



3000 Series Electromagnetic Lock

The **3000** series Electromagnetic lock is a single magnetic lock of 150- 180 kg holding force. It operates on dual voltage through pin shunt on the PCB. A single shunt across pins 2 and 3 will set the operating voltage to 24 volts. A shunt between pins 1 to 2 and a shunt between pins 3 to 4 sets the operating voltage to 12 volts. It requires a filtered and regulated DC power source for optimal performance. Door Status Monitor (**DSM**) and Magnetic Bond Sensor (**MBS**) is available as option.

These voltage shunts must be adjusted before 12 VDC or 24 VDC is applied to the Electromagnetic lock to prevent damage to the unit.

Power Input Requirements:

12 VDC 0.36 A
24 VDC 0.18 A

Magnetic Bond Sensor (MBS)

Power On and Door Closed: YELLOW and PURPLE short.
Power On and Door Open: YELLOW and RED short.
No Power On and Electromagnetic lock and armature plate is in contact : YELLOW and RED short.

Door Status Monitor (DSM)

Power On and Door Closed: BLACK and GREEN short.
Power On and Door Open: BLACK and GREEN open.
No Power On and Electromagnetic lock and armature plate is in contact : BLACK and GREEN short.

Note: Reed switch contact rating at 24 VDC, 0.2 A max.

Installation Tips

Do not tighten the armature plate tight against the door.

The armature plate must 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 head of the rubber washer on the armature center bolt
Trimming this rubber will adversely affect the operation of Magnetic lock.

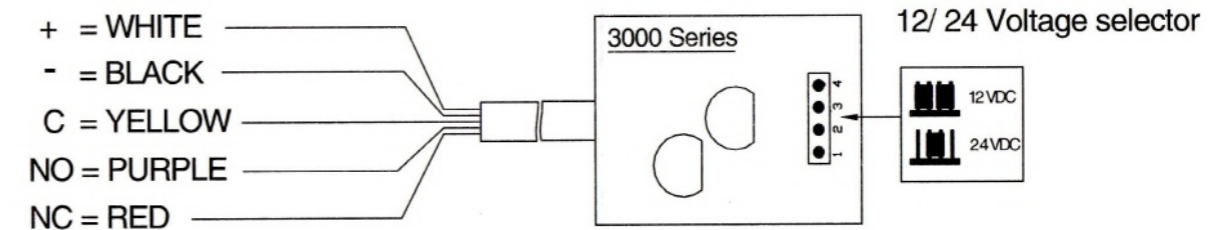
Trouble Shooting

Problem	Possible Cause	Solution
Door will not lock	No DC voltage to lock.	Check power supply and wiring to magnetic lock.
Reduced holding force	Insufficient Power	Correct Power source
	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.
Delay in door release	Circuit switch is not between magnetic lock and power source.. Secondary diode installed across magnetic lock.	Re-wire circuit switch between magnetic lock and power source.. Remove this diode. Voltage spike protection is on the PCB.

Maintenance

Contacting surface of the electromagnet and armature plate must be kept free of contaminating materials. Cleaned surface periodically Do not spray with any lacquer chemicals. This will cause serious problems with the release of the magnetic Lock and it's Armature Plate

Magnetic Bond Sensor



Door Status Monitor

