

# Counterfeit & Fraudulent Items

Tom Grace

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# Counterfeit & Fraudulent Items

## Agenda

- Impact of counterfeiting on the global economy
- Proliferation of counterfeit products
- What is the gray market and why it's the channel for counterfeit products
- Examples of counterfeit, suspect and fraudulent items affecting the nuclear industry
- How to mitigate your risk from counterfeit, suspect, and Fraudulent items

# What is the Global Impact of Counterfeiting?

# What is the Impact of Counterfeiting on the Global Market?

- Globally counterfeiting is estimated to be \$1.77T
- In the U.S. counterfeiting is estimated to be \$200B - \$250B
- The loss of 750,000 jobs annually in the U.S. can be attributed to the lost revenues of counterfeiting
- The domestic value of IPR seizures for 2016 was \$1.4B
- 538% Growth in value of seizures (MSRP) since 2010 with electrical products representing 12% of all seizures
- Nearly 90% of counterfeits seized by U.S. Customs originate in China or Hong Kong

The Timing has never been better to attack this Global Problem

# What is a Counterfeit?

# Definition

## Counterfeit:

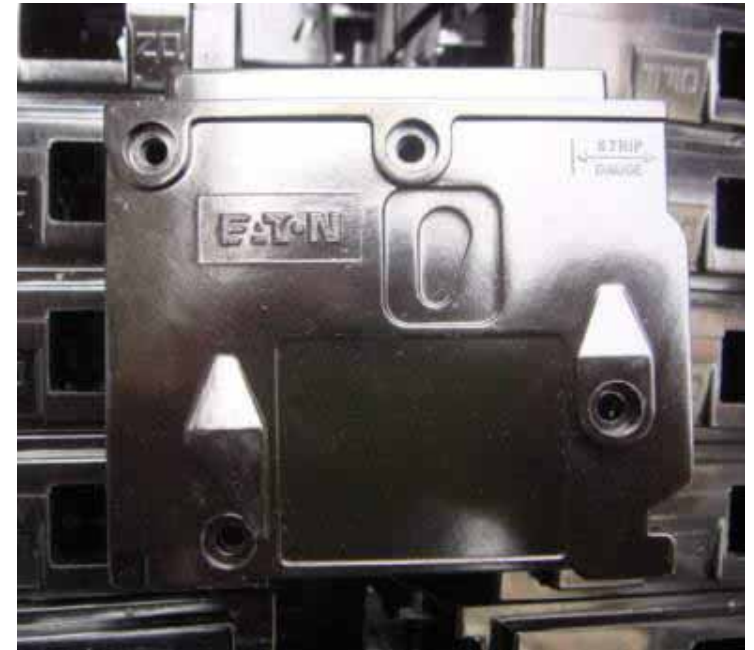
An imitation intended to be passed off fraudulently or deceptively as new or genuine.

## Related:

- Bargain priced knock-offs; common with luxury goods, watches, and handbags but now becoming more prevalent with electrical products.
- **Counterfeits** may be **newly manufactured fakes** or products **refurbished with counterfeit components, packaging, marks, documentation or labeling.**
- **Counterfeit and fraudulent** circuit breakers are **unsafe** and pose a significant risk to channel partners, contractors, and end users.
- **Unauthorized resellers tend to be the origin of counterfeit products,** knowingly or unknowingly, due to sourcing practices.

# What factors contribute to products being targeted by counterfeiters?

- Well known global brand
- High volume products
- High demand products
- Large installed base
- Complex, loosely controlled, supply and distribution chains
- Internet access to customers



All well-known brands are being counterfeited

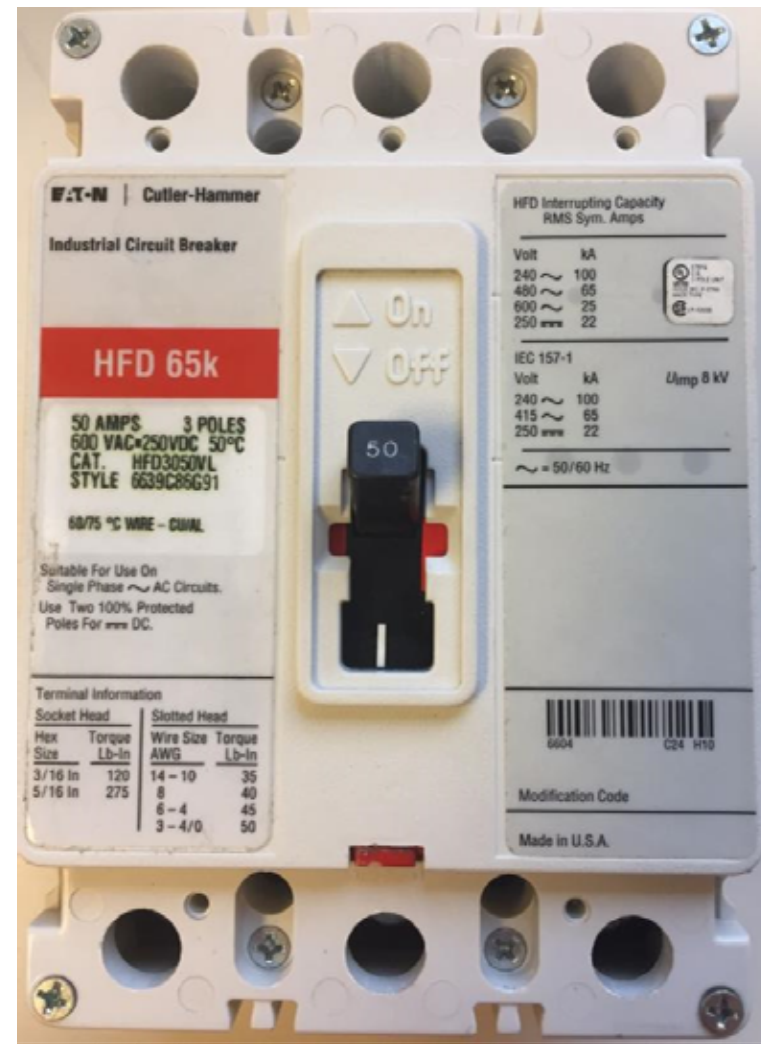
# Why are Counterfeits a Growing Problem?

- Consumers **desensitized** by bargain priced knock-offs
- Counterfeits **not fully understood as a major threat** to safety
- Easy **access** to **illicit** manufacturing and distribution via the **internet**
- **Laws** exist in many countries and **lack of** enforcement is still an issue



# Dangers of Counterfeit Electrical Products

- Counterfeit circuit breakers are difficult to detect and extremely dangerous.
- Assembled with inferior internal parts that are not built to OEM specifications and are likely untested.
- **Increased risk to personal safety, equipment, and loss of production due to failures.**



# What is the Gray Market and how it affects me

# What is Gray Market?

## Gray Market:

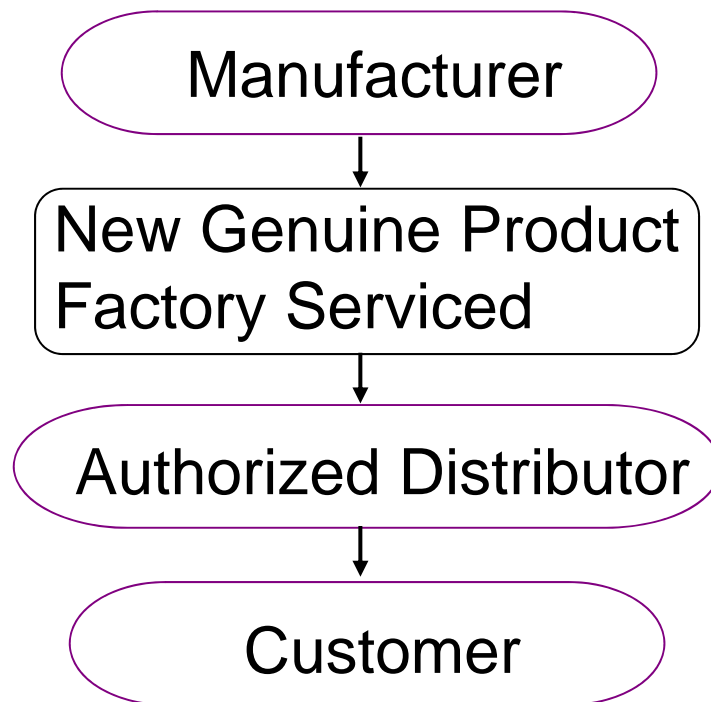
The unintended resell of genuine products by, **unauthorized, independent** resellers or brokers.

## Related:

- Products **sourced** by a variety of methods and sold “**as new**” but **without a manufacturer relationship, support, or warranty**.
- Gray market goods may be new but are **acquired** through means **outside of authorized distribution channels and policies**.
- Gray market resellers **frequently misrepresent surplus, used or refurbished** goods as new, genuine, product.
- Gray market resellers **have the highest risk for counterfeit, sub-standard, or fraudulent goods** due to sourcing practices.

# Product Origin – Authorized Distribution

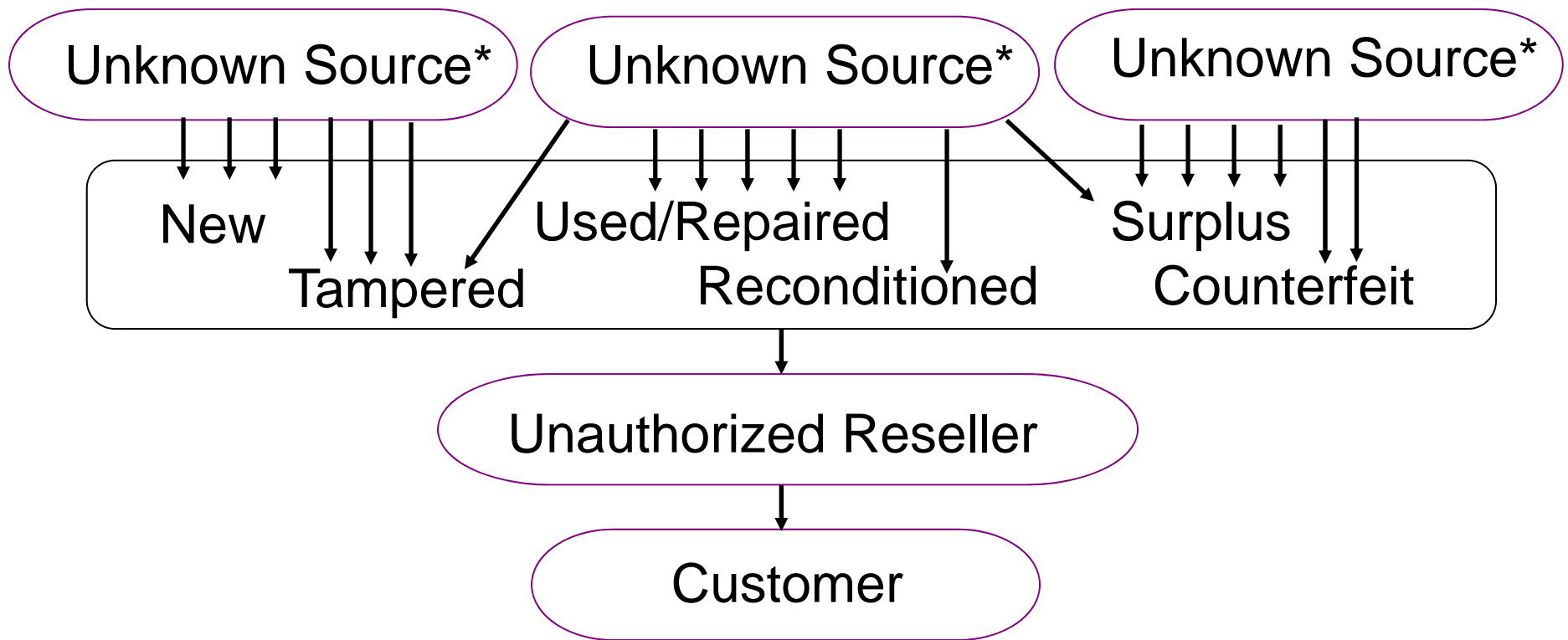
## Authorized Distribution



Purchasing products from a manufacturer's authorized reseller should ensure that the product is new, genuine, and fully warranted

# Product Origin - Gray Market

## Unauthorized Broker or Reseller



***Unknown sources means unauthorized resellers  
are ALWAYS at Risk***

# Gray Market Inventory Illustrated



Actual image from eBay listing for NEW Eaton circuit breakers

<http://www.ebay.com/itm/NIB-HFD3175-600V-3P-175A-EATON-CUTLER-HAMMER-BREAKER-NIB-/12234552632?hash=item1c7c5c9437:g:0PQAAOSwnipWVKfD>

# Breaker at US Nuclear Plant observed by AREVA



# Breaker at US Nuclear Plant observed by AREVA





# Breaker at US Nuclear Plant observed by AREVA



# Counterfeit Breaker Examples

# Counterfeit Breakers are an industry problem and prevalent across the major brokers

- TAMAS TOLDY OF **PIONEER BREAKER** PLEADS GUILTY TO TRAFFICKING COUNTERFEIT CIRCUIT BREAKERS
- JURY FINDS **BREAKERS UNLIMITED** GUILTY OF SELLING COUNTERFEIT CIRCUIT BREAKERS
- **NORTH AMERICAN BREAKER CO.** RECALLS COUNTERFEIT CIRCUIT BREAKERS DUE TO FIRE HAZARD
- **CONNECTICUT ELECTRIC** RECALLS COUNTERFEIT SQUARE D CIRCUIT BREAKERS DUE TO FIRE HAZARD
- SQUARE D® OBTAINS INJUNCTION AGAINST **MIAMI BREAKER** AND **GENERAL BREAKER & PANEL** TO PREVENT THE SALE OF COUNTERFEIT PRODUCTS
- SQUARE D® COMPANY OBTAINS INJUNCTION AGAINST **MAINE CIRCUIT BREAKER** TO PREVENT THE SALE OF COUNTERFEIT PRODUCTS
- SQUARE D® COMPANY SETTLES WITH **SPECIALTY LAMP INTERNATIONAL** TO PREVENT THE SALE OF COUNTERFEIT PRODUCTS
- **NORTH AMERICAN BREAKER COMPANY** PERMANENTLY ENJOINED FROM SELLING COUNTERFEIT SQUARE D® PRODUCTS
- **CES LIQUIDATING AND TES LIQUIDATING** PERMANENTLY ENJOINED FROM SELLING COUNTERFEIT SQUARE D® PRODUCTS
- **SCOTT ELECTRIC** PERMANENTLY ENJOINED FROM SELLING COUNTERFEIT SQUARE D® PRODUCTS

# Counterfeit Breakers are an industry problem and prevalent across the major brokers

**December 8, 2011**

Jacksonville, FL

## **Business owner pleads guilty to trafficking in counterfeit circuit breakers**

JACKSONVILLE, Fla. – A Texas business owner pleaded guilty in federal court Wednesday to one count of mail fraud and one count of trafficking in counterfeit circuit breakers, following an investigation by U.S. Immigration and Customs Enforcement's (ICE) Homeland Security Investigations (HSI).


Elod Tamas "Nick" Toldy, 62, of Austin, Texas, owner and operator of Pioneer Breaker & Control Supply in Austin, and Nick's Sales, the business' online sales and marketing component, is scheduled to be sentenced in April.

**"This individual, motivated only by greed, has allowed these potentially dangerous counterfeit circuit breakers to be bought and used in homes and businesses around the country. These items, which have not been properly manufactured or tested, could lead to costly repairs, property damage, and even serious injury or death,"** said Susan McCormick, special agent in charge of the ICE HSI office overseeing Jacksonville. "Together with our law enforcement partners, HSI will continue to engage in an unrelenting pursuit of those companies and individuals who attempt to profit from the illegal trafficking of counterfeit products."

On April 21, 2010, ICE HSI special agents from Jacksonville and Austin executed a search warrant at Pioneer Breaker & Control Supply's warehouse in Austin, resulting in the **seizure of approximately 19,000 counterfeit electrical components and label making equipment. The manufacturer's suggested retail price (MSRP) of the electrical components was more than \$1.7 million. A subsequent search of another warehouse in Laredo, Texas, by ICE HSI special agents there lead to the seizure of an additional 77,000 counterfeit circuit breakers with an MSRP of more than \$3 million.**



U.S. Immigration and Customs Enforcement



Counterfeit & Fraudulent Items  
1st Recorded Incident  
Nuclear Utility  
SCE&G  
2015

# Counterfeit & Fraudulent Items

## 1st (and 2nd) Recorded Incident



# Counterfeit & Fraudulent Items

## 1st (and 2nd) Recorded Incident

Suspect Counterfeit or Fraudulent Item Incident Report		Incident ID: 29
		Date Reported: 05/22/15
<p>Incidents reported may not yet be confirmed cases of counterfeit, fraudulent, or standard items (CFI). Reporting suspect items is encouraged as a preventative measure. Additional notification will be provided for incidents confirmed to be false by the original equipment manufacturer.</p>		
Status: New	Defect Type: CFI	
Reported By: Brian Mervak	Report Date: 05/22/15	
Part 1: Item	<p><b>Purchased from local Graybar Electric, Columbia, SC.</b></p> <ul style="list-style-type: none"> <li>• PO requires distributor to purchase from.</li> <li>• Items arrived with no documentation.</li> <li>• Identified at receipt that breakers were tampered (Date Codes / Serial Numbers removed)</li> </ul>	
<p>ITEM TYPE (NO Molded Case Circ CFI ITEM SUPP Graybar (Distrib ORIGINAL MAN Eaton Cutler-Ham ORIGINAL EQUIP Westinghouse ASSEMBLY LEV Part LOT, BATCH, OR QPC has been rem DISCOVERED F Suspect Packag</p> <p>If the suspect item component type COMPONENT T Molded Case Cir</p>	<p>Part 2: Repor</p> <p>IS CFI SUPPLI <input checked="" type="checkbox"/> YES Graybar is not an Eaton has been r</p> <p>WAS CFI SUPP <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Graybar was notified of our findings. This is a local location and is used often by both Nuclear and Fossil. <b>The original equipment manufacturer or other reliable source (not the CFSI supplier themselves) should be contacted to determine if the supplier who provided the CFSI is an approved distributor/agent. If CFSI supplier is not an approved distributor/agent, it is recommended that they not be notified prior to contacting the OEM and reporting the incident to proper authorities. If possible, suspect items should not be returned.</b></p> <p>WAS ORIGINAL MANUFACTURER NOTIFIED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Eaton was notified. This was a non-safety purchase <b>The original manufacturer should always be notified first so they may determine status of the suspect item supplier, inform authorities conducting ongoing investigations and assist in confirming or refuting</b></p>	
	<p>authenticity of the item(s) WAS NUCLEAR REGULATORY COMMISSION NOTIFIED? No NRC should be notified if the CFSI was: 1. Was purchased for use in a safety-related application and was identified as a CFSI before successful receipt (was not accepted into inventory) 2. Was purchased for use in a safety-related or nonsafety related application and was identified as a CFSI after</p>	
	<p>which is on an additional report. Items purchased from local Graybar Electric, Columbia, SC. PO requires distributor to purchase from OEM and provide us with a copy of the purchase order to the OEM. Items arrived with no documentation. It was identified at receipt that there were no date codes present on the breakers. Contacted Eaton and sent pictures. Eaton confirmed that the breakers were tampered with. Labels had been lifted and reapplied. Date codes removed, QPC (unique Eaton identifier/serial number) removed. Attached photos is for EHD3015 version of this breaker which was also found to be tampered with. Eaton and Graybar were notified of our findings. Eaton is taking measures against the supplier PCS Electrical Products.</p>	

# Counterfeit & Fraudulent Items

## 1st (and 2nd) Recorded Incident

### CFSI Recap

- Defect ID Reports 29, 30
- Molded case circuit breakers:
  - (2) EHD3070
  - (14) EHD3015
- Not purchased from a manufacturer's representative, documentation not provided
- Product found to be tampered and altered
- Reseller and OEM alerted





# Counterfeit & Fraudulent Items Nuclear Utility 2017

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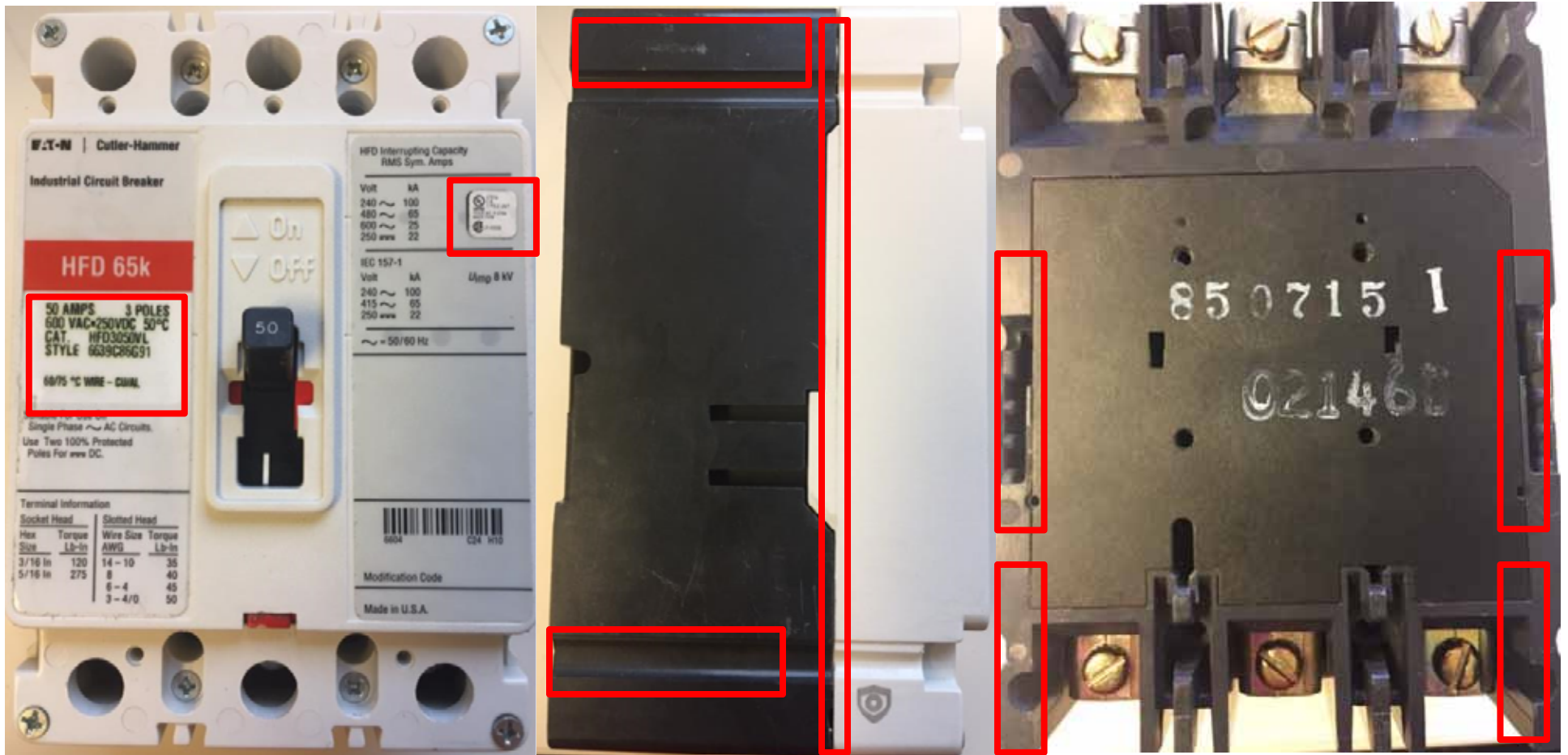


# Counterfeit & Fraudulent Items Nuclear Utility 2017



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## Nuclear Utility 2017



# Counterfeit & Fraudulent Items

## Nuclear Utility 2017

### CSFI Recap

- Multiple orders from (2) vendors.
- Molded case circuit breakers:
  - (5) HFD3050VL
  - (3) HFD3030V
- Not purchased from a manufacturer's representative, documentation not provided
- Product found to be counterfeit, scavenged, altered, modified and unsafe.

# How to mitigate my risks of counterfeit products

# How to Mitigate the Risk of Counterfeit Products

## 1. Know Counterfeit Products Pose a Danger

16807-1, UL O Test Sequence  
480v, 65kAIC, Eaton High Power Lab, 2017.03.23

# How to Mitigate the Risk of Counterfeit Products

1. Know Counterfeit Products Pose a Danger
2. Know Counterfeits are Hard to Spot



16807-2, UL O Test Sequence  
480v, 65kAIC, Eaton High Power Lab, 2017.03.23



# How to Mitigate the Risk of Counterfeit Products

1. Know Counterfeit Products Pose a Danger
2. Know Counterfeits are Hard to Spot
3. Know You Can Mitigate the Risk

16807-1, UL O Test Sequence  
480v, 65kAIC, Eaton High Power Lab, 2017.03.23

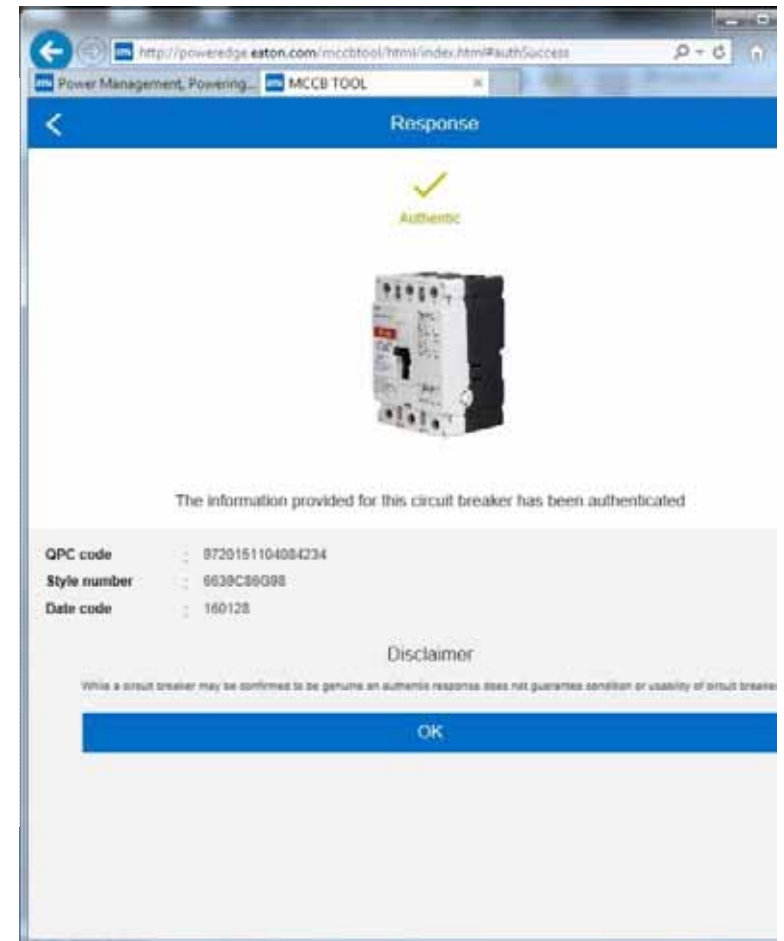
# How to Mitigate the Risk of Counterfeit Products

1. Know Counterfeit Products Pose a Danger
2. Know Counterfeits are Hard to Spot
3. Know You Can Mitigate the Risk
4. Know How to Report a Counterfeit

16807-1, UL O Test Sequence  
480v, 65kAIC, Eaton High Power Lab, 2017.03.23


# Use Manufacturer's Tools Authentication

- Support of Eaton's MCCB products through 400A (launched 2011)
- Circuit Breaker authentication and product information
- Responsive design for desktop and mobile devices
- Eaton's PowerEdge App for iOS and Android devices



# Call to Action

- You can easily become an unsuspecting victim of counterfeit products
- You should always be able to track a product to the original OEM – authorized distribution
- Authenticate whenever possible using the manufacturer's published information
- Alert the OEM of any suspect products that you might encounter



Thank You  
QUESTIONS?

Tom Grace  
Manager, Brand Protection  
Eaton Corporation  
1000 Cherrington Parkway  
Moon Township, PA 15108  
[tomagrace@eaton.com](mailto:tomagrace@eaton.com)  
412-893-3814



Joseph Beene  
PLM Electrical Components  
AREVA Nuclear Products  
100 East Kensinger Dr., Suite 100  
Cranberry Twp., PA 16066  
[joseph.beene@areva.com](mailto:joseph.beene@areva.com)  
Phone: 724-591-7003

