

# HMI System

*Multi-Legend Alarm Indicator.*

[www.eao.com/mi-panel](http://www.eao.com/mi-panel)



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## *Multi-Legend Alarm Indicator.*

**Flexible, bright and reliable alarm indicator** – with minimal back panel depth, and developed for driver's cabs this modular HMI simplifies fault monitoring contributing to increased safety within railway applications.

Train drivers need to easily see an overview of the current status or critical situations requiring their attention – whatever the cab lighting conditions and independent of the rest of the electrical systems. EAO offers a highly reliable, customisable and quick to engineer solution that meets the driver's needs and with the possibility to add additional functionality such as a dimmable illumination.

#### Typical applications

- Rail vehicles
  - Driver's cab
  - Switch cabinets
  - Control panel
- Industry
  - Switch cabinets
  - Status displays for machines
  - Building installations/automation
  - Fire protection systems
  - Ventilation status
- Commercial and Special vehicles
  - Cockpit status messages
  - General displays in the interior
  - Outdoor displays
  - Status indicator for other auxiliary functions

With its extremely flexible and modular design, the HMIS Multi-Legend Alarm Indicator fulfils a broad range of application needs. The panel size and the symbols are customisable. Different illumination colours are available. The flexi-

ble number and arrangement of the symbols diverse mounting options, and very low back panel depth of just a few millimetres ideally fit to driver desk and control cabinets, as well as in other railway application where the space envelope for the status indicators is limited.

Every alarm indicator is electrically independent to guarantee high operational safety and redundant illumination on each element provides increased reliability. The complete system of indicators is controllable by bus interface, digital IO or other interfaces, which allows easy and effective integration with existing systems. In addition, the indicator modules can be provided with dimmable illumination. The lamp test functionality is effective and immediate with a capacitive touch sensor or tactile dimmer switch included in the alarm panel. With a range of different indicator tile dimension, grid spacings, and numbers of tiles per module this is a truly flexible status monitoring system. Mounting of the indicator panel can be adapted to the customer needs – with both fixed and interchangeable symbols.

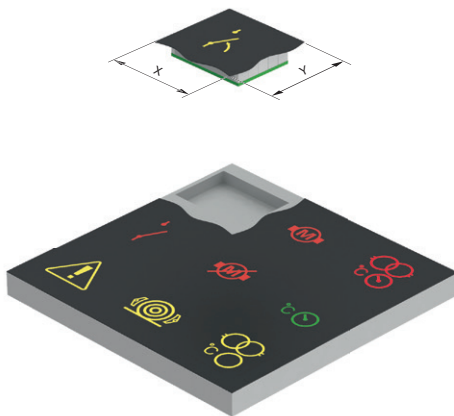
The Multi-Legend Alarm Indicator conforms to EN 45545 (depending on the number and size of symbols) and offers connectivity with up to 36 tiles in each module and is suitable for 16 to 143VDC systems. Its modular construction ensures short engineering and production lead-times even for new product configurations.



## Advantages.

- Customisable panel size and symbols
- Quick adaption to customer-specific requirements
- Additional functionality can be added
- Ultra-thin design (<8 mm) to fit in driver desk panels
- Bright even illumination visible in all light conditions

### Overview – Multi-Legend Alarm Indicator



#### Additional functions/features

- Dimmer and lamp test function (dimming levels can be programmed on a customer-specific basis)
- Touch function (capacitive)
- Tactile pushbutton (e. g. Series 71)
- Acoustic feedback
- 7-segment display
- Interchangeable symbols (insert strips)

#### Ambient conditions

- Operating temperature: –25 ... +70 °C
- Storage temperature: –30 ... +80 °C

#### Connection

- CAN, digital I/O, others on request

#### Electrical characteristics

- Operating voltage: 16–143 VDC

#### LED colours

- Red
- Green
- Blue
- Yellow
- White
- Amber

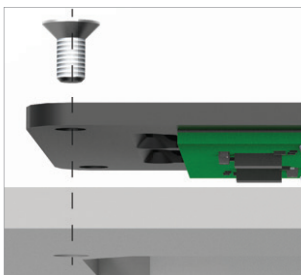
#### Indicators

- Symbol size (customer-specific)
- Symbols (customer-specific)
- Symbol colours (max. four per symbol)
- Number of symbols (customer-specific)
- Grid (customer-specific/depending on selected symbol configuration)

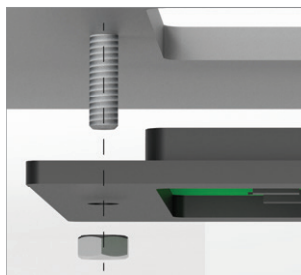
#### Standards

- EN 50155
- EN 45545 (size-dependent)
- EMV according to EN 50121-3-2
- EN 61373 (shock and vibration test)
- Symbols according to ISO 7000, EN 16186-2 and EN 16186-3

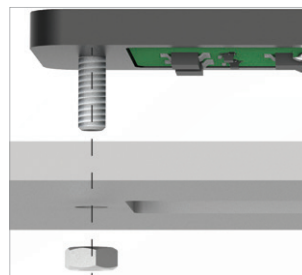
#### Mounting options



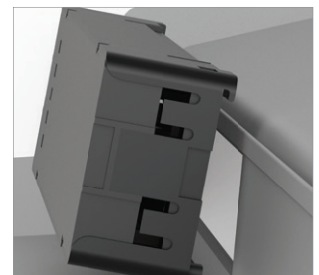
Mounting with screw.



Mounting with bolt.



Mounting rear side with bolt.



Individual solution (e. g. clip).

#### Note

The panel dimensions are dependent on the selected configuration.

Further information is available under [www.eao.com/mi-panel](http://www.eao.com/mi-panel)



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