



SOLUTIONS FOR DRIVER DESKS



Drivers from different countries must be able to take control of the driver's cab quickly, regardless of whether the vehicle comes from one country or another. UIC 612 specifies the rules to be applied for the type of product (push button, switches, toggle, etc.), the shape (round or square push button, different toggle heads, etc.), illuminated or not, the color, raised or flush products but also the pictograms to be used. This creates a wide variety of products. For more than 40 years, MAFELEC TEAM have been equipping those applications of the largest rail vehicle manufacturers in Europe and throughout the world.

MAFELEC AND TSL-ESCHA

CREATING TOGETHER SMART AND SUSTAINABLE INTERFACES

TSL stands for Touch, Signal and Light. Door opening push buttons, signal lights, sounders, indicator and display devices as well as LED lighting are part of the product portfolio. TSL-ESCHA develops, manufactures, and distributes individual customer solutions for public transportation.

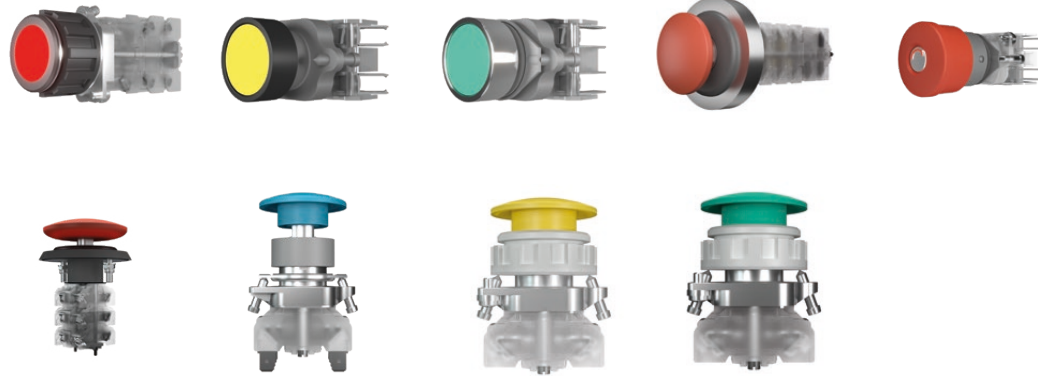
TSL-ESCHA based in Halver (Germany) and MAFELEC in Chimilin (France) are part of the MAFELEC TEAM. The owner-managed group of companies offers solutions for HMI, lighting and sensors and is active in the markets of bus and railway, industrial vehicle, industry, energy, defense, aerospace, and elevators.



PRODUCT OVERVIEW

PUSH BUTTONS, INDICATORS & EMERGENCY PUSH BUTTONS

For door control, travel direction, emergency functions



MAIN FEATURES

- Momentary or maintained functions
- Illuminated or not
- Raised or flush
- 22 mm or 30 mm panel cut out

KEY POINTS

- Round or square shape
- Different bezels and head colors
- Mushroom from 30 to 70 mm
- Customizable pictogram
- Up to 8 contacts
- Different connections: double faston, screws and brackets or screws and washers
- Accessories can be added

ROTARY SWITCHES

For light control, wiper control, rear wall operation board



MAIN FEATURES

- Momentary or maintained functions
- Illuminated or not
- Raised or flush
- 22 mm or 30 mm panel cut out

KEY POINTS

- Short or long handle, key, etc.
- Different bezels and handle colors
- Up to 16 contacts
- Different connections: double faston, screws and brackets or screws and washers
- Accessories can be added

TOGGLES, TUMBLERS & JOYSTICKS

For pantograph, train lighting, external warning horn applications



MAIN FEATURES

- From 2 to 5 positions one-way (0; +/- 17,5°; +/-35°)
- Neutral, ghost, unstable or stable position type
- 30 mm panel cut out (22mm available for tumblers)
- UIC 612 compliant

KEY POINTS

- Different shapes of handle: B, K, M, W & Z
- Different handle's color
- Up to 6 contacts
- Different connections: double faston, screws and brackets or screws and washers

SWITCHES: K4 & C800



MAIN FEATURES

- Slow motion or snap action solutions
- Front mounting

KEY POINTS

- Up to 16 or 80 contacts
- Up to IP65
- 24VDC or 110VDC application
- Up to 4 or 8 positions
- Different sizes of handles
- Special adaption feasible on request



SAFETY FUNCTIONS



CIRCUIT BREAKERS

- AC or DC applications, up to 50 A
- Magnetic-thermic
- Flush-mounted, pluggable or DIN Rail mounting



DEAD MAN PEDAL

- Different dimensions available
- Up to IP65
- 2 positions pedal
- Up to 4 contacts
- Ag/Ni or Ag/Ni+Au self-cleaning contacts

SIGNAL BOXES: BSI

Inform operators of status, train system default signal



MAIN FEATURES

- Customized pictogram
- Customized number of compartments
- Front or rear mounting

KEY POINTS

- Different dimensions available
- Interacting flashing modes or dual color light unit
- Plug and play
- Compact

CHARGING FUNCTIONS



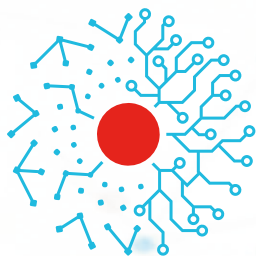
MAIN FEATURES

- Rear and front mounting
- USB socket: Type A or C, removable module
- Power socket: 250V/16A type E or F



KEY POINTS

- Vandal proof mounting
- Single or double USB socket
- Horizontal or vertical USB socket
- Customization of backlit color for power socket



MAFELEC TEAM

CREATING **TOGETHER** SMART AND SUSTAINABLE INTERFACES

HMI INTERIOR AND EXTERIOR

- DOOR EQUIPMENT
- PASSENGER COMFORT
- SANITARIES
- DRIVER DESK
- SAFETY SOLUTIONS

DETECTION & PROTECTION

- VOLTAGE & CURRENT SENSORS
- CIRCUIT BREAKERS
- INSULATORS AND BUSHINGS
- POWER SWITCHES

LIGHTING INTERIOR AND EXTERIOR

- FRONT LIGHTING
- INTERIOR LIGHTING
- EXTERIOR LIGHT SIGNATURE



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