EM5000 G / S / F Electro-Magnetic Lock

Wiring Instructions

The **GATE MAGLOCK** requires a filtered and regulated DC Power Source for optimal performance.

12VDC or 24VDC Power Wiring

Refer to Figure 1.

These wiring of the power must be connected correctly before 12VDC or 24VDC is applied to the Electro-Magnetic Lock to prevent damage to the unit.

Power Input Requirements:

12VDC 0.48A 24VDC 0.24A

Electro-Magnetic Lock Description:

The Magnetic Lock with stainless steel housing has a built-in voltage spike protection.

Each Magnetic Lock has a built-in Relay Switch which will indicate lock status (open or closed) for remote status monitoring. The Relay Switch functions on three output wires:

Red wire- Normally closed; **Green** wire- Normally open; **Black** wire- Common.

Relay Switch not Operated- No Power on Magnetic Lock.

Power on Magnetic Lock and Door is Open.

Relay Switch Operated- Power on Magnetic Lock and Door is Closed.

The Relay Switch contacts are rated at 24 volts for 1 Amps maximum.

Installation Tips

Do not tighten the armature plate tight against the door.

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

Do not trim the rubber washer mounted on the head of the armature center bolt

Trimming this rubber will adversely effect the operation of Magnetic Lock.

Trouble Shooting

Problem	Possible Cause	Solution
Door will not lock	No DC voltage to lock.	Check power supply and wiring
		to magnetic lock.
Reduced holding force	Bad physical contact between	Ensure mating surfaces are
	armature plate and face of	clean and in proper alignment
	magnet.	and the armature plate floats
		freely.
		Check magnetic lock for low
		voltage.
Delay in door release	Secondary diode installed	Remove this diode. Voltage
	across magnetic lock.	spike protection is embedded.
Relay Switch Status is incorrect	Misalignment of armature plate.	Check alignment of armature
		plate.

Maintenance

Contacting surface of the Electro-Magnet and Armature Plate must be kept free of contaminating materials. Surfaces should be cleaned periodically with a non-abrasive cleaner. Do not spray the Electro-magnet or Armature Plate surface with any chemicals such as lacquer, etc. This will cause serious problems with the release of the magnetic Lock and its Armature Plate resulting in serious safety problems.

EM5000 WIRING DIAGRAM

Figure 1

POWER INPUT