Wiring Instructons for Standard Magnet -10010/20/40/60

The standard magnet is designed to be operated by 12 or 24 volt DC systems. The Printed Circuit Board (PCB) in the magnet is factory set for 12V operation but can easily be changed for 24V operation (see wiring detail). The PCB also has built - in protection against Back EMF surges which means a separate Diode or MOV is not needed. Because the magnet is Faul Unlock (Fail Safe) it needs a constant DC supply to hold the Armature plate in position, it is therefore recommended that a Rechargable Battery is fitted in the Power supply.

Important Points to consider before Installation:-

1. The Magnet must be connected to a Regulated DC Power supply (Ideally with Battery backup facility)

2. Input voltage at the magnet PCB must be 12 or 24V±10%

3. The PCB already has built-in protection against Back EMF surges.

4. The Maximum current draw for 12V is 500mA and for 24V 250mA (Double version will draw twice as much).

5. DO NOT reverse polarity as this will result in damage to the PCB and coil.

6. There are two version of the PCB - Unmonitored (Models 10010 and 10060) and Monitored (Models 10020 and 10040).

7. Ensure all cabling and wiring connections conform to current Electrical Legislation.



Wiring detail for Standard Magnet UnMonitored - Model: 10010 / 10060

- 1. Check magnet PCB is set for correct voltage (Factory settings is 12V).
- 2. Connect Negative Output (-) from Power Supply to terminal 2 (-) on Magnet PCB.
- 3. Connect Positive Output (+) from Power Supply to common of Relay or Exit switch.

4. Connect Normally Closed (N/C) on Relay or Exit switch to terminal 1 (+) on Magnet PCB.

- 5. With the door open switch Power supply On and check that the Magnet will hold a Screwdriver.
- 6. Operate the Access Control Relay or Exit switch whilst holding the screwdriver to check magnet is working.
- 7. If the Screwdriver is released close the door and check the Holding force by pulling / pushing the door.

8. Re-fit the PCB cover plate with M4 25mm Csk Screw (J)

Wiring Instructor for Standard Magnet - 10010/20/40/60 (contd)



Wiring detail for Standard Magnet UnMonitored - Model: 10010 / 10060

- 1. Chek Magnet PCB is set for correct voltage (Factory setting is 12V).
- 2. Connect Negative Output (-) from Power Supply to terminal 2 (-) on Magnet PCB
- 3. Connect Positive Output (+) from Power Supply to Common of Relay or Exit switch.
- 4. Connect Normally Closed (N/C) on Relay or Exit switch to terminal 1 (+) on Magnet PCB.
- 5. Connect Positive Output (+) from Power Supply to terminal 4 (Common) on Magnet PCB.
- 6. Connect Negative Output (-) from Power Supply to Negative (-) terminal on each Lamp.
- 7. Connect terminal 3 (NO) to Poisitive (+) terminal of Lamp (DOOR LOCKED).
- 8. Connect terminal 5 (NC) to Positive (+) terminal of Lamp (DOOR OPEN).
- 9. With the door open switch Power supply On and check that the Magnet will hold a screwdriver.
- 10. Operate the Access Control Relay or Exit switch whilst holding the screwdriver to check magnet is working.
- 11. If the Screwdriver is released close the door and check the Holding force by pulling / pushing the door.
- 12. Check that the 2 Lamps are working correctly when the Magnet locks and unlocks.
- 13. Re-fit the PCB cover plate with M4 25mm Csk Screw (J).