Industry Notification
Safety Alert

Product Management – Industry Notification IN00031 | **April 2026**

Counterfeit Earth Leakage Toroid

PURPOSE

This notification serves to alert industry stakeholders to a safety issue regarding counterfeit Ampcontrol / Stemar Earth Leakage toroids that have recently been identified.

While the investigation is in its infancy, the criticality of the issue means that Ampcontrol has chosen to release this Safety Alert based on the information currently confirmed.

More alerts may be provided in future as detail is clarified.

RELATED BACKGROUND

In May 2024, Ampcontrol released two industry bulletins regarding counterfeit earth leakage relays. Please refer to Industry Notifications IN00019 (ELV Relay) and IN00021 (ELD Relay) for detailed technical and safety information.

Industry Notification IN00019
Industry Notification IN00021

NEPEAN Power subsequently admitted that the counterfeit relays and toroids were imported without Ampcontrol's knowledge or consent. NEPEAN Power also released the attached Letter to Customers and Industry, indicating NEPEAN Power had (to the best of their knowledge) replaced and destroyed all of the counterfeit relays and toroids.

NEPEAN Power - Letter to Customers and Industry

Ampcontrol released a final industry notice on the matter in August 2025. Notwithstanding the contents of the NEPEAN Power Letter to Customers and Industry, Ampcontrol recommended all users of its ELD, ELV relays and toroids, ensure they have inspected their devices to ensure they were genuine Ampcontrol Products.

Industry Notification IN00026

HOW THE COUNTERFEIT DEVICES WERE DETECTED

A NSW mine sent a piece of electrical plant manufactured by NEPEAN Power to Ampcontrol for a routine overhaul. As part of the overhaul inspection process, it was noted that the Earth Leakage toroids had the same serial number.

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Electrical testing showed that the toroids were out of specification, and the system did not trip in accordance with the leakage current setpoints.

The toroids were returned to Stemar to investigate. Stemar subsequently confirmed that the toroids were counterfeit devices. They noted a number of visual differences, but more importantly, constructional differences in the winding arrangement as well as core material which result in reduced sensitivity. The toroids fail the manufacturing QA tests Stemar perform and may result in inadequate electrical protection.

Stemar manufactures toroids that are specifically designed to be used with Ampcontrol Earth Leakage relays including.

- ELD
- ELV
- Integrated Protection Relays

The same NSW mine has subsequently located additional toroids with duplicate serial numbers identified in their equipment.

SAFETY IMPLICATIONS

The Ampcontrol protection relays are typically used as primary or backup earth leakage protection on switchgear associated with earth fault limited networks typical in mining applications. The genuine relays and matched toroid is an integral part of the electrical protection scheme that assures personnel safety in the event of an earth fault.

The counterfeit toroid has close visual similarities but has reduced electrical performance and the system may trip at a higher current level than the programmed setpoint.

Please note: The reduction in performance is unlikely to be detected using a standard “push to test” circuit typically installed as a routine test of protection functionality. Most push to test circuits inject a current that is above the typical maximum setpoints that end applications utilise. This allows the switchgear trip functionality to be tested regardless of the end application trip setpoint. Push to test circuits do not establish that the protection system has the correct sensitivity over the entire protection range. They are only suitable as a validation test for protection devices that have been previously confirmed compliant to AS/NZS2081. Ampcontrol protection devices have been tested to work correctly with application tripping ratios as low as 1.2 as required under AS/NZS2081.

As a consequence, a protection system containing the counterfeit toroids may not trip at the correct earth leakage current, and in some cases may fail to trip jeopardising personnel safety.

The counterfeit toroids must be removed from service.

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IDENTIFICATION OF COUNTERFEIT DEVICES

The counterfeit device illegally utilises the Ampcontrol and Stemar trademarks to imply it is a genuine product of Ampcontrol and Stemar, to infer the quality, reliability and electrical safety of a genuine Ampcontrol protection system.

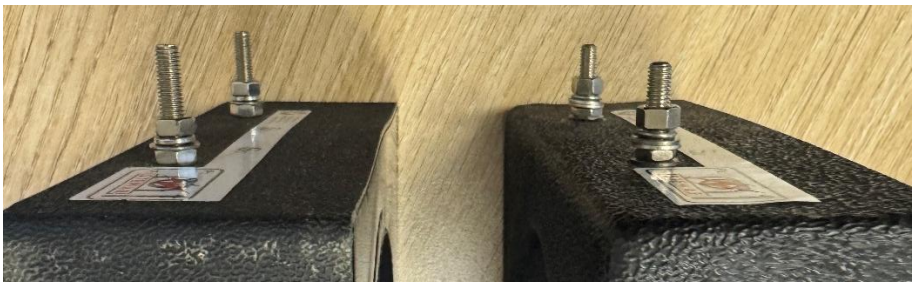
The counterfeit device has close visual similarity to the genuine product. The counterfeit can be identified from the genuine Ampcontrol / Stemar device by the visual cues in the photos below.

1. Serial numbers 681992 and 1908001964 are known duplicate serial numbers which may indicate a counterfeit device.

2. The rating nameplate layout does not match Stemar original template layout

Counterfeit Label	Genuine Label (Old)	Genuine Label (New)
Counterfeit label 69mmx 28mm	Genuine label 70mm x 28mm	Genuine label horizontal
Missing solid black border outline	Solid black border outline	
MADE IN SYDNEY not in *italics*	*MADE IN SYDNEY* in *italics*	
Phone: 61-2-97712100 not in *italics*	*Phone: 61-2-97712* in *italics*	
Glossy label material	Matte label material	

3. Secondary terminal stud length is longer



Counterfeit Stud 24-25mm Genuine Stud 20mm

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4. Counterfeit mounting feet are not galvanised

Counterfeit Genuine

5. Outer case is different material with a textured finish similar to older toroids supplied by Ampcontrol and Stemar. The present genuine toroid designs have a smooth finish

Counterfeit Genuine (Old) Genuine (New)

RECOMMENDATIONS FOR USERS

Stemar toroids have also been used with Ampcontrol Integrated Protection relays, not just our earth leakage (ELV and ELD) products.

Ampcontrol recommends all users of Ampcontrol Earth Leakage and Integrated Protection Relays urgently inspect their plant to ensure the toroids do not have the characteristics shown above and the relays do not have the characteristics shown in Industry Notifications 19 and 21.

If a toroid is suspected of being counterfeit, users should:

- Immediately remove the equipment from service
- Report the equipment containing the counterfeit toroids and the source of supply of the switchgear utilising the product to Ampcontrol.

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- Ensure the counterfeit device is permanently disabled and disposed so it cannot be inadvertently reused. It is preferred to return the counterfeit units to Ampcontrol to include in the ongoing investigation.

Ampcontrol will work with affected customers to quickly provide genuine protection devices to restore equipment functionality. Ampcontrol can also offer field service technicians to install the replacements if required.

TO REPORT COUNTERFEITS

To report a suspected counterfeit toroid or relay, please contact Ampcontrol: IndustryNotification31@ampcontrolgroup.com

FIND OUT MORE

For more information on this Notification, contact Ampcontrol Customer Service on +61 1300 267 373 or *customerservice@ampcontrolgroup.com*

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