ECU® Design Guide for VLD2

Refer to VLD2 application drawing when using this guide.

Topics

What does an ***ECU***® VLD2 do for me?

The VLD2 depending on the systems design can...

Monitor the condition of a systems battery voltage

Whether the voltage is high

Whether the voltage is low

The VLD2 cannot output the HI/LO like the VLD1

How the VLD2 works for you

The unit has voltage comparator circuits that constantly monitor the Battery voltage. If the battery voltage is above the high trip point the high trip contacts are closed. If the battery voltage decreases below the low trip the low battery contacts are closed.

If the battery voltage is in limits no outputs are energized.

What does it sense and control?

The VLD2 depending on systems design can...

Sense …

- Battery voltage
- Other DC voltages

Control...

- Pilot relays
- Lamps

Do not exceed the ratings of the contacts as stated in the VLD2 data sheet.

What kind of sensors are used with the VLD2?

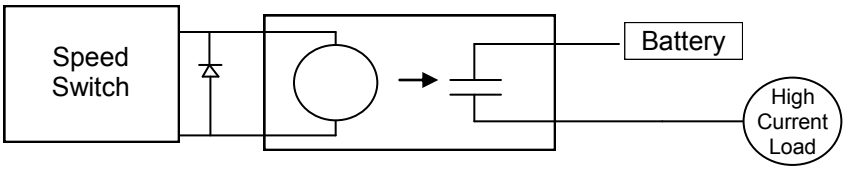
The VLD2 uses

- Voltage Sources such as the system Battery

What are pilot or slave relays?

Pilot or Slave relays

Many of the valves and solenoids the speed switch operates have high currents and it may become necessary to “buffer” the control against harmful currents.



Pilot or Slave relay

The Pilot or Slave relay simply “relays” the signal to the high current load. The input to the Slave relay can be small but it can control currents up to 100’s of amps. A diode is shown in the above illustration. This is a low cost preventative that adds years of useful life. The diode channels the surges of the slave relay into a harmless dissipation as opposed to causing arcing in the control contacts of the engine control.

By placing the pilot relays close to the loads other electrical benefits occur when the system is in an environment where electrical interference should be minimized.

Are there any application drawings available?

The VLD2 application example located on the flyer shows an example. Look at the various drawings on other products for ideas.

ECU® can be reached for special applications that we may already have drawings for.

We will endeavor to assemble all the drawings into a fixed gallery that can be emailed to our customers on a project by project basis.