22:35:38h

# Datasheet - AZM 161CC-12/12RKN-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
- Emergency release
- cable entries 4 M 16 x 1.5

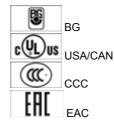
### **Ordering details**

Product type description
Article number
EAN Code
eCl@ss

AZM 161CC-12/12RKN-024 101181019 4030661314792 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<sub>d</sub> =  $\frac{B_{100}}{0.1 \times n_{op}}$ 

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

### **Global Properties**

Standards	EN 60947-5-1, BG-GS-ET-19
Compliance with the Directives (Y/N) $C\epsilon$	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	465

### Mechanical data

Actuating play in direction of actuation	5.5 mm
Design of electrical connection	Cage clamps
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	10
Clamping force F	2000 N
Max. Actuating speed	2 m/s
Actuating frequency	max. 1000 / h

### **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	2
Number of safety contacts	4
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
Rated insulation voltage Ui	250 V
Thermal test current Ithe	6 A
Utilisation category	AC-15: 230 V / 4 A, DC-13: 24 V / 2,5 A
Required rated short-circuit current	1000 A

### ATEX

Explosion protection categories for gases Explosion protected category for dusts

### **Miscellaneous data**

Applications

ŋ sliding safety guard, removable guard, hinged safety guard

### **Dimensions**

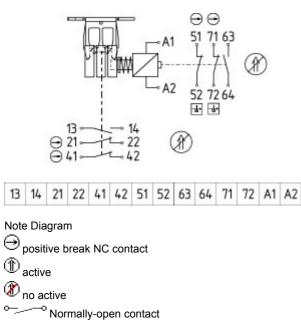
- Width of sensor
- Height of sensor
- Length of sensor

### notice

### Emergency release

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

### Diagram



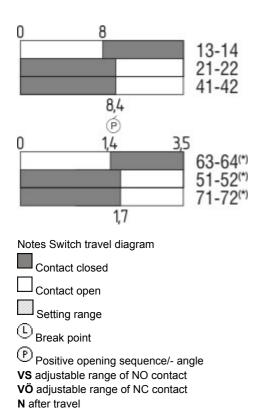
o\_\_\_\_\_ONormally-closed contact

### Switch travel diagram

None None

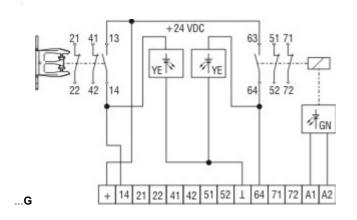
130 mm 90 mm

30 mm



# Ordering suffix

The applicable ordering suffix is added at the end of the part number of the safety switch. Order example: AZM 161CC-12/12RKN-024**G** 



limited terminating space 0,75 mm<sup>2</sup> Diagram 14 guard open 13 +24 VDC 63 0 VDC 64 unlocked

Protected against incorrect polarity and voltage spikes.

### **Ordering code**

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

(1)	
SK	Screw connection
сс	Cage clamps
ST	male connector M12, 8- and 4-poles (Only for Us: 24 VAC/DC)
(2)	
12/12	2 Normally open contact (NO) / 4 Opener (NC)
12/11	2 Normally open contact (NO) / 3 Opener (NC) (Plug-in connection)
11/12	2 Normally open contact (NO) / 3 Opener (NC) (Plug-in connection)
(3)	
without	Latching force 5 N
R	Latching force 30 N

without	Power to unlock
A	Power to lock
(5)	
without	Manual release lateral
ED	Manual release cover-side
EU	Manual release rear
т	Emergency exit lateral
TD	Emergency exit cover-side
ти	Emergency exit rear
Ν	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**

(4)

**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

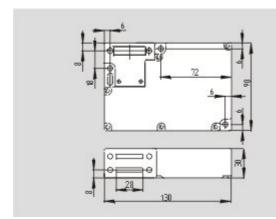
**CCC certification** (en) 5 MB, 26.10.2018 Code: q\_371p02

CCC certification (cn) 5 MB, 26.10.2018 Code: q\_371p03

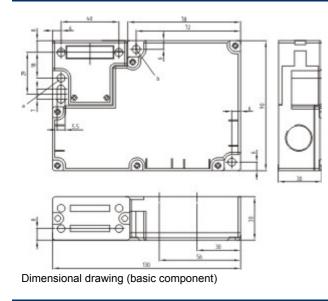
**EAC certification** (ru) 809 kB, 05.10.2015 Code: q\_6040p17\_ru

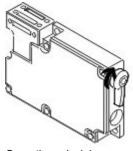
**notice** (de, en) 88 kB, 27.09.2007 Code: s\_161p01

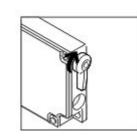
### Images



Dimensional drawing (basic component)







Operating principle

# System components

Actuator	101145117 - AZM 161-B1
ITL	101144416 - AZM 161-B1E
ITL	101171859 - AZM 161-B1ES
(T)	101175431 - AZM 161-B1F
( or of )	101171125 - AZM 161-B1S
	101173089 - AZM 161-B1-2053 WITH BALL LATCH





### Door-handle system



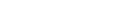
### AZM 161-STS30

- 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 - 22:35:39h Kasbase 3.3.0.F.64I