

Electrical Note September 2024



ACT
Government

Access
Canberra.

Access Canberra Electrical Inspections team provide this guidance note to electricians in the ACT on some emerging issues affecting the electrical industry.

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New AS/NZS 4777.1:2024 Grid connection of energy systems via inverters Part 1: Installation requirements.



Australian Capital Territory

On 23 August 2024, Standards Australia published a new version of AS/NZS_4777.1 - Grid connection of energy systems via inverters, Part 1: Installation requirements.

In the ACT there is a 6-month phase in period for new electrical standards referenced by AS/NZS 3000, such as AS/NZS 4777.1:2024

Electricians can start to use the new standard from date of publication or continue to use the previous version for the 6-month phase in period. It can only be one or the other version of the standard, you cannot mix clauses from both versions for compliance.

From 23 February 2025, all new installations of Grid connected energy systems via inverters, that are in scope of AS/NZS 4777.1 must be compliant to AS/NZS 4777.1:2024. Please clearly state the installation date, and standard used on the Certificate of Electrical Safety (CES) form.

Additional standards information is available from:
[Standards Australia - Standard Organisation in Australia](#)

Additional questions on implementation is available from the Access Canberra Electrical Inspections team via the [Contact Us](#) Page below.

Please Note

Advice from NSW is that they will be applying the same dates and phase in period.

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Recall – VARMPFRONT Power Bank 10400 mAh



Product Safety Recall



Do you own this product?

VARMPFRONT power bank

- 10 400 mAh
- model number E2038
- date stamps (YYWW) 2313, 2316, 2318 or 2319
- Identifying number: 70559612

Dates sold: 1 March 2024 – 1 April 2024

Why the product is recalled: Affected VARMPFRONT power banks can overheat and melt during use because of a manufacturing fault.

Hazard: There is a risk of serious injury from burns and/or property damage from fire if the power bank overheats during use.

1. Consumers should stop using affected power banks immediately.
2. Return them to an IKEA store for a replacement product or a full refund.

For more information visit <https://www.ikea.com/au/en/customer-service/product-support/recalls/>

Or phone IKEA on:

ACT/NSW – 02 8020 6641
 Queensland – 07 3380 6800
 Victoria/Tasmania – 03 8523 2154
 Western Australia – 08 8234 3944
 South Australia – 08 8234 3333

Purchased from: IKEA stores and online

PRA2024/20253

See [productsafety.gov.au](https://www.productsafety.gov.au) for Australian product recall information



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IKEA Pty Limited — VARMPFRONT power bank 10400 mAh dark blue AP

Product description

VARMPFRONT power bank

- 10 400 mAh
- model number E2038
- date stamps (YYWW) 2313, 2316, 2318 or 2319
- Identifying number: 70559612

What are the defects?

Affected VARMPFRONT power banks can overheat and melt during use because of a manufacturing fault..

What are the hazards?

There is a risk of serious injury from burns and/or property damage from fire if the power bank overheats during use.

What should consumers do?

Consumers should stop using affected power banks immediately.

Return them to an IKEA store for a replacement product or a full refund.

Additional Information

Supplier:

[IKEA Pty Limited](#)

Traders who sold this product:

IKEA stores and online

Dates available for sale:

1 Mar 2024 - 1 Apr 2024

ACCC Notice:

[IKEA Pty Limited — VARMPFRONT power bank 10400 mAh dark blue AP | Product Safety Australia](#)

Recall Notice

[Recall advertisement - 22 July 2024.pdf \(productsafety.gov.au\)](#)

EV Charger Isolator Requirements.

The Access Canberra Electrical Inspections team has received several queries regarding the requirement for an isolator in EV charging installations.

AS/NZS 3000:2018 Appendix P sets out many of these requirements.

P1.5.1 Connecting point

Point where one EV is connected to the fixed installation.

NOTE: The connecting point is a socket-outlet or a vehicle connector.

P1.5.1 provides information that an EV connection point is either a socket outlet or a vehicle connector. This is important when determining if an isolator is required by the standard.

Clauses P5.4.1 and P5.4.2 with Figures P1 and P2 show installations where the connecting point is deemed to be a socket outlet.

P5.4.1 Case A connection

Connection of an EV to the a.c. supply utilizing a supply cable and plug permanently attached to the EV with the plug connected to a socket-outlet (see Figure P1).

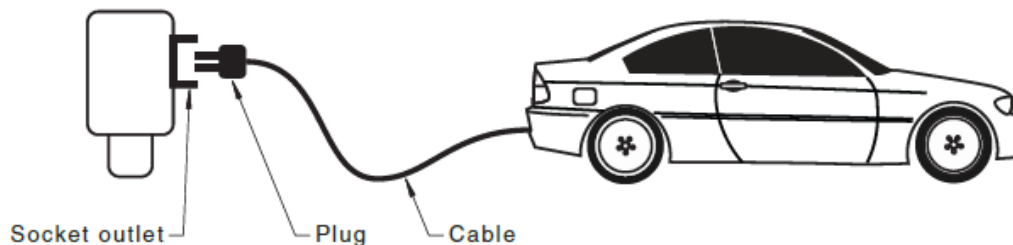


FIGURE P1 CASE A CONNECTION

P5.4.2 Case B connection

Connection of an EV to the a.c. supply utilizing a detachable cable assembly with a vehicle connector and a.c. supply connection to a socket-outlet (see Figure P2).

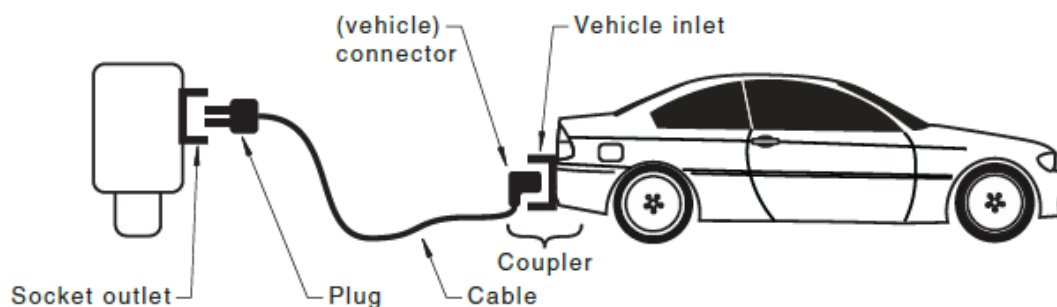


FIGURE P2 CASE B CONNECTION

Where the connecting point is deemed a socket outlet such as those in Figure P1 and P2 the requirements of **AS/NZS 3000:2018 clauses 4.4.4.1 and 2.6.3.2.2** need to be followed and an isolator installed adjacent to the EV charger if there is none built into the unit and RCD protection is to be installed.

AS/NZS 3000:2018 clause 4.4.4.1

Each socket-outlet *shall be individually controlled by a separate switch* that complies with either AS/NZS 3133, AS/NZS 60669.1 or AS/NZS 60947.3 and operates in all active conductors. Switches controlling socket-outlets shall comply with Clauses 4.4.4.2 and 4.4.4.3.

AS/NZS 3000:2018 clause 2.6.3.2.2 Domestic and residential installations

Additional protection by RCDs with a maximum rated residual current of 30 mA shall be provided for all final subcircuits in domestic and residential electrical installations.

Clause P5.4.3 and Figure P3 below shows an installation which is deemed to be a vehicle connector.

P5.4.3 Case C connection

Connection of an EV to the a.c. or d.c. supply utilizing a supply cable and vehicle connector permanently attached to the supply equipment (see Figure P3).

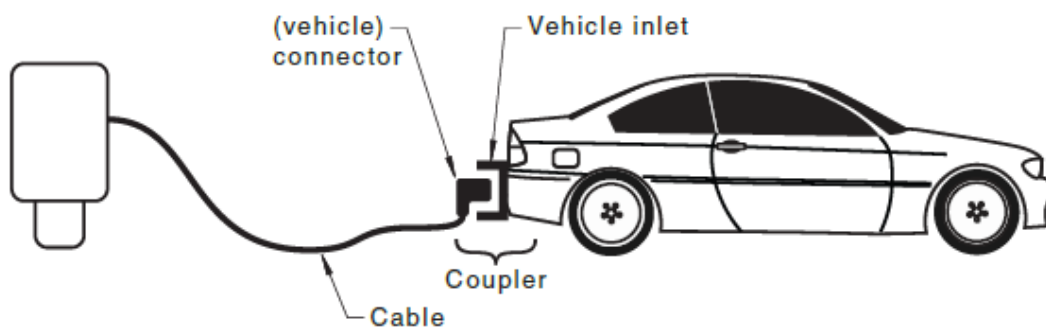


FIGURE P3 CASE C CONNECTION

As P5.4.3 Case C connection is not a socket outlet an isolator may not be required as clause 4.4.4.1 is not applicable in this case.

Should the installation be a vehicle connection point as in figure P3 and function as an electricity converter (AC input - DC output) then the requirements of **AS/NZS 3000:2018 clause 4.12.4.1** need to be followed and an isolator is to be installed at the EV charger in these applications

AS/NZS 3000:2018 clause 4.12.4.1

Each electricity converter shall be provided with an independent isolating switch in accordance with Clause 2.3.2.2. The isolating switch shall—

- be installed adjacent to or on the electricity converter so that a person operating the switch has a clear view of any person working on the converter;
- be provided with a means of securing the device in the isolated position that requires a deliberate action to engage or disengage it;
- comply with Clause 4.13 when the electricity converter incorporates an electric motor;
- be under manual control only; and
- not be capable of being overridden or bypassed by programmable control systems or the like.

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Photovoltaic (PV) Advice.



The Access Canberra Electrical inspections team are running a series of advice articles to assist Photovoltaic (PV) installers in achieving compliance with their PV installation work.

Plugs, Sockets and Connectors

Electricians and installers of PV systems can only use connectors and sockets that are of the same manufacturer and designed to be mated together, the correct tool should be used to terminate the plug or socket. For example, a crimper specifically designed for the that type of plug or socket, pliers will not suffice as it will not correctly crimp the plug and will leave a hot spot.



When terminating the plug or socket ensure it is done to the manufacturer's instructions, internal pins are installed and inserted to the correct length as arcing may result, which will be catastrophic.

Please see **AS/NZS 5033: 2021 Clause 4.3.9** for additional information on the installation of plugs, sockets and connectors

After completion of PV system wiring, it needs to be tested and commissioned in accordance with **AS/NZS 5033:2021 Clause 6.3**.

Testing and verification of the system is mandatory and Additional information is available in **AS/NZS 3000:2018 Section 8**.



Label Durability

All labels and signs are required to be.

- durable,
- designed to have a lifetime greater than or equal to the service life of the PV system,
- constructed of appropriate materials,
- suitable for the location,
- fixed in a manner appropriate for the location,
- in English,
- legible and the letter size to be appropriate for the location.



PV labels and signs exposed to direct sunlight need to be UV resistant, they need to be permanently fixed with pop-rivets or suitable screws, (not of excessive length), if screws are used, please ensure they don't protrude to cause injury while working on the switchboard.

The Access Canberra Electrical Inspectors are finding that many labels exposed to direct sunlight are degrading after a few months.

Please see **AS/NZS 5033: 2021 – Clause 5.2** for additional information on the requirements for labels and signs

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More Information



The Access Canberra electrical inspections team have published Frequently Asked Questions (FAQ) and fact sheets on several subjects that are either a concern for compliance, or where the electrical industry can benefit from our assistance.

The FAQs can be found on our web site at: [Electrician notes - Access Canberra \(act.gov.au\)](https://www.accesscanberra.act.gov.au)

If you think additional content is required, send us an [email](#).

The FAQs will be updated as new questions come in and Australian Standards are updated.

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Email Address and Contact Information



All licensed construction professionals in the ACT are required to keep their details up-to-date, and to notify Access Canberra within seven (7) days of any change. Use this [link](#) to access the change of address form.

Not only do we use your email address to keep you up to date with emerging issues affecting the electrical industry, the

- Licensing team need it to send out your licence reminders.
- Electrical inspections team need it to send out inspections reminders and results.



Where you use a work email address, consider to also use a personal email address, for those times you are on leave or change employers and we need to let you know of an important issue.

Did you know Access Canberra provides a list of construction professionals on their website?

Visit the choosing a Tradesperson page on the Access Canberra website at [Choosing a tradesperson - Access Canberra \(act.gov.au\)](https://www.accesscanberra.act.gov.au)

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Advice, Defect Notice Reviews, Extension of time



Advice

Electricians requiring advice on Wiring Rules interpretations should check out our FAQ page [Electrician notes - Access Canberra \(act.gov.au\)](#) and should additional information be required they can contact the electrical inspections team by [email](#) at Electrical.Inspections@act.gov.au.

To aid in providing consistent advice to the electrical industry, only the electrical inspections team manager will respond to your enquiry. If you pose a question on site to an electrical inspector, this must not be considered as binding advice but as the personal opinion of that inspector.

Defect Notice Questions & Review

If you receive a Defect Notice from an electrical inspector and have questions relating to it, we have the following process for reviewing it.

1. Call the inspector who issued the defect notice, their mobile number will be on the notice. Discuss your questions or concerns to see if a resolution is possible. If it is not possible to come to a consensus, ask for their team manager's contact details.
2. Call the team manager and discuss your concerns.
3. Should the team manager not be able to come to a consensus view then send an [email](#) to: **The Director of Electrical Inspections** at Electrical.Inspections@act.gov.au with your concerns and request a review.

Extension of time

If you require an extension of time to make repairs the Defect Notice has identified, please [email](#) the Electrical team with your request as soon as possible and before you receive the Final Notice.

Electrical.Inspections@act.gov.au

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Contact Us



Access Canberra Electrical Inspections Team

Phone: 02 6207 7775 (8:30am to 4:30pm) Business Days

Email: Electrical.Inspections@act.gov.au

Web: <https://www.accesscanberra.act.gov.au>

Previous electrical notices are available at: [Electrician notes - Access Canberra \(act.gov.au\)](#)
<https://www.accesscanberra.act.gov.au/business-and-work/building-and-construction/electrician-notes>

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