



AZM201Z-ST2-T-SD2P-A

- Power to lock
- 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

Product type description	AZM201Z-ST2-T-SD2P-A
Article number (order number)	103032732
EAN (European Article Number)	4030661529424
eCl@ss number, version 9.0	27-27-26-03
eCl@ss number, version 11.0	27-27-26-03
eCl@ss number, version 12.0	27-27-26-03
ETIM number, version 7.0	EC002593
ETIM number, version 6.0	EC002593

Approvals - Standards

Certificates	TÜV cULus EAC FCC IC
--------------	----------------------------------

General data

Standards	EN IEC 60947-5-1 EN ISO 13849-1 EN IEC 61508 EN IEC 60947-5-3 EN ISO 14119 EN IEC 62061
Coding	Universal coding
Coding level according to EN ISO 14119	Low
Working principle	RFID
Enclosure material	Glass-fibre, reinforced thermoplastic
Gross weight	596 g
Time to readiness, maximum	4,000 ms
Duration of risk, maximum	200 ms
Reaction time, switching off safety outputs via actuator, maximum	100 ms
Reaction time, switching off safety outputs via safety inputs, maximum	0.5 ms

General data - Features

Solenoid interlock monitored	Yes
Serial diagnostics	Yes
Manual release	Yes
Short circuit detection	Yes
Cross-circuit detection	Yes
Series-wiring	Yes
Safety functions	Yes
Integral system diagnostics, status	Yes

Number of safety contacts	2
Number of series-wiring of sensors	31

Safety classification

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

Safety classification - Interlocking function

Performance Level, up to	e
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 classification - Guard locking function

Mission time	20 Year(s)
--------------	------------

Mechanical data

Mechanical life, minimum	1,000,000 Operations
Holding force F_{Zh} in accordance with EN ISO 14119	2,000 N
Holding force F_{max} , maximum	2,600 N
Latching force	30 N
Actuating speed, maximum	0.2 m/s

Mechanical data - Connection technique

Termination	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	IP67 IP66
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 vibration to EN 60068-2-6	10 ... 150 Hz, amplitude 0.35 mm
Resistance to shock	30 g / 11 ms
Protection class	III

Ambient conditions - Insulation values

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 , maximum	50 mA
Current consumption with magnet ON, average	200 mA
Current consumption with magnet ON, peak	700 mA / 100 ms
Operating current	1,200 mA
Switching frequency, approx.	1 Hz

Electrical data - Magnet 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 - Safety 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 - Safety digital outputs

Rated operating current (safety outputs)	250 mA
Voltage drop U_d , maximum	2 V
Leakage current I_r , maximum	0.5 mA
Voltage, Utilisation category DC-13	24 VDC
Current, Utilisation category DC-13	0.25 A

Classification ZVEI CB24I, Source C2

Classification ZVEI CB24I, Sink C1
C2

Electrical data - Diagnostic outputs

Operating current	50 mA
Voltage drop U_d , maximum	4 V
Voltage, Utilisation category DC-13	24 VDC
Current, Utilisation category DC-13	0.05 A

Status indication

Note (LED switching conditions display)	Operating condition: LED green Error / functional defect: LED red Supply voltage UB: LED green
---	--

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

Scope of delivery

Scope of delivery	Actuators must be ordered separately. Triangular key for AZM 201
-------------------	---

Accessory

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

Note

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.
----------------	--

K.A. Schmersal GmbH & Co. KG, Möddinghofe 30, 42279 Wuppertal

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: 26/08/2022, 08:33