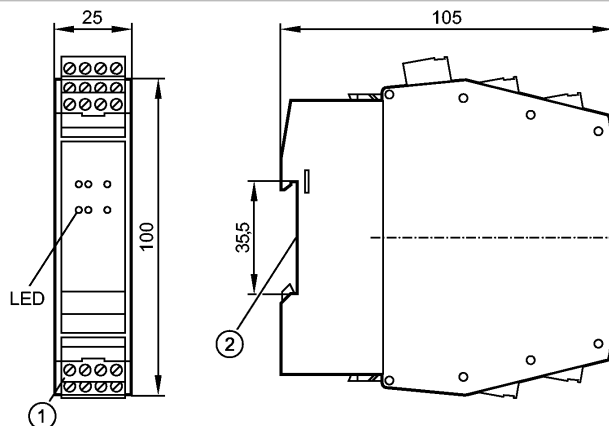


Safety switch gear

Evaluation systems for safety and hazardous areas



- 1: Combicon connector with screw terminals
2: Mounting on DIN rail



Made in Germany

Product characteristics

Safety relay

Terminal block Phoenix Contact MSTBO

For the connection of electronic and mechanical fail-safe sensors/switches and for use as two-hand control

Complies with the requirements:

EN ISO 13849-1: category 4 PL e

IEC 61508: SIL 3

EN 574: type IIIC

Electrical data

Electrical design

Operating voltage [V]

Current consumption [mA]

Power-on delay time [s]

Inputs

Current through feedback contacts [mA]

Input characteristics

Outputs

Output function

Output data

Contact rating

Short-circuit protection

Environment

Ambient temperature [°C]

Protection

Safety classification

Mission time TM [h]

Relay

24 DC (19.2...30 DC); incl. 5 % residual ripple

< 200

6

> 6

S34, S43:

"1": > 11 V, 6 mA

"0": < 5 V, < 500 µA

2 safety-related NO contacts (floating contacts); 1 signal output (positive switching)

S33:

push-pull short-circuit proof

"0": Isink ~ 30 mA

"1": Isource ≥ 50 mA, U > 18 V

S44:

"0": Ires ≤ 300 µA

"1": Isource ≥ 50 mA, U > 18 V

Y7:

"0": Ires ≤ 300 µA

"1": Isource ≥ 11 V (30 mA), ≥ 15 V (15 mA)

6 A, 250 V AC / 24 V DC (≥ 6 mA)

The contacts are to be protected by means of fuses with a nominal current of < 3.6 A.

-25...55

IP 20

≤ 175200

G1501S - Safety relay - eclass: 27272401 / 27-27-24-01

Safety-related reliability PFHd [1/h]	< 2.2E-09 *)
MTTFd [Years]	136 *)
DC/CCF/Cat.	99 % / 80 % / 4
B10d	≤ 780000
Mechanical data	
Housing materials	PA (polyamide)
Weight [kg]	0.295
Displays / operating elements	
Display	Voltage green Fault red Switching status 2x yellow Input pulses 2x yellow
Electrical connection	
Connection	Combicon connector with screw terminals
Accessories	
Accessories (included)	Combicon connector with screw terminals
Remarks	
Remarks	Additional comments concerning the cULus approval (UL 508): • Maximum ambient temperature 55°C (in the control cabinet) • The safety functions were not assessed by UL. The approval has been made according to UL 508 for general applications. • Use 60/75°C copper conductors only. • For use in pollution degree 2 environment • Same polarity (phase) referred to the output contacts *) with h(op) = 24 h, d(op) = 365 days, t(cycle) = 8640 s
Pack quantity [piece]	1
Other data	

Response time [ms]		
	Release	Safety requirement
Fail-safe sensors/switches with 2 x PNP	40	30
Clocked fail-safe sensors	160	180
Two-hand control using electronic sensors	40	30
Two-hand control using mechanical switches	110	30
Mechanical fail-safe switches (e-stop)	110	30