



AZM400Z-ST-I1-1P2P

- Individual coding with RFID technology
- Coding level "High" according to ISO 14119
- Connector M12, 8-pole
- Guard locking monitored
- 1 Diagnostic output
- manual release
- Bistable, motor-driven system
- Clamping force 10.000
- Release possible against lateral forces up to 300 N
- PL e / cat. 4 / SIL 3 for interlocking and guard locking function
- Two-channel input signal of the guard locking function
- Operation on P/P- and P/N-switching outputs
- High tolerance to door misalignment

Data

Ordering data

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|-------------------------------|---------------|
| EAN (European Article Number) | 4030661472591 |
| 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 EAC FCC IC |
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General data

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| Standards | IEC 60947-5-1 EN ISO 13849-1 IEC 61508 EN ISO 14119 |
| general information | Individual coding |
| Coding level according to ISO 14119 | High |
| Active principle | Magnetic field RFID |
| Enclosure material | Light alloy die-casting |
| Gross weight | 764 g |
| Time to readiness, maximum | 1,500 ms |
| Reaction time, maximum | 100 ms |

General data - Features

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| 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 diagnostic signals | 1 |
| Number of safety contacts | 2 |

Safety appraisal

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

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|--------------------------|---|
| Performance level, up to | e |
|--------------------------|---|

| | |
|--|--------------------------|
| Control category | 4 |
| PFH-value | 1.00×10^{-9} /h |
| PFD value | 9.00×10^{-5} |
| Safety Integrity Level (SIL), suitable for applications in | 3 |
| Mission Time | 20 Year(s) |

Safety appraisal - Guard locking

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|--|--------------------------|
| Performance level, up to | e |
| Control category | 4 |
| PFH-value | 1.80×10^{-9} /h |
| PFD value | 1.60×10^{-4} |
| Safety Integrity Level (SIL), suitable for applications in | 3 |
| Mission Time | 20 Year(s) |

Mechanical data

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| Interlocking principle | bistable |
| Mechanical life, minimum | 1,000,000 Operations |
| Note (Mechanical lifetime) | Which have a lateral force $F_{trans} = 100$ N: 100.000 operations |
| Minimum distance devices | 30 mm |
| Clamping force in accordance with ISO14119 F_{zh} | 10,000 N |
| Clamping force, maximum F_{max} | 13,000 N |
| Lateral force at bolt return, maximal (against locked door) | 300 N |
| Note (Lateral force at bolt return) | Does not apply to emergency exit, Bowden cable and manual release |
| Tightening torque of the screw | 8 Nm |

Mechanical data - Connection technique

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| Terminal Connector | Connector M12, 8-pole |
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Mechanical data - Dimensions

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| Length of sensor | 46.7 mm |
| Width of sensor | 77.8 mm |
| Height of sensor | 166.7 mm |

Ambient conditions

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|--|--------------------------------------|
| Degree of protection | IP66 to EN 60529 IP67 to EN 60529 |
| Ambient temperature, minimum | -20 °C |
| Ambient temperature, maximum | +55 °C |
| Storage and transport temperature, minimum | -40 °C |
| Storage and transport temperature, maximum | +85 °C |
| 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

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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 VDE 0100 | 3 |

Electrical data

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|-------------------------------------|--------|
| Operating Current | 100 mA |
| Current consumption, maximum | 600 mA |
| Current consumption at 24V, minimum | 10 mA |
| Current consumption at 24V, maximum | 15 mA |
| No-load supply current I_0 | 100 mA |

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|--|--------|
| Rated operating voltage | 24 VDC |
| Rated operating voltage | 24 VDC |
| Operating current | 50 mA |
| Required rated short-circuit current to EN 60947-5-1 | 100 A |
| Switching frequency, approx. | 0.3 Hz |
| Open / close cycle (Motor), minimum | 3 |
| Minimal average cycle time (with continuous operation) | 20 s |

Electrical data - Control inputs

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| Switching thresholds of the control inputs | –3 V ... 5 V (Low) 15 V ... 30 V (High) |
| Allowable discrepancy time (input), maximum | 10 s |
| Classification ZVEI CB24I, Sink | C0 |
| Classification ZVEI CB24I, Source | C1 C2 C3 |

Electrical data - Fail-safe digital inputs

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|---------------------------------|----|
| Classification ZVEI CB24I, Sink | C1 |
|---------------------------------|----|

Electrical data - Fail-safe digital outputs

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|--|--------|
| Rated operating current (safety outputs) | 250 mA |
| Voltage drop U_d , maximum | 2 V |
| Current leakage I_r | 1.5 mA |
| Voltage, Utilisation category DC12 | 24 VDC |
| Current, Utilisation category DC12 | 0.25 A |
| Voltage, Utilisation category DC13 | 24 VDC |
| Current, Utilisation category DC13 | 0.25 A |
| Classification ZVEI CB24I, Source | C2 |

Electrical data - Diagnostic output

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|------------------------------------|-----------------------------|
| Versions | short-circuit proof, p-type |
| Voltage drop U_d , maximum | 2 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 |

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 | E1 Control input 1 |
| PIN 3 | A2 GND |
| PIN 4 | Y1 Safety output 1 |
| PIN 5 | OUT Diagnostic output |
| PIN 6 | E3 Control input 3 |
| PIN 7 | Y2 Safety output 2 |
| PIN 8 | E2 Control input 2 |

Scope of delivery

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| Included in delivery | Actuators must be ordered separately. |
| Delivery scope of Mounting material | 2 x M6 (10.9) |

Accessory

Recommendation (actuator)

AZM400-B1

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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