



WE MAGNETISE THE WORLD



**HAHN CQ<sup>LINE</sup>**

Electromagnetic door holding systems



INDUSTRIAL MAGNETIC SYSTEMS



# We develop solutions!

Kendrion develops, manufactures and markets high-quality electromagnetic systems and components for industrial and automotive applications. For over a century, we have been engineering precision parts for the world's leading innovators in passenger cars, commercial vehicles and industrial applications.

As a leading technology pioneer, Kendrion invents, designs and manufactures complex components and customised systems as well as local solutions on demand. We are committed to the engineering challenges of tomorrow and taking responsibility for how we source, manufacture and conduct business is embedded into our culture of innovation. Rooted in Germany, headquartered in the Netherlands and listed on the Amsterdam stock exchange, Kendrion`s expertise extends across Europe to the Americas and Asia.

Created with passion and engineered with precision.

In the business unit **Industrial Magnetic Systems** (IMS) the focus lies on electromagnetic actuators and mecha- tronic assemblies for applications in power engineering, safety engineering, machine building, automation technology and other industries. With the experience of our traditional brands Binder, Neue Hahn Magnet and Thoma Magnettechnik we are successful in our markets as an industry expert with a high technological competence.

We offer you both customer-specific and standardised products. Our assemblies are based on powerful and reliable single-stroke, holding, locking, spreader, control, rotary, vibratory solenoids and solenoid valves.

**We always think in terms of solutions.**

Our strength lies in new developments for our customers. Our engineers are specialists for innovative products with optimum technical properties. Furthermore, we develop mechanical assemblies, modern drive electronics and sensor systems to your requirements.

Our products are manufactured in Germany at the parent companies Donaueschingen and Engelswies as well as in the USA, China and Romania. This ensures efficient project management and a needs-oriented delivery for our internationally operating customers.

By means of segmented production areas we can implement both small quantities and large series with an optimum degree of automation.

We guarantee top quality. All products are tested and developed in compliance with the norm DIN VDE 0580 for electromagnetic devices and components or according to industry-specific standards of our customers. In many cases our products are tested and certified by external associations, among others according to the CSA, VdS and ATEX guidelines. Our quality management system is certified according to DIN EN ISO 9001, and our environmental management system fulfils the norm ISO 14001.

With our subsidiaries in Austria, Italy, the USA, China and our worldwide distribution network we are your ideal partner on site.

**Kendrion – We magnetise the world**



## HAHN D.C Door Retainer Magnets CQ<sup>LINE</sup>

D.C Door Retainer Magnets of the HAHN CQ<sup>Line</sup> are primarily used as hold open devices for fire protection exclusions (fire protection swing doors, rolling gates, fire shutters with self locking devices).The fire door is normally held in the open state to allow easy passage and access through busy corridors. Controlled by a fire detection or smoke protection control unit, the door retainer releases the door when the power is cut and the over-door closer quickly closes the fire door automatically to prevent the spread of fire and smoke throughout the building.

The door retainer can be mounted to the wall, to the floor or to the ceiling behind the door. Due to the large product range almost any requirement profile can be met. The counterpart is the armature (keeper plate) which is mounted to the door. Both standard models and models that allow for flexible adjustment or even spring damped models are available.

Kendrion has been manufacturing door holding solenoids since the 1960's and is considered as one of the innovators of this type of retaining device. Over the years, continual innovation in design and technology has led to a leading position. Kendrion stands for quality, efficiency and user-friendliness. Quality in fire protection can save lives and is considered as a primary requirement to installation. Depending upon the line our door holding magnets are quality tested by the VdS in Cologne according to the regulations of the German institute of Structural Engineering ("Deutsches Institut fur Bautechnik") resp. tested according to the Eurocode ("Euronorm") EN1155 and EN14637.

Apart from the classic application door holding solenoids can also be used as locking devices for standard, house or business doors – wherever a door needs to be kept open safely as a passageway.

EN Classification:	Position 1 = Range of Application	Public
35 <sup>3</sup> <sub>5</sub> 113	Position 2 = Test Cycles	50,000
	Position 3 = Locking Size	Door Closer 3-5
	Position 4 = Suitability of Application	Fire-/Smoke Protection Doors
	Position 5 = Safety	Only 1 class defined
	Position 6 = Resistance to Corrosion	High Resistance

Product portfolio

HAHN CQ<sup>SAFE</sup>



Technical Details

Market	<ul style="list-style-type: none"><li>Germany: In terms of approvals concerning building inspection</li><li>World: For special requirements in terms of quality and installation (protection class, versions, etc.)</li></ul>
Features	<ul style="list-style-type: none"><li>Vacuum cast coil</li><li>VdS quality-tested according to EN1155 &amp; EN14637</li><li>Optimized design and quality</li></ul>
Diodes	<ul style="list-style-type: none"><li>Reverse polarity protection diode and spark supressing diode</li></ul>
Diameters of the base magnet	<ul style="list-style-type: none"><li>42 mm, 50 mm, 63 mm, 70 mm</li></ul>
Supply	<ul style="list-style-type: none"><li>24 V DC</li></ul>
Holding force	<ul style="list-style-type: none"><li>300 N – 1568 N</li></ul>
Power	<ul style="list-style-type: none"><li>1,5 Watt – 3 Watt</li></ul>
Keeper Plate	<ul style="list-style-type: none"><li>Choise available</li></ul>

HAHN CQ<sup>STANDARD</sup>



Technical Details

Market	<ul style="list-style-type: none"><li>Worldwide</li></ul>
Features	<ul style="list-style-type: none"><li>Pressed coil</li><li>Testet according to EN1155 &amp; EN14637</li><li>Cost-optimized and -oriented</li></ul>
Diodes	<ul style="list-style-type: none"><li>Reverse polarity protection diode and spark supressing diode</li></ul>
Diameters of the base magnet	<ul style="list-style-type: none"><li>48 mm, 63 mm</li></ul>
Supply	<ul style="list-style-type: none"><li>24 V DC, 48 V DC, 230 V AC</li></ul>
Holding force	<ul style="list-style-type: none"><li>200 N, 400 N resp. 850 N</li></ul>
Power	<ul style="list-style-type: none"><li>1,6 Watt for size 48 mm</li><li>2,2 Watt for size 63 mm</li></ul>
Keeper Plate	<ul style="list-style-type: none"><li>Flexible angle adjustment version included in delivery</li></ul>

Generally all magnets have at least protection class IP42. The base magnets of the CQ<sup>SAFE</sup> lines have the protection class IP65, the base magnets of the CQ<sup>STANDARD</sup> lines the protection class IP54. Beyond the standard versions and with a special product range of more than 100 versions we can also meet requirements such as EX-protected, versions for ships, etc.

Kendrion, your expert for  
Electromagnetic door holding systems



- Largest product portfolio in the field of electromagnetic door holders
- More than 50 years R&D experience with many renowned companies
- Constant further development and compliance of currently valid EU standards thanks to the close cooperation with testing and certification institutes.
- Worldwide availability through subsidiaries or sales partners



D.C Door Retainer Magnets  
Series HAHN CQ<sup>SAFE</sup>

The types of the HAHN CQ<sup>SAFE</sup> line are generally vacuum-potted with casting resin, the basic device having protection class IP65. The magnets are quality-tested according to the respective VdS-numbers and are therefore subject to sample taking by the VdS twice a year. Furthermore, the installation sizes are tested according to EN1155 and EN14637 in compliance with the European regulations. The individual production steps are subject to a monitored, quality-oriented production process.

All models (with the partial exception of magnets with feedback) are equipped with two integrated diodes (spark supressing and reverse polarity protection).



Base Magnet without Mounting Plate

Technical Details

Type	Diameter x Hight [mm]	Voltage [V]	Force [N]	Rated power [W]	Duty cycle [%]	VDS-No.
GT42R001	42 x 25	24	300	1.5	100	23055
GT50R001	50 x 30	24	490	1.5	100	23097
GT63R001	63 x 30	24	700	1.5	100	23049
GT70R001	70 x 35	24	1372	1.5	100	23098

Electrical Connection

- .01 = free strands, with inverse-polarity protection
- .11 = terminal clamp, inverse-polarity protection
- .31 = norm connector

Base Magnet with Mounting Plate



Technical Details

Type	Dimension Mounting Plate [mm]	Diameter x Hight [mm]	Voltage [V]	Force [N]	Rated power [W]	Duty cycle [%]	VDS-No.
GT42R002	55 x 55 x 5	42 x 25	24	300	1.5	100	23055
GT50R002	55 x 55 x 5	50 x 30	24	490	1.5	100	23097
GT63R002	75 x 75 x 8	63 x 30	24	700	1.5	100	23049
GT70R002	75 x 75 x 8	70 x 35	24	1372	1.5	100	23098

Electrical Connection

- .01 = free strands, with inverse-polarity protection
- .11 = terminal clamp, inverse-polarity protection
- .31 = norm connector

Base Magnet on Steel Mounting Plate with Clamp

In this series the base manget is mounted on a steel mounting plate.  
The serial electrical connection is a two-pole terminal clamp on the plate allowing for an easy installation. These types are primarily used in locking devices at sliding gates.



Technical Details

Type	Dimension Mounting Plate [mm]	Diameter x Hight [mm]	Voltage [V]	Force [N]	Rated power [W]	Duty cycle [%]	VDS-No.
GT40R018	73 x 45 x 3	42 x 25	24	300	1,8	100	23043
GT50R153	93 x 65 x 3	50 x 30	24	490	1,5	100	23097
GT60R018	93 x 65 x 3	63 x 23	24	686	1,6	100	23099
GT60R018	93 x 65 x 3	60 x 23	24	800	2,1	100	23070

In-Wall

This series is suitable for mounting behind the door in customary flush-mounted sockets.  
This allows for a low installation height and an inconspicuous, elegant appearance.



Technical Details

Type	Dimensions [mm]	Voltage [V]	Force [N]	Rated power [W]	Duty cycle [%]	VDS-No.
GT50R090	85 x 85 x 30	24	490	1,5	100	23097

### On-Wall

This series is suitable for wall-mounting.  
The use of the plastic PA6 with a 30% portion of fibre glass guarantees high stability. A manual release button is integrated. The electrical connection either from the rear side or through robust cable connections allowing for a later installation.

Model GT. .R061 = Closed housing; Connection rear side  
Model GT. .R062 = 2 cable connections PG9

#### Technical Details

Type	Dimensions [mm]	Voltage [V]	Force [N]	Rated power [W]	Duty cycle [%]	VDS-No.
GT50R06X	105 x 85 x 37,5	24	490	1.5	100	23097
GT63R06X	105 x 85 x 37,5	24	700	1.5	100	23049
GT70R06X	105 x 85 x 42,5	24	1372	1.5	100	23098

### Ground

This magnet is equipped with ground bracket. Alternatively, in the case of an installation size of 50mm, a different version in an elegant aluminium housing for highest visual and mechanical requirements (e.g. protection against vandalism) is available.

#### Technical Details

Type	Dimensions [mm]	Voltage [V]	Force [N]	Rated power [W]	Duty cycle [%]	VDS-No.	Housing
GT50R060	121 x 121 x 86	24	490	1.5	100	23097	PA6 30%GF
GT63R060	121 x 121 x 86	24	700	1.5	100	23049	PA6 30%GF
GT70R060	121 x 121 x 86	24	1372	1.5	100	23098	PA6 30%GF
GT50R020	109 x 121 x 86	24	490	1.5	100	23097	Aluminium

### Aluminium Swivel Head

This series is applicable for floor, ceiling and wall-mounting.  
The customer can easily turn the anodized aluminium swivel head from wall to floor resp. ceiling mounting. The tube can be shortened to 110 resp. 145 mm so that almost all distances between door and wall can be bridged.

#### Technical Details

Type	Dimension Mounting Plate [mm]	Wall Mounting Length [mm]	Floor and Ceiling Mounting Length [mm]	Voltage [V]	Force [N]	Rated power [W]	Duty cycle [%]	VDS-No.
GT50R089	90 x 80	185	150	24	490	1.5	100	23097
GT50R089	90 x 80	335	300	24	490	1.5	100	23097
GT50R089	90 x 80	485	450	24	490	1.5	100	23097

### Plastic Swivel Head

This series is applicable for floor, ceiling and wall-mounting.  
The customer can easily turn the plastic swivel head.

#### Technical Details

Type	Dimension Mounting Plate [mm]	Wall Mounting Length [mm]	Floor and Ceiling Mounting Length [mm]	Voltage [V]	Force [N]	Rated power [W]	Duty cycle [%]	VDS-No.
GT50R079	90 x 80	175	150	24	490	1.5	100	23097
GT50R079	90 x 80	325	300	24	490	1.5	100	23097
GT50R079	90 x 80	475	450	24	490	1.5	100	23097

### Distance Tube, Wall Mounting

This series is designed exclusively for wall mounting.  
Due to the wide product range distances form 65 mm to 450 mm can be realized.  
With magnet diameters of 63 and 70 mm also suitable for heavy doors!

#### Technical Details

Type	Dimension Mounting Plate [mm]	Dimension Wall Mounting Länge [mm]	Voltage [V]	Force [N]	Rated power [W]	Duty cycle [%]	VDS-No.
GT50R081	70 x 70	65	24	490	1.5	100	23097
GT50R109	90 x 80	150	24	490	1.5	100	23097
GT63R019	90 x 80	150	24	700	1.5	100	23049
GT63R019	90 x 80	300	24	700	1.5	100	23049
GT63R019	90 x 80	450	24	700	1.5	100	23049
GT70R019	90 x 80	150	24	1372	1.5	100	23098
GT70R019	90 x 80	300	24	1372	1.5	100	23098
GT70R019	90 x 80	450	24	1372	1.5	100	23098

### Explosion-Proof Model

The Explosion-Proof Models meet the following requirements :

- Device group II
- Decive category 2
- Encapsulation
- Maximum surface temperature 85°C

#### Product Features

- Connection within cast housing via connector clamps
- Approved for 24 V DC, max. current 325 mA
- Range of application: zones 1, 2

For EX-protected magnets only approved and chemically nickel-plated keeper plates may be used, according to the standard types, but with designations GT..R105, GT..R106, GT..R107, because chemically nickel-plated.

#### Technical Details

TYPE	Dimension [mm]	Voltage [V]	Force [N]	Rated power [W]	Duty cycle [%]	VDS-No.
GT50R050	130 x 117 x 106	24	588	3.0	100	23103
GT70R050	130 x 117 x 106	24	1568	3.0	100	23104



### Ship Model

#### Product Features

- Certificate: DNV GL: No. TAE00002JD
- For installation on ships or outdoor
- Protection Class IP56 according to IEC60529

#### Technical Details

Type	Dimension [mm]	Voltage [V]	Force [N]	Rated power [W]	Duty cycle [%]	VDS-No.
GT50R038	236 x 95 x 60	24	490	1.5	100	23097
GT70R022	236 x 95 x 60	24	1372	1.5	100	23098



### Feedback for Position Monitoring

In this series the function of the magnet (door open or closed) is monitored by a micro-switch. This variant is particularly used in safety systems.

#### Technical Details

Type	Dimension [mm]	Voltage [V]	Force [N]	Rated power [W]	Duty cycle [%]	VDS-No.	Other Details
GT50R071	93 x 65 x 42	24	490	1.5	100	23097	
GT50R132	65 x 65 x 47	24	490	1.5	100	23097	
GT63R032	75 x 75 x 38	24	700	1.5	100	23049	Response is given by Hall sensor
GT70R066	75 x 75 x 55	24	1372	1.5	100	23098	





D.C Door Retainer Magnets  
Series HAHN CQ<sup>STANDARD</sup>

The types of the HAHN CQ<sup>STANDARD</sup> Line describe a cost-optimized and oriented program designed specifically for the European market and its requirements. The magnets are tested according to EN1155 and EN14637. Through frequent self-monitoring and the annual inspection by the Vds, we guarantee highest quality.

Base

Product Features

- Version with terminal clamp and mounting plate
- Integrated reverse polarity protection diode and spark supressing diode
- Tested according to EN1155 / EN14637; Magnet IP54; Connection IP42

Technical Details

Type	Dimension [mm]	Voltage [V]	Force [N]	Rated power [W]	Duty cycle [%]
GTR048000A01	55 x 55 x 33	24	400	1.6	100



In-Wall

This series is suitable for mounting behind the door in conventional flush-mounted sockets. The focus lies on tehe low installation height.

Product Features

- Version with terminal clamp and mounting plate
- Integrated reverse polarity protection diode and spark supressing diode
- Tested according to EN1155 / EN14637; Magnet IP54; Connection IP42

Technical Details

Type	Dimension [mm]	Voltage [V]	Force [N]	Rated power [W]	Duty cycle [%]
GTR048000A03	85 x 85 x 35	24	400	1.6	100



On-Wall

This series is suitable for bridging bigger distances between door and wall.

Product Features

- Version with terminal clamp and mounting plate
- Integrated reverse polarity protection diode and spark supressing diode
- Tested according to EN1155 / EN14637; Magnet IP54; Connection IP42

Technical Details

Type	Dimension [mm]	Voltage [V]	Force [N]	Rated power [W]	Duty cycle [%]
GTR048000A06	70 x 70 x 65	24	400	1.6	100



Universal

This series is applicable for universal applications. The manual release button can be placed to the base (see picture) or to the left or right side. Cables are guided from the rear or through enclosed exits from the base side, left or right. With brackets (accessories) optional floor or wall mounting. You can find suitable accessory on page 14.

Product Features

- With manual release button
- Integrated reverse polarity protection diode and spark supressing diode
- Tested according to EN1155 / EN14637; Magnet IP54; Connection IP42

Technical Details

Type	Dimension Wall [mm]	Voltage [V]	Force [N]	Rated power [W]	Duty cycle [%]
GTR048000A07	110 x 85 x 38	24 DC	400 N	1.6	100
GTR048000A08	110 x 85 x 38	230 AC	400 N	1.6	100
GTR048000A13	110 x 85 x 38	24 DC	200 N	1.6	100
GTR048000A14	110 x 85 x 38	48 DC	200 N	1.6	100
GTR063000A07	110 x 85 x 38	24 DC	850 N	2.2	100



Magnet swivel head

This series impresses through a swivel head which can be easily turned by customer. Therefore floor and wall mounting's possible. Distance tube can be shortened by customer in order to adapt the distance as required.

- Three basic lengths for different distances to wall
- With manual release button
- Integrated reverse polarity protection diode and spark supressing diode
- Tested according to EN1155 / EN14637; Magnet IP54; Connection IP42

Technical Details

Type	Dimension Mounting Plate [mm]	Wall Mounting Length [mm]	Floor and Ceiling Mounting Length [mm]	Voltage [V]	Force [N]	Rated power [W]	Duty cycle [%]
GTR048000A10	90 x 80	175	150	24	400	1.6	100
GTR048000A10	90 x 80	325	300	24	400	1.6	100
GTR048000A10	90 x 80	475	450	24	400	1.6	100
GTR063000A10	90 x 80	180	160	24	850	2.2	100
GTR063000A10	90 x 80	330	310	24	850	2.2	100
GTR063000A10	90 x 80	480	460	24	850	2.2	100



Floor mounted bracket GTR048000A12006

This base is particularly suitable for models GTR048000A07, A08, A09, A13, A14 as well as for GTR063000A07 for floor mounting (Page 13).  
The magnet can either be mounted within the side plates (protection against vandalism) resp. in opposition (standard). Due to the thickness of the metal this base is also suitable for heavy-duty demands.



Wall mounted bracket

This bracket is particularly suitable for models GTR048000A07, A08, A09, A13, A14 as well as for GTR063000A07 for floor respectively wall mounting with distance tube (Page 13).

GTR048000A07800 = tube length 150 mm  
GTR048000A07900 = tube length 300 mm



Keeper Plate

The keeper plate, mounted to the door, effects an electro-magnetic connection between the holding magnet and the door. The plate is flexibly mounted to the bolting plate, thus balancing a possibly tilted stop bracket (max. 5°).

The keeper plate has to be selected according to the size of the door holding solenoid. GT42R etc. The diameter of the plate should exceed the solenoid to allow for easy installation. The holding surface is ground and then protected against corrosion by means of zinc plating (EX model, chemically nickel-plated).



Technical Details

Type	Dimensions [mm]	Diameter Plate [mm]	Other Details
GT42R005	55 x 55 x 18	45	
GT50R005	55 x 55 x 18	55	
GT63R005	75 x 75 x 23	65	
GT70R005	75 x 75 x 26	75	
GT50R105	55 x 55 x 18	55	EX-Model
GT70R105	75 x 75 x 26	75	EX-Model

Keeper Plate with Angle Adjustment

This model is designed for applications where the door has a stop bracket.

Due to the joint the keeper plate can be adjusted and set with 60° each into the respective direction. Surface ground and protected against corrosion.

With the CQ<sup>STANDARD</sup> Line the type is customarily included in delivery.



Technical Details

Type	Dimensions [mm]	Diameter Plate [mm]	Other Details
GT42R006	55 x 55 x 50	45	
GT50R006	55 x 55 x 50	55	
GT63R006	75 x 75 x 55	65	
GT70R006	75 x 75 x 56	75	
GT50R106	55 x 55 x 50	55	EX-Model
GT70R106	75 x 75 x 26	75	EX-Model

Telescopic Keeper Plate

The actual plate is supported in a cushioned way by means of an integrated spring (spring travel 20 mm). This design is of advantage with heavy doors resp. sliding doors because it cushions unavoidable heavy impacts and thus protects the door holding magnet and the door against destruction. The stop should not exceed 5°.

Technical Details

Type	Dimensions [mm]	Diameter Plate [mm]	Other Details
GT42R007	55 x 55 x 79	45	
GT50R007	55 x 55 x 79	55	
GT63R007	75 x 75 x 81	65	
GT70R007	75 x 75 x 84	75	
GT50R107	55 x 55 x 79	55	EX-Model
GT70R107	75 x 75 x 84	75	EX-Model





Interrupter Switches GTU 05 / 06 / 07

Interrupter rocker switches to activate retainer devices at fire-protection doors



Labelling acc. to IfB	„Close door“
Housing	Plastic
Contact load	max 0.5 Ampere, DC
Ambient temperature	0° to + 50° DC
Colour Frame	White
Switch	Red
On-wall mounting	Switch body with 2 bolts 4 mm at the wall
In-wall mounting	in Ø 60 mm flush-mounted socket
Type designation	GTU 05 = on-wall mounting GTU 06 = in-wall mounting GTU 07 = model for damp locations IP44 (on request)

Interrupter Switch (EX) GTU 08

Interrupter push button for manual activation of retain-  
er devices at fire protection exclusions in explosive  
areas. – Guideline 94/9/EG

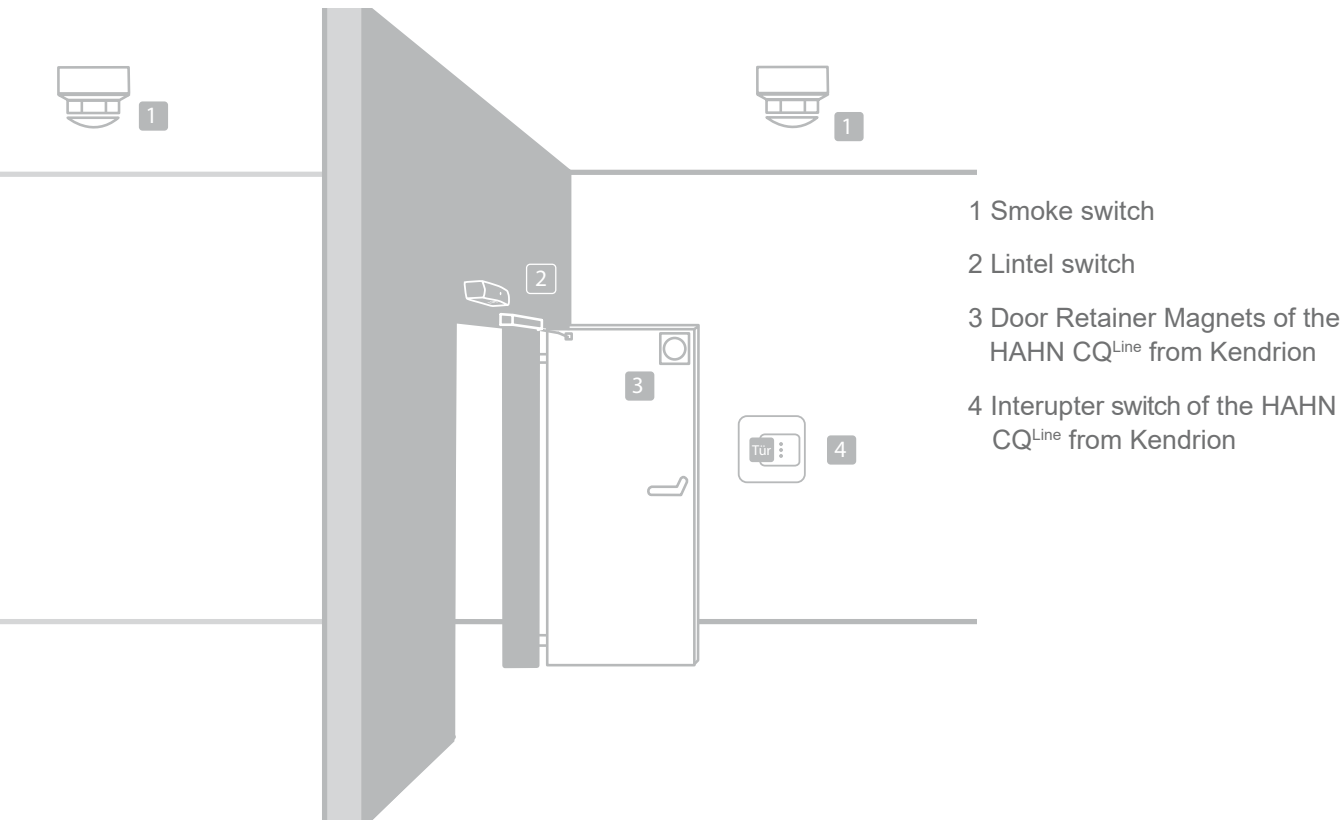


Designation of explosion protection:  
EX II 2 G EEx edqm ia/ib (ia/ib) II, IIA, IIB, IIC, T6, T5 resp. T4

Test report	PTB Ex 01-11181
EG-prototype test certificate	PTB 01ATEX 1105
Rated Voltage	max. 690 V
Approval	Zone 1 and Zone 2
Material Housing	polyester resin (fibre glass)
Sealing	EPDM
Closing of lid	M4 cylinder head bolts
Protection class	IP66
Connection per clamp	2,5 m²
Ambient temperature	-20° till +40° C
Bush	1 x M25 cable connection
Colour of push button	red ore green, internal inserts
Labelling acc. IfB.	„Close door“ is enclosed

Technical Explanations

Example of the complete installation on a fire proof exclusion



Normative Explanations

EN 1155	Electrically powered hold-open devices for swing doors
EN 14637	Electrically controlled hold-open systems for fire/smoke door assemblies
VdS-Nr.	Describes the number of the “Übereinstimmungszertifikat” of the door holding magnets which can be used in a hold-open system with a “Allgemeine bauaufsichtliche Zulassung“
Allgemeine bauaufsichtliche Zulassung	Describes the specific type and scope of a hold open device with all listed components which can be used

The field of application of the series Hahn CQ<sup>SAFE</sup> / Hahn CQ<sup>STANDARD</sup>

Hahn CQ<sup>STANDARD</sup>

The various versions of this series are used at different hold-open systems in Europe, which are tested according to EN14637.

Hahn CQ<sup>SAFE</sup>

All magnets of the wide range of this series have a respective VdS-number and are preferably used on hold-open systems, which have a „Allgemeine bauaufsichtliche Zulassung“. Further application areas are hold-open systems all over Europe, which due to difficult installation situations can not be covered by the standard range of the HahnCQ<sup>STANDARD</sup> series, as well as hold-open systems which require a higher quality standard.

# Overview of Catalogue

## Linear Solenoids



### Classic Line

- single-stroke solenoids
- compact design
- individual fixing
- mono- and bistable version



### High Performance Line

- square single-stroke solenoids
- high force with small installation space
- modular system
- short pull-in times



### High Power Line

- round single-stroke solenoids
- high forces and stroke travels
- short switching times
- also reversible solenoids



### Control Power Line

- control solenoids
- extremely fast switching
- short strokes
- precise switching



### Elevator Line

- spreader solenoids
- especially designed for elevator brakes
- extremely high forces
- any mounting position



### ATEX Line

- explosion-proof solenoids
- prevent the occurrence of sparks and light arcs
- dynamic and reliable switching



### Locking Line

- locking solenoids
- high transverse forces
- integrated feedback of locking function
- compact design



### System Line

- operated by AC
- extremely short activation times
- very high pull-in forces

## Electro Holding Magnets



### Hahn CQ Line

- door holding magnet
- design and functionality
- VdS, CE, EN 1155, EN 14637 tested
- great variety



### Industrial Line

- industrial holding magnets
- high holding force with low power consumption
- compact design
- variable connections

## Oscillating Solenoids



### Oscillating Line

- vibratory solenoids
- wide product range for transportation of bulk material
- low wear and tear
- compact design

## Custom Solutions

- Rotary solenoids
- Assemblies
- Customer-specific solutions

Please contact us for special or customer-specific solutions.

Impulse Automation Limited  
Andover, united Kingdom

Tel: +44 (0)1264 364194

Mail: [sales@impulseautomation.co.uk](mailto:sales@impulseautomation.co.uk)



WE MAGNETISE THE WORLD

If you do not find what you are looking for, please feel free to contact us! We will find the best solution for you.

Impulse Automation Limited  
Andover, United Kingdom

Tel: +44 (0)1264 364194

Mail: [sales@impulseautomation.co.uk](mailto:sales@impulseautomation.co.uk)