## animeo

Motor Controller 6 AC KNX DRM

## Operating Manual



Ref. 1870398

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$\triangle$ Before beginning any operation, the safety instructions in these instructions must be taken into account. SOMFY declines all responsibility for damage and defects caused by non-compliance with the instructions (incorrect installation, maintenance, repairs, etc.). The system may only be installed, checked and commissioned by an expert (in accordance with VDE 0100)! Switch off the voltage to all of the lines which are to be installed. Take all appropriate measures to avoid the system being switched on accidentally.

Somfy products must always be installed in easily accessible locations. If access is limited for maintenance and repair work (e.g. glued or extensively glued floors, installation behind lamps or panels), any additional costs incurred as a result shall not be borne by the seller.
Subject to technical modifications.

The Motor Controller 6 AC KNX DRM is suitable for controlling up to six individually configurable motors for Venetian blinds, roller shutters, awnings and windows.

## Functions and advantages

- The simple installation saves time, for example by means of spring terminals.
- The direction of rotation of the motors can be tested without the ETS software.
- The parameters are easily set with the user-friendly ETS software.
- The smart change between manual and automatic mode ensures outstanding user-friendliness and saves energy.
- The position of the motors is transmitted during movement and when the upper or lower end limits are reached.
- For each individual motor output, two different security positions can be freely determined.
- The security position for mains voltage return can be freely defined with feedback provided by the object.
- Automatic cascading of the outputs in the event of mains voltage return and the bus security functions minimise power spikes.

Full commissioning is possible if the KNX motor controller is connected to the KNX bus and is supplied by power by the latter.

## 1 Definitions

### 1.1 Manual command

A telegram received by objects 1-12 (1 bit command), 25-36 (byte command) or 37-42 (IP 1 bit command) is deemed to be a manual position order.

### 1.2 Automatic command

A telegram received by objects 13-24 (byte command) or 43-48 (IP 2 bit command) is deemed to be an automatic command.

### 1.3 Slat positions



## 2 Installation

DIN rail version of Motor Controller 6 AC KNX DRM


Wire and switch power supply on


## 3 Wiring diagram



| Connected to ... | Cable | Twisted pairs | Stripping <br> length |
| :--- | :--- | :--- | :--- |
| Motors | Min.: $4 \times 0.75 \mathrm{~mm}^{2} / 18 \mathrm{AWG}$ <br> Max.: $4 \times 2.5 \mathrm{~mm}^{2} / 13 \mathrm{AWG}$ | - | 6 mm |
| KNX bus | $2 \times 0.5 \mathrm{~mm}^{2} / 20 \mathrm{AWG}$ | Mandatory in accordance <br> with KNX topology instruc- <br> tions | 6 mm |
| $\mathbf{2 2 0 - 2 3 0}$ V AC | Min.: $3 \times 1.5 \mathrm{~mm}^{2} / 15 \mathrm{AWG}$ <br> Max.: $3 \times 2.5 \mathrm{~mm}^{2} / 13 \mathrm{AWG}$ |  | 6 mm |

## 4 Default settings on delivery

The KNX Motor Controller can be used as supplied via the operating buttons on the device without prior programming using the ETS software. The device is pre-programmed with handy standard settings. These settings apply to all six motor outputs.

- Travel time up/down, closed/open $=2$ minutes


### 4.1 Reset/Prog button function

### 4.1.1 Resetting to factory settings on the motor controller

Switch the power supply of the motor controller off. Press and hold the Reset/Prog button. Switch the power on again and keep the Reset/Prog button depressed for 10 seconds until 2 LEDs flash 3 times.
The motor controller is now reset to the factory settings.


### 4.1.2 Resetting to factory settings via ETS



Unload application
Unload application and address

The reset is indicated after approx. 15 seconds by the LEDs on the device lighting up briefly.

### 4.1.3 Motor controller status check

Press the Reset/Prog button briefly and the SCR, US and EU LEDs light up:
If the SCR, US and EU LEDs flash 3 times for 1 second, the motor controller has not yet been programmed via KNX.
If the SCR, US and EU LEDs only flash once for 3 seconds, the motor controller has been programmed via KNX.
Rapid flashing of the KNX LED means that there is no voltage at the KNX bus.

## 5 Communication objects

### 5.1 Overview of the objects

A maximum of 114 communication objects are available: they can not, however, all be used at the same time. In total, a maximum of 250 group addresses can be connected.

### 5.1.1 Object list

| No. | Object designation | Type | DPT_ID | Description |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Motor 1 Up/Down | 1 Bit | 1.008 | If a telegram with a value of " 0 " is received by this communication object, the corresponding blind is raised or the window is closed. If a telegram with a value of " 1 " is received, the corresponding blind is lowered or the window is opened. When the travel time configured for the up and down direction expires, the output relays are disabled. |
| 2 | Motor 2 Up/Down | 1 Bit | 1.008 |  |
| 3 | Motor 3 Up/Down | 1 Bit | 1.008 |  |
| 4 | Motor 4 Up/Down | 1 Bit | 1.008 |  |
| 5 | Motor 5 Up/Down | 1 Bit | 1.008 |  |
| 6 | Motor 6 Up/Down | 1 Bit | 1.008 |  |
| 7 | Motor 1 Step/Stop | 1 Bit | 1.007 | For Venetian blinds: <br> If a telegram is received by one of these communication objects when a Venetian blind is moving, the movement is stopped regardless of whether " 0 " or " 1 " is received. If the Venetian blind is not moving, a turn is performed. Furthermore, if a telegram with the value " 1 " is received, the slats close and if a telegram with the value " 0 " is received, they move upwards. The turn duration is determined in the parameter settings. <br> For vertical awnings, roller shutters, awnings and windows: <br> If a telegram is received by one of these communication objects when one of the end devices is moving, the movement is stopped, regardless of whether " 0 " or " 1 " is received. If a telegram is received one of these communication objects and one of the end devices is not moving, no operation is performed. |
| 8 | Motor 2 Step/Stop | 1 Bit | 1.007 |  |
| 9 | Motor 3 Step/Stop | 1 Bit | 1.007 |  |
| 10 | Motor 4 Step/Stop | 1 Bit | 1.007 |  |
| 11 | Motor 5 Step/Stop | 1 Bit | 1.007 |  |
| 12 | Motor 6 Step/Stop | 1 Bit | 1.007 |  |
| 13 | Motor 1 Position Up/Down Automatic | 1 Byte | 5.001 | If a telegram is received by one of these communication objects, the corresponding blind moves to the position which is dependent on the value received (\%): "0" = upper end limit, "100" = lower end limit. <br> For Venetian blinds: When the position is reached, the slats are turned to the same position as they were in before. |
| 14 | Motor 2 Position Up/Down Automatic | 1 Byte | 5.001 |  |
| 15 | Motor 3 Position Up/Down Automatic | 1 Byte | 5.001 |  |
| 16 | Motor 4 Position Up/Down Automatic | 1 Byte | 5.001 |  |
| 17 | Motor 5 Position Up/Down Automatic | 1 Byte | 5.001 |  |
| 18 | Motor 6 Position Up/Down Automatic | 1 Byte | 5.001 |  |


| No. | Object designation | Type | DPT_ID | Description |
| :---: | :---: | :---: | :---: | :---: |
| 19 | Motor 1 Slat position automatic | 1 Byte | 5.001 | For Venetian blinds: If a telegram is received by one of these communication objects, the corresponding slats move to the position specified by the value received. If a Venetian blind is moving and a value is received by the corresponding object, the position of the slats is only adjusted after the movement is complete. Depending on the parameter settings on the "General" index card, the position is defined as follows: <br> "100" = slats maximum closed/ " 0 " = slats maximum reversed or <br> " 0 " = slats maximum closed/ <br> "100" = slats maximum reversed |
| 20 | Motor 2 Slat position automatic | 1 Byte | 5.001 |  |
| 21 | Motor 3 Slat position automatic | 1 Byte | 5.001 |  |
| 22 | Motor 4 Slat position automatic | 1 Byte | 5.001 |  |
| 23 | Motor 5 Slat position automatic | 1 Byte | 5.001 |  |
| 24 | Motor 6 Slat position automatic | 1 Byte | 5.001 |  |
| 25 | Motor 1 Position Up/Down manual | 1 Byte | 5.001 | If a telegram is received by one of these communication objects, the corresponding blind moves to the position which is dependent on the value received: " 0 " = upper end limit, "100" = lower end limit. <br> For Venetian blinds: When the position is reached, the slats are turned to the same position as they were in before. |
| 26 | Motor 2 Position Up/Down manual | 1 Byte | 5.001 |  |
| 27 | Motor 3 Position Up/Down manual | 1 Byte | 5.001 |  |
| 28 | Motor 4 Position Up/Down manual | 1 Byte | 5.001 |  |
| 29 | Motor 5 Position Up/Down manual | 1 Byte | 5.001 |  |
| 30 | Motor 6 Position Up/Down manual | 1 Byte | 5.001 |  |
| 31 | Motor 1 Slat position manual | 1 Byte | 5.001 | For Venetian blinds: If a telegram is received by one of these communication objects, the corresponding slats move to the position specified by the value received. If a Venetian blind is moving and a value is received by the corresponding object, the position of the slats is only adjusted after the movement is complete. Depending on the parameter settings on the "General" index card, the position is defined as follows: <br> "100" = slats maximum closed/ <br> " 0 " = slats maximum reversed <br> or <br> " 0 " = slats maximum closed/ <br> "100" = slats maximum reversed |
| 32 | Motor 2 Slat position manual | 1 Byte | 5.001 |  |
| 33 | Motor 3 Slat position manual | 1 Byte | 5.001 |  |
| 34 | Motor 4 Slat position manual | 1 Byte | 5.001 |  |
| 35 | Motor 5 Slat position manual | 1 Byte | 5.001 |  |
| 36 | Motor 6 Slat position manual | 1 Byte | 5.001 |  |


| No. | Object designation | Type | DPT_ID | Description |
| :---: | :---: | :---: | :---: | :---: |
| 37 | Motor 1 Move to IP 1 | 1 Bit | 1.008 | If a telegram with the value "1" is received by one of these communication objects, the corresponding blind moves to intermediate position 1 configured in the ETS software. If a telegram with the value " 0 " is received by one of these communication objects, the corresponding blind moves to the upper end limit. <br> (Manual command) |
| 38 | Motor 2 Move to IP 1 | 1 Bit | 1.008 |  |
| 39 | Motor 3 Move to IP 1 | 1 Bit | 1.008 |  |
| 40 | Motor 4 Move to IP 1 | 1 Bit | 1.008 |  |
| 41 | Motor 5 Move to IP 1 | 1 Bit | 1.008 |  |
| 42 | Motor 6 Move to IP 1 | 1 Bit | 1.008 |  |
| 43 | Motor 1 Move to IP 2 | 1 Bit | 1.008 | If a telegram with the value "1" is received by one of these communication objects, the corresponding blind moves to intermediate position 2 configured in the ETS software. If a telegram with the value " 0 " is received by one of these communication objects, the corresponding blind moves to the upper end limit. <br> (Automatic command) |
| 44 | Motor 2 Move to IP 2 | 1 Bit | 1.008 |  |
| 45 | Motor 3 Move to IP 2 | 1 Bit | 1.008 |  |
| 46 | Motor 4 Move to IP 2 | 1 Bit | 1.008 |  |
| 47 | Motor 5 Move to IP 2 | 1 Bit | 1.008 |  |
| 48 | Motor 6 Move to IP 2 | 1 Bit | 1.008 |  |
| 49 | Motor 1 IP 1 Save/Delete | 1 Bit | 1.002 | If a telegram with the value "1" is received by one of these communication objects, the current position of the corresponding blind is saved as intermediate position 1 <br> If a telegram with the value " 0 " is received by one of these communication objects, intermediate position 1 is deleted. |
| 50 | Motor 2 IP 1 Save/Delete | 1 Bit | 1.002 |  |
| 51 | Motor 3 IP 1 Save/Delete | 1 Bit | 1.002 |  |
| 52 | Motor 4 IP 1 Save/Delete | 1 Bit | 1.002 |  |
| 53 | Motor 5 IP 1 Save/Delete | 1 Bit | 1.002 |  |
| 54 | Motor 6 IP 1 Save/Delete | 1 Bit | 1.002 |  |
| 55 | Motor 1 Security low prio | 1 Bit | 1.001 | If a telegram with the value "1" is received by one of these communication objects, the corresponding blind moves to the position configured in the ETS software (security, low priority). All other position orders are blocked. If a telegram with the value " 0 " is received by one of these communication objects, the security is disabled and position orders can once again be received. If "Repeat last position order after security (Yes)" is selected in the ETS parameters, the blind moves to the position it was in before the security function was enabled. <br> If a telegram with the value " 1 " is received by one of these communication objects 61-66 (security, high priority), the corresponding blind moves to the position configured in the ETS software (security, high priority). |
| 56 | Motor 2 Security low prio | 1 Bit | 1.001 |  |
| 57 | Motor 3 Security low prio | 1 Bit | 1.001 |  |
| 58 | Motor 4 Security low prio | 1 Bit | 1.001 |  |
| 59 | Motor 5 Security low prio | 1 Bit | 1.001 |  |
| 60 | Motor 6 Security low prio | 1 Bit | 1.001 |  |


| No. | Object designation | Type | DPT_ID | Description |
| :---: | :---: | :---: | :---: | :---: |
| 61 | Motor 1 Security high prio | 1 Bit | 1.001 | If a telegram with the value "1" is received by one of these communication objects, the corresponding blind moves to the position configured in the ETS software (security, high priority). All other position orders are blocked. If a telegram with the value " 0 " is received by one of these communication objects, the security is disabled and position orders can once again be received if the corresponding object 56-60 (security, low priority) has the value " 0 ". Otherwise, the configured measure for low security is carried out. If "Repeat last position order after security (Yes)" is selected and both security settings for the corresponding channel have a value of "0", the blind moves to the position it was in before the security function was enabled. |
| 62 | Motor 2 Security high prio | 1 Bit | 1.001 |  |
| 63 | Motor 3 Security high prio | 1 Bit | 1.001 |  |
| 64 | Motor 4 Security high prio | 1 Bit | 1.001 |  |
| 65 | Motor 5 Security high prio | 1 Bit | 1.001 |  |
| 66 | Motor 6 Security high prio | 1 Bit | 1.001 |  |
| 67 | Motor 1 block functions | 1 Bit | 1.001 | If a telegram with the value "1" is received by one of these communication objects, the functions configured in the ETS software for the corresponding blind are blocked. If a telegram with the value " 0 " is received by one of these communication objects, the functions configured in the ETS software for the corresponding blind are no longer blocked and are released again. |
| 68 | Motor 2 block functions | 1 Bit | 1.001 |  |
| 69 | Motor 3 block functions | 1 Bit | 1.001 |  |
| 70 | Motor 4 block functions | 1 Bit | 1.001 |  |
| 71 | Motor 5 block functions | 1 Bit | 1.001 |  |
| 72 | Motor 6 block functions | 1 Bit | 1.001 |  |
| 73 | Motor 1 Prio automatic/manual | 1 Bit | 1.001 | With these communication objects, priority can be switched between automatic and manual function. If a telegram with the value "1" is received by one of these communication objects, the automatic functions for the corresponding blind are enabled as a priority. If a telegram with the value " 0 " is received by one of these communication objects, the manual functions for the corresponding blind are enabled as a priority. |
| 74 | Motor 2 Prio automatic/manual | 1 Bit | 1.001 |  |
| 75 | Motor 3 Prio automatic/manual | 1 Bit | 1.001 |  |
| 76 | Motor 4 Prio automatic/manual | 1 Bit | 1.001 |  |
| 77 | Motor 5 Prio automatic/manual | 1 Bit | 1.001 |  |
| 78 | Motor 6 Prio automatic/manual | 1 Bit | 1.001 |  |
| 79 | Motor 1 Reset priority | 1 Bit | 1.017 | If a telegram with the value " 1 " or " 0 " is received by one of these communication objects, the priority switch for the corresponding blind is reset. Automatic or manual functions are then switched to active as a priority. Which of these functions is active as a priority depends on the status of communication objects $73-78$ or on the priority configured in the ETS software. |
| 80 | Motor 2 Reset priority | 1 Bit | 1.017 |  |
| 81 | Motor 3 Reset priority | 1 Bit | 1.017 |  |
| 82 | Motor 4 Reset priority | 1 Bit | 1.017 |  |
| 83 | Motor 5 Reset priority | 1 Bit | 1.017 |  |
| 84 | Motor 6 Reset priority | 1 Bit | 1.017 |  |


| No. | Object designation | Type | DPT_ID | Description |
| :--- | :--- | :--- | :--- | :--- |
| 85 | Motor 1 Position Request | 1 Bit | 1.017 | If a telegram with the value "1" or "0" is received by |
| one of these communication objects, if the type of |  |  |  |  |
| feedback is set to "request" in the ETS pparameters, |  |  |  |  |$|$| the current position is sent to the bus via objects |
| :--- | :--- | :--- | :--- | :--- |
| $91-102$. |


| No. | Object designation | Type | DPT_ID | Description |
| :--- | :--- | :--- | :--- | :--- |
| 109 | Motor 1 Feedback Lower End | 1 Bit | 1.002 | A telegram with the value "1" for the corresponding <br> blind is sent via this communication object when <br> the lower end limit is reached. If the lower end limit <br> of the corresponding blind is left, a telegram with |
| the value "0" is sent. The upper and lower end lim- |  |  |  |  |
| its are determined by means of the configured |  |  |  |  |
| travel times. |  |  |  |  |

## 6 Parameters

The selection options for the individual parameters are explained on a case-by-case basis. In the following images of the different parameter cards, as many parameters are shown as possible. Furthermore, objects not required according to the parameter settings are hidden.

## 6.1 "General" menu index card



### 6.1.1 Motor output configuration

| Default value: | - Combined |
| :--- | ---: |
| Selection options: | - Combined |
|  | - Individual |

This parameter determines if the motor outputs are configured in a "combined" or "individual" process. If the "Combined" parameter is selected, only one menu index card is visible for the basic settings of all six motor outputs (motor 1-6).
The "Combined" option is recommended for projects where the configuration of the motor outputs is the same.

If the "Individual" parameter is selected, six menu index cards are visible for configuration of the motor outputs (Motor 1, Motor 2, etc.).

### 6.1.2 Group control

Default value: • Enabled
Selection options: •Enabled

- Disabled


## - Enabled

Operating buttons on the motor controller are enabled. All 6 motor outputs can be operated at the same time.

## - Disabled

Operating buttons on the motor controller are disabled.

### 6.1.3 Slat position closed/reversed ONLY FOR VENETIAN BLINDS

| Default value: | - Max. closed (100)/Max. reversed (0) |
| :--- | :--- |
| Selection options: | - Max. closed (100)/Max. reversed (0) |
|  | - Max. closed (0)/Max. reversed (100) |

- Max. closed (100)/Max. reversed (0)

If the value "100" is transmitted to the corresponding object (19-24, 31-36), the slats are completely closed. If the value " 0 " is transmitted to the corresponding object (19-24, 31-36), the slats are reversed or completely open.


- Max. closed (0)/Max. reversed (100)

If the value " 0 " is transmitted to the corresponding object (19-24, 31-36), the slats are completely closed. If the value "100" is transmitted to the corresponding object ( $19-24,31-36$ ), the slats are reversed or completely open.


### 6.1.4 Automatic cascading reduces power spikes through motors

Default value: •No
Selection options: •No

- Yes

If this parameter is set to "Yes", the motor outputs move to the corresponding position with a 1 second delay. This delay is taken into account when starting the positions, which are generated based on the "Mains power return" settings.
$\triangle$ Advantage: With large systems, power spikes are reduced.

### 6.1.5 Send blinds to upper end limit after download

Default value: •Yes
Selection options: •No

- Yes

If this parameter is set to "Yes", a reference travel of 5 minutes to the upper end limit is conducted after every ETS download. The reference travel can be stopped at any time.

## 6.2 "Motor 1-6" menu index card

| 2.1.11 Motor Controller 6 AC KNX DRM > Motor 1-6 |  |  |  |
| :---: | :---: | :---: | :---: |
| General | Type of end product | Venetian blind | * |
| Motor 1-6 | Running time Up | 120 | $\stackrel{*}{*} 0,1 \mathrm{~s}$ |
| Functions motor 1-6 | Running time Down | 120 | $\stackrel{*}{*} 0,1 \mathrm{~s}$ |
|  | Complete tilting time | 9 | $\stackrel{*}{*} 0,1 \mathrm{~s}$ |
| Block, Safety, Feedback 1-6 | Step length | 2 | $\checkmark 0,05 \mathrm{~s}$ |
|  | Slack compensation | 0 | $\stackrel{0}{*} 01 \mathrm{~s}$ |
|  | Backlash time | 1 | $\stackrel{*}{*} 0,1 \mathrm{~s}$ |
|  | Start delay | 0 | $\stackrel{\square}{*} 0,05 \mathrm{~s}$ |

If the "Individual" parameter setting is selected in the "Motors" basic setting menu, six individual menu index cards (Motor 1...6) are visible. If the "Combined" parameter setting is selected in the "Motors" basic setting menu, one menu index card is visible (Motor 1-6).

### 6.2.1 Type of end product

Default value: • Venetian blind
Selection options: • Venetian blind

- Screen, roller shutter, awning
- Window


## - Venetian blind

This parameter determines that the Venetian blind can be controlled via the relevant object motor 1-6 up/down and via the object motor 1-6 tilting step/stop.

## - Screen, roller shutter, awning

This parameter determines that the corresponding vertical awning, roller shutter or awning can be controlled via the relevant object motor 1-6 up/down and via the object motor 1-6 stop.

- Window

This parameter determines that the corresponding window can be controlled via the relevant object motor 1-6 close/open and via the object motor 1-6 stop.

### 6.2.2 Running time Up/Running time Close

```
Default value: •120 seconds
Selection options: • 0.1-320 seconds
```

The time set here corresponds to the maximum travel time from the lower to the upper end limit or the maximum time the window motor requires to close the corresponding window. An additional time of 5 seconds is always added, with the exception of position telegrams (objects 13-16).

### 6.2.3 Running time Down/Running time Open

Default value: •120 seconds
Selection options: • 0.1-320 seconds
The time set here corresponds to the maximum travel time from the upper to the lower end limit or the maximum time the window motor requires to open the corresponding window. An additional time of 5 seconds is always added, with the exception of position telegrams (objects 13-16).

### 6.2.4 Complete tilting time

Default value: $\quad 1.3$ seconds
Selection options: • 0-20 seconds

The time set here corresponds to the maximum tilting time of the slat. This parameter is only visible if the "Type of end product" is set to "Venetian blind".

### 6.2.5 Step length

Default value: $\quad \bullet 0.2$ seconds
Selection options: • $0.1-10$ seconds
The time set here corresponds to the length of a tilting step. This parameter is only visible if "Type of end product" is set to "Venetian blind".

### 6.2.6 Slack compensation

| Default value: | $\bullet 0$ seconds |
| :--- | :--- |
| Selection options: | $\bullet 0-5$ seconds |

The mechanical compensation time is active as soon as a value greater than " 0 " is input. The time set here corresponds to the total time added to the tilting time to take account of mechanical tolerances. This time is always attributed to the first tilt step of the slats upwards in the lower end limit of the motorised product if "Type of end product" is set to "Venetian blind".

### 6.2.7 Backlash time

Default value: • 0 seconds
Selection options: •0-20 seconds

The mechanical compensation time is active as soon as a value greater than " 0 " is input. The time set here corresponds to the total time added to the tilting time to take account of mechanical tolerances. This time is always attributed to the first tilt step of the slats upwards or downwards if "Type of end product" is set to "Venetian blind".

### 6.2.8 Start delay

Default value: • 0 seconds
Selection options: •0-100 seconds

This parameter defines the necessary starting time of an electronic motor used, such as Somfy WT Motor 200 ms .

If electronic motors are controlled with this motor controller, the starting time delay of the electronic motor must be configured in the motor controller settings in order to reach a correct slat position.

If a starting delay $>\mathbf{0}$ s is set, a motorised product in the upper end limit can not be moved upwards again.

## 6.3 "Functions motor 1-6" menu index card

| 2.1.11 Motor Controller 6 AC KNX DRM > Functions motor 1-6 |  |  |  |
| :---: | :---: | :---: | :---: |
| General | Intermediate Position 1 (IP 1) | 50 | $\stackrel{\%}{*}$ |
| Motor 1-6 | IP 1 Slat position | 50 | $\stackrel{*}{*}$ |
| Functions motor 1-6 | Intermediate Position 2 (IP 2) | 80 | $\div \%$ |
|  | IP 2 Slat position | 80 | $\star$ \% |
| Block, Safety, Feedback 1-6 | Security position low priority | Ignore | $\checkmark$ |
|  | Security position high priority | Upper end limit | * |
|  | Cyclic monitor time (0-255) | 0 | $\stackrel{\sim}{*}$ minutes |
|  | Restore previous position after security | ( No Yes |  |
|  | Automatic/Manual function | Priority for automatic functions | * |

If the "Individual" basic setting for the motors is selected on the "General" menu index card, six individual menu index cards (functions of motors 1-6) are visible. If the "Combined" basic setting for the motors is selected on the "General" menu index card, one menu index card (functions of motors 1-6) is visible.

### 6.3.1 Intermediate Position 1 (IP 1)

### 6.3.1.1 Up/Down position (0-100\%)

Default value: $\quad 0 \%$ (function disabled)
Selection options: •0-100\%
This parameter sets the intermediate position 1 "Up/Down". The target value in \% refers to the configured travel times of the corresponding blind on the menu index card Motor 1...6/Motor 1-6.

If the Up/Down intermediate position is set to 0\%, the function is disabled.

### 6.3.1.2 IP 1 Slat position (0-100\%)

Default value: •0\%
Selection options: •0-100\%


This parameter sets the intermediate position 1 "Slat". The target value in \% refers to the configured complete slat tilts of the corresponding blind on the menu index card Motor 1...6/Motor 1-6.

### 6.3.2 Intermediate position 2 (IP2)

### 6.3.2.1 Up/Down position (0-100\%)

Default value: •0\% (function disabled)
Selection options: •0-100\%
This parameter sets the intermediate position 2 "Up/Down". The target value in \% refers to the configured travel times of the corresponding blind on the menu index card Motor 1...6/Motor 1-6.

If the $U p / D o w n$ intermediate position is set to $0 \%$, the function is disabled.

### 6.3.2.2 IP 2 Slat position (0-100\%)

Default value:

- 0\%

Selection options:

- 0-100\%


This parameter sets the intermediate position 2 "Slat". The target value in \% refers to the configured complete slat tilts of the corresponding blind on the menu index card
Motor 1...6/Motor 1-6.

### 6.3.3 Security position low priority

| Default value: | - Ignore |
| :--- | :--- |
| Selection options: | - Upper end limit |
|  | - Lower end limit |
|  | - Intermediate position 1 (IP 1) |
|  | - Intermediate position 2 (IP 2) |
|  | - Ignore |
|  | - Stop |
|  | - Close window |
|  | - Open window |
|  | - Only Up possible (ZIP screen) |

This parameter sets the "Security position low priority" for the corresponding blind. If a telegram with the value " 1 " is received by one of these communication objects (objects 55-60), the corresponding blind moves to position configured in the ETS software.
If a telegram with the value " 0 " is received by one of these communication objects, no operation is performed. If the "Restore previous position after security" function is set to "Yes" on the "Functions motor 1...6" menu index card, the blind returns to the position and angle it was in before this priority was enabled once the "low priority" (value "0") has ended.

### 6.3.4 Security position high priority

Default value: - Upper end limit
Selection options: - Upper end limit

- Lower end limit
- Ignore
- Close window
- Open window
- Stop

This parameter sets the "Security position high priority" for the corresponding blind. If a telegram with the value "1" is received by one of these communication objects (objects 61-66), the corresponding blind moves to position configured in the ETS software.
If a telegram with the value " 0 " is received by one of these communication objects, no operation is performed.
If the " Restore previous position after security " function is set to "Yes" on the "Functions motor $1 . . .6$ " menu index card, it will be checked regardless of whether the "low priority" is active or inactive. If "low priority" (value "1") is active, the blinds move to the "Security position low priority" position (see previous point). If "low priority" (value " 0 ") is also active, the blinds return to the last position, with the last angle, they were in before the high and low priority was enabled.

### 6.3.5 Cyclic monitor time (in minutes, 0-255)

Default value: •0
Selection options: • 0-255 minutes
The cyclic monitor time is active and applies to the high and low priority security objects.
The cyclic transmitter must be four times quicker than the cyclic monitoring. For example, if the cyclic message from the transmitter is set to 1 minute, the cyclic monitor time must be set to $\geq 4$ minutes.

### 6.3.6 Restore previous position after security

Default value: •No
Selection options: • No

- Yes

The parameter setting "Yes" causes the last active run command to be repeated after the security function has ended. This means that the blind will be moved back to the position in which it was before the receipt of a telegram with the value "1" at one of the corresponding safety objects (low or high safety).

### 6.3.7 Automatic/Manual function

| Default value: | - None |
| :--- | :--- |
| Selection options: | - None |
|  | - Priority for automatic functions |
|  | - Priority for manual functions |

## - None

The position orders are performed in the order in which they are received.

## - Priority for automatic functions

If an automatic command (1-byte position order) or IP 2 (1-bit) is received before a manual command (1-bit command), all manual commands will be disabled. The objects at the start of the intermediate positions 1 (objects 37-42) will also be disabled. The priority of automatic resets will be reset if "Reset priority" receives " 1 " or " 0 " at the corresponding object (79-84). The switch between priority for manual functions (value "0") and priority for automatic functions (value "1") is performed via the corresponding objects (73-78). After switching to the relevant priority, the function is in the reset status. For priority for automatic functions, this means that manual commands will only be blocked with the next automatic command.
$\triangle$ See Chapter 1 Definitions.

## - Priority for manual functions

If a manual command (1 bit or byte) is received before an automatic command ( 1 byte), all automatic commands and IP 2 will be disabled. Priority for manual functions is reset if "Reset priority" receives "1" or " 0 " at the corresponding object (79-84). The switch between priority for manual functions (value " 0 ") and priority for automatic functions (value "1") is performed via the corresponding objects (73-78). After switching to the relevant priority, the function is in the reset status. For priority for automatic functions, this means that manual commands will only be blocked with the next automatic command.
$\triangle$ See Chapter 1 Definitions.
$\triangle$ With the help of priority for manual functions, the user can disable automatic functions. User comfort can, for example, be determined with a time switch. At 8 a.m., priority for manual functions is enabled via the relevant object (73-78) and the user can select the desired position using the manual functions until the priority for automatic functions is enabled at about $5 \mathrm{p} . \mathrm{m}$. It is possible to switch between priority for automatic functions and priority for manual functions at any time via the relevant object (73-78).
$\triangle$ See Chapter 1 Definitions.


To set the timer, you should ideally use the animeo KNX Master Control W2 (art. no. 1860187) or animeo KNX Master Control W8 (art. no. 1860193).

## 6.4 "Block, safety, feedback 1-6" menu index card

| 2.1.11 Motor Controller 6 AC KNX DRM > Block, Safety, Feedback 1-6 |  |  |  |
| :---: | :---: | :---: | :---: |
| General | +++ Blocking +++ |  |  |
| Motor 1-6 | Block automatic position orders and IP 2 O No Yes |  |  |
| Functions motor 1-6 | ck automatic tilting orders | O No Yes |  |
|  | Block manual tilt/stop orders | O No Yes |  |
| Block, Safety, Feedback 1-6 | Block manual orders and IP 1 | O No Yes |  |
|  | +++ Bus safety +++ |  |  |
|  | Reaction at main power return | Ignore | * |
|  | Reaction at bus power failure | Ignore | * |
|  | +++ Feedback +++ |  |  |
|  | Feedback upper/lower end limit | O No Yes |  |
|  | Position feedback mode | None | * |

### 6.4.1 Block automatic position orders and IP 2

Default value: •No
Selection options: • No

- Yes

This parameter allows Up/Down position orders (bit) to be blocked via the object (51-54). If a telegram with value " 1 " is received by the corresponding object while the blind is moving, this operation will be completed. Only then will further Up/Down orders (bit) be blocked. If a telegram with value " 0 " is received by the corresponding object, the Up/Down orders (bit) will be allowed again.

### 6.4.2 Block automatic tilting orders

Default value: •No
Selection options: • No

- Yes

This parameter allows tilting orders (byte) to be blocked via the object (67-72). If a telegram with value " 1 " is received by the corresponding object while the blind is tilting, this operation will be completed. Only then will further tilting orders (byte) be blocked. If a telegram with value " 0 " is received by the corresponding object, the tilting order (byte) will be allowed again.

### 6.4.3 Block manual tilt/stops orders

Default value: •No
Selection options: • No

- Yes

This parameter can be used to block step/stop and tilting orders (bit) via the object (67-72). If a telegram with value " 1 " is received by the corresponding object while the blind is tilting, this tilting operation will be completed. Only then will further tilting orders (bit) be blocked. If a telegram with value " 0 " is received by the corresponding object, the step/stop orders (bit) will be allowed again.

### 6.4.4 Block manual orders and IP 1

Default value: • No
Selection options: •No

- Yes

This parameter allows Up/Down position orders (bit) to be blocked via the object (67-72). If a telegram with value " 1 " is received by the corresponding object while the blind is moving, this operation will be completed. Only then will further Up/Down orders (bit) be blocked. If a telegram with value " 0 " is received by the corresponding object, the Up/Down orders (bit) will be allowed again.

### 6.4.5 Reaction at main power return ( 230 V ) (for all motors)

Default value: •Ignore
Selection options: • Upper end limit

- Lower end limit
- Ignore
- Close window
- Open window
- Stop

This parameter determines the position which will be adopted when the mains power ( 230 V ) returns.

### 6.4.5.1 Reaction at bus power failure

Default value: • Ignore
Selection options: • Upper end limit

- Lower end limit
- Ignore
- Close window
- Open window
- Stop

This parameter determines the position which will be adopted in the event of a bus power failure.

### 6.4.6 Feedback upper/lower end limit

Default value: •No
Selection options: • No

- Yes

This option opens the "Position feedback mode" parameter.

### 6.4.7 Position feedback mode

Default value: • None
Selection options: • None

- On demand
- On status change
- Cyclic


## - On demand

The current positions must be requested via the objects 85-90.

## - On status change

The current position of the corresponding blind is communicated to the bus after each change in position.
The position is communicated to the bus when the destination position is reached.

## - Cyclic

This parameter opens another parameter ("feedback cycle time"), in which the time for the cyclic transmission is configured.

### 6.4.8 Position feedback type

Default value: •Up/Down and slat position
Selection options: • Up/Down position

- Slat position
- Up/Down and slat position



## - Up/Down position

With this parameter, the Up/Down position for the corresponding motor is sent to the bus according to the "Type of feedback" parameter "0" = Upper end limit, "100" = Lower end limit.

## - Slat position

With this parameter, the position of the slats for the corresponding motor is sent to the bus according to the "Type of feedback". "0" = slats open, "100" = slats closed. The value for the slats position communicated via the corresponding object depends on the parameter settings on the "General" menu index card.
Slat position closed/reversed ONLY FOR VENETIAN BLINDS.

## - Up/Down and slat position

With this parameter, the Up/Down position and the position of the slats for the corresponding motor is sent to the bus according to the "Type of feedback". "0" = upper end limit, "255" = Lower end limit, "0" = slats open, "100" = slats closed. The value for the slats position communicated via the corresponding object depends on the parameter settings on the "General" menu index card.
Slat position closed/reversed ONLY FOR VENETIAN BLINDS.

### 6.4.9 Feedback cycle time

Default value: • 30 seconds
Selection options: - 1 second

- 5 seconds
- 10 seconds
- 20 seconds
- 30 seconds
- 1 minute
- 5 minutes
- 10 minutes
- 20 minutes

30 minutes

- 60 minutes

This parameter determines the time intervals at which the current position of the corresponding blinds is communicated. The current position of the corresponding blinds is communicated to the bus.

## 7 Technical data

| Power supply | 220-230 V AC / 50/60 Hz |
| :---: | :---: |
| Stand-by current (IEC 62301) | < 3 mA @ 230 V AC |
| Stand-by power consumption (IEC 62301) | <0.5 W@230 V AC |
| KNX bus power supply voltage | KNX voltage 21... 30 V DC, SELV |
| Rated current consumption KNX | As per KNX guidelines, 12.5 mA |
| Max. current per motor output | $3 \mathrm{~A}, \cos \varphi=0.95$ |
| Max. total current for all motor outputs | $10 \mathrm{~A}, \cos \varphi=0.95$ |
| External overcurrent protection | 16 A fuse required |
| Relays | Microgap: $\mu$ |
| Terminals | Spring connectors |
| KNX connection terminals | KNX connection terminals (black/red) |
| Duration per output | Max. 5 minutes |
| Operating temperature | $-5^{\circ} \mathrm{C}$ to $+50^{\circ} \mathrm{C}$ |
| Relative humidity | Max. $85 \%$ (non-condensing) at $30^{\circ} \mathrm{C}$ |
| Material of housing | PC-ABS |
| Housing dimensions ( $\mathrm{w} \times \mathrm{h} \times \mathrm{d}$ ) | $108 \times 90 \times 60 \mathrm{~mm}$ |
| Weight | 245 g |
| Safety level | II |
| Degree of protection | IP 20 |
| Pollution degree | 2 |
| Conformity | www.somfy.com/ce |

## Somfy Activites SA

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