



AZM 170-11ZK 24VAC/DC

- 1 Cable entry M 20 x 1.5
- IDC method of termination
- Manual release
- Thermoplastic enclosure
- Double-insulated
- Compact design
- Interlock with protection against incorrect locking.
- Long life
- High holding force

Data

Ordering data

| | |
|-------------------------------|-----------------------|
| Product type description | AZM 170-11ZK 24VAC/DC |
| Article number (order number) | 101141639 |
| EAN (European Article Number) | 4030661122915 |
| 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 | IFA cULus CCC UKCA |
|--------------|-----------------------------|

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 | 280 g |

General data - Features

| | |
|--------------------------------|-----|
| Power to unlock | Yes |
| Manual release | Yes |
| Number of actuating directions | 2 |
| Number of auxiliary contacts | 1 |
| Number of safety contacts | 1 |

Safety classification

| | |
|---|--------------------------------------|
| Standards | EN ISO 13849-1 |
| Performance Level, up to | c |
| Category | 1 |
| B _{10D} Normally-closed contact (NC) | 2,000,000 Operations |
| Note | Electrical life on request. |
| B _{10D} Normally-open contact (NO) | 1,000,000 Operations |
| Note | at 10% I _e and ohmic load |
| Mission time | 20 Year(s) |

Safety classification - Safety outputs

| | |
|--|--------------------------------------|
| Note (B _{10D} Normally open contact (NO)) | at 10% I _e and ohmic load |
|--|--------------------------------------|

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

| | |
|--|----------------------|
| 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 | 8.5 N |
| Actuating speed, maximum | 2 m/s |
| Mounting | Screws |
| Type of the fixing screws | 2x M5 |
| Tightening torque of the fastening screws for the housing cover, minimum | 0.7 Nm |
| Tightening torque of the fastening screws for the housing cover, maximum | 1 Nm |
| Note | Torx T10 |

Mechanical data - Connection technique

| | |
|-------------|---------------------------|
| Cable entry | 1 x M20 x 1,5 |
| Termination | IDC method of termination |

| | |
|------------------------|----------------------|
| Cable section, minimum | 0.75 mm ² |
| Cable section, maximum | 1 mm ² |
| 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 | -25 ... +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 |
| Rated impulse withstand voltage U_{imp} | 4 kV |
| Oversvoltage category | III |
| Degree of pollution | 3 |

Electrical data

| | |
|--|-----------|
| Rated control voltage | 24 VAC/DC |
| Required rated short-circuit current | 1,000 A |
| Electrical power consumption, maximum | 12 W |

| | |
|--------------------------------------|--|
| Switching element | 1 NO contact, 1 NC contacts |
| Note (Switching element) | Change-over contact with double break, type Zb or 2 NC contacts, with galvanically separated contact bridges |
| Switching principle | slow action, positive break NC contact |
| Maximum 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 |
|---------------------|--|

Scope of delivery

Scope of delivery

Actuator must be ordered separately.
Slot sealing plugs

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)K(4)-(5)-(6)-(7)-(8)

(1)

without

Cut clamps

SK

Screw connection

(2)

11

1 NO contact/1 NC contact

02

2 NC contact

(3)

without

Latching force 5 N

R

Latching force 30 N

(4)

without

Power to unlock

A

Power to lock

(5)

without

Cable entry M20

ST

2 connector, M12, 4-pin

ST-2431

As well as ST; individual solenoid monitoring

ST8

Connector M12 8-pole

(6)

24VAC/DC

Us 24 VAC/DC

110VAC

Us 110 VAC

230VAC

Us 230 VAC

(7)

1637

Gold-plated contacts

(8)

without

Manual release

2197

Manual release from side (Standard in case of conector and power to unlock versions)

Pictures

Product picture (catalogue individual photo)



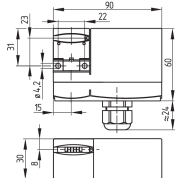
ID: kazm1f04

| 620.3 kB | .jpg | 352.425 x 356.658 mm - 999 x 1011 px - 72 dpi

| 48.7 kB | .png | 74.083 x 74.789 mm - 210 x 212 px - 72 dpi

| 71.0 kB | .jpg | 122.061 x 123.472 mm - 346 x 350 px - 72 dpi

Dimensional drawing basic component



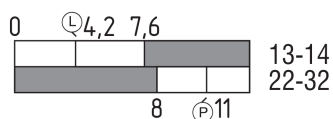
ID: lazmlg03

| 96.8 kB | .cdr |

| 3.7 kB | .png | 74.083 x 51.506 mm - 210 x 146 px - 72 dpi

| 75.8 kB | .jpg | 352.778 x 245.886 mm - 1000 x 697 px - 72 dpi

Switch travel diagram



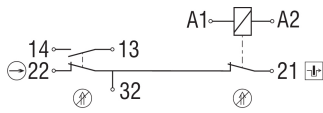
ID: kazm1s02

| 19.7 kB | .cdr |

| 2.0 kB | .png | 74.083 x 25.753 mm - 210 x 73 px - 72 dpi

| 50.1 kB | .jpg | 352.778 x 123.119 mm - 1000 x 349 px - 72 dpi

Diagram



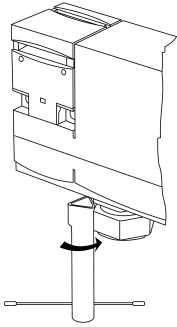
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| 52.5 kB | .ai | 297 x 210.002 mm - 841 x 595 px - 72 dpi

| 45.9 kB | .jpg | 352.778 x 112.183 mm - 1000 x 318 px - 72 dpi

| 2.5 kB | .png | 74.083 x 23.636 mm - 210 x 67 px - 72 dpi

Operating principle

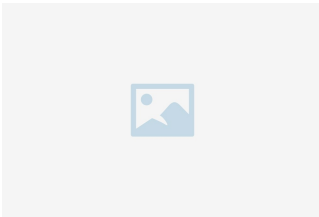


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| 213.5 kB | .jpg | 352.778 x 656.519 mm - 1000 x 1861 px - 72 dpi

| 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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