14.08.2015

23:09:39h

SCHMERSAL

Datasheet - AZM 170-02ZRK 230 VAC

Solenoid interlock / AZM 170

X Preferred typ





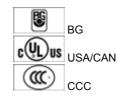
- Thermoplastic enclosure
- Double-insulated
- · Compact design
- 90 mm x 84 mm x 30 mm
- 1 Cable entry M 20 x 1.5
- · Interlock with protection against incorrect locking.
- Long life
- High holding force
- · IDC method of termination
- Manual release

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

Ordering details

Product type description	
Article number	
EAN code	
eCl@ss	

AZM 170-02ZRK 230 VAC 101136322 4030661056296 27-27-26-03



Classification

Approval

Approval

Standards B10d Opener (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

Product name	AZM 170
Standards	EN 60947-5-1, BG-GS-ET-19
Compliance with the Directives (Y/N) C ϵ	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	272 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 x 1.0 mm ² , 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 N	
Positive break force	17 N	
positive break travel	11 mm	
Clamping force Fmax	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

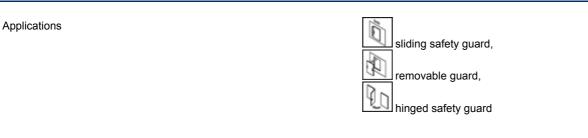
Electrical data

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	Yes
Power to lock	No
Rated control voltage Us	230 VAC
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

Dimonsions of the concor

- Width of sensor	90 mm
- Height of sensor	84 mm
- Length of sensor	30 mm

notice

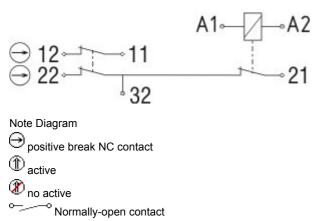
This type termination (IDC) method enables simple connetion of flexible conductors without the need for the use of conductor ferrules

Individual coding available on request

Manual release

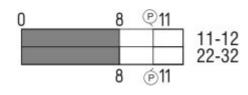
· For manual release using M5 triangular key, available as accessory

Diagram



•____• Normally-closed contact

Switch travel diagram



Notes Switch travel diagram

Contact closed

Contact open
Setting range
(L) 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 170-02ZRK 230 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)	
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
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) 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

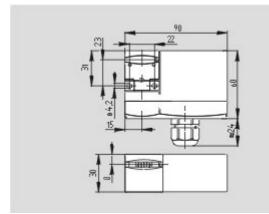
Code: z_m17p01

CCC certification (en) 596 kB, 23.06.2014 Code: q_371p02

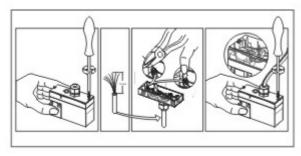
CCC certification (cn) 607 kB, 23.06.2014 Code: q_371p03

Gost certification (ru) 2 MB, 07.07.2011 Code: q_az1p01

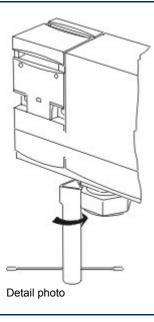
Images



Dimensional drawing (basic component)



Assembly example



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



• 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 14.08.2015 - 23:09:43h Kasbase 3.1.12.F.64I