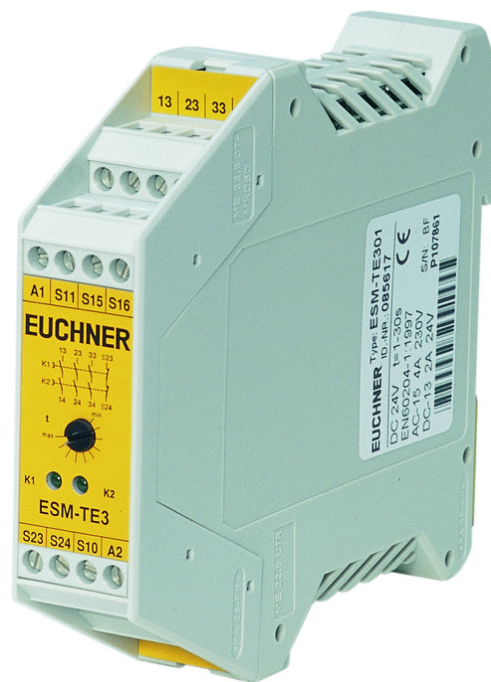


ITEM 085619 ESM-TE303

Description	Technical data	Accessories	Downloads
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Features

- › Usage up to category 3 according to EN ISO 13849-1
- › LED status indicators
- › Control using safety relays
- › 3 redundant time-delayed safety contacts
- › Delay time-range 1 s - 30 s
- › 1 auxiliary contact
- › Earth fault/ground fault monitoring can be selected

Relay outputs

The outputs are electrically decoupled and of redundant design.

Connection

By using suitable wiring the following function can be selected:

- › Earth fault/ground fault monitoring to detect short circuits between the connection cables and earth or ground and to shut down the outputs or prevent relay starting if necessary.

Time-delayed shutdown

The release time for the time-delay contacts can be set as required using a potentiometer on the safety relay.

Approvals



Mechanical values and environment

Housing material	Polyamide PA6.6
Weight	Net 0,23 kg
Ambient temperature	-15 ... 40 °C
At $U_B = 115/230V$ AC	
Degree of protection	IP20
Mechanical life	10×10^6
operating cycles	
Contact material	AgNi-10
Mounting method	Mounting rail 35mm according to DIN EN 60715 TH35
Connection	Connection terminals
Length of control cable	
With conductor cross-section 0.75mm^2	1000 m
	Safety contacts 17/18, 27/28, 37/38
Number of safety contacts	3
	Auxiliary contact S25/S26
Number of auxiliary contacts	1

Electrical connection ratings

Operating voltage	AC 230 V -10% ... +10%
Power consumption (apparent power)	4 VA
At 230 V AC	
Rated insulation voltage U_i	250 V
Rated impulse withstand voltage U_{imp}	4 kV
Leakage path/air gaps	
Overvoltage category according to IEC EN 60664-1	3
Rated supply frequency	50 ... 60 Hz
Degree of contamination (external, according to EN 60947-1)	2
Connection cross-section	0,14 ... 2,5 mm^2

Test voltage	Control system/contacts	2,5 kV
Control voltage	On S11	24 V
Control current	S11...S14	40 mA
LED indicator		2 status displays (green) for relays K1 and K2
Safety contacts 17/18, 27/28, 37/38		
Type of output	NO	Relay contacts, floating, positively driven (redundant) ^[1]
Switching voltage	AC	max.250 V
	DC	max.24 V
Switching current		at 24Vmin.20 mA
Cumulative current		For all contactsmax.10,5 A ^[2]
Fusing	External contact fuses (safety circuit) according to IEC 60269-1	10A gG (T4A / F6A)
Utilization category according to EN 60947-5-1	AC-15	4A, 250V
	DC-13	2A, 24V
	AC-12	6A ohmic load, 250V
	DC-12	1.25A ohmic load, 24V
Breaking capacity according to UL		6A 250V AC / 2A 24V DC per contact
Switching characteristics		Safety contact with adjustable time-delay
Delay time	Continuously adjustable	1 ... 30 s
Auxiliary contact S25/S26		
Type of output	NC	As monitoring contact for safety relay
Switching characteristics		Auxiliary contact with adjustable time-delay

Miscellaneous

in compliance with	EN 60439-1: 1999 + A1: 2004; EN 60947-1: 2007; EN 60947-5-1: 2004; EN 60947-7-1: 2002; EN 61000-6-2: 2005; EN 61000-6-3: 2007; EN ISO 13849-1: 2015; EN 62061: 2005 + AC: 2010 + A1: 2013 + A2: 2015; EN 60204-1: 2007
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Reliability values acc. to EN ISO 13849-1

Performance Level	PL d ^[3]
Category	3 ^[4]
PFHD	1.03×10^{-7} ^[5]

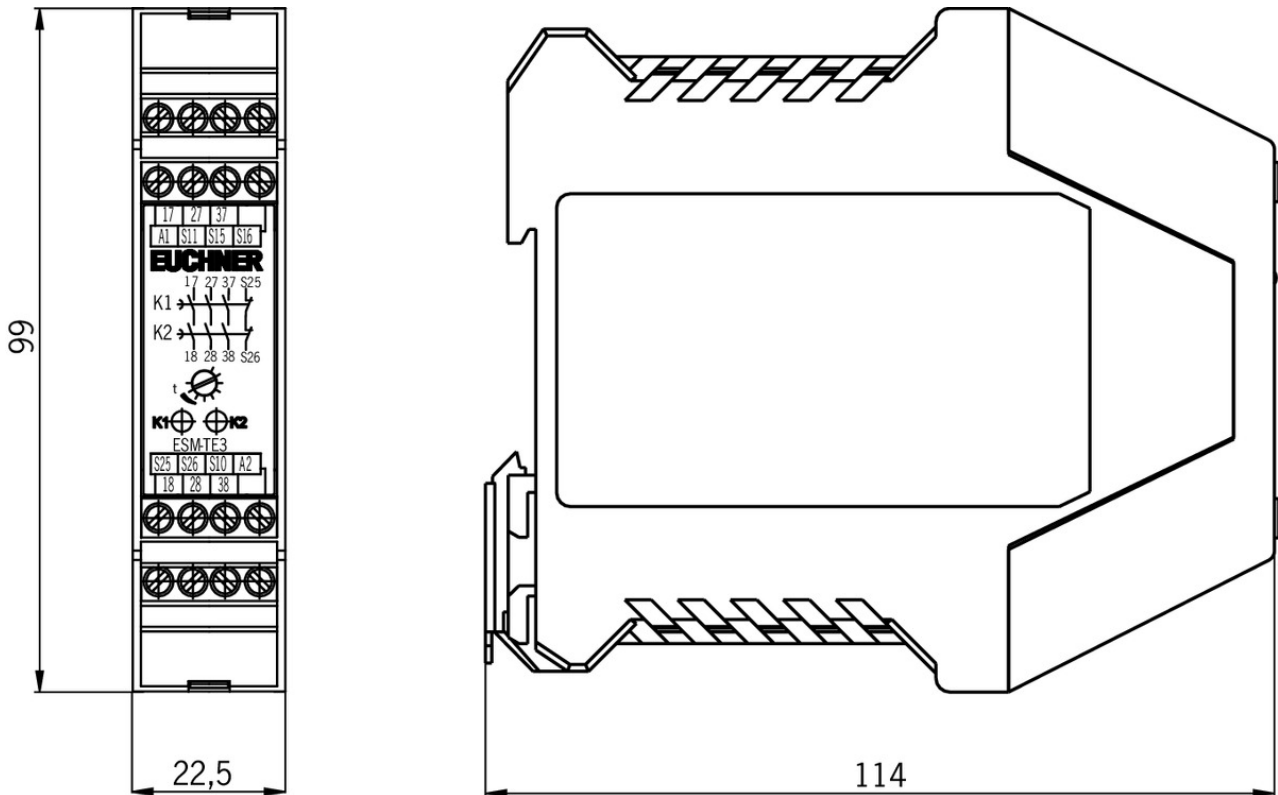
Number of switching cycles	≤ 0.1 A at 24 V DC	max.400000 1/Jahr
	≤ 1 A at 24 V DC	max.73000 1/Jahr
	≤ 2 A at 24 V DC	max.17000 1/Jahr
Mission time	20 y [6]	

[1] Positively driven relay according to EN 50205

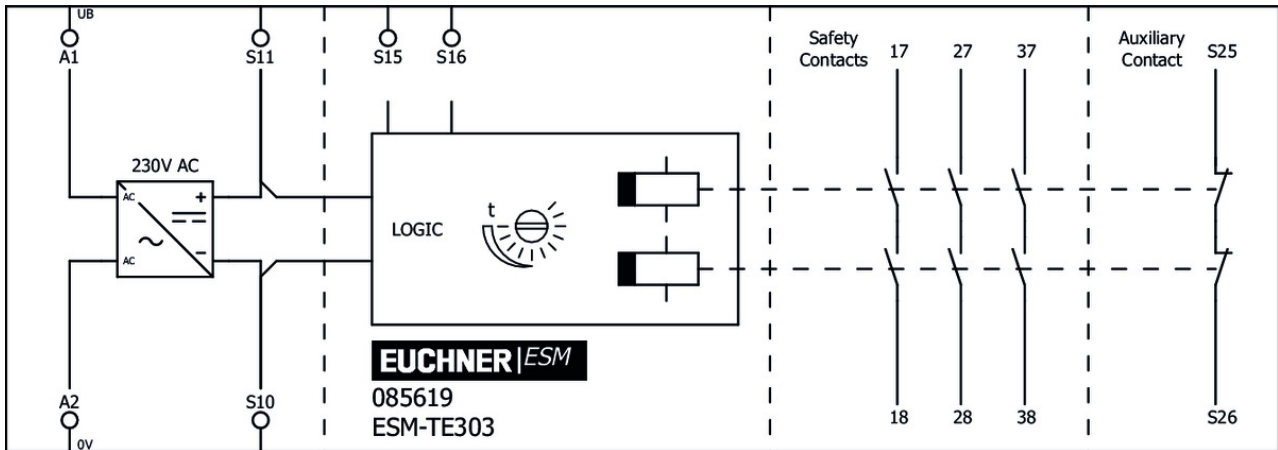
[2] Also applies for UL

[3, 4, 5, 6] This value is dependent on the number of switching cycles and the switching current.

Dimension drawing



Block diagram



Instructions

Time-Delayed Safety Relay ESM-TE3..

	Doc. no.	Version	Language	Download
Sicherheits-Kontakterweiterung ESM-TE3..	090075	08-02/15		0.6 MB
Time-Delayed Safety Relay ESM-TE3..	090075	08-02/15		0.5 MB

Catalogs

Relais de sécurité ESM Sicherheitsrelais ESM Safety Relays ESM 安全继电器 ESM

	Doc. no.	Version	Language	Download
Sicherheitsrelais ESM	110650	05-02/13		6.7 MB
Relais de sécurité ESM	110652	05-02/13		6.8 MB
Safety Relays ESM	110651	05-02/13		6.7 MB
安全继电器 ESM	155884	05-02/13		4.6 MB

Declaration of conformity

EU-Konformitätserklärung

	Doc. no.	Version	Language	Download
EU-Konformitätserklärung Declaración UE de conformidad Déclaration UE de conformité Dichiarazione di conformità EU declaration of conformity	2090791	15-04/17	 	0.3 MB