

Technical data sheet Safety position switch

Part no.: 63000303

S300-M13C3-M20-31

Contents

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Figure can vary



Technical data

Basic data

Series	S300
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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
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Characteristic parameters

Mission time T_M	20 years, EN ISO 13849-1
$B10_d$	40,000,000 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	2NC + 1NO
Contact opening	Force-fit
Short circuit protected	500 V, 10 A, type aM, IEC 60269-1
Contact protection	Earthing

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	3 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 ² to 2 x 1.5 mm ² , wire
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Mechanical data

Design	Cubic
Dimension (W x H x L)	56 mm x 33 mm x 88 mm
Housing material	Metal
Metal housing	ZAMAK
Electrical contact material	Silver alloy
Net weight	303 g
Housing color	Gray
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
Switching direction	Both sides One side
Approach actuation directions	360° 4 x side (90°)
Approach speed with angle of approach of 15°	0.009 ... 2.5 m/s
Approach speed with angle of approach of 30°	0.008 ... 1.5 m/s
Approach speed with angle of approach of 45°	0.007 ... 1 m/s
Approach speed with angle of approach of 60°	0.007 ... 0.75 m/s
Mechanical life time	20,000,000 actuation cycles, IEC 6047-5-1 switching cycles
Actuation frequency, max.	3,600 per hour, IEC 6047-5-1
Actuator	Roll actuator with lever
Actuator width	20 mm
Actuator length	40 mm
Actuation force, min. (torque)	0.1 N·m
Actuator mount	Long

Environmental data

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

Certifications

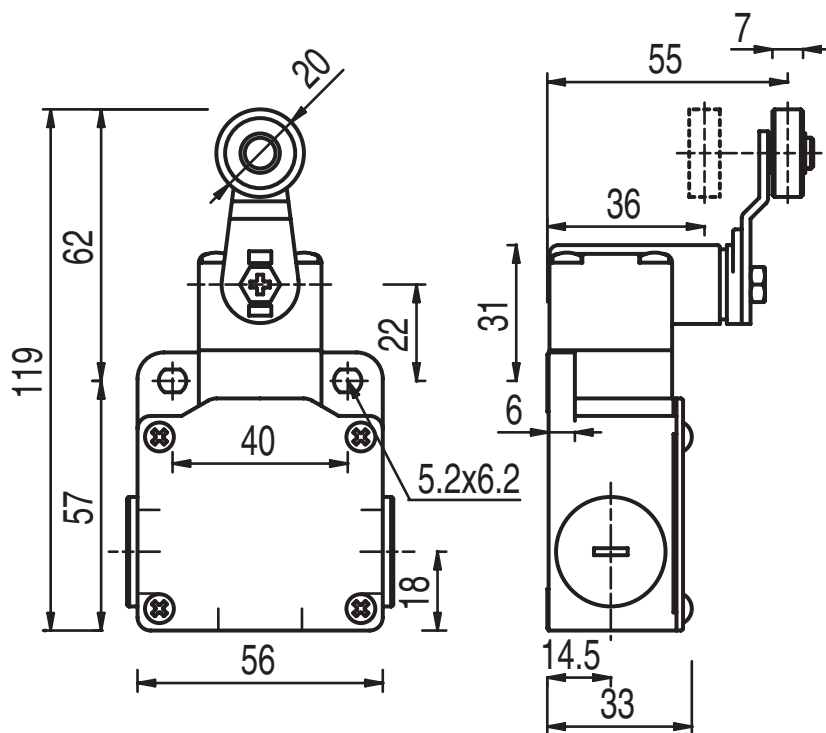
Degree of protection	IP 67
Certifications	c UL US IMQ

Classification

Customs tariff number	85369095
eCl@ss 5.1.4	27272601
eCl@ss 8.0	27272601
eCl@ss 9.0	27272601
eCl@ss 10.0	27272601
eCl@ss 11.0	27272601
ETIM 5.0	EC000030
ETIM 6.0	EC000030
ETIM 7.0	EC000030

Dimensioned drawings

All dimensions in millimeters



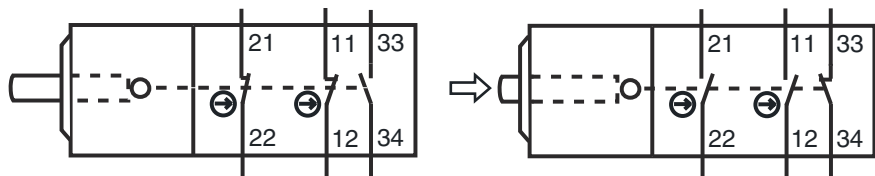
Electrical connection

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



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.