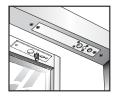
# Fail-Safe Electric Dropbolt Installation Instructions EB220/EB262/EB400 Series

## Features

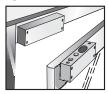
- Horizontal or vertical installation
- Available in mortise, surface and glass mount
- For double and single action doors
- Energy saving intelligent electronics
- Vandal resistant circuit design
- Relock time delay of 1, 3, 6, 9 seconds
- Field adjustable ball catch for wide door gaps (EB262N)
- Door ajar alarm 80 dB, selectable door ajar time 10/20/30/60 seconds (for NDB models)

#### Mortise Mount



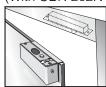
EB200NLW EB220N Series EB262N Series

#### Surface Mount



EB300 EB400NDS EB400NDB

Glass Mount (With UBK-262N bracket)



EB220N Series EB262N Series



EB200NVGL EB300VGL

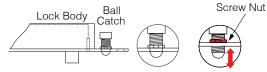
# Specifications

Models	EB220N	EB220NDS	EB220NDB	EB400NDS	EB400NDB	EB262N	EB262NDS	EB262NDB
Mounting Style	Mortise			Surface		Mortise		
Dimensions (mm)	32 (35/38) x 220 x 40			39 x 220 x 42.5		35 (32) x 262 x 40		
Optional Models	EB220N-35 & EB220N-38 Series					EB262N-32 Series		
Faceplate Material	Stainless Steel (32/38mm); Zinc Alloy (35mm)			Stainless Steel		Stainless Steel		
Relock Time Delay	•	•	•	•	•	•	•	•
Bolt Status Sensor Output	•	•	•	•	•	•	•	•
Door Position Status Output		•	•	•	•		•	•
Ball Catch						•	•	•
Door Ajar Alarm			•		•			•
Mode	Fail-Safe							
Operating Voltage	12 VDC (Tolerance 10%)							
Current Draw	Pull in: 0.9A; Holding: 0.3A							
Operating Temperature	-10°C~+49°C							
Humidity	0~85% non-condensing							
Solenoid Endurance Test	Over 500,000 cycles							
Relock time delay	1/ 3/ 6/ 9 seconds							

# Adjusting the Ball Catch

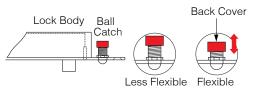
Only applies to **EB262N** Series.

## Adjusting the Door Gap



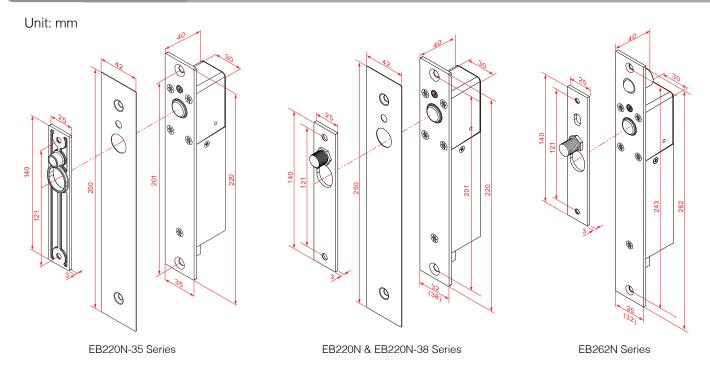
The ball catch can be extended or shortened by turning the screw nut to make proper contact with the strike plate.

### Adjusting Flexibility



The ball catch includes a spring and can be adjusted by turning the back cover for desired flexibility.

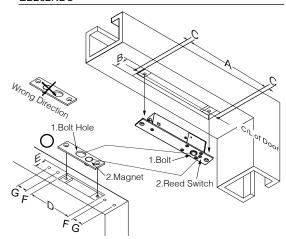
## **Mortise Mount Models**



# Mortise Mount Installation (For Hollow Metal Doors)

Please refer to the particular template for each specific cutting size and location to drill the screw holes.

	Α	В	С	D	Е	F	G
EB220N EB220NDS	221	33 (36/39)	15	141	25	15	25
EB262N EB262NDS	263	36(33)	15	141	25	15	25



- \*Please follow the instructions below before cutting the hole:
- 1. Check if the bolt and the bolt hole are aligned.
- 2. Check if the magnet and the reed switch are aligned.

#### Installation Instructions

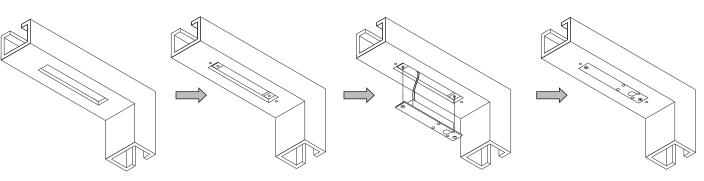
Ensure that the door frame can accommodate the lock body. Also check if it is possible to place the wires inside the door frame.

Ensure that the double action door swings back to the correct position so the dropbolt can lock up immediately.

Check if the regulated power supply or controller provides the correct current draw (Pull-in current: 0.9A/12VDC, holding current: 0.3A/12VDC).

## Warning:

- 1. The connection of an incorrect voltage may result in damage and is not covered by the product warranty.
- 2. Select an appropriate wire gauge to ensure sufficient power for the lock to operate.
- 3. DO NOT OIL OR LUBRICATE as this may cause damage to the internal electrics. This product is weather resistant under normal use and does not require maintenance.
- 4. This product must be used in conjunction with a quality floor spring or door closer to ensure positive realignment on closing.



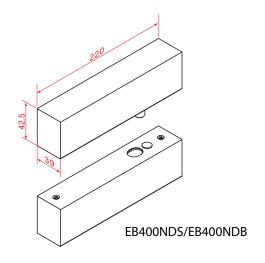
Mortise cutout in tube

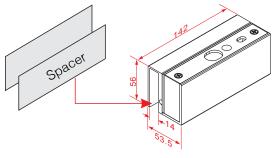
Attach fixing lugs

Connect the power

Assemble the lock and test it

Unit: mm

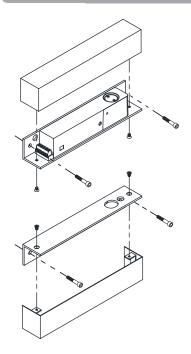




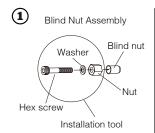
Glass thickness: 10 or 12mm

UBK-262N Glass Bracket (For EB220N/262N series)

## Surface Mount Installation (EB400NDS/EB400NDB)



#### **Installing Blind Nuts**



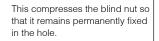


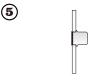


Drill a 9.4mm hole and hammer the blind nut assembly into the hole.

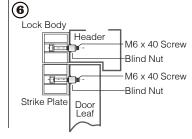
Use a wretch or vice-grip to tightly hold the nut. Then use the Allen wrench included to slowly tighten the screw firmly.



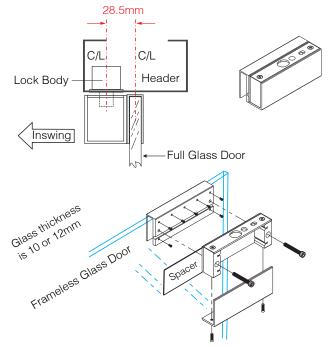




Remove the installation tool from the blind nut. Repeat step 2 through 4 for the other blind nuts.



## Glass Door Semi-Surface Mount Installation (with UBK-262N)



## Installation Instructions

- 1. Determine the installation location and clean the surface of glass.
- 2. Take off the sticker on the back side of the spacer and attach the spacer to the glass. The U shape bracket is 14mm in width and spacer is 1mm in thickness. Add more spacers if needed per thickness of the glass. Use silicone sealant or other adhesives to secure the bracket firmly.
- 3. Tighten the set scews with the Allen wrench, secure the magnet sensor and install the cover.

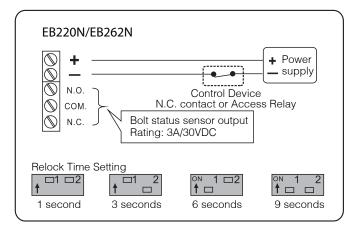
#### Caution:

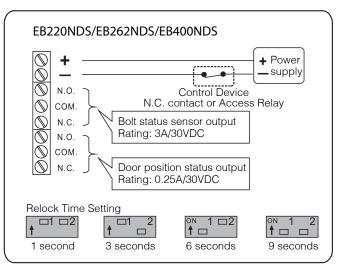
- 1. It is suggested to attach the spacer to the interior/secured side of the door.
- 2. Tighten the set screws firmly but do not overtighten to cause damage to the glass

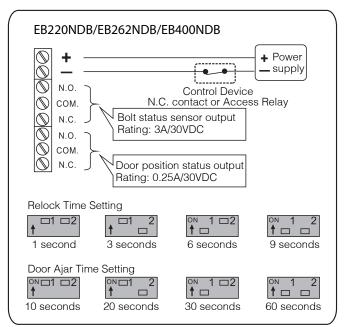
# **Connecting Diagrams**

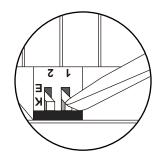
#### Caution:

Make sure that the "+" and "-" wires are connected correctly. Failure to observe polarity will result in a short circuit and is not covered by product warranty.







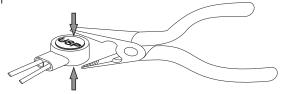


We recommend using a flathead screwdriver to adjust the relock time setting.

# Installing the Crimp Connectors:

Crimp connectors are provided to make wiring connections easier and more reliable. To install the connectors:

- 1. Insert the wires into the connector.
- 2. Use a crimping tool or pliers to evenly down on the head of the connector.



## **Trouble Shooting**

Problem	Possible Cause	Solution			
Dropbolt is not activated when the door is closed	The gap between the strike plate and the dropbolt is large	Change the sensing range to less than 5mm.			
	Low voltage /current	Check the output voltage and the current draw. (Pull-in current: 0.9A/12VDC)			
Bolt keeps projecting	Low voltage/current	Check the output voltage and the current draw. (Pull-in current: 0.9A/12VDC)			
	Dropbolt is not locked properly	Adjust the door closer or the door hinge so that the door is closed in the correct position.			
	Bropport to flot tooked property	Use on single action doors If the door hinge cannot be adjusted.			
Bolt cannot retract	Strike plate is misaligned	Move or sway the door to release the bolt to open the door.			
	Strike plate is Hilsalighed	Use on single action doors If the door hinge cannot be adjust			