16.07.2018

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Datasheet - AZM 170-02ZRKA 24 VAC/DC

Solenoid interlock / AZM 170

X Preferred typ





- 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

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

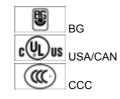
Ordering details

| Product type description |
|--------------------------|
| Article number |
| EAN Code |
| eCl@ss |

AZM 170-02ZRKA 24 VAC/DC 101141020 4030661120294 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 $MTTF_{d} = \frac{D_{100}}{0.1 \times n_{op}}$

 $n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{1000 \text{ s/h}}$ t _{ovele}



Global Properties

| Permanent light | AZM 170 |
|---|---|
| Standards | EN 60947-5-1, BG-GS-ET-19 |
| Compliance with the Directives (Y/N) CE | Yes |
| Number of actuating directions | 2 |
| Active principle | electromechanical |
| Duty cycle ED | Magnet 100 % |
| Materials | |
| - Material of the housings | Plastic, glass-fibre reinforced thermoplastic, self-extinguishing |
| - Material of the contacts | Silver |
| Housing coating | None |
| Weight | 278 |
| | |

Mechanical data

| Design of electrical connection | IDC method of termination |
|----------------------------------|---------------------------|
| Cable section | |
| - Min. Cable section | 1 x 0,75 |
| - Max. Cable section | 1 x 1.0, flexible |
| 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 |
| Positive break force | 17 |
| positive break travel | 11 |
| Clamping force F | 1000 N |
| Max. Actuating speed | 2 |
| | |

Ambient conditions

| Ambient temperature | |
|----------------------------------|----------------------|
| - Min. environmental temperature | -25 |
| - Max. environmental temperature | +60 |
| Protection class | IP67 to IEC/EN 60529 |

Electrical data

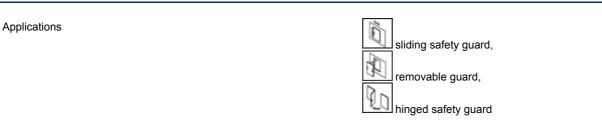
| Design of control element | Opener (NC) |
|--------------------------------------|--|
| notice | change-over contact with double break, type Zb or 2 NC contacts, with galvanically separated contact bridges |
| Switching principle | Creep circuit element |
| Number of auxiliary contacts | 0 |
| Number of safety contacts | 2 |
| Power to unlock | No |
| Power to lock | Yes |
| Rated control voltage Us | 24 VAC/DC |
| Power consumption | max. 10 W |
| Rated impulse withstand voltage Uimp | 4 kV |
| Rated insulation voltage Ui | 250 V |
| Thermal test current Ithe | 10 A |
| Utilisation category | AC-15: 230 V / 4 A, DC-13: 24 V / 4 A |
| | |

ATEX

Explosion protection categories for gases Explosion protected category for dusts

None None

Miscellaneous data



Dimensions

| Dimensions of the sensor | |
|--------------------------|----|
| - Width of sensor | 90 |
| - Height of sensor | 84 |
| - Length of sensor | 30 |

notice

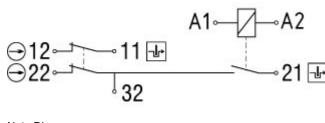
This type termination (IDC) method enables simple connetion of flexible conductors without the need for the use of conductor ferrules

Individual coding available on request

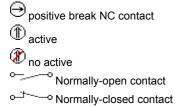
Manual release

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

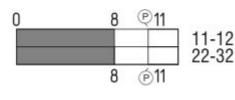
Diagram



Note Diagram



Switch travel diagram



Notes Switch travel diagram

Contact closed

| Contact open |
|------------------------|
| Setting range |
| L Break point |
| Positive opening s |
| VS adjustable range of |

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 24 VAC/DC**-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 approacted (NO) / 1 Opener (NC) |
| 02 | 1 Normally open contact (NO) / 1 Opener (NC) 2 Opener (NC) |
| 12/0.0 | 1 Normally open contact (NO), 2 Opener (NC) / - |
| | r Normany Open Contact (NO), 2 Opener (NC)7 - |
| (3) | |
| without | Latching force 5 N |
| R | Latching force 30 N |
| I | Individual coding |
| (4) | |
| without | Power to unlock |
| Α | Power to lock |
| (5) | |
| without | cable gland |
| ST | Connector 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 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) | |
| without | Latching force 5 N |
| R | Latching force 30 N |
| (3) | |
| without | Power to unlock |
| Α | Power 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) 668 kB, 11.01.2018 Code: mrl_azm170_de

Operating instructions and Declaration of conformity (it) 697 kB, 16.01.2018 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) 720 kB, 23.09.2010 Code: mrl_azm170_nl

Operating instructions and Declaration of conformity (en) 700 kB, 11.01.2018 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) 702 kB, 17.01.2018 Code: mrl_azm170_es Code: z_m17p02

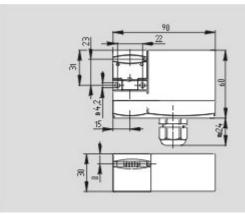
BG-test certificate (de) 257 kB, 09.12.2015 Code: z_m17p01

CCC certification (en) 1 MB, 13.06.2017 Code: q_371p02

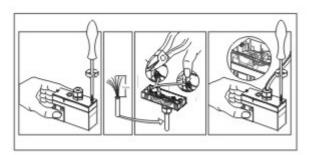
CCC certification (cn) 1 MB, 13.06.2017 Code: q_371p03

EAC certification (ru) 809 kB, 05.10.2015 Code: q_6040p17_ru

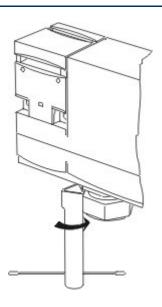
Images



Dimensional drawing (basic component)



Assembly example



System components

| Actuator | 101122893 - AZ 17/170-B1 • Particularly suitable for sliding doors |
|-------------|--|
| 00 | 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 16.07.2018 - 10:51:13h Kasbase 3.3.0.F.64I