# Cirprotec EN 50550

**European Standard** 

Power Frequency Overvoltage Protectors **(POP)** 



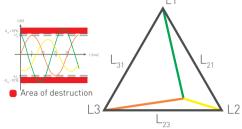




## EN 50550. Power Frequency Overvoltage Protectors (POP)

## What are power frequency overvoltages?

These are increases of hundreds of volts for an indefinite period caused by unbalanced phases. They are usually caused by breakage of the neutral conductor in the three phase power supply. This results in reduced receptor-life, their immediate destruction or even fire



Unbalanced three-phase system

## What does the EN 50550 standard say?

**EN 50550** "Power frequency overvoltage protective devices for household and similar applications (POP)" **published on March 16, 2011**, is the first standard for power frequency overvoltage protection.

**Objective:** To mitigate the effects of power frequency overvoltages between phase and neutral conductor caused by breakage of neutral

**Scope of the standard:** Power frequency overvoltage protectors (POP) for household and similar applications.

#### **SALIENT POINTS:**

• Progressive Voltage/Time tripping curve.

The tripping time depends on the magnitude of the overvoltage, ensuring quick tripping in the case of severe disturbances while avoiding unwanted activation in the event of small voltage increases.

- **Common manufacturer** of the power frequency overvoltage protector and the MCB.
- Prohibition on using earth leakage or current differential as operating principles.

## What does the EN 50550 standard involve?

Before the publication of EN 50550 there was no standard covering power frequency overvoltage protection. The design of such protective devices is now standardised.

#### **BENEFITS:**

- Ensures high standards of quality and reliability.
- Guarantees operation and power frequency overvoltage protection.
- Avoids untimely tripping



The new EN50550 product standard supports mandatory private technical specifications of power generation companies in Spain in the field of power frequency overvoltages, and paves the way for standarisation in the rest of Europe.



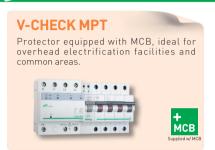
## Cirprotec has the romplete power frequency overvoltage protection range

The Cirprotec range has been adapted and tested according to the new EN 50550 standard.





## Combined protection (SPD + POP)





# V-CHECK 4R Protector with high discharge capacity (SPD) for MCCB, with undervoltage release actuation. Ideal for industrial facilities and on-site panels.



Protector with high discharge

capacity (SPD) for MCCB, with

**V-CHECK 4RPT** 



## SP)

## Power Frequency Overvoltage Protection (POP)





Demand products which comply with EN50550 for quality and safety. Trust a specialist. **Trust Cirprotec** 



## More information at www.cirprotec.com/EN50550

Specialists in comprehensive lightning and overvoltage protection. Specific solutions for all types of application. For more information contact our technical sales department or go to www.cirprotec.com/products.



Surge Protection



Power Frequency Overvoltage Protectors (POP)



Surge protection for telecom and signalling networks



External lightning protection systems



Monitoring of grounding systems



Insulation monitoring



Beacon



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