**General Installation Instructions**

1. **Fitting and alignment**
   - The bolt can be installed in a vertical or horizontal position fitted into the frame or door leaf.
   - Ensure that the circular magnet on the strike plate lines up with the S on the bolt faceplate.
   - The hole behind the strike plate is deep enough and clear of debris to take the full throw of the bolt.
   - The bolt does not rub or catch while in motion as it may not lock / unlock.
   - **DO NOT** - Fit bolt in floor firing upwards.

2. **Power Supply**
   - Ensure that a 2 amp PSU is used per bolt.
   - Place the PSU as near as possible to the bolt.
   - **DO NOT** - use AC transformer and rectifier due to power loss.

3. **Cable**
   - Connections are made with stranded alarm cable.
   - Allow extra cores to double/treble the cable should reduced voltage occur at bolt because of distance from bolt to PSU.
   - **DO NOT** - use solid telephone cabling for connections.

4. **Controlling the Bolt**
   - There is a preferred 3 wire full function, and a reduced 2 wire function. Features are opposite, full wiring details are overleaf.
   - 3 Wire function requires permanent power to the bolt, and a positive pulse across the control terminal (2) to operate the bolt.
   - 2 Wire function operates in a similar way to a normal electric locking device. Using 2 wire function loses the benefit of the built-in access control functions of 3 wire set-up.

### 3 Wire Function

- **Fail Open (PTL) or Fail Secure (PTO)**

**Connections**
- This method will require a permanent power feed across terminals 1 & 3.

**Operation**
- A short pulse between terminals 1 & 2 will unlock the bolt. The bolt will lock as soon as the door is closed. If the door is not opened the bolt will relock after DELAY TIME (please reference to Autolock Delay Time Setting).
- Apply a pulse between terminals 1 & 2 of longer than DELAY TIME and the bolt will relock as soon as the pulse times out and the door is closed.

### 2 Wire Function

- **Fail Open (PTL)**

**Connections**
- This method will require a switched on/off power feed across terminals 1 & 3.

**Operation**
- This bolt will be unlocked without power applied and will lock when the correct voltage is applied as long as the door is closed with the strike plate correctly aligned.

### Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>3 Wire Function</th>
<th>2 Wire Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti Tamper</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Current Draw</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12v DC</td>
<td>740mA</td>
<td>120mA</td>
</tr>
<tr>
<td>24v DC</td>
<td>440mA</td>
<td>70mA</td>
</tr>
<tr>
<td>Activating Current</td>
<td></td>
<td>Holding Current (After 3ms)</td>
</tr>
</tbody>
</table>

### Terminal Connections

- The EB250 / EB250K has a multiple voltage input from 12vDC -10% to 24vDC +15%
- Built-in transient and reverse polarity protection

<table>
<thead>
<tr>
<th>Terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td>NO</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>NO</td>
</tr>
</tbody>
</table>

### Euro Profile Cylinder Options

(Not supplied)

- **Single cylinder** (Key can project from either side).
- **Cylinder & Turn** (Key Outside, Thumbturn Inside).
- **Double cylinder** (Key both sides).
Read all instructions before starting installation

**MONITORING CONNECTIONS**

The EB250 has dual monitoring as standard.

**Door Position Switch (DPS)** - Terminals 4 & 5 has a maximum rating of 100v DC @ 500mA

**Bolt Position Switch (BPS)** - Terminals 6 & 7 has a maximum rating of 5v DC @ 1mA

DPS is triggered by the circular magnet on the strike plate lining up correctly with the ‘S’ on the bolt faceplate.

**NB.** If you connect the fail open (PTL) bolt using the 2 wire method you lose the DPS as it has been used to control the bolt. BPS is triggered by the bolt engaging fully in the locked or unlocked position.

**AUTO LOCK DELAY TIME SETTING**

<table>
<thead>
<tr>
<th>Time</th>
<th>ON Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 Secs</td>
<td>1</td>
</tr>
<tr>
<td>3 Secs</td>
<td>2</td>
</tr>
<tr>
<td>6 Secs</td>
<td>3</td>
</tr>
<tr>
<td>0 Secs</td>
<td>4</td>
</tr>
</tbody>
</table>

**Lubrication**

This product is lubricated for life.

Additional lubrication of any kind voids our warranty.

**POWER SELECTION**

- +12vDC or 24vDC

**KEY OVERRIDE INSTRUCTIONS**

Fail Locked Secure (PTO)

Key override is a mechanical operation with no additional wiring.

This can be used only in 3 wire modes.

1 - (+) Positive Power Input
2 - (C*) Control Wire (Do not confuse with Common)
3 - (-) Negative Power Input
4 - (NO) Door Position Switch - Normally Open
5 - (C) Door Position Switch - Common
6 - (C) Bolt Position Switch - Common
7 - (NO) Bolt Position Switch - Normally Open