



## AZM 161ST-12/11RKN-024

- Large wiring compartment
- Manual release
- 2 cable entries M 16 x 1.5
- 2 Connector M12, 4- and 8-poles
- Thermoplastic enclosure
- Double-insulated
- Interlock with protection against incorrect locking.
- 130 mm x 90 mm x 30 mm
- 6 Contacts
- Long life

## Data

### Ordering data

Product type description	AZM 161ST-12/11RKN-024
Article number (order number)	101198663
EAN (European Article Number)	4030661366159
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 level according to EN ISO 14119	Low
Working principle	electromechanical
Housing material	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
Gross weight	434 g

### General data - Features

Power to unlock	Yes
Manual release	Yes
Number of actuating directions	3
Number of auxiliary contacts	2
Number of safety contacts	3

### 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)

### Safety classification - Guard locking function

Performance Level, up to	e
Note (Performance Level)	Information for the safety classification of the guard locking function is documented in the "Operating instructions" or in the "Operation and mounting" instructions.

### Mechanical data

Mechanical life, minimum	1,000,000 Operations
Actuating play in direction of actuation	5.5 mm
Holding force $F_{Zh}$ in accordance with EN ISO 14119	2,000 N
Holding force $F_{max}$ , 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	10 N
Actuating speed, maximum	2 m/s
Mounting	Screws
Type of the fixing screws	3x M6

### Mechanical data - Connection technique

Termination	Connector plug M12, 4-pole, (A-coding) Connector plug M12, 8-pole, (A-coding)
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### Mechanical data - Dimensions

Length of sensor	30 mm
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Width of sensor 130 mm

Height of sensor 90 mm

### Ambient conditions

Degree of protection IP67

Ambient temperature -25 ... +60 °C

Storage and transport temperature, minimum -25 °C

Storage and transport temperature, maximum +85 °C

Note (Relative humidity) non-condensing  
non-icing

Protection class II

Permissible installation altitude above sea level, maximum 2,000 m

### Ambient conditions - Insulation values

Rated insulation voltage  $U_i$  250 VAC  
Connector, 4 poles - 250 V  
Connector, 8 poles - 60 V

Rated impulse withstand voltage  $U_{imp}$  0.8 kV

Rated impulse withstand voltage, connector 4-pole 2.5 kV

Rated impulse withstand voltage, connector 8-pole 0.8 kV

### Electrical data

Thermal test current 2 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	60 VDC
Current, Utilisation category DC- 13	2 A

### Electrical data - Auxiliary contacts

Voltage, Utilisation category AC- 15	230 VAC
Current, Utilisation category AC- 15	4 A
Voltage, Utilisation category DC- 13	60 VDC
Current, Utilisation category DC- 13	2 A

### Other data

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

Scope of delivery                      Actuator must be ordered separately.

## Note

Note (Manual release)                      For maintenance, installation, etc.  
For manual release using M5 triangular key, available as accessory

## Ordering code

Product type description:  
AZM161 (1)-(2)(3)K(4)-(5)/(6)-(7)(8)

(1)

<b>SK</b>	Screw connection
<b>CC</b>	Cage clamps
<b>ST</b>	Connector plug M12

(2)

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

(3)

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

(4)

**without**

Power to unlock

**A**

Power to lock

(5)

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**without**

Lateral manual release

**ED**

Manual release on the cover side

**EU**

Manual release on the back side

(6)

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**T**

Lateral emergency exit

**TD**

Emergency exit on the cover side

**TU**

Emergency exit on the back side

**N**

Emergency release

(7)

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**024**

Us: 24 VAC/DC

**110/230**

Us: 110/230 VAC

(8)

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**without**

without LED

**G**

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

## Pictures

### Product picture (catalogue individual photo)



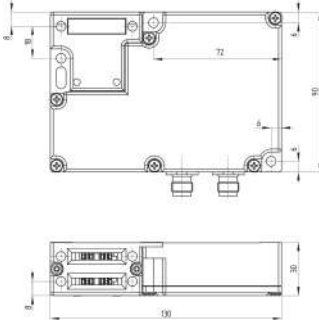
ID: kazm1f23

| 412.8 kB | .jpg | 352.778 x 291.394 mm - 1000 x 826 px - 72 dpi

| 36.0 kB | .png | 74.083 x 61.031 mm - 210 x 173 px - 72 dpi

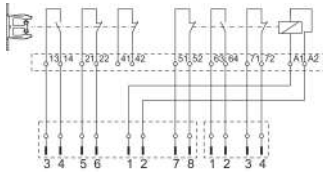
| 58.2 kB | .jpg | 123.472 x 101.953 mm - 350 x 289 px - 72 dpi

### Dimensional drawing basic component



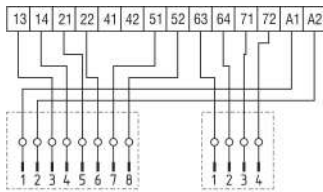
ID: kazm1g17  
 | 72.1 kB | .cdr |  
 | 5.1 kB | .png | 74.083 x 74.789 mm - 210 x 212 px - 72 dpi  
 | 150.9 kB | .jpg | 352.425 x 355.953 mm - 999 x 1009 px - 72 dpi

## Diagram



ID: kazm1k117  
 | 3.6 kB | .png | 74.083 x 38.806 mm - 210 x 110 px - 72 dpi  
 | 112.5 kB | .jpg | 352.778 x 185.208 mm - 1000 x 525 px - 72 dpi

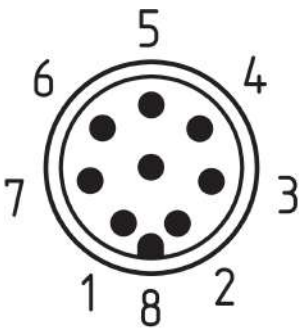
## Wiring example



AZM 161 12/11

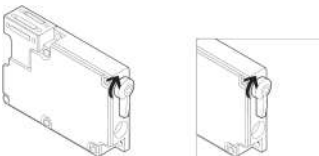
ID: kazm1k96  
 | 26.2 kB | .cdr |  
 | 128.8 kB | .jpg | 352.778 x 276.931 mm - 1000 x 785 px - 72 dpi

## Contact arrangement



ID: km23-k8b  
 | 5.3 kB | .png | 73.731 x 79.728 mm - 209 x 226 px - 72 dpi  
 | 139.8 kB | .jpg | 352.778 x 380.647 mm - 1000 x 1079 px - 72 dpi

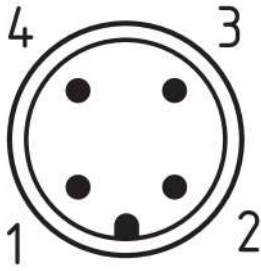
## Operating principle



ID: kazm1a43  
 | 48.1 kB | .cdr |  
 | 92.0 kB | .jpg | 352.778 x 170.744 mm - 1000 x 484 px - 72 dpi  
 | 11.6 kB | .png | 74.083 x 35.983 mm - 210 x 102 px - 72 dpi



## Contact arrangement



ID: km12-k4c

| 4.2 kB | .png | 74.083 x 74.083 mm - 210 x 210 px - 72 dpi

| 113.3 kB | .jpg | 352.778 x 352.778 mm - 1000 x 1000 px - 72 dpi

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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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