CATEGORY:
- ❑ Temperature
- ❑ Pressure
- ❑ Flow
- ❑ Speed
- ❑ Weighing
- ■ General Info

RELAY PROTECTION AND EMI SUPPRESSION

When using Api alarm module relays to switch inductive loads, maximum relay life and transient EMI suppression is achieved by using external protection. All external protection devices should be placed directly across the load and all leads lengths should be kept to a minimum length. For AC inductive loads (see Figure 1), place a properly rated MOV across the load in parallel with a series RC snubber. A good RC snubber consists of a 0.1 µF polypropylene capacitor of sufficient voltage and a 47 Ω ½ W carbon film resistor.

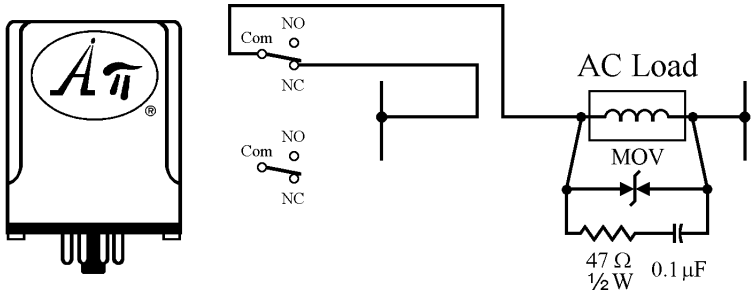


Figure 1: AC inductive loads

For DC inductive loads (see Figure 2), place a diode across the load (1N4006 recommended) being sure to observe proper polarity. Use of an RC snubber is an optional enhancement.

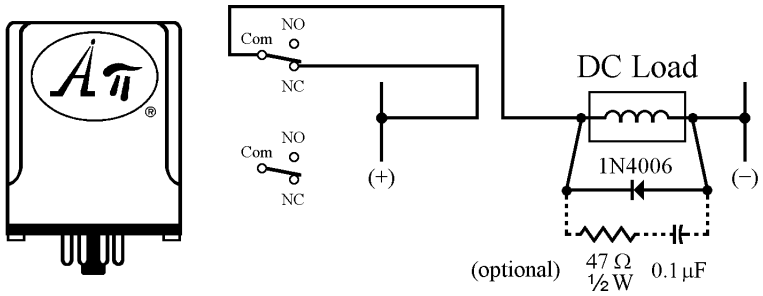


Figure 2: DC inductive loads

Did You Know ... ?

Api's standard heavy-duty relay contacts are rated 7A @ 240 VAC (resistive) and can directly control most devices.