

INTRODUCTION:

Adam Tech RPL relays are high power, modern relays, available in industry standard packages and can switch loads up to 30 amps. Available in both a PCB package and a combination PCB/Quick Connect terminal package, these relays are designed for applications such as Spa/Pool controls, HVAC, and large appliances.

FEATURES:

30 Amp Switching capability
PCB and PCB/Top mount packages
Industry Standard footprint

SPECIFICATIONS:

ELECTRICAL:

Contact arrangement: 1 Form A & 1 Form C
Contact material: Silver Alloy
Contact Rating (Resistive load): 30A @ 220V AC
30A @ 30V DC
Max. Switching Voltage: 220V AC / 30V DC
Max. Switching Power: 6600VA / 900W
Contact resistance: 50 mΩ max. Initial
Insulation resistance: 100 MΩ min. @ 500V DC
Dielectric withstanding voltage:
Between Coil & Contact: 2500V AC 50/60Hz for 1 min.
Between Contacts: 1500V AC 50/60Hz for 1 min.
Operating time: 15 ms max.
Release time: 10 ms max.
Electrical Life: 100,000 Operations (at rated load)

MECHANICAL:

Vibration resistance (Endurance): 1.5mm Double Amplitude 10-55Hz
Shock resistance: 10G min.
Mechanical Life: 10,000,000 Operations (no load)

TEMPERATURE RATING:

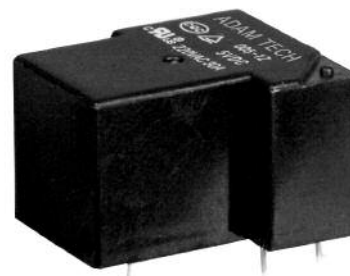
Ambient temperature: -55°C to +85°C

PACKAGING:

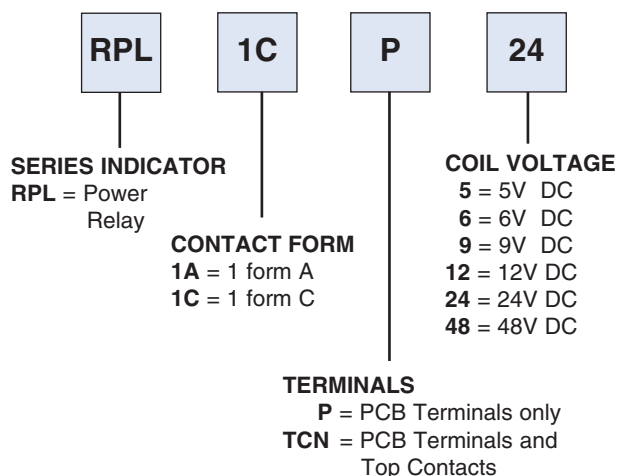
Anti-ESD plastic trays

SAFETY AGENCY APPROVALS:

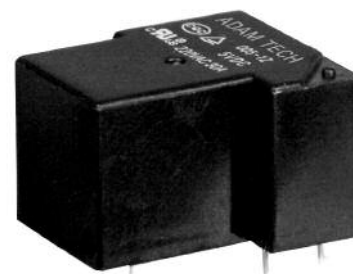
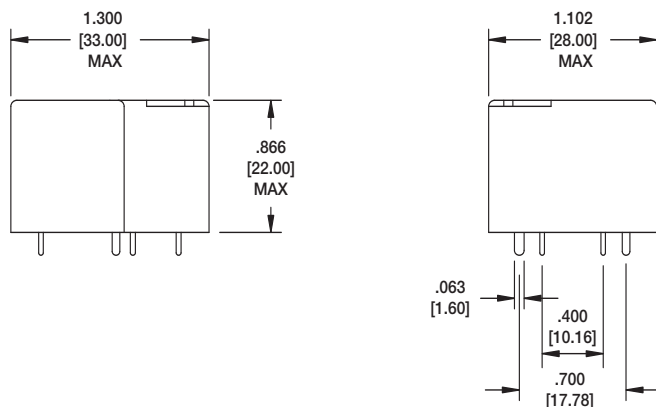
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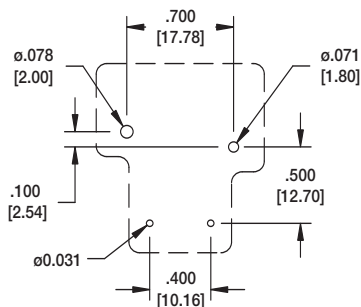
ORDERING INFORMATION POWER RELAY



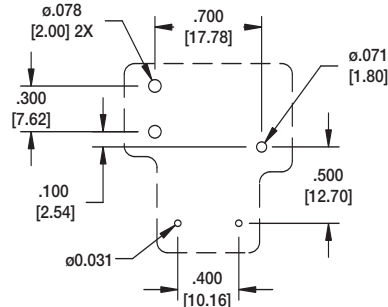
RPL SERIES



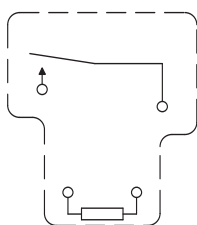
RPL-1C-P-12



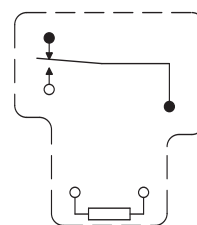
Recommended PCB Layout
1 Form A



Recommended PCB Layout
1 Form C

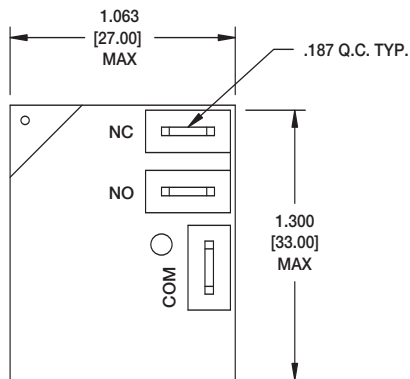


Schematic
1 Form A



Schematic
1 Form C

Nominal Voltage V DC	Pick-up Voltage V DC (max.)	Drop-out Voltage V DC (min.)	Coil Resistance ($\pm 10\%$)	Nominal Operating Power mW	Max allowable Voltage V DC
5	3.75	0.5	31	900	6
6	4.5	0.6	40	900	6.6
9	6.75	0.9	101	900	10.8
12	9.0	1.2	160	900	13.2
24	18.0	2.4	640	900	26.4
48	36.0	4.8	2,560	900	52.8

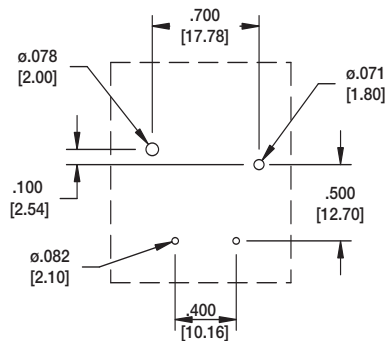


RPL SERIES (TOP CONTACTS)

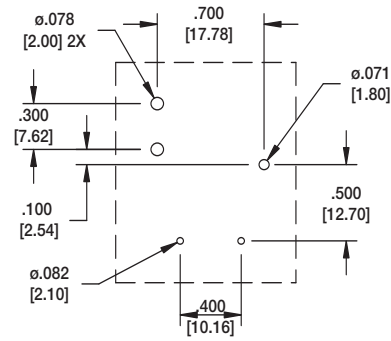


RPL-1C-TCN-12

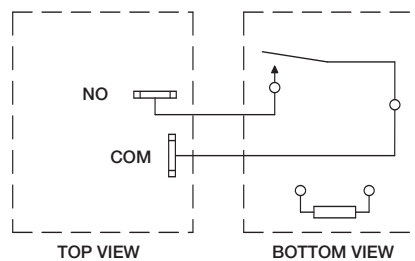
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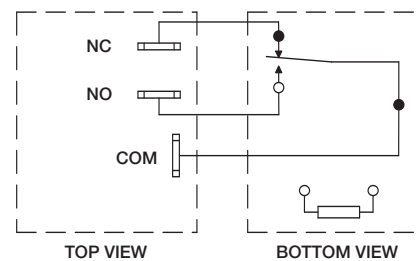
**Recommended PCB Layout
1 Form A**



**Recommended PCB Layout
1 Form C**



**Schematic
1 Form A**



**Schematic
1 Form C**

Nominal Voltage V DC	Pick-up Voltage V DC (max.)	Drop-out Voltage V DC (min.)	Coil Resistance (±10%)	Nominal Operating Power mW	Max allowable Voltage V DC
5	3.75	0.5	31	900	6
6	4.5	0.6	40	900	6.6
9	6.75	0.9	101	900	10.8
12	9	1.2	160	900	13.2
24	18	2.4	640	900	26.4
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