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## Datasheet - AZM 200ST-T-AS P

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

Preferred typ



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

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

#### **Ordering details**

Product type description
Article number
EAN Code
eCl@ss

#### Approval

Approval





## 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**

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 bousings Plastic, glass-fibre reinforced thermoplastic, self-extinguishing	Permanent light Standards	AZM 200 AS EN 50295, EN 60947-5-1, IEC 61508, EN ISO 13849-1, IEC 60947-5-3
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	Compliance with the Directives (Y/N) CE	Yes
Active principle       electromechanical         Duty cycle ED       Magnet 100 %         Materials       - Material of the housings         - Material of the housings       Plastic, glass-fibre reinforced thermoplastic, self-extinguishing	Number of actuating directions	1
Duty cycle ED Magnet 100 % Materials - Material of the housings Plastic, glass-fibre reinforced thermoplastic, self-extinguishing	Active principle	electromechanical
- Materials Plastic, glass-fibre reinforced thermoplastic, self-extinguishing	Duty cycle ED	Magnet 100 %
- Material of the housings Plastic glass-fibre reinforced thermoplastic self-extinguishing	Materials	
	- Material of the housings	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
Housing coating None	Housing coating	None
Weight 512	Weight	512
Guard locking monitored (Y/N) Yes	Guard locking monitored (Y/N)	Yes
Actuator monitored (Y/N) No	Actuator monitored (Y/N)	No
Response time < 60	Response time	< 60
Duration of risk < 120	Duration of risk	< 120
Time to readiness < 4000	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	
Protection rating Air clearances and creepage distances To IEC/EN 60664-1	II 🗆
Protection rating Air clearances and creepage distances To IEC/EN 60664-1 - Rated impulse withstand voltage U <sub>imp</sub>	II □ 0,8 kV
Protection rating Air clearances and creepage distances To IEC/EN 60664-1 - Rated impulse withstand voltage U <sub>imp</sub> - Rated insulation voltage U <sub>i</sub>	0,8 kV 32 VDC
Protection rating Air clearances and creepage distances To IEC/EN 60664-1 - Rated impulse withstand voltage U <sub>imp</sub> - Rated insulation voltage U <sub>i</sub> - Overvoltage category	II □ 0,8 kV 32 VDC III
Protection rating Air clearances and creepage distances To IEC/EN 60664-1 - Rated impulse withstand voltage U <sub>imp</sub> - Rated insulation voltage U <sub>i</sub> - Overvoltage category - Degree of pollution	II □ 0,8 kV 32 VDC III 3

## **Electrical data**

Power to unlock	Yes
Power to lock	No

## 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 UB	24 VDC (-15 % / +10 %) stabilised PELV
Operating current	≤ 500
Device insulation	$\leq$ 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

None None

## ATEX

Explosion protection categories for gases
Explosion protected category for dusts

## Miscellaneous data

Applications Sliding safety guard, removable guard, inged 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
В	Actuator monitored
BZ	
(2)	
without	Power to unlock
Α	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









- 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
- · No risk of injury from protruding actuator
- · No supplementary door handles required
- 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

  - Does not protrude into the door opening
  - · Various handles available



- 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

-1





# 



- 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

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The data and values have been checked throroughly. Technical modifications and errors excepted. Generiert am 13.02.2019 - 12:45:08h Kasbase 3.3.0.F.64I

