DATASHEET



AZM 161SK-12/12RKED-024

- Large wiring compartment
- Manual release, cover-side
- 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-12/12RKED-024
Article number (order number)	101187804
EAN (European Article Number)	4030661350875
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	461 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

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 mm²
Cable section, maximum	1.5 mm²
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 Top-side (ordering suffix -ED) or rear-side (ordering suffix -EU) mounting possible
Note (Emergency exit, Manual release)	A combination of manual release and emergency exit in different mounting directions in only possible for the following variants: -ED/-TU and -TD/-EU

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)

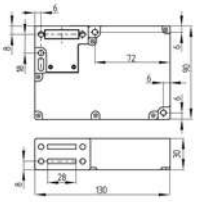
Pictures

Product picture (catalogue individual photo)



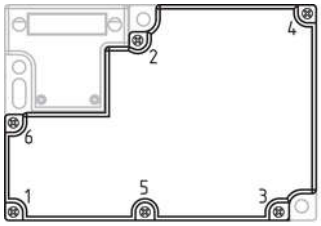
ID: kazm1f03
| 256.6 kB | .tif | 75.671 x 56.885 mm - 286 x 215 px - 96 dpi
| 698.5 kB | .jpg | 352.778 x 265.289 mm - 1000 x 752 px - 72 dpi
| 36.6 kB | .png | 74.083 x 55.739 mm - 210 x 158 px - 72 dpi
| 61.5 kB | .jpg | 123.472 x 92.781 mm - 350 x 263 px - 72 dpi

Dimensional drawing basic component



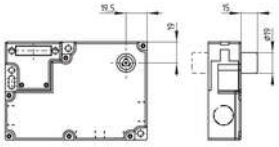
ID: 1azm1g09
| 8.1 kB | .swf |
| 3.6 kB | .png | 74.083 x 52.211 mm - 210 x 148 px - 72 dpi
| 75.8 kB | .jpg | 352.778 x 248.003 mm - 1000 x 703 px - 72 dpi

Dimensional drawing basic component



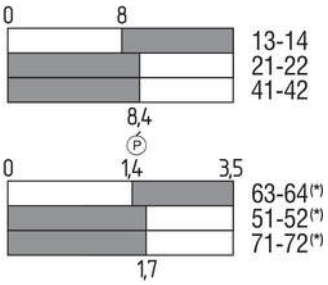
ID: 1azm1g30
| 93.0 kB | .jpg | 352.778 x 239.889 mm - 1000 x 680 px - 72 dpi

Dimensional drawing miscellaneous



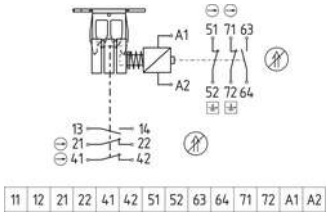
ID: 1azm1g23
| 76.8 kB | .jpg | 352.778 x 245.886 mm - 1000 x 697 px - 72 dpi

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



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

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

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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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