



## AZM 161SK-12/12RIAT-024G-B1

- Screw connection
- Manual release from side
- 2 cable entries M 16 x 1.5
- Compact design
- Interlock with protection against incorrect locking.
- Individual coding
- Coding level "High" according to ISO 14119
- Double-insulated
- High holding force
- Long life
- 130 mm x 90 mm x 30 mm
- Particularly suitable for sliding doors

## Data

### Ordering data

Product type description	AZM 161SK-12/12RIAT-024G-B1
Article number (order number)	103000011
EAN (European Article Number)	4030661419671
eCl@ss number, version 12.0	27-27-26-03
eCl@ss number, version 11.0	27-27-26-03
eCl@ss number, version 9.0	27-27-26-03
ETIM number, version 7.0	EC002593
ETIM number, version 6.0	EC002593

### Approvals - Standards

Certificates	cULus CCC
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## General data

Standards	EN ISO 13849-1 EN ISO 14119 EN IEC 60947-5-1
Coding	Individual coding
Coding level according to EN ISO 14119	High
Working principle	electromechanical
Housing material	Glass-fibre, reinforced thermoplastic
Material of the actuator	Stainless steel
Gross weight	490 g

## General data - Features

Power to lock	Yes
Emergency exit	Yes
Manual release	Yes
Integral system diagnostics, status	Yes
Number of actuating directions	3
Number of auxiliary contacts	2
Number of safety contacts	4

## Safety classification

Standards	EN ISO 13849-1
Performance Level, up to	c
Category	1
B <sub>10D</sub> Normally-closed contact (NC)	2,000,000 Operations

Note	Electrical life on request.
B <sub>10D</sub> Normally-open contact (NO)	1,000,000 Operations
Note	at 10% I <sub>e</sub> and ohmic load
Mission time	20 Year(s)

### Safety classification - Fault exclusion

Please note:	Can be used when fault exclusion for dangerous damage to the 1-channel mechanism is permissible and sufficient protection against manipulation is guaranteed.
Performance Level, up to	d
Category	3
Note	for 2-channel use and with suitable logic unit.
Mission time	20 Year(s)

### Mechanical data

Actuating radius, minimum	150 mm
Mechanical life, minimum	1,000,000 Operations
Actuating play in direction of actuation	5.5 mm
Holding force F <sub>Zh</sub> in accordance with EN ISO 14119	2,000 N
Holding force F <sub>max</sub> , maximum	2,600 N
Latching force	30 N
Positive break travel	10 mm
Positive break force per NC contact, minimum	10 N
Positive break force, minimum	20 N
Actuating speed, maximum	2 m/s
Mounting	Screws

Type of the fixing screws 3x M6

### Mechanical data - Connection technique

Cable entry	2 x M16 x 1.5
Termination	Screw terminals
Cable section, minimum	0.25 mm <sup>2</sup>
Cable section, maximum	1.5 mm <sup>2</sup>
Note (Cable section)	All indications including the conductor ferrules.
Allowed type of cable	solid single-wire solid multi-wire flexible

### Mechanical data - Dimensions

Length of sensor	30 mm
Width of sensor	130 mm
Height of sensor	90 mm

### Ambient conditions

Degree of protection	IP67
Ambient temperature	-30 ... +60 °C
Storage and transport temperature, minimum	-25 °C
Storage and transport temperature, maximum	+85 °C
Protection class	II
Permissible installation altitude above sea level, maximum	2,000 m

### Ambient conditions - Insulation values

Rated insulation voltage U 250 VAC

Rated impulse withstand voltage  $U_{imp}$  4 kV

### Electrical data

Thermal test current 6 A

Rated control voltage 24 VAC/DC

Required rated short-circuit current 1,000 A

Electrical power consumption, maximum 10 W

Switching element NO contact, NC contact

Switching principle slow action, positive break NC contact

Switching frequency 1,000 /h

Material of the contacts, electrical Silver

### Electrical data - Magnet control

Magnet switch-on time 100 %

Test pulse duration, maximum 5 ms

Test pulse interval, minimum 50 ms

### Electrical data - Safety contacts

Voltage, Utilisation category AC-15 230 VAC

Current, Utilisation category AC-15 4 A

Voltage, Utilisation category DC-13 24 VDC

Current, Utilisation category DC-13 2.5 A

### Electrical data - Auxiliary contacts

Voltage, Utilisation category AC-15	230 VAC
Current, Utilisation category AC-15	4 A
Voltage, Utilisation category DC-13	24 VDC
Current, Utilisation category DC-13	2.5 A

## Other data

Note (applications)	sliding safety guard removable guard hinged safety guard
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## Scope of delivery

Scope of delivery	Not available as spare part Slot sealing plugs The actuator is included in the scope of delivery
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## Note

Note (General)	Interlocks with the power to lock principle may only be used in special cases after a thorough evaluation of the accident risk, since the guarding device can immediately be opened on failure of the electrical power supply or when the main switch is opened.
Note (Emergency exit)	In case of emergency actuation from within the hazardous area
Note (Manual release)	For maintenance, installation, etc. For manual release using M5 triangular key, available as accessory

## Ordering code

Product type description:  
AZM 161(1)(2)(3)(4)(5)(6)(7)(8)(9)

(1)

<b>CC</b>	Cage clamps
<b>SK</b>	Screw terminals
<b>ST</b>	M12 connector

(2)

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<b>11/03</b>	Magnet: 1 NO contact, 1 NC contact / Actator: 3 NC contacts with connector plug
<b>12/11</b>	Magnet: 1 NO contact, 2 NC contacts / Actator: 1 NO contact, 1 NC contact with connector plug
<b>12/03</b>	Magnet: 1 NO contact, 2 NC contact / Actator: 3 NC contacts
<b>11/12</b>	Magnet: 1 NO contact, 2 NC contacts / Actator: 1 NO contact, 1 NC contact with connector plug
<b>12/12</b>	Magnet: 1 NO contact, 2 NC contacts / Actator: 1 NO contact, 2 NC contacts

(3)

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<b>without</b>	Latching force 5 N
<b>R</b>	Latching force 30 N

(4)

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<b>without</b>	Power to unlock
<b>A</b>	Power to lock

(5)

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<b>without</b>	Lateral manual release
<b>ED</b>	Manual release on the cover side
<b>EU</b>	Manual release on the rear side

(6)

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<b>T</b>	Lateral emergency exit
<b>TD</b>	Emergency exit on the cover side
<b>TU</b>	Emergency exit on the rear side
<b>N</b>	Emergency release

(7)

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<b>024</b>	Us: 24 VAC/DC
<b>110/230</b>	Us: 110/230 VAC

(8)

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**without**

without LED

**G**

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

(9)

**B1**

Actuator B1 included

**B1E**

Actuator B1E included

**B6L**

Actuator B6 left included

**B6R**

Actuator B6 right included

**B1-1747**

Actuator B1-1747 included

**B1-2024**

Actuator B1-2024 included

**B1-2053**

Actuator B1-2053 included

**B1-2177**

Actuator B1-2177 included

## Pictures

### Product picture (catalogue individual photo)



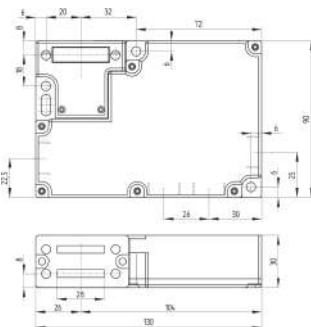
ID: kazm1f15

| 238.2 kB | .jpg | 352.778 x 251.883 mm - 1000 x 714 px - 72 dpi

| 19.4 kB | .png | 74.083 x 52.917 mm - 210 x 150 px - 72 dpi

| 27.1 kB | .jpg | 123.472 x 88.194 mm - 350 x 250 px - 72 dpi

### Dimensional drawing basic component



ID: kazm1g20

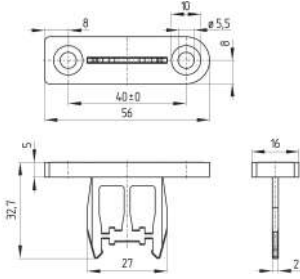
| 39.1 kB | .cdr |

| 4.8 kB | .png | 73.731 x 75.847 mm - 209 x 215 px - 72 dpi

| 154.6 kB | .jpg | 352.425 x 362.303 mm - 999 x 1027 px - 72 dpi

### Dimensional drawing actuator



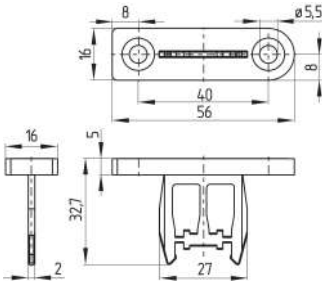


ID: kazm1b20

| 4.4 kB | .png | 74.083 x 62.794 mm - 210 x 178 px - 72 dpi

| 115.8 kB | .jpg | 352.778 x 299.508 mm - 1000 x 849 px - 72 dpi

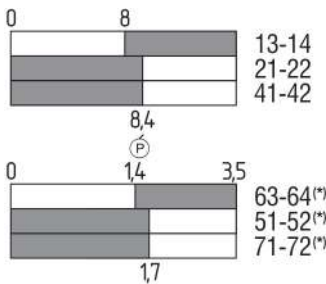
## Dimensional drawing miscellaneous



ID: 1azm1b20

| 124.6 kB | .jpg | 352.778 x 306.211 mm - 1000 x 868 px - 72 dpi

## Switch travel diagram

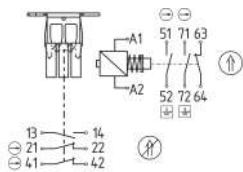


ID: kazm1s07

| 2.9 kB | .png | 74.083 x 63.853 mm - 210 x 181 px - 72 dpi

| 102.8 kB | .jpg | 352.778 x 304.8 mm - 1000 x 864 px - 72 dpi

## Diagram



ID: kazm1k30

| 75.0 kB | .ai | 297 x 210.002 mm - 841 x 595 px - 72 dpi

| 111.7 kB | .jpg | 352.778 x 227.542 mm - 1000 x 645 px - 72 dpi

| 4.9 kB | .png | 74.083 x 47.978 mm - 210 x 136 px - 72 dpi

13	14	21	22	41	42	51	52	63	64	71	72	A1	A2
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Schmersal India Pvt. Ltd., Plot No - G-7/1, Ranjangaon MIDC, Tal. - Shirur, Dist.- Pune 412 220

The details and data referred to have been carefully checked. Images may diverge from original. Further technical data can be found in the manual. Technical amendments and errors possible.

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