# Datasheet - AZM 415-02/02ZPK 24 VAC/DC

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

Article number

EAN code

eCl@ss

AZM 415-02/02ZPK 24 VAC/DC

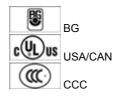
101186203

4030661326948

27-27-26-03

## **Approval**

Approval



### Classification

Standards

B<sub>10d</sub> Opener (NC)

Mission time

notice

EN ISO 13849-1

2.000.000

20 Years

$$MTTF_d = \frac{B_{10d}}{0.1 \times n_{op}}$$

$$n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{oyole}}$$

## **Global Properties**

Product name Standards AZM 415

EN 60947-5-1, BG-GS-ET-19

Compliance with the Directives (Y/N)  $\mathsf{C}\,\mathsf{E}$ 

Number of guard doors

Number of actuating directions

Active principle
Duty cycle

Materials

Material of the housingsMaterial of the contactsHousing coating

Weight

vveignt

Yes

1 piece 1 piece

electromechanical Magnet 100 %

Aluminium

Silver painted 930 g

#### **Mechanical data**

Design of electrical connection

Cable section

Min. Cable sectionMax. Cable section

Mechanical life

notice

Emergency unlocking device (Y/N)

Manual release (Y/N) Emergency release (Y/N)

Latching force
Positive break force
positive break travel
Clamping force F<sub>max</sub>
Max. Actuating speed

Screw connection

2 x 0,75 mm<sup>2</sup>

2 x 2.5 mm<sup>2</sup>

> 1.000.000 operations

All indications about the cable section are including the conductor ferrules.

No No

No

150 N ... 400 N

15 N min. 5 mm 3500 N 0,2 m/s

## **Ambient conditions**

Ambient temperature

Min. environmental temperatureMax. environmental temperature

Protection class

-25 °C

+50 °C

IP67 to IEC/EN 60529

## **Electrical data**

Design of control element

Switching principle

Number of auxiliary contacts Number of safety contacts Power to unlock

Power to lock

Rated control voltage Us
Power consumption

Rated impulse withstand voltage U<sub>imp</sub> Rated insulation voltage U<sub>i</sub> Thermal test current I<sub>the</sub>

Utilisation category

Max. fuse rating

Opener (NC)

Creep circuit element

0 piece 4 piece Yes

No 24 V AC / DC max. 10 W

max. 10 4 kV 250 V 6 A

> AC-15: 230 V / 4 A, DC-13: 24 V / 1 A 6 A gG D-fuse

#### **ATEX**

# None

#### Miscellaneous data

Applications



sliding safety guard

hinged safety guard

#### **Dimensions**

Dimensions of the sensor

- Width of sensor
- Height of sensor
- Length of sensor

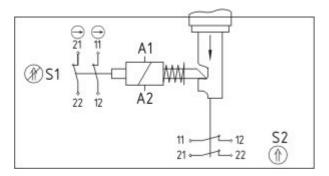
- 130 mm
- 100 mm
- 46.5 mm

## notice - Dimensional drawing

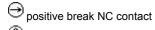
Α

setting screw Ball latch

## **Diagram**



Note Diagram







O—\_\_\_O Normally-open contact

o----- 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 415-02/02ZPK 24 VAC/DC-1637

...-1637

0,3 µm gold-plated contacts

## **Ordering code**

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

(1)

11/11

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 (only for Power to unlock)

TE Emergency exit and Manual release, Mounting outside (only for Power to

unlock)

TEI Emergency exit and Manual release, Mounting inside (only for Power to

unlock)

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

AZM 415 for double doors

AZM 415-33ZPDK(1)(2) (3)(4)

(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 (only for Power to unlock)

(4)

1637 gold-plated contacts

# Documents

Operating instructions and Declaration of conformity (es) 852 kB, 17.03.2010

Code: mrl\_azm415xx-xx\_es

Code: mrl\_azm415xx-xx\_nl

Operating instructions and Declaration of conformity (fr) 853 kB, 17.03.2010

Code: mrl\_azm415xx-xx\_fr

Operating instructions and Declaration of conformity (pl) 360 kB, 20.11.2013

Code: mrl\_azm415xx-xx\_pl

Operating instructions and Declaration of conformity (it) 832 kB, 17.03.2010

Code: mrl\_azm415xx-xx\_it

Operating instructions and Declaration of conformity (jp) 1 MB, 02.12.2010

Code: mrl\_azm415xx-xx\_jp

Operating instructions and Declaration of conformity (en) 671 kB, 02.02.2010

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) 382 kB, 27.06.2012

Code: mrl\_azm415xx-xx\_pt

Operating instructions and Declaration of conformity (de) 921 kB, 24.02.2011

Code: mrl\_azm415xx-xx\_de

BG-test certificate (en) 491 kB, 22.12.2010

Code: z\_i41p02

**BG-test certificate** (de) 502 kB, 22.12.2010

Code: z\_i41p01

CCC certification (cn) 123 kB, 04.02.2014

Code: q\_azmp05

CCC certification (en) 181 kB, 04.02.2014

Code: q\_azmp04

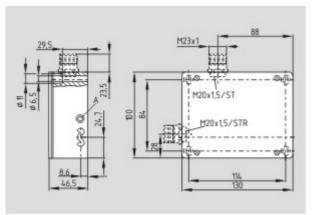
Gost certification (ru) 2 MB, 07.07.2011

Code: q\_az1p01

notice (de, en, fr) 108 kB, 27.02.2007

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 smal actuating radii in line with the plane of the actuator



# 1144797 - AZ/AZM 415-B3

- Particularly suitable for hinged guards
- For very smal 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-STS30

- Latching handle
- Suitable for all types of guard

#### **Accessories**



#### 101100887 - TRIANGULAR KEY TK-M5

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



1160461 - SZ AZ 415-22-1



1160462 - SZ AZ 415-22-2

K.A. Schmersal GmbH & Co. KG, Möddinghofe 30, D-42279 Wuppertal The data and values have been checked throroughly. Technical modifications and errors excepted. Generiert am 31.07.2015 - 05:59:47h Kasbase 3.1.12.F.64l