

## Technical data sheet

### Safety switch

Part no.: 63000105

S20-P4C1-M20-FH30

#### Contents

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



Figure can vary



## Technical data

### Basic data

Series	S20
--------	-----

### Functions

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

### 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 / 6 A, 125 V / 1.1 A, 250 V / 0.4 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 + 1NO
Contact opening	Force-fit
Short circuit protected	500 V, 10 A, type aM, IEC 60269-1
Contact protection	Protective insulation O

### Performance data

Rated insulation voltage	400 V AC, 500 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	6 -pin

### Cable properties

Connection cross sections	1 x 0.34 mm <sup>2</sup> to 2 x 1.5 mm <sup>2</sup> , wire
---------------------------	--

### 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	102 g
Housing color	Black Red
Type of fastening	Through-hole mounting
Type of cable entry	M20 x 1.5
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 6047-5-1
Actuation frequency, max.	3,600 per hour, IEC 6047-5-1
External actuator	AC-ANxx series: straight, angled, resilient, alignable
Extraction force, unlocked actuator	30 N
Actuating path with forced separation	7.8 mm
Recoil tolerance	4.5 mm

### Environmental data

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

### Certifications

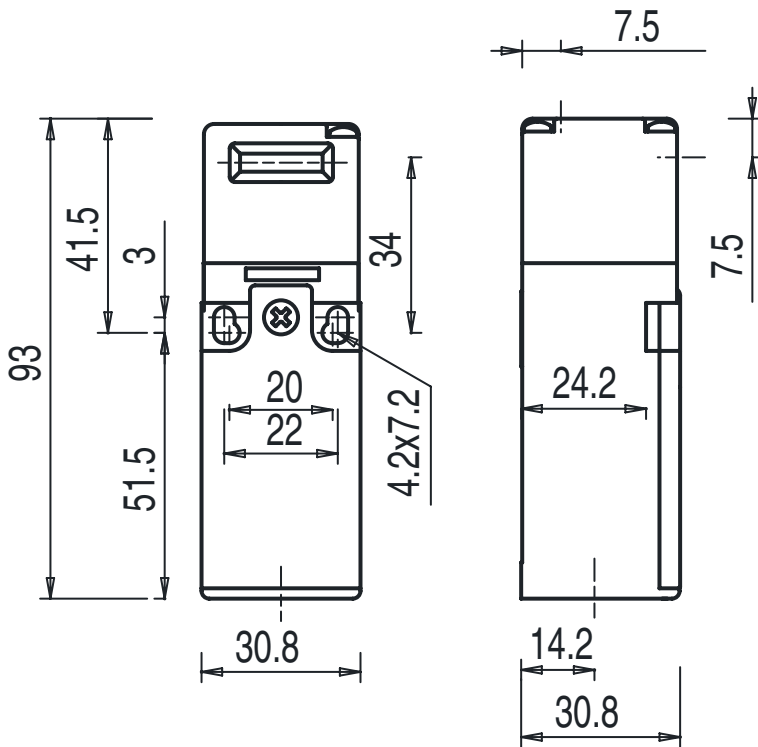
Degree of protection	IP 67
Certifications	c UL US IMQ

### Classification

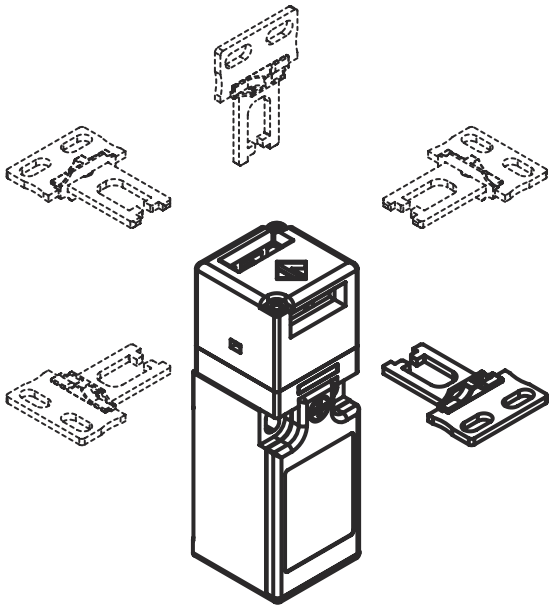
Customs tariff number	85369095
eCl@ss 5.1.4	27272602
eCl@ss 8.0	27272602
eCl@ss 9.0	27272602
eCl@ss 10.0	27272602
eCl@ss 11.0	27272602
ETIM 5.0	EC002592
ETIM 6.0	EC002592
ETIM 7.0	EC002592

## Dimensioned drawings

All dimensions in millimeters



### Approach directions



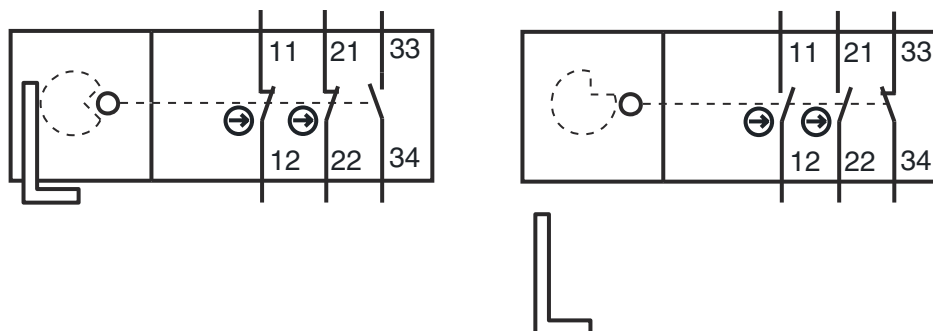
# Electrical connection

## Connection 1

Function	Contact connection
Type of connection	Terminal
Type of terminal	Screw terminal
No. of pins	6-pin

Pin	Pin assignment
	11
1	NC(1)
	12
2	NC(1)
	21
3	NC(2)
	22
4	NC(2)
	33
5	NO(1)
	34
6	NO(1)

## Circuit diagrams



21/22 NC contact, forced  
 11/12 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.