

Technical data sheet

Safety switch

Part no.: 50150001

S20-P3C1-FH



For illustration purposes only

Contents

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- Circuit diagrams
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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	Ue / Ie: 24 V / 3 A, 125 V / 0.55 A, 250 V / 0.3 A, EN 60947-5-1
Usage category at AC 15	Ue / Ie: 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 ² to 2 x 2.5 mm ² , 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

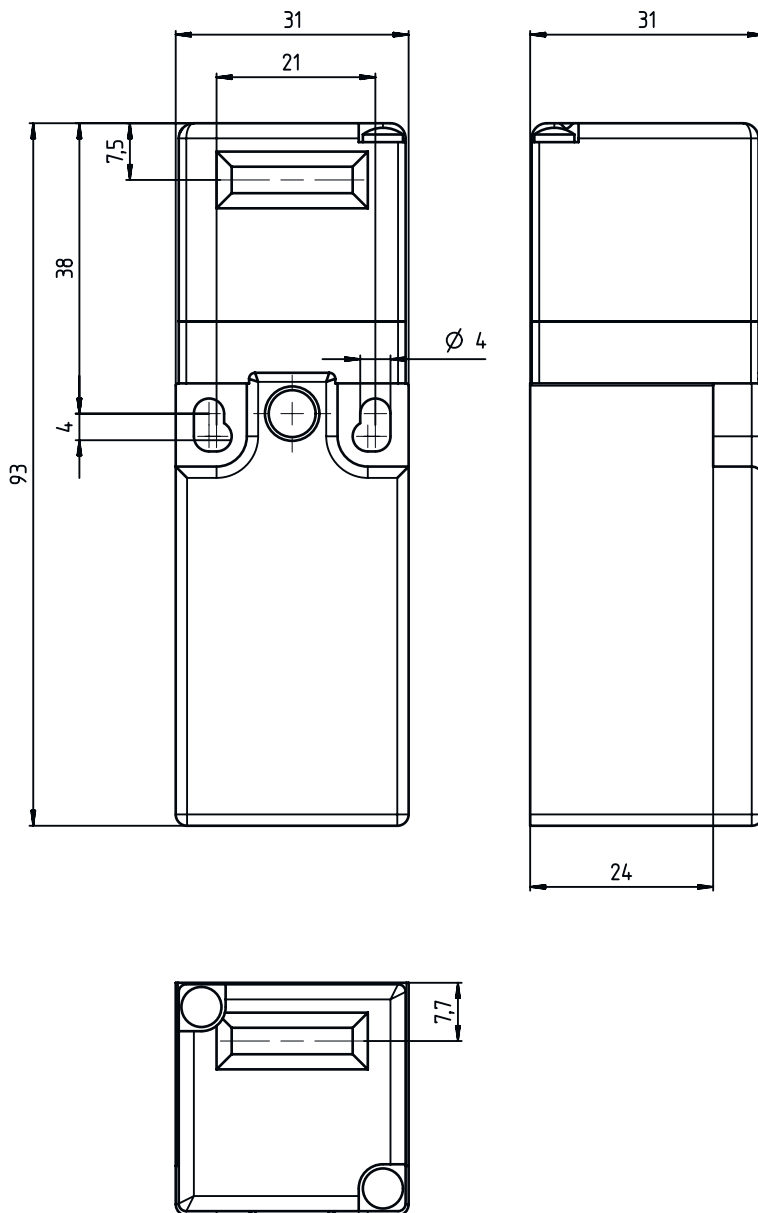
Degree of protection	IP 67
Approvals	c UL US IMQ

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

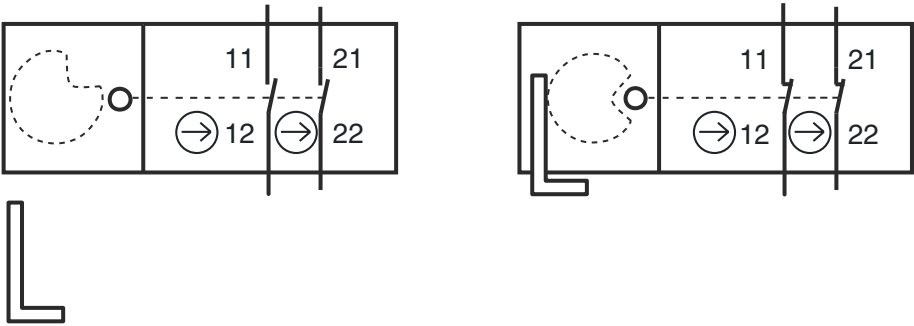
Connection 1

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.