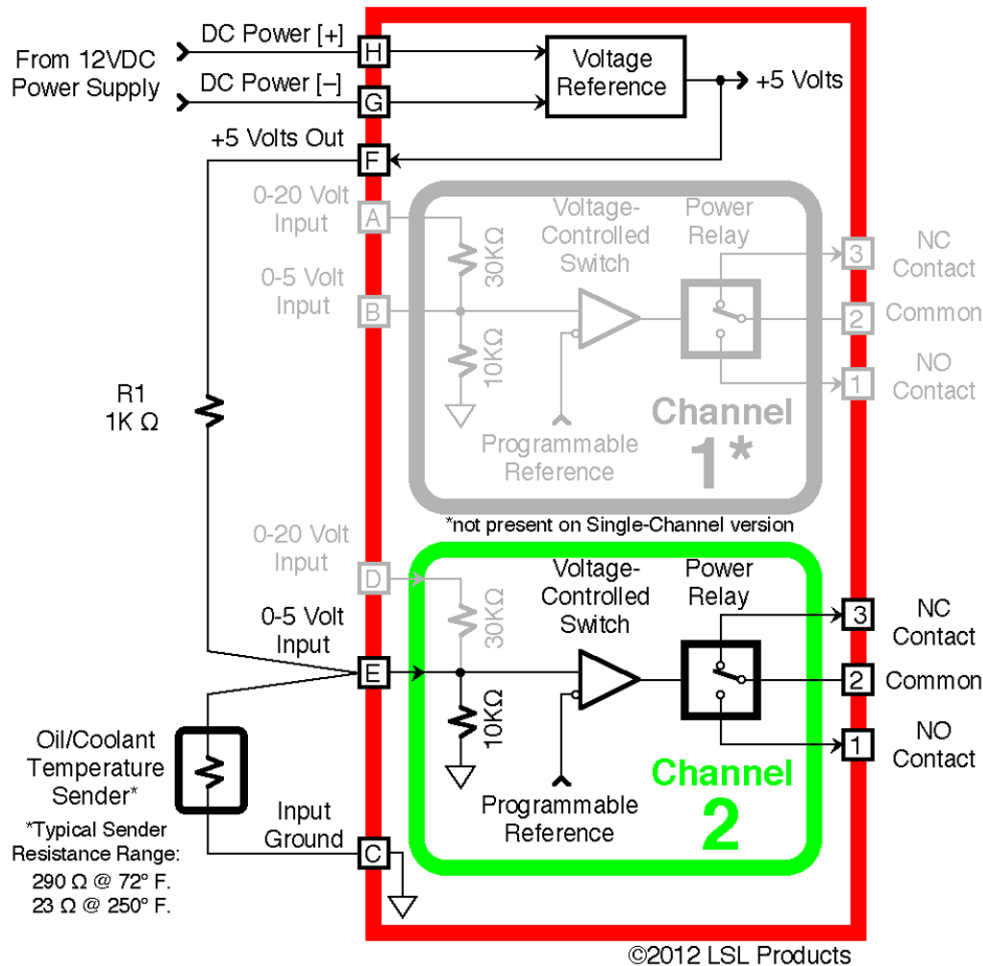


Oil or Coolant Over/Undertemperature Switch



This configuration uses a standard automotive oil or engine coolant temperature sender that is connected to produce a voltage which is proportional to the oil or coolant temperature it is measuring. Essentially, the sender forms the lower part of a resistive divider circuit, and resistor **R1** forms the upper part. As the sender is exposed to different amounts of oil pressure, its resistance will change, causing the voltage at the center of the divider to also change. We can program the **Pro-VCS™** to turn on or off at these different voltages, thereby allowing the unit to function as an oil pressure switch. Only one **Pro-VCS** channel is required to build this circuit.

The resistance of most temp senders decreases when exposed to higher temperatures. Thus, the configuration shown will produce a high voltage at low temperature (closing the **NO** relay contacts), or a lower voltage at high temperature (closing the **NC** relay contacts instead).

A typical application would to shut off an engine when its oil or coolant temperature exceeds a pre-set value (by connecting the engine's ignition circuit in series with the **Common** and **NO** relay contacts).

Note that a relatively low resistance value was chosen for **R1**, in order to increase the range of voltages produced by the sender at various oil temperatures.