

IDEM SCR3142TD Series Dual Channel Viper Safety Relays w/Configurable Delay



SCR3142TD-280006

The SCR3142TD Viper Safety Relays series from IDEM are designed with simplified wiring, configurable delay function and 8 LEDs for easy diagnostics. Applications include guard door monitoring, emergency stop devices and sensors. The SCR3142TD internal logic uses force guided relays to achieve cross monitoring. This ensures that a single fault does not lead to the loss of the safety function and that all faults are detected at or before the next safety demand.

Note: Not for use with safety light curtains

Features

- Emergency stop and guard interlock monitoring
- Monitored manual or automatic start/reset
- Time delay contacts
- Easy diagnostics of status via 8 LEDs
- 45mm DIN rail mounting



Safety Data per EN 13849-1

	Instant	Delayed
Category	4	3
Performance level	Ple	Ple
MTTF_d	134a (High)	134a (High)
DC_{avg}	95% (High)	95% (High)

Safety Data per IEC/EN 62061, IEC/EN 61508

Sil CL	SIL CL 3	SIL CL 3
Sil	SIL3	SIL3
HFT	1 (Dual channel)	1 (Dual channel)
DC_{avg}	95% (High)	95% (High)
SFF	90-99%	90-99%
PFH_d (t-20a)	2.00E ⁻⁰⁴	2.00E ⁻⁰⁴

SCR3142TD Series Dual Channel Relays with Configurable Delay

Part Number	Price	Type	Voltage	Outputs	Connection
SCR3142TD-280006	\$433.00	Dual channel operation	24V AC/DC	3 NO / 1 NC	Fixed screw terminals
SCR3142TD-280006-P	\$516.00			4 delayed NO 2 delayed NC	Pluggable terminals

SCR3142TD Series Specifications

General Specifications	
Temperature	-20° to +55°C [-4° to +131°F]
Altitude	< 2,000 meters
Vibration Resistance	Tested to IEC 60068-2-6
Degree Of Protection	IP20
Housing	UL 94V-0 Thermoplastic
Weight	300g (10.5 oz)
Agency Approvals and Standard	cULus file E258676, CE, TUV
Terminal Designation per EN 50 005	1 x 4 mm ² stranded ferruled (isolated) or 2 x 1.5 mm ² stranded ferruled (isolated) or 2 x 2.5 mm ² solid
Wire Fixing	M3.5 terminals with self-lifting wire protection or cage clamp terminals
Input Specifications	
Nominal Voltage	24V AC/DC
Voltage Range	85-110%
Maximum Consumption	5W (24VDC)
Nominal Frequency	50Hz-60Hz
Control Voltage	24VDC (S11)
Control Current	100mA (S11)
Short Circuit Protection	Internal PTC (Positive Temperature Coefficient resistor)
Over Voltage Protection	Internal VDR (Voltage Dependent resistor)
Output Specifications	
Electrical Contact Life	6A / 250VAC 100,000 cycles, 1A / 250VAC 1,000,000 cycles
Mechanical Life	10 x 10 ⁶
Contact Type	3 NO positively driven and 1 NC auxiliary contacts. Delayed: 4 NO and 2 NC
Operate Delay	100ms
Release Delay	25ms
Nominal Output Voltage	250VAC
Thermal Current (I _{th})	Max. 6A
Short Circuit Strength	Minimum Contact Fuses - 4A slow blow, 6A fast blow
Switching Capacity	AC - 250V, 1500V, 6A, Ohmic 230V, 4A for AC-15; DC - 24V, 30W, 1.25 A, Ohmic
Switching Frequency	Max. 360 switching cycles/hr

Safety Products



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