

MAFELEC TEAM

Creating Smart and Sustainable Interfaces Together

At InnoTrans 2024, TSL-ESCHA and MAFELEC will jointly present a wide range of solutions from a single source to further improve passenger comfort.

TSL-ESCHA and MAFELEC are focusing on continuous development to further improve passenger comfort in public transportation, both locally and long-distance. At InnoTrans 2024, they will showcase innovative solutions from a single source that are being utilised in thousands of vehicles worldwide.

By combining TSL-ESCHA and MAFELEC, the range of innovative solutions for traffic technology for buses and trains is continuously expanded. The new products such as the handrail lights HL22 and HL18, the handrail button HSTIAV, and the sounder WSM87 set new standards in traffic technology.

The aesthetic design of train interiors and exteriors is becoming increasingly important today. With the M-Light product series, MAFELEC offers front lighting solutions for rail vehicles that can be customised to meet customer requirements. MAFELEC not only supports train manufacturers in the development, but also in the production of light modules and complete optical systems.

NEW: PK55 Push Button – Technology of the Future, Design of the Present

With the latest edition of the PK5x series, TSL-ESCHA and MAFELEC are focusing on proven quality and advanced functions. The PK55 can accommodate dual activation: tactile actuation for reliable and haptic feedback compliant with PRM requirements, and a

touchless activation option that provides hygienic benefits.

The distance and activation time of our touchless M-Safe technology can be adjusted to prevent unintended activation.

The integrated M8 plug connection on the back of the push button for 24VDC applications. M8 offers a high level of reliability for an easy connection (3 to 5 poles) and reduces the number of junctions in door profiles, simplifying installation and reducing maintenance. The extension of the proven PK5x push button series offers a high level of convenience, safety and efficiency to meet the needs of passengers. More features to come.

NEW: Handrail Lights HL22 and HL18 - Enhanced LED Lighting Solutions

Leveraging their expertise in LED technology, TSL-ESCHA has introduced two versions of handrail lighting specifically designed for rail vehicles: the HL22 and HL18. The HL22 is another joint project between TSL-ESCHA and MAFELEC.

The lighting solutions are installed in handrails in the door area. They blend seamlessly into the vehicle's design, providing a modern appearance and enhancing the interior ambiance. Positioned strategically in the



New HL22 handrail light

door areas, the handrail lights function as orientation aids for passengers, improving transfer efficiency and ensuring safe and comfortable boarding and alighting.

NEW: Handrail Button HSTIAV – Versatile and Robust

TSL-ESCHA and MAFELEC offer a wide range of handrail buttons. These product families are very versatile, ranging from simple stop request buttons to backlit displays and touchless functions.

The HST series from TSL-ESCHA, which has been in production since 2004, has been further developed and now offers a variant with acoustic, visual and haptic feedback all in one. The HSTIAV (the 'I' stands for 'illumination', the 'A' for 'acoustic' and the 'V' for 'vibration') offers vibration and acoustic feedback in addition to the two-colour illumination option in red and green, which is activated for a short time when the button is pressed, so that the feedback can be seen, heard and felt. The goal is to provide passengers with an even greater sense of safety by offering a variety of feedback options when the handrail button is pressed.

NEW: WSM87 – An All-Rounder among Sounders

Sounders in the door area of rail vehicles are extremely important. Passengers need to be warned in good time before a door opens or closes.

The WSM87 is a new development from TSL-ESCHA. The sounder has a flat design and can be easily installed in the door leaf, door cove or vehicle wall of rail vehicles. With up to 15 different melodies, the vehicle operator has many individual sound design options and can thus effectively draw attention to different situations in the vehicle.

With its modern design and advanced features, it sets a new standard in acoustic warning devices for side entry systems.

M-Light – LED Lighting for Railway Vehicles

The MAFELEC M-Light range offers a suitable format for



Varied product portfolio from MAFELEC and TSL-ESCHA

all types of rail vehicles, so that all common installation environments and the implementation of all market-specific lighting functions can be realised. All M-Light products are adapted to the individual (lighting) technical requirements of the customer in order to provide an optimal lighting solution taking into account all operating conditions.

There is an M-Light solution for every new and refurbishment project.

Whether push buttons, LED lights and lighting for rail vehicles or sounders – the products from TSL-ESCHA and MAFELEC are always designed to meet individual customer requirements and offer passengers optimum comfort through innovation.

See the MAFELEC TEAM's products for yourself and visit the joint stand at this year's InnoTrans 2024 (**Hall 27, Booth 480**).

www.mafelec.com
www.tsl-escha.com


TSL-ESCHA

MAFELEC

Creating together smart and sustainable interfaces

ML5-1/170 as front lighting for rail vehicles

CK Touchless push button with tactile and touchless activation



MAFELEC TEAM



Hall 27
Booth 480