



AZM 161SK-12/12RIA-024 -B6R

- 1 Cable entry M 20 x 1.5
- Screw connection
- Manual release from side
- right-hand model
- Compact design
- For very small actuating radii in line with or at 90° to the plane of the actuator
- Interlock with protection against incorrect locking.
- Individual coding
- Coding level "High" according to ISO 14119
- Double-insulated
- High holding force
- Long life
- 130 mm x 90 mm x 30 mm

Data

Ordering data

Product type description	AZM 161SK-12/12RIA-024 -B6R
Article number (order number)	101211999
EAN (European Article Number)	4030661412184
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 UKCA
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General data

Standards	EN ISO 13849-1 EN ISO 14119 EN IEC 60947-5-1
Coding	Individual coding
Coding level according to EN ISO 14119	High
Working principle	electromechanical
Housing material	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
Material of the actuator	Stainless steel
Gross weight	485 g

General data - Features

Power to lock	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)

Mechanical data

Actuating radius, minimum	95 mm
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 M6

Tightening torque of the fastening screws for the housing cover	0.6 Nm
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Note	The tightening sequence of the cover screws must be observed. This can be found in the attached drawing in the “Pictures” tab.
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Mechanical data - Connection technique

Cable entry	4 x M16 x 1,5
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Termination	Screw terminals
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Cable section, minimum	0.25 mm ²
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Cable section, maximum	1.5 mm ²
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Note	All indications including the conductor ferrules.
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Allowed type of cable	solid single-wire solid multi-wire flexible
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Mechanical data - Dimensions

Length of sensor	30 mm
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Width of sensor	130 mm
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Height of sensor	90 mm
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Ambient conditions

Degree of protection	IP67
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Ambient temperature	-30 ... +60 °C
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Storage and transport temperature	-25 ... +85 °C
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Note (Relative humidity)	non-condensing non-icing
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Protection class	II
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Permissible installation altitude above sea level, maximum	2,000 m
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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
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Electrical data - Auxiliary contacts

Voltage, Utilisation category AC-15	230 VAC
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Current, Utilisation category AC-15	4 A
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Voltage, Utilisation category DC-13	24 VDC
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Current, Utilisation category DC-13	2.5 A
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Other data

Note (applications)	sliding safety guard removable guard hinged safety guard
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Scope of delivery

Scope of delivery	Not available as spare part Slot sealing plugs The actuator is included in the scope of delivery
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Note

Note (General)	Interlocks with the power to lock principle may only be used in special cases after a thorough evaluation of the accident risk, since the guarding device can immediately be opened on failure of the electrical power supply or when the main switch is opened.
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Note (Manual release)	For maintenance, installation, etc. For manual release using M5 triangular key, available as accessory
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Ordering code

Product type description:
AZM 161(1)(2)(3)I(4)(5)(6)(7)(8)(9)

(1)		
CC		Cage clamps
SK		Screw terminals
ST		M12 connector
(2)		
11/03		Magnet: 1 NO contact, 1 NC contact / Actuator: 3 NC contacts with connector plug
12/11		Magnet: 1 NO contact, 2 NC contacts / Actuator: 1 NO contact, 1 NC contact with connector plug
12/03		Magnet: 1 NO contact, 2 NC contact / Actuator: 3 NC contacts
11/12		Magnet: 1 NO contact, 2 NC contacts / Actuator: 1 NO contact, 1 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 rear side
(6)		
T		Lateral emergency exit
TD		Emergency exit on the cover side
TU		Emergency exit on the rear 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)

(9)

B1

Actuator B1 included

B1E

Actuator B1E included

B6L

Actuator B6 left included

B6R

Actuator B6 right included

B1-1747

Actuator B1-1747 included

B1-2024

Actuator B1-2024 included

B1-2053

Actuator B1-2053 included

B1-2177

Actuator B1-2177 included

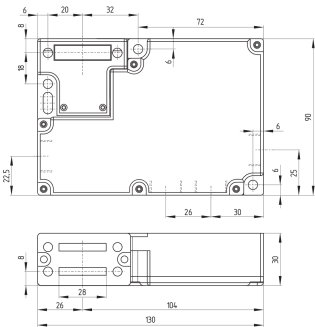
Pictures

Product picture (catalogue individual photo)



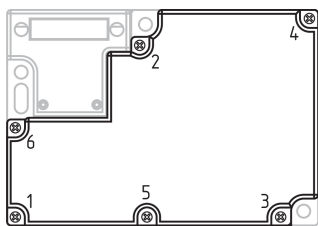
ID: kazm1f15
| 238.2 kB | .jpg | 352.778 x 251.883 mm - 1000 x 714 px - 72 dpi
| 19.4 kB | .png | 74.083 x 52.917 mm - 210 x 150 px - 72 dpi
| 27.1 kB | .jpg | 123.472 x 88.194 mm - 350 x 250 px - 72 dpi

Dimensional drawing basic component



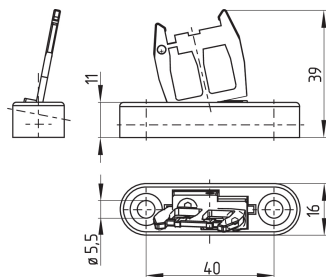
ID: kazm1g20
| 39.1 kB | .cdr |
| 4.8 kB | .png | 73.731 x 75.847 mm - 209 x 215 px - 72 dpi
| 154.6 kB | .jpg | 352.425 x 362.303 mm - 999 x 1027 px - 72 dpi

Dimensional drawing basic component



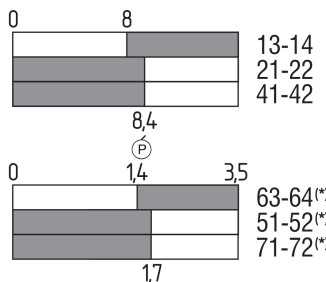
ID: lazm1g30
| 93.0 kB | .jpg | 352.778 x 239.889 mm - 1000 x 680 px - 72 dpi

Dimensional drawing actuator



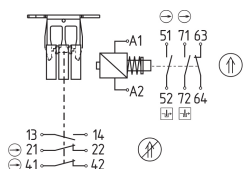
ID: lazm1b31
| 153.2 kB | .jpg | 352.778 x 296.333 mm - 1000 x 840 px - 72 dpi
| 18.4 kB | .png | 74.083 x 62.089 mm - 210 x 176 px - 72 dpi

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: kazm1k30
| 75.0 kB | .ai | 297 x 210.002 mm - 841 x 595 px - 72 dpi
| 111.7 kB | .jpg | 352.778 x 227.542 mm - 1000 x 645 px - 72 dpi
| 4.9 kB | .png | 74.083 x 47.978 mm - 210 x 136 px - 72 dpi

13	14	21	22	41	42	51	52	63	64	71	72	A1	A2
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