

CP4300 Wall Mount

ChargePoint® Networked Charging Station

Installation Guide



IMPORTANT SAFETY INSTRUCTIONS: SAVE THESE INSTRUCTIONS



WARNING:

- 1. Read and follow all warnings and instructions before installing and operating the ChargePoint® Charging Station. Install and operate only as instructed. Failure to do so may lead to death, injury, or property damage, and will void the Limited Warranty.
- 2. Only use licensed professionals to install your ChargePoint® Charging Station and adhere to all national and local building codes and standards. Before installing the ChargePoint® Charging Station, consult with a licensed contractor, such as a licensed electrician, and use a trained installation expert to ensure compliance with local building and electrical codes and standards, climate conditions, safety standards, and all applicable codes and ordinances. Inspect the Charging Station for proper installation before use.
- **3. Always ground the ChargePoint* Charging Station.** Failure to ground the Charging Station can lead to risk of electrocution or fire. The Charging Station must be connected to a grounded, metal, permanent wiring system, or an equipment grounding conductor shall be run with circuit conductors and connected to the equipment grounding terminal or lead on the Electric Vehicle Supply Equipment (EVSE). Connections to the EVSE shall comply with all applicable codes and ordinances.
- **4.** Install the ChargePoint® Charging Station using a ChargePoint approved method. Failure to install on a surface that can support the full weight of the Charging Station can result in death, personal injury, or property damage. Inspect the Charging Station for proper installation before use.
- 5. This charging station is not suitable for use in hazardous locations.
- 6. This device should be supervised when used around children.
- 7. Do not put fingers into the electric vehicle connector.
- 8. Do not use this product if the flexible power cord or EV cable is frayed, has broken insulation, or any other signs of damage.
- 9. Do not use this product if the enclosure or the EV connector is broken, cracked, open, or shows any other indication of damage.
- 10. Use 75°C or 90°C wire copper conductors only.



Important: Under no circumstances will compliance with the information in this manual relieve the user of his/her responsibility to comply with all applicable codes or safety standards. This document describes the most commonly-used installation and mounting scenarios. If situations arise in which it is not possible to perform an installation following the procedures provided in this document, contact ChargePoint, Inc.

ChargePoint, Inc. is not responsible for any damages that may result from custom installations that are not described in this document or for any failure to adhere to installation recommendations.

Product Disposal

Follow proper disposal methods according to local authorities. Re-using, recycling, or correctly processing obsolete devices is an important contribution to environmental protection. Product materials are recyclable as marked.



No Accuracy Guarantee

Commercially reasonable efforts were made to ensure that the specifications and other information in this manual are accurate and complete at the time of its publication. However, the specifications and other information in this manual are subject to change at any time without prior notice.

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Symbols Used in This Document

This guide and product use the following symbols:



DANGER: Risk of electric shock.



WARNING: Risk of personal harm or death.



CAUTION: Risk of equipment or property damage.



Important: Crucial step for installation success.



Read the manual for instructions.



Ground/protective earth.



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Prepare for Installation 1

This document provides step-by-step instructions for installing a CP4300 Wall Mount ChargePoint® Networked Charging Station. Depending on the specific model of CP4300 you are installing, it may be a single port or dual port charging station.



Important: You must be a ChargePoint Certified Installer to perform this installation. If you do not complete certification training, you cannot download the Installation Guide or access the ChargePoint Network to complete pinpointing and station setup.

To complete online training and become a Certified Installer, refer to ChargePoint University at: eu.chargepointuniversity.com.



CAUTION: Do not install the charging station in inclement weather. If you must complete the installation in rain or wind, you must use a weather-proof shelter that covers all boxes and components.

Before You Begin

- Ensure that all these conditions are met at the installation site:
 - The installation site is properly prepared and meets all conditions listed in the *CP4000 Site Design Guide* (a PDF version is available at chargepoint.com/eu/guides).
 - The appropriate circuit protection and metering is in place, following local codes and regulations.
 - The mounting surface is smooth, stable, plumb, and strong. It provides sufficient stability for installing the charging station.
 - The electrical cable has been installed and about 2 m of cable is left for a service loop.
 - The electrical cable has a maximum diameter of 25 mm. The wire does not exceed 16 mm².
 - The installation site is clean.
- If you have not already done so, **open Box #1 and locate the printed Quick Reference Guide**. Review all safety information and heed all warnings listed in the Guide.

- Arrange for two people to complete the installation, due to the weight of the CP4300 and attached cables.
- Do not place liquids, or objects containing liquids, on the charging station.
- Do not place stickers, or other materials that may eliminate sufficient air circulation, on the charging station.
- Only use accessories sold for the charging station by ChargePoint.
- Review the CP4300 Data Sheet (available at chargepoint.com/eu/guides).
- Review the contents of this Installation Guide to familiarize yourself with the contents of each shipping box and the required installation steps. Follow the instructions in this guide and heed all warnings.

Tools and Materials

- · Cordless drill with a 10 mm masonry drill bit
- Set of tamper-resistant Torx drivers (T20, T25, T27, T30)
- Set of metric hex drivers 3 8 mm
- Torque wrenches capable of measuring torques from 1 Nm 175 Nm
- #2 Phillips screwdriver
- Electrical wire strippers
- Crescent wrench, adjustable to 16 mm
- Bent-nose pliers with 90° bend, 1.35 mm max. tip diameter and 25 mm min. opening
- Spirit level, 40 cm length or shorter
- Measuring tape
- Utility knife or Dremel tool
- Cable tie wraps
- Electrical tape
- Wire end ferrules—optional, to cover the stripped ends of flexible wires
- Voltage meter
- Cup for holding small parts
- Damp cloth for wiping down the exterior of the station
- Floor mat, padded ground covering, or other similar material to protect station components
- Smartphone or laptop with a QR-code scanner, camera, and Internet connection

Summary of Shipping Boxes

Box #	Assembly Name	Overview of Box Contents	
1	CP4300 Charging Station Single Port or Dual Port	 Fully assembled charging station Grounding plate Station key and fasteners Phase rotation labels Activation sticker Power management jumper (dual port stations only) Quick Guide pointing to full online documentation 	
2	Wall Mount Kit	Clamps and mounting componentsInstallation kit containing small parts and fasteners	
3	Station Mount Kit	Support bracketMounting componentsInstallation kit containing small parts and fasteners	
4	Cable Management Kit	Fully assembled CMKInstallation kit containing small parts and fasteners	
	Grounding Kit	Grounding components, including fasteners	

A more detailed list of each box's contents is provided later in this guide.

Installation Sequence

Regardless of the specific type of CP4300 wall mount charging station, the high-level installation sequence is the same. Where this Installation Guide refers to two power cables or two station ports, the same instructions apply to single port stations.

- Install the CMK on page 5
- Install the Station Mounting Bracket on page 15
- Mount the Charging Station on page 21
- Wire the Charging Station on page 27
- Complete the Installation on page 37



Install the CMK 2

Check the Box Contents

Before unpacking any shipping boxes, place a floor mat, padded ground covering, or similar material in an area close to the installation site. When unpacking shipping boxes, place all components on the ground covering and ensure that all components are present and undamaged. Unpack shipping boxes only when you need to, as described in this Installation Guide.



Important: When unpacking the box, do not put any components or fasteners directly on the ground.

Locate **Box #1, the CP4300 Charging Station** and find the bag containing the mounting fasteners (screws and plastic wall anchors).

Open **Box #2, the Wall Mount Kit** and ensure you have all the components listed below (graphics are not to scale).

Locate Box #4, the Cable Management Kit (CMK). Do not open the box until later in this section.

Note: This is a complete list of parts. Depending on the configuration of the product you are installing, you may not need all of these items.

Note: UK installers also need the box containing the grounding components.



Cable Management Kit (CMK) clamp spacer (1)	
CMK clamp base (2)	
CMK clamp end (4)	
Support bracket cleat (1)	
Support bracket hanger (1)	
Pedestal hole plate (1)	
Strain relief hole plug (2)	

Installation kit (1)	Includes:		
	 25 mm M8 socket head cap screws (4) 20 mm M6 button head cap screws (4) 16 mm M8 socket head cap screws (2) 20 mm M6 flat head socket screws (2) 20 mm M8 flat head socket screws (2) 14 mm M8 flat head socket screws (2) 10 mm M8 button head cap screws (5) M8 toothed washers (5) Grounding cable, 127 mm (1) Grounding cable, 406 mm (1) Grounding cable, 635 mm (1) 		
Grounding kit (1)	Includes: • 635 mm grounding cable (1) • 241 mm grounding cable (1) • 10 mm M8 button head hex screws (3) • M8 star washers (5)		

Install the Grounding Components (UK Only)

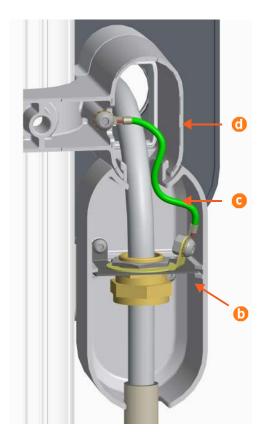
Note: If you are not installing this charging station within the United Kingdom, skip to Install the Cable Cover Base on page 8.

To install this charging station in the United Kingdom, begin by installing the grounding components.

- 1. Install a cable gland onto each power cable.
- 2. Use a 10 mm M8 button head hex screw, an M8 toothed washer, and a lock nut to connect the included grounding cable to each cable gland (a).
- **3.** Using the included fasteners, connect each gland to one of the metal plates.
- **4.** Slide each plate into a junction box.
- 5. Slide each junction box into the back of the cable cover base, one on each side.



6. Use a 10 mm M8 button head hex screw and an M8 toothed washer to connect each grounding cable (c) to the back of the cable cover base (d).



Install the Cable Cover Base

- 1. Measure and mark a spot on the wall 106 cm from the ground and aligned with the power cables.
- Align the top of the cable cover base with the mark on the wall. Use a spirit level to ensure the base is perfectly level.
- 3. Using the base as a template, mark where to drill holes for the mounting screws.
- 4. Using a 10 mm masonry drill bit, drill the holes.



- 5. Optional: If required at the installation site, gently tap the included wall anchors into the holes.
- Important: If you are installing the charging station within the United Kingdom, complete the steps described on page 7 before continuing.
- 6. Guide the power cables through the holes in the cable cover base, then bend them forward 90°.

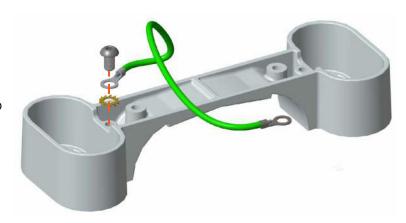
- 7. Use two 58 mm M8 self-tapping Torx screws to secure the base to the wall. Lightly tighten the screws.
- 8. Use a spirit level to ensure that the base is perfectly level on the wall. Torque the screws to 16 Nm.

Prepare the Cable Cover Clamp



Important: If you are installing the charging station within the United Kingdom, you do not have to complete this step. Skip to Mount the CMK Clamp to the Wall on page 9.

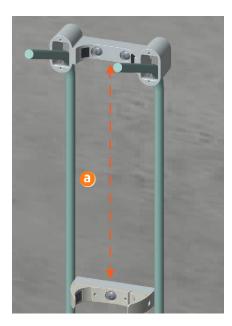
- Using a 5 mm hex driver and a 10 mm M8 button head hex screw with an M8 toothed washer, connect the 406 mm grounding cable to the cable cover clamp. Torque the screw to 16 Nm.
- 2. Put the cable cover clamp carefully to one side to install later in this section.



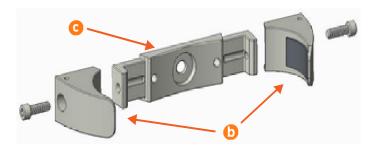
Mount the CMK Clamp to the Wall

The CMK clamp comes in four pieces (shown on page 6):

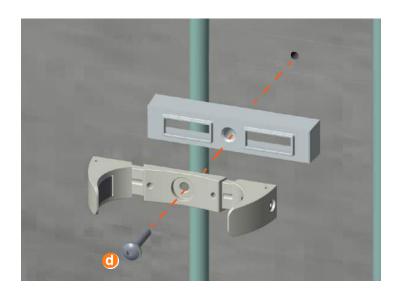
- 1 clamp spacer
- 1 clamp base (attaches to the spacer)
- 2 clamp ends (attach to the base)
- Measure and mark a spot on the wall that is 40 cm from the ground and centered under the cable cover base that you just installed.
 - Once installed, the CMK clamp must be centered under the cable cover base (a).
- 2. Align the top of the clamp spacer with the mark on the wall. Use a spirit level to ensure that the clamp spacer is centered under the power cable cover base.
- **3.** Using the clamp spacer as a template, mark where to drill the hole for the mounting screw.
- 4. Using a 10 mm drill bit, drill the hole.



- **5.** (Optional) If required at the installation site, gently tap a wall anchor into the hole.
- 6. Using a 6 mm hex driver and two 25 mm M8 socket head cap screws, attach the clamp ends (b) to the sides of the clamp base (c). Hand-tighten the screws. **Do not fully tighten the screws yet.**



7. Orient the spacer so that the hole on one long side faces down. Fit the clamp base and spacer together (d) and align them with the drilled hole.



(!)

Important: Ensure the hole on the spacer is facing down, not up, or you cannot install the grounding wire in a later step.

- 8. Use a 58 mm M8 pan head Torx screw to secure the clamp base and spacer to the wall. Hand-tighten the screw.
- 9. Use a spirit level to ensure that the components are perfectly level on the wall. Torque the screw to 16 Nm.

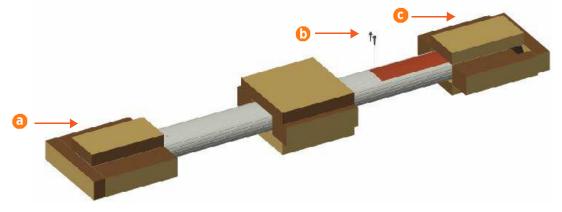
Prepare the CMK

Locate Box #4, the Cable Management Kit (CMK).



Important: When unpacking the box, put the CMK onto a padded surface.

1. Remove the CMK from the box and place it carefully on a padded ground covering with its base (a) close to the installation site.



Note: Do not unwrap the ropes.

2. Remove and discard the two 10 mm drive shipping screws (b) from the front face of the CMK.



Important: Do not tilt or carry the assembly with the top end (c) lower than the bottom end. When you remove the shipping screws, the counterweights are free to move in either direction.

- 3. Remove the packaging.
- **4.** Carefully roll the CMK onto its front side with the sign face down.
- 5. Using a 5 mm hex driver, a 10 mm M8 button head cap screw, and an M8 toothed washer, connect the 127 mm grounding cable to the CMK. Torque the screw to 16 Nm.



Install the CMK

Note: Two people are required for this step.

1. Carefully lift the CMK to a vertical position, top up, then place it on the ground so that it fits into the power cable cover base and CMK clamp.



Important: Continue to support the CMK until it is fully secured in place.

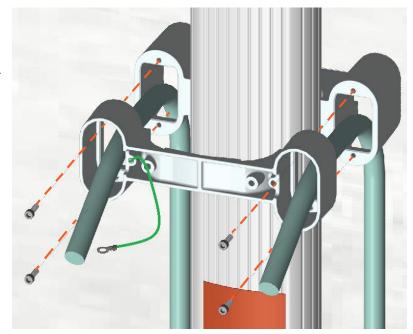


2. Tighten the screws on both CMK clamp ends. Alternate tightening the left side and the right side of the CMK clamp until it fits evenly and securely around the CMK.

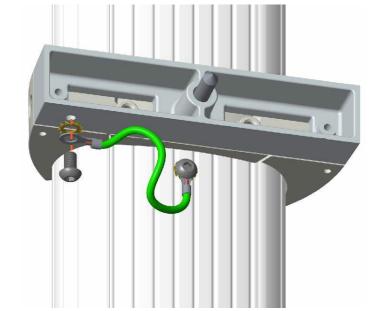


- **3.** Place the cable cover clamp over the CMK, aligning it to the cable cover base.
- 4. Use a 6 mm hex driver and four 20 mm M6 button head cap screws to secure it in place. Torque the screws to 6.5 Nm.

It is now safe to let go of the CMK.

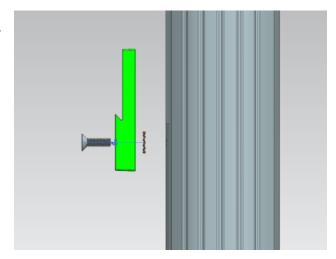


- 5. Using a 5 mm hex driver, a 10 mm M8 button head cap screw, and an M8 toothed washer, connect the loose end of the grounding cable from the CMK to the hole on the bottom of the CMK clamp spacer, as shown below. Torque the screw to 16 Nm.
- 6. Use a spirit level to ensure that the CMK is completely perpendicular. Check both the side and the front of the CMK.
- Make any required adjustments before continuing to the next step.

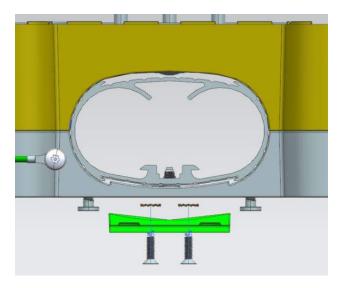


Install the Support Bracket Hanger

 Using two 14 mm M8 flathead Torx screws and two M8 star washers, secure the hanger onto the CMK using the predrilled holes. Torque the screws to 16 Nm.



 Place the remaining components from Box #2, the Wall Mount Kit, in a safe place for later use.



Install the Station Mounting **3**Bracket

Check the Box Contents

Before unpacking any shipping boxes, place a floor mat, padded ground covering, or similar material in an area close to the installation site. When unpacking shipping boxes, place all components on the ground covering and ensure that all components are present and undamaged. Unpack shipping boxes only when needed.



Important: When unpacking the box, **do not** put any components or fasteners directly on the ground.

Open **Box #3, the Station Mount Kit** and ensure you have all the components listed below (graphics are not to scale). You also need the remaining components from **Box #2, the Wall Mount Kit**.

·	
Support bracket (1)	
Fascia (1)	Control of the second s
Trim wall (1)	
Installation kit (1)	Includes: • 16 mm M6 flathead hex screws (2) • 14 mm M8 socket head hex screws (4) • M8 lock nuts (4)

Build the Station Mounting Bracket

- 1. Find the pedestal hole plate and the remaining grounding cable from **Box #2, the Wall Mount Kit**.
- 2. Using a 5 mm hex driver, a 10 mm M8 button head cap screw, and an M8 toothed washer, connect the 635 mm grounding cable to the pedestal hole plate. Torque the screw to 16 Nm.

Place the pedestal hole plate aside to install in a later step.

3. Fit the support bracket into the fascia.

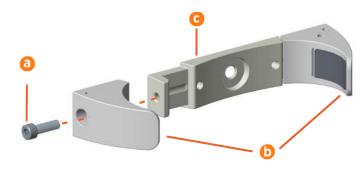
- 4. Find the support bracket cleat in **Box #2**. Note that the cleat has one angled edge (a).
- 5. Place the cleat on the reverse side of the fascia (b), angled edge towards the base of the support bracket (c). Position the bare metal side of the cleat away from the bracket.

Note: Ensure that the cleat is aligned properly.

6. Use a 5 mm hex driver and two
14 mm M8 flat head socket
screws to secure the support bracket, fascia, and cleat together. Torque the screws to 6.5 Nm.

- 7. The second CMK clamp (included in **Box #2**) comes in three pieces (no spacer required):
 - 1 clamp base
 - 2 clamp ends

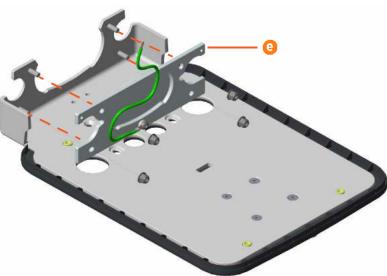
Using a 6 mm hex driver and two 25 mm M8 socket head cap screws (a), attach the clamp ends (b) to the sides of the clamp base (c). Install the two clamp ends with drilled holes on the right side of the grounding plate as you face the back of the plate with the holes facing up (d). Hand-tighten the screws. **Do not fully tighten the screws yet.**



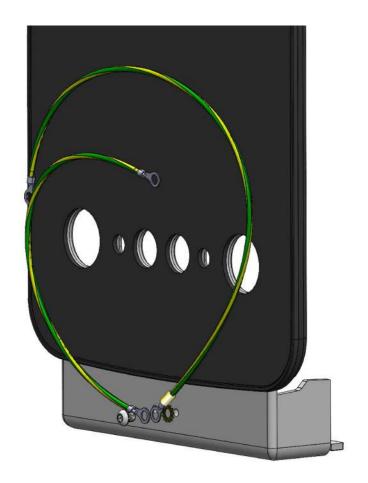
8. Align the CMK clamp on the reverse side of the fascia. Use a 5 mm hex driver and two 20 mm M8 flat head socket screws to secure the clamp base in place.



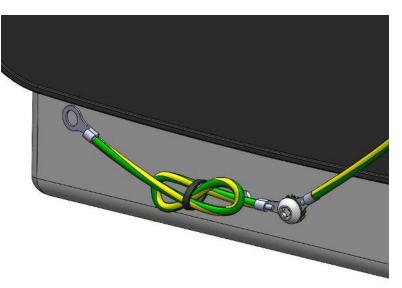
9. Position the pedestal hole plate (e) over the four bolts at the bottom of the support bracket, then use four M8 locknuts to secure it in place. Torque the bolts to 16 Nm.



10. Using a 5 mm hex driver, a 10 mm M8 screw, and a star washer, connect one end of the 635 mm grounding cable and one end of the 241 mm grounding cable to the left M8 hole in the station mounting bracket.



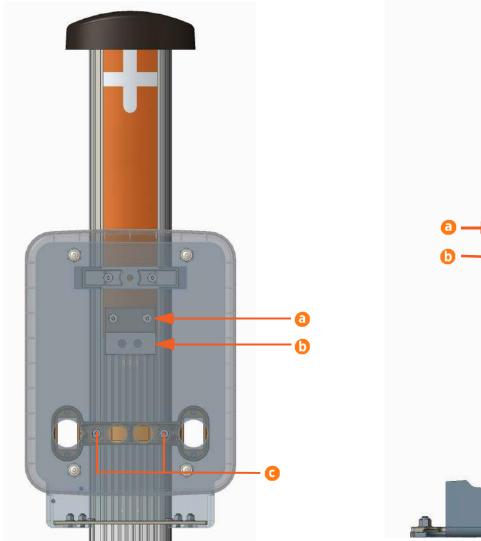
11. Use a cable tie to make sure the excess length of 241 cable is tied in loops leaving approximately 25 mm free.

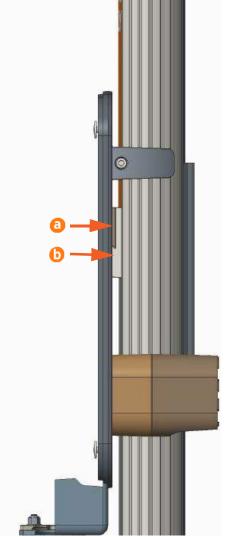


Install the Station Mounting Bracket

Note: This task is easier to complete with two people.

- 1. Using wire strippers, strip the outer jacket of the power cables back to the front edge of the power cable bracket.
- 2. Wrap electrical tape around the end of each cable, to make it easier to feed the cables into the station mounting plate.
- **3.** Hold the station mounting bracket in front of the CMK and feed the power cables through the two large openings in the bracket.
- **4.** Guide the station mounting bracket so that the cleat (a) on the back seats securely onto the hanger on the CMK (b).

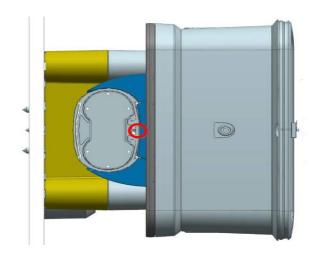




5. Using a 6 mm hex driver and two 16 mm M8 socket head cap screws (c), secure the station mounting bracket to the CMK.

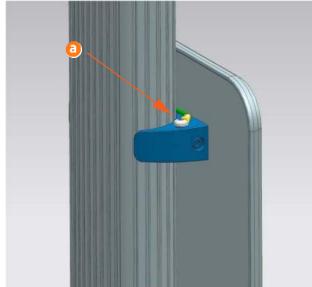
6. Route the 635 mm grounding cable through the gap between the CMK column and the CMK Clamp end.

Note: Make sure the lower portion of the CMK column is secure. This ensures there is a gap between the back of the CMK column and the CMK Clamp for the grounding cable.

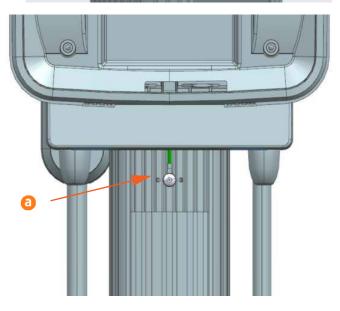


7. Using a 5 mm hex driver, a 10 mm M8 screw, and a star washer, connect the 635 mm grounding cable to the CMK Clamp end (a).

Note: Use a cable tie to make sure that any excess length of the cable is tied up in loops so that the cable is taut and not visible when looking at the front of the station.



- 8. Using a 5 mm hex driver, a 10 mm M8 screw, and a star washer, connect the loose end of the 241 mm grounding cable to the front of the CMK column (a). Torque the screw to 16 Nm.
- 9. Use the cable tie provided to make sure that any excess length of the cable is tied up in loops so that the cable is taut and not visible when looking at the front of the station.
- 10. Tighten the screws on both CMK clamp ends. Alternate tightening the left side and the right side of the CMK clamp until it fits evenly and securely around the CMK.



Mount the Charging Station



WARNING: Always de-energize all breakers associated with the charging station before you begin installation. To prevent risk of severe injury through electric shock, ensure that the Miniature Circuit Breaker (MCB) and Residual Current Devices (RCD) cannot be reactivated during installation.

Check the Box Contents



Important: When unpacking the box, **do not** put components or fasteners directly on the ground.

Note: The front of the charging station is protected by plastic film. Do not remove it until the installation is complete.

Find Box #1, the CP4300 Charging Station, and ensure you have all components (graphics are not to scale).

CP4300 Charging Station (1) (Model may be single port or dual port) Grounding plate (1)

Box of rubber grommets (1)	Contains 1 large and 2 small rubber grommets		
Installation kit (1)	Contains: Station key (1) Plastic wall anchor (4) Station washer (4) Activation sticker Phase rotation labels		
Power management jumper (1) L1 to L1 (Dual port stations only)	~~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		

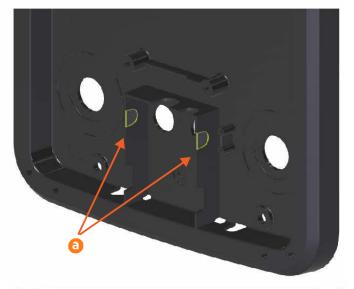
Install the Grounding Plate

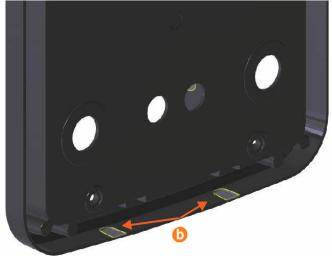
- Locate the grounding plate. Using a utility knife, drill, or Dremel tool, carve out two notches in the front of the grounding plate (a) and two in the back (b).
- 2. Locate the box of rubber grommets.

 Use an Exacto knife to cut a slit in one of the smaller grommets. The cut only needs to be large enough to slide the end of a grounding cable with ring lug through the slit.

Note: Cut the slit in the smaller grommet before installing the grommets in the station.

3. Fit the grommets into the three holes (one larger, two smaller) in the back of the charging station.





- **4.** Align the grounding plate (a) with the station mounting bracket.
- **5.** Feed the power cables (b) through the holes in the back of the grounding plate.
- 6. Feed the loose ends of the grounding cables from the cable cover clamp (c) and the pedestal hole plate (d) through the grounding plate.
- **7.** Fit the grounding plate onto the station mounting bracket.
- 8. Using four 14 mm M6 socket head screws, secure the grounding plate to the station mounting bracket. Torque the screws to 16.5 Nm.
- 9. Using a 5 mm hex driver, a 10 mm M8 button head hex screw, and an M8 toothed washer, connect the loose end of the grounding cable from the cable cover to the station mounting bracket. Torque the screw to 16 Nm.



Mount the Charging Station

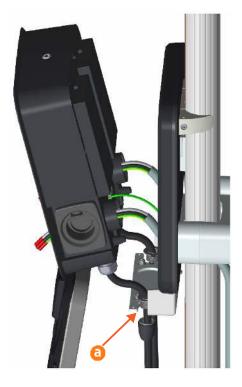
Note: The steps in this procedure require two people.

- 1. Gently lay the charging station face up on the padded ground covering.
- 2. Use the station key to unlock and open the door.
- **3.** Use a screwdriver to remove the screw holding the component cover in place.
- 4. Remove the component cover and put it in a safe place for later reuse.
- **5.** Gently lay the charging station face down on the padded ground covering, with the top of the station facing away from the wall.
- Lift the station and slowly begin to tilt it towards the upright position, carefully allowing the door to swing open.
- Feed the power cables into the holes on the back of the station.
- **8.** Guide the loose end of the grounding cable through the slit in the right-hand grommet.



- **9.** As the power cables are fed through, slowly tilt the charging station until it is fully upright.
- **10.** Holding the charging station close to the grounding plate, move both charging cables into the holes in the station mounting bracket (a).
- 11. When the charging cables are in place, seat the charging station in the grounding plate.
- <u>!</u>

Important: Continue to support the charging station until it is secured in place with mounting screws.



- 12. Using a 6 mm hex driver and four 25 mm M6 screws, secure the charging station in place. Torque the screws to 6.5 Nm.
- **13.** Connect the loose end of the grounding wire to PE between the two terminal blocks inside the charging station.



Wire the Charging Station 5

Review the wiring diagram appropriate to the station configuration being installed and complete the recommended configuration.

Wiring Options

In three-phase installations, consider the total quantity of charging stations to be installed at the site. To better balance load across all three phases across the site, ChargePoint provides labels to rotate incoming power across the terminal block.

Note: All stations ship with the standard power jumper. Dual port stations also ship with an L1 to L1 power jumper. The standard power jumper is preinstalled on the right RCD and used for standard single port and dual port installations. The L1 to L1 jumper can be swapped in for circuit sharing installations. An L1 to L2 power jumper is also available, sold separately.

For each charging station, follow the directions according to the configuration options shown:

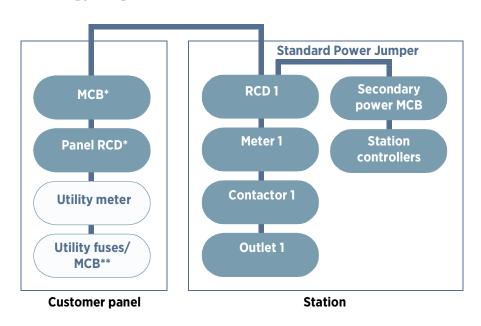
- **Single port charging station**, review the Standard Wiring, Single Port Station. Then proceed to Complete a Standard Wiring Configuration.
- **Dual Port stations with two input power cables**, review the Standard Wiring, Dual Port Station. Then proceed to Complete a Standard Wiring Configuration.
- Dual port stations sharing one power cable, review the Circuit-Sharing Wiring (Dual Port Station Only). Then proceed to Complete a Circuit-Sharing Configuration (Dual Port Stations Only). Install the ChargePoint Power Management Jumper to power both ports from a single circuit. The L1 to L1 jumper is included. For phase shifting between charge ports in the station, use the L1 to L2 jumper, sold separately.



Wiring Diagrams

Output	Input Circuits	Panel Breaker Required	Breakers Required
Single Port Stations			
22 kW	1	3-phase 32 A x 1	1
11 kW	1	3-phase 16 A x 1	1
7.4 kW	1	1-phase 32 A x 1	1
3.7 kW	1	1-phase 16 A x 1	1
Dual Port Stations			
22 kW	2	3-phase 32 A x 2	2
11 kW	2	3-phase 16 A x 2	2
7.4 kW	2	1-phase 32 A x 2	2
3.7 kW	2	1-phase 16 A x 2	2

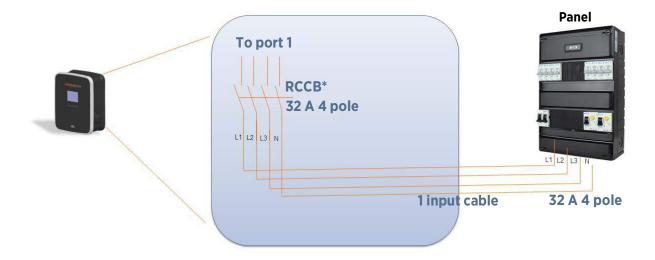
Standard Wiring, Single Port Station



^{*} Panel RCD optional. Install according to all applicable codes and regulations, as needed.

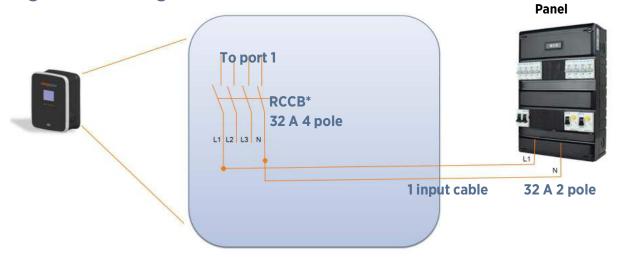
^{**}MCB: Miniature Circuit Breaker

Three Phase Wiring



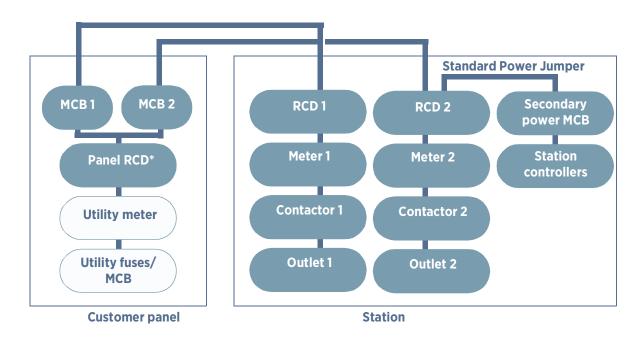
*RCCB: Residual-Current Circuit Breaker with Overcurrent Protection

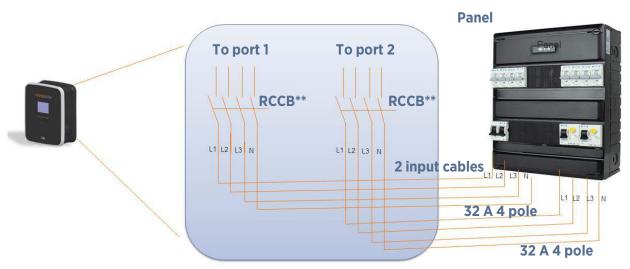
Single Phase Wiring



*RCCB: Residual-Current Circuit Breaker with Overcurrent Protection

Standard Wiring, Dual Port Station





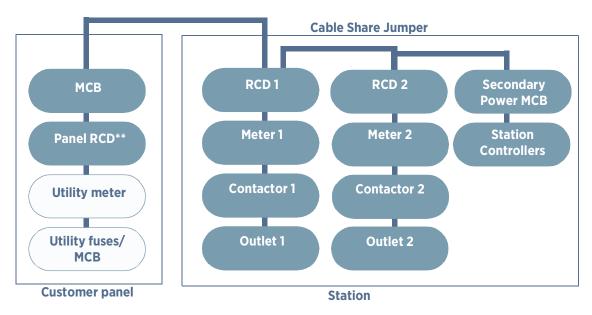
^{*} Panel RCD optional. Install according to all applicable codes and regulations, as needed.

^{**}RCCB: Residual-Current Circuit Breaker with Overcurrent Protection

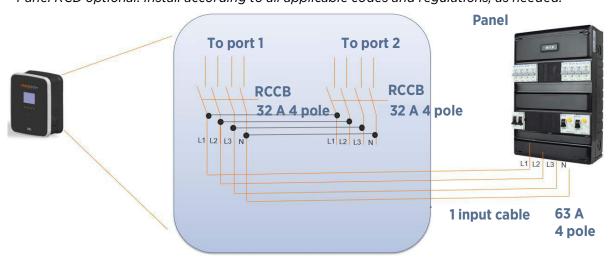
Circuit-Sharing Wiring (Dual Port Station Only)

To power a dual port station using a single power cable, use the Cable Share Jumper. The L1 to L1 Cable Share Jumper is included with the CP4000. The L1 to L2 Cable Share Jumper is an alternative and is sold separately. Circuit sharing is available only for dual port station configurations.

Output per Port	Input Circuits	Panel Breaker Required	Breakers Required
22 kW	1	3-phase 63 A x 1	1
11 kW	1	3-phase 32 A x 1	1
7.4 kW	1	1-phase 63 A x 1	1
3.7 kW	1	1-phase 32 A x 1	1



^{*} Panel RCD optional. Install according to all applicable codes and regulations, as needed.



**RCCB: Residual-Current Circuit Breaker with Overcurrent Protection

Meeting Power Supply Requirements

The charging station is designed for connection to and operation on rated voltages of 230 V (phase-neutral) or 400 V (phase-phase) at 50 Hz.

- Comply to all regulatory requirements for low voltage installations according to IEC 60364-1 and IEC 60364-5-52.
- Always connect the device to the protective earth conductor of the power source.
- Reserve a power source exclusively for the charging station and ensure that it complies with HD 60364-7-722:2012.
- Protect the charging station branch circuit in the panel (mains) with a suitable miniature circuit breaker (MCB).

Consult your electricity grid operator regarding requirements for local regulations. Depending on the desired rated power, the installation of the charging station may require registration with and/or approval by your electricity grid operator.

Grounding Requirements

The CP4000 must be connected to a grounded, metal, permanent wiring system. An equipment-grounding conductor must be run with circuit conductors and connected to an equipment-grounding terminal on the CP4000.

A grounding conductor that complies with applicable codes must be grounded to earth at the service equipment or, when supplied by a separate system, at the supply transformer, or may be grounded to an earth electrode. Ensure the grounding conductor complies with all applicable codes.

Connect the Wiring



WARNING: In areas with frequent thunderstorms, add surge protection at the service panel for all circuits.

Use new circuit breakers only. Used breakers can damage equipment and introduce the potential for an electrical fire.

Ensure all power and ground connections, especially those at the breaker and bus bar, are clean and tight. Remove all oxide from all conductors and terminals before connecting wiring.

Complete a Standard Wiring Configuration

- 1. Remove the electrical tape from the ends of the power cables. If necessary, trim the power cables back, leaving enough cable to create a service loop of about 300 mm.
- 2. Strip the wires 13 mm. If the power cables have flexible wires, fit the stripped ends with wire end ferrules.

- 3. Use a Phillips screwdriver to loosen the lower screws in the terminal blocks.
- 4. Insert the Protective Earth (PE) wire into the PE terminal.
- 5. Torque the lower screw on the PE terminal to no more than 3 Nm.

Connection Coding	Current-Carrying Conductor
L1	Phase 1
L2	Phase 2
L3	Phase 3
N	Neutral
PE	Protective earth

6. Connect the L1, L2, L3, and N wires to the right-hand terminal block.

Note: Consider which one of the three possible orientations for L1, L2, and L3 you want to use for this particular station. If the site has more than one station, ensure that the stations rotate through the three possible wiring orders to distribute the load evenly.

- **7.** Label the terminal block with the correct phase rotation label.
- 8. Torque the lower screws on the terminals to 3 Nm.
 For dual port stations, repeat this step for the second power cable, using the left-hand terminal block.
- 9. Take a picture of the completed terminal block wiring with labels to submit during pinpointing.



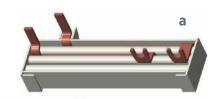
Continue to Close Up the Charging Station.

Complete a Circuit-Sharing Configuration (Dual Port Stations Only)

Note: The L1 to L1 Power Management Jumper is included. For phase shifting, the L1 to L2 jumper can be purchased separately.

To share a single circuit between two ports:

1. Remove the standard power jumper (a) from below the right-hand terminal block. Properly recycle this power jumper, following all local regulations.



- 2. Carefully insert the ChargePoint Power Management Jumper (b) so that it spans both terminal blocks.
- 3. Remove the electrical tape from the ends of the power cables. If necessary, trim the power cables back, leaving enough cable to create a service loop of about 300 mm.
- **4.** Strip the wires 13 mm. If the power cables have flexible wires, fit the stripped ends with wire end ferrules.
- 5. Using a Phillips screwdriver, loosen the lower screws in the terminal blocks.
- 6. Insert the Protective Earth (PE) wire into the PE terminal. Torque the lower screw on the PE terminal to 3 Nm.

Connection Coding	Current-Carrying Conductor
L1	Phase 1
L2	Phase 2
L3	Phase 3
N	Neutral
PE	Protective earth

7. Connect the L1, L2, L3, and N wires to the right-hand terminal block.

Note: Consider which one of the three possible orientations for L1, L2, and L3 you want to use for this particular station. If the site has more than one station, ensure that the stations rotate through the three possible wiring orders to distribute the load evenly.

- 8. Label the terminal block with the correct phase rotation label.
- 9. Torque the lower screws on the terminals to no more than 3 Nm.



10. Take a picture of the completed terminal block wiring with labels to submit during pinpointing.

Continue to Close Up the Charging Station.

Close Up the Charging Station

- 1. Lift the strain relief connectors (a) and tighten them onto the cable glands so that they fit snugly against the station mounting bracket.
- 2. Align the trim wall (b) so that it covers the bottom of the charging station and station mounting bracket. Use a T27 Torx driver and two M6 screws to secure the trim wall in place. Torque the screws to 6.5 Nm.
- **3.** Carefully inspect the charging station to prepare it for closing.
 - Ensure all electrical connections are clean and torqued to specification.
 - Ensure all seals are firmly in place and in proper condition.
 - Wipe inside the charging station with a cloth to remove any debris left by the wires.
 - Collect any tools or fasteners inside the charging station.
 - Ensure all cables are laid properly and the power cables are connected correctly to their terminal blocks.
- **4.** Replace the component cover.



- 5. Switch on the upstream breaker.
- 6. For dual port stations, switch on the left RCD (F1).
- 7. Switch on the **right** RCD (F3).
- 8. Switch on the **middle** MCB (F5).
 - The charging station establishes a connection to the power source.
- 9. Close the door, ensuring all wires are clear of the door and the latch clicks shut. Use the included key to lock the door.
- **10. Remove the key and put it in a safe place.** Once the installation is complete, give it to the station owner.
- 11. Remove the protective plastic film from the door of the charging station.
- Important: Keep the label on the plastic film. You need its activation information in a later step.
- Important: Do not leave the plastic film on the charging station for more than one day. Exposure to direct sun causes the plastic film to mar the front of the charging station.

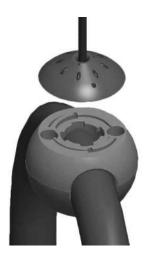
Complete the Installation 6

Connect the Cable Clamps



Important: Do not unwrap the ropes until they are securely attached to the charging cable.

- 1. Uncoil one charging cable by removing the plastic wrap and gently extending it all the way out, away from the station. Rotate the charging connector as necessary to remove any twists or kinks in the cable.
- 2. Insert the knot bearing at the end of the retractable rope into the cable clamp. Using bent-nose pliers, carefully turn the knot bearing clockwise approximately 1/4 turn. You may need to push down on the knot bearing to turn it.
- **3.** Pull down on the rope and remove the rope from its wrapper. When the rope is unwrapped, it retracts into the top cap of the CMK.
- **4.** Repeat these steps for the other charging cable.
- **5.** Ensure the cables are not kinked at the charging socket and no excessive strain is on the cable or the housing.
- **6.** Check that the charging cable extends and retracts fully and smoothly.
- **7.** Remove the plastic wrapping from the charging connectors and insert them into the holsters.



Troubleshooting

If the charging cable does not extend or retract fully and smoothly, it is likely that its rope has come off the pulley and you must re-position it.

1. Using a driver with 3 mm hex bit, loosen the set screws on each side of the CMK below the top cap.

2. Each rope is attached to a weight that sits on a shelf. Pull the weight shelf up by pulling the rope located in the middle of the top cap.



3. Rotate the top cap so the weight controlling the obstructed rope is facing towards you.



- 4. Inspect the rope to ensure it is properly aligned onto the pulley.
- 5. Carefully lower the weight back into the retractor.
- **6.** Rotate the top cap back into position and re-tighten the set screws to about 1.1 Nm.



Run the Installation Wizard

When you power on the charging station, the on-screen Installation Wizard runs. The wizard verifies operation of the station and performs basic setup tasks.



Important: Pinpointing the charging station is a key part of completing the installation, as it helps drivers locate the station quickly. Ensure you pinpoint the station when prompted by the Installation Wizard.

Before running the Installation Wizard, ensure you have:

- The charging station's activation label (located on the plastic film protecting the front of the charging station; a spare label is included in the shipping box)
- Smartphone or laptop with a QR-code scanner, camera, and Internet connection
- Your ChargePoint Certified Installer user name and password

The Installation Wizard includes these tasks:

Set a language for the Installation Wizard

Note: This does not permanently affect the station's display language. Choose the language most convenient for you.

- Configure power
- Check for faults
- Test the locking holsters
- Test network connectivity
- Complete the post-installation checklist

Troubleshooting

If the station does not power on and the Installation Wizard does not start, it is likely that the charging station does not have a power source.

- 1. Check the internal RCD(s).
- 2. If power was interrupted in the domestic supply, check the upstream MCB and switch it back on if required.
- 3. If the problem persists, contact ChargePoint Support: chargepoint.com/support.

Pinpoint the Station

For Smartphones With QR Scanning

- 1. Open a QR Code scanning app.
- Point the camera at the QR code presented by the installation wizard.
 - The app automatically redirects you to the installer pinpointing page,
- **3.** Log into the ChargePoint mobile site from your smartphone with your installer credentials.
 - Upon login, the MAC address and password of the charging station are automatically displayed
- 4. Follow the online instructions.

For Smartphones Without QR Scanning

- 1. Using your smartphone, navigate to <u>m.chargepoint.com</u>.
- 2. Log into the ChargePoint mobile site from your smartphone with vour installer credentials.
- **3.** Enter the MAC address and activation password presented by the installation wizard, and tap **Next**.
- 4. Follow the online instructions.



Start a Test Charging Session

- 1. Use your ChargePoint RFID card to start and stop a charging session.
- 2. Make sure that each plug holster unlocks. Plugging into a real vehicle is not required.

If the station operates correctly and no errors exist, the installation is complete. If the station does not power on or fails to attempt a charging session, de-energize the circuit and confirm that the wiring has been properly connected. If the station has been properly wired but does not operate correctly, you must resolve the error before leaving the site. Contact chargepoint.com/support for assistance.

Warranty Information and Disclaimer

The Warranty you received with your Charging Station is subject to certain exceptions and exclusions. For example, your use of, or modification to, the ChargePoint® Charging Station in a manner in which the ChargePoint® Charging Station is not intended to be used or modified will void the limited warranty. You should review your warranty and become familiar with the terms thereof. Other than any such limited warranty, the ChargePoint products are provided "AS IS," and ChargePoint, Inc. and its distributors expressly disclaim all implied warranties, including any warranty of design, merchantability, fitness for a particular purposes and non-infringement, to the maximum extent permitted by law.

Limitation of Liability

CHARGEPOINT IS NOT LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION LOST PROFITS, LOST BUSINESS, LOST DATA, LOSS OF USE, OR COST OF COVER INCURRED BY YOU ARISING OUT OF OR RELATED TO YOUR PURCHASE OR USE OF, OR INABILITY TO USE, THE CHARGING STATION, UNDER ANY THEORY OF LIABILITY, WHETHER IN AN ACTION IN CONTRACT, STRICT LIABILITY, TORT (INCLUDING NEGLIGENCE) OR OTHER LEGAL OR EQUITABLE THEORY, EVEN IF CHARGEPOINT KNEW OR SHOULD HAVE KNOWN OF THE POSSIBILITY OF SUCH DAMAGES. IN ANY EVENT, THE CUMULATIVE LIABILITY OF CHARGEPOINT FOR ALL CLAIMS WHATSOEVER RELATED TO THE CHARGING STATION WILL NOT EXCEED THE PRICE YOU PAID FOR THE CHARGING STATION. THE LIMITATIONS SET FORTH HEREIN ARE INTENDED TO LIMIT THE LIABILITY OF CHARGEPOINT AND SHALL APPLY NOTWITHSTANDING ANY FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY.

Declaration of Conformity

Category/Directive	Standard	Scope
General Safety Requirements Directive 2001/95/EC Low Voltage Directive 2014/35/EU	IEC61851-1, (3 rd ed.) IEC 61851-22 Ed. 2.0 IEC61439-7 Ed. 1.0; 2014-02	Electric Vehicle conductive charging systems, General Requirements Low-voltage switchgear and controlgear assemblies: electric vehicle charging stations
Electromagnetic Compatibility (EMC) Directive 2014/30/EU	EN 301 489-1 EN 301 489-3 EN 301 489-52 IEC 61000-3-X IEC 61000-4-X IEC 61000-6-X	EMC for standard Radio and service EMC for Short range radio, EMC for Cellular device, EMC for conductive electric vehicle charging station
Radio Equipment Directive (RED) 2014/53/EU	EN 300 330 v2.1.1 EN 301 893 v2.0.7 EN 300 328 v2.1.1 EN 301 511 v12.1.10 EN 301 908-1 v11.1.1	RF testing for WiFi and BT, RF testing for RFID, RF testing for Cell modem
RoHS Directive 2011/65/EU	EN 50581:2012	Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

See test report 2230436KAU-001a and 2230436KAU-040a See test report 230436KAU-004 Draft



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