## IM-T-9A

Safety Technology - For Safety Light Curtains


Technical data

| Type | IM-T-9A |
| :--- | :--- |
| ID | 3061425 |
| Function | Safety relay |
| Operating voltage | $21 \ldots 28$ VDC |
| Residual ripple | $<10 \% \mathrm{U}_{\text {ss }}$ |
| Output function | NO contact, Relay output |
| Switching frequency | $\leq 50 \mathrm{~Hz}$ |
| Response time typical | $<20 \mathrm{~ms}$ |
| Design | Terminal chamber |
| Dimensions | $118 \times 22.5 \times 84 \mathrm{~mm}$ |
| Housing material | Plastic, PC |
| Electrical connection | Removable terminal block, reverse polari- <br> ty protected, screw connection |
| Ambient temperature | $0 \ldots+50{ }^{\circ} \mathrm{C}$ |
| Relative humidity | $0 \ldots 90 \%$ |
| Protection class | IP20 |
| Power-on indication | LED, Green |
| Switching state | LED |
| Tests/approvals |  |

## Features

Safety category 4 acc.to ISO 13849-1 (EN 954-1)
$\square 3$ safety switching outputs (NO)
-Max. 6 A
Operating voltage 24 VDC +-15\%
Protection class IP20

Wiring diagram


## Functional principle

The interface modules for safety controllers have 24 VDC inputs and isolated, redundant outputs to connect for example DC safety light curtains to AC safety circuits. The NO outputs are rated for 250 VUC and 6 A and switch with a delay of 20 ms . A monitoring circuit connected to the two NC outputs Y1Y2 and Y3-Y4, detects interface-module errors and reports them to the higher-level safety controller. These errors are also evaluated for the internal relay contacts K1 and K2 of the interface module, which are connected to the EDM input of the higher-level controller. The higher-level safety controller can now detect interface-module errors via this monitoring circuit and can thus be installed in applications requiring control reliability acc. to OSHA/
ANSI or category 3 or 4 acc. to ISO13849-1 These interface modules can also be used to increase the switching capacity of low-power safety controllers. Two green LEDs at the front of the device indicate the output state of the relays K1 and K2.

