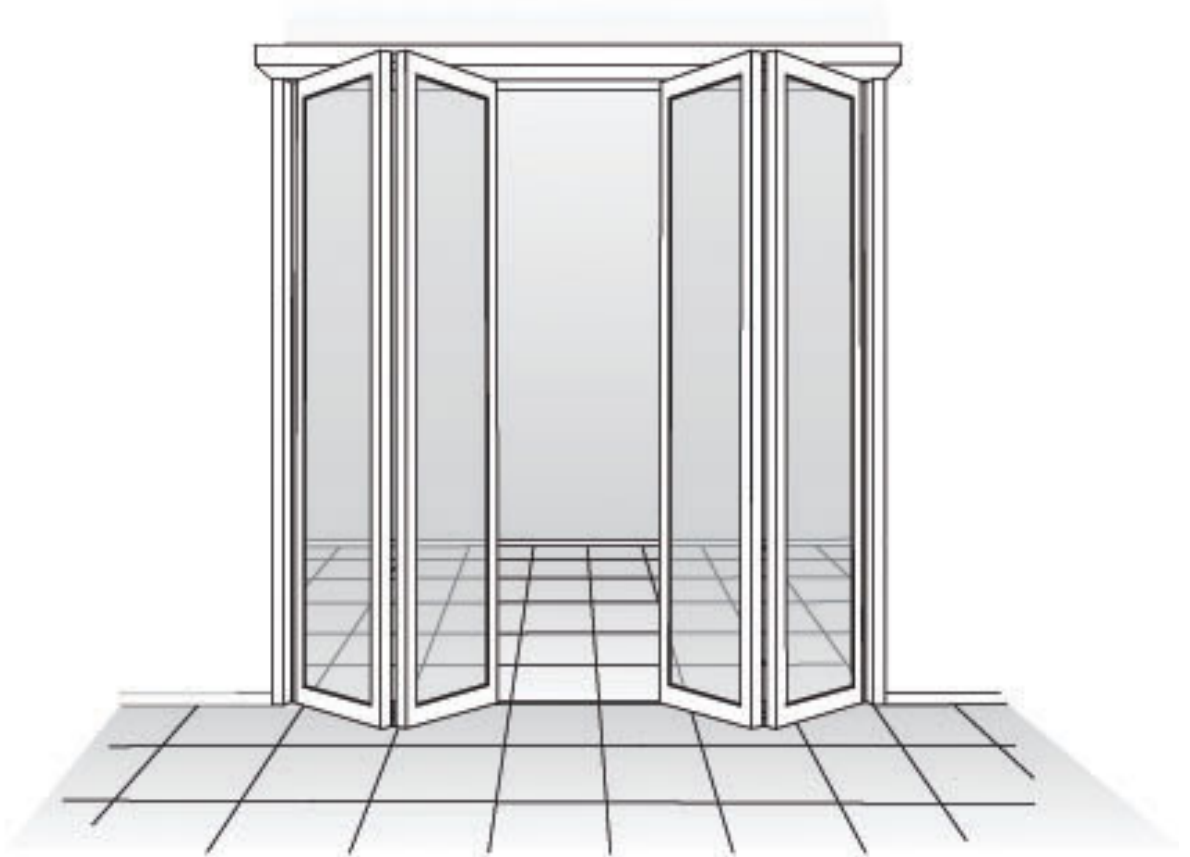


Slimdrive SF

Sliding Folding Door Drive for Automatic Doors



Operation & Maintenance Manual

GB

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Safety Instructions

General Safety Instructions

Before starting to use the door, read this user manual with care and comply with the following safety instructions at all times:

- The Slimdrive SF automatic sliding folding door operator is only intended for normal usage with automatic doors.
- Please comply with relevant accident prevention regulations.
- Please follow the guidelines for **BS 7036 1996 Safety at Powered Doors for Pedestrian Use**.
- Please adhere to the operating, servicing and repair conditions specified by **GEZE**.
- Servicing and repair work may only be carried out by properly trained **GEZE** personnel or authorized **GEZE** partner.
- Isolate all power before removing cover.
- **IMPORTANT:** The cover may only be removed by properly trained personnel authorized by **GEZE**.
- **GEZE** does not accept responsibility for damage resulting from unauthorized modification of the equipment. Warranty will be void if damage is caused from unauthorized modification.

System Description

Types of Door Leaves

Glass doors consisting of either single or double glazed glass.
Doors with metal or aluminium frames.

Drive

Low wear high capacity DC Motor.

Extremely quiet enclosed running gear.

Power transmission via toothed belts: deflection rollers in precision bearings.

Self learning processor control.

Permanent position sensing of door leaves by means of non-contact distance measuring System.

Determination of door leaf weight by means of acceleration meter.

Adjustable hold open time.

Automatic error detection.

Error indication at programme switch.

Audio signal in case of error.

Opening and closing speed individually adjustable.

Automatic adjustment of opening time dependent on traffic.

Connection to fire alarm (optional).

Stable electromotive break axle locking device to secure the door leaves against being forced open (Optional)

Automatic reversing function with adjustable reversing pressure. The door opens automatically, should it meet an obstacle during closure.

Emergency opening via an integrated battery back up in case of power failure.

Integrated double pole switch.

Closing force limited to < 150 N.

Occupier Safety Test

Extract from BS 7036 : Part 2 : 1996 (Annexes)

This section provides a checklist for occupier safety tests on powered doors, which suit the majority of installations. However, the person / organization responsible for the operation and maintenance of the doors should consider each individual installation and adopt a safety test procedure that is suitable for that installation. Additional tests to those given in this section may be necessary if specified by the manufacturer.

Occupier safety check list for all types of powered sliding doors

The occupier is responsible for undertaking the following test procedure which should be carried out at least weekly unless a different frequency for tests is identified in the Hazard Analysis and Risk Assessment (See 4.6.2.1 of Part 1).

For safety reasons it should not be assumed that equipment is working safely. There should be no notice boards, literature racks, merchandise displays, or other distractions or obstructions in the vicinity of the door that may congest or inhibit the traffic flow.

If an error is found which affects the safe operation of the door, the door operating equipment should be switched off and the door made safe. Use of the door should not be re-instated until an authorized technician has undertaken repairs.

Automatic Activation Devices

Sensor Activation (if fitted)

- 1) Test Sensors by walking towards the door opening. The door should start to open when a person is approximately 1400mm (5 ft) from the door. The door should fold smoothly to the open position and stop without impact.
- 2) Step out of the activation zone. After a delay (normally 1s to 5s) the door should close smoothly.
- 3) Repeat 1 and 2 on the other side of the door opening if the door has two way operation.

Safety Devices

- 4) Various devices are available to protect the threshold area by preventing a door from closing whilst the area is occupied. These include presence-sensing devices, hold open beams or safety mats. Test these devices as follows:
 - a) Presence Sensing Devices. If presence sensing devices are fitted, place the test object (see 8.4.2 of Part 1) within 150 mm of the plane of movement of the door (but not interrupting the safety light barrier) and verify the door remains open for a minimum of 30 s. After a minimum of 30 s it is allowable for the door to close.
 - b) Hold Open Beams. If hold open beams are fitted, place the test object (see 8.4.2 of part 1) on the threshold and verify the door remains open.

General Tests

- 5) Check that the door area has no tripping or slipping hazards.
- 6) Check all door panels for broken or cracked glass.
- 7) Check that all doors have signs correctly displayed at recommended viewing heights.
- 8) Check the position and security of associated screens and barriers.
- 9) Check the operation of manual activation, or remote activation, or emergency stop button if fitted.
- 10) Check for distractions or obstructions in the vicinity of the door.

Extract from BS 7036: Part 1: 1996 (4.6.2.1 Occupier Safety Checks)

To ensure continued operation of a powered door installation, the installation and its environment should be subjected to systematic operational checks as often as is appropriate to the type of installation and its traffic flow. This should be assessed with reference to the Hazard Analysis and Risk Assessment carried out under 4.1.4, e.g. in high traffic areas such as shops, hospitals and airports, an appropriate rate would be at least once a week using the tests given in parts 2 to 5.

Extract from BS 7036: Part 1: 1996 (8.4.2 Test Object)

The following test object should be used.

- a) For presence sensing devices, a cardboard box of approximate dimensions 250mm x 150mm x 710mm high (10in x 6in x 28in high) is a suitable test object.
- b) For motion sensing devices, testing is achieved by the tester approaching the door from several directions in turn.

Operational Switches

Operation of Settings

This type of programme switch carries out various functions. They are; select mode of operation, view error messages and programme and service the system. The modes of operation are as follows.

Automatic Mode (Au)

Whilst in this mode the door will be activated automatically by the relevant form of sensor fitted i.e. Radar, Push Pad etc. The door will power open, stay open for a designated time (normally 1 to 5 seconds) and then power close.

Hold Open Mode (Ho)

Whilst in this function the door will power open and be held permanently open.

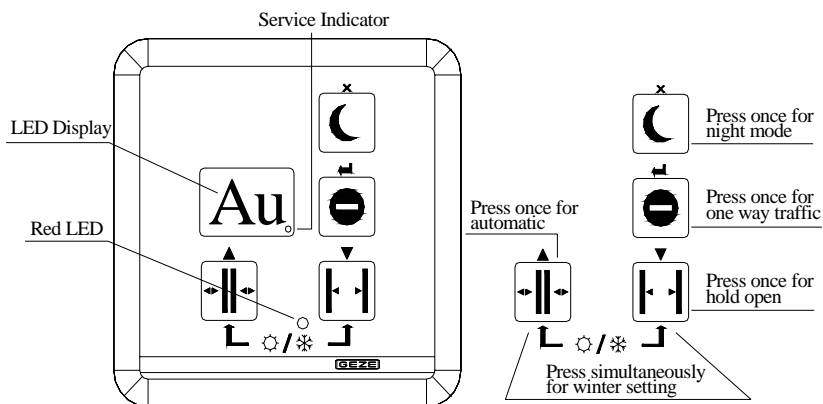
Night Mode (ni)

Whilst in this mode the drive unit is off. All activation and safety devices are isolated once the door is fully closed. If an integrated electric locking device is fitted, this will be engaged automatically to secure the doors (if fitted).

Exit Only (Eo)

Whilst in this mode the external activation device is isolated. The internal activation device is still active. This enables traffic to leave the premises at closing time.

Program Switch



IMPORTANT NOTICE

If manual locks are fitted to the door leaf, please ensure they are **UNLOCKED** prior to switching the drive unit into one of the operational modes. Also switch the drive unit to **NIGHT MODE** before locking the door.

Emergency Operation

Emergency operation of the door leaves

Opening the door leaf

In an emergency, e.g. when there is a power cut, it is possible to open and close the door leaves with an Allen key. The door leaf unlocking point is denoted by the sticker below and is located to the underside of the drive unit on the left side.

1. Insert the Allen key (6 mm) through the hole in the cover. The hole is identified by the sticker to the right.
2. Turn the key in the direction indicated to open a small gap between the door leaves.
3. Now open the door leaves by hand.



Closing the door leaf

1. Close the doors by hand. Insert the Allen key (6 mm) through the hole in the cover. The hole is identified by a sticker
2. Turn the key in the direction indicated to move the door leaves towards the closed position until the Allen key can no longer be turned.

Emergency unlocking operation of electro-mechanical lock. (If fitted)

In an emergency, e.g. when there is a power cut, it is possible to lock and unlock the door leaves with an Allen key.

1. Insert the Allen key (6 mm) through the hole in the left hand post profile. The hole is identified by a sticker
2. By turning the key in the directions indicated the door leaves will be unlocked



Error Codes – Slimdrive SF DCU 1

Error Messages

If an error occurs on the system a 2-digit number will be displayed on the program switch. This will flash every 20 seconds. Up to 5 separate error codes may be issued in succession. If the system has been appropriately configured, an audible warning also occurs. To assist in error diagnosis, please advise any error codes to our office without delay.

Code and description of all error messages. Please confirm this code when reporting the error to the Service Dept.

Error	Meaning
01	24V voltage internal (no voltage)
02	12V voltage internal (DCU 100 no voltage)
03	230V voltage supply (no voltage)
10	No signal from the position indicator
11	Excessive current through motor 1
12	Motor defective (DCU100)
13	Safety sensor 1 does not switch or takes longer than 4 minutes
15	No communication between controller and DPS
16	Locking device does not lock
17	Locking device does not lock
18	Lock and unlocked messages both active
19	Safety sensor 2 does not switch or takes longer than 4 minutes
25	Obstruction while opening
27	Safety sensor 1 (contact open)
28	Motor relay on main PCB defective
29	Safety sensor 2 does not switch or takes longer than 1 minute
32	Tamper switch is activated
33	Second control (sluice, draught lobby) not responding
35	Pharmacy contact activated longer than 4 minutes
36	Internal redundancy error on processor
37	Internal Activation (contact closed longer than 4 minutes)
38	External Activation (contact closed longer than 4 minutes)
39	KA Activation takes longer than 4 minutes
40	KB Activation takes longer than 4 minutes
41	Safety sensor 1 (contact open longer than 1 minute)
42	Emergency locking (contact closed longer than 4 minutes)
45	DCU100 Drive control (hot) temperature exceeds 110°C
46	Temperature sensor motor defective
47	Temperature sensor on processor defective
48	Motor or controller overheated temperature exceeds 115°C
60	Error on DCU100 main PCB
61	Battery flat or disconnected
63	Software of main PCB does not match secondary

Error Messages continued.

Error	Meaning
64	Door does not open in the required opening time
65	Error in internal computer monitoring
70	Error on DCU101 additional board
71	Short circuit on DCU101 additional PCB
72	DCU101 motor defective
75	DCU101 controller hot
77	DCU101 thermometer defective
78	DCU101 overheat
79	DCU101 motor relay defective
90	Controller is defective
91	No pulses from rotary transducer
X.X	Leaf position unknown (dot in left hand display)
X X.	Maintenance required
LE (EL)	Error during controller learning
8.8	No communication between processor and DPS

Power Failure

Power Failure

If a power failure occurs, first check the fuse at the customer end. The presence of a battery determines whether the door opens or closes when the power fails. In most cases, the door will open in the event of power failure unless in Night mode (**ni**)

Battery present	If the door is to be locked from the outside, operate the outside key switch (>4 seconds) until the programme switch lights up. Select ni by pressing the half moon symbol once: the door opens, closes and locks once. If the battery is discharged see “No battery present or battery discharged”
No battery present or battery discharged	Open: unlock door manually and open door leaf by hand Close: close the door leaf by hand and manually lock the door
After power failure	Door automatically returns to the previously selected operating state Or If the door is locked, it automatically changes to “Night” mode.

Fire Alarm activation (if fitted)

When the doors are in the “Automatic” setting they will power open and remain in the fully open position until the fire alarm has been reset. When the doors are in the “Night” position they will remain closed/locked so as not to compromise security

Service Indicator

When the service indicator LED is lit a annual service will be required.

General Cleaning & Maintenance

Maintenance of Drive Unit

Aluminium Cover

Wipe Clean with a damp cloth. DO NOT allow water to enter through the drive unit cover.

Activation & Safety Sensors

Ensure plastic lenses are clean & dust free. Wipe with a dry soft cloth if necessary.

Preventative Maintenance

GEZE strongly advise that a preventative maintenance programme is entered into, in line with the recommendations of BS 7036: Safety at powered doors for Pedestrian Use.

An Authorized Technician to BS 7036 must carry out any servicing.

Fabricated Doors / Screenwork only - See separate section for electrical drive unit covers.

Atmospheric deposits, sulphurous acids, carbon dioxides and other chemicals in the air will discolour and tarnish all metalwork, and in time cause corrosion. Regular maintenance prevents atmospheric deposits building up and attacking the metals.

Anodized Aluminium.

Wash with mild soap and water or a mild detergent solution, rinse down with clean water and dry off with a soft cloth or chamois leather. Apply a liquid wax polish to protect the metal from the atmosphere.

AVOID : Metal polish of any kind, abrasive cleaners, strong alkalines or acids, and the use of ammonia based cleaners for washing windows as they can cause staining of the surrounding framework.

Recommended frequency - WEEKLY.

Polyester Powder Coated Aluminium.

As with any organic coating, in order to retain the aesthetic properties, it is recommended that the coating be regularly maintained. Wash at intervals of not more than three months using a solution of warm water and mild detergent. (e.g. 5 % Teepol solution or mild washing up liquid.) All surfaces should be cleaned using a soft cloth or sponge but nothing harsher than a natural bristle brush.

AVOID: Abrasive cleaners or cleaning solutions such as ketones, esters, or alcohols.

Recommended frequency - THREE MONTHLY (depending on environment.)

Polished or Satin Stainless Steel.

Wash away grime and grit with luke warm soapy water or a mild detergent solution using a nailbrush for awkward crevices or corners. Repeat with clean water. Dry and polish with a soft duster or chamois leather.

AVOID : Metal polishes, and all abrasives, toxic materials, acids, strong alkalines, nylon pads, wire wool.

Recommended frequency - WEEKLY.

Glass.

Wash as often as possible with clean water and a chamois leather, scrim or squeegee, and dry off. The occasional application of a proprietary window cleaner or polish can be beneficial providing it does not contain ammonia. Advice may be given by a reputable window cleaning company.

Service Information

We are committed to the very best in customer service. To ensure rapid response and total peace of mind we offer 24 hour 7 day a week service and repair for all makes of automatic and manual doors throughout the UK.

Warranty Period - Up to 12 months from installation

Fully comprehensive GEZE parts and labour warranty which covers all faults other than those caused by abuse.

For Nationwide Assistance call 08456 77781

Post - Warranty period

Following the warranty period - GEZE provides a range of Service Contracts to suit individual site requirements. The current BS7036 recommends that powered doors are serviced twice per year - our Service Contracts are therefore based on this important recommendation.

**A comprehensive, 24 hour service,
nationwide – from your local office...**

GEZE Service Midlands

Blenheim Way
Fradley Park
Lichfield
Staffordshire
WS13 8SY

Tel: 0845 078 0880
Fax: 0845 078 0881

GEZE Service South West

Unit 39, Old Mills Industrial Estate
Old Mills
Paulton
Bristol
BS39 7SU

Tel: 0845 078 0884
Fax: 0845 078 0885

GEZE Service South East

Unit 15, Farnborough Business Centre
Eelmoor Road
Farnborough
Hampshire
GU14 7XA

Tel: 0845 078 0878
Fax: 0845 078 0879

GEZE Service North

Unit 24a, Oak Road
West Chirilton North Industrial Estate
North Shields
Tyne & Wear
NE29 8SF

Tel: 0845 078 0882
Fax: 0845 078 0883