



AZM 170-02ZKA 24VAC/DC

- 1 Cable entry M 20 x 1.5
- IDC method of termination
- Manual release
- without latching
- Thermoplastic enclosure
- Double-insulated
- Compact design
- Interlock with protection against incorrect locking.
- Long life
- High holding force

Data

Ordering data

| | |
|-------------------------------|------------------------|
| Product type description | AZM 170-02ZKA 24VAC/DC |
| Article number (order number) | 101141640 |
| EAN (European Article Number) | 4030661122922 |
| 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 |

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

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|--------------------------------|-----|
| 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 | 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 - Fault exclusion

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|--------------------------|---|
| 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

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|--|----------------------|
| 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 |
| 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 |
| 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

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|------------------------|---------------------------|
| 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

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|------------------|-------|
| 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 |
| 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 |
| Overvoltage 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 | 12 W |
| Switching element | Opener (NC) |
| 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 |
| 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 |

Other data

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

Scope of delivery

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|-------------------|--------------------------------------|
| Scope of delivery | Actuator must be ordered separately. |
|-------------------|--------------------------------------|

Note

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|-----------------------|--|
| 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 contacts/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



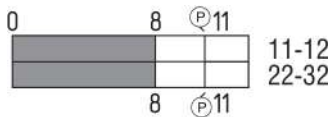
ID: laz1g03

| 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



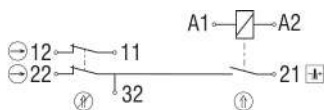
ID: kazm1s01

| 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



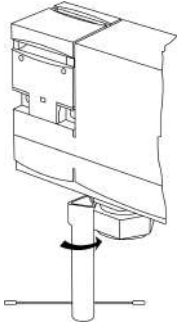
ID: kazm1k19

| 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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