



AZM 161SK-12/12RK-024

- Large wiring compartment
- Manual release
- cable entries 4 M 16 x 1.5
- 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 161SK-12/12RK-024 |
| Article number (order number) | 101164207 |
| EAN (European Article Number) | 4030661205144 |
| 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 |
|--------------|---------------------|

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 | 450 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 | 4 |

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

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

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|---|--|
| 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 | 20 N |
| Actuating speed, maximum | 2 m/s |
| Mounting | Screws |
| Type of the fixing screws | 3x M5 |
| Type of the screw head | Flat head screw |
| Tightening torque of the fastening screws for the housing cover | 0.6 Nm |
| Note | The tightening sequence of the cover screws must be observed. This can be found in the attached drawing in the "Pictures" tab. |

Mechanical data - Connection technique

| | |
|-------------|---------------|
| Cable entry | 4 x M16 x 1,5 |
|-------------|---------------|

| | |
|------------------------|---|
| Termination | Screw terminals |
| Cable section, minimum | 0.25 mm ² |
| Cable section, maximum | 1.5 mm ² |
| Note | 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 | -30 ... +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 |

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 |
| 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.

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)

| | |
|-----------|--------------------|
| SK | Screw connection |
| CC | Cage clamps |
| ST | Connector plug M12 |

(2)

| | |
|--------------|--|
| 11/03 | Magnet: 1 NO contact, 1 NC contact / Actuator: 3 NC contacts with connector plug |
| 12/03 | Magnet: 1 NO contact, 2 NC contact / Actuator: 3 NC contacts |
| 12/11 | Magnet: 1 NO contact, 2 NC contacts / Actuator: 1 NO contact, 1 NC contact with connector plug |
| 11/12 | Magnet: 1 NO contact, 1 NC contacts / Actuator: 1 NO contact, 2 NC contact with connector plug |
| 12/12 | Magnet: 1 NO contact, 2 NC contacts / Actuator: 1 NO contact, 2 NC contacts |

(3)

without Latching force 5 N
R Latching force 30 N

(4)

without Power to unlock
A Power to lock

(5)

without Lateral manual release
ED Manual release on the cover side
EU Manual release on the back side

(6)

T Lateral emergency exit
TD Emergency exit on the cover side
TU Emergency exit on the back side
N Emergency release

(7)

024 Us: 24 VAC/DC
110/230 Us: 110/230 VAC

(8)

without without LED
G with LED (only for Us: 24 VAC/DC)

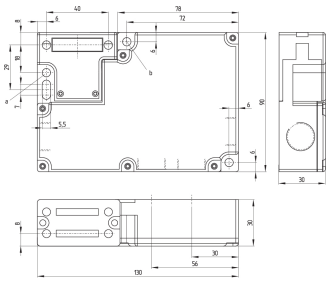
Pictures

Product picture (catalogue individual photo)



ID: kazm1f03
| 256.6 kB | .tif | 75.671 x 56.885 mm - 286 x 215 px - 96 dpi
| 698.5 kB | .jpg | 352.778 x 265.289 mm - 1000 x 752 px - 72 dpi
| 36.6 kB | .png | 74.083 x 55.739 mm - 210 x 158 px - 72 dpi
| 61.5 kB | .jpg | 123.472 x 92.781 mm - 350 x 263 px - 72 dpi

Dimensional drawing basic component



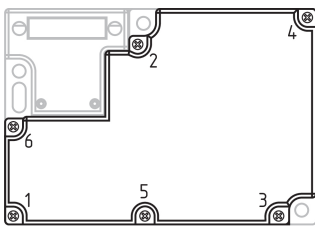
ID: kazm1g09

| 137.3 kB | .cdr |

| 4.5 kB | .png | 74.083 x 62.442 mm - 210 x 177 px - 72 dpi

| 139.6 kB | .jpg | 352.778 x 298.097 mm - 1000 x 845 px - 72 dpi

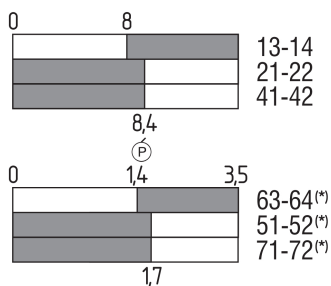
Dimensional drawing basic component



ID: 1azm1g30

| 93.0 kB | .jpg | 352.778 x 239.889 mm - 1000 x 680 px - 72 dpi

Switch travel diagram

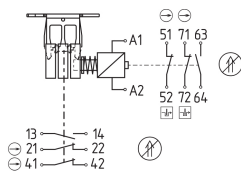


ID: kazm1s07

| 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: kazm1k29

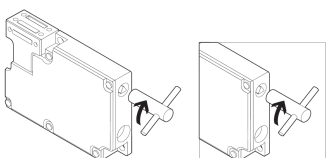
| 80.8 kB | .ai | 297 x 210.002 mm - 841 x 595 px - 72 dpi

| 111.9 kB | .jpg | 352.778 x 227.894 mm - 1000 x 646 px - 72 dpi

| 4.8 kB | .png | 74.083 x 47.978 mm - 210 x 136 px - 72 dpi

| | | | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 11 | 12 | 21 | 22 | 41 | 42 | 51 | 52 | 63 | 64 | 71 | 72 | A1 | A2 |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|

Operating principle



ID: kazm1a41

| 105.3 kB | .jpg | 352.778 x 170.744 mm - 1000 x 484 px - 72 dpi

| 13.0 kB | .png | 74.083 x 35.983 mm - 210 x 102 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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