

ECturn Inside

Original operating instructions

EN User manual

Contents


1	Symbols and means of representation.....	3
2	Product liability	3
3	Safety instructions	4
4	Terms.....	5
5	Design.....	6
6	Operation	7
6.1	Functions	7
6.2	Modes of operation.....	8
6.3	Button programme switch TPS (optional)	8
7	What to do if ... ?.....	9
8	Cleaning and maintenance.....	10
9	Technical data.....	11

1 Symbols and means of representation

Warnings




In these instructions, warnings are used to warn against material damage and injuries.

- ▶ Always read and observe these warnings.
- ▶ Observe all the measures that are marked with the warning symbol and warning word .

Warning symbol	Warning word	Meaning
	CAUTION	Danger for individuals. Non-compliance can result in minor injuries.

Further symbols and means of representation

Important information and technical notes are especially highlighted to explain correct operation.

Symbol	Meaning
	means "important note"
	means "additional information"
	Symbol for an action: Here you have to do something. ▶ If there are several actions to be taken, keep to the given order.

2 Product liability

In accordance with the manufacturer's liability for their products as defined in the German "Produkthaftungsgesetz" (Product Liability Act), the information contained in this brochure (product information and proper use, misuse, product performance, product maintenance, obligations to provide information and instructions) is to be noted and followed. Failure to comply releases the manufacturer from their statutory liability.

3 Safety instructions

Carefully read and abide by this user manual before commissioning the door. In addition, always observe the following safety precautions:

- The mandatory installation, maintenance and repair work must be performed by properly trained personnel authorised by GEZE.
- The country-specific laws and regulations are to be observed during safety-related tests.
- GEZE is not liable for any injuries or damage whatsoever resulting from unauthorised changes to the system.
- GEZE is not liable if products from other manufacturers are used with GEZE equipment.
- Furthermore, only original GEZE parts may be used for repair and maintenance work.
- The connection to the power supply must be made by a professional electrician. The power connection and safety earth conductor test must be carried out in accordance with DIN VDE 0100-610.
Exception: If the Ecturn swing door drive is connected to the mains voltage by the mounted power plug, the connection does not have to be carried out by a qualified electrician.
- Use a customer-accessible 10-A automatic circuit-breaker as the line-side disconnecting device.
- Protect the programme switch against unauthorised access.
- If a battery is connected:
 - Check the battery function once a month.
 - Recycle defective batteries.
- If changes are carried out in the detection field of the safety sensors (e.g. objects added or removed): Reteach the drive.
- Observe the latest versions of guidelines, standards and country-specific regulations, in particular:
 - BGR 232 "Guidelines for power-operated windows, doors, gates"
 - DIN 18650 "Building hardware - Powered pedestrian doors"
 - VDE 0100; Part 610 "Erection of low-voltage installations"
 - Accident-prevention regulations, especially BGV A1 "Principles of prevention" and BGV A2 "Electrical systems and equipment".
- The relevant regional building regulations must be consulted with regard to widths of escape routes.

4 Terms

Term	Statement
Hinge side	The side of the door where the hinges from which the door leaf is suspended are located. Usually that side of the door located in the opening direction.
Opposite hinge side	The side of the door that lies opposite the hinge side. Usually that side of the door located in the closing direction.
Contactors	Button, switch or movement detector for controlling the door drive. Actuation function in the "Automatic" operating mode. The contactor does not have any function in the "Night"/"Off" operating mode.
Contactors authorised (KB)	Access control function (for example key-operated switch or card reader) used by authorised persons to actuate the door drive. The actuation function is active in the "Automatic" and "Night" operating modes.
Contactors with switch function	Button for opening and closing the door. Actuation function only in the "Automatic" operating mode. The door is opened automatically when the button is first pressed and closed again automatically when the button is pressed the second time. The function can be activated during commissioning by parameter configuration.
Push & Go	When the door is pressed manually out of the closing position with an activated Push & Go function in the "automatic" operating mode, the door opens automatically as soon as a specific adjustable opening angle is exceeded.
Safety sensor open (SIO)	Presence detector (e.g. active infrared light sensor) for protecting the swinging 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.
Safety sensor close (SIS)	Presence detector (for example active infrared light sensor) for protecting the swinging range of the door in the closing direction. As a rule the sensor is located on the opposite hinge side of the door leaf.
Stop	Self-locking switch with which immediate stopping of the door drive can be triggered in case of danger. The drive remains in its current position until the user releases the stop switch again, thus terminating the stop situation.
Electrical door opener	Open-circuit door opener Available as AC or DC door opener version. When the door drive is actuated, the door opener is activated by the control unit of the door drive provided the door is in the closed position. The door opener remains activated until the door has left the closing position. Quiescent current door opener DC door opener version. The door opener is switched off when the door drive is activated provided the door is in the closed position. The door opener remains switched off until the door has left the closing position.
Lock feedback	The lock 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 signals to the control unit that the door is locked mechanically and can therefore not be opened by the door drive. In this case the control unit ignores the control commands of all the contactors.

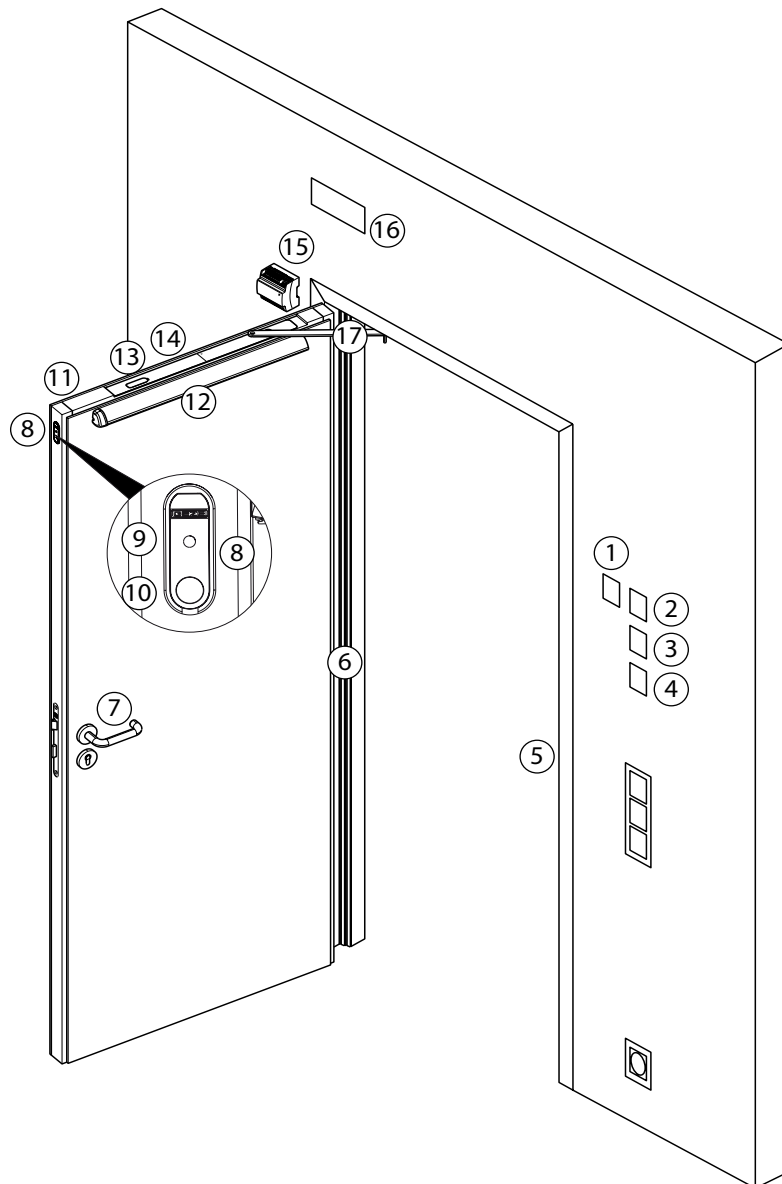
5 Design

System parts and options

- The door drive can be installed in the door leaf or in the frame
- The door drive is available as a 1-leaf version.
- The operating elements are arranged differently depending on the situation.



The most important components are shown. Due to the limited number of wires available in the door leaf, only certain combinations are possible (see wiring diagram Ecturn Inside, ID no. 149544).



- | | | | |
|---|---|----|---|
| 1 | Contactur authorised | 9 | Mode of operation switch |
| 2 | Button programme switch | 10 | Mode of operation LED |
| 3 | Key-operated switch enabling of button programme switch | 11 | Safety sensor open (back of door) |
| 4 | Stop switch | 12 | Safety sensor close |
| 5 | Electrical door opener | 13 | Door drive unit |
| 6 | Concealed door transmission cable | 14 | Rechargeable battery (optional, in the door leaf) |
| 7 | Door handle with door lock | 15 | Power supply (in the flush-mounted box) |
| 8 | Internal programme switch in the control cover (standard), alternatively separate e.g. in the primary closing edge (optional) | 16 | Contactur |
| | | 17 | Lever |

6 Operation

6.1 Functions

! The set parameters of the drive functions may only be modified by properly trained persons.

i Commissioning and the setting or modification of the door parameters as well as of some special drive functions can be carried out by using the buttons S1, S2 and the 5 LEDs on the controller or with the display programme switch (see wiring diagram ECturn Inside, ID No. 134079). No. 149544).

6.1.1 Normal operation

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

! **Special cases**
 In specific cases (e.g. special wiring, special function settings/parameters, special software) deviations from the information given in this user manual may occur.
 ► If this is the case, please ask the service technician responsible.

Functions in normal operation	Result
A contactor (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, waits the hold-open time and then closes.
Safety sensor close (SIS) is triggered while the door is closing.	Door opens immediately again, waits the hold-open time and then closes.
Safety sensor open (SIO) is triggered while door is opening.	The door stops and remains in the position until the end of actuation (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, waits the hold-open time and then closes.
A person moves toward the closing door and a movement detector is activated.	Door opens immediately again, waits the hold-open time and then closes.
Door contacts an obstruction when opening.	Door stops, waits and attempts again to move to the open position at a reduced speed. Then the door closes again.
Door contacts an obstruction when closing.	Door reopens immediately, waits the hold-open time and then closes at a reduced speed.
Switches/push-buttons	Function
Stop switch	The door stops immediately (in every operating mode) and holds the position until the stop switch is unlocked.
Contactor authorised (KB, e.g. outside key-operated switch)	Door opens once and closes after the hold-open time. The set operating mode is retained.
Contact sensor (e.g. radio module)	Door opens once and closes after the hold-open time. The set operating mode is retained.

6.1.2 Battery operation in case of power failure

Frame installation

If a rechargeable battery is installed, the swing door drive remains operational after a power failure for a period of up to 15 minutes (depending on the charging state of the battery and frequency with which the door is used). For setting of the swing door drive with battery operation after a power failure refer to the ECturn wiring diagram (ID No. 134079).

Door leaf installation

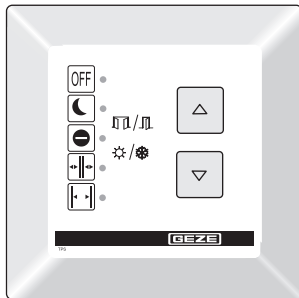
As frame installation except: A contact sensor is no longer active via radar with door leaf installation. A radio module must be used.

6.2 Modes of operation

Mode of operation	Colour
Automatic	Green
Night	Red
Permanent hold-open	Blue
Off	No colour



6.3 Button programme switch TPS (optional)

Can be connected additionally to the internal programme switch.




Button programme switch TPS

At the button programme switch, the system operating mode is selected and the corresponding programme is displayed.





The desired operating mode can be selected by pressing the  and  buttons.

The LED of the current operating state lights up.

The shop closing push-button  is not assigned.

The button programme switch is accessible for everyone without a key-operated switch. If desired, an additional key-operated switch can be used for locking. When using a key-operated switch Enable by operating the key-operated switch once briefly.

Operation of the button programme switch is disabled by briefly re-actuating the key-operated switch.

Mode of operation	Keys	Description
Automatic		Door opens and closes automatically as soon as a contact sensor is active.
Permanent hold-open		Door remains open.
Night		Door opens and closes only when actuated using the key-operated switch.
On / Off		Door is enabled and can be moved by hand.

7 What to do if ... ?

Problem	Cause	Remedy
Door only opens and closes slowly	Obstruction in sliding path	▶ Remove obstruction and check door leaf for ease of movement.
	Safety sensor close (SIS) soiled	▶ Clean the safety sensor close.
	Safety sensor close (SIS) misaligned or defective	▶ Notify a service technician.
Door opens and closes constantly	Obstruction in sliding path	▶ Remove obstruction and check door leaf for ease of movement.
	Light beams or reflections, e.g. reflective floor, falling rain	▶ Check detection field of movement detectors.
	Objects moving in the radar detection field range (plants, posters etc.)	▶ Check detection field of movement detectors.
	Misaligned movement detector	▶ Check detection field of movement detectors.
Door only opens a crack	Obstruction in sliding path	▶ Remove obstruction and check door leaf for ease of movement.
Door does not open	Obstruction in sliding path	▶ Remove obstruction and check door leaf for ease of movement.
	Movement detector misaligned or defective (outside)	▶ Check the movement detector. If necessary, notify a service technician.
	Stop activated	▶ Unlock the stop function.
	"Night" operating mode	▶ Select a different operating mode.
	Door locked mechanically	▶ Unlock the door.
	Door opener does not release	▶ Notify a service technician.
	Drive defective	▶ Notify a service technician.
Door does not close	Safety sensor close (SIS) soiled	▶ Clean the safety sensor close (SIS).
	Safety sensor close (SIS) misaligned or defective	▶ Notify a service technician.
	Obstruction in sliding path	▶ Remove obstruction and check door leaf for ease of movement.
	Movement detector triggers constantly	▶ Check the movement detector. If necessary, notify a service technician.
	"Permanent hold-open" operating mode	▶ Select a different operating mode.
	Current impulse button function triggers	▶ Terminate actuation by pressing the button once more.
Operating mode LED flashes red, green or blue	Fault message	▶ Notify a service technician.
Operating mode LED flashes yellow (2x fast)	Initialisation after power failure	▶ Wait for initialisation drive.

8 Cleaning and maintenance



CAUTION!

Danger of injury due to impact and crushing!

- ▶ The mounting, maintenance and repair work must be performed by properly trained personnel authorised by GEZE.
- ▶ Disconnect the drive from the power supply before carrying out work.
- ▶ Unplug the battery plug from the controller before carrying out work.
- ▶ Secure door leaves against accidental movement before carrying out work.
- ▶ Ensure that the drive cannot be activated via radio or Contactor authorised (KB).

Cleaning

Component	Cleaning
Safety sensor close (SIS, e.g. light sensors)	▶ Wipe with moist cloth.
Glass surfaces	▶ Wipe with a cold vinegar/water mixture; then dry.
Stainless surfaces	▶ Wipe with non-scratching cloth.
Painted surfaces	▶ Wipe with water and soap.
Anodised surfaces	▶ Wipe with non-alkaline potassium soap (pH value 5.5...7)

Maintenance

The owner must ensure that the system functions properly.

GEZE offers maintenance contracts with the following services:

- Inspect fastening elements for firm seating
- Performance of miscellaneous adjustment work
- Performance of operational checks
- Check all the safety and control equipment of the door system
- Lubricate all the moveable parts
- ▶ If maintenance is required, notify the service technician.

Inspection by trained professionals

In accordance with the "Guidelines for power-operated windows, doors and gates" (BGR 232 and GUV 16.10) Section 6, power-operated doors must be inspected for safety by a trained professional before initial commissioning and at least once a year.

9 Technical data

Opening speed	0 °/s ... 45 °/s
Closing speed	0 °/s ... 45 °/s
Electrical connection values	24.5 V ... 30 V DC
Current consumption	3 A ... 2.5 A
Connected load	75 W
Fuse protection	230 V
Current consumption for external devices	600 mA
Temperature range	-15 °C ... +50 °C; only for dry rooms
Enclosure rating	IP 20



Subject to change.

Germany

GEZE Sonderkonstruktionen GmbH
Planken 1
97944 Boxberg-Schweigern
Tel. +49 (0) 7930-9294-0
Fax +49 (0) 7930-9294-10
E-Mail: sk.de@geze.com

GEZE GmbH
Niederlassung Nord-Ost
Bühningstraße 8
13086 Berlin (Weissensee)
Tel. +49 (0) 30-47 89 90-0
Fax +49 (0) 30-47 89 90-17
E-Mail: berlin.de@geze.com

GEZE GmbH
Niederlassung West
Nordsternstraße 65
45329 Essen
Tel. +49 (0) 201-83082-0
Fax +49 (0) 201-83082-20
E-Mail: essen.de@geze.com

GEZE GmbH
Niederlassung Mitte
Adenauerallee 2
61440 Oberursel (b. Frankfurt)
Tel. +49 (0) 6171-63610-0
Fax +49 (0) 6171-63610-1
E-Mail: frankfurt.de@geze.com

GEZE GmbH
Niederlassung Süd-West
Breitwiesenstraße 8
71229 Leonberg
Tel. +49 (0) 7152-203-594
Fax +49 (0) 7152-203-438
E-Mail: leonberg.de@geze.com

GEZE GmbH
Niederlassung Süd-Ost
Parkring 17
85748 Garching bei München
Tel.: +49 (0) 89-120 07 42-50
Fax.: +49 (0) 7152-203-77050

GEZE Service GmbH NL Süd-West
Reinhold-Vöster-Straße 25
71229 Leonberg
Tel. +49 (0) 7152-9233-34

GEZE Service GmbH NL Nord-Ost
Bühningstraße 8
13086 Berlin (Weissensee)
Tel. +49 (0) 30-470217-32

GEZE Service GmbH NL West
Nordsternstraße 65
45329 Essen
Tel. +49 (0) 201-8 30 82 16

GEZE Service GmbH NL Mitte
Feldbergstraße 59
61440 Oberursel (b. Frankfurt)
Tel. +49 (0) 6171-63 327-0

GEZE Service GmbH NL Süd
Parkring 17
85748 Garching bei München
Tel. +49 (0) 89-120 07 42-0

Austria

GEZE Austria
Wiener Bundesstrasse 85
A-5300 Hallwang
Tel. +43/6225/87180
Fax +43/6225/87180-299
E-Mail: austria.at@geze.com

Baltic States

GEZE GmbH Baltic States office
Dzelzavas iela 120 S
1021 Riga
Tel. +371 (0) 67 89 60 35
Fax +371 (0) 67 89 60 36
E-Mail: office-latvia@geze.com

Benelux

GEZE Benelux B.V.
Steenoven 36
5626 DK Eindhoven
Tel. +31-(0)40-26 290-80
Fax +31-(0)40-26 290-85
E-Mail: benelux.nl@geze.com

Bulgaria

GEZE Bulgaria - Trade
Representative Office
61 Pirinski Prohod, entrance „B“,
4th floor, office 5,
1680 Sofia
Tel. +359 (0) 24 70 43 73
Fax +359 (0) 24 70 62 62
E-Mail: office-bulgaria@geze.com

China

GEZE Industries (Tianjin) Co., Ltd.
Shuangchengzhong Road
Beichen Economic Development
Area (BEDA)
Tianjin 300400, P.R. China
Tel. +86(0)22-26973995-0
Fax +86(0)22-26972702
E-Mail: Sales-info@geze.com.cn

China

GEZE Industries (Tianjin) Co., Ltd.
Branch Office Shanghai
Unit 25N, Cross Region Plaza
No. 899, Ling Ling Road,
XuHui District
200030 Shanghai, P.R. China
Tel. +86 (0)21-523 40 960
Fax +86 (0)21-644 72 007
E-Mail: chinasales@geze.com.cn

China

GEZE Industries (Tianjin) Co., Ltd.
Branch Office Guangzhou
Room 17C3
Everbright Bank Building, No.689
Tian He Bei Road
510630 Guangzhou, P.R. China
Tel. +86(0)20-38731842
Fax +86(0)20-38731834
E-Mail: chinasales@geze.com.cn

China

GEZE Industries (Tianjin) Co., Ltd.
Branch Office Beijing
Room 1001, Tower D
Sanlitun SOHO
No. 8, Gongti North Road,
Chaoyang District,
100027 Beijing, P.R.China
Tel. +86-(0)10-5935 9300
Fax +86-(0)10-5935 9322
E-Mail: chinasales@geze.com.cn

France

GEZE France S.A.R.L.
ZAC de l'Orme Rond
RN 19
77170 Servon
Tel. +33-(0)1-606260-70
Fax +33-(0)1-606260-71
E-Mail: france.fr@geze.com

Hungary

GEZE Hungary Kft.
Bartók Béla út 105-113.
Budapest
H-1115
Tel. +36 (1) 481 4670
Fax +36 (1) 481 4671
E-Mail: office-hungary@geze.com

Iberia

GEZE Iberia S.R.L.
Pol. Ind. El Pla
C/Comerc, 2-22, Nave 12
08980 Sant Feliu de Llobregat (Bar-
celona)
Tel. +34 9-02 19 40 36
Fax +34 9-02 19 40 35
E-Mail: info@geze.es

India

GEZE India Private Ltd.
MF2 & 3, Guindy Industrial Estate
Ekkattuthangal
Chennai - 600 097
Tamilnadu
Tel. +91 (0) 44 30 61 69 00
Fax +91 (0) 44 30 61 69 01
E-Mail: office-india@geze.com

Italy

GEZE Italia S.r.l
Via Giotto, 4
20040 Cambiagio (MI)
Tel. +39(0)29 50 695-11
Fax +39(0)29 50 695-33
E-Mail: italia.it@geze.com

Italy

GEZE Engineering Roma S.r.l
Via Lucrezia Romana, 91
00178 Roma
Tel. +39(0)6-72 65 31 1
Fax +39(0)6-72 65 31 36
E-Mail: roma@geze.biz

Poland

GEZE Polska Sp.z o.o.
ul. Annopol 21
03-236 Warszawa
Tel. +48 (0)22 440 4 440
Fax +48 (0)22 440 4 400
E-Mail: geze.pl@geze.com

Romania

GEZE Romania S.R.L.
IRIDE Business Park
Str. Dimitrie Pompei nr. 9-9a
Building 10, level 2, sector 2
020335 Bucharest
Tel. +40 (0) 21 25 07 750
Fax +40 (0) 21 25 07 750
E-Mail: office-romania@geze.com

Russia

OOO GEZE RUS
Gamsonovskiy Per. 2
115191 Moskau
Tel. +7 (0) 495 933 06 59
Fax +7 (0) 495 933 06 74
E-Mail: office-russia@geze.com

Scandinavia – Sweden

GEZE Scandinavia AB
Mallslingan 10
Box 7060
18711 Täby, Sweden
Tel. +46(0)8-7323-400
Fax +46(0)8-7323-499
E-Mail: sverige.se@geze.com

Scandinavia – Norway

GEZE Scandinavia AB avd. Norge
Industriveien 34 B
2073 Dal
Tel. +47(0)639-57200
Fax +47(0)639-57173
E-Mail: norge.se@geze.com

Scandinavia – Finland

Branch office of GEZE Scandinavia AB
Herralantie 824
Postbox 20
15871 Hollola
Tel. +358(0)10-40 05 100
Fax +358(0)10-40 05 120
E-Mail: finland.se@geze.com

Scandinavia – Denmark

GEZE Danmark
Branch office of GEZE Scandinavia AB
Märkærvej 13 J-K
2630 Taastrup
Tel. +45(0)46-32 33 24
Fax +45(0)46-32 33 26
E-Mail: danmark.se@geze.com

Singapore

GEZE (Asia Pacific) Pte, Ltd.
21 Bukit Batok Crescent
#23-75, Wcega Tower,
Singapore 658065
Tel. +65-6846 1338
Fax +65-6846 9353
E-Mail: gezesea@geze.com.sg

South Africa

GEZE Distributors (Pty) Ltd.
118 Richards Drive, Halfway House,
Ext 111, P.O. Box 7934, Midrand 1685,
South Africa
Tel. +27(0)113 158 286
Fax +27(0)113 158 261
E-Mail: info@gezesa.co.za

Switzerland

GEZE Schweiz AG
Bodenackerstrasse 79
4657 Dulliken
Tel. +41-(0)62-285 54 00
Fax +41-(0)62-285 54 01
E-Mail: schweiz.ch@geze.com

Turkey

GEZE Kapı ve Pencere Sistemleri
San. ve Tic. Ltd. Şti.
Ataşehir Bulvarı, Ata 2/3
Plaza Kat: 9 D: 84 Ataşehir
Ataşehir / İstanbul
Tel. + 90 (0) 21 64 55 43 15
Fax + 90 (0) 21 64 55 82 15
E-Mail: office-turkey@geze.com

Ukraine

GEZE Ukraine TOV
ul. Viskoznaya, 17,
Building 93-B, Office 12
02094 Kiev
Tel./Fax +38 (0) 44 501 22 25
E-Mail: office-ukraine@geze.com

United Arab Emirates/GCC

GEZE Middle East
P.O. Box 17903
Jebel Ali Free Zone
Dubai
Tel. +971(0)4-88 33 112
Fax +971(0)4-88 33 240
E-Mail: geze@emirates.net.ae

United Kingdom

GEZE UK Ltd.
Blenheim Way
Fradley Park
Lichfield
Staffordshire WS13 8SY
Tel. +44(0)1543 44 30 00
Fax +44(0)1543 44 30 01
E-Mail: info.uk@geze.com

GEZE GmbH

P.O.Box 1363
Reinhold-Vöster-Straße 21-29
71229 Leonberg
Germany

Tel.: 0049 7152 203-0
Fax: 0049 7152 203-310
www.geze.com

151891-00

