

Datasheet - AZM 161CC-12/12RKA-024

Solenoid interlock / AZM 161



- 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

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

Ordering details

Product type description	AZM 161CC-12/12RKA-024
Article number	1166287
EAN code	4030661213996

Approval


Approval	BG
	USA/CAN
	CCC

Classification

Standards	EN ISO 13849-1
B _{10d} Opener (NC)	2.000.000
Mission time	20 Years
notice	$MTTF_d = \frac{B_{10d}}{0,1 \times n_{op}}$ $n_{op} = \frac{d_{ap} \times h_{ap} \times 3600 \text{ s/h}}{t_{cycle}}$

Global Properties

Product name	AZM 161
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Standards	EN 60947-5-1, BG-GS-ET-19
Compliance with the Directives (Y/N) 	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	1 x 0,75 mm ²
- Max. Cable section	1 x 1.5 mm ²
Mechanical life	> 1.000.000 operations
Emergency unlocking device (Y/N)	No
Manual release (Y/N)	Yes
Emergency release (Y/N)	No
Latching force	30 N
Positive break force	20 N
positive break travel	10 mm
Clamping force F _{max}	2000 N
Max. Actuating speed	2 m/s
Actuating frequency	max. 1000 / h
notice	All indications about the cable section are including the conductor ferrules.

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 piece
Number of safety contacts	4 piece
Power to unlock	No
Power to lock	Yes
Rated control voltage U _s	24 VAC/DC
Power consumption	max. 10 W
Rated impulse withstand voltage U _{imp}	4 kV
Rated insulation voltage U _i	250 V
Thermal test current I _{the}	6 A
Utilisation category	AC-15: 230 V / 4 A, DC-13: 24 V / 2,5 A
Max. fuse rating	6 A gG D-fuse To DIN EN 60269-1

ATEX

Explosion protection categories for gases	None
Explosion protected category for dusts	None

Miscellaneous data

Applications	<div>sliding safety guard,</div> <div>removable guard,</div> <div>hinged safety guard</div>
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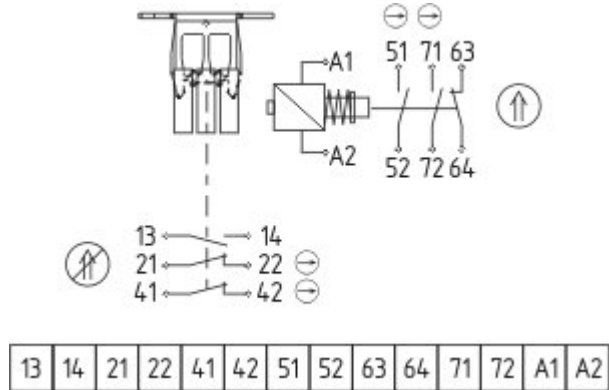
Dimensions

Dimensions of the sensor	
- Width of sensor	130 mm
- Height of sensor	90 mm
- Length of sensor	30 mm


notice


Manual release
<ul style="list-style-type: none">• For maintenance, installation, etc.• For manual release using M5 triangular key, available as accessory


Diagram





Note Diagram

 positive break NC contact

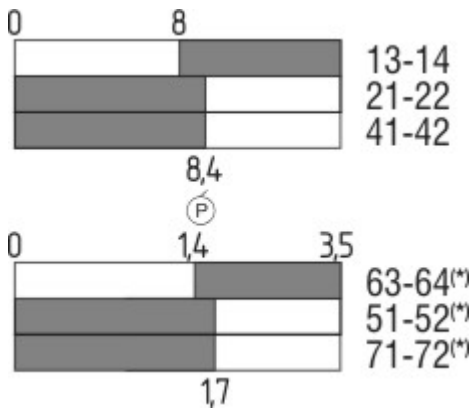
 active

 no active

 Normally-open contact

 Normally-closed contact

Switch travel diagram



Notes 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 161CC-12/12RKA-024**G**

... G	Protected against incorrect polarity and voltage spikes. limited terminating space 0,75 mm²
	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	Screw connection
CC	Cage clamps
ST	male connector M12, 8- and 4-poles (<i>Only for Us: 24 VAC/DC</i>)
(2)	
12/12	2 Normally open contact (NO) / 4 Opener (NC)
12/11	2 Normally open contact (NO) / 3 Opener (NC) (<i>Plug-in connection</i>)
11/12	2 Normally open contact (NO) / 3 Opener (NC) (<i>Plug-in connection</i>)
(3)	
<i>without</i>	Latching force 5 N
R	Latching force 30 N
(4)	
<i>without</i>	Power to unlock
A	Power to lock
(5)	

without Manual release lateral
ED 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 (de) 421 kB, 17.02.2011

Code: mrl_azm161_de

Operating instructions and Declaration of conformity (it) 706 kB, 16.12.2009

Code: mrl_azm161_it

Operating instructions and Declaration of conformity (fr) 752 kB, 16.12.2009

Code: mrl_azm161_fr

Operating instructions and Declaration of conformity (es) 711 kB, 16.12.2009

Code: mrl_azm161_es

Operating instructions and Declaration of conformity (en) 751 kB, 16.12.2009

Code: mrl_azm161_en

Operating instructions and Declaration of conformity (nl) 659 kB, 16.12.2009

Code: mrl_azm161_nl

Operating instructions and Declaration of conformity (jp) 1 MB, 24.11.2010

Code: mrl_azm161_jp

BG-test certificate (de) 219 kB, 09.02.2010

Code: z_m16p01

BG-test certificate (en) 219 kB, 09.02.2010

Code: z_m16p02

CCC certification (en) 747 kB, 12.12.2006

Code: q_371p02

CCC certification (cn) 725 kB, 12.12.2006

Code: q_371p03

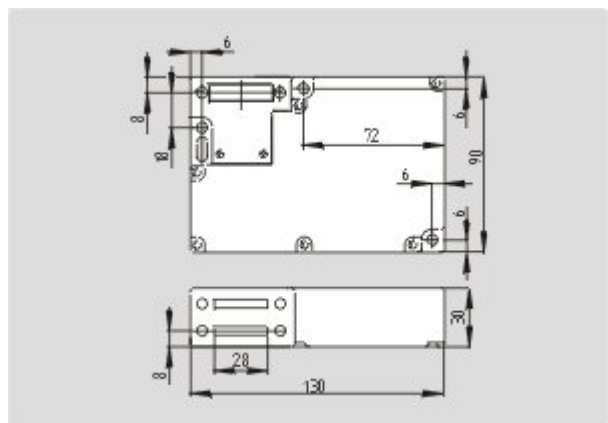
Gost certification (ru) 2 MB, 07.07.2011

Code: q_az1p01

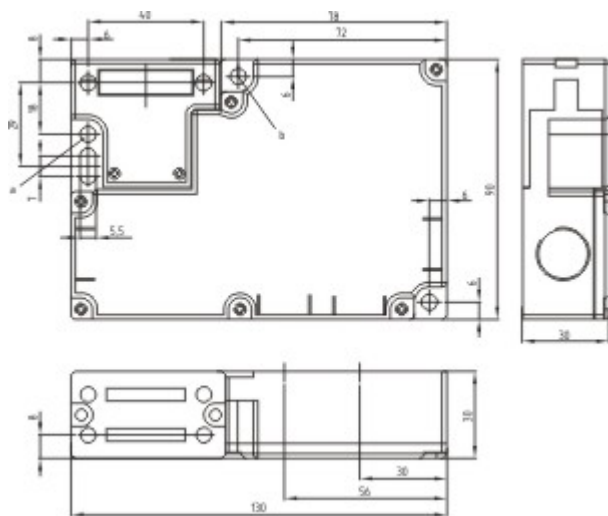
notice (de, en) 88 kB, 27.09.2007

Code: s_161p01

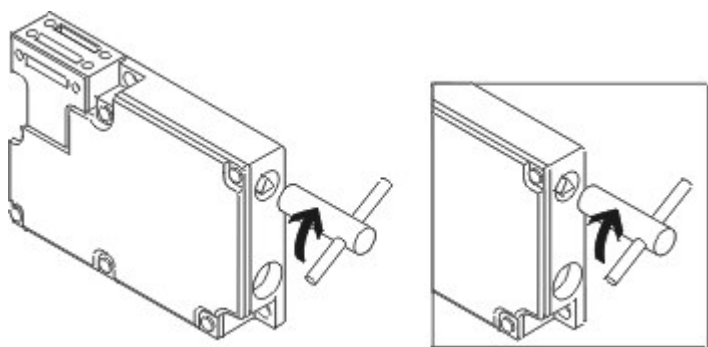
Images



Dimensional drawing (basic component)



Dimensional drawing (basic component)



Operating principle

System components

Actuator

1145117 - AZM 161-B1





1144416 - AZM 161-B1E



1171859 - AZM 161-B1ES



1175431 - AZM 161-B1F



1171125 - AZM 161-B1S



1173089 - AZM 161-B1-2053 WITH BALL LATCH



1164100 - AZM 161-B1-1747 WITH MAGNETIC LATCH



1178199 - AZM 161-B1-2024



1176642 - AZM 161-B1-2177 WITH CENTERING GUIDE



1174113 - AZM 161-B6-2177 WITH CENTERING GUIDE

- For very small actuating radii



1170375 - AZM 161-B6S



1144420 - AZM 161-B6

- For very small actuating radii

Door-handle system



AZM 161-STS30

- Latching handle
- Suitable for all types of guard

Accessories



1100887 - TRIANGULAR KEY M5

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