

# External protection

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## TeltoCharge RCD FAQs

### **What is an RCD and why do I need it for my charger?**

An RCD, or Residual Current Device, is a safety device that automatically cuts off the electric supply when it detects an imbalance in electricity flow and current increase on Protective Earth wire between live and neutral wires. This is crucial for preventing electric shocks and fires when using your charger.

### **What are the installation options available for the RCD?**

There are three installation options provided, with varying requirements for tripping current, overcurrent protection, and compliance with specific IEC standards. More details.

### **Is the RCD included in the Teltocharge package?**

No, the RCD is not included in the package and can be purchased separately. Please consult with your installation specialist.

### **Do I need an additional RCD if my house grid already has one installed?**

If the house grid already has an RCD pre-installed on the same supply line as Electric Vehicle Supply Equipment, an additional one is not required, but to avoid misunderstanding please consult with your installation specialist.

## **Is a Type B RCD mandatory for installation as per the manual, and will using a Type A RCD instead invalidate the warranty?**

Our company prioritizes safety, which is why we strongly recommend using an external Type B RCD with our device. A Type B RCD offers comprehensive protection against all types of residual currents, including those that Type A may not detect, such as smooth DC currents. While modern electrical grids typically include Type A RCDs, they do not cover some types of currents that Type B does. If a Type A RCD is used instead of the recommended Type B, it may not provide complete protection, which is essential for safety.

## **What do we have integrated in our product if it is not an RCD?**

Our charger uses Residual Current Monitoring (RCM) to detect unusual AC and DC currents and alert the system, which is not the same as an RCD. RCM continuously checks for electrical leakage without stopping the power flow, whereas a Type B RCD actively disconnects the electricity if faults are detected, offering a higher level of direct protection against electric shock.

# **TeltoCharge Product FAQs - SPD Information**

## **What is a Surge Protection Device (SPD) and why do I need one?**

An SPD is a device designed to protect electrical equipment from voltage spikes. It's necessary for safeguarding all electrical devices at home including the electrical components of your TeltoCharge products from sudden surges in electrical power.

## **Are SPDs included in the package with my charger?**

No, SPDs are not included in the package and must be purchased separately.

## **Should I use an external Surge Protection Device (SPD) with my charger?**

We highly recommend using an external SPD to shield all electrical devices power surges. Without an SPD, electrical devices including your charger may be more susceptible to damage from surges, potentially affecting its function and lifespan.

## **What types of SPDs are recommended ?**

We recommend two types of SPDs: Type 1 SPD with a maximum continuous working voltage of 275VAC, and a Combined Type 1&2 SPD with the same voltage specifications. Both should be certified according to the IEC 61643-111 standard. Using an uncertified SPD may not provide adequate protection against power surges, potentially resulting in damage to your electrical devices.

[More Info](#)

## **Is surge protection necessary for maintaining the warranty, and what happens if a customer declines the surge protection option?**

Surge protection is not a mandatory requirement to maintain your warranty; however, it is highly recommended to protect your charger and other devices from voltage surges. If you choose to decline the surge protection option, be aware that any damages resulting from power surges might not be covered under the warranty terms.