

AZM201Z-ST2-T-1P2PW-A



- Power to lock
- Manual release
- Intelligent diagnosis
- Thermoplastic enclosure
- Self-monitoring series-wiring
- 3 LEDs to show operating conditions
- Max. length of the sensor chain 200 m
- Suitable for hinged and sliding guards
- RFID-technology for needs-based protection against tampering
- Sensor technology permits an offset between actuator and interlock of ± 5 mm vertically and ± 3 mm horizontally

Data

Ordering data

AZM201Z-ST2-T-1P2PW-A
103016753

EAN (European Article Number) 4030661509136

eCl@ss number, Version 9.0 27-27-26-03

Approval - Standards

TÜV
cULus
EAC
FCC
IC

General data

AZM 201

	IEC 60947-5-1
	ISO 13849-1
	IEC 61508
	IEC 60947-5-3
	ISO 14119
	IEC 62061
general information	Universal coding
Coding level according to ISO 14119	Low
	RFID
Enclosure material	Glass-fibre, reinforced thermoplastic
Gross weight	594.9 g
Time to readiness, maximum	4,000 ms
Duration of risk, maximum	200 ms

General data - Features

Power to lock	Yes
Guard locking monitored	Yes
Manual release	Yes
Short circuit detection	Yes
Short-circuit recognition	Yes
Series-wiring	Yes
Safety functions	Yes
Integral System	Yes
Diagnostics, status	Yes
Number of safety contacts	2

Safety appraisal

ISO 13849-1
IEC 62061
IEC 61508

Safety appraisal - Interlocking

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

Safety appraisal - Guard locking

Performance level, up to	d
Control category	2

PFH-value	1.00 x 10 ⁻⁸ /h
PFD value	8.90 x 10 ⁻⁴
Safety Integrity Level (SIL), applicable for	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 M12, 8-pole
--------------------	-----------------------

Mechanical data - Dimensions

Height of sensor	220 mm
Length of sensor	50 mm
Width of sensor	40 mm

Ambient conditions

Protection class	IP66 to IEC 60529 IP67 to IEC 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 30 g / 11 ms III

Ambient conditions - Insulation value

Rated impulse withstand voltage	0.8 kV
	III
	3

Electrical data

Operating voltage, minimum	20.4 VDC
Operating voltage, maximum	26.4 VDC
No-load current	600 mA
Operating current	1,200 mA
Reaction time of actuator, maximum	100 ms
Reaction time of input, maximum	0.5 ms
Switching frequency, approx.	1 Hz

Electrical data - Solenoid control

-3 V ... 5 V (Low)
15 V ... 30 V (High)
C0
C1
C2
C3

Electrical data - Fail-safe digital inputs

-3 V ... 5 V (Low)
15 V ... 30 V (High)
C1
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	0.5 mA
Voltage, Utilisation category DC13	24 VDC
Current, Utilisation category DC13	0.3 A

C2

C1

C2

Electrical data - Diagnostic output

Operating current
(diagnostic output) 50 mA

Voltage drop U_d , maximum 4 V

Voltage, Utilisation
category DC13 24 VDC

Current, Utilisation category
DC13 0.1 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 Diagnostic output
PIN 6	X2 Safety input 2
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

Accessory

AZ/AZM201-B1
AZ/AZM201-B30

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.

Ordering code

Product type description:

AZM201(1)-(2)-(3)-T-(4)-(5)

(1)

Z Solenoid interlock monitored

NB, MBN, BN Actuator monitored

(2)

without Standard coding

I1 Individual coding

I2 Individual coding, re-teaching enabled

(3)

SK Screw terminals

CC Cage clamps

ST Connector plug M23, 12-pole

(4)

1P2PW 1 diagnostic output, p-type and >2 safety outputs, p-type > (combined diagnostic signal: guard system closed and interlock locked)

SD2P serial diagnostic output and 2 p-type safety outputs

(5)

without Power to unlock

A Power to lock

Pictures

Photo/Product/Catalogue



ID: kazm2f48

| 335,0 kB | .png | 74.083 x 340.783 mm - 210 x 966

Pixel - 72 dpi

| 735,6 kB | .jpg | 135.819 x 625.122 mm - 385 x 1772

Pixel - 72 dpi

Dimension/Product/Basic

ID: 1azm2g12

| 5,3 kB | .png | 74.083 x 64.911 mm - 210 x 184 Pixel
- 72 dpi

| 146,3 kB | .jpg | 352.778 x 308.681 mm - 1000 x 875
Pixel - 72 dpi

| 21,1 kB | .jpg | 169.686 x 148.519 mm - 481 x 421
Pixel - 72 dpi

Graphic/Product/Wiring

ID: kazm2l26

| 105,6 kB | .jpg | 352.778 x 192.969 mm - 1000 x 547
Pixel - 72 dpi

| 50,3 kB | .cdr |

K.A. Schmersal GmbH & Co. KG, Möddinghofe 3, D-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 372021-01-30T18:34:37+01:000601Europe/BerlinSat, 30 Jan 2021 18:34:37

+010037pmSaturday.30pm31Europe/BerlinCET3401Europe/BerlinJanuary2021Sat, 30 Jan 2021 18:34:37
+010001pm31