



# RP 3 SL series

## 16 Amp, 1 Pole PC Board Relay for High Inrush Loads

US File E214025



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.

### Features

- 1 Form A (SPST-NO).
- 16 amp models handles up to 120A peak inrush current.
- 4kV/8mm contact-to-coil.
- Latching and non-latching types.

### Contact Data

**Arrangements:** 1 Form A (SPST-NO), single contact.

**Material:** Silver-tin oxide.

**Expected Mechanical Life:** 30 million operations.

#### Ratings:

**Current:** 16A

**Voltage:** 250VAC

**Power (breaking):** 4,000VA

**Voltage (breaking):** 440VAC

**Make Current (max 4s at 10% duty cycle):** 25A

**Peak Inrush Current:** 120A

#### Load/Life

12A, 250VAC,  $\cos\phi = 1$ ; 300,000 ops.

TV8; 25,000 ops.

2,500W, 230VAC, Halogen lamps; > 10,000 ops.

1,000W, 250VAC, Incandescent lamps; 230,000 ops.

3,000W, 250VAC, Incandescent lamps; 36,000 ops.

1,500VA, Fluorescent lamps, 163 $\mu$ F; 10,000 ops.

### Initial Dielectric Strength

**Between Open Contacts:** 2,000Vrms

**Between Coil and Contacts:** 4,000Vrms.

**Creepage/Clearance:** 8/8mm.

### Coil Data DC @ 20°C

**Nominal Coil Power:** Non-latching: 500mW.

Single-coil latching: 1.2 - 1.4W.

Dual-coil latching: 1.2 - 1.5W.

Nominal Voltage VDC	DC Resistance in Ohms	Must Operate Voltage VDC	Drop-out Voltage VDC	Maximum Voltage VDC	Nominal Coil Current (mA)
<b>Non-Latching Models</b>					
12	270 $\pm$ 10%	9.0	1.2	21.6	44.4
24	1,100 $\pm$ 15%	18.0	2.4	43.2	21.8
48	4,400 $\pm$ 15%	36.0	4.8	86.4	10.9
60	6,540 $\pm$ 15%	45.0	6.0	108.0	9.2
Nominal Voltage VDC	DC Resistance in Ohms	Must Operate Voltage VDC	Reset Voltage VDC	Reset R1 Ohms / W	Nominal Coil Current (mA)
<b>Single-coil Latching Models – Reset Voltage 70-110% of Nom.</b>					
5	21 $\pm$ 10%	3.7	3.6	39 / 0.5	238.1
12	115 $\pm$ 10%	9.0	8.7	220 / 0.5	104.3
24	460 $\pm$ 10%	18.0	16.7	820 / 0.5	52.2
<b>Dual-coil Latching Models – Reset Voltage 75-120% of Nom.</b>					
12	105 $\pm$ 15%	9.0	9.0	–	114.3
24	460 $\pm$ 15%	18.0	18.0	–	52.2

### Operate Data

**Must Operate Voltage:** See Coil Data table.

**Operate / Release Time (Non-latching, typical):** 8 ms / 2 ms.

**Operate / Reset Time (Latching, typical):** 6 ms / 2 ms.

**Bounce Time (typical):** 2 ms.

**Switching Rate:** 6,000 ops./hr. max. at rated load.

### Environmental Data

**Temperature Range:**

**Operating:** -40°C to +70°C.

**Vibration (30-300 Hz.):** 20g.

**Shock (destructive):** 100g.

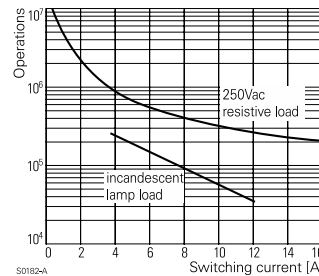
### Mechanical Data

**Termination:** Printed circuit terminals.

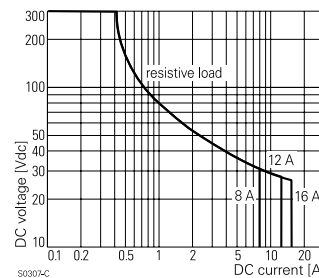
**Enclosure:** Flux-tight (RT II) plastic case or sealed (RT III) cover.

**Weight:** .63 oz. (18 g) approximately.

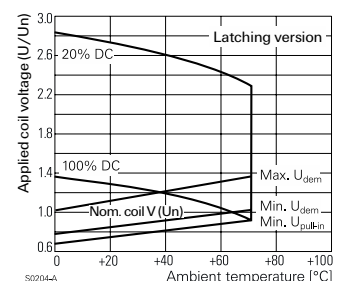
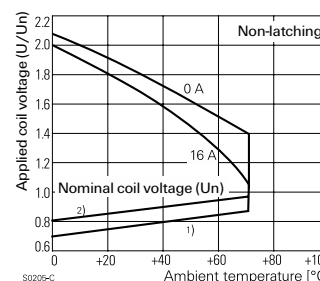
### Contact Life



### Max. DC Load Breaking Capacity



### Coil Operating Range



Non-Latching Models

Latching Models

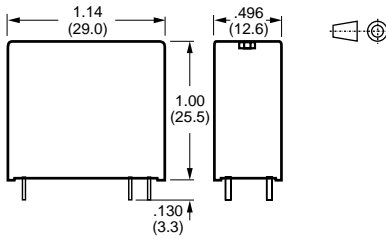
**Ordering Information**

		Typical Part Number ▶		<b>RP</b>	<b>3</b>	<b>SL</b>	<b>F12</b>
<b>1. Basic Series:</b> RP = Printed circuit board relay.							
<b>2. Version:</b> 3 = Flux tight.      7 = Sealed.							
<b>3. Contact Arrangement / Material:</b> SL = 1 Form A (SPST-NO), Silver-tin oxide.							
<b>4. Coil Voltage:</b> Non-Latching Models:      012 = 12VDC      024 = 24VDC      048 = 48VDC      060 = 60VDC Single-Coil Latching Models:      A05 = 5VDC      A12 = 12VDC      A24 = 24VDC Dual-Coil Latching Models:      F12 = 12VDC      F24 = 24VDC							

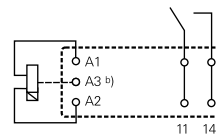
**Our authorized distributors are more likely to maintain the following items in stock for immediate delivery.**

TBD

**Outline Dimensions**



**Wiring Diagram (Bottom View)**

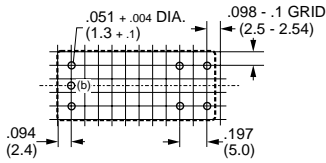


**Latching Versions:**  
 Contact position shown results during or after Coil energization with reset voltage.

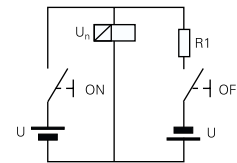
**Two-Coil Versions:**  
 Operate: A2, A3  
 Reset A1, A3

**Terminal b) only present on two-coil latching models**

**PC Board Layout (Bottom View)**



**Circuit Diagram for Single-Coil Latching Model**



50329-A

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [TE Connectivity](#) manufacturer:*

Other Similar products are found below :

[D38999/24FJ4AN](#) [570416-000](#) [CLTEQ-M81CE-SSRELAY-4-20V](#) [4-1195131-0](#) [650069-000](#) [SMD100-2](#) [2029299-1](#) [358838-000](#) [CB-1022B-78](#) [RM707012](#) [RP410012](#) [MMS42](#) [1-640426-8](#) [2EDL4CM](#) [DTS20W19-11PD-3028-LC](#) [RM202615](#) [NC6-P104-06](#) [MSPS103B](#)  
[DTS26F21-41HE-LC](#) [DTS26F21-41AE](#) [DTS26F21-41PE-LC](#) [DTS26F21-11SE-3028-LC](#) [30DCB6](#) [1932144-1](#) [293545-4](#) [LVR125S](#)  
[MS27466T25F4PB](#) [CKB-38-78010](#) [TR04AI-TINELLOCKRING](#) [1206SFF150F/63-2](#) [D38999/20JB35HA](#) [TE1500A2R2J](#) [DTS24F25-29PC-3028-LC](#) [D38999/20WC8BB](#) [DTS24F19-11SC-3028-LC](#) [D38999/24WG11HA](#) [D38999/24WG11HN](#) [MS27467T21F11H](#) [DJT16E21-11HA](#)  
[MS27467T21F35J](#) [MS27467T21F11J](#) [MS27467T21F16H-LC](#) [MS27467T21F35H](#) [MS27467T21F41H-LC](#) [1206SFH150F/24-2](#) [RP330024](#)  
[DJT16E21-11PA-LC](#) [DJT16E21-11HA-LC](#) [DJT16E21-11AA](#) [MS27467T21B11JA](#)