DATASHEET



AZM 161CC-12/12RKA -110/230

- Large wiring compartment
- Manual release
- 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 161CC-12/12RKA -110/230
Article number (order number)	101166288
EAN (European Article Number)	4030661214009
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	415 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

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	Cage clamps
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	110 VAC 230 VAC
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 (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.
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)



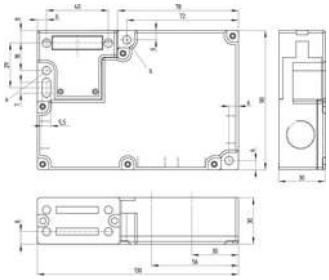
ID: kazm1f03
| 256.6 kB | .tif | 75.671 x 56.885 mm - 286 x 215 px - 96 dpi
| 698.5 kB | .jpg | 352.778 x 265.289 mm - 1000 x 752 px - 72 dpi
| 36.6 kB | .png | 74.083 x 55.739 mm - 210 x 158 px - 72 dpi
| 61.5 kB | .jpg | 123.472 x 92.781 mm - 350 x 263 px - 72 dpi

Product picture (catalogue individual photo)



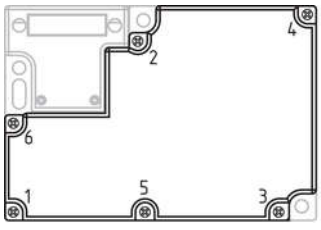
ID: sazm1f03
| 364.3 kB | .jpg | 352.778 x 265.289 mm - 1000 x 752 px - 72 dpi
| 25.3 kB | .png | 74.083 x 55.739 mm - 210 x 158 px - 72 dpi
| 41.1 kB | .jpg | 123.472 x 92.781 mm - 350 x 263 px - 72 dpi

Dimensional drawing basic component



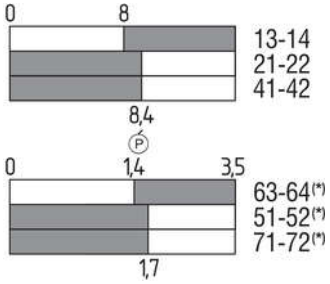
ID: kazm1g09
| 137.3 kB | .cdr |
| 4.5 kB | .png | 74.083 x 62.442 mm - 210 x 177 px - 72 dpi
| 139.6 kB | .jpg | 352.778 x 298.097 mm - 1000 x 845 px - 72 dpi

Dimensional drawing basic component



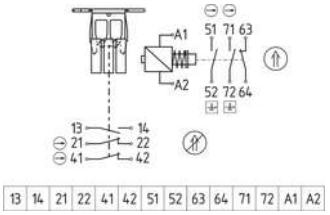
ID: 1azm1g30
| 93.0 kB | .jpg | 352.778 x 239.889 mm - 1000 x 680 px - 72 dpi

Switch travel diagram



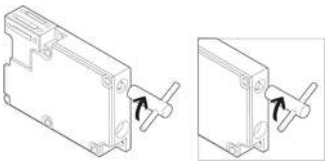
ID: kazm1s07
| 2.9 kB | .png | 74.083 x 63.853 mm - 210 x 181 px - 72 dpi
| 102.8 kB | .jpg | 352.778 x 304.8 mm - 1000 x 864 px - 72 dpi

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

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