## Datasheet - AZM 161SK-12/12RKN-024

Solenoid interlock / AZM 161

X Preferred typ





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

- · Thermoplastic enclosure
- Double-insulated
- Interlock with protection against incorrect locking.
- 130 mm x 90 mm x 30 mm
- 6 Contacts
- · Long life
- Large wiring compartment
- · Emergency release
- cable entries 4 M 16 x 1.5

## **Ordering details**

Product type description

Article number

EAN Code

eCl@ss

AZM 161SK-12/12RKN-024

101172152

4030661306865

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

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

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

## **Global Properties**

Permanent light **AZM 161** 

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

Compliance with the Directives (Y/N)  $\zeta \in$ Yes Number of actuating directions 3

Active principle electromechanical Magnet 100 % Duty cycle ED Materials

- Material of the housings Plastic, glass-fibre reinforced thermoplastic, self-extinguishing

- Material of the contacts Housing coating None Weight 435

#### **Mechanical data**

Actuating play in direction of actuation 5.5 mm

Design of electrical connection Screw connection

Cable section

- Min. Cable section 1 x 0,25 - Max. Cable section 1 x 1.5

Mechanical life > 1.000.000 operations

notice All indications about the cable section are including the conductor ferrules.

Emergency unlocking device (Y/N) No Manual release (Y/N) No Emergency release (Y/N) Yes Latching force 30 Positive break force 20 positive break travel 9.5

2000 N Clamping force F 2 m/s Max. Actuating speed

max. 1000 / h Actuating frequency

## **Ambient conditions**

Ambient temperature

- Min. environmental temperature -25 °C - Max. environmental temperature +60 °C

Protection class IP67 to IEC/EN 60529

## **Electrical data**

Thermal test current Ithe

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

6 A

Creep circuit element Switching principle

Number of auxiliary contacts 2 4 Number of safety contacts Power to unlock Yes Power to lock No

Rated control voltage Us 24 VAC/DC Power consumption max. 10 W Power consumption max. 10 W Rated impulse withstand voltage Uimp 4 kV 250 V Rated insulation voltage Ui

AC-15: 230 V / 4 A. Utilisation category

DC-13: 24 V / 2,5 A

Required rated short-circuit current

Max. fuse rating

1000 A

6 A gG D-fuse To DIN EN 60269-1

#### **ATEX**

Explosion protection categories for gases Explosion protected category for dusts

None

None

### Miscellaneous data

Applications



sliding safety guard,



removable guard,



hinged safety guard

## **Dimensions**

Dimensions of the sensor

- Width of sensor

- Height of sensor

- Length of sensor

130 mm

90 mm

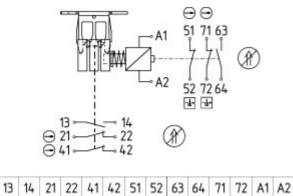
30 mm

### notice

Emergency release

- For cases of danger
- · Mounting only outside the guarded area

## Diagram



# Note Diagram

positive break NC contact

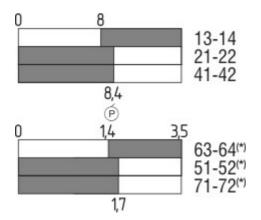




o-\_\_-o Normally-open contact

o--t---o Normally-closed contact

## Switch travel diagram



Notes Switch travel diagram

Contact closed

Contact open

Setting range

(L) Break point

Positive opening sequence/- angle

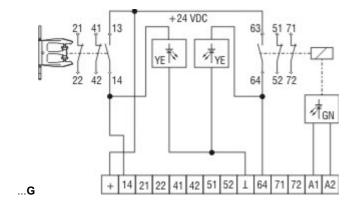
VS adjustable range of NO contact

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 161SK-12/12RKN-024G



Protected against incorrect polarity and voltage spikes.

limited terminating space 0,75 mm<sup>2</sup>

#### Diagram

14 guard open

13 +24 VDC

63 0 VDC

64 unlocked

### **Ordering code**

## AZM 161 (1)-(2)(3)K(4)-(5)-(6)(7)

(1)

SK

CC

ST

(2)

12/12

12/11

11/12

(3)

without

R

Screw connection

Cage clamps

male connector M12, 8- and 4-poles (Only for Us: 24 VAC/DC)

2 Normally open contact (NO) / 4 Opener (NC)

2 Normally open contact (NO) / 3 Opener (NC) (Plug-in connection)

2 Normally open contact (NO) / 3 Opener (NC) (Plug-in connection)

Latching force 5 N

Latching force 30 N

(4)

without Power to unlock

A Power to lock

(5)

without

ED

Manual release lateral

Manual release cover-side

EU

Manual release rear

T

Emergency exit lateral

TD

Emergency exit cover-side

TU

Emergency exit rear

(6)

Ν

 024
 Us: 24 VAC/DC

 110/230
 Us: 110/230 VAC

**(7)** 

**G** with LED (Only for Us: 24 VAC/DC)

Emergency release

#### **Documents**

Operating instructions and Declaration of conformity (sv) 423 kB, 15.08.2012

Code: mrl\_azm161\_sv

Operating instructions and Declaration of conformity (es) 444 kB, 09.03.2016

Code: mrl\_azm161\_es

Operating instructions and Declaration of conformity (de) 487 kB, 21.01.2019

Code: mrl\_azm161\_de

Operating instructions and Declaration of conformity (pt) 507 kB, 09.12.2016

Code: mrl\_azm161\_pt

Operating instructions and Declaration of conformity (en) 523 kB, 21.01.2019

Code: mrl\_azm161\_en

Operating instructions and Declaration of conformity (pl) 466 kB, 06.04.2016

Code: mrl\_azm161\_pl

Operating instructions and Declaration of conformity (fr) 444 kB, 28.04.2016

Code: mrl\_azm161\_fr

Operating instructions and Declaration of conformity (cs) 464 kB, 23.08.2017

Code: mrl\_azm161\_cs

Operating instructions and Declaration of conformity (jp) 728 kB, 23.08.2016

Code: mrl\_azm161\_jp

Operating instructions and Declaration of conformity (it) 438 kB, 19.04.2016

Code: mrl\_azm161\_it

Operating instructions and Declaration of conformity (nl) 473 kB, 03.08.2018

Code: mrl\_azm161\_nl

BG-test certificate (de) 140 kB, 20.05.2015

Code: z\_m16p01

BG-test certificate (en) 134 kB, 20.05.2015

Code: z\_m16p02

CCC certification (en) 5 MB, 26.10.2018

Code: q\_371p02

CCC certification (cn) 5 MB, 26.10.2018

Code: q\_371p03

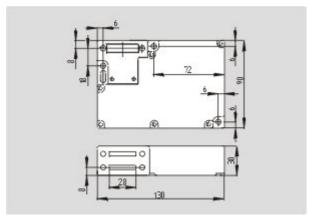
EAC certification (ru) 809 kB, 05.10.2015

Code: q\_6040p17\_ru

notice (de, en) 88 kB, 27.09.2007

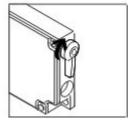
Code: s\_161p01

### **Images**



Dimensional drawing (basic component)





# **System components**

### **Actuator**

101145117 - AZM 161-B1





101171859 - AZM 161-B1ES



101175431 - AZM 161-B1F

101171125 - AZM 161-B1S



101173089 - AZM 161-B1-2053 WITH BALL LATCH



101164100 - AZM 161-B1-1747 WITH MAGNETIC LATCH



101178199 - AZM 161-B1-2024



101176642 - AZM 161-B1-2177 WITH CENTERING GUIDE



#### 101174113 - AZM 161-B6-2177 WITH CENTERING GUIDE

· For very smal actuating radii



101170375 - AZM 161-B6S



#### 101144420 - AZM 161-B6

• For very smal actuating radii

### **Door-handle system**



### **AZM 161-STS30**

- Latching handle
- Suitable for all types of guard
- suitable in combination with EX-AZM 161
- Max. 110 °C

## **Accessories**



## 101100887 - TRIANGULAR KEY TK-M5

- For manual release using M5 triangular key, available as accessory
- For maintenance, installation, etc.



101149213 - Mounting set MS AZM 161 R/P



101150376 - Mounting set MS AZM 161 P