



## AZM 170-02ZIA-B5 24VAC/DC

- 1 Cable entry M 20 x 1.5
- IDC method of termination
- Manual release
- Double-insulated
- Individual coding
- Coding level "High" according to ISO 14119
- 90 mm x 84 mm x 30 mm
- Compact design
- Interlock with protection against incorrect locking.
- Long life
- High holding force
- Particularly suitable for front mounting

## Data

### Ordering data

Product type description	AZM 170-02ZIA-B5 24VAC/DC
Article number (order number)	103026783
EAN (European Article Number)	4030661517094
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	BG cULus CCC
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## General data

Standards	BG-GS-ET-19 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	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
Material of the actuator	Stainless steel
Gross weight	295 g

## General data - Features

Power to lock	Yes
Manual release	Yes
Number of actuating directions	2
Number of safety contacts	2

## Safety classification

Standards	EN ISO 13849-1
Performance Level, up to	d
Category	3
Mission time	20 Year(s)

## Safety classification - Safety outputs

B <sub>10D</sub> Normally-closed contact (NC)	2,000,000 Operations
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## Safety classification - Fault exclusion

Mission time 20 Year(s)

### Mechanical data

Actuating radius, minimum	140 mm
Mechanical life, minimum	1,000,000 Operations
Holding force $F_{Zh}$ in accordance with EN ISO 14119	1,000 N
Holding force $F_{max}$ , maximum	1,300 N
Latching force	5 N
Positive break travel	11 mm
Positive break force per NC contact, minimum	8.5 N
Positive break force, minimum	17 N
Actuating speed, maximum	2 m/s
Mounting	Screws
Type of the fixing screws	2x M5

### Mechanical data - Connection technique

Termination	IDC method of termination
Cable section, minimum	0.75 mm <sup>2</sup>
Cable section, maximum	1 mm <sup>2</sup>
Allowed type of cable	flexible

### Mechanical data - Dimensions

Length of sensor	30 mm
Width of sensor	90 mm
Height of sensor	84 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
Protection class	II

### Ambient conditions - Insulation values

Rated insulation voltage $U_i$	250 VAC
Rated impulse withstand voltage $U_{imp}$	4 kV
Oversvoltage category	III
Degree of pollution	3

### 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	Opener (NC)
Note (Switching element)	Change-over contact with double break, type Zb or 2 NC or 3 NC or 4 NC contacts, with galvanically separated contact bridges
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 4 A

## Other data

Note (applications) sliding safety guard  
removable guard  
hinged safety guard

## Scope of delivery

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

## Note

Note (General) This type termination (IDC) method enables simple connection of flexible conductors without the need for the use of conductor ferrules

Note (Manual release) bottom  
For manual release using M5 triangular key, available as accessory

## Ordering code

Product type description:  
AZM 170(1)-(2)Z(3)I(4)-(5)-(6)-(7) (8)

(1)

**without**

Cut clamps

**SK**

Screw connection

(2)		
<b>11</b>		1 NO contacts/1 NC contact
<b>02</b>		2 NC contact
(3)		
<b>without</b>		Latching force 5 N
<b>R</b>		Latching force 30 N
<b>I</b>		Individual coding
(4)		
<b>without</b>		Power to unlock
<b>A</b>		Power to lock
(5)		
<b>without</b>		cable gland
<b>ST</b>		M12 x 1 connector
(6)		
<b>B1</b>		with actuator B1
<b>B5</b>		with actuator B5
<b>B6L</b>		with actuator B6L
<b>B6R</b>		with actuator B6R
(7)		
<b>without</b>		Manual release
<b>2197</b>		Manual release from side (Standard in case of conector and power to unlock versions)
<b>1637</b>		Gold-plated contacts
(8)		
<b>24VAC/DC</b>		Us 24 VAC/DC
<b>110VAC</b>		Us 110 VAC
<b>230VAC</b>		Us 230 VAC
(1)		

<b>11/11</b>	1 NO contact, 1 NC contact / 1 NO contact 1, NC contact
<b>11/02</b>	1 NO contact, 1 NC contact / 2 NC contacts
<b>12/00</b>	1 NO contact, 2 NC contacts / -
<b>12/11</b>	1 NO contact, 2 NC contact / 1 NO contact 1, NC contact
<b>12/02</b>	1 NO contact, 2 NC contact / 2 NC contacts
<b>02/01</b>	2 NC contacts / 1 NC contact
<b>02/10</b>	2 NC contacts, - / 1 NO contact

(2)

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

(3)

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

(4)

<b>B1</b>	with actuator B1
<b>B5</b>	with actuator B5
<b>B6L</b>	with actuator B6L
<b>B6R</b>	with actuator B6R

(5)

<b>1637</b>	Gold-plated contacts
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(6)

<b>2197</b>	Manual release for Power to unlock
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## Pictures

**Product picture (catalogue individual photo)**



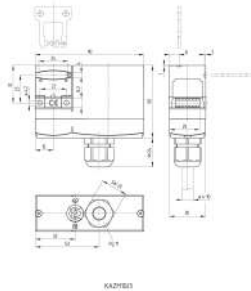
ID: kazm1fi3

| 595.8 kB | .jpg | 262.114 x 331.258 mm - 743 x 939 px - 72 dpi

| 49.6 kB | .png | 74.083 x 93.486 mm - 210 x 265 px - 72 dpi

| 54.5 kB | .jpg | 97.719 x 123.472 mm - 277 x 350 px - 72 dpi

## Dimensional drawing basic component



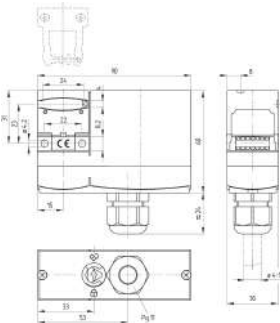
ID: cazm1gi3

| 179.5 kB | .cdr |

| 4.7 kB | .png | 74.083 x 74.083 mm - 210 x 210 px - 72 dpi

| 125.7 kB | .jpg | 352.778 x 352.778 mm - 1000 x 1000 px - 72 dpi

## Dimensional drawing basic component



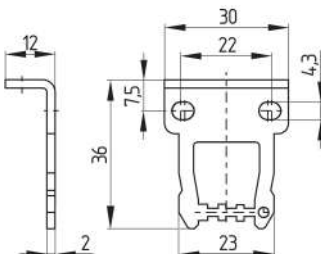
ID: kazm1gi3

| 106.0 kB | .cdr |

| 6.2 kB | .png | 74.083 x 83.961 mm - 210 x 238 px - 72 dpi

| 195.9 kB | .jpg | 352.778 x 400.403 mm - 1000 x 1135 px - 72 dpi

## Dimensional drawing actuator



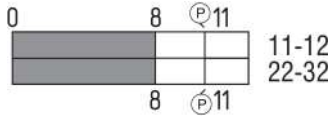
ID: 1az17b06

| 99.1 kB | .jpg | 352.778 x 277.989 mm - 1000 x 788 px - 72 dpi

| 4.8 kB | .png | 74.083 x 58.561 mm - 210 x 166 px - 72 dpi

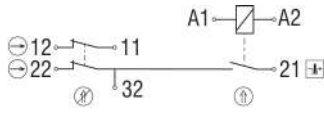
## Switch travel diagram





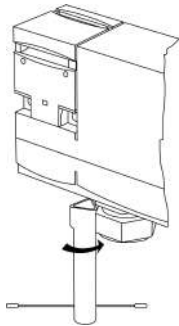
ID: kazm1s01  
 | 19.5 kB | .cdr |  
 | 1.8 kB | .png | 74.083 x 26.458 mm - 210 x 75 px - 72 dpi  
 | 49.4 kB | .jpg | 352.778 x 125.236 mm - 1000 x 355 px - 72 dpi

## Diagram



ID: kazm1k19  
 | 55.0 kB | .ai | 297 x 210.002 mm - 841 x 595 px - 72 dpi  
 | 46.7 kB | .jpg | 352.778 x 112.183 mm - 1000 x 318 px - 72 dpi  
 | 2.6 kB | .png | 74.083 x 23.636 mm - 210 x 67 px - 72 dpi

## Operating principle



ID: kazm1a70  
 | 213.5 kB | .jpg | 352.778 x 656.519 mm - 1000 x 1861 px - 72 dpi  
 | 6.5 kB | .png | 74.083 x 137.583 mm - 210 x 390 px - 72 dpi

## Assembly example



ID: kazm1m06  
 | 98.4 kB | .cdr |

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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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