

## AZM 161SK-12/12RKTU-110/230



- Long life
- 6 Contacts
- Double-insulated
- Emergency exit, rear
- 130 mm x 90 mm x 30 mm
- Thermoplastic enclosure
- Large wiring compartment
- cable entries 4 M 16 x 1.5
- Interlock with protection against incorrect locking.

### Data

#### Ordering data

|                               |                             |
|-------------------------------|-----------------------------|
|                               | AZM 161SK-12/12RKTU-110/230 |
|                               | 101187912                   |
| EAN (European Article Number) | 4030661357294               |
| eCl@ss number, Version 9.0    | 27-27-26-03                 |

#### Approval - Standards

cULus  
CCC  
EAC

#### General data

|                                      |                                                                   |
|--------------------------------------|-------------------------------------------------------------------|
|                                      | AZM 161                                                           |
|                                      | EN 60947-5-1                                                      |
|                                      | BG-GS-ET-19                                                       |
| Coding level according to ISO 14119  | Low                                                               |
| Active principle                     | electromechanical                                                 |
| Enclosure material                   | Plastic, glass-fibre reinforced thermoplastic, self-extinguishing |
| Material of the contacts, electrical | Silver                                                            |
| Gross weight                         | 480 g                                                             |

#### General data - Features

|                 |     |
|-----------------|-----|
| Power to unlock | Yes |
|-----------------|-----|

|                                |     |
|--------------------------------|-----|
| Emergency exit                 | Yes |
| Manual release                 | Yes |
| Number of actuating directions | 3   |
| Number of auxiliary contacts   | 2   |
| Number of safety contacts      | 4   |

### Safety appraisal

ISO 13849-1

|              |            |
|--------------|------------|
| Mission Time | 20 Year(s) |
|--------------|------------|

### Safety appraisal - Safety outputs

|                                   |                      |
|-----------------------------------|----------------------|
| B10d Normally-closed contact (NC) | 2,000,000 Operations |
| B10d Normally open contact (NO)   | 1,000,000 Operations |

### Mechanical data

|                                                     |                      |
|-----------------------------------------------------|----------------------|
| Mechanical life, minimum                            | 1,000,000 Operations |
| Actuating play in direction of actuation            | 5.5 mm               |
| Clamping force in accordance with ISO14119 $F_{zh}$ | 2,000 N              |
| Latching force                                      | 30 N                 |
| positive break travel                               | 10 mm                |
| Positive break force, minimum                       | 20 N                 |
| Actuating speed, maximum                            | 2 m/s                |

### Mechanical data - Connection technique

|                      |                                                                               |
|----------------------|-------------------------------------------------------------------------------|
| Terminal Connector   | Screw terminals                                                               |
|                      | 1 x 0.25 mm <sup>2</sup>                                                      |
|                      | 1 x 1.5 mm <sup>2</sup>                                                       |
| Note (Cable section) | All indications about the cable section are including the conductor ferrules. |

### Mechanical data - Dimensions

|                  |        |
|------------------|--------|
| Height of sensor | 90 mm  |
| Length of sensor | 30 mm  |
| Width of sensor  | 130 mm |

### Ambient conditions

|                              |                       |
|------------------------------|-----------------------|
| Protection class             | IP 67 to IEC/EN 60529 |
| Ambient temperature, minimum | -25 °C                |
| Ambient temperature, maximum | +60 °C                |

### Ambient conditions - Insulation value

Rated impulse withstand voltage 4 kV

### Electrical data

|                                                      |                        |
|------------------------------------------------------|------------------------|
| Thermal test current                                 | 6 A                    |
| Rated control voltage                                | 230 VAC                |
| Required rated short-circuit current to EN 60947-5-1 | 1,000 A                |
| Electrical power consumption, maximum                | 10 W                   |
| Switching element                                    | NO contact, NC contact |
| Switching principle                                  | Creep circuit element  |
| Switching frequency                                  | 1,000 /h               |

### Electrical data - Safety contacts

Voltage, Utilisation category AC15 230 VAC

Current, Utilisation category AC-15 4 A

Voltage, Utilisation category DC13 24 VDC

Current, Utilisation category DC13 2.5 A

### Electrical data - Auxiliary contacts

Voltage, Utilisation category AC15 230 VAC

Current, Utilisation category AC-15 4 A

Voltage, Utilisation category DC13 24 VDC

Current, Utilisation category DC13 2.5 A

### Other data

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

### Scope of delivery

Included in delivery Actuators must be ordered separately.

### Notes

|                                       |                                                                                                                                                      |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Note (Emergency exit)                 | The emergency exit is used where an intervention in an already locked hazardous area is required                                                     |
|                                       | Emergency exit by pressing the red push button                                                                                                       |
|                                       | Resetting by pulling on the latched button                                                                                                           |
|                                       | Top-side (ordering suffix -TD) or rear-side (ordering suffix -TU) mounting possible                                                                  |
| Note (Emergency exit, Manual release) | A combination of manual release and emergency exit in different mounting directions is only possible for the following variants: -ED/-TU and -TD/-EU |

## Ordering code

Product type description:

AZM 161 (1)-(2)(3)K(4)-(5)-(6)(7)

(1)

**SK** Screw connection

**CC** Cage clamps

**ST** Connector M12, 8 and 4 pole (only for Us: 24 VAC/DC)

(2)

**11/03** 1 NO contacts / 4 NC contacts (connector version)

**12/03** 1 NO contacts/5 NC contact

**12/11** 2 NO contacts / 3 NC contacts (connector version)

**11/12** 2 NO contacts / 3 NC contacts (connector version)

**12/12** 2 NO contacts/4 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 rear side

**T** Lateral emergency exit

**TD** Emergency exit on the cover side

**TU** Emergency exit on the rear side

**N** Emergency release

(6)

**024** Us: 24 VAC/DC

**110/230** Us: 110/230 VAC

(7)

**G** with LED (only for Us: 24 VAC/DC)

**Pictures**

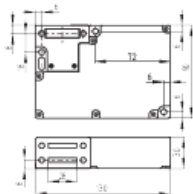
**Photo/Product/Catalogue**



ID: kazm1f03

| 36,6 kB | .png | 74.083 x 55.739 mm - 210 x 158  
Pixel - 72 dpi  
| 698,5 kB | .jpg | 352.778 x 265.289 mm - 1000 x 752  
Pixel - 72 dpi

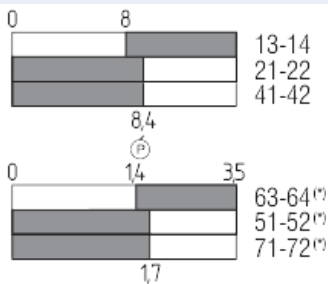
**Dimension/Product/Basic**



ID: 1azm1g09

| 3,6 kB | .png | 74.083 x 52.211 mm - 210 x 148 Pixel  
- 72 dpi  
| 75,8 kB | .jpg | 352.778 x 248.003 mm - 1000 x 703  
Pixel - 72 dpi

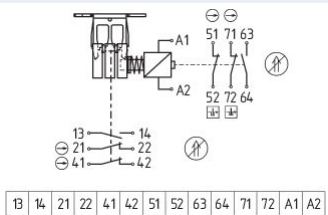
**Diagramm/Product/Travel**



ID: kazm1s07

| 102,8 kB | .jpg | 352.778 x 304.8 mm - 1000 x 864  
Pixel - 72 dpi  
| 2,9 kB | .png | 74.083 x 63.853 mm - 210 x 181 Pixel  
- 72 dpi

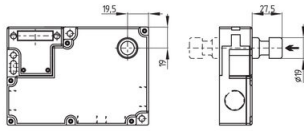
**Graphic/Product/Contact**



ID: kazm1k29

| 111,9 kB | .jpg | 352.778 x 227.894 mm - 1000 x 646  
Pixel - 72 dpi

**Dimension/Other**



ID: lazm1g24

| 82,4 kB | .jpg | 352.778 x 245.886 mm - 1000 x 697  
Pixel - 72 dpi

K.A. Schmersal GmbH & Co. KG, Möddinghofe 3, D-42279 Wuppertal

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.

Generated on 332021-01-30T19:13:33+01:000701Europe/BerlinSat, 30 Jan 2021 19:13:33

+010033pmSaturday.30pm31Europe/BerlinCET1301Europe/BerlinJanuary2021Sat, 30 Jan 2021 19:13:33

+010001pm31