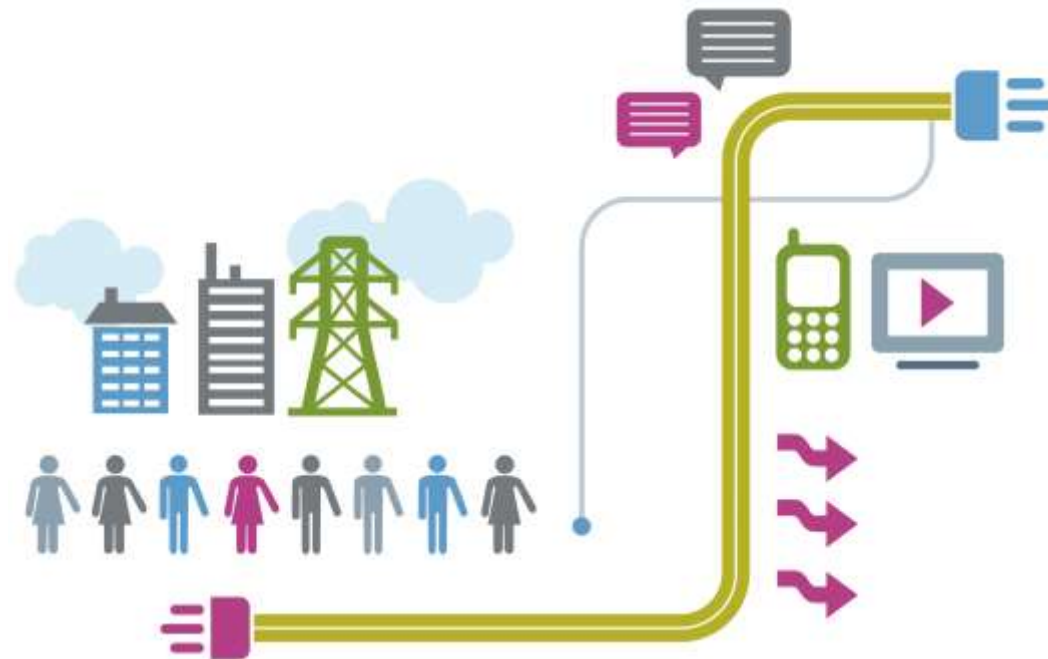


THE IMPACT OF COUNTERFEIT AND NON-COMPLIANT PRODUCTS ON YOUR BUSINESS, WHAT YOU NEED TO KNOW, AND WHAT'S BEING DONE ABOUT IT

Chris Stammers
BEAMA



About BEAMA

- **200 + member companies** from multi nationals to family owned SMEs
- Focus on current and future **Standards, Regulation and Legislation.**
- **Influence** on Safety, Environmental, Policy and Education.
- **Voice of the Industry** in decision making and information provision circles.
- **Manufacturing** a wide range of products and technologies:
 - Heating, hot water and air movement – all forms of heating and hot water products & controls, water treatment products, mechanical ventilation
 - Transmission and distribution – the electricity network equipment
 - Smart building energy management – smart, energy saving products for the home and non-domestic buildings
 - Electrical installation - products for the residential, commercial and industrial markets
- Representation on 200+ Standards Committees.

What are Counterfeit and non – compliant products?

They can usually be defined in two ways :

- The product carries false or misleading claims in respect of product performance, compliance with legislation or fitness for purpose
- The product infringes the Intellectual Property (IP) rights of the registered owner.

How big is the counterfeiting and non-compliant business ?

\$509 billion global business

- 3.3% of World Trade
- 7% Imports into EU are fakes (worth EUR 121 billion)
- 4% imports into UK (worth around £9.3 billion)

How is the UK coping with these issues?

- UK Police and Customs down by 20% in 7 years
- Trading Standards down by 56% - some areas have only one qualified officer
- Most recent Report - Overall UK customs cases down from 4.6 million in 2014 to 1.4m in 2017 (down 40% on previous year)
- Puts us behind Belgium, the Czech Republic, Germany, Greece, Lithuania, Malta, Netherlands and Romania

Sources

- China and Hong Kong still top producers of counterfeit and pirated products (82% +)
- Turkey, India, Thailand, Turkey, Malaysia, Pakistan and VietNam are now important
- Emerging transit points UAE, Saudi Arabia, Yemen, Africa, Panama, Albania, Egypt, Morocco

Is the Electrical Industry affected ?

17 leading Brands actively engaged through BEAMA in fighting Counterfeits



17 leading Brands actively engaged through BEAMA
in fighting Counterfeits



...across China, The Middle East, and Africa

90% OF FAKE ELECTRICAL INSTALLATION PRODUCTS ARE MADE IN CHINA



SOME OF THE VICTIMS!!



OVER **2700 COMPANIES** ON BEAMA'S OFFENDERS DATABASE

-95% are in China

-Information shared with local and international enforcers

OVER **25000 ILLEGAL B2B WEBSITE LINKS** REMOVED IN 2014 alone

-Alibaba

-Made in China

OVER **22.4m MILLION PRODUCTS** SEIZED AND DESTROYED SINCE 2000



Products most affected

- MCB's
- Wiring Accessories
- Distribution Boards
- Consumer Units
- Control Gear
- Fuses
- MCCB's
- Pushbuttons
- ACB's
- Cable
- Lighting Products
- Chargers
- Adaptors
- Batteries
- Hair straighteners
- Power Tools
- Kettles, Irons
- Electronic components



**PRODUCTS ARE VERY OFTEN
TRADED UNLABELLED TO
AVOID ACTION, and then
“OEM BRANDED”
AT THE POINT OF SALE**



**“PASSING OFF” OF
Established BRANDS**

LOOK AGAIN!



MK

IVIK



Schneider
LEGRAND
Hager
Crabtree
Tenby
MERLIN
EATON

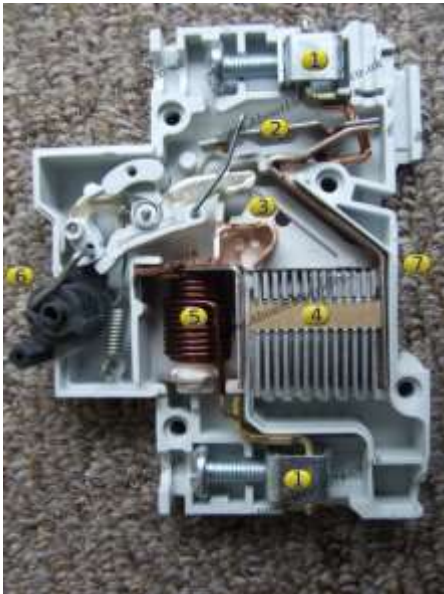
Schneider
LEGEND
Hoger
Crablice
Tonby
IVIERLIN
EATOIV

**LOOK-A-LIKES
COPY CATS
BAD FAITH MARKETING**

PASSING OFF



WHAT CAN LOOK PERFECTLY GOOD FROM THE OUTSIDE



CAN HIDE SOME HORROR STORIES WITHIN !!



THE BEAMA MODEL

Working Together and Taking Action

- Mutual Problems.
- Counterfeiters deal in Multiple brands.
- Use Investigators common to all the brands.
- Co-ordination through the Trade Association.
- Share resource, information and costs.
- Target both source and market locations.
- Lobbying Government & Enforcement bodies.

How relevant is this to the UK ?

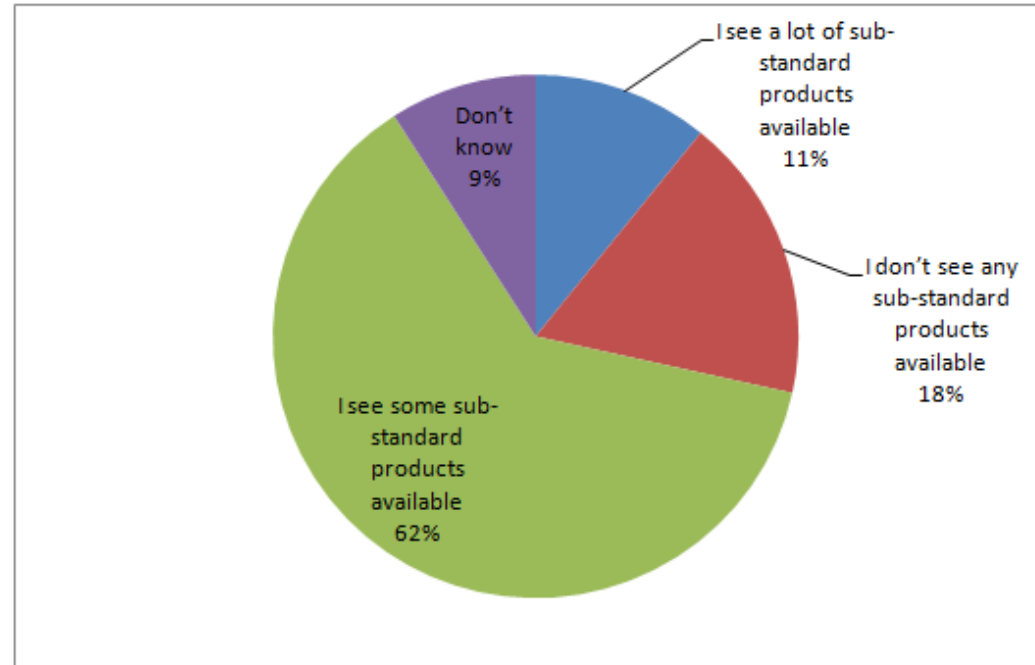
The established UK electrical distribution market is mature ... but

- The fastest growing distribution sector is the e-commerce channel
- The UK e-commerce market is the third largest globally .
- It is also the largest in Europe

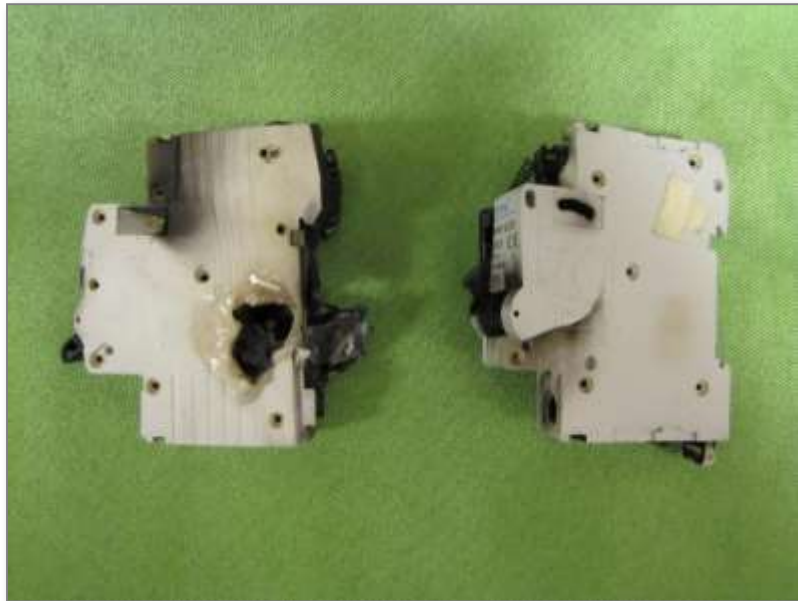
Are electrical infrastructure products being bought online in UK ?

A recent survey

How conscious are you of there being sub-standard* electrical products available for sale in the UK? (* Sub-standard is defined as not meeting a published standard – BSI, CENELEC, IEC)



- Almost three quarters of respondents reporting availability of either 'a lot' or 'some' substandard products.
- There are potentially significant quantities of non-compliant and unsafe products circulating within the UK market
- Distributors, importers and contractors need to be more diligent as they are responsible for what is imported, sold and installed in the UK.



2 Suspect brands of MCB literally 'explode' on Short Circuit test

BEAMA initiative takes products from the market and checks for compliance with Standards



Examples of Non-compliant products available on line



1 of 3 photos

[◀ Previous](#) [Next ▶](#)**Alert number:** A12/0260/19**Category:** Electrical appliances and equipment**Product:** Residual-current circuit-breaker**Brand:** AOELEC**Name:** Unknown**Type / number of model:** AUB1LE C40**Batch number / Barcode:** Unknown**Risk type:** Electric shock, Fire

The product does not break the electric circuit in case of a fault.

As a consequence, it does not protect against electric shock or it might overheat, leading to fire.



1 of 1 photo

Alert number: A12/0263/19**Category:** Electrical appliances and equipment**Product:** Residual Current Circuit Breaker**Brand:** CNC**Name:** Unknown**Type / number of model:** YCB7LE-63 4 pole**Batch number / Barcode:** Unknown**Risk type:** Electric shock, Fire

The Residual Current Circuit Breaker with Overcurrent Protection (RCBO) does not break the electric circuit as intended. This could lead to a possible risk of electric shock or fire.

The product does not comply with the requirements of the Low Voltage Directive and the relevant European Standard EN 61009-2

Share on



SELLING, INSTALLING OR USING THESE PRODUCTS OR SYSTEMS HAS CONSEQUENCES

- Inconvenience – due to a lack of performance and/or reliability
- Cost – of replacing a product when it fails (installation cost!)
- Damage to reputation – for selling or installing a product that has failed
- Loss of business – either an individual customer or even an entire business
- Damage to property
- Injury or death
- Criminal proceedings – fines or imprisonment

PROTECT YOURSELVES, YOUR CUSTOMERS AND YOUR FUTURE !

- Recognise the value of your IP.
- Register your Trademarks [®] and Designs in your market countries and China.
- Register a unique abstract mark for use by your company (carton, motif/symbol, stripes, etc).
- Ensure any Utility Patents are valid in your market countries and China.
- Enter into Trademark and Customs watch schemes, particularly for China.

PROTECT YOURSELVES, YOUR CUSTOMERS AND YOUR FUTURE !

- “Mould in” your company Name and/or Logo
- Use printed / branded cartons.
- Print directly (or preferably etch) details onto or into the product.
- Try not to use adhesive labels, where possible.
- If you have to use labels, use security style.
- Use security inks, where possible.
- Unique numbering system or barcode, for track and trace.
- Imbed your IP into the product where possible.

WHAT ADVICE DO WE GIVE THE MARKET AND TO BUYERS OF ELECTRICAL PRODUCTS ?

- Use well known manufacturers products.
Hopefully, from BEAMA member companies.
- Ensure that distributors are authorised by those companies.
- Beware of Grey Market and unauthorised sources.
- Beware of Internet Traders.
- If in any doubt, demand proof of any authorisation or compliance claims.
- If in any doubt, report any suspicious approaches, claims or activities back to the brand holder.

or to : www.doesitcomply.co.uk

BEAMA Safety Checklists



SAFETY CHECK-LIST



Miniature circuit breakers (MCBs)/Residual current operated circuit-breakers without integral overcurrent protection (RCCBs)/Residual current operated circuit breaker with integral overcurrent protection (RCBOs).

This check-list outlines simple measures to help you to safeguard against being deceived into buying counterfeit and non-compliant products.

Non-compliant products present significant risks to people and property and carry serious consequences for the distributor and installer of such products. Non-compliant products will not ensure protection against fire or electrocution, potentially resulting in lethal consequences. Choose your electrical circuit protection products with care.

The main function of a miniature circuit breaker (MCB) is overcurrent protection. It must interrupt electrical current in the case of a short circuit or an overload current flowing in an electrical circuit.

The main function of a residual current operated circuit-breakers without integral overcurrent protection (RCCB) is that it must interrupt electrical current in the case of either leakage current to earth.

The main function of a residual current operated circuit breaker with integral overcurrent protection (RCBO) is protection against overcurrent and earth leakage. It must interrupt electrical current in the case of:

1. Short circuit or overload current on an electrical circuit, or
2. A leakage current to earth.

Performance criteria is defined by the appropriate product standard e.g. BS EN 60898, BS EN 61008, BS EN 61009. Manufacturers/suppliers must be able to provide, when requested, the relevant documentation (e.g. Technical File).

CHECK 1 – General Quality Indicators

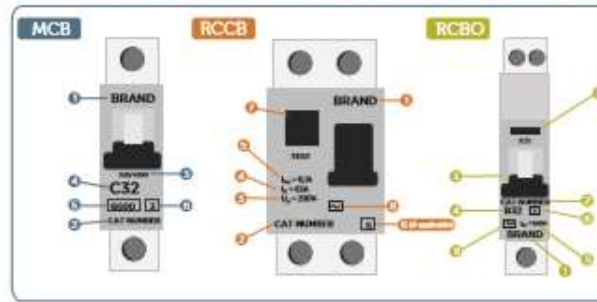
- * Imperfections in moulded case finish?
- * Presence of excess material / jagged edges on the outer casing of mouldings?
- * Visible corrosion of metal components (terminal clamps / screws)?
- * Is the product CE marked? (Indicates conformity with all relevant European legislation)
- * Illegible, poorly aligned or smudged markings?

One or more of the above quality indicators could indicate a non-compliant product. Products without CE marking are non-compliant.

CHECK 2 – Other Factors to Consider

- * Purchasing Channel – do you know and trust the person / organisation offering you this product?
- * How does the weight of the product compare to similar products with which you are possibly more familiar? (A lightweight product could indicate the absence of critical components).
- * Can your supplier provide you with a copy of a Type Test Certificate to prove compliance?
- * Does the Type Test certificate come from a recognised laboratory / authority?
- * BS7671 18th Edition states that devices and components installed in assemblies shall only be those declared suitable by the assembly manufacturer. Incompatible devices / assemblies could result in overheating and failure.
- * Extreme care must be exercised if you are offered previously used circuit protective devices as the service of these devices will be unknown. It is impossible to know the internal condition and protection capability of a used circuit protective device.

CHECK 3 – Does the product carry all of the required key markings?



The following must be marked in a durable manner (some may be marked on the side of the device)

MCB

1. Manufacturer's name or Trade mark. Do you know and trust this name?
2. Type, catalogue or serial number
3. Rated voltage(s): 230V or 400V or 230/400V
4. Rated current without the symbol 'X', preceded by the symbol of instantaneous tripping (Type B, C or D) e.g. B10, C32, D10
5. Rated short circuit capacity, in Amperes within a rectangle (e.g. 6000, 10000)
6. Energy limiting class as shown by the number 1 or 3 in a square

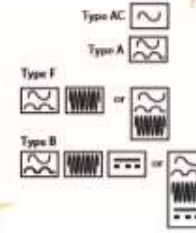
RCCB

1. Manufacturer's name or Trade mark. Do you know and trust this name?
2. Type, catalogue or serial number
3. Rated voltage(s): 230V or 400V or 230/400V
4. Rated current
5. Rated residual operating current ($I_{\Delta n}$) in A or mA
6. The symbol S in a square, for type S (time delay) devices (if applicable)
7. The test button marked with letter T
8. Operating characteristics, AC, A, F or B with the appropriate symbol(s)

RCBO

1. Manufacturer's name or Trade mark. Do you know and trust this name?
2. Type, catalogue or serial number
3. Rated voltage(s): 230V or 400V or 230/400V
4. Rated current without the symbol 'X', preceded by the symbol of instantaneous tripping (Type B, C or D) e.g. B10, C32, D10
5. Rated residual operating current ($I_{\Delta n}$) in A or mA
6. Energy limiting class as shown by the number 1 or 3 in a square
7. The symbol S in a square, for type S (time delay) devices (if applicable)
8. The test button marked with letter T
9. Operating characteristics, AC, A, F or B with the appropriate symbol(s)

RCCBs & RCBOs



If you have any concerns or suspicions about the authenticity and/or the claims being made in respect of the product, the following courses of action should be considered in order to safeguard your customers and your business. Ask your supplier for documentary evidence of compliance. Check with relevant test authorities, where appropriate.

Contact BEAMA on 0207 793 3020 or info@beama.org.uk or visit beama.org.uk

Thank you for listening