



AZM201Z-ST-T-1P2PW-2965-1

- 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)	4030661513812
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
	FCC
	IC

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 unlock	Yes
Guard locking monitored	Yes
Manual release	Yes
Short circuit detection	Yes
Short-circuit recognition	Yes
Series-wiring	Yes
Idle assignable pushbutton	Yes
Freely assignable LED	Yes
Safety functions	Yes
Integral System Diagnostics, status	Yes

Number of safety contacts	2
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Safety appraisal

Standards	IEC 62061 IEC 61508 EN ISO 13849-1
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Safety appraisal - Interlocking

Performance level, up to	e
Control category	4
PFH-value	1.90×10^{-9} /h
PFD value	1.60×10^{-4}
Safety Integrity Level (SIL), suitable for applications in	3
Mission Time	20 Year(s)

Safety appraisal - Guard locking

Performance level, up to	d
Control category	2
PFH-value	1.00×10^{-8} /h
PFD value	8.90×10^{-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	Connector M23, 12-pole
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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
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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 UB: LED green
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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
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Accessory

Recommendation (actuator)	AZ/AZM201-B1 AZ/AZM201-B30
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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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