# Datasheet - AZM 170-11ZRKA 230 VAC

Solenoid interlock / AZM 170

☑ 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 170-11ZRKA 230 VAC

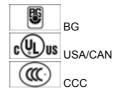
101136319

4030661056258

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

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

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

### **Global Properties**

Permanent light AZM 170

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

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
 Max. Cable section
 1 x 0,75
 1 x 1.0. flexible

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

Positive break force 8.5

positive break travel 11 mm

Clamping force F 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 Normally open contact (NO), 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

1
Number of safety contacts

1
Power to unlock

Power to lock

Rated control voltage Us

Power consumption

Rated impulse withstand voltage Uimp

4 kV

Rated insulation voltage Uimp

250 V

Rated insulation voltage Ui 250 V
Thermal test current I<sub>the</sub> 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

### Miscellaneous data

Applications

si

None

None

sliding safety guard,



removable guard,

hing

hinged safety guard

#### **Dimensions**

Dimensions of the sensor

- Width of sensor- Height of sensor84

- Length of sensor 30 mm

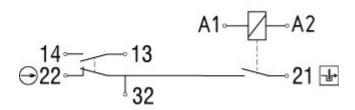
### notice

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

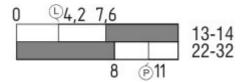


no active

o-\_\_- Normally-open contact

o----- Normally-closed contact

# Switch travel diagram



Notes Switch travel diagram



Contact open Setting range  L 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 170-11ZRKA 230 VAC-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	2 Opener (NC)
12/0.0	1 Normally open contact (NO), 2 Opener (NC) / -
(3)	Lattice Co. Co.
without	Latching force 5 N
R I	Latching force 30 N Individual coding
	individual coding
(4) without	Power to unlock
A	Power to lock
	1 3 13 1 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	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)

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)

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 Power to lock Α

(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) 702 kB, 12.07.2018

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

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) 5 MB, 26.10.2018

Code: q\_371p02

CCC certification (cn) 5 MB, 26.10.2018

Code: q\_371p03

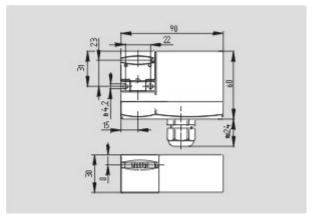
EAC certification (ru) 809 kB, 05.10.2015

Code: q\_6040p17\_ru

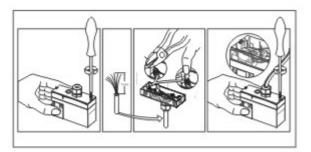
# **Images**



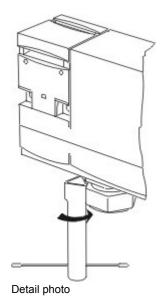
## Product photo



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