**01523.1**

Multifunction actuator, 4 relay outputs, NO 16 A 250 V~.

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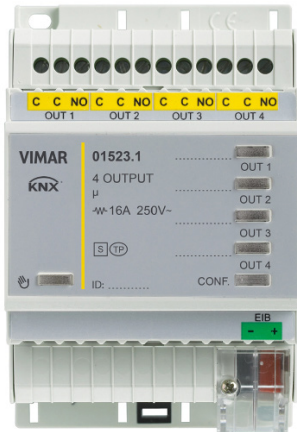
COMMUNICATION OBJECTS AND ETS PARAMETERS from page 8

For details of the Well-contact Plus system, consult the installer manual, which can be downloaded from the Download section ➔ Software ➔ Well-contact Plus on the website www.vimar.com.

4 output device

General characteristics and functions

Actuator with 4 NO relay outputs 16 A 250 V~, programmable with control function for lights, roller shutters with slat orientation, push buttons for local control, KNX standard, installation on DIN rails (60715 TH35), occupies 4 modules size 17.5 mm.



01523.1

General characteristics

The device is designed to manage 4 generic outputs for typical applications in the service industry (access to offices, hospital or hotel rooms, swimming pools, saunas, sports facilities, restricted access areas, etc.).

It is also designed to work as a virtual pocket function for the presence control in the room.

Outputs 1-2 and 3-4 can be used to control roller shutters or Venetian blinds.

Functions

The functions available are the same for all channels.


For "Single outputs", the following functions are available for the outputs:

- Disabled channel without function;
- Switching module the output is switched according to the other parameters;
- Stair light depending on the other parameters, the output is switched for a period of time (one-position stable relay).

Two outputs can be grouped together (OUT1/OUT2 and OUT3/OUT4) to obtain the following functions:

- Roller shutter
- Venetian blinds

Manual operation

Press the  push button to enter manual mode to check the output connections. Press push buttons OUT1, OUT2, OUT3, OUT4 to control the related outputs. During manual operation, outputs OUT1/OUT2 and OUT3/OUT4 are interlocked to prevent damaging any motors connected, and messages received from the bus are not managed.

Behaviour after powering on/off the Bus

Bus off: depending on the parameter settings.

Bus on: depending on the parameter settings.

Behaviour after reset

As for Bus power-on.

4 output device

General characteristics and functions

The KNX Secure protocol

The device is used to activate the “KNX SECURE” data encryption protocol, entering the QR code or the digits in ETS and also creating a password associated to the project.

Note: If the QR code printed on the label is too small, take a photo of it with a smartphone and enlarge it.

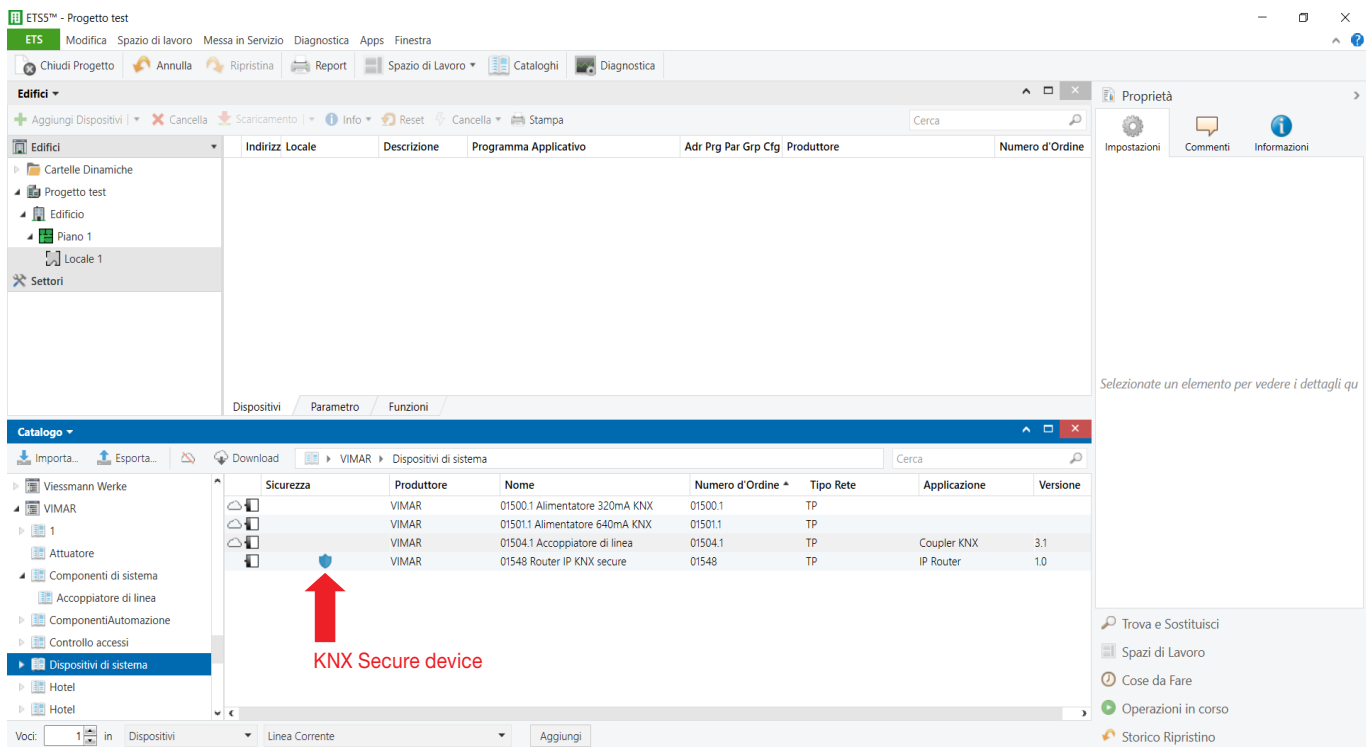
The password is mandatory in the following cases:

- when enabling the Secure part of the devices in the project
- when entering the certificate of a Secure device in the project

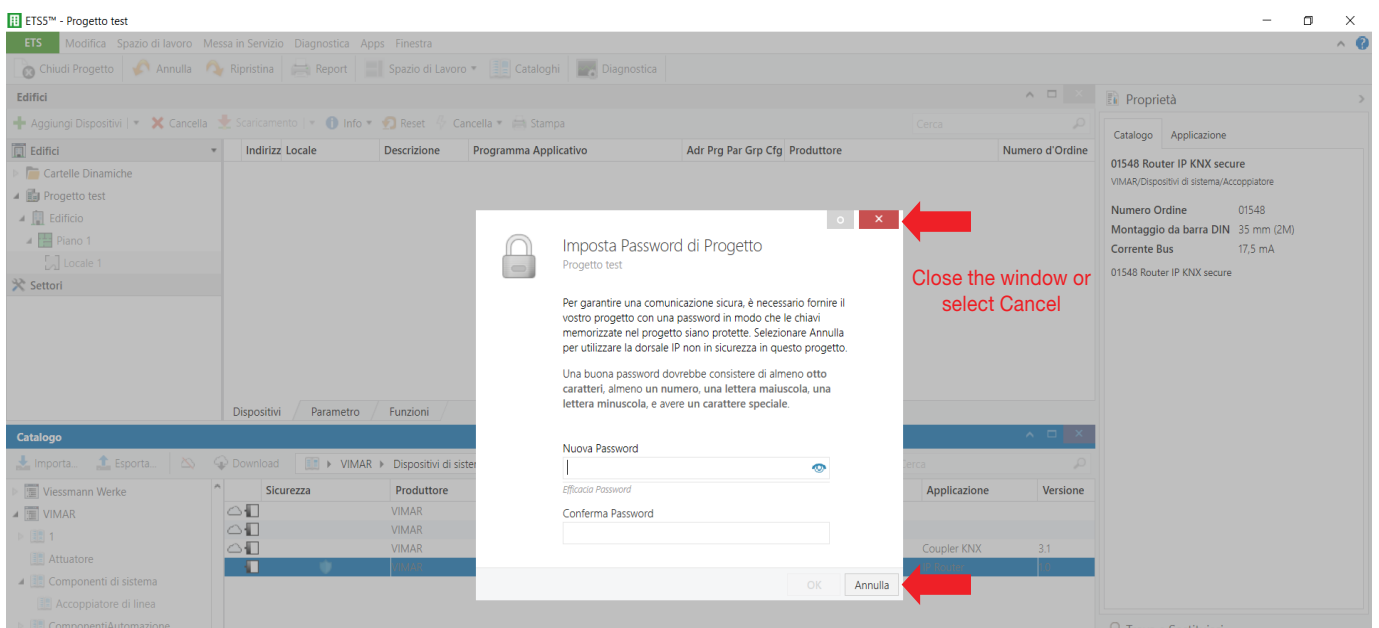
If the Secure part of a device is disabled, it acts exactly like a device that does not support this protocol.

If you do not wish to enable the Secure part, when importing the device into the project close the Secure request window as described in the following procedure.

1. Add the Secure device to the ETS project.



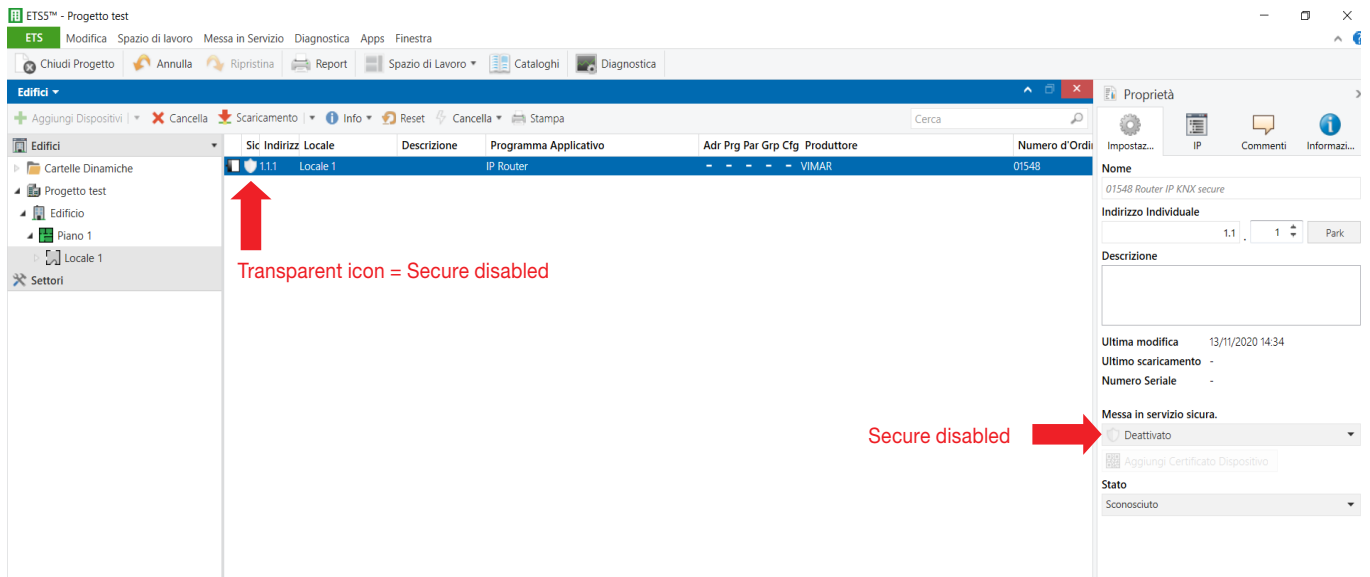
2. Ignore the set password request.



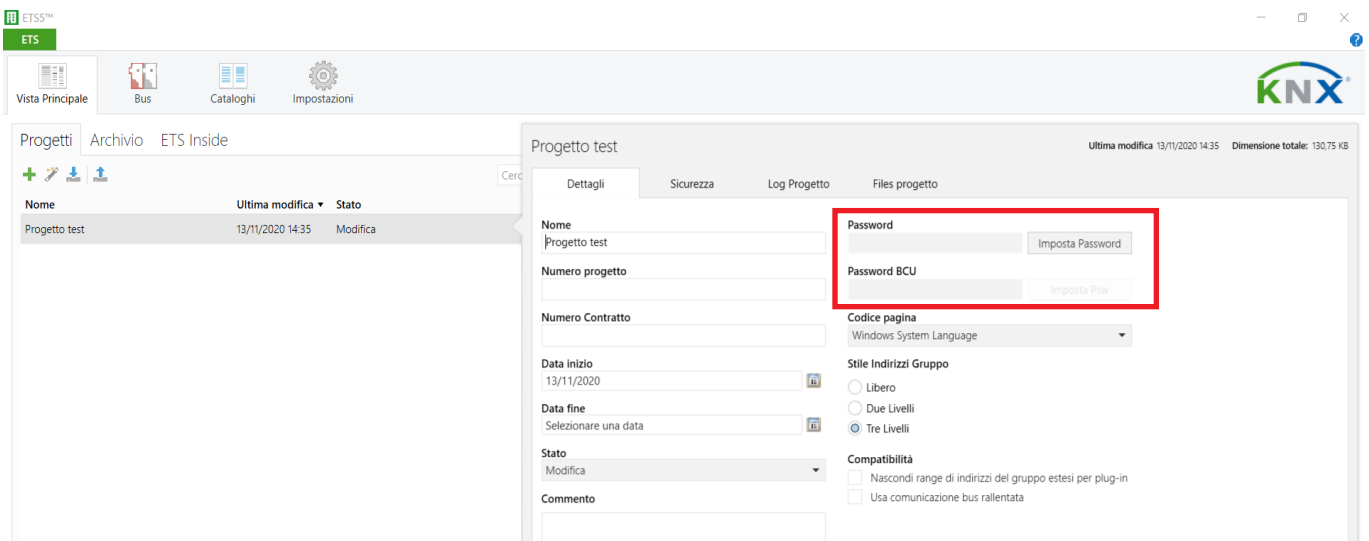
4 output device

General characteristics and functions

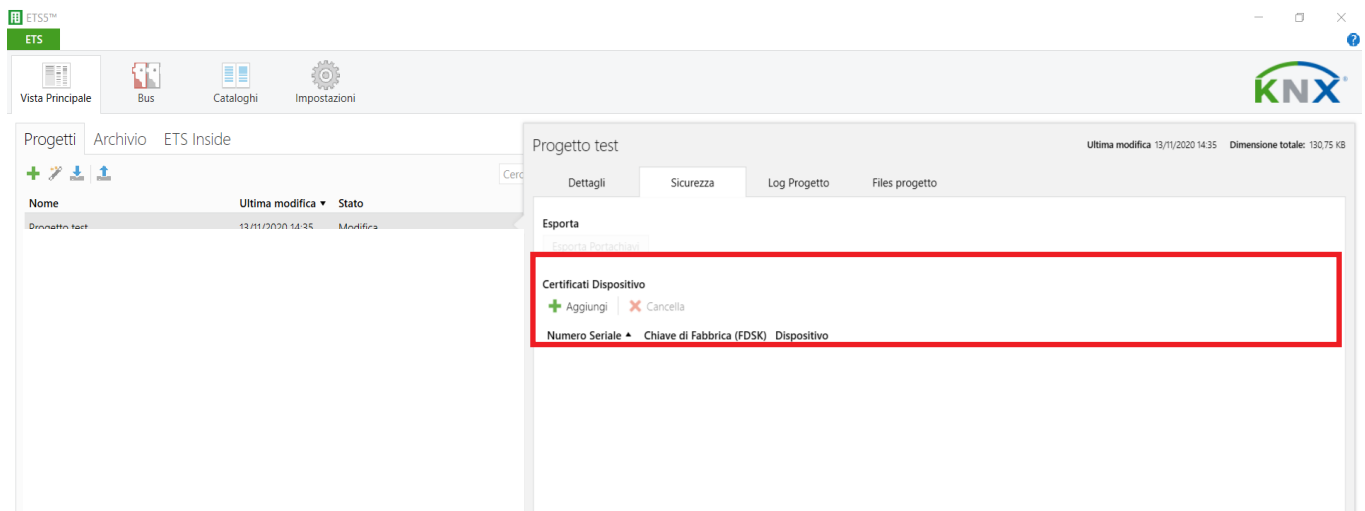
3. The device is displayed with the Secure part disabled.



4. No password is associated to the project.



5. No certificate is associated to the project.



4 output device



Communication objects and ETS parameters

List of existing communication objects

The following objects are available for each channel, depending on the function and settings; they are identical for every channel or for pairs of channels used for roller shutters. If a channel is not on there are no communication objects.

Output communication objects

Number ^	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type
1	Out 1	Switch on/off			1 bit	C	-	W	-	U	switch
4	Out 1	Block			1 bit	C	-	W	-	U	enable
5	Out 1	Scene			1 byte	C	-	W	-	U	scene control
6	Out 1	Status			1 bit	C	R	-	T	-	switch
7	Out 1	Logic 1			1 bit	C	-	W	-	U	boolean
8	Out 1	Logic 2			1 bit	C	-	W	-	U	boolean
9	Out 1	Logic 3			1 bit	C	-	W	-	U	boolean
10	Out 1	Logic 4			1 bit	C	-	W	-	U	boolean
15	Out 2	Stair case			1 bit	C	-	W	-	U	start/stop
17	Out 2	Block			1 bit	C	-	W	-	U	enable
19	Out 2	Status			1 bit	C	R	-	T	-	switch
111	Central function	Switch on/off			1 bit	C	-	W	-	U	switch

Example: *Output 1* - Switching module with block on, scenario on and logic with 4 objects, *Output 2* - Stair light with block on

Number ^	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type
1	Out 1/2	Shutter up/down			1 bit	C	-	W	-	U	up/down
2	Out 1/2	Blinds up/down /stop			1 bit	C	-	W	-	U	up/down
4	Out 1/2	Scene			1 byte	C	-	W	-	U	scene control
5	Out 1/2	Act. direction			1 bit	C	R	-	T	-	up/down
6	Out 1/2	Position (Absolute)			1 byte	C	-	W	-	-	percentage (0..100%)
7	Out 1/2	abs. Position of blinds			1 byte	C	-	W	-	-	percentage (0..100%)
8	Out 1/2	Position (Actual)			1 byte	C	R	-	T	-	percentage (0..100%)
9	Out 1/2	Actual Position of slats			1 byte	C	R	-	T	-	percentage (0..100%)
10	Out 1/2	Act. position valid			1 bit	C	R	-	T	-	boolean
11	Out 1/2	Drive to reference			1 bit	C	-	W	-	U	up/down
12	Out 1/2	Drive to limit			1 bit	C	-	W	-	U	up/down
13	Out 1/2	State upper Position			1 bit	C	R	-	T	-	boolean
14	Out 1/2	State lower Position			1 bit	C	R	-	T	-	boolean
16	Out 1/2	Block manual mode			1 bit	C	-	W	-	U	enable
17	Out 1/2	Move			1 bit	C	R	-	T	-	boolean
89	Out 1/2	Alert (Wind)			1 bit	C	-	W	-	U	alarm
90	Out 1/2	Alert (Rain)			1 bit	C	-	W	-	U	alarm
91	Out 1/2	Alert (Frost)			1 bit	C	-	W	-	U	alarm
92	Out 1/2	Block			1 bit	C	-	W	-	U	enable

Example: *Out 1/2* - Venetian blinds with possibility to control the position from the bus and with warnings active

Number ^	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type
105	Virtual holder	First movement detector			1 bit	C	-	W	-	U	switch
106	Virtual holder	Second movement detector			1 bit	C	-	W	-	U	switch
107	Virtual holder	Activity reporting			1 bit	C	-	W	-	U	switch
108	Virtual holder	Door input			1 bit	C	-	W	-	U	switch
109	Virtual holder	Waiting time			2 bytes	C	-	W	-	U	time (s)
110	Virtual holder	Room presence			1 bit	C	R	-	T	-	switch

Example: Virtual pocket enabled with 2 motion sensors and activity signal.

4 output device



Communication objects and ETS parameters

Communication objects per channel

Number	Name in ETS	Function in ETS	Description	Length	Flag 1				
					C	R	W	T	U
OUTPUTS									
With outputs OUT1, OUT2, OUT3 and OUT4 configured as single outputs									
1	Out 1	On/off	(If the output is enabled as "Switching module") to switch the output On/Off	1 bit	X		X		X
2	Out 1	Stair light	(If the output is enabled as "Stair Light") to switch the output on, with timed switch-off.	1 bit	X		X		X
3	Out 1	Force	(If the output "Block" parameter is on, with "Force" function) to force the output On/Off from the Bus	2 bit	X		X		
4	Out 1	Block	((If the output "Block" parameter is on, with "Block" function) to block the output control from the Bus	1 bit	X		X		X
5	Out 1	Scenario	(If the output "Scenario" parameter is on), to activate and, if required, store (if the parameter is active) a scenario associated to the output	1 byte	X		X		X
6	Out 1	State	(If the output is enabled as "Switching module") to know the output state	1 bit	X	X		X	
7... 13	Out 1	Logic 1... 7	(If the logic function for the output is on) A number of objects from 1 to 7 can be selected for OR, AND, XOR logics with the "On/off" object to determine the output state.	1 bit	X		X		X
14... 26	Out 2 (see similar objects for Out 1)		As per Out 1						
27... 39	Out 3 (see similar objects for Out 1)		As per Out 1						
40... 52	Out 4 (see similar objects for Out1)		As per Out 1						
OUTPUTS									
With outputs OUT1/OUT2 and OUT3/OUT4 configured as roller shutter or Venetian blinds									
1	Out 1/2	Roller shutter Up/Down	(If the output is enabled as "Roller shutter" or "Venetian blinds") To move the Venetian blinds/roller shutter.	1 bit	X		X		X
2	Out 1/2	Slats up/down/stop	(If the output is enabled as "Venetian blinds") To rotate/stop the slats.	1 bit	X		X		X
3	Out 1/2	Stop	(If the output is on as "Roller shutter") To stop the roller shutter.	1 bit	X		X		X
4	Out 1/2	Scenario	(If the output is on as "Venetian blinds" or "Roller shutter" and "Scenario" is on) To call up the scenarios from the Bus.	1 byte	X		X		X
5	Out 1/2	Actual direction	(If the output is on as "Venetian blinds" or "Roller shutter" and "select objects for absolute position" is on) Object signalling the roller shutter direction of movement. Reading the state, the object responds with the last movement made or the current one if the roller shutter is moving (1 = up, 0 = down).	1 bit	X	X		X	
6	Out 1/2	Position (Absolute)	(If the output is on as "Venetian blinds" or "Roller shutter" and "select objects for absolute position" is on) To set the roller shutter position from a supervisor (0% = all up, 100% = all down).	1 byte	X		X		
7	Out 1/2	Absolute slat position	(If the output is on as "Venetian blinds" and "select objects for absolute position" is on) To set the slat position from a supervisor (0% = open, 100% = closed).	1 byte	X		X		
8	Out 1/2	Position (Actual)	(If the output is on as "Venetian blinds" or "Roller shutter" and "select objects for absolute position" is on) To know the actual position of the roller shutter (0% = all up, 100% = all down).	1 byte	X	X		X	
9	Out 1/2	Current slat position	(If the output is on as "Venetian blinds" and "select objects for absolute position" is on). To know the actual slat position.	1 byte	X	X		X	
10	Out 1/2	Valid actual position	(If the output is on as "Venetian blinds" or "Roller shutter" and "select objects for absolute position" is on) To know the actual roller shutter position.	1 bit	X	X		X	
11	Out 1/2	Door to reference	(If the output is on as "Venetian blinds" or "Roller shutter" and "select objects for absolute position" is on) Object used to move the roller shutter Up/Down: sends a bit= 1 to the Bus to raise or a bit=0 to lower (the device will ignore all other commands sent to the Bus until the output switches off within the set time)	1 bit	X		X		X
12	Out 1/2	Door at limit	(If the output is enabled as "Venetian blinds" or "Roller shutter" and "Driving Area - Limitation" is on) Object used to move the roller shutter Up/Down: receives a bit =1 from the Bus to raise or a bit = 0 to lower.	1 bit	X		X		X
13	Out 1/2	Upper state - Position	(If the output is on as "Venetian blinds" or "Roller shutter" and "select objects for absolute position" is on) The device sends a bit to 1 when the upper limit stop is reached.	1 bit	X	X		X	

Continued

C = Communication, R = Read, W = Write, T = Transmission, U = Enable update

4 output device



Communication objects and ETS parameters

Continued

Number	Name in ETS	Function in ETS	Description	Length	Flag 1				
					C	R	W	T	U
14	Out 1/2	Lower state - Position	(If the output is on as "Venetian blinds" or "Roller shutter" and "select objects for absolute position" is on) The device sends a bit to 1 when the lower limit stop is reached.	1 bit	X	X		X	
15	Out 1/2	Automatic lock	(If the output is enabled as "Venetian blinds" or "Roller shutter" and "Automatic roller shutter operation" is on) To enable/disable the automatic operation (rain, wind, etc.).	1 bit	X		X		X
16	Out 1/2	Lock mode manual	(If the output is enabled as "Venetian blinds" or "Roller shutter") To enable/disable the manual operation (controlled from a button via Bus).	1 bit	X		X		X
17	Out 1/2	Move	(If the output is on as "Venetian blinds" or "Roller shutter" and "select objects for absolute position" is on) Object that sends a bit = 1 when the movement starts, or a bit = 0 when the movement ends. It is also possible to read the current state.	1 bit	X	X		X	
89	Out 1/2	Warning (Wind)	(If the output is enabled as "Venetian blinds" or "Roller shutter" and the "Warning Function" is on with "Warning Rain") to move the roller shutter/Venetian blinds to the position for this type of warning set in the specific parameters.	1 bit	X		X		X
90	Out 1/2	Warning (Rain)	(If the output is enabled as "Venetian blinds" or "Roller shutter" and the "Warning Function" is on with "Warning Rain") to move the roller shutter/Venetian blinds to the position for this type of warning set in the specific parameters.	1 bit	X		X		X
91	Out 1/2	Warning (Frost)	(If the output is enabled as "Venetian blinds" or "Roller shutter" and the "Warning Function" is on with "Warning Frost") to move the roller shutter/Venetian blinds to the position for this type of warning set in the specific parameters.	1 bit	X		X		X
92	Out 1/2	Block	(If the output is enabled as "Venetian blinds" or "Roller shutter" and the "Warning Function" is on with "Block") to block the roller shutter at the limit stop with a bit to "1" (upper or lower, according to the parameters).	1 bit	X		X		X
97	Automatic A	Automatic operation 1 - Position	(If the "Automatic operation" parameter of "Block-A" is on) To automatically control this roller shutter output object which can recall specific positions similar to scenarios.	1 bit	X		X		
98	Automatic A	Automatic operation 2 - Position	(If the "Automatic operation" parameter of "Block-A" is on) To automatically control this roller shutter output object which can recall specific positions similar to scenarios.	1 bit	X		X		
99	Automatic A	Automatic operation 3 - Position	(If the "Automatic operation" parameter of "Block-A" is on) To automatically control this roller shutter output object which can recall specific positions similar to scenarios.	1 bit	X		X		
100	Automatic A	Automatic operation 4 - Position	(If the "Automatic operation" parameter of "Block-A" is on) To automatically control this roller shutter output object which can recall specific positions similar to scenarios.	1 bit	X		X		
101	Automatic B	Automatic operation 1 - Position	(If the "Automatic operation" parameter of "Block-B" is on) To automatically control this roller shutter output object which can recall specific positions similar to scenarios.	1 bit	X		X		
102	Automatic B	Automatic operation 2 - Position	(If the "Automatic operation" parameter of "Block-B" is on) To automatically control this roller shutter output object which can recall specific positions similar to scenarios.	1 bit	X		X		
103	Automatic B	Automatic operation 3 - Position	(If the "Automatic operation" parameter of "Block-B" is on) To automatically control this roller shutter output object which can recall specific positions similar to scenarios.	1 bit	X		X		
104	Automatic B	Automatic operation 4 - Position	(If the "Automatic operation" parameter of "Block-B" is on) To automatically control this roller shutter output object which can recall specific positions similar to scenarios.	1 bit	X		X		
VIRTUAL POCKET									
105	Virtual pocket	First motion sensor	(If the "Virtual pocket" function is on) To receive an indication from a motion sensor.	1 bit	X		X		X
106	Virtual pocket	Second motion sensor	(If the "Virtual pocket" function is on and the "Second motion sensor" is enabled) To receive an indication from a second motion sensor.	1 bit	X		X		X
107	Virtual pocket	Activity signalling	(If the "Virtual pocket" function is on and "Activity signalling" is enabled) To receive an indication from a second motion sensor.	1 bit	X		X		X
108	Virtual pocket	Door input	(If the "Virtual pocket" function is on) To receive an indication on the door opening and closing.	1 bit	X		X		X
109	Virtual pocket	Wait time	(If the "Virtual pocket" function is on) To receive a value via bus for the Wait time.	1 byte	X		X		X
110	Virtual pocket	Presence in room	(If the "Virtual pocket" function is on) To transit a bit=1 to signal that the room is occupied and a bit=0 to signal that the room is free.	1 bit	X	X		X	

C = Communication, R = Read, W = Write, T = Transmission, U = Enable update

4 output device



Communication objects and ETS parameters

Communication objects per channel: once for all channels

Number	Function	Use	DPT	Direction
111	Centralised function	Simultaneous on/off of more than one output configured as "Switching module" or "Stair light". For "Stair light" the "Stair light time" is not considered and so the output must be switched off from the "Centralised function".	DPT 1.001	In, Write

Standard communication object settings

Communication objects: default output/input settings

Number	Name in ETS	Function in ETS	Length	Priority	Flag 1				
					C	R	W	T	U
1	Out 1	On/off	1 bit	Low	X		X		X
2	Out 1	Stair light	1 bit	Low	X		X		X
3	Out 1	Force	2 bit	Low	X		X		X
4	Out 1	Block	1 bit	Low	X		X		X
5	Out 1	Scenario	1 byte	Low	X		X		X
6	Out 1	State	1 bit	Low	X	X		X	
7	Out 1	Logic 1	1 bit	Low	X		X		X
8	Out 1	Logic 2	1 bit	Low	X		X		X
9	Out 1	Logic 3	1 bit	Low	X		X		X
10	Out 1	Logic 4	1 bit	Low	X		X		X
11	Out 1	Logic 5	1 bit	Low	X		X		X
12	Out 1	Logic 6	1 bit	Low	X		X		X
13	Out 1	Logic 7	1 bit	Low	X		X		X
14... 52	Out 2, Out 3, Out 4	As per Out 1							
1	Out 1/2	Roller shutter Up/Down	1 bit	Low	X		X		X
2	Out 1/2	Slats up/down/stop	1 bit	Low	X		X		X
3	Out 1/2	Stop	1 bit	Low	X		X		X
4	Out 1/2	Scenario	1 byte	Low	X		X		X
5	Out 1/2	Actual direction	1 bit	Low	X	X		X	
6	Out 1/2	Position (Absolute)	1 byte	Low	X		X		
7	Out 1/2	Absolute slat position	1 byte	Low	X		X		
8	Out 1/2	Position (Actual)	1 byte	Low	X	X		X	
9	Out 1/2	Current slat position	1 byte	Low	X	X		X	
10	Out 1/2	Valid actual position	1 bit	Low	X	X		X	
11	Out 1/2	Door to reference	1 bit	Low	X		X		X
12	Out 1/2	Door at limit	1 bit	Low	X		X		X
13	Out 1/2	Upper state - Position	1 bit	Low	X	X		X	
14	Out 1/2	Upper - Lower state	1 bit	Low	X	X		X	
15	Out 1/2	Automatic lock	1 bit	Low	X		X		X
16	Out 1/2	Manual lock mode	1 bit	Low	X		X		X
17	Out 1/2	Move	1 bit	Low	X	X		X	
89	Out 1/2	Warning (Wind)	1 bit	Low	X		X		X
90	Out 1/2	Warning (Rain)	1 bit	Low	X		X		X
91	Out 1/2	Warning (Frost)	1 bit	Low	X		X		X
92	Out 1/2	Block	1 bit	Low	X		X		X
27... 43 93... 96	Out 3/4	As per Out 1/2							
97	Automatic A	Automatic operation 1 - Position	1 bit	Low	X		X		X
98	Automatic A	Automatic operation 2 - Position	1 bit	Low	X		X		X
99	Automatic A	Automatic operation 3 - Position	1 bit	Low	X		X		X
100	Automatic A	Automatic operation 4 - Position	1 bit	Low	X		X		X
101	Automatic B	Automatic operation 1 - Position	1 bit	Low	X		X		X
102	Automatic B	Automatic operation 2 - Position	1 bit	Low	X		X		X

Continued

C = Communication, R = Read, W = Write, T = Transmission, U = Enable update

4 output device



Communication objects and ETS parameters

Continued

Number	Name in ETS	Function in ETS	Length	Priority	Flag 1				
					C	R	W	T	U
103	Automatic B	Automatic operation 3 - Position	1 bit	Low	X		X		X
104	Automatic B	Automatic operation 4 - Position	1 bit	Low	X		X		X
111	Centralised function	On/off	1 bit	Low	X		X		X
105	Virtual pocket	First motion sensor	1 bit	Low	X		X		X
106	Virtual pocket	Second motion sensor	1 bit	Low	X		X		X
107	Virtual pocket	Activity signalling	1 bit	Low	X		X		X
108	Virtual pocket	Door input	1 bit	Low	X		X		X
109	Virtual pocket	Wait time	2 byte	Low	X		X		X
110	Virtual pocket	Presence in room	1 bit	Low	X	X		X	

C = Communication, R = Read, W = Write, T = Transmission, U = Enable update

Number of communication objects	Max. number of group addresses	Max. number of associations
111	254	255

Reference ETS parameters

General

The following parameters are exclusive for all channels.

Output configuration

Define the output details.

ETS text	Values available [Default value]	Comment
Outputs: - Out 1/2 - Out 3/4	0 = Off	For "Single output" you can choose "Switching module" or "Stair light" corresponding to a two-position stable or one-position stable relay.
	1 = Single output	
	2 = Venetian blinds	
	3 = Roller shutter	
	[0]	
Interlock enabled	0=off	Only one output (e.g. for the fan coil) can be on at a time
	1=on	
	[0]	
Enabled for outputs	3 = A B	If "interlock enabled": outputs for which it will be on. If "A B" for example, it will not be possible to activate Out 1 and 2 at the same time
	5 = A C	
	9 = A D	
	6 = B C	
	10 = B D	
	12 = C D	
	7 = A B C	
	11 = A B D	
	13 = A C D	
	14 = B C D	
15 = A B C D		
	[7]	

Inputs

Function In 1/2

Single channels

Function In 3/4

Single channels

Outputs

Out 1/2

Single Output

Out 1

Switch

Out 2

Staircase

Out 3/4

Shutter

Channel configuration. (Example: Output 1 - Switching module, Output 2 - Stair light, Output 3/4 - Roller shutter)

4 output device

Communication objects and ETS parameters

Outputs

Output: switching module 1... 4

The following parameters are available for each channel and are identical for all of them.

Parameter configuration

Management of outputs 1/2/3/4 set as switching module.

ETS text	Values available [Default value]	Comment
Type	0 = normally closed 1 = normally open [1]	To define if the relay output is normally open or closed
Activation delay	0... 30000 s [0]	Activation delay in seconds
Deactivation delay	0... 30000 s [0]	Deactivation delay in seconds
Centralised control function	0 = off 1 = on [0]	Centralised function (to control more than one output from the Bus at the same time)
Block/Force	0 = no action 1 = Block 2 = Force	To block or force an output from the Bus
State at block state start	0 = Off 1 = On 2 = no change [2]	If block on
State at block state end	0 = Off 1 = On 2 = no change [2]	If block on
Behaviour at Bus power on	0 = Off 1 = On 2 = no change [2]	To define the relay output state at bus power on

Continued

Continued

ETS text	Values available [Default value]	Comment
Behaviour at Bus power off	0 = Off 1 = On 2 = no change [2]	To define the relay output state at bus power off
Logic function	0 = off 1 = on [0]	To enable logics on the outputs (AND, OR, XOR) for up to 7 objects
Scenario	0 = off 1 = on [0]	Scenario activation If on, an additional page is displayed (Output, secondary element scenario)

Type Normally open Normally closed

On Delay [s]

Off Delay [s]

Central Switch function Not active Active

Block

Behaviour at bus power up

Behaviour at bus power down

Logic function Not active Active

Scene 1 Not active Active

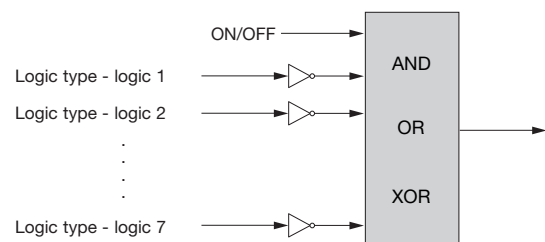
Switching module parameters

Logic function

The on/off objects can be used with logic objects (1 to 7) to create AND/OR/XOR logic functions to enable or disable the related output (OUT1, OUT2, OUT3, OUT4).

Parameter configuration

ETS text	Values available [Default value]	Comment
Logic inputs on	With 1 object With 7 objects [With 1 object]	To enable the objects required for the logic
Logic operation	0 = OR 1 = AND 2 = XOR [OR]	To select the required logic operation
Logic type - input	Not inverted Inverted [Not inverted]	To define if the selected input must be inverted or not



Active logic inputs

Logic operation

Logic type - input 1 No inversion Inverted

Logic type - input 2 No inversion Inverted

Logic type - input 3 No inversion Inverted

Logic type - input 4 No inversion Inverted

Logic type - input 5 No inversion Inverted

Logic type - input 6 No inversion Inverted

Logic type - input 7 No inversion Inverted

Logic parameters

4 output device



Communication objects and ETS parameters

Output, secondary element scenario

For each output, 8 scenario storage possibilities are available. For each scenario, the scenario index and the On or Off value for the output can be selected.

Scenario parameters (8 scenarios per output)

ETS text	Values available [Default value]	Comment
Store scenarios	0 = Off	The "Store scenarios" function is used to store the state linked to a scenario with a message from the Bus (scene learn).
	1 = On	
	[0]	
Scenario 1	Off	Used to select the scenario index.
	1... 64	
	[Off]	
Scenario 1	0=Off	To define the relay output state when scenario called up.
	1=On	
	[0]	
Scenario 2	Off	Used to select the scenario index.
	1... 64	
	[Off]	
Scenario 2	0=Off	To define the relay output state when scenario called up.
	1=On	
	[0]	
Scenario 3	Off	Used to select the scenario index.
	1... 64	
	[Off]	
Scenario 3	0=Off	To define the relay output state when scenario called up.
	1=On	
	[0]	
Scenario 4	Off	Used to select the scenario index.
	1... 64	
	[Off]	
Scenario 4	0=Off	To define the relay output state when scenario called up.
	1=On	
	[0]	
Scenario 5	Off	Used to select the scenario index.
	1... 64	
	[Off]	
Scenario 5	0=Off	To define the relay output state when scenario called up.
	1=On	
	[0]	
Scenario 6	Off	Used to select the scenario index.
	1... 64	
	[Off]	
Scenario 6	0=Off	To define the relay output state when scenario called up.
	1=On	
	[0]	
Scenario 7	Off	Used to select the scenario index.
	1... 64	
	[Off]	
Scenario 7	0=Off	To define the relay output state when scenario called up.
	1=On	
	[0]	
Scenario 8	Off	Used to select the scenario index.
	1... 64	
	[Off]	
Scenario 8	0=Off	To define the relay output state when scenario called up.
	1=On	
	[0]	

Scene saving enable

Not active Active

Scene 1

Not active

Scene 1

Off On

Scene 2

Not active

Scene 2

Off On

Scene 3

Not active

Scene 3

Off On

Scene 4

Not active

Scene 4

Off On

Scene 5

Not active

Scene 5

Off On

Scene 6

Not active

Scene 6

Off On

Scene 7

Not active

Scene 7

Off On

Scene 8

Not active

Scene 8

Off On

Scenario parameters

4 output device



Communication objects and ETS parameters

Output, timed stair light

The following parameters are available for each channel and are identical for all of them. If a channel is configured as stairs the following parameters are visible:

Stair light parameters (one-position stable output management)

ETS text	Values available [Default value]	Comment
Type	0=normally closed 1=normally open [0]	To define if the relay output is normally open or closed
Stair Light time [s]	0... 65535 [120]	Output activation time
Warning off	0=off 1=on [0]	To be able to switch the warning function on
Duration of warning [s]	0... 65535	If "Off warning" is on: having set a "warning time" and a "prewarning time", when the relay is switched off after the "stair light time" set, this remains Off for a time equal to the "warning time" and then comes on again for a time equal to the "prewarning time"
	[120]	
Duration of pre-warning [s]	0... 65535	Warning time (if "Off warning" is on). Three times will be added. Having set a "warning time" and a "prewarning time", when the relay is switched off after the "stair light time" set, this remains Off for a time equal to the "warning time" and then comes on again for a time equal to the "prewarning time"
	[120]	
Manual off	0=off	If manual off is active, on receiving an OFF message on the "Stair light" object, if on in one-position stable the output switches off
	1=on	
	[0]	
Centralised switching module function	0=off	To control more than one output from the Bus at the same time
	1=on	
	[0]	
State at block state start	0=Off	If block on
	1=On	
	2=no change	
	[2]	
State at the end of the block state	0=Off	If block on
	1=On	
	2=no change	
	[2]	
Behaviour when powering up the Bus	0=Off	To define the relay output state at bus power on
	1=On	
	2=no change	
	[2]	
Behaviour at Bus power off	0=Off	To define the relay output state at bus power off
	1=On	
	2=no change	
	[2]	

Type Normally open Normally closed

Time staircase [s]

Switch off warning Not active Active

Warning Duration [s]

Prewarning Duration [s]

Manual Switch Off Not active Active

Central Switch function Not active Active

Behaviour when blocked

Behaviour when unblocked

Behaviour at bus power up

Behaviour at bus power down

Stair light parameters

4 output device



Communication objects and ETS parameters

Automatic parameter activation

These settings activate objects. Each block has 4 objects, used to automatic controls on 4 objects calling up positions (similar to scenarios).

- Block A Not active Active
- Block B Not active Active

Automatic operation parameters

Parameters in automatic operation

ETS text	Values available [Default value]	Comment
Block A	0=off	For block A objects 1-4 are activated
	1=On	
	[0]	
Block B	0=off	For block B objects 1-4 are activated
	1=On	
	[0]	

Parameters

Venetian blinds parameters: characteristics relating to the control of Venetian blinds with slats

ETS text	Values available [Default value]	Comment
Execution time (sec)	1-10000 [45]	Movement time if not stopped
Step time for slats (ms)	100-1000 [200]	Sets the short press time for the button to interpret as slat control
Slat control time (ms)	10-10000 [1200]	Sets the slat control time for each press
Pause at change of direction (ms)	1-1000 [500]	Sets the delay time between the command and the change of direction
Motor start delay (ms)	0-255 [0]	Sets the delay time between the command and the start of movement (useful for motor starting)
Motor power-off delay (ms)	0-255 [0]	Sets the delay time between the command and the end of movement (limit stop)
Slat position at end of driving	0%-100%	Sets the slat position at the end from the reference travel 0-100% having set the limit stop (100% closed)
	[50]	
Slat position at end of driving by absolute value.	0%-100%	Sets the slat position at the end of the movement due to the "Position (absolute)" object
	[50]	
Object selection for absolute position	0=off	For feedback on the position on a supervisor, if on, 0%=all up and 100%=all down
	1=on	
	[0]	
Reaction after driving to reference	0=no reaction	Only if Position absolute
	1=Door to previous position	
	[0]	
Driving area: Limitation	0= off	Only if limitation on: sets the upper/lower thresholds of the Venetian blind travel to stop it before the limit stop
	1=on	
	[0]	
Lower limit	0%-100% [0%]	Only if limitation on (driving area) (100% = closed)

Continued

- Complete running time
- Running time [sec]
- Step time for slats [ms]
- Duration of slats adjustment [ms]
- Pause at change of direction [ms]
- Switch-on delay motor [ms]
- Switch-off delay motor [ms]
- Position of slats at end of driving
- Position of slats at end of driving for absolute value
- Select objects for absolute position Not active Active
- Driving area: Limitation Not active Active
- Scene Not active Active
- Automatic function (Shutter) Not active Active

Venetian blinds parameters

4 output device

Communication objects and ETS parameters

Continued

ETS text	Values available [Default value]	Comment
Upper limit	0%-100%	Only if limitation on (driving area) (100% = closed)
	[100%]	
Scenario	0= off	Enables the Venetian blind to be included in scenarios
	1=on	
	[0]	
Automatic Operation	0= off	Defines the possibility of having the Venetian blind possibilities with 4 objects devoted to their automatic control from the Bus (Rain, Wind, Frost, Block)
	1=on	
	[0]	
Warning Function	0= off	Used to view the section with "Warning-Out" parameters, to enable the ETS obtaining to be switched on/off (e.g. a weather station) and obtain the automatic movement of the Venetian blinds in the event of rain, wind, frost, block-out
	1=on	
	[0]	

Roller shutter parameters: characteristics relating to the control of roller shutters (without slats)

ETS text	Values available [Default value]	Comment
Execution time (sec)	1-10000	Movement time if not stopped
	[45]	
Pause at change of direction (ms)	100÷1000	Sets the delay time between the command and the change of direction
	[500]	
Motor start delay	0÷255	Sets the delay time between the command and the start of movement (useful for motor starting)
	[0]	
Motor power-off delay	0÷255	Sets the delay time between the command and the end of movement (limit stop)
	[0]	
Select objects for absolute position	0 = Off	Selects the possibility or not to use communication objects to view the actual position of the roller shutter (0%=all up, 100%=all down) for feedback of the position on a supervisor
	1 = Door to previous position	
	[0]	
Reaction after driving to reference	0 = No reaction	If "Select objects for absolute position" on
	1 = Door to previous position	
	[0]	
Driving area: limitation	0 = Off	Only if limitation on: sets the upper/lower thresholds of the Venetian blind travel to make it stop before the limit stop
	1 = On	
	[0]	
Lower limit	0%... 100%	If "Driving area" on (100% = closed)
Upper limit	0%... 100%	If "Driving area" on (100% = closed)
Scenario	0 = Off	Enables the roller shutter to be included in scenarios
	1 = On	
	[0]	

Continued

Complete running time

Running time [sec]

Pause at change of direction [ms]

Switch-on delay motor [ms]

Switch-off delay motor [ms]

Select objects for absolute position Not active Active

Driving area: Limitation Not active Active

Scene Not active Active

Automatic function (Shutter) Not active Active

Alert function Not active Active

Roller shutter parameters

4 output device

Communication objects and ETS parameters

Continued

ETS text	Values available [Default value]	Comment
Automatic operation	0 = Off	Defines the possibility of having the required roller shutter position with 4 objects devoted to their automatic control from the Bus (rain, wind, frost, block)
	1 = On	
	[0]	
Warning Function	0 = Off	Used to view the section with "Warning-Out" parameters, to enable the ETS obtaining to be switched on/off (e.g. a weather station) and obtain the automatic movement of the roller shutters in the event of rain, wind, frost, block-out
	1 = On	
	[0]	

Scenarios

For each channel, 8 scenarios can be stored and called up. For each scenario, it is possible to select the scenario index, the position of the roller shutter and slats (only for Venetian blinds).

Scenario parameters: scenario management

ETS text	Values available [Default value]	Comment
Store scenarios	0=off	The "Store scenarios" function is used to store the state linked to a scenario with a message from the Bus (scene learn).
	1=on	
	[0]	
Scenario 1	1-64	Used to select the scenario index.
	Off	
	[Off]	
Scenario 1 Position	0%-100%	Used to select the roller shutter position when the scenario is called up
	[0]	
Scenario 1 - Slats position	0%-100%	Used to select the position of the slats when the scenario is called up (Venetian blinds only)
	[0]	
...		
Scenario 8		

The Store scenarios function is used to store the state linked to a scenario with a message from the Bus (scene learn).

Save scenes

Not active Active

Scene 1	Not active
Scene 1 - Position	0%
Scene 2	Not active
Scene 2 - Position	0%
Scene 3	Not active
Scene 3 - Position	0%
Scene 4	Not active
Scene 4 - Position	0%
Scene 5	Not active
Scene 5 - Position	0%
Scene 6	Not active
Scene 6 - Position	0%
Scene 7	Not active
Scene 7 - Position	0%
Scene 8	Not active
Scene 8 - Position	0%

Scenario parameters

4 output device



Communication objects and ETS parameters

Warnings Out 1/2 and 3/4

Warnings Parameters:

if the "Warning Function" parameter is enabled on the output, to define the operations to be performed automatically in the event of the objects "Rain, Wind, Frost, Block" being activated by the Bus (by interaction with weather stations)

ETS text	Values available [Default value]	Comment
Warning order	0 = Wind, Rain, Frost, Block	To give a priority to the warnings
	1 = Wind, Rain, Block, Frost	
	2 = Wind, Block, Rain, Frost	
	3 = Block, Wind, Rain, Frost	
	[0]	
Action after warnings/block reset	0 = No action	What the output does (Venetian blinds/roller shutter) when the warning or block ends
	4 = Door to previous position	
	1 = Door to higher level	
	2 = Door to lower level	
	[0]	
"Wind" warning	0 = Off	
	1 = On	
	[0]	
Cycle time (min, 0 = Off)	0-120	From the moment the alarm is triggered, a time can be set after which the alarm condition is reset (if no other messages are received)
	[30]	
Action	0 = No action	Defines what happens in the event of a "Wind" alarm
	1 = Door to higher level	
	2 = Door to lower level	
	[0]	
"Rain" warning	0 = Off	
	1 = On	
	[0]	
Cycle time (min, 0 = Off)	0-120	From the moment the alarm is triggered, a time can be set after which the alarm condition is reset (if no other messages are received)
	[30]	
Action	0 = No action	Defines what happens in the event of a "Rain" alarm
	1 = Door to higher level	
	2 = Door to lower level	
	[0]	
"Frost" warning	0 = Off	
	1 = On	
	[0]	

Continued

Order of Alerts Wind, Rain, Frost, Block

Action at reset of alerts/blocking no action

Wind alert Not active Active

Cycle Time (min, 0 = off) 30

Action no action

Rain alert Not active Active

Cycle Time (min, 0 = off) 30

Action no action

Frost alert Not active Active

Cycle Time (min, 0 = off) 30

Action no action

Block Not active Active

Action no action

Warnings Parameters

Continued

ETS text	Values available [Default value]	Comment
Cycle time (min, 0 = Off)	0-120	From the moment the alarm is triggered, a time can be set after which the alarm condition is reset (if no other messages are received)
	[30]	
Action	0 = No action	Defines what happens in the event of a "Frost" alarm
	1 = Door to higher level	
	2 = Door to lower level	
	[0]	
Block	0 = Off	
	1 = On	
	[0]	
Action	0 = No action	
	1 = Door to higher level	
	2 = Door to lower level	
	[0]	

4 output device



Communication objects and ETS parameters

Automatic operation

In this point the object block and required position are assigned, if the "Automatic operation" parameter is enabled on the output.

Automatic parameters

ETS text	Values available [Default value]	Comment
Automatic objects	Block A	The automatic operations are divided into 2 blocks A and B that can be associated to outputs 1/2 and 3/4.
	Block B	
	[Block A]	
Automatic operation 1 (-4) - Position	0%-100%	For each of the 4 automatic operations, it is possible to define the roller shutter position (100% = Closed)
	[0%]	
(-4) - Blind position	0%-100%	For each of the 4 automatic operations, it is possible to define the slat position (100% = Closed)
	[0%]	

Note.

Automatic 1 = position 1 - position 2 - position 3 - position 4.

Automatic 2 = position 1 - position 2 - position 3 - position 4.

Automatic objects Block A Block B

Automatic function 1 - Position 0% ▾

Automatic function 1 - Position of slats 0% ▾

Automatic function 2 - Position 0% ▾

Automatic function 2 - Position of slats 0% ▾

Automatic function 3 - Position 0% ▾

Automatic function 3 - Position of slats 0% ▾

Automatic function 4 - Position 0% ▾

Automatic function 4 - Position of slats 0% ▾

Automatic operation parameters

Virtual pocket

The virtual pocket function can be enabled by selecting "Enabled" in the "Output configuration" page. This function is used to check if a room is occupied and signal it in the 1 bit object "Presence in room". To implement the function, at least a motion sensor and a room access door opening and closing signal must be used. The use of another motion sensor or the configuration of an object signalling activity in the room are optional.

The following parameters are available for this function

ETS text	Values available [Default value]	Comment
Wait time	0÷65535 min	To select the presence in room detection wait time from the bus
	[5]	
Second motion sensor	Disabled	To enable a second motion sensor that can signal the presence in the room
	Enabled	
	[Disabled]	
Activity signalling	Disabled	If this parameter is enabled, any command received on the "Activity signalling" object signals the presence in the room
	Enabled	
	[Disabled]	

Waiting time 3 min

Second movement detector Disabled Enabled

Activity reporting Disabled Enabled

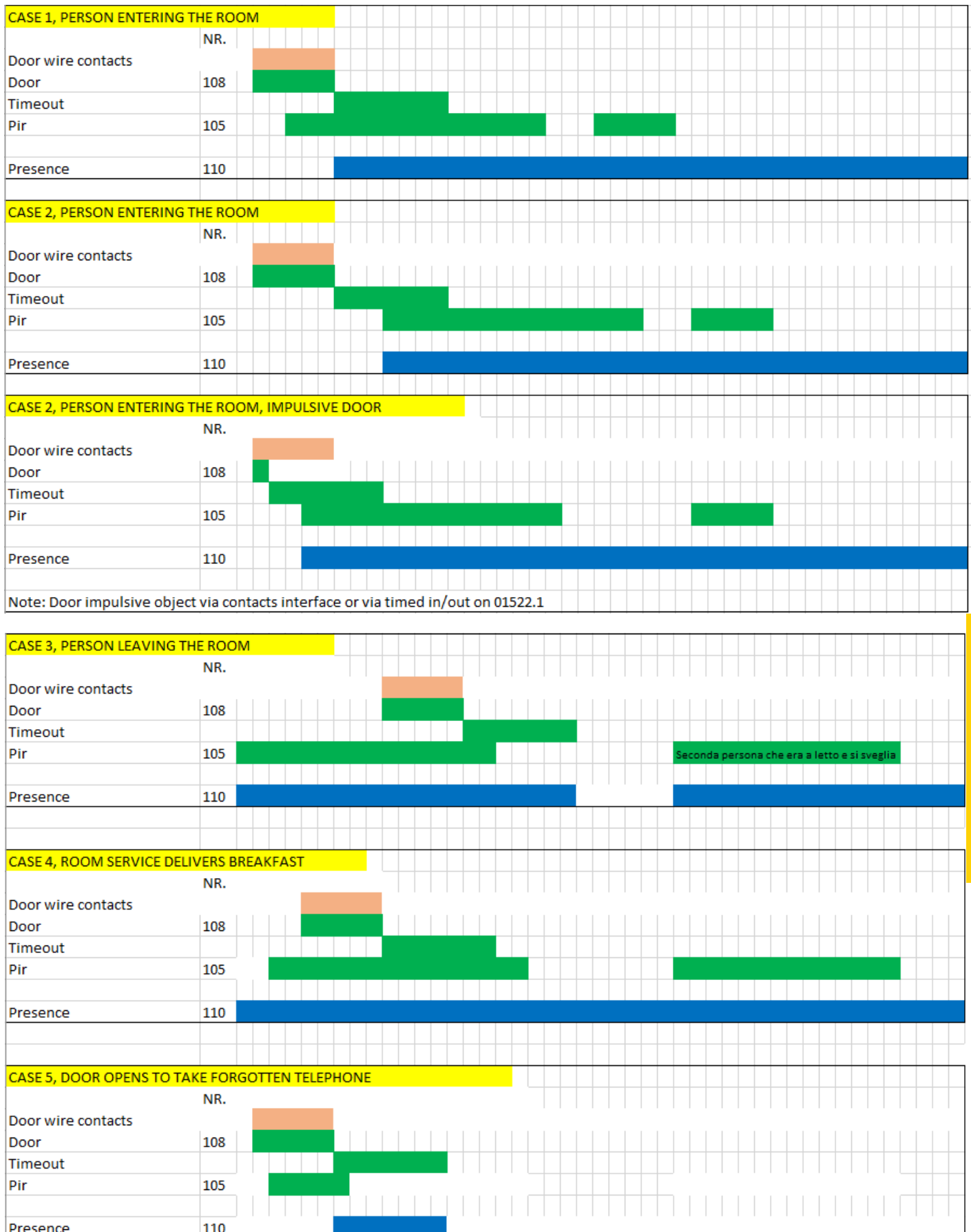
Virtual pocket parameters

The following graphics illustrate some cases of using the "virtual pocket" function. In all cases, the door opening and closing is signalled (received on the "Door input" object), as is the movement on a PIR (received on the "First motion sensor" object) and the room occupied is sent (on the "Presence in room" object).

General note: The motion sensor disabling time must be less than the timeout ("Wait time" parameter or "Wait time" object) for leaving the room. In this way, at the end of the timeout, the "Presence in room" signal is disabled and the room can be placed in the "not occupied" state.

4 output device

Communication objects and ETS parameters





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