# SolarEdge Three-Phase Commercial Inverter and Three-Phase Inverter with Synergy Technology – Replacing DC Fuses with Neutral Links – Support Kit Manual

# **Revision history**

Version 1.0, January 2024 – initial release

# Kit contents

SolarEdge Neutral links PN: FLD-3PH-NEUTRAL-LINK (36 links per kit)

# **Required tools**

Fuse extraction tool



- Phillips screwdriver
- 5mm Allen wrench

# Fuse replacement – Three-phase commercial inverter

The fuses in the Three-phase commercial inverter are in the DC Disconnect (DCD) unit.

### To replace the fuses

- 1. Set the 0/1/P switch at the bottom of the inverter to "0" (OFF).
- 2. Wait at least five (5) minutes for the DC voltage to drop to a safe level (<50V).
- 3. Turn the switch on the cover of the DCD unit to OFF.
- 4. Disconnect AC power to the inverter by turning OFF the circuit breakers at the distribution panel.
- 5. Using the 5mm Allen wrench, unscrew the screws in the cover of the DCD unit.
- 6. Carefully pull the cover away horizontally before lowering it.



- When removing the cover, make sure not to damage the internal components.
  SolarEdge will not be held responsible for any components damaged because of incorrect cover removal.
- Use a voltmeter to measure the AC and DC voltages. The AC voltage must be 0V and the DC voltage must be <50V.</li>
- 7. Using a dedicated fuse extraction tool, carefully remove all the fuses.





#### CAUTION!

Failure to use a dedicated fuse extraction tool may cause damage to the equipment and void the unit's warranty.



- 8. Carefully insert solid neutral links in place of each fuse.
- 9. Put the DCD unit cover in place and, using the 5mm Allen wrench, fasten the screws.
- 10. Re-apply AC power to the inverter by turning ON the circuit breakers at the distribution panel.
- 11. Turn the safety switch on the cover of the DCD unit ON.
- 12. Set the P/1/0 switch of the inverter to "1" (ON).

### Fuse replacement – Three-phase inverter with Synergy technology

The fuses in the Three-phase Inverter with Synergy technology are in the Synergy Manager.

### To replace the fuses

- 1. Set the 0/1/P switch at the bottom of the inverter to "0" (OFF).
- 2. Wait at least five (5) minutes for the DC voltage to drop to a safe level (<50V).
- 3. Turn the safety switch on the cover of the Synergy Manager to OFF.
- 4. Disconnect AC power to the inverter by turning OFF the circuit breakers at the distribution panel.
- 5. Using the 5mm Allen wrench, unscrew the screws in the cover of the Synergy Manager.
- 6. Carefully pull the cover away horizontally before lowering it.



### CAUTION!

- When removing the cover, make sure not to damage the internal components. SolarEdge will not be held responsible for any components damaged because of incorrect cover removal.
- Use a voltmeter to measure the AC and DC voltages. The AC voltage must be 0V and the DC voltage must be <50V.
- 7. Disconnect the connector on the right-hand side of the surge protection device (SPD board).
- 8. Using a Phillips screwdriver, remove the four screws securing the SPD board.



- 9. Move the SPD board aside to expose the fuses.
- 10. Using a dedicated fuse extraction tool, carefully remove all the fuses.



#### CAUTION!

Failure to use a dedicated fuse extraction tool may cause damage to the equipment and void the unit's warranty.





- 11. Carefully insert solid neutral links in place of each fuse.
- 12. Insert the screws to secure the SPD board and using the Phillips screwdriver, tighten the top screws to a torque of 2.6N·m and the bottom screws to a torque of 1.3N·m.



### CAUTION!

Tighten the two upper screws to the correct torque. Failure to do so may cause the SPD to malfunction.



- 13. Re-connect the connector at the right-hand side of the board.
- 14. Put the Synergy Manager cover in place and using the 5mm Allen wrench, fasten the screws.
- 15. Re-apply AC power to the inverter by turning ON the circuit breakers at the distribution panel.
- 16. Turn the safety switch on the cover of the Synergy Manager ON.
- 17. Set the P/1/0 switch of the inverter to "1" (ON).