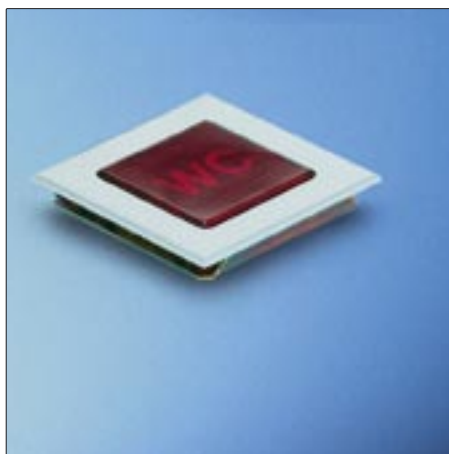
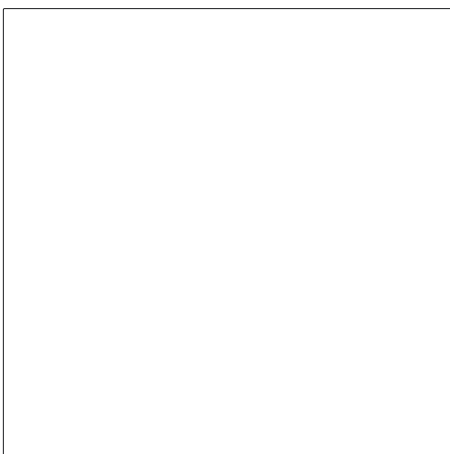
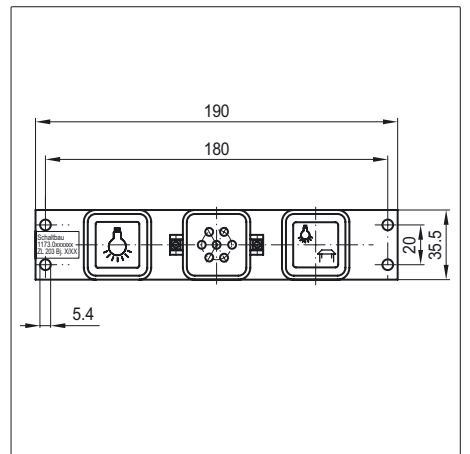
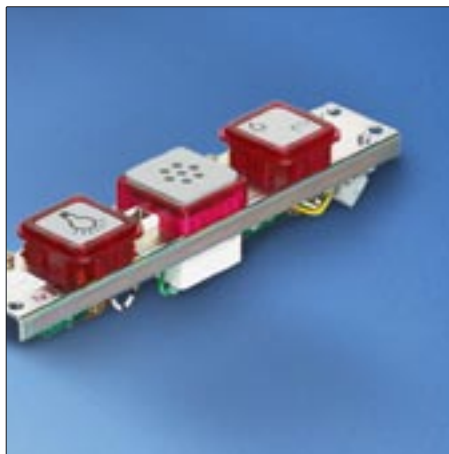
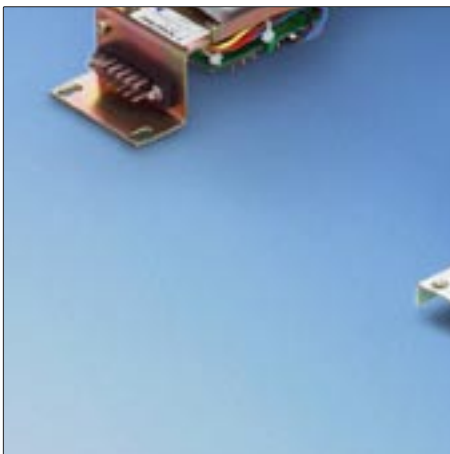
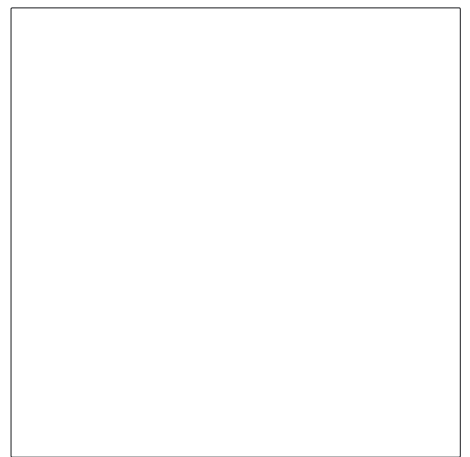
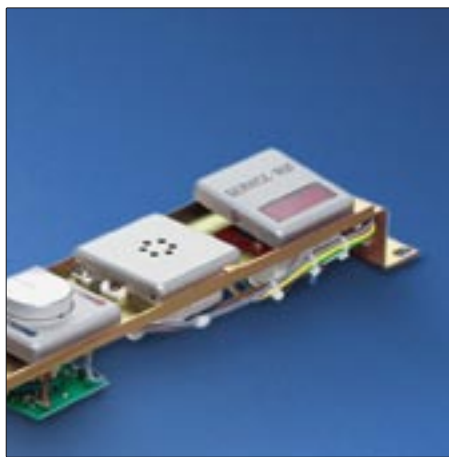


Control panel assemblies for motorised trains and passenger coaches



F 175.en

Control and indicating equipment for passenger coaches

Schaltbau control-panel assemblies can be found in all types of passenger coaches at home and abroad. During the years our comprehensive custom-made range of single and multiple-

section control-panel assemblies was developed which cannot be presented in its entirety. This catalogue is meant to give you an survey of our standard control-panel assemblies.

Features

- **Robust:**
 - Rugged mechanical design ensures long life
 - Panels made of anodized aluminium with indelible pictograms
- **Attractive:** Elegant contemporary design incorporating internationally conventional pictograms
- **Integrable:**
 - Modules for air-conditioning (temperature sensor and setpoint device)
 - Passenger information system (volume control)
 - Interface with central control system via bus
- **Optional:**
 - Temperature sensor with rotatable air hose terminal for measuring ambient temperature
 - Pushbutton also available with timer

Standards

- **EN 50155:** Bahnanwendungen - Elektronische Einrichtungen auf Schienenfahrzeugen
- **IEC 60571:** Electronic equipment used on rail vehicles
- **IEC 60077-1:** Railway applications - Electric equipment for rolling stock - Part 1: General service conditions and general rules
- **IEC 60068:** Environmental testing
- **BN 411002:** Vorschriften für elektrische Einrichtungen auf Schienenfahrzeugen

Variants

Do you need a special variant? Do not hesitate to contact us! Maybe the assembly you are looking for is among our many **special designs**. If not, we also **manufacture to customer requirements**. In this case, however, minimum order quantities apply.

Control-panel assemblies for vehicle compartments, standard



Standard control-panels for vehicle compartments are used where large panels and indicators are required.

Features

- Panel-mounted assembly with or without faceplate
- Combination of momentary or maintained push-buttons, indicators, volume and temperature control, temperature sensor
- Electrical connection via cage clamps or flat tabs

Control-panel assemblies for vehicle compartments, standard (selection)

| Series | Control panels from left to right | | | | |
|---------|-----------------------------------|------------------------|------------------------|---------------------|--------------------|
| | 1. Panel | 2. Panel | 3. Panel | 4. Panel | 5. Panel |
| ZL162 | Volume control | Nighttime economy lamp | Rocker switch | --- | --- |
| ZL178 | Volume control | Light switch | Nighttime economy lamp | Temperature control | Temperature sensor |
| ZL179 a | Temperature sensor | Light switch | Volume control | WC »Occupied« | --- |
| ZL179 b | WC »Occupied« | Volume control | Light switch | Temperature sensor | --- |
| ZL185 a | Light switch | Nighttime economy lamp | Temperature control | Temperature sensor | Service call |
| ZL185 b | Light switch | Light switch | Temperature control | Temperature sensor | Service call |
| ZL185 c | Light switch | Nighttime economy lamp | Temperature control | Temperature sensor | Dummy plate |
| ZL189 b | Volume control | Nighttime economy lamp | Light switch | Temperature control | --- |

Standard indicators

The main focus is on the state of the WC indicators for »Occupied«, »Not working« or »Unusable«.



Features

- Excellent visibility of LED display
- Long design life of LED array
- Indicator panel available with frame made of anodised aluminium
- Available with different supply voltages
- WC indicators: Use not dependent on WC system

| WC indicators (selection) | | |
|---------------------------|------------------------|-------------------------------------|
| Series | Indicator | Description |
| ZL181 | »WC Occupied« | with silver-grey frame |
| ZL181 b | »WC Occupied« | without frame |
| ZL181 c | Yellow backlit display | fire alarm light with frame |
| ZL184 | »WC Not working« | with silver-grey frame |
| ZL187 | »WC Unusable« | with silver-grey frame |
| ZL205 | »WC Occupied« | displayed green or red (switchable) |
| ZL214 | » + « | first aid indicator with frame |

Control-panel assemblies for vehicle compartments, miniaturised

This type of assembly allows mounting in confined space as in the city nightline trains of DACH-Hotelzug AG or the ICE3 high-speed trains.



Features

- Panel mounted base assembly without faceplate
- Red or blue LED lit panel frames as function indicator
- Combination of pushbuttons, indicators, volume and temperature control, temperature sensor
- Electrical connection via cage clamps or flat tabs

| Control-panel assemblies for vehicle compartments, miniaturised (selection) | | | | | |
|---|--------------------------------------|---------------------------------|---------------------|----------------|----------------------------------|
| Series | Control panels from left to right | | | | |
| | 1. Panel | 2. Panel | 3. Panel | 4. Panel | 5. Panel |
| ZL203 | Light switch | Temperature sensor | Reading lamp switch | --- | --- |
| ZL204 | Temperature control | Nighttime economy lamp | --- | --- | --- |
| ZL206 A | Pushbutton for running water (timer) | Switch for heating | Light switch | WC Not working | Pushbutton for flushing toilette |
| ZL208 | Pushbutton for running water (timer) | --- | --- | --- | --- |
| ZL209 | Light switch | Temperature sensor | --- | --- | --- |
| ZL210 | Light switch | Temperature sensor | Temperature control | --- | --- |
| ZL227 A | Light switch | Temperature sensor and -control | --- | --- | --- |
| ZL228 C | Light switch | Fire alarm light, yellow | --- | --- | --- |



Schaltbau GmbH has an environment management system that has been certified since 2002.



Schaltbau GmbH has a quality management system that has been certified since 1994.

Electrical Components and Systems for Railway Engineering and Industrial Applications

Connectors

- Connectors manufactured to industry standards
- Connectors to suit the special requirements of communications engineering (MIL connectors)
- Charging connectors for battery-powered machines and systems
- Connectors for railway engineering, including UIC connectors
- Special connectors to suit customer requirements

Snap-action switches

- Snap-action switches with positive opening operation
- Snap-action switches with self-cleaning contacts
- Enabling switches
- Special switches to suit customer requirements

Contactors

- Single and multi-pole DC contactors
- High-voltage AC/DC contactors
- Contactors for battery powered vehicles and power supplies
- Contactors for railway applications
- Terminal bolts and fuse holders
- DC emergency stop switches
- Special contactors to suit customer requirements

Control devices

- Master controllers and reversers for railway applications
- Toggle switch devices
- Handles and foot switches for railway applications (dead-man equipment)
- Switching elements with high breaking capacity
- Emergency brake handles
- Signal devices

Transportation system equipment

- Power supplies for passenger coaches (electric equipment)
- Battery chargers for locomotives and passenger coaches
- High-voltage equipment for single and multi-phase operation
- Heating devices and heating controls
- Design and engineering services for high-voltage equipment
- Special equipment to suit customer requirements

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