# Datasheet - AZM 170SK-02ZRKA 110 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
- Screw connection
- Manual release

## **Ordering details**

Product type description

Article number

EAN Code

eCl@ss

AZM 170SK-02ZRKA 110 VAC

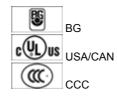
101144267

4030661132150

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

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

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

## **Global Properties**

Permanent light

AZM 170

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

Compliance with the Directives (Y/N)  $\mathsf{C}\mathsf{E}$ 

Number of actuating directions

Active principle
Duty cycle ED

Materials

Material of the housingsMaterial of the contacts

Housing coating

Weight

Yes

electromechanical

Magnet 100 %

Plastic, glass-fibre reinforced thermoplastic, self-extinguishing

Silver None

290

**Mechanical data** 

Design of electrical connection

Cable section

- Min. Cable section

- Max. Cable section

Mechanical life Emergency unlocking device (Y/N)

incigency amouning

- bottom

Manual release (Y/N) Emergency release (Y/N)

Latching force
Positive break force
positive break travel

Clamping force F

Max. Actuating speed

Screw connection

1 x 0,25

1 x 1.5, flexible

> 1.000.000 operations

No

Yes

No 30 17

11 mm 1000 N 2 m/s

**Ambient conditions** 

Ambient temperature

Min. environmental temperatureMax. environmental temperature

Protection class

−25 °C

+60 °C

IP67 to IEC/EN 60529

**Electrical data** 

Design of control element

notice

Switching principle

Number of auxiliary contacts Number of safety contacts Power to unlock

Power to lock
Rated control voltage Us
Power consumption

Rated insulation voltage Ui Thermal test current Ithe

Rated impulse withstand voltage Uimp

Utilisation category

Max. fuse rating

Opener (NC)

change-over contact with double break, type Zb or 2 NC contacts, with

galvanically separated contact bridges

Creep circuit element

0 2 No Yes

110 VAC max. 10 W 4 kV

250 V 10 A

AC-15: 230 V / 4 A DC-13: 24 V / 4 A 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

90

- Height of sensor

100.5

- Length of sensor

30 mm

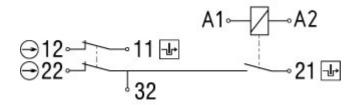
## notice

Individual coding available on request

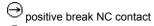
Manual release

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

## Diagram



Note Diagram



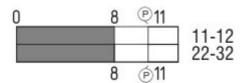




o-\_\_-o Normally-open contact

o----- Normally-closed contact

# Switch travel diagram



Notes Switch travel diagram

Contact closed

Contact open

Setting range

(L) Break point

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-02ZRKA 110 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 Normally open contact (NO) / 1 Opener (NC)

02 2 Opener (NC)

12/0.0 1 Normally open contact (NO), 2 Opener (NC) / -

(3)

withoutLatching force 5 NRLatching force 30 N

Individual coding

(4)

withoutPower to unlockAPower to lock

(5)

withoutcable glandSTConnector 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)

11/02

11/11 1 Normally open contact (NO), 1 Opener (NC) / 1 Normally open contact

(NO), 1 Opener (NC)

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)

**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)

withoutPower to unlockAPower to lock

(4)

1637 gold-plated contacts

(5)

2197 Manual release for Power to unlock

#### **Documents**

Operating instructions and Declaration of conformity (fr) 701 kB, 15.02.2018

Code: mrl\_azm170\_fr

Operating instructions and Declaration of conformity (de) 672 kB, 20.05.2019

Code: mrl azm170 de

Operating instructions and Declaration of conformity (it) 718 kB, 06.06.2019

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) 702 kB, 12.07.2018

Code: mrl\_azm170\_nl

Operating instructions and Declaration of conformity (en) 702 kB, 20.05.2019

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) 736 kB, 14.06.2018

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) 719 kB, 31.05.2019

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) 5 MB, 26.10.2018

Code: q\_371p02

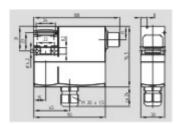
CCC certification (cn) 5 MB, 26.10.2018

Code: q\_371p03

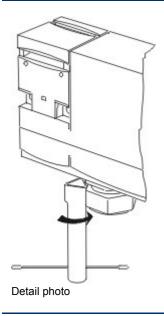
EAC certification (ru) 809 kB, 05.10.2015

Code: q\_6040p17\_ru

# **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



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 - 17:21:01h Kasbase 3.3.0.F.64I