GEZE TSA 325 NT REVOLVING DOORS
FOR MANUAL AND AUTOMATIC OPERATION
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INTRODUCTION

Focal point of the entrance area

The entrance area is the poster child of your building and thus of your enterprise. Therefore it is imperative to validate the positive optical impression through the faultless function of the door system even in the case of high access frequency. GEZE revolving doors meet these requirements and enthral planers, owners and users of buildings. The practically unlimited freedom of design and the full range of materials and colours fulfil even highest architectural demands. Open and closed at the same time, revolving doors eliminate draught. Owing to an entrance area without draught the area in direct vicinity to the entrance can be used commercially and at the same time noise, dust and dirt are kept outside. The clear physical separation into interior and exterior area and the energy that is saved thereby offer clear cost advantages and makes the use of revolving doors even more advantageous.

The range of application of revolving doors is manifold. They are suited for:

- Business buildings
- Public buildings
- Shopping centres
- Hotels and restaurants
- Administrative buildings
- Car dealerships
- Airports and railway stations

Due to the available optional features with folding leaves, revolving doors are also suitable for the use in escape and rescue routes depending on the required width of the escape route.

GEZE revolving doors are tailor-made for each individual object. They feature a variety of options and versions. Should your desired object vary from the stated dimensions and options please do not hesitate to contact us. We offer a door for each entrance!
Advantages for planers and builders:

• Freedom of design and object-specific individual planning with a variety of optional features
• Commercial use of the entrance area for shops, offices, exhibition areas and reception desk
• Harmonious optical appearance of the facade and the interior
• Representative entrance with an excellent visual effect
• Improvement of the energy balance of the building
• Economic solution due to a high degree of prefabrication ex works

Advantages for the user:

• Faultless and unobstructed operation of the door system even in the case of high access frequency
• Simple adjustment of the desired mode of operation
• Effective protection against noise, dust and dirt
• Draught-proof design of the entrance area

Advantages for the installer:

• Modular and flexible system
• Simple installation due to a high degree of prefabrication ex works
• Pre-defined and programmed control technology for a quick start-up
• Door system and safety devices comply with the actually valid standards and regulations

IBM Ehningen · Fully-automatic GEZE revolving doors with 4 leaves, BO function and automatic night time locking mechanism
The selection of the revolving door with regards to the mode of operation and the diameter depends on the object and its specific use. Please determine the planned type of use and the expected influx of visitors during the planning phase in order to come to a decision on the optimum revolving door system. Furthermore please check whether the entrance will also be used as escape and rescue route and which further special demands are put on the door system, e.g. whether an access control system via a card reader will be required.

Manual revolving door
We recommend manual revolving doors with a diameter of approx. 3000 mm for buildings with a limited flow of visitors. Larger manual doors are possible (up to max. 3600 mm), however, the comfort of use is considerably reduced due to the increased exertion of force and the increased friction of the brushes. The doors can be operated by slightly pushing them. The door is spacious but small enough to be operated by everybody without any effort. The door is not equipped with a motor, it has no transmission and no safety devices and is therefore moderately priced.

- Option: incl. speed limiter
Combined with a self-regulating speed limiter, which counteracts to a further increase of the peripheral speed as soon as the top limiting speed has been reached.

- Option: incl. positioning device
As an alternative a manual revolving door can be equipped with a positioning device. For this purpose a motor and a drive unit is installed into the ceiling or the floor, which returns the turnstile to the final position at low speed and with a minimum of force after manual operation. Thus the next visitor has the possibility to directly enter the revolving door without having to rotate the leaves prior to entering. A further advantage is that the door is always in the final position which leaves a well-ordered optical impression.
**Revolving door systems**

**GEZE TSA 325 NT**

**TYPES OF DRIVES**

**Automatic revolving door with Push & Go function**

The automatic door with Push & Go function is suited for high access frequency without lack of comfort. An increased capacity is achieved by the greater diameter of the door system (up to max. 3600 mm). The automatic revolving door is activated by shortly pushing the revolving leaf. The automatic door system accelerates and then rotates in an adjustable automatic speed. The door is suited for objects with a constant circle of visitors who are familiar with the activation of the revolving door which is the case in office buildings as well as administrative buildings.

**Fully-automatic revolving door**

The fully-automatic door with movement detectors is suited for high access frequency. These door systems can be produced up to a maximum internal diameter of 3600 mm. The automatic revolving door is activated via inside and outside movement detectors. Upon activation the door accelerates and rotates in an automatic speed. Thus the revolving door offers high comfort and smooth and trouble-free passage. The automatic speed is adjustable and the after-running function can be freely adjusted for the modes of operation "summer" (elongated after-running) and "winter" (no after-running function). As further option a "button for the disabled" can be installed inside and outside of the door. By operating this switch the revolving speed is reduced in order to allow wheelchair users or hampered persons to pass the revolving door without any problems. This reduced speed can also be adjusted. At the end of the after-running period the revolving door reduces the speed in all modes of operation and stops in the final position, where the door leaf seals tightly against the side walls thus leaving all disturbing environmental determants such as draught, automobile exhaust, cold and noise outside.

**All-glass revolving door**

The revolving door with the GEZE all-glass system offers highest transparency. The entire drive and control technology are concealed in the floor. The high-quality surface of the aluminium profiles which are reduced to a minimum with soft edges implies discreet elegance. The drum walls of the all-glass revolving doors are made of curved laminated glass and only the glass edges have narrow cover profiles. The door leaves consist of finely-framed toughened safety glass and two half-shelves of annealed glass form the roof that is fixed by point fittings of stainless. GEZE realises individual, object-related solutions for revolving doors. Door systems with three and four leaves with clear passage heights of up to 3000 mm and freely selectable diameters of 1800 - 3300 mm can be realised as well as all mentioned types of drives.
The decision for a revolving door with 3 or 4 leaves

The revolving door with 3 leaves has a slightly reduced passage capacity. However, it offers higher comfort in use, since there is more space between the door leaves. This higher comfort accommodates the elderly or disabled who cannot adapt themselves to the speed of the revolving door. This type of door is also suited for shopping centres where persons with shopping trolleys or families with prams use this type of door. The inner width of the door is smaller than that of a 4-leaves revolving door with the same diameter. This should be taken into account when planning the door system.

The revolving door with 4 leaves is the classic version with the highest capacity, suited for two-way traffic and a large stream of visitors. Due to the symmetric construction the drum of the revolving door is closed by two leaves which results in an improved protection against environmental influences and an improved air-trap effect. This type of door has a larger opening width and is optically very attractive due to its symmetric form.

Romeo and Juliet, Frankfurt
Automatic revolving door with 4 leaves and fanlight made of glass

Hella KGaA HBPO GmbH, Lippstadt
Automatic all-glass revolving door with 3 leaves with underfloor operator and night-locking mechanism
### TSA 325 NT

#### Revolving door systems

- **Revolving doors**
- **GEZE TSA 325 NT**

#### All modes of operation

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>TSA 325 NT All modes of operation</th>
<th>TSA 325 NT GG All modes of operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inner diameter (freely selectable) (special dimensions on request)</td>
<td>1800–3600 mm</td>
<td>1800–3300 mm</td>
</tr>
<tr>
<td>Number of leaves</td>
<td>3 or 4 leaves</td>
<td>3 or 4 leaves</td>
</tr>
<tr>
<td>Clear passage height (special dimensions on request)</td>
<td>2100– max. 3000 mm</td>
<td>2100– max. 3000 mm</td>
</tr>
<tr>
<td>Canopy height (depending on drive) (special dimensions on request)</td>
<td>75 mm/200 mm</td>
<td>16–20 mm glass roof</td>
</tr>
</tbody>
</table>

- Revolving door for the use in escape and rescue routes: suitable | not possible

#### Door construction

| Side walls in all-glass panels 16 mm | • | • |
| Side walls with sheet panels 20 mm | • | not possible |
| Flat thermally insulated aluminium panels 34 mm | • | not possible |
| Screwless construction of toughened safety glass (ESG) 10 mm | • | • |

#### Roof construction

| Dust protection roof with wood covering | • | not possible |
| Optical sheet covering | • | not possible |
| Waterproof roof with two waterspouts | • | not possible |

#### Surface of the aluminium components

| Powder coating in accordance with RAL | • | • |
| Anodised | • | • |
| Colour anodised acc. to sample | • | • |
| Anodised similar to stainless steel | • | • |
| Covered with stainless steel, ground (grain size 240) mirror-polished | • | • |

#### Night-time locking mechanisms and locking of the door

| Night-time locking mechanism manual and automatic | • | • |
| Night-time locking inside and outside running | • | outside running only |
| Night-time locking of curved laminated glass 10 mm (VSG) or curved aluminium panels | • | • |
| Manual locking of the door leaf | • | • |
| Automatic locking of the door leaf | • | not possible |

#### Further options

| Door handles horizontal or vertical | • | • |
| Illumination with LEDs | • | not possible |
| Floor ring | • | • |
| Floor mat | • | • |
| Underfloor operator | • | • |
| Button for the disabled | • | • |
| Air curtain | • | on request |

• = Option
Revolving door systems

GEZE TSA 325 NT

PASSAGE CAPACITY

<table>
<thead>
<tr>
<th>Internal diameter (exemplary)</th>
<th>Capacity Persons/hour</th>
<th>Persons/minute</th>
<th>Capacity Persons/hour</th>
<th>Persons/minute</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 mm</td>
<td>1320</td>
<td>22</td>
<td>1610</td>
<td>26</td>
</tr>
<tr>
<td>2400 mm</td>
<td>1130</td>
<td>18</td>
<td>1460</td>
<td>24</td>
</tr>
<tr>
<td>2800 mm</td>
<td>1910</td>
<td>31</td>
<td>2300</td>
<td>38</td>
</tr>
<tr>
<td>3200 mm</td>
<td>2500</td>
<td>41</td>
<td>3020</td>
<td>50</td>
</tr>
<tr>
<td>3600 mm</td>
<td>2180</td>
<td>36</td>
<td>2680</td>
<td>44</td>
</tr>
</tbody>
</table>

All stated values refer to the maximum capacity in one direction and a peripheral speed of 0.75 m/s

DIMENSIONS

Illustration: manual version, 3 leaves

Illustration: actuated version, 4 leaves
PASSAGE WIDTHS

for manual revolving doors

<table>
<thead>
<tr>
<th>Inner diameter (exemplary)</th>
<th>3 leaves Glass in frame</th>
<th>4 leaves Glass in frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 mm</td>
<td>945 mm</td>
<td>1370 mm</td>
</tr>
<tr>
<td>2400 mm</td>
<td>1145 mm</td>
<td>1652 mm</td>
</tr>
<tr>
<td>2800 mm</td>
<td>1345 mm</td>
<td>1934 mm</td>
</tr>
<tr>
<td>3200 mm</td>
<td>1545 mm</td>
<td>2216 mm</td>
</tr>
<tr>
<td>3600 mm</td>
<td>1745 mm</td>
<td>2498 mm</td>
</tr>
</tbody>
</table>

for automatic revolving doors

<table>
<thead>
<tr>
<th>Inner diameter (exemplary)</th>
<th>3 leaves Glass in frame</th>
<th>4 leaves Glass in frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 mm</td>
<td>895 mm</td>
<td>1325 mm</td>
</tr>
<tr>
<td>2400 mm</td>
<td>1097 mm</td>
<td>1609 mm</td>
</tr>
<tr>
<td>2800 mm</td>
<td>1297 mm</td>
<td>1893 mm</td>
</tr>
<tr>
<td>3200 mm</td>
<td>1497 mm</td>
<td>2177 mm</td>
</tr>
<tr>
<td>3600 mm</td>
<td>1697 mm</td>
<td>2461 mm</td>
</tr>
</tbody>
</table>

3 leaves with outside running night locking mechanism

4 leaves with outside running night locking mechanism

3 leaves with inside running night locking mechanism

4 leaves with inside running night locking mechanism
GEZE revolving doors for the use in escape and rescue routes

The GEZE revolving door with BO function (Break-out function) is suited for the use in escape and rescue routes. All leaves are pivoted and are mechanically held. Breaking out is possible at approx. 220 N (default for breakout force in accordance with DIN 18650 and AutSchR). The force can be adjusted at each individual leaf using customary tools. The adjustment can be made without the necessity of dismantling any components.

The revolving door with BO function can be realised as door with 3 or 4 leaves, either as manual, push & go or automatic door, however, not as all-glass revolving door (IGG). The minimum canopy height is 200 mm, a floor ring is required in any case.

Maximum diameter: 3600 mm
Minimum diameter for a “reasonable” width of rescue route: 2600 mm.

The width of the escape way depends on the number of leaves and the drum diameter. It must be taken into account that the maximum width of the escape route can only be accomplished if the leaves are folded away to form a package and put aside.

<table>
<thead>
<tr>
<th>Internal diameter</th>
<th>3 leaves Width of the escape route (FWB)</th>
<th>4 leaves Width of the escape route (FWB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1800 mm</td>
<td>650 mm</td>
<td>660 mm</td>
</tr>
<tr>
<td>2000 mm</td>
<td>750 mm</td>
<td>760 mm</td>
</tr>
<tr>
<td>2200 mm</td>
<td>850 mm</td>
<td>860 mm</td>
</tr>
<tr>
<td>2400 mm</td>
<td>950 mm</td>
<td>960 mm</td>
</tr>
<tr>
<td>2600 mm</td>
<td>1050 mm</td>
<td>1060 mm</td>
</tr>
<tr>
<td>2800 mm</td>
<td>1150 mm</td>
<td>1160 mm</td>
</tr>
<tr>
<td>3000 mm</td>
<td>1250 mm</td>
<td>1260 mm</td>
</tr>
<tr>
<td>3200 mm</td>
<td>1350 mm</td>
<td>1360 mm</td>
</tr>
<tr>
<td>3400 mm</td>
<td>1450 mm</td>
<td>1460 mm</td>
</tr>
<tr>
<td>3600 mm</td>
<td>1550 mm</td>
<td>1560 mm</td>
</tr>
</tbody>
</table>
Breaking out of a leaf will result in immediate disconnection of the drive. Afterwards it is possible to rotate the leaves manually (even when broken out).

Due to the manual breaking out function the use of TSA 325 NT BO is limited to max. 220 N in areas with increased wind load. Depending on the diameter and the clear height, GEZE revolving doors can be used up to a wind speed of max. 6 Beaufort (Bft). This is equal to approx. 49 km/h. If the leaves are only used for ventilation and transport purposes, the break-out force can be increased, which will result in an increased break-out safety in the case of wind pressure.

To prevent people from entering the building through the folding leaves, two leaves must be locked at the minimum. This can be done as follows:

- Two electromechanical locking devices
- Night locking mechanism (automatic or manual)

Note: The use of revolving doors in escape and rescue routes must be according to local safety regulations and planning laws.

<table>
<thead>
<tr>
<th>MINIMUM CANOPY HEIGHTS</th>
<th>Minimum canopy height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual revolving door</td>
<td>75 mm</td>
</tr>
<tr>
<td>Manual revolving door with speed limiter</td>
<td>200 mm</td>
</tr>
<tr>
<td>Manual revolving door with positioning device</td>
<td>200 mm</td>
</tr>
<tr>
<td>Automatic revolving door with push &amp; go function</td>
<td>200 mm</td>
</tr>
<tr>
<td>Automatic revolving door</td>
<td>200 mm</td>
</tr>
<tr>
<td>Automatic revolving door with BO function</td>
<td>200 mm</td>
</tr>
<tr>
<td>Automatic revolving door with underfloor actuator</td>
<td>75 mm</td>
</tr>
<tr>
<td>Manual all-glass revolving door</td>
<td>16 mm</td>
</tr>
<tr>
<td>Manual all-glass revolving door with positioning device</td>
<td>16 mm</td>
</tr>
<tr>
<td>Automatic all-glass revolving door with push &amp; go function</td>
<td>16 mm</td>
</tr>
<tr>
<td>Automatic all-glass revolving door</td>
<td>16 mm</td>
</tr>
</tbody>
</table>
Operating elements for automatic revolving doors

**Mode of operation OFF**
In the mode of operation "OFF" the motor is switched off and the door can be opened manually. This mode of operation is particularly suited for maintenance and cleaning of the door. All actuation elements are switched off.

**Mode of operation Night**
In the mode of operation "Night" the most different types of locking options can be selected for the revolving door.
- No locking
- Manual locking of the door leaves via a bar lock
- Locking with the electromechanical disk brake
- Electromechanical locking of the door leaves
- Locking with manual night locking
- Locking with automatic night locking

**Mode of operation shop closing time**
In the mode of operation "shop closing time" the door is actuated by the internal movement detectors only. It moves a preset number of sectors in automatic speed and will then stop in the target position.

**Mode of operation Automatic**
In the mode of operation "Automatic" all connected pulse generators are active. After actuation the door accelerates to a preset automatic speed, rotates the preset number of sectors and then changes over to a reduced speed. The slower revolving speed and the after-running period can be preset. By simultaneously pressing the arrow keys you can change over to "winter operation". The after-running period will be omitted and the revolving door will slide to the end position. As an option it is possible to connect a button for the disabled. By operating this button the revolving speed is reduced, allowing older or hampered persons to pass through the door without any problems. The revolving speed and the overtravel time can also be preset.

**Mode of operation manual**
In the mode of operation "manual" the revolving door can be freely rotated. If no further functions are set, the mode of operation "manual" is identical with the mode of operation "OFF". The following options can be set: a positioning device returns the door to the target position at a slower speed after people have passed through the door. Safety functions can be deactivated.
Types of floor rings

- **Floor ring of stainless steel with sheet metal base**
  - Top edge finished floor (OKFFB)
  - Isolation to be provided by the customer
  - Sheet metal base
  - Foil
  - Unfinished floor (RFB)

- **Floor ring with sheet metal base and swivel flange**
  - Top edge finished floor (OKFFB)
  - Isolation to be provided by the customer
  - Sheet metal base
  - Foil
  - Unfinished floor (RFB)

**Underfloor operator**

**Note:** If an external control is housed in a control cabinet (dimensions: approx. 500 x 600 x 170 mm) at a distance of max. 20 m a small drive box (dimensions: approx. 714 x 900 x 280 mm) can be installed as well.
Façade connection

with sheet-metal panel

Façade connection

with glass pane
Night locking

Detail
inside night locking

Night locking

Horizontal section
connection night locking
Connection roof TOP

Night locking

Vertical section night locking
Automatic door

Vertical section night locking
Manual door

Leaf
Side panel

Ceiling construction

Clear passage height DH
Overall height of system GH
Canopy height
Night locking
Revolving door systems

GEZE TSA 325 NT

Underfloor operator

Underfloor operator for night locking

Drive and guidance night locking

Night locking

Leaf

Brush

Side panels

Further drain pipes to be provided by customer

318
312
3
34
30
48
40
20
40
Weather roof
Top view weather roof

Weather roof
Vertical section weather roof

- INSIDE
- OUTSIDE
- Axis
- Waterspout
- Drainage
- Sheet metal
- Wooden board
- Insulation
- Ceiling construction
- Brush
- Leaf
- Clear passage height
- Canopy height
- Side panel
**Air curtain**

Top view air curtain

- Blow-out channel
- Axis
- Inside
- Outside

**Air curtain**

Vertical section air curtain

- Other types of air intake available
- Axis
- Inside
- Outside
- Clear passage height
- Opening for air intake
- Blow-out opening
- Brush
- Leaf
- Canopy height

The main unit air curtain is installed vertically from the top or from the bottom!
1  Movement detector inside
2  Movement detector outside
3  Anterpost safety sensor
4  Emergency Off button inside and outside
5  Programming keypad
6  Key-operated switch
7  Warning label inside and outside
8  Button for the handicapped (optional)
9  Post safety device
10 Heel protecting strip
11 Safety contact strip vertical
12 Mobile safeguarding device (optional)

Explanation of the safety devices and the sensor technology

Movement detectors inside and outside
The inside and outside movement detectors are fixed to the ceiling canopy and work on a radar basis. The movement detectors are used for automatic revolving doors as actuating element. The detection zone of the sensor can be adjusted.

Anterpost safety sensor
The anterpost safety sensor is a presence sensor that works on an active infrared basis. It detects the area in front of the post by means of a light curtain which is activated as soon as one of the leaves of the revolving door approaches the post. The detection zone of the sensor is adjustable. As an option a less complex sensor can be installed into the ceiling canopy. This simple sensor does not comply with DIN 18650 and is not approved for use in Germany.

Emergency OFF button inside and outside
The emergency OFF button inside and outside is mounted to the stationary side panel and releases an emergency stop if operated which brings the revolving door to an immediate standstill. After braking the door can be manually operated or opened into both directions.

Programming keypad
The different modes of operation of an automatic revolving door can be set using the programming keypad.

Key-operated switch
The operation of the programming keypad by unauthorised persons can be prevented by installing a keyoperated switch.
Explanation of the safety devices and the sensor technology

**Warning labels inside and outside**
Warning labels must be attached to each revolving door to make parents aware of their obligation to take care. A revolving door is no playground.

**Buttons for the handicapped**
The button for the handicapped is attached at the inside and outside of the stationary side panel or near a wall or façade. When operating the button for disabled the revolving speed of the door is reduced in order to allow older or hampered persons to pass through the door. The speed and duration of activation can be adjusted.

**Post safety device**
The post safety device is a rubber safety strip that is attached to the main closing edge of the fixed side panel of the revolving door. Upon operation this safety strip releases an emergency stop of the door. Upon release of the emergency stop the revolving door is brought to a standstill, the door stops for an adjustable period of time and will then continue closing in the preset mode of operation and speed.

**Heel protecting strip**
The heel protecting strip is a rubber safety strip, which is attached horizontally at the bottom of one of the leaves of the revolving door. The safety strip prevents that an obstacle or a person is seized by the moving leaves. As soon as the safety strip gets in contact with an obstacle or a person, an emergency stop is released and the revolving door stops immediately. Upon release of the emergency stop the revolving door is brought to a standstill, the door stops for an adjustable period of time and will then continue closing in the preset mode of operation and speed.

**Safety contact strip vertical**
The safety contact strip is a rubber safety strip that is attached vertically at the outer edge of the leaves and that prevents persons from being drawn in. As soon as a person or a part of the body gets in contact with the safety strip, an emergency stop is released and the revolving door is stops immediately. Upon release of the emergency stop the revolving door is brought to a standstill, the door stops for an adjustable period of time and will then continue closing in the preset mode of operation and speed.

**Mobile safeguarding device**
"Mobile safeguarding devices" are optical sensors, which are attached to the top edge of the leaves. They work after the infrared principle and optically scan the area in front of the moving leaves of a revolving door. As soon as the sensor detects an obstacle or a person, the revolving door is stopped. If the obstacle remains within the detection zone of the sensor the speed of the revolving door is reduced until the moving leaf stops in front of the obstacle. The sensitivity and the detection zone are adjustable.
Wiring diagram revolving door ceiling mounted

<table>
<thead>
<tr>
<th>LS</th>
<th>Light switch (by customer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSI</td>
<td>Emergency stop button inside ¹</td>
</tr>
<tr>
<td>NSA</td>
<td>Emergency stop button outside ²</td>
</tr>
<tr>
<td>PS</td>
<td>Programme switch</td>
</tr>
<tr>
<td>ZU</td>
<td>Timer</td>
</tr>
<tr>
<td>BTI</td>
<td>Button for disabled inside</td>
</tr>
<tr>
<td>BTA</td>
<td>Button for disabled outside</td>
</tr>
<tr>
<td>KIR</td>
<td>Contactor inside (KI) radar</td>
</tr>
<tr>
<td>KAR</td>
<td>Contactor outside (KA) radar</td>
</tr>
<tr>
<td>KIT</td>
<td>Contactor inside (KI) button ²</td>
</tr>
<tr>
<td>KIA</td>
<td>Contactor outside (KI) button ³</td>
</tr>
<tr>
<td>KB</td>
<td>Contactor authorised (kB) ⁴</td>
</tr>
<tr>
<td>LSG</td>
<td>Switchgear for air curtain</td>
</tr>
<tr>
<td>RTI</td>
<td>Room thermostat in the interior</td>
</tr>
</tbody>
</table>

¹) Install emergency stop switches at all access points
²) Several contactors inside (K) may be installed
³) Several contactors outside (K) may be installed
⁴) Several contactors authorised (KB) may be installed

Notes:
- Wiring in accordance with VDE 0100
- Wiring, connection and start-up must only be carried out by authorised electricians.
- GEZE will not assume any warranty or provide service if GEZE products are combined with third-party products.
- Additional actuation elements for the revolving door drive are installed within the profiles located outside or within the door drum.
- The cables stated in this wiring diagram must be laid by customer.
- The wiring diagram is only a schematic representation. The exact routing of the cables must be determined on site.
- Cable and water connections must be made by a specialist company commissioned by the customer.

Cable:
1. NYM-J 3 x 1,5 mm²
2. NYM-J 5 x 1,5 mm²
3. JE-Y(ST)Y 2 x 2 x 0,8 mm
4. JE-Y(ST)Y 10 x 0,8 mm max. 20 m

The cable must protrude at least 6 m out of the wall
### Wiring diagram revolving door underfloor installation

<table>
<thead>
<tr>
<th>LS</th>
<th>Light switch (by customer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSI</td>
<td>Emergency stop button inside ¹</td>
</tr>
<tr>
<td>NSA</td>
<td>Emergency stop button outside ²</td>
</tr>
<tr>
<td>PS</td>
<td>Programme switch</td>
</tr>
<tr>
<td>ZU</td>
<td>Timer</td>
</tr>
<tr>
<td>BTI</td>
<td>Button for disabled inside</td>
</tr>
<tr>
<td>BTA</td>
<td>Button for disabled outside</td>
</tr>
<tr>
<td>KIR</td>
<td>Contactor inside (KI) radar</td>
</tr>
<tr>
<td>KAR</td>
<td>Contactor outside (KA) radar</td>
</tr>
<tr>
<td>KIT</td>
<td>Contactor inside (KI) button ³</td>
</tr>
<tr>
<td>KIA</td>
<td>Contactor outside (KI) button ³</td>
</tr>
<tr>
<td>KB</td>
<td>Contactor authorised (kB) ⁴</td>
</tr>
<tr>
<td>LSG</td>
<td>Switchgear for air curtain</td>
</tr>
<tr>
<td>RTI</td>
<td>Room thermostat in the interior</td>
</tr>
</tbody>
</table>

¹) Install emergency stop switches at all access points  
²) Several contactors inside (K) may be installed  
³) Several contactors outside (K) may be installed  
⁴) Several contactors authorised (KB) may be installed

**Notes:**  
Wiring in accordance with VDE 0100  
Wiring, connection and start-up must only be carried out by authorised electricians.  
GEZE will not assume any warranty or provide service if GEZE products are combined with third-party products.  
Additional actuation elements for the revolving door drive are installed within the profiles located outside or within the door drum.  
The cables stated in this wiring diagram must be laid by customer.  
The wiring diagram is only a schematic representation.  
The exact routing of the cables must be determined on site.  
Cable and water connections must be made by a specialist company commissioned by the customer.

**Cable:**  
1. NYM-J 3 x 1,5 mm²  
2. NYM-J 5 x 1,5 mm²  
3. JE-Y(ST)Y 2 x 2 x 0,8 mm  
4. JE-Y(ST)Y 10 x 0,8 mm max. 20 m

---

**Diagram:**

- Mains connection 230V / 50Hz for door drive/lighting
- Mains fuse 10A, supplied by customer
- Main switch supplied by customer
- Mains connection 400V / 50Hz for electric air curtain
- Mains fuse 3x 40A, supplied by customer
- Revolving door
- Air curtain
- Hot water connection 2 x 3/4”
- Air curtain
- Revolving door control
- The cable must protrude at least 6 m out of the wall
Revolving door systems

GEZE TSA 325 NT

References

Mercedes Benz Plant, Milan, Italy

Automatic GEZE revolving door with 4 leaves

Ørstedhus, Kopenhagen, Denmark

Automatic GEZE revolving door TSA 325 NT with 3 leaves

Bock 39, Frankfurt, Germany

Automatic GEZE revolving door TSA 325 NT with 3 leaves
References

Manually operated GEZE all-glass revolving door TSA 325 NT with 4 leaves

Vitra Haus, Weil am Rhein, Germany

VGH Versicherungen, Hannover, Germany

Automatic GEZE revolving door with 4 leaves

Flight Forum, Eindhoven, Netherlands

Automatic GEZE revolving door with 4 leaves
Revolving door systems

GEZE TSA 325 NT

References

Mercedes Benz Museum, Stuttgart, Germany

Automatic GEZE revolving door with 3 leaves

Hitachi Power, Duisburg, Germany

Manual revolving door TSA 325 NT with 3 leaves

BayArena Leverkusen, Germany

Manual revolving door TSA 325 NT with 4 leaves
References

Hotel Atrium Baska, Krk, Croatia

Automatic GEZE revolving door with 3 leaves

University Library of Humboldt University Jacob and Wilhem, Berlin, Germany

Automatic GEZE revolving doors with 4 leaves

Sungate Hotel, Antalya, Turkey

Automatic GEZE revolving door with 3 leaves
You will find more product information in the relevant brochures, see ID numbers.

### Door technology

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| **02** | Hold-open systems  
ID 091593, ID 091594 |
| **03** | Integrated door closers  
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| **04** | Floor springs  
ID 091607 |
| **05** | Sliding door gear systems and linear guides  
ID 123605, ID 008770, ID 000586 |

### Automatic door systems

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| **07** | Sliding, telescopic and folding doors  
ID 143639 |
| **08** | Circular and semi-circular sliding doors  
ID 135772 |
| **09** | Revolving doors  
ID 132050 |
| **10** | Actuation devices and sensors  
ID 142655 |

### Smoke and heat extraction and window technology

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| **14** | Electric chain drives  
ID 127785, ID 127789 |
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### Safety technology

<p>| | |</p>
<table>
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| **17** | Access control systems  
ID 132158 |
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| **19** | Electric strikes  
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### Glass systems

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</table>
| **21** | Manual sliding wall systems (MSW)  
ID 104377 |
| **22** | Integrated all-glass systems (IGG)  
ID 104366 |
| **23** | GEZE Patch fittings mono glass systems  
ID 122521 |
Door technology

The functionality, superior performance and reliability of GEZE door closers are impressive. A common design across the range, the ability to use them on all common door leaf widths and weights, and the fact that they can be individually adjusted makes their selection simple. They are continually being improved and enhanced with up-to-date features. For example, the requirements of fire protection and accessibility are fulfilled with a door closer system.

Automatic door systems

GEZE automatic door systems open up a huge variety of options in door design. The latest, innovative high-performance drive technology, safety, ease of accessibility and first class universal drive design set them apart. GEZE offers complete solutions for individual requirements. A dedicated division is responsible for the development and construction of individual special designs.

Smoke and heat extraction and window technology

GEZE smoke and heat extraction systems and ventilation technology provide complete systems solutions combining the many requirements of different types of windows. We supply a full range from energy efficient drive systems to natural ventilation and complete solutions for supplying and extracting air, also as certified SHEVs.

Safety technology

GEZE safety technology sets the standards where preventative fire protection, access control and anti-theft security in emergency exits are concerned. For each of these objectives GEZE offers tailored solutions, which combine the individual safety requirements in one intelligent system and close doors and windows in case of danger in a coordinated manner.

Building systems

In GEZE’s Building Management System GEZE door, window and safety products can be integrated into the security and control systems of the building. A central control and visualisation system monitors various automation components in the building and offers security through many different networking capabilities.

Glass systems

GEZE glass systems stand for open and transparent interior design. They can either blend discreetly into the architecture of the building or stand out as an accentuated feature. GEZE offers a wide variety of technologies for functional, reliable and aesthetic sliding wall or sliding door systems providing security with lots of design scope.