

# LVD12 & LVD24

## DC Voltage Monitoring Units



- Battery under voltage relay
- Delay on battery disconnect voltage
- 11 pin relay format
- Monitors its own supply

### Description

#### BATTERY / DC VOLTAGE MONITORING UNITS 11 PIN PLUG-IN TYPE

These units have been configured to monitor the voltage of their own DC supply. They are particularly suited to applications where a load is applied to the battery with no charger present (i.e., battery back-up system) where the battery is supplying the load in the event of a mains failure.

To prevent irreversible damage to the batteries, this unit will give a signal to connect the batteries at a safe set point. This set point is factory set at customers' specified levels.

Each unit contains single pole change over relays for battery disconnect voltage, which can be delayed for 0-300 seconds and de-energizes on fault.

#### Battery Disconnect Voltage

If the voltage falls below the low voltage set point, the override delay timer is activated. Failure of the voltage to rise above the set point for the duration of the timer will cause the relay to de-energize. The relay will remain de-energized until the voltage rises above the set point value, plus an additional 2 volts (i.e., if set point is 10V,DC, relay will re-energize at 12V,DC and prevent the battery from being reconnected below a safe operating level.)

#### Warranty

A one year limited warranty on materials and workmanship is given with this product. Details are available upon request.

### Product Specification

#### Power Supply:

Nominal Operating Voltages	9V,DC - 32V,DC
Loss of Control & Time Delay	4V,DC on 12V,DC system 8V,DC on 24V,DC system

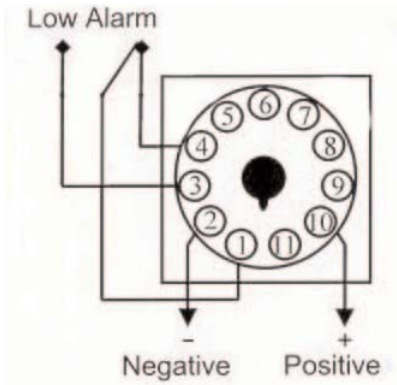
#### Relay:

Relay Type	volt-free SPDT contacts Relay energized on fault
Contact Rating	1A@30V,DC (resistive load)

#### General:

Operating Temperature	14 to +131°F (-10 to +55°C)
Overall Dimensions	1.97" x 1.97" x 1.61"
Weight	0.22 lbs.
EMC Emission / Immunity	EN58801-2 / EN50082-2

## Electrical connection

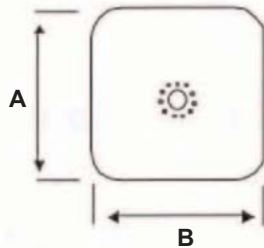


The contacts are shown in an “off-the-shelf” (or de-energized) condition. The Negative and Positive contacts (2 and 10) are for either supply or sensing operation.

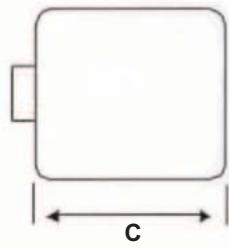
Please Note: Volt-free relays are rated at 1 amp @ 30V,DC or 120V,AC.

## Dimensions

Bottom View



Side View



	A	B	C
<b>LVD12 and LVD24</b>	1.97" (50 mm)	1.97" (50 mm)	1.61" (41 mm)

## How to Order When ordering, please specify --

Product	Nominal Input V,DC	
	12	24
LVD12	■	
LVD24		■

	UNDER VOLTAGE TRIP POINT	
	RANGE	
	12V 9-16V	24V 18-32V
<b>U*</b>	Specify trip point	
<b>U*</b>		Specify trip point


	UNDER VOLTAGE TIME DELAY (in seconds)
	0 - 300 seconds
<b>S*</b>	Specify duration / interval

Product	Under Volts	Time Delay
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\* = Enter duration intervals for these items to complete your order.

**LVD12      U11.5      S120**

The above example shows the order code for a 12V,DC input relay with battery disconnect voltage set at 11.5V,DC and a time delay of 120 seconds.

 <p>www.pc-s.com</p>	<p>For more information and certifications, please contact:  <b>Panel Components &amp; Systems, Inc. ■ Phone: (800) 523-9194</b></p>		
	<p>Main Office: Stanhope, NJ      Phone: (973) 448-9400          South East: Charlotte, NC      Phone: (704) 535-3357          South Central: Tulsa, OK      Phone: (862) 258-6974          Canada: Edmonton, AB      Phone: (877) 962-0557</p>		