

IM-T-11A Safety Technology – For Safety Light Curtains



Technical data

Туре	IM-T-11A
ID no.	3061424
Function	Safety relay
Operating voltage	2128 VDC
Residual ripple	< 10 % U _{ss}
Output function	NO/NC, Relay output
Switching frequency	≤ 50 Hz
Response time typical	< 20 ms
Design	Terminal chamber
Dimensions	118 x 22.5 x 84 mm
Housing material	Plastic, PC
Electrical connection	Removable terminal block, reverse polari- ty protected, screw connection
Ambient temperature	0+50 °C
Relative humidity	090 %
Protection class	IP20
Power-on indication	LED, Green
Switching state	LED
Tests/approvals	

Tests/approvals

Features

- Safety category 4 acc.to ISO 13849-1 (EN 954-1)
- 2 safety switching outputs (NO)
- 1 auxiliary switching output (NC)
- 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 Y1-Y2 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.