Datasheet - AZM 170-02ZRKA-ST 230 VAC

Solenoid interlock / AZM 170





- Thermoplastic enclosure
- Double-insulated
- · Compact design
- 90 mm x 84 mm x 30 mm
- · Interlock with protection against incorrect locking.
- · Long life
- High holding force
- Connector M12, 4-pole
- 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 170-02ZRKA-ST 230 VAC

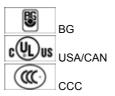
101141453

4030661122007

27-27-26-03

Approval

Approval



Classification

Standards

B_{10d} Opener (NC)

Mission time

notice

EN ISO 13849-1

2.000.000

20 Years

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

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

Global Properties

Product name

Standards

AZM 170

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

Compliance with the Directives (Y/N) 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 278 g

Mechanical data

Design of electrical connection Connector M12

Mechanical life > 1.000.000 operations

Emergency unlocking device (Y/N) No Manual release (Y/N) Yes

- bottom

Emergency release (Y/N) No

Latching force 30 N

Positive break force 17 N

positive break travel 11 mm

Clamping force F_{max} 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 0 piece Number of safety contacts 2 piece Power to unlock No Power to lock Yes Rated control voltage Us 230 VAC Power consumption max. 10 W 4 kV Rated impulse withstand voltage Uimp 250 V Rated insulation voltage Ui

Thermal test current line 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

None
Explosion protected category for dusts

None

Miscellaneous data

Applications



Dimensions

Dimensions of the sensor

- Width of sensor
- Height of sensor
- Length of sensor

90 mm

75.5 mm

30 mm

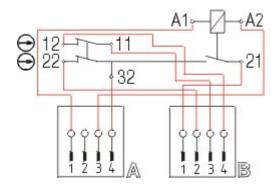
notice

Individual coding available on request

Manual release

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

Diagram



Note Diagram

⊖ positive break NC contact

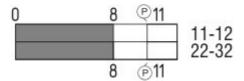
 $^{\scriptsize\textcircled{\scriptsize{1}}}_{\rm active}$

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 170-02ZRKA-ST 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 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)

without Power to unlock

A Power 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) 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

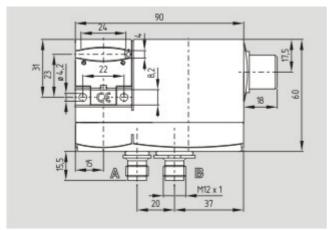
CCC certification (cn) 607 kB, 23.06.2014

Code: q_371p03

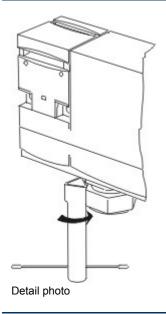
Gost certification (ru) 2 MB, 07.07.2011

Code: q_az1p01

Images



Dimensional drawing (basic component)



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



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 18.08.2015 - 23:18:10h Kasbase 3.1.12.F.64l