

TYPES OF OVER VOLTAGE

HIGH VOLTAGE

High/Over Voltage:

Long duration (milliseconds, seconds, minutes, hours or days) rise in the voltage above acceptable limits. Depending on the level of the over-voltage, the damage can be instantaneous, severe and irreparable.



What causes it? On return of mains supply after power cuts, under-sized utility oscillating between periods of brown-outs and over-voltage or accidental (e.g. accidental connection between two phases).

Solutions



TVGUARD
H1VOLTGUARD

AVS

SVS

POWER-BACK SURGES

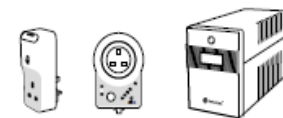
Power-Back Surges:

These typically occur when power returns after a power-cut and connected equipment receives a surge of electricity at an over-voltage level, which can be very damaging (see above).



What causes it? Power back surges are created by the utility, when it restores supply at an above normal voltage in order to compensate for the demand as connected equipment re-starts simultaneously.

Solutions



GUARDS

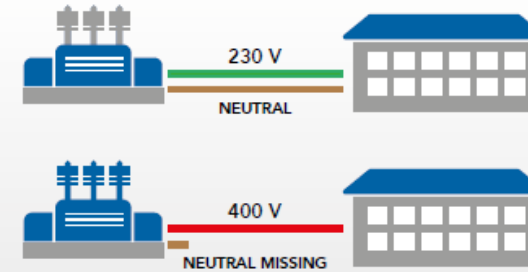
AVS

UPS

LOSS OF NEUTRAL

Loss of Neutral:

The single-phase voltage can rise to the three-phase level, exposing your equipment to over 400 V instead of the expected 230 V. This over voltage can be catastrophic for appliances.



What causes it? The neutral wire is damaged or disconnected caused by severe weather such as storms and lightning, accidents such as trees falling on wires or copper wire theft during power outages.

Solutions

AVS30



FLUCTUATING VOLTAGE

Fluctuating Voltage: Voltage fluctuations refer to changes in the AC voltage of an incoming power supply. Some of these variations can be short-term, but in cases where the mains supply has significant issues, they can be a persistent problem.

What causes it? Voltage fluctuations can result from overloaded circuits, faulty equipment, grid instability or weather conditions.

Solutions

AVS30, SVS, UPS

