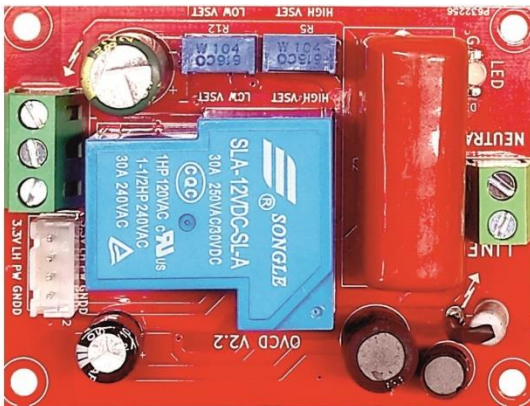


OVCD- Only Product to Protect Against Over Voltage and Low Voltage Conditions



Features:

- Neutral open protection (Protection up to 500 volts)
- Withstands up to 6000V spikes
- Smart start
- Under/over voltage protection
- No waveform distortion.
- Light weight , transformer-less design
- 5kA Surge protection

Working principle:

"OVCD" stands for "Over Voltage Cut-off Device." An Over Voltage Cut-off Device is a protective device designed to safeguard electronic or electrical equipment from damage caused by excessive voltage levels. The device typically monitors the voltage of the incoming electrical supply and disconnects the load or equipment if the voltage exceeds a predetermined threshold.

How Over Voltage Cut-off Device generally works:

1. **Voltage Monitoring:** The OVCD continuously monitors the incoming voltage from the power supply.
2. **Threshold Setting:** A predetermined voltage threshold is set, usually based on the safe operating range of the connected equipment. If the voltage surpasses this threshold, indicating an overvoltage condition, the OVCD takes action. You can adjust the Low voltage (Low VSET) and high voltage (HIGH VSET) using the potentiometer. By default, low cutoff voltage is 180V and higher cutoff voltage is 240V.
3. **Reconnection:** This OVCDs It Have feature to automatically reconnect the power supply once the voltage returns to a safe level / Threshold voltage. Others may require manual intervention to reset the device.
4. The Over Voltage Cut-off Device serves as a protective measure against power fluctuations, especially in regions where voltage spikes are common. It helps prevent damage to sensitive electronic devices, appliances, and equipment that may be sensitive to overvoltage conditions.
5. Applications of OVCD include protecting appliances like refrigerators, air conditioners, computers, IOT Device, Gateway, Nodes and other electronic devices from potential damage due to voltage fluctuations. It is particularly useful in areas with an unreliable power supply or frequent voltage surges.
6. When installing or using an OVCD, it's important to follow the manufacturer's guidelines and recommendations to ensure proper functionality and the safety of connected equipment. Additionally, understanding the device's specifications, such as its rated voltage, response time, and reset mechanism, is crucial for effective protection.

OVCD - Only Product to Protect Against Over Voltage and Low Voltage Conditions

Specifications:

Parameter	Value	12A Relay	30A Relay	Unit
Operating Voltage	100~500	-	-	VAC
Operating Frequency	45~50	-	-	Hz
Operating Current	150	-	-	mA @12VAC
Operating Wattage	2	-	-	W
Operating Temperature	10 ~ 105	-	-	°C
Contact Rating	-	12A/120VAC 12A/250VAC	1HP/16A/120VAC 20A/250VAC 30A/250VAC	-
Max switching voltage	-	250	250	VAC
Max switching current	-	12	30	A
Max switching power	-	1440	7200	VA
Part No	-	ST2023PW0012	ST2023PW0030	-
Connector Type J2	JST-XH 2.54	-	-	mm
Dimension	73x55x30	-	-	mm

Connector Details

- J1: Input AC Supply
- J2: Digital state Reading
- J3: Load/OUTPUT

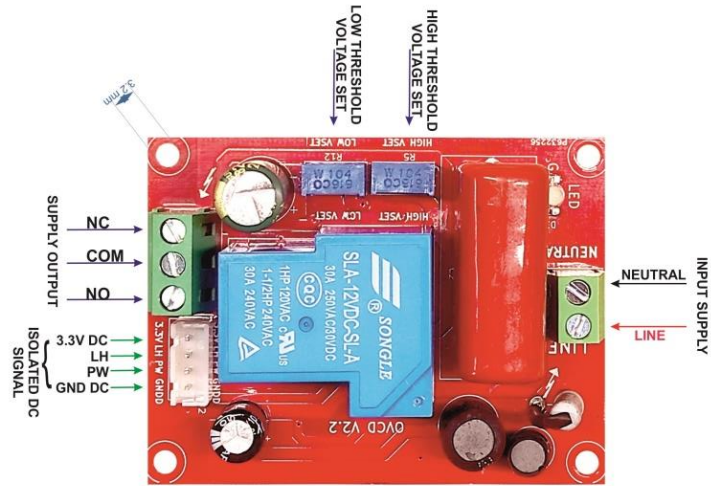
Trimpot Details

- R5: To set the High Level Cutoff Voltage.
- R12: To set the Low Level Cutoff Voltage

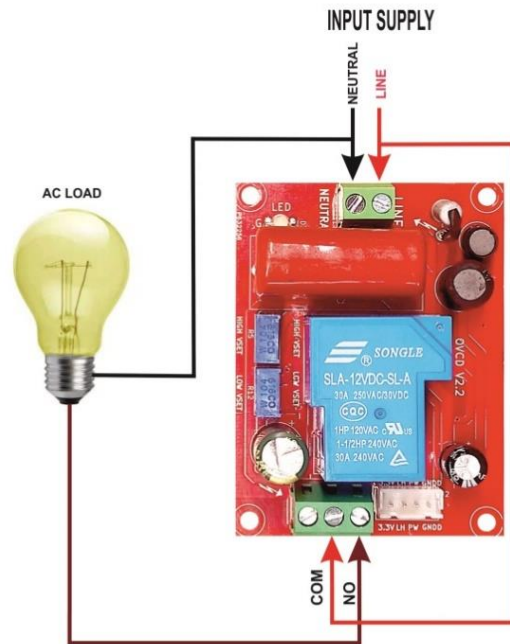
LED Indication:

- D1: LED Indicates that the Relay ON/OFF Condition.
- OFF condition: Very Low Voltage or No Input Supply
- Green: When the Normal Voltage
- Red: Low or High Voltage indication

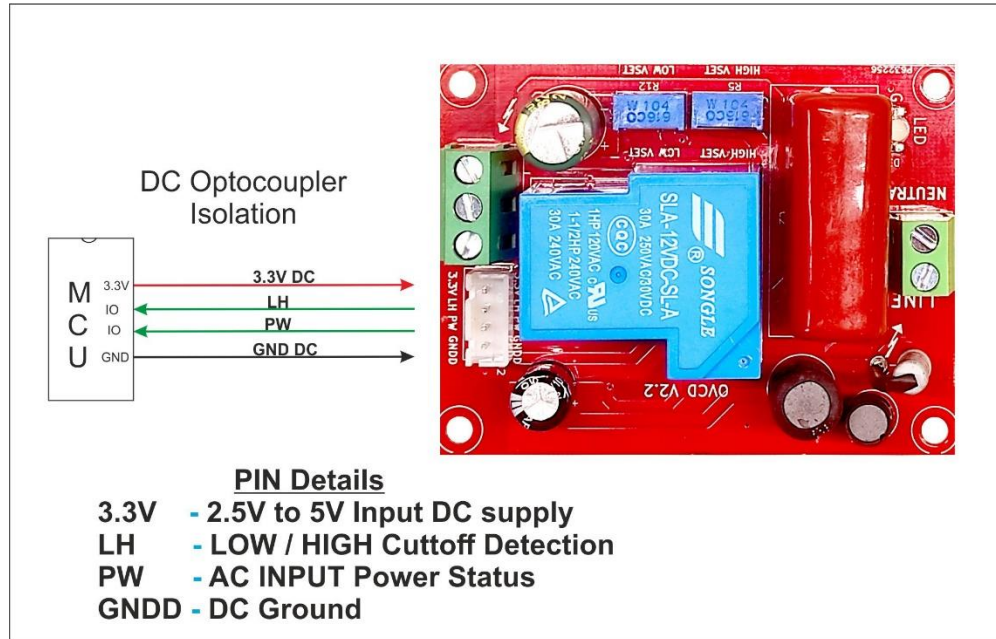
Pin Details:



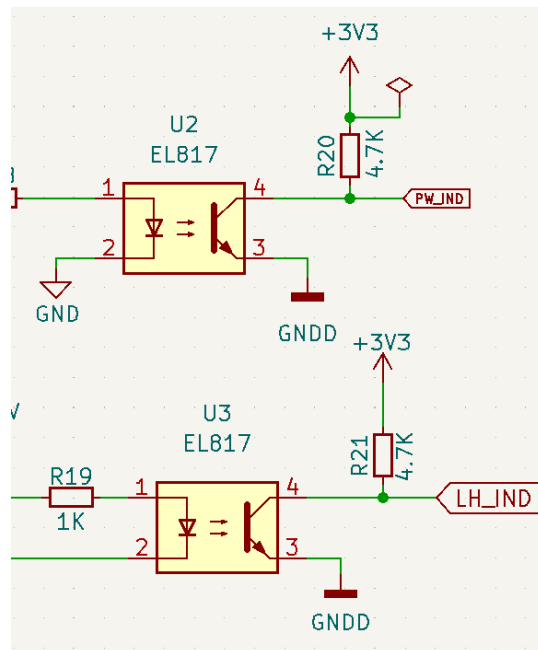
Typical Circuit for Load:



Typical Circuit for Interface:

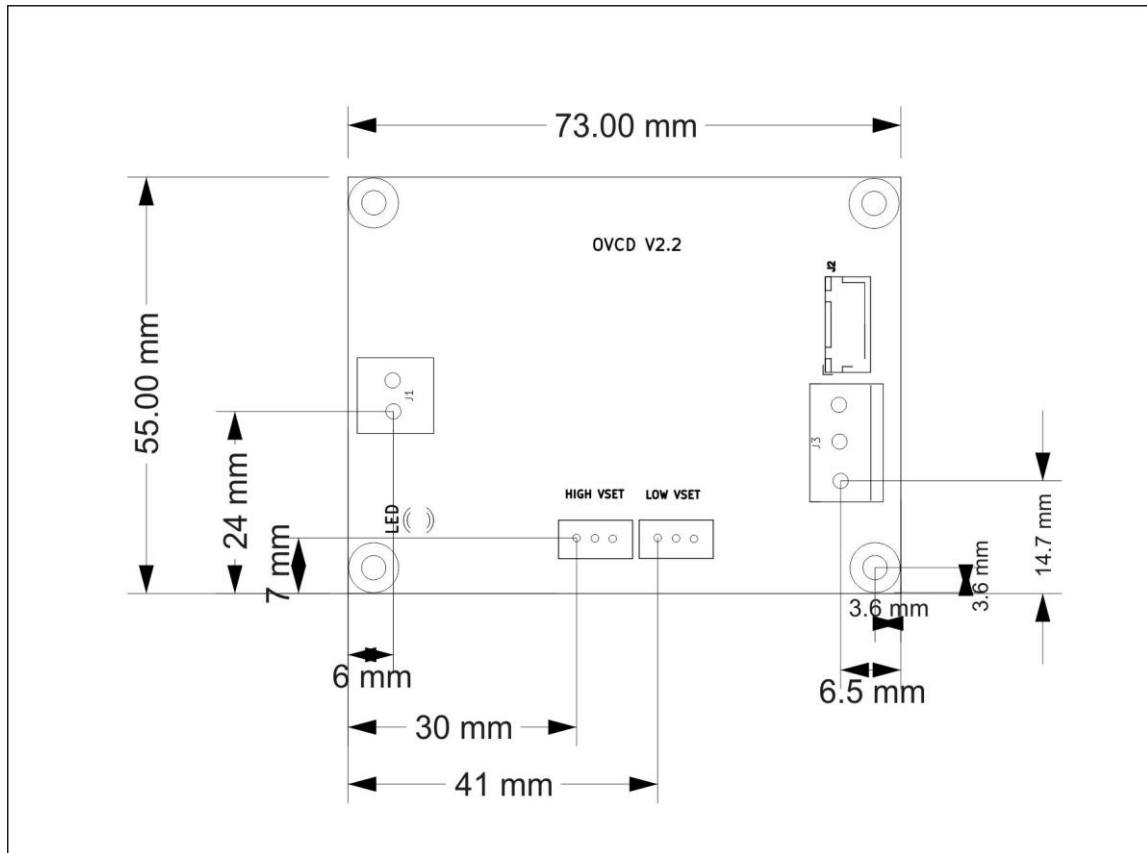


Internally used optocoupler to get the status of device and Power state. Used EL817 optocoupler to get the digital signal.



OVCD - Only Product to Protect Against Over Voltage and Low Voltage Conditions

Dimensions:



End Use Applications:

- IOT Device, Gateway, Nodes, etc.
- UPS
- AC Drives
- Stabilizers
- Deep Freezers
- 3 Phase Motors
- Compressors
- Control Panels
- Electrical Applications (Heavy Duty)
- Dish Satellite System
- Industrial Power Drives
- Medical Equipment's