

Expansion Module with Time Delay for use with SCR-2/3 SEU-TD-1

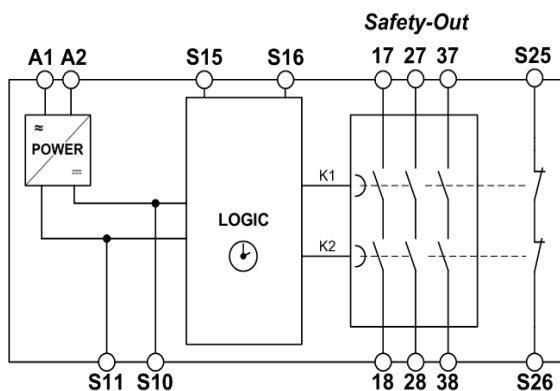
OVERVIEW:

The SEU-TD-1 is an expansion unit which can be used with an existing system using SCR-2 or SCR-3 Safety Relays to allow delayed shutdown or timing to a safety application. Time delay is variable from 1 to 30 seconds.

The safety actuation is achieved from the basic SCR-2 or SCR-3 Safety Relay.

FEATURES:

- 3NC Relay outputs
- 1NO Auxiliary contact
- Standards: EN60204-1, ISO13849-1, EN62061
- Stop Category: 1
- SILCL2 EN62061
- Up to PLd to ISO13849-1
- 3 Force guided contacts
- Fault monitoring by basic SCR device



Block Diagram and Electrical Connection SEU-TD-1

A1 A2	Power
S11	24Vdc Control Voltage
S10 S15 S16	Control Lines
S25 S26	Fault Monitoring
17-18	Safety Contact 1
27-28	Safety Contact 2
37-38	Safety Contact 3

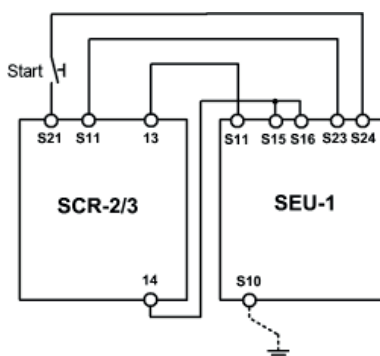
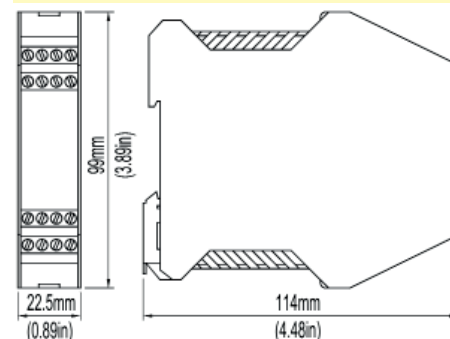
Standards: EN60204-1 ISO13849-1 EN62061

Safety Switching Outputs	3NC 1-30 secs continuously adjustable
Auxiliary Contact	1NO monitoring contact for basic device
Operating Voltage	24Vac/dc 110Vac or 230Vac
Supply Deviation	+/-10%
Control Voltage at S11	24Vdc
Control Current S11 to S14	40mA approx.
Monitored Reset Circuit Loop	Auto or monitored, manual reset
Maximum Line Conductor Cross Section	2.5 sq mm
Maximum Length of Control Line	1000m with 0.75 sq mm
Contact Material	AgNi
Indication - Green	LED1 and LED2 OSSD closed
Contact Service Life	Mechanical 1x10 ⁷ Electrical 1x10 ⁵
Safety Contact Breaking Capacity	AC 250V, 1500VA, 6A, ohmic 230V, 4A for AC15 DC 24V, 30W, 1.25A ohmic 24V, 30W, 2.0A for DC-13
External Fuse Protection - Safety Outputs	4A slow blow or 6A quick blow
Minimum Voltage and Current	24V, 20mA dc
Rated Insulation Voltage	250V
Degree of Protection	IP20
Rated Impulse Withstand Voltage	4kV
Operating Temperature	-15C to +40C
IP Protection IEC529	Terminals IP20
Mounting	35mm DIN rail
Weight	0.25kg approx.

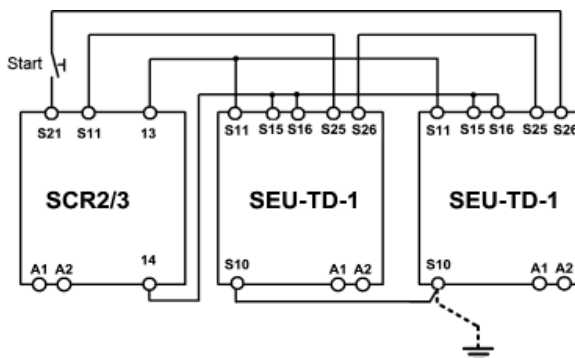


Safety Expansion Relay offering Delayed Outputs

DIMENSIONS:



Connection of an SEU-TD-1 to a basic device SCR-2 or SCR-3



Connection of several SEU-TD-1 to a basic device SCR-2 or SCR-3

Safety Classification and Reliability Data: Specified PL or SILCL were determined under worst case conditions

ISO13849-1	
Performance Level	d
Category (ISO13849-1)	3
MTTFd	487 years
DC (average)	92.1%
Proof Test Interval (Life)	20 years
Safety Data Annual Usage	365 days per year 24 hours per day Test cycle 3600 seconds/cycle Full load AC1

EN62061	
SILCL	2
Proof Test Interval (life)	20 years
Hardware Fault Tolerance	1
DC (average)	92.1%
PFHd	1.03 x 10 ⁻⁷

SALES NUMBER	TYPE	TERMINAL TYPE	SUPPLY VOLTAGE	DELAYED OUTPUT CONTACTS
180015	SEU-TD-1	Standard Screw Terminals	24Vac/dc	3NC 1NO
180016	SEU-TD-1		110Vac	3NC 1NO
180017	SEU-TD-1		230Vac	3NC 1NO
180015-P	SEU-TD-1	Pluggable Screw Terminals	24Vac/dc	3NC 1NO
180016-P	SEU-TD-1		110Vac	3NC 1NO
180017-P	SEU-TD-1		230Vac	3NC 1NO