

Technical data sheet

Safety position switch

Part no.: 63000303

S300-M13C3-M20-31

Contents

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



For illustration purposes only



Technical data

Basic data

Series	S300
--------	------

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
-----------	---

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	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	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
---------------------------	--

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

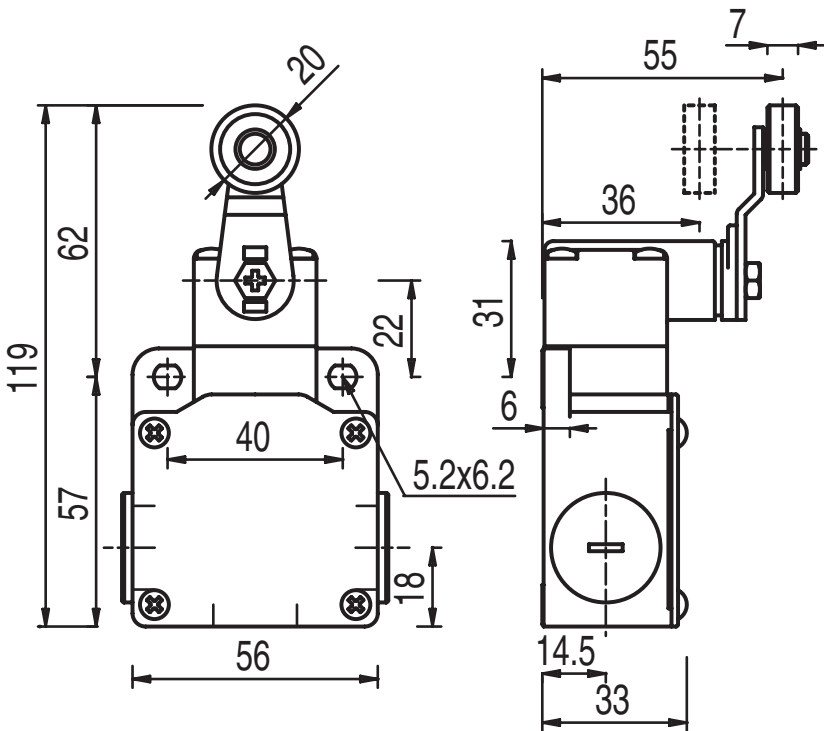
Degree of protection	IP 67
Approvals	c UL US IMQ

Classification

Customs tariff number	85369095
ECLASS 5.1.4	27272601
ECLASS 8.0	27272601
ECLASS 9.0	27272601
ECLASS 10.0	27272601
ECLASS 11.0	27272601
ECLASS 12.0	27272601
ECLASS 13.0	27272601
ECLASS 14.0	27272601
ECLASS 15.0	27272601
ETIM 5.0	EC000030
ETIM 6.0	EC000030
ETIM 7.0	EC000030
ETIM 8.0	EC000030
ETIM 9.0	EC000030
ETIM 10.0	EC000030

Dimensioned drawings

All dimensions in millimeters



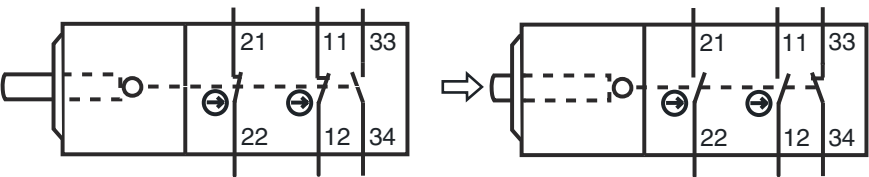
Electrical connection

Connection 1

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

Terminal	Assignment
11	NC(1)
12	NC(1)
21	NC(2)
22	NC(2)
33	NO(1)
34	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.