

Automatic Sliding Door System

TSA 360NT / TSA 360NT-FR / TSA 360BO



Musical "Tanz der Vampire", Stuttgart-Möhringen

TSA 360NT



Automatic sliding door system TSA 360NT / TSA 360NT-FR

Sliding door technology for functional comfort – safe and precise

GEZE TSA 360NT and TSA 360NT-FR: intelligent automatic sliding door mechanisms ensure functional precision in entrance areas of buildings such as shopping centres, DIY stores, institutions and hospitals. In other words, in all those places where a lot of people come and go and it does not seem very appropriate to open and close doors manually.

A self-learning micro-chip control system coordinates the smooth and extremely quiet sequence of movements of the door panels. The automatic weight assessment determines the acceleration and deceleration behaviour of the doors. With the help of permanent path measurement the control system is informed about the current door position at any time.

The GEZE sliding door systems TSA 360NT and TSA 360NT-FR are multifunctional in their application, i.e. all common control elements (radar, infrared movement sensors, switch control, code control/card readers and others) can be used.

Maximum safety even at the busiest time:

- ▶ Safety systems such as light barriers and presence sensors
- ▶ Automatic reverse switching when recognising obstacles during closing
- ▶ Soft opening and closing by adjusting the braking force to the weight of the door
- ▶ Closing force limiter



TSA 360NT-FR

Robust drive – perfect function

Functional principle

A maintenance-free high-performance direct current motor with low wear characteristics powers the nearly silent drive system. The power is transmitted via toothed belts, the pulley wheels feature precision bearings. The weight of the door panels is transmitted to the track profiles via four large carrier rollers and the quiet action is supported by two tensioning rollers.

Component structure

The TSA 360NT (NT-FR) has been designed as a fully modular system, completely in aluminium, consisting of track profile, folding hood and side parts:

- ▶ overall height 200 mm or 150 mm
- ▶ overall depth 180 mm
- ▶ plug-in connections throughout
- ▶ the drive components are fitted to the track profile
- ▶ special profiles in anodised aluminium
- ▶ extruded hood profiles

Fitting

- ▶ Robust running track for simple fitting to concrete or brickwork
- ▶ All system components are easy to assemble and dismantle when fitted

Servicing

The TSA 360NT (NT-FR) is very service-friendly due to its clear system design with easily accessible components and fully digital technology, amongst other aspects.

- ▶ Easy servicing due to folding hood
- ▶ Easy access to all system components
- ▶ Plug-in connections
- ▶ Adjusting the system and maintenance diagnosis completely and exclusively via the display on the programme selector
- ▶ Motor, gears and toothed belts are maintenance-free



TSA 360NT / NT-FR

TSA 360BO



Automatic sliding door system TSA 360NT-FR / TSA 360BO

On the safe side – even in emergencies

In order to ensure safe operation on escape and rescue routes, GEZE offers two different drive concepts to suit the respective applications.

Both door systems have been approved in accordance with the Directive for Automatic Sliding Doors on Escape and Rescue Routes – AutSchR.

TSA 360 NT-FR

Redundant power for drive system
During power cuts or when there is a fault, the redundant drive arrangement ensures that the sliding door opens safely and automatically in the operating modes 'Automatic' and 'Shop closing'. When the programme is set to 'Night', the locking mechanism will prevent the door to be opened by unauthorised persons.

Safety functions

Both these concepts feature comprehensive safety functions.

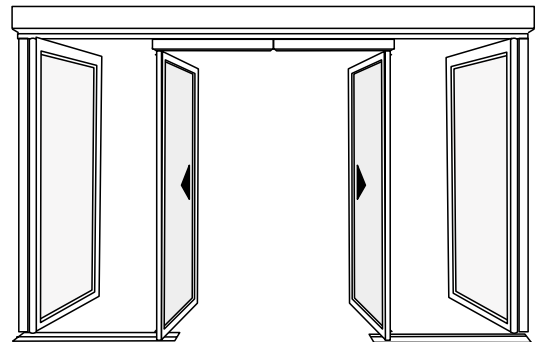
- ▶ Light barrier protection in accordance with ZH 1/494
- ▶ Automatic reversing when the door hits an obstacle during its closing action (the door opens again)
- ▶ Unbolting in an emergency where a bolting mechanism exists
- ▶ Battery pack for closing and opening the door during a power cut and when the programme is set to 'Night'.

TSA 360BO (Break-Out)

The drive system as well as the type of fittings make it possible to swing the door panels open in the direction of the escape route – i.e. basically making it a sliding door system with swing door fittings.

This so-called break-out solution provides the answer for the requirements of rescue routes but also provides the further option, depending on the type of fittings, of changing, for a short time, a small opening width into an opening width that is twice as large.

The TSA 360BO, for example, is suitable for installation in car showrooms. Likewise, this version is a suitable option for doors to public authority offices where special requirements apply.



GEZE TSA 360BO, with two door panels, seen from the inside in the escape situation.

TSA 360NT-FR

The whole range at a glance

Application areas

GEZE sliding door systems of the product group TSA 360 are versatile in application: single or double panel doors, toughened glass panels with thin framing, 22 mm double glazing as well as framed panels or door panels from other materials. Suitable for both internal and external doors.

Colours

The sliding door system TSA 360NT / TSA 360NT-FR and TSA 360BO is available in EV1 as well as all RAL colours.



Technical data

	TSA 360NT	TSA 360NT-FR	TSA 360BO
Opening width, single panel*	700 - 2000 mm	1000 - 2000 mm	900 - 1400 mm
Opening width, double panel*	900 - 3000 mm	1000 - 3000 mm	1000 - 2400 mm
Max. panel weight, single panel	100 kg	100 kg	100 kg
Max. panel weight, double panel	2 x 100 kg	2 x 100 kg	2 x 100 kg
Max. opening speed, double panel with 2 x 100 kg	0,7 m/s	0,7 m/s	0,6 m/s
Max. closing speed	0,4 m/s	0,4 m/s	0,4 m/s
Height of door panel	bis ca. 3000 mm	bis ca. 3000 mm	bis 2500 mm
Door panel options	Double glazed, thin frame Toughened glass, thin frame Door with frame	Double glazed, thin frame Toughened glass, thin frame Door with frame	Double glazed, thin frame
Programme selector	Display programme selector	Display programme selector	Mechanical programme selector

* The above dimensions for opening widths are standard dimensions: special dimensions on request.

Automatic sliding door system TSA 360NT / TSA 360NT-FR

Control systems and features

Precision-controlled automatic sliding door mechanism

Great versatility, easy operation, easy to fit, improved serviceability – the fully digital control system TSA 360 with 16 bit high-performance processor offers a full range of future-orientated features.

Functions in the standard version:

- ▶ Self-learning, plug-and-go facility
- ▶ System is quick to install and start up
- ▶ Programming: parameters (hold-open time, opening speed, etc.) are set using a few function buttons on the programme selector
- ▶ Connectivity for movement sensor, light barrier, fixed-panel safeguarding, electromagnetic locking, battery operation, secured key switch, code/card reader and all known control elements
- ▶ Self-recognition of errors, emergency operation characteristics
- ▶ Different hold-open times for different functions
Programme saved in Flash EPROM, allowing programme updates on site. The hold-open time is adapted automatically to the number of users (can be activated) through to permanent open position.

Options

- ▶ Combining two systems for joint control (lobby function with standard systems)
- ▶ Easy connectivity for access control systems (e.g. GEZE Toplock CTI / CTS) limited secure opening width
- ▶ Connectivity for break-in alarm system with potential-free contact



Display Programme Selector*

Functions available on the programme selector



- ▶ **Permanently open**
The door moves into 'open' position and stays open.



- ▶ **Night**
The movement sensors are deactivated.
The door is locked (optional)



- ▶ **Shop closing time**
The door will only open and close when somebody wants to leave (i.e. go outside).
The outside movement sensor is deactivated while the inside sensor remains active.



- ▶ **Automatic function**
The door will open as soon as the control system is triggered via movement sensor or switch and will close after a time interval which can be set. Light barriers protect the path of travel of the door panels so that users are not at risk.

- ▶ **Reduced opening width**
In the positions 'Automatic', 'Permanent open' and 'Shop closing' the door will only open for part of the maximum opening width; this allows greater control over e.g. the loss of heat. The required opening width can be set with continuous manual adjustment of the door position.

Programme selector versions

The programme selector is available in 80 mm width for installation under plaster or surface-mounted. Accessories: control switch button (elbow activated), same width.

Programme diagnosis/maintenance diagnosis

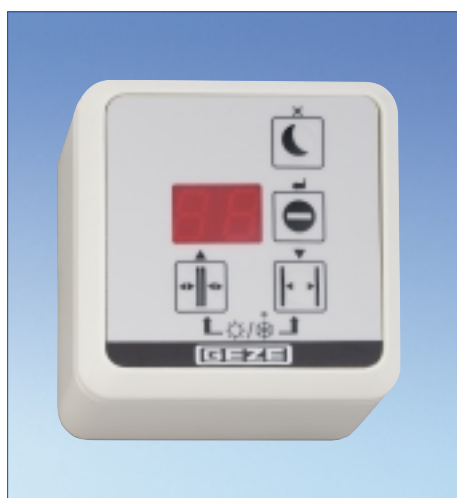
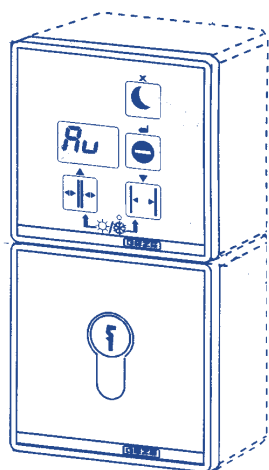
The TSA 360 sliding door control system is programmed exclusively via the programme selector. A 7-digit display shows the operating mode, fault messages, maintenance intervals as well as all functional parameters.

For the TSA 360NT-FR system the key programme selector is mandatory.

Technical characteristics: electrical connection

- ▶ Mains connection 230 V AC + 6% - 10% at 50 Hz or 60 Hz
- ▶ Power input 400 VA
- ▶ **CE** conformity

* The TSA 360BO is operated via a manual programme selector instead of the digital programme selector.



GEZE display programme selector



GEZE key switch

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