

## Technical data sheet

### Safety switch

Part no.: 50150001

S20-P3C1-FH

#### Contents

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For illustration purposes only



## Technical data

### Basic data

Series	S20
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### Functions

Functions	Type 2 interlock device with mechanically actuated position switch with low-coded actuator acc. to DIN EN ISO 14119
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### Characteristic parameters

Mission time $T_M$	20 years, EN ISO 13849-1
$B10_d$	2,000,000 number of cycles

### Electrical data

Usage category at DC 13	$U_e / I_e$ : 24 V / 3 A, 125 V / 0.55 A, 250 V / 0.3 A, EN 60947-5-1
Usage category at AC 15	$U_e / I_e$ : 250 V / 6 A, 400 V / 4 A, 500 V / 1 A, EN 60947-5-1
Contact allocation	2NC
Contact opening	Force-fit
Short circuit protected	500 V, 10 A, type aM, IEC 60269-1

#### Performance data

Rated insulation voltage	500 V AC, 600 V DC
Conventional thermal current, max.	10 A

### Connection

Number of connections	1 Piece(s)
Number of cable entries	1 Piece(s)

#### Connection 1

Function	Contact connection
Type of connection	Terminal
Type of terminal	Screw terminal
No. of pins	4 -pin

#### Cable properties

Connection cross sections	1 x 0.5 mm <sup>2</sup> to 2 x 2.5 mm <sup>2</sup> , wire
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### Mechanical data

Design	Cubic
Dimension (W x H x L)	30.8 mm x 30.8 mm x 93 mm
Housing material	Plastic
Plastic housing	Glass fiber reinforced (PPS), self-extinguishing
Electrical contact material	Silver alloy
Net weight	93 g
Housing color	Black Red
Type of fastening	Through-hole mounting
Type of cable entry	PG 13.5
Switch type	Interlock device without guard interlocking, ISO 14119
Switching principle	Slow-action contact
Approach actuation directions	1 x top 4 x side (90°)
Approach speed	0 ... 0.5 m/s
Mechanical life time	1,000,000 actuation cycles, IEC 60947-5-1
Actuation frequency, max.	3,600 per hour, IEC 60947-5-1
External actuator	AC-ANxx series: straight, angled, resilient, alignable
Extraction force, unlocked actuator	10 N
Actuating path with forced separation	9 mm
Recoil tolerance	4.5 mm

### Environmental data

Ambient temperature, operation	-25 ... 80 °C
Degree of contamination, external	3, EN 60947-1

### Certifications

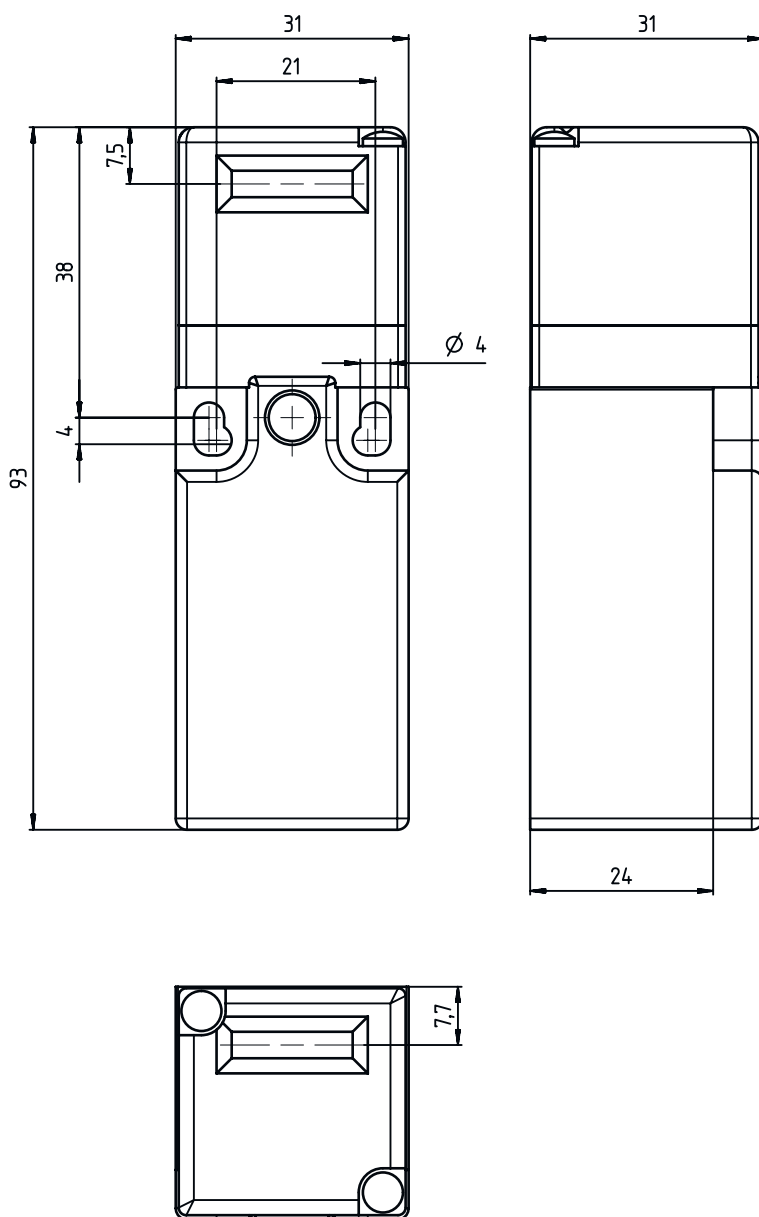
Degree of protection	IP 67
Approvals	c UL US IMQ

### Classification

Customs tariff number	85369095
ECLASS 5.1.4	27272602
ECLASS 8.0	27272602
ECLASS 9.0	27272602
ECLASS 10.0	27272602
ECLASS 11.0	27272602
ECLASS 12.0	27272602
ECLASS 13.0	27272602
ECLASS 14.0	27272602
ECLASS 15.0	27272602
ETIM 5.0	EC002592
ETIM 6.0	EC002592
ETIM 7.0	EC002592
ETIM 8.0	EC002592
ETIM 9.0	EC002592
ETIM 10.0	EC002592

## Dimensioned drawings

All dimensions in millimeters



## Electrical connection

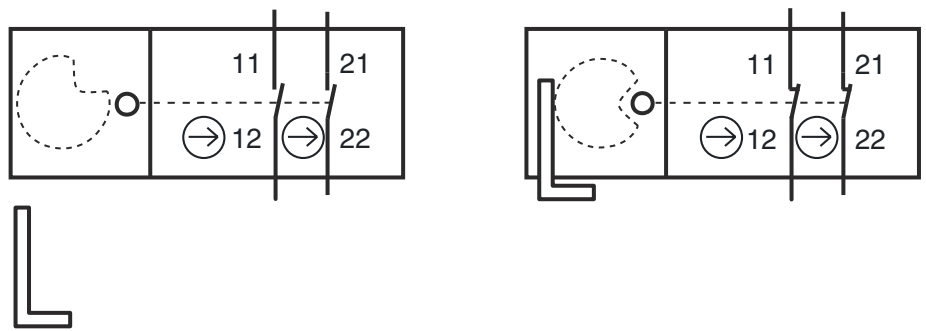
### Connection 1

Function	Contact connection
Type of connection	Terminal
Type of terminal	Screw terminal
No. of pins	4 -pin

# Electrical connection

Terminal	Assignment
11	NC(1)
12	NC(1)
21	NC(2)
22	NC(2)

## Circuit diagrams



11/12 NC contact, forced  
 21/22 NC contact, forced

## Notes

**Observe intended use!**

- The product may only be put into operation by competent persons.
- Only use the product in accordance with its intended use.