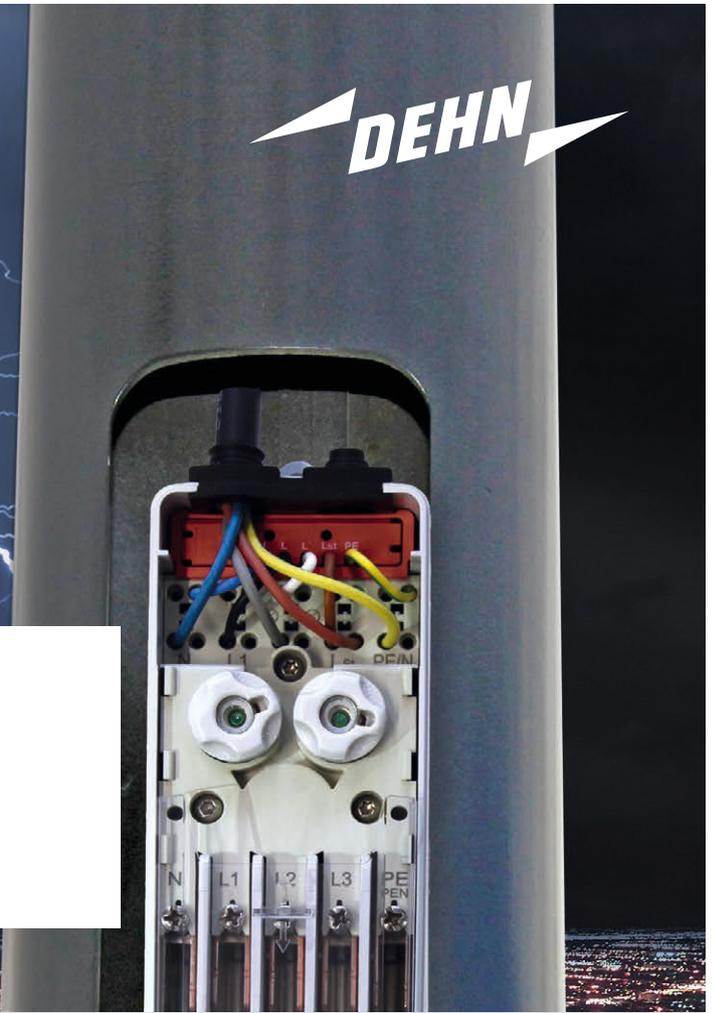




DEHN protects.

Fuse boxes for LED street lights from Langmatz



Customer

Langmatz 

Project overview

Sector

Power supply systems

Application

Surge protection for LED street lights

Hardware

DEHNcord type 2 surge arrester

DEHN protects.



Fuse boxes for LED street lights from Langmatz

Langmatz GmbH

Langmatz GmbH is a medium-sized company which offers customised system solutions and high-quality products for infrastructure applications with customers across Europe in the power supply, telecommunication and transportation sector. The company's core competences for these markets range from the design, through the development and production up to the marketing of innovative systems, for example in the field of fuse boxes for LED street lights with integrated surge protection from DEHN.

Challenge

Street lights are currently being retrofitted in German communities and municipal utilities, often with LEDs. The reasons for this include, for example, energy efficiency, subsidy programmes, removal of certain lamp technologies from the market or the long lifetime of the new LED technology. An adequate and efficient surge protection concept should be incorporated at the design stage to ensure longevity and availability and to avoid unnecessary maintenance.

Although LED technology has a lot of advantages, it has the disadvantage over older luminaire technologies that replacement costs for equipment are higher and that LEDs are more susceptible to surges. An analysis of surge damage to LED street lights shows that not individual but several LED lights are affected in the majority of cases. The consequences of damage become evident in partial or complete failure of the LED modules, destruction of the LED drivers, reduced brightness or failure of electronic control systems.

Solution

The EK 480 fuse box from Langmatz with the application-specific DEHNcord L 3P surge arrester masters these challenges. Thanks to its excellent workmanship, the fuse box ensures stability, safety and optimal installation. Moreover, the transparent enclosure cover allows quick identification of the arrester status by means of the LED indicators. The LED street light circuit can be optionally interrupted as soon as the surge arrester operates to ensure that the need for maintenance is visually indicated.

Easy installation of the overall solution was of utmost importance when integrating the DEHNcord L 3P surge arrester in the fuse box. LEDs with high-quality electronics can thus be efficiently protected against surges resulting from switching operations or nearby lightning strikes.



EK 480 fuse box with DEHNcord L 3P 275 surge arrester

Benefits of the DEHN solution

- ➔ Multipole surge arrester with monitoring device and disconnecter
- ➔ Dual visual fault indication for the discharge path of the supply voltage and the control phase
- ➔ Protection of the control phase
- ➔ The LED can be disconnected in case of a faulty surge protective device
- ➔ Compact design and space-saving installation in the upper cable connection area of the EK 480 fuse box
- ➔ Top-quality product from Germany, laboratory-tested protective effect
- ➔ Optimal technical support and training