

Tesla, Powerwall w/ Backup Switch Meter Socket Adapter Usage Requirements, Connections to PSE&G

Function of Device:

Intended for use with Tesla Powerwall battery system. Enables a confirmed disconnect from the grid when grid voltage is not available. This allows battery inverter to restart after the home electric system is isolated from the grid. This system includes a control cable between the Backup Switch and the Powerwall 3 or Powerwall+.

Required Adapter Features:

- The catalog number reviewed is 1624171-nn-a, where nn are numbers and a is a letter.
- The backup switch review is only intended for 120/240 volt, 3 wire single phase connections with maximum current of 200 amps.

Installation Limitations unique to this Tesla, Backup Switch adapter

- Adapter may only be used in meters socket blocks rated from 100 amps thru 200 amps. It may not be used with sockets rated 320 amps.
- Adapter may only be used on services described as: 120/240 volt, 3 wire, single phase service.
- Adapter may not be used on Conventional Underground services (120/208 volt, network feed from multiple transformers with network protectors). Concerns of no voltage neutral terminal and available fault current > 22 kA.
- Adapter relocates the mounting position of meter. A clear space of at least 44 inches between the property line (as defined by the municipality) or other obstruction and the front of the meter socket.
- ½" liquid-tight flexible conduit for control cable connection to Powerwall, is attached to the bottom of the adapter. It may not block access to breaker compartments in meter socket or second meter position in meter socket.

General Requirements for installation of Meter Socket Adapters

- Oxide-inhibiting joint compound shall not be applied to jaws of sockets or PSE&G meter terminals.
- Socket jaw pressure on meter blades must meet requirements to support heat transfer away from the meter and socket adapter.
- Service conductor insulation must be in place without evidence of failure.
- Only one adapter may be installed behind a meter.
- Meter Mounting Equipment shall be for a single meter position or two meter positions.
- Meter socket must be firmly attached to its mounting.
- Circuit Breakers, when present, shall have an interrupting rating consistent with the maximum design short circuit duty rating at the point of connection in compliance with NEC.
- Meter socket adapters may not be used where customer has opted-out from having an Advanced Metering Infrastructure (AMI) Meter installed.