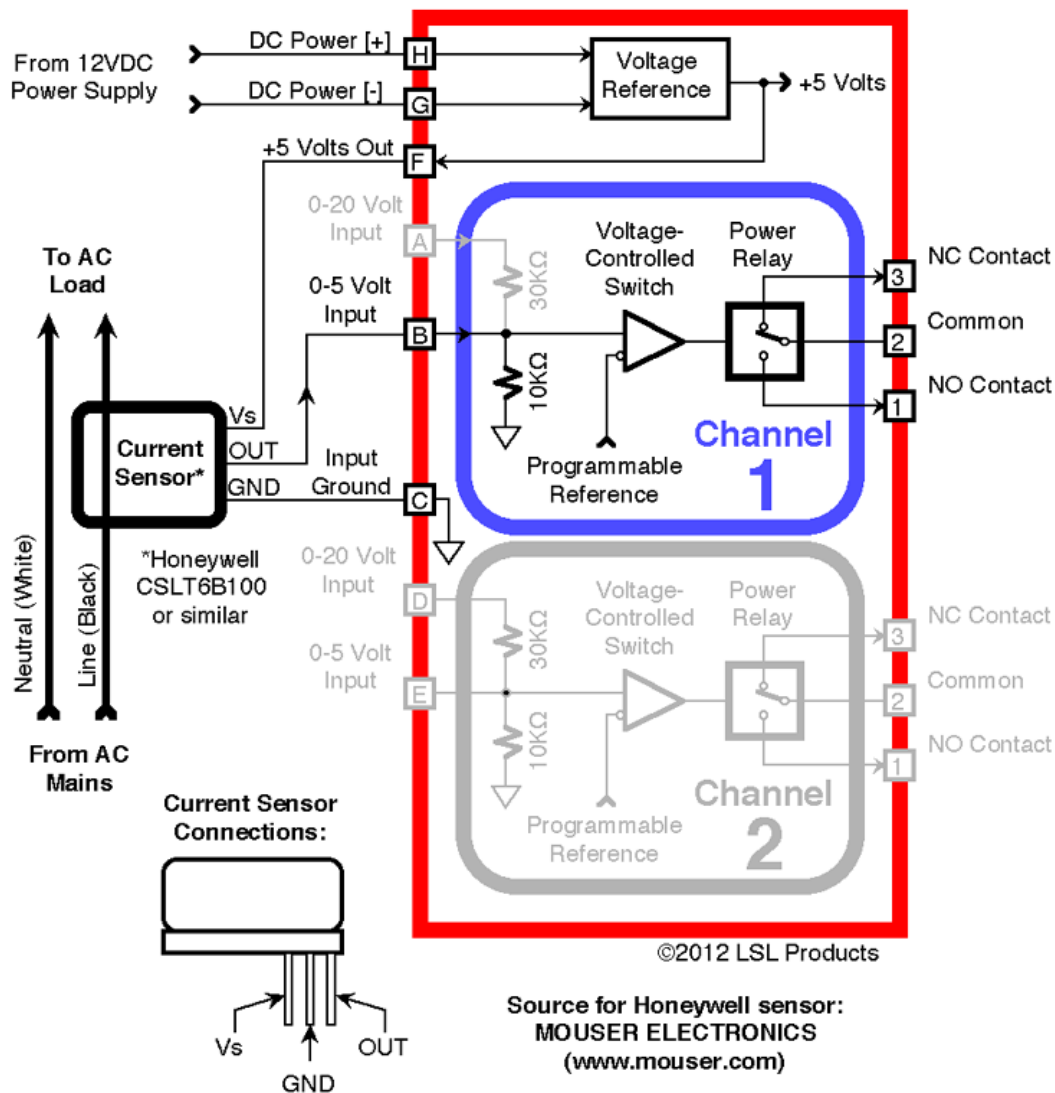


Pro-VCS™ Application Example: AC Current-Operated Switch



This configuration measures the voltage developed by a Hall-Effect current sensor, which is proportional to the amount of AC load current flowing through it. Unlike a shunt resistor, this sensor electrically isolates **Pro-VCS™** from the AC mains - which is absolutely essential for safety. The sensor also works with DC loads.

Several typical applications would be to automatically turn on a video monitor whenever a desktop computer is manually turned on, or to disconnect an appliance that is drawing too much current.

This particular Honeywell sensor only requires a +5 VDC power source and draws less than 10 mA, allowing it to be powered by Terminal **F** on the **Pro-VCS™** unit. Although this sensor measures up to 100 amps of AC current, its range can be halved (or quartered) by looping the AC **Line** (Black) wire through it twice (or 4 times). This can improve its sensitivity and accuracy when measuring small currents.

The sensor produces two different output voltages for the same AC current flowing in opposite directions. This makes it possible for the **Pro-VCS™** to distinguish between forward and reverse current flow, and to trigger on either one.