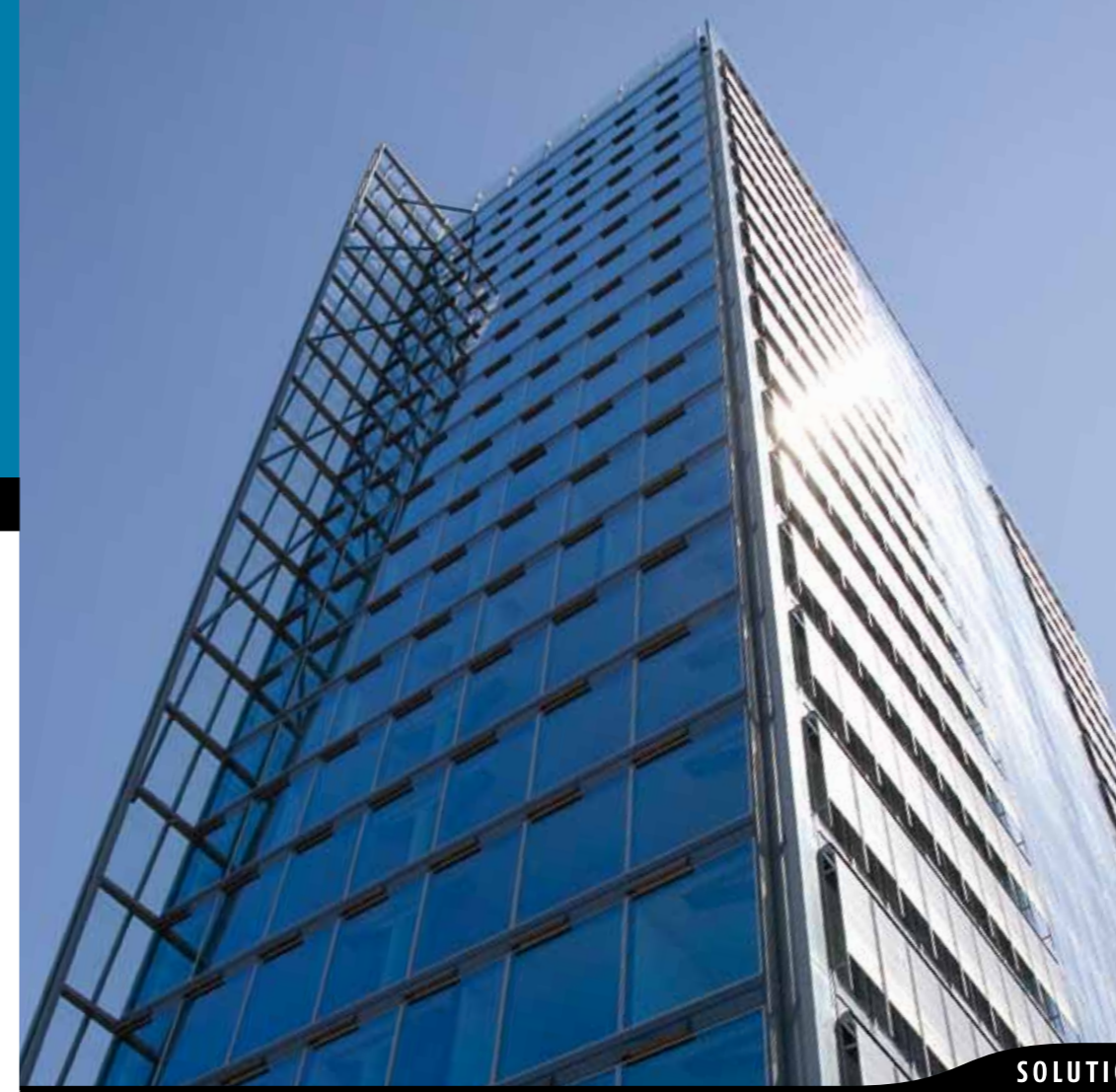


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SOLUTIONS FOR BIOCLIMATIC FAÇADES



SOLUTIONS FOR BIOCLIMATIC FAÇADES

animeo KNX

Multi-faceted façade management through
intelligent sun protection controlling



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About Somfy

Founded in 1960 in Cluses (France), Somfy has invented, designed and created controls and motors for openings and closures in residential and commercial buildings, using high-tech motorisation and automation systems. The Somfy enterprise – “Société d’Outillage et de Mécanique du Faucigny” is listed on the Paris Stock Exchange and operates internationally.

Today, Somfy has 68 subsidiaries in 54 countries with a total of around 7.100 employees.

Somfy is sensitive to environmental issues and operates a strategy of anticipating comfort and energy cost reductions for buildings of all types.

Dynamic Insulation™, daylight management and natural ventilation are Somfy’s three unique areas of expertise dedicated to the development of bioclimatic façades: with our automatic controls, façades become bioclimatic, solar protections react to weather variations offering occupants greater comfort while saving energy.



Somfy KNX – All advantages at a glance

The following aspects supporting animeo KNX Sun protection controller by Somfy:

* Wind direction measurement:

Only a façade is affected by wind speed, depending on wind direction, the blinds move up to the security position. All other façade parts remain shaded. In case of storm the blinds of all façades move up.

* Daylight management:

animeo KNX guarantees optimum lighting management, glare protection, and better viewing comfort. This saves energy spent on artificial lighting and improves the lighting conditions in the room.

* Energy savings through:

- Solar gains from the sun in winter with absence of the user.
- Diminished slat-turn angles and reduced cooling requirements in summer.
- Intelligent wind protection only controlled from the wind affected façades. With all other façade zones, the blinds remain in the sun protection position and thus reduce the load for cooling.

* Functions spanning across different trades:

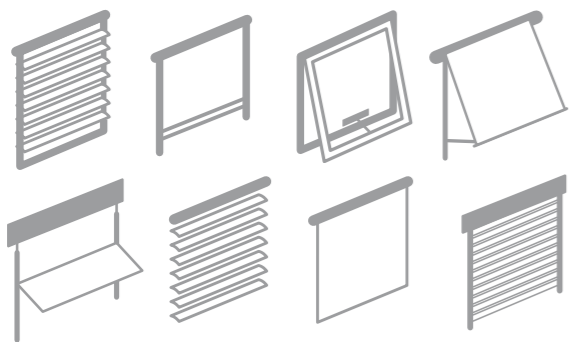
Other applications like lighting, heating, cooling, can be integrated.

* High user comfort:

All blinds can be operated locally. The user is able to counter-control the automatic function.

* More functions:

- Individual sun protection controlling per façade and thus, improved working conditions in every room.
- Sensors are multi useable.
- All types of blinds and façade elements can be controlled. 16 different blinds and façade elements are available.



Wind speed Wind direction



Comfortable control



Compatible with all installation environments



Operating Software



Project Examples: Solutions in use

Daylight management for maximum energy savings

„One Hyde Park is regarded as the most prestigious residential development undertaken in Europe over recent months. As part of the extensive building and entertainment control solutions used throughout the property, the specification called for a sophisticated solar blind control system to ensure occupier comfort and stringent energy management requirements were met.“

(Jeremy Aston, System Integrator, Reality Logic)



One Hyde Park, London, UK, 2011

A critical part of this solution is the motor control provided by Somfy KNX products. Reality Logic were responsible for commissioning a KNX solution consisting of several hundred Motor Controllers controlling over 2000 individual interstitial solar blinds throughout 84 apartments. In addition, Somfy KNX hardware provide environmental data via roof mounted weather stations.

The Motor Controllers are distributed on each floor of each of the four pavilions that make up the development. All the KNX traffic is marshalled through KNX-IP gateways and tightly integrated with the visualisation front end. Binary inputs on the Motor Controllers were also configured to allow simple and robust integration with the lighting control system so that occupiers can override automated processes.

The Motor Controllers have been configured so that solar gain through the glass is effectively managed. As part of this, each of the 16 façades have been individually configured for solar path tracking and daylight management.

The sophistication of the mathematical representation of the façades in the KNX system is such that the 3D models used to test and prove the system match real world situations to within one minute.

Although the system is highly sophisticated, the commissioning process was relatively straightforward. The Somfy KNX hardware has proven to be robust and consistent in its operation meaning that we were easily able to guide the other contractors to issues in wiring or blinds where problems were encountered. Once the solar model had been refined we had a very high level of confidence in its accuracy and this was proven by the witnessing of the whole system being undertaken in the minimum of time yet to the complete satisfaction of the consultants. The system was completed to time and budget and a major part of this success is down to the choice of Somfy KNX hardware at the heart of the system.



Technical Data

- 2.523 pc. interior roller blinds
- 721 pc. animeo KNX Motor Controller 4 AC
- 16 pc. KNX Building Controller AS 315N

Automatic interior sun protection

„In order to provide the user of the building with an optimum in operative easiness and energy savings, it was necessary to work hand in hand with the companies who were directly involved with sun protection technology. Here, Hella, Elin and Somfy performed professional planning work through intensive consultation, taking into account the individual conditions on site and carrying out diverse tests before starting up. Doing it this way meant that the site managers were supplied with an economical and tailor-made solution, which from a technical standpoint, does much more than just fulfill requirements.“

(Werner Heindl, engineer, Electrical Planning Enterprise Elin GmbH)

The Viennese TownTown area with its 21 buildings totaling around 80,000 m², is one of the top office complexes in the heart of Vienna – and an example of sustainable building methods. By using construction elements activation, cold and warmth are fed to all parts of the building through pipes. Together with the building's insulation, a projected cost savings of up to 40% had been targeted. In 2009, TownTown was awarded with the silver prize for sustainable building technology (DGNB).

An important component of the sustainability concept is the intelligent sun protection system. With its intelligent controlling, it contributes to cooling and heating rooms naturally. To find a tailor-made offer for the operator, Somfy works in close collaboration with planners, architects, and electrical planners. Through working together, solutions are developed which at the same time, take into account all the requirements of all those involved in the building project.

In test phases, the move-strategy which can best guarantee an efficient sun protection is analysed and at the same time, keeping actual moves at a possible minimum. The reduction in moves of the inside sun protection contributes to guaranteeing a long life expectancy of the roller blind mechanics and avoiding disturbances to the user through noise.

For the high-rise, „Company Building 21“ as a part of the third construction phase, 2000 Somfy low-voltage motors J 101 installed for motorised inside sun protection.

To control sun protection, the animeo KNX technology was used. Any desired motor group can be formed and defined over the KNX wire to design the sun protection for all areas of the building as individually and efficiently as possible. This way, costly KNX operating points are not needed.



Business Park TownTown, Vienna, Austria, 2011

Technical Data

- 2.000 pc. interior Venetian blinds (24 V)
- 520 pc. animeo KNX Motor Controller 4 DC
- 260 pc. animeo Power Supply DC 4,5 A
- Integration of conventional local push buttons over binary inputs on the animeo KNX Motor Controller 4 DC

Flexible museum illumination

„ULC has been working with Somfy Netherlands for quite some time now and the reasons are: good quality products, a wide product range, solutions right from top to bottom and not forgetting of course, highly qualified personnel.“

(Leo Verstoep, Senior Planning Manager, ULC)



Hermitage Museum, Amsterdam, Netherlands, 2010

Dignity and modern technology combined

“The Amsterdam Heritage, the former ‘Amstelhof’, has been given a new lease on life in becoming a museum. Originally build in 1881, the building was a shelter for elderly women and has been recently completely rebuilt. Without damaging its characteristics, the architects not only had to draw a beautiful and functional building, but it also had to be energy efficient, as a real ‘child’ of its days. With these pre-requisites in mind, ULC Elektra in Utrecht installed modern Somfy technology.”

The essence of automated solar protection

“The importance of an efficient use of energy is commonly accepted. Of course, this has its consequences for designers of utility buildings and houses. It also has its influence on the revitalization of existing buildings. Recent research has made clear that a lot of building users are not aware of the fact that automated sun protection saves energy costs.

Automated solar protection means: the use of the warmth of the sun depending on the need of cooling and or heating. Somfy is constantly active to bring this to the attention of constructors and designers.”

Hermitage requires differentiation

“A museum demands a certain amount of light, which depends on the kind of exposition. The automation of the solar protection has to be flexible. ULC Elektra has involved the CBS department of Somfy to find a solution together.”

ULC Elektra has a lot of experience in designing and installing electro technical installations and Somfy Netherlands too, the market leader in the Netherlands when it comes to project controls for solar protection.

To fulfill the demands of the Hermitage, Somfy and ULC decided to chose for animeo KNX/EIB, an advanced façade solution. Nearly five hundred screens and interior window sun protections were installed. In the larger exhibition rooms control of the sun blinds is realized via touch panels.

As both central and individual controlling is possible, the building controller can measure out each demand for any number of lights and the amount of light can also be determined for smaller, individual spaces.”



Technical Data

- 140 pc. animeo KNX Motor Controller 4 AC
- 2 pc. KNX Building Controller AS 315N
- 443 pc. external screens and interior blinds



Product overview

KNX sun protection controller

KNX Central Control


1-16 Façade areas



Sensor station:
Wind direction sensor
saves several
wind speed sensors



Master Control W2 (2 x )

Master Control W8
(8 x )



KNX Operating software:
System integration made easy through user software

KNX BUS

KNX Central Control

1-3 Façade areas



Combined sensor



Building Controller AS 315 N



Inside temperature sensor

Pluggable radio modules

RTS Radio Receiver



KNX-RTS Radio Receiver

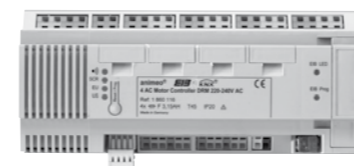


Multi functional Motor Controlles for every installation environment

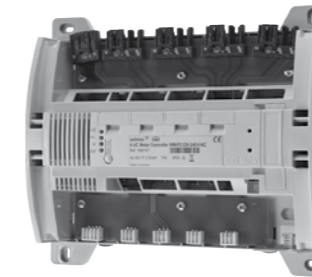
Wall mounted
for 230 V-motors



DIN rail
for 230 V-motors



Plug connectors
for 230 V-motors



Wall mounted
for 24 V-motors



Wall mounted for 24 V-motors
with Encoder technology



Free choice of local control for maximum user comfort

Push button input



Universal binary input



KNX



Local radio control or radio control via KNX



A complete service all around your project.
From planning right through to maintenance.

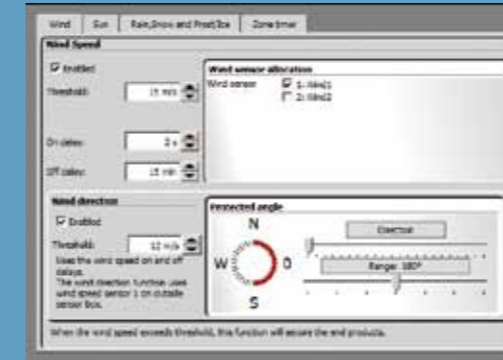
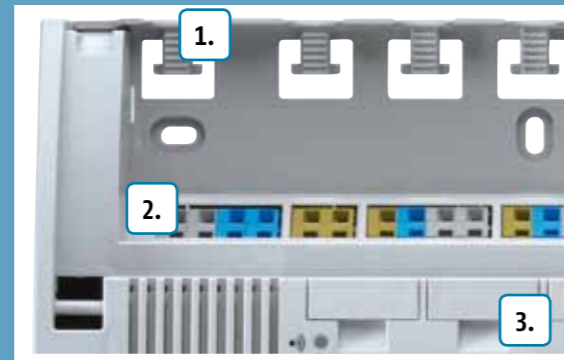
„Somfy as your partner“

Cost-optimised and comfort-
optimised preparation

Quick and effective installation

Trouble-free programming of
sun protection controllers

Smooth and time-optimised operation



Planning

Installation

Commissioning

Operation

Somfy provides you with tailor-made solutions. In planning consultations we can determine the specific needs for your project. What you get from us is exactly what you need – no more and no less. You don't get annoyed later because of over-dimensional technology, or having to fit additional and costly equipment because vital components of the sun protection technology are missing.

Quick installation and connection of the Motor Controllers through

1. Integrated strain relief.
More safety without additional expenditure.
2. Spring tension terminals and double terminals.
Time savings through not having a junction box.
3. Generous design.
More space for the connection of single cables.

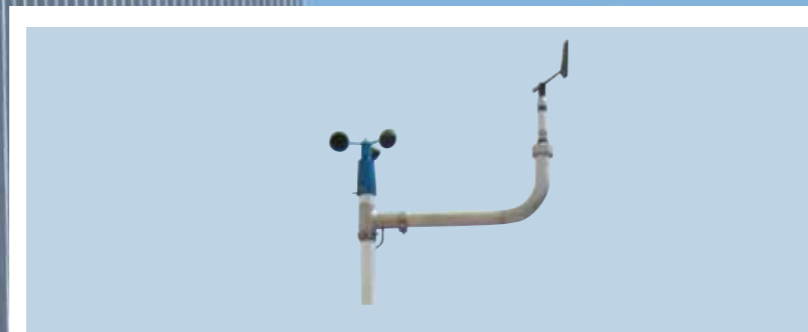
- Self-explanatory, intuitive animeo KNX Operating software allows the facility manager a non-dependent start-up step by step. Usual ETS software is not necessary for parameter changes.
- Sample, pattern projects can be established through Somfy support to simplify programming.
- Supported by a Somfy employee on site.

- With maintenance work (e. g. window cleaning) blocking individual façades is possible through the Operating Software.
- State display of the active functions. It is always clear which command is currently controlling the sun protection system.
- animeo KNX Operating software allows changes in settings without using the ETS software usual for KNX Bus systems. They can be made directly in the animeo KNX Operating software.
- Monitoring of all weather data for energy optimisation.

All product solutions on KNX basis

KNX Central Control

1 – 16 façade zones incl. Operating Software – parameter adaptation without ETS



Product advantages

- The weather station (IP 65) is able to define 2 x (W2) or 8 x (W8) wind speed, wind direction, rain, snow, frost, ice, outside temperature and 8x sun zones.
- Time and date are sent to the KNX bus.
- Indoor temperature values can be defined and assigned to zones to gain maximum energy savings.
- Weekly and annual timers are also included and can be integrated freely on the KNX bus.
- Automatic functions can be allocated by the user selectively and are also counter-controllable.
- Monitoring of all weather data for energy optimization.
- All real values can be sent to the KNX bus and visualized at the same time via the graphic Windows user interface on the PC.
- The states of the façades can be called up from memory and the set values, as long as passwords have been given, can be changed in the menu by the user without prior ETS knowledge.

Further product features

- All safety functions (wind speed, wind direction, rain, snow, frost, ice, outside temperature) are sent cyclically on the bus.
- Using one wind direction sensor, multiple single wind speed sensors on the façade can be avoided.
- For each of the 16 façades, individual response and delay times can be parametered for all available functions.
- Slat tracking for each zone depending on the sun's elevation and azimuth can be parametered in the user software.
- The entire parametering of the sun protection control centre is done over a user-friendly graphic Windows interface.
- The single façades can be controlled over the operating user interface.
- The direct move to a freely determinable position is possible.
- For maintenance purposes it is possible to block single façades or the complete building over the user interface.

KNX Master Controller W2 / W8



Façade Management provides optimum light and climatic conditions in residential and functional buildings. The environmental factors are measured with a weather station (Outside sensor box) and handed on to the KNX bus.



KNX Master Controller W2

1 860 187

Measurements (WxHxD):	180 x 182 x 110 mm
Degree of protection:	IP 20
Protection class:	III
Operating voltage:	24 V DC
Environment temperature:	0 °C to +55 °C

For wall mounted installation. For 2 wind speed sensors.


KNX Master Controller W8

1 860 193

Measurements (WxHxD):	180 x 254 x 110
Degree of protection:	IP 20
Protection class:	III
Operating voltage:	24 V DC
Environment temperature:	0 °C to +55 °C

For wall mounted installation. For 2 wind speed sensors.

Outside Sensor Box



The Outside Sensor Box is the interface between the weather station and the animeo KNX Master Control W2 / W8. All measurement values are evaluated here and sent to the animeo KNX Master Control W2 / W8. It requires an external 24 V AC / DC power supply.

Product advantages

- Convenient lightning protection – only two cables (power supply 24 V AC / DC and data cable) must be laid to the outside.


Further features

- All sensors incl. Outside Sensor Box can be fixed to the sensor station mast.
- Up to 8 sun sensors, 2 wind sensors, 1 wind direction sensor, 1 rain sensor, 1 outside temperature sensor as well as a DCF plug module can be connected to the Outside Sensor Box.

Outside Sensor Box	9 001 606
Measurements (WxHxD):	235 x 207 x 90 mm
Degree of protection:	IP 65
Protection class:	III
Operating voltage:	24 V AC / DC
Environment temperature:	-30 °C to +70 °C

For wall mounted installation.

animeo Power Supply DC




To supply the Outside Sensor Box (with heated sensors) and the animeo KNX Master Control W2 / W8.

animeo Power Supply DC	1 860 093
Measurements (WxHxD):	130 x 180 x 61 mm
Degree of protection:	IP 20
Protection class:	II
Operating voltage:	230 V AC
Output current:	2,5 A (switch-on duration 100 %) 4,5 A (switch-on duration 50 %: 3 mins on, 3 mins off


For wall mounted and DIN-rail installation.

Wind Sensor (not heated)



Wind Sensor (not heated)	9 001 608
Measurements (WxHxD):	Height 200 mm, ø 240 mm max. ø-mast: 48 mm
Degree of protection:	IP 65
Wiring recommendations:	2 x 0,8 mm

Heated Wind Sensor



Power supplied via Outside Sensor Box.

Windsensor (beheizt)	9 140 180
Measurements (WxHxD):	Height 190 mm, ø 240 mm max. ø-mast: 48 mm
Degree of protection:	IP 54
Wiring recommendations:	5 x 1,5 mm ²


Wind Direction Sensor



With high-quality bearing.

Wind Direction Sensor	9 013 807
Measurements:	Height 303 mm, Arrow length 515 mm, max. ø-mast: 48 mm
Degree of protection:	IP 54
Wiring recommendations:	2 x 1,5 mm


Outside Temperature Sensor



With solar radiation sensor shelter.

Outside Temperature Sensor	9 001 611
Measurements:	ø 115 x 150 mm
Degree of protection:	IP 65
Wiring recommendations:	2 x 0,8 mm


Rain Sensor



With direct 24 V supply over the Outside Sensor Box.

Rain Sensor	9 001 610
Measurements (WxHxD):	50 x 90 x 40 mm
Degree of protection:	IP 65
Wiring recommendations:	3 x 1,5 mm

Rain Sensor Ondeis




Power supply through the Outside Sensor Box.

Available Q4/2011

Rain Sensor Ondeis	9 016 344
Measurements (WxHxD):	115 x 100 x 85 mm
Degree of protection:	IP 44
Wiring recommendations:	3 x 1,5 mm

Sun Sensor



For direct connection to the Outside (Extension) Sensor Box.

Sun Sensor without mounting bracket	9 050 100
Measurements (WxHxD):	34 x 88 x 47 mm
Degree of protection:	IP 43
Protection class:	III
Wiring recommendations:	2 x 0,8 mm
Angle position:	150°

Mounting bracket for Sun Sensor	9 127 888
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Sensor Station



The Sensor Station consists of an aluminium mast with pre-mounted and pre-wired Outside Sensor Box, 4 Sun Sensors, 1 Wind Sensor and 1 Outside Temperature Sensor. The Sensor Station can be equipped with additional sensors such as Sun Sensors and a Rain Sensor. Wall brackets included.

Measurements/mast height: 3200 mm

Sensor Station 9 013 726

Sensor Station without sensors

Sensor Station without sensors and Outside Sensor Box

Sensor Station without sensors 9 014 301

Sensor Station Extended



The Sensor Station consists of an aluminium mast with pre-mounted and pre-wired Outside Sensor Box, 8 sun sensors, 1 wind sensor, 1 wind direction sensor, rain sensor and -outside temperature sensor. Wall brackets included.

Measurements/mast height: 3200 mm

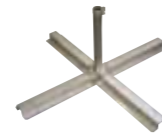
Sensor Station extended 9 013 727

Sensor Station Extended without sensors

Sensor Station Extended without sensors and Outside Sensor Box. Incl. accessories for wind direction sensor.

Sensor Station Extended without sensors 9 014 302

Roof Mounting



For the installation of Sensor Station on roof. Stainless steel.

Roof Mounting 9 014 300

Strain connection for roof mounting only 9 014 303

Lightning protection



To protect the controls inside. Is used in combination with the Outside Sensor Box.

Electronic lightning protection RS 485 9 001 630

Electronic lightning protection power supply 9 001 629



KNX Central Control

1 – 3 façade zones with integrated user interface



Product advantages

- Façade automation system for 3 façades.
- Controls sun protection and window systems ranging from a single-family house to a large building.
- Provides optimum light and climate inside the building.
- The connected weather station communicates the following information to the KNX Combined sensor AS 315 N: Brightness from east, south and west, dusk, wind speed, rain, outside temperature, time and date via integrated DCF-77 receiver (radio controlled clock, Frankfurt).
- Wiring advantages: only one cable (2 x 2 x 0,8 mm) needs to be laid from the AS 315 N to the weather station.
- An optional Inside Temperature Sensor (e. g. for winter garden) can be connected.
- The KNX Combined sensor AS 315 N evaluates and processes all weather signals so that the sun protection and window system can be controlled user and energy-oriented.
- The most important functions can be set over the ETS as well as directly settable over the display on the AS 315 N.

Further product features

- The weather station is monitored continuously through the AS 315 N.
- All façades can be parametered independent from each other.
- An air ventilation function is parameterable.
- All real-time values are shown in the display and can be sent to the KNX Bus.
- Optimum switching between automatic and manual operation is enabled over the timer-switch channel of the AS 315 N in combination with the animeo KNX Motor Controller for user comfort and energy savings.

KNX Central Control, 1 – 3 façade zones

KNX Combined sensor AS 315 N



Weather Station AS 315 N

Product advantages

- More precise sensor evaluation.
- Wiring made easy as all sensors are integrated in the device.
- Monitored communication between Building Controller and Compact Sensor.

Further features

- Integrated sensor.s
- Three Sun Sensors in fixed direction 90 ° (east), 180 ° (south) and 270 ° (west.)
- Wind Speed Sensor without moving parts.
- Outside Temperature Sensor.
- Heated Rain Sensor.
- DCF Receiver for time synchronisation.
- Bracket for wall or post mounting.

The complete weather station in a small format. 3 x sun, 1 x wind, 1 x outside, temperature, 1 x rain, DCF receiver.
Additional requirements: 24 V DC power supply.

KNX Combined sensor AS 315 N

1 860 068

Measurements (WxHxD): 140 x 90 x 64 mm (8 TE)
Degree of protection: IP 20
Protection class: II
Operating voltage: 230 V AC
Environment temperature: -5 °C to +45 °C

For DIN-rail installation.

Wetterstation

9 015 079

Measurements (WxHxD): 96 x 77 x 118 mm
Degree of protection: IP 44
Protection class: III
Operating voltage: 230 V AC
Environment temperature: -25 °C to +50 °C

For DIN-rail installation.

Kit AS 315 N + Weather Station

1 860 069

Delivery incl. 1 x KNX Combined sensor AS 315 N + 1 x Weather Station

Inside Temperature Sensor



For interior temperature controlling and air ventilation. Ideal for winter gardens. To connect to the AS 315 N.

Inside Temperature Sensor

9 001 461

Measurements (WxHxD): 84 x 50 x 32 mm
Degree of protection: IP 20
Protection class: II

For wall mounted installation.



Product advantages

- Time-saving through friendly mounting; e. g. spring connectors and tension relief through cable ties.
- Cost savings: Up to 8 local push button inputs on the Motor Controller device can be used as universal KNX binary inputs so that e. g. window contacts, room thermostats or presence detectors can be connected. With conventional push buttons, also lighting actuators can be controlled and dimmed.
- User-friendly and intuitive parameter settings in the ETS software.
- Intelligent switching between manual and automatic operation to guarantee excellent user-friendliness and energy savings.
- Extendability: Extendable at any time with the animeo RTS radio module. Without any additional wiring investment, 4 motors can be controlled individually or in group per radio using the Somfy RTS Technology
- **New:** Through the animeo KNX-RTS Radio Receiver (Ref. 1 860 191) radio signals can be linked to the KNX-Bus.

Further product features

- Position feedback per motor output during movement and when reaching the top and bottom end position.
- Two different safety positions freely definable for each individual motor output.
- Safety position after mains voltage return freely definable.
- Automatic cascading of the outputs with mains voltage return and Bus safety function to minimise current peaks.
- Each motor output is protected by an individual fuse.
- The device can be used "out of the box", without necessary programming with the ETS software.
- Mix-systems: In contrast to Motor Controllers based on the Somfy Controlling Technology, with KNX, different motor types can be connected to one Motor Controlling device (e. g. for Venetian blinds, screens, windows).
- Advanced operating mode: Greater user comfort through local disabling of non-security commands (e. g. sun) as soon as local operation is assigned. At a defined time, the system switches to automatic again.
- Radio extendability for devices with this symbol:



KNX 4 AC Motor Controller



Product advantages

- Cost savings through use of **8 freely-definable binary inputs**.
- Upgradable for local operation per radio or infrared.

Further features

- Easy-accessible safety fuse per output.

For roller shutters, screens, exterior Venetian blinds and windows. For the controlling of 4 x 230 V AC motors.

Degree of protection:	IP 20
Protection class:	II
Operating voltage:	230 V AC
Environment temperature:	0°C to +45°C
Output voltage:	230 V AC
Max. current consumption (motor)	max. 3,15 A per output

KNX 4 AC Motor Controller WM	1 860 114
Measurements (WxHxD):	255 x 180 x 61 mm

For wall mounted installation.

KNX 4 AC Motor Controller DRM	1 860 116
Measurements (WxHxD):	90 x 210 x 61 mm

For DIN rail installation.

KNX 4 AC Motor Controller WM-P2



- Upgradable for local operation per radio.
- Clear, self-explanatory ETS index cards.

Further features

- Easy-accessible safety fuse per output.

For roller shutters, screens, exterior Venetian blinds and windows. For the controlling of 4 x 230 V AC motors.

Product advantages

- For Wago Winsta® plug connectors
- Cost savings through use of **8 freely-definable binary inputs**.

KNX 4 AC Motor Controller WM-P2	1 860 197
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Degree of protection:	IP 20
Protection class:	II
Operating voltage:	230 V AC
Environment temperature:	0°C bis +45°C
Output voltage:	230 V AC
Max. current consumption (motor)	max. 3,15 A pro Ausgang

For wall mounted installation.

KNX 4 DC Motor Controller



- Clear, self-explanatory ETS index cards.
- Settable slats turning speed for optimum user ergonomics.

Further features

- Outputs protected through -current detection.

For interior blinds, interior Venetian blinds and windows. For the controlling of 4 x 24 V DC motors. External 24 V DC power supply required (see accessories).

Product advantages

- Cost savings through use of **8 freely-definable binary inputs**.
- Upgradable for local operation per radio.

KNX 4 DC Motor Controller WM	1 860 128
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Measurements (WxHxD):	255 x 180 x 61 mm
Degree of protection:	IP 20
Protection class:	III
Operating voltage:	24 V DC
Environment temperature:	0°C to +45°C
Output voltage:	24 V DC
Max. current consumption (motor):	max. 2,1 A per output

For wall mounted installation.

KNX 4 DC/DC-E Motor Controller



- An exact positioning of the Venetian blind.
- Upgradable for local operation per radio.
- Local setting of intermediate position and user ergonomics.
- Settable slats-turning speed for optimum user ergonomics.
- Clear, self-explanatory ETS index cards.

Further features

- Outputs protected through current identification.

For interior blinds, interior Venetian blinds. For the controlling of 4 x 24 V DC or DC-E Somfy Encoder Motors from the "Somfy Concept 25" series.

Product advantages

- Easy installation: integrated 230 V AC power supply.
- Cost savings through use of **8 freely-definable binary inputs**.
- Especially precise positioning of the slats in combination with the Somfy DC Encoder Motor and the Somfy CTS winding system.

KNX 4 DC/DC-E Motor Controller WM	1 860 127
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Measurements (WxHxD):	255 x 180 x 61 mm
Degree of protection:	IP 20
Protection class:	II
Operating voltage:	230 V AC
Environment temperature:	0°C to +45°C
Output voltage:	24 V DC
Max. current consumption (motor):	max. 0,5 A per output

For wall mounted installation.



RTS Radio module



Receiver for retrofitting KNX 4 AC, 4 DC or 4 DC/DCE Motor Controllers. Directly pluggable in the Motor Controller.

RTS Radio module **1 860 105**
 Measurements (WxHxD): : 52 x 92 x 27 mm

KNX Radio Receiver RTS



- Selection of usual applications such as Venetian blinds, light switch / dimming, scene call-up.
- Comfortable operation using scroll wheel with Modulis handheld sender – ideal for Venetian blinds and dimming lights.

Further features

- Up to 5 universal radio channels.
- Application per radio channel freely definable (Venetian blinds, switching, turning Venetian blinds slowly).
- Up to 4 Somfy RTS sender addresses per radio channel can be learned in.

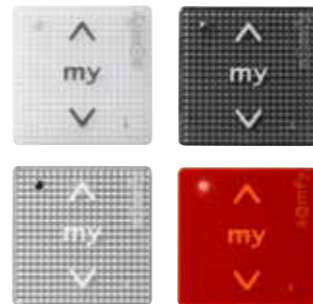
Radio receiver for forwarding the Somfy RTS radio signals on the KNX bus. *In use from July, 2011* for all animeo KNX Motor Controllers.

Product advantages

- Economic radio operation for KNX.
- No additional bus subscriber (physical address).
- Pluggable in existing animeo KNX Motor Controller.

KNX-RTS Radio Receiver **1 860 191**
 Measurements (WxHxD): 52 x 92 x 27 mm

Smoove 1 RTS



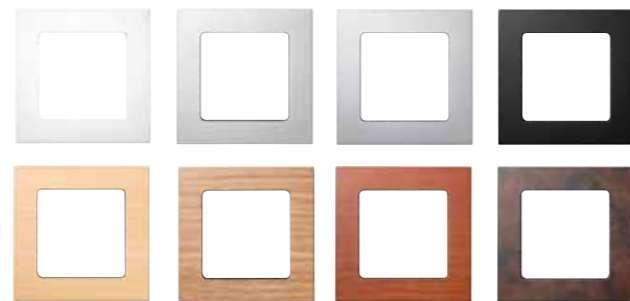
1channel on-wall radio transmitter for controlling the RTS radio module and RTS radio receiver

Measurements (W x H x D): 50 x 50 x 10 mm
 Operating voltage: 3 V (battery model CR 4 0)
 Operating temperature: 0°C to +60°C
 Environmental conditions: dry living rooms
 Protection class: IP 30
 Radio frequency: 433,42 MHz

Smoove 1 RTS
 – Pure Shine **1 810 873**
 – Black Shine **1 810 902**
 – Silver Shine **1 810 904**
 – Red Light **1 810 905**

Attachment disk for other switching programs **1 860 116**

Smoove Frame



Smoove Frames
 – Pure **9 015 022**
 – Black Silver **9 015 024**
 – Silver Mat **9 015 025**
 – Black **9 015 023**
 – Light Bamboo – wood optic **9 015 027**
 – Ambergris Bamboo – wood optic **9 015 026**
 – Cherry – wood optic **9 015 036**
 – Walnut – wood optic **9 015 037**
 – Double frame pure **9 015 038**

Telis 1 RTS



Telis 1 RTS Pure Telis 1 RTS Silver Telis 1 RTS Lounge Telis 1 RTS Patio

1-channel radio handheld transmitter, manual control of one or several motors per radio.

Telis 1 RTS = 1 channel: Single or group operation possible.

Telis 1 RTS Pure **1 810 630**
Telis 1 RTS Silver **1 810 637**
Telis 1 RTS Lounge **1 810 649**
Telis 1 RTS Patio **1 810 642**

Scope of delivery: Handheld transmitter including wall brackets and battery.

Telis 4 RTS



Telis 4 RTS Pure Telis 4 RTS Silver Telis 4 RTS Lounge Telis 4 RTS Patio

5-channel radio handheld transmitter, manual control of one or several motors per radio.

Telis 4 RTS = 5 channels: Single or group operation possible.

Telis 4 RTS Pure **1 810 631**
Telis 4 RTS Silver **1 810 638**
Telis 4 RTS Lounge **1 810 651**
Telis 4 RTS Patio **1 810 644**

Scope of delivery: Handheld transmitter including wall brackets and battery.

Telis 1 Modulis RTS



Telis 1 Modulis RTS Pure Telis 1 Modulis RTS Silver Telis 1 Modulis RTS Lounge

1-channel radio hand transmitter, manual control of one or several Venetian blind motors per radio.

Comfortable manual alignment of the slats using the scroll wheel.

Telis 1 Modulis RTS Pure **1 810 974**
Telis 1 Modulis RTS Silver **1 810 975**
Telis 1 Modulis RTS Lounge **1 810 976**

Scope of delivery: Handheld transmitter including wall brackets and battery.

Telis 4 Modulis RTS



Telis 4 Modulis RTS Pure Telis 4 Modulis RTS Silver Telis 4 Modulis RTS Lounge

5-channel radio hand transmitter, manual control of one or several Venetian blind motors per radio.


Comfortable manual alignment of the slats using the scroll wheel. Telis 4 Modulis RTS = 5 channels: Single or group operation possible.

Telis 4 Modulis RTS Pure **1 810 974**
Telis 4 Modulis RTS Silver **1 810 975**
Telis 4 Modulis RTS Lounge **1 810 976**

Scope of delivery: Handheld transmitter including wall brackets and battery.

- Large, medium and small projects
- All types of façade applications
- Proprietary and open Bus Systems

KNX Power supply




This power supply unit provides the system power necessary for the KNX bus. The connection to the bus is established by clicking the device on the DIN-rail (with data-rail installed) or by connecting the bus to the front-connector.

Measurements (WxHxD): 126 x 90 x 64 mm (7 TE)
 Protection class: III
 Degree of protection: IP 20
 Operating voltage: 230 V AC

KNX Power supply **9 704 032**
 For DIN-rail mounting.

KNX Line / backbone coupler




Provides a data connection between separate KNX bus lines and also insulates the bus lines from each other in order to limit bus line interference.

Measurements (WxHxD): 72 x 90 x 56 mm (2 SUs)
 Protection class: III
 Degree of protection: IP 20

KNX Line-Backbone coupler **9 706 007**
 For DIN-rail mounting.

KNX Data rail




Is stuck in the DIN-rail and touches the contact on the back of e.g. the KNX Power supply and / or RS 232 Interface.

Measurements (Length): 216 mm (12 SUs; 1 SU = 18 mm)

KNX Data rail **9 704 037**
 For DIN-rail mounting.

KNX Connector device




To connect the KNX Bus to the Data rail.

Measurements (WxHxD): 18 x 90 x 64 mm (1 SU)
 Protection class: III
 Degree of protection: IP 20

KNX Connector device **9 704 035**
 For DIN-rail mounting.

KNX USB Interface




Allows to connect a PC for configuration, visualisation and logging purposes to the KNX network. Uses a USB port on the PC.

Measurements (WxHxD): 18 x 90 x 56 mm (1 SU)
 Protection class: III
 Degree of protection: IP 20

KNX USB Interface **1 860 145**
 For DIN-rail mounting.


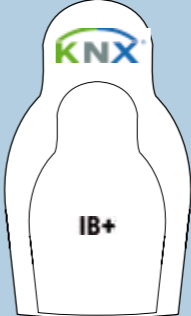

KNX RS232 Interface

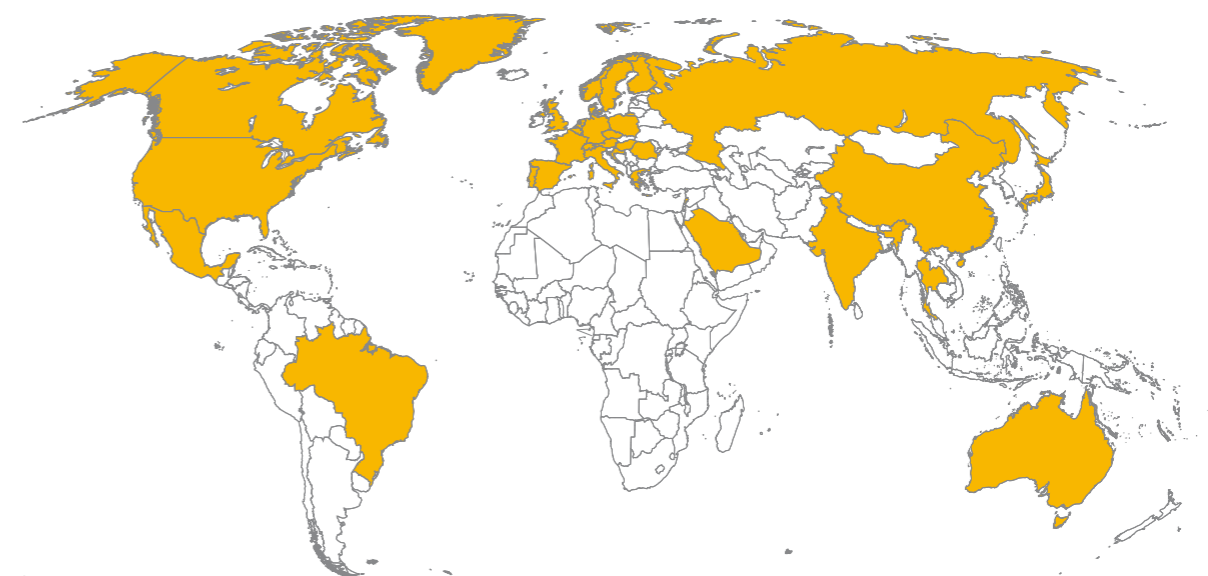


Allows to connect a PC for configuration, visualisation and logging purposes to the KNX network. Uses an RS232 port on the PC. An RS232 cable is additionally needed.

Measurements (WxHxD): 54 x 90 x 56 mm (3 SUs)
 Protection class: III
 Degree of protection: IP 20

KNX RS232 Interface **9 704 045**
 For DIN-rail mounting.

Somfy Controlling technology animeo IB+	Open Bus Systems	
	for KNX	for LON
		
The optimized price/function relation	Cost optimized planning with a multi functional device	Enormous variety of functions for large projects



Products:

Somfy offers controllers and motorized solutions for the following types of blinds and façade elements:

Interior elements:

Venetian blinds, Roman blinds, shades, screens, curtains, horizontal shading, pleated blinds, pro-jec-tion walls for home cinema and conference rooms.

Exterior elements:

Roller shutters, case arm awnings, cassette awnings, joint-arm awnings, wicker awnings, drop-arm awnings, winter garden awnings, window awnings with and without cassette, façades and skylights, large slats, horizontal shading, outside Venetian blinds, sectional gates, sectional side-gates, sliding ceilings, swing gates, tilting gates, wing gates including rolling gates and sliding gates for driveways.