CZH-LABS Electronics-Salon

Model: D-1008 Voltage Comparator Relay Module



Features:

- Support internal or external reference voltage.
- LED indication for relay action.
- Omron 10 Amp power relay.
- Panel mount or DIN rail mount types to choose. DIN rail mount version can support width 35 / 32 / 15mm rails.

Electrical Parameters:

- Operating voltage / current: 12V DC / 50mA.
- Internal reference voltage adjust range: 0 ~ 10V.(for internal reference voltage mode)
- External reference voltage range: 0 ~ 10V. (for external reference voltage mode)
- Input signal voltage: 0 ~ 10V.

Size:

- Panel mount version: 72.5 x 47.35 x 20mm (L x W x H)
- DIN rail mount version: 83 x 50 x 42mm (L x W x H)

Choose Version List:

- 1. MD-D1008, Panel mount.
- 2. MD-D1008T, DIN rail mount.

Circuit Schematic and PCB Size:



For internal reference voltage mode:



REF OPTION setting: J2 - IN shorted and J1 – EX disconnect.

Terminal block <u>VCC</u> connect power supply +12V DC.

Terminal block <u>GND</u> connect power supply ground(neutral, 0V) and input signal ground.

Terminal block <u>REF</u> not connect any circuit and wires.

Terminal block TRIG connect input signal.

Reference voltage adjust: adjust the <u>VR1</u> potentiometer, and use voltage-meter test terminal block <u>REF OPTION J1</u> pin position voltage, you can got $0 \sim 10V$ reference voltage.

When the input voltage > reference voltage, relay switch \underline{C} to \underline{NC} disconnected and \underline{C} to \underline{NO} connected. when the input voltage < reference voltage, relay switch \underline{C} to \underline{NC} connected and \underline{C} to \underline{NO} disconnected.

DC + 12V | CC O CZH-LABS D-1008 VER: 1.0 External Reference Voltage > Signal Voltage > Signal Voltage > Short J1

For external reference voltage mode:

REF OPTION setting: J2 - IN disconnect and J1 – EX shorted. Terminal block VCC connect power supply +12V DC. Terminal block GND connect power supply ground(neutral, 0V) and input signal ground. Terminal block REF connect external reference voltage. Terminal block TRIG connect input signal. When the input voltage > reference voltage, relay switch \underline{C} to \underline{NC} disconnected and \underline{C} to \underline{NO} connected. when the input voltage < reference voltage, relay switch \underline{C} to \underline{NC} connected and \underline{C} to \underline{NO} disconnected.