KNX Home Automation

Manual 53KNX20002

M0760 - REV00
November 2023

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General information

Item 53KNX20002 allows the independent switching of two roller shutters. The device is equipped with an integrated interface module to the KNX bus and is built in a four-module DIN-rail housing, ready for installation on a unified rail within electrical panels.
During operation, the module receives communication telegrams from the KNX bus sent by another device (e.g. a manual command, sensor, timer etc.). These telegrams cause outputs to be activated or deactivated by applying a series of utility functions defined according to the programming. Manual control of the outputs is also possible using the front panel buttons; LED indicators allow the status of the outputs to be monitored.
The device draws its power supply exclusively from the KNX bus line with a SELV voltage of 30 VDC.

Characteristics

The characteristics are described with reference to fig. 1

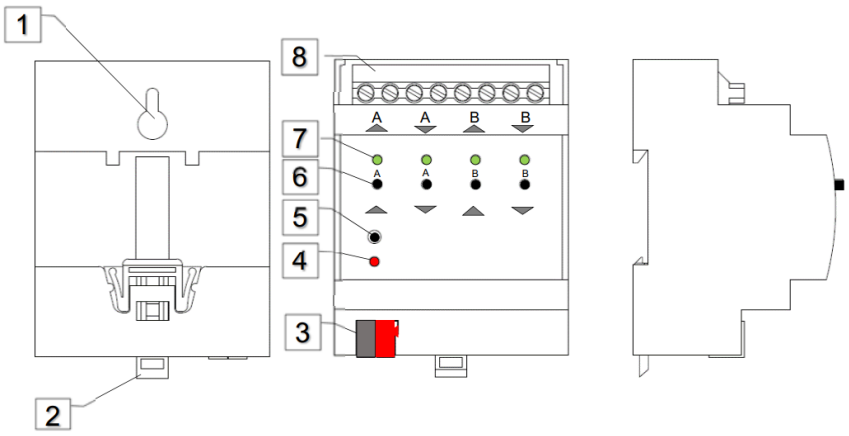


fig. 1a fig. 1b fig. 1c

Legend - fig. 1

1. Wall fixing slot
2. DIN rail coupling tooth
3. KNX bus line connection terminals
4. Red programming LED
5. Programming button
6. Button for UP forcing of channel A (in line also for Down forcing and for channel B))
7. Status LED for channel A's Up output (Down output and for channel B are also in line)
8. Output connection terminals: in-line for channels A ÷ B.

Mechanical

- Mechanical classification according to EN 50491-2: 3M2.
- Container: 4 DIN modules (71.5 l x 90 h x 64 d) mm
- Protection rating: IP20 (IP40 when installed).
- Container colour: grey RAL 7035.
- Fixing: on EN 50022 DIN rail.
- Weight: 184 g

Connections

The connections for the outputs (fig. 1b position ⑧) are via screw terminals:

- Insulation stripping: 8mm.
- Screw: head for flat-head screwdriver 4.5 x 0.8 mm.
- Tightening torque: 0.5 Nm
- Capacity: 0.2 mm2 ÷ 6 mm2 flexible (30 ÷ 10 AWG), 0.2 mm2 ÷ 6 mm2 rigid (30 ÷ 10 AWG).
- Opening: 3.4 mm x 4.8 mm

For the bus connection (fig. 1b position ③) there is a 2-pole removable spring-loaded terminal block standard KNX TP1 (red + black) for rigid cables:

- Insulation stripping: 6mm.
- Clamping: spring
- Capacity: 4 x rigid wire; Ø 0.6 ÷0.8 mm.
- Terminal +V: BUS positive.
- Terminal -V: GND.

Weather conditions

- Climate class according to EN 50491-2: 3K5.
- Operating ambient temperature range: -5 °C ÷ +45 °C.
- Relative humidity: max. 90% non-condensing.
- Storage conditions: -5 °C ÷ +45 °C; max RH 90%
- Transport conditions: -25 °C ÷ +70 °C.
- Max altitude: 2000 m a.s.l.

KNX bus power supply

- Bus rated voltage: 30 VDC
- Bus absorption: < 17 mA
- Max. Bus absorption: < 50 mA (for max. 80 ms per relay).

Final Actuator

- Bistable relay with 1 potential-free closing contact (16A / 250V~).
- Minimum contact opening distance of less than 3 mm, and in any event no less than 1.2 mm, to ensure functional interruption and not safety insulation.
- Safety distances between exchange contact and internal active parts: 6 mm (surface and in air).
- If one of the contacts is used in grid voltage circuits, the adjacent contact cannot be used in SELV or PELV circuits.

Nominal load

Max. switching frequency: 6 cycles/min.
Rated voltage: 230V~.

- Ohmic load (cosϕ 1): 10A.
- Motor: 4A.

Inrush current

IIR = 320 A for 2 ms

Overload or short-circuit protection

Install a C10 1.5kA (min) circuit breaker or a 10A GF 1.5kA (min) fuse in series with the circuit.

Electrical durability

- > 100,000 operations @ 10 A PF 1 and 8 A PF 0.4 @ 230 V~ (1 s ON, 9 s OFF).
- > 6,000 operations @ 4 A motor load @ 230 V~ (0.5 s ON, 0.5 s OFF).

Mechanical durability

- 1,000,000 operations at the maximum switching frequency of 60 cycles/min.

Forcing button ⑥

They are active unless disabled by a special parameter (see dedicated section) and operate in 'hold-to-run' mode: the relevant contact is closed as long as the button is pressed. There is also an interlock: two buttons on the same channel cannot be pressed at the same time. The time between pressing the two buttons is also determined by the 'Down-Up reverse wait time' parameter.

Output status LEDs ⑦

They always follow the status of the contact: they turn green when the contact is closed.

Programming LED ④

Normally off, it turns red when the device is in address programming mode (the ⑤button is momentarily pressed). The red light flashes when ETS initiates address detection or when the device is not programmed.

Programming button ⑤

When it is pressed for a short time, the device will enter the programming mode.

ETS library

The ETS library features a series of parameters used to characterise the operation of each actuator output.
These parameters are conveniently divided into two pages dedicated to the configuration of each channel; a main page is added for enabling the channel and for general parameters.

- Max. number of group addresses: 200
- Maximum number of associations: 200

General page

Roller shutter X (X-X)

The outputs of the device can be enabled or disabled by retrieving the corresponding communication objects of each channel. The parameter may take the following values:

if the value is set to 'disable', the channels will not be used and will not be managed by the local button either.

Alarm Management

Dedicated parameters can be enabled to prevent weather damage to the load connected to the actuator.

When this parameter is enabled, dedicated menus appear, both for the general configuration and for each channel.

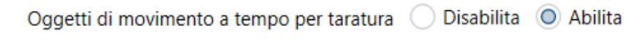
Roller shutter and slat positions when downloading the ETS application

To avoid resetting the times each time the program is downloaded, this parameter allows the existing stroke times to be retained.

If **Reset** is selected, the times will be cleared on each download.
By selecting the value **Retain**, the device will retain the values of the existing times on each download.

Time movement objects for calibration

This parameter can be used to provide communication objects that allow the **ETS bus monitor** to test the motorisation stroke times and any slat adjustments. In this case, the times set in the functional parameters are bypassed, losing the status it had prior to the test.
This parameter allows these communication objects to be used to verify the 'test' times.

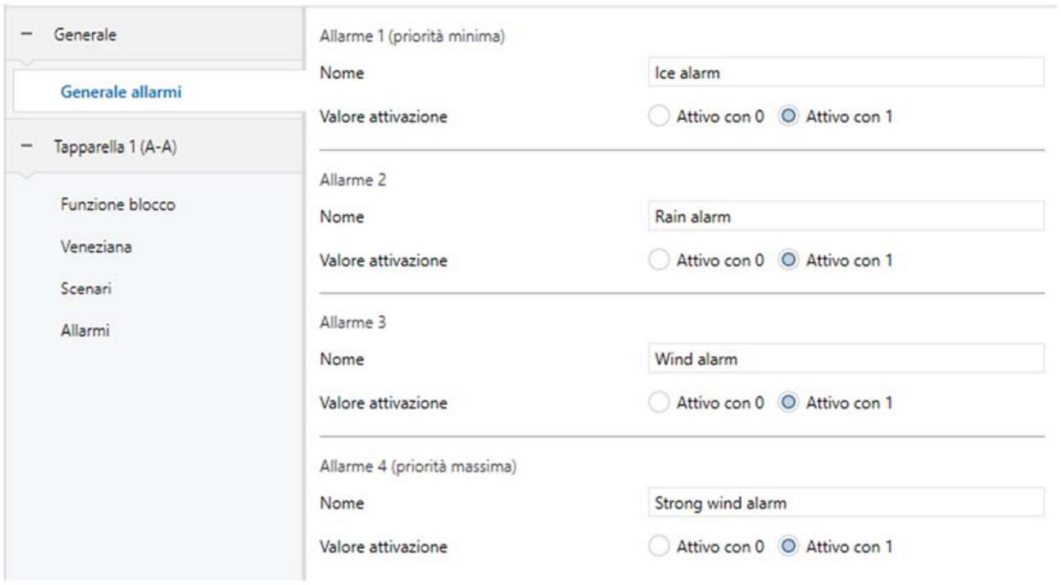


When **Enable** is selected, the movement test objects for the relevant channels will be displayed.

General Alarms

Enable the **Alarm Management** function from the general menu to open the sub-menu below. Four different alarm levels are provided, each of which can be managed independently as required. The relative priority between alarms is as follows:

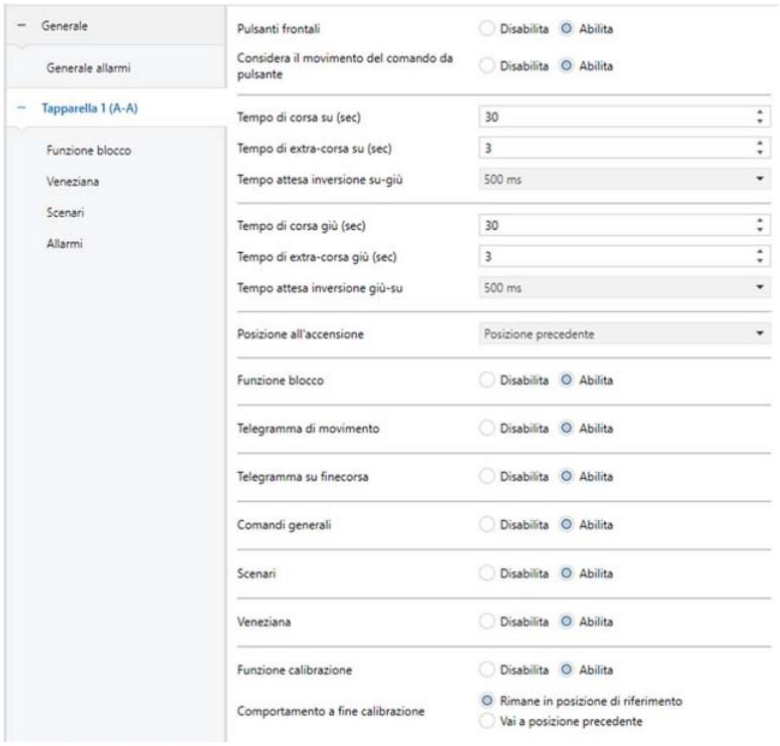
- Alarm 1 (lowest priority) default name: Ice alarm.
- Alarm 2 (medium priority) default name: Rain alarm.
- Alarm 3 (high priority) default name: Wind alarm.
- Alarm 4 (highest priority) default name: Strong wind alarm.



It is possible to change the name of the alarm in the corresponding field. The communication object will take the name entered and the logic of the alarm priorities does not change.

Roller shutter X (X-X)

The following individual channel settings are available: Roller shutter 1 (A-A) and roller shutter 2 (B-B).
The various chapters and sub-menus with the same items are illustrated here below.
Certain menus are visible if the corresponding parameters are activated.

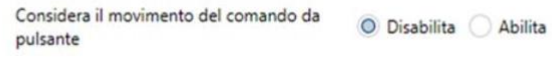


Front buttons

Firstly, it is possible to selectively disable the front forcing buttons on the unit for each individual roller shutter:

Consider the movement commanded by the button

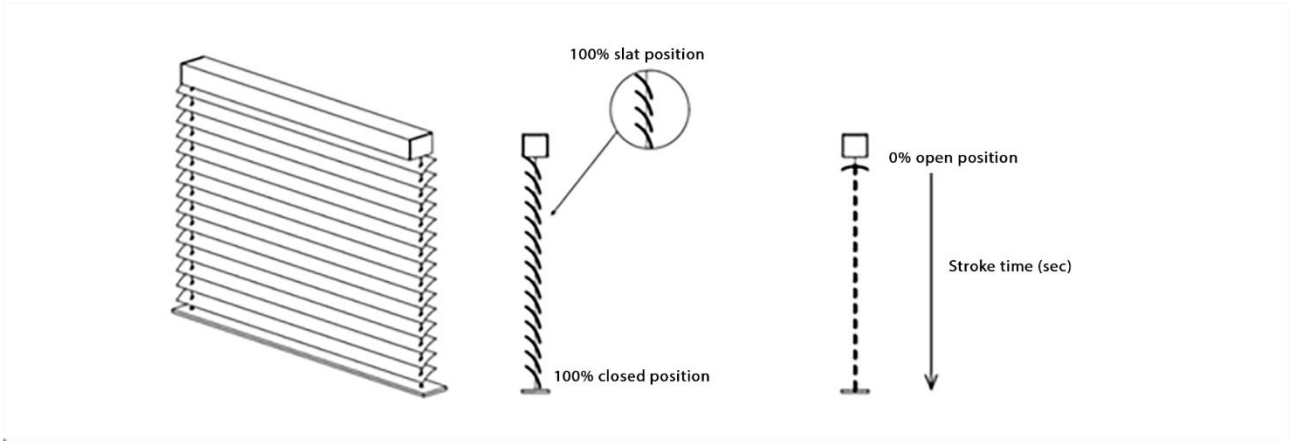
Then there is the second option. By activating this parameter, it is possible to take into account the command given to the local buttons on the basis of the settings dedicated to each channel and on the basis of the running time.



If set to **Disable**, the device will not take into account the commands given via the local keys with regard to the stroke time. It should be noted that the alignment between the physical position and the logic position stored in the module's memory will be lost and recalibration will then be necessary.

Stroke up time (sec) and Stroke down time (sec).

The position of the roller shutter is calculated by the module based on the known travel time to the end of the movement, which may be different for the two movements because the motor is slightly slower on the way up as it has to work against gravity.
This information must be programmed in the configuration parameters by assigning a value to the **Up Stroke Time (sec)** and **Down Stroke Time (sec)** fields.
These parameters allow the device to calculate the position as a percentage, so that it can move in proportion to the time measured in the actual field. When the Roller Shutter/Venetian blind is rolled up, the value is 0%, when it is rolled down, the value is 100% and vice versa.



Over-stroke up time (sec) and Over-stroke down time (sec)

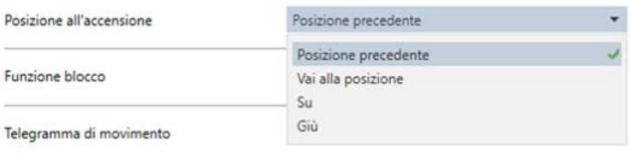
Over time, the Roller Shutter/Venetian blind may experience a change in the up and down stroke; a slowing down of the movement due to wear of the mechanical parts or even certain weather conditions, such as wind, may alter the mechanical behaviour.
To ensure that the end of the stroke is always reached, an extra stroke value (seconds) can be set to be added to the stroke time. Additional times will not be considered in the calculation of the position.

Up-down reversal waiting time and Down-up reversal waiting time

Finally, it is possible to set a pause between movements when changing direction by programming the appropriate fields.

Position at switch-on

It is possible to set the roller shutter to the position it will have when it is powered up: the same position as before it was switched off, a specific position, or all the way up or down.



When a specific position is chosen, two fields appear in which the position of the roller shutter and slats can be defined:

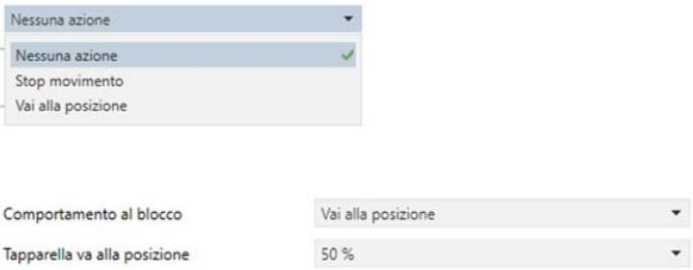
Block function

It is possible to block the device in a specific state after receiving the communication object that activates the block function; until it is deactivated, all commands received on all other incoming communication objects will not be executed. This means that the block function is the function with the highest priority.

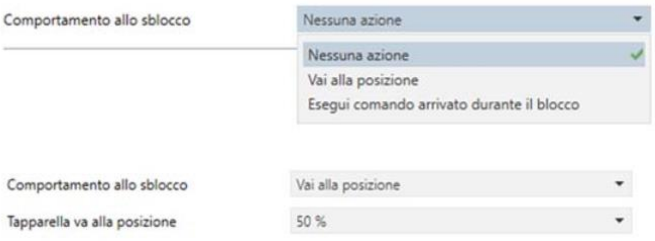
Enabling the block function automatically opens the corresponding menu on the General root of the channel:

Two activation modes can be selected to determine which logic value received via the Communication object will activate the function:

The blocked roller shutter can then be set to perform no action, to stop (if it is moving), or to move to a specific position. In the latter case, the corresponding field will appear where the % level of the stroke can be assigned:



Similarly, it is possible to define the behaviour of the shutter when it is released: it can either do nothing, go to a certain level, or execute pending commands received while it was blocked:



Movement telegram

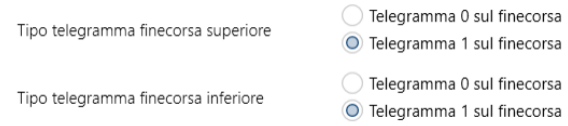
It allows two communication objects to be displayed in relation to the roller shutter's current movement, so that they can be clearly identified:

Values can be 'inverted' according to the **'Up/Down movement telegram type'** parameter: this can facilitate transmissions to KNX for statuses with different and easily adaptable values.

Telegram on end stops

Enabling this parameter makes it possible to receive a value that is determined and sent only when the upper or lower end stops of the Roller Shutter/Venetian blind is reached. If activated, it will send a telegram with value 0 or 1.
This communication object has a 1-bit value.

The values of the 1-bit communication objects can be defined within the 'Upper/lower end stop telegram type' parameter, facilitating KNX bus transmissions for states with different and easily customisable values.



General commands

Enabling this parameter will make the channel part of the general commands.

General commands have the same group object for all channels in the device. This makes it easier to configure the ETS software to send general commands to the
channels that are enabled in this function. The communication objects to be used are as follows:

General up/down commands, percentage position commands, stop/step commands, slat percentage position commands (if the device is used in the Venetian blind configuration) can be sent over the KNX bus to the device.

Scenarios

Up to eight scenarios can be defined for each roller shutter. Enabling the function automatically opens the Scenarios sub-menu on the channel root.

Venetian blind

The Venetian blind is a special type of roller shutter with adjustable slats. Certain characteristic parameters must then be defined in a special menu that is created on the general channel root when the Venetian blind option is enabled.

Calibration function

This parameter makes available, for each channel, a communication object whose function is to align the physical position of the window frame with the logic position stored in the memory by the actuator module. The calibration command object triggers an up or down movement with an activation time equal to the sum of all the times set in the parameters for the direction chosen by the command.
The set times of stroke, extra-stroke, slats (if present) and any down-times will be taken into account.
This command ensures that the mechanical position and the logic position maintained by the actuator module are consistent.

When **Enable** is selected, the individual communication objects for the corresponding channels are displayed. Below are the available communication objects:

Behaviour at the end of calibration

When the Calibration function has been enabled, this parameter defines the position of the slats at the end of the calibration tests.

- **Stay in the reference position**

  This means that the roller shutter/Venetian blind will remain all the way up or all the way down depending on the command given on the communication object (Up/down calibration movements).

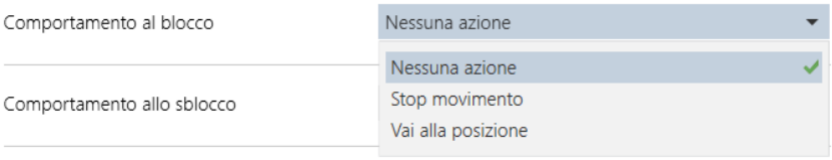
- Go to the previous position

It means that after moving all the way up or all the way down the Roller Shutter/Venetian blind will then return to the position from which it started.

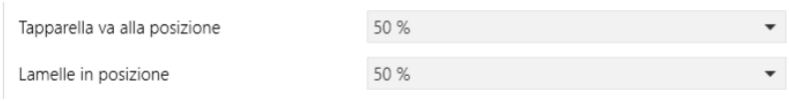
Sub-menu

Block function

This parameter allows setting the channel during blocking in a specific condition. The available settings are:

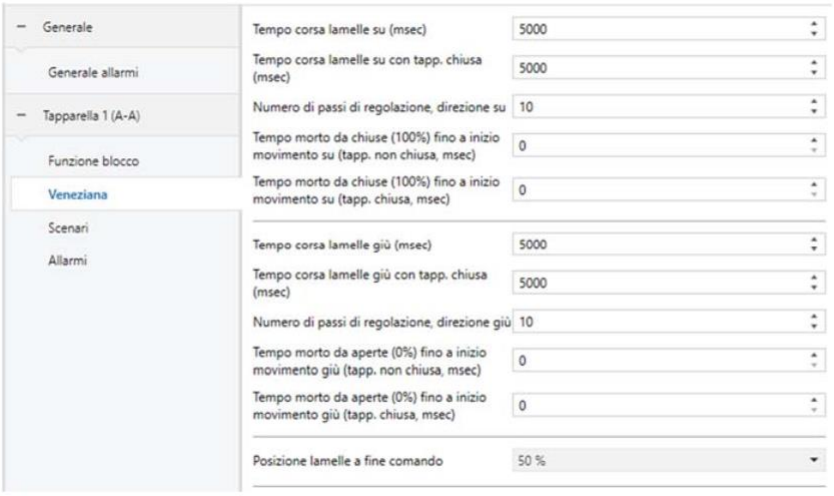


- **No action:** when the block is activated, this setting will perform no action on the channel.
- **Stop movement:** when the block is activated, this setting will cause a stop on the channel.
- **Go to position:** choosing this parameter makes a new setting visible.



You can set the percentage value of the roller shutter/Venetian blind position to be reached. If the device is used in the Venetian blind configuration, the position of the slats can also be defined. If this is not used, the set value will be disregarded.

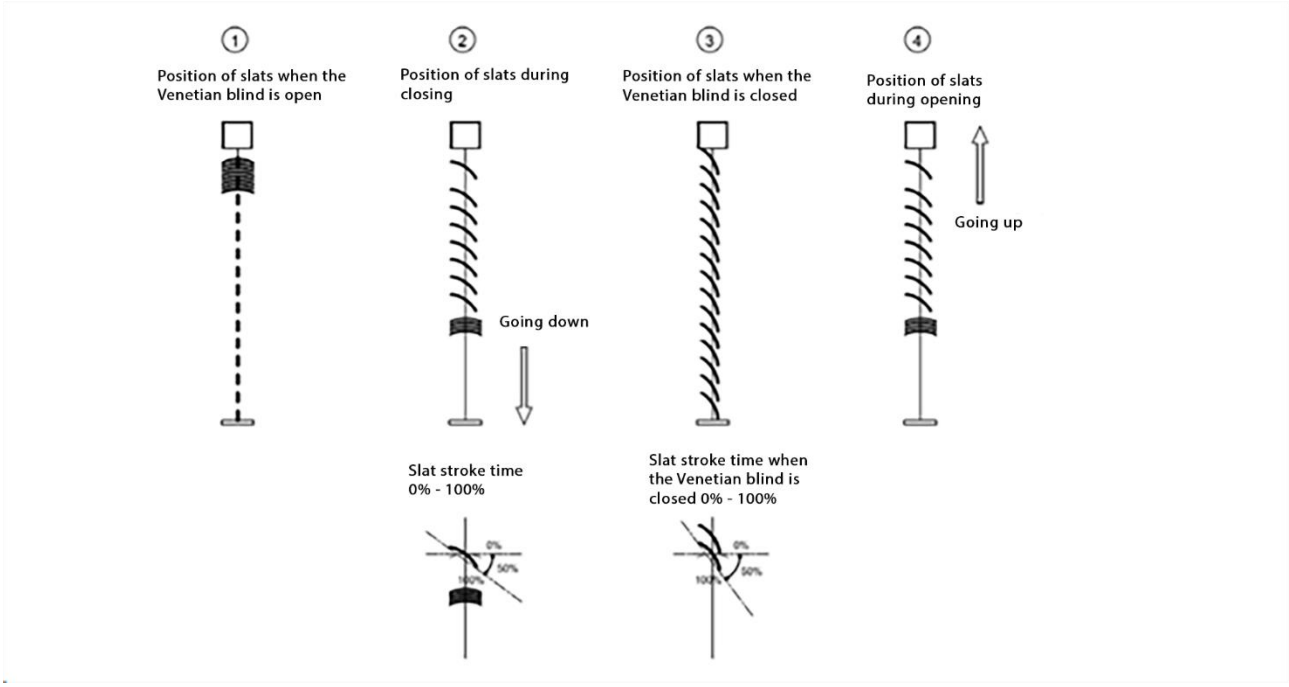
Venetian blind



Slat up stroke time (msec)

This parameter allows the total time to be set for the slats to move to the stroke position (as shown in the figure below) when moving up. It is therefore defined that the slat movement is identified with a separate value from that defined as the 'up/down stroke time' of the Roller shutter/Venetian blind. Therefore, the time taken for the slat to rotate from 0% to 100% is a second measurement to be identified in the field.
Once this value has been identified, it must be entered in the 'Slat Stroke Time' parameter. This time can be very fast and the scale value is expressed in milliseconds.

The figure below shows that for some types of Venetian blinds the position of the slats during the descent phase ② is different from the position at the end of their stroke ③



The value ② should be entered for this parameter.

Slat up stroke time with rolling shutter closed (msec)

This parameter allows setting the total slat movement time to 0% closed position③ (as shown in the picture). It is defined that this slat movement is identified with a separate value from that defined as 'Total stroke time and in closed position'.

Number of adjustment up steps

This parameter allows setting the number of steps calculated by dividing the total rotation time by the number of steps required.

Down-time from roller shutter closed (100%) until the start of the up movement (roller shutter not closed, msec)

This parameter allows setting the so-called 'down-times'. These are periods when the motor is driven by the actuator but mechanically does not produce any movement. These times can be taken into account if the manufacturer of the automation system indicates them, or by testing the device and measuring the times directly during the 'movement' phase.

Venetian blind position	Slat position	Send Command	t	Start of movement
①	Slat rotation from all closed (100%) to all open (0%)	Up →	Down-time	Roll-up start of the roller shutter

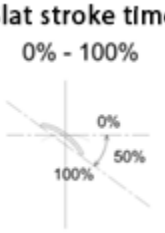
Down-time from roller shutter closed (100%) until the start of the up movement (roller shutter closed, msec)

This parameter allows setting the so-called 'down-times'. These are periods when the motor is driven by the actuator but mechanically does not produce any movement. These times can be taken into account if the manufacturer of the automation system indicates them, or by testing the device and measuring the times directly during the 'movement' phase.

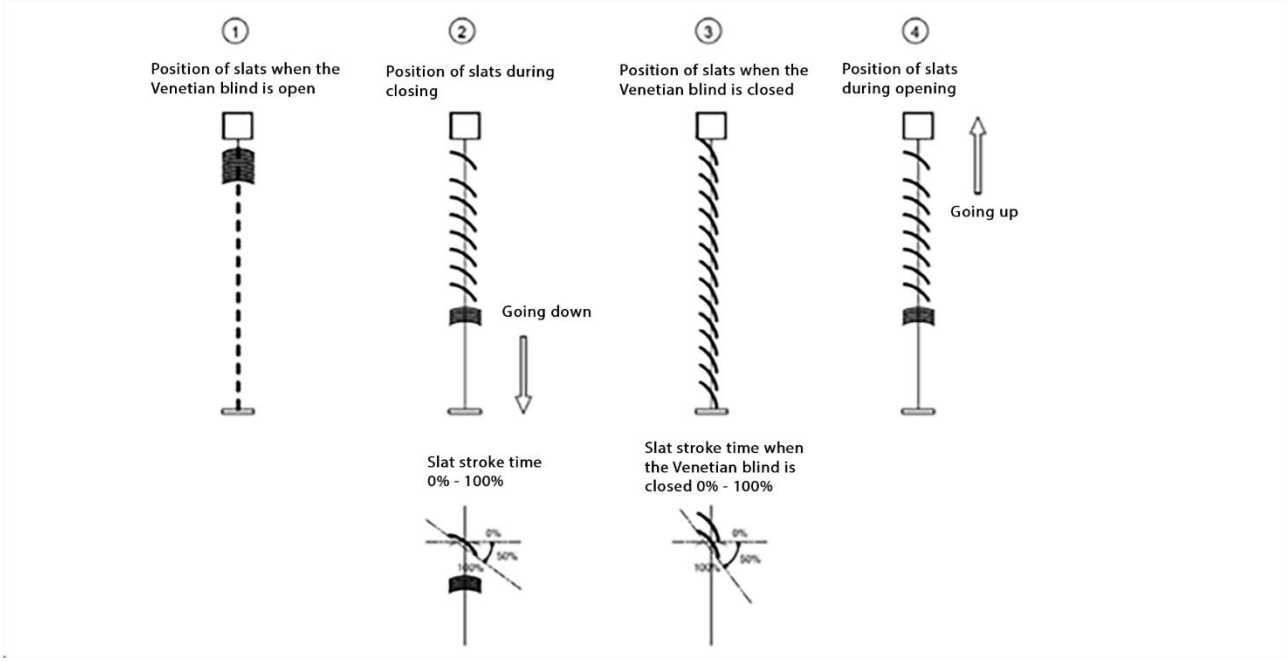
Posizione Veneziana	Posizione Lamelle	Invio Comando	t	Inizio movimentazione
③	Rotazione lamelle da tutte chiuse (100%) a tutte aperte (0%)	Salita →	Tempo Morto	Inizio salita tapparella

Slat down stroke time (msec)

This parameter allows the total time to be set for the slats to move to the stroke position (as shown in the figure below) when moving down. It is defined that the slat movement is identified with a separate value from that defined as the 'up/down stroke time of the Roller shutter/Venetian blind. Therefore, the time taken for the slat to go from 0% to 100% is a second measurement to be identified in the field.
Once this value has been identified, it must be entered in the 'Slat Stroke Time' parameter. This time can be very fast and the scale value is in msec. The factory setting is 5000 ms.



The figure below shows that for some types of Venetian blinds the position of the slats during the descent phase ② is different from the position at the end of their stroke ③



The value ② should be entered for this parameter.

Slat down stroke time with roller shutter closed (msec)

This parameter allows setting the total slat movement time to 100% closed position③ (as shown in the picture). It is defined that this slat movement is identified with a separate value from that defined as 'Total stroke time and in open position'.

Number of down adjustment steps

This parameter allows setting the number of steps calculated by dividing the total rotation time by the number of steps required.

Down-time from roller shutter open (0%) until the start of the down movement (shutter not closed, msec)

This parameter allows setting the so-called 'down-times'. These are periods when the motor is driven by the actuator but mechanically does not produce any movement. These times can be taken into account if the manufacturer of the automation system indicates them, or by testing the device and measuring the times directly during the 'movement' phase.

Venetian blind position	Slat position	Send Command	t	Start of movement
①	Slat rotation from all closed (100%) to all open (0%)	Up →	Down-time	Roll-up start of the roller shutter

Down-time from roller shutter open (0%) until the start of the down movement (shutter closed, msec)

This parameter allows setting the so-called 'down-times'. These are periods when the motor is driven by the actuator but mechanically does not produce any movement. These times can be taken into account if the manufacturer of the automation system indicates them, or by testing the device
and measuring the times directly during the 'movement' phase.

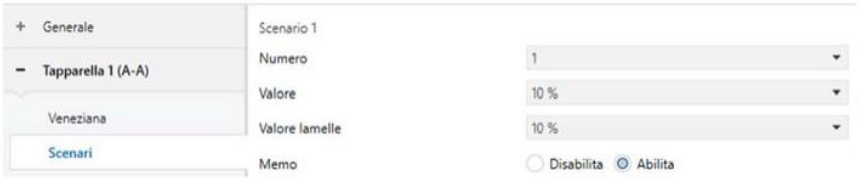
Posizione Veneziana	Posizione Lamelle	Invio Comando	t	Inizio movimentazione
③	Rotazione lamelle da tutte chiuse (100%) a tutte aperte (0%)	Salita →	Tempo Morto	Inizio salita tapparella

Slat position at end of the command

This parameter allows setting the position of the slats at the end of movement (value in %).

Scenarios

Depending on whether the Venetian blind function is activated or not, the parameterisation may also contain the position of the Slats.



Number

Identifies the scenario, among the 64 available.

Value

Indicates the desired position of the shutter, where 0% is fully open and 100% is fully closed, with minimum increments of 5%. The 8 scenarios are assigned default values in ascending order.

Slat value

It is displayed when the Venetian blind function is active, and indicates the desired position of the slat, where 0% refers to the fully open position and 100% refers to the fully darkened position. The 8 scenarios are assigned default values in ascending order.

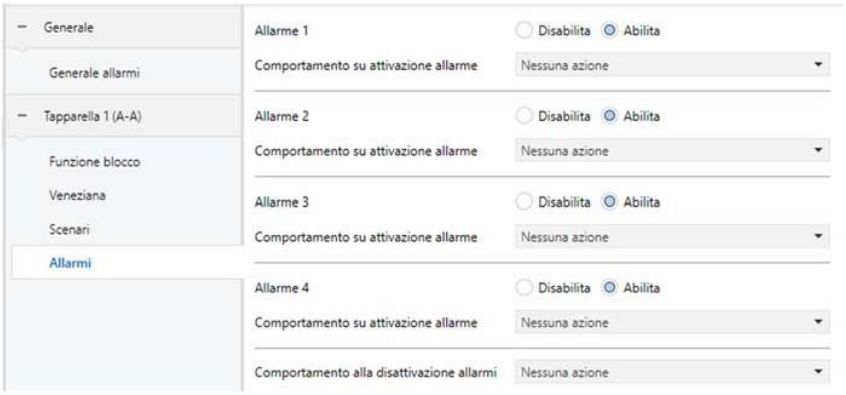
Memo

This parameter is used to enable or disable the storage / learning of the channel status by using the same communication object. When retrieving the scenario, the value in %

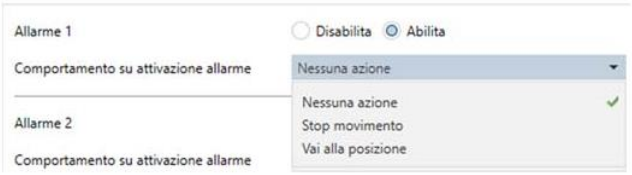
learnt at the time of its storage will be retrieved. This parameter can only be set when using the ETS programme. The factory setting is Disable.
Learning the scenario includes storing the percentage position of the slats (if the Venetian blind operation is selected). Therefore, the execution of a scenario must also include the reproduction of the previously stored slat position, where required.

Alarms

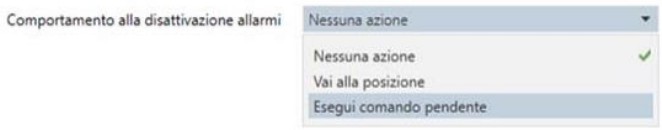
Once the four alarms have been defined in the general menu, it is possible to activate a specific action for each roller shutter and, selectively, for each alarm. The actions are defined in the corresponding sub-menu of each roller shutter:



They can be: No action, or a stop (if moving) or movement to a specific position:



Similarly, it is possible to define the behaviour when the alarm is deactivated: the roller shutter can either do nothing, go to a specific level, or execute pending commands received during the alarm period:



Note: the behaviour will not actually be implemented if a lower priority alarm is active at the same time.

Regulatory compliance

- RoHS Directive 2011/65/EU
- REACh Regulation (EC) No. 1907/2006

- EN 50491-2 General requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS). Part 2: Environmental conditions.

- EN 50491-3 General requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS). Part 3: Electrical safety requirements.

- EN 50491-4-1 General requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS). Part 4-1: General functional safety requirements for products intended to be integrated in HBES and BACS systems

- EN 50491-5-1 General requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS). Part 5-1: Electromagnetic Compatibility (EMC) test requirements, conditions and set-ups.

- EN 50491-5-2 General requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS). Part 5-3: Electromagnetic compatibility (EMC) requirements for HBES/BACS devices used in residential, commercial and light industrial environments.

- EN 50428 Switches for household and similar fixed electrical installations - Collateral standard - Switches and related accessories for use in home and building electronic systems (HBES).

Communication objects sequential list

No.	Object name	Enabling condition	Dim.	Flags					DPT
0	Shutt. 1 Set up/down	Shutt. 1 = Enable	1 Bit	C		W			[1.008] up/down
1	Shutt. 1 Up/down mov. status	Shutt. 1 = Enable	1 Bit	C	R		T		[1.008] up/down
2	Shutt. 1 Set % position	Shutt. 1 = Enable	1 Byte	C		W			[5.001] Percentage (0..100%)
3	Shutt. 1 Position % status	Shutt. 1 = Enable	1 Byte	C	R		T		[5.001] Percentage (0..100%)
4	Slats 1 Set % position	Shutt. 1 & Blinds = Enable	1 Byte	C		W			[5.001] Percentage (0..100%)
5	Slats 1 Position % status	Shutt. 1 & Blinds = Enable	1 Byte	C	R		T		[5.001] Percentage (0..100%)
6	Shutt. 1 Stop/slats step	Shutt. 1 = Enable	1 Bit	C		W			[1.007] step
7	Shutt. 1 Scene	Shutt. 1 & Scene = Enable	1 Byte	C		W			[18.001] scene control
8	Shutt. 1 Set lock	Shutt. 1 & Lock = Enable	1 Bit	C		W			[1.003] enable
9	Shutt. 1 Lock status	Shutt. 1 & Lock = Enable	1 Bit	C	R		T		[1.011] state
10	Shutt. 1 Moving up	Shutt. 1 & Movem. message = Enable	1 Bit	C	R		T		[1.002] boolean
11	Shutt. 1 Moving down	Shutt. 1 & Movem. message = Enable	1 Bit	C	R		T		[1.002] boolean
12	Shutt. 1 Up limit	Shutt. 1 & Limit message = Enable	1 Bit	C	R		T		[1.002] boolean
13	Shutt. 1 Down limit	Shutt. 1 & Limit message = Enable	1 Bit	C	R		T		[1.002] boolean
14	Shutt. 1 Up/down test time movement	Shutt. 1 & Time mov. Obj. Tuning = Enable	2 Byte	C		W			[8.003] time lag (10ms)
15	Shutt. 1 Up/down calibrat. movement	Shutt. 1 & Time mov. Obj. Tuning = Enable	1 Bit	C		W			[1.008] up/down
20	Shutt. 2 Set up/down	Shutt. 2 = Enable	1 Bit	C		W			[1.008] up/down
21	Shutt. 2 Up/down mov. status	Shutt. 2 = Enable	1 Bit	C	R		T		[1.008] up/down
22	Shutt. 2 Set % position	Shutt. 2 = Enable	1 Byte	C		W			[5.001] Percentage (0..100%)
23	Shutt. 2 Position % status	Shutt. 2 = Enable	1 Byte	C	R		T		[5.001] Percentage (0..100%)
24	Slats 2 Set % position	Shutt. 2 & Blinds = Enable	1 Byte	C		W			[5.001] Percentage (0..100%)
25	Slats 2 Position % status	Shutt. 2 & Blinds = Enable	1 Byte	C	R		T		[5.001] Percentage (0..100%)
26	Shutt. 2 Stop/slats step	Shutt. 2 = Enable	1 Bit	C		W			[1.007] step
27	Shutt. 2 Scene	Shutt. 2 & Scene = Enable	1 Byte	C		W			[18.001] scene control
28	Shutt. 2 Set lock	Shutt. 2 & Lock = Enable	1 Bit	C		W			[1.003] enable
29	Shutt. 2 Lock status	Shutt. 2 & Lock = Enable	1 Bit	C	R		T		[1.011] state
30	Shutt. 2 Moving up	Shutt. 2 & Movem. message = Enable	1 Bit	C	R		T		[1.002] boolean
31	Shutt. 2 Moving down	Shutt. 2 & Movem. message = Enable	1 Bit	C	R		T		[1.002] boolean
32	Shutt. 2 Up limit	Shutt. 2 & Limit message = Enable	1 Bit	C	R		T		[1.002] boolean
33	Shutt. 2 Down limit	Shutt. 2 & Limit message = Enable	1 Bit	C	R		T		[1.002] boolean
34	Shutt. 2 Up/down test time movement	Shutt. 2 & Time mov. Obj. Tuning = Enable	2 Byte	C		W			[8.003] time lag (10ms)
35	Shutt. 2 Up/down calibrat. movement	Shutt. 2 & Time mov. Obj. Tuning = Enable	1 Bit	C		W			[1.008] up/down
120	All shutters Set up/down	Always	1 Bit	C		W			[1.008] up/down
121	All shutters Set % position	Always	1 Byte	C		W			[5.001] Percentage (0..100%)
122	All shutt./all slats Set stop/step position	Always	1 Bit	C		W			[1.007] step
123	All slats Set % position	Always	1 Byte	C		W			[5.001] Percentage (0..100%)
130	Ice alarm Set	Alarms management = Enable	1 Bit	C		W			[1.005] alarm
131	Rain alarm Set	Alarms management = Enable	1 Bit	C		W			[1.005] alarm
132	Wind alarm Set	Alarms management = Enable	1 Bit	C		W			[1.005] alarm
133	Strong wind alarm Set	Alarms management = Enable	1 Bit	C		W			[1.005] alarm
134	Ice alarm Status	Alarms management = Enable	1 Bit	C	R		T		[1.005] alarm

135	Rain alarm Status	Alarms management = Enable	1 Bit	C	R		T		[1.005] alarm
136	Wind alarm Status	Alarms management = Enable	1 Bit	C	R		T		[1.005] alarm
137	Strong wind alarm Status	Alarms management = Enable	1 Bit	C	R		T		[1.005] alarm

Installation and use

The installation of the receiver must include an upstream double pole disconnector and be housed in an enclosure with an appropriate degree of protection. A circuit breaker or fuse, of a rating appropriate to the load current, and in any case not exceeding 10A - 230V~, must then be provided for each of the controlled loads.

Coupled outputs