

# SURGE ARRESTORS

## What is a surge?

A surge is a very short burst of high energy. Surges often occur on main supplies and telecommunication cables and may cause electrical equipment to malfunction or be damaged.

## Causes of a surge?

Some surges are caused by lightning and by switching operations on the power supply system. Surges due to network switching and adjacent lightning strikes can cause damage to electronic equipment.

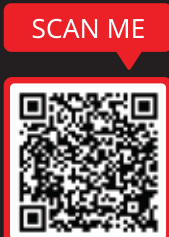
Surges from nearby lightning strikes are less dangerous than those from direct strikes, but are far more common. Power system switching operations may cause surges by switching equipment in sub-stations, industrial machinery (e.g. motor drives or air conditioners) or switch-mode power supplies (e.g. PC power supplies). Static electricity can also be a hazard.

## What are surge protective devices (SPDs)?

SPDs protect equipment by limiting the surge to which the equipment is exposed. At the same time, they divert dangerous surge currents to earth and away from sensitive equipment. In simple terms, an SPD may be seen as a switch between mains and earth. Normally the switch is open and the SPD does not affect the operation of the equipment in any way. Only when a sufficiently high surge appears across its terminals does the switch close and divert the surge away from the equipment.

CBI offers Class II, clip-in DIN and dual mounted Surge Protection Devices with LED indications. The QFL and QKL ranges are available in 1 to 4 pole configurations.

For more information  
on CBI SPDs, scan:



SCAN ME



## Why are surge protective devices (SPDs) needed?

A typical measured surge is shown below. Surges can damage electrical equipment because their amplitude can easily exceed the insulation level. Surges of up to many thousand volts are common. SPDs protect equipment from these surges, therefore assisting with saving on repair or replacement costs, and downtime.

