



# 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 arresters

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### 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 communities and municipal utilities. In this process, conventional luminaires are frequently replaced by 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. To ensure longevity and availability and to avoid unnecessary maintenance, a suitable and particularly efficient surge protection concept should be incorporated at the design stage.

Although LED technology has a lot of advantages, it has the disadvantage over older luminaire technologies that replacement costs for equipment are higher and the surge immunity is lower. An analysis of surge damage to LED street lights shows that in the majority of cases not individual, but several LED lights are affected. Luminaire manufacturers and users such as municipal utilities or communities frequently cannot find the cause of damage. 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 EK480 fuse box with integrated surge protection from DEHN is used for LED street light masts. The fuse box stands out due to its excellent workmanship and practice-proven features such as optimal installation, stability and safety (during installation and operation). The EK480 product series includes a two-pole DEHNcord surge arrester with monitoring device and disconnecter. This arrester distinguishes itself thanks to its compact design and space-saving installation and efficiently protects luminaires with high-quality electronic systems against surges resulting from switching operations or nearby lightning strikes.



EK 480 fuse box with DEHNcord 275 surge arrester

### Benefits of the DEHN solution

- ➔ Two-pole surge protective device with monitoring device and disconnecter
- ➔ Visual fault indication
- ➔ Compact design and space-saving installation
- ➔ Laboratory-tested protective effect
- ➔ Optimal technical support and training