



## EX-AZM 161CC-12/12RK-024-3D

- Cage clamps
- Ex-Zone 22
- Thermoplastic enclosure
- 130 mm x 90 mm x 30 mm
- Clamping force 2000N
- 6 Contacts
- Manual release
- Interlock with protection against incorrect locking.
- cable entries 4 M 16 x 1.5

## Data

### Ordering data

|                               |                             |
|-------------------------------|-----------------------------|
| Product type description      | EX-AZM 161CC-12/12RK-024-3D |
| Article number (order number) | 101195956                   |
| EAN (European Article Number) | 4030661363295               |
| 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                    |

### Explosion protection

|                                   |                                                                                                                 |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Explosion protection: regulations | EN IEC 60079-0<br>EN 60079-31                                                                                   |
| Explosion protection zones        | 22                                                                                                              |
| Explosion protection category     | 3D                                                                                                              |
| Explosion protection designation  |  II 3D Ex tc IIIC T80°C Dc X |

## General data

|                   |                                                                   |
|-------------------|-------------------------------------------------------------------|
| Standards         | EN IEC 60947-5-1                                                  |
| 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 <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        |
| 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) |
|--------------|------------|

## Mechanical data

|                                                                          |                      |
|--------------------------------------------------------------------------|----------------------|
| Mechanical life, minimum                                                 | 1,000,000 Operations |
| Actuating play in direction of actuation                                 | 5.5 mm               |
| Impact energy, maximum                                                   | 1 J                  |
| Energy impact (protective case), maximum                                 | 7 J                  |
| Latching force                                                           | 30 N                 |
| Positive break travel                                                    | 10 mm                |
| Positive break force, minimum                                            | 20 N                 |
| Actuating speed, maximum                                                 | 1 m/s                |
| Mounting                                                                 | Screws               |
| Type of the fixing screws                                                | 3x M6                |
| Type of the screw head                                                   | Flat head screw      |
| Tightening torque of the fastening screws for the housing cover, minimum | 0.6 Nm               |
| Tightening torque of the cable gland                                     | 3 Nm                 |

## Mechanical data - Connection technique

|                                                  |                                                   |
|--------------------------------------------------|---------------------------------------------------|
| Termination                                      | Cage clamps                                       |
| Cable cross-section of the cable glands, minimum | 5 mm                                              |
| Cable cross-section of the cable glands, maximum | 10 mm                                             |
| Cable section, minimum                           | 1 x 0.75 mm <sup>2</sup>                          |
| Cable section, maximum                           | 1 x 1.5 mm <sup>2</sup>                           |
| Note                                             | All indications including the conductor ferrules. |

## Mechanical data - Dimensions

|        |       |
|--------|-------|
| Length | 30 mm |
|--------|-------|

|       |        |
|-------|--------|
| Width | 130 mm |
|-------|--------|

|        |       |
|--------|-------|
| Height | 90 mm |
|--------|-------|

### Ambient conditions

|                          |                             |
|--------------------------|-----------------------------|
| Degree of protection     | IP67                        |
| Ambient temperature      | -10 ... +50 °C              |
| Note (Relative humidity) | non-condensing<br>non-icing |

### Ambient conditions - Insulation values

|                                           |         |
|-------------------------------------------|---------|
| Rated insulation voltage $U_i$            | 250 VAC |
| Rated impulse withstand voltage $U_{imp}$ | 4 kV    |

### Electrical data

|                                       |                                        |
|---------------------------------------|----------------------------------------|
| Rated control voltage                 | 24 VAC                                 |
| Rated control voltage                 | 24 VDC                                 |
| Utilisation category DC-13            | 24 VDC                                 |
| Utilisation category DC-13            | 2.5 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 DC-13 | 24 VDC |
| Current, Utilisation category DC-13 | 2.5 A  |

### Electrical data - Auxiliary contacts

|                                     |        |
|-------------------------------------|--------|
| Voltage, Utilisation category DC-13 | 24 VDC |
| Current, Utilisation category DC-13 | 2.5 A  |

### Scope of delivery

|                   |                                                                                                   |
|-------------------|---------------------------------------------------------------------------------------------------|
| Scope of delivery | Actuator must be ordered separately.<br>Including Ex-certified screwed cable gland and screw plug |
|-------------------|---------------------------------------------------------------------------------------------------|

### Note

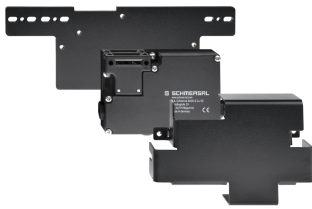
|                       |                                                                                                           |
|-----------------------|-----------------------------------------------------------------------------------------------------------|
| Note (Manual release) | For maintenance, installation, etc.<br>For manual release using M5 triangular key, available as accessory |
|-----------------------|-----------------------------------------------------------------------------------------------------------|

### Ordering code

Product type description:  
EX-AZM 161 (1)-12/12-(2)K(3)-024-3D

|                |                     |
|----------------|---------------------|
| (1)            |                     |
| <b>SK</b>      | Screw connection    |
| <b>CC</b>      | Cage clamps         |
| (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       |

## Pictures

**Product picture (catalogue individual photo)**

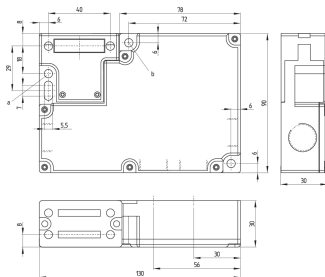
ID: kxazm1f06

| 197.6 kB | .jpg | 352.778 x 236.714 mm - 1000 x 671 px - 72 dpi

| 21.2 kB | .png | 74.083 x 49.742 mm - 210 x 141 px - 72 dpi

| 28.3 kB | .jpg | 123.472 x 82.903 mm - 350 x 235 px - 72 dpi

## Dimensional drawing basic component



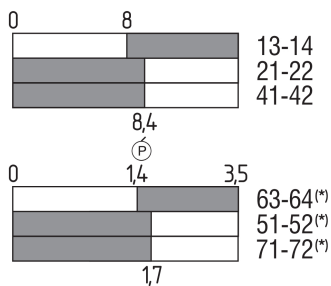
ID: kazm1g09

| 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

### Switch travel diagram

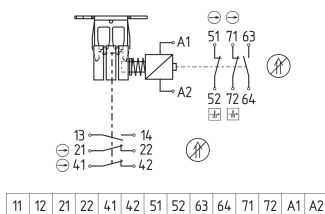


ID: kazm1s07

| 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



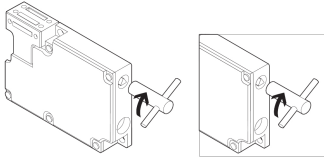
ID: kazm1k29

| 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

## 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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