



AZM300Z-I2-ST-SD2P

- Repeated individual coding with RFID technology
- Coding level "High" according to ISO 14119
- Connector M12, 8-pole
- Power to unlock
- Guard locking monitored
- serial diagnostic output
- Hygienic design
- Protection class IP 69
- Suitable for mounting to profile systems
- Thermoplastic enclosure
- RFID-technology for needs-based protection against tampering
- 3 different directions of actuation
- Compact design
- 3 LEDs to show operating conditions
- Suitable for hinged and sliding guards
- Series-wiring
- Manual release

Data

Ordering data

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|-------------------------------|---------------|
| EAN (European Article Number) | 4030661426037 |
| eCl@ss number, Version 9.0 | 27-27-26-03 |
| eCl@ss number, Version 11.0 | 27-27-26-03 |

Approval - Standards

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| Certificates | TÜV cULus ECOLAB EAC FCC IC |
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General data

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| Standards | IEC 61508 IEC 60947-5-3 EN ISO 13849-1 EN ISO 14119 |
| general information | Individual coding, multiple teaching |
| Coding level according to ISO 14119 | High |
| Active principle | RFID |
| Frequency band RFID | 125 kHz |
| Transmit power, maximum | -6 dB/m |
| Enclosure material | Plastic, glass-fibre reinforced thermoplastic, self-extinguishing |
| Gross weight | 585 g |
| Time to readiness, maximum | 5,000 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 | 1.5 ms |

General data - Features

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| Power to unlock | Yes |
| Guard locking monitored | Yes |
| Serial diagnostics | Yes |
| Latching | Yes |
| Manual release | Yes |

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| Short circuit detection | Yes |
| Short-circuit recognition | Yes |
| Series-wiring | Yes |
| Safety functions | Yes |
| Integral System Diagnostics, status | Yes |
| Number of fail-safe digital outputs | 2 |

Safety appraisal

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

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| Performance level, up to | e |
| Control category | 4 |
| PFH-value | $5.20 \times 10^{-10} /h$ |
| PFD value | 4.50×10^{-5} |
| Safety Integrity Level (SIL), suitable for applications in | 3 |
| Mission Time | 20 Year(s) |

Mechanical data

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| Mechanical life, minimum | 1,000,000 Operations |
| Note (Mechanical lifetime) | When using as door stop: ≥ 50.000 operations (door mass ≤ 5 kg and actuating speed ≤ 0.5 m/s) |
| Angular offset between interlocking device and actuator, maximum | 2 ° |
| Clamping force in accordance with ISO14119 F_{zh} | 1,150 N |
| Clamping force, maximum F_{max} | 1,500 N |
| Latching force, adjustable, position 1 | 25 N |
| Latching force, adjustable, position 2 | 50 N |

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| Type of the fixing screws | 2x M6 |
| Tightening torque of the fixing screws, minimum | 6 Nm |
| Tightening torque for the fixing screws, maximum | 7 Nm |

Mechanical data - Switching distances according IEC 60947-5-3

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| Switch distance | 2 mm |
| Ensured switch distance "ON" S_{ao} | 1 mm |
| Ensured switch distance "OFF" S_{ar} | 20 mm |

Mechanical data - Connection technique

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| Terminal Connector | Connector M12, 8-pole, A-coded |
| Length of sensor chain, maximum | 200 m |
| Note (length of the sensor chain) | Cable length and cross-section change the voltage drop depending on the output current |
| Note (series connection of the sensors) | Unlimited number of devices, observe external line fusing, max. 31 devices in case of serial diagnostic SD |

Mechanical data - Dimensions

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| Length of sensor | 120 mm |
| Width of sensor | 87.5 mm |
| Height of sensor | 35 mm |

Ambient conditions

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| Degree of protection | IP66 to EN 60529 IP67 to EN 60529 IP69 to EN 60529 |
| Ambient temperature, minimum | +0 °C |
| Ambient temperature, maximum | +60 °C |

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| Storage and transport temperature, minimum | -10 °C |
| Storage and transport temperature, maximum | +90 °C |
| Relative humidity, maximum | 93 % |
| Note (Relative humidity) | non-condensing non-icing |
| 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 |
| Zulässige Aufstellhöhe über NN, maximum | 2,000 m |

Ambient conditions - Insulation value

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| Rated insulation voltage U_i | 32 VDC |
| Rated impulse withstand voltage U_{imp} | 0.8 kV |
| Overvoltage category | III |
| Degree of pollution to IEC/EN 60664-1 | 3 |

Electrical data

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| Operating voltage, minimum | 20.4 VDC |
| Operating voltage, maximum | 26.4 VDC |
| Notes (Power supply, general) | stabilised PELV power supply |
| No-load supply current I_0 | 100 mA |
| Current consumption with solenoid ON, average | 200 mA |
| Current consumption with solenoid ON, peak | 350 mA / 200 ms |
| Required rated short-circuit current to EN 60947-5-1 | 100 A |
| External wiring and device fuse rating | 2 A gG |

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| Switching frequency, maximum | 0.5 Hz |
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Electrical data - Solenoid control

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| Switching thresholds | -3 V ... 5 V (Low) 15 V ... 30 V (High) |
| Duty cycle solenoid | 100 % |
| Test pulse duration, maximum | 5 ms |
| Test pulse interval, minimum | 40 ms |
| Classification ZVEI CB24I, Sink | C0 |
| Classification ZVEI CB24I, Source | C1 C2 C3 |

Electrical data - Fail-safe digital inputs

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|-----------------------------------|--|
| Switching thresholds | -3 V ... 5 V (Low) 15 V ... 30 V (High) |
| Current consumption at 24V | 5 mA |
| Test pulse duration, maximum | 1 ms |
| Test pulse interval, minimum | 100 ms |
| Classification ZVEI CB24I, Sink | C1 |
| Classification ZVEI CB24I, Source | C1 C2 C3 |

Electrical data - Fail-safe digital outputs

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| Versions | short-circuit proof, p-type |
| Voltage drop U_d , maximum | 4 V |
| Current leakage I_r | 0.5 mA |
| Voltage, Utilisation category DC12 | 24 VDC |
| Current, Utilisation category DC12 | 0.25 A |
| Voltage, Utilisation category DC13 | 24 VDC |

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| Current, Utilisation category DC13 | 0.25 A |
| Test pulse duration, maximum | 0.5 ms |
| Test pulse interval, typical | 1000 ms |
| Classification ZVEI CB24I, Source | C2 |
| Classification ZVEI CB24I, Sink | C1 C2 |

Electrical data - Diagnostic output

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|------------------------------------|-----------------------------|
| Versions | short-circuit proof, p-type |
| Voltage drop U_d , maximum | 4 V |
| Voltage, Utilisation category DC12 | 24 VDC |
| Current, Utilisation category DC12 | 0.05 A |
| Voltage, Utilisation category DC13 | 24 VDC |
| Current, Utilisation category DC13 | 0.05 A |

Electrical data - Serial diagnostic SD

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| Operation current | 150 mA |
| Wiring capacity | 50 nF |

Status indication

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| 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

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| PIN 1 | A1 Supply voltage UB |
| PIN 2 | X1 Safety input 1 |
| PIN 3 | A2 GND |
| PIN 4 | Y1 Safety output 1 |

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| PIN 5 | OUT serial diagnostic output |
| PIN 6 | X2 Safety input 2 |
| PIN 7 | Y2 Safety output 2 |
| PIN 8 | IN serial diagnostic input |

Scope of delivery

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| Included in delivery | Actuators must be ordered separately. |
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Accessory

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| Recommendation (actuator) | AZ/AZM300-B1 |
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Notes

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| Note (General) | <p>For doors that are flush with the door frame, the optional mounting plate MP-AZ/AZM300-1 can be used.</p> <p>For glass and Makrolon doors, the optional mounting kit MS-AZ/AZM300-B1-1 can be used.</p> <p>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.</p> |
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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.

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