

Important Safety Instruction

Secure the Magnetic lock body firmly to the door frame.

Our electromagnetic lock is shock resistant to unlimited door closures, so it is vital to check if the electromagnetic lock is secure firmly on the top door header to prevent it from falling and causing possible injury.

Do not tighten the armature plate tight against the door.

The armature plate must remain movable to allow surface alignment with the magnet face. The Magnetic Lock will lose holding force without this floating alignment.

Do not trim the armature center bolt rubber head.

Trimming this rubber will adversely effect the operation of magnetic lock.

Settings and Wiring:

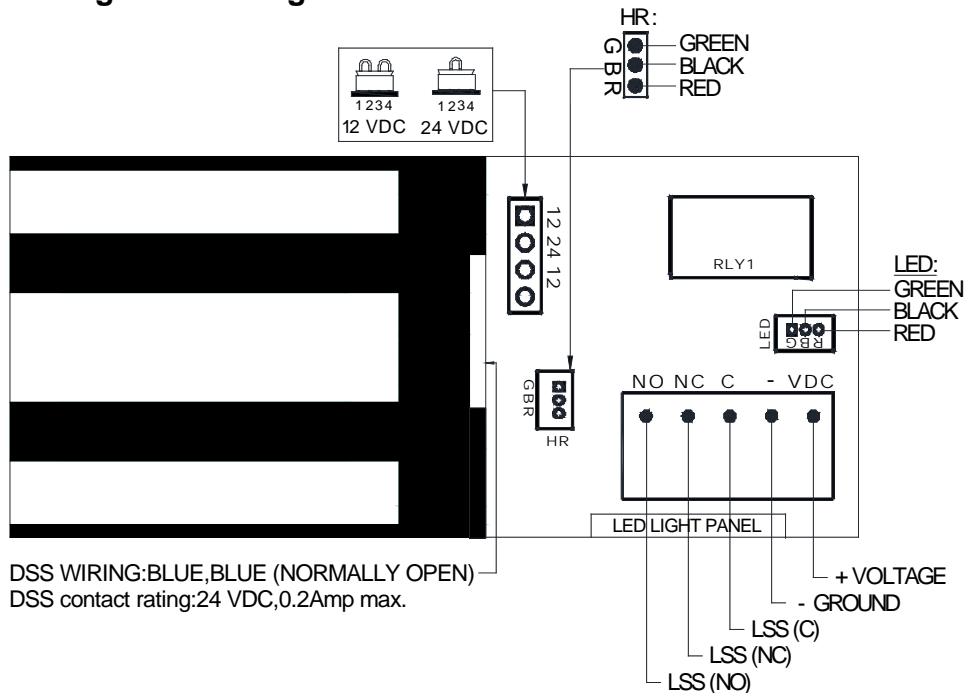


Figure 1

V1.2 2018

EM3500 series

INSTALLATION

ANOTHER QUALITY PRODUCT

EM3500 series Electro-Magnetic Lock

Wiring Instructions

For wiring installation, refer to Figure 1.

The **EM3500** series Electro-magnetic locks has a broader light emitting diode display panel for a better eye view. The unit requires a filtered and regulated DC Power Source of correct voltage.

12VDC or 24VDC Power Wiring:

Remove the wiring cavity cover plate and Choose for the correct voltage shunt usage on the PCBA. See Setting on Figure 1. Default factory voltage shunt is shunt in 24VDC.

These voltage shunts must be placed correctly before 12VDC or 24VDC power is supplied to the Electro-Magnetic Lock to prevent damage to the PCBA.

The (+) lead of the Power Source is connected to the RED wire and the (-) lead is connected to the BLACK wire. The operating switch or controlling contacts must be installs from the power source across the Magnetic Lock to reduce operating time of the Magnetic Lock to a minimum.

Power Input Requirements:

12VDC / 0.51 A max.

24VDC / 0.27 A max.

Electro-Magnetic Lock Description:

The **EM3500** series magnetic locks run on 12 or 24 VDC settings, with a built-in Hall Effect Switch to indicate **Lock Status** (Normally Open or Normally Closed), It has a Light Panel indicator on the magnet housing and a dry SPDT output that changes state when lock is secure. The Relay output C is short to the Relay output NO when the lock is secured and C is short to NC when the lock is not secure. The additional **Door Status Sensor (DSS)** feature is available on **EM3500 DSS** version.

Light Panel Indicators:

System Status	Green light	Red light	Relay
Power Off	OFF	OFF	De-Energized
Power On-Door open	OFF	ON	De-Energized
Power On-Door close	ON	OFF	Energized

The Relay Contacts are rated at 24 VDC, 1.0 A maximum. The Relay contact outputs are marked on the Printed Circuit Board.

Trouble Shooting

PROBLEM	POSSIBLE CAUSE	SOLUTION
Door will not lock	No DC voltage to lock	Check power and wiring
	Loose wire	Check for correct voltage
	Wrong wiring	Check wirings connection
Reduced holding force	Bad physical contact between armature plate and face of magnet	Ensure mating surfaces are clean and in proper alignment and the armature plate floats freely
	Low voltage or wrong voltage setting	Check magnetic lock for low voltage or wrong voltage setting
Delay in door release	Circuit switch is not between magnetic lock and power source	Re wire circuit switch between magnetic lock and power source
	Secondary diode installed across magnetic lock	Remove this diode, voltage spike protection is on PCB.
Light Panel status is incorrect	Misalignment of armature plate	Check alignment of armature plate
	Hall Effect Switch located in wrong position into magnetic block	Reposition Hall Effect switch, contact manufacturer for instruction