

Replacing System Shutdown (SSD) Switch with a single-pole or 2-pole breaker

Enphase requires the installation of a System Shutdown (SSD) Switch when installing the Enphase Energy System with the Enphase PV system to ensure the safety of maintenance technicians.

The SSD is mandatory when installing the Enphase IQ8 Series Microinverter system with the Enphase IQ System Controller 3 INT and the IQ Battery 5P. The SSD Switch is not required for other legacy systems, including IQ7 Series, S Series, or M Series.

The SSD is a double-pole single-throw lockable switch that should be placed in a readily accessible location and wired to the IQ System Controller. The SSD Switch comes with the IQ System Controller; however, it can be replaced with a single-pole or 2-pole breaker, so it can be mounted on the DIN rail when there is sufficient space inside the IQ System Controller 3 INT.

As the application used for the switch is not for breaking current, the rated current for the breaker can be of any size. For example, the smallest current rating available is 6 A or 10 A.

The wiring

- Use wires of cross-section 0.5–1.5 mm². The recommended cables are Electra EAS7302PHV/EAS7502PHV or the LAPP 1270802 (same as the battery control cable).
- When using a single-pole breaker, wire pin 1 and pin 2 to the top of the breaker, and pin 3 and pin 4 to the bottom of the breaker, as shown in [Figure 1](#).

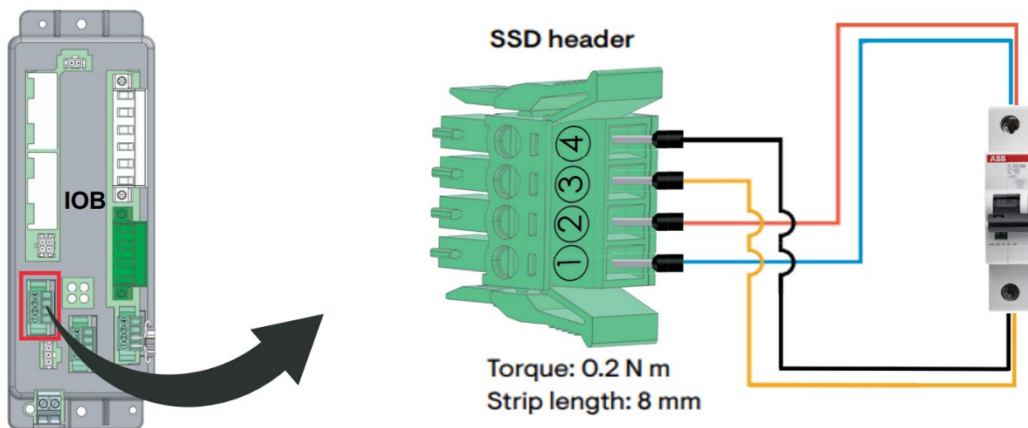


Figure 1: SSD wiring using a single-pole breaker

- When using a 2-pole breaker, wire pin 1 and pin 4 to the first pole, and pin 2 and pin 3 to the second pole of the breaker, as shown in [Figure 2](#).

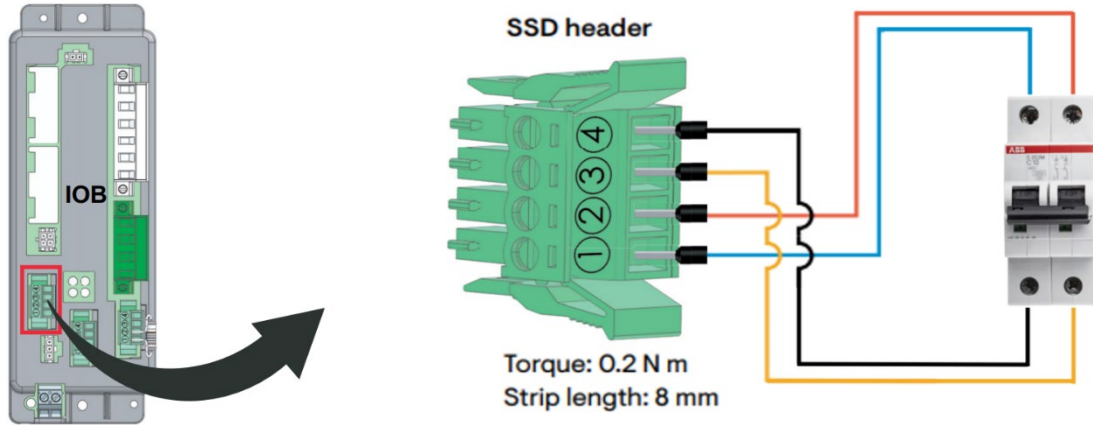


Figure 2: SSD wiring using a 2-pole breaker

Revision history

Revision	Date	Description
TEB-00110-2.0	December 2023	Added single-pole breaker information.
TEB-00110-1.0	November 2023	Initial release.

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