

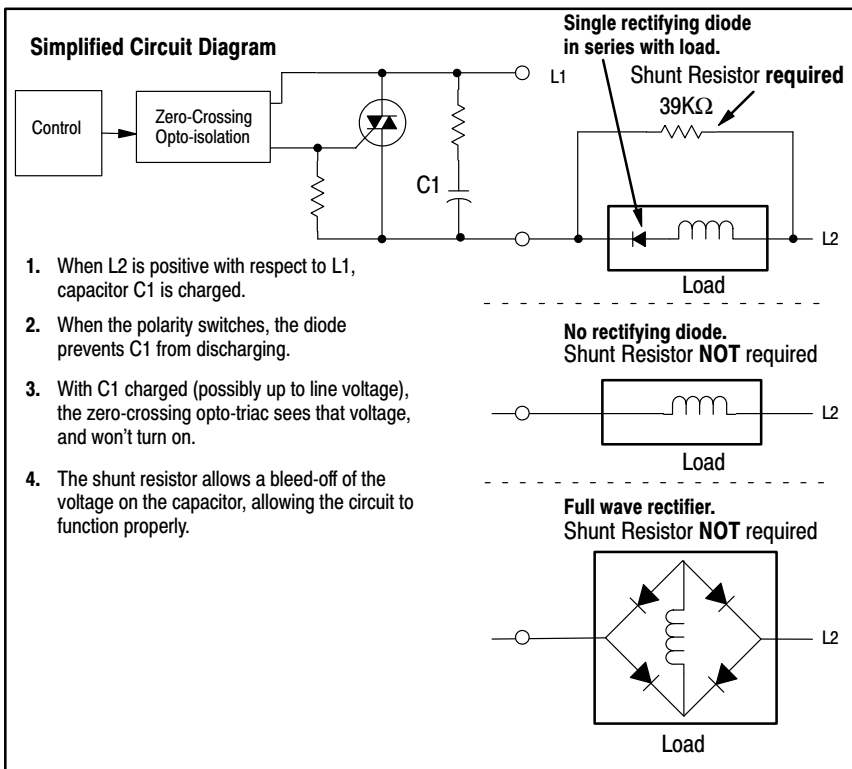


## Using Half-wave Rectifying Load Devices (Single Diode) with 1791 ac Output Modules

### Application Information

Some ac output modules use zero-crossing technology to allow output turn-on when the voltage is less than some specified level (typically 40–50V). This type of circuit greatly reduces the stress on contacts and other devices that are sensitive to current surges.

When using an output module that includes zero-crossing technology with a device that includes a single diode in series with the load, place a shunt resistor across the load. The resistor is required to allow proper output turn-on.



## Application Information

Using Half-wave Rectifying Load Devices  
(Single Diode) with 1791 ac Output Modules

1791 modules currently using zero-crossing technology include:

- 1791-0A16 series B
- 1791-0A32 series B
- 1791-8AC series B
- 1791-16AC series B
- 1791-24A8 series B



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