



AES 7112.3

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

Data

Ordering data

	AES 7112.3
	101120016
EAN (European Article Number)	4030661058641
eCl@ss number, Version 9.0	27-37-18-19

Approval - Standards

cULus
EAC

General data

	AES 7112
	IEC/EN 60204-1
	IEC 60947-5-3
	ISO 13849-1
	BG-GS-ET-14
	BG-GS-ET-20
Enclosure material	Glass-fibre reinforced thermoplastic, ventilated
	AgSn0
Gross weight	140 g

General data - Features

Stop-Category	0
Wire breakage detection	Yes
Short-circuit recognition	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	4
Number of safety contacts	1

Safety appraisal

ISO 13849-1
IEC 61508

Safety appraisal - Relay outputs

Performance Level, up to	d
Control category to EN13849	3
PFH-value	1.00×10^{-7} /h
Notice	for max. 50,000 switching cycles/year and max. 80% contact load
Safety Integrity Level (SIL), applicable for	2
Mission time	20 Year(s)

Mechanical data

Mounting	Snaps onto standard DIN rail to EN 60715
Mechanical life, minimum	3,000,000 Operations

Mechanical data - Connection technique

Terminal Connector	Screw connection rigid or flexible 1.5 mm ²
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Mechanical data - Dimensions

Width	105 mm
Height	96 mm
Depth	58 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	5 A
	24 VAC
Rated AC voltage for controls, 50 Hz, minimum	20.4 VAC
Rated control voltage at AC 50 Hz, maximum	26.4 VAC
Rated AC voltage for controls, 60 Hz, minimum	20.4 VAC
Rated control voltage at AC 60 Hz, maximum	26.4 VAC
Electrical power consumption	1.5 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	250 VAC
Current, Utilisation category AC-15	2 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.
Monitoring 1 guard door(s), each with a magnetic safety sensor of the BNS range
Monitoring further guard doors: Further magnetic safety sensors can be connected to S2 in a similar way to those on S1.
To secure a guard door up to PL c and Category 1

Ordering code

Product type description:

AES 7112.(1)

(1)

- 1 110 VAC
- 2 230 VAC
- 3 24 VAC

Pictures

Photo/Product/Catalogue

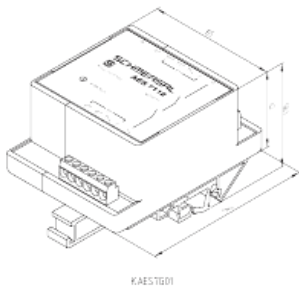


ID: kaes7f01

| 67,1 kB | .png | 73.731 x 86.783 mm - 209 x 246 Pixel - 72 dpi

| 692,8 kB | .jpg | 246.239 x 289.278 mm - 698 x 820 Pixel - 72 dpi

Dimension/Product/Basic



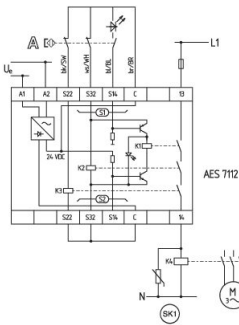
ID: caes7g01

| 6,0 kB | .png | 74.083 x 74.083 mm - 210 x 210 Pixel - 72 dpi

| 191,6 kB | .jpg | 352.778 x 352.778 mm - 1000 x 1000 Pixel - 72 dpi

| 81,7 kB | .cdr |

Graphic/Product/Wiring



ID: kaes7l01

| 167,8 kB | .jpg | 352.778 x 458.964 mm - 1000 x 1301 Pixel - 72 dpi

| 62,1 kB | .cdr |