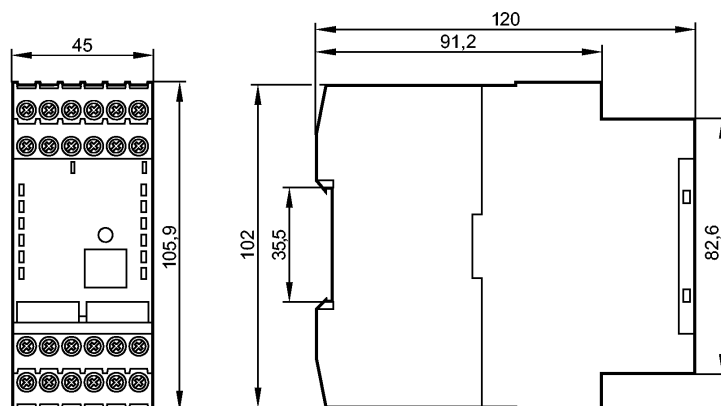


AC031S

Safety mon/1 ch. enhan. net

Bus system AS-Interface



Made in Germany

Product characteristics

AS-i safety monitor

Screw terminal

Extended functionality

1-channel

Configuration and setup by configuration software ASIMON

Complies with the requirements:

EN ISO 13849-1: PL e

IEC 61508: SIL 3

Electrical data

Electrical design	1 safety-related output
Operating voltage [V]	24 DC $\pm$ 15%
Total current consumption from AS-i [mA]	< 45
Rated operating current [mA]	200
Peak switch-on current **) [mA]	600
Overvoltage category	3, for rated operating voltage 300 V AC to VDE 0110 part 1

Inputs

Inputs	start input: optocoupler input (high active), input current approx. 10 mA (24 V DC) contactor control input (EDM): optocoupler input (high active), input current approx. 10 mA (24 V DC)
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Outputs

Message output Safety ON ***)	PNP transistor output/ 200 mA / reverse polarity and short-circuit protection
Safety output	2 volt-free NO contacts max. contact load: 1 A DC-13 (24 V DC) / 3 A AC-15 (230 V AC) continuous thermal current: 3 A per output circuit

Interfaces

Configuration interface	9600 baud / no parity / 1 start bit / 1 stop bit / 8 data bits
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Environment

Ambient temperature [°C]	-20...60
Storage temperature [°C]	-30...70

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Bus system AS-Interface

Protection	IP 20 *)
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Tests / approvals

EMC	EN 50081-2 (1993)
	EN 61000-6-2 (1999)
	EN 60947-5-1 (2000)
	EN 60204-1

Safety classification

Mission time TM [h]	175200, (20 years)
PFD	7.2 x 10E-5
PFH	9.9 x 10E-9

AS-i classification

AS-i profile	7.F
I/O configuration [hex]	7
ID code [Hex]	F
AS-i certificate	in preparation

Mechanical data

Housing materials	polyamide black
Weight [kg]	0.384

Electrical connection

Wiring

AS-i +:	connection AS-i bus
AS-i -:	connection AS-i bus
AS-i S+ / AS-i S-:	Safe AS-i output for actuator monitoring or connection to another AS-i network
L+:	+24V DC supply
M:	GND reference earth
FE:	functional earth
1.Y1:	EDM 1 Input feedback circuit / output circuit 1
1.Y2:	start / start input Output circuit 1
1.13:	Output switching element 1 Output circuit 1
1.14:	Output switching element 1 Output circuit 1
1.23:	Output switching element 2 Output circuit 1
1.24:	Output switching element 2 Output circuit 1
1.32:	Safety ON / signal output Output circuit 1

Remarks

Remarks	*) Only suitable for use in electrical operating rooms or control cabinets with minimum protection rating IP54 **) Simultaneous switch-on of all relays, the current for the message outputs is not taken into consideration ***) The "Safety ON" message output is not relevant to safety
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Pack quantity [piece]	1
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