# Datasheet - AZM 161CC-12/12RK-110/230

Solenoid interlock / AZM 161

☑ 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
- Manual release
- cable entries 4 M 16 x 1.5

### **Ordering details**

Product type description

Article number

EAN Code

eCl@ss

AZM 161CC-12/12RK-110/230

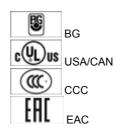
101166284

4030661213965

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) Yes

Number of actuating directions 3

Active principle electromechanical Duty cycle ED Magnet 100 % Materials

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

- Material of the contacts Silver
Housing coating None
Weight 412

#### **Mechanical data**

Actuating play in direction of actuation 5.5 mm

Design of electrical connection Cage clamps

Cable section

- Min. Cable section- Max. Cable section1 x 0,251 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) Yes Emergency release (Y/N) No Latching force 30 Positive break force 20 positive break travel 10 2000 N Clamping force F 2 m/s Max. Actuating speed

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 contacts2Number of safety contacts4Power to unlockYesPower to lockNo

Rated control voltage Us 110 / 230 VAC
Power consumption max. 10 W
Power consumption max. 10 W
Rated impulse withstand voltage Uimp 4 kV
Rated insulation voltage Ui 250 V

Rated insulation voltage Ui

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

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

130 mm

- Height of sensor

90 mm

- Length of sensor

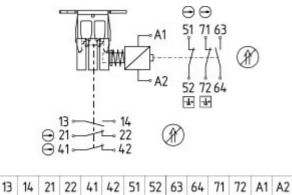
30 mm

# notice

#### Manual release

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

## Diagram



# Note Diagram

opositive break NC contact

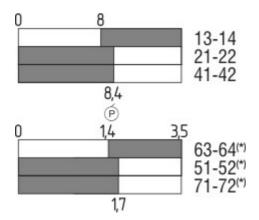




o-\_\_-o Normally-open contact

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 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

(4)

without

Α

(5)

without

ED EU

\_

Т

TD TU

N

(6) 024

110/230

(7)

G

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

Power to unlock

Power to lock

Manual release lateral

Manual release cover-side

Manual release rear

Emergency exit lateral

Emergency exit cover-side

Emergency exit rear

Emergency release

Us: 24 VAC/DC

Us: 110/230 VAC

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

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

Code: mrl\_azm161\_sv

Operating instructions and Declaration of conformity (es) 544 kB, 31.05.2019

Code: mrl\_azm161\_es

Operating instructions and Declaration of conformity (de) 490 kB, 22.05.2019

Code: mrl\_azm161\_de

Operating instructions and Declaration of conformity (pt) 525 kB, 29.01.2019

Code: mrl\_azm161\_pt

Operating instructions and Declaration of conformity (cn) 585 kB, 23.08.2016

Code: mrl\_azm161\_cn

Operating instructions and Declaration of conformity (en) 524 kB, 22.05.2019

Code: mrl\_azm161\_en

Operating instructions and Declaration of conformity (pl) 546 kB, 20.02.2019

Code: mrl\_azm161\_pl

Operating instructions and Declaration of conformity (fr) 526 kB, 24.05.2019

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) 518 kB, 28.05.2019

Code: mrl\_azm161\_it

Operating instructions and Declaration of conformity (nl) 527 kB, 08.02.2019

Code: mrl\_azm161\_nl

BG-test certificate (de) 1 MB, 22.07.2019

Code: z\_m16p01

BG-test certificate (en) 1 MB, 22.07.2019

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

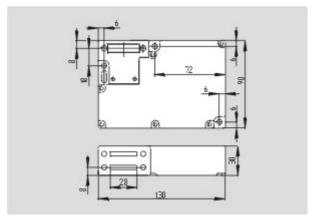
Code: q\_6040p17\_ru

notice (de, en) 88 kB, 27.09.2007

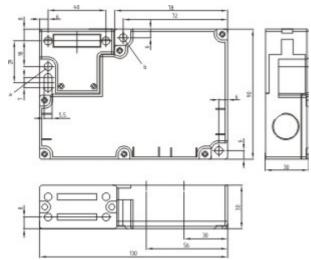
Code: s\_161p01



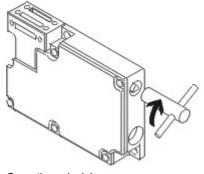
# Product photo

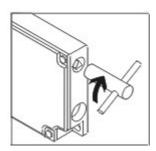


Dimensional drawing (basic component)



Dimensional drawing (basic component)





Operating principle

## **System components**

### **Actuator**



101145117 - AZM 161-B1

101144416 - AZM 161-B1E



101171859 - AZM 161-B1ES

T

101175431 - AZM 161-B1F

101171125 - AZM 161-B1S







#### 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
- 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



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 15.08.2019 - 21:54:56h Kasbase 3.3.0.F.64I