



AES 1112.1

- 1 safety contact, STOP 0
- Monitoring of BNS range magnetic safety sensors

Data

Ordering data

	AES 1112.1
	101128798
EAN (European Article Number)	4030661059174
eCl@ss number, Version 9.0	27-37-18-19

Approval - Standards

cULus
EAC

General data

	AES 1112
	IEC/EN 60204-1
	IEC 60947-5-3
	ISO 13849-1
	BG-GS-ET-14
	BG-GS-ET-20
	EN 60068-2-3
	BG-GS-ET-14
Enclosure material	Glass-fibre reinforced thermoplastic, ventilated
	AgCdO
Gross weight	160 g

General data - Features

Stop-Category	0
Wire breakage detection	Yes
Automatic reset function	Yes

Reset after disconnection of supply voltage	Yes
Integral System Diagnostics, status	Yes
Number of LEDs	1
Number of openers	2
Number of shutters	1
Number of safety contacts	1

Safety appraisal

ISO 13849-1
IEC 61508

Safety appraisal - Relay outputs

Performance Level, up to	c
Control category to EN13849	1
PFH-value	1.14×10^{-6} /h
Notice	for max. 50,000 switching cycles/year and max. 80% contact load
Safety Integrity Level (SIL), applicable for	1
Mission time	20 Year(s)

Mechanical data

Mounting	Snap onto standard DIN rail to EN 60715
Mechanical life, minimum	10,000,000 Operations

Mechanical data - Connection technique

Terminal Connector	Screw connection rigid or flexible
Terminal designations	IEC/EN 60947-1 2.5 mm ²
Tightening torque of Clips	0.6 Nm

Mechanical data - Dimensions

Width	22.5 mm
Height	75 mm
Depth	110 mm

Ambient conditions

	IP40
	IP54
	IP20
Ambient temperature, minimum	+0 °C
Ambient temperature, maximum	+55 °C

Storage and transport temperature, minimum	-25 °C
Storage and transport temperature, maximum	+70 °C
Resistance to vibrations to EN 60068-2-6	10...55 Hz, Amplitude 0.35 mm, $\pm 15\%$ 30 g / 11 ms

Ambient conditions - Insulation value

Rated impulse withstand voltage	4 kV
	III
	2

Electrical data

Frequency range	60 Hz
Thermal test current	4 A
	110 VAC
Rated AC voltage for controls, 50 Hz, minimum	93.5 VAC
Rated control voltage at AC 50 Hz, maximum	121 VAC
Rated AC voltage for controls, 60 Hz, minimum	93.5 VAC
Rated control voltage at AC 60 Hz, maximum	121 VAC
Electrical power consumption	2.4 W
Contact resistance, maximum	0.1 Ω
Note (Contact resistance)	in new state
Drop-out delay in case of power failure, typically	80 ms
Drop-out delay in case of emergency, typically	20 ms
Pull-in delay at automatic start, maximum, typically	100 ms
Pull-in delay at RESET, typically	20 ms

Electrical data - Safe relay outputs

Voltage, Utilisation category AC15	230 VAC
Current, Utilisation category AC-15	3 A
Voltage, Utilisation category DC13	24 VDC
Current, Utilisation category DC13	2 A
Switching capacity, minimum	10 VDC
Switching capacity, minimum	10 mA
Switching capacity, maximum	250 VAC
Switching capacity, maximum	8 A

Electrical data - Digital inputs

Conduction resistance, maximum 40 Ω

Electrical data - Digital Output

Voltage, Utilisation category DC12 24 VDC

Current, Utilisation category DC12 0.1 A

Electrical data - Relay outputs (auxiliary contacts)

Switching capacity, maximum 24 VDC

Switching capacity, maximum 2 A

Electrical data - Electromagnetic compatibility (EMC)

EMC rating EMC-Directive

Status indication

Indicated operating states Authorised operation

Other data

Note (applications) Safety sensor
Guard system

Notes

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

Circuit example

Note (Wiring diagram) The wiring diagram is shown with guard doors closed and in de-energised condition.
To secure 2 guard doors up to PL c and Category 1
Monitoring 2 guard door(s), each with a magnetic safety sensor of the BNS range
Monitoring one guard door: If only one magnetic safety sensor is connected to S1, the terminals S22, S32 and C of S2 must be bridged.

Ordering code

Product type description:

AES 1112.(1)

(1)

1	110 VAC
2	230 VAC
3	24 VAC
4	42 VAC

Photo/Product/Catalogue



| 142,7 kB | .png | 74.083 x 157.692 mm - 210 x 447
Pixel - 72 dpi

| 388,1 kB | .jpg | 136.525 x 291.042 mm - 387 x 825
Pixel - 72 dpi

ID: kaes1l06

| 175,9 kB | .jpg | 352.778 x 474.486 mm - 1000 x
1345 Pixel - 72 dpi
| 36,2 kB | .cdr |

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.

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+010001pm31
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