Datasheet - AZM 200ST-T-AS AP

AS interface safety at work / Safety switchgear / Solenoid interlock / AZM 200 AS

☒ Preferred typ

(Minor differences between the printed image and the original product may exist!)

- Solenoid interlock
- Thermoplastic enclosure
- High holding force 2000
- 40 mm x 244 mm x 50 mm
- Interlock with protection against incorrect locking.
- Double-insulated ⧈
- Long life
- Integrated AS-Interface
- Solenoid supply 24 VDC (Aux)
- Guard locking monitored

Ordering details

Product type description	AZM 200ST-T-AS AP
Article number	101190948
EAN Code	4030661356433
eCl@ss	27-27-26-03

Approval

Approval	AS-i TÜV USA/CAN

Classification

Standards	EN ISO 13849-1, IEC 61508, IEC 60947-5-3
PL	up e
Control category	4
PFH	4 x 10^{-9} / h
SIL	up 3
Mission time	20 Years
Classification	PDF-M

Global Properties

Permanent light	AZM 200 AS
Standards	EN 50295, EN 60947-5-1, IEC 61508, EN ISO 13849-1, IEC 60947-5-3
Compliance with the Directives (Y/N) CE	Yes
Number of actuating directions	1
Active principle	electromechanical
Duty cycle ED	Magnet 100 %
Materials	
- Material of the housings	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
Housing coating	None
Weight	523
Guard locking monitored (Y/N)	Yes
Actuator monitored (Y/N)	No
Response time	< 60
Duration of risk	< 120
Time to readiness	< 4000

Mechanical data

Design of electrical connection	connector plug M12, 4-pole
Mechanical life	> 1.000.000 operations
restistance to shock	30 g / 11 ms
Resistance to vibration	10 HZ … 150 HZ, Amplitude 0,35 mm
Latching force	30
Clamping force F	2000 N
Tightening torque for cover srews	0,7 … 1
Max. Actuating speed	≤ 2

Ambient conditions

Ambient temperature	
- Min. environmental temperature	−25
- Max. environmental temperature	+60
Storage and transport temperature	
- Min. Storage and transport temperature	−25
- Max. Storage and transport temperature	+85
Relative humidity	30 … 95
- non-condensing	
Protection class	IP67 to IEC/EN 60529
Protection rating	II ⧈
Air clearances and creepage distances To IEC/EN 60664-1	
- Rated impulse withstand voltage U_{imp}	0,8 kV
- Rated insulation voltage U_i	32 VDC
- Overvoltage category	III
- Degree of pollution	3

Electrical data

Power to unlock	No
Power to lock	Yes

Electrical data - AS interface

AS-i Supply voltage	26.5 … 31.6 VDC, Protection against polarity reversal
AS-i operating current	≤ 100
AS-i Device insulation	internally short-circuit proof
AS-i Specification	
- version	V 2.1
- Profile	S-7.B.F.E
- IO-Code	0x7
- ID-Code	0xB
- ID-Code1	0xF
- ID-Code2	0xE
AS-i Inputs	
- Channel 1	Data bits DI 0/DI 1= dynamic code transmission
- Channel 2	Data bits DI 2/DI 3= dynamic code transmission
AS-i Outputs	
- DO 0	Solenoid control
- DO 1	not used
- DO 2	not used
- DO 3	not used
AS-i Parameter bits	
- P0	Safety guard and actuator detected
- P1	Solenoid interlock locked
- P2	magnet voltage in tolerance range
- P3	Error
AS-i input module address	0
- Default on address 0, programmable via the AS-Interface Master or Hand-held programming device	

Electrical data - Auxiliary voltage (Aux)

Supply voltage U_B	24 VDC (−15 % / +10 %) stabilised PELV
Operating current	≤ 500
Device insulation	≤ 4 A (if used in accordance with UL 508)

LED switching conditions display

LED switching conditions display (Y/N)	Yes
AS-i LED switching conditions display	
(1) green/red LED (AS-i duo LED)	Supply voltage / Communication error / slave address = 0
(2) red LED	device error
(3) yellow LED	Device status

ATEX

Explosion protection categories for gases	None
Explosion protected category for dusts	None

Miscellaneous data

Applications	 sliding safety guard,  removable guard,  hinged safety guard

Dimensions

Dimensions of the sensor	
- Width of sensor	40
- Height of sensor	244
- Length of sensor	50

Pin assignment

1	AS-i +
2	Aux − (P)
3	AS-i −
4	Aux + (P)

notice

Interlocks with power to lock principle may only be used in special cases after a thorough evaluation of the accident risk, since the guarding device can immediately be opened on failure of the electrical power supply or when the main switch is opened.

Included in delivery

Actuators must be ordered separately.

Ordering code

AZM 200 (1) ST-T-AS (2)P

(1)	
without	Guard locking monitored
B	Actuator monitored
BZ	
(2)	
without	Power to unlock
A	Power to lock

Documents

Operating instructions and Declaration of conformity (es) 364 kB, 19.07.2016
Code: mrl_azm200as_es

Operating instructions and Declaration of conformity (pl) 373 kB, 28.10.2016
Code: mrl_azm200as_pl

Operating instructions and Declaration of conformity (da) 280 kB, 13.10.2015
Code: mrl_azm200as_da

Operating instructions and Declaration of conformity (nl) 399 kB, 05.07.2016
Code: mrl_azm200as_nl

Operating instructions and Declaration of conformity (fr) 359 kB, 20.07.2016
Code: mrl_azm200as_fr

Operating instructions and Declaration of conformity (de) 549 kB, 20.06.2016
Code: mrl_azm200as_de

Operating instructions and Declaration of conformity (jp) 394 kB, 22.02.2012
Code: mrl_azm200as_jp

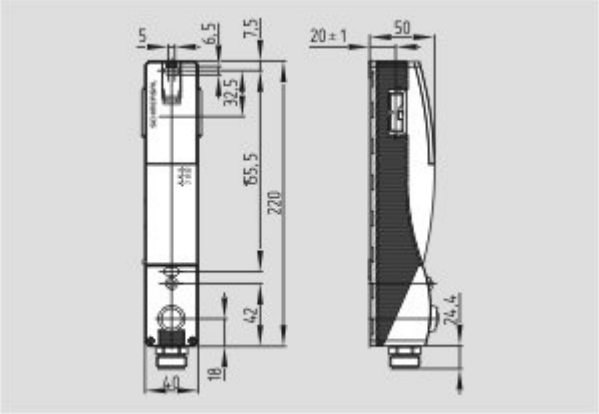
Operating instructions and Declaration of conformity (cn) 474 kB, 26.07.2017
Code: mrl_azm200as_cn

Operating instructions and Declaration of conformity (en) 400 kB, 20.06.2016
Code: mrl_azm200as_en

Operating instructions and Declaration of conformity (pt) 344 kB, 03.02.2017
Code: mrl_azm200as_pt

Operating instructions and Declaration of conformity (it) 407 kB, 05.07.2016
Code: mrl_azm200as_it

Images



Dimensional drawing (miscellaneous)

System components

Actuator

101183470 - AZ/AZM 200-B1-RTP0

- Actuators with return spring
- Actuator for sliding guards
- Tolerates up to max. 5 mm overtravel

101183469 - AZ/AZM 200-B1-RT

- Actuators with return spring
- Actuator for sliding guards
- Tolerates up to max. 5 mm overtravel

101183466 - AZ/AZM 200-B1-LTP0

- Actuators with return spring
- Actuator for sliding guards
- Tolerates up to max. 5 mm overtravel

101183465 - AZ/AZM 200-B1-LT

• Actuators with return spring
• Actuator for sliding guards
• Tolerates up to max. 5 mm overtravel

101192104 - AZ/AZM 200-B30-RTAG2P25

• One-hand emergency exit,
even in de-energised condition
• Actuator for hinged guards
• With door detection sensor T
• Easy and intuitive operation
• No risk of injury from protruding actuator
• No supplementary door handles required
• Does not protrude into the door opening
• Various handles available
Greater mechanical stability

101191659 - AZ/AZM 200-B30-RTAG2P20

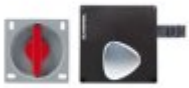
• One-hand emergency exit,
even in de-energised condition
• Actuator for hinged guards
• With door detection sensor T
• Easy and intuitive operation
• No risk of injury from protruding actuator
• No supplementary door handles required
• Does not protrude into the door opening
• Various handles available
Greater mechanical stability

101181143 - AZ/AZM 200-B30-RTAG2P1

• One-hand emergency exit,
even in de-energised condition
• Actuator for hinged guards
• With door detection sensor T
• Easy and intuitive operation
• No risk of injury from protruding actuator
• No supplementary door handles required
• Does not protrude into the door opening
• Various handles available
Greater mechanical stability

101181139 - AZ/AZM 200-B30-RTAG2

• Actuator for hinged guards
• With door detection sensor T
• Easy and intuitive operation
• No risk of injury from protruding actuator
• No supplementary door handles required
• Does not protrude into the door opening
• Various handles available
Greater mechanical stability



101192106 - AZ/AZM 200-B30-LTAG2P25

• One-hand emergency exit,
even in de-energised condition
• Actuator for hinged guards
• With door detection sensor T
• Easy and intuitive operation
• No risk of injury from protruding actuator
• No supplementary door handles required
• Does not protrude into the door opening
• Various handles available
Greater mechanical stability

101189020 - AZ/AZM 200-B30-LTAG2P20

• One-hand emergency exit,
even in de-energised condition
• Actuator for hinged guards
• With door detection sensor T
• Easy and intuitive operation
• No risk of injury from protruding actuator
• No supplementary door handles required
• Does not protrude into the door opening
• Various handles available
Greater mechanical stability

101181141 - AZ/AZM 200-B30-LTAG2P1

• One-hand emergency exit,
even in de-energised condition
• Actuator for hinged guards
• With door detection sensor T
• Easy and intuitive operation
• No risk of injury from protruding actuator
• No supplementary door handles required
• Does not protrude into the door opening
• Various handles available
Greater mechanical stability

101181137 - AZ/AZM 200-B30-LTAG2

• Actuator for hinged guards
• With door detection sensor T
• Easy and intuitive operation
• No risk of injury from protruding actuator
• No supplementary door handles required
• Does not protrude into the door opening
• Various handles available
Greater mechanical stability

101192103 - AZ/AZM 200-B30-RTAG1P25

• One-hand emergency exit,
even in de-energised condition
• Actuator for hinged guards
• With door detection sensor T
• Easy and intuitive operation
• No risk of injury from protruding actuator
• No supplementary door handles required
• Does not protrude into the door opening
• Various handles available
Greater mechanical stability

101192102 - AZ/AZM 200-B30-LTAG1P25

• One-hand emergency exit,
even in de-energised condition
• Actuator for hinged guards

• With door detection sensor T
• Easy and intuitive operation
• No risk of injury from protruding actuator
• No supplementary door handles required
• Does not protrude into the door opening
• Various handles available
Greater mechanical stability

101186144 - AZ/AZM 200-B30-RTAG1P20

• One-hand emergency exit,
even in de-energised condition
• Actuator for hinged guards
• With door detection sensor T
• Easy and intuitive operation
• No risk of injury from protruding actuator
• No supplementary door handles required
• Does not protrude into the door opening
• Various handles available
Greater mechanical stability

101178738 - AZ/AZM 200-B30-RTAG1P1

• One-hand emergency exit,
even in de-energised condition
• Actuator for hinged guards
• With door detection sensor T
• Easy and intuitive operation
• No risk of injury from protruding actuator
• No supplementary door handles required
• Does not protrude into the door opening
• Various handles available
Greater mechanical stability

101178680 - AZ/AZM 200-B30-RTAG1

• Actuator for hinged guards
• With door detection sensor T
• Easy and intuitive operation
• No risk of injury from protruding actuator
• No supplementary door handles required
• Does not protrude into the door opening
• Various handles available
Greater mechanical stability

101186150 - AZ/AZM 200-B30-LTAG1P20

• One-hand emergency exit,
even in de-energised condition
• Actuator for hinged guards
• With door detection sensor T
• Easy and intuitive operation
• No risk of injury from protruding actuator
• No supplementary door handles required
• Does not protrude into the door opening
• Various handles available
Greater mechanical stability

101178668 - AZ/AZM 200-B30-LTAG1P1

• One-hand emergency exit,
even in de-energised condition
• Actuator for hinged guards

• With door detection sensor T
• Easy and intuitive operation
• No risk of injury from protruding actuator
• No supplementary door handles required
• Does not protrude into the door opening
• Various handles available
Greater mechanical stability

101178681 - AZ/AZM 200-B30-LTAG1

• Actuator for hinged guards
• With door detection sensor T
• Easy and intuitive operation
• No risk of injury from protruding actuator
• No supplementary door handles required
• Does not protrude into the door opening
• Various handles available
Greater mechanical stability
