ILLINOIS CAPACITOR, INC.
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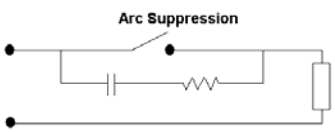
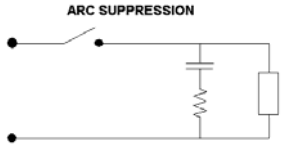
ARC SUPPRESSION (relays)

Arc suppression is when a capacitor and resistor are connected across the contacts of a relay to absorb (suppress) the electrical arc that occurs when the contacts open. The resistor is utilized to current limit the added energy that could be stored in the capacitor when the contacts were opened.

The following are used to determine the capacitance and resistance values needed to suppress the arc.





$C=I^2/10$
$R=V/ [10+ (1+ (50/V))]$

The main characteristics are:

- capacitance
- dv/dt
- Voltage rating