



DEHN protects Safety Critical Systems

Ensure reliable operation of your safety systems

Be it fire protection, alarm and security systems or emergency and escape route lighting, electrical safety systems are only safe if they are not susceptible to failure during thunderstorms or electrical surges.

If lightning strikes or surges destroy safety systems / safety-related functions and are no longer available, then human life may be at risk. Surges can also lead to false alarms, inconvenience for operators, disruption to production and high follow-up and repair costs.

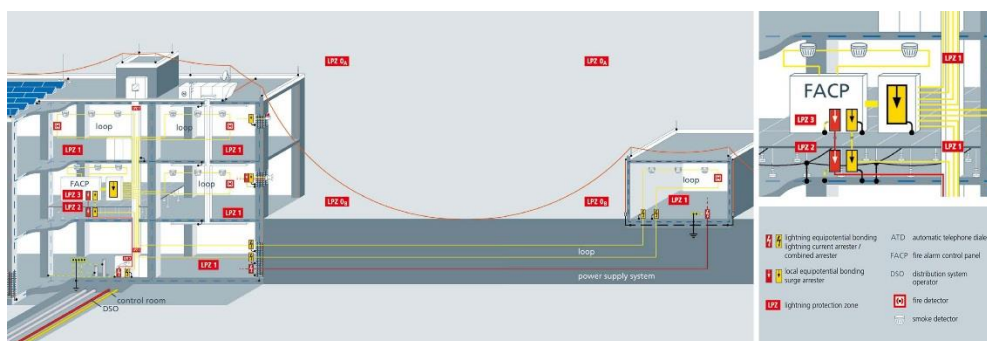
Integrating safety systems into the lightning and surge protection design will protect them against damaging lightning strike and surges.

Lightning protection zones in buildings equipped with safety systems

Safety systems, Building management, telecommunication and control systems are increasingly used in all areas of residential, commercial and industrial buildings. These networked systems make the building intelligent and ensure its optimised use with building owners and operators making high demands on the availability and reliability of these systems.

An external lightning protection system protects persons and material assets in a building from fire, however, electrical and electronic systems are not protected against failure as a result of surges caused by a lightning discharge. The British Standard for lightning protection, BSEN62305, shows that automated fire alarm systems should be protected against overvoltages if they have been selected as a risk component to reduce the level of tolerable risk during a risk assessment.

A lightning protection zone concept in accordance with the BSEN 62305-4 Lightning Protection standard provides effective protection against surges caused by a lightning electromagnetic impulse (LEMP). According to this principle, the structure to be protected must be subdivided into inner lightning protection zones with different LEMP threat values. It is advisable to match the lightning protection zones and their LEMP threat values with the withstand capability of the relevant electronic system.



The above illustration shows the lightning protection zones concept applied to a fire alarm system.

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Press release

DEHN (UK) Ltd 2016



Surge protection for Safety, Security and Fire alarm Systems

Security, safety and alarm systems are all susceptible to surges, lightning discharges and over-voltages which can cause major problems to equipment resulting in physical damage and loss of service.

The new DEHNvario DVR 2 BY S 150FM (928430) combined Type 1 Lightning current and surge arrester from DEHN protects electroacoustic systems – e.g. voice alarm, Public Address and loudspeaker systems from damaging lightning effects and surges. The performance parameters of the arrester and its high nominal current ensures safe operation of electroacoustic systems even during thunderstorms.

The DEHNvario DVR 2 BY S 150 FM protects one cable pair and allows direct or indirect shield earthing. The plug-in design enables fast installation without tools and also has an integrated remote signalling contact. Easy replacement of the arrester is ensured by the integrated terminal unit which can be released and then removed from the enclosure.

This new arrester is the first device of the new **DEHNvario** product series. This series is a new product platform which provides the flexibility to create different types of DEHNvario devices for a variety of applications from a common platform.



Power Supplies

The d.c. supplies of emergency lighting systems and the a.c. supplies of fire, security and burglar alarm systems also place especially high demands on surge protective devices. The DEHN **Red/Line** range of SPD's with their high discharge capacity and low voltage protection levels meet these demands. Remote monitoring is also available via volt free contacts allowing the status of the SPD to be constantly monitored and integrated into the building management system.



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