

A2



ANDERSEN

www.andersen-ev.com

A2-012020V2 .1

ANDERSEN DISCLAIMER

The Andersen A2 should only be installed by an electrician with the appropriate knowledge and qualifications to carry out this type of electrical installation. Failure to do so could result in injury or death.

It is the responsibility of the installer and/or designer to determine the correct residual and overcurrent protection where external influences could have an effect on inbuilt protection.

Opening of containment should only be carried out when the supply is isolated from the mains. The undertaking any live testing should only be carried out by a person or persons qualified to do so.

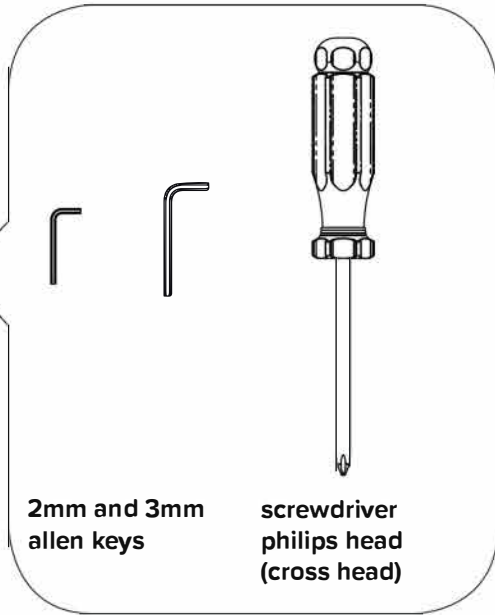
The installation instructions should be followed closely to ensure correct installation and commissioning. Failure to follow these instructions could result in damage to the Andersen charger, existing installation or supplier's equipment.

During and on completion of the installation, the installation shall be inspected and tested to verify that it complies with the latest amendment of the BS7671.

Before the Andersen A2 is put into service, we as the manufacturer require the installer to simulate a charge with a recognised EVSE adaptor and multifunction tester.

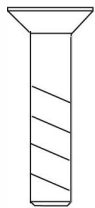
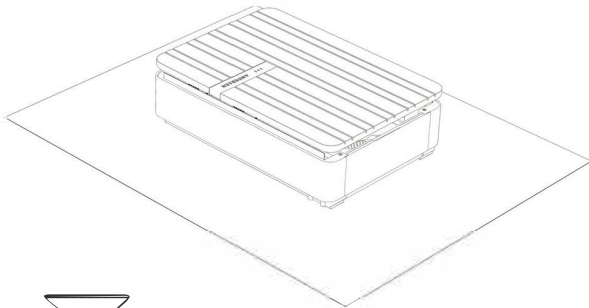
Use of this equipment should only be undertaken by someone who has an understanding of its functions and has the experience and knowledge to do so.

ANDERSEN A2

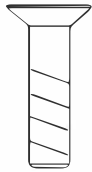


2mm and 3mm allen keys

screwdriver philips head (cross head)



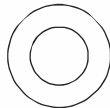
x29 M3 x 16mm long screw



x2 M5 x 12mm long screw



x4 M5 x 8mm counter sunk screw



x2 6mm penny washer



x2 6mm washer

OPERATION LED STATUS



System powering up. Red, Amber, Green LED flash together twice a second



Standby State (solid green)



Vehicle connected state (solid green & solid amber)

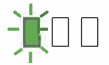


Vehicle charging state (solid amber)



Charge point locked or awaiting scheduled charge (solid green & solid red)

ERROR & UPDATE LED STATUS



Disconnected from network/cloud (green LED flash every 5 seconds)



RCM or charge error (blip red every second)



Firmware upgrade (sequence of green, amber, red for duration of upgrade)

SETUP LED STATUS



Wifi Setup (Amber LED flash once per second)



Reset warning. Red, Amber, Green LED flash 4 times per second.

SETUP MULTI FUNCTION OPERATION



x2 Reset RCM (Two button presses)



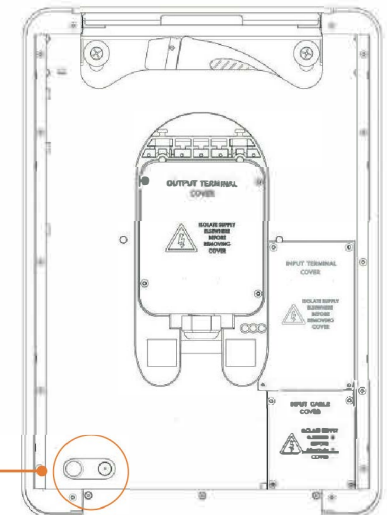
x3 Enter Network setup mode (Three button presses)



x1 Exit Network setup mode (One button press)



x5 Enter unit reset mode (Five button presses) + Exit Timeout 30 secs

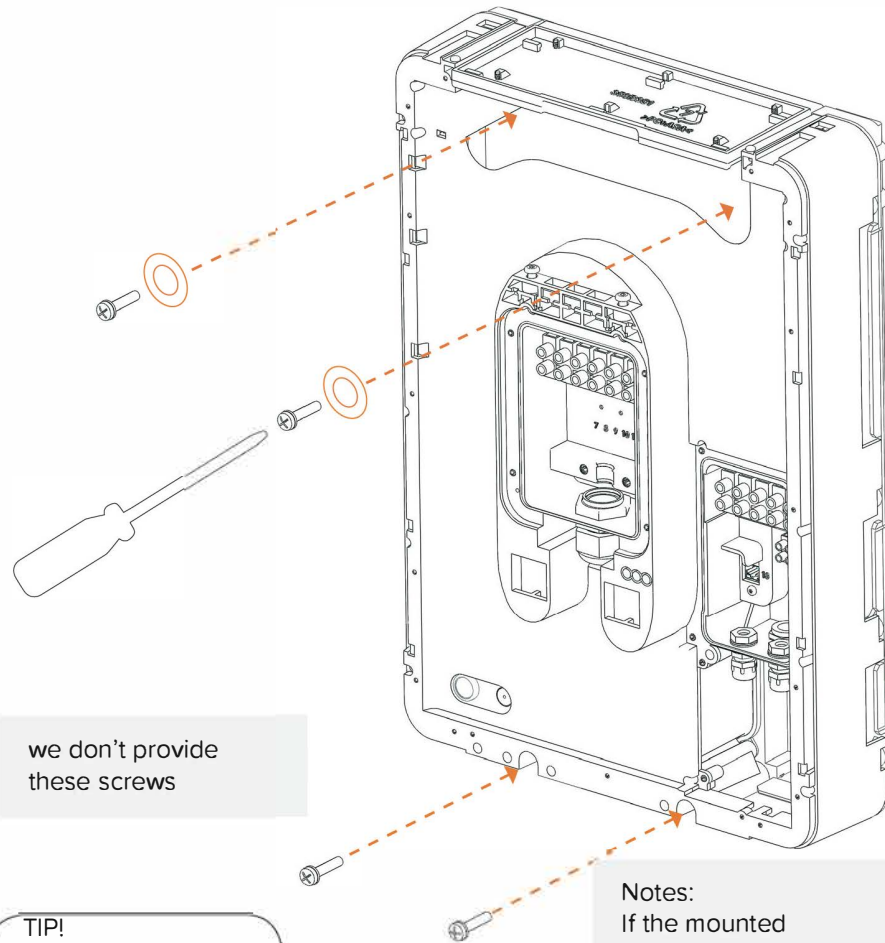


Multi function button located at the bottom left inside the cable slot

Step 1: Installing A2 unit to wall

x2
6mm penny washer

x2
6mm washer



we don't provide
these screws

TIP!
Install top fixings
first then mark the
bottom holes of the
unit

Notes:
If the mounted
surface is uneven use
spacers to ensure
the unit core is sitting
flush to the wall

Step 2: Prepare A2 core for supply cable entry

Default cable entry is from the rear See Fig: 1

Note:
this can be done on wall

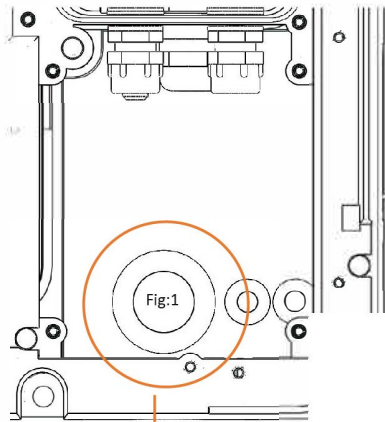


Fig 1

Bottom entry drill out cable entry section with 20 25mm hole saw, see Fig :2
Use rubber grommet from the rear cable entry hole

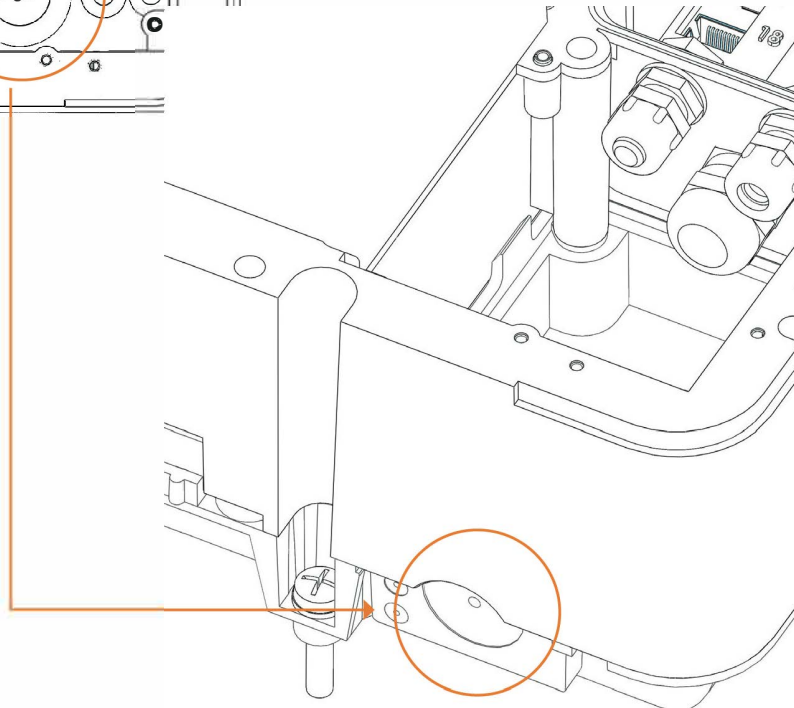
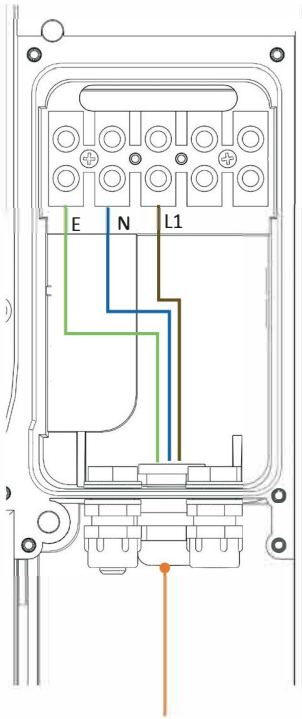


Fig 1

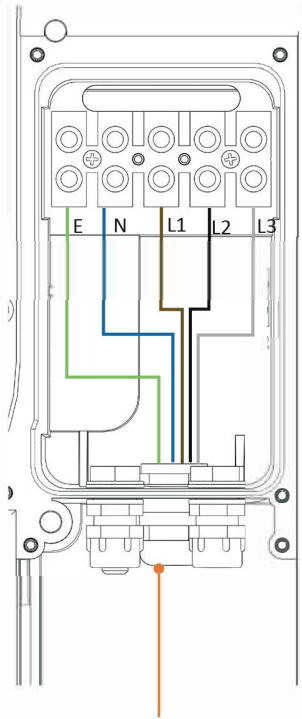
Step 3: Terminate supply power cable

Single Phase installation

Three Phase installation

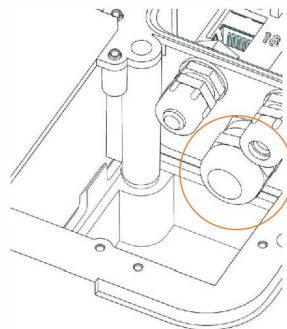


Incoming single phase supply



Incoming three phase supply

TIP!
Suggested cable types PVC or SWA

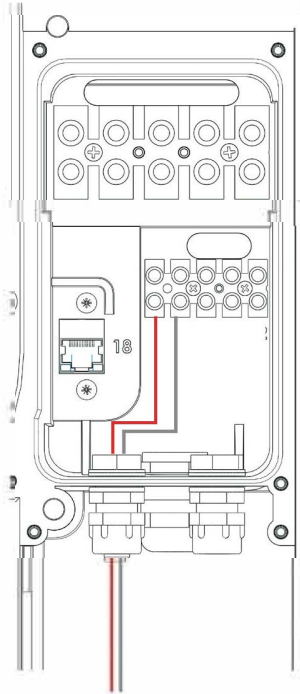


Important.
Make sure the gland is tightened after cable installation

Note:
HI TUFF cable not recommended, it is very difficult to terminate

Step 4: Terminate sensor cables

**Solar Advanced CT
sensor cable**
* Optional

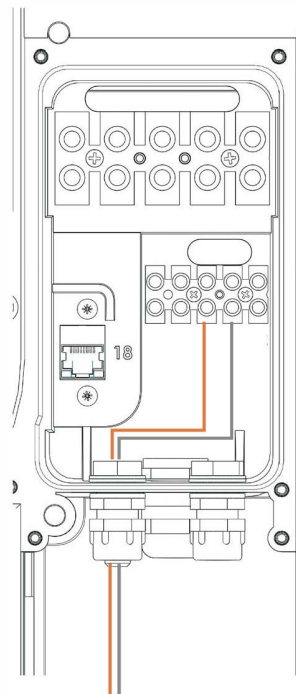


Solar Advanced CT

Note: Fit CT clamp to PV inverter supply. Orientation can be determined during testing.

Recommended Cable:
Shielded twisted
pair e.g. CAT5e/CAT6

**Solar Basic / Adaptive
Fuse CT sensor cable**
* Optional

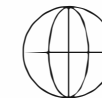


Solar Basic/Adaptive CT

Note: Fit CT clamp to incoming supply. Orientation can be determined during testing. CT orientation can be confirmed in dashboard using a load reference i.e. kettle 3Kw

Recommended Cable:
Shielded twisted
pair e.g. CAT5e/CAT6

If you have questions use our helpful support resources



www.andersen-ev.com/support



support@Andersen-ev.com



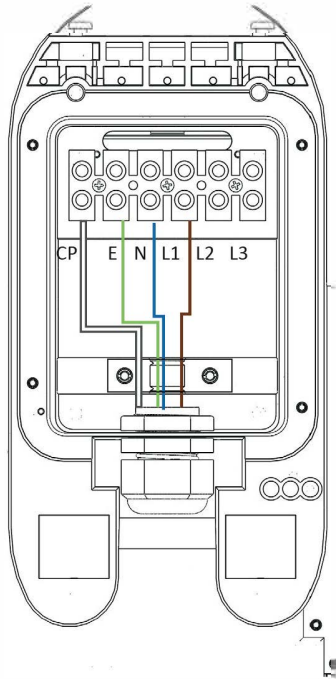
+44 (0) 203 8904510



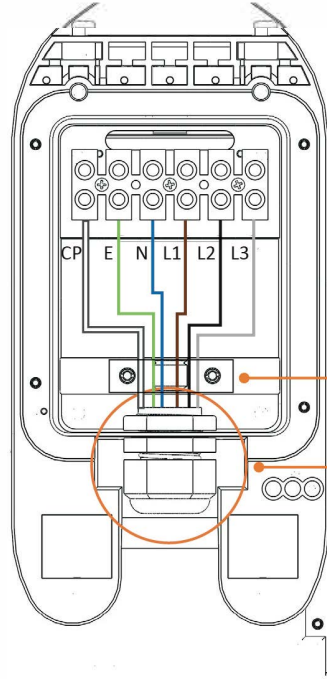
Andersen Chat

Step 5: Terminate vehicle side charging cable

Single Phase cable



Three Phase cable



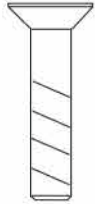
Important.
Ensure cable
stress relief
clamp is
correctly
tightened



Important.
Make sure
the gland is
tightened
after cable
installation!

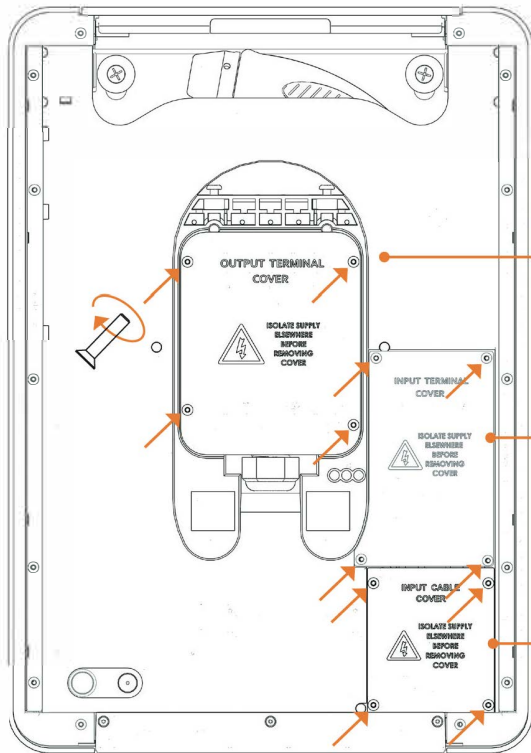
Orange cable not used

Step 6: Fit weather project covers



x12
M3 x 16mm long
countersunk screw
steel

Torque setting must be
0.7Nm

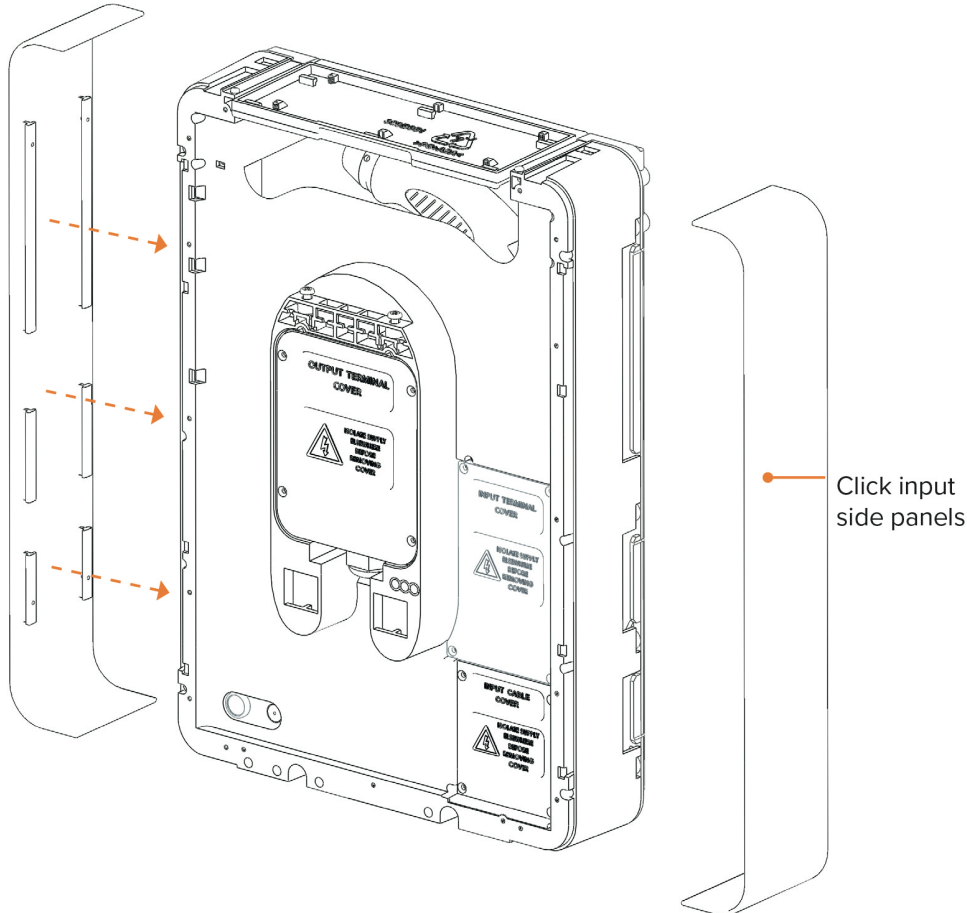


A: Fit Output terminal cover
Ensure seals are correctly
positioned and fixing
screws correctly torqued to
0.7Nm

B: Fit input terminal cover
Ensure seals are correctly
positioned and fixing
screws correctly torqued to
0.7Nm

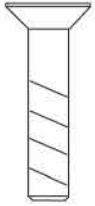
C: Fit input supply cover
Ensure seals are correctly
positioned and fixing
screws correctly torqued to
0.7Nm

Step 7: Fit side panels

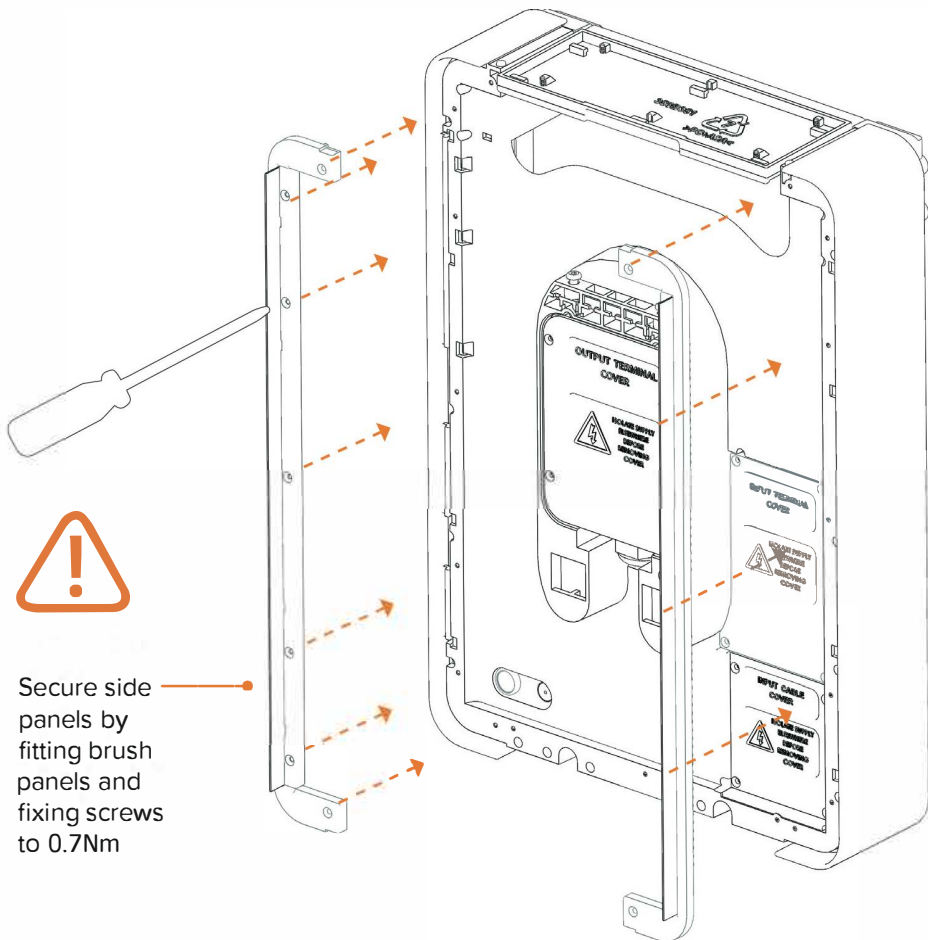


Note:
For further tips and tricks see our support videos

Step 8: Fit cable brushes



x14
M3 x 16mm long
screw

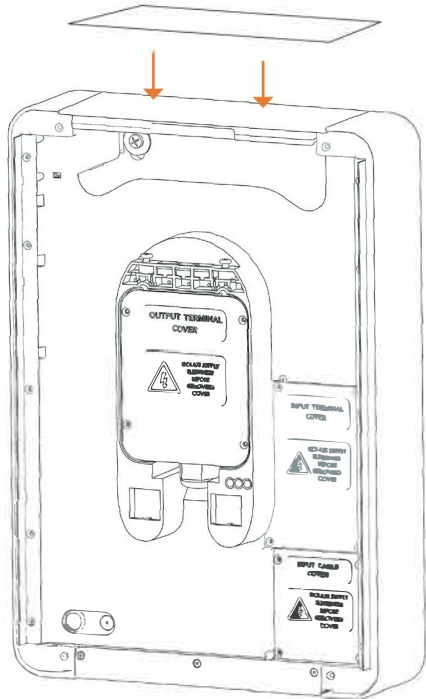


Step 9: Fit lid panel

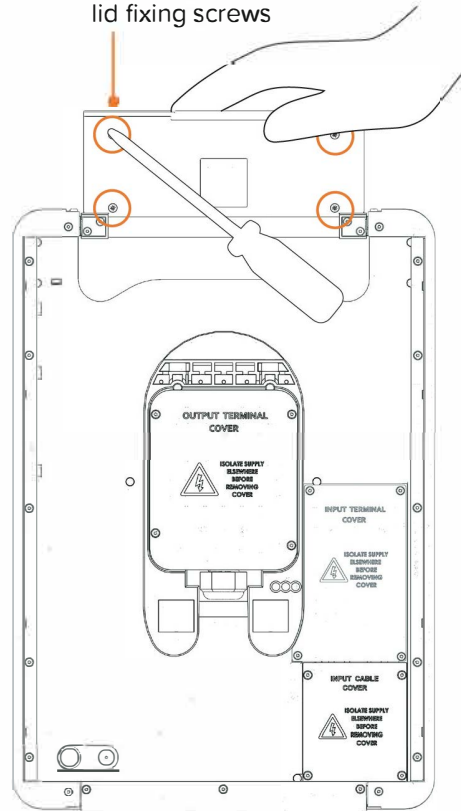


x4
M5 x 8mm counter sunk screw

A: Click lid panel into the lid core

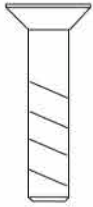


B: Insert and tighten lid fixing screws

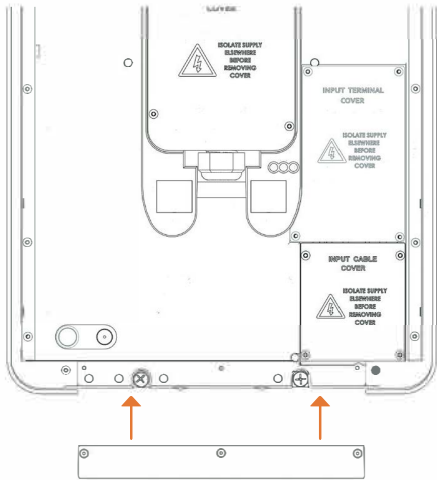


Note:
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tricks see our support
videos

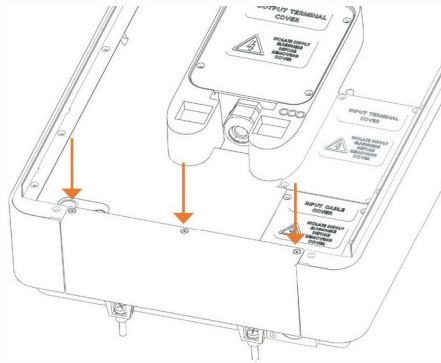
Step 10: Fit bottom panel



x3
M3 x 16mm long screw



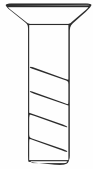
A: Fit bottom cover



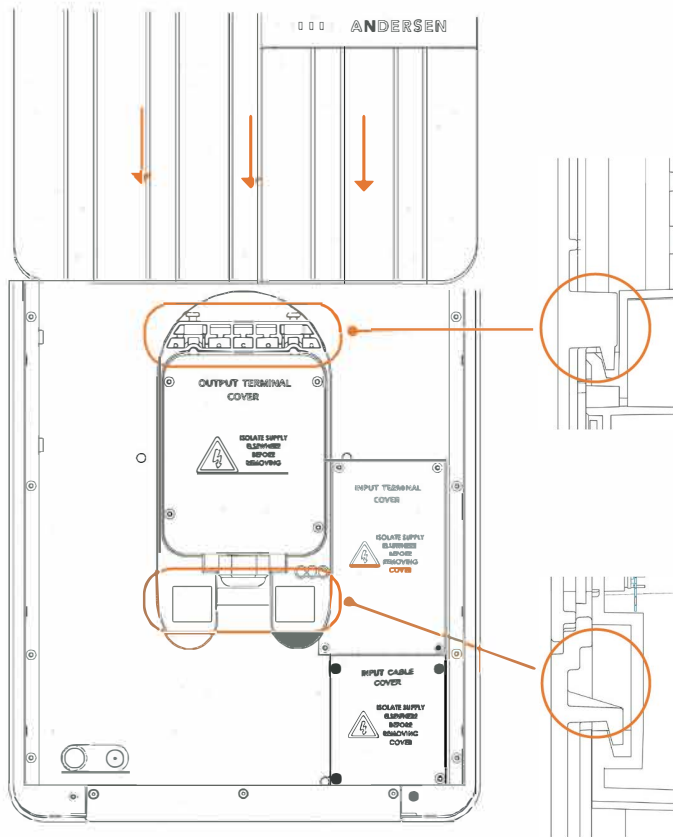
B: Tighten screws to 0.7Nm

Note:
For further tips and
tricks see our support
videos

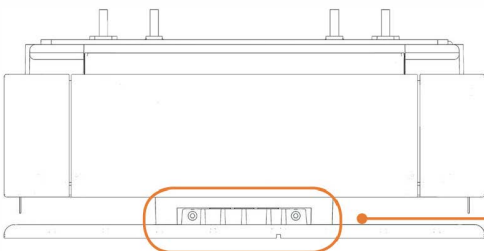
Step 11: Fit front panel



x2
M5 x 12mm long screw



A: Ensure the front panel mounts are located into the slots correctly



B: insert and tighten front panel screws correctly torqued to 2.5Nm.

<u>Technical Data</u>	
Mounting Location	Indoor/Outdoor permanent mounting on a suitable structure
Charging Mode	Mode 3 (IEC 61851-1 compliant communication protocol) & RED compliant
Display	Status lights- Green/Amber/Red
Internal Lights	Courtesy Lights- Warm White, Hall sensor operated
Charging Current	Single Phase/3 Phase units 6A to 32A Per Phase
Variable Current	Single Phase Only 6A-32A CT Monitored (Adaptive Fuse)
Connector Type	Type 2 tethered cable IEC 62196-2 compliant.
Compliance	RED 2014/53/EU, LVD 2014/35/EU, EMC 2014/30/EU, EN 61851-1:2017, EN 62196, EN 62955:2018, ROHS 2011/65/EU, WEEE 2012/19/EU CE Certified.
Ingress Protection	Enclosure, core and plug compartment IP65/ Type 2 plug connector IP44 with rubber cap in use.
Operating Specification	Humidity to 95% RH non condensing -25 Celsius to +45 Celsius.
Security	Remote software enabled charge point locking, 128-bit data SSL AES encryption for smart connectivity, Bluetooth with TLS encryption
Fault Monitoring	Realtime health monitor system, Start-up self-test, Earth monitoring, Welded contactor monitor, PME monitoring
Enclosure Core Material	Polycarbonate blend
Finish Material	Aluminium Nylon Coated, Accoya® wood
Shipped Weight	15-16Kg
<u>Electrical Specifications</u>	
Rated Power	7kW (1-phase) / 22kW (3-phase)
Rated Supply Voltage	230V AC Single Phase or 400V AC 3-Phase (+/- 10%)
Rated Frequency	50Hz
Operating Voltage	207-253 Vac
Rated Current	32 Amps
O-PEN technology	Conforming to 722.411.4.1 (iii) (iv)
Earth Leakage Protection	Internal 6mA DC protection (EN 62955)
Standby Power	8 Watts
CT Sensor Voltage	0.333V
CT Sensor Specification	0-120amps/25mm ² maximum cable size split core
EVOFLEK Charging Cable	4mm ² Live Conductors/32a max current. High-performance ultra flexible cable

<u>Installation</u>	
Mounting	Flush mounting location using x4 fixing points
Cable Entry	Rear/Bottom (Lower left Below Cable Terminations) 20mm removable compression gland
Cable Sizing	4mm ² – 10mm ²
Dimensions Unboxed	494 x 348 x 148 mm (metal) 156mm (wood)
Height	Installed between 0.75m – 1.2m from ground level
CT Sensor Cable	Maximum extended length 30 meters unshielded CAT5/6 50 meters shielded CAT6 data cable.
Upstream Protection	40a Type A RCBO (61009) or Type A RCD/RCCB (61008) + 40a B curve MCB (60898)
Installed Weight	9.5Kg - 11.2Kg
<u>Device Connection</u>	
Internet Connection	Wi-Fi - 802.11 b/g/n support, 802.11 n (2.4 GHz), up to 150 Mbps
Bluetooth	Bluetooth BLE 5 (setup only)
Device Support	Apple iOS mobile device/Android mobile devices

Danger

Danger to life due to electrical voltage! Injuries due to electric shock and/or burns, possibly resulting in death, are possible.

During all work, make sure at all times that power to the system is switched off and secured so it cannot inadvertently be switched on.

- Before commissioning the device check that all screw and terminal connections are tight.
- The termination panel covers must never be left opened without supervision. Fit the termination panel cover when you leave the charge point.
- Do not make any unauthorised changes or modifications to the charge point.
- Repair work to the charge point may only be completed by the manufacturer or a trained expert.
- Do not remove any identifiers such as safety symbols, warning instructions, rating plates, labels or cable markings.
- Ensure that the charging cable is not mechanically damaged (kinked, jammed or run over) and that the contact area does not come into contact with heat sources, dirt or water.

Warning

Safety notice:

- Isolate all poles and from all live sources.
- Lock off to prevent re-energising of the supply.
- Verify isolation from the supply.
- Electrical safety warning notices applied.
- Cover neighbouring live parts and cordon off danger areas.

Caution

Ensure that the charge point is not damaged by incorrect handling (housing cover, internal parts, etc.).

On outdoor installations, do not open the termination panel cover in damp conditions.

Danger of breaking the plastic housing.

- Do not tighten the securing screws with force.
- The installation surface must be completely flat, do not bend the housing.
- Electronic components may be damaged if handled. Before handling modules, perform an electrical discharge process by touching a metallic earthed object.

A failure to follow the safety information may result in a danger of death, injury and damage to the device. The device manufacturer cannot accept any liability for claims resulting from this.