



AmpCharge EV Charger 7kW Installation Manual Australia

This document is used for the installation of
AmpCharge EV Charger 7kW models.

Please note:

A licensed electrician is required to install this device and register it on <https://evos.app/login> to complete installation.

If you have any questions, please call **13 14 04**
9am to 6pm, Monday to Friday Sydney Time.

AmpCharge EV Charger 7kW - Installation Manual Australia

Safety Warning	3
Installation Warning	3
Product Specification	4
Communication	4
Compliance	4
Connector	4
Electrical	4
Environmental	4
Logistics	4
Physical	4
Installation Checklist	5
M20 Cable Gland	5
Supply Wiring	6
Installation	7
Tools	7
Installation Location	7
Maximise Wi-Fi Signal Reception:	7
Component Guide	7
Installation Steps	8
Home Owners Guide - Ampcharge EV Charger 7kW	12
Charging a Vehicle	12
Charger Status Information	13
Customer Connecting Wi-Fi Setup	14



Warnings

Safety Warning

- Upstream protection must be installed for safe operation.
- AmpCharge EV Charger 7kW installation must be performed by a licensed electrician.
- The AmpCharge EV Charger 7kW is designed to only be connected to a dedicated AC supply.
- The AmpCharge EV Charger 7kW requires only Type A RCD + MCB upstream protection.
- The use of adapters or conversion adapters is not permitted with AmpCharge EV Charger 7kW.
- The use of cord extensions is not permitted with AmpCharge EV Charger 7kW.
- AmpCharge EV Charger 7kW must be installed according to local regulations (AS/NZS 3000:2018 Electrical Installations (Australian Wiring Rules)).
- Upstream power must be isolated before insertion or removal of the charging cable from the charging unit (only relevant if cable is being swapped out of unit).
- Service / replacement must be performed by a licensed electrician.

Installation Warning

- The AmpCharge EV Charger 7kW must be installed by a licensed electrician.
- Please ensure there are no other safety concerns in and around the area of work prior to commencing installation.



Product Specification

Communication	
Charging Mode	3
Protocol	OCPP 1.6j
Wireless	Wi-Fi: 2.4GHz IEEE 802.11.b/g/n Bluetooth: 4.1
Compliance	
Certification	CE Certified, AS/NZS 3820:2009, AS/NZ 4417.2:2012
Protection Class	I
Standards	IEC 61851-1, IEC 61851-21-2 EU RoHS Directive Compliant
Connector	
Charging Cable length	5m
Charging Connector Type	Type 2 (IEC 62196 Type 2)
Electrical	
Charging Power	7.4kW (1P max)
Connection Method	Permanently connected
Ground	PE Cable
Input power supply characteristics	EV supply equipment connected to AC supply network
Input voltage (L-N)	110 to 230 V AC
Maximum Input Current	32 Amps
Nominal AC Frequency	50 Hz / 60 Hz
Output power supply characteristics	AC EV supply equipment
Protection	6mA DC RCD - Only Type A RCD + MCB upstream protection required
Environmental	
Access Condition	Unrestricted Access
Altitude	Up to 2000M
Impact Protection	IK08
Ingress Protection	IP65
Operating temperature	-30 °C to 50 °C
Relative humidity	Max. 95% non-condensing
Logistics	
Storage temperature	From -40°C to 85°C
Packing weight	3.3kg
Packing Dimensions (L x W x H)	380x380x100mm
Physical	
Colour	- White/Blue fascia - Black connector and enclosure
Dimensions (W circular x H)	320mm x 83mm
HMI	LED
Mounting Height	Minimum 900mm from lowest edge to floor level
Mounting Type	Wall mount
Weight (including cable)	3.3kg



Installation Preparation

- Ensure that the charging cable is positioned so it will not be stepped or tripped on, driven over or subjected to damage or stress.
- Be careful not to damage the circuit boards or components during installation.
- Use a cable sheath or protective conduit to cover the supply cables. The colour black is recommended.

Installation Checklist

INSTALLATION WARNING: This must be completed by a licensed electrician.

Please use this checklist to ensure the charging unit is installed safely.

Item	Yes	Comment
Charging unit and charging cable are not damaged		
Charging unit mounted position is easy to access		
Charging unit mounted position is protected from vehicle damage		
Charging unit's lower edge above 900mm above ground level		
Upstream type A RCD installed		
Upstream C curve MCB installed		
Charging unit base is mounted securely to surface		
Circuit amperage limit has been set		

In the Box

AmpCharge EV Charger 7kW charging unit with attached type 2 charging cable, installation template, adoption key and M20 cable gland. Note: Input power cable is not included and will be provided by the installing licensed electrician.

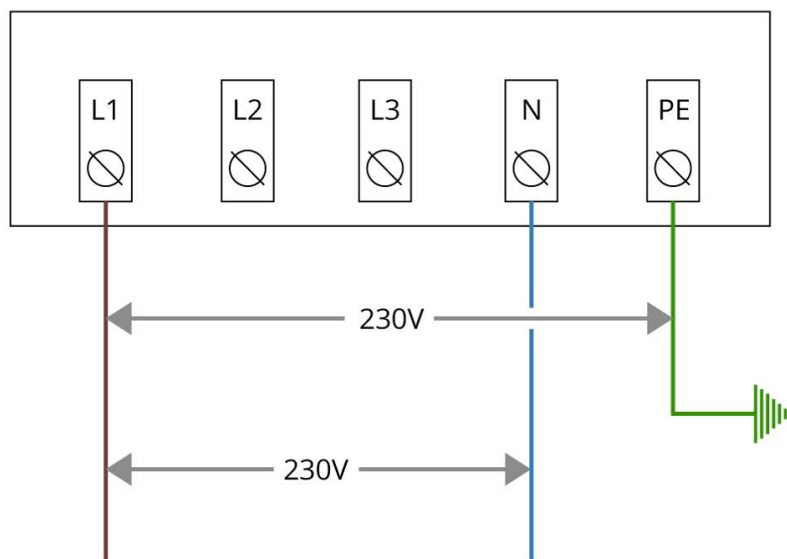


IP 65 – Ingress protection

Ingress protection for the AmpCharge EV Charger 7kW must be maintained on installation of the input power cable. Use the correct cable gland for the size of supply cable, hole size is M20. Either use the cable gland supplied or an equivalent sized conduit plain-to-screwed adaptor with lock ring.



Supply Wiring



1 Phase Installation

Only one phase may be connected to L1 designation on input connector.

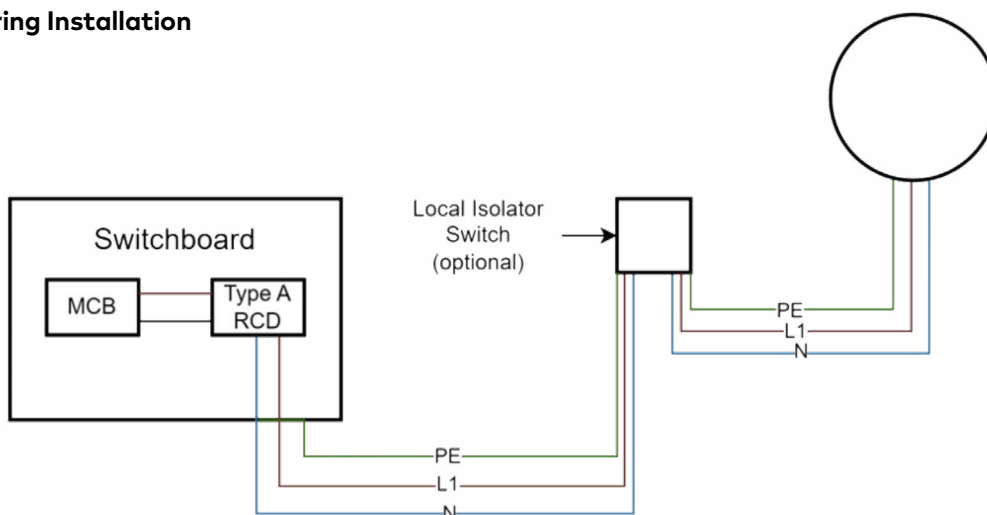
Neutral (N) and Protective Earth (PE) must be connected to designation on input connector.

The phase voltage must measure ~230V to neutral.

⚠ L2 or L3 designation on input connector cannot be used for AmpCharge EV Charger 7kW installation


Typical Installation example

Typical Wiring Installation



Installation

Tools Required

- 1 x 3mm Post Hex Security Bit 
- 1 x Power Drill
- 1 x M5 Drill Bit
- 1 x Phillips Head Screw Bit
- 1 x ¼" Drive Ratchet
- 1 x 90mm Extension Bit
- 1 x Standard Electrical Test Equipment 1 x Level
- 1 x Mobile Phone or Laptop with Wi-Fi
- 1 x test adaptor such as a Metrel A1532, Fluke FEV300, or HT EV-TEST100 is required in order to complete mandatory test requirements of AS/NZS 3000

Installation Location

Before installation, check the preferred installation location has these features

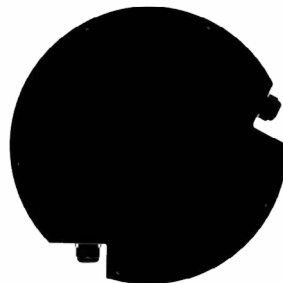
1. Installation surface must be flat to remain compliant with IP65 Rating
2. Easy access by driver.
3. Easy stowage of charging cord (prevent wheel crush damage).
4. Easy to plug in vehicle without straining cable.
5. Charger is protected from vehicle damage.
6. Station lower edge mounting height is minimum 900mm from floor level.
7. No obstructions to left and right of the charger. Please keep in mind cable management (wrap around unit or cable hook required and space needed to ensure ease of use).

Maximise Wi-Fi signal reception:

Avoid installing AmpCharge EV Charger 7kW on opposite sides of concrete, masonry, metal studs, and other physical obstructions that could impede Wi-Fi signal reception.

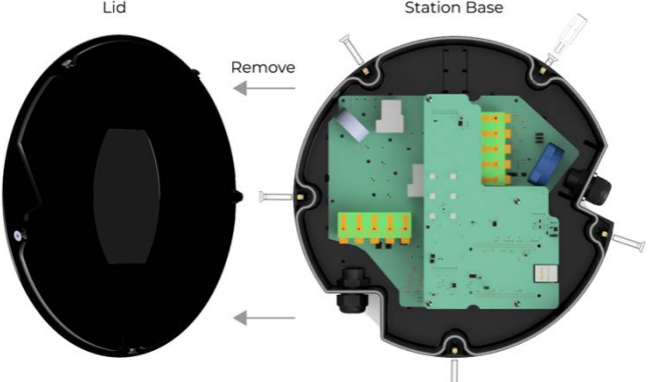
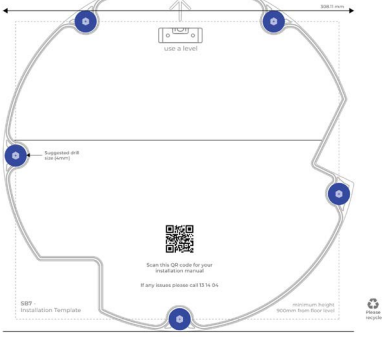
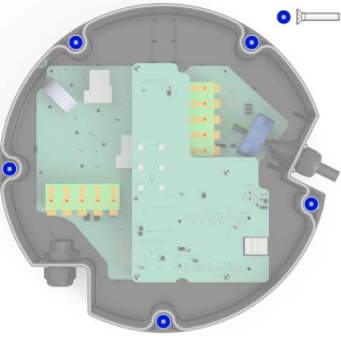
Component Guide

Tethered Charging Cable with Type 2 Connector



Installation Steps

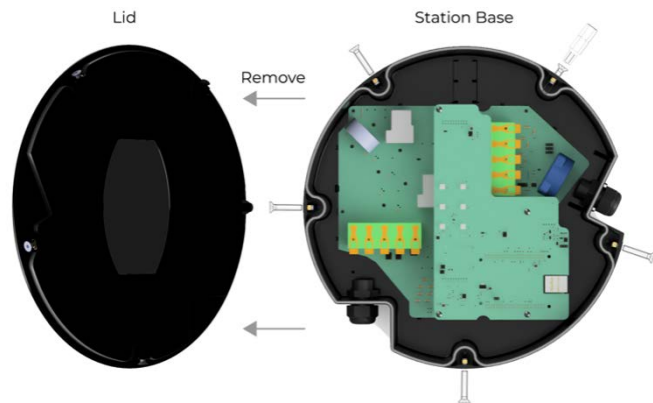
Please check off the items on the checklist located on the last page of this document.

<p>1 Remove lid</p>	<ol style="list-style-type: none">1. Using a 3mm Post Hex Security Bit, remove the charger housing fasteners and place them aside carefully for re-installation.2. Remove the lid.  <ol style="list-style-type: none">3. Place on a flat surface where it will not be marked or damaged.
<p>2 Mark fixing point</p>	<p>Use a level and the provided marking template to drill holes to ensure that the charger is properly aligned.</p> <ul style="list-style-type: none">• Minimum height of the lower edge is 900mm from floor level.  <p>Installation Template</p>
<p>3 Mount station base</p>	<p>Use fasteners to fix the station to mounting surface.</p>  <p>Connect the input power cable in accordance with the Supply Wiring diagram on Page 5.</p>



4 Re-install lid

Use the charger housing fasteners and re-install the lid. Torque rating for lid M5 security screws 0.5Nm.



Ensure the gasket is fitting correctly, and press firmly on the cover at each fastener location to ensure alignment of the fixing screw with the embedded female thread whilst installing each screw.

5 Register and configure (mandatory)

1. Connect to the EVOS Installation Portal by using this URL: <https://evos.app/login>.
2. If you have an installer account, please sign in, otherwise register an account

Sign In

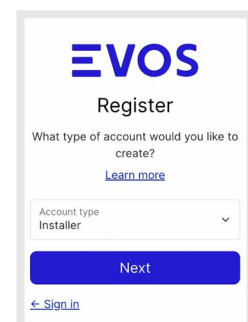
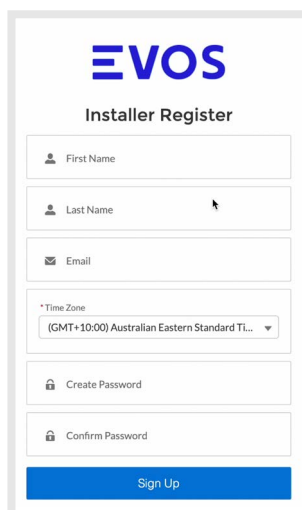
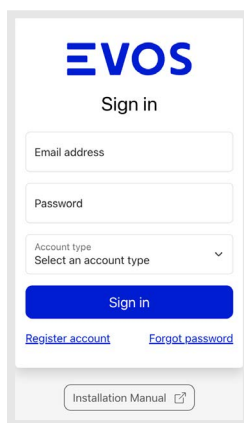
Enter your username and password, then click "Sign In" to access the EVOS App.

Register

Click "Register" to create a login for the EVOS App as an Installer.

Reset Password

Click "Forgot your password?" to reset your password



Electrical Licence

At the install screen, please enter:

1. Your electrical licence number.
2. Your electrical licence type.
3. Your electrical licence expiration date.
4. Which country is this licence is for.
5. Which state or territory this licence is for.

The screenshot shows the 'Commission charger' screen in the EVOS installer. At the top, there are navigation links for 'INSTALLER', 'Commission charger', 'Support', and 'Test Installer'. The main heading is 'Commission charger'. Below it, a sub-heading reads: 'After installation, commission the charger using this form to connect it to the internet and unlock all its capabilities, such as faster charging. To finalise commissioning, enter the details of your electrical licence (required for charger installation) and the charger.' Below this is a table titled 'Electrical licenses' with columns for License Number, License Type, Country, State, Expiry Date, and Delete. The table is currently empty, with a message 'You have no electrical licenses' and a 'Next' button. There are also 'Reload' and 'Add' buttons. At the bottom, there is an 'Installation Manual' link.

Commission Charger

At the install screen, please enter:

1. The charger serial number (located on a barcode on the side of the charging unit).
2. The address where the station is installed.
3. The "Circuit Amperage Limit".

This value represents the maximum continuous amperage the station may draw from the local circuit.

⚠ NOTE. The default circuit amperage limit is set to 32A. This value MUST be verified / adjusted by the installation electrician at the time of installation.

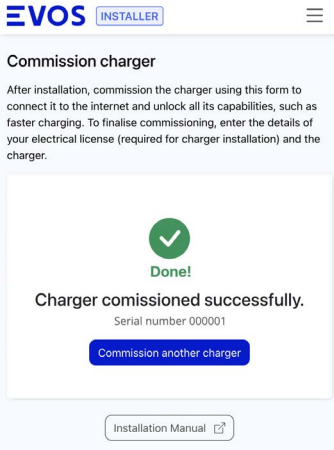
4. Take/upload 3 photos of the installation that show:
The Charger,
Compliance label,

The screenshot shows the 'Commission charger' screen in the EVOS installer. At the top, there are navigation links for 'INSTALLER', 'Commission charger', 'Support', and 'Demo User'. The main heading is 'Commission charger'. Below it, a sub-heading reads: 'After installation, commission the charger using this form to connect it to the internet and unlock all its capabilities, such as faster charging. To finalise commissioning, enter the details of your electrical licence (required for charger installation) and the charger.' Below this is a form titled 'Charger details' with the following fields:

- Charger serial: Enter charger serial... (text input)
- Charger Address: Enter charger address... (text input)
- Circuit amperage limit: Select a circuit amperage limit (dropdown menu)
- Number of Phases: Select the number of phases (dropdown menu)
- Owner's email address: Enter owner email... (text input)
- Photos: Three photo upload sections for 'Charger', 'Barcode / compliance sticker', and 'Residual-current device'. Each section has a 'Choose file' button and a 'No file chosen' message.

At the bottom, there is a 'Back' button and a 'Commission' button. There is also an 'Installation Manual' link.



	<p>The successful install screen will be displayed on configuration. If unsuccessful, please call 13 14 04 (between hours of 9am –6pm, Mon-Fri AEDT)</p> 
<p>6 Electrical Tests</p>	<ol style="list-style-type: none"> 1. Inspect and verify installation meets local requirements before placing into service. 2. AS/NZS 3000 requires a number of mandatory tests to be conducted upon installation. These must be conducted.
<p>7 Power ON</p>	<p>Enable the upstream power.</p>
<p>8 Test Charge</p>	<p>AS/NZS 3000 requires a number of mandatory tests to be conducted upon installation as per the testing equipment required, please ensure you can use a specialised RCD test instrument capable of 6mA smooth DC testing is required for testing of the built-in RDC-DD function. Recommended to use a thermal camera to verify there are no hot spots on the input connector.</p>
<p>9 Remove plastic film</p>	<p>Remove plastic film from the lid.</p>
<p>10 Charge Light</p>	<p>To indicate your job is complete, the charger will be flashing white and cyan to indicate that it is ready to charge and also looking for a Wi-Fi connection.</p> <p>If the charger's Circuit Amperage Limit is set below 32A, it is advisable to connect the charger to Wi-Fi to ensure that this setting is uploaded to the device.</p> <p>The next steps including Wi-Fi setup are for the homeowner to complete.</p> <p>Please note that this charger will charge at full capacity without a Wi-Fi connection.</p>

****Please provide the customer with the Completed Certificate of Compliance for this Installation****

Installation complete.



Home Owners Guide - AmpCharge EV Charger 7kW

(This section is for the Homeowner to follow)







Charging a Vehicle

1. Check AmpCharge EV Charger 7kW status LED is White or White and Cyan (if charger is not connected to internet) – both modes will allow you to charge your vehicle.
2. Follow vehicle preparation instructions for starting a charging session (unlock inlet / open door / remove inlet cover).
3. Remove the protective cap from the charging cable.
4. Check the charging cable for damage or contamination.
5. Insert the Type 2 charging cable into the vehicle inlet. Check the charging cable is fully inserted.
6. The vehicle inlet will lock the charging cable.
7. Start of charging session
8. When the charging session ends, follow the vehicle instructions to unlock the vehicle inlet.
9. Remove the charging from the vehicle inlet.
Never use force to remove the charging cable.
10. Loop the cable once anti-clockwise around the shield and replace the connector protective cap immediately.
11. Check AmpCharge EV Charger 7kW status LED is White (if connected to Wi-Fi) or White and Cyan (if not connected to Wi-Fi)
12. Follow vehicle instructions after charging session (install covers / close door).



Charger Status Information

The LEDs on the AmpCharge EV Charger 7kW convey the state of the station as listed below.

 <p>A circular LED indicator with a white lightning bolt icon and the AMPOL AMPCHARGE logo. The top-right portion of the circle is shaded blue.</p>	 <p>A circular LED indicator with a blue lightning bolt icon and the AMPOL AMPCHARGE logo. The top-right portion of the circle is shaded blue.</p>	 <p>A circular LED indicator with a green lightning bolt icon and the AMPOL AMPCHARGE logo. The top-right portion of the circle is shaded blue.</p>
White – Ready to charge	Blue – Charger is charging	Green – Check car is ready for charge
 <p>A circular LED indicator with a red lightning bolt icon and the AMPOL AMPCHARGE logo. The top-right portion of the circle is shaded blue.</p>	 <p>A circular LED indicator with a cyan lightning bolt icon and the AMPOL AMPCHARGE logo. The top-right portion of the circle is shaded blue.</p>	 <p>A circular LED indicator with a purple lightning bolt icon and the AMPOL AMPCHARGE logo. The top-right portion of the circle is shaded blue.</p>
Red – Charger has a fault Contact 13 14 04	Cyan and White Flashing Looking for internet connection	Purple – downloading update



Customer Connecting Wi-Fi Setup

Connect your charger to your home Wi-Fi network to access the AmpCharge Driver Portal and to allow firmware updates to be installed remotely as needed.

- 1 Connect to your home Wi-Fi using your mobile device:
 - a. Go to your mobile device settings.
 - b. Select Wi-Fi.
 - c. From the network list, select your Charger Serial Number (this will be a six-digit number located on the side of the charger).

Note: It may take a moment to appear on the network list. Repeat this step if your serial number does not appear after a few minutes.

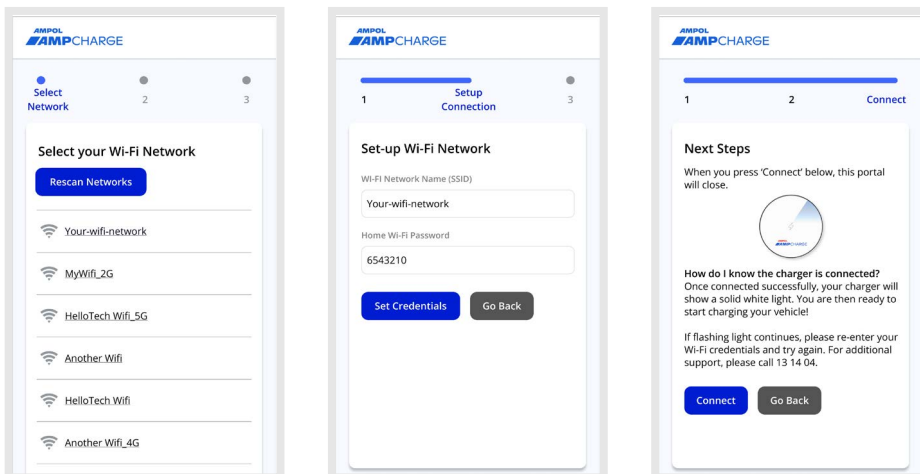
- d. Once selected, follow the below screen shots to connect.

Note: Repeat this step if you find the connection drops off or incorrect credentials were entered or if you need to change Wi-Fi credentials in the future.

- 2 A pop-up will appear with the following screens and steps – please follow the prompts to successfully connect.

Note: Please ensure your network name does not contain spaces or special characters.

Also, if the charger has been powered on for over 10 minutes without the step above being complete, please turn off and on again to restart the Wi-Fi signalling.



Setup Completed – Enjoy using your new AmpCharge Home EV Charger.

Maintenance of your AmpCharge Home EV Charger

- 1 Regular Cleaning: Please do not hose or spray with water. Ensure to clean the charger's connectors and the surrounding area regularly by using a soft, dry cloth or a mild cleaning solution to remove any grime or debris.
- 2 Check for Physical Damage: Inspect the charging cable and device for signs of damage.
- 3 Monitor Charging Speed: Keep an eye on your EV's charging speed.

If you notice any damage, decrease in charging speed or any issues with connections, please turn off at the isolator and contact 13 14 04.

