# Datasheet - AZM 161CC-12/12RKEU-024

Solenoid interlock / AZM 161





(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
- Manual release, rear
- cable entries 4 M 16 x 1.5

### **Ordering details**

Product type description

Article number

EAN code

eCl@ss

AZM 161CC-12/12RKEU-024

101187879

4030661357119

27-27-26-03

**Approval** 

Approval



### Classification

Standards

B<sub>10d</sub> Opener (NC)

Mission time

notice

EN ISO 13849-1

2.000.000

20 Years

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

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

## **Global Properties**

Product name AZM 161

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

Compliance with the Directives (Y/N) **C** € Yes

Number of actuating directions 3 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 500 g

#### **Mechanical data**

Actuating play in direction of actuation 5.5 mm

Design of electrical connection Cage clamps

Cable section

Min. Cable section
 Max. Cable section
 1 x 0,25 mm²
 1 x 1.5 mm²

Mechanical life > 1.000.000 operations

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

Emergency unlocking device (Y/N)NoManual release (Y/N)YesEmergency release (Y/N)NoLatching force30 NPositive break force20 N

Positive break force 20 N
positive break travel 10 mm
Clamping force F 2000 N
Max. Actuating speed 2 m/s

Actuating frequency max. 1000 / h

#### **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)

Switching principle Creep circuit element

Number of auxiliary contacts2 pieceNumber of safety contacts4 piecePower to unlockYesPower to lockNo

Rated control voltage Us

24 VAC/DC

Power consumption

max. 10 W

Rated impulse withstand voltage Uimp

4 kV

Rated insulation voltage Uimp

250 V

Thermal test current I<sub>the</sub> 6 A
Utilisation category AC-15: 230 V / 4 A,

DC-13: 24 V / 2,5 A

Required rated short-circuit current 1000 A

Max. fuse rating 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

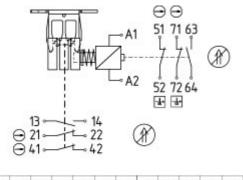
30 mm

### notice

### Manual release

- For maintenance, installation, etc.
- For manual release using M5 triangular key, available as accessory
- Top-side (ordering suffix -ED) or rear-side (ordering suffix -EU) mounting possible
- A combination of manual release and emergency exit in different mounting directions in only possible for the following variants: -ED/-TU and -TD/-EU

### **Diagram**





## Note Diagram

opositive break NC contact

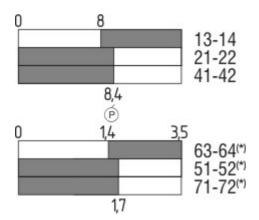




o-\_\_- Normally-open contact

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

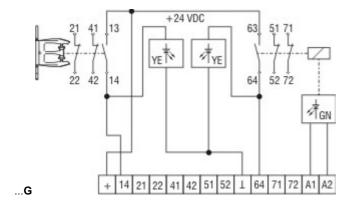
VS adjustable range of NO contact

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 161CC-12/12RKEU-024**G** 



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

N

Emergency release

(6)

 024
 Us: 24 VAC/DC

 110/230
 Us: 110/230 VAC

**(7)** 

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

#### **Documents**

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

Code: mrl\_azm161\_sv

Operating instructions and Declaration of conformity (es) 566 kB, 09.03.2016

Code: mrl\_azm161\_es

Operating instructions and Declaration of conformity (de) 439 kB, 29.01.2016

Code: mrl\_azm161\_de

Operating instructions and Declaration of conformity (pt) 402 kB, 10.07.2014

Code: mrl\_azm161\_pt

Operating instructions and Declaration of conformity (en) 443 kB, 29.01.2016

Code: mrl\_azm161\_en

Operating instructions and Declaration of conformity (pl) 424 kB, 24.03.2014

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) 425 kB, 15.08.2012

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) 425 kB, 15.08.2012

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) 933 kB, 16.08.2016

Code: q\_371p02

CCC certification (cn) 932 kB, 16.08.2016

Code: q\_371p03

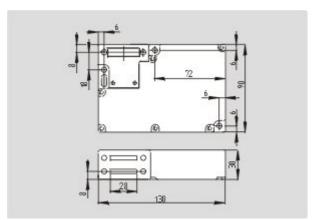
EAC certification (ru) 809 kB, 05.10.2015

Code: q\_6040p17\_ru

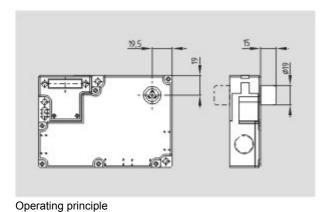
notice (de, en) 88 kB, 27.09.2007

Code: s\_161p01

## **Images**



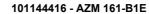
Dimensional drawing (basic component)



# **System components**

# Actuator







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







### 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
- einsetzbar in Verbindung mit EX-AZM 161
- suitable in combination with #01#
- Max. 110 °C

suitable in combination with #01#

Max. <u>#01#</u> °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





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 31.10.2016 - 08:30:00h Kasbase 3.2.5.F.64I