26.07.2019

18:03:54h

Datasheet - AZM 170SK-02/01ZRK-2197 24 VAC/DC

Solenoid interlock / AZM 170





- Thermoplastic enclosure
- Double-insulated
- Compact design
- 90 mm x 84 mm x 30 mm
- 1 Cable entry M 20 x 1.5
- Interlock with protection against incorrect locking.
- Long life
 - High holding force
 - Manual release from side
 - Screw connection

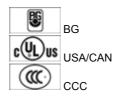
(Minor differences between the printed image and the original product may exist!)

Ordering details

Product type description Article number EAN Code eCl@ss AZM 170SK-02/01ZRK-2197 24 VAC/DC 101182772 4030661318189 27-27-26-03

Approval

Approval



Classification

Standards B10d Normally-closed contact (NC) Mission time notice EN ISO 13849-1 2.000.000 20 Years

 $MTTF_{d} = \frac{B_{10d}}{0.1 \times n_{op}}$

 $n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{oycle}}$

Global Properties

Permanent light	AZM 170
Standards	EN 60947-5-1, BG-GS-ET-19
Compliance with the Directives (Y/N) C ϵ	Yes
Number of actuating directions	2
Active principle	electromechanical
Duty cycle ED	Magnet 100 %
Materials	
- Material of the housings	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
- Material of the contacts	Silver
Housing coating	None
Weight	344

Mechanical data

Design of electrical connection	Screw connection	
Cable section		
- Min. Cable section	1 x 0,25	
- Max. Cable section	1 x 1.5, flexible	
Mechanical life	> 1.000.000 operations	
Emergency unlocking device (Y/N)	No	
Manual release (Y/N)	Yes	
- right		
Emergency release (Y/N)	No	
Latching force	30	
Positive break force	8.5	
positive break travel	11 mm	
Clamping force F	1000 N	
Max. Actuating speed	2 m/s	

Ambient conditions

Ambient temperature	
- Min. environmental temperature	−25 °C
- Max. environmental temperature	+60 °C
Protection class	IP67 to IEC/EN 60529

Electrical data

Design of control element	Opener (NC)
notice	change-over contact with double break, type Zb or 2 NC contacts, with galvanically separated contact bridges
Switching principle	Creep circuit element
Number of auxiliary contacts	0
Number of safety contacts	3
Power to unlock	Yes
Power to lock	No
Rated control voltage Us	24 VAC/DC
Power consumption	max. 10 W
Rated impulse withstand voltage Uimp	4 kV
Rated insulation voltage Ui	250 V
Thermal test current Ithe	10 A
Utilisation category	DC-13: 24 V / 4 A
Max. fuse rating	6 A gG D-fuse

Explosion protection categories for gases	None
Explosion protected category for dusts	None

Miscellaneous data



Dimensions

Dimensions of the sensor	
- Width of sensor	108
- Height of sensor	100.5
- Length of sensor	30 mm

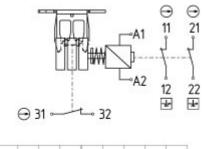
notice

Individual coding available on request

Manual release from side

- For manual release using M5 triangular key, available as accessory
- Additional manual release on side

Diagram





Note Diagram

⊖ positive break NC contact
1 active
🛞 no active
° Normally-open contact

o-t----o Normally-closed contact

Ordering suffix

The applicable ordering suffix is added at the end of the part number of the safety switch. Order example: AZM 170SK-02/01ZRK-2197 24 VAC/DC**-1637**

Ordering code

AZM 170(1)-(2)Z(3)K(4)-(5)-(6)-(7)	
(1)	
without	IDC method of termination
SK	Screw connection
(2)	
11	1 Normally open contact (NO) / 1 Opener (NC)
02	2 Opener (NC)
12/0.0	1 Normally open contact (NO), 2 Opener (NC) / -
(3)	
without	Latching force 5 N
R	Latching force 30 N
I	Individual coding
(4)	
without	Power to unlock
Α	Power to lock
(5)	
without	cable gland
ST	Connector M12 x 1
ST-2431	Connector M12 x 1, Individual solenoid monitoring
(6)	
24VAC/DC	Us 24 VAC/DC
110VAC	Us 110 VAC
230VAC	Us 230 VAC
(7)	
without	Manual release
2197	Manual release from side (Power to unlock)
1637	gold-plated contacts
	AZM 170ST and AZM 170SK
	AZM 170ST-(1)Z(2)K(3)-(4)-(5)-024
	AZM 170SK-(1)Z(2)K(3)-(4)-(5)-024
(1)	
11/11	1 Normally open contact (NO), 1 Opener (NC) / 1 Normally open contact (NO), 1 Opener (NC)
11/02	1 Normally open contact (NO), 1 Opener (NC) / 2 Opener (NC)
12/00	1 Normally open contact (NO), 2 Opener (NC) / -
12/11	1 Normally open contact (NO), 2 Opener (NC) / 1 Normally open contact (NO), 1 Opener (NC)
12/02	1 Normally open contact (NO), 2 Opener (NC) / 2 Opener (NC)
02/01	2 Opener (NC), - / 1 Opener (NC), -
02/10	2 Opener (NC), - / 1 Normally open contact (NO), -
(2)	
without	Latching force 5 N
R	Latching force 30 N
(3)	
without	Power to unlock
Α	Power to lock

Documents

Operating instructions and Declaration of conformity (en) 634 kB, 23.05.2019 Code: mrl_azm170-xx-xx_en

Operating instructions and Declaration of conformity (da) 509 kB, 24.11.2015 Code: mrl_azm170-xx-xx_da

Operating instructions and Declaration of conformity (it) 631 kB, 28.05.2019 Code: mrl_azm170-xx-xx_it

Operating instructions and Declaration of conformity (nl) 532 kB, 29.06.2018 Code: mrl_azm170-xx-xx_nl

Operating instructions and Declaration of conformity (de) 605 kB, 23.05.2019 Code: mrl_azm170-xx-xx_de

Operating instructions and Declaration of conformity (cs) 546 kB, 24.11.2015 Code: mrl_azm170-xx-xx_cs

Operating instructions and Declaration of conformity (pt) 636 kB, 04.06.2019 Code: mrl_azm170-xx-xx_pt

Operating instructions and Declaration of conformity (jp) 601 kB, 07.09.2016 Code: mrl_azm170-xx-xx_jp

Operating instructions and Declaration of conformity (fr) 511 kB, 28.04.2016 Code: mrl_azm170-xx-xx_fr

Operating instructions and Declaration of conformity (es) 656 kB, 31.05.2019 Code: mrl_azm170-xx-xx_es

Operating instructions and Declaration of conformity (pl) 691 kB, 31.05.2019 Code: mrl_azm170-xx-xx_pl

Operating instructions and Declaration of conformity (cn) 544 kB, 05.05.2017 Code: mrl_azm170-xx-xx_cn

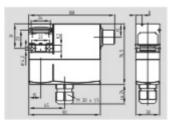
BG-test certificate (en) 260 kB, 09.12.2015 Code: z_m17p02

BG-test certificate (de) 257 kB, 09.12.2015 Code: z_m17p01

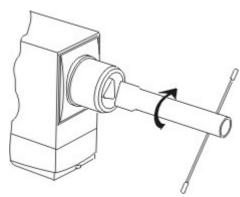
CCC certification (en) 5 MB, 26.10.2018 Code: q_371p02

CCC certification (cn) 5 MB, 26.10.2018 Code: q_371p03

Images



Dimensional drawing (basic component)





System components

Actuator



101122893 - AZ 17/170-B1

· Particularly suitable for sliding doors



101137406 - AZ 17/170-B1-2245

Particularly suitable for sliding doors

Damps vibration on guard device



101122895 - AZ 17/170-B5

Particularly suitable for sliding doors

101139788 - AZ 17/170-B11

Particularly suitable for sliding doors







101139789 - AZ 17/170-B15

· Particularly suitable for sliding doors

101123391 - AZM 170-B6

- Particularly suitable for hinged guards
- For very smal actuating radii
- The direction of actuation can be selected by applicable insertion of the insert

Accessories



101208493 - AZM 170-B CENTERING GUIDE

• for AZ 17 and AZM 170



101100887 - TRIANGULAR KEY TK-M5

• For manual release using M5 triangular key, available as accessory

• For maintenance, installation, etc.

Connector



A-K4M12

- Pre-wired cable
- 4-pole



S-K4M12

- Connector without cable
- 4-pole

K.A. Schmersal GmbH & Co. KG, Möddinghofe 30, D-42279 Wuppertal The data and values have been checked throroughly. Technical modifications and errors excepted. Generiert am 26.07.2019 - 18:03:55h Kasbase 3.3.0.F.64I