



GEZE TSA 325 NT REVOLVING DOORS FOR MANUAL AND AUTOMATIC OPERATION

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GEZE revolving door systems

Focal point of the entrance area

The entrance area is the face of the building and thus of the enterprise. Therefore it is imperative to validate the positive visual 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 planners, owners and users of buildings. Revolving door systems of the type TSA 325 NT enables large numbers of people passing through them easily and combines convenient passage with first-class design. Prestigious buildings all over the world are equipped with tailor-made entrance solutions from GEZE Sonderkonstruktionen.

Advantages at a glance:

- Individual planning and production for every building
- TÜV type-tested according to DIN 18650 in all versions
- Effective protection against draughts, the weather and noise
- Suitable for large numbers of visitors
- Prestigious entrance with excellent visual effect
- Emphasis on transparency with the glass roof variant
- High-quality materials and state-of-the-art control technology guarantee high efficiency
- Straightforward installation due to a high degree of prefabrication ex works
- Simple and effective parameter setting and after-sales service with the GEZEconnects software

TSA 325 NT: Standard drive for the manual or automatic operation of revolving door systems

TSA 325 NT BO: Revolving door system for use in escape and rescue routes with break-out door leaves

TSA 325 NT RC2: Burglary-resistant revolving door system with automatic night-time closer

TSA 325 NT GG: All-glass revolving door system for maximum transparency



Ørstedhus, Kopenhagen, Denmark (Photo: Morten Bak)

Overview of revolving door systems

Product features				
	TSA 325 NT	TSA 325 NT BO	TSA 325 NT RC2	TSA 325 NT GG
Manual operation	•	-	-	•
With speed limiter (optional)	•	-	-	•
With positioning device (optional)	•	-	-	•
Fully automatic operation	•	•	•	•
Servo function	•	-	-	•
Suitability for escape and rescue routes	-	•	-	-
Break-out function (BO)	-	•	-	-
Inner diameter (min.)	1800 mm		2500 mm	1800 mm
Inner diameter (max.)	3600 mm		3400 mm	3000 mm
For 3-leaf door systems	•	•	•	•
For 4-leaf door systems	•	•	•	•
Clear passage height*	3000 mm			
Canopy height (min.)	200 mm			17 mm
Side elements version	10 mm VSG, 22 mm panel lining, Special glass on request		10 mm VSG, Special glass on request	16 mm GG, Special glass on request
Surfaces	powder-coated according to RAL, anodised light alloy E6/EV1, coated with grit 240 stainless steel, coated with polished stainless steel, special coating on request		powder-coated according to RAL, anodised light alloy E6/EV1, special coating on request	powder-coated according to RAL, anodised light alloy E6/EV1, coated with grit 240 stainless steel, coated with polished stainless steel, special coating on request
Version of roof structure	as dust protection roof with wood covering, optical sheet metal covering, waterproof roof with waterspout		optical sheet metal covering, water- proof roof with waterspout	glass roof
Illumination	with roof variant			not possible with glass roof
Floor covering	Scraper mat			
Hot-air curtain system	electric air curtain, hot water air curtain, possible, depends on the ceiling construction			on request
Night-time closer layout	inside, outside		inside	outside
Night-time closer type	manual / automatic		automatic	manual
Night-time closer design	10 mm VSG, 22 mm ISO glass, 22 mm panel lining, special glass on request		10 mm VSG, Special glass on request	10 mm VSG
Locking mechanism	manual, rod, electromechanical		rod	manual
Door handles horizontal or vertical	•	•	•	•
Floor ring	•	•	•	•
Underfloor operator	•	-	-	•
Disabled person's button	•	•	•	•
Approvals	DIN 18650			

- = YES
- = NOT AVAILABLE
- * = HIGHER ON REQUEST

General information

Types of drive, number of door leaves, passage capacity, dimensions, passage clearances, minimum canopy heights

TYPES OF DRIVE

Manual revolving door

Manual revolving doors are used with a diameter of approx. 3000 mm for buildings with a limited flow of visitors. Larger diameters 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. Manually operated revolving doors are available in 3- and 4-leaf versions, each of which is possible as an all-glass variant. The doors can be operated by slightly pushing them. Safety features are not necessary in accordance with DIN 18650. There are two operating modes available: „Locked“ and „Manual“.

Option: Speed limiter

The optional speed limiter counteracts a further increase in peripheral speed as soon as the top limiting speed has been reached.

Option: Positioning device

The optional positioning device with a motor in the ceiling or the floor returns the door to the initial position with a minimum of force after manual operation ready for the next visitor. The door is thus always in the final position and leaves a well-ordered optical impression.

Automatic revolving door with servo function

This variant provides more convenient passage than a manual door because the turnstile starts automatically. In order to reach walking speed, the turnstile can be overridden by hand. After the door has been passed, it revolves slowly to the final position. The speeds are limited such that the specifications of „low-energy operation“ in accordance with DIN 18650 are kept.

Fully automatic revolving door

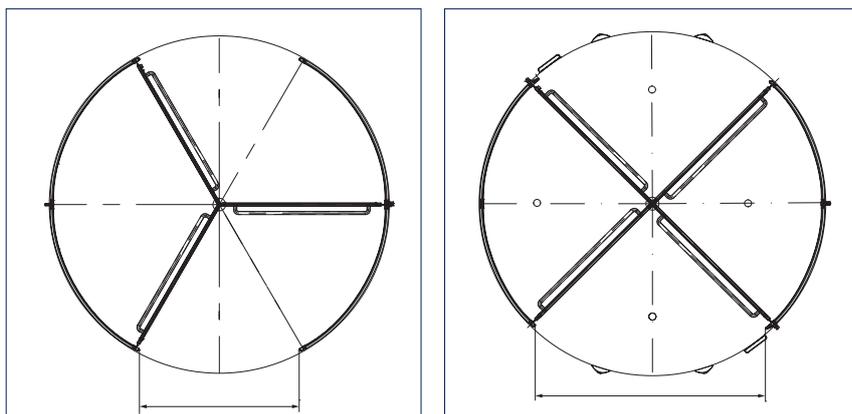
The fully automatic door with movement detectors is suited for high access frequency. Thus this revolving door offers maximum comfort and smooth and trouble-free passage. These door systems can be produced up to a maximum inner diameter of 3600 mm. The automatic revolving door is activated via inside and outside movement detectors. Upon activation the door accelerates and rotates at an automatic speed. The automatic speed is adjustable and the time delay can be freely adjusted for the modes of operation „summer“ (longer delay) and „winter“ (no delay). As further option a „disabled person's button“ can be installed on the inside and outside of the door. When this switch is actuated, the revolving speed is reduced to allow wheelchair users or people who have difficulty walking to pass through the revolving door without any problems. This reduced speed can also be adjusted. At the end of the time delay the revolving door reduces speed in all operating modes and stops in the final position, where the door leaves seal tightly against the side walls, thus leaving all environmental influences such as draughts, exhaust gases from vehicles, cold and noise outside the building.

NUMBER OF DOOR LEAVES

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 significantly more space between the door leaves. This higher comfort mainly accommodates people with restricted mobility who cannot adapt themselves easily to the speed of the revolving door. This type of door is first choice for shopping centres. The inner width of the door is smaller than that of a 4-leaf revolving door with the same diameter.

The 4-leaf revolving door is the classic version with the highest capacity, suited for two-way traffic and large streams 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 symmetrical form.

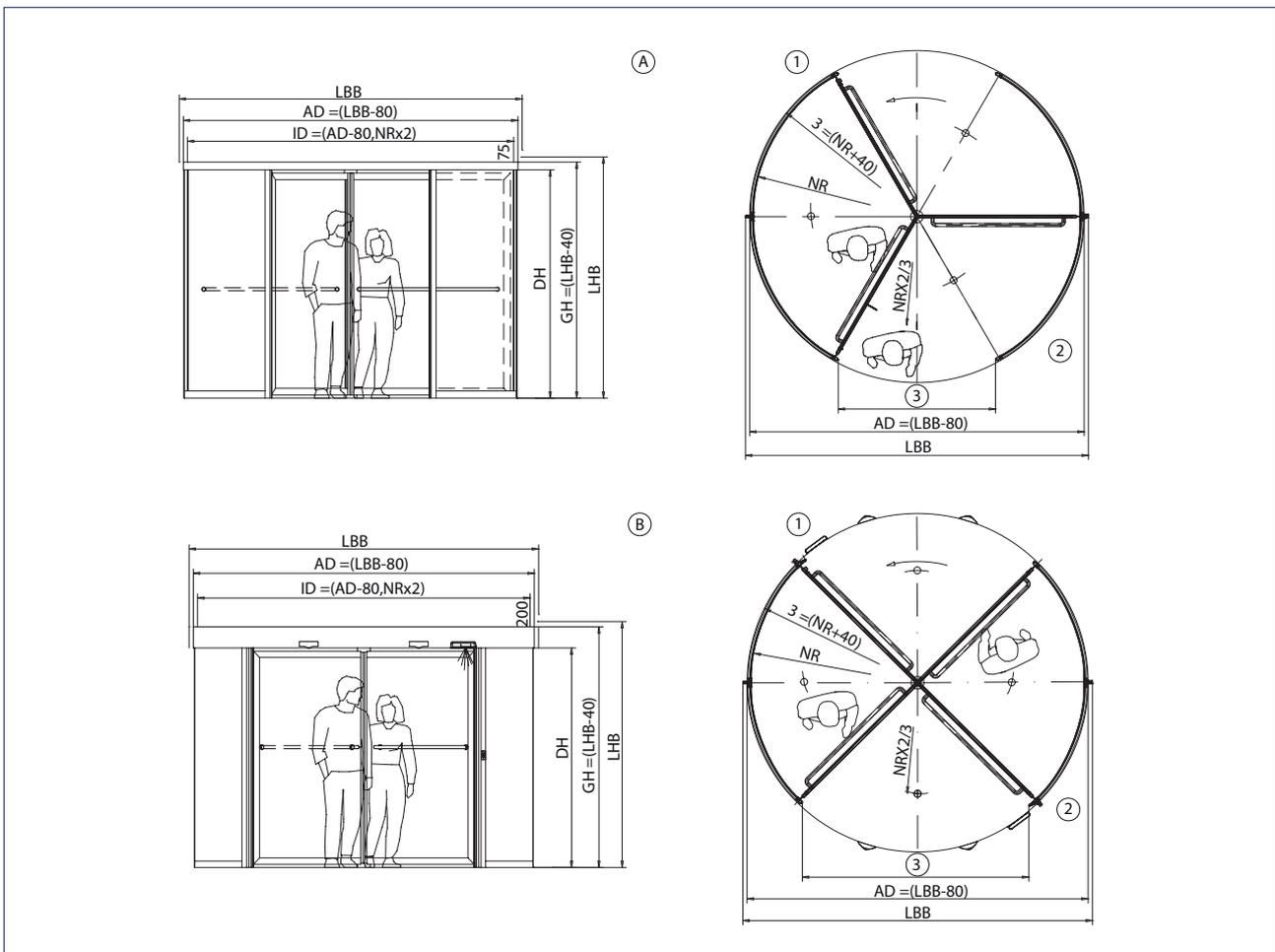


PASSAGE CAPACITY

Inner diameter (exemplary)	3-leaf		4-leaf	
	Capacity persons/hour	Persons/minute	Capacity persons/hour	Persons/minute
2000 mm	1203	20	1604	26
2400 mm	1002	16	1336	22
2800 mm	1718	28	2291	38
3200 mm	2256	37	3008	50
3600 mm	2005	33	2673	44

All stated values refer to the maximum capacity in one direction and a peripheral speed of 0.7 m/s

Dimensions



- A = Illustration: manual version, 3-leaf
- B = Illustration: manual version, 4-leaf
- LBB = Clear width
- AD = Outer diameter
- ID = Inner diameter
- DH = Clear passage height
- GH = Overall height system
- LHB = Clear height
- NR = Nominal radius
- 1 = Inside
- 2 = Outside
- 3 = Clear passage clearance

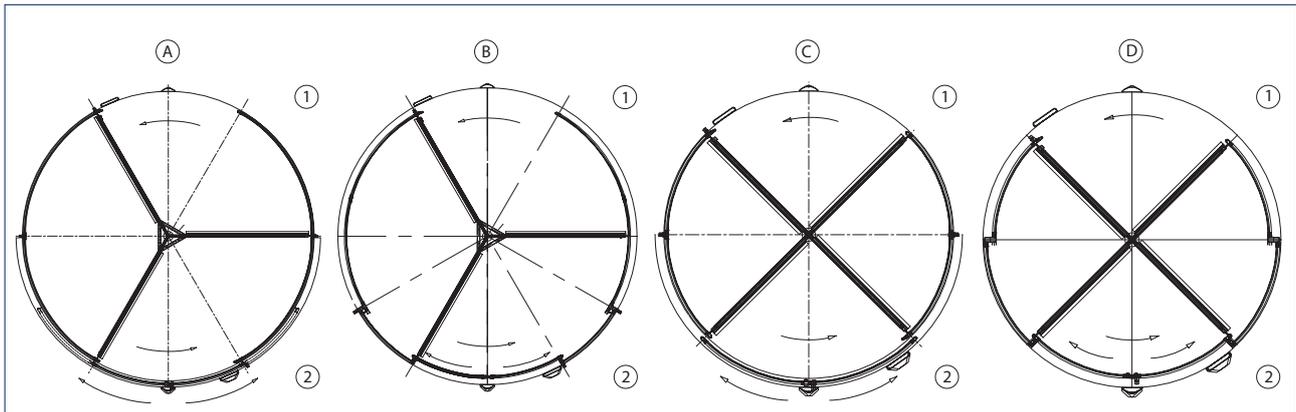
GEZE TSA 325 NT

Passage clearances for manual revolving doors

	3-leaf	4-leaf
Inner diameter (exemplary)	Glass in frame	Glass in frame
2000 mm	945 mm	1370 mm
2400 mm	1145 mm	1652 mm
2800 mm	1345 mm	1934 mm
3200 mm	1545 mm	2216 mm
3600 mm	1745 mm	2498 mm

Passage clearances for automatic revolving doors

	3-leaf	4-leaf
Inner diameter (exemplary)	Glass in frame	Glass in frame
2000 mm	895 mm	1325 mm
2400 mm	1097 mm	1609 mm
2800 mm	1297 mm	1893 mm
3200 mm	1497 mm	2177 mm
3600 mm	1697 mm	2461 mm



- A = 3-leaf with outside-running night-time closer
- B = 3-leaf with inside-running night-time closer
- C = 4-leaf with outside-running night-time closer
- D = 4-leaf with inside-running night-time closer
- 1 = Inside
- 2 = Outside

GEZE revolving door drive TSA 325 NT BO

Break-out function for use in escape and rescue routes

The GEZE revolving door with BO function (Break-out function) is suited for 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 a 3- or 4-leaf automatic door, but not in combination with the all-glass variant (GG). The minimum canopy height is 200 mm and a floor ring is always required. The width of the escape route 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 turned to the side.



GEZE GmbH, Leonberg, Germany (Photo: Martin Jakop)

Application range

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

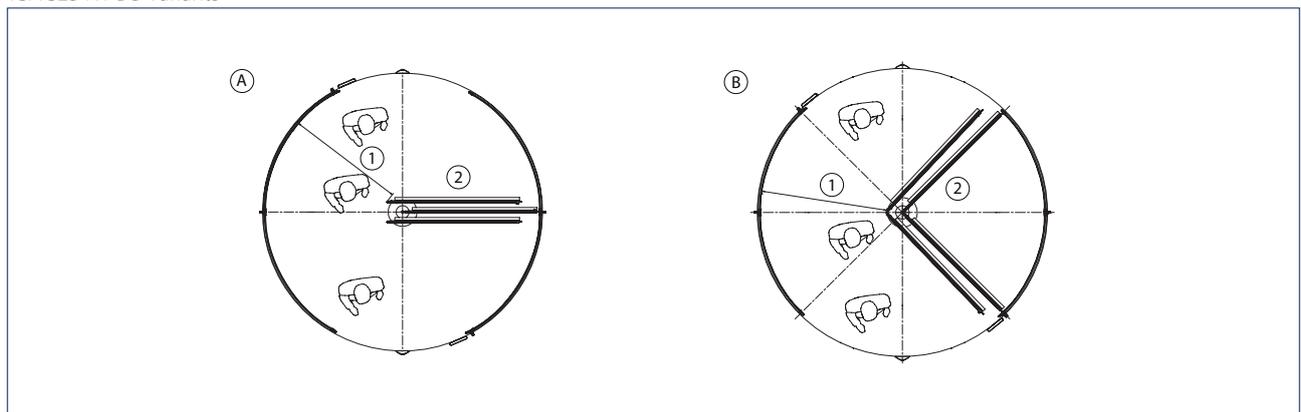
GEZE TSA 325 NT

Technical data

Product features	TSA 325 NT BO
Fully automatic operation	•
Suitability for escape and rescue routes	•
Break-out function (BO)	•
Inner diameter (min.)	1800 mm
Inner diameter (max.)	3600 mm
For 3-leaf door systems	•
For 4-leaf door systems	•
Clear passage height*	3000 mm
Canopy height (min.)	200 mm
Side elements version	10 mm VSG, 22 mm panel lining, special glass on request
Surfaces	powder-coated according to RAL, anodised light alloy E6/EV1, coated with grit 240 stainless steel, coated with polished stainless steel, special coating on request
Version of roof structure	as dust protection roof with wood covering, optical sheet metal covering, waterproof roof with waterspout
Illumination	with roof variant
Floor covering	scraper mat
Hot-air curtain system	electric air curtain, hot water air curtain, possible, depends on the ceiling construction
Night-time closer layout	inside, outside
Night-time closer type	manual, automatic
Night-time closer design	10 mm VSG, 22 mm ISO glass, 22 mm panel lining, Special glass on request
Locking mechanism	Rod, electromechanical
Door handles horizontal or vertical	•
Floor ring	•
Disabled person's button	•
Approvals	DIN 18650

- = YES
- = NOT AVAILABLE
- * = HIGHER ON REQUEST

TSA 325 NT BO variants



- A = 3-flügelig
- B = 4-leaf
- 1 = Width of escape route
- 2 = Leaves opened

Width of escape route

	3-leaf	4-leaf
Inner diameter	Width of escape route (FWB)	Width of escape route (FWB)
1800 mm	650 mm	660 mm
2000 mm	750 mm	760 mm
2200 mm	850 mm	860 mm
2400 mm	950 mm	960 mm
2600 mm	1050 mm *	1060 mm *
2800 mm	1150 mm *	1160 mm *
3000 mm	1250 mm *	1260 mm *
3200 mm	1350 mm *	1360 mm *
3400 mm	1450 mm *	1460 mm *
3600 mm	1550 mm *	1560 mm *

* = Suitable for escape and rescue routes

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 on the turnstile
- or
- Night-time closers on sliding doors (automatic or manual)

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



IBM Ehningen, Germany (Photo: GEZE GmbH)

GEZE revolving door drive TSA 325 NT RC2

Burglary-resistant door system with automatic night-time closer

The burglar-resistant automatic revolving door system GEZE TSA 325 NT RC2 makes life difficult for burglars. It was specially developed for building entrances with increased safety requirements (component resistance class 2). An inner sliding door locking component as night time closure ensures increased resistance to forced entry. Automatic night-time closure provides increased convenience since manual locking is no longer required. The transparent appearance of the revolving door system is not affected by the RC2 functionality (use of standard profile systems).



BAU Trade Fair, GEZE booth, Munich, Germany (Photo: Lazaros Filoglou)

Application range

- Public buildings
- Government buildings
- Banks
- Insurance companies
- Large companies and stores with high-end ranges of products

Technical data

Product features	TSA 325 NT RC2
Fully automatic operation	●
Inner diameter (min.)	2500 mm
Inner diameter (max.)	3400 mm
For 3-leaf door systems	●
For 4-leaf door systems	●
Clear passage height*	3000 mm
Canopy height (min.)	200 mm
Side elements version	10 mm VSG, special glass on request
Surfaces	powder-coated according to RAL, anodised light alloy E6/EV1, special coating on request
Version of roof structure	optical sheet metal covering, waterproof roof with waterspout
Illumination	with roof variant
Floor covering	scraper mat
Hot-air curtain system	electric air curtain, hot water air curtain, possible, depends on the ceiling construction
Night-time closer layout	inside
Night-time closer type	automatic
Night-time closer design	10 mm VSG, special glass on request
Locking mechanism	rod
Door handles horizontal or vertical	●
Floor ring	●
Disabled person's button	●
Approvals	DIN 18650

● = YES

* = HIGHER ON REQUEST

Note

The burglary-resistant function RC2 is only enabled in „Night“ operating mode.

GEZE TSA 325 NT

GEZE revolving door drive TSA 325 NT GG

All-glass system for maximum transparency

Revolving door systems with the GEZE all-glass system offer maximum transparency. Here, the entire drive and control technology is concealed in the floor. The high-quality surface of the rounded-edge aluminium profiles which are reduced to a minimum imply discreet elegance. The drum walls of the all-glass revolving doors are made of curved laminated safety glass (VSG) and only the glass edges have slim cover profiles. The door leaves consist of fine-framed toughened safety glass (ESG) and two half-shells of heat strengthened glass (TVG) form the roof that is fixed by single point fixings made of stainless steel. GEZE realises individual, building-related revolving door solutions using the all-glass system in the standard variant width. 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.



Vitra Haus, Weil am Rhein, Germany (Photo: Oliver Look)

Application range

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

Technical data

Product features	TSA 325 NT GG
Manual operation	•
With speed limiter (optional)	•
With positioning device (optional)	•
Fully automatic operation	•
Servo function	•
Inner diameter (min.)	1800 mm
Inner diameter (max.)	3000 mm
For 3-leaf door systems	•
For 4-leaf door systems	•
Clear passage height*	3000 mm
Canopy height (min.)	17 mm
Side elements version	16 mm GG, special glass on request
Surfaces	powder-coated according to RAL, anodised light alloy E6/EV1, coated with grit 240 stainless steel, coated with polished stainless steel, special coating on request
Version of roof structure	glass roof
Illumination	not possible with glass roof
Floor covering	scraper mat
Hot-air curtain system	on request
Night-time closer layout	outside
Night-time closer type	manual
Night-time closer design	10 mm VSG
Locking mechanism	manual
Door handles horizontal or vertical	•
Floor ring	•
Underfloor operator	•
Disabled person's button	•
Approvals	DIN 18650

- = YES
- = NOT AVAILABLE
- * = HIGHER ON REQUEST

Operating automatic revolving doors

Operating states

OFF

In the „OFF“ operating state the motor is switched off and the door can be rotated freely by hand. This operating state is especially suitable for maintenance and cleaning of the door. All activation devices are switched off.

Night

In the „Night“ operating state a wide range of different locking options can be selected for the revolving door:

- No locking
- Manual locking of the door leaves using a bar lock
- Locking using the electromechanical disc brake
- Electromechanical locking of the door leaves
- Locking with manual night-time closer
- Locking with automatic night-time closer

Shop closing

In the „Shop closing“ operating state the door is actuated by the internal movement detector only. It revolves a preset number of sectors at automatic speed and then stops in the target position.

Automatic

All the connected pulse generators are active in the „Automatic“ operating mode. After activation the door accelerates to a preset automatic speed, rotates the preset number of sectors and then changes over to a reduced speed. The slow revolving speed and time delay can be set. Pressing both arrow keys at the same time changes the system to „winter mode“. In this case, there is no time delay and the revolving door moves immediately to its final position. As an option, a disabled person's button can be connected. When this push button is actuated, the revolving speed is reduced so that people with restricted mobility can pass through the door without any problems. The revolving speed and time delay can also be set.

Manual

The revolving door can be rotated freely in manual operation. If no further functions are set, the „Manual“ operating mode is identical with the „OFF“ operating mode. The following option can be set here: A positioning device returns the door to the target position at slow speed after people have passed through the door. Safety functions can be deactivated.



Keypad programme switch with key push button (TPS-SCT)

Securing automatic revolving doors

Safety devices and sensors

Movement detectors inside and outside

The inside and outside movement detectors are fixed to the ceiling canopy and work on a radar basis. They are used as activation devices for automatic revolving doors. The detection zone of the sensor can be set.

Front post safety sensor

The front post safety sensor is a presence detector that works on an active infrared basis. It monitors the area in front of the post by means of a light curtain which is only activated as one of the leaves of the revolving door approaches the post. The detection zone of the sensor can be set. Alternatively, a less complex sensor can be installed in the ceiling canopy. This simple sensor does not comply with DIN 18650 and is therefore not approved for use in Germany.

Emergency-off push button inside and outside

The emergency-off push button inside and outside is mounted to the static side part and triggers maximum braking in an emergency, which brings the revolving door to an immediate standstill. After it has been stopped, the door can be rotated or operated in both directions.

Keypad programme switch

The different operating modes of an automatic revolving door can be set using the keypad programme switch.

Key push button

The operation of the keypad programme switch can be prevented by installing a key push button.

Warning sign inside and outside

Warning signs must be attached to all revolving doors to make parents aware of their duty to take care of their children.

Disabled person's button

The disabled person's button is attached on the inside and outside of the static side part or nearby on the wall or façade. When the disabled person's button is actuated, the revolving speed of the door is reduced to allow people with restricted mobility to pass. The speed and duration of activation can be set.

Post safety

The post safety device is a rubber safety strip that is attached to the primary closing edge on the fixed side part of the revolving door. This safety strip triggers emergency braking of the door when contacted. When emergency braking is triggered, the revolving door is slowed down until standstill, remains stopped for an adjustable period and then continues its movement in the set operating mode and speed.

Heel protection strip

The heel protection strip is a rubber safety strip that is attached horizontally to the bottom of a revolving door leaf. It prevents an obstacle or a person being caught by the revolving door leaves. As soon as the safety strip makes contact with an obstacle or a person, emergency braking is triggered and the revolving door stops immediately. When emergency braking is triggered, the revolving door is slowed down until standstill, remains stopped for an adjustable period and then continues its movement in the set operating mode and speed.

Vertical safety contact strip

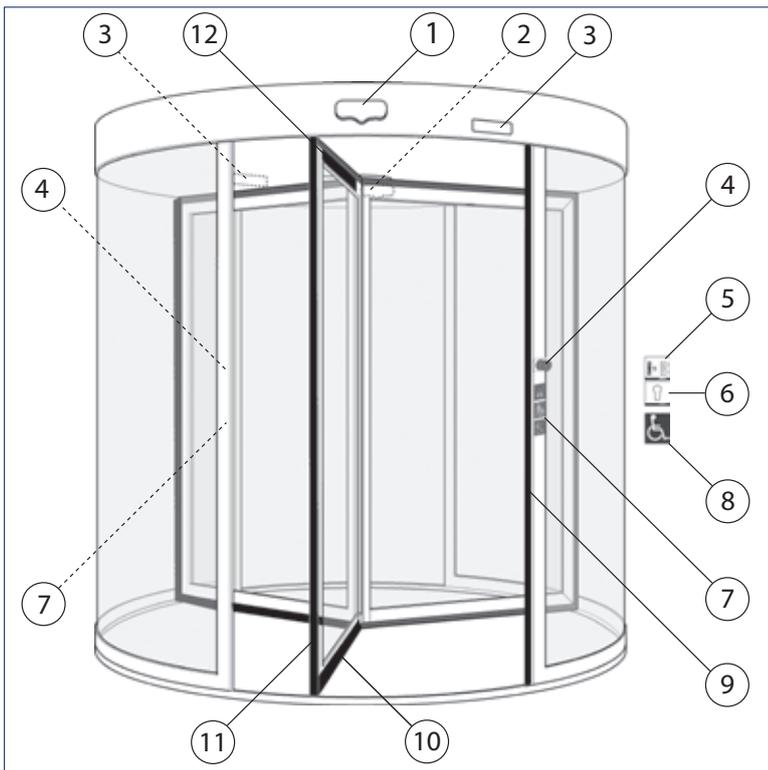
The safety contact strip is a rubber safety strip which is attached vertically to the outer edge of the rotating leaf and prevents people being drawn in. As soon as a person or a part of the body gets in contact with the safety strip, emergency braking is triggered and the revolving door is stopped immediately. When emergency braking is triggered, the revolving door is slowed down until standstill, remains stopped for an adjustable period and then continues its movement in the set operating mode and speed.

Mobile safeguarding device

„Mobile safeguarding devices“ are optical sensors which are fixed to the top edge of the rotating leaves. They work on an infrared basis and optically monitor the area in front of the rotating leaves of a revolving door. As soon as the sensor recognises an obstacle or a person, the revolving door is slowed down. If the obstacle remains within the scanned area of the sensor, the rotating speed is reduced to such an extent that the rotating leaf of the door comes to a standstill before the obstacle. The sensitivity and scanned area of the sensors can be set.

GEZE TSA 325 NT

Operating elements



- 1 = Movement detector inside
- 2 = Movement detector outside
- 3 = Front post safety sensor
- 4 = Emergency-off push button inside and outside
- 5 = Keypad programme switch
- 6 = Key push button
- 7 = Warning sign inside and outside
- 8 = Disabled person's button (optional)
- 9 = Post safety
- 10 = Heel protection strip
- 11 = Vertical safety contact strip
- 12 = Mobile safeguarding device (optional)

Service Tools

GEZEconnects

Bluetooth is an internationally standardised short-distance radio signal with a range of up to ten metres. The software GEZEconnects makes wireless connection via Bluetooth possible between a computer and the automatic door systems from GEZE. All door system settings can be carried out via an intuitive graphic interface, stored, sent by e-mail and transferred to a word processing programme as a protocol. Diagnosis functions show the most important function parameters of the door system in real time, so that problems are recognised at a glance and can be eliminated. All the pre-settings can be taken over very easily for further door systems. The convenient documentation of initial operation, servicing and diagnosis protocols as well as all statistical data can be downloaded at any time. Password protection to freeze operating parameters and servicing data guarantees there will be no unauthorised modifications made.

Service terminal ST 220

Mobile, handy and straightforward – that is parameter setting for the automatic GEZE door systems using the service terminal ST 220. Communication and data exchange between the service terminal and the door drive is via an integrated RS485 interface. The large illuminated interface is easy to operate thanks to the plain text display. The service terminal is equipped with a readout function for servicing and diagnosis work. Power is supplied via the door system. Password protection to freeze operating parameters and servicing data guarantees there will be no unauthorised modifications made.



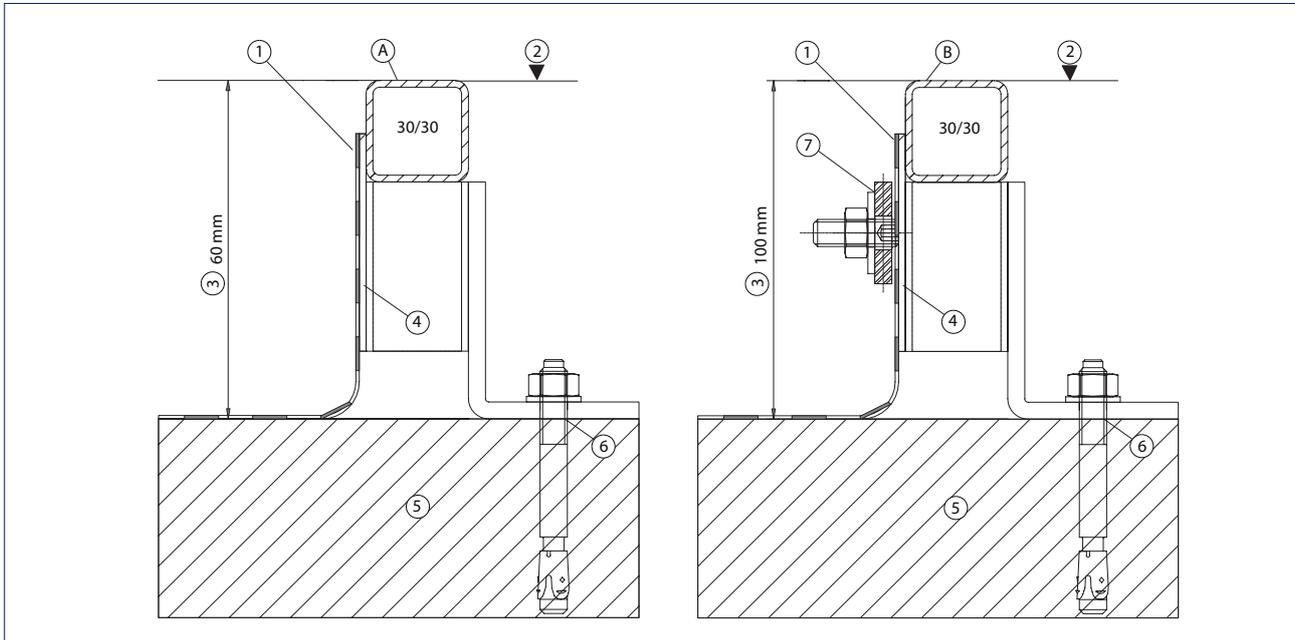
GEZEconnects



Service terminal ST 220

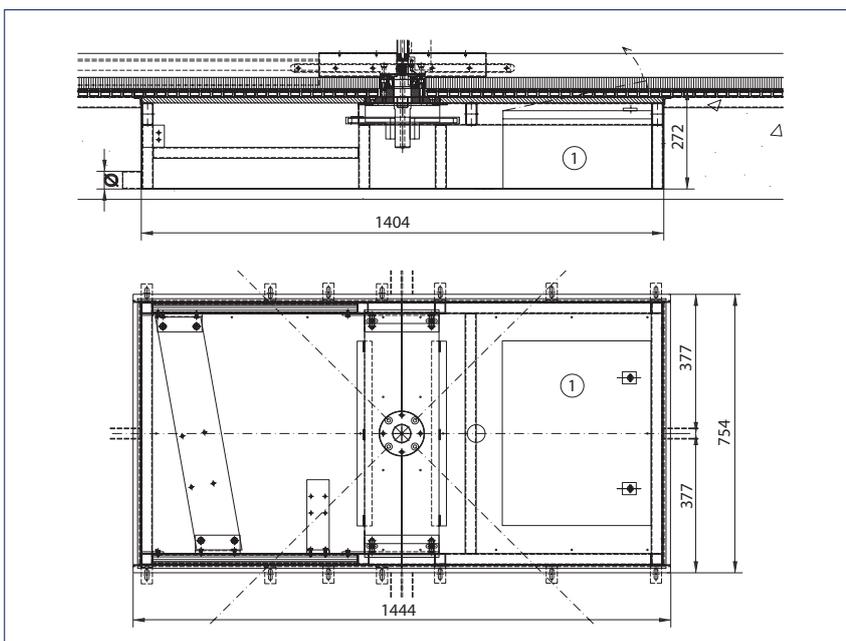
Installation drawings TSA 325 NT

Types of floor rings



- A = Stainless steel floor ring with sheet metal base
- B = Floor ring with sheet metal base and swivel flange
- 1 = Sealing provided by the customer
- 2 = Finished floor level
- 3 = Floor structure (min.)
- 4 = Sheet metal base
- 5 = Unfinished floor (RFB)
- 6 = Fixed to unfinished floor
- 7 = Swivel flange

Underfloor operator



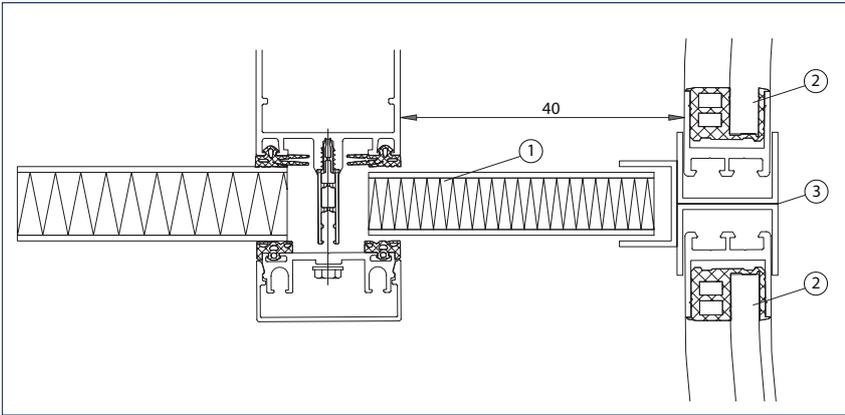
Note: If an external control is housed in a control cabinet (dimensions approx. 500 x 600 x 170 mm) at a max. distance of 20 m, a small drive box (dimensions approx. 714 x 900 x 280 mm) can be installed as well.

- 1 = Control box

GEZE TSA 325 NT

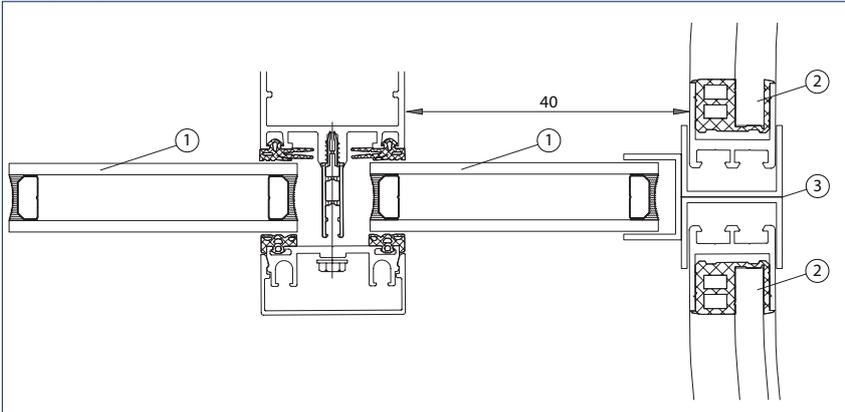
Façade connection

with sheet metal panel



- 1 = Sheet metal panel
- 2 = Side part
- 3 = Axis

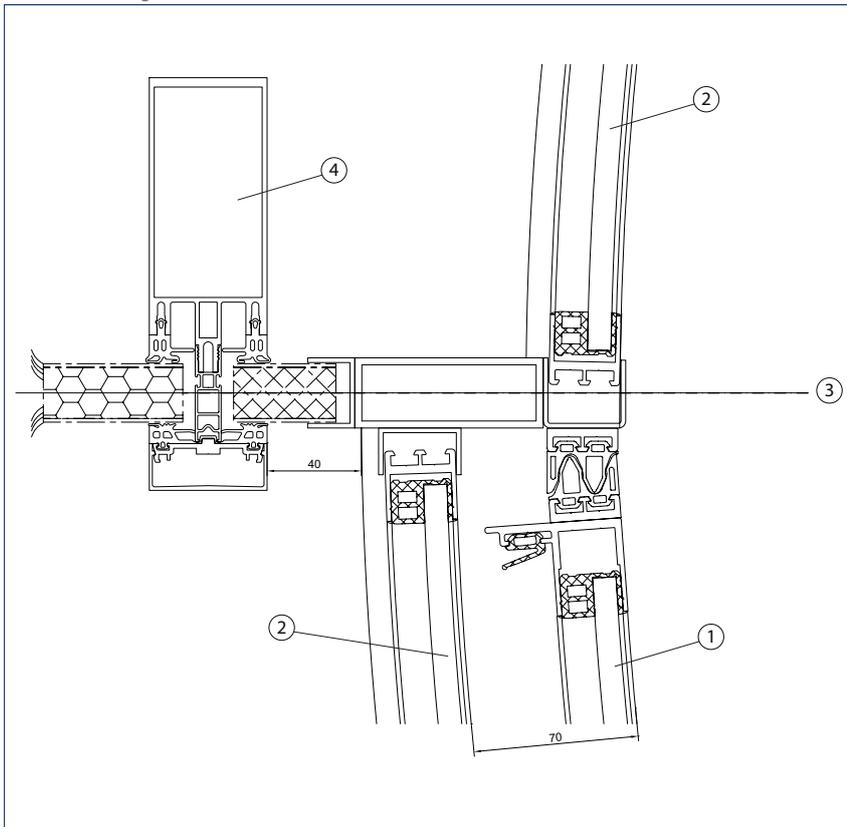
with glass pane



- 1 = Glass pane
- 2 = Side part
- 3 = Axis

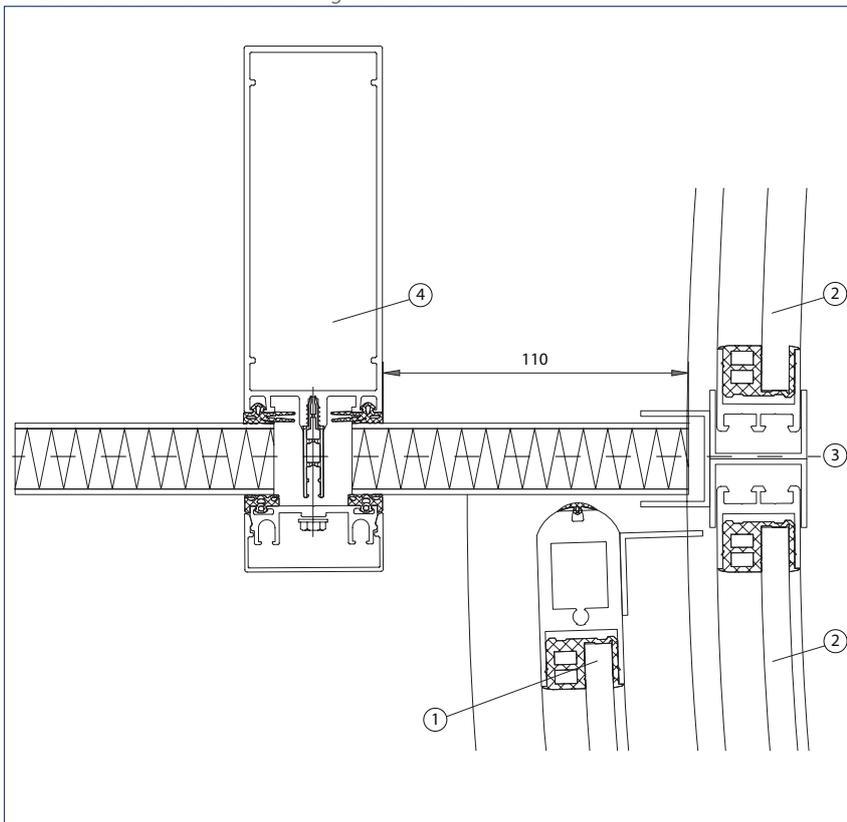
Night-time closer

Detail inside night-time closer



- 1 = Night-time closer
- 2 = Side part
- 3 = System axis
- 4 = Façade

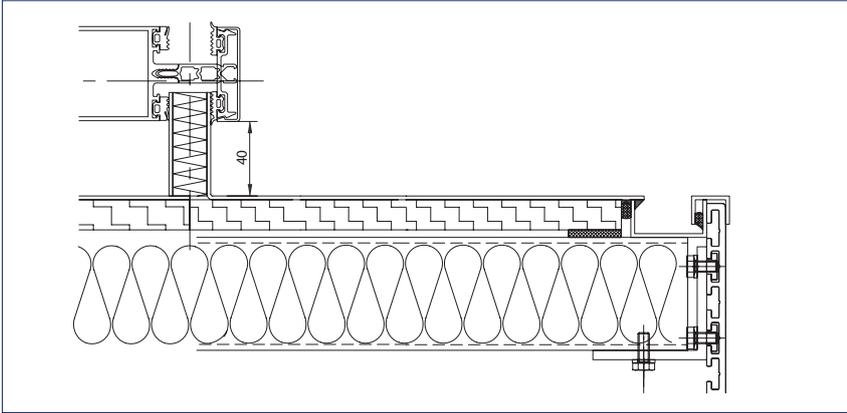
Horizontal section of connection night-time closer



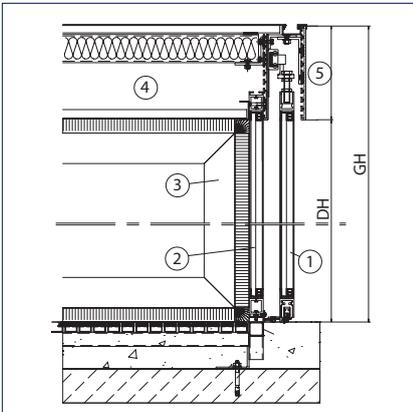
- 1 = Night-time closer
- 2 = Side part
- 3 = System axis
- 4 = Façade

GEZE TSA 325 NT

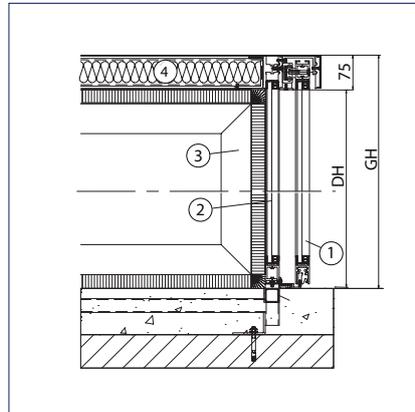
Connection roof top



Vertical section of night-time closer automatic door



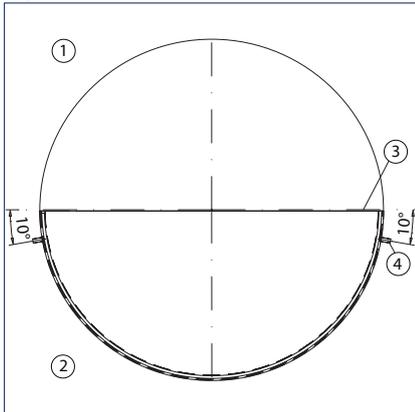
Vertical section of night-time closer manual door



- 1 = Night-time closer
- 2 = Side part
- 3 = Leaf
- 4 = Ceiling construction
- 5 = Canopy height
- GH = Overall height system
- DH = Clear passage height

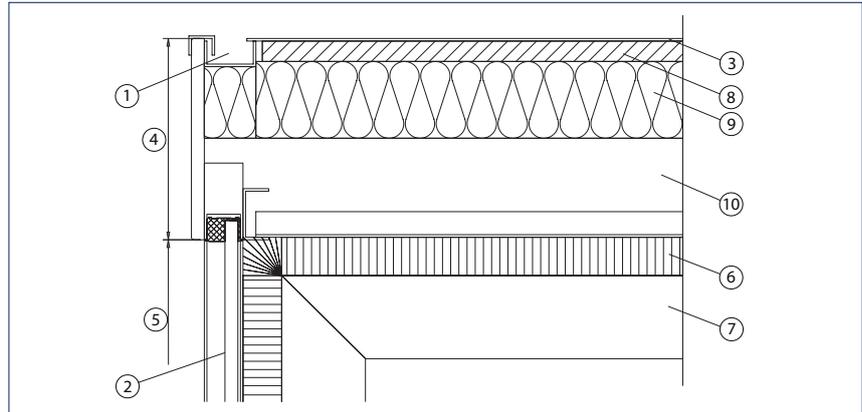
Weather roof

Top view of weather roof



- 1 = Inside
- 2 = Outside
- 3 = Axis
- 4 = Wasserspout

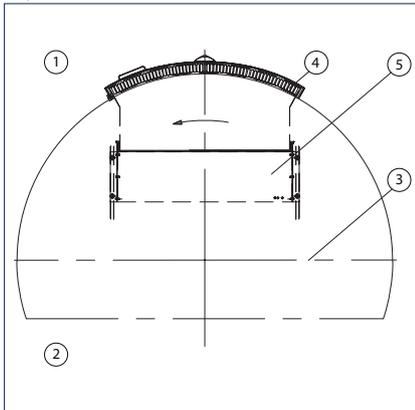
Vertical section of weather roof



- 1 = Drainage
- 2 = Side part
- 3 = Sheeting
- 4 = Canopy height
- 5 = Clear passage height
- 6 = Brush
- 7 = Leaf
- 8 = Wooden board
- 9 = Insulation
- 10 = Ceiling construction

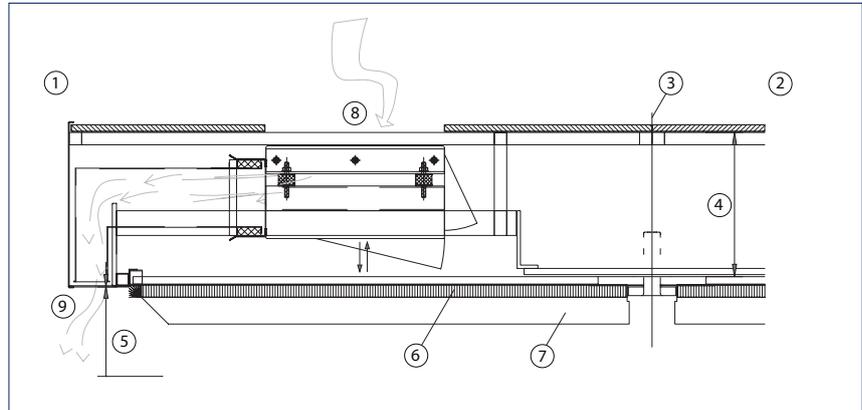
Air curtain

Top view of air curtain



- 1 = Inside
- 2 = Outside
- 3 = Axis
- 4 = Blow-out channel
- 5 = Air curtain

Vertical section of air curtain

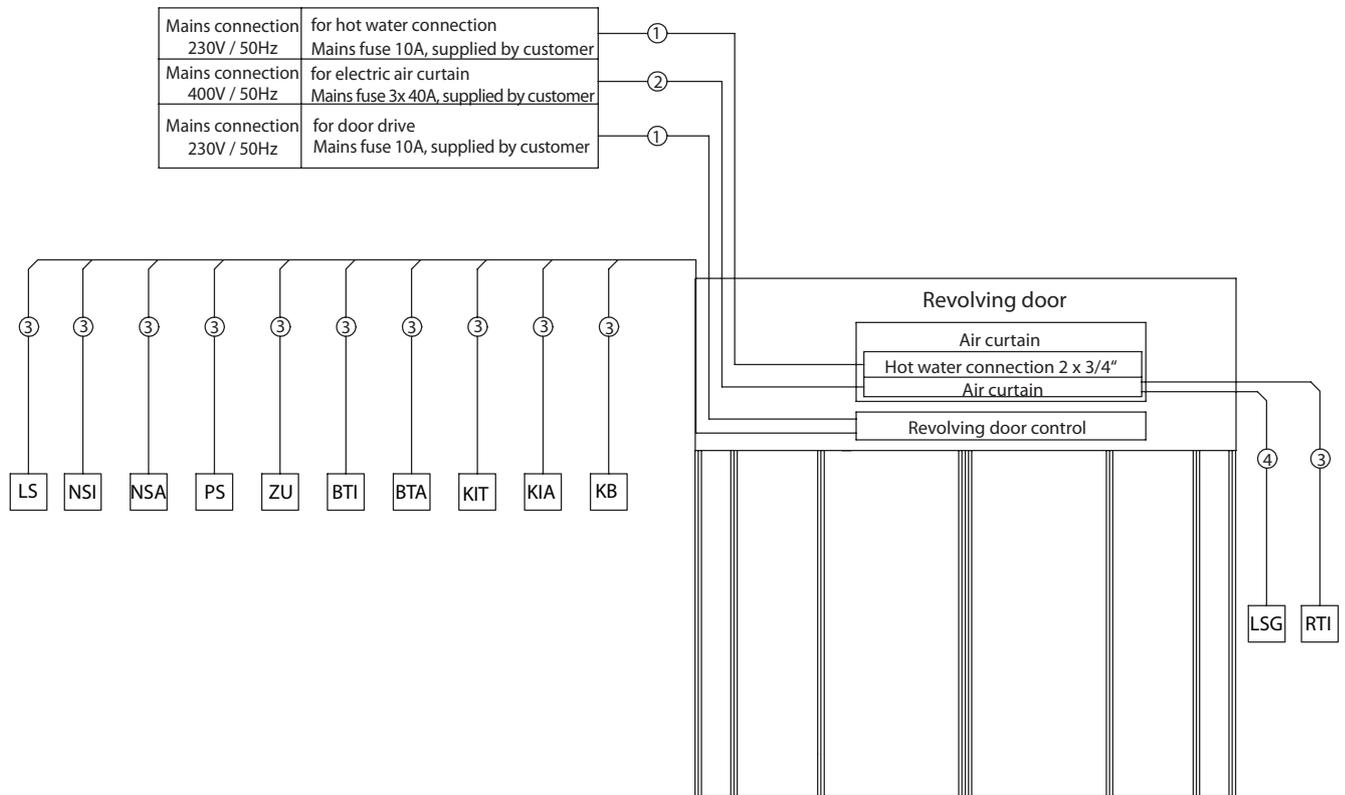


- 1 = Inside
- 2 = Outside
- 3 = Axis
- 4 = Canopy height
- 5 = Clear passage height
- 6 = Brush
- 7 = Leaf
- 8 = Opening for air intake
- 9 = Blow-out opening

GEZE TSA 325 NT

Cable plan TSA 325 NT - Ceiling mounted

For detailed information concerning connection of the activation devices and sensors refer to connection diagram 129846 (English version).



LS	Light switch (by customer)
NSI	Emergency stop switch inside ¹⁾
NSA	Emergency stop switch outside ¹⁾
PS	Programme switch
ZU	Timer
BTI	Button for disabled inside
BTA	Button for disabled outside
KIR	Inner activation device (KI) radar
KAR	Outer activation device (KA) radar
KIT	Inner activation device (KI) button ²⁾
KIA	Outer activation device (KI) button ³⁾
AB	Authorised activation device (KB) ⁴⁾
LSG	Switchgear for air curtain
RTI	Room thermostat in the interior

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

¹⁾ Install emergency stop switches at all access points
²⁾ Several inner activation devices (KI) may be installed
³⁾ Several outer activation devices (KA) may be installed
⁴⁾ Several authorised activation devices (KB) may be installed

Notes

- Wiring in accordance with VDE 0100
- Wiring, connection and commissioning 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 activation devices 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 the 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.

References



Flight Forum, Eindhoven, Netherlands (Photo: Erwin Kamphuis)

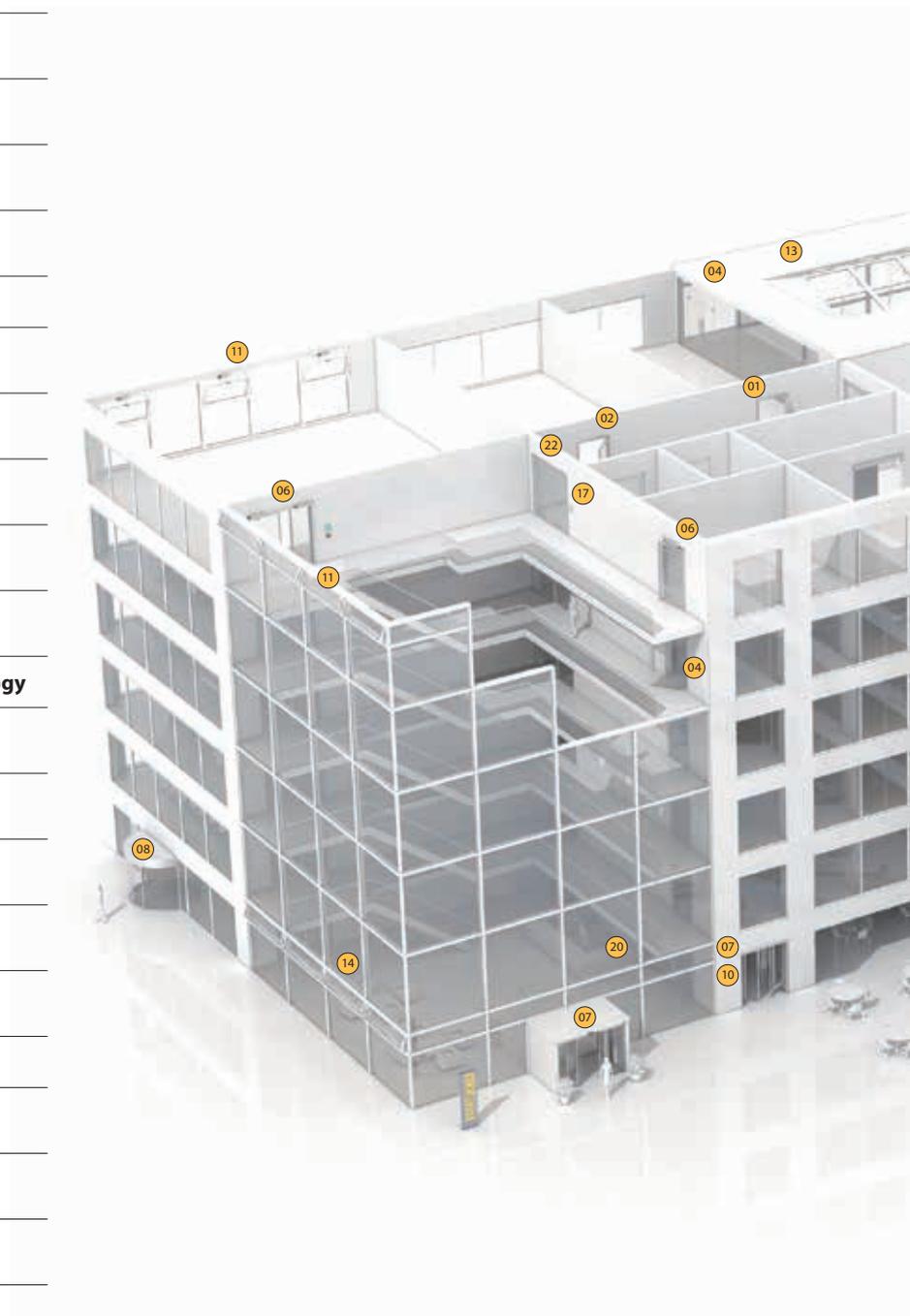


IBM Ehningen, Germany (Photo: Nikolaus Grünwald)

POTENTIAL APPLICATIONS OF GEZE PRODUCTS

You will find more product information in the relevant brochures, see ID numbers.

Door technology	
01	Overhead door closers ID 091593, ID 091594
02	Hold-open systems ID 091593, ID 091594
03	Integrated door closers ID 091609
04	Floor springs and all-glass fittings ID 091607
05	Sliding fitting systems and linear guides ID 123605, ID 000586
Automatic door systems	
06	Swing doors ID 144785
07	Sliding, telescopic and folding doors ID 143639
08	Curved sliding doors ID 135772
09	Revolving doors ID 132050
10	Activation devices and sensors ID 142655
Smoke and heat extraction and window technology	
11	Fanlight opening systems ID 127787
12	Electric opening and locking systems ID 127785, ID 127789
13	Electrical spindle and linear drives ID 127785, ID 127789
14	Electric chain drives ID 127785, ID 127789
15	Smoke and heat extraction systems ID 127785, ID 139075
Safety technology	
16	Emergency exit systems ID 132408
17	Access control systems ID 132158
18	Panic locks ID 132848
19	Electric strikes ID 148666
20	Building management system ID 132408
Glass systems	
21	Manual sliding wall systems (MSW) ID 104377
22	Integrated all-glass systems (IGG) ID 104366



POTENTIAL APPLICATIONS OF GEZE PRODUCTS



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.

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 in to 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.

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