

## Technical data sheet

### Safety hinge switch

Part no.: 63000404

S410-M1CB2-B

#### Contents

- Technical data
- Dimensioned drawings
- Electrical connection
- Circuit diagrams
- Notes



Figure can vary



## Technical data

### Basic data

Series	S400
--------	------

### 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
-----------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

### 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)
-----------------------	------------

#### 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

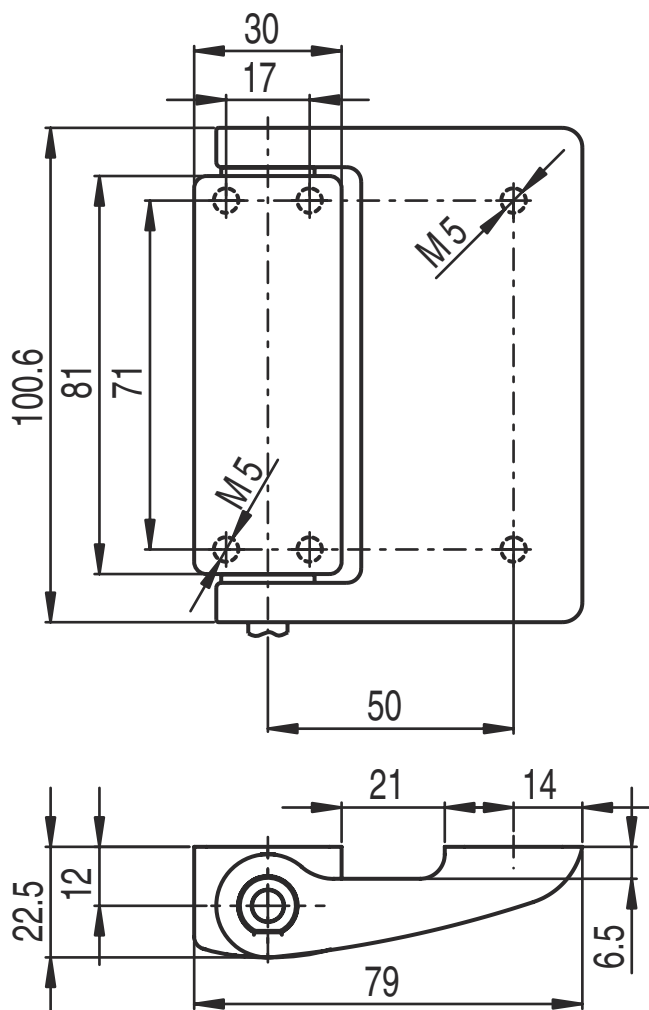
Degree of protection	IP 67 IP 69K
Certifications	c UL US IMQ

### Classification

Customs tariff number	85369095
eCl@ss 5.1.4	27272690
eCl@ss 8.0	27270609
eCl@ss 9.0	27270609
eCl@ss 10.0	27270609
eCl@ss 11.0	27270609
ETIM 5.0	EC002591
ETIM 6.0	EC002591
ETIM 7.0	EC002591

## Dimensioned drawings

All dimensions in millimeters



## Electrical connection

### Connection 1

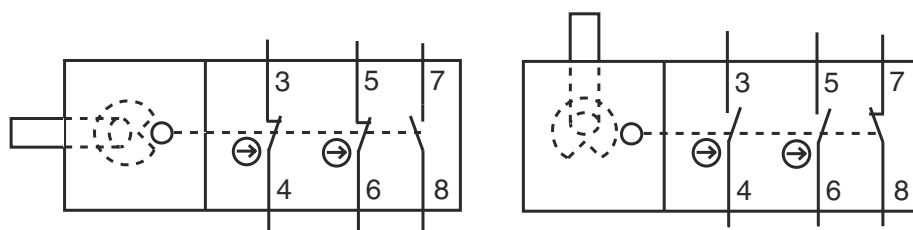
Function	Contact connection
Type of connection	Cable
Cable length	2,000 mm
Sheathing material	PVC
Cable color	Black
Number of conductors	7 -wire
Wire cross section	0.5 mm <sup>2</sup>

### Conductor color

### Conductor assignment

GreenYellow	GND
Black	NC(1)
BlackWhite	NC(1)
Red	NC(2)
RedWhite	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.