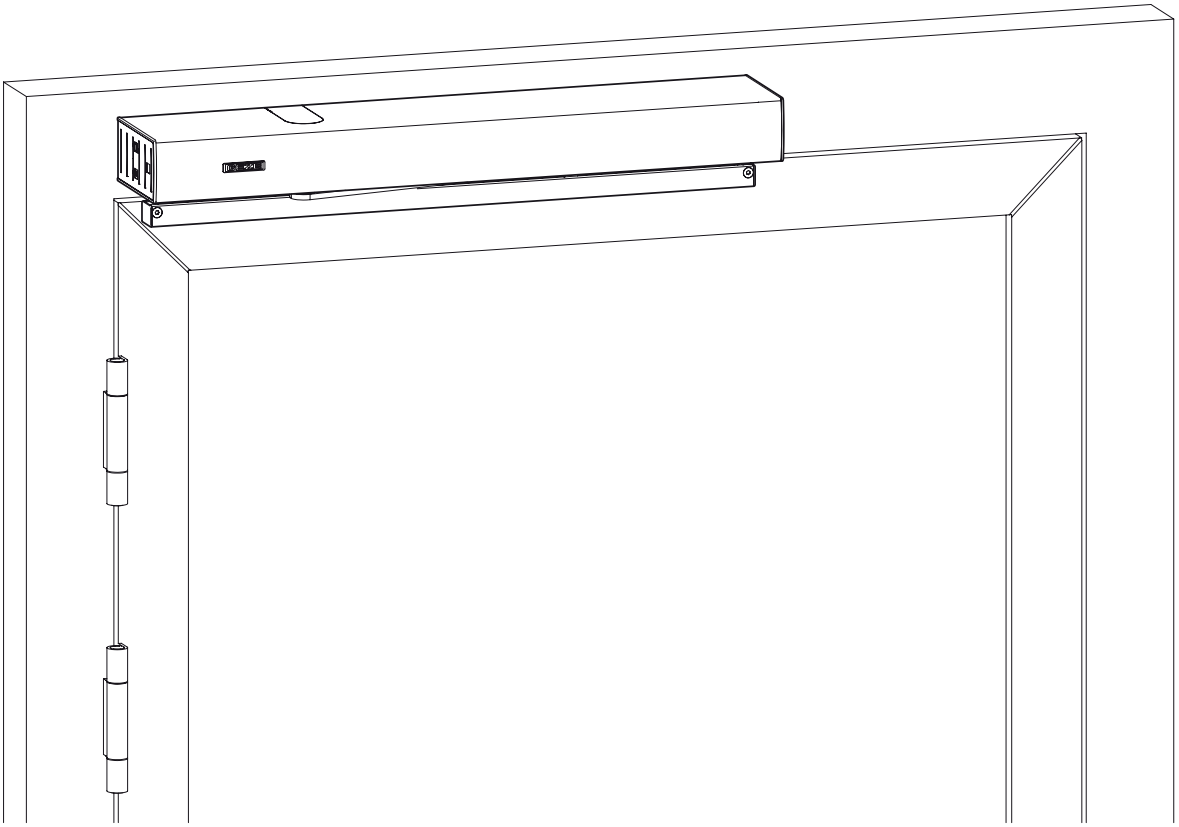


Automatic door drive Powerturn

EN User manual

156539
2026-11_06

Translation of the original manual

Contents

1 Symbols and illustrations ... 4

1.1 Product liability ... 4

1.2 Special cases ... 4

2 Notes ... 5

2.1 Intended use ... 5

2.2 Reasonably foreseeable misuse ... 6

2.3 Safety notes ... 7

2.4 Reference documents ... 8

3 Product description ... 9

3.1 Possible types of installation and versions ... 9

3.2 Structure ... 9

3.3 Overview of operating modes ... 10

3.4 Operating elements ... 11

3.5 Door in normal operation ... 12

4 Operation ... 15

4.1 Parameter change ... 15

4.2 Selecting the mode of operation using the operating modes push button ... 15

4.3 Selecting the mode of operation at the mechanical programme switch MPS ... 16

4.4 Selecting the mode of operation using the display programme switch DPS ... 16

5 Testing the safety features ... 17

6 Troubleshooting ... 20

7 Cleaning and maintenance ... 22

7.1 Cleaning ... 22

7.2 Maintenance ... 23

7.3 Inspection by an expert ... 23

8 Technical data ... 24

Glossary ... 25

1 Symbols and illustrations

Warning notices

In this manual, warning notices are used to warn against material damage and injuries.

→ Read and follow the safety instructions.

→ Follow the instructions marked with the warning symbol and warning phrase.



Indicates an imminent danger. Failure to heed the danger will result in death or serious injury.



Indicates a potentially imminent danger. Failure to heed the danger may lead to death or serious injury.



Indicates a potentially imminent danger. Failure to recognise the danger may result in minor or slight injuries.

Further symbols and illustrations

Important information and technical instructions are highlighted to explain correct operation.



means "important note". Information to prevent property damage, to understand or optimise the operation sequences.



means “additional information”.

a) Symbol for an action. This means the user needs to do something. If there are several steps, follow them in the given order.

1.1 Product liability

In accordance with the manufacturer’s liability for its products as defined in the German "Product Liability Act", compliance with the information contained in this brochure (product information and intended use, misuse, product performance, product maintenance, obligations to provide information and instructions) must be ensured. Failure to comply releases the manufacturer from its statutory liability.

1.2 Special cases

In certain cases, deviations from the information given in this user manual may occur. Examples of this include:

→ special wiring

→ Special function settings (parameters)

→ special software

– For further information, please ask the relevant service technician.

2 Notes



The automatic swing door drive is partly completed machinery. It complies with all the relevant regulations of the guidelines 2014/35/EU and 2014/30/EU and may be installed and operated in automatic door systems in accordance with the Machinery Directive. The manufacturer of this machine must ensure that all requirements resulting from the Machinery Directive are observed. A risk assessment must be carried out and documented. Before initial commissioning, the manufacturer of the machine must issue an EC Declaration of Conformity in accordance with Annex II of the Machinery Directive 2006/42/EC and attach the CE marking visibly and permanently to the door system.

2.1 Intended use

The Powerturn/Powerturn F door operator is designed for the automatic opening and closing of side-hung leaf single-action doors.

The Powerturn is designed solely for use
- → in dry rooms,
- → in entrances and interior areas of pedestrian traffic in commercial areas and public areas,
- → in private areas.

The Powerturn may be used on escape and rescue routes.

The Powerturn F
- → is designed for use on fire or smoke protection doors,
- → may be used on escape and rescue route doors.

Any other use than the intended use, such as permanent manual operation, as well as any modification to the product, are not permitted.

2.2 Reasonably foreseeable misuse

The Powerturn

- → must not be used on fire doors or smoke protection doors,
- → must not be used for potentially explosive areas.

The Powerturn F must not be used in potentially explosive atmospheres.

Other misuses

- → Operation without safety device.
- → Permanent manual operation.
- → Operation without door stopper.
- → Changes to the drive, as non-instructed person.
- → Use of a wedge.
- → Blocking the travel path.
- → Removal of the hood during operation.
- → Changing the wiring.
- → Aggressive passage through the door (e.g. by kicking).
- → Missing maintenance.
- → Cleaning with a high-pressure cleaner.
- → Cleaning with corrosive, non-compatible cleaning agents.
- → Locking the door in the open position.
- → Operation in rooms that are not dry.
- → Operation in a potentially explosive area.
- → Children playing (in and at the door).

2.3 Safety notes

For the user

Before commissioning the door, please read the safety notes and user information.

- → Follow the operating, maintenance and repair instructions.
- → Assembly, maintenance and maintenance work must be carried out by expert personnel authorised by GEZE.
- → No changes may be made to the system without prior agreement from GEZE.
- → If unauthorised changes are made to the system, GEZE cannot be held liable in any way whatsoever for any resulting damage, and the statement of approval for use in escape and rescue routes is no longer valid.
- → The operator is responsible for the safe operation of the system.
- → Have a service technician check the safe operation of the system at regular intervals.
- → If safety devices are incorrectly adjusted and no longer fulfil their intended purpose, continued operation is not permitted. The service technician must be informed without delay.
- → Attach safety stickers to glass leaves.
- → Protect the programme switch from unauthorised access.
- → Danger of injury due to sharp edges in the drive.
- → Risk of injury from hanging parts.
- → This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- → Children must not play with the appliance.
- → Cleaning and user maintenance must not be carried out by children.

For the service technician

- → GEZE does not accept any warranty for combinations with third-party products.
- → Use only original GEZE parts for repair and maintenance work.
- → Only combine third-party products with original parts following agreement by GEZE. Only genuine GEZE parts may be used for repair and maintenance work.
- → The power connection and protective earth check must be carried out in accordance DIN VDE 0100-600.
- → Use an on-site automatic circuit-breaker as the line-side disconnecting device. Adjust its rated value to suit the type, cross-section, installation method and environmental conditions of the power supply circuit. The automatic cut-out must have at least 4 A and may have max. 16 A.

2.4 Reference documents

Material no.	Document	Product
154917	Installation and service instructions	Powerturn
154919	Wiring diagram	Powerturn
079141	Inspection book	Hold-open systems FA GC 150/160

Table 1: Reference documents

The diagrams are subject to change without notice. Use only the most recent version.

3 Product description

3.1 Possible types of installation and versions

→ The automatic door drive can be mounted on the lintel using transom installation or on the door leaf using door leaf installation.
→ The automatic door drive is available in single leaf and double leaf versions.
→ The Powerturn F-IS and Powerturn F-IS/TS can only be fitted in a transom installation.

3.2 Structure

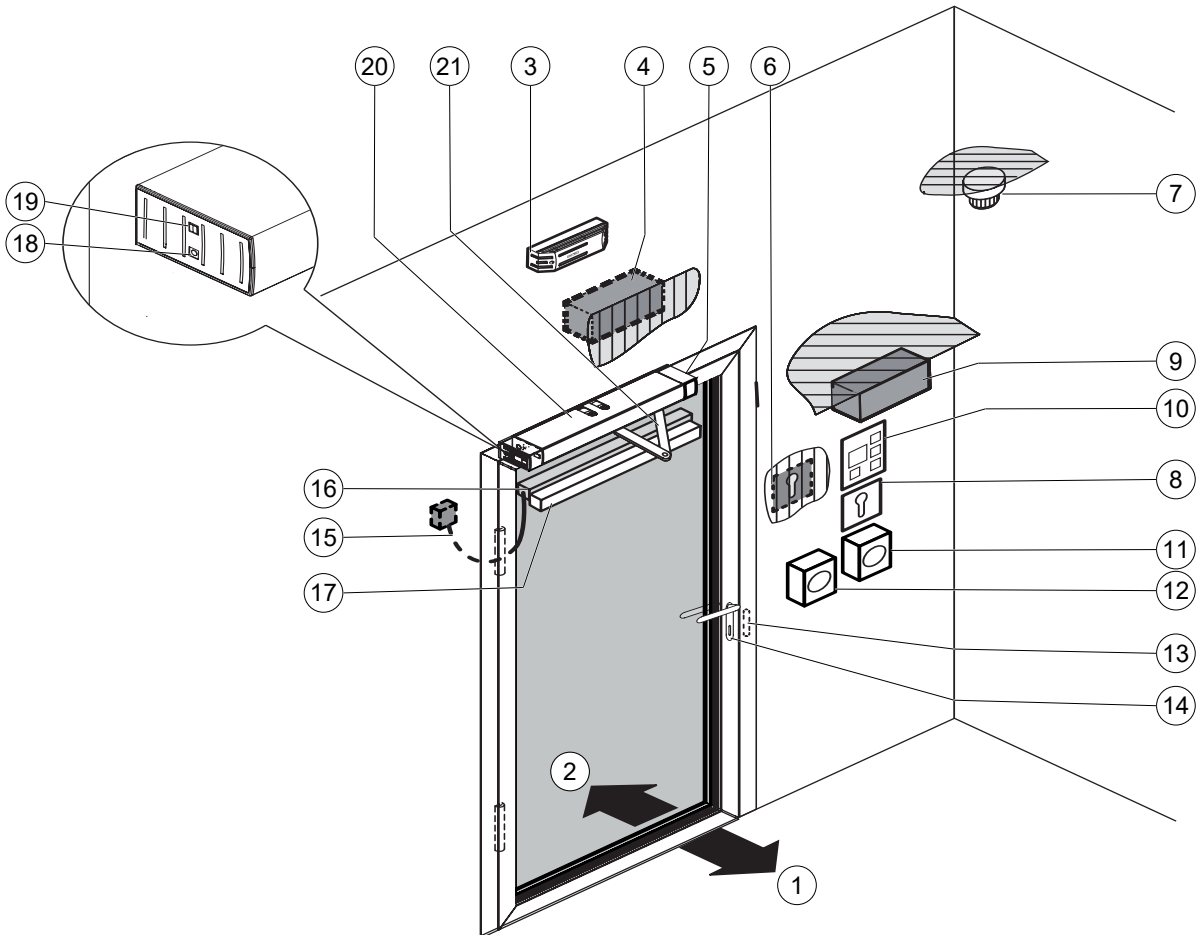


Illustration 1: Example: Powerturn door operator, single leaf, transom installation

1 Interior of the building
2 Exterior of the building
3 Smoke control unit
4 External activation element (KA)
5 Smoke detector
6 Authorised activation element (KB)
7 Internal activation element (KI)
8 Key-operated switch for enabling the program switch
9 Internal activation element (KI)
10 Program switch
11 Emergency stop switch
12 “CLOSE DOOR” push button
13 Electric strike
14 Door handle with door lock
15 Door loop cable
16 Safety sensor opening (SIO)
17 Safety sensor closing (SIS)
18 Socket for ST220 service adapter and Bluetooth adapter

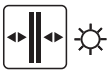
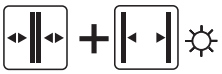
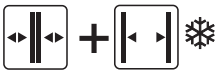
19 Operating mode selector with operating mode indicator
20 Door drive
21 Rod or roller guide rail

The illustration is a schematic diagram for explanatory purposes only. For technical reasons, we cannot show all of the possibilities here. The operating elements can be arranged individually.

3.3 Overview of operating modes

The following modes of operation can be set on the Powerturn:

- → Automatic
- → Exit only
- → Hold open
- → NIGHT
- → OFF

Mode of operation [I]	MPS/MPS-ST [II]	DPS [III]		Explanatory notes
		Key	Display	
Automatic			Au	Door opens and closes again. The inside and outside activation devices are active.
→ Opening two leaves				When the keys are pressed simultaneously, the mode of operation changes between 1-leaf opening and 2-leaf opening.
→ Opening one leaf				On the DPS the LED ❄ is lit in 1-leaf operation.
Exit only			LS	Door only opens and closes if someone exits. Only the inside activation devices are active.
Hold open			do	Door remains open.
Night mode			nA	Door opens and closes only when activated using the key switch. The inside and outside activation devices are inactive.
OFF			oF	Powerturn: The door is unlocked and can be moved manually. Powerturn F: The door closes via a spring; it acts like a door closer.

Mode of operation [I]	MPS/MPS-ST [II]	DPS [III]		Explanatory notes
		Key	Display	
				The inside and outside activation devices are inactive.

[I] Mode of operation

[II] mechanical program switch

[III] Display programme switch

Table 2: **Overview of operating modes**

3.4 Operating elements

The following operating elements are used to select the modes of operation:
- → Push button mode of operation on the drive unit.
- → MPS mechanical programme switch with or without an integrated key switch.
- → Display programme switch

3.4.1 Operating modes push button with operating modes display

The mode of operation can be selected using the push button mode of operation on the drive unit. The operating modes display lights up in the colour of the current mode of operation:

Mode of operation	Operating mode indicator colour (21)
OFF	–
Night mode	red
Exit only	white
Automatic	green
Hold open	blue
The control has not been taught	yellow (continuous light)
The control has not been initialised yet	lights up in the colour of the current mode of operation periodically interrupted by two brief flashing impulses (1 Hz)
One or more faults are queued	flashes quickly (10 Hz) in the colour of the current mode of operation
The operating modes push button is deactivated	operating modes display is switched off

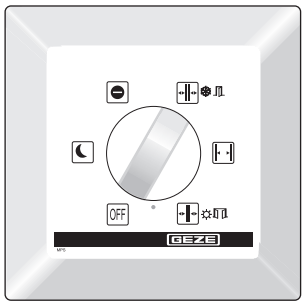


In the OFF mode of operation, there is no fault display on the operating modes display.

3.4.2 Mechanical programme switch MPS

Can be connected in addition to the operating modes push button.

MPS mechanical programme switch:
At the mechanical programme switch MPS, the mode of operation for the system is selected and the corresponding programme is displayed. The mechanical programme switch is accessible for everyone without a key operated button.



MPS-ST mechanical programme switch with integrated key switch:
With the mechanical programme switch MPS-ST, selection of the modes of operation is disabled if the key provided has been removed.



3.4.3 Display programme switch DPS

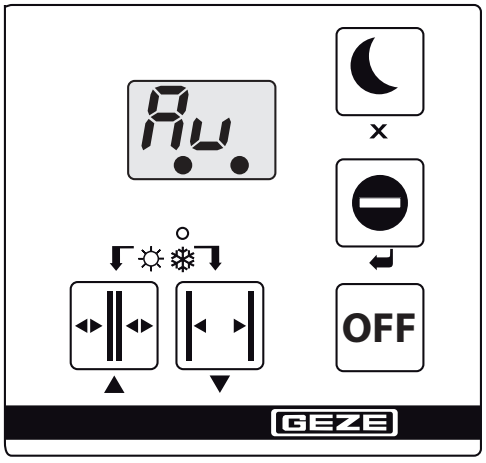
Can be connected in addition to the operating modes push button.

If a dot appears in the bottom right-hand part of the display, maintenance is due.



If a dot appears in the middle of the display, the door has not yet been fully initialised after the mains voltage has been switched on.
Initialisation is carried out automatically when the drive opens and closes the door.





3.5 Door in normal operation

In normal operation, the door is automatically opened and closed.

When Powerturn IS/TS is used, only the active leaf opens automatically. The passive leaf must be opened manually.

What happens?	What does the door do?
An activation device (push button, switch or movement detector) is triggered.	Door opens, waits the hold-open time and then closes.
Safety sensor close (SIS) is triggered when the door is open (e.g. light switch).	Door remains open.
Safety sensor close (SIS) is triggered while the door is closing.	The door immediately opens again or stops depending on the parameter setting.
Safety sensor open (SIO) is triggered while door is opening.	The door stops and remains in position until the end of activation (door opens) or until the end of the hold-open time (door closes).
Safety sensor open (SIO) is triggered when the door is closed.	Door remains closed.
A person moves toward the opened door and a movement detector is activated.	Door remains open.
A person moves toward the closing door and a movement detector is activated.	Door reopens immediately.
Door contacts an obstruction when opening. The safety sensor open has not been activated.	Door stops, waits and attempts again to move to the open position at a reduced speed. Then the door closes again.
Door hits an obstacle when closing. The safety sensor close has not been activated.	Door reopens immediately, waits the hold-open time and then closes at a reduced speed. When door closer mode is used with the safety sensor close deactivated, the drive presses against the obstacle with the force set.
Emergency-stop switch	The door stops immediately (in every mode of operation) and holds the position until the emergency stop switch is unlocked.
Key switch of the display programme switch	If a key switch is connected to the display programme switch, the operation of the display programme switch can be locked or released with it.
Activation device authorised (KB) (e.g. outside key switch)	Door opens once and closes after the hold-open time. The set mode of operation is retained.
Activation device with radio board	Door opens once and closes after the hold-open time. The set mode of operation is retained. If the key in radio channel 1 is pressed for longer than 5 s, the controller changes to the DO mode of operation. After the key has been pressed again for at least 5 s, the control changes back to the AU mode of operation.
Switch function	The automated door can be activated using the switch function. Normal switch function: → Switch contact opens the door and the door remains in the open position.

What happens?	What does the door do?
	→ Switch contact closes the door. Switch function with hold-open time: → Switch contact opens the door. → Switch contact closes the door or the door starts to close after the hold-open time.
Double push button	In the case of 2-leaf drives, a button with a double function can be connected via a configurable push button. This means that 1-leaf or 2-leaf opening is possible by pressing the push button. If the push button is pressed once, only the active leaf opens and closes after the hold-open time has expired. If the button is pressed twice within 1.5 s, both leaves open and close after the double leaf hold-open time has expired.
Emergency lock	When using the emergency lock, a switch can be used to immediately close the 1- or 2-leaf system. The doors close with the set force and without sensor strips and obstacle detection. There is an increased risk of injury.
WC control	The door opens after the elbow switch on the outside of the toilet has been pressed, and closes automatically after the set hold-open time has passed. When the push button is activated inside the toilet cabin, the system is switched to the exit only mode of operation, which means the outer push button no longer opens the door. At the same time, the lights indicate that the toilet is occupied. The electric strike is supplied with current, preventing manual opening of the door from the outside. Activating the "inner" push button again or through manual opening from inside, the WC function (exit only mode of operation) is cancelled and the drive switched back to the automatic mode of operation. The occupied displays and lights go out.

4 Operation

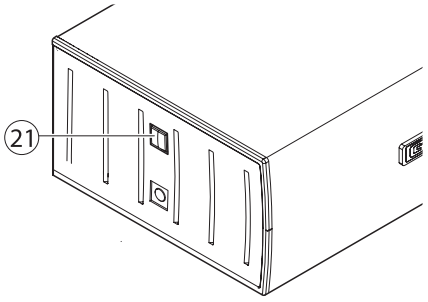
4.1 Parameter change

Risk of injury due to incorrectly set parameters.

The set parameters of the drive functions may only be modified by a service technician.

4.2 Selecting the mode of operation using the operating modes push button

The operating modes push button can be deactivated by a service technician.



Changing the mode of operation (with single-leaf doors or active leaf)

a) Briefly push the push button mode of operation using the mode display.

⇨ The operating modes display immediately switches one mode of operation further. The drive itself only changes to the new mode of operation 1 second after the last button press.

Sequence of operating modes (the colour of the operating mode indicator is shown in brackets):

... -> OFF (-) -> Night (red) -> Exit only (white) -> Automatic (green) -> Hold open (blue) -> OFF (-) -> Night (red) -> ...

The 1-second delay makes it possible, for example, to switch the mode of operation from automatic to 'hold open' to 'night mode' without the door opening when set to 'hold open'.

Changing the mode of operation (with passive leaf)

a) Briefly push the push button mode of operation using the mode display.

The drive on the passive leaf is switched on and off.

When the drive is switched on, the mode of operation indicator lights up in the colour corresponding to the mode of operation.

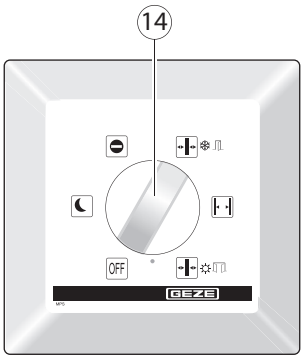
If the drive is switched off, the operating modes display does not light up.

4.3 Selecting the mode of operation at the mechanical programme switch MPS

With the programme switch MPS

a) Turn the rotary switch (14) to the desired mode of operation.

⇨ The mode of operation is set.



With the programme switch MPS-ST (key operated button)

Operation of the mechanical programme switch MPS-ST is only possible with the supplied key (13).

a) Insert the key (13) into the mechanical programme switch MPS-ST.
b) Turn the key rotary switch (16) to the desired mode of operation.

⇨ The mode of operation is set.

a) Remove the key.

⇨ The mechanical programme switch MPS-ST is locked.

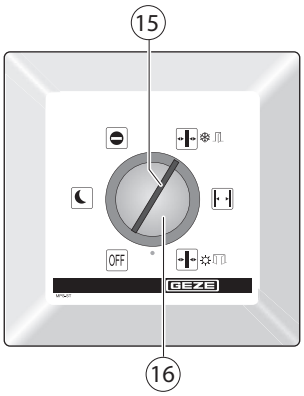


Table 3: **Select the mode of operation on the mechanical programme switch**

4.4 Selecting the mode of operation using the display programme switch DPS

a) Tap the desired mode of operation on the display programme switch.

⇨ The mode of operation is set and indicated on the display (25).

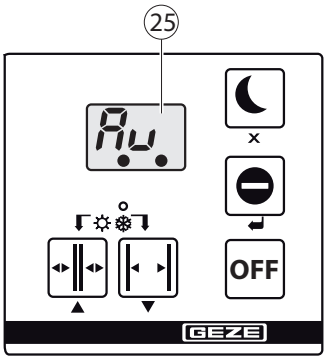


Table 4: **Select the mode of operation on the display programme switch**

Fault messages on the display

If a fault occurs in the system, it is displayed on the display programme switch approximately every 10 seconds.

a) Read the number of the fault message, note it down and notify the service technician.

5 Testing the safety features

SF1 – Safety sensor for monitoring the closing process

For single-leaf doors:

- → Sensor detects in closed position: the door remains closed.
- → The sensor is configured as an activation sensor and detects in the closed position: the door opens.
- → Sensor detects in open position: the door remains open.
- → Sensor detects during the closing process: the door reverses to the open position.

For double leaf doors:

- → Sensor detects on the active leaf during the closing process and the passive leaf is not yet closed: the passive leaf also reverses to the open position. Both leaves are in the open position.
- → Sensor detects on the passive leaf during the closing process and the active leaf is already closing: the active leaf also reverses to the open position. Both leaves are in the open position.

NOTICE! If the sensor detects for longer than 4 minutes, the "Permanent activation" error is displayed and the door closes at a safe speed. The door will close slowly until the sensor test is successful again.

SF2 – Safety sensor for monitoring opening

For single-leaf doors:

- → Sensor detects in closed position: the door remains closed.
- → Sensor detects during opening: the door leaf slows to a stop and remains stationary.

NOTICE! In the case of a double leaf door, you can specify whether the other door leaf should also remain stopped. The door leaf can be operated manually.

- → Sensor detects for longer than 20 seconds after the activation has been completed: the door closes.
- → Sensor inactive before the 20 seconds have elapsed after activation: the door continues to open.

NOTICE! Once a wall clearance angle has been programmed or set, the control system will no longer process the sensor signal when the door is opened once this angle has been reached. The rest of the opening will then take place without monitoring.

SF3 safety contact for stopping the door leaf (emergency stop push button)

For single-leaf doors:

- → Emergency stop push button is pressed whilst the door is opening or closing: the drive will bring the door leaf to a complete stop. The door leaf remains stopped until the contact is deactivated. The door leaf can be operated manually.

For double leaf doors:

- → Emergency stop push button is pressed whilst the doors are opening or closing: the drive will bring both door leaves to a complete stop. Both door leaves remain stopped until the contact is deactivated. The door leaves can be operated manually.

SF4 – Reliable measurement of the door leaf's position and speed

This is checked as part of the self-test. See Testing the safety features [▶ 19]

SF5 – Safe limitation of static force

This is checked as part of the self-test. See Testing the safety features [▶ 19]

SF6- Safe limitation of dynamic force

This is checked as part of the self-test. See Testing the safety features [▶ 19]

SF7 – Low-energy mode

The following requirements must be met for low-energy mode.

When the power is off:

→ The spring's retention force and opening force are set to <67 N at the main closing edge.
→ The closing time from 90° to 0° is set using the table.

a) Once the power is connected, set the value for the "Braking force" parameter so that the closing time is complied with in the de-energised state.

When powered:

→ Static force on the main closing edge is <67 N.

a) The opening and closing force must be set to 60 using the "Opening force" and "Closing force" or FO and FC parameters.

→ Limit the kinetic energy in the door leaf to 1.6 J.

a) The door opening and closing times are set using the parameters 'Opening time' (oT) and 'Closing time', 'Manual closing time' (cT) and 56, as shown in the table.
b) Set the hold-open times (or, oH, OP, HO, oS) to more than 5 seconds.

Door weight [kg]/ Leaf width [mm]	**60**	**90**	**120**	**150**	**180**	**210**	**240**	**270**	**300**	**330**	**370**	**400**	**430**	**460**	**490**	**520**	**550**	**580**	**600**
800	4	4	5	5	6	6	7	7	7	8	8	8	9	9	9	10	10	10	10
900	4	5	5	6	7	7	7	8	8	9	9	9	10	10	11	11	11	11	11
1000	4	5	6	7	7	8	8	9	9	10	10	10	11	11	12	12	–	–	–
1100	5	6	6	7	8	8	9	9	10	10	11	11	12	–	–	–	–	–	–
1200	5	6	7	8	8	8	10	10	11	11	12	–	–	–	–	–	–	–	–
1300	6	7	8	8	9	10	11	11	12	–	–	–	–	–	–	–	–	–	–
1400	6	7	8	9	10	11	11	12	–	–	–	–	–	–	–	–	–	–	–
1500	6	8	9	10	11	11	12	–	–	–	–	–	–	–	–	–	–	–	–
1600	7	8	9	10	11	12	–	–	–	–	–	–	–	–	–	–	–	–	–

Example:

The weight of the leaf is 90 kg; the leaf width 1000 mm

→ The opening time must be set to 5 seconds.
→ The closing time must be set to 5 seconds.

SF8 – Safe Speed

This is checked as part of the self-test. See Testing the safety features [▶ 19]

SF9 – Safe behaviour in the event of a power failure or fire alarm

Self-test

Performed in the following cases:

- → Change in mode of operation
- → Clear all errors
- → After 24 hours
- → After switching on the drive
- → After the drive teaching run
- → Every 20 seconds

Not carried out in the following cases:

- → Switch to night mode
- → Switch to hold open mode
- → Switch to Off
- → If the drive has not been initialised.

If the door is not in the closing position.

- → Change the mode of operation from 'Hold Open' to 'X'.

If the drive is in motion, the self-test timer is reset.

- → The timer is set to 20 seconds.

6 Troubleshooting

Problem	Cause	Remedy
Door only opens and closes slowly	Obstruction on travel path	→ Remove obstruction and check door leaf for ease of movement → Allow the door to close completely once; door moves at a safe speed after obstruction until a complete closing process has been completed.
	Safety sensor close (SIS) dirty	→ Clean safety sensor close → Allow the door to close completely once; door moves at a safe speed after obstruction until a complete closing process has been completed.
	Safety sensor close (SIS) misaligned or defective	→ Notify a service technician
Door opens and closes constantly	Obstruction on travel path	→ Clear the obstruction
	Light beams or reflections, e.g. reflective floor, falling rain	→ Check the detection area of movement detector
	Misaligned movement detector	→ Check the detection area of movement detector
Door only opens a crack	Obstruction on travel path	→ Remove obstruction and check door leaf for ease of movement
Door does not open	Obstruction on travel path	→ Remove obstruction and check door leaf for ease of movement
	Movement detector misaligned or defective (outside)	→ Check the movement detector, notify a service technician if necessary
	Emergency stop button actuated	→ Unlock emergency stop button
	Operating mode NACHT	→ Select a different mode of operation
	Mode of operation: exit only	→ Select automatic mode of operation
	Door locked mechanically	→ Unlock the door
	Electric strike does not release	→ Notify a service technician
	Fire alarm active (only Powerturn F)	→ Carry out a reset (depending on the configuration of the drive, by pressing the reset switch, by changing the mode of operation).

Problem	Cause	Remedy
	Drive defective	→ Notify a service technician
The door does not close (After 4 minutes of permanent activation by the safety sensor, the Powerturn/Powerturn F automatically closes the door in low-energy mode)	Safety sensor close (SIS) dirty	→ Clean safety sensor close (SIS)
	Safety sensor close (SIS) misaligned or defective	→ Notify a service technician
	Obstruction on travel path	→ Remove obstruction and check door leaf for ease of movement
	Movement detector triggers constantly	→ Check the movement detector; contact a service technician if necessary
	Mode of operation: Hold open	→ Select a different mode of operation
	Current impulse push button function controls	→ Terminate activation by pressing the push button again
Display programme switch cannot be operated	Display programme switch is disabled	→ Activate key switch for release
	The display programme switch is faulty	→ Notify a service technician
Display programme switch displays 88	Connection between display programme switch and control unit faulty	→ Notify a service technician
	Display programme switch or control unit defective	→ Notify a service technician
Display programme switch is dark	Power failure	→ Check mains fuse
	Connection between display programme switch and control unit faulty	→ Notify a service technician
	Display programme switch or control unit defective	→ Notify a service technician
Display of error messages on the display programme switch	Fault in the door system	→ Note fault messages. Up to 10 different fault messages can occur in succession. The display changes about every 10 seconds. → Notify a service technician

7 Cleaning and maintenance

The building operator must ensure that the system is working perfectly. To ensure that the door system operates correctly, it must be cleaned and serviced regularly.

7.1 Cleaning



Risk of injury during cleaning due to unsecured points where there is a risk of crushing, impact, shearing or entanglement!

a) Set the mode of operation to Off.

b) Secure door leaves against accidental movement before carrying out cleaning work.

Cleaning work may be carried out by the operator.

What is to be cleaned?	How is it to be cleaned?
Safety sensor close (SIS/SIO) (e.g. light switch)	→ Wipe with a damp cloth.
Glass surfaces	→ Wipe with a cold vinegar/water mixture; then dry.
Stainless surfaces	→ Wipe with a soft cloth.
Painted surfaces	→ Wipe with water and soap.
Anodised surfaces	→ Wipe with non-alkaline potassium soap (pH value 5.5…7).
Display programme switch Keypad programme switch Mechanical programme switch	→ Wipe with damp cloth. Do not use a cleaning agent.

7.2 Maintenance

The operator is responsible for ensuring that the system functions properly. To ensure that the system operates correctly, it must be serviced by a service technician at regular intervals.

Carry out maintenance at least once a year or when the maintenance indicator appears on the display programme switch.

Have assembly, maintenance and repair work carried out by expert personnel authorised by GEZE.

If a dot appears in the bottom right-hand part of the display, maintenance is due.



a) Notify a service technician.

The maintenance display lights up after the specified calendar period or number of opening cycles, depending on what occurs first:

Product	Interval	Maintenance work
Powerturn (F)	500,000 cycles or 1 year	see list

Table 5: Maintenance interval

7.3 Inspection by an expert

In accordance with the ‘Guidelines for Doors and Gates’ (ASR A1.7 and GUV 16.10), Section 6, power-operated doors must be inspected by an expert to ensure they are in a safe condition prior to initial commissioning and at least once a year, and this must be documented.

8 Technical data

Operating voltage	230 V AC –15 %, +10 %
Frequency of supply voltage	50/60 Hz
Capacity rating	200 W
Protection class	I
Mains connection	Fixed connection (installation cable or drip loop)
Primary fuse	–
Secondary fuse	10 A slow-blow, 5×20 mm
Secondary voltage (transformer)	33 VAC (46 VDC)
Control voltage for external components	24 VDC ±10 %
Output current control voltage 24 V	1200 mA permanently 1800 mA briefly (2 s, duty rating 30 %)
Fuse protection <24 V	2.5 A; reversible
Temperature range	–15…+50 °C
IP rating	IP30
Emission sound pressure level	< 70 dB (A)
Opening time	3…25 s
Closing time	5…25 s

Glossary

Activation device authorised (KB)

Access control (e.g. key switch or card reader) for the activation of the drive unit by authorised persons. The activation function is active in the AUTOMATIC, EXIT ONLY and NIGHT/OFF modes of operation.

Activation device inside (KI)

Push button, switch or movement detector for activating the drive unit. The activation device is located within the room enclosed by the door. Activation function in the AUTOMATIC and EXIT ONLY modes of operation. The activation device does not have any function in the NIGHT/OFF mode of operation.

Activation device outside (KA)

Push button, switch or movement detector for activating the drive unit. The activation device is located outside the room enclosed by the door. Activation function in the AUTOMATIC mode of operation. Active in the Exit only mode and Night/Off mode.

Activation device with current impulse function

Push button for opening and closing the door. Control function available only in automatic and exit only modes of operation. The door opens automatically when the button is pressed once and closes automatically when it is pressed a second time. This function can be activated during commissioning by performing parameter settings via the display programme switch, ST 220 or GEZEconnects. If the activation device is connected to the control system using the "current surge" function, both door leaves will open when activated, even if the passive leaf control is switched off.

Active leaf

The active leaf of a double-leaf door. When the door is used, the active leaf must open as the first door leaf and close as the last door leaf.

Bolt feedback

The bolt feedback function is a contact integrated in the door catch that is activated when the door is locked mechanically by the tie bolt of the door lock. It informs the control system that the door is mechanically locked and therefore cannot be opened by the drive unit. In this case the control unit ignores the control commands of all the activation devices.

Door closer mode

In automatic mode (normal operation) the automatic swing door drive can behave like a door closer. This means that closing is torque-controlled. This closing torque can be adjusted and adapted to the respective passage situation.

Electrical closing sequence control

In normal operation of double-leaf drive units, the closing sequence of the door leaves is controlled by the control units of the drive units, First, the passive leaf is closed. The active leaf remains in the open position until the passive leaf has reached the closing position, then the active leaf begins to close.

Emergency stop button

Self-locking switch that can be used to release the door operator for an immediate stop in the event of an emergency. The drive unit remains in its current position until the user unlocks the emergency stop switch, thereby ending the emergency stop situation.

Fail-safe electric strike

DC door opener version. The electric strike is switched off when the drive unit is activated provided the door is in the closing position. The electric strike remains switched off until the door has left the closing position.

Fail-secure electric strike

Available as an alternating current or DC door opener. When the drive unit is activated, the electric strike is switched on by the drive unit control system, provided that the door is in the closed position. The electric strike remains activated until the door has left the closing position.

Hinge side

The side of the door where the hinges from which the door leaf is suspended are located. Usually the side of the door facing the opening direction.

Integrated closing sequence control (-IS)

In the event of a power failure, the closing sequence for double leaf door systems fitted with Powerturn F-IS and Powerturn F-IS/TS is controlled mechanically. The door leaves are closed by the drives' energy storage devices, whilst the active leaf is held open by the integrated mechanical closing sequence control. When the passive leaf has reached the closed position, it releases the active leaf by means of the mechanical elements of the closing sequence control so that it can also close completely.

Low-energy function

The GEZE Powerturn can be used as a low-energy drive. In low-power mode, the force required to open and close the door is reduced to 67 N. The reduced opening and closing times also minimise the risk of injury caused by impacts with the moving leaf. If the door is used by persons in need of special protection, special measures must be taken to eliminate the risk of contact (e.g. the use of safety sensors).

Opposite hinge side

The side of the door facing the hinge side. Usually the side of the door facing the closing direction.

Passive leaf

The secondary leaf of a double-leaf door. When the door is opened, the passive leaf must not open until the active leaf has moved out of the closed position, and it must be the first door leaf to close again.

Push & Go

If, in the automatic mode of operation with the Push & Go function enabled, the door is pushed manually out of the closed position, it will open automatically as soon as a specific, adjustable opening angle is exceeded.

Reset

Push button for restarting the drive after the operating voltage has been switched on or after a fire alarm has been terminated. When the push button is pressed, the latching operation circuit integrated in the drive is activated, causing the drive to be activated.

Safety sensor close (SIS)

Presence detector (for example active infrared light sensor) for protecting the swivelling range of the door in the closing direction. As a rule the sensor is located on the opposite hinge side of the door leaf.

Safety sensor open (SIO)

Presence detector (e.g. active infrared light sensor) for protecting the swivelling range of the door in the opening direction. As a rule the sensor is located on the hinge side of the door on the door leaf.

Servo operation

If a servo is used, the swing door drive supports manual opening through torque. The support torque and the support period can be set for this support.

GEZE GmbH
Reinhold-Vöster-Straße 21-29
71229 Leonberg
Germany

Fon: +49 7152 203 0
Fax: +49 7152 203 310
Mail: info@geze.com

www.geze.com

EN · Subject to change without notice