Read all instructions before starting installation

Installation

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

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

Ensure that

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

Features	3 Wire Function	2 Wire Function		
Anti Tamper	~	~		

Current Draw	Activating Current	Holding Current (After 3ms)		
12v DC	740mA	120mA		
24v DC	440mA	70mA		

Terminal Connections

The EB-250 / EB-250K has a multiple voltage input from 12vDC -10% to 24vDC +15%

Built-in transient and reverse polarity protection

- 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

A 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.

SEE BACK PAGE FOR EB-250K INSTRUCTIONS

2 Wire Function Fail Open (PTL)

Connections

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

+ 12vDC or 24vDC

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.

3 Wire Function Fail Open (PTL) or Fail Secure (PTO)

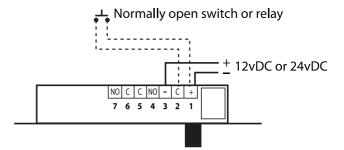
Connections

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.



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.

Lubrication

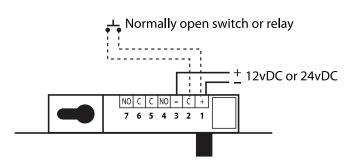
This product is lubricated for life.

Additional lubrication of any kind voids our warranty.

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 (I	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

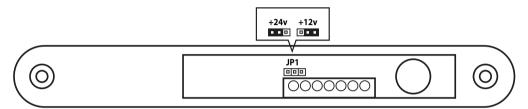
Electric Bolt EB250 & EB250KO - Instructions

EURO PROFILE CYLINDER OPTIONS (Not supplied)

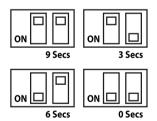
Single cylinder (Key can project from either side). **Cylinder & Turn** (Key Outside, Thumbturn Inside). **Double cylinder** (Key both sides).



POWER SELECTION



AUTO LOCK DELAY TIME SETTING



IEC Limited Harwell Road Nuffield Estate Poole Dorset BH17 0BD Great Britain

101202 676262 101202 680101 101202 680101 101202 680101 101202 680101