

Electronic Solenoid

48785 Electronic Solenoid 85A 9-31V DC ★

Fully solid-state, with no moving parts to wear out. The Electronic Solenoid stands up to over 20 million On-Off cycles. It is completely sealed, ignition protected, and withstands vibration and adverse environments. Perfect for vehicles that are always on the move. Use the Electronic Solenoid in both 12V or 24V applications... or any voltage between 9 and 31V.

- Solenoid can be used in both High Side and Low Side switching applications.
- Needs only a very low control current.
- Suitable for high inrush demand circuits.



Specifications:

9 - 31V DC, 85A continuous or 175A intermittent.

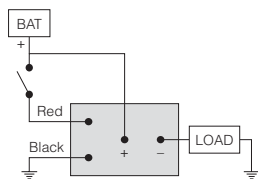
Low On resistance of .005Ω

Low control current of .02A (max) means lighter wires, smaller harnesses.

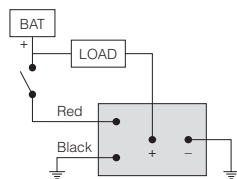
On/Off control voltage must be identical to the system voltage.

Wide temperature operating range -40°C to + 85°C without derating.

Protected from transient voltage spikes or surges.



High side switching application



Low side switching application



emergency cutoff

Emergency cutoff switches are commonly mounted on many types of vehicles such as buses, and those used in construction and agriculture. Fire departments routinely familiarize themselves with the location of cutoffs, so that vehicles can quickly be isolated in case of emergency. Additionally, OSHA requires cutoffs on certain vehicles, particularly those with ancillary motorized equipment, such as garbage trucks. See Section J2.

H solenoids & relays

H5 RELAYS

Relay Sockets

*Accepts Cole Hersee relays and standard ISO relays.
Modular – sockets dovetail together.
Accepts standard quick-connect terminals. Easy mount
bracket. Constructed of rugged glass-filled polyamide.
Temperature range -40F to 85C.*

99025 High Power Socket



For use with Cole Hersee High Power Relays. Form A (SPST)
Use with Tyco (AMP) terminals 280756 or 280755 (consult terminal manufacturers for full specs).

99026 Heavy Duty Socket



For use with Cole Hersee Heavy Duty Relays. Form A (SPST) or Form C (SPDT).

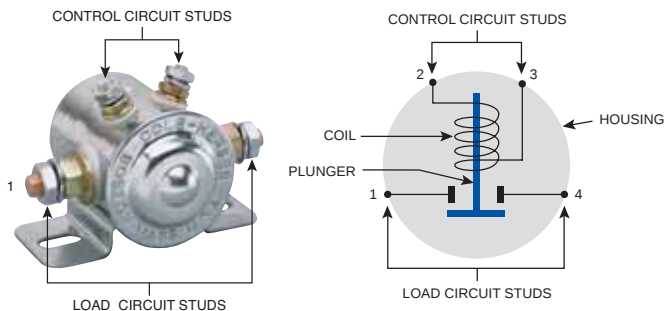
Use with Tyco (AMP) terminals 42281 or Ark-Les 3000H112A series (consult terminal manufacturers for full specs).

solenoids & relays

H6 INFORMATION ON SOLENOIDS

Solenoids are relays which are commonly used to remotely switch a heavier current. By using a solenoid, the amount of heavy wiring needed to power the load is reduced, since the control circuit mounted inside the cab typically utilizes a smaller wire gauge.

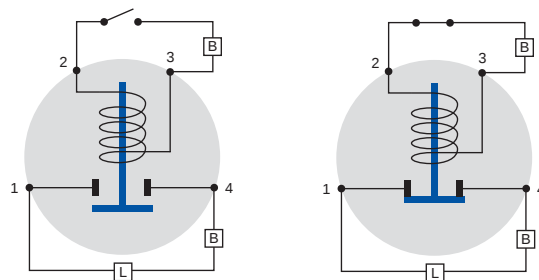
Solenoids are commonly used to control starter and winch motors, and they have many other uses on vehicles of all kinds.



A typical 4-stud solenoid

4-stud solenoid diagram

The diagram shows a magnetic coil surrounding a contact plunger. Before energization, the plunger is not electrically connected to the control circuit. When the control circuit is energized, the electromagnetic force induced in the coil attracts the plunger, which moves to close the load circuit. When the control circuit is de-energized, the spring-loaded plunger returns to its normal state and the load circuit is broken. In continuous duty applications, energization of the coil causes heating, therefore the solenoid housing will become warm even in normal operation.



Solenoid in its normal state
Control circuit and load circuit open

Energized solenoid
Control circuit and load circuit closed

For more information on solenoids, visit the interactive training section of the Cole Hersee website:
www.colehersee.com > Resource Center > Training.

★ Rapid ship item. BP Available in retail clamshell pack. ★ Minimum order quantity may apply.