



AZM201D-I2-ST2-T-1P2P2P-A

- Thermoplastic enclosure
- 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
- 2 OSSD safety outputs for guard door monitoring
- 2 OSSD safety outputs for guard locking monitoring
- symmetrical construction form, assembly on 40mm profiles
- Emergency exit / Emergency release suitable for retrofitting

Data

Ordering data

EAN (European Article Number) 4030661559247

Approval - Standards

Certificates TÜV
cULus
EAC
FCC
IC

General data

Standards	EN ISO 13849-1 EN ISO 14119 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	495 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
Actuator monitored	Yes
Guard locking monitored	Yes
Manual release	Yes
Short circuit detection	Yes
Short-circuit recognition	Yes
Safety functions	Yes
Integral System Diagnostics, status	Yes
Number of safety contacts	4

Safety appraisal

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

Performance level, up to	e
Control category	4
PFH-value	5.70×10^{-10} /h
PFD value	5.00×10^{-5}
Safety Integrity Level (SIL), suitable for applications in	3
Mission Time	20 Year(s)

Safety appraisal - Interlocking 2

Performance Level, up to	d
Control category	3
Safety Integrity Level (SIL), suitable for applications in	2
Mission time	20 Year(s)

Safety appraisal - Guard locking

Mission Time	20 Year(s)
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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 M12, 8-pole

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, 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
Note, Utilisation category DC13	Gilt für die Ausgänge Y1 und Y2
Classification ZVEI CB24I, Source	C2
Classification ZVEI CB24I, Sink	C1 C2

Electrical data - Diagnostic output

Operating current	100 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	ELEC_DATA_CONNECTOR_1_PIN_ASSIGNMENT_2OUT

PIN 3	A2 GND
PIN 4	Y1 Safety output 1
PIN 5	ELEC_DATA_CONNECTOR_1_PIN_ASSIGNMENT_5Y3
PIN 6	ELEC_DATA_CONNECTOR_1_PIN_ASSIGNMENT_6Y4
PIN 7	Y2 Safety output 2
PIN 8	IN Solenoid control

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.
Note (Actuator monitored)	Safety outputs Y1, Y2
Note (Guard locking monitored)	Safety outputs Y3, Y4

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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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