

Datasheet - AZS 2305

Fail-safe delay timer / AZS 2305



Preferred typ



- Fail-safe delay timer
- Time adjustable from 0,1 s to 99 min
- 3 safety contacts
- 2 Signalling outputs

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

Ordering details

Product type description	AZS 2305
Article number	101126703
EAN Code	4030661058986
eCl@ss	27-37-19-01

Approval


Approval



Classification

Standards	EN ISO 13849-1, IEC 61508
PL	up d
Control category	up 3
PFH value	1.0 x 10 ⁻⁷ /h
SIL	up 2
Mission time	20 Years
PFH _d	
Switching frequency c	
MTTF _d	
Classification	

Global Properties

Permanent light	AZS 2305
Standards	IEC/EN 60204-1, EN ISO 13849-1, BG-GS-ET-20
Compliance with the Directives (Y/N) 	Yes
Mounting	snaps onto standard DIN rail to EN 60715
Materials	
- Material of the housings	Plastic, glass-fibre reinforced thermoplastic
Weight	
Start conditions	Automatic
Start input (Y/N)	No
Feedback circuit (Y/N)	No
Reset after disconnection of supply voltage (Y/N)	Yes
Automatic reset function (Y/N)	Yes
Reset with edge detection (Y/N)	No

Mechanical data

Connection type	Screw connection
Cable section	
- Min. Cable section	-
- Max. Cable section	4
Pre-wired cable	rigid or flexible
Tightening torque for the terminals	0,4
Detachable terminals (Y/N)	No
notice	All indications about the cable section are including the conductor ferrules.
resistance to shock	30 g / 11 ms
Resistance to vibration To EN 60068-2-6	10...55 HZ, Amplitude 0,35 mm
Time range	0,1 s ... 99 min.
Minimum time t_{min} .	0,1 s
Maximum time t_{max} .	99 min.
Timing tolerance	< 2 %

Ambient conditions

Ambient temperature	
- Min. environmental temperature	0
- Max. environmental temperature	+55
Storage and transport temperature	
- Min. Storage and transport temperature	-25
- Max. Storage and transport temperature	+70
Protection class	
- Protection class-Enclosure	IP40
- Protection class-Terminals	IP20
- Protection class-Clearance	IP54
Air clearances and creepage distances To IEC/EN 60664-1	
- Rated impulse withstand voltage U_{imp}	4.8 kV
- Overvoltage category	III To VDE 0110
- Degree of pollution	2 To VDE 0110

Electromagnetic compatibility (EMC)

EMC rating	conforming to EMC Directive
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Electrical data

Rated DC voltage for controls	
- Max. rated DC voltage for controls	20.4
- Max. rated DC voltage for controls	27.6
Rated AC voltage for controls, 50 Hz	
- Min. rated AC voltage for controls, 50 Hz	-
- Max. rated AC voltage for controls, 50 Hz	-
Rated AC voltage for controls, 60 Hz	
- Min. rated AC voltage for controls, 60 Hz	-
- Max. rated AC voltage for controls, 60 Hz	-
Contact resistance	max. 100 mΩ
Power consumption	< 5
Type of actuation	DC
Switch frequency	10
Rated operating voltage U_e	24 VDC \pm 15%
Operating current I_e	0,1 A
Electronic protection (Y/N)	No

Inputs

Monitored inputs

- Short-circuit recognition (Y/N)	Yes
- Wire breakage detection (Y/N)	Yes
- Earth connection detection (Y/N)	Yes
Number of shutters	1
Number of openers	1
Input resistance	approx. 2000 Ω at GND
Input signal "1"	10 ... 30 VDC
Input signal "0"	0 ... 2 VDC
Cable length	100 m with 0,75 mm ² (for Rated voltage)

Outputs

Number of safety contacts	3
Number of auxiliary contacts	0
Number of signalling outputs	2
Switching capacity	
- Switching capacity of the safety contacts	min. 10 mA, max. 6 A
- Switching capacity of the signaling/diagnostic outputs	Y1, Y2 = 100 mA
Fuse rating	
- Protection of the safety contacts	6 A gG D-fuse
- Fuse rating for the signaling/diagnostic outputs	short-circuit proof
Signalling output	Y1: Authorized operation, safety contacts on; Y2: No authorised operation, safety contacts off
Utilisation category To EN 60947-5-1	AC-15: 250 V / 2 A DC-13: 24 V / 2 A
Number of undelayed semi-conductor outputs with signaling function	2
Number of undelayed outputs with signaling function (with contact)	0
Number of delayed semi-conductor outputs with signaling function.	0
Number of delayed outputs with signalling function (with contact).	0
Number of secure undelayed semi-conductor outputs with signaling function	0
Number of secure, undelayed outputs with signaling function, with	

contact.	0
Number of secure, delayed semi-conductor outputs with signaling function	0
Number of secure, delayed outputs with signaling function (with contact).	0

LED switching conditions display

LED switching conditions display (Y/N)	Yes
Number of LED's	1

Integral system diagnosis \$missingShortName\$

Integral system diagnosis ISD

- The following faults are registered by the safety monitoring modules and indicated by ISD
- Failure of the safety relay to pull-in or drop-out
- Fault on the input circuits or the relay control circuits of the safety monitoring module
- Difference in time setting between channel I and channel II
- Cross conclusions to the input lines
- Interruption of the input connections

Miscellaneous data

Applications



Fail-safe delay timer

Dimensions

Dimensions

- Width 55 mm
- Height 75 mm
- Depth 110 mm

notice

Inductive loads (e.g. contactors, relays, etc.) are to be suppressed by means of a suitable circuit.

notice - Wiring example

To monitor one guard door at plants with dangerous run-on movements up to PL d and Category 3

Monitoring time for unlocking of solenoid interlocks

The solenoid interlock releases the guard device only when the set time has elapsed.

The time begins to run when the power contactors have dropped out.

The wiring diagram is shown with guard doors closed and in de-energised condition.

The ISD tables (Integral System Diagnostics) for analysis of the fault indications and their causes are shown in the appendix.

Documents

Operating instructions and Declaration of conformity (jp) 368 kB, 14.03.2016

Code: mrl_azs2305_jp

Operating instructions and Declaration of conformity (en) 266 kB, 16.11.2017

Code: mrl_azs2305_en

Operating instructions and Declaration of conformity (nl) 264 kB, 21.02.2018

Code: mrl_azs2305_nl

Operating instructions and Declaration of conformity (es) 269 kB, 10.01.2018

Code: mrl_azs2305_es

Operating instructions and Declaration of conformity (da) 267 kB, 21.02.2018

Code: mrl_azs2305_da

Operating instructions and Declaration of conformity (pt) 276 kB, 23.01.2018

Code: mrl_azs2305_pt

Operating instructions and Declaration of conformity (pl) 283 kB, 21.02.2018

Code: mrl_azs2305_pl

Operating instructions and Declaration of conformity (fr) 268 kB, 24.01.2018

Code: mrl_azs2305_fr

Operating instructions and Declaration of conformity (it) 266 kB, 21.02.2018

Code: mrl_azs2305_it

Operating instructions and Declaration of conformity (de) 223 kB, 16.11.2017

Code: mrl_azs2305_de

Wiring example (99) 26 kB, 20.08.2008

Code: Kazs2I01

ISD tables (Integral System Diagnostics) (de) 45 kB, 29.07.2008

Code: i_azsp01

ISD tables (Integral System Diagnostics) (en) 28 kB, 29.07.2008

Code: i_azsp02

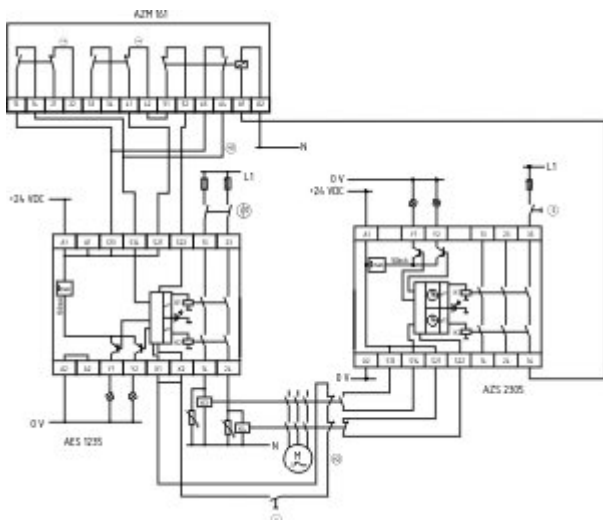
BG-test certificate (de, en) 596 kB, 11.03.2015

Code: z_azsp01

BG-test certificate (de, en) 208 kB, 22.02.2010

Code: z_azsp01

Images



Wiring example

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The data and values have been checked thoroughly. Technical modifications and errors excepted.

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