Electrical Device Safety: How To Shop Well Online?

https://www.promotelec.com/particuliers/securite-des-produits-electriques-comment-bien-acheter-en-ligne/

Because electrical safety begins with quality equipment that complies with the technical requirements in force, Promotelec and the Electrical Safety and Compliance Association (ASEC) are launching an information campaign to guide you in the purchase of electrical devices on the sites. online sales in order to avoid accidents by warning you of the risks to you, your property and your pets, and thus guarantee the proper functioning of your electrical equipment

<u>On the program</u>: the responsible purchasing path to choose your electrical equipment, videos to better understand the challenges of electrical safety, a cross-interview with ASEC members and **insight into the risks** incurred with the installation of non-compliant devices..





What is a responsible purchasing path?

Discover in 10 key steps the responsible purchasing path to follow in order to know how to locate compliant equipment on the internet and to ensure the quality of the equipment you choose to carry out your electrical installation.

In this article, we have chosen to take as a practical example the purchase of protection devices, circuit breakers or Inter-differential, for an electrical installation in the residential area.

Here are two videos to illustrate this responsible purchasing journey in pictures:

Lire la suite





The dangers incurred with a non-conforming electrical device present in an electrical installation



For an electrical product to operate safely, the equipment used must meet applicable safety standards and technical requirements. These characteristics are attested by the CE marking and can be confirmed by the NF mark. In this article, we explain the risks posed by the use of non-compliant electrical equipment for your safety on the one hand and the consequences for your electrical installation on the other hand.



Lire la suite

The ideal partner of this campaign to raise awareness of the risks of non-compliant and dangerous electrical devices, ASEC has been working for over ten years to maintain the safety of users of electrical equipment by reporting devices recognized as non-compliant with serious risks while respecting the law. competition. We interviewed Olivier Masseron, President of ASEC and Pierre Selva, Vice-President to find out more about the association's actions.



Lire la suite

Promotelec presents the responsible purchasing process in pictures.



Télécharger

Think you know everything about the responsible purchasing path for compliant electrical devices? Test your knowledge in answering to our questions on the Promotelec Website (in French language)

Online shopping: how to choose the right electrical appliances?

Published on 15th of March, 2021

Discover in 10 key steps the responsible purchasing process to follow to know how to locate compliant electrical devices on the internet and to ensure the quality of the material you choose to carry out your electrical installation. In this article, we have chosen to take as a practical example the purchase of protection devices, circuit breakers or differential switches, for an electrical installation in the residential sector.





- 1. Read the characteristics **announced on the web page** corresponding to the protection device (function, current, number of poles, voltage, etc.) and compare them to those required.
- **2.** Check the consistency of the information given on the web page. For example, make sure that the content of the product sheet (photo, description) matches the advertised material. Inconsistencies in the characteristics presented should alert you.
- 3. Check the presence of markings / symbols on the product displayed on the web page:
 - CE marking (compulsory)
 - Standard EN or NF-EN XXX (compulsory)

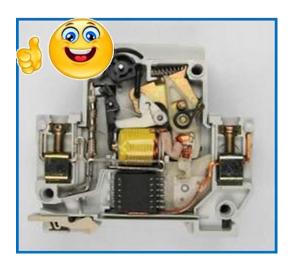
If the markings / symbols described above are not present, then the product is not intended for the French / European market.

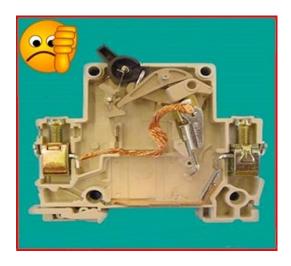


Logo NF © LCIE

4. Do not buy transparent devices (not meeting standards) or electronic differential switches (prohibited by the installation standard in France NF C 15 100).

For information, here is the internal design of a circuit breaker presumed to comply, and that of a circuit breaker found on the internet leading to serious risks.





- 5. Look for legal information on the chosen seller before ordering.
- 6. Do not order during the first connection. Reconnect later to see if the link is still active.
- **7.** Check whether delivery is possible directly to your address and whether the payment and the invoice are in Euros.



- 8. Before ordering, ask yourself a few questions, such as:
 - "I am aware that the product chosen meets my needs, so I buy with peace of mind";
 - "I am aware that the product chosen meets my needs, and will be installed in an electrical installation that meets the <u>6 safety points</u>";
 - "I am aware that the product chosen meets my needs, so I protect my loved ones, my pets as well as my property";
 - "I am aware that the product chosen meets my needs, so I ensure my safety as users of electrical equipment."



9. Once the device has been received, **check that the characteristics of the device received correspond to the one ordered:** markings, functions, manufacturer's brand, number of poles, quantity, etc.

Focus on the potential consequences of purchasing a non-compliant protective device leading to serious risks.

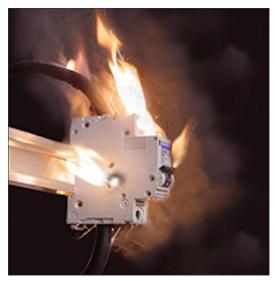






Photo © Fire-Men

10. To avoid making mistakes in the purchase of your electrical appliances, **seek the advice of a professional electrician** who will be able to give you the best advice to ensure the safety of users of the electrical installation

What are the risks of buying a non-compliant electrical device?

Published on 15th of March, 2021

For an electrical product to operate safely, the equipment used must meet applicable safety standards and technical requirements. These characteristics are attested by the CE marking affixed by the manufacturer on his devices or their packaging and confirmed or not by the NF mark issued by an independent laboratory. In this article, we explain the risks to your safety, to your property and to your pets, posed by the use of non-compliant electrical equipment.

Two guidelines for choosing the right devices

This is one of the key points of the responsible purchasing process to be followed to guarantee the proper functioning of your electrical product and ensure its quality over time: **check the presence of CE and NF acronyms or not on the device.**

As the ASEC (Electrical Safety and Compliance Association) specifies on its <u>website</u>, **"the CE marking is a mandatory European marking for all products subject to one or more European Directives"**. It indicates that the products comply with the essential requirements of the "New Approach" Directives dealing in particular with questions of safety, public health and consumer protection. The CE marking allows the free circulation of products in France.



Logo NF © LCIE

The NF conformity mark is voluntary and allows a manufacturer to add an additional guarantee to its product by ensuring that it meets the quality, safety and reliability requirements in force in France. The devices are tested by an independent approved laboratory before they are placed on the market, then by periodic inspections in the factory.

The nature of these two benchmarks lets us easily guess the risks that the use of non-compliant electrical products can represent. Non-compliant equipment that can be found today for sale on the internet has not been checked to ensure its good functionality.

The device is at first glance similar to an approved product, but does not have the technical capacity to properly fulfill its mission. Sometimes the difference is gross and can alert the most seasoned: difference in size, weight, poorly executed finishes, absence of elements ... But, in the end, no one is safe from being deceived one day or the next. " other if the stages of the responsible purchasing process that we recommend are not followed.

In terms of safety, electricity is not an area that can escape regulatory audit protocols and deal with unapproved products, the danger is too great.



Electric shock, fire ... the risks of a non-compliant electrical device can be serious



Photo © Fire-men

Each year, France has around <u>50,000 declarations of home fires from an electrical source</u>, according to ONSE (National Observatory for Electrical Safety), of which 61% are related to electrical equipment.

3,000 people are victims of electrisation, a phenomenon corresponding to the passage of electric current through the body, which can cause more or less serious injuries (burns), and about **40 people of electrocution** (electrisation causing death).

The electrical installation of your home is cleverly designed machinery to properly operate all of your electrical equipment, following a series of technical rules to protect you from electrical risk and preserve their quality over time.

Each component of your electrical installation is designed to play a specific role. All it takes is a lack of equipment to put exposed people, your property and your pets at risk (electrocution, fire).

>> To find out how to choose your electrical equipment on the internet, see our article detailing the steps in the responsible purchasing process.

How ASEC hunts down non-compliant electrical devices

Published on 17th of March, 2021

The ideal partner of this campaign to raise awareness of the risks of non-compliant and dangerous electrical devices, ASEC has been working for over ten years to maintain the safety of users of electrical equipment by reporting devices recognized as non-compliant with serious risks, while respecting the competition law. We interviewed Olivier Masseron, President of ASEC and Pierre Selva Vice-President to find out more about the association's actions

With this new campaign, ASEC (Electrical Safety and Compliance Association) encourages the general public to follow a responsible purchasing process to choose the right electrical devices in the event of work in homes. Why is it important to respect each step of this process?



Olivier Masseron: More and more people are tinkering in their homes and buying their electrical products on the internet. While many do so from the big brands that they know well, there are many who get their supplies from other specialized sites, from marketplaces, which distribute all the daily products.

The risks are therefore not the same when buying an item of clothing or an electrical protective device. For the latter, security issues require certain precautions to be taken from the purchase phase

With this campaign, ASEC wishes to make the general public aware of the risks involved in the purchase of electrical devices of receiving non-compliant devices. It's not just about the price argument, which can sometimes be an indicator of device compliance, but looking at all the criteria of electrical devices that help keep electricity users safe.



Pierre Selva: Electrical appliances are not trivial. The purchase of this type of device first requires that the buyer be aware of the risks he runs by purchasing unsuitable and non-compliant devices. He must then be able to identify the characteristics of the devices to be purchased and check that they correspond to those mentioned on the merchant site.

Once the device has been received, make sure that it conforms to the one ordered and that it has the expected characteristics. Finally comes the device assembly phase which also requires skills on the part of the buyer in order to guarantee a so-called safety installation.

Two marks make it easy to recognize compliant devices, the CE marking and the NF mark. What sets them apart from each other?

Pierre SELVA: CE marking (European conformity) is made compulsory for electrical devices by regulations, and allows their circulation on European territory. The NF mark is voluntary.

It is the manufacturer who takes the process of certifying his device to the NF mark. The objective of this approach is to strengthen the confidence of its customers by proving the conformity of the device with the standards applicable in France, but also its conformity within the framework of an

electrical installation. An electrical device marked NF can be used in an electrical installation without any limit

What are the risks involved in purchasing a non-compliant electrical device?

Pierre Selva: First of all, the purchase of devices as we said, is essential in order to ensure the supply of compliant devices. The first of the risks for the person after the installation of a nonconforming device, is to lead to an electricization of the exposed person, even to an electrocution. This is the case, for example, with a non-compliant circuit breaker, the risk of which is that the latter will not trip when necessary, and put you in danger.

Also, if the circuit breaker is incorrectly calibrated, there may be abnormal heating in the cables which may cause a fire to start in the home which may luckily be quickly mastered and extinguished, but also become uncontrollable and require the intervention of Firefighters. This is one of the reasons why the technical specifications of the device to be installed in the switchboard must be defined in advance, as they will determine the effectiveness of the protection and the limitation of risks.

What share do nonconforming electrical products occupy in the market?

Pierre Selva: The development of e-commerce and the multiplication of distribution channels make this estimate difficult today. It is now possible to buy devices halfway around the world with a few clicks, it becomes impossible to trace everything. Nevertheless, it is estimated that around 150,000 non-compliant electrical devices are installed in homes in France, with all the risks that this may entail.

Thanks to the data published by the ONSE (National Observatory of Electrical Safety), we also know that 25% to 35% of fire claims in the residential area are from an electrical source, which represents around 50,000 fire declarations per year.

The economic impact of these electrical disasters and accidents in France amounts to around 3 billion euros. A significant proportion is caused by faulty electrical protection of the installation.

How does ASEC fight against the proliferation of these non-compliant electrical devices on the market?

Olivier Masseron: ASEC's action consists first of all in identifying devices on merchant sites that appear questionable or even non-compliant. Consumers also have the option of reporting devices that they consider potentially dangerous directly to the ASEC website.

ASEC buys the most risky devices for testing by independent laboratories. These tests are defined by the standards and similar to those carried out by an industrialist when he wants to have his devices certified for the NF mark.

Pierre SELVA: Since the creation of ASEC in 2008, our team has studied more than 1000 different devices. When the non-conformity is confirmed by the test report, we draw up a technical file that we send to the DGCCRF (Directorate General for Competition, Consumption and Fraud Control), in which we detail all factual elements concerning the non-conformity of the device.

While ASEC does not communicate any information to the general public, as can a consumer defense association, it plays a real support role for market surveillance authorities

Olivier Masseron: Beyond the benefit for the consumer of having an efficient, compliant and safety device within his electrical installation, ASEC also ensures that all market players play by following

the same rules, so that they there is no distortion of competition between those who respect the rules and those who would have no qualms about circumventing them.

>> For more information, visit www.securelectrique.com

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