

HOW TO SELECT A HIGH VOLTAGE RELAY OR CONTACTOR

In the most basic terms, a relay is a remotely operated switch designed to isolate voltage and a contactor is a remotely operated switch designed to switch power. In everyday applications there is cross over and no clearly defined difference between a relay and a contactor. Sensata | Gigavac High Voltage Relays and Contactors have different design characteristics but both have the advantage of being sealed providing a safe and predictable switching environment.

Learn more about relays and contactors in this brief flyer.

What is your circuit voltage, or what do you need to isolate?

If it is over 1500V then you will need to look at **High Voltage Relays**



If it is 1500V or less then look at **Sensata Contactors**



What form is required, SPST, SPDT, or DPDT?

Sensata | Gigavac **High Voltage Relays** offer all three possibilities. **Contactors** are all SPST designs.

What coil voltage is required?

Sensata offers standard coil ratings from 5Vdc to 240VAC, product dependent. Some special coil requirements can be accommodated.

Are there any mechanical size or mounting requirements, PCB mount, panel mount, etc?

Sensata offers a wide variety of package and mounting features. Special packaging requirements may be accommodated with a minimum order volume.

Is a Latching, bi-stable, contact form required?

Both **High Voltage Relays** and **Contactors** offer latching versions.

Following are some basic questions to help in selecting the right Sensata High Voltage Relay or Contactor

Sensata High Voltage Relays



Sensata Contactors



Does the relay need to switch under load, open or close, while current is flowing?

- If yes and your circuit voltage is under 1500V then
 Sensata Contactors are probably the best choice
- If yes and your circuit voltage is over 1500V then
 Sensata High Voltage Relays are the best choice
- If not switching under load, most Sensata | Gigavac switching products can meet your application needs (given other requirements).
- * Once voltage and switching requirements are defined there are a number of other factors to look at on the summary and detailed specification pages.

Is the application circuit DC, AC, or RF?

High Voltage Relays and **Contactors** can be used in DC or AC circuits. Most Sensata **High Voltage Relays** are suited for RF applications.

Are there any environmental considerations like temperature extremes, shock, vibration, etc?

The environmental specifications of each product can be found on the corresponding datasheet.