

# **Power Distribution Relay Boards**



## **FEATURES**

- Available with 4, 6, 8, 9, or 12 Relay Outputs
- Visual diagnostics via LED indicators
- Integral coil side protection to prevent damage from wiring errors
- Circuit board with poured power planes to reduce operating temperature and voltage drop
- Vehicle network communication options
- 9 channel Relay Contains 2 independent relays
- Custom configurations and packages

## **TECHNICAL SPECIFICATIONS**

| Operating Voltage             | 8 to 18VDC                      |  |
|-------------------------------|---------------------------------|--|
| Relay Contact Material        | AgSnO alloy                     |  |
| Relay Contact Rating          | 50A at 14VDC                    |  |
| Contact Voltage Drop          | Typical 50mV at 10A             |  |
| Operate Time                  | 20ms maximum                    |  |
| Release Time                  | 20ms maximum                    |  |
| Relay Power Consumption       | 1.6W                            |  |
| Relay Coil Current            | 133mA                           |  |
| Relay Coil Resistance         | 90 Ohms                         |  |
| Relay Coil Circuit Protection | 1A maximum via resettable fuse  |  |
| Relay Output Current Max      | 20A                             |  |
| Operating Temperature         | -40C to +125C (-40°F to +257°F) |  |

# IMPROVED RELIABILITY AND PERFORMANCE DELIVERED IN A DROP-IN DESIGN

Innovative Controls Inc. power distribution relay boards contain independent automotive switching relays with jumper selectable input polarity. The relays can be controlled from switch panels, load managers, and vehicle interlocks. The relay outputs can be connected for normally open and closed operation and the relay output circuits are protected by 20 amp circuit breakers.

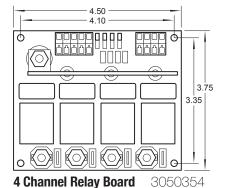
The relay coil input and switched outputs contain LED indicators for visual diagnostics. The relay coils can be driven by a switch or load manager. These load manager inputs can be used in combination with actuator switches. The 9 relay power distribution board also contains two general purpose relays protected with 10 amp circuit breakers.

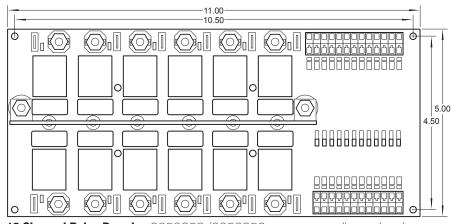
Improvements include integral coil side protection to prevent damage from wiring errors and poured power planes to reduce operating temperatures and voltage drop.

## **MODELS**

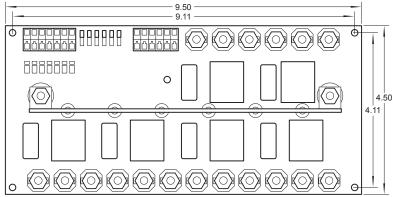
| Description                         | Innovative Controls Part Number |
|-------------------------------------|---------------------------------|
| 4 Channel Relay Board               | 3050354                         |
| 6 Channel Relay Board               | 3050355                         |
| 8 Channel Relay Board with CAN Bus  | 3050357                         |
| 9 Channel Relay Board               | 3050356                         |
| 12 Channel Relay Board              | 3050358                         |
| 12 Channel Relay Board with CAN Bus | 3050359                         |

see dimensions on reverse side



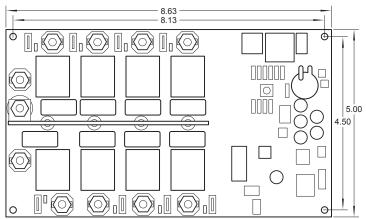


**12 Channel Relay Board** 3050358 (3050359 uses same dimensions)

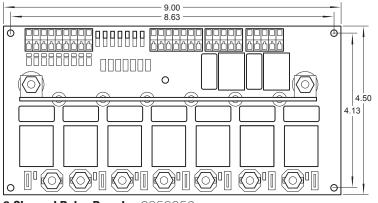


**6 Channel Relay Board** 





8 Channel Relay Board with CAN Bus



9 Channel Relay Board 3050356

3050357