# Datasheet - AZM 170SK-11ZRK-2197 230 VAC

Solenoid interlock / AZM 170





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

- 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

# **Ordering details**

Product type description

Article number

EAN code

eCl@ss

AZM 170SK-11ZRK-2197 230 VAC

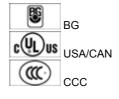
101144268

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27-27-26-03

### **Approval**

Approval



### Classification

Standards

B<sub>10d</sub> Opener (NC)

Mission time

notice

EN ISO 13849-1

2.000.000

20 Years

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

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

## **Global Properties**

Product name AZM 170

Standards EN 60947-5-1, BG-GS-ET-19

Compliance with the Directives (Y/N) 
✓ Yes

Number of actuating directions 
2 piece

Active principle electromechanical Duty cycle Magnet 100 %

Materials

- Material of the housings Plastic, glass-fibre reinforced thermoplastic, self-extinguishing

- Material of the contacts Silver
Housing coating None
Weight 305 g

### **Mechanical data**

Design of electrical connection Screw connection

Cable section

- Min. Cable section 1 x 0,25 mm<sup>2</sup>

Max. Cable section
 Mechanical life
 1 x 1.5 mm², flexible
 > 1.000.000 operations

Emergency unlocking device (Y/N)

Manual release (Y/N)

Yes

bottomright

Emergency release (Y/N) No
Latching force 30 N
Positive break force 8.5 N
positive break travel 11 mm

positive break travel 11 mm

Clamping force F 1000 N

Max. Actuating speed 2 m/s

### **Ambient conditions**

Ambient temperature

Min. environmental temperature
 Max. environmental temperature
 +60 °C

Protection class IP67 to IEC/EN 60529

### **Electrical data**

Thermal test current Ithe

Design of control element Normally open contact (NO), 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

1 piece

Number of safety contacts

1 piece

Power to unlock

Yes

Power to lock

No

Rated control voltage Us

230 VAC

Power consumption max. 10 W
Rated impulse withstand voltage U<sub>imp</sub> 4 kV
Rated insulation voltage U<sub>i</sub> 250 V

Utilisation category AC-15: 230 V / 4 A

DC-13: 24 V / 4 A

10 A

Max. fuse rating 6 A gG D-fuse

## **ATEX**

Explosion protection categories for gases

Explosion protected category for dusts

None

None

## Miscellaneous data

Applications



sliding safety guard,



removable guard,



hinged safety guard

## **Dimensions**

Dimensions of the sensor

- Width of sensor

- Height of sensor

- Length of sensor

108 mm

100.5 mm

30 mm

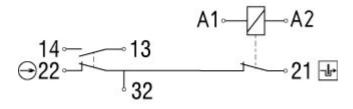
### notice

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

opositive break NC contact

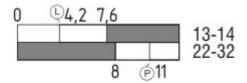




O—\_\_\_O Normally-open contact

o----- Normally-closed contact

## Switch travel diagram



Notes Switch travel diagram



Contact open Setting range  Break point P Positive opening sequence/- angle VS adjustable range of NO contact VÖ adjustable range of NC contact N after travel  Ordering suffix  The applicable ordering suffix is added at the end of the part number of the safety switch.	
Order example: AZM 170SK-11ZRK-2197 230 VAC-1637	
1637	0,3 µm gold-plated contacts
ST-2431	connector M12 , Individual solenoid monitoring
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
ı	Individual coding
(4)	Developed a contract.
without A	Power to unlock Power to lock
	rower to lock
(5) without	achla gland
ST	cable gland Connector M12 x 1
ST-2431	Connector M12 x 1, Individual solenoid monitoring
	Connected W12 X 1, marviadar colonida 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
	Δ7M 170ST and Δ7M 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)

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)

2 Opener (NC), - / 1 Opener (NC), -

02/10 2 Opener (NC), - / 1 Normally open contact (NO), -

(2)

02/01

without Latching force 5 N R Latching force 30 N

(3)

without Power to unlock

A Power to lock

(4)

1637 gold-plated contacts

(5)

2197 Manual release for Power to unlock

#### **Documents**

Operating instructions and Declaration of conformity (fr) 611 kB, 29.04.2016

Code: mrl\_azm170\_fr

Operating instructions and Declaration of conformity (de) 595 kB, 25.04.2016

Code: mrl azm170 de

Operating instructions and Declaration of conformity (it) 609 kB, 08.07.2016

Code: mrl\_azm170\_it

Operating instructions and Declaration of conformity (cn) 655 kB, 08.05.2017

Code: mrl\_azm170\_cn

Operating instructions and Declaration of conformity (nl) 720 kB, 23.09.2010

Code: mrl\_azm170\_nl

Operating instructions and Declaration of conformity (en) 611 kB, 25.04.2016

Code: mrl\_azm170\_en

Operating instructions and Declaration of conformity (jp) 843 kB, 23.08.2016

Code: mrl\_azm170\_jp

Operating instructions and Declaration of conformity (pl) 651 kB, 08.07.2016

Code: mrl\_azm170\_pl

Operating instructions and Declaration of conformity (da) 582 kB, 07.08.2012

Code: mrl\_azm170\_da

Operating instructions and Declaration of conformity (es) 609 kB, 22.06.2016

Code: mrl\_azm170\_es

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) 1 MB, 13.06.2017

Code: q\_371p02

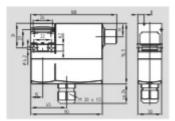
CCC certification (cn) 1 MB, 13.06.2017

Code: q\_371p03

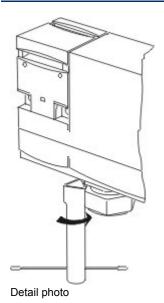
EAC certification (ru) 809 kB, 05.10.2015

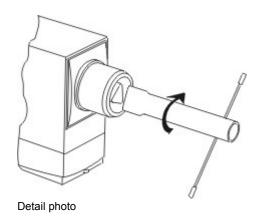
Code: q\_6040p17\_ru

# **Images**



Dimensional drawing (basic component)





#### **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



- 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 30.10.2017 - 13:18:29h Kasbase 3.2.7.F.64I