

## Technical data sheet

### Safety hinge switch

Part no.: 63000404

S410-M1CB2-B

#### Contents

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For illustration purposes only



## Technical data

### Basic data

Series	S400
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### Functions

Functions	Integration in control circuits up to category 4 in accordance with EN ISO 13849-1 Locking device without guard interlocking according to EN ISO 14119 Mechanical hinge with integrated safety switch
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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 24 V, Ie 2 A, EN 60947-5-1
Usage category at AC 15	Ue 24 V, Ie 2 A, EN 60947-5-1
Contact allocation	2NC + 1NO
Contact opening	Force-fit
Short circuit protected	500 V, 2 A, type gG, IEC 60269-1

#### Performance data

Rated insulation voltage	30 V AC, 36 V DC
Conventional thermal current, max.	2 A

### Connection

Number of connections	1 Piece(s)
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#### Connection 1

Function	Contact connection
Type of connection	Cable
Cable length	2,000 mm
Sheathing material	PVC
Number of conductors	7 -wire

### Mechanical data

Design	Cubic
Dimension (W x H x L)	79 mm x 22.5 mm x 100.6 mm
Housing material	Metal
Metal housing	ZAMAK
Electrical contact material	Silver alloy
Net weight	589 g
Housing color	Silver
Type of fastening	Mounting thread
Side of cable entry	From below (with left installation)
Switch type	Interlock device without guard interlocking, ISO 14119
Switching principle	Snap-action contact
Axial stress	750 N·m
Radial stress	500 N·m
Torsional stress	12 N·m
Mechanical life time	1,000,000 actuation cycles, IEC 6047-5-1
Actuation frequency, max.	1,200 per hour, IEC 6047-5-1
Internal actuator	Safety switch in hinge, encapsulated
Actuating path (angle) with forced separation	4 N
Actuation angle, max.	180 °
Actuating path (angle) with forced separation	From set switching point

### Environmental data

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

### Certifications

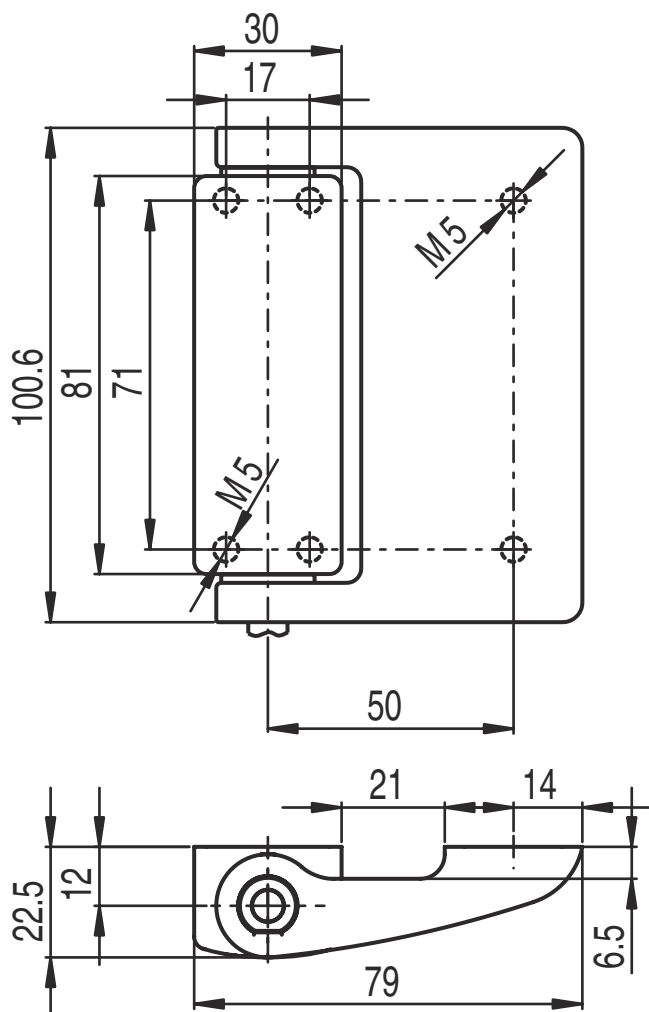
Degree of protection	IP 67 IP 69K
Approvals	c UL US IMQ

### Classification

Customs tariff number	85369095
ECLASS 5.1.4	27272690
ECLASS 8.0	27270609
ECLASS 9.0	27270609
ECLASS 10.0	27270609
ECLASS 11.0	27270609
ECLASS 12.0	27272608
ECLASS 13.0	27272608
ECLASS 14.0	27272608
ECLASS 15.0	27272608
ETIM 5.0	EC002591
ETIM 6.0	EC002591
ETIM 7.0	EC002591
ETIM 8.0	EC002591
ETIM 9.0	EC002591
ETIM 10.0	EC002591

## Dimensioned drawings

All dimensions in millimeters



## Electrical connection

### Connection 1

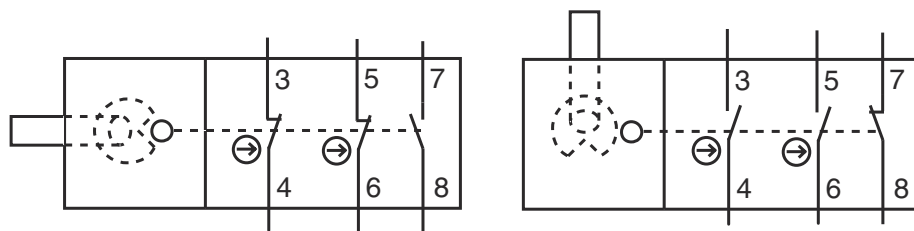
Function	Contact connection
Type of connection	Cable
Cable length	2,000 mm
Sheathing material	PVC
Cable color	Black
Number of conductors	7 -wire
Wire cross section	0.5 mm <sup>2</sup>

### Conductor color

### Conductor assignment

Green / Yellow	GND
Black	NC(1)
Black / White	NC(1)
Red	NC(2)
Red / White	NC(2)
Brown	NO(1)
Blue	NO(1)

## Circuit diagrams



- |               |             |
|---------------|-------------|
| 3 Black       | 6 Red-white |
| 4 Black-white | 7 Brown     |
| 5 Red         | 8 Blue      |

## 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.