SR-IM-11A
Safety Technology –   Safety Relay

31.1 [1.22]

100 [3.94]

97.8 [3.85]

22.5 [0.89]

mm [Inch]
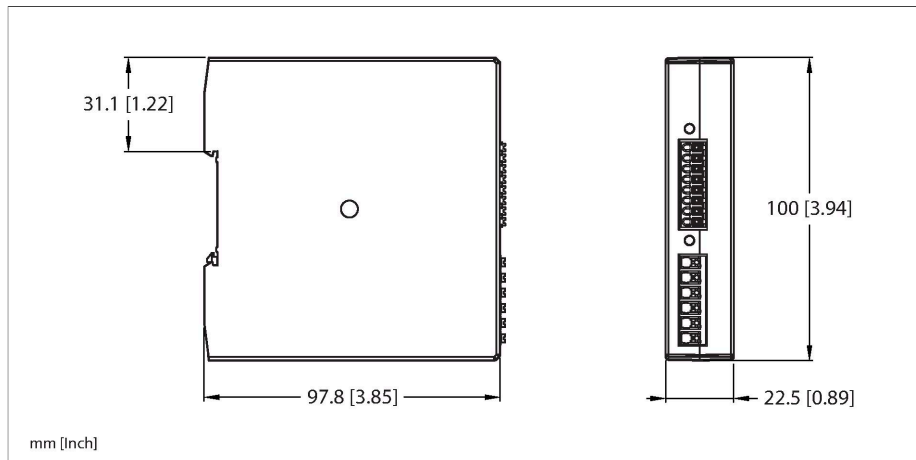
Technical data

Type	SR-IM-11A
ID	3805733
Function	Safety relay
Operating voltage	20.4…27.6 VDC
Residual ripple	< 10 % U_{ss}
Max. current safe output	6000 mA
Output function	NO contact, Relay output
Response time typical	< 20 ms
Design	Terminal chamber
Dimensions	100 x 22.5 x 97.8 mm
Housing material	Plastic, PC
Electrical connection	Spring type terminals
Ambient temperature	0…+50 °C
Relative humidity	0…90 %
Protection class	IP20
Power-on indication	LED, Green
Switching state	LED
Tests/approvals	

Features

■ Safety category 4 acc. to ISO 13849-1
■ Two redundant outputs (NO)
■ One non-safety-related output (NC auxiliary contact)
■ Max. 6 A
■ Operating voltage 24 VDC +-15%
■ Protection class IP20

Wiring diagram
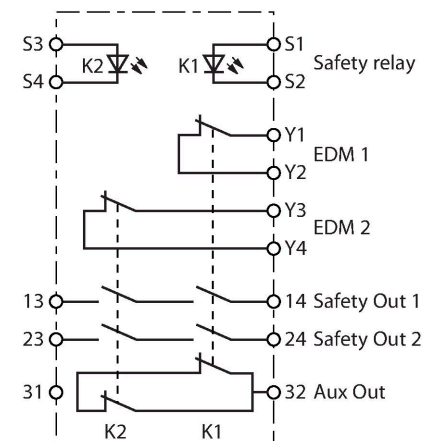
Functional principle

The interface modules of the SR-IM series have 24 VDC inputs and isolated, redundant outputs for connecting safety light curtains or similar higher-level safety controllers with OSSD transistor outputs or outputs with hard-wired contacts and external device monitoring (EDM).
The interface module's outputs, which are NO contacts, are designed for up to 250 V AC/DC and 6 A and switch with a delay of 20 ms to the higher-level safety controllers.
A monitoring circuit connected to the two output contacts 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 used to connect to the EDM input of the higher-level safety 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.