



Sparkasse Mainfranken:

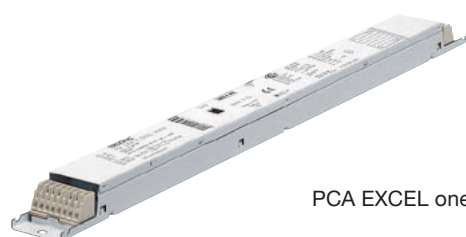
More light, lower costs

For the underground car park at its headquarters, Sparkasse Mainfranken Würzburg wanted a modern lighting system that combined maximum energy efficiency with high levels of reliability and safety. They opted for electronic control equipment from Tridonic mainly because of its integrated corridorFUNCTION.

Sparkasse Mainfranken Würzburg has around 1,800 employees and a network of 138 branches and offices, which makes it one of the largest financial institutions of its kind in Germany. As a business with deep roots in its local region, Sparkasse Mainfranken is committed to promoting local culture and social welfare in addition to improving the environment. In renovating its headquarters it was decided also to install a modern lighting system in the car park. This lighting system is characterised by energy efficiency, financial savings, high reliability and exceptional safety.

The first phase involved modernising the ATM areas and at the same time upgrading the lighting system to make it energy-efficient. Electronic control equipment from Tridonic with the integrated corridorFUNCTION was used at this initial phase and highly impressed the people at Sparkasse Mainfranken. Since the ballast itself provides intelligent control of the light there is no need for any other components. The installation was extremely cost-effective and offered great energy savings.

When it came to upgrading the lighting system for the car park at a later stage of the renovation work, Sparkasse Mainfranken wanted a convenient and above all energy-efficient solution. The entire lighting system had always been operated at 100 % output at all times and, when there were few people using the car park, the light was turned off at a switch. Anyone then coming into the car park would be in complete darkness until they had found the light switch. For reasons of convenience and safety this drawback had to be eliminated with an intelligent lighting solution.



PCA EXCEL one4all Ip

No longer in the dark

“On the one hand we needed a high level of illumination for the underground car park but the system also had to save energy for ecological reasons”, said Herbert Manger from the construction department of Sparkasse Mainfranken. To meet this challenge, the company WEBER Engineering of Würzburg, specified ballasts from Tridonic featuring the corridorFUNCTION, which had already been utilised successfully for the ATM area. This provided the required solution by producing light 24 hours a day in areas where safety and security are a necessity, achieving savings in terms of energy and costs.

The corridorFUNCTION provides enough light at all times for safety and security whilst also creating a pleasant atmosphere. Ballasts equipped with this function are preset at the factory to provide 100 % output when someone is present and fade down to 10 % when the area is vacated. The transition from one setting to the other within a pre-defined time can be easily adjusted to suit individual requirements, as can the top and bottom dimmer settings.



Pendant luminaire “peanut-H T5” from Regiolux

More light, lower costs

The old lighting system comprised 180 luminaires with 1x58W T8 fluorescent lamps and magnetic ballasts which was replaced by efficient linear luminaires with T5 fluorescent lamps. There are now 210 pendant luminaires “peanut-H T5” from Regiolux with 2x35W T5 fluorescent lamps and PCA EXCEL one4all Ip dimmable electronic ballasts from Tridonic.



5 % luminous flux as the absence value



100 % luminous flux as the presence value

The completely transparent casing of the peanut is fully lit and appears to float in the room. The dustproof impact-resistant luminaire (IP 55) repels dirt and is very easy to clean. The transparent casing means a high level of indirect light, making ceilings appear higher and giving a much better feeling of space and well being for users. Installation costs are low thanks to the convenient clip fastening and the integrated connecting cable with an IP 65 connector system for this project solution.

Despite the 40 percent higher installed electrical power, Sparkasse Mainfranken will save more than 13,000 kWh each year thanks to the corridorFUNCTION. The associated CO₂ savings are 21 t, reducing the burden on the environment considerably.

Simple upgrade, simple operation

“With the ballasts from Tridonic it was so easy to upgrade the lighting and provide the necessary features”, said Rainer Zachleder, managing director of elektro zachleder GmbH in Gemünden who were given the task of installing the new system. The luminaires are controlled via presence sensors that are all connected via a bus cable (EIB). Rainer Zachleder was impressed by the simple cabling – no different from normal dimming systems – and also by how easy it was to commission the system.

Individually configured corridor mode

The system is now operated in corridor mode from early morning to late evening. At other times the luminous flux is reduced to 5 percent within thirty seconds of the system detecting no presence, and the lights are switched off completely after a further three minutes.

Rapid payback

Reducing the luminous flux in this way leads to considerable energy savings and therefore rapid amortisation of the new lighting installation. On the basis of a comparable light output from the original installation the payback time is just a little more than three years.

corridorFUNCTION: unique on the lighting market

Underground car parks, corridors and stairwells can all be equipped with energy-saving and money-saving lighting thanks to the unique corridorFUNCTION from Tridonic. Existing lighting systems can be easily upgraded. According to Herbert Manger, “compared with non-dimmable lighting systems, the added value for Sparkasse Mainfranken is clear for all to see: high levels of convenience and safety for visitors and customers, large CO₂ savings to benefit the environment and significant financial benefits for the company.”

For more information on corridorFUNCTION and the specially developed energy saving calculator go to www.corridorfunction.com. For more information on the luminaire “peanut” go to www.regiolux.de.