

## Datasheet - AZM 415-02/11ZPK 230 VAC

Solenoid interlock / AZM 415



(Minor differences between the printed image and the original product may exist!)

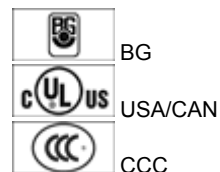
- Metal enclosure
- Interlock with protection against incorrect locking.
- Robust design
- Long life
- 2 cable entries M 20 x 1.5
- Cut clamp termination
- Adjustable ball latch to 400 N
- 2 switches in one enclosure
- Problem-free opening of stressed doors by means of bell-crank system
- Ex version available
- 130 mm x 100 mm x 46,5 mm

### Ordering details

Product type description	AZM 415-02/11ZPK 230 VAC
Article number	101174546
EAN Code	4030661331973
eCl@ss	27-27-26-03

### Approval

Approval




### Classification

Standards	EN ISO 13849-1
B10d Normally-closed contact (NC)	2.000.000
Mission time	20 Years
notice	$MTTF_d = \frac{B_{10d}}{0,1 \times n_{op}}$ $n_{op} = \frac{d_{op} \times h_{cp} \times 3600 \text{ s/h}}{t_{cycle}}$

### Global Properties

Permanent light	AZM 415
Standards	EN 60947-5-1, BG-GS-ET-19

Compliance with the Directives (Y/N) 	Yes
Number of guard doors	1
Number of actuating directions	1
Active principle	electromechanical
Duty cycle ED	Magnet 100 %
Materials	
- Material of the housings	Aluminium
- Material of the contacts	Silver
Housing coating	painted
Weight	910

## Mechanical data

---

Design of electrical connection	Screw connection
Cable section	
- Min. Cable section	2 x 0,75 mm <sup>2</sup>
- Max. Cable section	2 x 2.5 mm <sup>2</sup>
Mechanical life	> 1.000.000 operations
notice	All indications about the cable section are including the conductor ferrules.
Emergency unlocking device (Y/N)	No
Manual release (Y/N)	No
Emergency release (Y/N)	No
Latching force	150 N ... 400 N
Positive break force	15 N min.
positive break travel	5
Clamping force F	3500 N
Max. Actuating speed	0,2 m/s

## Ambient conditions

---

Ambient temperature	
- Min. environmental temperature	-25 °C
- Max. environmental temperature	+50 °C
Protection class	IP67 to IEC/EN 60529

## Electrical data

---

Design of control element	Normally open contact (NO), Opener (NC)
Switching principle	Creep circuit element
Number of auxiliary contacts	1
Number of safety contacts	3
Power to unlock	Yes
Power to lock	No
Rated control voltage U <sub>s</sub>	230 V AC
Power consumption	max. 10 W
Rated impulse withstand voltage U <sub>imp</sub>	4 kV
Rated insulation voltage U <sub>i</sub>	250 V
Thermal test current I <sub>the</sub>	6 A
Utilisation category	AC-15: 230 V / 4 A, DC-13: 24 V / 1 A
Max. fuse rating	6 A gG D-fuse

## ATEX

---

Explosion protection categories for gases  
Explosion protected category for dusts

None  
None

## Miscellaneous data

Applications



sliding safety guard



hinged safety guard

## Dimensions

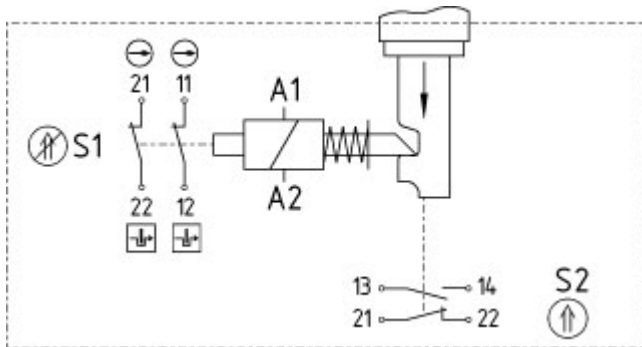
Dimensions of the sensor

- Width of sensor	130
- Height of sensor	100
- Length of sensor	46.5

## notice - Dimensional drawing

A setting screw Ball latch

## Diagram



Note Diagram

- positive break NC contact
- active
- no active
- Normally-open contact
- Normally-closed contact

## Ordering suffix

The applicable ordering suffix is added at the end of the part number of the safety switch.  
Order example: AZM 415-02/11ZPK 230 VAC-**1637**

...-**1637**

0,3 µm gold-plated contacts

## Ordering code

AZM 415-(1)(2)PK(3)-(4) (5)(6)-(7)

(1)

11/11

2 Opener (NC) / Normally open contact (NO) 2

11/02	3 Opener (NC) / 1 Normally open contact (NO)
11/20	1 Opener (NC) / 3 Normally open contact (NO)
02/11	3 Opener (NC) / 1 Normally open contact (NO)
02/20	2 Opener (NC) / 2 Normally open contact (NO)
02/02	4 Opener (NC)
(2)	
X	Protection class IP54
Z	Protection class IP67
(3)	
without	Power to unlock
A	Power to lock
(4)	
STR	connector M23 right
ST	connector M23 bottom
(5)	
without	without Manual release
E	Manual release using triangular key
F	using triangular key (secured with locking screw)
FE	using triangular key
RS	Manual release with key
T	Emergency exit using latched pushbutton ( <i>only for Power to unlock</i> )
TE	Emergency exit and Manual release, Mounting outside ( <i>only for Power to unlock</i> )
TEI	Emergency exit and Manual release, Mounting inside ( <i>only for Power to unlock</i> )
NS	Emergency release using lock button
(6)	
24VAC/DC	Us: 24 VAC/DC
110VAC	Us: 110 VAC
230VAC	Us: 230 VAC
(7)	
1637	gold-plated contacts
	<b>AZM 415 for double doors</b>
	<b>AZM 415-33ZPDK(1)(2) (3)(4)</b>
(1)	
A	Power to lock
(2)	
ST	connector M23 right
without	Power to unlock
STR	connector M23 bottom
(3)	
without	without Manual release
E	Manual release using triangular key ( <i>only for Power to unlock</i> )
(4)	
1637	gold-plated contacts

## Documents

---

**Operating instructions and Declaration of conformity** (cn) 577 kB, 24.09.2018

Code: mrl\_azm415xx-xx\_cn

**Operating instructions and Declaration of conformity** (es) 452 kB, 24.09.2018

Code: mrl\_azm415xx-xx\_es

**Operating instructions and Declaration of conformity** (nl) 491 kB, 24.09.2018

Code: mrl\_azm415xx-xx\_nl

**Operating instructions and Declaration of conformity** (fr) 468 kB, 24.09.2018

Code: mrl\_azm415xx-xx\_fr

**Operating instructions and Declaration of conformity** (pl) 502 kB, 24.09.2018

Code: mrl\_azm415xx-xx\_pl

**Operating instructions and Declaration of conformity** (it) 462 kB, 24.09.2018

Code: mrl\_azm415xx-xx\_it

**Operating instructions and Declaration of conformity** (jp) 508 kB, 24.09.2018

Code: mrl\_azm415xx-xx\_jp

**Operating instructions and Declaration of conformity** (en) 541 kB, 18.12.2018

Code: mrl\_azm415xx-xx\_en

**Operating instructions and Declaration of conformity** (da) 384 kB, 08.08.2012

Code: mrl\_azm415xx-xx\_da

**Operating instructions and Declaration of conformity** (pt) 467 kB, 24.09.2018

Code: mrl\_azm415xx-xx\_pt

**Operating instructions and Declaration of conformity** (de) 510 kB, 18.12.2018

Code: mrl\_azm415xx-xx\_de

**BG-test certificate** (en) 1 MB, 08.01.2018

Code: z\_i41p02

**BG-test certificate** (de) 1 MB, 08.01.2018

Code: z\_i41p01

**CCC certification** (cn) 2 MB, 17.01.2018

Code: q\_azmp05

**CCC certification** (en) 2 MB, 17.01.2018

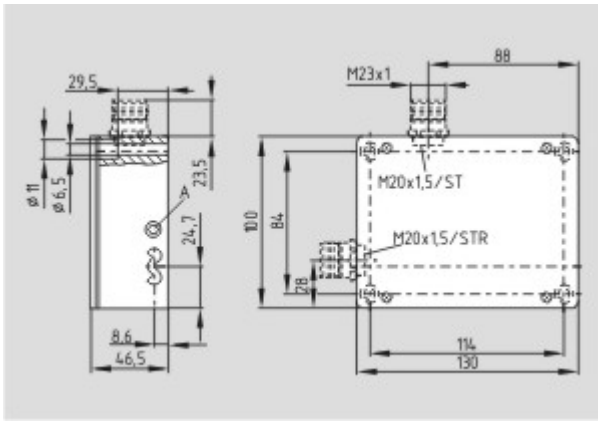
Code: q\_azmp04

**notice** (de, en, fr) 108 kB, 28.02.2007

Code: s\_zm4p01

## Images

---



Dimensional drawing (basic component)

## System components

### Actuator



#### 1128545 - AZ/AZM 415-B1

- For sliding doors
- Actuators with return spring
- Tolerates up to max. 6 mm overtravel



#### 1144796 - AZ/AZM 415-B2

- Particularly suitable for hinged guards
- For very small actuating radii in line with the plane of the actuator



#### 1144797 - AZ/AZM 415-B3

- Particularly suitable for hinged guards
- For very small actuating radii at 90° to the plane of the actuator



#### 101142540 - AZ/AZM 415-B4PS

- For sliding doors
- with locking bolt and ball latch

### Door-handle system



#### AZM 415-ST30

- Latching handle
- Suitable for all types of guard
- einsetzbar in Verbindung mit EX-AZM 415

## Accessories



### 101100887 - TRIANGULAR KEY TK-M5

- For manual release using M5 triangular key, available as accessory
- For maintenance, installation, etc.

---

K.A. Schmersal GmbH & Co. KG, Möddinghofe 30, D-42279 Wuppertal

The data and values have been checked thoroughly. Technical modifications and errors excepted.

Generiert am 13.02.2019 - 14:48:03h Kasbase 3.3.0.F.64l