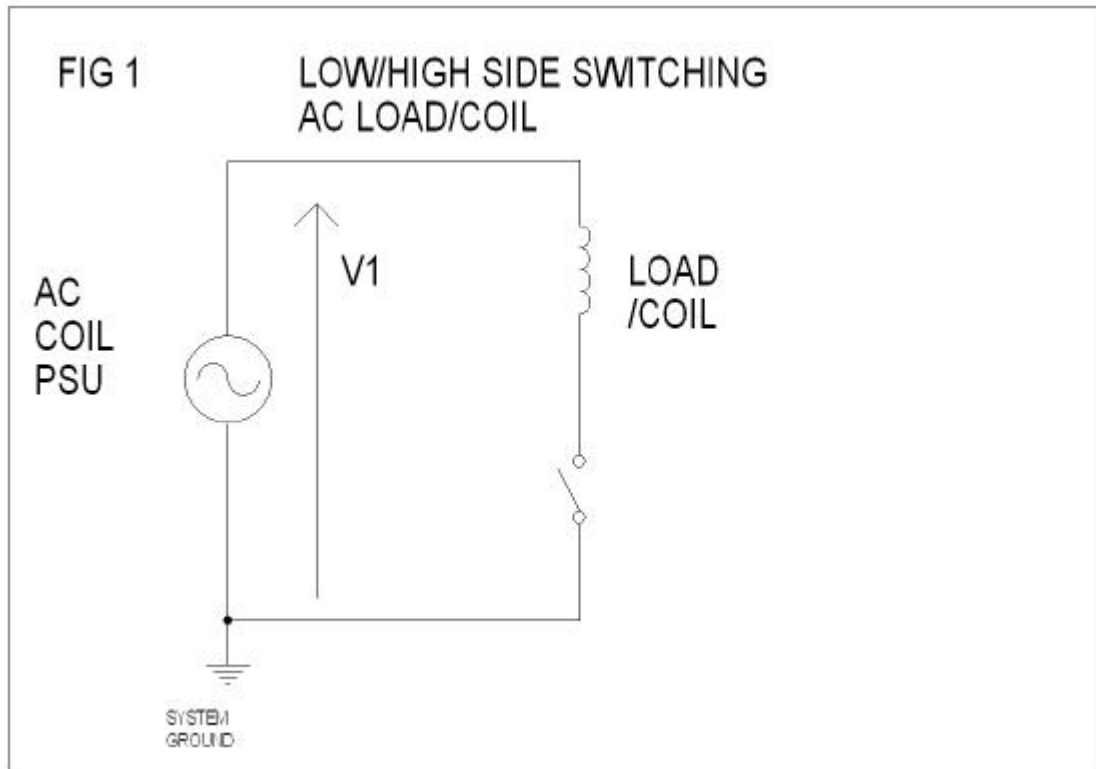


## AN260706: Reflex AC (SSR) Switch Module Selector

The following information should be used to assist the selection of the most appropriate AC (SSR based) switch module for a particular application. For more information please contact Applied Relay Testing.



Key:

V1 = Maximum voltage (rms)

Notes:

1. AC loads/coils can also be switched using two DC switch module elements please refer to application note AN171005 and 'Reflex DC switch module selector' for more information about this.

AC switches interface to the switch controller card (ASY5739) located in the reflex chassis via an SSR drive module. These modules are available in dual (D-SSR) and quad (Q-SSR) versions which are suitable for controlling two or four AC SSR switches respectively. Up to four SSR drive modules can be controlled by a switch controller card. ART supply both DIN rail mounting SSRs with integral heat sinks and surface mounting versions which require external heat sinking.

Most SSR relays are zero voltage switching, however some are available in a random switching version:

- Zero voltage switching versions are recommended for use with single phase resistive loads or motor loads with power factor >0.8.

- Random (instantaneous) versions are recommended for switching motor loads with a power factor of <0.8.

SSR devices require over-voltage and transient protection to prevent damage to the devices. Please refer to the tables below for more information.

*DIN RAIL MOUNTING SSR SWITCHES (WITH INTEGRAL HEATSINK):*

Part Number	Number of switching elements	DC/AC	Voltage range (Volts RMS)	Current range (Amps RMS)	Max. surge current (Amps)	Max. Transient over-voltage (Volts)
280AC-35	1	AC	24-280	0.15-35	250	600
280AC-45	1	AC	24-280	0.15-45	625	600
280AC-55	1	AC	24-280	0.25-55	1000	600
280AC-65	1	AC	24-280	0.25-65	1200	600
530AC-35	1	AC	48-530	0.15-35	250	1200
530AC-45	1	AC	48-530	0.15-45	625	1200
530AC-55	1	AC	48-530	0.25-55	1000	1200
530AC-65	1	AC	48-530	0.25-65	1200	1200

Notes:

1. These devices require over-voltage and transient protection.
2. Other devices are available.

Table 1

*SURFACE MOUNTING SSR SWITCHES (REQUIRE EXTERNAL HEATSINK):*

Part Number (add R suffix for random switching)	Number of switching elements	DC/AC	Voltage range (Volts RMS)	Current range (Amps RMS)	Max. surge current (Amps)	Max. Transient over-voltage (Volts)
280AC-50	1	AC	24-280	0.1-50	235	600
660AC-50(R)	1	AC	48-660	0.1-50	235	1200
280AC-125	1	AC	24-280	0.1-125	510	600
660AC-125(R)	1	AC	48-660	0.1-125	510	1200

Notes:

1. These devices include integral over-voltage and transient protection.
2. Other devices are available.

Table 2