Instructions

animeo® KNX® MASTER CONTROL W2/W8

Version 1.1 Revision date: 07.07.11 REF: 5102965

Somfy SAS 50 avenue du Nouveau Monde 74300 Cluses France

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Before starting up it is necessary to follow the safety instructions in these instructions. 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 starting up 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.

1. Description of functions

1.1. Functions

animeo KNX Master Control is a sun protection controller which can control up to 16 different zones in a building via the KNX bus wire. Depending on weather conditions (sun, wind and wind direction, rain, temperature, ...) and depending on time programs, animeo KNX Master Control sends information via the KNX bus wire to the individual sun protection control devices (e.g. animeo KNX Motor Controller) to provide optimum light and room climate conditions in the building and to protect the sun protection against damages. The sun protection controller can be connected to external systems (e.g. fire warning equipment), so that safety is guaranteed in the building. Thanks to special controlling of the sun protection equipment, the animeo KNX Master Control saves energy costs.

The parameter setting is realised with a user-friendly PC surface (animeo KNX Operating Software) and the objects are linked with the ETS Software.

animeo KNX Master Control is available in two versions:

- animeo KNX Master Control W2 (#1860187) to connect from up to two wind speed sensors on the Outside Sensor Box (#9001606).
- animeo KNX Master Control W8 (#1860193) to connect from up to eight wind speed sensors, two on the Outside Sensor Box (#9001606) and six more to the direct connection in animeo KNX Master Control W8.

1.2. Product contents

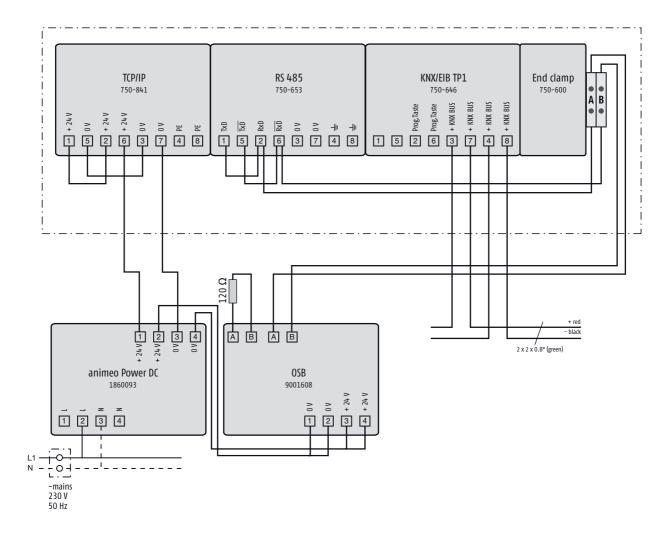
The central control animeo KNX Master Control contains:

- The controller module animeo KNX Master Control W2 (#1860187) or
- The controller module animeo KNX Master Control W8 (#1860193)
- A CD "animeo KNX Master Control W2/W8" with the following files and programs:
 - o animeo KNX Operating software for setting parameters
 - o operating and setting instructions (PDF format)
 - o connection diagrams (PDF format)
 - o KNX product data base and symbols file
- A cross-over cable for direct communication between PC and animeo KNX Master Control.

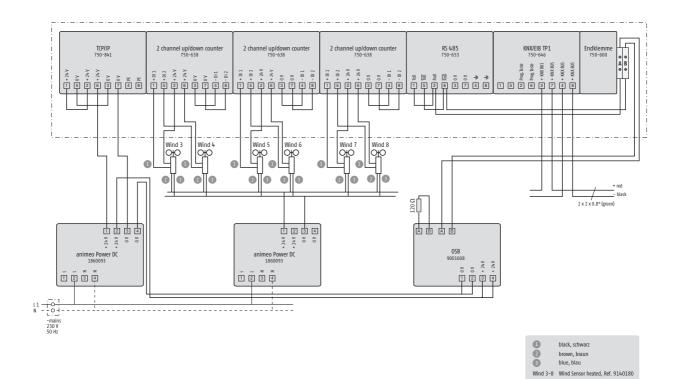


1.3. Connection diagrams

1.3.1. Connection diagram animeo KNX Master Control W2 version



1.3.2. Connection diagram animeo KNX Master Control W8 version



	Wiring colour of the wind sensor (#9140180)
1	Black
2	Brown
3	Blue

1.3.3. Wiring

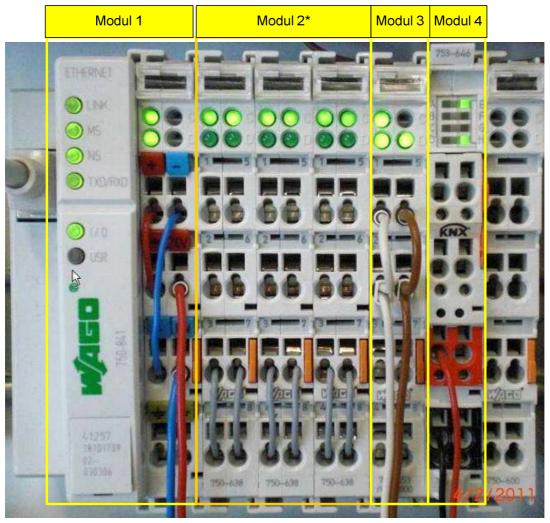
Connection on	Cable	Twisted pair	Max. distance
24 V DC	Min: 2 x 1.5 mm ² /16 AWG Max: 2 x 2.5 mm ² /18 AWG	-	-
Outside Sensor Box	Min: 2 x 0.6 mm ² /19 AWG Max: 2 x 0.8 mm ² /18 AWG	necessary	500 m/ 1650 ft
Ethernet	Cat. 5/100 Mbit/s	-	100 m/ 330 ft
KNX Bus wire	2 x 2 x 0.8 mm ²	necessary, see KNX topology instruction	
Wind sensor	Min.: 4 x 1.5 mm ² /16 AWG Max.: 2 x 2,5 mm ² /13 AWG	-	

1.4. Checking the connections

Before you start with setting the parameters, check first whether the controller is properly connected. The LEDs in animeo KNX Master Control and in the Outside Sensor Box indicate whether the connection is correct.

Wait a few seconds until the system has started and compare the LEDs on the devices to the normal LED state in the table. If they do not match, the connection must be checked.

1.4.1. Checking the KNX Master Control connections



^{*}Only available with animeo KNX Master Control W8, Ref. 1860193.

1.4.1.1. Module 1 (Ethernet TCP/IP)

Connection	LED State
Module 1: Ethernet TCP/IP connection (If connected to network)	LINK: green MS: green NS: green, blinking TXD/RXD: green, quickly blinking I/O: green USR: OFF A: green B: or C: green
Module 1: Ethernet TCP/IP connection (If connected to network)	LINK: OFF MS: green NS: green, blinking TXD/RXD: OFF I/O: green USR: OFF A: green B: or C: green

1.4.1.2. Module 2* (counter/wind sensor connection)

Connection	LED State
Module 2: Counter/wind sensor connection* (If wind sensor connected)	A: green B: OFF; blinks green, when connected wind mill turns* C: green D: OFF; blinks green, when connected wind mill turns* (* to check if necessary, the sensor wheel of the corresponding wind sensor)

^{*}Only with animeo KNX Master Control W8

1.4.1.3. Module 3 (RS485 connection)

Connection	LED State
Module 3: RS485 connection (If Outside Sensor Box is connected to network)	A: green B: green C: OFF D: green, blinking

1.4.1.4. Module 4 (KNX connections)

Connection	LED State
Module 4: KNX connection (If not already programmed with the ETS)	A: OFF B: OFF C: OFF D: OFF D: OFF E: green F: OFF G: red H: green
Module 4: KNX connection (If already programmed with the ETS)	A: OFF B: OFF C: OFF D: OFF D: OFF E: green F: OFF G: OFF H: green

1.4.2. Checking the Outside Sensor Box connection



1.4.2.1. COMM LED (RS 485 sensor bus)

Connection	LED State
Outside Sensor Box	COM: yellow, blinking

2. Software Installation

2.1. Required software

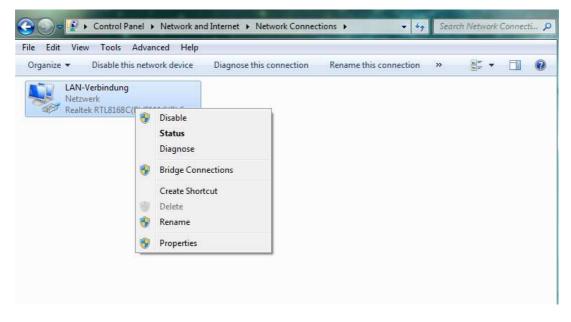
Before you start with the configuration of the project, you must install the following software on your computer:

- Framework.NET 1.1 (for ETS3 Plug in)
- Framework.NET 3.5 (for animeo KNX Operating Software)
- animeo KNX Operating Software (see accompanying CD)
- Licensed ETS 3.0 and the following or higher version
- WAGO Ethernet Settings (see accompanying CD)

3. Setting the PC IP address

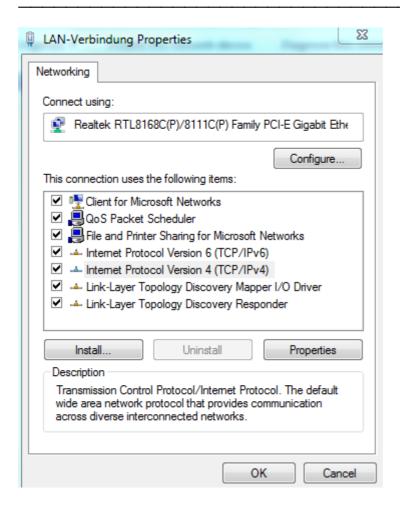
To enable communication between the computer and animeo KNX Master Control via the TCP/IP, you must assign to the computer an IP address in the same subnet as with the animeo KNX Master Control. The IP addresse/subnet mask of the animeo KNX Master Control is in the delivery state 192.168.0.2/255,255.0.0.

In the computer you select under "System Control\Network connections" the option "LAN connections". With the right mouse button you select "properties".

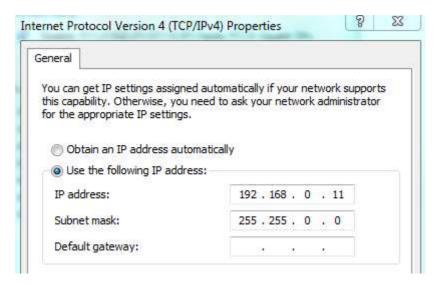


Now select "Internet protocol version 4 (TCP/IPv4)" and click on "properties".





Enter an IP address (e.g. 192.168.0.11) and the subnet mask 255,255.0.0.



Confirm your entry with "OK" and close the remaining windows.



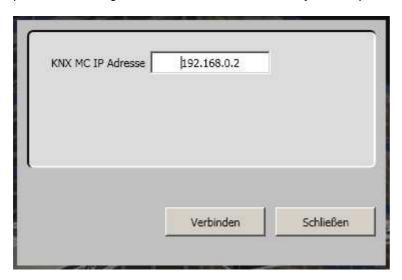
4. animeo KNX Operating software

4.1. Starting up the Operating software

Start the animeo KNX Master Control Operating software.

Enter the address IP. The address IP in the delivery state is "192.168.0.2" which you can change at any time in the software. The last assigned address is always saved and indicated.

You can change the IP address at any time in the menu under "settings" and "TCP/IP settings". Click on "connect" to start the communication with animeo KNX Master Control and to carry out the parameter settings online. Click on "close" to carry out the parameter settings off-line.



4.2. Input serial number in the Operating software





With the first connection of the animeo KNX Operating Software with the animeo KNX Master Control, you are asked to enter the serial number (Serial Key) of the device. You will find this beside the Ethernet connection (see picture).



The serial number (serial key) must be entered only once. Since this is saved in the animeo KNX Master Control Operating software, with a renewed connection between software and hardware, this standard number must not be entered again.

Should the animeo KNX Operating Software not be connected with the animeo KNX Master Control, the serial number can be also entered by hand in the software and saved.



4.3. Software Overview



4.3.1. Menu

The menu contains the following menu and cascading menu points:

- File
 - o Project open
 - o Project save
 - o Project print
 - o Exit
- Setting
 - o TCP/IP setting
 - o Languages
 - Time format
 - o Units
 - o Wind
 - o Temperature
 - o Time adjust
 - Password

- Help
 - o Help
 - o Homepage visit
 - o Info
 - Serial number

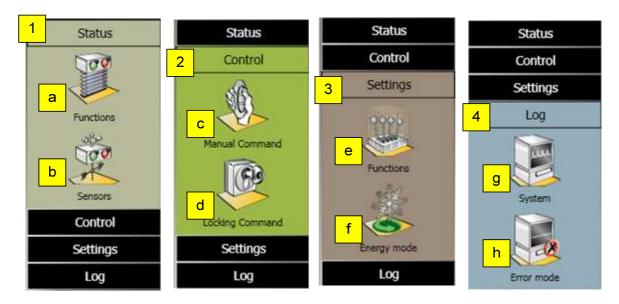
4.3.2. Sensor bar

In the sensor bar, the current sensor values (wind direction, wind speed, sun value, outside temperature and indoor temperature, rain and snow), error, alarm, time and date are displayed.

4.3.3. Navigation

Using the navigation bar you reach:

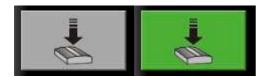
- the visualisation of the functions and sensor values
- · the manual control and blockage of the sun protection zones
- the parameter setting of the zones
- the protocol of the system data and errors



- 1. Status
 - a. Function: Overview of the function states (active or inactive) for every zone (Chapter 4.5.1)
 - b. Sensors: Display of the sensor values and eventual errors (chapter 4.5.2)
- 2. Contro
 - a. Manual operation: Manual operation via the PC for every zone (chapter 4.6.1)
 - b. Blocking: Blocking of the building or a single zone on the PC (chapter 4.6.2)
- Settings
 - a. Function: Setting of the function in every zone (chapter 4.7.1)
 - b. Operation mode: Setting of the energy savings function in every zone (chapter 4.7.2)
- 4. Log
 - a. System data: Display of the sensor data, function data and user data (chapter 4.8.1)
 - b. Error: Error message in the system (chapter 4.8.2)

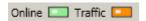
4.3.4. Data transfer

As soon as a setting is changed in animeo KNX Operating Software, this button becomes green. To download updates in animeo KNX Master Control, press the button. When downloading is completed, the button becomes grey again.



4.3.5. Communication

If animeo KNX Operating Software is connected with animeo KNX Master Control, the "online" diode shines pale green. If the software is offline, the diode becomes dark green. In the data transfer between the PC and animeo KNX Master Control, the "PC-Comm" diode blinks yellow.



4.4. Menu

4.4.1. File

The menu point "File" contains all Windows Applications functions with regard to printing, file management and exiting. The individual sub functions of this menu point are described in the following.

4.4.1.1. Project save

With this sub function the project is saved as a "Projectname.caw". Thus a backup of a project (*.p) can occur.

4.4.1.2. Project open

Here, project files "Projectname.caw" can be opened.

4.4.1.3. Project print

This command prints out all configurations and settings data to your project. Here, the project can be documented.

4.4.1.4. Exit

Here, the application is closed. When exiting the program asks, provided that updates were carried out, whether these should be saved; this prevents data getting lost.

4.4.2. Setting

The menu point "Setting" contains settings with regard to the TCP/IP setting, languages, time format, units, time adjust, password, position, zones and sensor adjustment. The individual sub functions of this menu point are described in the following.

4.4.2.1. TCP/IP setting

With this sub function communication is made between the software (KNX Operating Software) and the hardware (KNX Master Control W2 or KNX Master Control W8). Select the IP address of the desired KNX Master Control. In the delivery state this is 192.168.0.2

4.4.2.2. Languages

Here the language can be selected for the entire software. The language can also be selected later.

4.4.2.3. Time format

Here you can set the desired time format 12 or 24.

4.4.2.4. Units

Select the units which should be displayed. The selected unit is marked by a tick. The units are divided into the following categories:

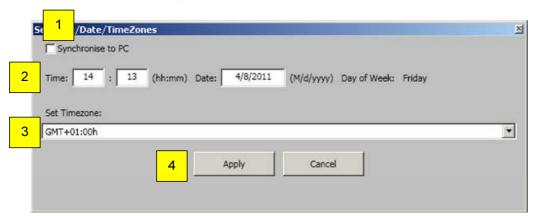
1. Temperature

Celsius and Fahrenheit.

2. Wind

m/s, km/h and mph.

4.4.2.5. Time setting



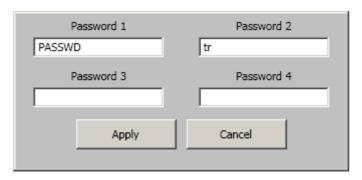
Define the following time parameters:

- 1. "Synchronise with PC", if the time, the date and time zone should be taken over from the internal clock of the PC.
- 2. Manual setting of the time and the date
- 3. Manual selection of time zone, e.g. Germany is GMT+01:00h
- 4. "OK" for taking over of the setting;
 - "Cancel" without taking over the setting.

4.4.2.6. Password

With this sub function, up to 4 passwords are defined which are required for entering in the different menu points. These passwords ensure that updates are not carried out in the settings by mistake or by unauthorised persons.

In the delivery state there is the first password "PASSWD" (see picture below) which is required for changing or entering further passwords.



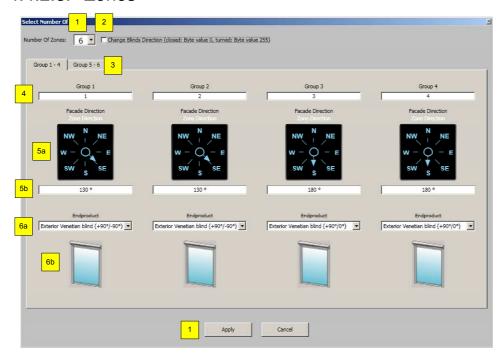
Change or define new passwords.

4.4.2.7. Position

Enter the position of the building (degree of longitude and degree of latitude) either as a number or in degrees.

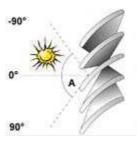


4.4.2.8. Zones



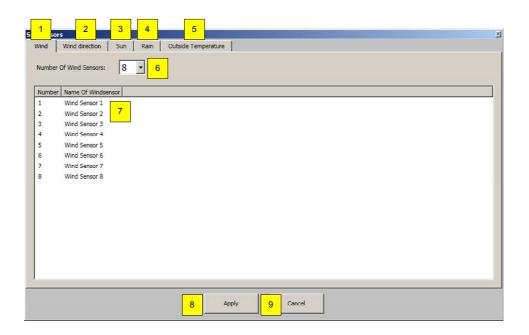
Defining the following zone parameters:

- 1. Number of the zones in the project
- 2. Slat alignment by use of -90990° outside Venetian blind change: (the slat alignment normally corresponds to 90° to the value 0, 90° correspond s to the value 255). If the definition has reverted, however, select the option "change slat alignment".



- 3. If more than 4 zones are set up, the next 4 zones can be selected by clicking the corresponding register heading.
- 4. Assigned zone name
- 5. Orientation/alignment of the single zone with the help of the arrow (a) or by direct input in degrees (b).
- 6. Type of product in every zone
- 7. "OK" for taking on the setting
- 8. "Cancel" without taking on the settings.

4.4.2.9. Sensors



Define following sensor parameters:

- 1. Wind sensor; 0 to 8 wind sensors can be activated under point 7.
 - Wind 1 and wind 2 are two wind sensors which are connected to the Outside Sensor Box (KNX Master Control W2, #1860187).
 - wind 3 to wind 8 are the wind sensors which are connected directly to the KNX Master Control W8 (#1860193).
- 2. Wind direction sensor; 0 to 1 wind direction sensor can be activated.
 - o Wind direction sensor is connected to the Outside Sensor Box.
- Solar sensors; 0 to 8 solar sensors can be activated.
 - o Solar sensors are connected to the Outside Sensor Box.
- Rain sensor; from 0 to 1 rain sensor can be activated.
 - o Rain sensor is connected to the Outside Sensor Box.
- 5. Outside temperature sensor; 0 to 1 outside temperature sensors can be activated.
 - o Outside temperature sensor is connected to the Outside Sensor Box.
- 6. Number of the activated sensors, in dependence on points 1 to 5
- 7. Assigned sensor name
- 8. "OK" for taking over of the setting
- 9. "Cancel" without taking over the settings.

4.4.3. Help

4.4.3.1. Help

In this sub point you can call up the program help files; you also find this manual there. The help file can also be called up with F1.

4.4.3.2. Homepage

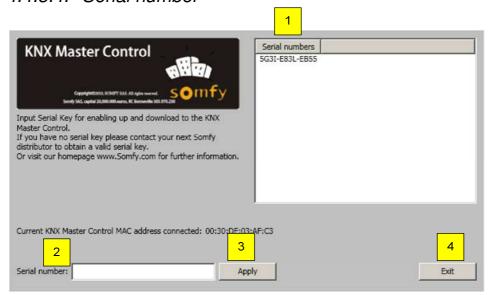
In this sub point a browser is automatically started and opens the corresponding Somfy internet address automatically for further information.

4.4.3.3. Info



- 1. Display of the animeo KNX Master Control Operating Software version
- 2. Firmware version of the connected KNX Master Control W2 or KNX Master Control W8
- 3. Through "System info" you receive access to the system information of your computer.
- 4. "OK" to close the window.

4.4.3.4. Serial number



- 1. Listing of already entered serial numbers
- 2. Serial number of the KNX Master Control entry (see chapter 4.2.)
- 3. "OK" for taking over the entered serial number.
- "Close" to close the current window.

4.5. State

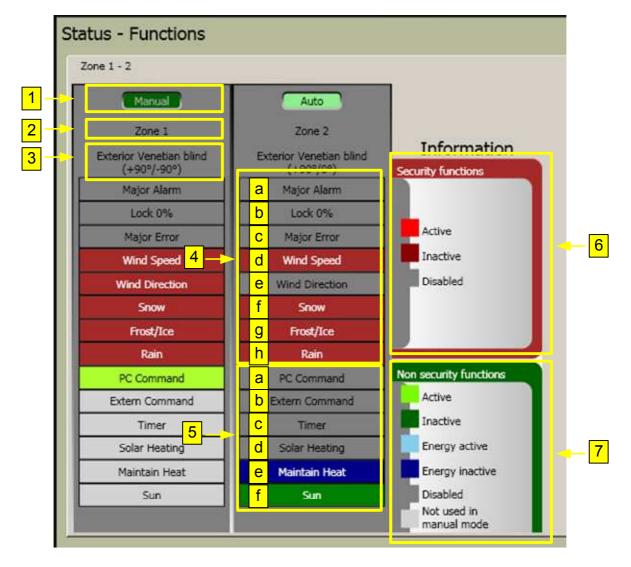
Important: To visualise the states, the computer with the KNX Master Control must be online.

4.5.1. Function states

In the navigation bar you click on "state" and then on "functions".

In the window, "state functions", a complete overview is displayed of all function states in every zone. The functions are listed according to priority (the important functions are at the top). If more than one function is active in a zone, only the function with the highest priority is carried out. The state of the individual function is defined by its colour.

The arrows ▲ or ▼ appear during the delay time of the function to be performed.



Explanation of the functions:

- 1. Display whether zone is in automatic or manual mode
- 2. Assigned zone name
- 3. Installed carrier product of the zone
- 4. Safety functions



- a. **Alarm input:** The function becomes active when over the object KNX " KNX.MC.Zone_Major_Alarm_Bit_IN [n] "1" is transmitted. Then all carrier products go to the upper end position (0 %). Chapter 6.1.1 KNX Object No.: 72ff).
- b. **Everything locked at 0 %:** The function is triggered when in the KNX Operating Software individual zones or the whole building are locked. Then all carrier products go to the upper end position (0 %) (chapter 4.6.2).
- c. **Error:** When activated, all carrier products go to the 0-% positions. For the identification of error see chapter 3.4.3 and error code.
- d. **Wind speed:** The Wind alarm is triggered with the exceeding of the defined threshold value. Then all carrier products in a zone go to the safety position (chapter 4.7.1.1).
- e. **Wind direction:** The Wind direction alarm is triggered if the wind speed lies above the threshold value and the wind comes from the defined direction. Then all carrier products in a zone go to the safety position. (chapter 4.7.1.2).
- f. **Snow:** The Snow alarm is triggered at temperatures under 4°C and the measurement by rain is triggered. Then all carrier products in a zone go to the safety position. (chapter 4.7.1.5).
- g. **Frost/ice:** The Frost alarm is triggered at temperatures below the threshold value. All carrier products in a zone go to the safety position. (chapter 4.7.1.5).
- h. **Rain:** With an active function all carrier products in a zone go to the safety position. (chapter 4.7.1.5).
- 5. Non-safety functions
 - a. Manual service through PC: The function becomes active if manual command is entered over the KNX Operating Software a. (chapter 4.6.1).
 - a. Zone control outside: The function becomes active when over the object KNX "KNX.MC.Zone_Position_UP_DOWN_1Byte_IN [n]" (Chapter 6.1.1 KNX Object No.:88ff and "KNX.MC.Zone_Slat_Position_1Byte_IN [n]" 0-255 values are transmitted. All carrier products go in the transmitted position and angle. (chapter 6.1.1 KNX Object No.:138ff).
 - a. Timer: With activation the zone goes in the given position and angle (chapter 4.7.1.6).
 - a. Heat by the sun: With activation the zone uses solar energy for warming, for example, the sun protection is driven in 0-% positions (chapter 4.7.4.1).
 - a. Heat retention: With activation the zone saves the caloric energy, for example, the sun protection is driven to the 100-% position (chapter 4.7.4.2).
 - a. The sun: Active with excess of the threshold value for solar intensity. The zone goes in the defined position (defined or according to sun tracking) (chapter 4.7.4.3).
- 6. Information safety functions
- 7. Information non-safety functions

4.5.2. Sensor states

In the navigation bar click on "state" and then on "sensors".

In the register "sensors: wind, sun, rain" the sensor values are indicated which are directly in the KNX Master Control or are connected via the Outside Sensor Box.



Parameter:

- Name of sensor type
- 2. Physical sensor name within the system.
- 3. Selected special sensor name.
- 4. Display of the current sensor measured value
- 5. Details of the sensor function. When it is functioning without interference, "OK" appears in the LED display (green), with interference, "Error" (red).
- 6. Eventual details of errors with interference.

In the register "sensor: inside, outside temperature", the sensor values are indicated which are connected via the KNX master Control on the Outside Sensor Box or received via the object "KNX.MC.Zone_In_Temp_2Byte_IN[n]".



Status - Sensors Sensor: Wind, Sun, Rain Sensor: Inside, Outside Temperature **Inside Temperature sensors** Inside Temp1 Inside temperature 1 (KNX) 6 Inside Temp2 Inside temperature 2 (KNX) Inside temperature 3 (KNX) Inside Temp3 Inside temperature 4 (KNX) Inside temperature 5 (KNX) Inside Temp5 Inside temperature 6 (KNX) Inside Temp6 Inside temperature 7 (KNX) Inside Temp7 Inside temperature 8 (KNX) Inside Temp8 Inside temperature 9 (KNX) Inside Temp9 - °C Inside temperature 10 (KNX) Inside Temp10 Inside temperature 11 (KNX) Inside temperature 12 (KNX) Inside temperature 13 (KNX) Inside Temp13 - °C Inside temperature 14 (KNX) Inside Temp14 Inside temperature 15 (KNX) Inside Temp15 - °C Inside temperature 16 (KNX) Inside Temp16 Outside (Outside sensor box): 9 °C Ok Outside Temp.

Parameter:

- Name of the sensor model
- 2. Physical sensor name within the system.
- 3. Selected sensor name.
- 4. Display of the current sensor measured data
- 5. Details of the sensor function. When the sensor functions interference-free, "OK" appears in the LED display (green). With an interference "error" (red) will appear.
- 6. Eventual details of errors with sensor interference.

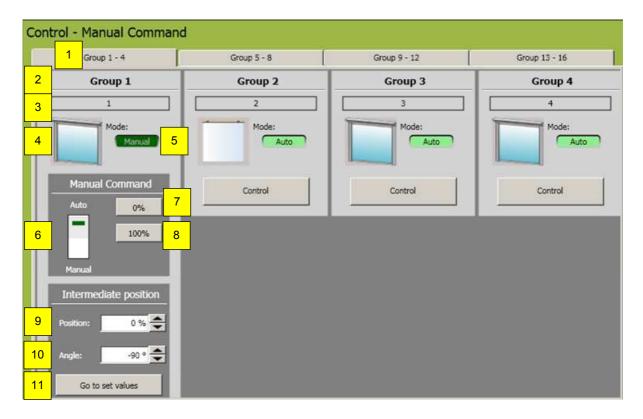
4.6. Control

4.6.1. Manual operation

In the navigation bar you click on "control" and then on "manual operation".

Select the zone in which the carrier products are moved manually. Press the switch position "Manual". Click on 0 % (the carrier products go to the upper end position) or by pressing on 100 % (the carrier products go to the bottom end position). The carrier products can also be moved to an intermediate position (position between 0 % and 100 % and angles between -90°, 0° and 90°). Click on "move to position".





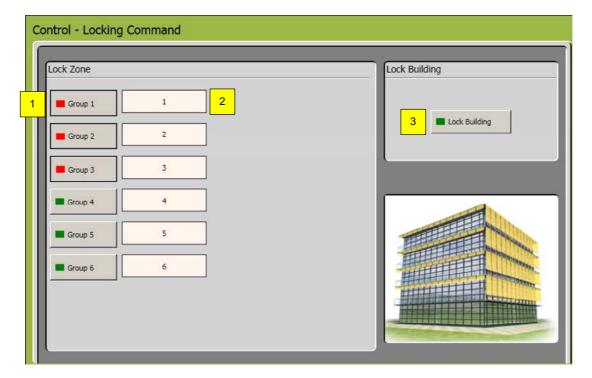
- 1. When more than 4 zones have been defined, the next 4 zones can be selected by clicking on the corresponding register overview.
- 2. Zone number.
- 3. Assigned zone name.
- 4. Graphic display of the end product type.
- 5. Display of the control mode \rightarrow manual or automatic.
- 6. Selection of the control mode → manual or automatic.

 In manual mode the manual commands can be entered and other functions can be activated via the PC. In automatic mode, all functions can be activated. Manual control via the computer is not possible. Local control through press buttons or remote is possible in both modes as long as no security functions are active.
- 7. Click to carry out the command; move to 0 % position. (move up/move in, close), end product moves to the upper end position.
- 8. Click to carry out the command; move to 100 % position. (move down/move out/open), end product moves to the bottom end position..
- 9. Selection of desired position which will be moved to after activating; "move to position".
- 10. Selection of desired angle which will be moved to after activating; "move to position" (Not available with all end products).
- 11. Click to carry out the previously set value under position (point 9) or angle (point 10).

4.6.2. Locking command

In the navigation bar click on "control" and then on "lockout".

Every zone (zone lock) as well as the whole building (all locked) can be locked. This function is used, e.g. with window cleaning.



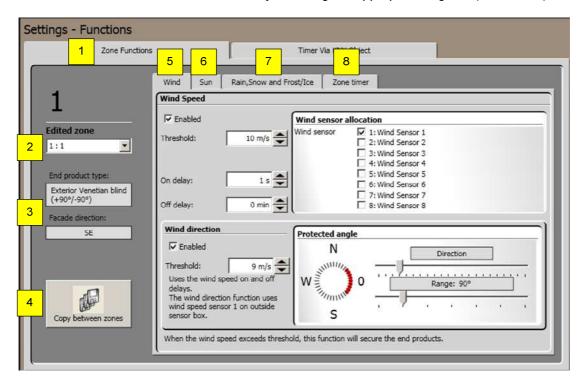
- 1. Locking interface for the individual zones
- 2. Selected zone names
- 3. Locking interface for the whole building (all zones)

4.7. Setting

4.7.1. Setting of the functions - zone functions

In this window individual settings of the single zones can be planned. Select the zone functions by clicking the zone register (1) select. Select the zone to be worked on from the dropdown menu (2). In (3) the entries appear; end product model and façade orientation of the selected zone.

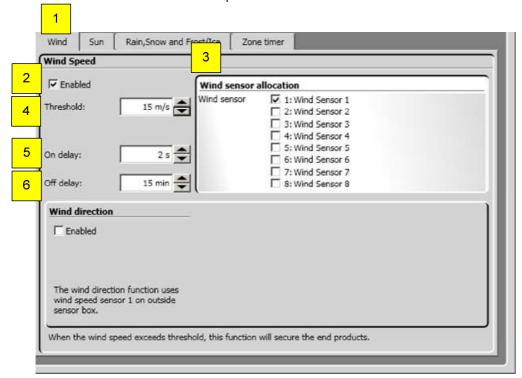
The function to be worked on is selected by choosing the appropriate register (from 4 to 7) from select.



- 1. Select "zone functions" or "timer via KNX objects".
- 2. Select "zone" which is worked on.
- 3. Display of end product and façade orientation of the current zone.
- 4. Copy parameters of a zone on another zone (chapter 3.6.3.7).
- 5. Select wind function (chapter 3.6.3.1) and wind direction function (chapter 3.6.3.2).
- 6. Select sun function (chapter 3.6.3.3) and sun tracking (chapter 3.6.3.4).
- 7. Select rain, snow and frost/ice function (chapter 3.6.3.5),
- 8. Select zone timer function (chapter 3.6.3.6).

4.7.1.1. Wind

Using the wind function, it can be ensured that the end products do not become damaged by wind. If one of the assigned wind sensors measures values above the defined threshold value for wind speed, the corresponding KNX object (KNX.MC.Zone_Security_High_Prio_Bit_OUT) will transmit 1. This function is not available for end products in an inside zone.

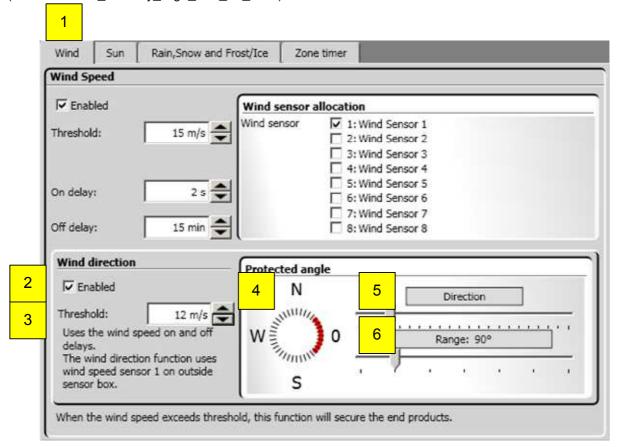


- Select wind function.
- 2. Activate/deactivate function.
- 3. Allocate wind sensor. All sensors are displayed in the list. Wind sensors are assigned to the selected zone by clicking the control box. At least one sensor must be assigned.
- 4. Threshold value wind speed → necessary measured wind speed to trigger the function. The value of the maximum fixable set value is dependent on the type of end product.
- 5. Response time → time span, in which the wind speed must exceed the threshold value (4), before the wind function is activated.
- 6. Delay time → time span, how long the wind speed must be below the threshold value (4), before the wind function is deactivated.

4.7.1.2. Wind direction

With the wind direction function it can be ensured that the end products do not become damaged by wind from a particular direction. The wind direction functions only in connection with the first wind sensor (Wind1).

If the wind set value is exceeded and lies in the protected area, the corresponding KNX object (KNX.MC.Zone_Security_High_Prio_Bit_OUT) will transmit 1.

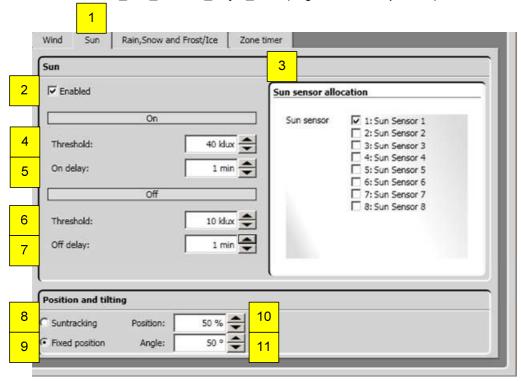


- 1. Select wind function.
- 2. Activate/deactivate function.
- 3. Set wind speed value → necessary measured wind speed to trigger the function.
- 4. Monitored direction → wind direction for the protective angle by rotating the button (8) adjust to the left or on the right, so that the alignment of the selected façade lies in the middle of the lighted diode ring.
- 5. Monitored zone → the size of the protective angle is varied by pulling the bar (9) to the right or left. Generally, the protective angle is 180 ° and the direction will be measured according to the direction middle of the façade.
- 6. The function wind direction uses the response times and delay times (5 and 6) of the wind function.

4.7.1.3. Sun function

With the help of the sun function, end products are moved to certain positions. If the sun rays exceed the set value (2), the end products are moved down. If the sun rays are below the set value (4), the end products are moved to the 0 % position. If the sun function, on account of the set value, becomes active, the end products are moved to a defined position (8) or to a position calculated according to the sun situation; you find detailed information in the chapter 3.7.1.4 sun tracking.

This function is only carried out when no other function with a higher priority is active. The corresponding KNX objects are KNX.MC.Zone_Position_UP_DOWN_1Byte_OUT (height of the end product) and KNX.MC.Zone_Slat_Position_1Byte_OUT (angle of the end product)



- 1. Select sun function.
- 2. activate/deactivate function.
- 3. Sun sensor assignment → at least one sensor must be selected. Assign sun sensor by activating the control box assign of the zone. When assigning several sensors, the highest measured value of the sun rays is used.
- 4. On set value ("on") → necessary measured sun intensity to trigger the function.
- 5. On response time → time span, during the sun rays must exceed the set value (4) before the sun function is activated. The average value is 2 minutes.
- 6. Off set value ("off") → the necessary measured sun intensity which must be below the value to deactivate the sun function.
- Off delay time → time span during the sun rays off set value (6) must be below before the sun function is deactivated.
- 8. Select sun tracking, see the following chapter 3.6.3.4.
- 9. Select predefined position which is moved to with exceeding an on set value (4).
- 10. Position which is moved to with exceeding the on set value (4).
- 11. Angle, which is moved to with exceeding the on set value (4). Not available with all end products.



4.7.1.4. Sun tracking

The function is not available for windows, joint arm awnings and screens.

This function aligns the position of the end products automatically to the sun's angle. Select the option "Sun tracking" (1) and click on the button on the right "settings" (2).

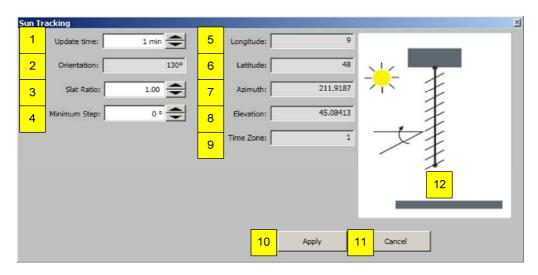
This function is only carried if no other function with a higher priority is active. The corresponding KNX objects are KNX.MC.Zone_Position_UP_DOWN_1Byte_OUT and KNX.MC.Zone Slat Position 1Byte OUT.



Parameter:

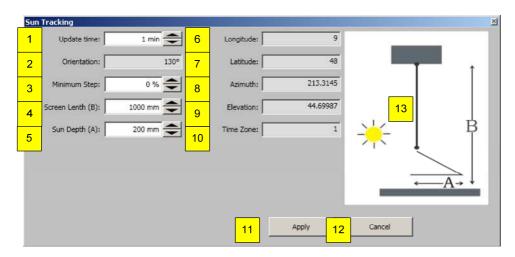
- 1. Select sun tracking
- 2. Settings; an extra window is opened for setting sun tracking (see picture below)

4.7.1.4.1. Sun tracking with outside Venetian blind



- 1. Updating time: the time between two position calculations.
- Façade direction: orientation of the zone, determined under zones setting (chapter 3.4.2.8).
- 3. Slats distance/width: Ratio between slats distance and slats width. This parameter is used for the calculation of the sun tracking to ensure an optimum ratio of brightness and glare protection.
- 4. Minimum steps: States the minimum percent value which must be calculated from the position before a move command can be carried out.
- 5. Degree of longitude: Provides the geographical length of the building. Setting is done under settings position (chapter 3.4.2.7).
- 6. Degree of latitude: Provides the geographical width of the building. Setting is done under settings position (chapter 3.4.2.7).
- 7. Azimuth: Horizontal angle of the current sun tacking.
- 8. Elevation: Height angle of the current sun tracking.
- 9. Time zone: States the time zone of the building. Setting is done under settings zones (chapter 4.4.2.5).
- 10. "OK" for taking on the setting.
- 11. "Cancel" for quitting without settings.
- 12. Graphic display of the end product. Setting is done under settings zones (chapter 4.4.2.8).

4.7.1.4.2. Suntracking with outside hangings



Parameter:

- 1. Updating time: gives the time between two position calculations.
- Façade orientation: Orientation of the zone, set under setting zones (chapter 3.4.2.8).
- 3. Minimum step: Gives the minimum percent value which the calculated position must be before a move command is carried out.
- 4. Screen length (B): The maximum length of the screen.
- 5. Sun depth (A): Gives the maximum depth of how far the sun rays will enter the room.
- 6. Degree of longitude: Gives the geographic position of the building. Setting is done under settings position (chapter 3.4.2.7).
- 7. Degree of latitude: Gives the geographic position of the building. Setting is done under settings position (chapter 3.4.2.7).
- 8. Azimuth: Horizontal angle of the actual suntracking.
- 9. Elevation: Height angle of the actual suntracking.
- 10. Time zone: Gives the time zone of the building. Setting is done under settings zones (chapter 4.4.2.5).
- 11. "OK" for taking on the setting.
- 12. "Cancel" to quit without settings.
- 13. Graphic display of the end product. Setting is done under settings zones (chapter 4.4.2.8).

4.7.1.5. Rain, snow and frost/ice function

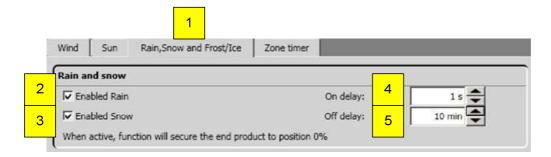
This function is not available for inside sun protection.

With rain, snow, frost and ice, the end products are locked in the safety position.

The rain and frost functions use the same sensor. If the outside temperature is lower than 4° C, then r ain is interpreted as snow. Frost is recognised if the outside temperature is under the set value. Ice is recognised if the outside temperature is lower than the set value and when it has been raining in the last hours.

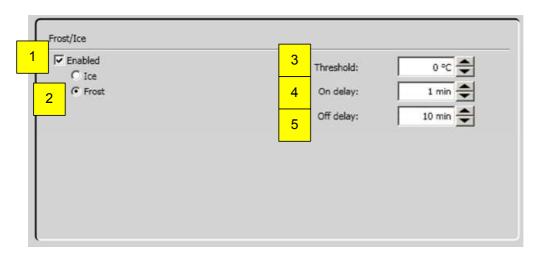


These functions are only carried out if no other function with a higher priority is active. The corresponding KNX object is KNX.MC.Zone_Security_High_Prio_Bit_OUT. First you select the zone which is to be configured.



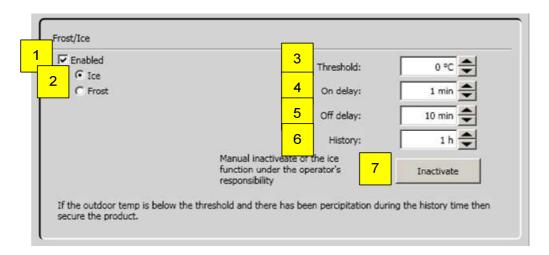
Rains and snow parameter:

- Select rain, snow and frost/ice function.
- 2. Activate/deactivate rain function.
- 3. Activate/deactivate snow function.
- 4. Response time → duration of the rain, before the rain function or snow function becomes active.
- 5. Delay time → Time span without rain, before the rain function or snow function becomes inactive.



Frost parameter:

- Activate/deactivate frost/ice function.
- 2. Activate/deactivate frost function.
- 3. Set value → the necessary measured outside temperature which it must be below to trigger the function.
- 4. Response time → time span, during rain or snow is detected, before the rain function or snow function is activated.
- 5. Delay time → Time span during rain or snow is not detected any more, before the rain function or snow function is deactivated.



Ice parameter:

- 1. Activate/deactivate frost/ice function.
- Activate/deactivate ice function.
- Set value → the necessary measured outside temperature which it must be below to trigger the function.
- 4. Response time → time span during rain or snow is detected, before the rain function or snow function is activated.
- 5. Delay time →Time span, during rain or snow is not detected any more, before the rain function or snow function is deactivated.
- 6. History → Time span.
- 7. "Deactivate" to set back the history time by hand and to deactivate with it the ice function.

4.7.1.6. Zone timer

This function enables the end products of a zone, within a defined period, to move to a certain position. When this is completed, the end products go to the upper end position (position 0 % and angle 0). This function is only carried out if no other function with a higher priority is active. The corresponding KNX objects are KNX.MC.Zone_Position_UP_DOWN_1Byte_OUT [n] and KNX.MC.Zone_Slat_Position_1Byte_OUT [n] whereby n stands for the respective selected zone 1-16.



- 1. Select zone timer.
- 2. Activate/deactivate function.
- 3. Open zone timer for this zone which then opens the following window.

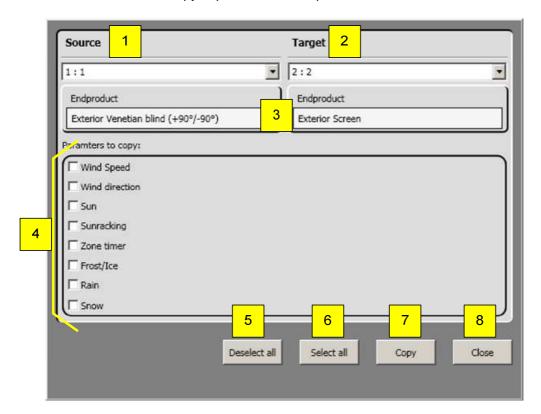


Set Zone Tin 0:00 1:00 2:00 3:00 4:00 5:00 6:00 7:00 8:00 9:00 10:00 11:00 12:00 13:00 14:00 15:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 00:00 100 % 90° Angle: 1 Tuesday 90 ∘ 💠 ☐ Invert 100 % Angle: 08:00 - 17:00 Timer 90 ° 🔷 100 % Angle: 08:00 - 17:00 2 ▼ Invert 90 ° 🔷 = Angle: 08:00 - 17:00 90 ∘ 💠 Friday **☑** Invert 100 % Angle: 100 % 90 ° 🔷 00:00 - 00:00 90° 100 % Angle: 00:00 - 00:00 Click and drag mouse on timeline to set active time period. 6 8 Defined position Upper endlimit Cancel

- 1. Time interval (green) in a time line
 - a. Add new time interval: With pressed mouse button, click on desired day and suitable position bar (1). Drag the time interval (2) to the right or left. Release the mouse button. The set time is displayed on the right beside the bar.
 - a. Change time interval: With pressed mouse button on one of the bar ends of the time interval to be changed (2), click and drag this in the desired direction. Release the mouse button. The set time is displayed on the right beside the bar.
 - a. Shift time interval: With pressed mouse button on the time interval (2) to be shifted, click and drag this in the desired direction. Release the mouse button. The set time is indicated on the right beside the bar.
 - a. Delete time interval: With pressed mouse button on one of the bar ends of the time interval to be deleted (2), click and drag this until it disappears. With the button "delete" (3), all time intervals can be deleted.
- 2. Inverts the time interval.
- 3. Position to which is moved after colour change white to green in the time line (1).
- 4. Angle to which is moved after colour change white to green in the time line (1). Not available with all end products.
- 5. Description with explanation.
- 6. "Delete" to delete all set time intervals in this zone.
- 7. "OK" for taking on the setting.
- 8. "Cancel" for quitting without settings.

4.7.1.7. Copy zone

With the function "copy zone" settings of a zone can be transmitted quickly to other zones. Select source and destination zone as well as the functions to be copied and then press the copy button. The functions available for the copy depend on the end products in the zone.



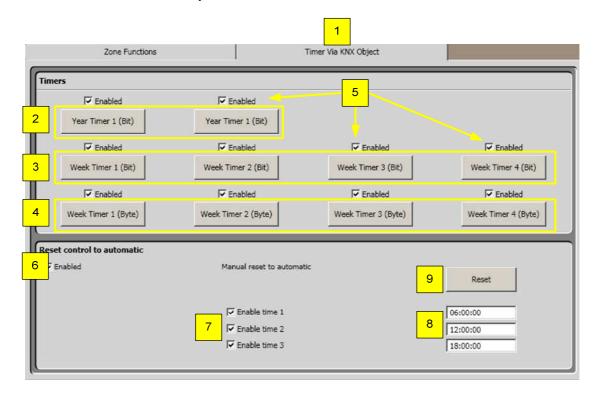
- 1. The source from the zone you would like to copy the parameters.
- 2. The destination to the zone you would like to copy the parameters.
- 3. The display of end product was defined for the zone (chapter 3.4.2.8).
- 4. The selection of single parameters to be copied.
- 5. "Select all", all parameters (4) are deactivated. No selection.
- 6. "Select all", all parameters (4) are activated.
- 7. "Copy", activated parameters (4) are copied from the source to the destination. After successfully copying, these are displayed in green.
- 8. "Close" to close the current window.

4.7.2. Setting of the functions – timer via object KNX object

In this window, settings can be made for individual timers. These timers stand are not related to the previous parametered zones.

These timers transmit the set time to certain KNX objects bit or byte values. Select the timer functions by clicking the zone register (1). Then activate the timer to be worked on (5) and then click on the appropriate timer (2-4).

In the second part (6) up to three daily time points can be defined (7) where the automatic is reset which is also realized over a KNX object.



- Select "timer via KNX object".
- 2. Select "annual timer bit" (chapter 3.6.4.1.).
- 3. Select "weekly timer bit" (chapter 3.6.4.2).
- 4. Select "weekly timer byte" (chapter 3.6.4.3).
- 5. Activate/deactivate timer.
- 6. Activate/deactivate automatic operation (chapter 3.6.4.4).
- 7. Activate/deactivate time point 1-3.
- 8. Time at which time point 1-3 is carried out.
- 9. "Reset" to reset by hand the automatic operation.



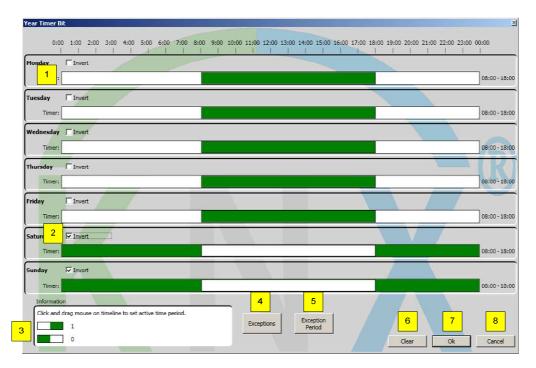
4.7.2.1. Annual timer (bit)

This function transmits "1" as a bit telegram at the defined time. At the end of the period it transmits "0". Two annual timers are available.

On some days (e.g. vacation, bank holidays) the timer commands are not necessary and can be deactivated using "exception" and "exception time period" and can be deactivated. This function is not taken into consideration in the priority function list.

The corresponding object KNX is KNX.MC.Timer_Yearly_Bit_OUT.

To set the timer function, click on "activate" and on "annual timer bit 1" or "annual timer bit 2".

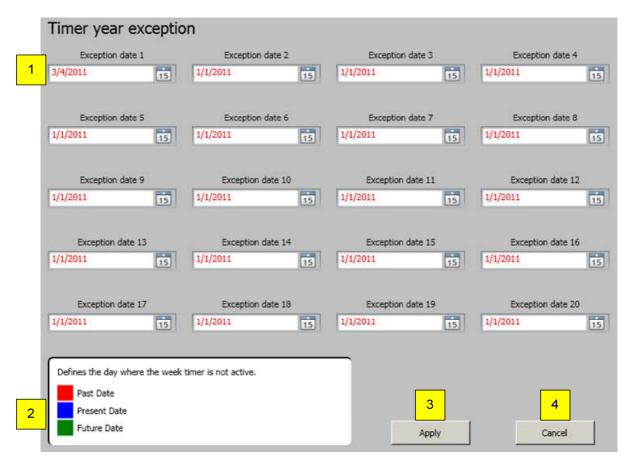


- 1. Time interval (green) in a time line
 - a. Add new time interval: With pressed mouse button, click on desired day and corresponding position bar (1). Drag the time interval (2) to the right or left. Release the mouse button. The set time is displayed on the right beside the bar.
 - b. Change time interval: With pressed mouse button on one of the bar ends of the time interval to be changed (2), click and drag this in the desired direction. Release the mouse button. The set time is displayed on the right beside the bar.
 - c. Shift time interval: With pressed mouse button on the to be shifted time interval (2), click and drag this in the desired direction. Release the mouse button. The set time is indicated on the right beside the bar.
 - d. Delete time interval: With pressed mouse button on one of the bar ends of the time interval to be deleted (2), click and drag this until it disappears. With the button "delete" (3), all time intervals can be deleted.
- 2. Inverts the time interval.
- 3. Key with explanation.
- 4. Exception defines one or more days (chapter 3.6.4.1.1).
- 5. Exception time period defines a time period (chapter 3.6.4.1.2).
- 6. "Delete" to delete all set time intervals in this zone.
- 7. "OK" for taking on the setting.
- 8. "Cancel" for quitting without settings.



4.7.2.1.1. Exceptions

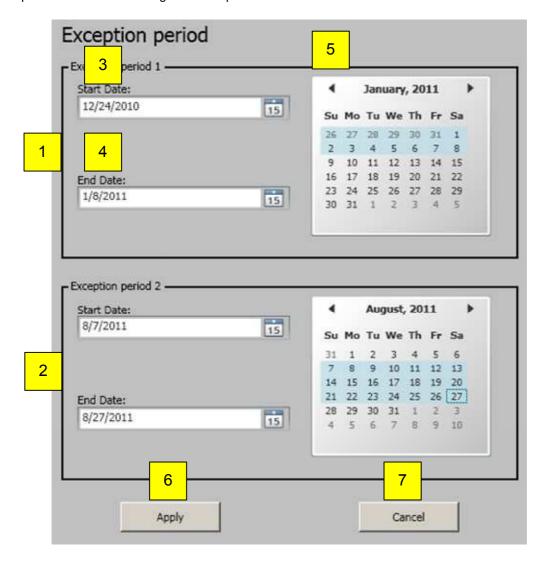
To deactivate the annual timer on particular days, exception days can be defined. Click on "exceptions" and the following window opens.



- 1. 20 possible exception days.
- 2. Key with explanation.
- 3. "OK" for taking on the setting.
- 4. "Cancel" for quitting without taking on settings.

4.7.2.1.2. Exception time period

To deactivate the annual timer for certain periods, two periods can be defined. Click on "exception time period" and the following window opens.



- 1. The first exception period.
- 2. The second exception period.
- 3. "Start date" when the exception period should begin.
- 4. "Date", when the exception period should end.
- 5. Display, the exception period under 3rd and 4th.
- "OK" for taking on the setting.
- 7. "Cancel" for quitting without taking on settings.

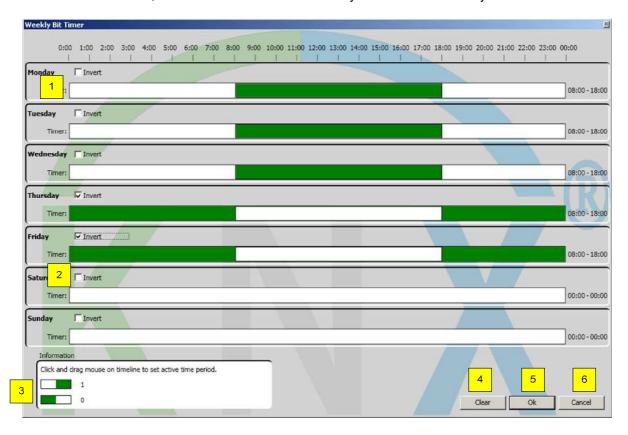
4.7.2.2. Weekly timer (Bit)

This function transmits "1" as a bit telegram at the defined time. At the end of the period it transmits "0". Four weekly timers (bit) are available.

This function is not taken into consideration in the priority function list.

The corresponding KNX object is KNX.MC.Timer_Weekly_Bit_OUT[n], whereby n stands for the corresponding selected weekly timer Bit 1-4.

To set the timer function, click on "activate" and on "weekly timer bit 1" to "weekly timer bit 4".



- 1. Time interval (green) in a time line
 - **a.** Add new time interval: With pressed mouse button click on desired day and corresponding position bar (1). Drag the time interval (2) to the right or left. Release the mouse button. The set time is displayed on the right beside the bar.
 - **b. Change time interval:** With pressed mouse button on one of the bar ends of the time interval to be changed (2), click and drag this in the desired direction. Release the mouse button. The set time is displayed on the right beside the bar.
 - c. Shift time interval: With pressed mouse button on the time interval (2) to be shifted, click and drag this in the desired direction. Release the mouse button. The set time is indicated on the right beside the bar
 - **d. Delete time interval:** With pressed mouse button on one of the bar ends of the time interval to be deleted (2), click and drag this until it disappears. With the button "delete" (3), all time intervals can be deleted.
- 2. Inverts the time interval.
- 3. Key with explanation.
- 4. "Delete" to delete all set time intervals in this zone.
- 5. "OK" for taking on the setting.
- 6. "Cancel" for quitting without settings.



4.7.2.3. Weekly timer (Byte)

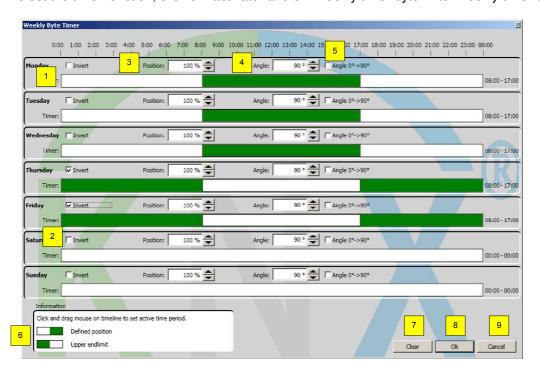
This function enables moving at a set time an end product, by means of two KNX objects, to a predefined position and angle.

This function transmits two "Byte" telegrams for position and angle at a defined time. At the end of the time period it transmits two byte telegram with the value 0 to position and angle. Four weekly timers (byte) are available.

This function is not taken into consideration in the priority function list.

The corresponding KNX object for the position is (KNX.MC.Timer_Weekly_Position_UP_DOWN_1Byte_OUT[n]) and for the angle (KNX.MC.Timer_Weekly_Slat_Position_1Byte_OUT[n]), whereby n stands for the corresponding selected weekly timer byte 1-4.

To set the timer function, click on "activate" and on "weekly timer byte 1" to "weekly timer byte 4".



- 1. Time interval (green) in a time line
 - a. Add new time interval: With pressed mouse button click on desired day and corresponding position bar (1). Drag the time interval (2) to the right or left. Release the mouse button. The set time is displayed on the right beside the bar.
 - b. Change time interval: With pressed mouse button on one of the bar ends of the time interval to be changed (2), click and drag this in the desired direction. Release the mouse button. The set time is displayed on the right beside the bar.
 - c. Shift time interval: With pressed mouse button on the time interval (2) to be shifted, click and drag this in the desired direction. Release the mouse button. The set time is indicated on the right beside the bar.
 - d. Delete time interval: With pressed mouse button on one of the bar ends of the time interval to be deleted (2), click and drag this until it disappears. With the button "delete" (3), all time intervals can be deleted.
- 2. Inverts the time interval.
- Position to which is moved after colour change white to green in the time line (1).
- 4. Angle to which is moved after colour change white to green in the time line (1). Not available with all end products.
- 5. Angle $0^{\circ} \rightarrow 90^{\circ}$.

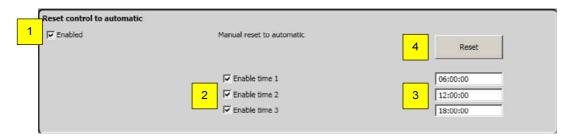


- 6. Key with explanation.
- 7. "Delete" to delete all set time intervals in this zone.
- 8. "OK" for taking on the setting.
- 9. "Cancel" for quitting without settings.

4.7.2.4. Automatic operation recover

This function enables, by means of a KNX object on the KNX motor, (e.g. animeo KNX 4 AC Motor Controller), to switch priority from manual to automatic.

Up to three time points daily can be defined in which this occurs automatically. Or you can make this also directly in the software manually by pressing "Reset". Automatically or manually, "1" is transmitted on KNX object No. 25 KNX.MC.Timer Reset To Auto Bit OUT)



- 1. Activate/deactivate automatic operation.
- 2. Activate/deactivate time point 1-3.
- 3. Time period to carry out time point 1-3.
- 4. "Reset" to recover automatic operation manually.

4.7.3. Operation mode

For every zone, an operation mode can be set individually to optimise the room climate and to reduce energy consumption. Two functions are available: "Heating with sun" and "keep heat".

In the navigation bar click on "settings" and enter your password.

Select the zone which is to be configured. The general setting is displayed.

In the register "assign sensors", the inside temperature sensors and sun sensors are assigned. The inside temperature sensors are exclusively KNX sensors which are solely assigned to the zone: Inside Temperature 1 for the zone 1, Inside Temperature 2 for zone 2 and so on.

If no sensor is activated, the functions are deactivated (appears in grey).

To accelerate the setting procedure, you can copy the settings between the zones (chapter 6.3.2.7).



Settings - Energy Mode 4 Solar Heating Inside temperature sensor allocation Inside Temperature ▼ 1: Inside Temp1 Edited zone 1:1 • Sun sensor allocation End product type: Sun sensor ✓ 1: Sun Sensor 1 2: Sun Sensor 2 Exterior Venetian blind (+90°/-90°) 3: Sun Sensor 3 4: Sun Sensor 4 5: Sun Sensor 5 Facade direction: 6: Sun Sensor 6 7: Sun Sensor 7 SE 8: Sun Sensor 8 3 Copy between zones

Parameter:

- 1. Select "zone" which is worked on.
- 2. Display end product and façade orientation of the current zone.
- 3. Copy parameters of a zone to another zone copy (chapter 3.6.3.7).
- 4. Select "assigning sensors".
- 5. Activate/deactivate indoor temperature sensor.
- 6. Display sun sensors activated under sun function 3.6.3.3 for this zone.

4.7.3.1. Heating with Sun

This function is available only for sun protection. In this mode, the sun's heat is used to lower heating costs (e.g. in winter after working hours). If the indoor temperature is lower than the set value and the sun's brightness is higher than the set value, the sun protection hangings move to a predefined position. This function is only carried out if no other function with higher priority is active.

The corresponding KNX objects are KNX.MC.Zone_Energy_Saving_Bit_OUT[n], KNX.MC.Zone_Position_UP_DOWN_1Byte_OUT[n] and KNX.MC.Zone_Slat_Position_1Byte_OUT[n], whereby n stands for the corresponding selected zones 1-16.



Sensor Allocation Solar Heating Maintain Heat Solar heating ▼ Enabled Delays Thresholds On delay: Indoor ter Off delay: Position / Angle If indoor temperature is below its threshold an sun intensity is above its threshold then move to the given position. Position: Angle: 8

- 1. Select heating by sun.
- 2. Activate/deactivate function.
- 3. Response time → time span, during indoor temperature (5) falls below and sun rays (6) must exceed before the function is activated.
- Delay time → time span, during the indoor temperature (5) must be exceeded and sun rays be less than (6) before the function is deactivated.
- 5. Indoor temperature → the necessary measured indoor temperature which must be exceeded or be below to activate or deactivate the function.
- 6. The sun → the necessary measured sun intensity which must be exceeded or be below to activate or deactivate the function.
- 7. Position, to which is moved to with the function activate.
- 8. Angle, to which is moved with the function activate.

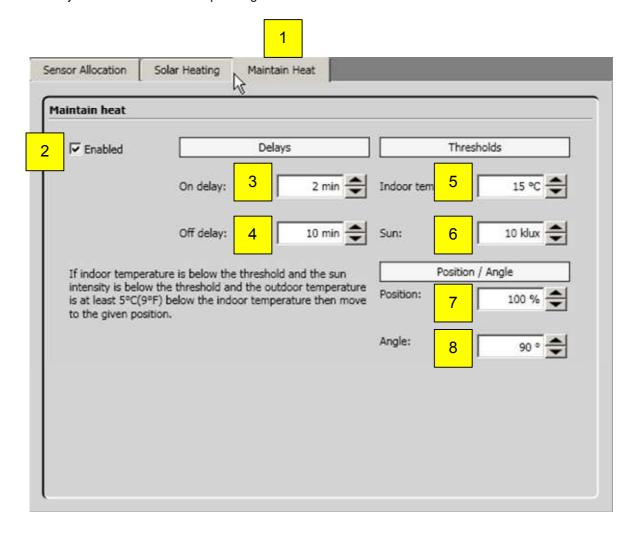


4.7.3.2. Maintain heat

This function enables heat to be kept in the building with the help of the sun protection. This function is normally used after working hours.

If the indoor temperature and the sun brightness are lower than the set value and the outside temperature lies under 5°C, the sun protection hanging s move to a predefined position. This function is only carried out if no other function with higher priority is active.

The corresponding KNX objects are KNX.MC.Zone_Energy_Saving_Bit_OUT[n], KNX.MC.Zone_Position_UP_DOWN_1Byte_OUT[n] and KNX.MC.Zone_Slat_Position_1Byte_OUT[n] whereby n stands for the corresponding zones 1-16.



Parameter:

- Select heating by sun.
- 2. Activate/deactivate function.
- 3. Response time → time span, during indoor temperature (5) falls below and sun rays (6) must exceed before the function is activated.
- Delay time → time span, during the indoor temperature (5) must be exceeded and sun rays less than (6) before the function is deactivated.
- Indoor temperature → the necessary measured indoor temperature which must be exceeded or be below to activate or deactivate the function.
- 6. The sun → the necessary measured sun intensity which must be exceeded or be below to activate or deactivate the function.
- 7. Position, to which is moved to with the function activate.
- 8. Angle, to which is moved with the function activate.

4.8. Protocolling

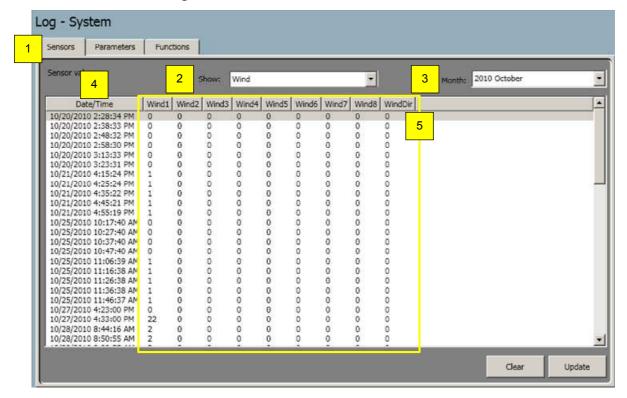
Important: System data (sensor values, parameters updates or functions) and errors are only recorded if a PC with KNX Operating software is connected to the animeo KNX Master Control. The KNX Master Control has no storage for system data or errors.

4.8.1. Protocolling of the System Data

In the navigation bar, click on "Protocol" and then on "System Data".

Current values of individual sensors, parameter updates and function states (active or inactive) are saved since the start of the project and are displayed here.

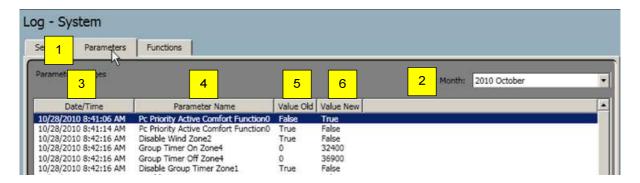
4.8.1.1. Protocolling sensors



Parameter:

- 1. Select sensors.
- 2. Select sensor (wind, sun or other sensors) for the protocol to be display.
- 3. Select month for the protocol to be displayed.
- 4. Date/time.
- 5. Protocolled sensor value.
- 6. Delete current protocol.
- 7. Update current protocol.

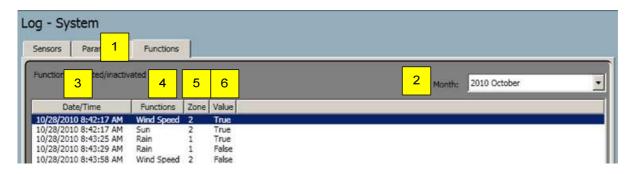
4.8.1.2. Protocol parameter



Parameter

- 1. Select parameter.
- 2. Select month for the protocol to be displayed.
- 3. Date/time.
- 4. Name of the parameter.
- 5. Value before update.
- Value after update.

4.8.1.3. Protocol functions



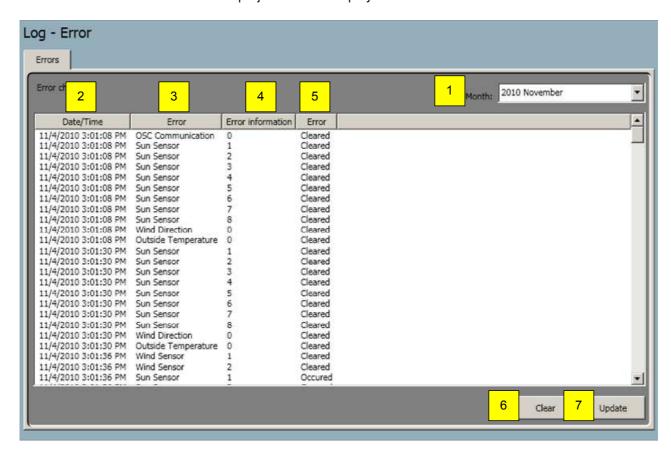
- Select functions.
- 2. Select month for the protocol to be displayed.
- 3. Date/time.
- 4. Name of function.
- 5. Details of zone.
- 6. Value (true = active, false = inactive).



4.8.2. Protocolling errors

In the navigation bar, click on "Protocol" and then on "error".

All errors are saved since start of the project and are displayed here.



- 1. Select month for the protocol to be displayed.
- 2. Date/time.
- Type of error.
- 4. Error information.
- 5. Error.
- 6. Delete current protocol.
- 7. Update current protocol.

5. ETS Programming

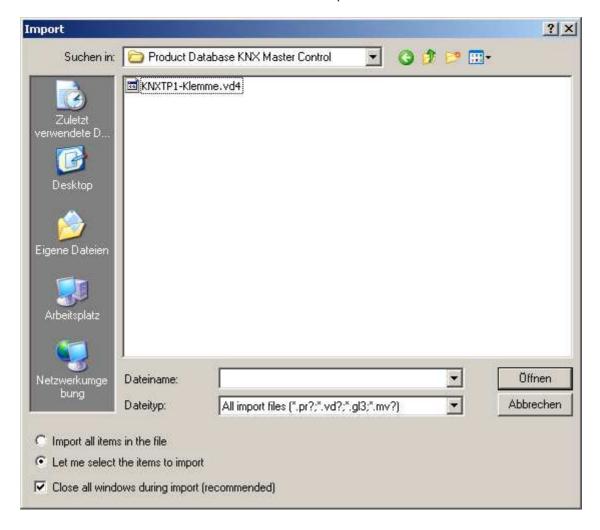
5.1. Start up of the KNX terminal

The following chapter describes the procedure for using the ETS3 plug-ins for the KNX terminal within the ETS3.

5.2. Import database

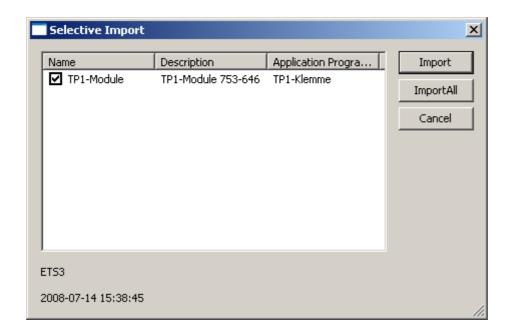
Start the software ETS. Import the KNX Master Control ETS product database "KNXTP1-Klemme.vd4" under "File\import ... " in the ETS3 software. You will find the product database on the provided CD "animeo KNX Master Control Operating Software" in the subdirectory: \ETS\Product Database KNX Master Control\.

Select the file "KNXTP1-Terminal.vd4" and click on "open".



Select the database (TP1-module) and click on "import".

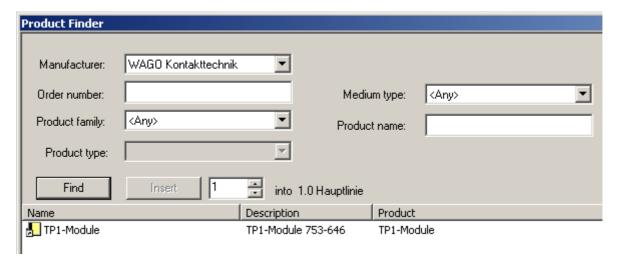




5.3. Paste animeo KNX Master Control in ETS project

Firstly, you paste the device in the topology level, by going to the desired topology level line of the ETS project and clicking on it with the right mouse button. Now select option "add device".

In the newly opened window "search product" you select under manufacturer "Wago Contact Technology" and click on "search". Now select the "TP1 modules" and click on "insert" to paste it in the project.

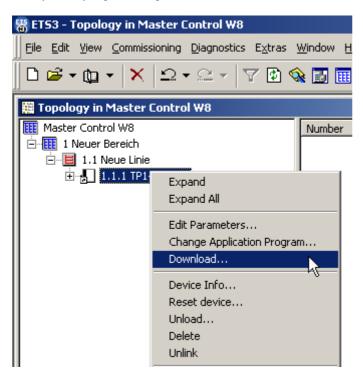


After successfully inserting you can close the product search.



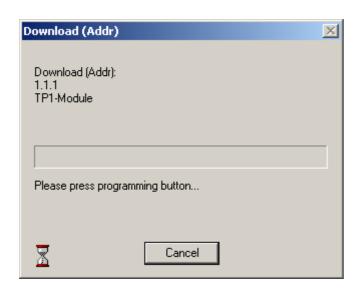
5.4. Programming physical addresses of the KNX terminal

In the topology window, click with the right mouse button on the device "TP1 terminal" and you select the option "programming ... ".

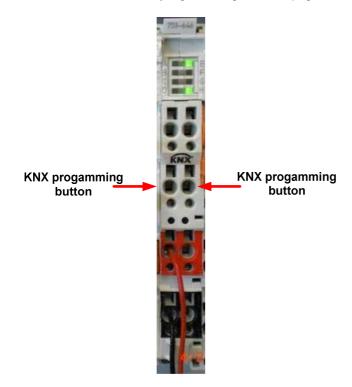








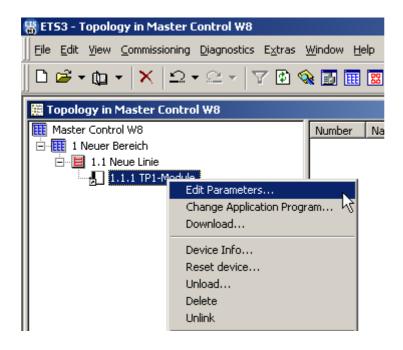
The yellow LED's "D" on the KNX terminal begin to blink. Make an electronic connection for a short moment between the KNX programming buttons (e.g. with a wire bridge).

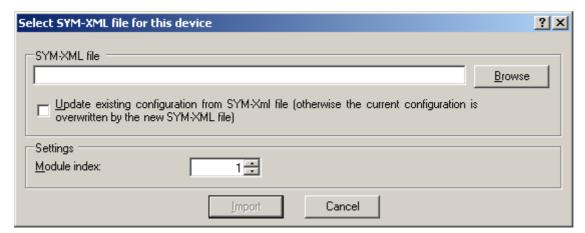


The red LED "B" on the KNX terminal blinks and shows that it is now in the active programming mode. Shortly afterwards, the green LED's "C", "H" and "E" will blink. The physical address of the KNX terminal has been programmed successfully when the green LED's "E" and "H" are continuously lit.



5.5. Importing the symbol data

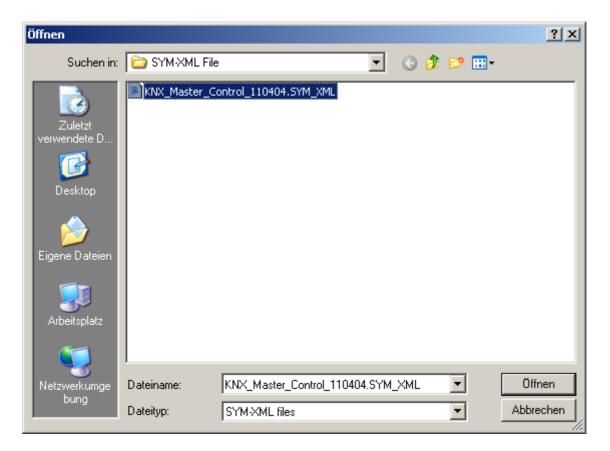




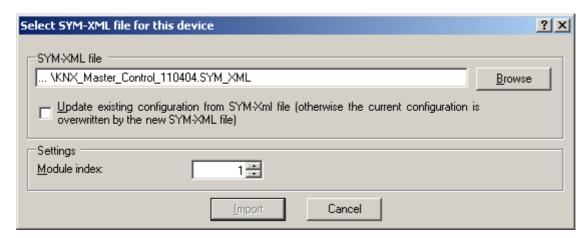
You will find the required symbol data file "KNX_Master_Control. SYM_XML" on the provided CD "animeo KNX Master Control Operating Software" in the subdirectory: \ETS\SYM-XML\

Select the file "KNX_Master_Control .SYM_XML" and click on "open".





Import the file "KNX_Master-Control. SYM_XML".

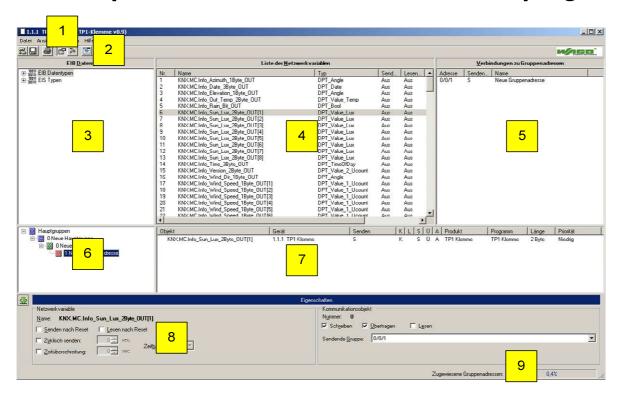


The list of the communication objects and the properties of each object appear in the window.

The following graphic interface shows all relevant data which are needed for the configuration.



5.6. Operational elements of the ETS3 plug-in



Parameter:

- 1. Main menu (chapter 4.5).
- Tool bar (chapter 4.6).
- KNX data type (chapters 4.7).
- 4. Network variables (chapter 4.8).
- 5. Connections with group addresses (chapter 4.9).
- 6. Available group addresses (chapter 4.10).
- 7. Properties of the selected group (chapter 4.11).
- Property window (chapter 4.12).
- Percent bar menu (chapter 4.13).

5.6.1. Main menu

5.6.1.1. File

The menu point "File" contains all Windows application functions with regard to printing, file management and finishing. The individual sub-functions in this menu point are dealt with in the following.

5.6.1.1.1. SYM XML file import ...

To import a SYM_XML file

5.6.1.1.2. Save

Saves the settings in the database of the ETS3. With saving, the basic updates carried out by means of ETS3 plug-in, e.g. defining new groups, are saved in the ETS3. These settings are relevant primarily for the ETS3. The menu point is only activated when updates are carried out.



5.6.1.1.3. Export configuration ...

This exports the current configuration as an XML file (not SYM_XML file). All settings of the WAGO devices (assigning of network variables, their properties,

settings of the network variables as well as the assigning of the communication objects on the group addresses etc.) are exported as an XML file. This file serves as a backup or as a template for the ETS3 plug-in. The predefined settings are taken on in the devices through the import of this file and replace already existing settings.

5.6.1.1.4. Import configuration ...

This imports a configuration as an XML file. In this case, it is not a SYM_XML file.

5.6.1.1.5. Print

This prints out the current configuration. You can select between two options:

Print based on group addresses:

1.1.1 **TP1-Klemme Project details:** Project: Master Control W8 Projectnumber: Unknown Devicename: TP1-Klemme Individual address: Print date: 4/11/2011 10:01:00 AM Group addresses: 1. 1/0/56 Inside Temp Zone 1 in 1. KNX.MC.Info_Out_Temp_2Byte_OUT Uses this group address for sending 2. KNX.MC.Zone In Temp 2Byte IN[1] Uses this group address for sending

Print based on network variables:

Project deta	ils:			
Project:	Master Control W8			
Projectnumber:				
Completionstatus:	Unknown			
Devicename:	TP1-Klemme			
Individual address:	1.1.1			
Print date:	4/11/2011 10:03:29 AM			
Module index:	1			
Network va	-			
Network vai	riables:			
Network val 1. KNX.MC.Info_ Properties:	riables: Azimuth_1Byte_OUT not assigned to CO			
Network val 1. KNX.MC.Info_ Properties: CO number:	riables: Azimuth_1Byte_OUT			
Network val 1. KNX.MC.Info_ Properties: CO number: Send on rese	riables: Azimuth_1Byte_OUT not assigned to CO disabled			
Network val 1. KNX.MC.Info_ Properties: CO number: Send on rese Read on rese	riables: Azimuth_1Byte_OUT not assigned to CO t: disabled t: disabled			



5.6.1.1.6. Print preview

Displays a print preview. Both display options are valid for printing.

5.6.1.1.7. Cancel

Here, the application is closed. While quitting the program asks, provided that updates were carried out, whether these should be saved. This prevents data getting lost.

5.6.1.2. View

5.6.1.2.1. View toolbar

When activated the toolbar is displayed. Otherwise it is hidden.

5.6.1.2.2. View property window

When activated, the property window is displayed. Otherwise it is hidden.

5.6.1.3. Options

5.6.1.3.1. Options

In the dialog box "options ... " you set up an automatic saving of the momentary configuration. In addition, the control box "automatic saving of configuration" must be selected. Enter a number which determines the saving interval in minutes. No XML file is saved (as with the function "configuration export ... "). The function "automatic saving" is the same as the "Save" function and saves the updates in the ETS3 database.

5.6.1.4. Help

5.6.1.4.1. Online help

Activates the online help

5.6.1.4.2. About ...

Displays information about the ETS3 plug-in

5.6.2. Toolbar

The toolbar gives you quick and comfortable access to the primarily used functions in the main menu:

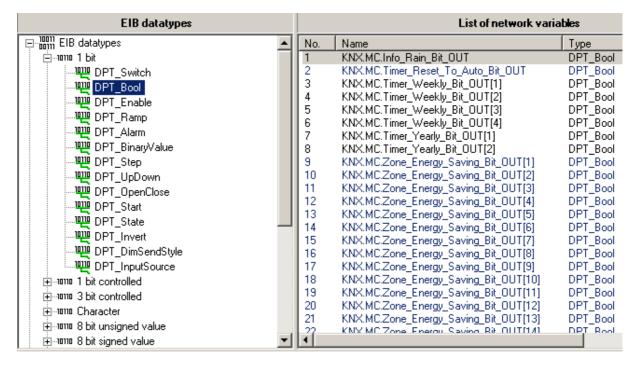


- 1. Imports a SYM_XML file, for analogously selecting the SYM_XML file".
- Saves the settings in the ETS3. The SYM XML file is not changed.
- Prints the current configuration.
- Blends in or out property window.
- 5. Opens the menu options.
- 6. Exports a configuration (no SYM_XML file).
- 7. Imports the current configuration as an XML file (no SYM_XML file).
- 8. Activates the online help.

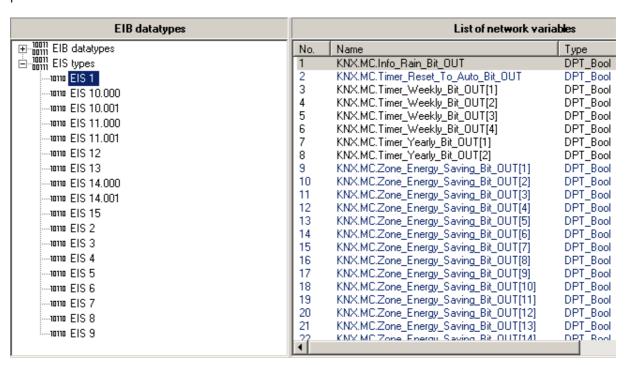


5.6.3. KNX data types

In the left, upper end of the user interface there is the window of the data types EIB, as well as EIS types. These types display the available data point types within the ETS. Depending on which data type or EIS types have been selected, only those network variables which correspond to the selected model will be displayed. Thus, it can be understood that the KNX data type window is a filter for the list of network variables.



Tip: Only one data type can be given as a filter. Multiple selection in the data type window EIB is not possible.





5.6.4. Network variables

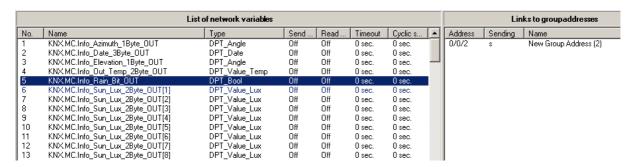
In the middle of the user interface the available network variables are listed which you are able to link with group addresses from the ETS3. These network variables have in each case a certain data point type (e.g. DPT_Bool) which corresponds with the ETS3 world (e.g. "Switch").

Likewise, these network variable types can be also filtered as EIS types. Analogously to the above example would be "ICE 1" for "DPT_Bool". DPTs/Network variables of the same length are summarised in the display.

In addition, the list of the network variables displays the present settings of the network variables, e.g. "reading after reset " (see chapter 4.12).

5.6.5. Linking with group addresses

The right, upper window of the user interface to connect group addresses shows you with which group address is currently connected with the selected network variable in the window "list of the network variables". In addition to the actual group address, the name of this specific address and the states of the flag are also displayed. These flags are based on the ETS3. For more detailed information see your ETS3 software documentation.



5.6.6. Available group addresses

The zone "available group addresses" displays the available group addresses in the usual ETS3 procedure. In the tree view, the desired group address can be selected.

Tip: Only one group address can be marked!

Only one group address can be selected. In addition, new group addresses can be added. To do this, activate the menu of the middle group with the right mouse button and then select add new group address (see following diagram).



You can select freely the name of the group address. The address of the group address consists of your main group and middle group, as well as the number 0 ... 255 which can be set in this dialog. When the set address has already been assigned, you will be informed by the ETS3 plug-in.



Add new group address

There exist already a group address with that address

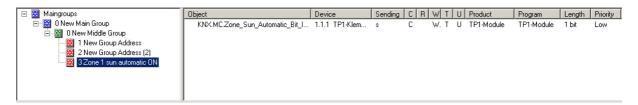
OK

In this case, select another, unassigned number.

Analogously to adding a new group address, you can also define new main groups or middle groups.

5.6.7. Selected group properties

In the zone "selected group properties", the connected network variables to group address are displayed which have just been selected in the window "available group addresses". In addition, the current settings of the network variables are also displayed.



5.6.8. Properties window

The properties window displays the current properties of the network variables. Here, you can modify the behaviour of the variables (chapter 4.6.2).

5.6.9. Percent bar menu

The percent display shows the relative extent of utilisation of the ETS3 plug-in on the basis of following limitations on:

253 communication objects for configuring of controlling terminals

254 group addresses for configuring of controlling terminals

254 associations for configuring of controlling terminals

The percent display is taken from the amounts respectively.

Example:

If the 253 communication objects or 254 group addresses or 254 associations are available, the system is used to full capacity.

If 2 communication objects are connected with 127 group addresses, there will be 254 associations. In this case, the system is used to full capacity.

With a full capacity of 100 % no further assigning is possible.

Tip: Take note of restrictions for main and middle groups and group addresses. A maximum of 16 main groups can be assigned. Per main group a maximum of 8 middle groups are available, per middle group up to 256 group addresses can be assigned.



With second-layer group addresses, the middle groups are not included, i.e. the second layer of the representation is made up of a combination of middle group addresses. In this case, as with the third-layer representation, a maximum of 16 main groups can be assigned. Each of these main groups can administer up to 2048 group addresses, corresponding to 8 middle groups with 256 group addresses in the third layer representation.

5.7. Functions of the ETS3 plug-in

Basically, the task of the software is to visualise and edit the links of network variables of the KNX terminal or of the KNX IP controller with group addresses of the ETS3. In addition, using the software, you can easily configure the network variables and group addresses.

5.7.1. Assigning links

In the following, three options are described of how to create valid links of network variables and group addresses. In all options, the ETS3 plug-in carries out an internal plausibility check. Invalid links are recognised and displayed.

5.7.1.1. "Drag and drop" from the window "main groups"

To create a connection from the window "main groups" by means of "drag and drop", click with the left mouse button the desired group address and hold the mouse button pressed. Drag the mouse pointer on the target network variable in the window "list of the network variables" and release the mouse button. Now in the window "links with group addresses" of the target network variables, the source-group address is displayed.

5.7.1.2. "Drag and drop" from the window "network variables"

To create a link from the window "network variables" by means of drag and drop, click the desired network variable in the window "list of network variables" and keep the mouse button pressed. Then move the mouse cursor to the target group addresses in the window "group addresses" and release the mouse button. In the window "links to group addresses", the source network variable will display the target group addresses.

5.7.1.3. Object menu of network variables

By clicking in the object menu of network variables **link to group address** ..., the dialog box opens "linking network variable". This dialog allows you to select from a list of existing group addresses, the desired target group address and to make a link, or to assign a new group address directly that is linked with the network variable in the same way.

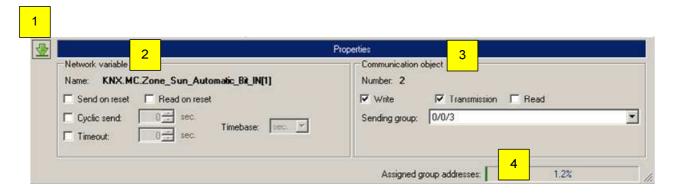




In the dialog box "link to group addresses", the source network variables will be shown to the target group addresses.

5.7.2. Configuring network variables and communication objects

The setting of the flag must be carried out in the property window. Depending on whether the property window is visible or invisible, the symbol changes in the left upper corner of the property window.

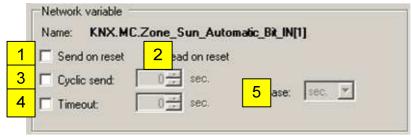


Parameter:

- Property windows show/hide.
- Zone variable (chapter 4.6.2.1).
- 3. Communication object (chapter 4.6.2.2).
- 4. Percent bar.

5.7.2.1. Network variable area

In the left half of the property window, the currently selected network variable is displayed. A network variable can be configured in several ways.



Parameter:

- 1. Send after reset (chapter 5.6.2.1.1).
- 2. Read after reset (chapter 5.6.2.1.2).
- 3. Send cyclically (chapter 5.6.2.1.3).
- 4. Exceed time (chapter 5.6.2.1.4).
- Time base (chapter 5.6.2.1.5).

5.7.2.1.1. Send after Reset

The value of the communication object is sent after the device is reset. Resetting is done with a voltage reset, the reset of the knot from the ETS, as well as a software reset of the IEC application.



5.7.2.1.2. Read after Reset

The device is programmed to read the current value of the bus after the reset.

5.7.2.1.3. Send Cyclically

When activated, the device sends its value to the bus in given intervals. The intervals can be entered on the right hand side.

5.7.2.1.4. Time Exceeded

When activated, the device, after a given time period and without a telegram update, displays a timeout on the corresponding FbDPT component in the SPS.

5.7.2.1.5. Time basis

This function only becomes active when cyclical sending or time exceeded are activated. It determines the time unit of the interval or the time excess. Possible units are seconds and minutes.

Communication object area

In the right half of the property window, the currently selected communication object is displayed. A communication object can be configured in several ways:



Parameter:

- 1. Number (chapter 5.6.3.1.1).
- 2. Write (chapter 5.6.3.1.2).
- 3. Transfer (chapter 5.6.3.1.3).
- 4. Read (chapter 5.6.3.1.4).
- 5. Sending groups (chapter 5.6.3.1.5).

5.7.2.1.6. Number

Consecutive number which is dependent on the linking sequence given by the system. This value cannot be changed.

5.7.2.1.7. Write

ETS3 flag of the communication objects, see ETS3 manual.

5.7.2.1.8. Transmit

ETS3 flag of the communication objects, see ETS3 manual.

5.7.2.1.9. Read

ETS3 flag of the communication objects, see ETS3 manual.



5.7.2.1.10. Sending groups

To every communication object, a group address as sending group must be able to be entered. Normally, the ETS3 assigns the first assigned group address as a "sending group". All available group addresses are displayed in the combo box and can be selected.

6. Communication objects

6.1. Object overview

A maximum of 183 communication objects are available. The number of the objects is dependent on the number of the zones.

6.1.1. List of Objects

No.	Object name	Model	Description
1	KNX.MC.Info_Azimuth_1Byte_OUT	1 byte	The object sends telegrams with the value of the sun azimuth
2	KNX.MC.Info_Date_3Byte_OUT	3 bytes	The object sends telegrams with the date.
3	KNX.MC.Info_Elevation_1Byte_OUT	1 byte	The object sends telegrams with the value of the elevation of the sun.
4	KNX.MC.Info_Out_Temp_2Byte_OUT	2 bytes	The object sends telegrams with the value of the outside temperature.
5	KNX.MC.Info_Rain_Bit_OUT	1 bit	The object sends "1" if the rain sensor on the Outside Sensor Box recognizes rain and sends "0" when the rain has stopped.
6	KNX.MC.Info_Sun_Lux_2Byte_OUT [1]	2 bytes	The objects send telegrams with the
7	KNX.MC.Info_Sun_Lux_2Byte_OUT [2]		value of the sun's brightness of the respective sun sensor.
8	KNX.MC.Info_Sun_Lux_2Byte_OUT [3]		respective surf serisor.
9	KNX.MC.Info_Sun_Lux_2Byte_OUT [4]		
10	KNX.MC.Info_Sun_Lux_2Byte_OUT [5]		
11	KNX.MC.Info_Sun_Lux_2Byte_OUT [6]		
12	KNX.MC.Info_Sun_Lux_2Byte_OUT [7]		
13	KNX.MC.Info_Sun_Lux_2Byte_OUT [8]		
14	KNX.MC.Info_Time_3Byte_OUT	3 bytes	The object sends telegrams with the time.
15	KNX.MC.Info_Version_2Byte_OUT	2 bytes	The object sends telegrams with the software Version the KNX Master Control.
16	KNX.MC.Info_Wind_Dir_1Byte_OUT	1 byte	The object sends telegrams with the value of the wind direction.



No.	Object name	Model	Description
17	KNX.MC.Info_Wind_Speed_1Byte_OUT [1]	1 byte	The object sends telegrams with the
18	KNX.MC.Info_Wind_Speed_1Byte_OUT [2]		value of the wind speed of the respective wind sensor. Wind sensor 1
19	KNX.MC.Info_Wind_Speed_1Byte_OUT [3]		and 2 are connected to the Outside
20	KNX.MC.Info_Wind_Speed_1Byte_OUT [4]		Sensor Box. Wind sensors 3 to 8 are
21	KNX.MC.Info_Wind_Speed_1Byte_OUT [5]		connected to the KNX Master Control W8 (chapter 1.4).
22	KNX.MC.Info_Wind_Speed_1Byte_OUT [6]		Control Wo (chapter 1:4).
23	KNX.MC.Info_Wind_Speed_1Byte_OUT [7]		
24	KNX.MC.Info_Wind_Speed_1Byte_OUT [8]		
25	KNX.MC.Timer_Reset_To_Auto_Bit_OUT	1 bit	The object sends "1" if the function "timer reset to autot" becomes active (chapter 3.6.3.6).
26	KNX.MC.Timer_Weekly_Bit_OUT [1]	1 bit	The object sends "1" if the function
27	KNX.MC.Timer_Weekly_Bit_OUT [2]		"timer weekly" becomes active. They transmit "0" if the function becomes
28	KNX.MC.Timer_Weekly_Bit_OUT [3]		inactive (chapter 3.6.3.4)
29	KNX.MC.Timer_Weekly_Bit_OUT [4]		,
30	KNX.MC.Timer_Weekly_Position_UP_DOWN_1Byt e_OUT [1]	1 byte	The objects send telegram with a value between 0 and 255 (e.g.
31	KNX.MC.Timer_Weekly_Position_UP_DOWN_1Byt e_OUT [2]		position) if the function "timer weekly byte" becomes active They send "0"
32	KNX.MC.Timer_Weekly_Position_UP_DOWN_1Byt e_OUT [3]		if the function becomes inactive (chapter 3.6.3.5).
33	KNX.MC.Timer_Weekly_Position_UP_DOWN_1Byt e_OUT [4]		
34	KNX.MC.Timer_Weekly_Slat_Position_1Byte_OUT	1 byte	The objects sends telegrams with a
35	[1] KNX.MC.Timer_Weekly_Slat_Position_1Byte_OUT [2]		value between 0 and 255 (e.g. slats angle) if the function "timer weekly byte" becomes active. They send "0"
36	KNX.MC.Timer_Weekly_Slat_Position_1Byte_OUT [3]		if the function becomes inactive (chapter 3.6.3.5).
37	KNX.MC.Timer_Weekly_Slat_Position_1Byte_OUT [4]		
38	KNX.MC.Timer_Yearly_Bit_OUT [1]	1 bit	The objects transmit "1" if the func-
39	KNX.MC.Timer_Yearly_Bit_OUT [2]		tion " annual timer of bit " becomes active. They transmit "0" if the function becomes inactive (chapter 3.6.3.1).
40	KNX.MC.Zone_Energy_Saving_Bit_OUT [1]	1 bit	Per zone: the objects send "1" if the
41	KNX.MC.Zone_Energy_Saving_Bit_OUT [2]		energy savings function becomes active. If the function becomes inac-
42	KNX.MC.Zone_Energy_Saving_Bit_OUT [3]		tive, "0" is sent (chapter 3.6.4).
43	KNX.MC.Zone_Energy_Saving_Bit_OUT [4]		` ' '
44	KNX.MC.Zone_Energy_Saving_Bit_OUT [5]		
45	KNX.MC.Zone_Energy_Saving_Bit_OUT [6]		



No.	Object name	Model	Description
46	KNX.MC.Zone_Energy_Saving_Bit_OUT [7]		
47	KNX.MC.Zone_Energy_Saving_Bit_OUT [8]		
48	KNX.MC.Zone_Energy_Saving_Bit_OUT [9]		
49	KNX.MC.Zone_Energy_Saving_Bit_OUT [10]		
50	KNX.MC.Zone_Energy_Saving_Bit_OUT [11]		
51	KNX.MC.Zone_Energy_Saving_Bit_OUT [12]		
52	KNX.MC.Zone_Energy_Saving_Bit_OUT [13]		
53	KNX.MC.Zone_Energy_Saving_Bit_OUT [14]		
54	KNX.MC.Zone_Energy_Saving_Bit_OUT [15]		
55	KNX.MC.Zone_Energy_Saving_Bit_OUT [16]		
56	KNX.MC.Zone_In_Temp_2Byte_IN [1]	2 bytes	Per zone: The object receives a
57	KNX.MC.Zone_In_Temp_2Byte_IN [2]		telegram with the value of the KNX indoor temperature sensor. These
58	KNX.MC.Zone_In_Temp_2Byte_IN [3]		values are used for the energy func-
59	KNX.MC.Zone_In_Temp_2Byte_IN [4]		tions (chapter 3.6.4).
60	KNX.MC.Zone_In_Temp_2Byte_IN [5]		
61	KNX.MC.Zone_In_Temp_2Byte_IN [6]		
62	KNX.MC.Zone_In_Temp_2Byte_IN [7]		
63	KNX.MC.Zone_In_Temp_2Byte_IN [8]		
64	KNX.MC.Zone_In_Temp_2Byte_IN [9]		
65	KNX.MC.Zone_In_Temp_2Byte_IN [10]		
66	KNX.MC.Zone_In_Temp_2Byte_IN [11]		
67	KNX.MC.Zone_In_Temp_2Byte_IN [12]		
68	KNX.MC.Zone_In_Temp_2Byte_IN [13]		
69	KNX.MC.Zone_In_Temp_2Byte_IN [14]		
70	KNX.MC.Zone_In_Temp_2Byte_IN [15]		
71	KNX.MC.Zone_In_Temp_2Byte_IN [16]		
72	KNX.MC.Zone_Major_Alarm_Bit_IN [1]	1 bit	Per zone: When the object receives
73	KNX.MC.Zone_Major_Alarm_Bit_IN [2]		"1", the KNX Master Control under- stands it as an alarm input signal
74	KNX.MC.Zone_Major_Alarm_Bit_IN [3]		and sends "1" on the object
75	KNX.MC.Zone_Major_Alarm_Bit_IN [4]		KNX.MC.Zone_Security_High_Prio
76	KNX.MC.Zone_Major_Alarm_Bit_IN [5]		_Bit_OUT.
77	KNX.MC.Zone_Major_Alarm_Bit_IN [6]		
78	KNX.MC.Zone_Major_Alarm_Bit_IN [7]		
79	KNX.MC.Zone_Major_Alarm_Bit_IN [8]		
80	KNX.MC.Zone_Major_Alarm_Bit_IN [9]		
81	KNX.MC.Zone_Major_Alarm_Bit_IN [10]		
82	KNX.MC.Zone_Major_Alarm_Bit_IN [11]		
83	KNX.MC.Zone_Major_Alarm_Bit_IN [12]		
84	KNX.MC.Zone_Major_Alarm_Bit_IN [13]		
85	KNX.MC.Zone_Major_Alarm_Bit_IN [14]		



No.	Object name	Model	Description
86	KNX.MC.Zone_Major_Alarm_Bit_IN [15]		
87	KNX.MC.Zone_Major_Alarm_Bit_IN [16]		
88	KNX.MC.Zone_Position_UP_DOWN_1Byte_IN [1]	1 byte	Per zone: When the object receives
89	KNX.MC.Zone_Position_UP_DOWN_1Byte_IN [2]		a telegram with a value between 0 and 255, the object sends
90	KNX.MC.Zone_Position_UP_DOWN_1Byte_IN [3]		KNX.MC.Zone_Position_UP_DOWN
91	KNX.MC.Zone_Position_UP_DOWN_1Byte_IN [4]		_1Byte_OUT, the same value, as if
92	KNX.MC.Zone_Position_UP_DOWN_1Byte_IN [5]		no function with a higher priority is active.
93	KNX.MC.Zone_Position_UP_DOWN_1Byte_IN [6]		
94	KNX.MC.Zone_Position_UP_DOWN_1Byte_IN [7]		
95	KNX.MC.Zone_Position_UP_DOWN_1Byte_IN [8]		
96	KNX.MC.Zone_Position_UP_DOWN_1Byte_IN [9]		
97	KNX.MC.Zone_Position_UP_DOWN_1Byte_IN [10]		
98	KNX.MC.Zone_Position_UP_DOWN_1Byte_IN [11]		
99	KNX.MC.Zone_Position_UP_DOWN_1Byte_IN [12]		
100	KNX.MC.Zone_Position_UP_DOWN_1Byte_IN [13]		
101	KNX.MC.Zone_Position_UP_DOWN_1Byte_IN [14]		
102	KNX.MC.Zone_Position_UP_DOWN_1Byte_IN [15]		
103	KNX.MC.Zone_Position_UP_DOWN_1Byte_IN [16]		
104	KNX.MC.Zone_Position_UP_DOWN_1Byte_OUT [1]	1 byte	Per zone: The object sends a tele-
105	KNX.MC.Zone_Position_UP_DOWN_1Byte_OUT [2]		gram with a value between 0 to 255 (e.g. position).
106	KNX.MC.Zone_Position_UP_DOWN_1Byte_OUT [3]		(e.g. position).
107	KNX.MC.Zone_Position_UP_DOWN_1Byte_OUT [4]		
108	KNX.MC.Zone_Position_UP_DOWN_1Byte_OUT [5]		
109	KNX.MC.Zone_Position_UP_DOWN_1Byte_OUT [6]		
110	KNX.MC.Zone_Position_UP_DOWN_1Byte_OUT [7]		
111	KNX.MC.Zone_Position_UP_DOWN_1Byte_OUT [8]		
112	KNX.MC.Zone_Position_UP_DOWN_1Byte_OUT [9]		
113	KNX.MC.Zone_Position_UP_DOWN_1Byte_OUT [10]		
114	KNX.MC.Zone_Position_UP_DOWN_1Byte_OUT [11]		
115	KNX.MC.Zone_Position_UP_DOWN_1Byte_OUT [12]		
116	KNX.MC.Zone_Position_UP_DOWN_1Byte_OUT [13]		
117	KNX.MC.Zone_Position_UP_DOWN_1Byte_OUT [14]		
118	KNX.MC.Zone_Position_UP_DOWN_1Byte_OUT [15]		
119	KNX.MC.Zone_Position_UP_DOWN_1Byte_OUT [16]		
120	KNX.MC.Zone_Security_High_Prio_Bit_OUT [1]	1 bit	Per zone: when an alarm function
121	KNX.MC.Zone_Security_High_Prio_Bit_OUT [2]		(e.g. wind) is active, the objects
122	KNX.MC.Zone_Security_High_Prio_Bit_OUT [3]		send "1".



No.	Object name	Model	Description
123	KNX.MC.Zone_Security_High_Prio_Bit_OUT [4]		
124	KNX.MC.Zone_Security_High_Prio_Bit_OUT [5]		
125	KNX.MC.Zone_Security_High_Prio_Bit_OUT [6]		
126	KNX.MC.Zone_Security_High_Prio_Bit_OUT [7]		
127	KNX.MC.Zone_Security_High_Prio_Bit_OUT [8]		
128	KNX.MC.Zone_Security_High_Prio_Bit_OUT [9]		
129	KNX.MC.Zone_Security_High_Prio_Bit_OUT [10]		
130	KNX.MC.Zone_Security_High_Prio_Bit_OUT [11]		
131	KNX.MC.Zone_Security_High_Prio_Bit_OUT [12]		
132	KNX.MC.Zone_Security_High_Prio_Bit_OUT [13]		
133	KNX.MC.Zone_Security_High_Prio_Bit_OUT [14]		
134	KNX.MC.Zone_Security_High_Prio_Bit_OUT [15]		
135	KNX.MC.Zone_Security_High_Prio_Bit_OUT [16]		
136	KNX.MC.Zone_Slat_Position_1Byte_IN [1]	1 byte	Per zone: if the object receives a
137	KNX.MC.Zone_Slat_Position_1Byte_IN [2]		telegram with the value between 0 and 255 (e.g. slats angle), the object
138	KNX.MC.Zone_Slat_Position_1Byte_IN [3]		KNX.MC.Zone_Slat_Position_1Byte
139	KNX.MC.Zone_Slat_Position_1Byte_IN [4]		_OUT sends this value when no
140	KNX.MC.Zone_Slat_Position_1Byte_IN [5]		function with a higher priority is active.
141	KNX.MC.Zone_Slat_Position_1Byte_IN [6]		
142	KNX.MC.Zone_Slat_Position_1Byte_IN [7]		
143	KNX.MC.Zone_Slat_Position_1Byte_IN [8]		
144	KNX.MC.Zone_Slat_Position_1Byte_IN [9]		
145	KNX.MC.Zone_Slat_Position_1Byte_IN [10]		
146	KNX.MC.Zone_Slat_Position_1Byte_IN [11]		
147	KNX.MC.Zone_Slat_Position_1Byte_IN [12]		
148	KNX.MC.Zone_Slat_Position_1Byte_IN [13]		
149	KNX.MC.Zone_Slat_Position_1Byte_IN [14]		
150	KNX.MC.Zone_Slat_Position_1Byte_IN [15]		
151	KNX.MC.Zone_Slat_Position_1Byte_IN [16]		
152	KNX.MC.Zone_Slat_Position_1Byte_OUT [1]	1 byte	Per zone: The object sends a tele-
153	KNX.MC.Zone_Slat_Position_1Byte_OUT [2]		gram with a value between 0 and 255 (e.g. slats angle).
154	KNX.MC.Zone_Slat_Position_1Byte_OUT [3]		233 (e.g. siats angle).
155	KNX.MC.Zone_Slat_Position_1Byte_OUT [4]		
156	KNX.MC.Zone_Slat_Position_1Byte_OUT [5]		
157	KNX.MC.Zone_Slat_Position_1Byte_OUT [6]		
158	KNX.MC.Zone_Slat_Position_1Byte_OUT [7]		
159	KNX.MC.Zone_Slat_Position_1Byte_OUT [8]		
160	KNX.MC.Zone_Slat_Position_1Byte_OUT [9]		
161	KNX.MC.Zone_Slat_Position_1Byte_OUT [10]		
162	KNX.MC.Zone_Slat_Position_1Byte_OUT [11]		



No.	Object name	Model	Description
163	KNX.MC.Zone_Slat_Position_1Byte_OUT [12]		
164	KNX.MC.Zone_Slat_Position_1Byte_OUT [13]		
165	KNX.MC.Zone_Slat_Position_1Byte_OUT [14]		
166	KNX.MC.Zone_Slat_Position_1Byte_OUT [15]		
167	KNX.MC.Zone_Slat_Position_1Byte_OUT [16]		
168	KNX.MC.Zone_Sun_Automatic_Bit_IN [1]	1 bit	Per zone: If the object receives "1",
169	KNX.MC.Zone_Sun_Automatic_Bit_IN [2]		the sun function is activated. If the object receives "0", the sun function
170	KNX.MC.Zone_Sun_Automatic_Bit_IN [3]		is deactivated.
171	KNX.MC.Zone_Sun_Automatic_Bit_IN [4]		
172	KNX.MC.Zone_Sun_Automatic_Bit_IN [5]		
173	KNX.MC.Zone_Sun_Automatic_Bit_IN [6]		
174	KNX.MC.Zone_Sun_Automatic_Bit_IN [7]		
175	KNX.MC.Zone_Sun_Automatic_Bit_IN [8]		
176	KNX.MC.Zone_Sun_Automatic_Bit_IN [9]		
177	KNX.MC.Zone_Sun_Automatic_Bit_IN [10]		
178	KNX.MC.Zone_Sun_Automatic_Bit_IN [11]		
179	KNX.MC.Zone_Sun_Automatic_Bit_IN [12]		
180	KNX.MC.Zone_Sun_Automatic_Bit_IN [13]		
181	KNX.MC.Zone_Sun_Automatic_Bit_IN [14]		
182	KNX.MC.Zone_Sun_Automatic_Bit_IN [15]		
183	KNX.MC.Zone_Sun_Automatic_Bit_IN [16]		

7. Changing the IP address

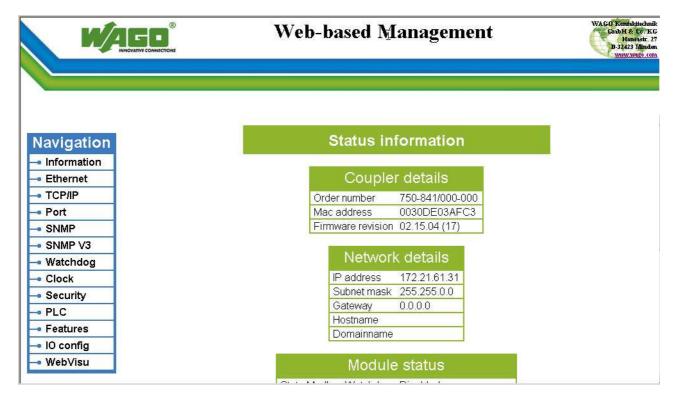
Below chapter will describe how they change the opposed address IP the KNX Master Control.

7.1. Preparation

To change the IP address of the animeo KNX Master Control, you need a web browser (e.g. Microsoft's Internet Explorer) and a connection to the network from a PC to the animeo KNX Master Control. The network connection can be a direct connection between PC and animeo KNX Master Control via a Crossover cable (included with delivery). Alternatively, it can also be a network connection whereby the PC and the animeo KNX Master Control are connected via the network (e.g. intranet).

7.2. Carrying out the IP address change

Open your web browser and enter the corresponding IP address of the animeo KNX Master Control (factory setting 192.168.0.2).

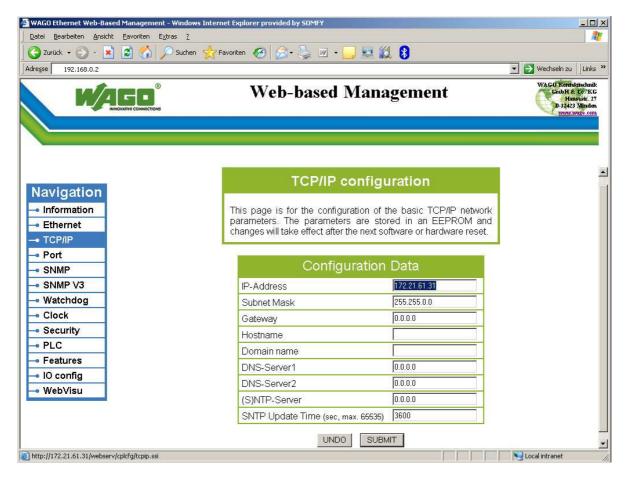


Now change to "TCP/IP" in the left hand navigation bar.





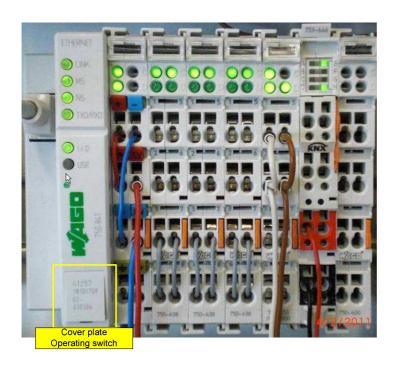
After clicking, a new menu window appears which requests you to enter a user name and password. Please enter as user name **admin** (small letters, not capitals) and as password **wago** (small letters) and confirm with "OK".

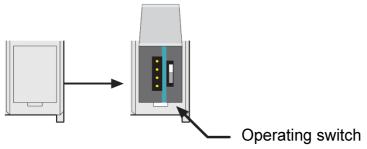


Now enter in the field "Configuration Data" under IP Address, the new desired IP address and likewise the subnet mask and confirm the entry with "Submit".



7.3. New start





To activate the set IP address, a reset must be carried out on the animeo KNX Master Control. To do this, open the cover plate and press down the operation switch briefly using a screw driver. During pressing down, the LED's for "I/O" and "USR" shine red.

Now, discontinue pressing the operating switch and the LED "I/O" begins to blink. After a short time, the blinking stops and the LED's, "LINK", "MS", "NS", "TXD/RXD" and "I/O" light up green (see also chapter 1.5.1.1).

The animeo KNX Master Control has been successfully started and has taken on the new IP address.

8. Technical data

CHARACTERISTICS:

W8 Ref. 1860193	W2 Ref. 1860187
24 V DC	24 V DC
2.4 W@24V DC	2.2 W@24V DC
500 mA@24V DC	500 mA@24V DC
0°C to 55°C	0°C to 55°C
35 %	85 %
CC-ABS polycarbonate	CC-ABS polycarbonate
180 x 254 x 110 mm	180 x 182 x 110 mm
P 20	IP 20
II	III
www.somfy.com/CE	www.somfy.com/CE
	24 V DC 2.4 W@24V DC 500 mA@24V DC 0°C to 55°C 85 % CC-ABS polycarbonate 80 x 254 x 110 mm P 20

The KNX Master Control is an electronically-operated, independently-mounted control.

- Class A control function
- Type 1 action
- Pollution degree: 2
- Type X attachment
- Method of attachment for non-detachable cords: screwless spring terminal



Contact 9.

9.1. Internet

www.somfy.com/DFS/manuals

Addresses 9.2.

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