

# **Features**

- 4 NO and 2 NC or 3 NO and 3 NC or 5 NO and 1 NC contacts.
- · Extremely compact.
- High insulation spacing for the safe separation of the contact circuits.
- Sealed case.
- · Ideal for emergency shut-off, machine control, elevator and escalator control, light barrier control.

#### Contact Data @ 23°C

**Type:** Single button contacts, forcibly guided. **Arrangements:** 3 NO and 3 NC, 4 NO and 2 NC or 5 NO and 1 NC.

Material: Silver nickel alloy.

Max. Continuous Current at Max. Amb. Temp.: 8A, 1 contact loaded.

Max. Switched Voltage: 400VAC/VDC.

Max. Switched Power: 2,000VA.

Max. Switching Rate: 6 operations/min. at rated load.

600 operations/min. at minimum load.

Minimum Load: 50mW.

Initial Contact Resistance:  $100 \text{ m}\Omega - 1\text{A}/24\text{VDC}$ .

Expected Mechanical Life: 107 operations

Electrical Life: 250VAC, 70°C ambient, 1 NO loaded with 8A and 1 NC

loaded with 5A: 75,000 operations.

## Initial Dielectric Strength

Between Open Contacts: 1,000VAC rms. Between Adjacent Contacts: 3,000VAC rms. Between Coil and Contacts: 3,000VAC rms.

## Coil Data @ 23°C

Voltage: 5 to 110VDC. Nominal Power: 1.2W. Max. Coil Temperature: 130°C. Duty Cycle: Continuous.

#### Coil Data @ 23°C

Con Data @ 23 C									
Coil Resistance (Ohms)	Must Operate Voltage (VDC)	Nominal Coil Current (mA)							
21 ± 2	3.75	240							
$30 \pm 3$	4.5	200							
68 ± 7	6.8	130							
120 ± 12	9.0	100							
270 ± 27	13.5	70							
370 ± 40	15.8	60							
480 ± 50	18.0	50							
1,330 ± 130	30.0	30							
3,000 ± 300	45.0	20							
6,020 ± 600	64.0	14							
10,000 ± 1,000	82.5	11							
	Coil Resistance (Ohms)  21 ± 2 30 ± 3 68 ± 7 120 ± 12 270 ± 27 370 ± 40 480 ± 50 1,330 ± 130 3,000 ± 300 6,020 ± 600	Coil Resistance (Ohms)         Must Operate Voltage (VDC)           21 ± 2 3.75 30 ± 3 68 ± 7 120 ± 12 270 ± 27 370 ± 40 480 ± 50 1,330 ± 130 3,000 ± 300 6,020 ± 600         3.75 4.5 6.8 1.9 9.0 13.5 13.5 13.5 15.8 480 ± 15.8 18.0 18.0 45.0 6,020 ± 600							

## V23050 series

SR6 "Safety Relay" - PCB, neutral, monostable relay with six forcibly guided contacts.

c **Su**us File E214024

№ No. 116064

TUV-Rheinland, No. 945/EZ 116/99

Users should thoroughly review the technical data before selecting a product part number. It is recommended that users also seek out the pertinent approvals files of the agencies/laboratories and review them to ensure the product meets the requirements for a given application.

### Operate Data @ 23°C

Minimum Release Voltage: 10% of nominal voltage.
Minimum Operating Voltage @ 70°C: 85% of nominal voltage.

## **Environmental Data**

Temperature Range: -25°C to +70°C. Solder Bath Temp./Max. Duration: 260°C/5s.

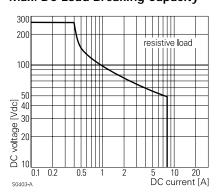
#### **Mechanical Data**

Termination: Printed circuit terminals.

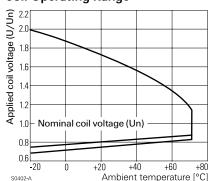
Enclosure (UL94V-2 Flammability Ratings): Sealed (RTIII) plastic case.

Weight: 1.01 oz. (30g).

## Max. DC Load Breaking Capacity



#### Coil Operating Range



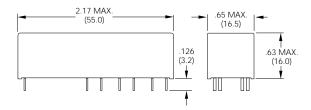
## **Ordering Information**

Oracining innormation							
	Typical Part Number ▶	V23050	A1	012	Α	5	33
1. Basic Series: V23050 = SR6 safety relay.							
2. Enclosure: A1 = Sealed.			-				
3. Coil Voltage: 005 = 5VDC		= 21VDC ) = 110VDC					
4. Contact Type: A = Single contact.							
5. Contact Material: 5 = Silver nickel.							
6. Contact Arrangement: 33 = 3 NO and 3 NC. 42 = 4 NO and 2 NC. 51 = 5 NO and 1 NC.							

Our authorized distributors are more likely to stock the following items for immediate delivery.

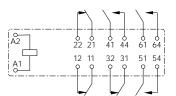
None at present.

## **Outline Dimensions**

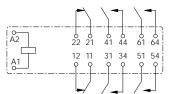


## Wiring Diagrams (Bottom Views)

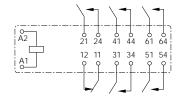
3 NO and 3 NC



4 NO and 2 NC

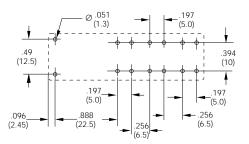


5 NO and 1 NC



## Suggested PC Board Layouts (Bottom Views)

## 3 NO and 3 NC, 4 NO and 2 NC



## 5 NO and 1 NC

