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 AZM 170-11ZRKA 230 VAC 1136319 4030661056258

Approval

Approval



Classification

Standards B_{10d} Opener (NC) Mission time notice EN ISO 13849-1 2.000.000 20 Years

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

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

Global Properties

Product name Standards Compliance with the Directives (Y/N) CC Number of actuating directions Active principle Duty cycle Materials - Material of the housings - Material of the contacts

- Material of the contacts Housing coating Weight

Mechanical data

AZM 170 EN 60947-5-1, BG-GS-ET-19 Yes 2 piece electromechanical Magnet 100 %

Plastic, glass-fibre reinforced thermoplastic, selfextinguishing Silver None 278 g

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
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 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

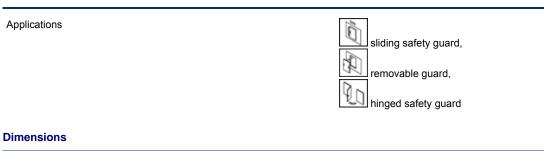
Design of control element	Normally open contact (NO), Opener (NC)
Switching principle	Creep circuit element
Number of auxiliary contacts	1 piece
Number of safety contacts	1 piece
Power to unlock	No
Power to lock	Yes
Rated control voltage Us	230 VAC
Power consumption	max. 10 W
Rated impulse withstand 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
Max. fuse rating	6 A gG D-fuse

ATEX

Explosion protection categories for gases

None

Miscellaneous data



Dimensions of the sensor

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

notice

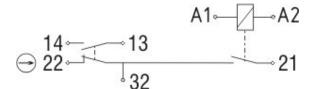
This type termination (IDC) method enables simple connetion of flexible conductors without the need for the use of conductor ferrules

Individual coding available on request

Manual release

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

Diagram



Note Diagram

e positive break NC contact

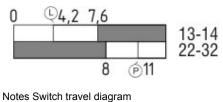
(f) active

🗶 no active

----- Normally-open contact

Normally-closed contact

Switch travel diagram



Contact closed

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 170-11ZRKA 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)

(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 170SK-(1)Z(2)K(3)-(4)-(5)-024

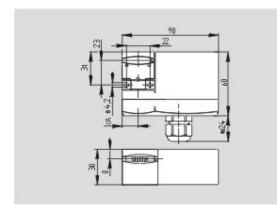
1 Normally open contact (NO), 1 Opener (NC) / 1 Normally open contact (NO), 1 Opener (NC)
1 Normally open contact (NO), 1 Opener (NC) / 2 Opener (NC)
1 Normally open contact (NO), 2 Opener (NC) / -
1 Normally open contact (NO), 2 Opener (NC) / 1 Normally open contact (NO), 1 Opener (NC)
1 Normally open contact (NO), 2 Opener (NC) / 2 Opener (NC)
2 Opener (NC), - / 1 Opener (NC), -
2 Opener (NC), - / 1 Normally open contact (NO), -
Latching force 5 N Latching force 30 N
Power to unlock Power to lock
gold-plated contacts
Manual release for Power to unlock

Documents

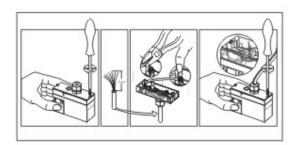
Images



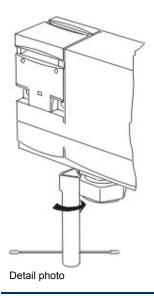
Product photo



Dimensional drawing (basic component)



Assembly example



System components



• Particularly suitable for hinged guards (front mounting)



K.A. Schmersal GmbH, Möddinghofe 30, D-42279 Wuppertal The data and values have been checked throroughly. Technical modifications and errors excepted. Generiert am 10.10.2011 - 10:00:12h Kasbase 1.5.5 DBI