

VCMR-10

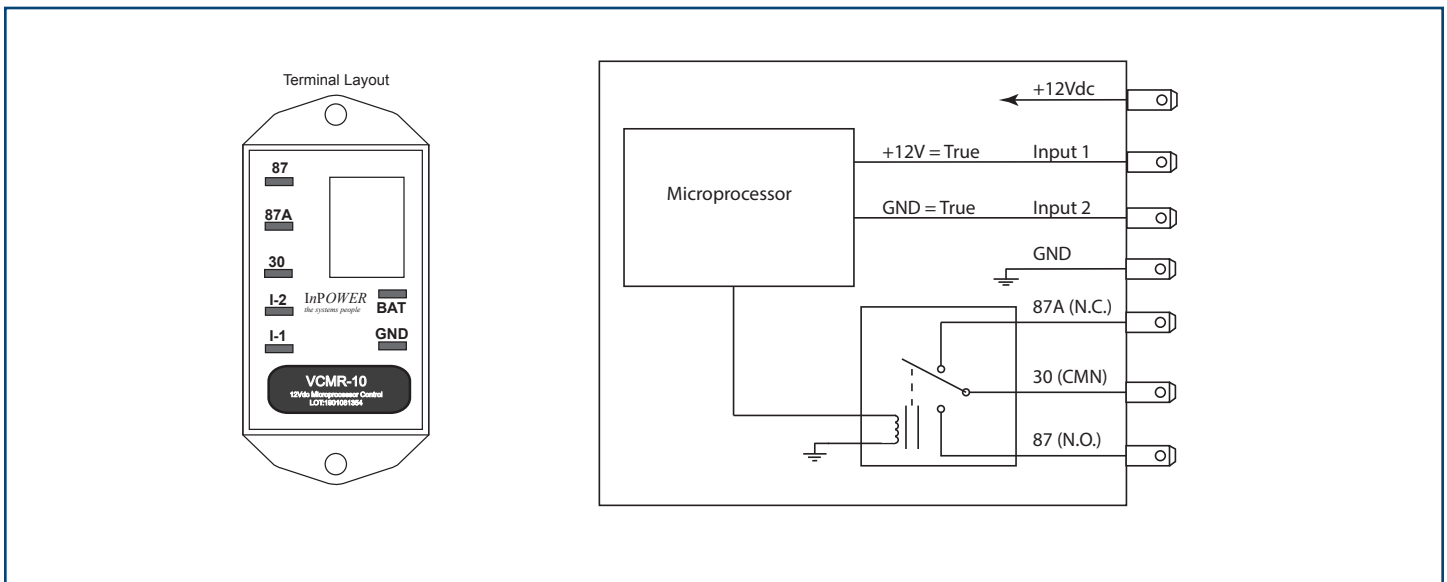
Microprocessor Controlled Form C Relay



Key Features

- Microprocessor Programmable Operation
- Transient Tolerant Outputs
- 12 Volt 20 Amp Form C Outputs, Normally Closed (N.C.) and Normally Open (N.O.)
- Unpowered N.C. Relay contact.
- Compact Size with Panel-Mount Bracket
- Dual Inputs (Ground and +12 Volt Actuated)

System Diagram



VCMR-10

Dual Input Processor Controlled Power Relay

InPower's VCM Series *Vehicle Control Modules Relay* is a set of tools for the designers of vehicle electrical control systems. Designed to withstand the environments typically found on trucks, emergency vehicles, buses, coaches and speciality vehicles, these modules are available in a variety of standard and custom configurations and functions.

Technical Description

The InPower VCMR-10 is a Processor Controlled Form C relay with One Normally Closed - N.C. and One Normally Open - N.O. contact both are rated as +12 volt @ 20 amp outputs (or less). The module has two inputs, one actuated by a transition to +12 volts (Input A) and one actuated by a transition to ground (Input B). The outputs are actuated when either Input A or Input B is activated. The outputs are rated at +12 volts @ 20 amps and should be appropriately fused by the installer.

Ordering Guide

Model	Description
VCMR-10	Processor Controlled Dual input Form C relay with +12 volt @ 20 amp output and two inputs.

Specifications

Power Input (BAT):	+10 to 16 Vdc
Ground (GND):	Connection to vehicle ground (BatteryNegative)
N.C. (87A)	This is the normally closed contact of the Form-C Relay circuit. Load circuit to be fused by installer at 20 amps or less. When the logic of the VCMR using inputs I-1and/or I-2 is true this terminal will disconnect from terminal 30.
N.O. (87):	This is the normally open contact of the Form-C Relay circuit. Load circuit to be fused by installer at 20 amps or less. When the logic of the VCMR using inputs I-1 and/or I-2 is true this terminal will connect to terminal 30.
Form C Wiper (30):	This is the common wiper of the Form-C Relay output circuit. Load circuit to be fused by installer at 20 amps or less.
I-1:	This Input is used for the VCMR logic. It is 12Vdc = True like Input A on the standard VCM series of products but custom programs can be written changing this input to ground = true.
I-2:	This Input is used for the VCMR logic. It is Ground = True like Input B on the standard VCM series of products but custom programs can be written changing this input to 12Vdc = true.
BAT:	This is the +12 Vdc power supply to operate the VCMR. Operating Voltage range is 10-16 Vdc. Current requirements are 0.010 amps when the relay is off and 0.175 when the relay is on.
GND:	This is the VCMR power supply ground. Current requirements are 0.010 amps when the relay is off and 0.175 when the relay is on.

Installation

1. We recommend that the module be installed by a person trained and skilled in vehicle electrical systems. The installation should comply with SAE (Society of Automotive Engineers) and the vehicle manufacturer's electrical wiring procedures (e.g., Ford, General Motors, etc.).
2. The module should be installed on the inside of the vehicle in a dry and protected environment.
3. Do not connect loads to the output that will exceed the output current rating of the module.
4. The 12 volt power input must be from a properly fused +12 volt power source.
5. Wiring must be of the proper gage and type to handle the intended load currents.
6. We recommend the use of insulated 1/4 inch female blade terminals that connect to the terminals on the module. Be sure to properly crimp these terminals. **Do not solder wires directly to the module terminals.**
7. If you are experiencing problems with the installation or need troubleshooting assistance, contact InPower Customer Service at 740-548-0965.

Mechanical Drawing

