DATASHEET



AZM 161ST-12/11K-024

- Large wiring compartment
- Manual release
- 2 cable entries M 16 x 1.5
- 2 Connector M12, 4- and 8-poles
- 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 161ST-12/11K-024
Article number (order number)	101192422
EAN (European Article Number)	4030661352381
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	490 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	3

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	5 N
Positive break travel	10 mm
Positive break force per NC contact, minimum	10 N
Positive break force, minimum	10 N
Actuating speed, maximum	2 m/s
Mounting	Screws
Type of the fixing screws	3x M5
Type of the screw head	Flat head screw

Mechanical data - Connection technique

Termination	Connector plug M12, 4-pole, (A-coding) Connector plug M12, 8-pole, (A-coding)

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	-25 ... +60 °C
Storage and transport temperature	-25 ... +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 Connector, 4 poles - 250 V Connector, 8 poles - 60 V
Rated impulse withstand voltage U_{imp}	0.8 kV
Rated impulse withstand voltage, connector 4-pole	2.5 kV
Rated impulse withstand voltage, connector 8-pole	0.8 kV

Electrical data

Thermal test current	2 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	60 VDC
Current, Utilisation category DC-13	2 A

Electrical data - Auxiliary contacts

Voltage, Utilisation category AC-15	230 VAC
Current, Utilisation category AC-15	4 A
Voltage, Utilisation category DC-13	60 VDC
Current, Utilisation category DC-13	2 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

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)

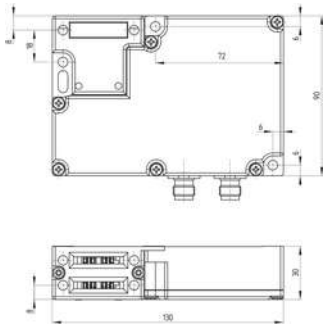
Pictures

Product picture (catalogue individual photo)



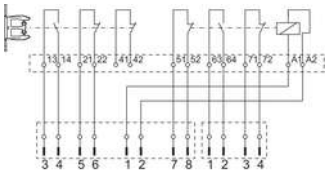
ID: kazm1f23
| 412.8 kB | .jpg | 352.778 x 291.394 mm - 1000 x 826 px - 72 dpi
| 36.0 kB | .png | 74.083 x 61.031 mm - 210 x 173 px - 72 dpi
| 58.2 kB | .jpg | 123.472 x 101.953 mm - 350 x 289 px - 72 dpi

Dimensional drawing basic component



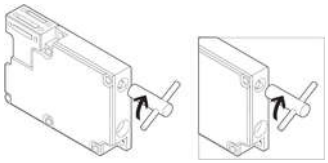
ID: kazm1g17
| 72.1 kB | .cdr |
| 5.1 kB | .png | 74.083 x 74.789 mm - 210 x 212 px - 72 dpi
| 150.9 kB | .jpg | 352.425 x 355.953 mm - 999 x 1009 px - 72 dpi

Diagram



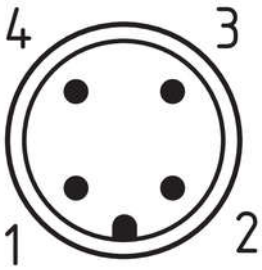
ID: kazm1k117
| 3.6 kB | .png | 74.083 x 38.806 mm - 210 x 110 px - 72 dpi
| 112.5 kB | .jpg | 352.778 x 185.208 mm - 1000 x 525 px - 72 dpi

Operating principle



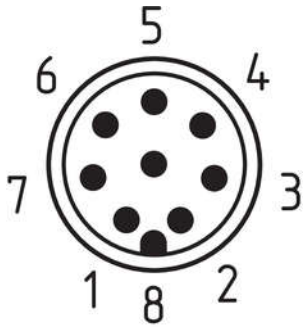
ID: kazm1a41
| 105.3 kB | .jpg | 352.778 x 170.744 mm - 1000 x 484 px - 72 dpi
| 13.0 kB | .png | 74.083 x 35.983 mm - 210 x 102 px - 72 dpi

Contact arrangement



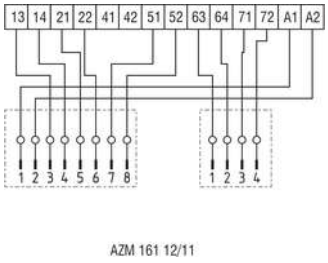
ID: km12-k4c
| 4.2 kB | .png | 74.083 x 74.083 mm - 210 x 210 px - 72 dpi
| 113.3 kB | .jpg | 352.778 x 352.778 mm - 1000 x 1000 px - 72 dpi

Contact arrangement



ID: km23-k8b
| 5.3 kB | .png | 73.731 x 79.728 mm - 209 x 226 px - 72 dpi
| 139.8 kB | .jpg | 352.778 x 380.647 mm - 1000 x 1079 px - 72 dpi

Wiring example



AZM 161 12/11

ID: kazm1k96
| 26.2 kB | .cdr |
| 128.8 kB | .jpg | 352.778 x 276.931 mm - 1000 x 785 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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