



AES 1102

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

Data

Ordering data

	AES 1102
	101128981
EAN (European Article Number)	4030661059242
eCl@ss number, Version 9.0	27-37-18-19

Approval - Standards

cULus
EAC

General data

	AES 1102
	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	120 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	4
Number of shutters	2
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	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
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, ± 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
	24 VDC ± 15 %
Rated AC voltage for controls at DC minimum	20.4 VDC
Rated control voltage at DC, maximum	27.6 VDC
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	250 VAC
Current, Utilisation category AC-15	1.5 A
Voltage, Utilisation category DC13	24 VDC
Current, Utilisation category DC13	1 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

	To secure one or a number of guard doors up to PL c and Category 1
Note (Wiring diagram)	Monitoring a number of guard doors using magnetic safety sensors BNS range The wiring diagram is shown with guard doors closed and in de-energised condition.

Ordering code

Product type description:

AES 1102.(1)

(1)

without 24 VDC

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

Pictures

Photo/Product/Catalogue



ID: kaes1f05

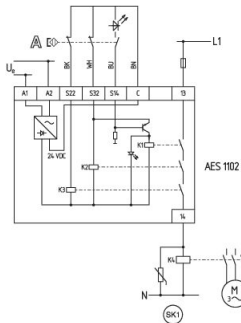
| 144,3 kB | .png | 74.083 x 156.986 mm - 210 x 445

Pixel - 72 dpi

| 393,5 kB | .jpg | 135.819 x 288.219 mm - 385 x 817

Pixel - 72 dpi

Graphic/Product/Wiring



ID: kaes1i07

| 54,4 kB | .cdr |

| 144,3 kB | .jpg | 352.778 x 461.433 mm - 1000 x 1308 Pixel - 72 dpi

K.A. Schmersal GmbH & Co. KG, Möddinghofe 3, D-42279 Wuppertal

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.

Generated on 562021-01-31T12:26:56+01:001201Europe/BerlinSun, 31 Jan 2021 12:26:56

+010056pmSunday.31pm31Europe/BerlinCET2601Europe/BerlinJanuary2021Sun, 31 Jan 2021 12:26:56

+010001pm31