



# AZM201Z-ST-T-1P2PW-A-2965-1

- Power to lock
- Thermoplastic enclosure
- Max. length of the sensor chain 200 m
- Self-monitoring series-wiring
- Coding in accordance to ISO 14119 by using RFID-Technology
- 3 LEDs to show operating conditions
- Sensor technology permits an offset between actuator and interlock of ± 5 mm vertically and ± 3 mm horizontally
- Suitable for hinged and sliding guards
- Intelligent diagnosis
- Manual release
- Protection class IP66, IP67
- High holding force 2000
- symmetrical construction form, assembly on 40mm profiles
- OSSD safety outputs
- Emergency exit / Emergency release suitable for retrofitting

### **Data**

### **Ordering data**

EAN (European Article Number) 4030661513829

eCl@ss number, Version 9.0 27-27-26-03

eCl@ss number, Version 11.0 27-27-26-03

### **Approval - Standards**

Certificates TÜV

cULus

EAC

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#### **General data**

Standards IEC 60947-5-1

EN ISO 13849-1 IEC 61508 IEC 60947-5-3 EN ISO 14119 IEC 62061

general information Universal coding

Coding level according to ISO 14119 Low

Active principle RFID

Enclosure material Glass-fibre, reinforced thermoplastic

Gross weight 610 g

Time to readiness, maximum 4,000 ms

Duration of risk, maximum 200 ms

Response time safety outputs in case of switch-off by actuator, maximum

100 ms

Response time safety outputs in case

of switch-off by safety inputs,

maximum

0.5 ms

#### **General data - Features**

Power to lock Yes

Guard locking monitored Yes

Manual release Yes

Short circuit detection Yes

Short-circuit recognition Yes

Idle assignable pushbutton Yes

Freely assignable LED Yes

Safety functions Yes

Integral System Diagnostics, status Yes

Number of safety contacts 2

# Safety appraisal

Standards IEC 62061

IEC 61508 EN ISO 13849-1

## Safety appraisal - Interlocking

Performance level, up to e

Control category 4

PFH-value  $1.90 \times 10^{-9} / h$ 

PFD value  $1.60 \times 10^{-4}$ 

Safety Integrity Level (SIL), suitable for

applications in

Mission Time 20 Year(s)

## Safety appraisal - Guard locking

Performance level, up to d

Control category 2

PFH-value  $1.00 \times 10^{-8} / h$ 

PFD value  $8.90 \times 10^{-4}$ 

Safety Integrity Level (SIL), suitable for

applications in

2

3

Mission Time 20 Year(s)

#### **Mechanical data**

Mechanical life, minimum 1,000,000 Operations

Clamping force in accordance with 2,000 N

ISO14119 F<sub>zh</sub>

Clamping force, maximum F<sub>max</sub> 2,600 N

Latching force 30 N

Actuating speed, maximum 0.2 m/s

## **Mechanical data - Connection technique**

Terminal Connector Connector M23, 12-pole

Wire cross-section, minimum 23 AWG

Wire cross-section, maximum 15 AWG

### **Mechanical data - Dimensions**

Length of sensor 50 mm

Width of sensor 40 mm

Height of sensor 220 mm

### **Ambient conditions**

Degree of protection IP66 to EN 60529

IP67 to EN 60529

Ambient temperature, minimum -25 °C

Ambient temperature, maximum +60 °C

Storage and transport temperature,

minimum

-25 °C

Storage and transport temperature,

maximum

+85 °C

Relative humidity, minimum 30 %

Relative humidity, maximum 95 %

Note (Relative humidity) non-condensing

Resistance to vibrations to EN 60068-2-

6

10 ... 150 Hz, amplitude 0.35 mm

Restistance to shock 30 g / 11 ms

Protection rating III

### **Ambient conditions - Insulation value**

Rated insulation voltage U<sub>1</sub> 32 VDC

Rated impulse withstand voltage  $U_{imp}$  0.8 kV

Overvoltage category III

Degree of pollution to VDE 0100 3

#### **Electrical data**

Operating voltage, minimum 20.4 VDC

Operating voltage, maximum 26.4 VDC

No-load supply current I<sub>0</sub> 50 mA

Current consumption with solenoid ON, 200 mA

average

Current consumption with solenoid ON,

peak

700 mA / 100 ms

Operating current 1,200 mA

Switching frequency, approx. 1 Hz

#### **Electrical data - Solenoid control**

Switching thresholds -3 V ... 5 V (Low)

15 V ... 30 V (High)

Classification ZVEI CB24I, Sink C0

Classification ZVEI CB24I, Source C1

C2

C3

## Electrical data - Fail-safe digital inputs

Switching thresholds  $-3 \text{ V} \dots 5 \text{ V} \text{ (Low)}$ 

15 V ... 30 V (High)

Classification ZVEI CB24I, Sink C1

Classification ZVEI CB24I, Source

C1 C2

С3

## Electrical data - Fail-safe digital outputs

Rated operating current (safety outputs) 250 mA

Voltage drop U<sub>d</sub>, maximum 4 V

Current leakage I<sub>r</sub> 0.5 mA

Voltage, Utilisation category DC13 24 VDC

Current, Utilisation category DC13 0.25 A

Classification ZVEI CB24I, Source C2

Classification ZVEI CB24I, Sink C1

C2

## **Electrical data - Diagnostic output**

Operating current 50 mA

Voltage drop U<sub>d</sub>, maximum 4 V

Voltage, Utilisation category DC13 24 VDC

Current, Utilisation category DC13 0.05 A

#### **Status indication**

Note (LED switching conditions display) Operating condition: LED green

Error / functional defect: LED red Supply voltage UB: LED green

### Pin assignment

PIN 1 A1 Supply voltage UB

PIN 2 X1 Safety input 1

PIN 3 A2 GND

PIN 4 Y1 Safety output 1

PIN 5 OUT Diagnostic output

PIN 6 X2 Safety input 2

PIN 7 Y2 Safety output 2

PIN 8 IN Solenoid control

PIN 9 white LED

PIN 10 Key button

PIN 11 Key button

PIN 12 Not used

## **Scope of delivery**

Included in delivery Actuators must be ordered separately.

Triangular key for AZM 201

## Accessory

Recommendation (actuator) AZ/AZM201-B1

AZ/AZM201-B30

#### **Notes**

Note (General) As long as the actuating unit remains inserted in the solenoid interlock,

the unlocked safety guard can be relocked. In this case, the safety outputs are re-enabled, so that the safety guard must not be opened.

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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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