Access Control

USER MANUAL

Translation of the original instructions

Version: **1.0**

Date: **10/01/2023**

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VERSION	DATE	CHANGES
1.0	10/01/2023	-

Any information inside this manual can be changed without advice.

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Exclusion of liability:
Despite checking that the contents of this document match the hardware and software, deviations cannot be completely excluded. We therefore cannot accept any liability for this.
Any necessary corrections will be incorporated into newer versions of this manual.

Symbol for relevant information

Symbol for warning

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1. Access Control Parameters

Configuration

Communication objects involved:

“<Access> System ID”	2 Bytes	CW
“<Access> Legacy”	10 Bytes	CW
“<Access> Reset Legacy”	10 Bytes	CW
“<Access> Standard”	14 Bytes	CW
“<Access> Reset Standard”	14 Bytes	CW
“<Access> Transit”	4 Bytes	CT

KNX PARAMETER	SETTINGS
Card management	standard/legacy
The two methods differ in the length and format of the telegram used to set the passwords, validity, time slots and all the other information necessary for managing access via card. Depending on the mode selected, the related communication objects will be available. **Legacy:** the 10B object is used to maintain compatibility with the **Synchronicity** access control system (for products sold until 2021). **Standard:** the 14B object is used to take advantage of the new functions of the **9025 RFID Mifare** system.	
Validity start	<hours>, <minutes>
Validity end	<hours>, <minutes>
Only in **Legacy** mode do these parameters define in which hour-minute of the day the start and end of validity must be understood to be.	
Counter function	disabled/enabled
See paragraph **“Counter” on page 5**.	
Date control	disabled/enabled
Enables or disables control by the device on the start/end validity date of the card. To manage the card without expiry date, deactivate the date control.	
Day hour control	disabled/enabled
Enables or disables control by the device of the daily time slots. Activate the **“day hour control”** to manage the entrances only during certain time slots (for example in communal areas).	
Week day control	disabled/enabled
Similar to the previous parameter, it activates the control based on days of the week. Activate the **“week day control”** to manage entrances only on certain days (for example in communal areas).	
Enables alarms	disabled/enabled
Activating the parameter displays a page dedicated to managing the alarms associated with card reading. On the page it is possible to select which alarm to activate: **System ID:** system code not recognised **Card ID**: card code not recognised **Card Date**: card with incorrect validity interval **Card HOD**: Card with incorrect hour of day **Card DOW**: card with incorrect day of week **Card Access**: card with access **Counter**: card with exhausted counter For each alarm it is possible to set a colour of the RGB bar, an action on the backlighting LEDs, an acoustic warning with the buzzer, an alarm deactivation time, a 1-bit object dedicated to sending of the alarm status on bus.	

RGB / LED TOP / BUZZER

For each element of the **CARD HOLDER** device, it is possible to set a different behaviour for the **Welcome** event and for the **Goodbye** one.

Welcome Event: card inserted and recognised

Goodbye Event: valid card extracted

RGB

KNX PARAMETER	SETTINGS
RGB temporary action	none fixed 500 ms flashing 1s flashing
This parameter defines the behaviour of the RGB LED.	
Colour	RGB/HSV
it is possible to set the desired colour by choosing between RGB or HSV colour method.	

TOP LED

KNX PARAMETER	SETTINGS
Top LED action	none temporary flashing switches in off switches in on
This parameter defines the behaviour of the Top LED.	

BUZZER

KNX PARAMETER	SETTINGS
Buzzer action	no/yes
Actives or not the buzzer	
Tone	tone 1...tone 16
With this parameter it is possible to choose the desired buzzer tone.	

Access control

For each command of the **CARD HOLDER** device, it is possible to set a different value for the **Welcome** event and for the **Goodbye** event.

KNX PARAMETER	SETTINGS
Command	no/yes
Enabling the parameter makes visible a generic 1-bit communication object, which sends a telegram at each access, regardless of the type of card read.	
Access types managed	Customer Service Maintenance Electrical Safety Assistance Administrator
For each enabled access level (the customer level is always enabled) a 1-bit command object and a 1-bit enabling/disabling command object from the bus can be associated. Furthermore, for each type of access enabled, a dedicated configuration page opens.	
Activation telegram	telegram “0” / “1”

The parameter refers to the activation value of the disable object. If this parameter is set to the value “1”, the command “1” on the enable/ disable object will cause activation of the command object.	
Goodbye telegram delay	no delay 1,2 3, 5, 10, 15, 30, 45 seconds 1, 2, 5, 10, 15, 20, 30 minutes
With this parameter it is possible to set a delay time for sending of the goodbye telegram.	
Send transit even when card is removed	no/yes
This parameter defines whether to send the “<Access> Transit” object for the goodbye event.	

ACCESS TYPE <X>

The types of accesses available are:

- customer
- service
- maintenance
- installer
- safety
- assistance
- administrator

This paragraph describes the parameters and objects present on the pages visible when the management of a certain type of access is activated.

Communication objects involved:

COMMON

“Scene <Access>”	1 Byte	CRT
“HVAC <Access>”	1 Byte	CRT
“Setpoint <Access>”	1 Byte	CRT
“Command <Access>”	1 Bit	CRT

ACCESS TYPE-SPECIFIC

“<Access> x - Command”	1 Bit	CRT
“<Access> x - Percentage/Angle/Relation/Rate/Pulses”	1 Byte	CRT
“<Access> x – Enable”	1 Bit	CW

All objects available for sending in each access type are subject to the ability to be enabled / disabled via the 1-bit object, with the exception of the Admin access which can never be disabled.

For each command of the **CARD HOLDER** device, it is possible to set a different behaviour for the **Welcome** event and for the **Goodbye** event.

Welcome Event: card inserted and recognised

Goodbye Event: valid card extracted

KNX PARAMETER	SETTINGS
State after download	disabled/enabled
Establishes whether after a download the user type is enabled or disabled.	

Common objects: **Scene command** **HVAC control** **Setpoint command**	 no/yes no/yes no/yes
There are three objects, one of the scene type, one of the HVAC type and one of the setpoint type, which can send telegrams on the bus upon each access. For each type of access it is possible to enable or disable the use of this object and to define the value to be sent which may be different for each type of access.	
Common objects: **Scene value** **HVAC value** **Setpoint value**	1 ... 64 auto/comfort/standby/economy/ protection -671088 ... 670760
Defines the value to be sent on the related common object.	
Command	no/yes
Used to enable the “<Access> x - Command” object.	
Command value	telegram “0” / telegram “1”
Defines the value to be sent on the “<Access> x - Command” object.	
1 Byte command	no/yes
For each type of access it is also possible to activate a further 1 Byte object, distinct for each type, for which to define a data format (DPT) and a value using the following parameters: **Datapoint type** DPT 5.001 percentage (0 ... 100%) DPT 5.003 angle (degrees) DPT 5.004 percentage (0 ... 255%) DPT 5.005 relation (0 ... 255) DPT 5.006 rate (0 ... 255) DPT 5.010 pulse counter (0 ... 255) **1 byte command value** 0 ... 255	

Hour meter

Communication objects involved:

“<Access> Counter A – Enable”	1 Bit	CW
“<Access> Counter A – Feedback”	1 Byte	CRT
“<Access> Counter B – Enable”	1 Bit	CW
“<Access> Counter B – Feedback”	1 Byte	CRT
“<Access> Counter C – Enable”	1 Bit	CW
“<Access> Counter C – Feedback”	1 Byte	CRT
“<Access> Counter D – Enable”	1 Bit	CW
“<Access> Counter D – Feedback”	1 Byte	CRT

KNX PARAMETER	SETTINGS
Activation telegram	telegram “0” / telegram “1”
Defines which 1-bit telegram value activates the counter function.	
Counter to be decreased after download	none counter A counter B counter C counter D
Defines the counter enabled upon device download.	
Inhibition time [s]	1,5,10.30
With this parameter it is possible to choose a card reading inhibition time.	
Enable feedback objects	disabled/enabled

It defines whether or not to send the state with a 1 Byte object.

Alarms

Communication objects involved:

“<Access> System ID Alarm”	1 Bit	CRT
“<Access> Card ID Alarm”	1 Bit	CRT
“<Access> Card Date Alarm”	1 Bit	CRT
“<Access> Card HOD Alarm”	1 Bit	CRT
“<Access> Card DOW Alarm”	1 Bit	CRT
“<Access> Card Access Alarm”	1 Bit	CRT
“<Access> Counter Alarm”	1 Bit	CRT
“<Access> Alarm Reset”	1 Bit	CW

This paragraph describes the parameters present on the pages visible when an alarm is activated (System ID, Card ID, Card Date, Card HOD, etc.).

KNX PARAMETER	SETTINGS
Activation telegram	telegram “0” / telegram “1”
Defines which 1-bit telegram value triggers the Alarm function.	
System ID alarm Monitors the correspondence between the System ID of the card and that of the device, set via the “<Access> System ID” object. **Card ID Alarm** Monitors the correspondence between the card number and the list of cards registered on the device. **Card Date Alarm** Monitors the correspondence between the validity window and the card reading date. **Card HOD Alarm** Monitors the correspondence between the validity hours and the card reading hour. **Card DOW Alarm** Monitors the correspondence between the validity days and the card reading day. **Card Access Alarm** Monitors the correspondence between the access types enabled and the access type configured for the card. **Counter Alarm** Monitors the number of accesses permitted on the card. N.B. The alarms are listed in order of control.	

KNX PARAMETER	SETTINGS
RGB temperature action	none fixed 500 ms flashing 1 s flashing
Enabling the parameter makes visible a generic 1-bit communication object, which sends a telegram at each access, regardless of the type of card read.	
Colour	RGB/HSV
it is possible to set the desired colour by choosing between RGB or HSV colour method.	
Top LED action	none temporary flashing switches in off switches in on
This parameter defines the behaviour of the Top LED.	
Buzzer action	no/yes
Actives or not the buzzer	
Alarm switch off when a valid “System ID, Card ID etc.” is detected	no/yes
Defines whether to stop the alarm when a card correspondence is detected.	
Automatic alarm deactivation [min] (0=never)	no/yes
Enables automatic deactivation of the alarm	
Enables alarm object	disabled/enabled
Used to enable the specific alarm object	