

EVOS Fleet Home22

Installation Manual - Australia

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Qualifications

- ❗ The EVOS Fleet Home22 is designed to only be connected to a dedicated AC supply.
- ❗ The EVOS Fleet Home22 requires only Type A RCD + MCB upstream protection.
- ❗ The use of adapters or conversion adapters are not permitted with EVOS Fleet Home22.
- ❗ The use of cord extensions are not permitted with EVOS Fleet Home22.
- ❗ EVOS Fleet Home22 initial installation must be performed by a qualified electrician.
- ❗ EVOS Fleet Home22 must be installed according to local regulations (AS3000).
- ❗ Ventilation function is not supported by EVOS Fleet Home22.
- ❗ Upstream power must be isolated before insertion or removal of the QUICKON connector.
- ❗ Upstream power must be isolated before insertion or removal of the charging cable.

Product Specification

Communication

Charging Mode	3
Protocol	OCPP 1.6
Wired	Ethernet 10/100Mbit
Wireless	Wi-Fi: 2.4GHz IEEE 802.11.b/g/n Bluetooth: 4.1 Optional: LTE CAT-M1

Compliance

Certification	CE Certified
Protection Class	I
Standards	IEC 61851-1, IEC 61851-21-2 EU RoHS Directive Compliant

Connector

Cable length	5m (optional 6m)
Charging Connector Type	Type 1 (SAE J1772 / IEC 62196 Type 1) Type 2 (IEC 62196 Type 2)

Electrical

Charging Power	7.4kW (1P max) or 22kW (3P 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 Output Current	32 Amps per phase
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	IK10
Ingress Protection	IP65
Operating temperature	-25 °C to 50 °C
Relative humidity	Maximum 95% non-condensing

Logistics

Storage temperature	From -30°C to 85°C
Packing weight	8.2kg
Packing Dimensions (L x W x H)	530 x 510 x 200mm

Physical

Colour	Black Piano
Dimensions (W circular x H)	380 x 100mm
HMI	LED with dedicated apps
Mounting Height	Minimum 900mm from lowest edge to floor level
Mounting Type	Wall
Weight (excluding cable)	2.9kg

Installation Preparation

Audience

This document is intended for consumption by licenced electricians.

Electrical Safety

Upstream protection must be installed for safe operation.

Built In Protection	6mA DC RCD	
Required Upstream Protection	1 Phase Installation	1. Only type A RCD 1P+N (as per AS3000) Recommended 30mA Type A 2. MCB 1P+N (as per AS3000) Recommended Type C MCB 40A
	3 Phase Installation	1. Only type A RCD 3P+N (as per AS3000) Recommended 30mA Type A 2. MCB 3P+N (as per AS3000) Recommended Type C MCB 40A

Supply Wiring

Where multiple stations are connected to the same three phase supply, it is recommended to rotate L1 input phase to prevent overloading.

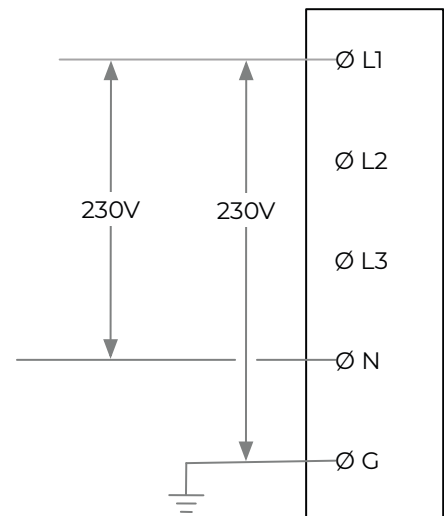
1 Phase Installation

Only one phase (L1, L2 or L3) may be connected to L1 designation on input connector.

Neutral (N) and ground (G) 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 1 phase installation.

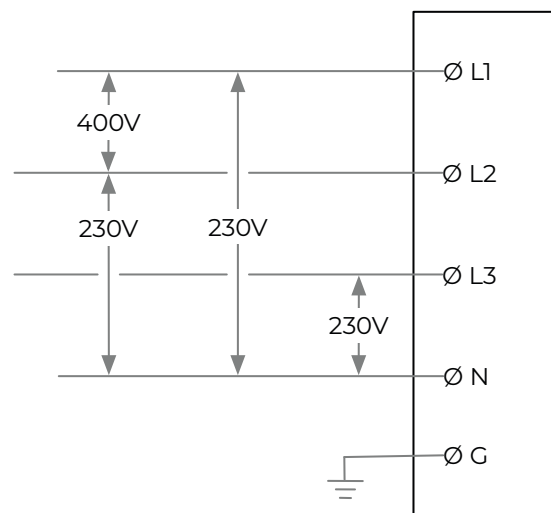


3 Phase Installation

All three phases (L1, L2 and L3), Neutral (N) and Ground (G), must be connected to corresponding designation on the input connector.

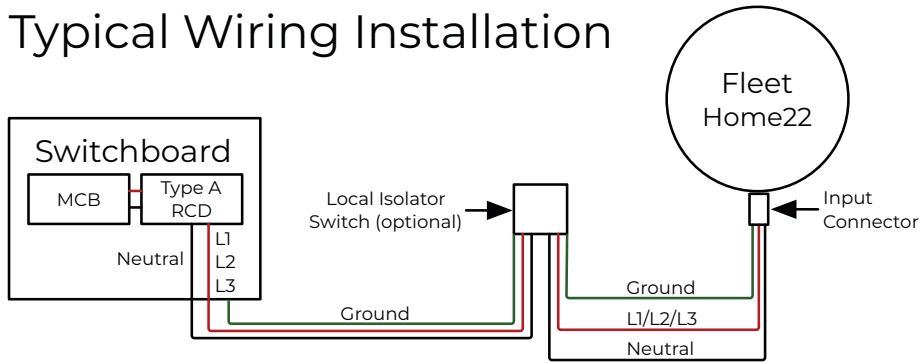
Each phase voltage must measure ~230V to neutral.

- ! Only L1 designation on the input connector is used when charging single phase vehicles



Typical Installation Example

Typical Wiring Installation



Supply Wiring - Input Connector

Phoenix QUICKON Nut

Wire diameter incl. insulation	2.95mm ... 5.00mm
Conductor Size	2.5mm ² ... 6mm ²
AWG Conductor Cross Section	14 ... 10

Typical installation will use a 6mm² 4C+E heavy duty flex cable.

Installation guide can be found on the Phoenix Contact Website
Choose "Downloads", then "Package Slip"

<https://www.phoenixcontact.com/en-au/products/installation-pressure-nut-qpd-n-4pe60-12-20-bk-1410406>

Example Installation Video

<https://www.youtube.com/watch?v=nC7tl9qDsFA>

Installation

Tools

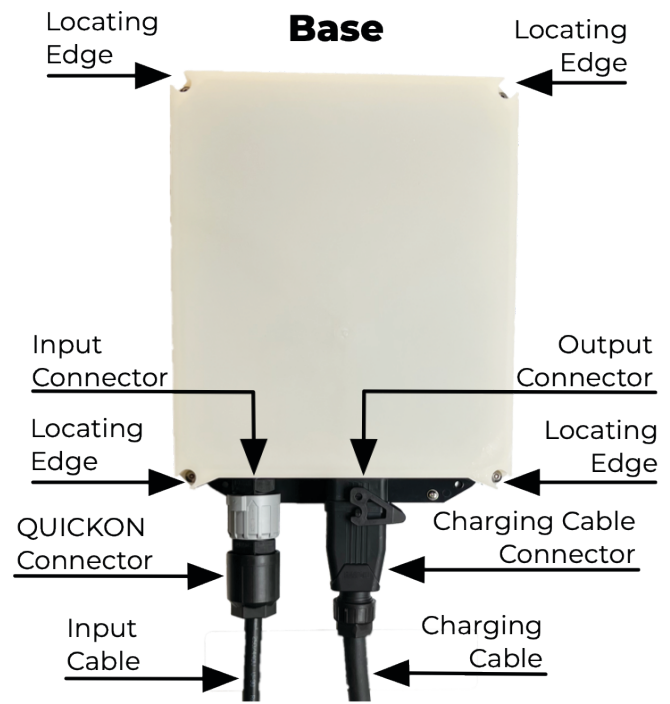
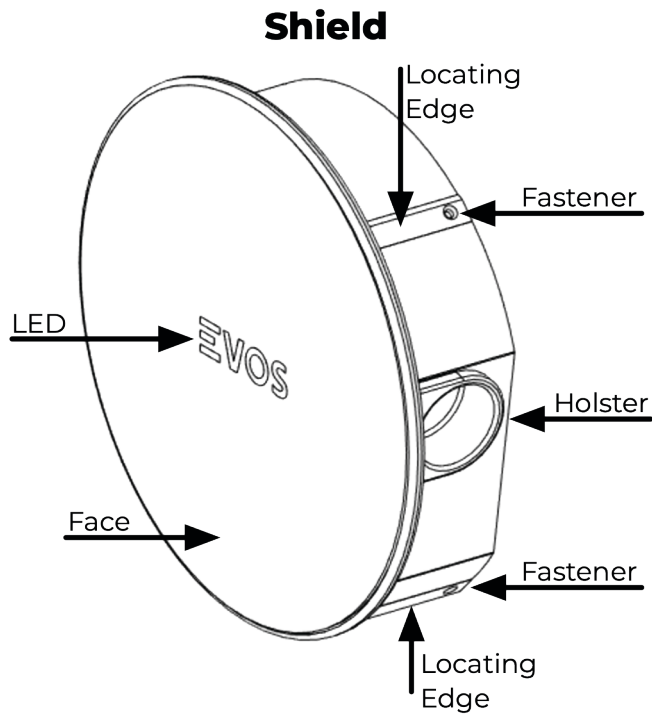
- 1 x Phillips Head Screwdriver
- 1 x 3mm Hexagonal Security Bit
- 1 x ¼" Drive Ratchet

Location

Before installation, check the preferred installation location has these features

1. Easy access by driver
2. Easy stowage of charging cord (prevent wheel crush damage)
3. Easy to plug in vehicle without straining cable
4. Station is protected from vehicle damage
5. Station lower edge mounting height is minimum 900mm from floor level.

Component Guide



Charging Cable with Phoenix Contact Type 1 Plug



Charging Cable with Phoenix Contact Type 2 Plug



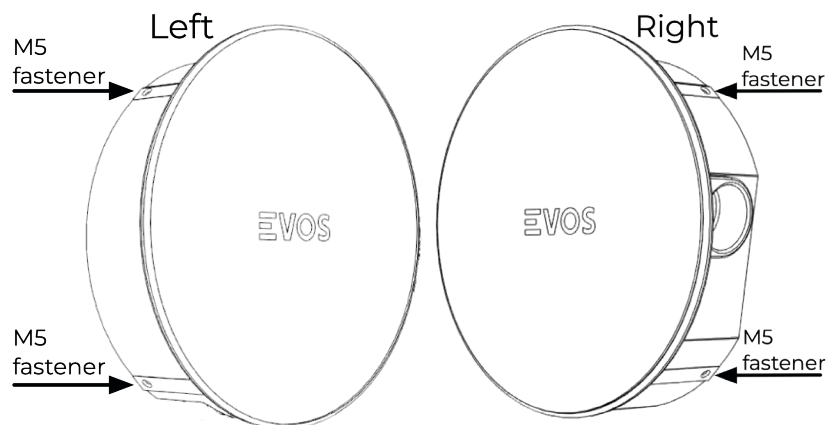
Installation Steps

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

1. Remove shield from station

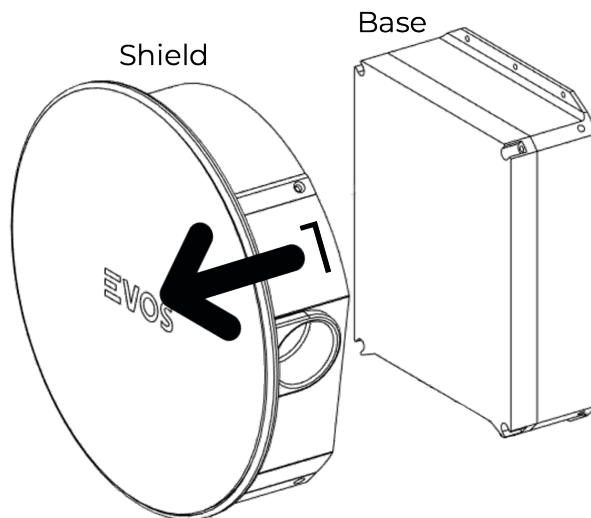
Remove the 4 x M5 fasteners that secure the shield to the base using a 3mm Hexagonal Security Bit.

Place fasteners aside for re-installation.



(1) Slide the shield away from the base.

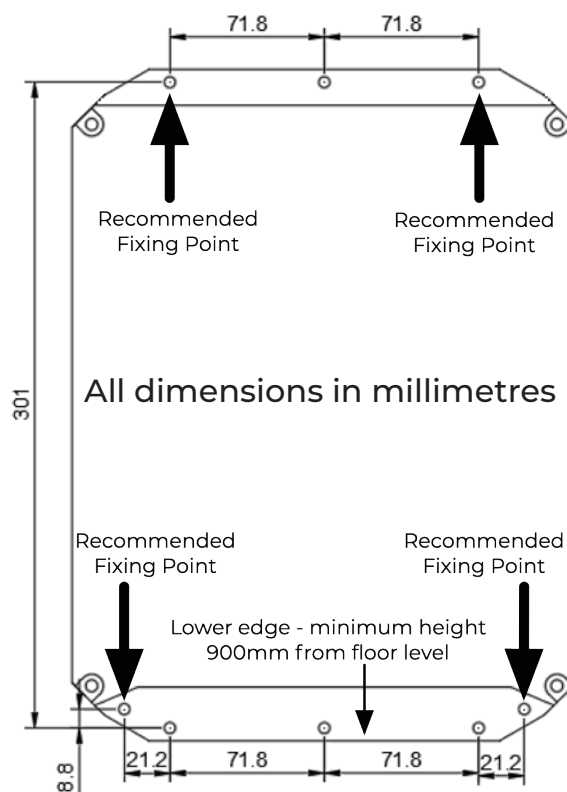
Place the shield face up where it will not be marked, scratched or damaged.



2. Mark fixing point

Use the provided measurements of the image below to mark fixing points on the mounting surface.

! Minimum height of the lower edge is 900mm from floor level



3. Mount station base

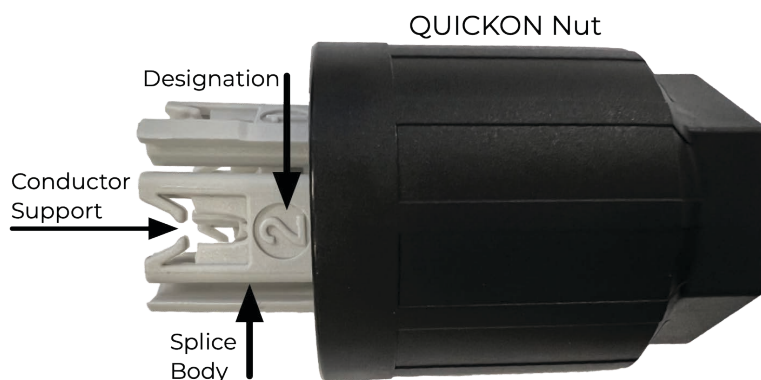
Use size M4 fasteners (supplied) to fix the station to mounting surface. Do not exceed 5 Nm when installing fasteners

4. Terminate AC Input cable

Strip 60mm off outer sheath

Wrap earth cable around live conductors

Expose splice body - Hold QUICKON Nut and screw splice body anticlockwise until designations are visible - do not use tools.



Confirm wiring conductor size is within limits of the QUICKON Nut specifications.

Fix wires in conductor supports of the splice body corresponding with the L1, L2, L3, N and PE designation.

Cut off excess wire flush to splice body

Align white line of QUICKON connector with the black line of the splice body in QUICKON Nut

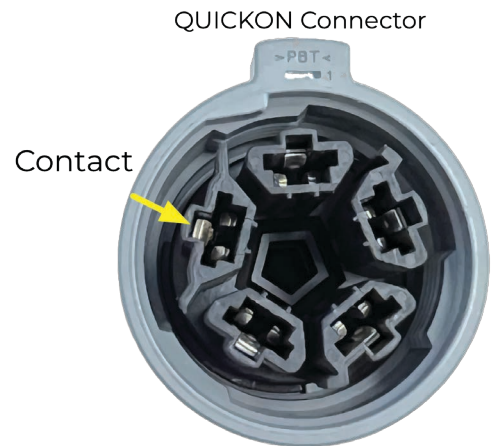
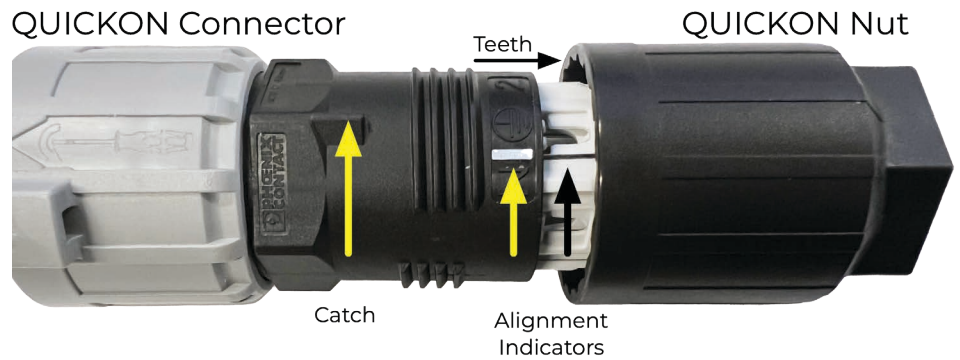
Tighten QUICKON Nut as far as it will go by hand.

Hold the QUICKON connector with your hand and use a tool to turn the QUICKON Nut until you feel mechanical latching.

Check the QUICKON nut is not removable by hand.

Check continuity of L1, L2, L3, N and PE contacts of the QUICKON connector.

Perform an adequate pull test to confirm the connection is acceptable.



Example Installation Video - <https://www.youtube.com/watch?v=nC7tI9qDsFA>

5. Connect QUICKON Connector

(1) Twist the grey collar of QUICKON connector to far left. Collar will rise slightly and click in place.

Locate white indicator on station inlet

Orient Leverage Point and Arrow on the grey collar of QUICKON connector to the left side of the white indicator on the input connector.

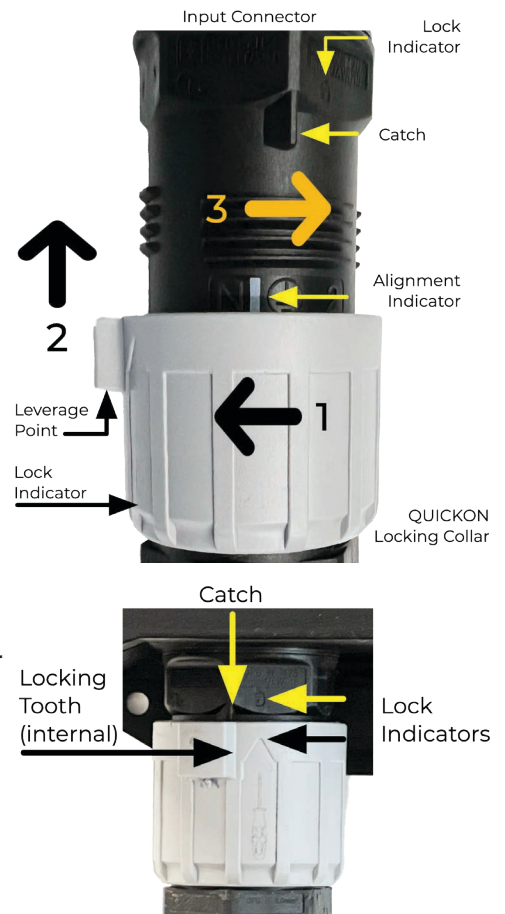
(2) Slide QUICKON connector upwards as far as it will go.

(3) Twist the grey collar of QUICKON connector to the right until the locking tooth of the leverage point clicks over the catch.

If the grey collar does not twist to the right, the connector is not fully inserted.

! Do not proceed until connector is secure.

The QUICKON connector has dangerous voltages present when upstream power is enabled. The connector should not be removable by hand.



6. Connect charging cable

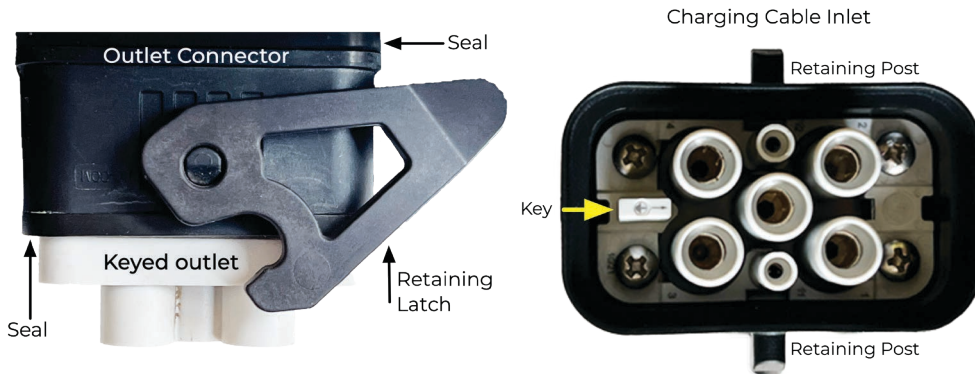
- (1) Swing the retaining clip upward.
- (2) Insert charging cable inlet into the station outlet until it is snug.

If the inlet does not engage, turn it 180° and try again.

- (3) Swing the retaining clip downwards until the retaining clip snaps in place.

! Do not proceed until the connector is secure.

The station output connector has dangerous voltages present when a vehicle is charging.



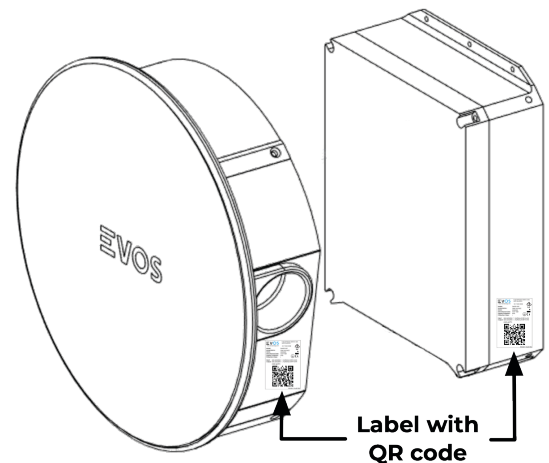
7. Register and configure (Mandatory)

Connect to the EVOS App using the QR code on the base and register the station. If the QR code does not work, enter this URL into a browser

<https://evos.app/c/<serial>>

Example where serial is 123456

<https://evos.app/c/123456>



Sign In

Enter your username and password, then click “Sign In” (1) to access the EVOS App.

Register

Click “Register” (2) to create a login for the EVOS App

Reset Password

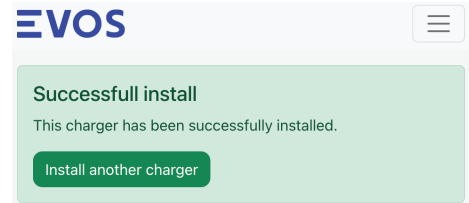
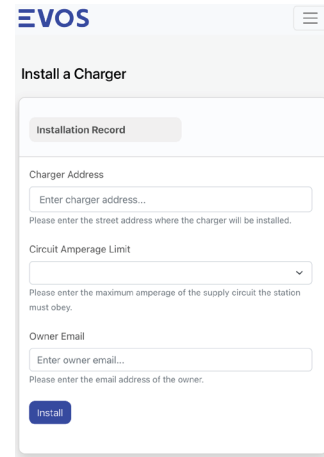
Click “Forgot your password?” (3) to reset your password

At the install screen, please enter

1. The address where the station is installed.
2. The “Circuit Amperage Limit”.
This value represents the maximum continuous amperage the station may draw from the local circuit.
3. Owners email address

The successful install screen will be displayed on configuration.

If unsuccessful, please call +61 7 3040 6668

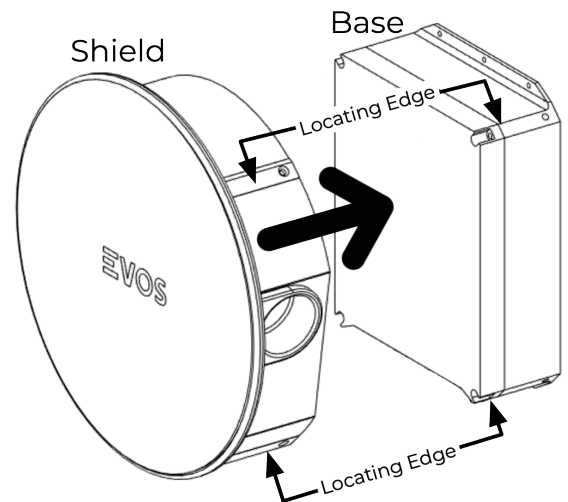


8. Install Shield

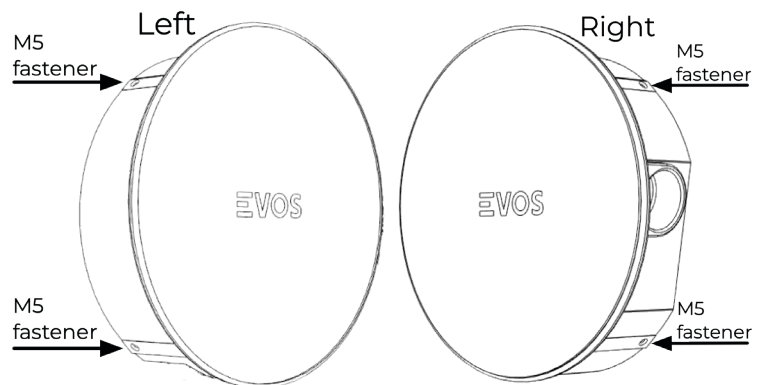
Align the shield with the docking port facing the right-hand side.

Slide the shield over the four locating edges of the station base.

Shield should gently slide until flush.



Use the 4 x M5 fasteners saved in step 1 to secure the shield to the station base using a 3mm Hexagonal Security Bit.



9. Power ON

Enable the upstream power

10. Electrical Tests

Perform all required electrical tests

11. Test Charge

1. Connect a vehicle and perform a test charge.
2. Recommended to use a thermal camera to verify there are no hot spots on the input connector.

Version Control Information

Item	Version	Date	Contributors
Initial document creation	1	17/01/2022	Leslie Smith
Additions to product specification Added 900mm minimum mounting height instructions Modified minimum input cable to 4mm ²	2	18/02/2022	Leslie Smith
Added access condition to product specification	3	21/02/2022	Leslie Smith
Updated IP rating on specification page	4	03/05/2022	Leslie Smith
Updated boxed dimensions, updated installation link and app URL.	5	18/07/2022	Leslie Smith
Updated images for clarity when printed in black and white	5.3	23/08/2022	Leslie Smith
Updated layout for easier reading Modified minimum input cable to 2.5mm ²	5.4	10/11/2022	Leslie Smith

Checklist

Please use this checklist to ensure the station has been installed safely.

Item	Yes	No	Comment
Station base, shield and charging cable are not damaged			
Station mounting position is easy to access			
Station mounting position is protected from vehicle damage			
Station lower edge above 900mm above ground level			
Upstream type A RCD installed			
Upstream type C MCB installed			
Station base is mounted securely to surface			
QUICKON Nut is secure and not removable by hand.			
QUICKON connector is secure and not removable by hand.			
Charging cable is secure and not removable by hand			
Circuit amperage limit has been set			
Shield is mounted flush and secured with 4 x M5 fasteners			