DATASHEET

EX-AZM 170-02ZK 24VAC/DC-3G/D

- IDC method of termination
- Manual release
- Explosion protection for ATEX Zones 2 and 22
- Thermoplastic enclosure
- 1 Cable entry M 20 x 1.5
- Interlock with protection against incorrect locking.
- High holding force
- 90 mm x 84 mm x 30 mm

Data

Ordering data

Product type description	EX-AZM 170-02ZK 24VAC/DC-3G/D
Article number (order number)	101211767
EAN (European Article Number)	4030661390635
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

Explosion protection

Explosion protection: regulations	EN IEC 60079-0 EN IEC 60079-15 EN 60079-31
Explosion protection zones	2 22

Explosion protection category	3G 3D
Explosion protection designation	II 3G Ex nC IIB T5 Gc X II 3D Ex tc IIIC T80°C Dc X
Manufacturer declaration	ATEX Zone 2 and 22

General data

Standards	EN IEC 60947-5-1
Working principle	electromechanical
Housing material	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
Gross weight	300 g

General data - Features

Power to unlock	Yes
Manual release	Yes
Number of safety contacts	2

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
Mission time	20 Year(s)

Safety classification - Fault exclusion

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
Impact energy, maximum	1 J
Energy impact (protective case), maximum	7 J
Holding force	1,000 N
Latching force	5 N
Positive break travel	11 mm
Positive break force, minimum	17 N
Actuating speed, maximum	1 m/s
Mounting	Screws
Type of the screw head	Flat head screw
Tightening torque of the fastening screws for the housing cover, minimum	0.4 Nm
Tightening torque of the fastening screws for the housing cover, maximum	0.5 Nm
Tightening torque of the cable gland	4.5 Nm

Mechanical data - Connection technique

Termination	IDC method of termination
Cable cross-section of the cable glands, minimum	6.5 mm
Cable cross-section of the cable glands, maximum	12 mm
Cable section, minimum	2 x 1.0 mm^2, flexible
Cable section, maximum	1 x 1 mm^2, flexible

Mechanical data - Dimensions

Length of sensor	30 mm
Width of sensor	90 mm

Height of sensor	84 mm

Ambient conditions

Degree of protection	IP67
Ambient temperature	-15 ... +45 °C
Note (Relative humidity)	non-condensing non-icing

Ambient conditions - Insulation values

Rated insulation voltage U_i	250 VAC
Rated impulse withstand voltage U_{imp}	4 kV

Electrical data

Thermal test current	2 A
Rated control voltage	24 VAC
Rated control voltage	24 VDC
Utilisation category AC-15	230 VAC
Utilisation category AC-15	2 A
Utilisation category DC-13	24 VDC
Utilisation category DC-13	2 A
Electrical power consumption, maximum	10 W
Switching element	Opener (NC)
Switching principle	Slow action
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

Scope of delivery

Scope of delivery	Actuator must be ordered separately. Including Ex-certified screwed cable gland and screw plug

Note

Note (General)	This type termination (IDC) method enables simple connetion of flexible conductors without the need for the use of conductor ferrules
Note (Manual release)	bottom For manual release using M5 triangular key, available as accessory

Ordering code

Product type description:
EX-AZM 170-(1)Z(2)K(3)-24VAC/DC-(4)-3G/D

(1)

11	1 NO contacts/1 NC contact
02	2 NC contact

(2)

without	Latching force 5 N
R	Latching force 30 N

(3)

without	Power to unlock
A	Power to lock

(4)

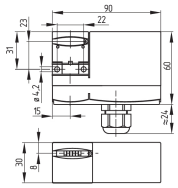
without	Manual release
1637	Gold-plated contacts

Pictures

Product picture (catalogue individual photo)

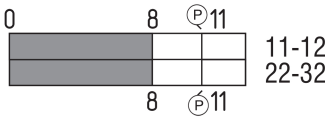
ID: kazm1f04
| 620.3 kB | .jpg | 352.425 x 356.658 mm - 999 x 1011 px - 72 dpi
| 48.7 kB | .png | 74.083 x 74.789 mm - 210 x 212 px - 72 dpi
| 71.0 kB | .jpg | 122.061 x 123.472 mm - 346 x 350 px - 72 dpi

Dimensional drawing basic component



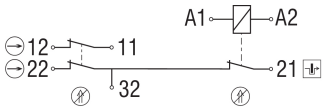
ID: 1azm1g03
| 96.8 kB | .cdr |
| 3.7 kB | .png | 74.083 x 51.506 mm - 210 x 146 px - 72 dpi
| 75.8 kB | .jpg | 352.778 x 245.886 mm - 1000 x 697 px - 72 dpi

Switch travel diagram



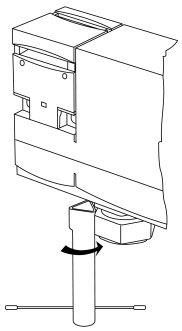
ID: kazm1s01
| 19.5 kB | .cdr |
| 1.8 kB | .png | 74.083 x 26.458 mm - 210 x 75 px - 72 dpi
| 49.4 kB | .jpg | 352.778 x 125.236 mm - 1000 x 355 px - 72 dpi

Diagram



ID: kazm1k11
| 55.1 kB | .ai | 297 x 210.002 mm - 841 x 595 px - 72 dpi
| 47.2 kB | .jpg | 352.778 x 112.183 mm - 1000 x 318 px - 72 dpi
| 2.5 kB | .png | 74.083 x 23.636 mm - 210 x 67 px - 72 dpi

Operating principle



ID: kazm1a70
| 213.5 kB | .jpg | 352.778 x 656.519 mm - 1000 x 1861 px - 72 dpi
| 6.5 kB | .png | 74.083 x 137.583 mm - 210 x 390 px - 72 dpi

Assembly example

ID: kazm1m06
| 98.4 kB | .cdr |

Schmersal Ltd., Sparrowhawk Close, WR14 1GL Malvern

Generated on: 14/02/2024, 04:55