



V23092 (SNR) series

6 Amp Slim Miniature, PC Board Relay

File E48393

File 0631 / 0160 / 0435

Users should thoroughly review the technical data before selecting a product part number. It is recommended that user 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.

Features

- 1 Form A (SPST-NO) and 1 Form C (SPDT).
- 6 A rated current.
- Slim package : 5mm width.
- Sensitive coil 170mW.
- 4kV coil-to-contact insulation.
- Applications: PLCs, timers, temperature controllers, I/O modules.

Contact Data @ 20°C

Arrangements: 1 Form A (SPST-NO) and 1 Form C (SPDT).
Material: Silver tin oxide, silver tin oxide with gold plating; and silver nickel 90/10.
Max. Switching Rate: 12,000 ops./min. (no load).
 60 ops./min. (rated load).
Initial Contact Resistance:
AgSnO or AgNi 90/10: 100 milliohms @ 1A, 12VDC.
AgSnO, Au plated: 50 milliohms @ 100mA, 6VDC.
Max. Switched Voltage: AC: 400V; **DC:** 300V.
Rated Voltage: AC: 250V; **DC:** 24V.
Max. Switched Current: 6A.
Max. Switched Power: 1,500VA. (See curve for DC Power).
Minimum Load: AgSnO or AgNi 90/10: >500mA, 12VAC/VDC.
AgSnO, Au plated: >10mA, 5VAC/VDC.
Expected Mechanical Life: 10 million operations.
Expected Electrical Life: See curve.

Initial Dielectric Strength

Between Open Contacts: 1,000VAC, (1 minute).
Between Contacts and Coil: 4,000VAC, (1 minute).
Surge Voltage Between Coil and Contacts: 6,000V (1.2/50µs).
Creepage/Clearance Coil-to-Contact: Min. 6/8mm. Consult factory regarding availability of 1 Form A model with 8/8mm.

Initial Insulation Resistance

Between Mutually Insulated Conductors: 100,000Mohm @ 500VDC.

Coil Data @ 20°C

Voltage: 5 to 48VDC.
Nominal Power: 170mW.

V23092				
Rated Coil Voltage (VDC)	Nominal Current (mA)	Coil Resistance (ohms) ± 10%	Must Operate Voltage (VDC)	Must Release Voltage (VDC)
5	34.0	119	3.50	0.25
12	14.2	848	8.40	0.6
24	7.1	3,390	16.80	1.20
48	4.5	10,600*	33.60	2.40

* ± 15%

Operate Data @ 20°C

Must Operate Voltage: 70% of nominal voltage or less.
Must Release Voltage: 5% of nominal voltage or more.
Operate Time: 5 ms max. at nominal voltage.
Release Time: 2.5 ms max. at nominal voltage.
Bounce Time: 1.5 ms (N/O) typical at nominal voltage.
 5 ms (N/C) typical at nominal voltage.

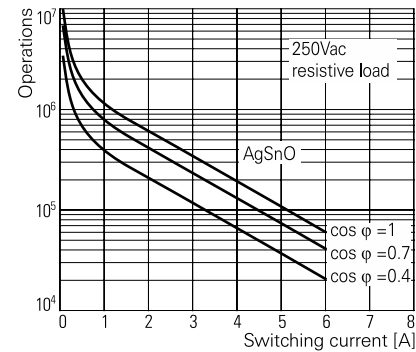
Environmental Data

Temperature Range:
Operating: -40°C to +85°C.
Operating Humidity: 20 to 85% RH.

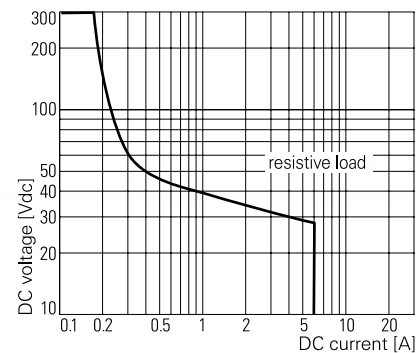
Mechanical Data

Termination: Printed circuit terminals.
Enclosure (94V-0 Flammability Ratings): Plastic sealed case (RT III wash tight).
Weight: 0.2 oz. (6g) approximately.

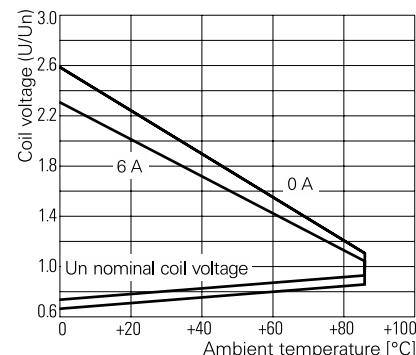
Contact Life



Max. DC Load Breaking Capacity



Coil Operating Range



Ordering Information

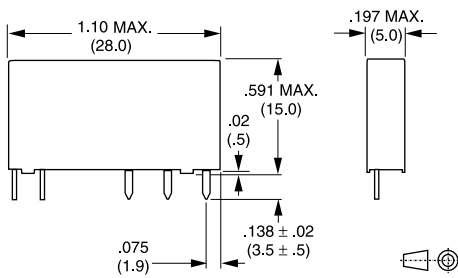
		Typical Part Number ▶		V23092	A	1	024	A	3	01
1. Basic Series: V23092 = Slim PC board relay.										
2. Package Type: A = PCB vertical version. B = PCB flat pack version.										
3. Enclosure: 1 = Plastic sealed case.										
4. Coil Input: 005 = 5VDC 012 = 12VDC 024 = 24VDC 48 = 48VDC										
5. Contact System: A = Standard.										
6. Contact Material: 2 = AgSnO ₂ , Au plated. 3 = AgSnO 8 = AgNi 90/10										
7. Contact Arrangement: 01 = 1 Form C (SPDT). 02 = 1 Form A (SPST-NO).										

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

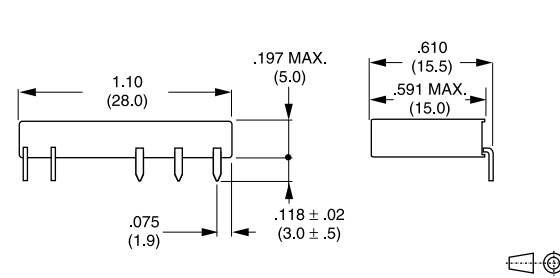
V23092A1012A301
V23092A1024A301

Outline Dimensions

Vertical Version



Flat Pack Version

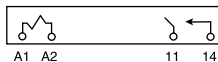


Wiring Diagrams (Bottom Views)

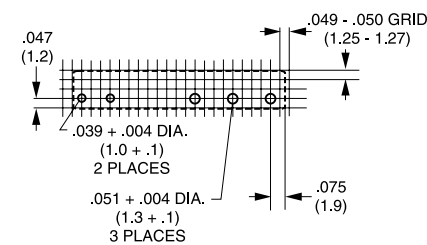
1 Form C



1 Form A



PC Board Layout (Bottom View)





DIN Rail Interface Module and Accessories for V23092 Series (SNR) Relay PC Board Relay

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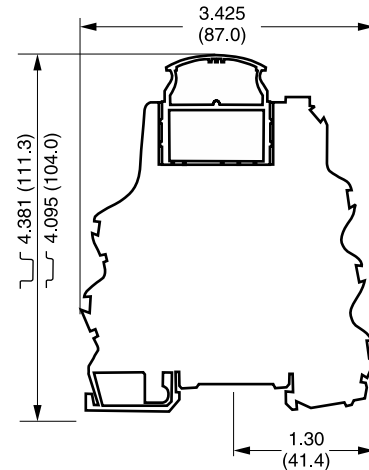
Features

- Module width is 0.2 in (5.08mm).
- Narrow width permits high density packing of modules on a DIN rail.
- Jumper bars available.
- Available as a set or as individual components.

Technical Information

Rated Current / Rated Voltage: 6A / 250VAC.
Dielectric Strength, Coil-to-Contact: >4,000Vrms.
Insulation Category (VDR 0110b): C / 250.
Operating Ambient Temperature: - 20°C to +55°C.
Protection Category: IP 20.
Protection Against Accidental Contact Meeting: VBG 4.
Wire Cross Section with/without Bootlace Crimp: 0.22 - 2.5mm².
Terminal Torque (Nominal / Maximum): .295 / .442 ft-lb (0.4 / 0.6 Nm).

Outline Dimensions



Component Parts

ST 1F 000	Socket without LED
ST 1F L24	Socket with LED for 12-24VDC.
ST 16 016	Mounting frame for relay, without marking
ST 17 002	Jumper bar, 2 pole
ST 17 005	Jumper bar, 5 pole
ST 17 010	Jumper bar, 10 pole
ST 16 040	Marking plate, consisting of 100 marking tags



Sets - Relay in frame, mounted in socket

ST 1P3 024	24VDC, AgSnO ₂ contacts
ST 1P3 L12	12VDC, with LED, AgSnO ₂ contacts
ST 1P3 L24	24VDC, with LED, AgSnO ₂ contacts
ST 1P3 L48	48VDC, with LED, AgSnO ₂ contacts
ST 1P2 L24	24VDC, with LED, Au plated AgSnO ₂ contacts