



GEZE

SYSTEM INTEGRATION
MADE EASY!

ASHRAE

BACnet™

KNX®

GEZE

Contents

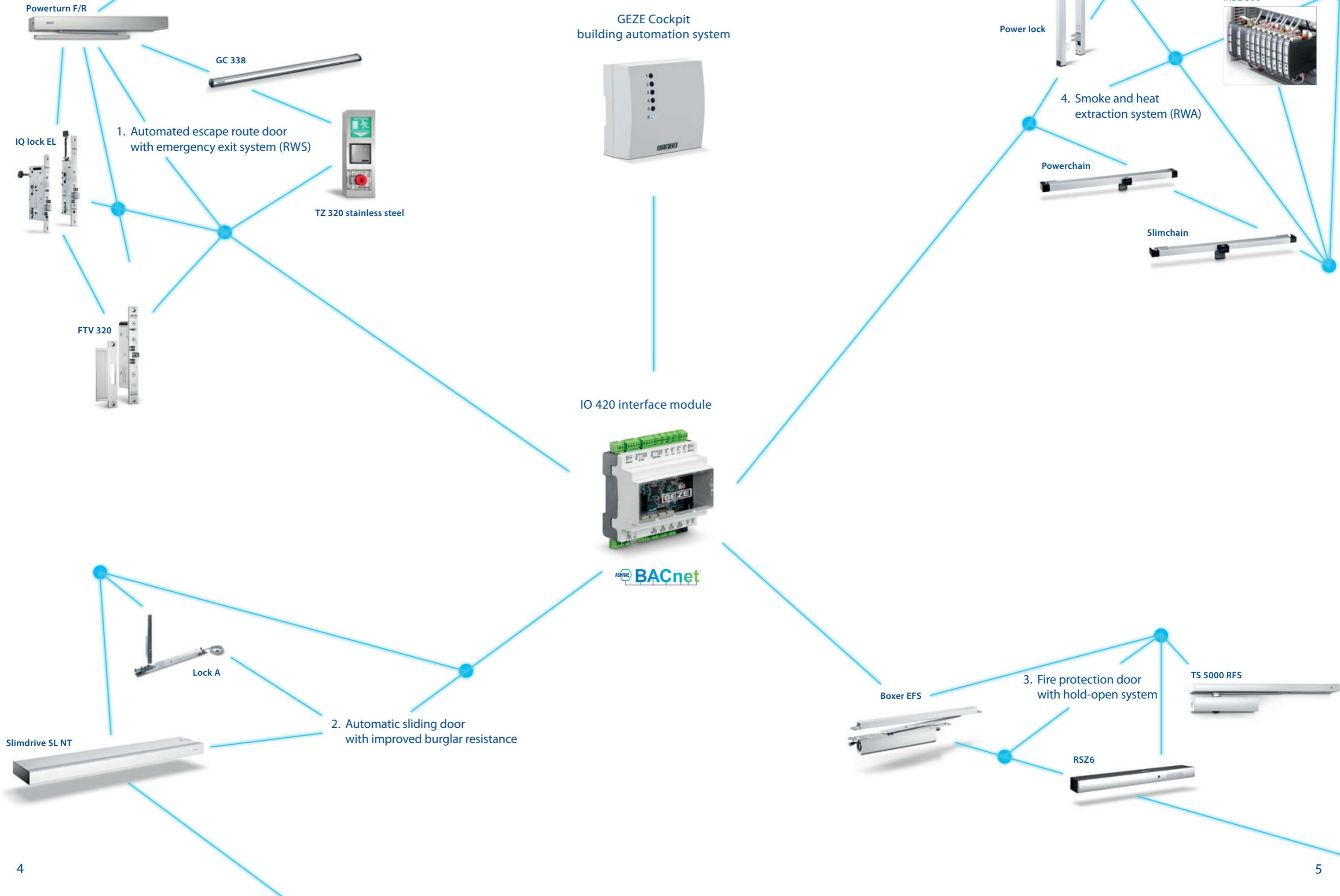
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Imprint:
 GEZE GmbH
 Reinhold-Vöster-Straße 21–29
 71229 Leonberg
 Germany
 Telephone: +49 7152-203-0
 Fax: +49 7152-203-310
 E-mail: info.de@geze.com
 www.geze.com

System integration made easy!

GEZE solutions turn buildings into "Smart Buildings". As a system provider we combine safety systems and drive technology to create innovative, networked and modular solutions: everything from a single source. With our new interface modules, GEZE products can also be integrated into the widely used communication standards of home and building system technology. What's more: our new building automation system GEZE Cockpit makes it possible to control and monitor all connected products reliably.

Whether at airports, in hospitals or in administrative buildings: with multifunctional GEZE products for doors and windows, networked system solutions for safety and comfort in the field of building operation can be created. They guarantee, for example, safe smoke and heat extraction (RWA), close fire sections and clear rescue routes. If the building includes sensitive areas where restricted access is required, GEZE access control systems clear routes in a monitored way.



GEZE Cockpit: intelligent building control for smart technology

Operating buildings efficiently and safely: the new GEZE Cockpit building automation system truly supports that. It allows automated GEZE products from the fields of door, window and safety technology, along with third-party products, to be operated reliably and monitored precisely. GEZE Cockpit can function both as an independent building automation system or be integrated as part of a higher-ranking building control system.

The hardware components of the building control system comprise an embedded system, on which three different GEZE software packages with different performance functionalities can be installed. The data exchange between GEZE Cockpit and the products is via the IO 420 interface module on the open communications protocol BACnet. Be it a PC, tablet or smartphone: the GEZE Cockpit applications are browser-based and can therefore be used on every IP capable end device.

Various applications – to fulfil all needs

Various options are available depending on the software package. The GEZE Cockpit BASIC application allows GEZE Cockpit to be integrated into a higher-ranking building control system so that built-in GEZE products can be operated and monitored; a wide range of configuration software and user data administration are also available. The GEZE Cockpit VISU and VISU+ applications enable the GEZE solution to be used as an independent building automation system. For example the GEZE Cockpit VISU version includes an application that enables you to visualise products – so that their specific mode can be detected and changed at any time and independently of location. With GEZE Cockpit VISU+, alarms, monitoring and an e-mail reporting service can also be configured – thus enabling the control of all products without visual inspection.

At a glance:

- efficient and secure building automation system for GEZE products
- up to 62 GEZE products can be connected per GEZE Cockpit
- secure data exchange via the BACnet communication standard
- certified in accordance with BACnet standard ISO 16484-5
- user-friendly applications, browser-based
- different software packages: GEZE Cockpit BASIC, VISU and VISU+
- can be integrated as surface-mounted or top hat rail mounting



IO 420 interface module: the networker for building management systems

With the GEZE IO 420 interface module, GEZE products from the automatic door systems, window technology, smoke and heat extraction systems (RWA), and safety technology segments can be integrated quickly and easily into network solutions with BACnet and networked with one another through BACnet MS/TP. This intelligent module enables central visualisation and control of all automatic door systems via the building management system. In this way, monitoring and setting the modes of operation of doors, emergency exit protection systems and windows does not only save time, but it also optimises the energy balance sheet and increases security.



At a glance:

- access to the future-oriented BACnet world
- standardised networking of all GEZE automation solutions
- easy integration in building management systems
- MS/TP interface
- BACnet device profile B-ASC
- certified in accordance with the BACnet standard ISO 16484-6

1. Automated escape route door with emergency exit system (RWS)

The IO 420 interface module makes it possible to release emergency exit systems (RWS), such as the TZ 320 door control unit, via a building management system. Door control units can be monitored and report errors and alarm statuses. In case of danger, electric locks and swing door drives are controlled automatically and emergency exit routes are activated – for safe and efficient building management.

TZ 320 stainless steel: elegant door control unit

- controls and monitors one or more electrically locked escape route doors
- features a high-quality stainless steel cover
- protected against vandalism and exceptionally stable
- removal of front plate will trigger the sabotage alarm
- simple installation using only four screws
- for surface or flush mounting
- simple retrofitting of lighting etc.
- approved in the test certificates of the GEZE TZ 320 and TZ 300 door control units



Powerturn F/R: strong connection

- drive for single and double-leaf swing doors
- approved for heavy fire protection doors
- smoke control unit invisibly integrated into the cover
- Smart swing function for easy manual passage
- opening and closing even under adverse conditions (wind, suction, etc.)
- quick and easy installation
- door leaf widths of up to 1,600 mm or leaf weights of up to 600 kg
- overall height of just 7 cm



GC 338: slim, efficient safety sensor

- secures automatic swing and revolving doors thanks to sensor technology
- offers an extremely slim, space-saving profile
- can be combined with all GEZE swing door drives for leaf widths of up to 1,500 mm
- “one button commissioning” and automatic learning function
- quick installation thanks to installation system without any tools



IQ lock EL: electronic motor lock

- motor lock for single-leaf swing doors
- cross-latch construction for quick, jarring-free locking
- different modes of operation (e.g. night-time operation, permanently open, etc.)
- potential-free contact evaluation
- routing to a monitoring system



FTV 320: secure unlocking – safe escape route

- electric escape door lock combined with TZ 320 or TZ 300 door control units
- secures escape routes against unauthorised access
- strong hold of over 5,000 N thanks to three-latch-design
- reliable unlocking in case of danger, even under heavy preload
- vandalism protection: reporting of sabotage attempts
- versatile installation options
- quick and easy installation



2. Automatic sliding door with improved burglar resistance

GEZE automatic sliding door systems open and close entrances reliably and provide barrier-free access. The Lock A automatic hook bolt lock, fully integrated into the main closing edge, provides for a secure lock as required. IO 420 monitors and controls the automatic components via a building management system.

Slimdrive SL NT: sleek all-rounder

- automatic sliding door system, ideal for glass façades
- low overall height of only seven centimetres
- moves door leaf weights of up to 125 kg
- easy commissioning, maintenance and diagnosis
- easy installation thanks to modular design and new track

Lock A: a secure lock

- fast, secure and automatic locking and unlocking
- high-level security thanks to locking on the main closing edge
- virtually invisible installation, concealed by the leaf profile
- without additional composition or soil preparation
- parameters can easily be set and control is made easy via a sliding door system



3. Fire protection door with hold-open system

Fire protection doors which are held open electrically with a hold-open system for barrier-free use can be closed from a central point in case of emergency thanks to the IO 420. This helps to reliably prevent the spread of fire.

Boxer EFS: integrated free swing door closer

- closing force can be variably adjusted from EN 4 to EN 6
- comfort hold-open function at the end of the free swing area as standard
- flexible spindle extension by 4 or 8 mm possible using accessories
- reduced inventory costs as DIN left and DIN right lever can be used
- simple door processing thanks to compact installation dimensions



TS 5000 RFS: accessible fire protection doors

- variably adjustable closing force from EN 3 to EN 6 (up to 1,400 mm leaf width)
- standard comfort hold-open function at the end of the free swing area
- discreet, easy to install electrical connection
- simple cable connection after door closer installation
- easy retrofitting of the comfort hold-open function



RSZ6: reliable smoke switch control unit

- detects fire and smoke at an early stage
- controls hold-open mechanisms for fire and smoke-resistant doors
- can be combined with door closers with integrated hold-open device and hold-open magnet
- additional smoke switches can be connected



4. Smoke and heat extraction system (RWA)

The MBZ 300 modular RWA control unit takes over control of the smoke and heat extraction system. Combined with the new IO 420 BACnet interface module, MBZ 300 can be integrated into the building management system and implement a wide range of ventilation scenarios.

MBZ 300: flexible control unit

- bus control unit for RWA and daily ventilation
- will take over the power supply to all connected opening systems in RWA situations and ensure their coordination and monitoring
- flexible modular design, can easily be extended
- mapping of even complex RWA systems with PC software
- can be configured ex works as an individual solution
- can be used as a central control unit or in the form of multiple networked control units



Slimchain: slim all-rounder

- compact chain drive for unobtrusive façade design
- suitable for natural ventilation, RWA and SHEVs
- different stroke versions of 300 mm, 500 mm and 800 mm
- individual adjustment of drive stroke and speeds
- easy synchronisation of up to four drives without an external control unit



Powerchain: genuine power package

- strong chain drive for heavy window façades, roof windows and skylights
- suitable for natural ventilation, RWA and SHEVs
- achieves high opening speeds in RWA situations
- different stroke versions of 600 mm, 800 mm and 1,200 mm
- individual adjustment of drive stroke and speeds
- easy synchronisation of up to four drives without an external control unit



Power lock: large-scale locking

- Locking drive for large windows
- Can be used for frame and leaf installation
- Flexible retro-fitting with the new chain and spindle drives
- Can be used with Slimchain, Powerchain and the E 250 NT spindle drive in SHEVs
- Standard central locks possible
- Simple commissioning and automatic sequence control



Intelligent building automation in the BACnet world via the IO 420 interface module

Building-specific solution for modern building management system

Project:

Construction of a new office complex

Focus:

- building automation system with intelligent control
- interoperability between automated trades

Requirement:

- monitoring and control of escape doors via a building management system
- changing of modes of operation and status monitoring of automatic door systems
- activation of hold-open systems
- controlling the flow of people into buildings – as needed (e.g. for events)
- status monitoring of the RWA system and activation of the multifunctional RWA fresh air supply door

GEZE solution:

- connection of the installed GEZE products (TZ 320 door control unit, swing door drives, revolving doors, motor locks, hold-open systems) via the IO 420 interface module on BACnet MS/TP
- integration of third-party products such as high-speed doors



1. Automated entrance door with improved burglar resistance



GEZE SecuLogic GCER 100



Ecturn Inside

Building control
Elsner WS 1000 Style



KNX display
Corlo Touch mit WLAN



GEZE IQ box KNX



2. Automated ventilation window

TOF/Spot
time of flight measurement
(AIR)



Slimchain



GEZE IQ box KNX: direct dialogue between windows and components

A natural, energy-efficient supply of fresh air whenever needed – entirely on demand and under control at all times: the new GEZE IQ box KNX interface module allows GEZE IQ windowdrives to be directly incorporated in KNX building systems. Thus enabling a dialogue with other KNX-enabled components, such as push buttons and sensors. In contrast to simple switch contacts, the IQ box KNX uses the intelligence of the window drives and after performing a 'command' reports the mode of a window to the KNX building system or building management system. More detailed window information is also made available via the module, such as the precise opening width.



At a glance:

- precise positional activation of GEZE IQ windowdrives
- safe integration in the KNX world
- easy and time-saving installation and commissioning
- scalable system – depending on the needs
- reliable status report from every automated window
- more efficient window monitoring



1. Automated entrance door with improved burglar resistance

Outstanding protection against burglary, controlled access and comfortable use: multifunctional door systems are also becoming increasingly important in the entrance areas of private houses or smaller commercial buildings. GEZE offers solutions that are fully tailored to the individual need. For example with the ECTurn Inside automatic swing door drive, a multi-point locking system and the new SecuLogic GCER 100 stand-alone access control system. This can be combined with all motor locks and multi-point locking systems on front doors. It also fits perfectly into the world of GEZE system products and controls swing and sliding door drives, electric strikes, panic locks and emergency exit control.

ECTurn Inside: barrier-free doors

- compact automatic swing door drive
- flexible integration in various door leaves or door frames
- operation in low-energy and automatic mode
- for door leaf widths of up to 1,100 mm or leaf weights of up to 125 kg
- optional rechargeable battery for continued operation in the event of a power failure
- additional sensors can be connected

GEZE SecuLogic GCER 100: keyless access control

- access control system for smaller buildings and up to 100 persons
- use of ID cards, key rings ("tags") and all standard car keys possible
- managed using a master card
- encrypted data transmission for high data security
- straightforward commissioning
- inside and outside use



2. Automated ventilation window

The GEZE solutions for ventilation and indoor climate control complete the comprehensive range of drive systems for daily ventilation, as well as the GEZE RWA systems and can be optimally combined with these. Via a KNX interface of the indoor climate control, this control can be integrated into an overall KNX system, and existing KNX devices can be used for its activation. GEZE solutions offer building operators a variety of automation, comfort and safety functions.

Slimchain: slim all-rounder

- compact chain drive for unobtrusive façade design
- suitable for natural ventilation, RWA and SHEVs
- different stroke versions of 300 mm, 500 mm and 800 mm
- individual adjustment of drive stroke and speeds
- easy synchronisation of up to four drives without an external control unit



TOF/Spot time of flight measurement (AIR): compact unit

- self-monitoring compact sensor
- precise light beam for protection
- hides certain detection areas
- suitable for installing in façade, wall or ceiling elements.
- inside and outside use (protection rating IP65)
- dimensions of detection field approx. 40 x 40 mm at a distance of 2 m
- maximum distance to background: 6 m
- minimum distance to background: 0.2 m



Practical example: networked system solutions by GEZE

Building-specific solution for automated windows with IQ box KNX

Project:

Renovation of a large office complex

Focus:

High-quality, environmentally friendly building management system

Requirement:

- automation of manual windows
- automated night-time back cooling
- ventilation at the touch of a button
- energy-efficient control of heating and ventilated ceiling, depending on the window position
- continued use of available manual fittings

GEZE solution:

- special window automation solution thanks to the development of a drive which took over the function of the previously manual crank of the GEZE F 1200 window fittings
- integration of the GEZE drives into the building management system via IQ box KNX simultaneously enables the intelligent control of heating and air conditioning



A4000 vector electric strike: the perfect fit for comfort and design

Electric strikes are an essential aid on highly frequented entrance doors. The A4000 vector electric strikes from IST Systems, a member of the GEZE Group, are an optimum solution here. Their particular strengths include almost silent opening with direct current – even under heavy preload and without additional electric. With the typical small size expected from IST, A4000 vector electric strikes give door manufacturers, installation companies, architects, and planners new design options and greater planning security. The versions with optional I.S.T.Kingfix latch guide support discreet door designs. Cutaways on the door profile can be reduced to a minimum. This means that door seals are not compromised and that the A4000 I.S.T.Kingfix is an optimal component when increased heat and sound proofing are needed. The dimensions of the I.S.T.Kingfix latch guide are compatible with standard electric strikes and strike plates – guaranteeing simple retrofitting.



At a glance:

- high retention forces of 5,000 N
- symmetrical configuration: installation
DIN left/DIN right as well as vertical or horizontal
- integrated bipolar EMC protective diodes
- very quiet opening under preload
- small dimensions (typical of IST)
- can be combined with standard strike plates
- large operating voltage due to twin coil technology
- numerous versions to meet different needs



Services from GEZE: quick, efficient, reliable

Customer satisfaction takes top priority for GEZE. From initial consultancy through individual solution-finding to commissioning, regular after-sales service and training: services from GEZE guarantee reliable planning possibilities and reduce your day-to-day effort and costs.

Data packages for LogiKal (Orgadata): efficiency for planning

When planning, calculating and building façades, planners and metal processors can also access GEZE product data. The Orgadata software solution LogiKal optimises planning and manufacturing processes and saves time and costs. At the click of a mouse, the technical details of GEZE products can easily be included in the calculation and planning as package solutions and integrated in further manufacturing processes. Special requests are no problem either. For example, even complex systems can be planned and produced in a simple and technically perfect way.

At a glance:

- optimisation of planning and production processes
- flexible choice and composition of GEZE products
- broad scope of functions and simple maintenance
- efficient and precise planning and production of solutions to match requests

GEZE Customer Solutions: creative freedom with special solutions

With GEZE Customer Solutions, customers benefit from sophisticated, customised and special solutions, which offer the best-possible safety and comfort. And all this from a single source. A central contact person is available for all questions from the initial idea right up to commissioning; irrespective of whether the questions refer to special building requests, applications in terms of traffic or solutions for machines and systems. GEZE customised solutions provide everything you need.

At a glance:

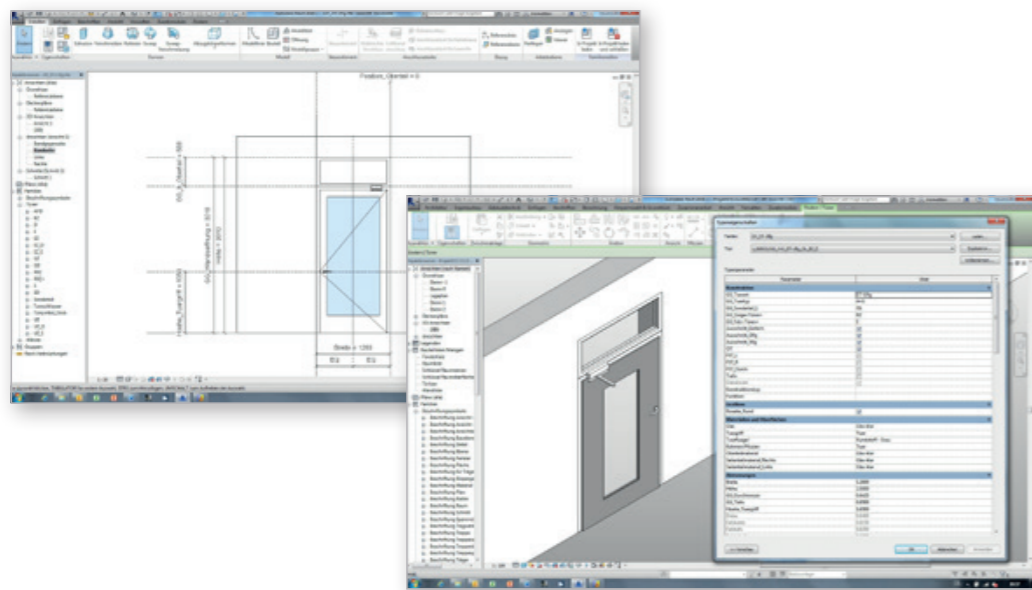
- sound advice for individual requests, national and international service
- compilation of customised, cross-product (special) solutions e.g. for buildings, ships, trains, transport vehicles or machines
- coordination of the interfaces in case of specific requests
- one central contact person to answer all your questions



Building Information Modeling (BIM): five elements for end-to-end door planning

Greater planning security with little effort: all the doors in a building can be planned extremely easily using GEZE BIM objects. Because the GEZE solution enables everything to be displayed using just five multifunctional doors – from swing and sliding doors through to revolving doors. GEZE BIM objects are compatible with the most common CAD programmes, so that planners can generate their door list directly.

Behind Building Information Modeling (BIM) is a method of innovative building planning that uses a digital building model – from planning and implementation through to operation and possible demolition. BIM allows buildings to be designed, modelled, optimised and simulated. During this process, all relevant building data is recorded, combined and networked. And all that in just one 3D model which all the participants work on jointly.



At a glance:

- all door solutions generated with just five door types
- simple and easy to use
- can be used flexibly in every phase of the project
- complete depiction possible in 3D
- complete list of elements at the push of a button
- compatible with the most common CAD programs
- can be used offline
- better exchange of information among all participants
- increased productivity
- earlier error detection and rectification
- more planning and cost security

