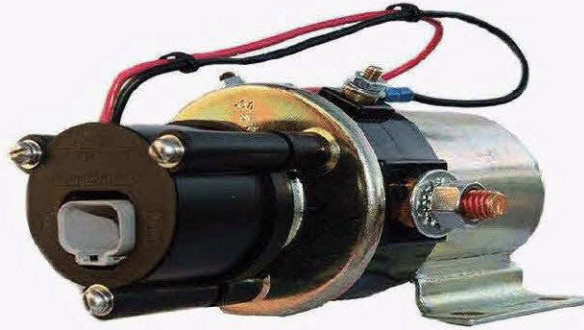


# Solenoid Control Moduel



## Solenoid Controller Explanation

We developed the **SCM** solenoid controller in order to address;

- Need for increased duty cycle
- High heat production from the solenoid coil
- Customer demand for larger current loads across the contacts for longer periods
- Desires for lower consumption of energy

## Operation

The controller supplies required voltage to the solenoid coil, providing the energy necessary to pull in the plunger, thus completing the electrical circuit. With the solenoid fully activated, the controller drops the voltage down to a level sufficient to maintain the plunger in a seated position. Pulse Width Modulation helps to manage heat build-up at the coil level during the time the solenoid is activated.

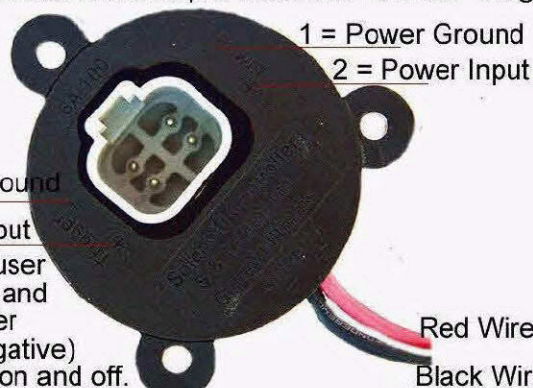
The solenoid relay activation sequence is started by applying a "trigger" voltage to the controller module (2 to 40 volts). The trigger can either be an external trigger or it can be activated by using the same voltage as the solenoid coil input. The ability to use an external trigger is extremely useful when a solenoid requires a relatively large amount of power and you wish to control it with a low power voltage such as a TTL compatible signal.

Typical features of the solenoid controller are:

Parameter	Minimum	Maximum
Supply Voltage (Volts DC)	8	40
Peak Current (Amps)	--	20
RMS Current (Amps)	--	3
Trigger Range (Volts DC)	2	40
Temperature range (°C)	-40	120
Holding voltage to supply voltage ratio (%)	--	25
Peak time (milliseconds)	--	200

This RoHS compliant controller comes with a 4-pin DT Series Deutsch receptacle that mates with a DT06-4S plug but can be configured to AMP or other brand connector. It has also been designed to either be mounted to solenoid or mounted elsewhere in the electrical system.

The controller can be ordered pre-mounted to allow "Plug and Play".



1 = Power Ground  
2 = Power Input

4 = Trigger Ground  
3 = Trigger Input

Red Wire Positive Out To Solenoid  
Black Wire Negative Out To Solenoid

The Solenoid Controller allows the user to either use an independent power and signal source or tie them together (Positive to Positive & Negative to Negative) & use another switch to turn the controller on and off.