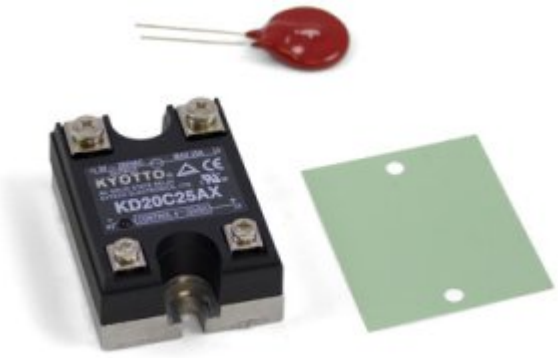
AC Solid State Relay – 280V 25A

Product Description

For AC switching applications, this solid state relay is economical and reliable. Using the digital outputs from a Phidgets device, you can control the relay to silently switch a AC circuit at 280V/25A or less. There's an indicator LED on the control side of the circuit so you can tell the state of the relay at a glance.

If your SSR is overheating, you should consider getting a heat sink for safety. See the "Compatible Products" tab for a list of compatible heatsinks. This SSR comes with a heat transfer pad that can be placed between the metal base of the SSR and the surface it's mounted to in order to help encourage heat flow. It also comes with a varistor that can be used to protect your SSR against voltage spikes in some applications.

Comes Packaged with



This SSR comes with a heat transfer pad and a TMOV20RP200E varistor. Use the heat transfer pad whenever mounting the SSR on a heat sink or metal surface. If you're switching a load at 120V or less, you can put the varistor across the load terminals in parallel with the rest of the load circuit in order to protect your relay from voltage spikes. If you're switching a load higher than 120V, do not use the varistor. For more information, see the Solid State Relay Primer.

Connection

This relay can be controlled using a Phidgets relay output board. See the “Compatible Products” tab for details.

Warnings 

1. If you’re running the SSR close to it’s maximum current rating, you’ll probably need to mount it to a heat sink or a surface that can function as a heat sink.
2. Use the heat transfer pad between the SSR and the heat sink. Failure to do so can cause overheating and could damage the relay.
3. Make sure that the SSR terminal screws are tight. If the screws are not tight, the SSR will get damaged by heat generated when the power is ON.
4. When an SSR fails, it most often fails permanently closed – leaving your load powered, and possibly creating a fire or safety hazard. Be sure to have failsafes in these situations.
5. Make sure that you use the relay within the product specifications.
6. Ensure that the relay terminals are covered or protected when switching high voltage loads.

Product Specifications

Electrical Properties	
Isolation Method	Photoelectric
Dielectric Strength	2.5 kV AC
Control Voltage Min	4 V DC
Control Voltage Max	32 V DC
Load Voltage Max (AC)	280 V AC
Load Current Max (AC)	25 A
Load Surge Current	260 A
Turn-on Time Max	2 ms
Physical Properties	
Length	57 mm
Width	43 mm
Height	25 mm
Operating Temperature Min	-20 °C
Operating Temperature Max	80 °C
Other Properties	
Manufacturer Part Number	KD20C25AX