

Features

- SIL 3 / SC 3
- Input from Zone 0
- Installation in Zone 2
- High Voltage/Current rating relay output
- Field open and short circuit detection
- In-field programmability by DIP Switch
- Three port isolation, Input/Output/Supply

1CH I.S. SIL3 Switch/Proximity Relay-Out Repeater

RS Stock No.: 329087



RS PRO is the own brand of RS. The RS PRO Seal of Approval is your assurance of professional quality, a guarantee that every part is rigorously tested, inspected, and audited against demanding standards. Making RS PRO the Smart Choice for our customers.

Product Description

This module is suitable for applications requiring SIL 3 level in safety related systems for high-risk industries. The unit can be configured for switches or proximity detectors, located in Hazardous Area, and repeats the input state to a relay contact in Safe Area. The selectable fault detection circuit is available for proximity sensors or switches equipped with end of line resistors. If needed, the output can also be inverted.

General Specifications

Input switching current levels	ON ≥ 2.1 mA, OFF ≤ 1.2 mA
Fault current levels	Open fault ≤ 0.2 mA, short fault ≥ 6.8 mA
Input equivalent source	8 V 1 k Ω typical (8 V no load, 8 mA short)
Output	Voltage free SPDT relay contact
Contact material	Ag Alloy (Cd free), gold plated
Contact rating	4 A 250 Vac 1000VA, 4 A 250 Vdc 120 W (resistive load)
Contact min. switching current	1 mA
DC and AC load breaking capacity	Refer to the Instruction Manual
Mechanical/electrical life	$5 * 10^6$ / $3 * 10^4$ operation, typical
Operate/Release Time	8 / 4 ms, typical
Frequency response	10 Hz maximum

Mechanical Specifications

Weight	about 120 g
Connection	by polarized plug-in disconnect screw terminal blocks to accommodate terminations up to 2.5 mm ² (13 AWG)
Dimensions	Width 12.5 mm, Depth 123 mm, Height 120 mm

Mounting	DIN-Rail 35 mm, with/without Power Bus
----------	--

Electrical Specifications

Supply	24 Vdc nom (18 to 30 Vdc), reverse polarity protected
Current consumption	18 mA, @ 24 Vdc with short circuit input and relay energized, typical
Power dissipation	0.45 W, @ 24 Vdc with short circuit input and relay energized, typical
Isolation	I.S. In/Out 2.5 kV; I.S. In/Supply 2.5 kV; Out/Supply 2.5 kV

Operation Environment Specifications

Operating temperature	temperature limits -40 to +70 °C
Storage temperature	temperature limits -45 to +80 °C

Intrinsic Safety Data

IS Description	Associated apparatus and non-sparking electrical equipment. $U_o = 10.5 \text{ V}$, $I_o = 22 \text{ mA}$, $P_o = 56 \text{ mW}$ (terminals 7-8) $U_m = 250 \text{ Vrms or Vdc}$, $-40 \text{ °C} \leq T_a \leq 70 \text{ °C}$
----------------	---

Approvals

Declarations	EU Declaration of Conformity
Hazardous Area Certification	ATEX / IECEx
Functional Safety	SIL Manufacturer Declaration

Accessories

325642	Bus Connector
329103	Bus Mounting Kit

