## animeo ${ }^{\circledR}$ KNX RS485 Motor Controller WM/PCB <br> Operating manual



Ref. 1860236
Ref. 1860238

## somfy.

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$\triangle$These instructions apply to animeo KNX RS485 Motor Controller WM/PCB from version A.

$\triangle$
If more than one motor is connected to the animeo KNX RS485 Motor Controller WM (ref. 1860236) or PCB (ref. 1860238) it is mandatory to use the same type of motor and end product. The blinds must have the same length. In this case it is not possible to receive error or position feedback from one single motor.

Before connecting motor and Motor Controller make sure that the end limits of the motor have been set correctly.

Before starting up it is necessary to follow the safety instructions in this instruction. SOMFY cannot be held liable for defects and damages when these have been caused as a result of not following instructions (wrong installation, incorrect service etc.). Establishing, testing and commissioning of the equipment is permitted only by a qualified person (in accordance with VDE 0100). Switch on all connections without voltage. Take precautions against unintentional turning on.

The installation of the Somfy products may occur only at easily accessible places. If maintenance and repair become hindered by accessibility substantially (e.g. stuck or extensively stuck flooring, installation behind lamps or behind façades), any originating supplementary costs therein cannot be charged to the seller.



## CABLE

| Connected to ... |  | Cabling |  | Twisted pair | Max. distance |
| :---: | :---: | :---: | :---: | :---: | :---: |
| RS485 bus | Modular Jack 8P4C (RJ45) spring clamp terminal | Min.: | $4 \times 2 \times 0.4 \mathrm{~mm} / 26$ AWg | Required twisted pair shielded, impedance $100 \Omega(-10 \Omega /+30 \Omega)$, recommended CAT5-FTP, following Somfy RS485 guidelines | 1000 m |
| Switches | spring clamp terminal | Min.: Max.: | $\begin{aligned} & 3 \times 0.6 \mathrm{~mm} / 22 \text { AWG } \\ & 3 \times 0.8 \mathrm{~mm} / 20 \text { AWG } \end{aligned}$ | Recommended | 100 m |
| KNX Bus |  | $2 \times 0.8$ | mm/20 AWg | Required, following KNX topology guidelines | - |

A maximum of 26 communication objects are available, which however cannot be used at one time. Maximally 255 group addresses can be linked.

| No. | Object name | Model | DPT_ID | Description |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Motor UP / DOWN | 1 Bit | 1.008 | If a telegram with the value " 0 " is received on this communication object, the appropriate blind goes up. If a telegram with the value " 1 " is received, the appropriate blind goes down. |
| 2 | Motor STEP / STOP | 1 Bit | 1.017 | If the end product is in a fully moving process, it stops with the receipt of a telegram on the object, regardless of whether a telegram with the value " 0 " or " 1 " is received. If the end product is in passive state, then with the receipt of a telegram on this communication object no action is executed. |
| 3 | Motor Position UP / DOWN | 1 Byte | 5.001 | If this communication object receives a telegram, the appropriate blind will go into the position which is defined by the received value. "0" = UP "100" = DOWN |
| 4 | Motor Move to IP 1 | 1 Bit | 1.022 | If a telegram with the value " 1 " is received on this communication object, the blind goes to the intermediate position 1 which was configured by local switch in the ETS parameters. The last position which has been configured is active. Receiving a telegram with the value "0" on this communication object the blind goes to the upper end position. |
| 5 | Motor Move to IP 2 | 1 Bit | 1.022 | If a telegram with the value "1" is received on this communication object, the corresponding blind moves to the intermediate position 2 parametered in the ETS parameters. Receiving a telegram with the value " 0 " on this communication object, the blind moves to the upper end position. |
| 6 | Motor Security, low prio | 1 Bit | 1.001 | If a telegram with the value " 1 " is received on this communication object, the blind goes to the position which was parameterised in the ETS parameters. When the communication object receives a telegram with value " 0 " no action will be executed. Only by selecting "Repeat the last telegram after security (Yes)" in the ETS parameters the blind will execute this command. If this communication object is active through a telegram with the value " 1 " and if then on the communication object 7 (security position, high priority) a telegram with value "1" is received, the blind will move to the position configured in the ETS parameters (security position, high priority). |
| 7 | Motor Security, high prio | 1 Bit | 1.001 | If a telegram with the value " 1 " is received on this communication object, the blind goes to the position which was parameterised in the ETS parameters. When the communication object receives a telegram with value " 0 " no action will be executed. Only by selecting "Repeat the last telegram after security (Yes)" in the ETS parameters the blind will execute this command. If an object for security position, low priority is active ("1"), the parameterised position will be started up. |
| 8 | Motor Feedback position | 1 Byte | 5.001 | On this communication object the current position (UP / DOWN direction) of the blind is sent to the bus based on the programmed running time. The type of feedback (on demand, status change, cyclic) is defined in the ETS parameters. "0" = UP / "100" = DOWN |
| 9 | Motor Status position | 1 Bit | 1.017 | If a telegram with the value "1" or " 0 " is received on this communication object, the current status position is sent on the bus (object 8 ). |
| 10 | Motor Upper end position | 1 Bit | 1.002 | Over this communication object a telegram with the value "1" is sent if the upper end position is reached. When leaving the upper end position of the blind a telegram with the value " 0 " is sent. The upper and the lower end position result from the parameterised running times. |
| 11 | Motor Lower end position | 1 Bit | 1.002 | Over this communication object a telegram with the value "1" is sent after the lower end position is reached. When leaving the lower end position of the blind a telegram with the value " 0 " is sent. |


| No. | Object name | Model | DPT_ID | Description |
| :---: | :---: | :---: | :---: | :---: |
| 12 | Motor Block functions | 1 Bit | 1.001 | If a telegram with the value " 1 " is received on this communication object the function which is selected in ETS parameters will be blocked for the blind. If a telegram with the value " 0 " is received on this communication object the function for the blind will be enabled again. |
| 13 | Motor Prio automatic/manual | 1 Bit | 1.003 | Over this communication object priority between automatic function and manual function can be switched. If a telegram with the value "1" is received on this communication object priority automatic function is active for the blind. If a telegram with the value " 0 " is received on this communication object priority manual functions are active for the blind. |
| 14 | Motor Reset priority | 1 Bit | 1.017 | If on this communication object a telegram with the value "1" or "0" is received the appropriate priority for the blind is reset. Priority automatic function or priority manual function is then again actively switched. The active priority depends on which communication object is active and/or which priority has been selected in the ETS parameters. |
| 15 | Motor Error feedback | 1 Bit | 1.002 | Over this communication object a telegram is sent if a motor error occurs. An error is when a move command was sent to the motor, but the motor does not respond. <br> The sent value of this communication object depends on what has been selected in the ETS parameters. <br> - $1 / 0$ ( 1 = error, $0=$ no error) or <br> - 0/1 (0 = error, 1 = no error) |
| 16 | Switch input 1: UP/ DOWN | 1 Bit | 1.008 | A long pressing of the switch at the input A generates a telegram with the value " 0 " on this communication object. The Venetian blind goes up. A long pressing of the switch at the input B generates a telegram with the value " 1 " on this communication object. The venetian blind goes down. |
| 17 | Switch input 1: STEP/STOP | 1 Bit | 1.007 | A short pressing of the switch at the input A generates a telegram with the value " 0 " on this communication object. The slat will tilt to reverse (open). If the Venetian blind is in full moving process a short press of the switch at the input A generates a stop order. A short press of the switch at the input B generates a telegram with the value "1" on this communication object. The slat will tilt to close. If the Venetian blind is in a full moving process a short press of the switch at the input $B$ generates a stop order. |
| 18 | Switch input 1: A, Switch | 1 Bit | 1.001 | According to the parameter settings and the state at input 1, contact $A$, a switching telegram with the value " 1 " or " 0 " is generated over this communication object. |
| 19 | Switch input 1: B, Switch | 1 Bit | 1.001 | According to the parameter settings and the state at input 1, contact B, a switching telegram with the value " 1 " or " 0 " is generated over this communication object. |
| 20 | Switch input 1: A, 8-Bit value | 1 Byte | 5.004 | According to the parameter settings with a rising edge at the input 1, contact $A$, the configured value ( $0-255$ ) is sent. |
| 21 | Switch input 1: B, 8-Bit value | 1 Byte | 5.004 | According to the parameter settings with a rising edge at the input 1, contact $B$, the configured value ( $0-255$ ) is sent. |
| 22 | Switch input 1: A/B, Dimming | 1 Bit | 1.001 | On/0ff: <br> According to the parameter settings of the input 1 contact A/B with a short actuation a telegram with the value " 1 " and/or " 0 " will be generated. <br> Toggle/Toggle: <br> According to the parameter settings of the input 1 contact A/B with a short actuation a telegram with the value " 1 " and/or " 0 " is generated. |


| No. | Object name | Model | DPT_ID | Description |
| :--- | :--- | :--- | :--- | :--- |
| 23 | Switch input 1: <br> A/B, Dimming, Value | 4 Bit | 3.007 | Brighter/darker dimming: <br> According to the parameter settings of the input 1 contact A with a long <br> actuation it is dimmed brighter. <br> According to the parameter settings of the input 1 contact B with a long <br> actuation it is dimmed darker. <br> Brighter/darker toggle: <br> According to the parameter settings of the input 1 contact A with a long <br> actuation it is dimmed 100 \%. When releasing the appropriate switch at <br> the input A a stop order is generated. The dimming action operated last <br> is thus inverted. <br> According to the parameter settings of the input 1 contact B with a long <br> actuation it is dimmed 100 \%. When releasing the appropriate switch at <br> the input B a stop order is generated. The dimming action operated last <br> is thus inverted. |
| 24 | Switch input 2: C, Switch | 1 Bit | 1.001 | See object description 18, C instead A |
| 25 | Motor ID | 3 Byte | 232.600 | Read out the motor ID of the connected RS485 motor. |
| 26 | Motor Cycles | 4 Byte | 12.001 | Read out the movement cycles of the motor. |

The selection options of the single parameters are described in each case. The default setting is printed in italic. In the following illustrations of the different parameter cards the maximum number of parameters is shown. Besides this and depending on the parameter settings, objects which are not required are faded out.

### 3.1 Menu index card "Motor"

| Gerät: -.-- animeo KNX RS485 Motor Controller WM |
| :--- |
| Motor  <br> Functions Motor  <br> Binary input 1, A/B  <br> Binary input 2, C  <br> Bus Safety <br> Feedback motor positions Type of end product <br> Adjust actual end limit  <br> Security position low priority Screen, roller shutter, awning |

## Type of end product

Options: • Screen, roller shutter, awning

## - Screen, roller shutter, awning

This parameter determinates that the blind is selected over move/stop commands when the controlling is done over the local push button inputs. When the local push button inputs are used as universal push button inputs, the operating ergonomics are defined over the corresponding parameters (short/long pressing of the push button).

## Adjust actual end limit

## Options: • No

- Move upwards
- Move downwards

This parameter is to shift the taught-in end limit of the motor in the upper or lower direction. With the parameter "Move upwards" or "Move downwards" further menu parameters open.
$\triangle$ Before starting to download the set ETS-Parameter into the KNX RS485 Motor Controller the blind has to be in the upper or lower end position which has to be shifted in the upper or lower direction.

## - No

The end limit will not be adjusted.

## - Move upwards

The end limit will be adjusted into the up direction by the set value as soon as the application is downloaded via the ETS software.

Adjust actual end limit
Adjust actual end limit upwards Basis 1 (10-50)


## - Move downwards

The end limit will be adjusted into the down direction by the set value as soon as the application is downloaded via the ETS software.

```
Adjust actual end limit
Adjust actual end limit downwards Basis 1 (10-50)
```

| Move downwards |
| :--- | :--- |
| 10 |

© If "Adjust actual end limit" is set you have to set the parameter back to "No" to avoid changing the end limits again!

## Direction of rotation

Options: - As it is

- Standard
- Inverted

Should the roller shutter not move into the desired direction, e.g. upwards after an UP command, you can change the move direction by adjusting "inverted".

- As it is

No change of the motor running direction.

- Standard

This will change the motor running direction. So if an UP command is sent, the motor will move with an anti-clockwise rotation.


## - Inverted

This will change the motor running direction. So if an UP command is sent, the motor will move with a clockwise rotation.


## Security position

Low priority
Options: - Upper end limit

- Lower end limit
- Intermediate position 1 (IP1)
- Intermediate position 2 (IP 2)
- Ignore security
- Stop

This parameter determinates the "Security position low priority" for the blind. If a telegram with the value "1" is received on this communication object (object 6) the blind moves to the position parametered in the ETS parameters.
If a telegram with the value " 0 " is received on this communication object, no operation is carried out.
If the function "Repeat last telegram after security" is set with "Yes" in the menu index card "Functions motor ", the blind moves, after ending of the "Low priority" (value " 0 "), again to the last position and angle before activating this priority.

## Security position <br> High priority

Options: - Upper end limit

- Lower end limit
- Ignore security
- Stop

This parameter determinates the "Security position high priority" for the blind. If a telegram with the value "1" is received on this communication object (object 7) the blind moves to the position parametered in the ETS parameters.
If a telegram with the value " 0 " is received on this communication object, no operation is carried out. If the function "Repeat last telegram after security" is set with "Yes" in the menu index card "Functions motor", it is checked whether "Low priority" is active or inactive. When "Low priority" (value "1") is active the blinds move to the parametered "Security position low priority" (see previous point). If the "Low priority" (value " 0 ") is also inactive, the blind moves again to the last position before activating the high and low priorities.

## Cyclic monitor time in seconds (0-255)

Options: - 0

- 0-255 seconds

The cyclic monitoring time is active, as soon as a higher value than "0" is entered and refers to both security objects, low and high priority.
© With active cyclic monitoring time, attention must be paid to the fact that the time of the cyclic transmitter is lower approx. $1 / 4$ than the parametered cyclic monitoring time for the security objects, low and high priority. If the predefined value " 0 " remains set, the security objects react statically to the values "1" and "0".

## Motor

Automatic/Manual function
Options: - None

- Priority automatic functions
- Priority manual functions


## - None:

The move commands are carried out in the incoming order sequence.

## - Priority automatic functions:

If an automatic command (1 byte move command) occurs before a manual command ( 1 bit move command), all manual commands are disabled. The object at the start-up of the intermediate positions 1 and 2 (objects 4 and 5) are also disabled. A manual command is also generated over the local push button inputs. However, a turn command ( 1 bit ) can always be made within the parametered turning time. A reset of the priority automatic function occurs when "Priority reset" (object 14) receives "1" or " 0 " on the corresponding object. Shifting between priority manual function (value " 0 ") and priority automatic function (value "1") is done over the corresponding object (object 13). After changing over to the corresponding priority the function is again in the reset state. This means that for priority automatic functions the manual commands are blocked only with the next automatic command.

## - Priority manual functions:

When a manual command (1 bit) occurs before an automatic command (1 byte), all automatic commands are blocked. A manual command is also generated over the local push button inputs. A reset of the priority manual function occurs when "Priority reset" (object 13) receives " 1 " or " 0 " on the corresponding object. Shifting between priority manual functions (value " 0 ") and priority automatic functions (value "1") is done over the corresponding object (13). After changing over to the corresponding priority the function is again in the reset state. This means that for priority automatic functions the manual commands are blocked only with the next automatic command.

Over the priority manual function the user has the option of switching off the automatic functions. User comfort can be defined, for example, with a timer: At 8 a.m. the priority manual function is activated over the corresponding object (13) and the user can move to the desired position using the manual functions until priority automatic functions change over to priority automatic functions around 5 p.m. Over the corresponding object (13), switching to and from priority manual function and priority automatic function can be done at any time.

## Zone 1:




To set the timer, ideally the façade controller
animeo KNX Master Control W2 (Ref. 1860187) or animeo KNX Master Control W8 (Ref. 1860193) can be used.

### 3.2 Menu index card "Functions Motor"



## Intermediate position 1

## UP / DOWN position (0-100 \%)

```
Options: - 0
    - 0-100%
```

With this parameter the intermediate position 1 "UP/DOWN" is defined. The set value in \% refers to the parametered running time of the blind.

## Intermediate position 2

UP / DOWN position (0-100 \%)

```
Options:
    - 0
    - 0-100 %
```

With this parameter the intermediate position 2 "UP/DOWN" is defined. The set value in \% refers to the parametered running time of the blind.

## Block position orders (1 Byte)

```
Options: • No
    - Yes
```

Position orders (byte) can be blocked per object (12) using this parameter. If a telegram with the value "1" is received on the corresponding object during a blinds move, this move is carried out up to the end. Only then are further move commands (byte) blocked. If a telegram with the value " 0 " is received on the corresponding object, the move commands (byte) are released again.

## Block UP/DOWN orders (1 Bit) and intermediate position 1

Options: • No

- Yes

UPIDOWN orders (bit) can be blocked per object (12) using this parameter. If a telegram with the value "1" is received on the corresponding object during a blind move, this move is carried out up to the end. Only then are further UP/DOWN orders (bit) blocked. If a telegram with the value " 0 " is received on the corresponding object, the UP/DOWN orders (bit) are released again.

## Block STEP/STOP orders (1 Bit)

Options: • No

- Yes

Step/stop (bit) can be blocked per object (12) using this parameter. If a telegram with the value "0" is received on the corresponding object, the step/stop or turn commands (bit) are released again.

## Block local input 1, A/B

## Options: • No <br> - Yes

Local inputs can be blocked per object (12) using this parameter. If a telegram with the value "1" is received on the corresponding object during a motor movement, this move is carried out to the end. Only then further commands, generated over local push button inputs, are blocked. If a telegram with the value " 0 " is received on the corresponding object, the local push button inputs are freed again.

## Block local input 2, C

Options: • No

- Yes

Local inputs can be blocked per object (12) using this parameter. If a telegram with the value "1" is received on the corresponding object during a motor movement, this move is carried out to the end. Only then further commands, generated over local push button inputs, are blocked. If a telegram with the value " 0 " is received on the corresponding object, the local push button inputs are freed again.

## Repeat last telegram after security

```
Options: • No
- Yes
```

If this parameter is set to "Yes", the last move command is repeated after security. This means that it will move to the position which was active before a telegram with the value "1" was received on one of the corresponding security objects, low or high.

## Error feedback

Options: - 1/0 (1 = error, $0=$ no error $)$

- $0 / 1$ ( $0=$ error, 1 = no error)
- 1/0:

A telegram with the value "1" is sent if a motor error occurs. E.g. a move command was sent to the motor, but the motor does not move.

- 0/1:

A telegram with the value " 0 " is sent if a motor error occurs. E.g. a move command was sent to the motor, but the motor does not move.

### 3.3 Menu index card "Binary input 1 A/B"



## Use universal binary input 1, A/B

Options:

- No
- Yes

With the parameter "Yes", further menu parameters open. Now the local inputs can be connected over the corresponding object (16-23). A conventional push button can thus be used for various types of functions. For example Switching, Venetian blind function, Dimming or Sending a value.

## General information for binary input

Four different basis functions can be selected for each input:
Options: - Venetian blind UP/ DOWN

- Switch dry contact
- 8-Bit value (rising edge)
- Dimming

The single functions and parameters will be explained which arise depending on the selection of the basis function. For this, another basis function has been selected for each push button.
© For the basis function "Venetian blind UP / DOWN" attention must be paid to which contact "UP" or "DOWN" is switched. The same is true if the basis function "Dimming" for "Brighter" or "Darker" dimming is selected. The pre-setting of the basis function for the menu index card is Venetian blind UP / DOWN.

### 3.3.1 Menu index card "Binary input, Venetian blind UP/DOWN"



## Basic function

Options: - Venetian Blind UPI DOWN

- Switch dry contact
- 8 -Bit value (rising edge)
- Dimming


## After long operation of push button

Options: - 0.3 seconds

- $0.3-5.0$ seconds

This parameter defines the activity time of the corresponding push button which distinguishes between the sending of a short-term telegram (Step/Stop) and a long-term telegram (UP I DOWN). If the time, for example, is set on 0.3 seconds, a long-term telegram is generated only with a pressing of the push button which is longer than 0.3 seconds. An activation which is smaller than 0.3 seconds generates a short-term telegram.

## Contact type input A

Options: • Normally open

- Normally closed

Over this parameter it is defined which type of contact is at the local input A. Normally open: The contact at the local input is closed when activated and opened when not activated. Normally closed: The contact at the local input is opened when activated and closed when not activated.

## Contact type input B

Options: - Normally open

- Normally closed

Over this parameter it is defined which type of contact is at the local input B. Normally open: The contact at the local input is closed when activated and opened when not activated. Normally closed: The contact at the local input is opened when activated and closed when not activated.

### 3.3.2 Menu index card "Binary input, Switch/Dry contact"



## Basic function

Options: - Venetian blind UP/ DOWN

- Switch dry contact
- 8-Bit value (rising edge)
- Dimming


## Edge evaluation contact A

Options: • Rising ON, falling OFF

- Rising OFF, falling ON
- Rising ON
- Falling 0 N
- Rising 0FF
- Falling 0FF
- Rising toggle
- Falling toggle
- Rising toggle, falling toggle
- No evaluation

On ("1") Off ("0") Toggle ("1/0")

The corresponding object value " 0 " or " 1 " is generated depending on which edge evaluation is parametered.

## - Rising ON, falling OFF

If a rising edge at the local input appears, the object value " $0 n$ " is generated. If a falling edge at the local input appears, the object value "Off" is generated. The duration of the activation is not evaluated.

## - Rising OFF, falling ON

If a rising edge at the local input appears, the object value "Off" is generated. If a falling edge at the local input appears, the object value " 0 n " is generated. The duration of the activation is not evaluated.

## - Rising 0 N

If a rising edge at the local input appears, the object value " 0 n " is generated. If a falling edge at the local input appears, it is not evaluated. The duration of the activation is not evaluated.

## - Falling ON

If a falling edge at the local input appears, the object value "On" is generated. If a rising edge at the local input appears, it is not evaluated. The duration of the activation is not evaluated.

## - Rising 0FF

If a rising edge at the local input appears, the object value "Off" is generated. If a falling edge at the local input appears, this is not evaluated. The duration of the activity is not evaluated.

## - Falling OFF

If a falling edge at the local input appears, the object value "0ff" is generated. If a rising edge at the local input appears, this is not evaluated. The duration of the activity is not evaluated.

## - Rising toggle

If a rising edge at the local input appears, the object value is inverted. If a falling edge at the local input appears, this is not evaluated. The duration of the activity is not evaluated.

## - Falling toggle

If a falling edge at the local input appears, the object value is inverted. If a rising edge at the local input appears, this is not evaluated. The duration of the activity is not evaluated.

- Rising toggle, falling toggle

If a rising or falling edge at the local input appears, the object value is inverted. The duration of the activity is not evaluated.

## - No evaluation

If a rising or falling edge at the local input appears, this is not evaluated.

## Edge evaluation contact B

Options: - Rising ON, falling OFF

- Rising OFF, falling ON
- Rising 0 N
- Falling 0 N
- Rising 0FF
- Falling 0FF
- Rising toggle
- Falling toggle
- Rising toggle, falling toggle
- No evaluation

The corresponding object value " 0 " or " 1 " is generated depending on which edge evaluation is parametered.
Option details see page 15, Edge evaluation contact A.

## Send starting value on bus power return

Options: - Yes

- No

If this parameter is set to "Yes", the current state of the input is transmitted with the bus voltage return. If this parameter is set to "No", the current state of the input is not transmitted.

## Contact A and B

Cyclic sending of status
Options: - No cyclic sending

- ON
- OFF
- ON and OFF

With this parameter it is defined whether the corresponding switch value of the communication object should be transmitted cyclically.

## - No cyclic sending

The switching value of the communication object is not transmitted cyclically.

## - ON

If the object value is "1", this is transmitted cyclically. If the object value changes by edge change at the local input or reception of a telegram on " 0 ", the cyclic sending stops.

- OFF

If the object value is " 0 ", this is transmitted cyclically. If the object value changes by edge change at the local input or reception of a telegram on " 0 ", the cyclic sending stops after " 1 ".

- ON and OFF

If the object value is " 1 " or " 0 ", this is transmitted cyclically. If the object value changes by edge change at the local input or with reception of a telegram, the current object value is transmitted cyclically.

Be aware that " 0 n " and "Off" means the internal state and not the push-button activation. An inappropriate edge evaluation (see above) might result in uninterruptable sending!

## Cyclic sending in seconds (1-3600)

Options:

- 5
- 1-3600

With this parameter the time intervals are defined in which the corresponding object value should be transmitted cyclically.
$\triangle$ Please note that cyclical supervision time of the receiver is approx. $1 / 4$ higher than that of the transmitter.

### 3.3.3 Menu index card "Binary input, 8-Bit value"



## Basic function

Options: - Venetian blind UP/ DOWN

- Switch/Dry contact
- 8-Bit value (rising edge)
- Dimming


## Contact A

Value on rising edge (0-255)

Options:

- 0
- 0-255

With this parameter the value is set which is transmitted with a rising edge at the local input A .

## Contact type input A

## Options: • Normally open

- Normally closed

With this parameter it is defined which type of contact is at the local input A. Normally open: The contact at the local input is activated closed and not activated opened. Normally closed: The contact at the local input is activated opened and not activated closed.

## Contact B

Value on rising edge (0-255)
Options:

- 0
- 0-255

With this parameter the value is set which is transmitted with a rising edge at the local input B.

## Contact type input B

Options: • Normally open

- Normally closed

With this parameter it is defined which contact type is at the local input B. Normally open: The contact at the local input is activated closed and not activated opened. Normally closed: The contact at the local input is activated opened and not activated closed.

### 3.3.4 Menu index card "Binary input, Dimming"



## Basic function

Options: - Venetian blind UP/ DOWN

- Switch/Dry contact
- 8-Bit value (rising edge)
- Dimming


## Longer operation (dimming) after

Options: - 0.3 seconds

- $0.3-0.5$ seconds

This parameter defines the activity time of the corresponding push button which makes a distinction between the sending of a switching and a dimming telegram. If the time, for example, is set on 0.3 seconds, a dimming telegram is generated only with a press activation longer than 0.3 seconds. A press shorter than 0.3 seconds generates a switch telegram.

## Input A/B

Options:

- On/0ff
- Toggle/Toggle
On ("1") Off ("0") Toggle ("1/0")

This parameter defines the value which is transmitted with a short pressing of the corresponding input.

## - On/0ff

With a short pressing of the push button at the input A , an "Off" telegram is generated. A short activation of the corresponding push button at the input $B$ generates an " 0 n " telegram. This function can be inverted by reconnecting the inputs.

## - Toggle/Toggle

Switching over can be done with a short pressing of the push button at the input A or B. This means that the value which is in the corresponding switching object is first inverted and then transmitted.

## Contact type input A

Options: - Normally open

- Normally closed

With this parameter it is defined which contact type is at the corresponding local input.
Normally open: The contact at the local input is activated closed and not activated open.
Normally closed: The contact at the local input is activated open and not activated closed.

## Contact type input B

Options: - Normally open

- Normally closed

With this parameter it is defined which contact type is at the corresponding local input.
Normally open: The contact at the local input is activated closed and not activated open.
Normally closed: The contact at the local input is activated open and not activated closed.

## Dimming with

Options: - Cyclic interval

- Stop telegram


## - Cyclic interval

With a short pressing of the push button at the local input A or B, an "On" or "Off" telegram is generated over the corresponding object (1 bit). With a long pressing of the push button at the local input A brighter dimming is done over the corresponding object ( 4 bit) as long as the push button is pressed. When the push button is released on the local input A cyclical sending is stopped. The length of steps and the time duration for brighter dimming is given from the parameters "Ionger push button pressing (dimming)" and "interval for cyclical dimming".
With a long pressing of the push button at the local input B , darker dimming is done over the corresponding object ( 4 bit) as long as the push button is pressed. When the push button is released on the local input $B$, cyclical sending is stopped. The length of steps and the time duration for darker dimming is given from the parameters "longer push button pressing (dimming)" and "interval for cyclical dimming".

## - Stop telegram

With a short pressing of the push button at the local input A or B, a telegram is generated over the corresponding object (1 bit). With a long pressing of the push button at the local input A brighter dimming is done over the corresponding object ( 4 bit). With a long pressing of the push button at the local input B , darker dimming is done over the corresponding object ( 4 bit ). When the corresponding push button at the local input $A$ or $B$ is released, a stop command is generated.

## Long operation (dimming)

Options: • Adjust by 100 \%

- Adjust by $1 / 2$
- Adjust by $1 / 4$
- Adjust by $1 / 8$
- Adjust by $1 / 16$
- Adjust by $1 / 32$
- Adjust by $1 / 64$

This parameter defines the dimming length of steps of the telegrams which are transmitted with a longer pressing.
© When "Dimming with cyclic intervals" is parametered, attention must be paid to the fact that the dimming length of steps and the interval for the cyclical dimming are matched to the dimming time of the actuator.

## Interval for cyclic dimming

Options: - 0.5 seconds

- $0.5-7.0$ seconds

This parameter defines the duration of an interval for cycling sending. If, for example, a "change $1 / 4$ " and an "interval of 0.5 seconds" is set, then with a longer pressing of the push button on the corresponding local input, every 0.5 seconds $1 / 4$ brighter or darker will be dimmed.

### 3.4 Menu index card "Binary input 2, C"



## Using binary input 2, C

Options:

- No
- Yes

With the parameter "No", the binary input reacts as a window contact. A normally closed window contact can thus be used to block all commands sent by Input A/B.

With the parameter "Yes", further menu parameters open. Now the local inputs can be connected over the corresponding object (24). A conventional push button can thus be used for the switching function.

| Device: -.-.- animeo KNX RS485 Motor Controller WM |  |  |  |
| :---: | :---: | :---: | :---: |
| Motor | Use universal binary input 2, C |  |  |
| Functions Motor | Use universal binary input 2, C | Yes | $\checkmark$ |
| Binary input 1, $\mathrm{A} / \mathrm{B}$ | Basic function | Switch/Dry contact |  |
| Binary input 2, C |  |  |  |
| Bus Safety | Edge evaluation contact C | rising ON, falling OFF | - |
| Feedback motor positions | Send starting value on Bus power return | No | $\checkmark$ |
|  | Contact C Cyclic sending of status | No cyclic sending | $\checkmark$ |

For details see chapter 3.3.2 "Binary input 1 A/B, Switch/Dry contact"

### 3.5 Menu index card "Bus safety"



On this menu index card, the reaction can be defined for motor output with bus failure and bus power return.

On this menu index card the parameters can be selected to announce the position status of the individual blinds on the bus. In addition, the generated status positions are based on the parametered running and tilting times of the menu index cards "Motor" or "Functions Motor".

## MOTOR

Reaction at bus power return
Options: - Upper end limit

- Lower end limit
- Ignore
- Intermediate position 1 (IP1)
- Intermediate position 2 (IP2)


### 3.6 Menu index card "Feedback motor positions"

| Device: -.--- animeo KNX RS485 Motor Controller WM |  |
| :--- | :--- |
| Motor | Feedback of status upper/lower end position |
| Functions Motor | Motor feedback of |
| Binary input $1, \mathrm{~A} / \mathrm{B}$ | Yos |
| Binary input $2, \mathrm{C}$ |  |
| Bus Safety | Mor type of feedback |
| Feedback motor positions | Every |

On this menu index card the parameters can be selected to announce the position status of the individual blinds on the bus. In addition, the generated status positions are based on the set running time.

## Feedback of status Upper/lower end position

Options:

- No
This parameter opens the parameter
- Yes
"Type of messaging".

MOTOR
Feedback of

Options: • UP/DOWN position

- None


## - UP/DOWN position

Using this parameter the position UP/DOWN is sent on the bus for the corresponding motor depending on the parameter "Type of messaging". "0" = upper / "255" = lower.

## - None

No positions on the bus are messaged.

## MOTOR

Type of feedback

Options: - On demand

- Status change
- Cyclic


## - On demand

The current position of the blinds must be requested over object 9 .

## - Status change

The current position of the blind is transmitted after every position change on the bus. The position is transmitted on the bus when the destination position is reached.

- Cyclic

This parameter opens a further parameter ("Every") with which the time for cyclical sending is set.

## Every

Options: - 1 second

- 5 seconds
- 10 seconds
- 20 seconds
- 30 seconds
- 1 minute
- 5 minutes
- 10 minutes
- 20 minutes
- 30 minutes
- 60 minutes
$\triangle$ This parameter defines, in which time intervals the current position of the blinds are messaged. Then the current position of the blinds is transmitted on the bus.


## CHARACTERISTICS: animeo KNX RS485 MOTOR CONTROLLER

| KNX RS485 AC Motor Controller | Ref. 18602236 WM | Ref. 18602238 PCB |
| :---: | :---: | :---: |
| Supply voltage from KNX bus | KNX bus voltage 21... 30 V DC, SELV | KNX bus voltage 21... 30 V DC, SELV |
| Rated current consumption KNX | According to KNX guidelines $\leq=12.5 \mathrm{~mA}$ | According to KNX guidelines $\leq=12.5 \mathrm{~mA}$ |
| Supply voltage of local push button inputs | SELV, 16 VDC = | SELV, 16 VDC = |
| Terminals | Spring clamp terminals + RJ45 | Spring clamp terminals + RJ45 |
| Running time per output | Max. 5 minutes | Max. 5 minutes |
| Operating temperature | $-5^{\circ} \mathrm{C}$ to $50^{\circ} \mathrm{C}$ | $-5^{\circ} \mathrm{C}$ to $50^{\circ} \mathrm{C}$ |
| Relative air humidity | Max. 85 \% | Max. 85 \% |
| Housing material | CC-ABS polycarbonate | CC-ABS polycarbonate |
| Housing dimensions ( $\mathrm{w} \times \mathrm{h} \times \mathrm{d}$ ) | $90 \times 180 \times 45 \mathrm{~mm}$ | $65 \times 105 \times 20 \mathrm{~mm}$ |
| Degree of protection | IP 20 | IP 00 |
| Protection class | III | III |
| Conformity | www.somfy.com/ce | www.somfy.com/ce |

The animeo KNX RS485 Motor Controller is only compatible with Somfy RS485 motors!

The Motor Controller is an electronically and manually-operated, independently-mounted control

| Software class | A control function |
| :--- | :--- |
| Action | Type 1 |
| Pollution degree | 2 |
| Rated impulse voltage | 4 kV |
| Temperature of ball hardness test | $75^{\circ} \mathrm{C}$ |
| Type of fixing | Type X |
| Method of attachment for non-detachable cords: | Screwless spring terminal and WAGO connectors |

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