



SE-304 C AUSWERTEGERAET

- To monitor 1 ... 4 safety edge(s)
- 1 safety contact, STOP 0
- 1 Signalling output

Data

Ordering data

EAN (European Article Number)	4030661293622
eCl@ss number, Version 9.0	27-37-18-19
eCl@ss number, Version 11.0	27-37-18-19
ETIM number, version 6.0	EC001449

Approval - Standards

Certificates	TÜV EAC
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General data

Standards	EN ISO 13850 EN ISO 13849-1
Climatic stress	EN ISO 13856-2
Enclosure material	Glass-fibre, thermoplastic
Gross weight	175 g
Reaction time, maximum	17 ms

General data - Features

Stop-Category	0
Electronic Fuse	Yes
Wire breakage detection	Yes
Short-circuit recognition	Yes
Start input	Yes
Feedback circuit	Yes
Automatic reset function	Yes
Reset edge detection	Yes
Reset after disconnection of supply voltage	Yes
Earth connection detection	Yes
Integral System Diagnostics, status	Yes
Number of LEDs	5
Number of undelayed semiconductor outputs with signaling function	1
Number of safety contacts	1
Number of signalling outputs	1

Safety appraisal

Performance level, up to	d
Control category to EN13849	3
Control category to EN954	3
PFH-value	1.01×10^{-7} /h
Note (PFH-value)	up to max. 5,000 switching cycles/year
Mission Time	20 Year(s)

Mechanical data

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

Mechanical data - Connection technique

Terminal Connector	Screw connection
Length of cable	200 m
Cable section, maximum	2 x 1.5 mm ²
Note (Cable section)	All indications about the cable section are including the conductor ferrules.

Mechanical data - Dimensions

Width	22.5 mm
Height	100 mm
Depth	121 mm

Ambient conditions

Degree of protection of the enclosure	IP40
Degree of protection of the mounting space	IP54
Degree of protection of clips or terminals	IP20
Ambient temperature, minimum	+5 °C
Ambient temperature, maximum	+55 °C
Resistance to vibrations to EN 60068-2-6	10 ... 55 Hz, amplitude 0.15 mm

Ambient conditions - Insulation value

Rated impulse withstand voltage U _{imp}	4 kV
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Overvoltage category	III
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Degree of pollution to VDE 0110	2
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Electrical data

Frequency range	50 Hz
Rated operating voltage	24 VDC +20% / -10% 24 VAC +10% / -10%
Operating current	500 mA
Rated AC voltage for controls, 50 Hz, minimum	21.6 VAC
Rated control voltage at AC 50 Hz, maximum	28.8 VAC
Rated AC voltage for controls at DC minimum	21.6 VDC
Rated control voltage at DC, maximum	28.8 VDC
Utilisation category AC-15	230 VAC
Utilisation category AC-15	2 A
Utilisation category DC-13	24 VDC
Utilisation category DC-13	2 A
Electrical power consumption, maximum	4 W
Pull-in delay at RESET	100 ms ... 2000 ms

Electrical data - Electromagnetic compatibility (EMC)

EMC rating	EMC-Directive
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Status indication

Indicated operating states	Authorised operation fault indication
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Other data

Note (applications)

Safety edges

Notes

Note (General)

The overall machine safety depends on the professional mounting and installation of the safety monitoring module and the signal transmitter, as well as on the correct and professional electrical connection of the components. If there is any risk whatsoever, the machine may not be restarted.

Circuit example

Note (Wiring diagram)

Both re-initialisation and auto-reset must comply with the requirements of EN 1760-2 (diagram A2, A3).

The wiring diagram is shown for the de-energised condition.

Monitoring the safety edges SE 40 / SE 70 with a safety monitoring unit SE-304C up to PL d and Category 3.

Manual reset function or auto-reset: the manual reset function is triggered by an edge-sensitive signal (edge switching "0-1-0" within 100 ms up to 2 s) (X2/X3).

Alternatively, the auto-reset function can be activated by a connection (A3/X2).

If less than 4 safety edges are connected, the following diagram must be observed.

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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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