

ED50LE/ED100LE

Low energy swing door operators
Fine cover

Owner's Manual

DL4616-003 – 09-2021

| EN |

dormakaba 

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1 General information

1.1 Owner's Manual.

This Owner's Manual applies to dormakaba ED50LE and ED100LE (fine cover) low energy swing door operators.

1.2 ED50LE and ED100LE installation.

NOTICE

Interior building surface installation.

The ED50LE and ED100LE with fine cover must be installed on an interior building surface.

ED50LE interior door installation.

The ED50LE is intended for installation on interior doors only.

1.3 ED100LE exterior door use.

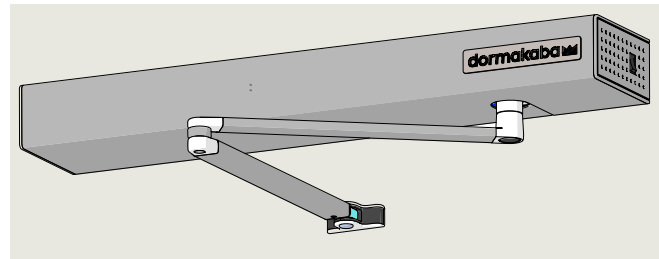
NOTICE

Exterior door use.

To insure proper suitability for exterior door use, the following topics must be addressed in the context of the door application setting.

- Site-specific use factors such as high wind conditions and/or building pressure.
- Door width, height, weight, and usage patterns.
- Observable prevailing conditions at the opening under which the operator is expected to perform. In some instances, this may require increased force settings to counteract these conditions.
- Door mounted presence sensors (ED100LE)
When attempting to overcome these forces, it is strongly suggested that door mounted presence sensors be employed to enhance pedestrian safety through the opening.

Fig. 1.1 ED50LE/ED100LE operator with fine cover



1.4 Manual storage.

This document must be kept in a secure place, and accessible for reference as required.

If the door system should be transferred to another facility, insure that this document is transferred as well.

1.5 dormakaba.us website.

Manuals are available for review, download, and printing on dormakaba.us website.

1.6 Dimensions

Unless otherwise specified, all dimensions are given in inches (").

1.7 Symbols used in this manual.



WARNING

This symbol warns of hazards which could result in personal injury or threat to health.

NOTICE

Draws attention to important information presented in this document.

2 To our customers

We are pleased that a dormakaba ED50LE or ED100LE (fine cover) low energy swing door system has been selected for this installation.

dormakaba designed, tested and built the system to provide many years of service.

The purpose of this manual is to familiarize you with your ED50LE/ED100LE (fine cover) swing door system.

It is essential that you "know your system" and that you recognize the importance of maintaining your door system in compliance with industry standards for safety.

It is your responsibility as owner and caretaker of the equipment, to inspect the operation of your door system on a daily basis as outlined in **Chapter 5, Daily Safety Check Procedures** to insure that it is safe for use by your customers and employees.



WARNING

Should the door fail to operate as prescribed in the Safety information checklist or at any other time for any reason, do not attempt to repair or adjust the ED50LE or ED100LE swing door system!

Call your local authorized dormakaba USA, Inc. distributor for repair. The distributor's AAADM certified technicians are trained to service the ED50LE/ED100LE swing door system using dormakaba USA, Inc. Installation and Setup Manuals, and in accordance with applicable industry standards.

2.1 Service availability.

dormakaba USA, Inc. has a nationwide network of authorized distributors for sales, installation and service of its products.

2.2 Compliance with industry standards for safety.

Your ED50LE/ED100LE swing door system was designed to the latest operating and safety standards. In order to insure the continued safe operation of the door, it is important that:

- Proper decals and labels be applied and maintained on your doors (Chapter 6).
- If decals and labels have been removed, or cannot be read, contact your local authorized dormakaba USA, Inc. distributor for replacement decals or labels.

3 What you should know

3.1 Distributor information

3.1.1 dormakaba USA Inc. distributor information.

Be sure that the dormakaba USA Inc. distributor has provided the following information for each door installation:

1. dormakaba USA Inc. ED50LE/ED100LE Fine Cover Owner's Manual DL4616-003.
2. Review of:
 - Daily Safety Check Procedure (Chapter 5).
 - General Safety Related Items (Chapter 6).
3. Instructions on how to conduct the daily safety check procedure by walk through example.
4. Annual compliance inspection label completion (Chapter 4).
5. Circuit breaker or disconnect location for 115 Vac power to the ED50LE/ED100LE fine cover assembly.
6. ED50LE/ED100LE Mode switch panel location and instructions in its use (Para. 3.4).
7. Discussion of problems that could result from ED operator being allowed to operate after a malfunction observed.
8. Number to call for service or questions about your system if you are uncertain of any condition or situation.



WARNING

If there are any problems, discontinue door operation immediately and secure the door in a safe manner.
Call your local dormakaba USA Inc. distributor for repair.

3.2 ED50LE/ED100LE low energy operator

ED50LE/ED100LE operators are available only as a low energy operator (Para. 3.3).

3.3 Low energy power operated swinging doors ANSI/BHMA A156.19

3.3.1 Low energy power operator door definition (ANSI/BHMA A156.19).

A door with a power mechanism that opens the door upon receipt of a knowing act signal, does not generate more kinetic energy than specified in the ANSI/BHMA A156.19 standard, and is closed by a power mechanism or other means.

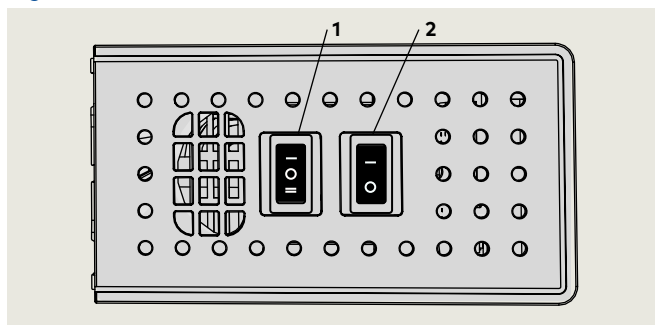
3.3.2 Knowing act definition (ANSI/BHMA A159.19).

Any conscious action with the expected result of opening a door. This includes but is not limited to:

- Wall or jamb mounted contact or non contact switches such as pushplates.
- The action of manually opening (pushing or pulling) a door.
- Controlled access devices such as keypads, card readers, wireless transmitters and key switches.

3.4 Mode switch and Exit Only switch panels

Fig. 3.4.1 Fine cover



- 1 Mode switch, 3 position
 2 Exit Only switch, 2 position

3.4.1 Mode switch positions.

Fig. 3.4.2 Auto

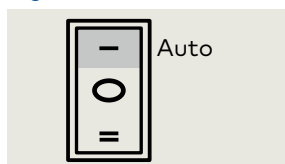


Fig. 3.4.3 Close

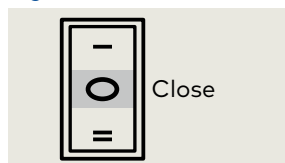


Fig. 3.4.4 Open



3.4.2 Exit Only switch positions.

Fig. 3.4.5 On

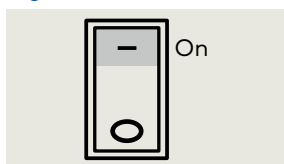


Fig. 3.4.6 Off

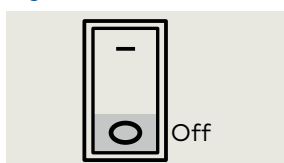
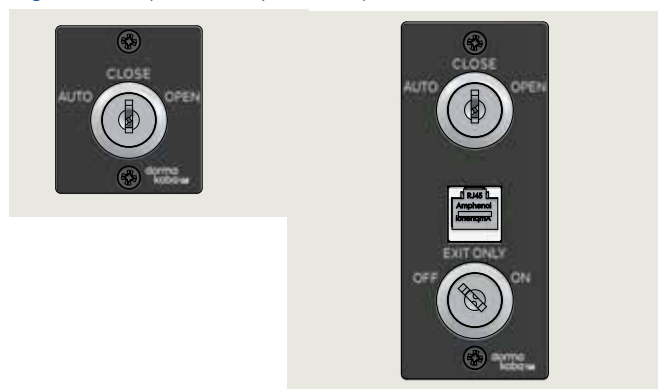


Fig. 3.4.7 Optional key switch panels



3.4.3 Mode switch position descriptions.

Auto

1. Door opens automatically when one of the activators is actuated or triggered. Door closes on expiration of adjustable hold open time with no activators or actuators triggered.
2. With knowing act device actuation (Para. 3.3.2). Door will remain at full open position for not less than 5 seconds.
3. With push/pull actuation of door (Para. 6.1). Door will remain at full open position for not less than 3 seconds.

Close

1. Door will remain closed, or if door is open door will close.

Open

1. Door opens automatically and remains open.

3.4.4 Exit Only switch position descriptions.

On

1. Exterior activation sensor or knowing act device disabled when door fully closed.
 - Only interior activation sensor or knowing act device will enable door opening.

Off

1. Both interior and exterior activation sensors or knowing act devices will enable door opening.

4 AAADM Safety information label

4.1 Safety information label, low energy power operated doors

4.1.1 Low energy swing door safety information label.

This AAADM label outlines safety checks that should be performed daily on swing door controlled by an ED50LE or ED100LE operator.

4.1.2 Safety information label location.

Place label in a protected, visible location on door frame, near program switch panel if possible.

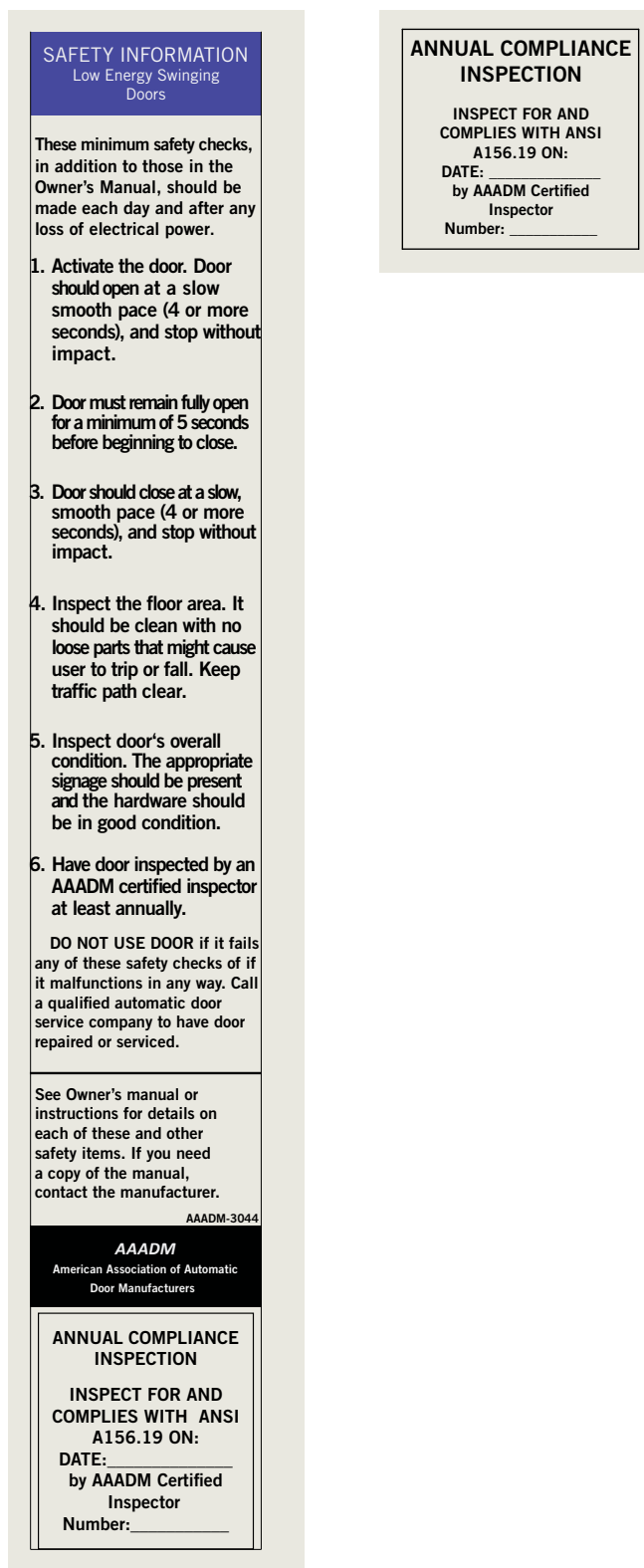
4.1.3 Annual compliance section of label.

This section of label is only completed on low energy swing doors that comply with ANSI/BHMA A156.19 Standard for Low Energy Power Operated Swinging Doors and pass inspection by a AAADM certified dormakaba USA, Inc. technician.

4.1.4 Additional annual compliance inspection labels.

Place additional labels over annual compliance inspection section of safety information label.

Fig. 4.1.1 Safety Information and Annual Compliance Inspection labels



5 Daily safety check procedures

5.1 Low energy power operated swing doors

5.2.1 Performing daily safety checks.

Perform safety checks daily on your low energy swing door to insure your customer and employee safety. These daily safety checks are also listed in Chapter 4, Safety Information labels, low energy swinging doors.

1. Activate the door by a knowing act device (Para.3.3).
 - Door should open at a slow smooth pace (4 seconds or more) and stop without impact.
2. Door must remain fully open for a minimum of 5 seconds before beginning to close.
 - Door should close at a slow smooth pace (4 seconds or more) and stop without impact.
3. Inspect the floor area, it should be kept clean with no loose parts that might cause user to trip or fall. Keep traffic path clear.
4. Inspect door's overall condition. The appropriate signage should be present and all hardware should be in good condition.
5. Have door inspected by a dormakaba USA Inc. AAADM certified technician annually, at a minimum.



WARNING

If there are any problems, discontinue door operation immediately and secure the door in a safe manner.
Call your local dormakaba USA, Inc. distributor for repair.

5.2.2 Review safety related items and perform checks periodically as noted.



TIPS AND RECOMMENDATIONS

Perform these checks while traffic is restricted.

1. Housekeeping
 - Check door area for tripping or slipping hazards.
 - Make sure all hardware and overhead covers are properly secured.
 - There should be no bulletin boards, literature racks, merchandise displays, or other attractions in the door area that would interfere with the use of the door or encourage people to stop and stand in the door area.
2. Check all doors for damage.
3. Force
 - Force to prevent the door from closing should not exceed 15 pounds measured with a force gauge.
4. Door safety signage
 - Refer to Chapter 6 for door safety signage requirements.
5. Lock stile
 - With door open, grasp lock stile of door and attempt to move horizontally and vertically.
 - There should be no looseness in the door pivots or in connections between door and operator.



WARNING

If there are any problems, discontinue door operation immediately and secure the door in a safe manner.
Call your local dormakaba USA, Inc. distributor for repair.

6 ED50LE/ED100LE door signage

6.1 Low energy operator, ANSI/BHMA A156.19

6.1.1 Overview

Signage and warnings are specified in ANSI /BHMA A156.19, American National Standard for Low Energy Power Operated Swinging Doors.

6.1.2 All low energy doors.

AUTOMATIC CAUTION DOOR decal.

- All low energy doors shall be marked with signage visible from both side of door with the words "AUTOMATIC CAUTION DOOR".
- Signs shall be mounted 50" ± 12" from floor to centerline of sign.

6.1.3 Knowing act used to initiate door operation.

ACTIVATE SWITCH TO OPERATE decal.

- When a knowing act device is used to initiate operation of door operator, door shall be provided with sign on each side of door where switch is operated with message "ACTIVATE SWITCH TO OPERATE".

6.1.4 Push/Pull used to initiate door operation.

PUSH TO OPERATE, PULL TO OPERATE decals.

- When push/pull is used to initiate operation of door operator, doors shall be provided with the message "PUSH TO OPERATE" on push side of door and "PULL TO OPERATE" on pull side of door.

Fig. 6.1.1 AUTOMATIC CAUTION DOOR decal

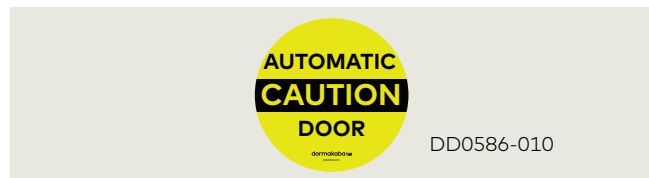
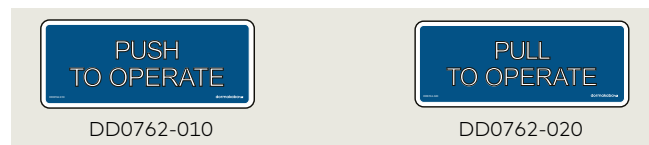


Fig. 6.1.2 ACTIVATE SWITCH TO OPERATE decal

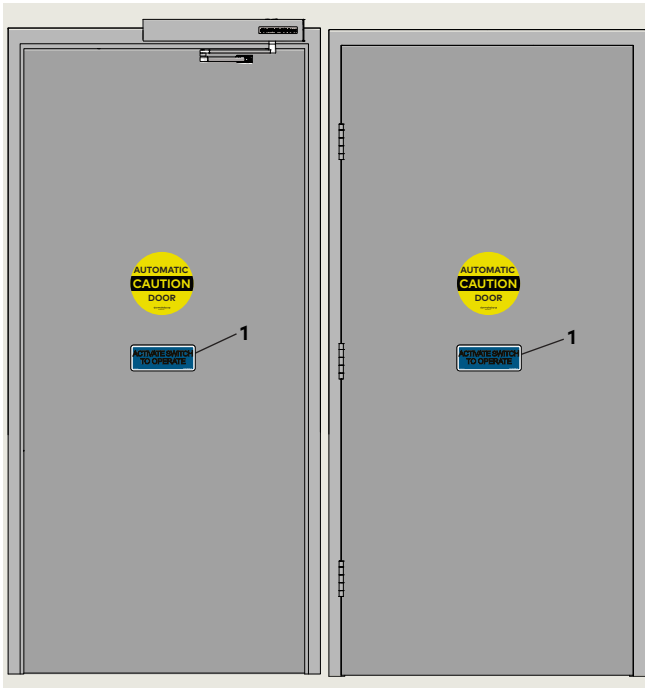


Fig. 6.1.3 PUSH/PULL TO OPERATE decals



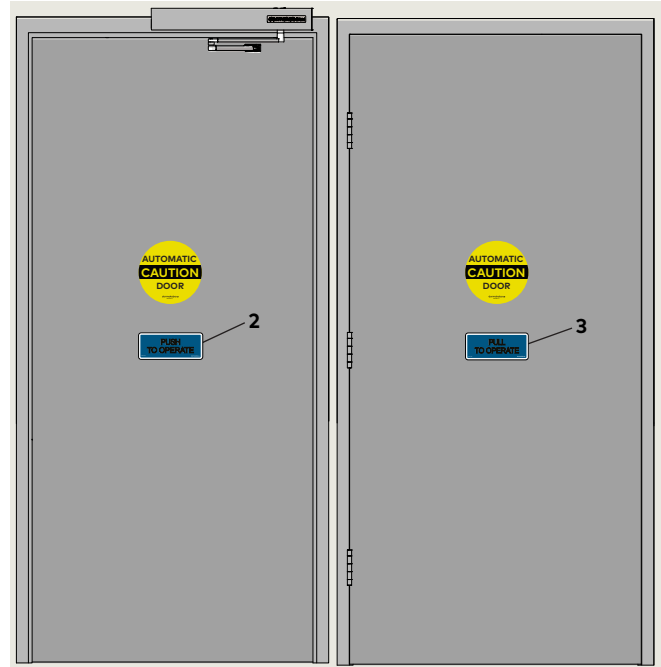
6.2 Door signage, low energy single swing door, ANSI/BHMA A156.19

Fig. 6.2.1 Knowing act device initiation of door operation



- 1 Activate Switch to Operate DD0758-010

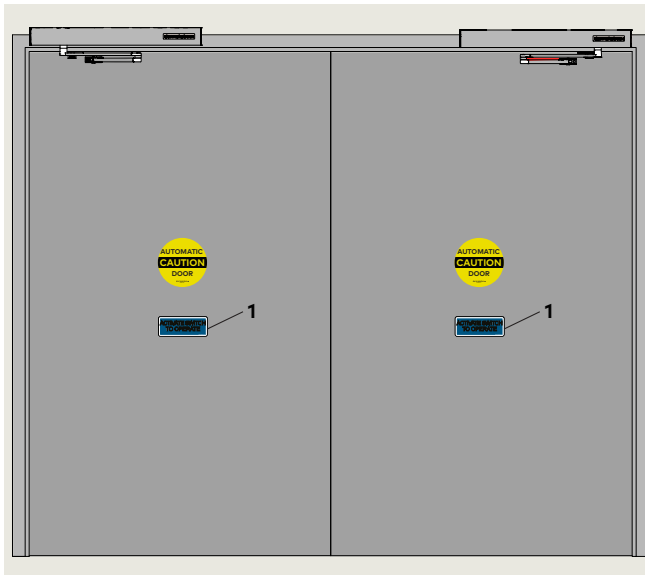
Fig. 6.2.2 Push / Pull initiation of door operation
Push to Operate Pull to Operate



- 2 Push to Operate DD0762-010
- 3 Pull to Operate DD0762-020

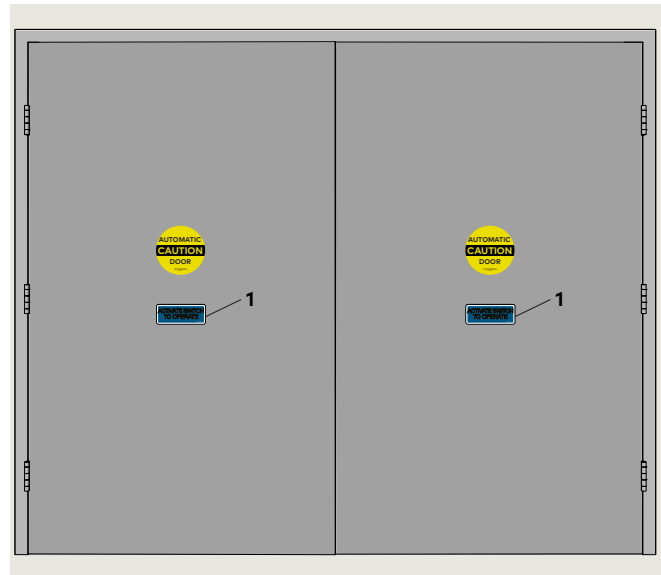
6.3 Door signage, low energy double swing doors, ANSI/BHMA A156.19

Fig. 6.3.1 Knowing act, non-hinge side



- 1 Activate Switch to Operate DD0758-010

Fig. 6.3.2 Knowing act, hinge side



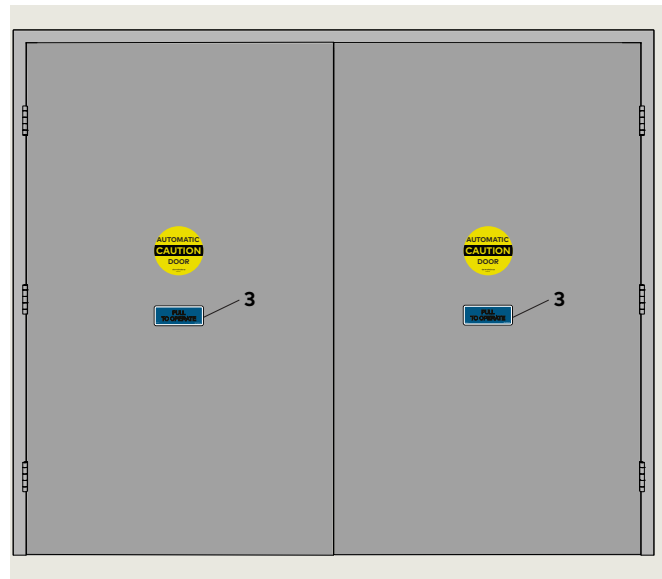
- 1 Activate Switch to Operate DD0758-010

Fig. 6.3.3 Push / Pull, push to operate



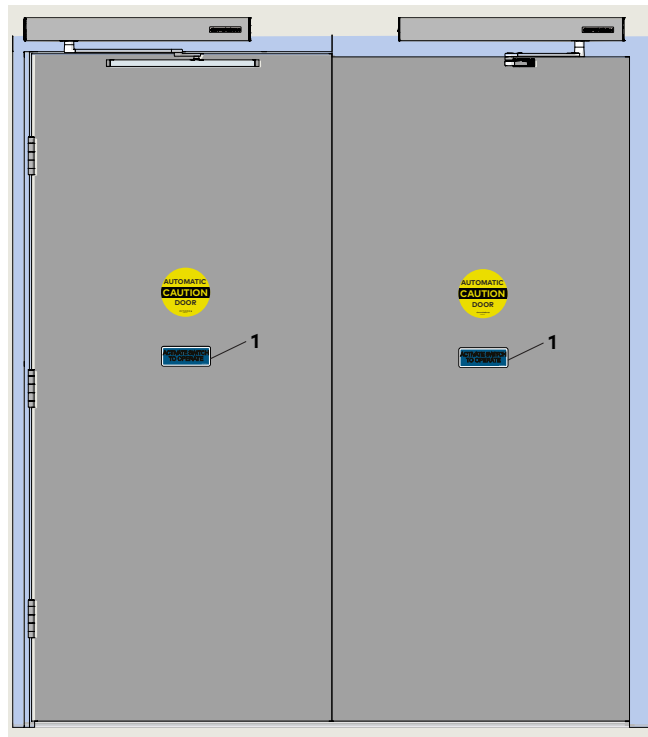
2 Push to Operate
DD0762-010

Fig. 6.3.4 Push / Pull, pull to operate



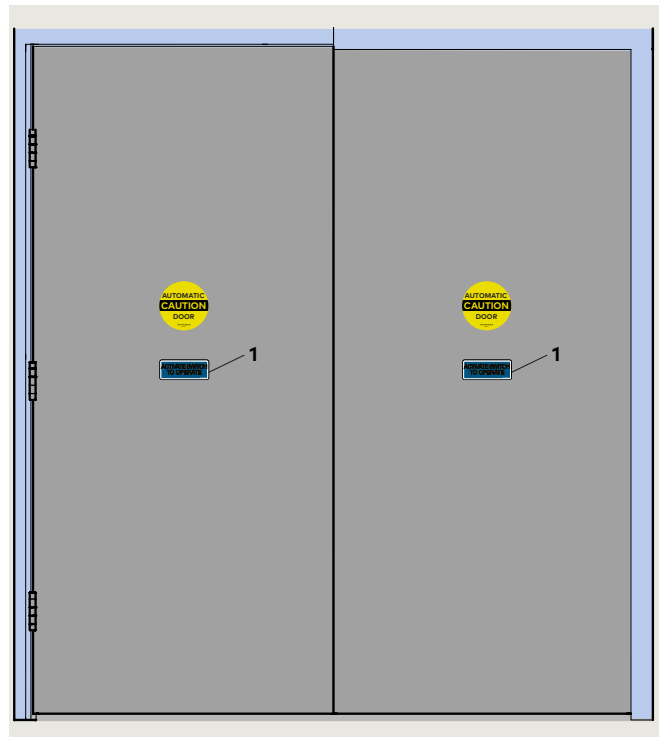
3 Pull to Operate
DD0762-020

Fig. 6.3.5 Double egress, knowing act



1 Activate Switch to
Operate DD0758-010

Fig. 6.3.6 Double egress, knowing act



1 Activate Switch to
Operate DD0758-010

7 ED50LE/ED100LE maintenance

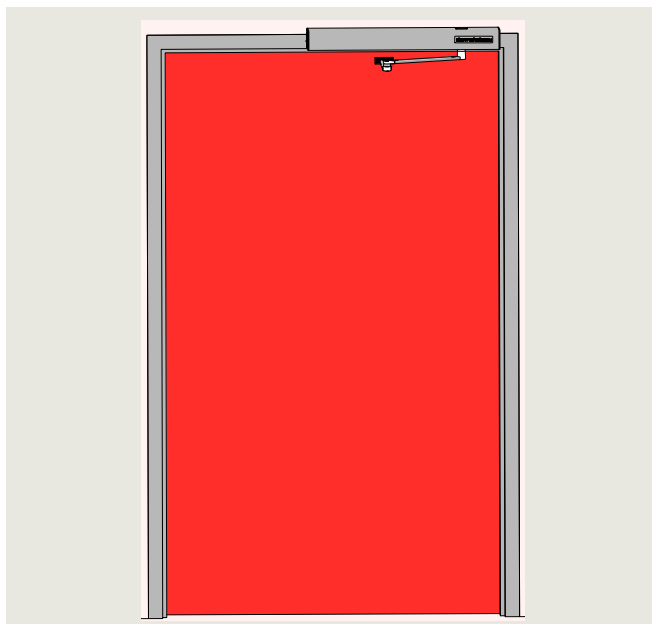
7.1 Environment

Table 7.1.1 Operator environmental requirements.

Ambient temperature	5° to 122 °F [-15° to 50°C]
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7.2 Cleaning

Fig. 7.2.1 ED50LE/ED100LE with fine cover



7.2.1 ED50LE/ED100LE environmental requirements.

The ED50LE and ED100LE with fine cover is designed to operate on an interior building surface under the specifications shown in Table 7.1.1.

7.2.1 Areas around door(s) and door swing radius.

Areas around doors and door swing radius must be kept clear of all obstacles.

7.2.2 Cleaning



WARNING

Cleaning of fine cover surfaces must be done with Mode switch (Para. 3.4) in Close position!

Fine cover surface can be cleaned with a damp cloth and commercial cleaning agents.



TIPS AND RECOMMENDATIONS

Abrasive (scouring) agents should not be used as they may damage external surfaces.

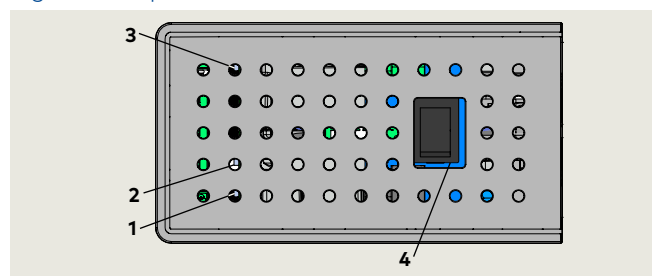
7.2.3 Water and other liquids.

CAUTION

No water or other liquids must be sprayed or spilled on ED50LE/ED100LE fine cover!

7.3 ED operator status LEDs

Fig. 7.3.1 Operator status LEDs



- 1 Red LED
- 2 Yellow LED
- 3 Green LED
- 4 Power switch

7.3.1 Operator status LEDs.

1. Red LED
Blinking codes are used to indicate system status, operating conditions or certain error codes.
2. Yellow LED
Maintenance interval indicator. When illuminated, an indication the operator system should be serviced.
3. Green LED
 - On, internal 24 Vdc power is On.
 - Off, internal 24 Vdc power is Off.



WARNING

If there are any problems, discontinue door operation immediately and secure the door in a safe manner.
Call your local dormakaba USA Inc. distributor for repair.

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