

# AC SENSE RELAY

## Safe Power Sensing



The AC sense relay provides isolated power sensing and control. It's more than just a relay in a box. It contains an AC powered relay, circuit breaker, safety delay and debounce circuits, and screw terminal dry-contact outputs.

The relay coil driver senses AC power. The contacts can control either AC or DC devices. Whenever AC power is within usable ranges (ie. 80-140VAC), the relay is activated. When activated, the NO contact is closed and the NC contacts is open. When power fails, this is reversed: NC is closed, and NO is opened.

The output contacts are fully isolated, and can be directly connected to a microcontroller for signaling, or they can be used to control a high power AC or DC load. The two output contacts can control one normally on device, one normally off device, or both simultaneously.

Applications include:

- AC power failover systems
- Battery / solar backup systems
- Building automation & home theater
- Alarms, power failure alert systems.
- Green power and energy conservation

Loads of up to 15 Amps total may be controlled. Your imagination is the limit.

- A single 120V AC input signal controls one high-current SPDT relay. This relay signal switches a single contact which provides either normally-on or normally-off operation.
- Self-contained design eliminates dangerous high voltage wiring and safety hazards.
- Safety features include:
  - Magnetic isolation -- eliminates shock hazard
  - Relay hysteresis -- prevents relay chatter
  - De-bounce protection -- extends contact life
- The durable SPDT control relay is rated at 30/40A, 400,000 operations at 12A resistive. At no load, the estimated lifetime is 5.3 million mechanical operations.
- A 15A thermal safety circuit breaker switch prevents overloads and adds supplemental protection.
- Recommended operating ranges: AC input 90-120VAC. Current 0-12A. 15A peak. Stranded wire only.
- Input connector: IEC 60320-1 C-8
- Output connector 3x screw terminals.
- Included cord: 24" IEC-C7 to 5-15 unpolarized.
- Indoor use only: -35F to 145F, 5-95% noncondensing.



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