



Gen 3 Wall Connector Manual

48A Single Phase



This manual applies to Wall Connectors identified by part number 1457768-\*\*-\*.

# **Product Specifications**

Voltage and Wiring	Nominal 200-240 V AC single-phase	
Current Output Range	12 - 48 amps	
Terminal Blocks	12-4 AWG (3.5 - 25 mm <sup>2</sup> ), copper only	
Supported Conduit Sizing	<sup>3</sup> / <sub>4</sub> " (21 mm) default, 1" (27 mm) optional	
Grounding Scheme	TN/TT	
Frequency	50/60 Hz	
Cable Length	8.5' (2.6 m) or 18' (5.5 m)	
Wall Connector Dimensions	Height: 13.6" (345 mm)  Width: 6.1" (155 mm)  Depth: 4.3" (110 mm)	
Wire Box Bracket Dimensions	Height: 9.8" (250 mm)  Width: 4.7" (120 mm)  Depth: 2.0" (50 mm)	
Weight (including wirebox)	10 lb. (4.5 kg)	
Operating Temperature	-22°F to 122°F (-30°C to 50°C)	
Storage Temperature	-40°F to 185°F (-40°C to 85°C)	
Enclosure Rating	Type 3R	
Ventilation	Not required	
Means of Disconnect	External branch circuit breaker	
Ground Fault Circuit Interrupter	Integrated, no additional required (CCID20)	
Wi-Fi	2.4 GHz, 802.11b/g/n	
Agency Approvals	cULus - E351001	

Transportation and storage: Ensure that Wall Connector is within storage temperature when moving, transporting, or storing.

This device complies with part 15 of the FCC Rules. Operation is subject to the following conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

# Circuit Breaker Rating / Maximum Output

### **Power Output**

For maximum power output, install a standard double pole 60 amp circuit breaker. Wall Connector includes integrated GFCI protection - do not install a GFCI circuit breaker.

Wall Connector incorporates automatic load management, which allows the max output to be customized to an existing power supply. If the electrical supply is unable to support the 60 amp configuration, select a lower amperage configuration.

Circuit breaker (amps)	Max output (amps)	Power output at 240 volts (kW)
60	48	11.5
50	40	9.6
40	32	7.6
30	24	5.7
20	16	3.8
15	12	2.8

NOTE: External disconnect switches are neither required nor recommended.

**NOTE:** Circuit breaker size is programmed during the commissioning process. See Commissioning Procedure on page 22 for details.

**NOTE:** Some Tesla vehicles may draw less current than the max output. Actual charging rate depends on Wall Connector output and onboard charger in the vehicle.

#### Branch Circuit Conductors and Ground Wire

- If installing for less than maximum power, refer to local electrical code to select correct conductors and ground wire size that are suitable for the chosen circuit breaker.
- If installing for maximum power, use minimum 6 AWG, 90° C-rated copper wire for conductors. **NOTE:** Upsize conductors if necessary.
- For sites with multiple Wall Connectors, each Wall Connector must have its own branch circuit with L1, L2/N, and Ground.
- COPPER WIRE TERMINATIONS ONLY for landing in Wall Connector wirebox terminals. Conductors can be stranded or solid.
- For outdoor installations, use watertight fittings when securing feeder wires to the wirebox.

# **Grounding Connections**

Wall Connector must have a ground path back to the main equipment earthing point on site. Without a proper ground connection, the Wall Connector will fault during a ground assurance test. Equipment-grounding conductor must be run with the circuit conductors and connected to the equipment-grounding terminal in the wirebox. Install a ground (PE) wire sized according to local electrical code.

# PRODUCT OVERVIEW

# **Using Wall Connector**

- 1. Open the vehicle charge port by pressing the button on the charging handle, pressing on the charge port door, using the mobile app, or using the vehicle touchscreen.
- 2. Insert the charging handle into the vehicle charge port.
- 3. Check the vehicle controls to verify charging.
- 4. To remove the charging handle from the vehicle, press and hold the button on the handle to unlock the charge port.

**NOTE:** The vehicle must be unlocked for the charging handle to be removable.



- 5. Remove the charging handle from the vehicle charge port.
- 6. Wrap the charging cable counter-clockwise around the Wall Connector and insert the charging handle into the holster.





# In the Box

