# Counterfeit circuit protection devices are dangerous and put people at risk

Learn how to help advance safety and prevent the use of fakes or lookalikes

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#### How to identify counterfeit and knockoff circuit protection products

Similar in appearance, and sold online as a suitable replacement, counterfeit and knockoff circuit protection products are likely to be unsafe. The counterfeit and knockoff products are intended to fool the unsuspecting consumer and even some contractors. Unfortunately, these counterfeit and knockoff circuit protection products are not suitable for any application where there is a requirement to meet electrical code or safety certifications, such as UL\*. These potentially dangerous products are failing to provide adequate protection for homes, buildings, or nearly anywhere they are installed.

This industry-wide issue is impacting reputable manufacturers the world over. The good news is that it is a preventable problem. It is important that you are aware of the key features and characteristics of a genuine product that will help you more easily identify a suspect product. An educated consumer or contractor will be better prepared to avoid online listings of counterfeit and knockoff products. However, taking the next step to report suspect products to the original manufacturer or local authorities will enable the removal of these products from the e-commerce platforms that they are frequently being sold on. This paper provides important information to help you identify counterfeit or knockoff electrical circuity protection devices and better understand the risks associated with this issue.

When counterfeit or knockoff circuit protection products fail, there is a dramatically increased risk of failure, fire, injury, and property damage. A homeowner may not fully realize this. A circuit breaker is a critical part of safely using, and managing, the home's electrical power. It is vital to safety that a homeowner or a contractor only purchases and installs genuine products. Purchasing only authentic products from reputable manufacturers and their authorized representatives is the best way to mitigate the risk of counterfeit and knockoff products. It is also important to use only products that are listed by the manufacturer to meet the intended electrical standard, such as a UL product listing.

#### WHAT IS THE DIFFERENCE BETWEEN COUNTERFEIT AND KNOCKOFF CIRCUIT PROTECTION DEVICES?

Fundamentally, both counterfeits and knockoffs pose safety risks and should not be applied. Counterfeit circuit breakers and fuses are fakes that are made to look like they were made by a trusted manufacturer, but they are actually made by an unknown manufacturer. Knockoff circuit protection devices also are made to look like genuine products from trusted manufacturers, but these lookalike copies are unbranded and typically marketed as a replacement for an original manufacture's product, often using the OEM part number.



## Dangers of counterfeit and knockoff circuit protection products

Counterfeit and knockoff circuit protection products put people's lives at risk and can result in equipment malfunctions or failures. Fundamentally, circuit protection products are used across applications to support the safe distribution of electrical power. These products are designed to protect electrical circuits from hazardous conditions such as an overload or short circuit. When these conditions occur, the circuit protection device will operate or trip, interrupting the flow of electricity and preventing potentially unsafe conditions from occurring. It is critical that these devices function as intended to protect people and property.

While counterfeit and knockoff electrical products may look like the original, they are often poorly constructed, use inferior parts, and are unlikely to meet published specifications. Further, they often misrepresent the actual voltage, current, and interrupting ratings, often failing independent testing of applicable performance standards such as UL<sup>®</sup> 489.

In addition to increased safety risks, counterfeit and knockoff electrical products may also result in added costs and longer project timelines. If a product is identified as a counterfeit late in the procurement process, it can cause project delays, unplanned downtime (for replacement), extra shipping costs, and more.

## Tips to avoid counterfeit and knockoff electrical products

- 1. Understand the dangers of using counterfeit and knockoff products.
- 2. Know that it can be hard to identify counterfeit and knockoff products by their catalog numbers.
- **3.** Contractors should purchase products from authorized resellers who can trace the path directly to the original manufacturer; online shopping requires extra diligence to source from authorized resellers.
- 4. Avoid shopping and searching for products by part number; this can lead to risky and unvetted suppliers.
- 5. Use tools provided by the original manufacturer or certification organizations to verify that electrical products are authentic.
- 6. Look for branded packaging including the original manufacturer's logo.
- 7. Examine the product to ensure proper UL and other markings; products without the authentic UL certification should not be used.

See **Figure 1** for additional guidance about what to look for on an Eaton circuit breaker to ensure it is authentic.

### What to do when you think you have a fake circuit protection device

- Do not use suspected counterfeit or knockoff electrical products. If the device has already been applied, it should be removed from service.
- Report it to the manufacturer listed and your local authorities. You can report suspected counterfeit Eaton products to report\_fakes@eaton.com. If you cannot find a brand contact, email the National Intellectual Property Rights Coordination Center (IPR Center) at IPRCenter@dhs.gov or call 1-866-IPR-2060.

To learn more, visit Eaton.com/counterfeit.

## How to spot genuine Eaton circuit breakers

Counterfeit and knockoff electrical products are an industry-wide issue that puts unsafe devices into homes and buildings. This challenge is preventable and you can help by identifying potential counterfeit devices.

## **PRO-TIP**

All labels should be clearly printed, scannable and adhered properly. If you suspect the product label was tampered with, the product may be a counterfeit or knockoff device.



Figure 1. What to look for on an Eaton circuit breaker to ensure it is authentic

If you suspect that you are dealing with a counterfeit or knockoff product, report it to **report\_fakes@eaton.com** 

Learn more at Eaton.com/counterfeit

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