Datasheet - AZM 170-02ZRK 110 VAC

Solenoid interlock / AZM 170





- · Compact design
- Double-insulated
- 90 mm x 84 mm x 30 mm

· Thermoplastic enclosure

- 1 Cable entry M 20 x 1.5
- Interlock with protection against incorrect locking.
- Long life
- · High holding force
- · IDC method of termination
- Manual release

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

Ordering details

Product type description

Article number

EAN Code

eCl@ss

AZM 170-02ZRK 110 VAC

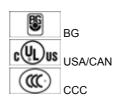
101136321

4030661056289

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

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

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

Permanent light

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

Active principle electromechanical
Duty cycle ED Magnet 100 %
Materials

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

AZM 170

- Material of the contacts Silver
Housing coating None

Mechanical data

Design of electrical connection IDC method of termination

Cable section

Min. Cable section
 Max. Cable section
 1 x 0,75
 1 x 1.0, flexible

Mechanical life > 1.000.000 operations

Emergency unlocking device (Y/N)

Manual release (Y/N)

Yes

- bottom

Emergency release (Y/N) No

Latching force 30

Positive break force 17

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

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

Number of safety contacts

Power to unlock

Power to lock

Rated control voltage Us

No

Power consumption

No

Max. 10 VAC

Power consumption max. 10 W
Rated impulse withstand voltage U_{imp} 4 kV
Rated insulation voltage U_i 250 V
Thermal test current I_{the} 10 A

Utilisation category AC-15: 230 V / 4 A, DC-13: 24 V / 4 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 sensorHeight of sensor

- Length of sensor

90

84

30 mm

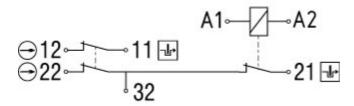
notice

This type termination (IDC) method enables simple connetion of flexible conductors without the need for the use of conductor ferrules Individual coding available on request

Manual release

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

Diagram



Note Diagram

opositive break NC contact

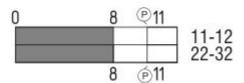
 $^{\scriptsize\textcircled{\scriptsize{1}}}$ active

no active

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 170-02ZRK 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	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
1	Individual coding
(4)	
without	Power to unlock
A	Power to lock
(5)	
without	cable gland
ST	Connector M12 x 1
ST-2431	Connector M12 x 1, Individual solenoid monitoring

(6) 24VAC/DC 110VAC 230VAC

(7)
without
2197
1637

Manual release
Manual release from side (Power to unlock)

gold-plated contacts

AZM 170ST and AZM 170SK

Us 24 VAC/DC

Us 110 VAC

Us 230 VAC

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)

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

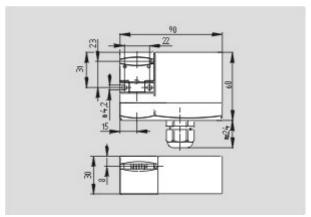
CCC certification (cn) 5 MB, 26.10.2018

Code: q_371p03

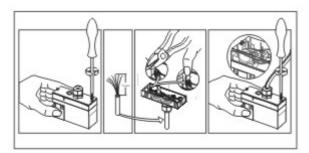
EAC certification (ru) 809 kB, 05.10.2015

Code: q_6040p17_ru

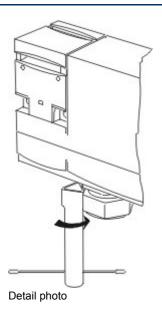
Images



Dimensional drawing (basic component)



Assembly example



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

1

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 25.07.2019 - 22:46:38h Kasbase 3.3.0.F.64I