

Technical data sheet

Safety switch

Part no.: 50149761

S20-P0C1-M20-FH

Contents

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



For illustration purposes only



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	U _e / I _e : 24 V / 6 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	1NC + 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	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
---------------------------	---

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	M20 x 1.5
Switch type	Interlock device without guard interlocking, ISO 14119
Switching principle	Snap-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	10 N
Actuating path with forced separation	7.2 mm
Recoil tolerance	4.5 mm

Environmental data

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

Certifications

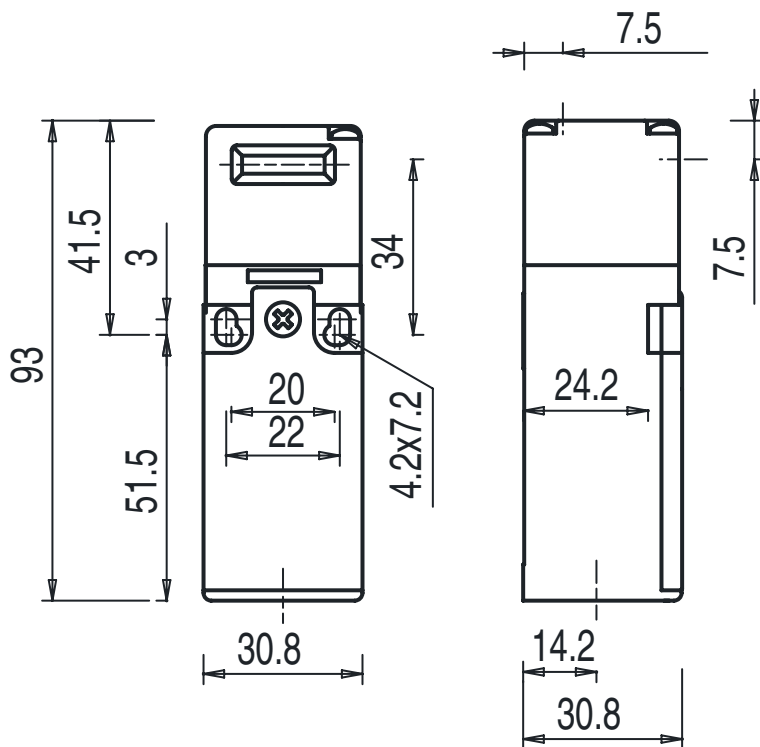
Degree of protection	IP 67
Certifications	c UL US IMQ

Classification

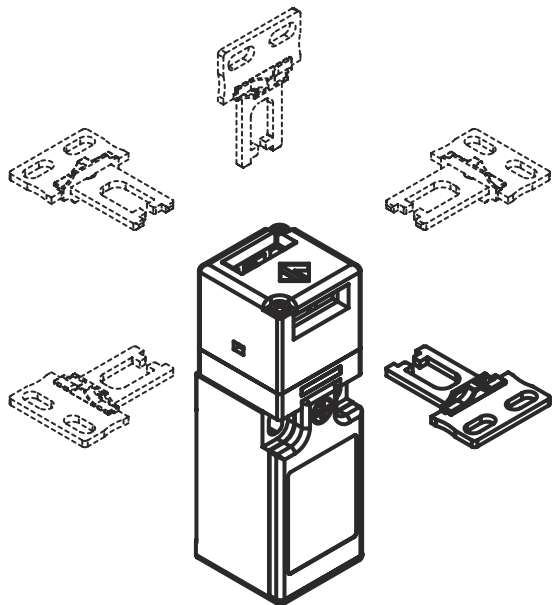
Customs tariff number	85369095
ECLASS 5.1.4	27272602
ECLASS 8.0	27272602
ECLASS 9.0	27272602
ECLASS 10.0	27272602
ECLASS 11.0	27272602
ECLASS 12.0	27272602
ECLASS 13.0	27272602
ECLASS 14.0	27272602
ETIM 5.0	EC002592
ETIM 6.0	EC002592
ETIM 7.0	EC002592
ETIM 8.0	EC002592
ETIM 9.0	EC002592

Dimensioned drawings

All dimensions in millimeters



Approach directions



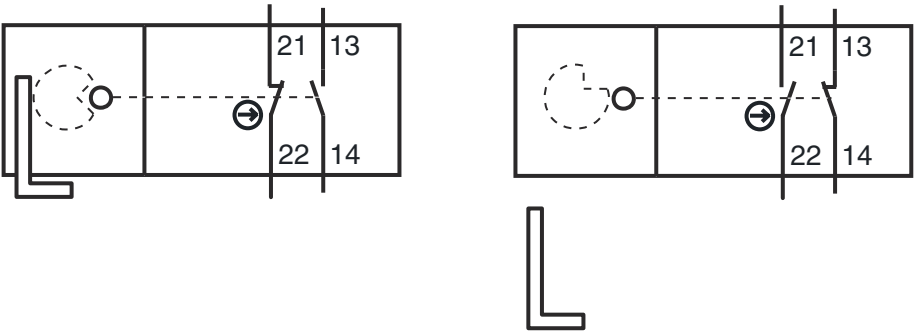
Electrical connection

Connection 1

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

Terminal	Assignment
13	NO
14	NO
21	NC
22	NC

Circuit diagrams



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.