SCHMERSAL
THE DNA OF SAFETY

AZM161SK-12/12RK-M16-24V



- **Long life**
- **6 Contacts**
- **Manual release**
- **Double-insulated**
- **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	
Product type description	AZM 161SK-12/12RK-024
Article number (order number)	101164207
EAN (European Article Number)	4030661205144
eCl@ss number, Version 9.0	27-27-26-03
Approval - Standards	
Certificates	cULus CCC EAC
General data	
Product name	AZM 161
Standards	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	415 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 appraisal	
Standards	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
Cable section, minimum	1 x 0.25 mm²
Cable section, maximum	1 x 1.5 mm²
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	24 VAC/DC
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 (Manual release)	For maintenance, installation, etc. For manual release using M5 triangular key, available as accessory
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 (conector version)

12/03 1 NO contacts/5 NC contact

12/11 2 NO contacts / 3 NC contacts (conector version)

11/12 2 NO contacts / 3 NC contacts (conector 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

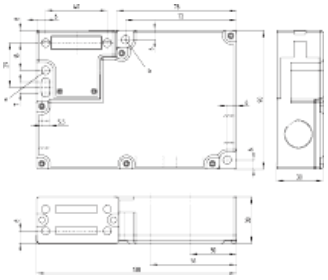
Product picture (catalogue individual photo)



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

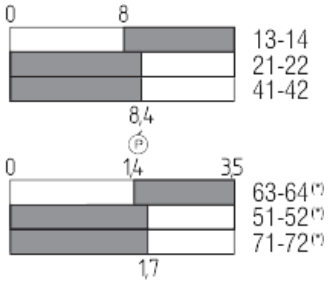
Dimensional drawing basic component



ID: kazm1g09

| 137,3 kB | .cdr |
| 139,6 kB | .jpg | 352.778 x 298.097 mm - 1000 x 845 Pixel - 72 dpi
| 4,5 kB | .png | 74.083 x 62.442 mm - 210 x 177 Pixel - 72 dpi

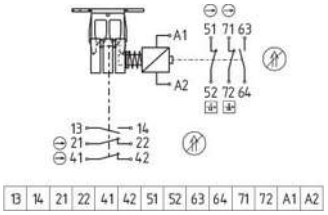
Switch travel diagram



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

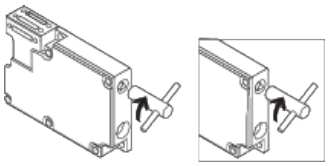
Diagram



ID: kazm1k29

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

Operating principle



ID: kazm1a41

| 13,0 kB | .png | 74.083 x 35.983 mm - 210 x 102 Pixel - 72 dpi
| 105,3 kB | .jpg | 352.778 x 170.744 mm - 1000 x 484 Pixel - 72 dpi
| 48,4 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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