Datasheet - AZM 170-11ZRK 24 VAC/DC

Solenoid interlock / AZM 170







- 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 170-11ZRK 24 VAC/DC

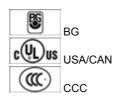
101140788

4030661119762

27-27-26-03

Approval

Approval



Classification

Standards

B_{10d} Opener (NC)

Mission time

notice

EN ISO 13849-1

2.000.000

20 Years

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

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

Global Properties

Product name AZM 170

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

Compliance with the Directives (Y/N) **C** € 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 270 g

Mechanical data

Design of electrical connection IDC method of termination

Cable section

- Min. Cable section 1 x 0,75 mm²

- Max. Cable section $1 \times 1.0 \text{ mm}^2, \text{ flexible}$ 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 N
Positive break force 8.5 N
positive break travel 11 mm
Clamping force F 1000 N

Ambient conditions

Max. Actuating speed

Ambient temperature

Min. environmental temperature
 Max. environmental temperature
 +60 °C

Protection class IP67 to IEC/EN 60529

Electrical data

Design of control element Normally open contact (NO), Opener (NC)

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

2 m/s

galvanically separated contact bridges

Switching principle Creep circuit element

Number of auxiliary contacts1 pieceNumber of safety contacts1 piecePower to unlockYesPower to lockNo

Rated control voltage U_s 24 VAC/DC Power consumption max. 10 W Rated impulse withstand voltage U_{imp} 4 kV Rated insulation voltage U_i 250 V 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

sliding safety guard, removable guard,

hing

hinged safety guard

Dimensions

Dimensions of the sensor

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

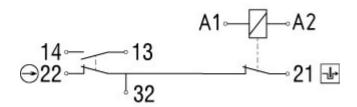
notice

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

Diagram



Note Diagram

opositive break NC contact

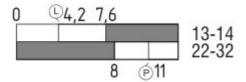


no active

o-__- Normally-open contact

o----- Normally-closed contact

Switch travel diagram



Notes Switch travel diagram



Contact open Setting range 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 170-11ZRK 24 VAC/DC-1637	
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 12/0.0	2 Opener (NC) 1 Normally open contact (NO), 2 Opener (NC) / -
	1 Normally open contact (NO), 2 Opener (NO) / -
(3)	Lataking faces 5 N
without R	Latching force 5 N Latching force 30 N
I	Individual coding
	marvioud occaring
(4) without	Power to unlock
A	Power to lock
	1 3 1 3 1 3 3 K
(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	U₅ 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) / -

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)

2 Opener (NC), - / 1 Opener (NC), -

02/10 2 Opener (NC), - / 1 Normally open contact (NO), -

(2)

02/01

without Latching force 5 N R Latching force 30 N

(3)

without 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) 611 kB, 29.04.2016

Code: mrl_azm170_fr

Operating instructions and Declaration of conformity (de) 595 kB, 25.04.2016

Code: mrl azm170 de

Operating instructions and Declaration of conformity (it) 609 kB, 08.07.2016

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) 611 kB, 25.04.2016

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) 651 kB, 08.07.2016

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) 609 kB, 22.06.2016

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) 1 MB, 13.06.2017

Code: q_371p02

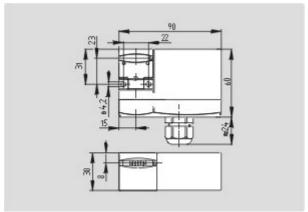
CCC certification (cn) 1 MB, 13.06.2017

Code: q_371p03

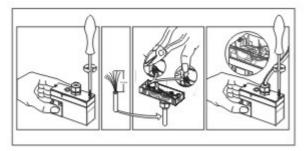
EAC certification (ru) 809 kB, 05.10.2015

Code: q_6040p17_ru

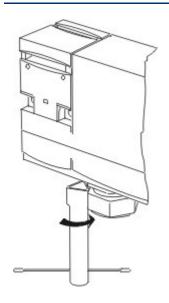
Images



Dimensional drawing (basic component)



Assembly example



System components

Actuator



101122893 - AZ 17/170-B1

• Particularly suitable for sliding doors



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 18.10.2017 - 13:34:01h Kasbase 3.2.7.F.64I