

# LOW CURRENT SOLID STATE RELAY

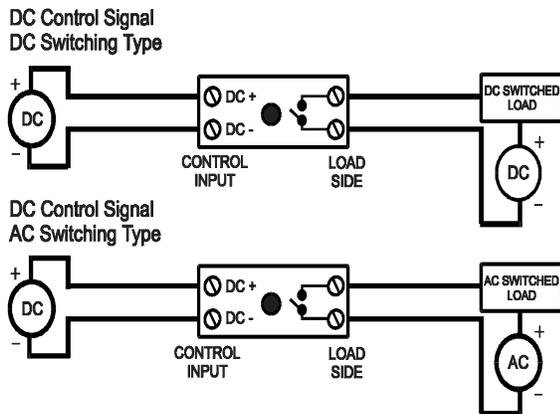
Type: SSR-WG4-200V-xxxVyy-1A  
 Where: xxx = Maximum Switched Voltage  
 yy = AC or DC



## Description:

The SSR-WG4-200V-xxxVyy-1A is a solid state relay designed to accept a wide input voltage range of 4-200 volts DC to control a DC or AC voltage (depending upon the model selected, not greater than 200 Volts at 1 Amp). This makes it ideal for direct connection to unbuffered microprocessor port pins or other applications that are incapable of driving standard loads such as relays. The relay provides for very high-speed on/off switching times allowing the control voltage to operate from DC to 3 kHz maximum. The relay has no moving parts eliminating the bounce and burning of contacts normally associated with mechanical relays. This relay is a single-pole normally open (Form 1A) solid state replacement for low current electromechanical relays.

## Application:



The solid state relay provides complete isolation between the input and output terminals. The input can be driven by a DC voltage from 4 to 200 Volts Peak. The drive current required is 2.5 mA maximum. This makes the solid state relay an ideal control module for low power devices. A typical application would be a load which requires a microprocessor to control the on and off states. Another application involves using the solid state relay to interface between a TTL or CMOS output, such as a rotary encoder or counter, and a data line going through a noisy environment.

## Technical Specifications:

All specifications typical at nominal line, full load and 25°C unless otherwise specified

### General Specifications:

Minimum

Typical

#### Maximum

Switch-On Time		20 uSec	
Switch-Off Time		20 uSec	
Isolation Voltage			2500 Volts
Isolation Resistance	10,000		
Isolation Capacitance			10pF

### Input Specifications:

Input Control Voltage Range	4 Volts Peak		200 Volts Peak
Input Control Current Range	1 mA		2.5mA
Input Frequency	DC		3 KHz

### Output Specifications:

Output Voltage Range			
SSR-WG4-200V-200VDC-1A	0 VDC		200 VDC
SSR-WG4-200V-120VAC-1A	0 VDC		120 VAC RMS
Output Current Continuous			1.0 Amps
Output Power			
SSR-WG4-200V-200VDC-1A			200 Watts
SSR-WG4-200V-120VAC-1A			120 Watts
On-State Resistance @ 48 VDC			
SSR-WG4-200V-200VDC-1A			0.18 Ohms
SSR-WG4-200V-120VAC-1A			0.18 Ohms
Off-State Resistance			> 1 MOhm
Output Capacitance		200 pF	

### Dimensions:

Type: Wieland WEG 4 terminal modular housing  
Polyamide 6.6 plastic, UL94V-0  
#12 to #22 AWG terminals

Size: 60.6 mm x 90.5 mm x 22.5 mm (2.39" x 3.56" x 0.89")  
(W x H x D excluding DIN rail)

**Operating Conditions:** -40 to 85°C (-40 to 185°F), 0 to 93% Relative Humidity

**Protection Rating:** IP20

**Weight:** 0.10 lbs. (0.045 kg)

**Ordering Part Number:** SSR-WG4-200V-200VDC-1A  
SSR-WG4-200V-120VAC-1A

*Specifications are indicative and subject to change. Actual performance will vary depending on the application and operating conditions. Users should satisfy themselves that the product is suitable for use in the intended application.*

*All our products carry a limited warranty against defects in material and workmanship. Please refer to our Warranty, Application Approvals/Limitations and Return Materials Process as described on [www.axiomatic.com/service.html](http://www.axiomatic.com/service.html).*

Form: TD0600AX-07/14/09