Datasheet - AZM 170-02ZRK-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
- · IDC method of termination
- Manual release

Ordering details

Product type description

Article number

EAN code

eCl@ss

AZM 170-02ZRK-2197 230 VAC

101144237

4030661131955

27-27-26-03

Approval

Approval



Classification

Standards

B_{10d} Opener (NC)

Mission time

notice

EN ISO 13849-1

2.000.000

20 Years

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

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

Global Properties

Product name

Standards

AZM 170

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

Compliance with the Directives (Y/N) € €

Number of actuating directions

Active principle

Duty cycle

Materials

- Material of the housings

- Material of the contacts
Housing coating

Weight

Yes 2 piece

electromechanical

Magnet 100 %

Plastic, glass-fibre reinforced thermoplastic, self-extinguishing

Silver None 280 g

Mechanical data

Design of electrical connection

Cable section

- Min. Cable section

- Max. Cable section

Mechanical life Emergency unlocking device (Y/N)

Manual release (Y/N)

- bottom

- right

Emergency release (Y/N)

Latching force
Positive break force

positive break travel

Clamping force F_{max}

Max. Actuating speed

Ambient conditions

Ambient temperature

Min. environmental temperatureMax. environmental temperature

Protection class

Electrical data

Design of control element

notice

Switching principle

Number of safety contacts
Power to unlock
Power to lock

Rated control voltage Us

Power consumption

Rated impulse withstand voltage Uimp

Number of auxiliary contacts

Rated insulation voltage Ui Thermal test current Ithe Utilisation category

Max. fuse rating

IDC method of termination

1 x 0,75 mm²

1 x 1.0 mm², flexible

> 1.000.000 operations

No Yes

No

30 N 17 N 11 mm

1000 N 2 m/s

-25 °C +60 °C

IP67 to IEC/EN 60529

Opener (NC)

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

galvanically separated contact bridges

Creep circuit element

0 piece 2 piece Yes No 230 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,

D hi

hinged safety guard

Dimensions

Dimensions of the sensor

- Width of sensor
- Height of sensor
- Length of sensor
30 mm

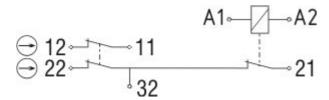
notice

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

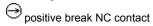
Manual release

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

Diagram



Note Diagram



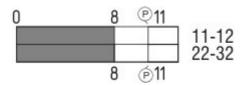




o-__- Normally-open contact

o----- Normally-closed contact

Switch travel diagram



Notes Switch travel diagram





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-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)

1 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 NIIndividual 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) 11/11

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) / -

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) 670 kB, 01.07.2010

Code: mrl_azm170_fr

Operating instructions and Declaration of conformity (de) 923 kB, 24.02.2011

Code: mrl_azm170_de

Operating instructions and Declaration of conformity (it) 645 kB, 09.04.2010

Code: mrl_azm170_it

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

Code: mrl_azm170_nl

Operating instructions and Declaration of conformity (en) 746 kB, 12.03.2010

Code: mrl_azm170_en

Operating instructions and Declaration of conformity (jp) 709 kB, 14.04.2011

Code: mrl_azm170_jp

Operating instructions and Declaration of conformity (pl) 590 kB, 11.02.2015

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) 665 kB, 25.03.2010

Code: mrl_azm170_es

BG-test certificate (en) 236 kB, 10.12.2013

Code: z_m17p02

BG-test certificate (de) 238 kB, 10.12.2013

Code: z_m17p01

CCC certification (en) 596 kB, 23.06.2014

Code: q_371p02

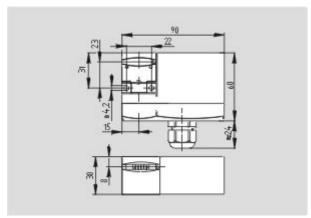
CCC certification (cn) 607 kB, 23.06.2014

Code: q_371p03

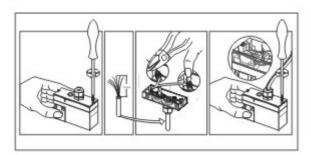
Gost certification (ru) 2 MB, 07.07.2011

Code: q_az1p01

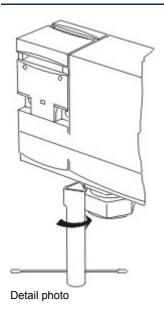
Images

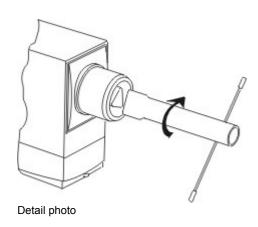


Dimensional drawing (basic component)



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



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 14.08.2015 - 23:21:17h Kasbase 3.1.12.F.64I