crydom

InstallationSheet

# LVD Series

## Panel Mounted Low Voltage Disconnect DC Solid State Switches

Crydom LVD Series Solid State Switches were developed to offer the advantages of Crydom's thermal management technology in a switch that monitors a system's battery voltage and disconnects the battery from the system when it's voltage falls below a preset low voltage value.

## FEATURES

- Wide range of output current ratings and control set points
- MOSFET DC switching technology
- Industry standard package
- Ambient temperature compensated

## MOUNTING INSTRUCTIONS

Please read all installation instructions before using your LVD Series switch.
Choose one of the two mounting options and follow the instructions.

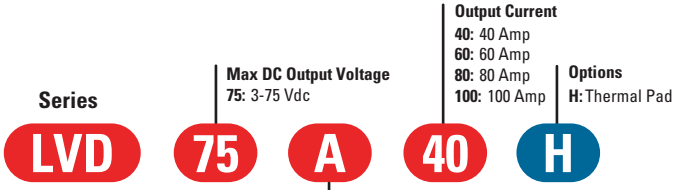
### Mounting on Heat Sink

- Select adequate heat sink (see thermal derating curves)
- Be sure to use thermal pad/grease between LVD switch and the selected heat sink
- Align SSR tabs with heat sink surface and screw both top and bottom sides. Recommended torque is 20 in lb (2.2 Nm)

### Mounting on Panel

- Locate the panel section on which the LVD switch will be mounted on
- Be sure to use thermal pad/grease between LVD switch and the panel
- Tab holes have a diameter of 0.125 in (3.2 mm). You will need two screws no longer than that to mount the LVD switch onto panel
- Align LVD switch tabs with panel surface and screw both top and bottom sides. Recommended torque is 20 in lb (2.2 Nm)

## PART NUMBER NOMENCLATURE




Required for valid part number

For options only and not required for valid part number

Rev: 111710





A brand of CST CUSTOM SENSORS & TECHNOLOGIES

crydom

# InstallationSheet

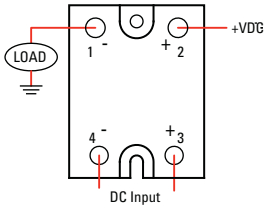
## WIRING DIAGRAMS

**Maximum Recommended Terminal Screw Torque [in/lbs] (Nm)**
Input 8-10 (0.9-1.1) / Output 18-20 (2.0-2.2)

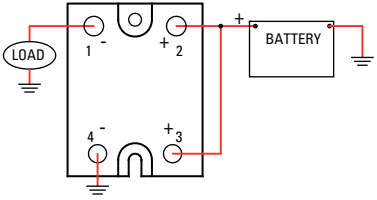
**Input Terminal Wire Capacity**
12 AWG (2.5 mm)

**Output Terminal Wire Capacity**
Select wire size depending on current

**BASIC WIRING**

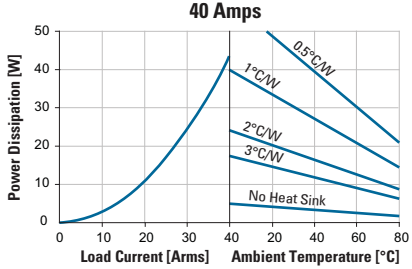


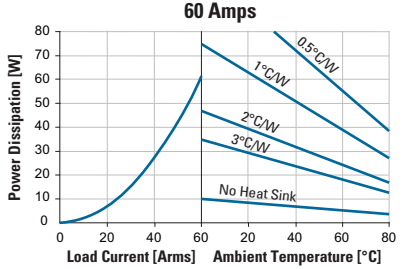

**TYPICAL LVD CONNECTION (A, B)**

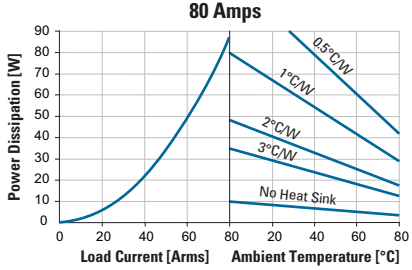


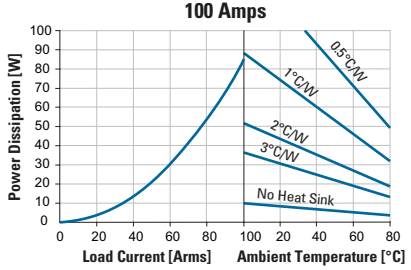

(A) When wired as above the maximum battery voltage is limited to 36 Vdc
(B) Typical LVD Connection Wiring diagram does not feature electric isolation between Input (1, 2) and Output (3, 4) terminals

## DERATING CURVES




| ⚠ WARNING | ⚠ DANGER |
|---|---|
| **RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE**<br>• The product's side panels may be hot, allow the product to cool before touching.<br>• Follow proper mounting instructions including torque values.<br>• Do not allow liquids or foreign objects to enter this product.<br>**Failure to follow these instructions can result in serious injury, or equipment damage.** | **HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH**<br>• Turn off power supply before working on this equipment.<br>**Failure to follow these instructions will result in death or serious injury.** |

**Rating - Heat Sink part number**
0.5°C/W - HS053
1°C/W - HS103/HS103DR
2°C/W - HS201/HS201DR
3°C/W - HS301/HS301DR

Rev: 111710

Do not forget to visit us at: **www.crydom.com**



A brand of CST
CUSTOM SENSORS & TECHNOLOGIES