



## AZM201Z-I2-CC-T-1P2PW-A

- 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  $\pm 5$  mm vertically and  $\pm 3$  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) 4030661511153

### General data

Standards	EN ISO 13849-1
	EN ISO 14119
	IEC 60947-5-1
	IEC 60947-5-3
	IEC 61508
	IEC 62061
general information	Individual coding, multiple teaching
Coding level according to ISO 14119	High
Active principle	RFID

Enclosure material	Glass-fibre, reinforced thermoplastic
Gross weight	568.8 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
Series-wiring	Yes
Safety functions	Yes
Integral System Diagnostics, status	Yes
Number of safety contacts	2

## Safety appraisal

Standards	EN ISO 13849-1 IEC 62061 IEC 61508
-----------	--

## 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	3
Mission Time	20 Year(s)

### Safety appraisal - Guard locking

Performance level, up to	d
PFH-value	$1.00 \times 10^{-8}$ /h
PFD value	$8.90 \times 10^{-4}$
Safety Integrity Level (SIL), suitable for applications in	2
Mission Time	20 Year(s)

### Mechanical data

Mechanical life, minimum	1,000,000 Operations
Clamping force in accordance with ISO14119 $F_{zh}$	2,000 N
Clamping force, maximum $F_{max}$	2,600 N
Latching force	30 N
Actuating speed, maximum	0.2 m/s

### Mechanical data - Connection technique

Terminal Connector	Spring pulley connection
Cable section, minimum	0.25 mm <sup>2</sup>
Cable section, maximum	1.5 mm <sup>2</sup>
Note (Cable section)	All indications about the cable section are including the conductor ferrules.
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
Resistance to shock	30 g / 11 ms
Protection rating	III

## Ambient conditions - Insulation value

Rated insulation voltage $U_i$	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 $I_0$	50 mA
Current consumption with solenoid ON, average	200 mA
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 V ... 5 V (Low) 15 V ... 30 V (High)
Classification ZVEI CB24I, Sink	C1
Classification ZVEI CB24I, Source	C1 C2 C3

### Electrical data - Fail-safe digital outputs

Rated operating current (safety outputs)	250 mA
Voltage drop $U_d$ , maximum	4 V
Current leakage $I_r$	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 $U_d$ , 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 $U_B$ : LED green
---	--

## 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.
----------------	--

Schmersal, Inc., 15 Skyline Drive, Hawthorne, NY 10532

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.

Generated on: 11/9/2021, 9:24 AM