15.07.2016

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# Datasheet - AZM 170SK-11/11ZRK-2197 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
  - Manual release from side
  - Cut clamp termination

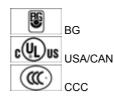
(Minor differences between the printed image and the original product may exist!)

## **Ordering details**

Product type description Article number EAN code eCl@ss AZM 170SK-11/11ZRK-2197 24 VAC/DC 101179710 4030661312798 27-27-26-03

## Approval

Approval



## Classification

Standards B10d Opener (NC) Mission time notice EN ISO 13849-1 2.000.000 20 Years MTTF<sub>d</sub> =  $\frac{B_{100}}{0.1 \times n_{op}}$ 

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

#### **Global Properties**

Product name	AZM 170
Standards	EN 60947-5-1, BG-GS-ET-19
Compliance with the Directives (Y/N) CE	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	315 g

## Mechanical data

Design of electrical connection	Screw terminals
Cable section	
- Min. Cable section	1 x 0,25 mm²
- Max. Cable section	1 x 1.5 mm², flexible
Mechanical life	> 1.000.000 operations
Emergency unlocking device (Y/N)	No
Manual release (Y/N)	Yes
- right	
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
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

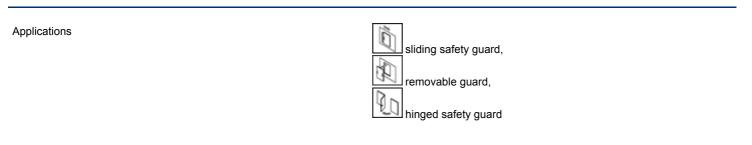
#### **Electrical data**

Design of control element	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	2 piece
Number of safety contacts	2 piece
Power to unlock	Yes
Power to lock	No
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
Max. fuse rating	6 A gG D-fuse

#### ATEX

Explosion protection categories for gases	None	
Explosion protected category for dusts	None	

#### **Miscellaneous data**



108 mm

30 mm

100.5 mm

## Dimensions

<ul> <li>Width of sensor</li> </ul>	
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- Height of sensor
- Length of sensor

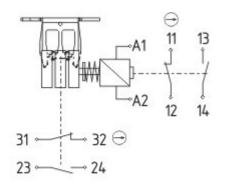
### notice

### Individual coding available on request

Manual release from side

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

## Diagram





## Note Diagram

 $\ominus$  positive break NC contact

① active

🏽 no active

•----• Normally-open contact

o-t---- Normally-closed contact

## **Ordering suffix**

1637
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...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)	
without	Latching force 5 N
R	Latching force 30 N
I	Individual coding
(4)	
without	Power to unlock
A	Power to lock
(5)	achla aland
without ST	cable gland Connector M12 x 1
ST ST-2431	
	Connector M12 x 1, Individual solenoid monitoring
(6)	
24VAC/DC	
	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)
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**

(0)

**Operating instructions and Declaration of conformity** (en) 509 kB, 21.04.2016 Code: mrl\_azm170-xx-xx\_en

**Operating instructions and Declaration of conformity** (da) 509 kB, 24.11.2015 Code: mrl\_azm170-xx-xx\_da

**Operating instructions and Declaration of conformity** (it) 509 kB, 22.04.2016 Code: mrl\_azm170-xx-xx\_it

**Operating instructions and Declaration of conformity** (nl) 511 kB, 24.11.2015 Code: mrl\_azm170-xx-xx\_nl

**Operating instructions and Declaration of conformity** (de) 494 kB, 21.04.2016 Code: mrl\_azm170-xx-xx\_de

**Operating instructions and Declaration of conformity** (cs) 546 kB, 24.11.2015 Code: mrl\_azm170-xx-xx\_cs

**Operating instructions and Declaration of conformity** (pt) 384 kB, 26.06.2012 Code: mrl\_azm170-xx-xx\_pt

**Operating instructions and Declaration of conformity** (jp) 535 kB, 27.05.2011 Code: mrl\_azm170-xx-xx\_jp

**Operating instructions and Declaration of conformity** (fr) 511 kB, 28.04.2016 Code: mrl\_azm170-xx-xx\_fr

**Operating instructions and Declaration of conformity** (es) 512 kB, 24.11.2015 Code: mrl\_azm170-xx-xx\_es

**Operating instructions and Declaration of conformity** (pl) 543 kB, 10.09.2015 Code: mrl\_azm170-xx-xx\_pl

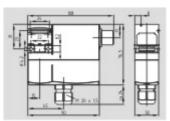
**BG-test certificate** (en) 260 kB, 09.12.2015 Code: z\_m17p02

**BG-test certificate** (de) 257 kB, 09.12.2015 Code: z\_m17p01

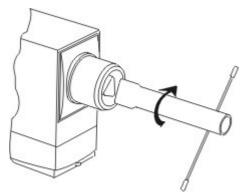
CCC certification (en) 596 kB, 23.06.2014 Code: q\_371p02

CCC certification (cn) 607 kB, 23.06.2014 Code: q\_371p03

#### 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 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 15.07.2016 - 18:22:07h Kasbase 3.2.4.F.64I