D371B/D371C



ΕN



Fire Systems

Installation Instructions 24 V/110 V Floor Mount Door Holder



Notice



Carefully follow these instructions to prevent damage to the equipment.

Installation Standards

Install, test, and maintain the D371B/D371C according to these instructions, the National Fire Protection Association (NFPA) 72, local codes, and the authority having jurisdiction (AHJ).



Failure to follow these instructions can result in the failure of the D371B/D371C to operate in alarm.

Bosch is not responsible for improperly installed, tested, or maintained devices.

1.0 Overview

Use these instructions to install the D371B/D371C 24 V/110 V Floor Mount Door Holder.

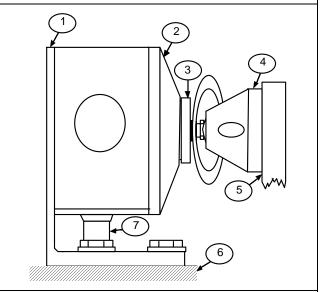
The installation procedure includes:

- Installing the floor-mounted bracket,
- Attaching the backbox to the bracket,
- Connecting the electromagnet to the circuit wiring,
- Installing the electromagnet in the backbox, and
- Installing the catch plate.

The D371B/D371C operates on 24 VDC, 24 VAC, or 110 VAC. It provides up to 110 lb (49.9 kg) of holding force for fire door or other magnetic applications.

Each door holder includes all hardware necessary to install the floor-mount bracket, attach the backbox to the bracket, mount the electromagnet in the backbox, and attach the catch plate to a standard door. Install the bracket on a door that swings open to within 5 in. (12.7 cm) of a single gang backbox (Figure 1).

D371B/D371C Installation - Plan View Figure 1:



- Bracket
- D371B/D371C Electromagnet
- D371B/D371C Catch Plate
- Swivel base
- Door
- 6 -Floor
- Conduit

Use extension rods if the door does not swing open within 5 in. (12.7 cm) of the backbox. Extension rods are available in lengths of 1 in. to 4 in. (2.5 cm to 10 cm). The 40 in. (10 cm) hinged extension rod compensates for misaligned catch plates and electromagnets.



Use the D378 Extension Rod Wrench when installing extension rods.

2.0 Installation

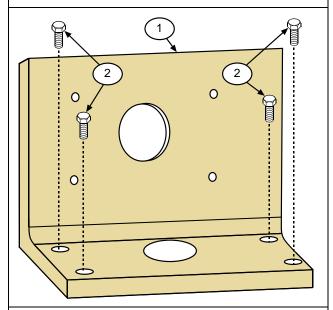
2.1 Installing the Floor-Mount Bracket



Verify the bracket mounting can withstand the stress the door exerts on it through the D371B/D371C Electromagnet.

The D371B/D371C is packaged with the backbox mounted on the bracket. The backbox accepts electrical conduit through knockouts at the top, bottom, and back (*Figure 2*).

Figure 2: D371B/D371C Bracket Mounting

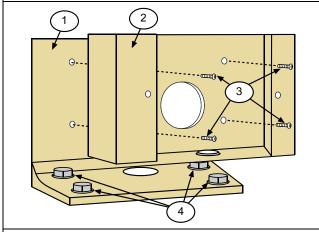


- 1 Floor-mount bracket
- 2 Floor mounting anchor screws (4)
- 1. Remove the four backbox mounting screws.
- 2. Position the bracket so the backbox aligns with the catch plate location on the door. Refer to Section 2.4 Mounting the Catch Plate to the Door on page 5 for the catch plate location and alignment.
- 3. Securely mount the bracket to the floor.

2.2 Attaching the Backbox to the Bracket

Refer to *Figure 3* when attaching the backbox to the bracket.

Figure 3: Backbox to Bracket Mounting



- 1 Floor mount bracket
- 2 Backbox
- 3 Backbox screws (4)
- 4 Anchor screws (4)
- 1. Mount the backbox to the bracket and connect the wiring conduit.
- 2. Pull the circuit wiring through the conduit and into the backbox.

The D371B/D371C operates on 24 VDC, 24 VAC, or 120 VAC. The D371B/D371C terminals accept wires between 12 AWG (2.3 mm) and 22 AWG (0.8 mm). You can wire 120 VAC to either Terminal L or Terminal H depending on the required holding force (*Table 1*).

Table 1: Specifications

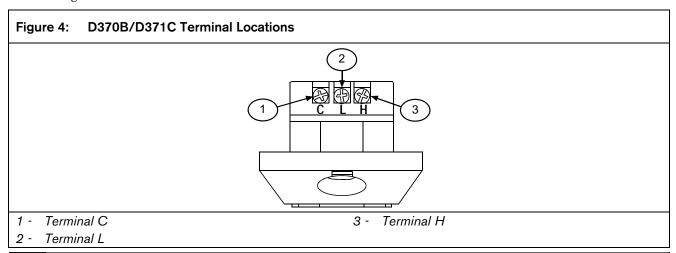
Input Voltage	Terminal Connections	Current Draw	Holding Force
24 VDC nominal (18 VDC to 30 VDC)	C&L	20 mA	40 lb (18 kg)
24 VAC nominal (18 VAC to 30 VAC)	C&L	19 mA	40 lb (18 kg)
120 VAC nominal (90 VAC to 150 VAC)	C&H	20 mA	35 lb (16 kg)
120 VAC nominal (90 VAC to 150 VAC)	C&L	100 mA	110 lb (50 kg)

Terminal C = Common

Terminal L = Low voltage

Terminal $H = High \ voltage$

Refer to Figure 4 for the D371B/D371C terminal locations.





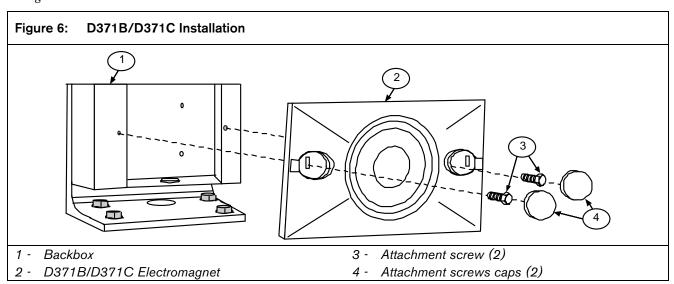
Do not loop wires under the terminal screws. Break the wires and then reconnect them.

Figure 5: Low-Voltage Circuit Connections

1 - Power input
2 - To next device

2.3 Connecting the Electromagnet to Circuit Wiring

Ensure the wiring connections are secure and install the D371B/D371C Electromagnet in the backbox as shown in Figure 6.



2.4 Mounting the Catch Plate to the Door

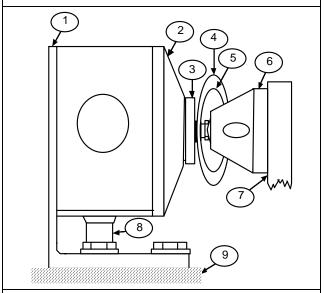
2.4.1 **Direct Mounting**



To avoid misaligning the electromagnet during this procedure, center the catch plate on the D371B/D371C.

Refer to *Figure 7* when installing the catch plate to the door.

Figure 7: Catch Plate to Door Installation



- **Bracket**
- Alignment template
- D371B/D371C
- 6 -Swivel base
- Electromagnet
- 7 -Door
- Catch plate
- 8 -Conduit
- Mounting template
- Floor
- 1. Apply power to the D371B/D371C Electromagnet (*Item 2*).
- 2. Attach the catch plate (*Item 3*) to the electromagnet.
- 3. Separate the mounting template (*Item 4*) from the alignment template (*Item 5*).
- 4. Remove the adhesive backing from the mounting template and slide the template over the swivel base (Item 6) with the printing toward the electromagnet.

- 5. Gently close the door against the swivel base and adjust the base flush against the door (Item 7).
- While holding the door in position, slide the mounting template back over the base to lie flat against the door. Then press the mounting template, firmly attaching it to the door.
- Open the door and place the alignment template inside the mounting template.
- Rotate the alignment template for horizontal and vertical alignment.
- While holding the alignment template in position, remove the adhesive backing from the tab. Then press the tab against the door, attaching the alignment template.
- 10. Center punch the two points for horizontal and vertical alignment.
- 11. Drill two 1/8 in. holes 1 in. to 1.5 in. deep.



Do not drill through the door.

- 12. Remove the alignment template.
- 13. Place the swivel base inside the mounting template, aligning the holes in the swivel base with the holes in the door.
- 14. Insert the screws and tighten.
- 15. Remove the mounting template.

2.4.2 Through-Door Mounting

Refer to *Figure 8* when mounting the catch plate through the door.

Figure 8: Through-Door Catch Plate Mounting

1 - Door 3 - Swivel base
2 - Receiving plate 4 - 3/16 in. machine screws
(2)

- 1. Repeat Steps 1 through 10 in Section 2.4 Mounting the Catch Plate to the Door on page 5.
- 2. Drill two 1/8 in. pilot holes through the door (*Item 1*).
- 3. Drill the pilot holes again using a 5/16 in. drill.
- 4. Place the receiving plate (*Item 2*) in the drilled holes on the opposite side of the door.
- 5. Remove the alignment template.
- 6. Place the swivel base (*Item 3*) inside the mounting template, aligning the swivel base holes with the door holes.
- 7. Using two 3/16 in. machine screws (*Item 4*), attach and tighten the swivel base to the door.
- 8. Remove the mounting template.

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3.0 Accessories

Refer to Table 2 for the D371B/D371C accessories.

Table 2:	Accessories
Model	Description
D371B	24 V/110 V Magnetic Door Holder, Brass
D371C	24 V/110 V Magnetic Door Holder, Chrome
D372B	Surface-mount Backbox, Brass
D372C	Surface-mount Backbox, Chrome
D373B	1 in. (2.5 cm) Extension Rod, Brass (package of 5)
D373C	1 in. (2.5 cm) Extension Rod, Chrome (package of 5)
D374B	1.5 in. (3.8 cm) Extension Rod, Brass (package of 5)
D374C	1.5 in. (3.8 cm) Extension Rod, Chrome (package of 5)
D375B	2 in. (5 cm) Extension Rod, Brass (package of 5)
D375C	2 in. (5 cm) Extension Rod, Chrome (package of 5)
D376B	3 in. (7.6 cm) Extension Rod, Brass (package of 5)
D376C	3 in. (7.6 cm) Extension Rod, Chrome (package of 5)
D377B	4 in. (10 cm) Extension Rod, Brass (package of 5)
D377C	4 in. (10 cm) Extension Rod, Chrome (package of 5)
D378	Extension Rod Wrench
D379	Swivel Base M-16 Drill Fixture

Notes

Bosch 130 Perinton Parkway Fairport, NY 14450-9199 Customer Service: (800) 289

Customer Service: (800) 289-0096 Technical Support: (888) 886-6189

