

Datasheet - AZM 170-02ZRKA-ST 110 VAC

Solenoid interlock / AZM 170



- Thermoplastic enclosure
- Double-insulated \square
- 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

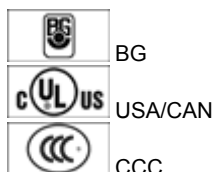
(Minor differences between the printed image and the original product may exist!)

Ordering details

| | |
|--------------------------|---------------------------|
| Product type description | AZM 170-02ZRKA-ST 110 VAC |
| Article number | 101141424 |
| EAN code | 4030661121901 |
| eCl@ss | 27-27-26-03 |

Approval

Approval




Classification

| | |
|------------------|--|
| Standards | EN ISO 13849-1 |
| B10d Opener (NC) | 2.000.000 |
| Mission time | 20 Years |
| notice | $MTTF_d = \frac{B_{10d}}{0,1 \times n_{op}}$ $n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{cycle}}$ |

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 | Connector M12 |
| Mechanical life | > 1.000.000 operations |
| Emergency unlocking device (Y/N) | No |
| - bottom | |
| Manual release (Y/N) | Yes |
| 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 | -25 °C |
| - 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 U_s | 110 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 | None |
| Explosion protected category for dusts | None |

Miscellaneous data

Applications



sliding safety guard,



removable guard,



hinged safety guard

Dimensions

Dimensions of the sensor

| | |
|--------------------|---------|
| - Width of sensor | 90 mm |
| - Height of sensor | 75.5 mm |
| - Length of sensor | 30 mm |

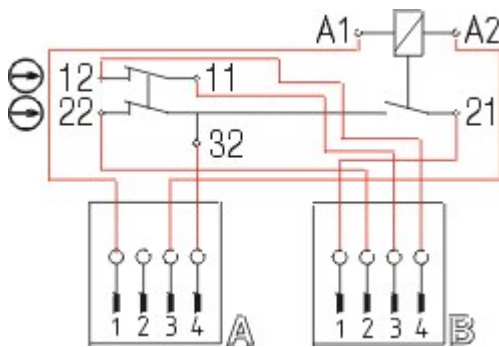
notice

Individual coding available on request

Manual release

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

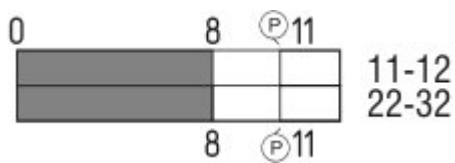
Diagram



Note Diagram

- positive break NC contact
- active
- no active
- Normally-open contact
- Normally-closed contact

Switch travel diagram



Notes Switch travel diagram

- Contact closed
- 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 170-02ZRKA-ST 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) <i>without</i> SK | IDC method of termination Screw connection |
| (2) 11 02 12/0.0 | 1 Normally open contact (NO) / 1 Opener (NC) 2 Opener (NC) 1 Normally open contact (NO), 2 Opener (NC) / - |
| (3) <i>without</i> R I | Latching force 5 N Latching force 30 N Individual coding |
| (4) <i>without</i> A | Power to unlock Power to lock |
| (5) <i>without</i> ST ST-2431 | cable gland Connector M12 x 1 Connector M12 x 1, Individual solenoid monitoring |
| (6) 24VAC/DC 110VAC 230VAC | U _s 24 VAC/DC U _s 110 VAC U _s 230 VAC |
| (7) <i>without</i> 2197 1637 | Manual release Manual release from side (Power to unlock) 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) |

| | |
|----------------|---|
| 12/00 | 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) | |
| <i>without</i> | Latching force 5 N |
| R | Latching force 30 N |
| (3) | |
| <i>without</i> | 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) 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

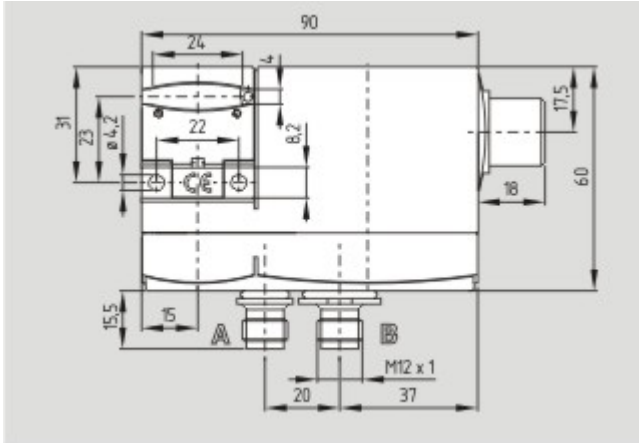
CCC certification (cn) 607 kB, 23.06.2014

Code: q_371p03

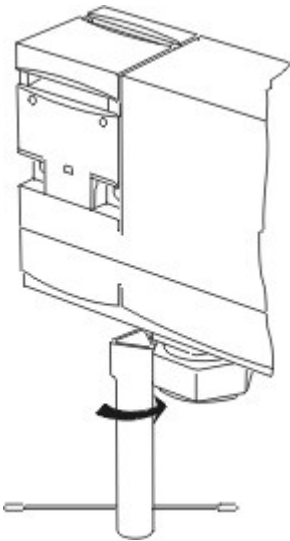
Gost certification (ru) 2 MB, 07.07.2011

Code: q_az1p01

Images



Dimensional drawing (basic component)



Detail photo

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 small 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



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The data and values have been checked thoroughly. Technical modifications and errors excepted.

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