

Technical data sheet

Safety switch

Part no.: 63000101

S20-P1C1-M20-FH

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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 / 1.1 A, 250 V / 0.4 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 | 99 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 | 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

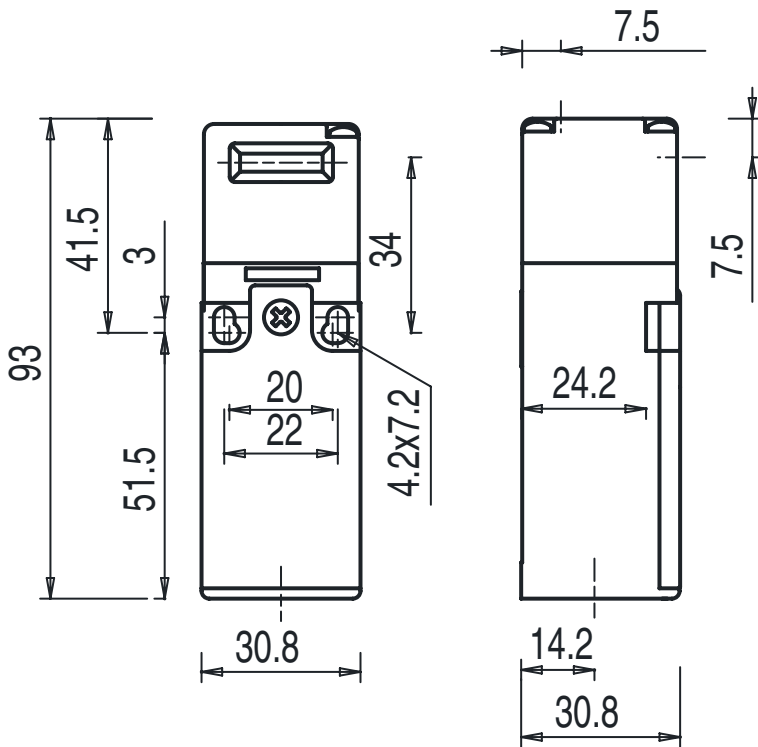
| | |
|----------------------|----------------|
| Degree of protection | IP 67 |
| Approvals | c UL US IMQ |

Classification

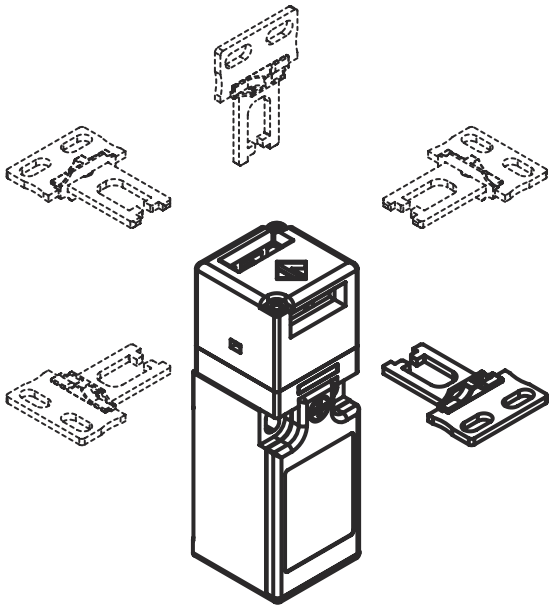
| | |
|-----------------------|----------|
| Customs tariff number | 85369095 |
| ECLASS 5.1.4 | 27272602 |
| ECLASS 8.0 | 27272602 |
| ECLASS 9.0 | 27272602 |
| ECLASS 10.0 | 27272602 |
| ECLASS 11.0 | 27272602 |
| ECLASS 12.0 | 27272602 |
| ECLASS 13.0 | 27272602 |
| ECLASS 14.0 | 27272602 |
| ECLASS 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



Approach directions



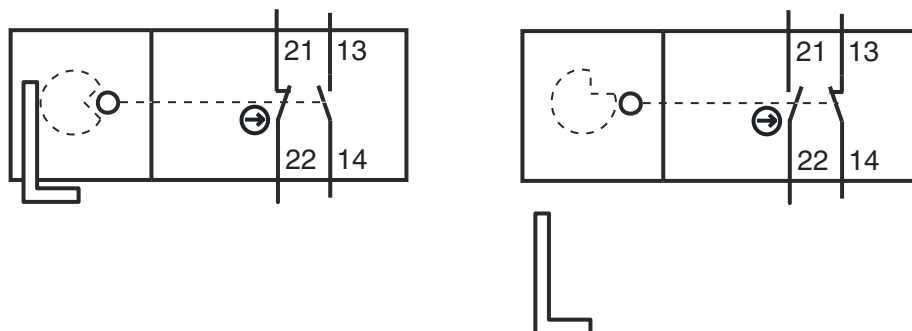
Electrical connection

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! | |
| | <ul style="list-style-type: none"> ⚡ The product may only be put into operation by competent persons. ⚡ Only use the product in accordance with its intended use. |