

Installation Instructions

5601012 Low Voltage Power Disconnect

Buyers Products 5601012 Vehicle Control Module by InPower, is a tool for the designers of vehicle electrical control systems. Made to withstand the environments typically found on trucks, emergency vehicles, buses, coaches and speciality vehicles.

Technical Description

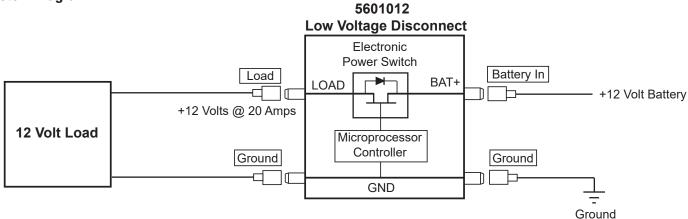
Buyers Products 5601012 by InPower is a solid state low voltage disconnect for 12 volt vehicle applications. The 4-wire terminal configuration allows easy installation with two-conductor power cables typically used with 12 volt power point supplies. LVDs protect against draining the battery when the engine is not running by automatically disconnecting loads when the battery voltage reaches a critical level. The LVD module contains a microprocessor controller and a solid state 20 amp power switch for powering the output loads. The output provides over current fault shut down protection. The LVD continuously monitors the voltage level of the 12 volt power input. When the voltage is above 13.25 volts, the power switch will turn on to supply up to 20 amps on the output terminal to power the loads. If the voltage drops below 12.8 volts, a timer is started. If the voltage remains below 12.8 volts until the timer expires, the power switch will turn off, disconnecting the power to the loads. If the voltage drops below 11.8 volts with the timer running, the power switch is shut off immediately. Any time the input voltage increases to above 13.25 volts, the power switch will turn on to supply power to the loads and the timer will be reset.



Key Features

- Voltage >13.25 Output On
- Voltage <12.8 Output Off After 5 Minute Shut-Off Timer Expires
- Voltage <11.8 Output Instant Off
- 12 Volt 20 Amp Solid State Output
- Over Current Fault Shutdown Protection
- 4-Wire Terminal Configuration
- Compact Size
- Durable Metal Case







Specifications

Power Input (BAT+): +8 to 16 Vdc @ 20 amps Module Output (LOAD): +12 volts @ 20 amps, with over current fault shutdown protection

Mechanical

Weight: 0.10 lbs.

Operating Temperature: -40° C to $+85^{\circ}$ C Dimensions: 1.75" H x 2.30" W x 0.65"

Output Disconnect Operation:

Input voltage >13.25 - Output on

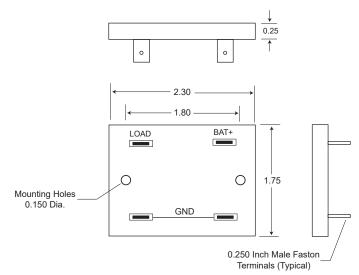
Input voltage <12.8 - Output off after 5 minute shut-off timer expires

Input Voltage <11.8 - Output instant off

Installation

- 1. We recommend that the module be installed by a person trained and skilled in vehicle electrical systems. The installation should comply with SAE (Society of Automotive Engineers) and the vehicle manufacturer's electrical wiring procedures (e.g. Ford, General Motors, etc.).
- **2.** The module should be installed on the inside of the vehicle in a dry and protected environment.
- **3.** For optimum power output performance the product should be mounted to a metal surface.
- **4.** Do not connect loads to the output that will exceed the output current rating of the module.
- **5.** The 12 volt power input must be from a properly fused +12 volt power source.
- **6.** Wiring must be of the proper gage and type to handle the intended load currents.
- **7.** We recommend the use of insulated 1/4 inch female blade terminals that connect to the terminals on the module. Be sure to properly crimp these terminals. Do not solder wires directly to the module terminals.
- **8.** If you are experiencing problems with the installation or need troubleshooting assistance, contact InPower Customer Service at 740-548-0965. Reference Buyers Products P/N 5601012/VCM-12-1-05MF.

Mechanical Drawing



All dimensions in inches. Do not scale.

WARRANTY

Buyers Products Co. warrants all truck/trailer hardware manufactured or distributed by it, to be free from defects in material and workmanship for a period of one year from date of shipment. Parts must be properly installed and used under normal conditions. Any product which has been altered, including modification, misuse, accident or lack of maintenance will not be considered under warranty. Normal wear is excluded. The sole responsibility of Buyers Products Co. under this warranty is limited to repairing or replacing any part or parts which are returned, prepaid, and are found to be defective by Buyers Products Co. Authorization from Buyers Products Co. must be obtained before returning any part. No charges for transportation or labor performed on Buyers' products will be allowed under this warranty.