

# **PRODUCT OVERVIEW**

## **Product Specifications**

This manual applies to Wall Connectors identified by part number 1734412-XX-X.

Voltage and Wiring	Nominal 200-240 V AC single-phase		
Current Output Range	12 – 48 amps		
Terminal Blocks	12-4 AWG G (3.5 - 25 mm2), copper		
Supported Conduit Sizing	3/4" (21 mm) default, 1" (27 mm) optional		
Grounding Scheme	TN/TT		
Frequency	50/60 Hz		
Cable Length	24 ft (7.3 m)		
Wall Connector Dimensions	Height: 13.6 in (345 mm)  Width: 6.1 in (155 mm)  Depth: 5.9 in (150 mm)		
Wire Box Bracket Dimensions	Height: 9.8 in (250 mm)  Width: 4.7 in (120 mm)  Depth: 3.5 in (90 mm)		
Weight (including wirebox)	~13lbs (5.7kg)		
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		
	IP 54		
Ventilation	Not required		
Means of Disconnect	External branch circuit breaker		
Wi-Fi	2.4 GHz, 802.11b/g/n		
Agency Approvals	ETL/cETL		
	ENERGY STAR PARTNER		

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### **Circuit Breaker Rating / Maximum Output**

#### **Power Output**

For maximum power output, install a standard double pole 60 amp 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 29 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.
- For maximum power, check temperature rating of circuit breaker used:
  - For 60°C rated circuit breaker, use minimum 4AWG, 90°C THWN-2-rated copper wire for conductors.
  - o For 75°C rated circuit breaker, use minimum 6AWG, 90°C THWN-2-rated copper wire for conductors.



NOTE: Increase conductor size if necessary.

- For sites with multiple Wall Connectors, the group power management feature can enable the safe utilization of a single branch circuit. See single line examples in *Breaker and Branch Circuit Setup on page 38*.
- COPPER WIRE TERMINATIONS ONLY for landing in Wall Connector wirebox terminals. Conductors can be stranded or solid.
- · Hardwire branch circuits to disconnects or circuit breakers. Do NOT install cord-and-plug type connections.
- · For outdoor installations, use watertight fittings when securing feeder wires to the wirebox.

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### **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.

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