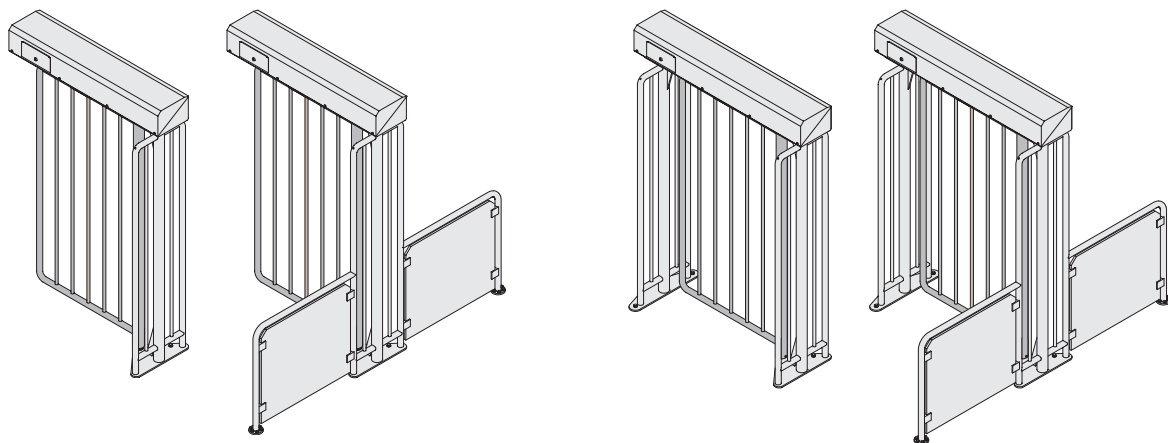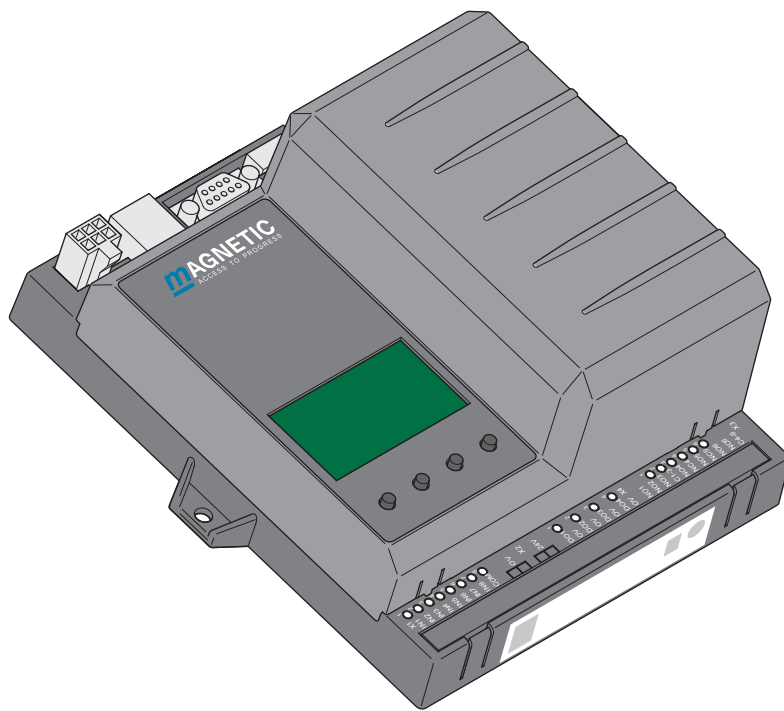**Description**

Full height swing door

MPG-362 and MPG-372

Control unit MGC

Original Operating Instructions

This document is available as PDF in the Magnetic Autocontrol download area (www.magnetic-access.com). Authorisation is required for download.

Contents

1 Notices on the document

1.1 Purpose and contents of this description

This document describes the control unit MGC from the programme versions listed below.

Software number (Software #) and software version (SW version) are displayed in the menu "Module info".

Designation	Software #	SW version
Gate Controller	4915.1006	3.0
MHP2 motor	4915.4003	2.4
Safety Controller	4915.3014	2.1
Detector 1	4915.3001	1.2
MGC.Connect	4910.5052	1.8

Table 1:   Programme versions control unit MGC

> **IMPORTANT!**
>
> For information on design and function, for technical data, installation and mounting, electrical connection, commissioning and cleaning and maintenance, see the separate operating instructions
> ↗ Page 7, chapter 1.2.

1.2 Separate operating instructions

The operating instructions contain the following information: Design and function, technical data, installation and mounting, electrical connection, commissioning, cleaning and maintenance.

> › Full height swing door MPG-362 and MPG-372: Doc.ID: 58175819

1.3　Symbols and illustrations used in this document

1.3.1　Warning notes and notes

Warning notes are characterised by pictograms in these instructions. A warning note starts with a signal word that expresses the extent of the hazard.

It is absolutely essential to observe the warning notes and to proceed with caution in order to prevent accidents as well as personal injuries and property damage.

Warning notes

⚠ DANGER
The signal word DANGER indicates an immediately dangerous situation, which leads to death or severe injuries if not avoided.

⚠ WARNING
The signal word WARNING indicates a potentially dangerous situation, which can lead to death or severe injuries if not avoided.

⚠ CAUTION
The signal word CAUTION indicates a potentially dangerous situation, which can lead to minor injuries if not avoided.

NOTICE
The signal word NOTICE indicates a potentially harmful situation, which leads to property damage if not avoided.

Notes and recommendations

IMPORTANT!

The signal word IMPORTANT highlights useful notes and recommendations as well as information for an efficient and trouble-free operation.

1.4 Target group

1.4.1 Personnel – activities and qualifications

All work on the control unit may only be performed by Magnetic service experts with the following qualifications.

Electrical work to the product must be carried out by technicians with additional qualification and by Magnetic service experts. Electrical work to the electrical system provided by the customer must only be carried out by a qualified electrician.

Designation	Qualification
Technician	› Has completed training as a systems mechanic, machinery technician, installation mechanic, installation technician or has comparable technical training. › Has an additional qualification that enables him to carry out electrical work such as establishing the electrical connection to the product. › Has additional knowledge and experience. › Knows the relevant technical terms and regulations. › Can evaluate the work assigned to them, recognise possible dangers, and take appropriate safety measures.
Magnetic service expert	› Meets all the requirements of the technician. › Trained and authorised by Magnetic.

Table 2:   Qualification of the personnel – control unit MGC

2   Digital inputs, digital outputs and relay outputs

⚠ WARNING
Improper wiring and parameterisation of the control unit! Improper wiring and parameterisation of the control unit can lead to undesired functions and thus to injuries. › Only Magnetic service experts may wire and parameterise the control unit. › The electrical connection of the signal transmitters to the IN1 to IN8 inputs must fit the parameterisation.

Parameterisation: ↗ Page 29, chapter 5.

2.1   Digital inputs

Definition of "entry" and "exit": ↗ Page 58, chapter 7.

By parameterising the inputs, you assign certain functions to the inputs. For example, if you parameterise the "Illumination off" function for input IN4, switch the illumination on and off via this input.

If the function is marked with "|", the input is inverted (closed-circuit principle). ↗ Page 46, chapter 6.3.3

The following functions are assigned to the inputs as default settings.

Clamp	Description	Function
IN1	Digital input 1	| Emergency open
IN2	Digital input 2	Open entry
IN3	Digital input 3	Open exit
IN4	Digital input 4	–
IN5	Digital input 5	Confirm warnings
IN6	Digital input 6	Close (Inhibit opening)
IN7	Digital input 7	–
IN8	Digital input 8	–

Table 3:   Factory setting "Digital inputs"

Function	Description
–	Inputs that you assign this function "–" to are being deactivated.
| Emergency open	Emergency situation (closed-circuit principle)
	Connect fire brigade switches, emergency opening contacts, etc. to this input. This input has the highest priority. As soon as +24 V DC are applied to this input, the pedestrian gate is in operation.
	As soon as 0 V are applied to this input, the blocking element is opened in the direction of the zone not controlled.
	This input function is high priority to all other input functions.
Confirm warnings	Confirm warnings
	A pulse at this input confirms the "Warning" output function. The output is reactivated the next time a warning occurs.
	The number of the warning message remains stored in the event list until the control unit is rebooted.
Open entry	Validation for a passage from the zone not controlled (ZNC) to the zone controlled (ZC)
	If the signal is present for longer than 3 seconds, permanent open is activated. ↗ Page 41, Parameter "Permanent open".
Open exit	Validation for a passage from the zone controlled (ZC) to the zone not controlled (ZNC)
	If the signal is present for longer than 3 seconds, permanent open is activated. ↗ Page 41, Parameter "Permanent open".
Close (Inhibit opening)	Close the pedestrian gate
	Use this input to close the pedestrian gate in both passage directions. In case of a permanent signal, no more validations are accepted. Input IN1 "| Emergency open" remains superordinated. This means that the pedestrian gate can also be opened via input IN1 when the pedestrian gate is closed.
Sensor entry	This input function is required if you use a customer-side sensor to detect people. Operation with sensor: ↗ Page 63, chapter 9.
Sensor exit	This input function is required if you use a customer-side sensor to detect people. Operation with sensor: ↗ Page 63, chapter 9.
Multi valid entry	Multi validation for a passage from the zone not controlled (ZNC) to the zone controlled (ZC)
	Function when multiple signals are required to trigger a validation for a passage from the zone not controlled (ZNC) to the zone controlled (ZC).
	A validation is triggered when a pulse is pending at all inputs with the function "Multi valid entry". Pulses are deleted after 10 seconds.
	Example: Passage will not be granted until a face mask has been identified and the hands have been disinfected. In the example, you must parameterise two inputs with the function "Multi valid entry".

Digital inputs, digital outputs and relay outputs

Function	Description
Multi valid exit	Multi validation for a passage from the zone controlled (ZC) to the zone not controlled (ZNC)
	Function when multiple signals are required to trigger a validation for a passage from the zone controlled (ZC) to the zone not controlled (ZNC).
	A validation is triggered when a pulse is pending at all inputs with the function "Multi valid exit". Pulses are deleted after 10 seconds.
	Example: Passage will not be granted until a face mask has been identified and the hands have been disinfected. In the example, you must parameterise two inputs with the function "Multi valid exit".

Table 4:   Function digital inputs

2.2   Digital outputs and relay outputs

Definition of "entry" and "exit": ↗ Page 58, chapter 7.

By parameterising the outputs, you assign certain functions to the outputs.

If the function is marked with "|", the output is inverted (closed-circuit principle).

The following functions are assigned to the outputs as default settings.

Clamp	Description	Function
DO1	Digital output 1	GED red entry
DO2	Digital output 2	GED green entry
DO3	Digital output 3	GED red exit
DO4	Digital output 4	GED green exit
NO1	Relay output 1	Passage pulse entry
NO2	Relay output 2	Passage pulse exit
NO3	Relay output 3	Obstacle detection
NO4/NC4	Relay output 4	Passage clear Entry
NO5/NC6	Relay output 5	Passage clear Exit
NO6/NC6	Relay output 6	Closed

Table 5:   Factory setting digital outputs and relay outputs

NOTICE
Changing the factory assignment of terminals and functions – terminals DO1, DO2, DO3, DO4! By default, the terminals are wired for the listed factory setting. A change will cause the pedestrian gate to malfunction. › Do not change the assignment of the listed terminals.

NOTICE
Malfunction due to excessive output current at terminal X2! The maximum output current at terminal X2 is limited to 300 mA by a self-resetting fuse. › Make sure that the maximum output current is not exceeded. › If necessary, supply components such as other illumination with an additional power supply unit. The additional power supply unit must be installed outside the pedestrian gate.

Function	Description
–	Outputs that you assign this function "–" to are deactivated.
| Error	When the control unit recognises any safety-relevant error or error, the output with this function is deactivated (closed-circuit principle). ↗ Page 71, chapter 10.3.
| Warning	When the control unit recognises any "Warning", the output with this function is deactivated (closed-circuit principle). ↗ Page 71, chapter 10.3.
Gate ready	Pedestrian gate is ready for operation This output is activated as soon and as long as the pedestrian gate is ready for operation.
Passage pulse entry	Pulse (300 ms) for the passage from the zone not controlled (ZNC) to the zone controlled (ZC) **Function without detector module DM02** As soon as the passage is opened in the passage direction, a pulse is issued via this output. **Function with DM02 detector module and activated option "Inhibit opening (presence detection)"/ function with sensors and activated option "Inhibit opening (presence detection)"** If there is a validation and the opening loop / sensor "Input" is not occupied, the swing door remains closed and a pulse is generated at the output with this function. This pulse signal can be forwarded to a turnstile MPT, for example as a validation signal. Unlike the "function without detector module DM02", **no** pulse is issued via this output once the passage is opened in the passage direction. Operation with induction loops or sensors: ↗ Page 63, chapter 9.
Passage pulse exit	Pulse for the passage from the zone controlled (ZC) to the zone not controlled (ZNC) **Function without detector module DM02** As soon as the passage is opened in the passage direction, a pulse is issued via this output. **Function with DM02 detector module and activated option "Inhibit opening (presence detection)"/ function with sensors and activated option "Inhibit opening (presence detection)"** If there is a validation and the opening loop / sensor "Input" is not occupied, the swing door remains closed and a pulse is generated at the output with this function. This pulse signal can be forwarded to a turnstile MPT, for example as a validation signal. Unlike the "function without detector module DM02", **no** pulse is issued via this output once the passage is opened in the passage direction. Operation with induction loops or sensors: ↗ Page 63, chapter 9.
Passage clear Entry	Control of display "Passage in zone controlled direction cleared" When the passage in the zone controlled direction is cleared, a permanent signal is emitted via this exit. This exit may also be used to block a pulse encoder such as a card reader for the opposite direction. The request generator must be equipped with a lock input for this.

Function	Description
Passage clear Exit	Control of display "Passage in zone not controlled direction cleared" When the passage in the zone not controlled direction is cleared, a permanent signal is emitted via this output. This exit may also be used to block a pulse encoder such as a card reader for the opposite direction. The request generator must be equipped with a lock input for this.
Closed	Blocking element in position "Closed" As long as the blocking element is in the position "Closed", this output is activated.
Opening	Blocking element in opening movement As long as the blocking element is making an opening movement, this output is activated.
Closing	Blocking element in closing movement As long as the blocking element is making a closing movement, this output is activated.
Stopped by sensor	This output function is required when using either induction loops or sensors. The function serves as feedback when the function sequence is controlled by the connected sensor. Operation with induction loops or sensors: ↗ Page 63, chapter 9.
Vandalism	The output is activated in the following cases: › The blocking element is moved from the "Closed" position without validation. › The blocking element is stopped and moved back during the closing movement. The output remains activated until the blocking element is in the "closed" position.
Buzzer/Siren (alarm)	Acoustic signal transmitter connection An acoustic signal transmitter is connected to this output. You can parameterise the events for which an acoustic signal is to be triggered via the "Buzzer/Siren" parameter in the "Signalling" menu.
Obstacle detection	Obstacle detection during the movement As soon as an obstacle is detected during movement, this output is activated. An obstacle could be, for example, a stopping user or a trapped piece of luggage.
Service mode active	Pedestrian gate in service mode As soon as the service mode is switched on via the slider on the control unit MGC, this output is activated.
Timer	Activate the input function for a specified time. For the function "Timer", you must connect this output to the input with the desired input function via a jumper. Use the menu "Timer" to parameterise the switch-on time, the switch-off time and the week days. ↗ Page 50, Table 29
GED red entry	Gate End Display connection Connect the GED "red" of the zone not controlled to this output.

Digital inputs, digital outputs and relay outputs

Function	Description
GED green entry	Gate End Display connection Connect the GED "green" of the zone not controlled to this output.
GED red exit	Gate End Display connection Connect the GED "red" of the zone controlled to this output.
GED green exit	Gate End Display connection Connect the GED "green" of the zone controlled to this output.

Table 6:   Function digital outputs and relay outputs

2.3 Plug-in modules MFM01, DM02 and EM01

The MGC control unit is equipped with 5 slots for plug-in modules. The function is permanently assigned via the slot number.

The MFM01 plug-in module is plugged in ex works. The two magnets for locking are controlled simultaneously via this plug-in module. Digital 60 V / 3 A power outputs are available via this plug-in module.

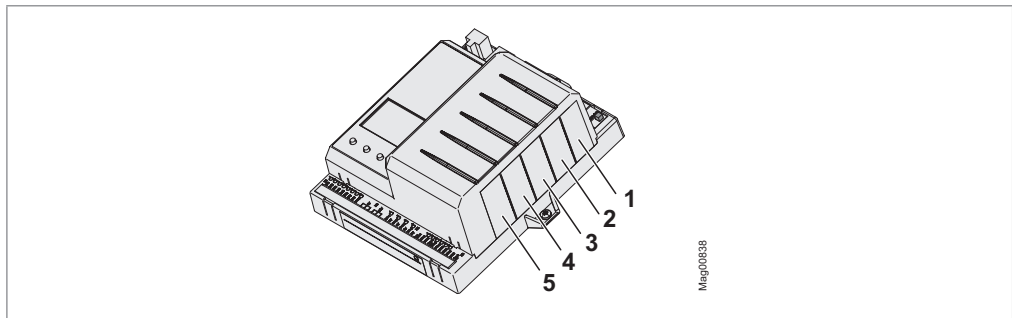Optionally, plug-in modules like the loop detector module DM02 and the Ethernet module EM02 can be plugged into the other slots.

Fig. 1: Slot numbers

Slot assignment and function MPG-362 and MPG-372

Slot number [1]	Terminal plug-in module		LED plug-in module	Function
1	–			
2	–			
3	–			
4	–			
5	MFM01: Magnets for locking			
	1		Red	–
	2		Green	–
	3		Yellow	Magnet RL1 and magnet RL2

1) The optional Ethernet module EM01 can be plugged into all unoccupied slots.

Table 7: Slot assignment and functions of the plug-in modules – MPG-3x2

3 Parameterising MPG-362 and MPG-372

You have the following possibilities to parameterise the control unit MGC:

› Directly at the control unit MGC

› via the programme "MGC.Connect".

The "MGC.Connect" programme also allows you to test the function of the pedestrian gate.

3.1 Parameterisation directly at the control unit

The control unit is mounted in the support beam and is accessible when the cover of the support beam is dismounted.

IMPORTANT!
For access to the control unit, see separate operating instructions
↗ Page 7, chapter 1.2.

3.2 Parameterisation via the "MGC.Connect" programme

The programme "MGC.Connect" is available on the Magnetic website in the download centre. You can also download the programme with the programme for the Service Module SM01 "SM-Downloader".

Additionally required components:

› Laptop

› Magnetic Service Module "Service Module SM01"

› USB cable A plug to B plug

› RJ-45 patch cable, with a maximum length of 3 meters.

Additional options:

› Ethernet module EM01 for connection via Ethernet

System requirements laptop:

› Windows 10 or higher

› .NET Framework 4.5 or higher

› USB connection

3.2.1   **Establishing the connection via service module SM01**

1. Connect the SM01 service module to the RJ-45 socket of the MGC control unit.

2. Connect the Service Module SM01 to the laptop.

3. Start the "MGC.Connect" programme on the laptop.

   √ The MGC.Connect start view is displayed.

   √ The connection between MGC.Connect and the pedestrian gate is established.

√ When the connection is established, the symbol "Connection established" is displayed in the MGC.Connect header.

If the connection could not established, the connection settings may have been changed.

1. Open the "Configuration" window. To do so, click the "⚙" button in the header of the MGC.Connect programme.

   √ The "Configuration" window is displayed:
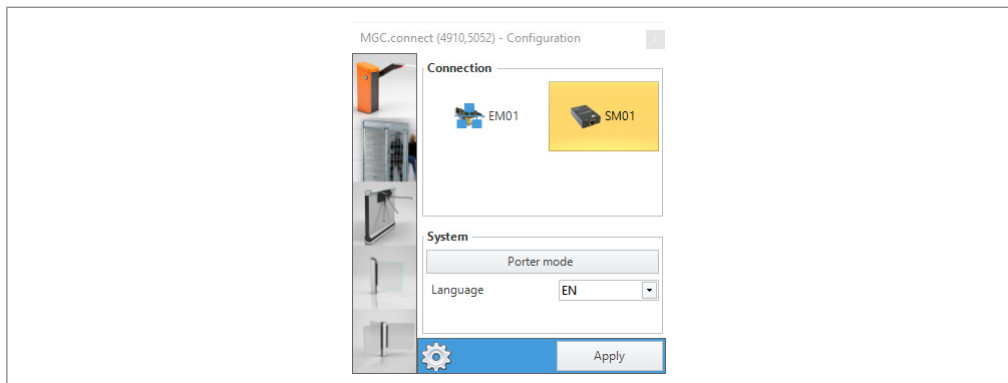
Fig. 2:   "SM01 configuration" window

2. Select the connection "SM01".

3. Click the "Apply" button.

√ The connection between pedestrian gate and "MGC.Connect" programme is established.

3.2.2 Connection via Ethernet module EM01

Further information on the Ethernet module: Technical Manual "Ethernet Module" (Doc.ID: 5815,0001).

For pedestrian gates with the option "Ethernet module EM01", the Ethernet module is installed ex works.

1. Connect the EM01 Ethernet module to the customer's network via a customer-side network cable.

2. Check whether the LEDs on the EM01 Ethernet module are flashing. If the LEDs flash, the Ethernet module is connected correctly.

3. If necessary, set the IP address of the Ethernet module. DHCP is activated ex works. Note the IP address.

4. Start the "MGC.Connect" programme on the laptop.

   √ The MGC.Connect start view is displayed.

   √ The "Configuration" window is displayed:
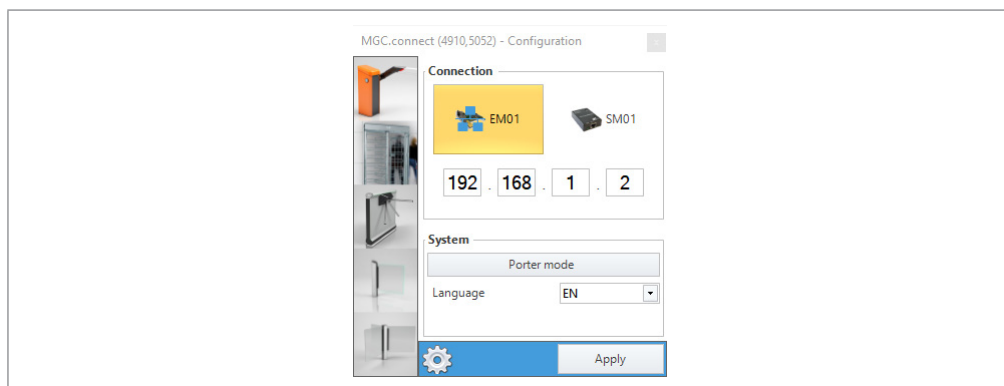
Fig. 3: "EM01 configuration" window

5. Select the connection "EM01".

6. Enter the previously noted IP address of the pedestrian gate.

7. Click the "Apply" button.

√ The connection between pedestrian gate and "MGC.Connect" programme is established.

3.2.3 Updating control unit MGC

> **IMPORTANT!**
> If necessary, download and update via the "SM-Downloader" programme.

4 Description of the "MGC.Connect" programme

4.1 Overview
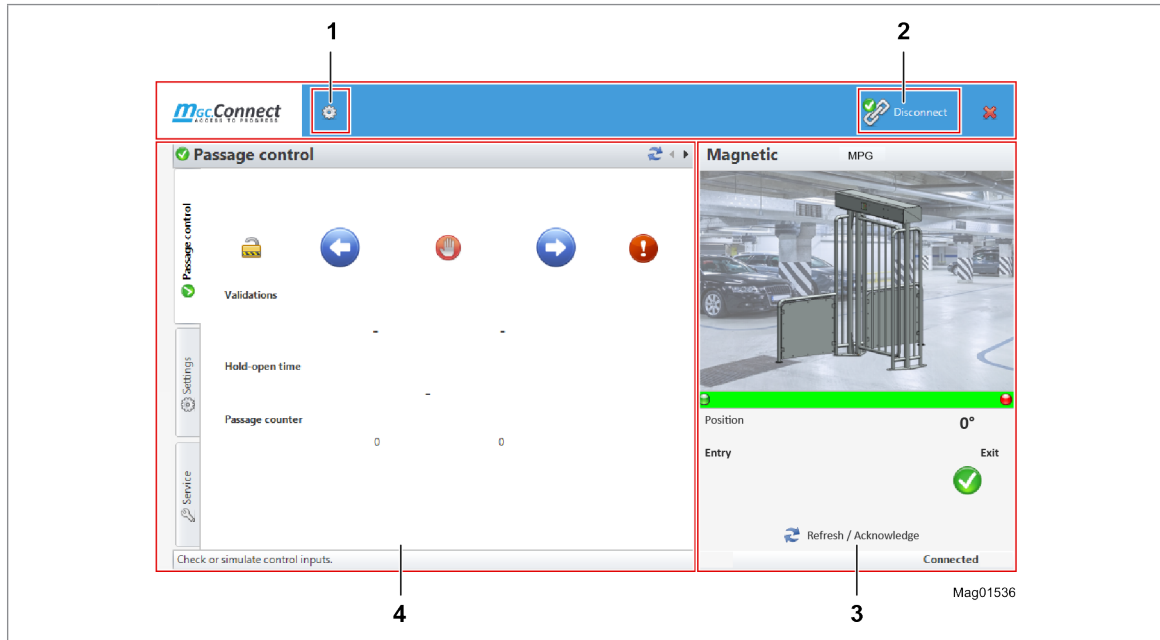
Fig. 4:   Exemplary view "MGC.Connect"

1   Button to open the "Configuration" window
2   Button to disconnect or connect the connection
3   Status display of the pedestrian gate
4   Tabs and parameters

Button	Description
	No connection There is **no connection** between the pedestrian gate and the "MGC.Connect" programme. If the connection via the Service Module SM01 or via the Ethernet module exists and you click on the "Connect" button, the connection is established.
	Connection is established The connection between pedestrian gate and "MGC.Connect" programme is currently being established.
	Connection available There is **one connection** between the pedestrian gate and the "MGC.Connect" programme. If you click on the "Disconnect" button, the connection is interrupted.

Table 8:   Description of the buttons "Connect" and "Disconnect"

4.2 Changing the menu language for MGC.Connect

By default, the MGC.Connect programme applies the language of the operating system.

You can change the menu language via the "Language" option in the "Configuration" window. Open the "Configuration" window with the "⚙" button in the header of the MGC.Connect programme. ↗ Page 21, Fig. 4, pos. 1.

The changes are only assumed after a programme restart.

4.3 Status display MPG-3x2

The status display shows the current position of the turn wing, signals certain events and shows the current status of the swing door.

In addition, the current position of the turn wing is displayed from -90° to +90°. In the "Closed" position the value is 0°. In the position "Turn wing opened in exit direction", the value is -90° and in the position "Turn wing opened in entry direction", the value is +90°.
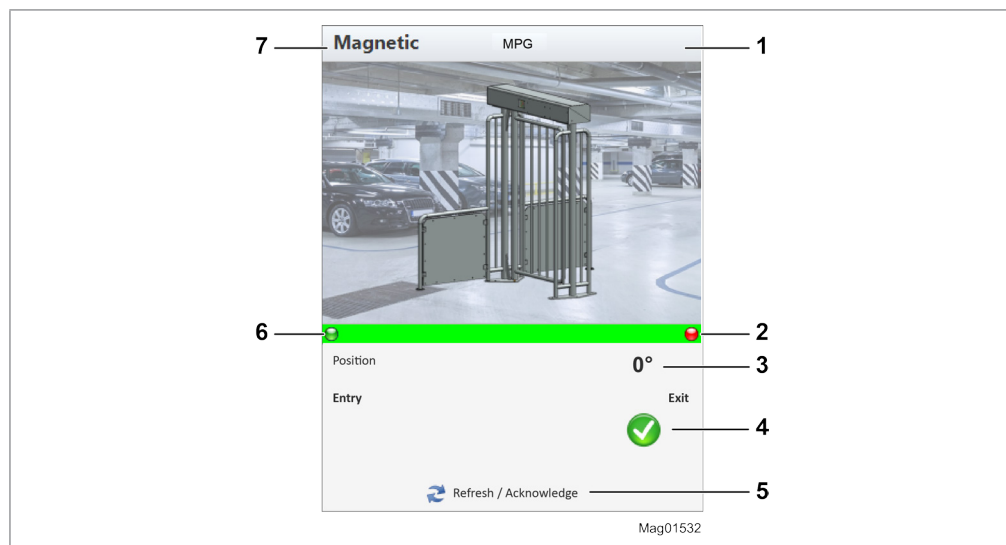
Fig. 5: Status display, here as an example MPG with status "OK"

1   Display of symbols: ↗ Page 23, Table 9
2   Display of the current status of the output functions "GED red exit" and "GED green exit" depending in the parameterisation of the "GED mode exit" parameter. If no LED symbol is displayed, the option "Off" has been set for the parameter "GED mode exit".
    ↗ Page 45
3   Position of the turn wing
4   Current status of the pedestrian gate such as "OK", WARNING, ERROR
5   Refresh the event display and, if available, confirm the pending messages
6   Display of the current status of the output functions "GED red entry" and "GED green entry" depending in the parameterisation of the "GED mode entry" parameter. If no LED symbol is displayed, the option "Off" has been set for the parameter "GED mode entry".
    ↗ Page 45
7   Gate type, here e.g. MPG
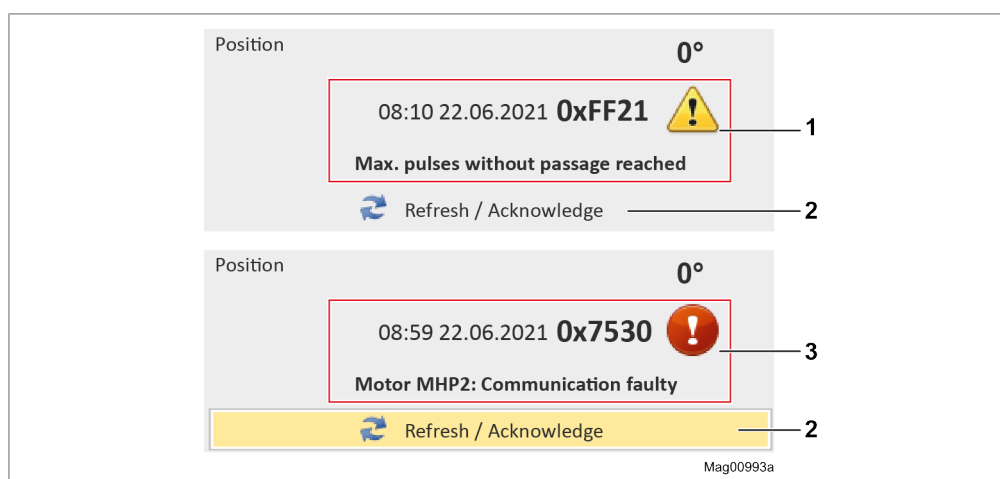
Fig. 6:   Examples of event displays
1   Example of an event of the type WARNING
2   Confirm pending messages and update display
3   Example of an event of the type ERROR

Information on WARNING and ERROR: ↗ Page 71, chapter 10.3.

Symbol	Description
✅	OK No warning and no error is pending.
⚠️	WARNING A warning is pending. If you click the "Refresh / Acknowledge" button, the warning is confirmed and the display is refreshed.
❗	ERROR There is an error. After correcting the fault and a reset, you can acknowledge the fault and refresh the display via the "Refresh / Acknowledge" button. If several errors are pending at the same time, the next error is displayed after refreshing. In the "Service" tab, you can generate a current system report for the pedestrian gate. The system report contains an event log with additional information about a fault / message such as "Node name". ↗ Page 27, chapter 4.6.
✋	The pedestrian gate has detected an attempted vandalism.

Table 9:   Status display – Description symbols

4.4 "Passage control" tab

Use the "Passage control" tab to test the behaviour of the pedestrian gate.
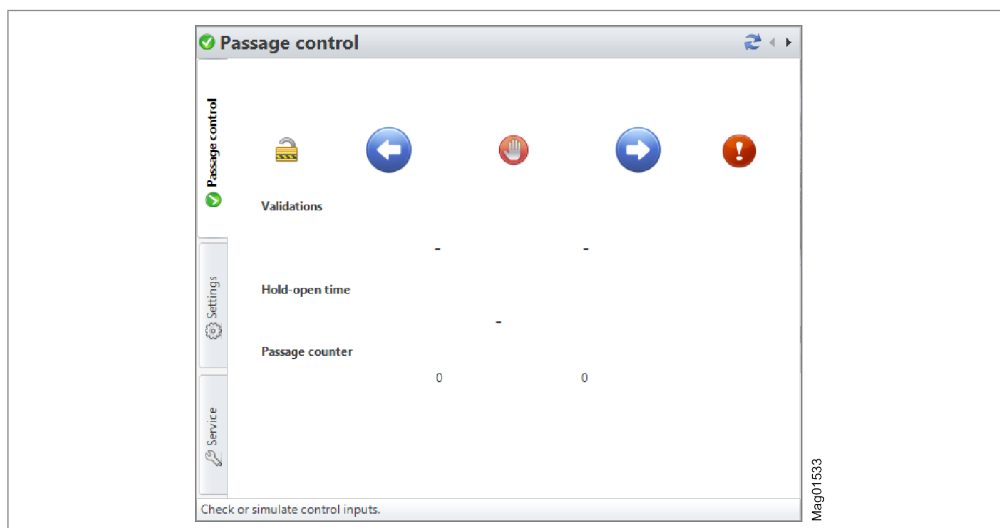
Fig. 7: "Passage control" tab

The view offers the following options.

Information about the input functions: ⬈ Page 10, chapter 2.1.

Button / parameters	Description
🔓	The permanent signal is deactivated.
	The 3 central buttons simulate pulse operation and you can test the respective input function by clicking on the button. The selected input function is automatically reset.
🔒	The permanent signal is activated.
	The 3 central buttons are in hold mode. After you have selected an input function, this input function is held until you click the button again.
➡	Test input function "Open entry".
	Trigger a validation for a passage from the zone not controlled (ZNC) to the zone controlled (ZC). Passage from this direction is possible.
✋	Test input function "Inhibit opening".
	Lock the pedestrian gate in both passage directions and delete validations. No validations are accepted anymore.
⬅	Test input function "Open exit".
	Trigger a validation for a passage from the zone controlled (ZC) to the zone not controlled (ZNC). Passage from this direction is possible.
❗	Test input function "Emergency open".
Validations	Display of pending validations.

Button / parameters	Description
Hold-open time	Display of the current hold-open time still available.
	If several validations are pending, the total hold-open time is not displayed. The hold-open time is counted down again from the set value with each validation.
	↗ Page 40, chapter 6.2.1
Passage counter	Display of the current counters. ↗ Page 51, chapter 6.6

Table 10: "Passage control" tab – Description buttons and parameters

4.5 "Settings" tab

The "Settings" tab encloses the sections: General, MGC OK, Signalling, Impact and Sensor.

Use the "Settings" tab to check and adjust the settings.
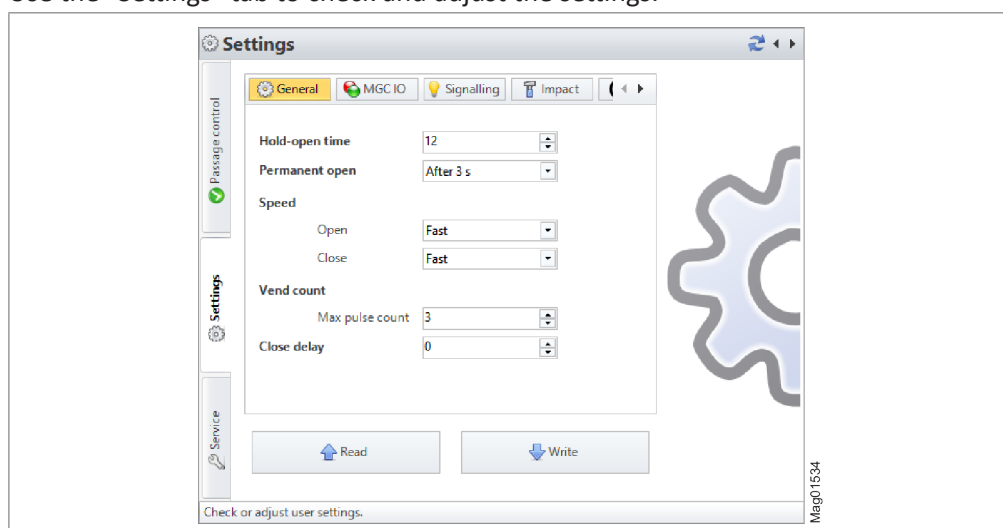
Fig. 8: "Settings" tab, "General" section

Button	Description
⬆ Read	Read current settings from the MGC control unit into the "MGC.Connect" programme.
⬇ Write	Transfer settings from the "MGC.Connect" programme to the MGC control unit.

Table 11: "Settings" tab – Description of buttons

"General" section

Parameter	Description
Hold-open time	"Hold-open time" parameter: ↗ Page 40
Permanent open	"Permanent open" parameter: ↗ Page 41
Speed	"Speed" parameter: ↗ Page 41
Vend count	"Vend count" menu: ↗ Page 42
Closing delay	"Close delay" parameter: ↗ Page 40

Table 12: "Settings" tab – "General" section

"MGC OK" area

This view shows the currently parameterised input functions and output functions. Activated inputs are indicated via a red LED. Activated outputs are indicated via a green LED.

"Signalling" section

Parameter	Description
Buzzer/Siren	"Buzzer/Siren" parameter: ↗ Page 45
GED input	"GED mode entry" parameter: ↗ Page 45
GED output	"GED mode exit" parameter: ↗ Page 45

Table 13: "Settings" tab – "Signalling" section

"Impact" section

Parameter	Description
Impact when opening – Response	"Open – Impact response" parameter: ↗ Page 43
Impact when opening – Delay	"Open – Impact Delay" parameter: ↗ Page 43
Impact when closing – Response	"Close – Impact response" parameter: ↗ Page 43
Impact when closing – Delay	"Close – Impact Delay" parameter: ↗ Page 44
Sensitivity	Parameter "Sensitivity": ↗ Page 44

Table 14: "Settings" tab – "Impact" section

"Sensor" section

4.6 "Service" tab

The "Service" tab displays the configured locking.

For the swing door, you can adjust the locking. In this case, conversion work is required on the pedestrian gate. ↗ Page 48, chapter 6.4.1
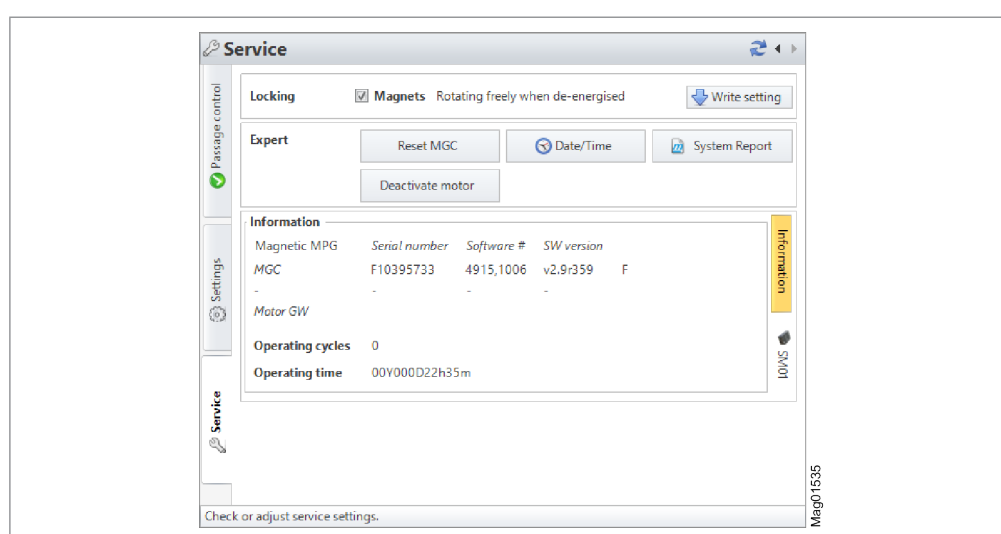
Fig. 9: "Service" tab

Description of the buttons and parameters

Button / parameters	Description
Locking – magnets	This parameter is used to specify the switching signal for the Magnets RL1 and RL2 for locking.
	Options
	› [X]: Activated: The locking has been parametrised for the "rotating freely when de-energised" configuration. In the event of power failure, the locking is unlocked and the blocking element can be moved.
	› [ ]: Deactivated: The locking has been parametrised for the "locked when de-energised" configuration. In the event of power failure, the locking is locked and the blocking element can **not** be moved.
	Factory setting
	› [X]: Activated (rotating freely when de-energised)
Experte – Deactivate motor	Disconnect the motor from mains. You can move the blocking element freely and check the current position of the blocking element in the status display. The "Closed" position is 0°.

Button / parameters	Description
Experte - Reset MGC	Perform reset.
System report	Create and open the current system report. You can save the system report. The system report includes various information, the current parameterisation of the inputs and outputs, an event list (event log) and the current parameter settings.
Date/Time	Set the date and time.
Information	Display of serial number, software # and software versions
Operating cycles	Display of the current cycle counter reading of the pedestrian gate. The counter reading cannot be changed.
Operating time	Displays the operating hours counter. The operating hours counter records the time, during which the pedestrian gate is supplied with electrical power.

Table 15:   "Service" tab – Description buttons and parameters

5 Parameterising the control unit

5.1 Changing menu language

The default setting in the MGC control unit is the menu language "English".

Change the menu language as follows:

The operational view is displayed.
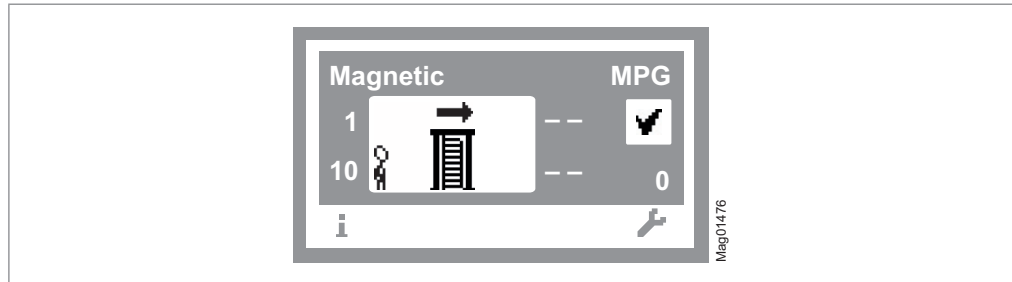
Fig. 10: Example "Operational view"

1. Press right operating button «🔧».

2. Access to parameterisation can be password-protected. If password protection was activated, you are asked to enter a password.
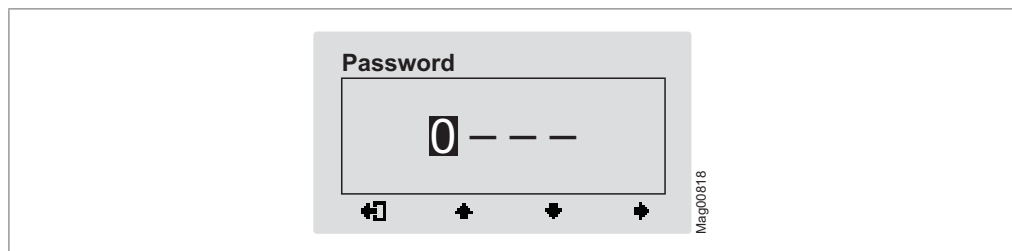
Fig. 11: "Enter password" view

3. The "Main menu" menu is displayed. The "Settings" menu has a dark background and is thus selected.
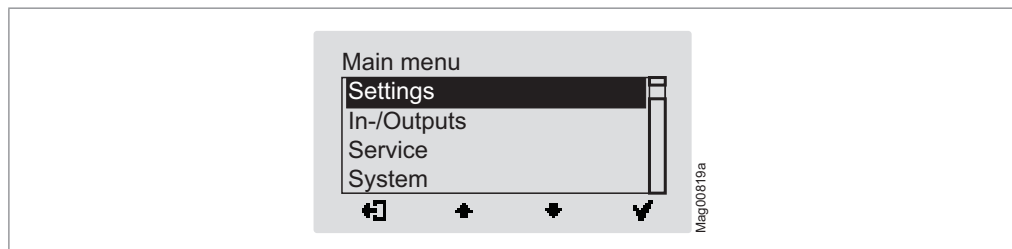
Fig. 12: "Main menu – Settings" view

4. Select the "System" menu with the two middle buttons «━», «━».
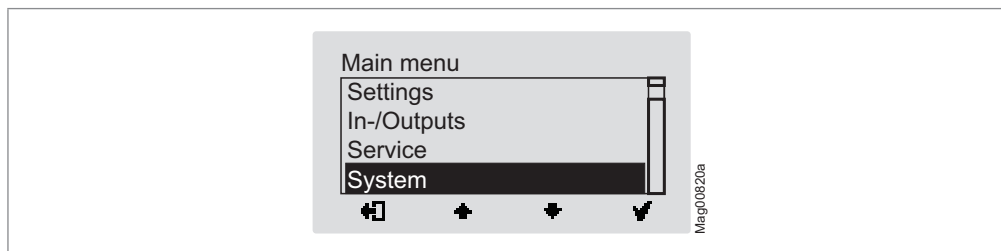
Fig. 13:   "Main menu – System" view

5. Confirm selection with the right control button «✔». The following view is displayed. The menu "Language" is chosen.
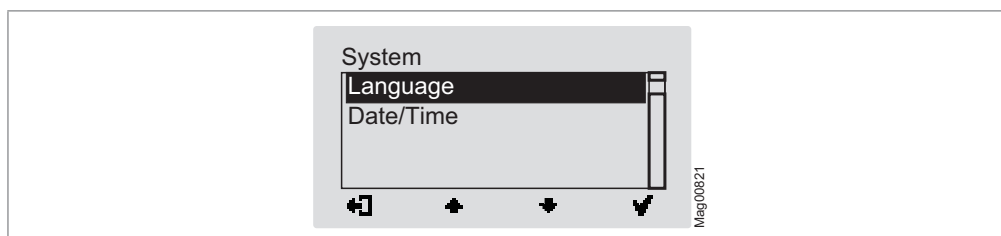
Fig. 14:   "Language" view

6. Confirm selection with the right button «✔». The following view is displayed. The menu language "English" is chosen.

Fig. 15:   "Language – English" view

7. Select the language "German" with the two middle buttons «━», «━». The language "German" has a dark background.
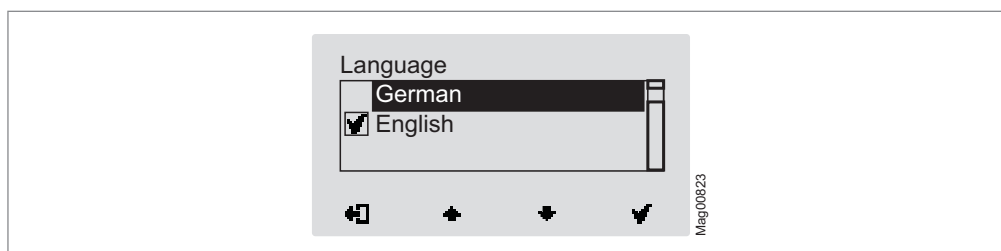
Fig. 16:   "Language – German" view

8. Use the right button «✔» to select the new menu language. Your selection is marked with the symbol «✔».
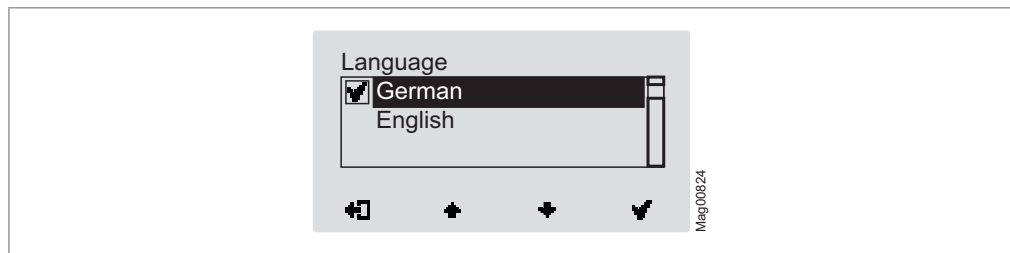

Fig. 17: "Language – German, step 2" view

9. Use the left button «⬅» to leave the "Language" menu. The safety prompt "Save changes?" appears.
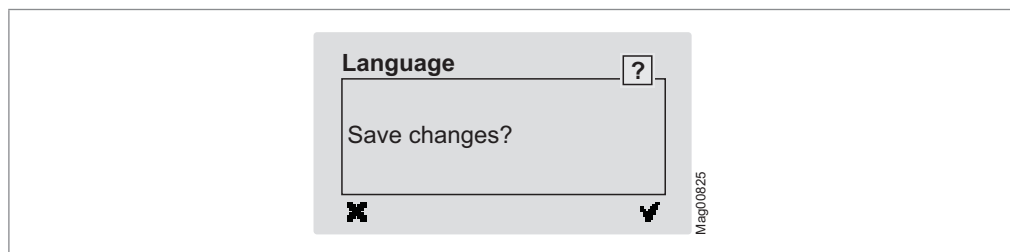

Fig. 18: View "Safety prompt – Save changes?"

10. Push the left button «✖» if you do not want to save the changes. The menu language "English" remains active.

11. Confirm safety prompt with the right button «✔». The new menu language "German" is activated. The following view is displayed:
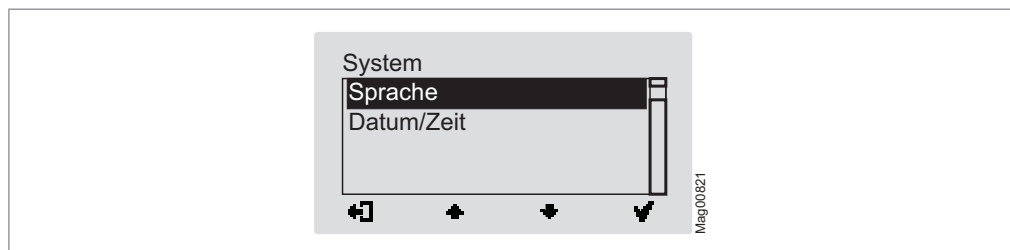

Fig. 19: View "System" menu – Menu language "German" is activated

12. Press the left button «⬅» repeatedly until the operational view is displayed again.

5.2   Entering password

You need to enter a password in the following cases:

⟩ You would like to change parameters in the control unit and the password protection was activated.

⟩ You would like to restore the parameters to factory settings.

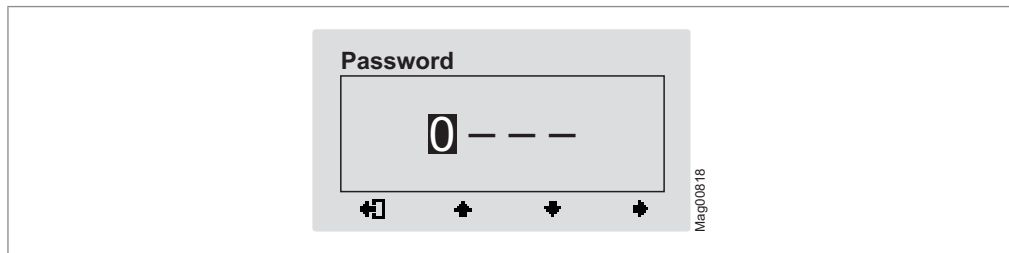If a password is required, the following view is displayed:

Fig. 20:   "Password" view

1.   Use the two middle buttons «✚», «✚» to enter the first digit of the password.

2.   Use the right button «✚» to select the second digit of the password. The following view is displayed:

Fig. 21:   "Enter second digit of the password" view

3.   Use the two middle buttons «✚», «✚» to enter the second digit of the password.

4.   Use the right button «✚» to select the third digit of the password.

5.   Use the two middle buttons «✚», «✚» to enter the third digit of the password.

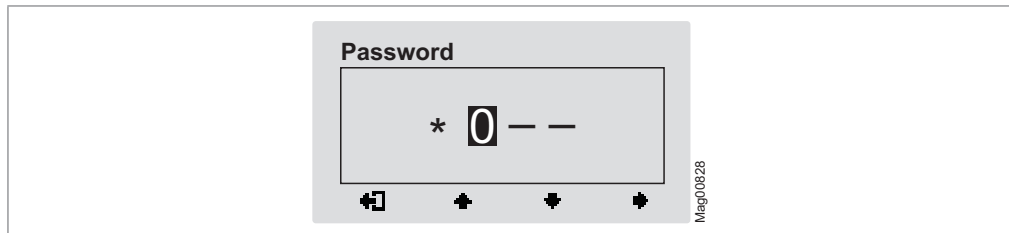6. Use the right button «➡» to select the fourth digit of the password. The following view is displayed:
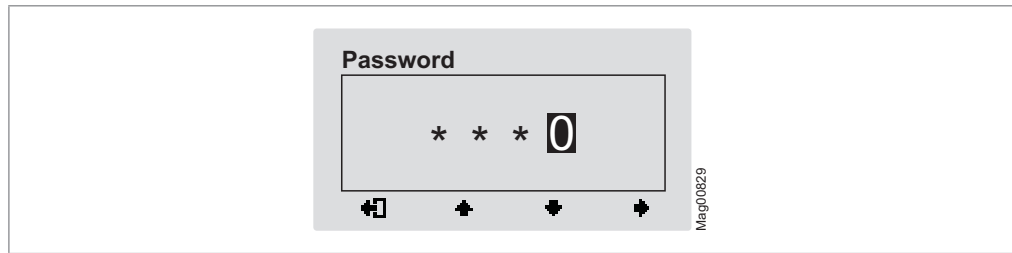
Fig. 22:   "Enter fourth digit of the password" view

7. Use the two middle buttons «➡», «➡» to enter the fourth digit of the password.

8. Confirm the password with the right control button «✔».

5.3   Control unit elements
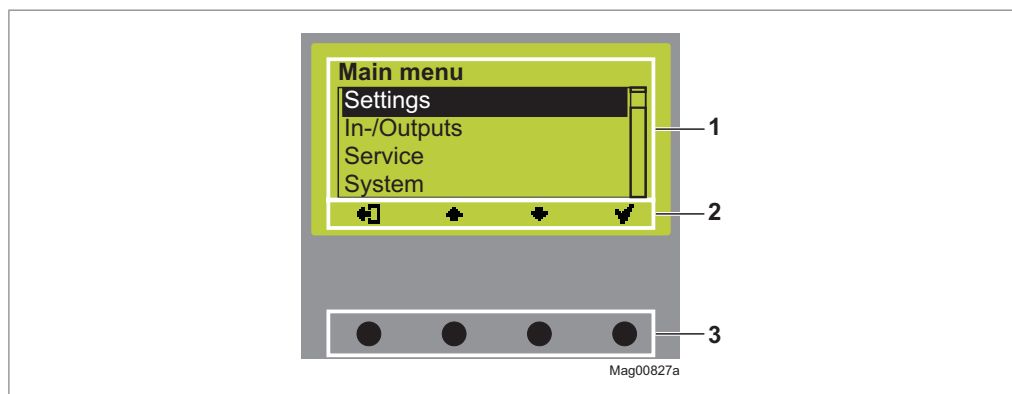
Fig. 23:   Control unit MGC elements
1   Menu
2   Current function of the 4 control buttons
3   Control buttons

5.4 Displays of the control unit
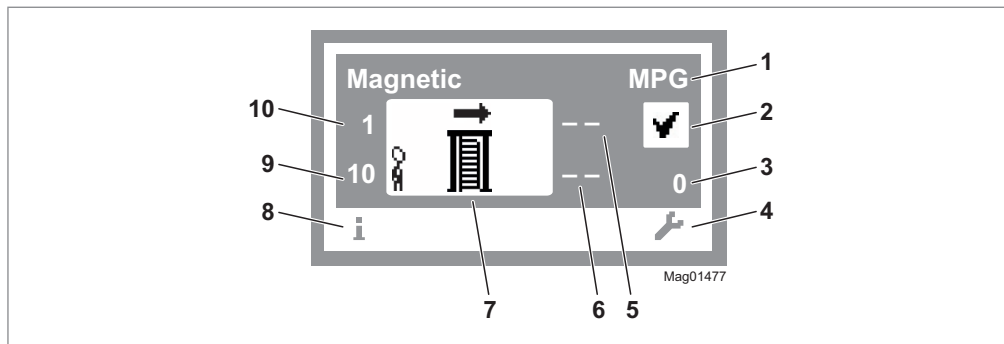
Fig. 24: Example "Operational view"

1   Type pedestrian gate, here MPG
2   Status display, here ready for operation
3   Angle of rotation, here 0
4   Current function of the right control button, here accessing menu "Main menu"
5   Validations exit, here locked
6   Hold-open time exit, here locked
7   Operating display, here passage direction left enabled
8   Current function of the left control button, here accessing menu "Information"
9   Holding-open time entry, here 10
10 Validations entry, here 1
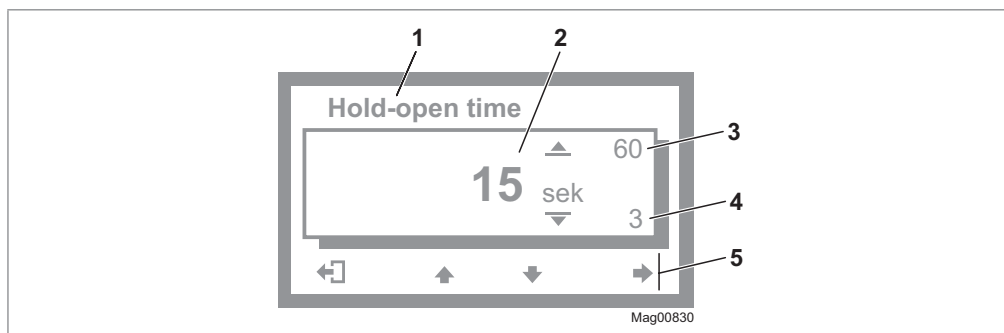
Fig. 25: Example "Screen Change Value"

1   Parameter
2   Current value
3   Possible upper value
4   Possible lower value
5   Current functions of the control buttons

5.5 Symbols in the display

5.5.1 Control button functions

The control unit is equipped with 4 control buttons. The function of the control buttons change depending on the current view in the display. The current functions are shown in the display.

Symbols	Description
i	› Access "Information" menu. › Scroll "Information" menu.
	Access "Main menu" menu. In the "Main menu" menu you can make all settings.
	Leave current menu level. The next-higher menu level is displayed.
✔	› Access next-lower menu level. › Select desired option or desired value. When the desired option was selected, the symbol ☑ is displayed.
☑	Option was selected but not yet stored.
⬆	› Within one menu level: Move cursor (market) upwards. › For setting value: Increase figure.
⬇	› Within one menu level: Move cursor (market) downwards. › For setting value: Decrease figure.
➡	Move cursor one position to the right.
✖	› Delete error message. › When changing settings: Cancel changing process.

Table 16: Control button functions

5.5.2 Further symbols

Symbols	Description
	Wrong password entered. Access denied.
	Reset values to factory settings. To do this, you must enter the password "0000".
	There is an information. Check the "Information" menu. To do this, press the left operating button.
	There is a warning. Check the "Information" menu. To do this, press the left operating button.
	There is an error. Check the "Information" menu. To do this, press the left operating button.
	The passage in zone controlled direction cleared is cleared.
	The passage in zone not controlled direction cleared is cleared.
	The passage is enabled in both directions.

Table 17:   Further symbols

5.6 Setting display contrast

The display contrast of the control unit is adjustable after activation while the logo is still displayed. The logo is displayed for 3 seconds.

If you push one of the middle buttons «⬥», «⬥», the display time of the logo extends by 2 seconds per push. You can thus extend the time to set the display contrast.

› Increase contrast, display grows darker: Press the «⬥» button.

› Reduce contrast, display grows lighter: Press the «⬥» button.

The set display contrast is saved automatically.

5.7 Protecting parameterisation from access

You can apply the access to the main menu with password protection.
↗ Page 49, chapter 6.4.2.

5.8 Parameterising value

Example: Change hold-open time

The operational view is displayed. ↗ Page 34, Fig. 24.

1. Press the right button «⌐».

    √ The "Main Menu" menu is displayed.

2. Select the "Settings" menu with the two middle buttons «✚», «✚».

3. Confirm the selection with the right button «✔».

4. The "Hold-open time" parameter has a dark background and is therefore
    selected. If necessary, use the two middle buttons «✚», «✚» to select the
    "Hold-open time" parameter.

5. Press the right button «✔».

    √ The current hold-open time value is displayed. The cursor flashes on the first
    digit.

6. Use the middle buttons «✚», «✚» to set the desired digit.

7. Use the right button «✚» to move the cursor to the right.

    √ The cursor flashes on the second digit.

8. Use the middle buttons «✚», «✚» to set the desired digit.

9. Press the right button «✚».

10. Use the left button «✚]» to leave the "Hold-open Time" parameter.

    √ The safety prompt "Save changes?" appears.

11. If the changes are to be saved, press the right button «✔». The new hold-open
    time is activated.
    If the changes are not to be saved, press the left button «✖». The previous
    hold-open time remains active.

    √ The "Settings" menu is displayed.

12. Press the left button «✚]» repeatedly until the operational view is displayed
    again.

5.9 Switching the "Service" mode on and off

IMPORTANT!

In service mode, all validations from the control unit inputs and via Ethernet are ignored.

IMPORTANT!

If the "Service" mode is switched on when the pedestrian gate is switched on, no reference run (homing) is performed. ⬈ Page 61, chapter 8.2.3

The current position of the drive is used as the locked position. This behaviour allows for tests during commissioning or troubleshooting and prevents unexpected start-up when the control unit is rebooted.

Switching the "Service" mode on

Switch the "Service" switch for the "Service" mode. The LED lights red. The display backlighting flashes.

Switching the "Service" mode off

After the service work, the switch "Service" must be switched. The LED must light green.
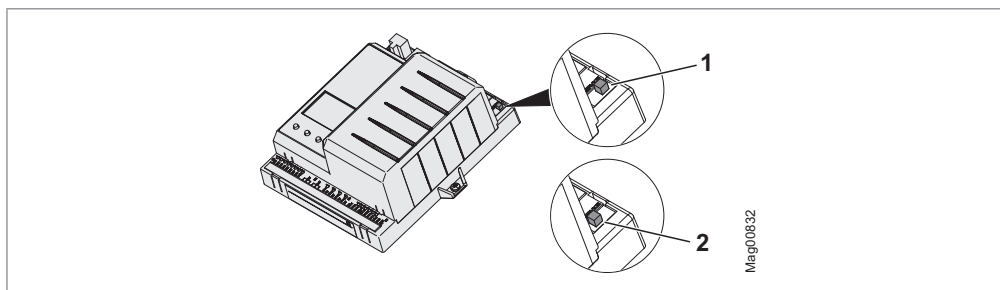
Fig. 26:   Service switch
1   Mode "Service" on
2   Mode "Service" off

Button function

In "Service" mode, you can control the swing door with the two middle control buttons.

> Middle left button «➧»: Validation for a passage from the zone controlled (ZC) to the zone not controlled (ZNC). This button corresponds to the input function "Open exit".

> Middle right button «➧»: Validation for a passage from the zone not controlled (ZNC) to the zone controlled (ZC). This button corresponds to the input function "Open entry".

6 Description of menus and parameters

6.1 "Information" menu

Accessing and navigating

The operational view is displayed. ⬈ Page 29, Fig. 10.

1. Press left button «ℹ».

2. Use the left button «ℹ» to scroll within the menu.

3. The "Information" menu can be left as follows:

   › press the left button «ℹ» repeatedly until the operational view is displayed again or

   › press the right button «⬅⬜».

Operational View > Information	
Parameter	**Description**
Error, warning or event messages	Display of the error, warning or event messages that occurred since the last voltage reset, including date and time.
	Use the «➕» and «➖» buttons to navigate through the messages.
	If no messages are present, the menu is not displayed.
Inputs	Displays the current settings for the digital inputs IN1 to IN8.
	Separate inputs can be deactivated or inverted. Deactivated inputs are marked with a "–", e.g. "IN8: –". Inputs with inverted functions are marked with a "|", e.g. "IN6: | Close (Inhibit opening)".
Outputs	Displays the current settings for the digital outputs DO1 to DO4 and the relay outputs NO1 to NO3 and NO/NC4 to NO/NC6.
	Separate outputs can be deactivated or inverted. Deactivated outputs are marked with a "–", e.g. "DO2: –". Outputs with inverted functions are marked with a "|", e.g. "NO4/ NC4: | Passage clear Entry".
Module info	Display of the software numbers (software #) and software versions (SW - version) of the control unit and optionally plugged-in plug-in modules.

Table 18:   Menu "Information"

6.2 "Settings" menu

6.2.1 Hold-open time

Operational view > Main menu > Settings > Hold-open time	
Parameter	**Description**
Hold-open time	Set the hold-open time.
	The hold-open time is started by a validation by a control device, such as a card reader. A passage should take place within the set hold-open time. If there is no passage during the hold-open time, the direction is blocked.
	If the setting is 0 s, the pedestrian gate remains open until a signal is restored at the "Close (Inhibit opening)" input.
	Setting range
	⟩ 0 to 60 s
	Factory setting
	⟩ 12 s

Table 19: Hold-open time

6.2.2 Close delay

Operational view > Main menu > Settings > Close delay	
Parameter	**Description**
Close delay	The closing of the pedestrian gate is delayed by the set time.
(Closing delay)	The close delay can prevent collisions in the following application cases:
	⟩ The pedestrian gate is closed via the "Close" input.
	⟩ A signal transmitter is connected to the "Buzzer/Siren" output and the closing warning is activated via the "Buzzer/Siren" parameter.
	⟩ An induction loop or a sensor is connected and the "close after passage" function is activated.
	Setting range
	⟩ 0 to 12 s
	Factory setting
	⟩ 0 s

Table 20: Close delay

6.2.3 Permanent open

Operational view > Main menu > Settings > Permanent open	
Parameter	**Description**
Permanent open	You use this parameter to specify whether and after what time the permanent open is activated for a permanent signal at the "Open entry" or "Open exit" input. **Example "After 3 s" option** If the signal is present at the "Open entry" or "Open exit" input for 3 seconds, the system switches to the "Permanent open" operating mode. As soon as the signal is no longer present at the input, the direction is immediately blocked. **Case Hold-open time < time "Permanent open"** If a shorter time has been set for the parameter "Hold-open time" than for the parameter "Permanent open", the system switches to the operating mode "Permanent open" immediately after the hold-open time has elapsed. **Options** › Deactivated › After 3 s › After 10 s **Factory setting** › After 3 s

Table 21:   Permanent open

6.2.4 Speed

Operating view > Main menu > Settings > Speed	
Parameter	**Description**
Close	Speed at which the motor turns the blocking element in the "Close" direction. **Options** › Slow: 70% of the maximum authorised speed › Medium: 85% of the maximum authorised speed › Fast: Maximum speed permitted as per standard **Factory setting** › Fast

Operating view > Main menu > Settings > Speed	
Parameter	**Description**
Open	Speed at which the motor turns the blocking element in the "Open" direction. **Options** › Slow: 70% of the maximum authorised speed › Medium: 85% of the maximum authorised speed › Fast: Maximum speed permitted as per standard **Factory setting** › Fast

Table 22:   Speed

6.2.5   Vend count

Operational view > Main menu > Settings > Vend count	
Parameter	**Description**
Entry	Shows the current counter for validations for the passages in zone controlled direction.
Exit	Displays the current counter for validations of passages in the zone not controlled direction.
Max pulse count (Max count validation)	Set the behaviour of the pedestrian gate during validation. › 1: The hold-open time is extended (retriggered) by the set hold-open time with each new validation. › 2 to 10: As soon as the set value is exceeded, further validations are ignored. **Setting range** › 1 to 10 **Factory setting** › 3

Table 23:   Vend count

6.2.6   Impact

Operational view > Main menu > Settings > Impact	
Parameter	**Description**
Open – Impact response	Select the response in case of the control unit detecting an obstacle when opening. An obstacle could be, for example, a stopping user or a trapped piece of luggage. **Options** › Safe stop: The blocking element is rotated 5° against the direction of movement. After the set delay, the control unit attempts to rotate the blocking element to the "Open" position with reduced speed and force. › Close (Reverse): The pedestrian gate is closed. After the set delay, the control unit attempts to rotate the blocking element to the "Open" position with reduced speed and force. › Free spin: The pedestrian gate is disconnected from the power supply. The user can move the blocking element. After the set delay, the control unit attempts to rotate the blocking element to the "Open" position with reduced speed and force. › Push on: The blocking element is rotated further in the "Open" direction at reduced speed and force. **Factory setting** › Safe stop
Open – Impact delay (Impact delay)	Select the delay after which the movement of the blocking element is continued with reduced speed and force. **Options** › 3 s, 5 s, 7 s, 10 s or 15 s **Factory setting** › 5 s
Close – Impact response	Select the response in case of the control unit detecting an obstacle when closing. An obstacle could be, for example, a stopping user or a trapped piece of luggage. **Options** › Safe stop: The blocking element is moved 5° against the direction of movement. After the set delay, the control unit attempts to rotate the blocking element to the "Closed" position with reduced speed and force. › Close (Reverse): The pedestrian gate is closed. After the set delay, the control unit attempts to rotate the blocking element to the "Closed" position with reduced speed and force. › Free spin: The pedestrian gate is disconnected from the power supply. The user can move the blocking element. After the set delay, the control unit attempts to rotate the blocking element to the "Closed" position with reduced speed and force. › Push on: The blocking element is rotated further in the "Closed" direction at reduced speed and force. **Factory setting** › Safe stop

Operational view > Main menu > Settings > Impact	
Parameter	**Description**
Close – Impact Delay (Impact delay)	Select the delay after which the movement of the blocking element is continued with reduced speed and force. **Options** › 3 s, 5 s, 7 s, 10 s or 15 s **Factory setting** › 5 s
Sensitivity	Select the sensitivity for impact detection. **Options** › Medium › High › Low **Factory setting** › Medium

Table 24:   Impact

6.2.7   Signalling

Operational view > Main menu > Settings > Signalling	
Parameter	**Description**
Buzzer/Siren	Activate events for which an acoustic signal is to be triggered. Connect the acoustic signal to the "Buzzer/Siren (alarm)" output.
	An acoustic signal is possible for the following events:
	› Vandalism
	› Validation
	› Error
	› Obstacle detection
	› Closing warning (a signal is sent before the pedestrian gate is closed.)
	Options
	› [ ]: Deactivated
	› [X]: Activated
	Factory setting
	› Event "Vandalism" activated
GED mode entry	Set the behaviour of the optional GEDs.
	Options
	› Off: The display is dark.
	› Red: The display is permanently red.
	› Green: The display is permanently green.
	› Standby red: The display is red when locked. When released, the display turns green. The display is red during a passage in the opposite direction.
	› Standby off: The display is off when locked. When released, the display turns green. The display is red during a passage in the opposite direction.
	› Standby green: The display is green when locked. When released, the display flashes green. The flashing frequency is increased at the end of the hold-open time. The display is red during a passage in the opposite direction.
	Factory setting
	› Standby green
GED mode exit	↗ "GED mode entry" parameter.

Table 25:   Signalling

6.3 "Inputs/Outputs" menu

6.3.1 Inputs

6.3.2 Outputs

6.3.3 Inverted In-/Outputs

This menu is only intended for MAGNETIC's service and only accessible with a password.

This menu allows you to invert individual inputs and outputs and with it the assigned functions. Additional relays by the customer for signal inversion are therefore not required.

Example

The input IN6 is assigned the function "Close (Inhibit opening)". In delivery state, this input is parameterised so that no validations are accepted as soon as a voltage of 24 V is applied to this input.

If no validations are to be accepted as soon as a voltage of 0 V is applied to input IN6, invert the "Close (Inhibit opening)" function according to the following description.

The operational view is displayed.

1.   Press the right button «⚡».

   √ The "Main Menu" menu is displayed.

2.   Select the menu "Inputs/Outputs".

3.   Confirm selection with the right control button «✔».

4.   Select the menu "Invert Inputs/Outputs".

5.   Confirm selection with the right control button «✔».

6.   Enter "Service Password".

7.   Confirm password with the right control button «✔».

8.   Select the menu "Inputs".

9.   Confirm selection with the right control button «✔».

10. Select input "Input 6 [   ]".

11. Invert the function of the input with the right button «✔».

   √ Your selection is marked with the symbol [X].

12. Use the left button «⬅] » to leave the "Settings" menu.

    √ The menu "Invert In-/Outputs" is displayed.

13. Press the left button «⬅] » repeatedly until the operational view is displayed again.

Input IN6 and therefore the assigned function "Close (Inhibit opening)" is inverted. In the menu "Information ()", the input IN6 with inverted function is marked with a "|"; in this example, it is "IN6: | Close (Inhibit opening)".

ℹ IMPORTANT!

In the program MGC.Connect, an input with an inverted function that is not occupied is symbolised with a red LED in the MGC IO area. As soon as the input is occupied, the LED goes out.

In the control unit MGC, the LED for a not occupied input with an inverted function remains off.

6.4 "Service" menu

This menu is only intended for service and only accessible with a password.

6.4.1 Gate HW

IMPORTANT!

As standard, the swing door is delivered with the "Locking rotating freely when de-energised" configuration. If you want a different configuration, convert the locking and adjust the parameter "Locking".

For locking conversion, see separate operating instructions
↗ Page 7, chapter 1.2.
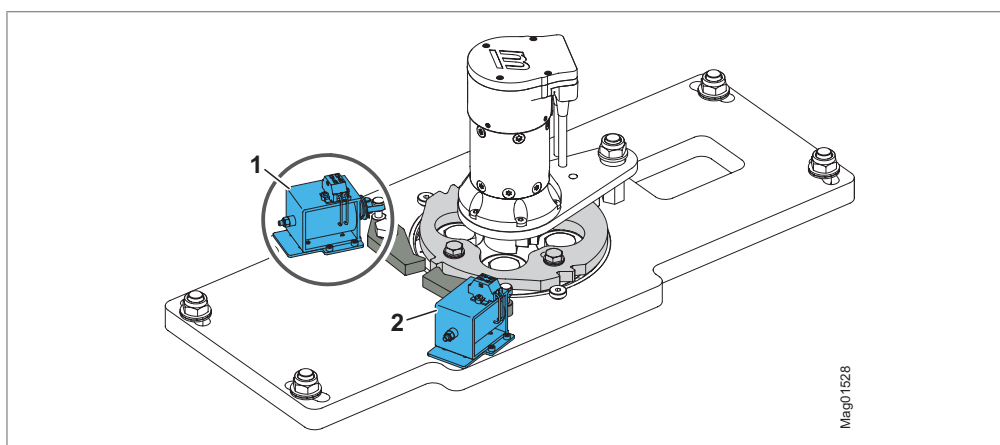
Fig. 27:   Locking configuration "rotating freely when de-energised"
1   Magnet RL1
2   Magnet RL2

Operational view > Main menu > Service > Gate HW	
Parameter	**Description**
Unlocked de-energised (Unlocked when de-energised)	This parameter is used to specify the switching signal for the Magnets RL1 and RL2 for locking.
	Options
	› [X]: Activated: The locking has been parametrised for the "Rotating freely when de-energised" configuration. In the event of power failure, the locking is unlocked and the blocking element can be moved.
	› [ ]: Deactivated: The locking has been parametrised for the "Locked when de-energised" configuration. In the event of power failure, the locking is locked and the blocking element can **not** be moved.
	Factory setting
	› [X]: Activated (Rotating freely when de-energised)

Table 26:   Gate HW

6.4.2 Further parameters

Operational view > Main menu > Service	
Parameter	**Description**
Cycles	Display of complete passage procedures.
Lifetime	Displays the operating hours counter. The operating hours counter records the time, during which the pedestrian gate is supplied with electrical power.
System time	Displays the internal date and the internal clock.
Main menu password	Activate and deactivate password protection for the main menu. To activate a change of the settings, you must power cycle the power supply. **Options** › Inactive (OFF): You can change the main menu without entering a password. › Active (ON): You can change the main menu only after entering a password. The password is identical with the one for the "Service" menu. **Factory setting** › Inactive (OFF)

Table 27: Service – Further parameters

6.5 "System" menu

Operational view > Main menu > System	
Parameter	**Description**
Language	Select menu language. **Factory setting** › English
Date/Time	Correct date and time of the control unit MGC. The current date and time is displayed via the parameter "System time".
Timer	↗ Page 50, Table 29

Table 28: System

The control unit is equipped with the "Timer" function, which controls the output with the "Timer" function. Use the menu "Timer" to parameterise the switch-on time, the switch-off time and week days.

For the "Timer" function, you must connect the output with the "Timer" function to the input that is parameterised with the desired input function via a jumper. Output function "Timer": ↗ Page 15

You can only select hours via the "Timer" menu. For exact times, we recommend the customer provide a solution. We also recommend checking the system time every six months and correcting it if required using the "Date/Time" parameter.

> "System time" parameter: ↗ Page 49

> "Date/Time" parameter: ↗ Page 49

Operational view > Main menu > System > Timer	
Parameter	**Description**
Switch-on hour	Select the hour at which the output function "Timer" is activated ↗ Page 15. **Options** > 0 to 23 h (by the hour)
Switch-off hour	Select the hour at which the output function "Timer" is deactivated ↗ Page 15. **Options** > 0 to 23 h (by the hour)
Monday, Tuesday, ... Sunday	Select the days of the week for the "Timer" function or deactivate the "Timer" function. If no day of the week has been selected, the "Timer" function is deactivated. **Factory setting** > No week day selected: Function "Timer" is deactivated.

Table 29:   Timer

6.6 "Passage counter" menu

Operational view > Main menu > Passage counter	
Parameter	**Description**
From entry	Display for the number of completed turn wing openings in zone controlled direction. If necessary, the value can be changed. **Setting range** › 0 to 30000
From exit	Display for the number of completed turn wing openings in zone not controlled direction. If necessary, the value can be changed. **Setting range** › 0 to 30000

Table 30: Passage counter

6.7 "Information" menu

Operational view > Main menu > Information	
Parameter	**Description**
Serial no	Displays the serial number of the control unit
Hardware version	Displays the present hardware version
Software #	Displays the present software number
SW version	Displays the present software version
Temperature	Displays the current temperature in the control unit
Logic voltage	Display of the logic voltage, from hardware version E
X20-EN	Display of the analogue voltage 0–10 V at the terminal "X20-EN"
PSU-FB	Feedback signal of the mains unit (for future expansions)

Table 31: Information

6.8 "Motor MHP2" menu

Operating view > Main menu > Motor MHP2	
Parameter	**Description**
Motor temperature	Display of the current motor temperature.
Information	Display of information about the "MHP2 Motor" module: Serial number (Serial No), hardware version, software # and software version.

Table 32: Motor MHP2

6.9 Menu "Detector 1 (A-B)"

The assignment of the induction loops is fixed:

› Induction loop A: Entry (passage from the zone not controlled (ZNC) to the zone controlled (ZC))

› Induction loop B: Exit (passage from the zone controlled (ZC) to the zone not controlled (ZNC))

Operational view > Main Menu > Detector 1 (A-B)	
Parameter	**Description**
Recalibration	Start reference of the induction loops (activate).
Mode A	› **No** induction loop connected: You must select option "Inactive" for this parameter. › Induction loop connected: This parameter setting does not influence the function. **Factory setting** › Monitoring
Mode B	› **No** induction loop connected: You must select option "Inactive" for this parameter. › Induction loop connected: This parameter setting does not influence the function. **Factory setting** › Active
Sensitivity A	Set the response sensitivity of the induction loop A. The response sensitivity is divided into increments. **Setting range** › 0 to 9 **Factory setting** › 5
Sensitivity B	Set the response sensitivity of the induction loop B. The response sensitivity is divided into increments. **Setting range** › 0 to 9 **Factory setting** › 5
Frequency setting	↗ Page 53, Table 34.
Special functions	This submenu has no function for MPG-3x2.
Information	Displays information via the plug-in module "Detector 1 (A–B)". Here, for example, the serial number, hardware version and software version of the plug-in module are displayed.

Table 33: Detector 1 (A-B)

Operational view > Main Menu > Detector 1 (A-B) > Frequency settings	
Parameter	**Description**
Freq. A	Displays the currently measured frequency for induction loop A
Freq. B	Displays the currently measured frequency for induction loop B
Freq. Shift	Interference influences, e.g. from external loop detectors or induction loops can influence the frequency of induction loops A and B. Use the parameter "Freq. shift" to change the frequency values for induction loops A (channel A) and B (channel B) by approx. 10% and thus reduce the influence on induction loops A and B. **Options for channels A and B** › High: high frequency value › Low: low frequency value **Factory setting** › High
Ref val. A	Displays the reference frequency for induction loop A
Ref val. B	Displays the reference frequency for induction loop B

Table 34: Frequency settings

6.9.1 Check working frequency of induction loops

The operational view is displayed.

1. To check the working frequency of the induction loops, press the left button "**ℹ**" repeatedly until the menu "Detector 1 (A-B)" is displayed.
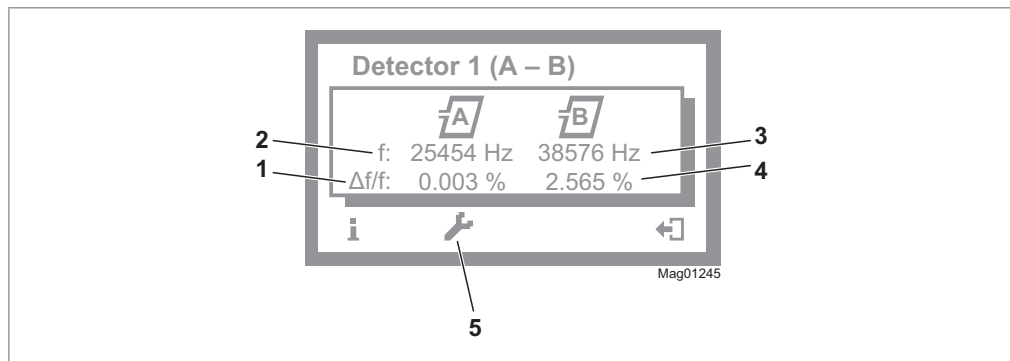

Fig. 28: View "Detector 1 (A-B)" (example)

1 Relative frequency of induction loop A
2 Currently measured frequency of induction loop A
3 Currently measured frequency of induction loop B
4 Relative frequency of induction loop B
5 Perform reference of the induction loops

2. Press the right button «⏎».

√ The operational view is displayed again.

6.9.2   Reconciling and setting the operating frequency of the induction loop

Operating frequency requirements

The operating frequency must fulfil following requirements:

› When driving over the induction loop with a bicycle, a significant frequency increase must be measurable. Chose stage 5 or 6 for sensitivity. The relative frequency change (Δf/f) must be at least 0.1%. The higher the relative frequency increase, the higher the operating safety of the induction loop.

› The induction loops of a control unit operate alternating, and can therefore not affect each other. However, to avoid interferences by frequency coupling from external loop detectors or other control devices in the direct proximity, a frequency clearance of at least 1000 Hz must be kept to them. For this, the menu "Freq. shift" is used to set the frequency option to "Low" or "High" or to adjust the induction loop coil number.

Recalibrate the working frequency via the "Information" menu

The operational view is displayed. ↗ Page 34, Fig. 24.

1. Press the left button «**i**» repeatedly, until the menu "Detector 1 (A-B)" is displayed. ↗ Page 53, Fig. 28.

2. Press the second operating button from the left «⌐».

    √ The induction loops are recalibrated. The loop symbols flash during recalibration.

3. Test the working frequencies.

4. Press the right button «⊡».

    √ The operational view is displayed.

5. If necessary, set sensitivity etc. via the "Detector 1 (A-B)" menu.
    Path: Operational view > Main Menu > Detector 1 (A-B)

Frequency value of the un-assigned induction loop unstable

If the frequency value of an induction loop is unstable, this induction loop is influenced by another induction loop or an external detector. The induction loops connected to the two channels of a detector module do not affect each other.

Depending on the loop geometry and settings of the external detector, set the menu "Freq. shift" to "Low" or "High".

The operational view is displayed. ↗ Page 34, Fig. 24.

1. Press the right button « ⌐ ».

   √ The "Main Menu" menu is displayed.

2. Select the menu "Freq. shift". Path: Main menu > Detector 1 (A-B) > Frequency settings > Freq. shift

3. Confirm selection with the right control button « ✔ ».

4. Select the parameter "Channel A" or "Channel B" with the two middle buttons « ➕ », « ➖ ».

5. Confirm selection with the right control button « ✔ ».

6. The selected parameter "Channel A" or "Channel B" is displayed.

7. Select the option "Low" or "High" with the two middle buttons « ➕ », « ➖ ».

8. Use the right button « ✔ » to select the option. Your selection is marked with the symbol « ✔ ».

9. Use the left button « ⬅ » to leave the menu.

   √ The safety prompt "Save changes?" appears.

   › If the changes are to be saved, press the right button « ✔ ».

   › If the changes are not to be saved, press the left button « ✖ ».

10. Press the left button « ⬅ » repeatedly until the operational view is displayed again.

11. Test the working frequency.

6.10 "Factory settings" menu

IMPORTANT!

The parameters of the control unit are stored in the three memory areas "Default settings", "Factory settings" and "User settings".

The default settings are identical to the factory settings in these operating instructions. The default settings are firmly store din the firmware and cannot be changed.

The factory settings can be assigned factory- or product-specific settings.

The user settings are the operating parameters.

Options in the "Factory settings" menu

The menu "Factory setting" offers the following options:

› Restore factory settings: The stored parameters in the memory area "Factory settings" are accepted as operating settings.

› User settings as factory settings: The current parameter settings are stored as factory settings. These factory settings can be used to receive project-specific settings.

› Default settings as factory settings: The factory settings are overwritten by the default settings.

If you would like to accepted the default settings as operating settings and the factory settings were overwritten first, you need to use the option "Default settings as factory setting" and then the option "Restore factory setting".

"Restore factory setting" option

The operational view is displayed. ↗ Page 34, Fig. 24.

1. Press the right button « ».

    √ The "Main Menu" menu is displayed.

2. Select the menu "Factory setting" with the two middle buttons « », « ».

3. Confirm selection with the right control button « ».

4. Enter password "0 0 0 0".

5. Confirm password with the right control button « ».

    √ The message "Restore to factory settings" appears.

6. Press the right button «✔».

    √ The safety prompt "Save changes?" appears.

    › If the changes are to be saved, press the right button «✔». The current
      settings are reset to factory settings. A restart is performed.

    › If the changes are not to be saved, press the left button «✖».

7. Press the left button «⬅» repeatedly until the operational view is displayed
    again.

Via service password for all options

The service password is different from the password "0 0 0 0".

The operational view is displayed. ↗ Page 34, Fig. 24.

1. Press the right button «⤵».

    √ The "Main Menu" menu is displayed.

2. Select the menu "Factory setting" with the two middle buttons «➕», «➖».

3. Confirm selection with the right control button «✔».

4. Enter "Service Password".

5. Confirm password with the right control button «✔».

    √ The message "Restore to factory settings" appears.

6. Select the desired option with the two middle buttons «➕», «➖».

7. Confirm selection with the right control button «✔».

    √ The safety prompt "Save changes?" appears.

    › If the changes are to be saved, press the right button «✔». The current
      settings are reset to factory settings. A restart is performed.

    › If the changes are not to be saved, press the left button «✖».

8. Press the left button «⬅» repeatedly until the operational view is displayed
    again.

7   Definitions and versions

Entry and exit

The service door or the cover of the support beam points into the zone controlled.

› Entry: Passage from the zone not controlled (ZNC) to the zone controlled (ZC)

› Exit: Passage from the zone controlled (ZC) to the zone not controlled (ZNC)

Entry	Exit
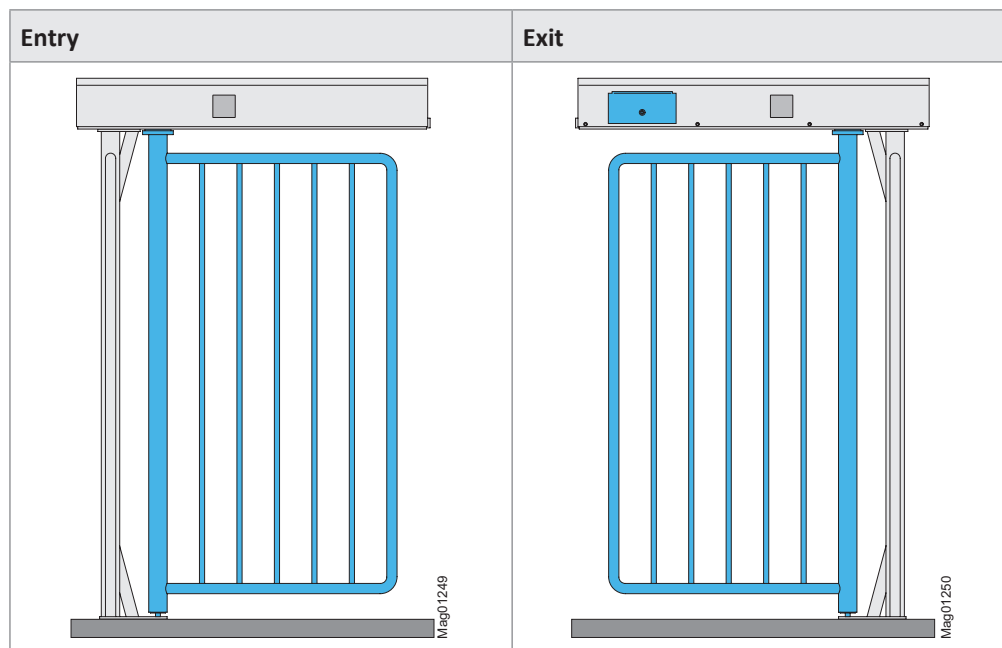
Fig. 29:	MPG-362: View from zone not controlled (ZNC) – entry	Fig. 30:	MPG-362: View from the zone controlled (ZC) – exit

Entry	Exit
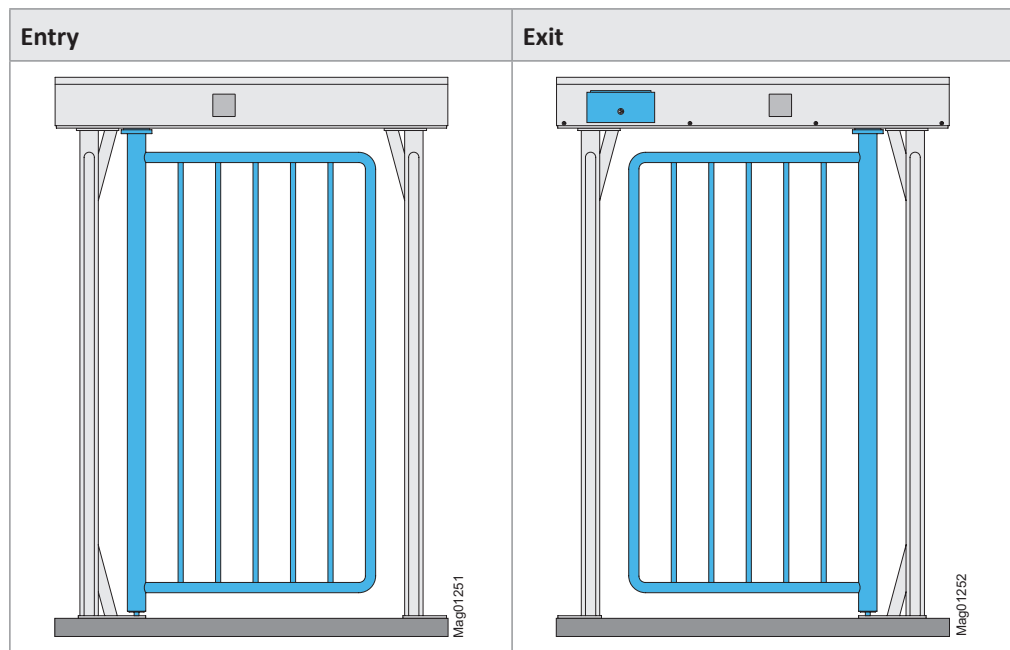
Fig. 31:   MPG-372:
View from zone not controlled
(ZNC) – entry

Fig. 32:   MPG-372:
View from the zone controlled
(ZC) – exit

8 Function description MPG-3x2

8.1 Function MPG-3x2

The MPG-372 swing door can be mounted rotating freely. The MPG-362 swing door is designed for attachment to another pedestrian gate such as to an MPT turnstile.

The swing door is also suitable as a supplement to other pedestrian gates, where bulky objects must be taken along or persons separated in a wheelchair-accessible manner. In general, the hinged gate is integrated in the fence and gate systems.

The turnstile can be operated in two directions. In multi-lane installations with high passage rates, the entry and exit lanes can also be configured for one-way passage.

When idle, the passage is blocked. The swing door is only opened after authorisation by an external command device such as a card reader or by a doorman.

In order to fulfil high safety requirements, the swing door is equipped with a locking system by default. The locking locks the turn wing in the locked position. You can choose between the variants "locking locked when de-energised" or "locking rotating freely when de-energised".

The MPG-362 and MPG-372 swing doors are optionally available with two handrails. Induction loops are integrated into the handrails either on one side or on both sides, depending on the version. Optionally, the handrails are also available without induction loops.

8.2 Start-up and regular movement sequence MPG-3x2

8.2.1 De-energised state

The swing door is available in the following configurations:

› Locking rotating freely when de-energised

› Locking locked when de-energised

If no details were given in the order, the configuration "Locking rotating freely when de-energised" is supplied.

"Lock rotating freely when de-energised" configuration

With this configuration, the swing door can be opened in both directions in the de-energised state.

"Lock locked when de-energised" configuration

With this configuration, the swing door is locked in both directions in the de-energised state. The turn wing is locked.

8.2.2 Regular movement process

After receiving a validation in one direction, the swing door is opened in the passage direction. The hold-open time expires immediately. Once the hold-open time is 0 seconds and there are no further validations, the swing door is closed.

Via the "Close (Inhibit opening)" input, the hold-open time and all pending validations are deleted.

If the value "1" was set for the parameter "Max pulse count", the hold-open time is extended (retriggered) by the set hold-open time with each new validation. If a value greater than "1" has been set for the "Max pulse count" parameter, further validations are ignored as soon as the set value is exceeded. You can set a maximum of 10 validations.

8.2.3 Start-up routine (reference run)

5 seconds after switching on, the swing door automatically performs a reference run (homing). During the reference run, the turn wing is slowly rotated in exit direction (ZNC).

The turn wing is then rotated to the closed position, the two lockings are activated and the centre position between the two lockings is determined.

If the "Service" mode is switched on when the pedestrian gate is switched on, no reference run is performed.

If the alignment between the turn wing and the foot is not correct, the alignment of the turn wing must be adjusted using the oblong holes on the base plate for the drive unit.

8.3   Special cases within the motion sequence

8.3.1   Turning back during the closing movement

If a user tries to turn back the turn wing during the closing movement, the status is logged via the warning message 0xFF06 "Vandalism".

The motor attempts to maintain the position of the turn wing with a reduced torque.

8.3.2   Obstacle detection

The behaviour of the swing door when it detects an obstacle is set via the "Impact" menu.

"Impact"" menu: ↗ Page 43, chapter 6.2.6

If an obstacle is detected during the movement, e.g. a user does not continue to walk or a piece of luggage is jammed, the set response is executed. After the set delay, the movement of the turn wing is continued with reduced speed and force. After several consecutive opening attempts with obstacle detection, the swing door is closed.

8.3.3   Vandalism attempt

If a user tries to pass through the swing door without authorisation, the output function "Buzzer/Siren (Alarm)" is set.

The output function "Buzzer/Siren (alarm)" is parametrised via the parameter "Buzzer/Siren". The "Vandalism" event is activated by default for the "Buzzer/Siren" parameter.

"Buzzer/Siren" parameter: ↗ Page 45

8.3.4   Emergency situation MPG-3x2

If the "| Emergency open" input is interrupted during operation, the turn wing is opened into the direction of the zone not controlled.

The status is logged via the warning message 0xFF20.

As soon as power is restored at the "| Emergency open" input of the control unit, the swing door is put back into operation.

9 Operation with induction loops or sensors

9.1 Induction loop connection

The MPG-362 and MPG-372 swing doors are optionally available with two handrails. Induction loops are integrated into the handrails either on one side or on both sides, depending on the version. These induction loops must be connected to the DM02 loop detector module. Alternatively, you can also install induction loops in the passage area of the swing gate and connect these to the DM02 loop detector module.

The induction loops can be used to detect bicycles, for example. Bicycles with little metal content, such as carbon bicycles, are not recognised by the induction loops.

The assignment of the induction loops is fixed:

› Induction loop A: Entry (passage from the zone not controlled (ZNC) to the zone controlled (ZC))

› Induction loop B: Exit (passage from the zone controlled (ZC) to the zone not controlled (ZNC))

The loop detector module is parameterised via the "Detector" menu on the MGC control unit.
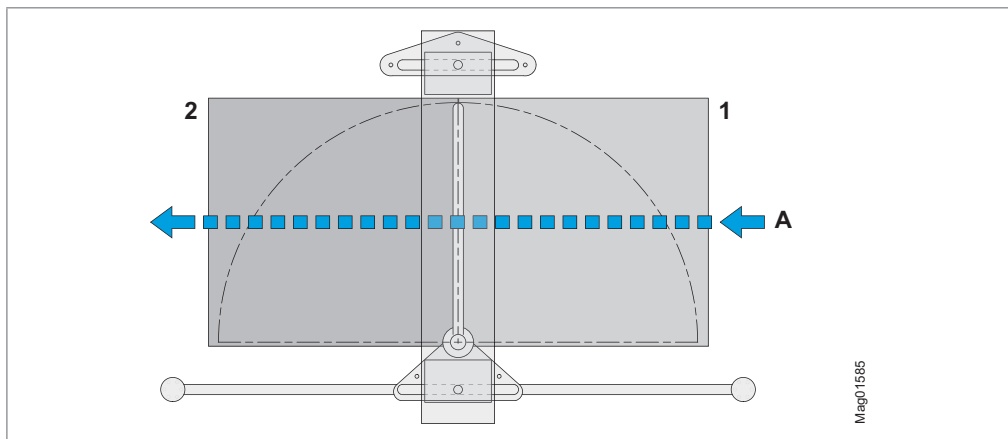
Fig. 33: Definitions

A Passage direction (there is a validation in this direction)

1 "Open" area: Opening loop or induction loop on the side of the swing door with validation

2 "Safety loop" area: Safety loop (closing loop) or induction loop on the side of the swing gate without validation

You receive a feedback via the output function "Stopped by sensor", if the function sequence is controlled by the induction loops.

9.2 Connection of sensors

Connect the sensor signals for the detection of persons to the inputs with the functions "Sensor entry" and "Sensor exit".

You receive a feedback via the output function "Stopped by sensor", if the function sequence is controlled by the sensors.
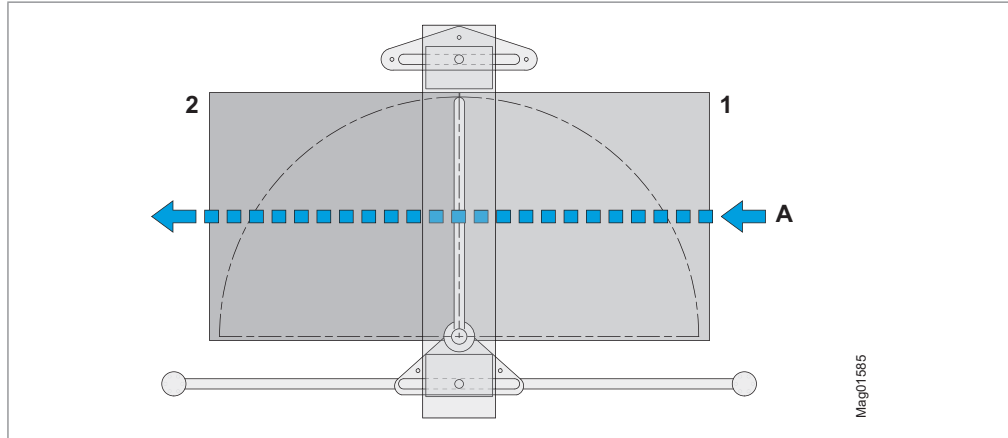
Fig. 34:   Definitions
A   Passage direction (there is a validation in this direction)
1   "Open" area: Input function "Sensor entry"
2   "Safety loop" area: Input function "Sensor exit"

The safety zones for the "Open" and "Safety loop" areas must never be occupied by the swing door's turn wing.

If the turn wing moves through a safety zone, select the option "Continue closing" for the parameter "When closing" and the option "Deactivated" for the parameter "Stop when opening".

9.3   Notices on operation with induction loops / sensors

If the induction loop or the sensor is occupied when the swing door is closed and there is still no validation signal, the GED flashes green. As soon as the validation signal is available, the swing door is opened and GED lights up green.

If the swing door is to be opened independently of presence detection, the swing door must be opened via the "Emergency open" input.

You can parameterise a delay for closing the swing door.
Parameter "Close delay": ⬈ Page 40.

In certain cases, you can forward a validation signal to a turnstile MPT. Output functions "Passage pulse entry": ⬈ Page 14 and "Passage pulse exit": ⬈ Page 14

9.4   Parameterisation of the "Induction loops / Sensors" function via MGC.Connect

IMPORTANT!

If you have connected induction loops to the DM02 detector module or sensor signals to the inputs with the functions "Sensor entry" and "Sensor exit", you can parameterise additional functions via the program MGC.Connect in the "Sensor" area.

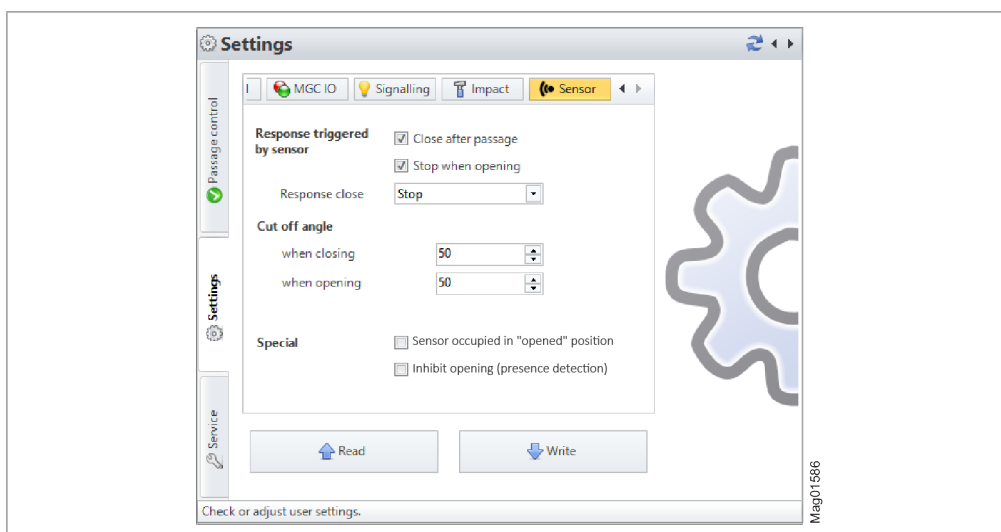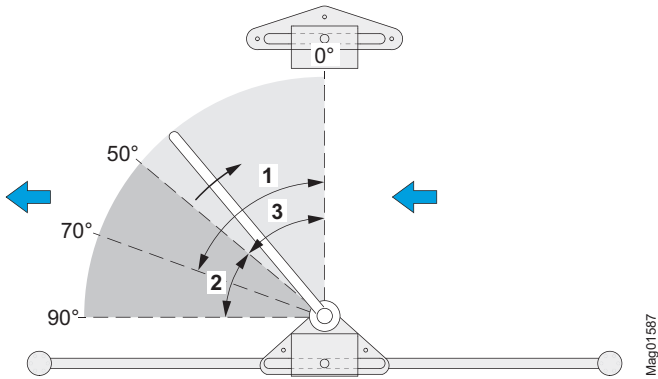In this chapter, the induction loops are referred to as sensors.

Fig. 35:   "MGC.Connect" programme, "Settings" tab, "Sensor" section

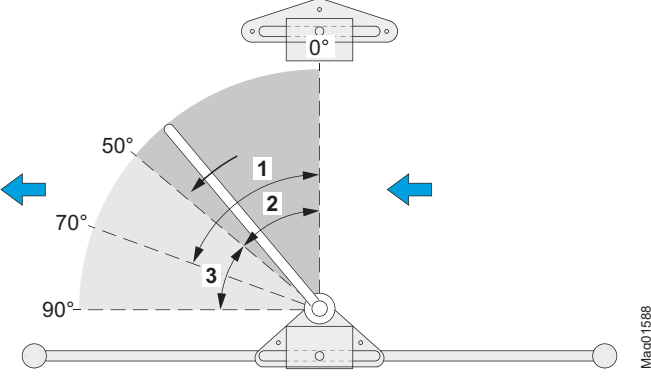| Parameter	Description
Response triggered by sensor	Select the response of the swing door when the sensor is occupied during the selected movement.
	More information: ↗ Page 68, Table 36, "Response triggered by sensor"
	If the function of the swing door is controlled by the sensor, this is reported via the output function "Stopped by sensor".
Cut off angle when closing	If the option "Sensor occupied in "opened" position" is activated, this option **is not** displayed.
	Enter the cut off angle for the closing process, if the sensor is occupied during closing.
	This parameter is effective if "Stop" or "Open" has been selected for the "Response close" parameter.
	Setting range:
	› 0° to 70°
	Factory setting:
	› 50°
	"Response close" parameter, "Stop" option
	If the sensor in the swivel range is occupied during the closing and the current opening angle of the turn wing is greater than the set cut off angle "When closing", the turn wing is stopped in the movement.
	Fig. 36: Swing door is closed, set cut off angle in this example is 50°
	1 Adjustment range 0° to 70°
	2 Area in which the turn wing is stopped during closing
	3 Area in which the turn wing is no longer stopped during closing
	"Response close" parameter, "Open" option
	If the sensor in the swing area is occupied during closing and the current opening angle of the turn wing is greater than the set cut off angle "When closing", the swing door is opened again.

Parameter	Description
Cut off angle when opening	Enter the cut off angle for the opening process, if the sensor is occupied during opening. This parameter is effective if "Activated" has been selected for the "stop when opening" parameter. If the sensor in the swivel range is occupied during the opening and the current opening angle of the turn wing is smaller than the set cut off angle "When opening", the turn wing is stopped in the movement. **Setting range:** › 0° to 70° **Factory setting:** › 50° Fig. 37: Swing door is opened, set cut off angle in this example is 50° 1 Adjustment range 0° to 70° 2 Area in which the turn wing is opened during closing 3 Area in which the turn wing is no longer stopped during opening
Sensor occupied in "opened" position	Activated: Monitoring only takes place in the opening direction. As soon as the hold-open time and the close delay have elapsed, the swing door is closed. The signal from the sensor "Output (Safety loop)" is ignored. **Factory setting:** › Activated
Inhibit opening (presence detection)	› Activated: The swing door is opened when the sensor is occupied. › Deactivated: The swing door is opened via the input functions "Open entry" and "Open exit". With this setting, the sensors are only used for monitoring or automatic closing. **Factory setting:** › Activated

Table 35:   "Settings" tab – "Sensor" section

Response triggered by sensor

Selection	Description
Close after passage	If the option "Sensor occupied in "opened" position" is activated, this option **is not** displayed. Select the response of the swing door when the sensor for the area "Exit (safety loop)" becomes free. **Options:** › Activated: As soon as the sensor for the area "Exit (safety loop)" is free, the validations are decremented by one. If there are no further validations, the swing door is closed immediately. › Deactivated: No action. After the end of the hold-open time, the validations are decremented by one. If there are no further validations, the swing door is closed immediately. **Factory setting:** › Activated
Response close	If the option "Sensor occupied in "opened" position" is activated, this option **is not** displayed. Select the response of the swing door if the sensor in the swivel range is occupied when closing and the current opening angle of the turn wing is greater than the set cut off angle "When closing". **Options:** › Stop: The movement of the turn wing is stopped. As soon as the sensor becomes free again, the movement of the turn wing is continued. › Open (Reverse): The swing door is opened again. › Continue closing: The swing door is closed further. **Factory setting:** › Stop
Stop when opening	Select the response of the swing door if the sensor in the swivel range is occupied when opening and the current opening angle of the turn wing is smaller than the set cut off angle "When opening". **Options:** › Activated: The movement of the turn wing is stopped. As soon as the sensor becomes free again, the movement of the turn wing is continued. › Deactivated: The swing door is opened further. **Factory setting:** › Activated

Table 36: "Settings" tab – "Response triggered by sensor" section

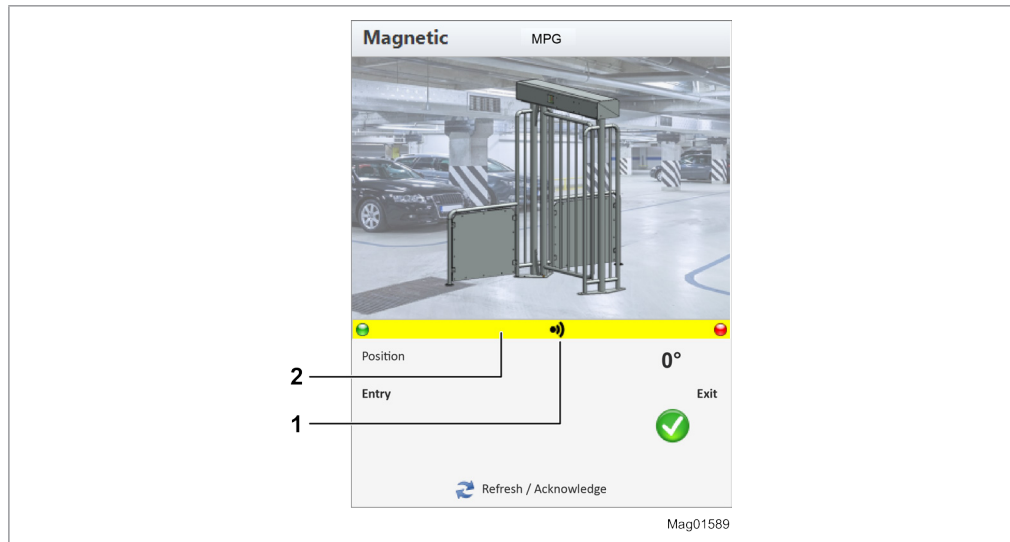## 9.5   Visualisation of the signals from the induction loops / sensors with MGC.Connect

Fig. 38:   Visualisation for applications with induction loops / sensors

1   Symbol for induction loop / sensor, here induction loop / sensor "Output (safety loop)" occupied

2   Yellow bar: The function sequence was controlled by the connected induction loops / sensors

Symbol	Description
	Induction loop / sensor "Entry (open)" occupied
	Induction loop / sensor "Exit (safety loop)" occupied

10   Corrective action

10.1   Safety in troubleshooting

Qualification of personnel

› Magnetic service expert

↗ Page 9, chapter 1.4.1.

Electrical work to the product must be carried out by technicians with additional qualification and by Magnetic service experts. Electrical work to the electrical system provided by the customer must only be carried out by a qualified electrician.

Personal protective equipment

Wear the following personal protective equipment:

› Work clothes

› Protective gloves

› Safety shoes

› Protective helmet.

⚠ WARNING	
⚠	**Inappropriate troubleshooting!**
	Inappropriate troubleshooting can cause severe injuries.
	› Observe possible movements of the turn wing. Defective control may lead to inadvertent movement of the turn wing.
	› In case of damaged components, take the pedestrian gate out of operation.
	› Use only original spare parts.
	› After completion of troubleshooting, ensure that all covers are correctly mounted.

The following chapters describe possible causes of malfunctions and troubleshooting tasks.

Faults of the types WARNING and ERROR may only be corrected by a MAGNETIC service expert.

Required qualification: ↗ Page 9, chapter 1.4.1.

10.2   Malfunctions pedestrian gate

Malfunction: Display is difficult or impossible to read.

Possible cause	Corrective action	Removal by
Display contact set too light or dark.	Correct display contact. ↗ Page 36, chapter 5.6.	Magnetic service expert

Malfunction: Turn wing does not rotate.

Possible cause	Corrective action	Removal by
Power supply is not connected.	› Switch on power supply. › Check power supply.	Magnetic service expert, electrician if required
Error present. The corresponding error message is displayed.	Depending on error message, check components, wiring, etc.	Magnetic service expert
Power supply is present. Control unit display does not light up.	Control unit defective. Replace the control unit.	Magnetic service expert
Locking signal present.	Remove locking signal.	Magnetic service expert

10.3   Event, warning and error messages – definitions

The control unit differentiates between events, warnings and errors. The corresponding message is displayed.

Event messages "INFO"

Event messages inform about events. The pedestrian gate continues to operate normally. Event messages do not influence the outputs of the control unit.

Warning messages "WARNING"

Faults that could be reset by the control unit are displayed as warnings. Operation of the pedestrian gate is not or only briefly impaired.

If the function "Warning" has been chosen for an output, this output is deactivated at pending warnings (closed-circuit principle).

Error messages "ERROR"

Faults that cannot be reset by the control unit are displayed as errors. The pedestrian gate is put out of service.

> **i** IMPORTANT!
>
> With some messages, the control unit tries to reset the cause of the message. If the attempt was successful, the message is displayed as WARNING. If the attempt failed, the message is displayed as ERROR.

10.4 Displaying and signalling messages

Messages are displayed and signalled as follows:

› Status display in the MGC.Connect programme: ↗ Page 23, Fig. 6.

› On the display of the MGC control unit.

› The output with the function "| Error" is deactivated in case of an error (ERROR) (closed-circuit principle). This function is not parameterised ex works. ↗ Page 13, chapter 2.2.

› The output with the function "| Warning" is deactivated in case of a warning (WARNING) (closed-circuit principle). This function is not parameterised ex works. ↗ Page 13, chapter 2.2.

10.5 Procedure in case of a fault / message

IMPORTANT!

Faults of the types WARNING and ERROR may only be corrected by a Magnetic service expert.

Required qualification: ↗ Page 9, chapter 1.4.1.

IMPORTANT!

In the "Service" tab of the "MGC.Connect" programme, you can generate a current system report for the pedestrian gate. The system report contains an event log with additional information about a fault / message such as "Node name". ↗ Page 27, chapter 4.6.

1. Correct the fault according to the following chapters:

   › Node name "Gate Controller": ↗ Page 74, chapter 10.6.1.

   › Node name "Motor MHP2": ↗ Page 76, chapter 10.6.2.

   › Node name "Safety Controller": ↗ Page 78, chapter 10.6.3.

   › Node Name "Detector": ↗ Page 79, chapter 10.6.4.

   › All others: ↗ Page 79, chapter 10.6.5.

2. Perform reset. ↗ Page 80, chapter 10.7.

3. Acknowledge message.

10.6 Event, warning and error messages (troubleshooting)

10.6.1 Event, warning and error messages – Logic control (control unit)

Number	Designation	Possible cause	Corrective action
3120 ERROR	Mains power failure	Short-term power failure detected.	Check supply voltage and mains quality.
5112 WARNING	24 V logic voltage too low	Under voltage	› Reduce load. › Check mains unit.
5530 ERROR	EEPROM checksum	Checksum of parameters not correct	› Reset parameters to factory settings. ↗ Page 56, chapter 6.10. › If required, contact Service.
6000 ERROR	Module SW-update failed	Firmware update was not performed correctly.	› Restart the control unit. › If the error remains, perform the update again via the service module.
6101 ERROR	Software error: VS	Software error	› Perform software update.
6102 ERROR	Software error: System bus	Within the control, an error is pending in communication.	› Check SW versions of all plug-in modules. If necessary, update via the service module. › If all FW versions are up to date, contact service.
6103 WARNING	FW defaults restored	After a software update.	› Perform reset. ↗ Page 80, chapter 10.7. › If the error occurs repeatedly, replace the control unit MGC.
6104 WARNING	Unexpected motor state	Motor control error	› Perform reset. ↗ Page 80, chapter 10.7. › Perform software update. › Check wiring.
6105 ERROR	Homing failed	The pedestrian gate could not execute a reference run.	› Check lockings. › Check motor communication. › Check mechanics. › Check proximity sensor. › Perform reset. ↗ Page 80, chapter 10.7.

Number	Designation	Possible cause	Corrective action
6110 ERROR	Safety Controller: SW update required	MHP2 motor detected. A software package with the firmware Motor GW is installed in the control unit.	Perform the software update as follows: › Execute package PREPARE_MHP2. › Install the latest firmware package for pedestrian gates SMP-MGC-PA0.
6130 ERROR	Safety Controller: Configuration faulty	The configuration of the safety controller is not consistent.	› Reset parameters to factory settings. ↗ Page 56, chapter 6.10.
7530 WARNING	Motor MPH2: Communication faulty	› No motor connected. › Cables and / or plugs to the motor interrupted. › Power supply to the motor interrupted.	› Check connections. › Check CAN termination and correct if necessary. See separate electrical wiring diagram.
8130 WARNING	Node monitoring	The communication to a plug-in module was interrupted.	› Check whether all plug-in modules are listed in the main menu. › Perform reset. ↗ Page 80, chapter 10.7.
FF20 WARNING	Emergency open active	0 V or no signal is present at the "Emergency open" input.	› Check input signal. › If not used, deactivate the input function.
FF28 ERROR	Locking faulty	Locking was not recognised during homing.	› During homing, there was an obstacle in the swivel range of the blocking element. › Check plug-in module MFM01. › Check the wiring to the two magnets RL1 and RL2. › Check "Locking" parameterisation. The parameterisation must match the installed magnets. ↗ Page 48, chapter 6.4.1 › Check the mechanism of the locking.

Table 37:   Event, warning and error messages – Logic control (control unit)

10.6.2 Event, warning and error messages – Motor MHP2

Number	Designation	Possible cause	Corrective action
2220 WARNING	Over current	Over current detected	› Check mains unit. › Check wiring.
3210 ERROR	Over voltage Ucc	Over voltage detected. Vandalism or mains unit defective.	› Check mains unit.
3211 ERROR	Over voltage Udc	Over voltage detected. Vandalism or mains unit defective.	› Check wiring. › Check mains unit.
3220 WARNING	Under voltage Ucc	Under voltage detected	› Disconnect additional loads from the MGC control unit. › Check mains unit.
3221 WARNING	Under voltage Udc	Under voltage detected. Mains unit overloaded. The message can occur in case of vandalism and deactivated locking.	› Disconnect additional loads from the MGC control unit. › Check mains unit. › Check wiring.
4210 ERROR	Over temperature	High temperature detected. Motor overloaded or blocked.	› Check the motor temperature via the "Motor MHP2" menu. The temperature must be below 100°C. › Reduce load. › Reduce speed.
4211 ERROR	Over temperature PCB	Motor overloaded or blocked.	› Reduce load. › Reduce speed.
4220 WARNING	Derating	The power consumption of the motor is reduced to prevent the temperature from increasing any further. Motor overloaded or blocked.	› Remove inadmissible attachments. › Reduce load. › Reduce speed.
4221 ERROR	Under temperature PCB	Ambient temperature too low.	› Install heating.
5010 ERROR	Motor HW	–	› Perform reset. ⬈ Page 80, chapter 10.7. › Perform software update. › Replace motor.
5020 ERROR	Encoder	–	› Perform reset. ⬈ Page 80, chapter 10.7. › Perform software update. › Replace motor.

Number	Designation	Possible cause	Corrective action
5030 ERROR	Hardware: I2C	–	› Perform reset. ⬈ Page 80, chapter 10.7. › Perform software update. › Replace motor.
5040 ERROR	Hardware: SPI	–	› Perform reset. ⬈ Page 80, chapter 10.7. › Perform software update. › Replace motor.
6150 ERROR	Selftest failed	EMC interference, motor control or microcontroller defective.	› Perform reset. ⬈ Page 80, chapter 10.7. › Perform software update. › Replace motor. › If the error occurs repeatedly, replace the control unit MGC.
6170 ERROR	Configuration faulty	–	› Perform reset. ⬈ Page 80, chapter 10.7. › Perform software update.
FF06 WARNING	Vandalism	An unauthorised passage was detected.	› Check locking. › Confirm warning via input.
FF32 ERROR	HW-Enable test failed	–	› Perform reset. ⬈ Page 80, chapter 10.7. › Perform software update. › Check wiring. › If other errors are displayed, correct the causes of these errors first.
FFA1 ERROR	Trajectory	–	› Perform reset. ⬈ Page 80, chapter 10.7. › Perform software update. › Check Motor.

Table 38: Event, warning and error messages – Motor MHP2

10.6.3 Event, warning and error messages – Safety controller

Number	Designation	Possible cause	Corrective action
6150 ERROR	Selftest failed	EMC interference, motor control or microcontroller defective.	› Perform reset. ⬈ Page 80, chapter 10.7. › Perform software update. › Replace motor. › If the error occurs repeatedly, replace the control unit MGC.
6170 ERROR	Configuration faulty	–	› Perform reset. ⬈ Page 80, chapter 10.7. › Reset parameters to factory settings. ⬈ Page 56, chapter 6.10. › Perform software update.
FF32 WARNING	HW-Enable test failed	–	› Perform reset. ⬈ Page 80, chapter 10.7. › Perform software update. › Check wiring. › If other errors are displayed, correct the causes of these errors first.
FFB1 WARNING	Emergency stop	The speed or torque has been exceeded during movement, e.g. due to vandalism or motor overload.	› Perform reset. ⬈ Page 80, chapter 10.7. › Perform software update.
FFB2 WARNING	Safety stop	Vandalism, safety parameter exceeded or motor overloaded.	› Perform reset. › Perform software update.

Table 39: Event, warning and error messages – Safety controller

10.6.4 Event, warning and error messages – Detector

Number	Designation	Possible cause	Corrective action
FF4A ERROR	Hardware error	Internal HW functional test failed	› Perform reset. ↗ Page 80, chapter 10.7.
FF4B WARNING	Error loop A or C	Short-circuit or open circuit on induction loop A or C	› Correct loop error and perform recalibration. › If no induction loop is connected, select the"Inactive" option in the"Detector" menu.
FF4C WARNING	Error loop B or D	Short-circuit or open circuit on induction loop B or D	› Correct loop error and perform recalibration. › If no induction loop is connected, select the"Inactive" option in the"Detector" menu.

Table 40: Event, warning and error messages – Detector

10.6.5 Event, warning and error messages – All modules

Number	Designation	Possible cause	Corrective action
5510 ERROR	Controller selftest failed	EMC interference, MGC control unit or microcontroller defective.	› Perform reset. ↗ Page 80, chapter 10.7. › Perform software update. › If the error occurs repeatedly, replace the control unit MGC.
5531 WARNING	EEPROM 1 checksum	After a software update	› Perform reset. ↗ Page 80, chapter 10.7. › If the error occurs repeatedly, replace the control unit MGC.
5532 WARNING	EEPROM 2 checksum	After a software update	› Perform reset. ↗ Page 80, chapter 10.7. › If the error occurs repeatedly, replace the control unit MGC.
5600 WARNING	Motor/Gearbox configuration invalid	Wrong motor installed.	› Compare the marking on the type plate of the spare part with the original motor.
6010 WARNING	Watchdog reset	SW error	› Perform software update.

Number	Designation	Possible cause	Corrective action
8110 WARNING	Bus fault	Warning	› If required, contact Service.
8120 WARNING	Bus HW fault	Warning	› Check the DIP switch next to the service interface (ON position). › If necessary, remove devices at the service interface.

Table 41:   Event, warning and error messages – All modules

10.7   Performing reset

If you use one of the following options, the control unit will perform a reset:

› Switch of power supply and switch it on again after 10 seconds.

› Press the two middle operating buttons on the control unit display for 5 s.

› In the "MGC.Connect" programme, click on the "Service" tab and select the "Reset" button.

NOTICE
! **Restarting quickly!** Restarting the pedestrian gate too quickly can lead to damage of the equipment! › Wait at least 10 seconds after switching off the pedestrian gate before you switch the pedestrian gate on again.

11 Menu structure
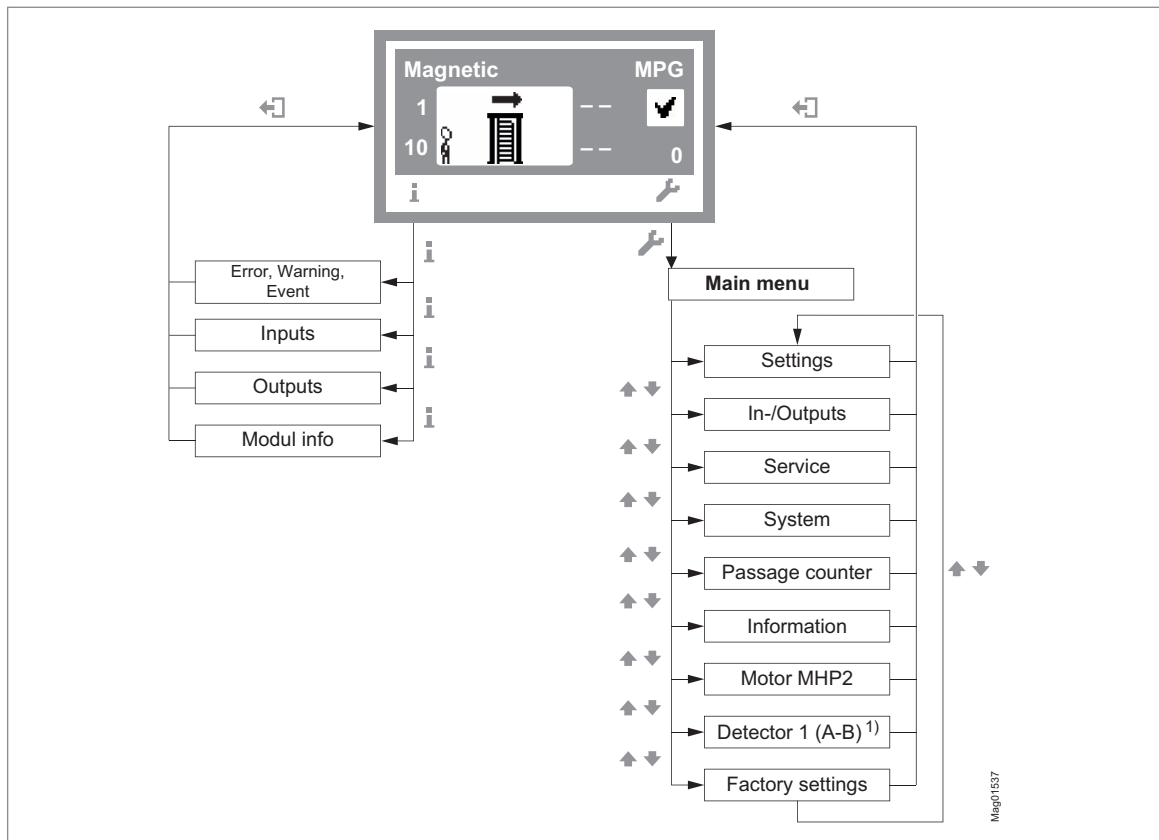
Fig. 39:   "Information" menu and "Main menu"
            1) "Detector 1 (A-B)" menu with "Detector" plug-in module inserted
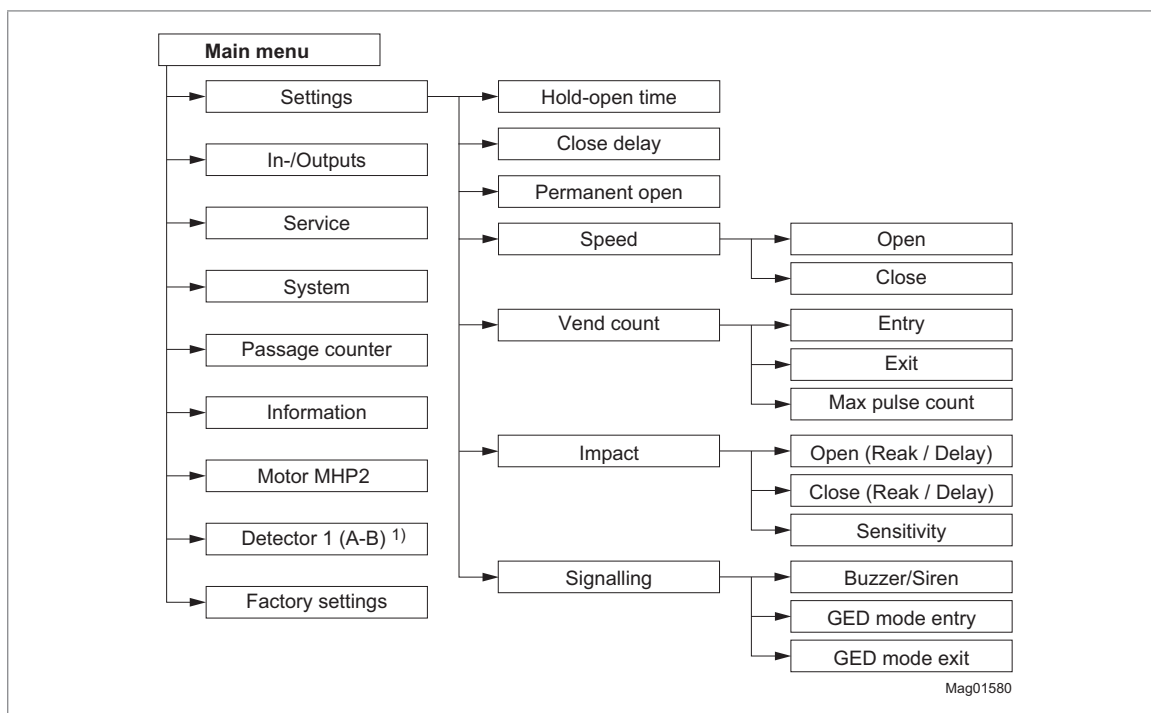
Fig. 40:   "Settings" menu
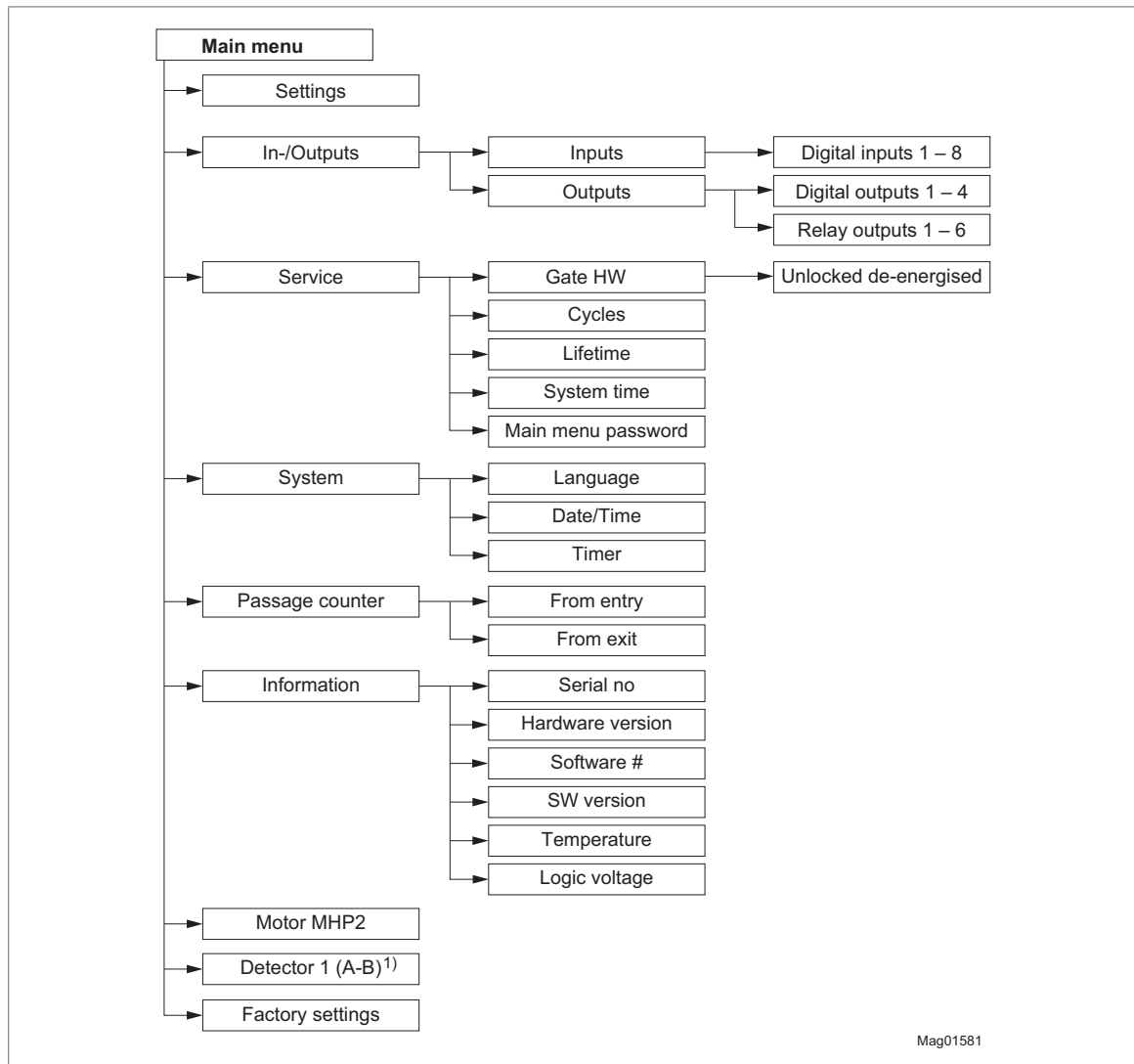
Fig. 41: Menu "Inputs/Outputs", "Service", "System", "Passage counter", "Information" and "Factory settings
1) Menu "Detector 1 (A-B)" with "Detector" plug-in module inserted
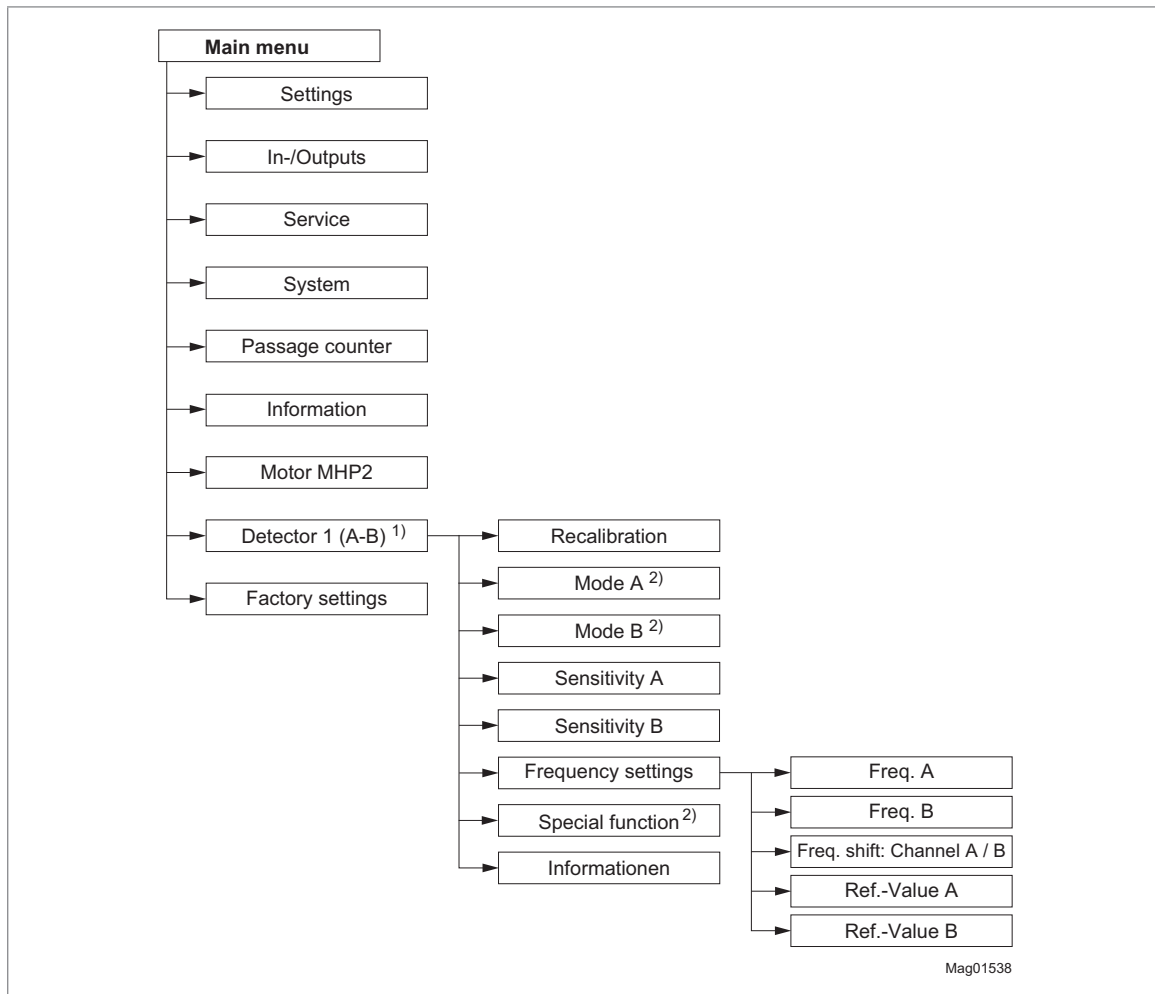
Fig. 42:   Menu "Detector 1 (A-B)"
1) Menu "Detector 1 (A-B)" with "Detector" plug-in module inserted
2) Parameter / submenu without function

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