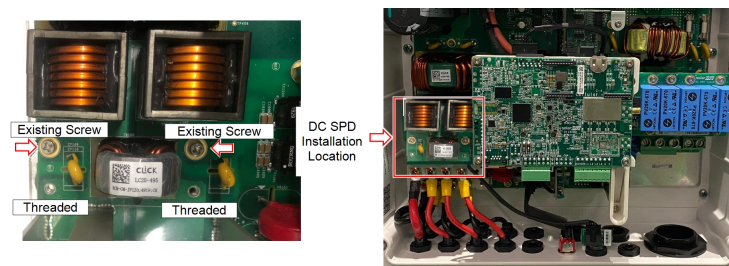


Figure 1: Location of DC SPD inside the inverter

2. Remove the two existing screws from the power board (see Figure 1).
3. Connect the plug of the DC SPD cable to the P12 connector on the power board (see Figure 2).



Figure 2: DC SPD Cable

4. Position and secure the short size metal standoff in the threaded hole on the power board (see *Figure 3*) with a torque of 1.2 N*m (10.6 lb*in).

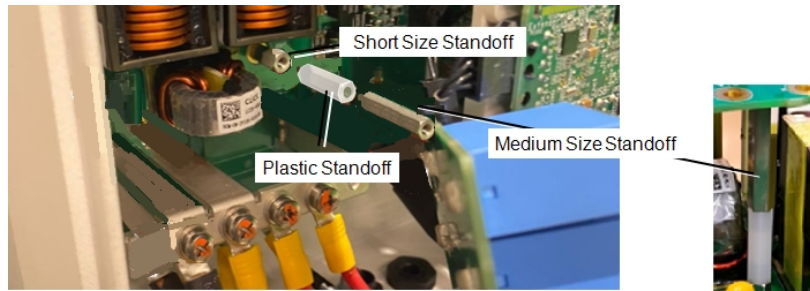


Figure 3: Installing the metal/plastic/metal standoff

5. Secure the plastic standoff on top of the short metal standoff (see *Figure 3*) with a torque of 0.1 N*m (0.9 lb*in).
6. Secure the medium size standoff on top of the plastic standoff (see *Figure 3*) with a torque of 0.1 N*m (0.9 lb*in).
7. Position and secure the three long metal standoffs into the threaded holes on the power board (see *Figure 4*) with a torque of 1.2 N*m.

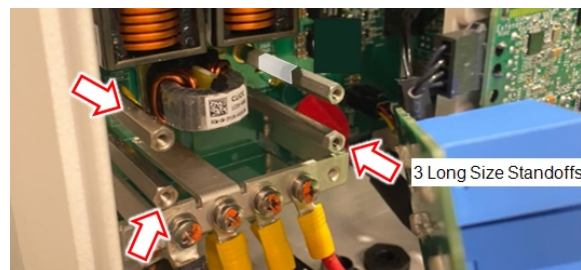


Figure 4: Installing the three long metal Standoffs

8. Connect the plug of the DC SPD Cable to the P1 connector on the DC SPD (See *Figure 5*).
9. Place the DC SPD on the standoffs and fasten the screw of the metal/plastic/metal standoff with a torque of 0.15 N*m (1.32 lb*in).

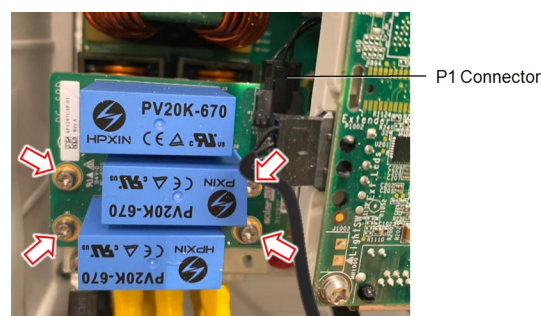


Figure 5: Securing the DC SPD

10. Fasten the rest of the three standoff screws with a torque of 1.3 N*m (11.5 lb*in).
11. Close the inverter cover and fasten the six Allen screws.

Configuring the DC SPD on the Inverter

→ To configure the DC 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) - DC SPD - Enable.