

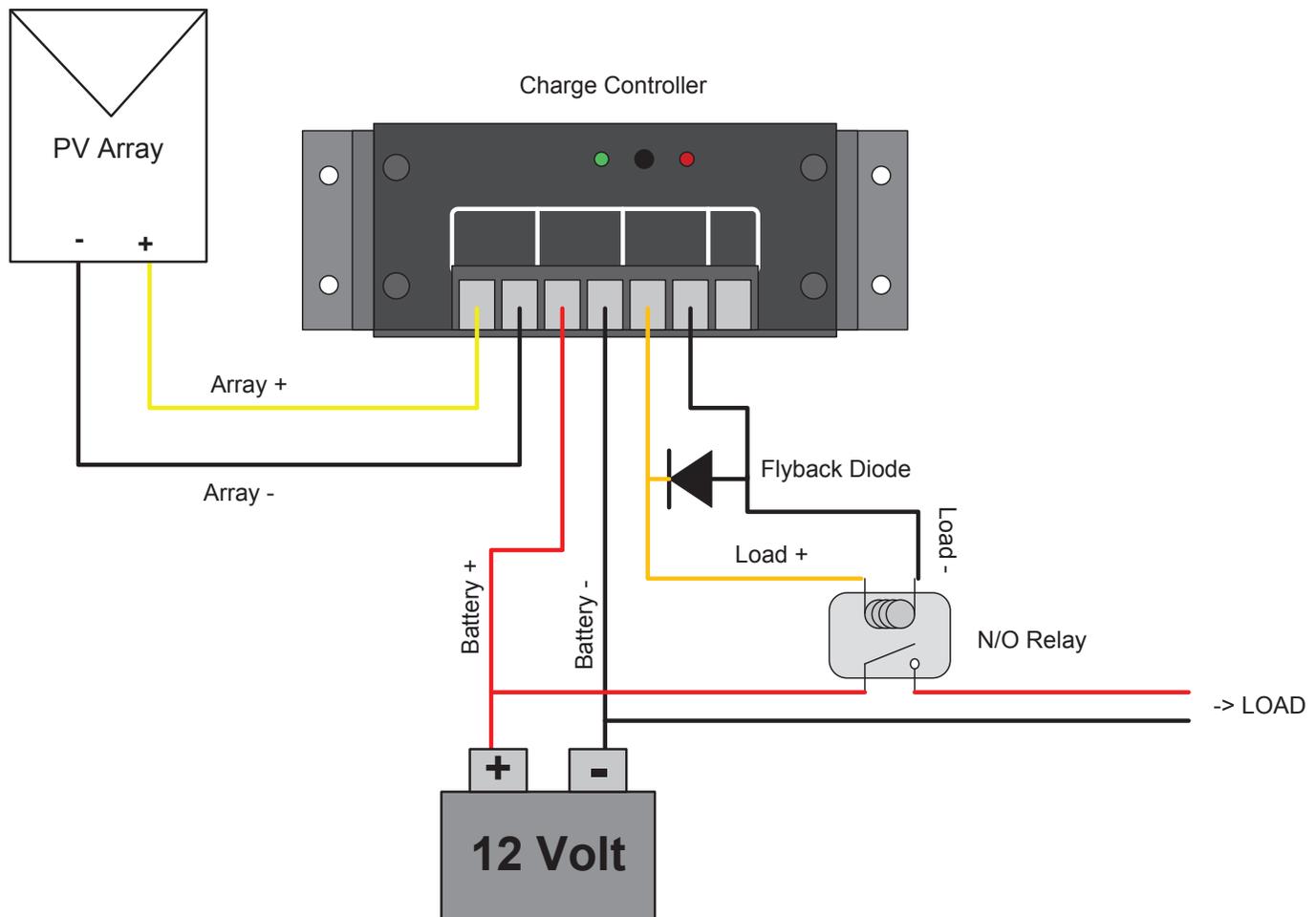
Load Control With A Relay

Load Control for Large, Inductive, or Capacitive Loads

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Abstract:

Some loads are not suitable for direct connection to the Load terminals of a Morningstar controller. Heavily inductive or capacitive loads such as pumps, motors, compressors, and inverters should not be wired to the controller's Load terminals. In addition, loads exceeding the Load Current Rating of the controller should not be connected to the controller's Load terminals. Low Voltage Disconnect protection can be maintained when using these loads via the use of a Relay. A diagram and corresponding notes shows how this can be accomplished.



IMPORTANT: This is not intended to be a complete system diagram; fusing, disconnects, and grounding should comply with local electric codes.

Notes:

- Used when the load is an inverter, pump, motor, compressor, or exceeds the controller's Load current rating.
- The Flyback Diode is recommended to clamp inductive voltage spikes when the Relay is de-energized. The Diode should be rated to at least the maximum current drawn by the Relay coil.
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- The Charge Control above can be any Morningstar controller with built-in Load terminals and LVD (low voltage disconnect) functionality.
- For detailed installation information, please consult the respective product manual.