



SOMFY FOR COMMERCIAL BUILDINGS

Product Guide Version 2

Somfy intelligent controls for commercial buildings

somfy®

Solutions for buildings

Somfy solutions for greater comfort and energy savings

Somfy solutions offer the capability to manage all types of buildings thanks to innovative products (motors, façade management systems and local controls).

Discover a Somfy solution for any project compatible with all sunshading and opening devices.



External venetian blinds



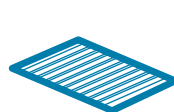
Roller shutters



External vertical screens



Projection screens



Horizontal blinds



Interior venetian blinds



Window openers



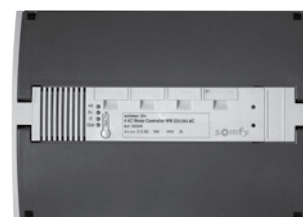
Interior vertical screens

Somfy solutions include



1. animeo intelligent building controls

Façade management systems enable the control of all or part of solar shadings and windows via a PC or a dedicated control system. Motors and automation devices communicate with each other via a proprietary Somfy bus (Solo, IB+) or market standards (KNX or LON).



animeo Motor Controller

2. Motors

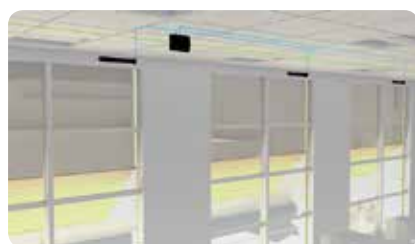
Whatever the end product (indoor or outdoor shading devices, roller shutters, projection screens), Somfy's motorisation will always meet its exact specification.



Somfy tubular motor



Motor for exterior venetian blinds



3. Local commands

Depending on the number of blinds and configuration of the room, there will always be a specific Somfy unit available with the required number of channels. The various technologies (radio, wired, digital) offer a number of advantages that are adapted to each type of building (hospital, school, office).



Telis 1
RTS pure



Telis 1 Mod/Var
RTS pure



Smooove IB



Solutions for buildings

System architecture

Somfy products installed in a typical building equipped with exterior blinds.

Motor Controller range

for any type of motors (high/ low voltage), compatible with proprietary bus (Solo, IB+) or open protocols (LON, KNX).



Motors



Sensor station
send commands
to the Building
Controllers.



The bus line can be
proprietary (Solo, IB+) or
open (LON, KNX) and allows
simple or bidirectional
communication between
the various products
connected to the bus line.

Building Controllers
compatible with
proprietary bus (IB+)
or open protocols
(KNX). To control small
to large buildings.



Local commands

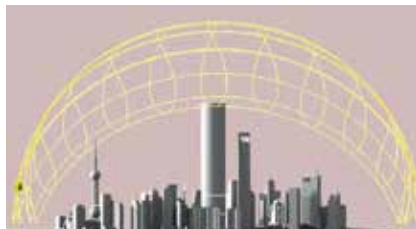


**Programming and
configuration interfaces**



Solutions for buildings

animeo: why and what for?



Sun path

With animeo, solar protections constantly adapt to the exterior environment and occupants needs inside the building.

Throughout the day the azimuth and elevation of the sun are constantly changing as well as the occupants activities, the animeo range of intelligent controls ensures the movement of blinds accordingly to maintain comfort levels of occupants.

The main elements to be taken into account are:

1. The geolocation of the building



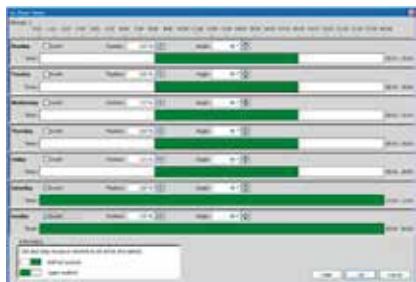
Sun and shadow impacting a city at different times of the day



Each building is unique, both in terms of its size, geographical location, environment or architecture.

The sun path, the shadow generated by surrounding buildings or the building shape itself have an impact on its energy needs. Consideration of these elements is essential in the choice of solar protection and control strategy.

2. User needs



Zone Timer in animeo IB+ and KNX software.



Each building is designed for a specific purpose (Office, school, hospital) with different occupancy periods: a school will be closed during some weeks, a hospital will always be occupied.

> For example blind management in an office not occupied during the weekend.

3. The definition of zones

It is therefore essential to enhance the building energy performance and fit with occupants needs.

A zone can be:

A façade



A floor



A window



Within the same zone, all blinds behave the same way. Smaller zones enable more efficient operation.


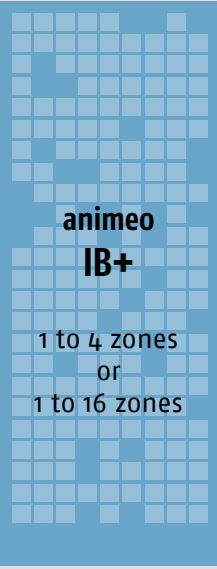
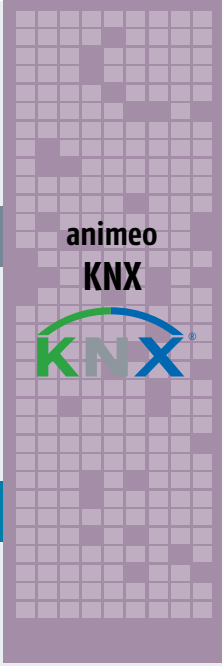




Solutions for buildings

animeo: a range of Somfy controls for commercial buildings

animeo is a range of intelligent controls to manage blinds and shutters within buildings, designed to adapt to any façade configuration. By optimising the management of air, sun and shade in buildings, animeo solutions actively enhance occupants' well-being while improving the building's energy performance.

animeo: compatible with all sun shadings and opening devices








animeo range overview

	Stand-alone		Open protocol	
Building size	IB	IB+	KNX	LON
 Large		 animeo IB+ 1 to 4 zones or 1 to 16 zones	 animeo KNX	 animeo LON
 Medium				
 Small	 animeo Solo 1 or 2 zones			
Number of motors	1 - 800	1 - 6400	> 6400	> 6400
Number of zones	1 - 2	1 - 16	> 16	> 16

Solutions for buildings



Functions offered by animeo range of solutions

Depending on the chosen animeo solution, many functions and algorithms are available to enhance visual comfort and energy savings.

Functions for visual comfort and savings with artificial lighting		How does it work?	animeo solution compatibility
Basic Sun function	 <p>The blinds are automatically down in direct glare, and up if no sun. The function applies at a building, façade, zone or floor level.</p>	Through programmable weekly timers or commands given through sun sensor.	Solo IB+ KNX LON
Sun tracking	 <p>To maximise the amount of light in the room, still avoiding direct glare (group of windows). Occupants' visual comfort is increased, since they can enjoy a view through as much of the window as possible.</p>	Algorithm embedded in Somfy animeo softwares: function enabled, depending on the building precise geolocalisation.	IB+ KNX LON
Shadow management	 <p>Basic sun function or sun tracking functions managed at a window or on group level. This function impacts the movement of the sun protection according to the shadow projected on the window. The need of artificial lighting is reduced.</p>	The shadow function is based on a precise building model including surrounding buildings that could project shadow onto the façades.	KNX LON
At night	 <p>All blinds down to avoid discomfort linked to exterior lighting (direct spotlights lighting up the façades of some office buildings).</p>	Through programmable timer.	Solo IB+ KNX LON
Functions for increased building energy performance		How does it work?	animeo solution compatibility
Avoid overheating	 <p>To keep the heat outside. Blinds are automatically down when sun is detected. The function applies at a building, façade, zone or floor level.</p>	Commands, given by sun sensors linked to indoor and outdoor temperature sensors.	Solo IB+ KNX LON*
Gain heat	 <p>Blinds are automatically up when the weather is sunny and when the inside temperature is lower than the outside temperature. Natural energy is used to heat the building.</p>		
Keep heat inside	 <p>Blinds are automatically down to avoid heat loss and reduce heating costs.</p>		

* With third-party

Solutions for buildings

Maintenance functions: Protection of solar shading or people (building safety)		How does it work?	animeo solution compatibility
Window cleaner safety	 All blinds are up and occupants' local commands are disabled to ensure cleaners safety. The function applies at a zone or building level.	Central command, sent from the Building Controller.	Solo IB+ KNX LON
Links to fire alarm	All blinds go up in the event of fire (building level).	Central command sent from Building Controller.	
Protection of exterior blinds	 Wind, frost, ice, rain is detected at building or zone level. All blinds are up and occupants local commands are disabled to ensure blinds are protected.	Wind sensors, ice/ rain/frost sensor detection: the message is sent by the Building Controller.	
Blind synergy	When interior blinds, exterior blinds or window openers work together, the level of priorities can be programmed.	With the Building Controller.	IB+

Maintenance functions: Advanced functions / links to BMCS		How does it work?	animeo solution compatibility
Status of motor position	Motor feedback during movement and/or at end-limits up/down, intermediate position.	Displayed on computer, using specific software (BMCS).	KNX LON
Remote access	Remote access to blinds for the facility manager.	Via the OPC server.	IB+ KNX LON

Functions to enhance the façade's appearance or indoor space		How does it work?	animeo solution compatibility
Blind alignment	 Whenever wished (different times of the day) for increased façade aesthetics.	With RS485 or Encoder motors and specific controls: displayed on computer via a specific software (BMCS).	IB+ KNX LON
Communication on façades	Showing messages, words on the façade.	Via the OPC server.	KNX LON

Functions to enhance user comfort		How does it work?	animeo solution compatibility
Manual override	Occupants can always control their own blinds, using a wall switch or a remote control (Somfy RTS).	With a RTS sister card plugged into the Motor Controller.	Solo IB+ KNX LON
Occupancy detection	Light Balancing PHILIPS somfy Somfy Philips Light Balancing solution to optimise the use of artificial lighting.	See Light Balancing documentation in the appendix.	IB+ KNX LON

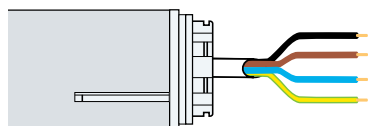
Solutions for buildings

animeo solutions are compatible with a large range of motors. The choice of controllers depends on the motor type.

- AC motors with typical applications**

Asynchronous motor (AC)

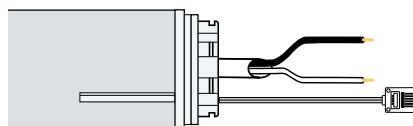
The cost-effective standard solution. Especially used outside and for applications requiring higher torque.



Electrical connection	L-up, L-down, N, PE
Torque of shading system	4-120 Nm
Energy by window motors	150-400 N
Diameter (not for window motors)	40-60 mm
Voltage	230 V AC
Current consumption	0.5-3.15 A
Installation comments	–
Applications	For roller shutters, screens, internal blinds, awnings, large slats, windows and Fabric Tension Systems (FTS).

Asynchronous motor with integrated increment encoder (AC-E)

The increment encoder in the motor measures the exact position and sends a message to the controller. Used in all situations where exact positioning is required.

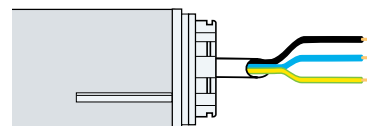


Electrical connection	L, N, PE + extra cable with RS485
Torque	3-15 Nm
Diameter	50 mm
Voltage	230 V AC
Current consumption	0.5-1.5 A
Installation comments	Specific controlling
Applications	For roller shutters and screens in situations where exact positioning and consistent high precision is required. Applicable for blinds greater than three meters in height.



Asynchronous motor with integrated radio receiver (AC radio)

Controlling of the motor is done via a radio transmitter. There is no wiring between motor and the point of operation. Motors can be connected in parallel. Mainly used in the residential and small purpose-buildings area.



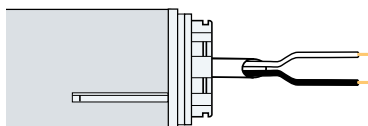
Electrical connection	L, N, PE
Torque	6-120 Nm
Diameter	50-60 mm
Voltage	230 V AC
Current consumption	0.5-3.15 A
Installation comments	Max. recommended radio distance: 20 m with up to 2 cement walls.
Applications	For roller shutters, screens, internal blinds and awnings.

Solutions for buildings

• DC motors with typical applications

DC Motor (DC)

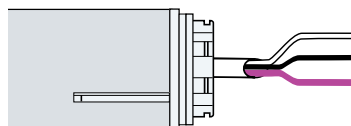
- For interior venetian blinds: motors with smaller dimensions and lower torque.
- For windows: motors operated with safety low voltage.



Electrical connection	+, -
Torque of shading system	0.5–1.2 Nm
Energy with window motor	150–400 N
Diameter (not for window motors)	25–35 mm
Voltage	24 V DC
Current consumption; shading systems	0.3–1 A
Current consumption; window motors	0.3–2.5 A
Installation comments	Maximum recommended distance between motor and controller: 20 m (voltage loss).
Applications	For interior shading or for window opening motors.

DC motor with increment encoder (DC-E)

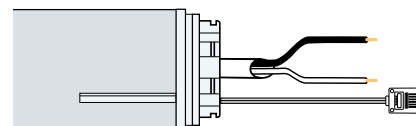
The increment encoder in the motor measures the exact position and sends the position to the controller. This is useful, especially in the DC area of interior venetian blinds as the speed of the motor is strongly dependent on load and for this reason is not constant.



Electrical connection	+, -, cable for increment encoder
Torque	0.5–1.2 Nm
Diameter	25 mm
Voltage	24 V DC
Current consumption	0.3–1 A
Installation comments	Specific control Max. distance between motor and controller: 20 m.
Applications	For interior venetian blinds.

DC motor with integrated increment encoder (DC-E)

The increment encoder in the motor measures the exact position and sends a message to the controller. Applied in all situations where precise positioning is required.



Electrical connection	+, - extra cable with RS485
Torque	2 Nm
Diameter	30 mm
Voltage	24 V DC
Current consumption	0.5–1.5 A
Installation comments	Specific control
Applications	For interior screens in situations where exact positioning and consistent high precision is required. Applicable for blinds greater than three meters in height.



Solutions for buildings

Somfy solutions are compatible with most technologies on the market

Depending on the installation, various Somfy user interfaces are available:

Wired technologies



WT

Wired Technology, (Somfy standard wired control). An ideal solution for new buildings.

Wireless technologies



Radio Technology Somfy®

With over 3 million installations throughout the world, RTS has become the standard for secure radio technology in the building industry. Installations can be upgraded as new controls are added.

Digital technologies



Somfy Digital Network

Wired protocol used by Somfy with its own digital protocol, also called "RS485". Digital controls provide the convenience of a multi-application and scalable system.



KNX

World standard for home and building control which fits for use in any application domain.



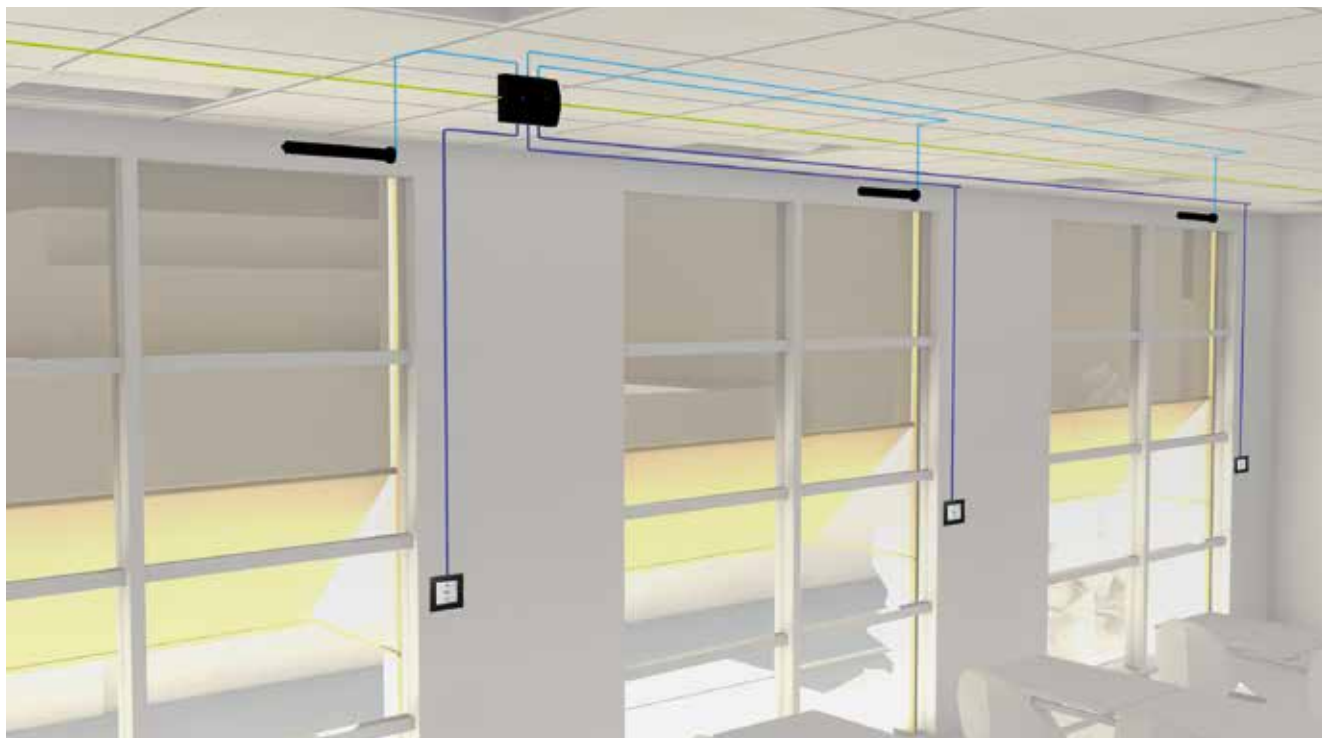
LON

Networking platform specifically created to address various functions within buildings (blind management, lighting, HVAC).

Solutions for buildings

Typical installation

AC Motor Controller and Smoove IB for local command



Motor Controller with Telis Mod/Var RTS and/or Smoove RTS



Solutions for buildings

Local controls for animeo range

Somfy solutions include a wide range of local controls fixed or remote according to the building usage (public/private).

Smoove 1 RTS



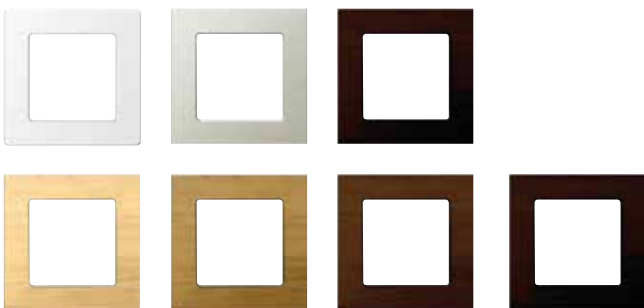
1 channel on-wall radio transmitter for controlling the RTS radio module.

Dimensions (w × h × d):	50 × 50 × 10 mm
Degree of protection:	IP 30
Protection class:	II
Operating voltage:	3 V (battery model CR 2430)
Operating temperature:	0° C to + 60° C
Radio frequency:	433.42 MHz

Smoove 1 RTS

• Pure	Ref. 1 810 881
• Black	Ref. 1 810 882
• Silver	Ref. 1 810 883

Smoove frames



Smoove frames

• Pure	Ref. 9 015 022
• Silver	Ref. 9 015 024
• Black	Ref. 9 015 023
• Light Bamboo	Ref. 9 015 027
• Amber Bamboo	Ref. 9 015 026
• Cherry	Ref. 9 015 236
• Walnut	Ref. 9 015 237

Smoove Origin RTS

NEW



Well-mounted, mechanical, single-channel control unit. Up, down and stop functions and <<my>> position. Only available in standard Pure (Switch and frame package).

Smoove Origin RTS	Ref. 1 811 045
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Solutions for buildings

Telis 1 RTS



Pure Silver Lounge Patio

1 channel handheld radio transmitter, control of one or several motors per radio.
Telis 1 RTS = 1 channel: single or group operation possible.

Telis 1 RTS

• Pure	Ref. 1 810 630
• Silver	Ref. 1 810 637
• Lounge	Ref. 1 810 649
• Patio	Ref. 1 810 642

Delivery including wall bracket and battery.

Telis 1 Mod/Var RTS



Pure Silver Lounge

1 channel handheld radio transmitter, manual control of one or several venetian blind motors per radio.
Comfortable manual alignment of the slats using the scroll wheel.

Telis 1 Mod/Var RTS

• Pure	Ref. 1 810 974
• Silver	Ref. 1 810 975
• Lounge	Ref. 1 810 976

Delivery including wall bracket and battery.

Telis 4 RTS



Pure Silver Lounge Patio

5 channel handheld radio transmitter, manual control of one or several motors per radio.
Telis 4 RTS = 5 channels: single or group operation possible.

Telis 4 RTS

• Pure	Ref. 1 810 631
• Silver	Ref. 1 810 638
• Lounge	Ref. 1 810 651
• Patio	Ref. 1 810 644

Delivery including wall bracket and battery.

Telis 4 Mod/Var RTS



Pure Silver Lounge

5 channel handheld radio transmitter, manual control of one or several venetian blind motors per radio.
Comfortable manual alignment of the slats using the scroll wheel.
Telis 4 Mod/Var RTS = 5 channels: single or group operation possible.









Telis 4 Mod/Var RTS

• Pure	Ref. 1 810 765
• Silver	Ref. 1 810 663
• Lounge	Ref. 1 810 664










Delivery including wall bracket and battery.

Solutions for buildings

Selection guide for sensors associated with animeo solutions

	Wind				Temperature			
	Ref. 9 013 807	Ref. 9 001 608	Ref. 9 140 180	Ref. 9101479	Ref. 9 001 611	Ref. 9 008 044	Ref. 9 709 808	Ref. 9 001 461
	Wind direction sensor	Wind sensor	Heated wind sensor	Eolis wind sensor	Outside temperature sensor	Inside temperature sensor	Room thermostat	KNX inside temperature sensor
								
	animeo Solo	OK (1)		OK (1)	OK (1)		OK (1)	
	animeo IB+	OK (2)	OK (2)	OK (2)	OK (2)	OK (4)		
SOMFY ANIMEO RANGE	animeo KNX	OK (8)	OK (10)	OK (10)	OK (8)		OK (11)	OK (5)
	animeo LON	OK (3)	OK (3)	OK (3)	OK (3)		OK (11)	

- (1) Directly connected to animeo Solo Building Controllers 1 and 2.
 (2) Directly connected to the Outside sensor box.
 (3) Directly connected to the Outside sensor box. The Outside sensor box has to be connected to the LON sensor interface.
 (4) Directly connected to the Inside sensor box.
 (5) Directly connected to the Building Controller AS 315 N
 (6) The Sensor station is directly connected to the Building Controllers.

Sun		Rain		Combined sensors/Sensor Station				
Ref. 9 154 043	Ref. 9 154 217	Ref. 9 016 344	Ref. 9016345	Ref. 9154080	Ref. 9 015 047	Ref. 9 015 079	Ref. 9 013 726	Ref. 9 013 727
Kit sun sensor and bracket	Kit sun sensor and bracket	Rain sensor Ondeis 24 V DC	Rain sensor	Sun and wind combined sensor Soliris IB	KNX and IB+ Compact Sensor (wind, sun, rain, temperature, clock)	Compact Sensor for the KNX Building Controller AS 315 N (wind, sun, rain, temperature, clock)	Sensor station	Sensor station extended
								
	OK (1)		OK (1)	OK (1)				
OK (2)		OK (2)				OK	OK (6)	OK (6)
OK (8)		OK (8)			OK		OK (9)	OK (9)
OK (3)		OK (3)					OK (7)	OK (7)

(7) The Sensor station is directly connected to the LON Sensor interface.

(8) Directly connected to the Outside sensor box. Directly connected to the Master Control W2 and W8.





(9) Directly connected to the Outside sensor box. The sensor is directly connected to the Master Control W2 and W8

(10) Directly connected to the Master Control W2 and W8.



(11) Via binary input on Motor Controller KNX and LON.

Solutions for buildings






Comparative table of functions

	Solo	IB +	KNX	LON
BMCS interoperability (OPC server)	-	✓	-	✓
Integrated data logging (system status)	-	✓	✓	-
Integrated building timer 	✓	✓	✓	✓
Integrated zone timer 	-	✓	✓	✓
Integrated yearly timer 	-	-	✓	✓
Zone control switch / key switch 	✓	✓	✓	✓
System configuration	PC software	✓	✓	✓
	Via display	✓	on request	-
System operation	PC software (BMCS)	✓	✓	✓
	Via display	✓	on request	on request

User comfort / Energy saving functions

Wired local control	✓	✓	✓	✓
Radio local control (Somfy RTS)	✓	✓	✓	✓
NEW Radio link to Bus network (Somfy RTS)	-	-	✓	-
NEW Light management through Somfy RTS	-	-	✓	-
Temperature inside 	-	4 sensors	✓	✓
Sun 	2 sensors	12 sensors	✓	✓
Sun tracking	-	✓	✓	✓
Zone based shadow management	-	-	✓	-
Window based shadow management	-	-	-	✓
Auto / Manual priority	-	✓	✓	✓
Auto / Manual priority via presence detector	-	✓	✓	✓
Link to HVAC system	-	✓	✓	✓
Dali connection / Light scenes	-	✓	✓	✓

Security Functions

Alarm input	✓	✓	✓	✓
Wind speed 	✓	✓	✓	✓
Wind direction 	-	✓	✓	✓
Rain 	✓	✓	✓	✓
Outside temperature 	✓	✓	✓	✓
Snow 	-	✓	✓	-
Frost	✓	✓	✓	✓
Ice	-	✓	✓	✓
Window contact	-	✓	✓	✓



animeo Solo

- System topology
- Benefits
- Products
- Project example
- Case study

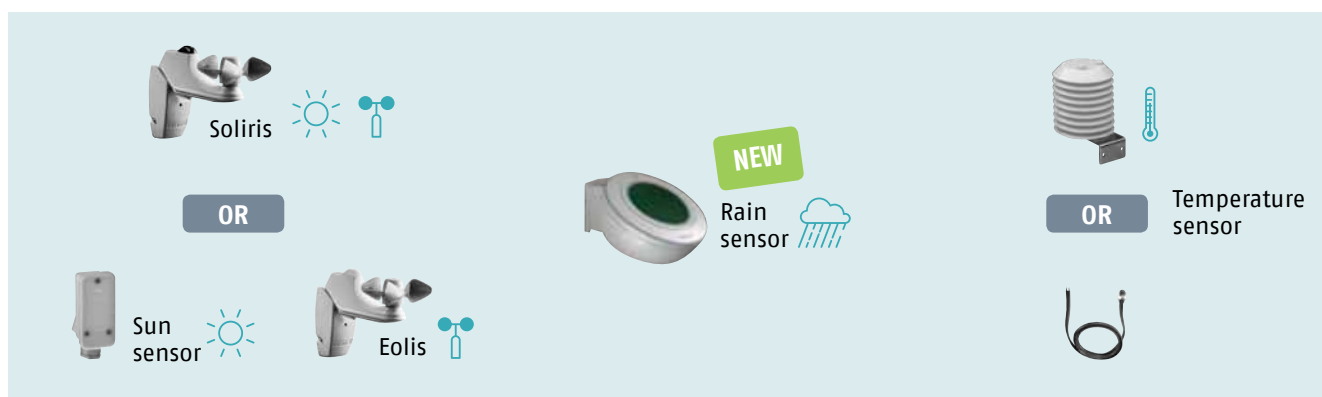


animeo Solo

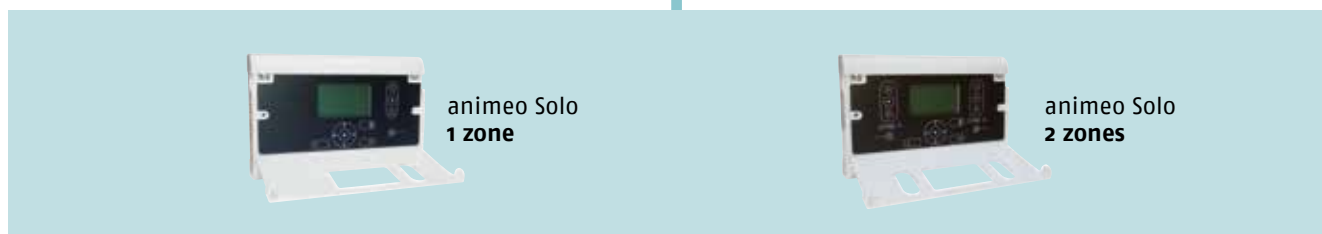
The easy-to-use system to control 1 or 2 zones, and up to 800 motors.
Specifically designed for small commercial buildings.
animeo Solo is based on IB Somfy controlling technology.

System topology

Outside sensors



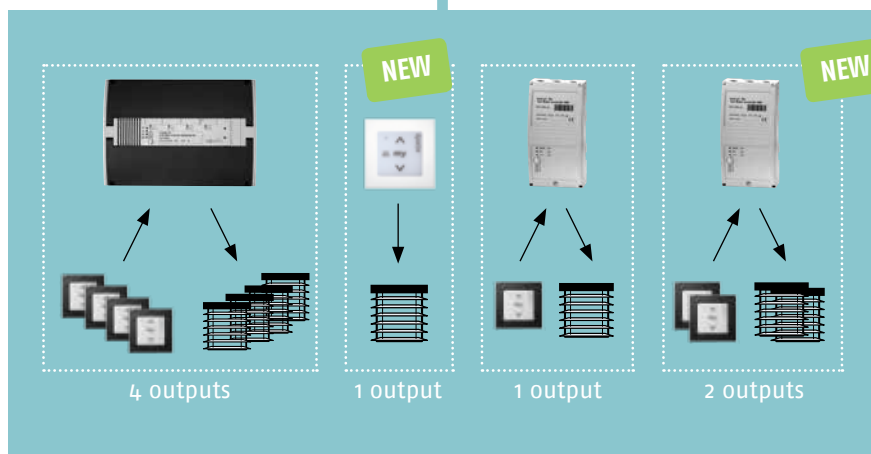
Building Controllers



Compatible with radio local control



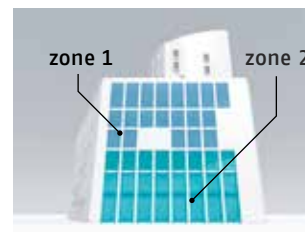
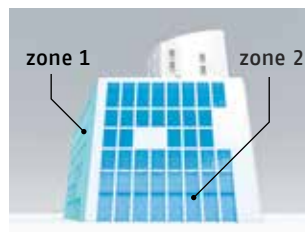
Motor Controllers



Benefits of the solution

Easiness of programming and installation

- Easy programming and commissioning through the LCD display (no need for a computer).
- The system comes with a basic configuration, and the user can use the screen-based interface to program the system, which saves time on site.



Energy-saving functions

- Effective management of solar gains and light levels to improve building energy performance and occupants visual comfort.
- Year round, animeo Solo automatically controls your motorised sun protection devices using sensors. In winter, for example, as soon as night falls, the pre-programmed "cold protection" function closes all shutters and sun protection devices in order to increase window insulation and avoid excessive heating consumption.
- In the daytime, on the other hand, its "natural heating" function opens the shutters and sun protection devices to make the most of the sun's heat.



Simple operation for facility management

- The building manager can control (up – down – stop) each zone separately or lock zones for maintenance operations.
- The LCD continuously presents the system status and weather data such as wind speed, rain, sun radiation and temperature.



animeo Solo

Building Controller

animeo Solo Building Controller



Central Control unit

Further features

- Controlling up to 2 zones or façades.
- For each zone, up to 100 Motor Controller devices can be connected.
- AC, DC or DC-E motor systems can be controlled (one type per zone).
- Compatible with all Motor Controller devices from the Somfy Controlling technology: animeo IB+, IB-Inteo, CD.

At zone / façade level

- Precise setting of running and tilting times depending on the selected end product to be controlled.
- Sun function with configurable threshold values, delays, positions and degree of angle.
- Wind security function with configurable threshold values and sensor assignment.
- Rain and frost security function with configurable threshold value and time delays.
- Outside temperature function with configurable threshold value and delay times.
- Direct connection of 1 or 2 independent zone switches for maintenance purposes.

At building level

- Timer with 2 setting times per day to configure an UP or DOWN command (incl. blocking).
- An input for the main alarm, potential free contact. When the input is active all end products are locked in the UP position.

Dimensions (w × h × d):	225 × 148 × 48 mm
Degree of protection:	IP 20
Protection class:	II
Operating voltage:	230 V AC
Operating temperature:	0° C to +45° C

animeo Solo 1 zone	Ref. 1 860 143
animeo Solo 2 zone	Ref. 1 860 144

For wall-mounted installation.

Sensors and accessories

Soliris Sensor



Combined weather station.

Further features

- Measurement of wind speed and sun intensity combined in one housing.
- Comfort threshold setting on the device.

Dimensions (w × h × d):	160 × 236 × 40 mm
Degree of protection:	IP 43
Protection class:	II
Wiring recommendations:	2 × 2 × 0.8 mm ²
Soliris Sensor	Ref. 9 154 080

Eolis Sensor



Wind sensor

Further features

- Measurement of wind speed and sun intensity combined in one housing.
- Comfort threshold setting on the device.

Dimensions (w × h × d):	160 × 236 × 40 mm
Degree of protection:	IP 33
Protection class:	II
Wiring recommendations:	2 × 2 × 0.8 mm ²
Eolis Sensor	Ref. 9 101 479

Wind Sensor



Measurement of wind speed.

Dimensions:	Height 200 mm, ø 240 mm max. ø-mast: 48 mm
Degree of protection:	IP 65
Wiring recommendations:	2 × 1.5 mm ²
Wind Sensor (not heated)	Ref. 9 001 608

animeo Solo

Sensors and accessories

Soliris Sun Sensor



Measurement
of sun value in Lux.

Dimensions Sun Sensor (w x h x d):	34 × 88 × 47 mm
Degree of protection:	IP 43
Wiring recommendations:	2 × 0.8 mm ²
Angle position:	150°

Soliris sun sensor without mounting brackets	Ref. 9 154 217
Complete pack	Ref. 9 154 043

Outside Temperature Sensor



Measurement
of outside temperature
(with solar radiation
sensor shelter).

Dimensions:	Height 150 mm ø 115 mm
Degree of protection:	IP 65
Wiring recommendations:	2 × 0.8 mm ²

Outside Temperature Sensor	Ref. 9 001 611
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Housing for Inside Temperature Sensor



For the protection of
inside temperature sensor.

Dimensions (w × h × d):	75 × 75 × 25 mm
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Housing for Inside Temperature Sensor	Ref. 9 008 045
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Inside Temperature Sensor



Measurement
of inside temperature.
With 1m cable.

Inside Temperature Sensor	Ref. 9 008 044
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Rain Sensor Ondeis 24 V DC

NEW



Power supply through
the Outside Sensor Box or
Power Supply DC 24V 1.5A.

Dimensions (w × h × d):	115 × 100 × 85 mm
Degree of protection:	IP 44
Wiring recommendations:	3 × 1.5 mm ²

Rain Sensor Ondeis 24 V DC	Ref. 9 016 344
----------------------------	----------------

Power Supply DRM 24 V DC 1.5 A

NEW



To supply the Rain Sensor
Ondeis and the wind
sensor.

Dimensions (w × h × d):	78 × 93 × 56 mm
Degree of protection:	IP 20
Protection class:	II
Operating voltage:	230 V AC
Output voltage:	24 V DC
Output current:	1.5 A

Power Supply DRM 24 V DC 1.5 A	Ref. 9 017 611
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Room Thermostat



Measurement
of inside temperature.

Dimensions (w × h × d):	75 × 75 × 25 mm
Degree of protection:	IP 20
Protection class:	III
Wiring recommendations:	2 × 2 × 0.8 mm ²

Room Thermostat	Ref. 9 709 808
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animeo Solo

Project example

Building owner desired and specified functionalities

- A small commercial building with two separate floors to be controlled
- The solution must be simple and intuitive to install
- Easy to operate display is desired for the user interface
- Local control through sensitive touch is also requested for excellent user comfort.

Legend

	Links to sensors
	Bus line Solo
	Power supply
	Motor cable



Products installed



animeo Solo
2 zones
Ref. 1 860 144



Soliris Sensor
Ref. 9 154 080



Rain Sensor
Ref. 9 016 344



Outside temperature
Sensor
Ref. 9 001 611



Motor Controller
Smooove UNO IB+
Ref. 1 811 205



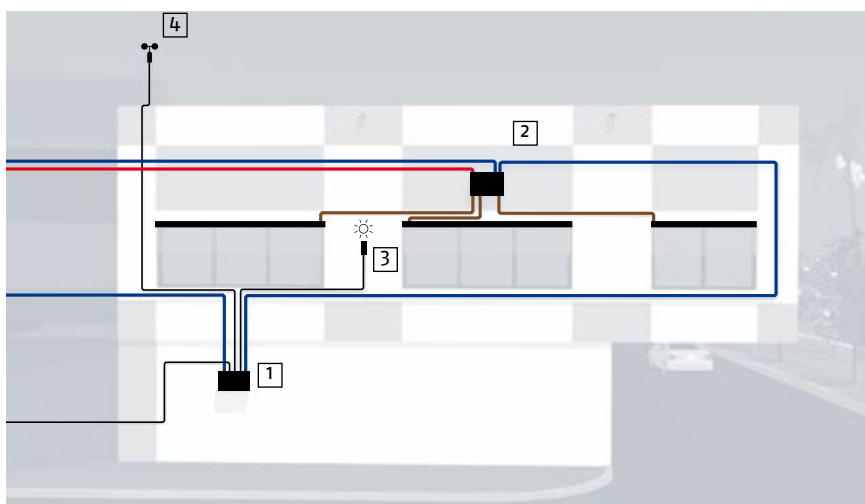
animeo Motor
Controller
Ref. 1860049

NEW

Automatic functions

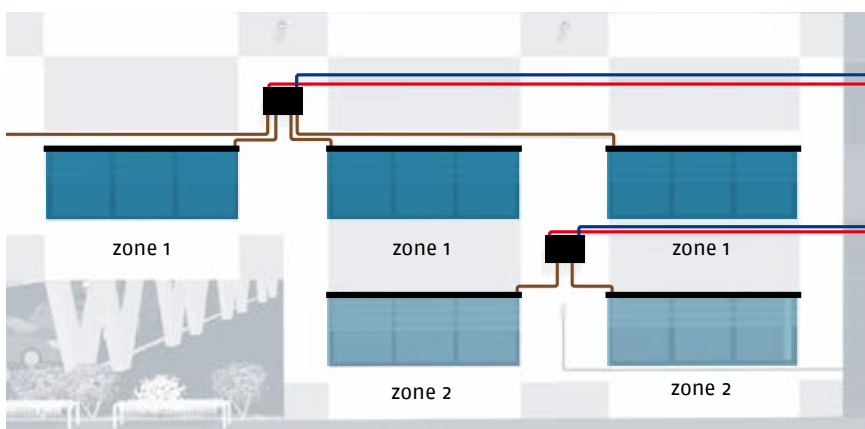
- Wind security per zone
- Sun automatic per zone
- Rain and frost security
- Daily timer per zone

Installation details



The **animeo Solo** Building Controller is directly connected to the **Motor Controllers**, the **sun sensor** and the **Sensor Station** on the roof.

1. animeo Solo
2. Motor Controllers
3. Sun sensor
4. Wind sensor



The **animeo Solo** Building Controller **enables to automate two zones** (here: ground floor and first floor).

Each automatic function applies per zone.

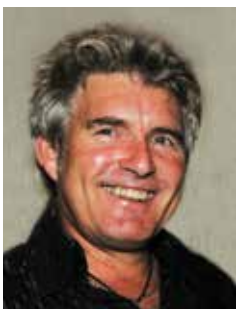
animeo Solo

Case study

Framo Cluster Sandsli Bergen, Norway



"The system is working just as we expected it. The automation animeo Solo takes care of the sun protection just as we wanted it to do when we decided to install the exterior screens from Tundra. I will actually go so far as saying it has worked 100 % perfect!"



ALFRED MEHL
Managing Director
Tundra sol

Initial Brief

Find a small and intelligent automatic façade system to control the exterior screens. Three main objectives:

- Sun and wind protection
- Gain and preserve heat (timer)
- Option to extend the system

Reasons to use animeo Solo

- Solution used in several previous projects which demonstrated it to be easy to install and to use, for both the facility manager and the daily users.
- Excellent technical support from Somfy in the planning process with drawings and during the installation.
- With the animeo RTS card, changing motor assignment to a channel on the remote control is very easy.
- Possibility to extend the system and to upgrade to an animeo IB+ system in the future.

Technical information

- animeo Solo 2
- 2 sun and wind sensors
- 15 Motor Controller 4 AC
- 15 animeo RTS cards
- 58 external screens



animeo IB+

- System topology
- Benefits
- Products
- Project example
- Case study






animeo IB+

An intelligent system to control 1 to 16 zones and up to 6400 motors. Specifically designed for medium and large buildings.

System topology





Inside sensors (optional)


Max 16x  Max 4x 



Inside Sensor Box



Outside sensors (solution 1)






3x    




Compact Sensor

Outside sensors (solution 2)

Max 12x  Max 4x 



Outside Sensor Box

Building Controllers

NEW  1 - 4 zones

OR

 1 - 8 zones  9 - 16 zones


Central control
Heating input
Cooling input


Operating options


 OR 


Operating Software
Operating Interface

Motor Controllers

 4 outputs

NEW  1 output

 1 output

NEW  2 outputs

Compatible with radio local control

 Radio Receiver

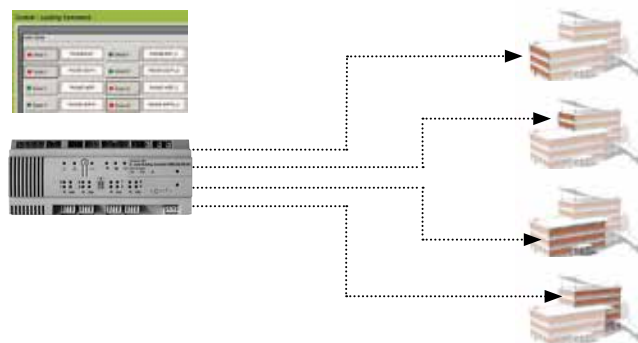
 RTS
Radio Technology Society

NEW 

Benefits of the solution

Application independent

- Very extensive and comprehensive selection of functions and parameters, specially matched to the type of end product to be controlled such as venetian blinds, blinds, roller shutters and windows.
- The system comes with a basic configuration and the user can use the screen-based interface to program the system and define the zones.



Tracking the sun's position



- The sun's tracking function positions the blades on venetian blinds according to the angle of incidence for the best visual comfort all day long.

Reduced energy costs

- Optimised energy savings in combination with a variety of functions: natural air-conditioning, cooling, heating, limited tilting angle.
- The system switches back to automatic at a pre-defined time.

Interoperability

- Link to Building Management Control Systems (BMCS) available through animeo IB+ OPC software.

Optimum balance

- Advanced operating mode: enhanced room-specific user comfort by enabling non-security functions (e.g. sun) as soon as local operation has been assigned.

Building Controller

Building Controller



Ref. 1822395

NEW



Ref. 1822064

Product benefits

- A system with one Building Controller can control up to eight zones (façade orientation) and a system with two Building Controllers can control up to 16 zones.
- Optimised energy savings in conjunction with a wide range of functions: natural ventilation, cooling, heating.
- Enhanced operating mode: Increased, room-based user comfort thanks to the suppression of centralised non-safety functions (for example, sun function) as soon as local controls are used. The system is switched back into automatic mode

at three freely definable times each day.

- Restricted venetian blind tilting angles for room users ensure energy savings whilst still enabling excellent lighting comfort.
- Compatible with all conventional Motor Controllers (animeo IB+, Inteo and CD). For maximum functionality, we recommend animeo IB+ Motor Controllers.

Further features

- One system can control up to 6400 motors.
- User-friendly configuration software (for setup, it is recommended that the technician is fully familiar with sun protection and window control systems in order to ensure the best possible system performance).
- User-friendly and intuitive Operating software.
- Free choice of operating interface for systems with up to eight areas: PC software or Operating Interface (with reduced functions).
- The Building Controller and Operating Interface can be installed separately with, for example, the Operating Interface in the control room.
- The separation of the Sensor Interface (Outside Sensor Box), which is normally mounted outside, and the control center (Building Controller), which is normally mounted inside, enables extremely cost-effective lightning protection for the system.
- Communication between the Outside Sensor Box and the Building Controller is monitored.
- Extensive yet clear selection of functions and parameters which are specially tailored to the type of end

product to be controlled (venetian blinds, blinds, roller shutters, and windows).

- Sun function with configurable threshold values, delays, position, angled orientation for venetian blinds, freely defined sensor assignment, for each zone.
- Sun tracking: instead of one fixed position, up to three different positions can be actuated per day for each zone. These three positions can be set by the software and can differ for each month. They can be manually maintained in the system.
- Wind safety function in combination with wind direction: to increase the lifetime of the blind elements, they can be moved into a safety position if a certain wind force is reached and if the wind direction is such that the specific zone is affected.
- The blind elements are only moved into the safety position if there are strong winds (gale warning).
- Rain and snow safety function with configurable time delays, both for each area.
- Ice safety function with configurable temperature threshold value and delay times, both for each zone.

- Zone timer with two configurable time ranges per day for the configuration of an up and down or position command.
- Central timer with two configurable time ranges per day for the configuration of an up and down command.
- Potential free main alarm input with configurable action per area: up and down command with lock.

- DCF-77 time levelling (optional with Outside Sensor Box).
- Password protection for settings.
- Potential free error output if, for example, a sensor fails.
- Connection to Building Management Control System (BMCS) possible using OPC software plug-in.

Dimensions (w × h × d):	210 × 90 × 61 mm
Degree of protection:	IP 20
Protection class:	II
Operating voltage:	230 V AC
Operating temperature:	0° C to + 45° C

animeo IB + Building Controller 4 zones	Ref. 1 822 395
animeo IB + Building Controller 8 zones	Ref. 1 822 064

For DIN-rail installation.

Operating Software + Interface



Interface between the Building Controller and the computer including configuration and user software.

Product benefits

- User-friendly screen display: large, high, good resolution, multi-coloured.
- Intuitively designed, comprehensive and operator-friendly.
- The Operating software can be used regardless of the location of the Building Controller installation.

Further features

- For computers with minimum Intel Pentium II, 500 MHz, Windows 2000, CD Rom disc drive, 128 MB storage and 40 MB free hard drive storage.

Software + USB / RS485 Interface	Ref. 9 012 519
USB / RS485 Interface	Ref. 9 016 356

animeo IB+

User interfaces

Operating Interface / Display



For the operating and configuration of the animeo Compact System. Display of current weather and system data.

Product benefits

- Intuitively designed and comprehensive user display; suitable for users without or with only a little experience in controlling sun protection systems.

Dimensions (w × h × d):	130 × 182 × 98 mm
Safety type:	IP 20
Protection class:	II
Operating voltage:	230 V AC
Operating temperature:	0° C to + 45° C

Operating Interface	Ref. 9 013 219
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For wall-mounted installation.

- Integrated wiring test facilitates easier planning and start-up.
- The Operating Interface is operable independent of the location of the installed Building Controller.

Further features

- Password protection for settings.
- Assigned configurations can also be called up by the animeo Compact PC software and modified.
- The Operating Interface can be removed after successful configuration.
- Communication with animeo Compact Building Controller over RS485 interface.
- Manual blocking of zones is possible (window cleaning function).
- Operation of blinds according to façades or zones.

Sensors and accessories

Compact Sensor



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

Product benefits

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

Further features

Integrated sensors:

- 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.
- GPS receiver for time synchronisation.
- Bracket for wall or post mounting.

Dimensions (w × h × d):	96 × 77 × 118 mm
Degree of protection:	IP 65
Protection class:	III
Operating voltage:	24 V DC ± 10%
Operating temperature:	-25° C to + 50° C

animeo IB+ Compact Sensor	Ref. 9 015 047
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OPC Software



The animeo IB+ OPC Software is a software plug-in which can be used in combination with the animeo IB+ Operating Software 2.2.

Through this the link to Building Management Control System (BMCs) can easily be established and makes animeo IB+ systems even more flexible.

Various functions can be executed through the Building Management System using this connection to the animeo IB+ system: control of individual zones, switching between automatic and manual priority, feedback of sensor status and values, and more.

The animeo IB+ OPC Software allows managing up to 8 animeo IB+ systems resulting in the control of max. 128 individual zones.

The animeo IB+ OPC Software is fully OPC certified with the OPC foundation rules and standards.

animeo IB+ OPC Software	Ref. 9 015 866
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animeo IB+

Sensors and accessories

Outside Sensor Box / Outside Sensor Extension Box



Outside Sensor Box

The Outside Sensor Box is the interface between the weather station and the Building Controller. All measurement values are evaluated here and sent to the Building Controller. It requires an external 24 V AC/DC power supply.

Product benefits

- Only two cables (power supply 24 V AC/DC and data cable) need to be laid to the outside.
- Convenient lightning protection possible as only two cables are 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. The Outside Sensor Extension Box offers extension capabilities of 2 additional wind sensors and 4 sun sensors.

Outside Extension Sensor Box

For the connection of 4 more sun sensors and two wind sensors to an animeo IB+ system.

Product benefits

- Only two cables (power supply 24V AC/DC and data cable) need to be laid to the outside.
- Convenient lightning protection possible as only two cables are laid to the outside.

Dimensions (w × h × d):	207 × 255 × 90 mm
Degree of protection:	IP 65
Protection class:	III
Operating voltage	24 V AC / DC
Operating temperature:	- 30° C to + 70° C

Outside Sensor Box	Ref. 9 001 606
Outside Sensor Extension Box	Ref. 9 001 607

For wall-mounted installation.

Power Supply DRM 24 V 1.5 A

NEW


To supply the Outside Sensor Box (without heated sensors) or the animeo IB+ Compact Sensor.

Dimensions (w × h × d):	78 × 93 × 56 mm
Safety type:	IP 20
Protection class:	II
Operating voltage:	230 V AC
Output voltage:	24 V DC
Output current:	1.5 A

Power Supply DRM 24 V DC 1.5 A	Ref. 9 017 611
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animeo Power Supply DC



To supply the Outside Sensor Box (with heated sensors).

Dimensions (w × h × d):	130 × 180 × 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 min on, 3 min off)

animeo Power Supply DC	Ref. 1 860 093
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For wall-mounted and DIN-rail installation.

Lightning protection



To protect the controls from lightning. Is used in combination with the Outside Sensor Box or Compact Sensor.

Electronic lightning protection power supply	Ref. 9 001 629
Electronic lightning protection RS 485	Ref. 9 001 630

Sensors and accessories

Wind Sensor



Measurement of wind speed.

Dimensions:	Height 200 mm, Ø 240 mm max. Ø-mast: 48 mm
Degree of protection:	IP 65
Wiring recommendations:	2 × 0.8 mm ²

Wind Sensor	Ref. 9 001 608
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Outside Temperature Sensor



With solar radiation sensor protective housing.

Dimensions:	Height 150 mm, Ø 115 mm
Degree of protection:	IP 65
Wiring recommendations:	2 × 0.8 mm ²

Outside Temperature Sensor	Ref. 9 001 611
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Heated Wind Sensor



Power supply via Outside Sensor Box. Measurement of wind speed.

Dimensions:	Height 190 mm, Ø 240 mm max. Ø-mast: 48 mm
Degree of protection:	IP 54
Wiring recommendations:	5 × 1.5 mm ²

Heated Wind Sensor	Ref. 9 140 180
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Rain Sensor Ondeis 24 V DC

NEW



Power supply through the Outside Sensor Box or Power Supply DC 24V 1.5A.

Dimensions:	115 × 100 × 85 mm
Degree of protection:	IP 44
Wiring recommendations:	3 × 1.5 mm ²

Rain Sensor Ondeis	Ref. 9 016 344
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Wind Direction Sensor



With high-quality bearing.

Dimensions:	Height 303 mm, Arrow length 515 mm, max. Ø-mast: 48 mm
Degree of protection:	IP 54
Wiring recommendations:	5 × 1.5 mm ²

Wind Direction Sensor	Ref. 9 013 807
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Sun Sensor



Measurement of sun value in Lux.

Dimensions (w × h × d):	34 × 88 × 47 mm
Degree of protection:	IP 43
Protection class:	III
Wiring recommendations:	2 × 0.8 mm ²
Angle position:	150°

Sun Sensor without mounting bracket	Ref. 9 050 100
Mounting bracket for Sun Sensor	Ref. 9 127 888
Complete pack	Ref. 9 154 043

Sensors and accessories

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.

Dimensions / mast height:	3200 mm
Sensor Station	Ref. 9 013 726
Sensor Station without Sensor	Ref. 9 014 301

Roof mounting



For roof-mounting of Sensor Station. Stainless steel.

Roof mounting	Ref. 9 014 300
Strain connection for roof mounting only	Ref. 9 014 303

Sensor Station extended



The Sensor Station extended 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 extended can be equipped with additional sensors such as sun sensors and a rain sensor. Wall brackets included.

Dimensions / mast height:	3200 mm
Sensor Station extended	Ref. 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	Ref. 9 014 302
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Sensors and accessories

Mast for sun, wind and rain sensors



Individual mast for sun, wind and rain sensors.

Mast for sun, wind, rain sensors

Ref. 9 001 394

Inside Sensor Box



For connection to external push buttons or key switches per zone and up to 2 Inside Temperature Sensors. In an animeo IB+ system, up to 2 Inside Sensor Boxes can be used.

Product benefits

- Window cleaners need no access to the complete user interface (display or PC interface).
- Inside Temperature Sensors enable easy extendability of energy saving options of the system.

Further features

- In an animeo IB+ system, up to 2 Inside Sensor Boxes can be used regardless whether 2 Building Controllers are used.

Dimensions (w × h × d):	210 × 90 × 61 mm
Degree of protection:	IP 20
Protection class:	II
Operating voltage:	230 V AC
Operating temperature:	0° C to + 45° C

Inside Sensor Box	Ref. 9 001 614
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For DIN-rail installation.

Housing for Inside Temperature Sensor



For the installation of inside temperature sensor.

Dimensions (w × h × d):	75 × 75 × 25 mm
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Housing for Inside Temperature Sensor	Ref. 9 008 045
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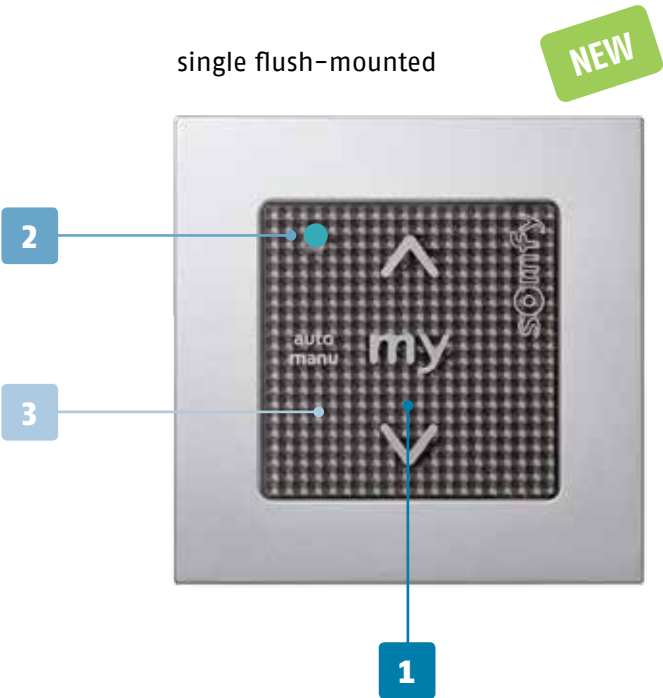
Inside Temperature Sensor



With 1 m cable.

Inside Temperature Sensor	Ref. 9 008 044
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Motor Controller for flush-mounted installation



- 1**
 - Touch-sensitive technology
 - my = intermediate position
- 2**
 - Display prioritised central commands (e.g. wind)
- 3**
 - Suitable for all 50 x 50 mm mounting frames
 - 3 colours
 - Combinable with cut-off relay for flush-mounted box
 - Sun automatic on/off

Smoove frames



animeo IB+

Motor Controller

Smoove UNO IB+

NEW



For roller shutters, screens, exterior venetian blinds and windows. Designed for flush-mounted installation. For the individual control of 1 x 230 V AC motors via touch-sensitive switch or in groups via Somfy IB or animeo IB+ controlling technology.

Product benefits

- Fits in standard 50 x 50 mm frames
- Cover plate and frame can be integrated at finish to prevent soiling during installation.
- Feedback of active status through LED on the device.

Further features

- Priority management between local and automatic commands directly on the device or through different modes configurable via animeo IB+ Building Controller.

Dimensions (w × h × d):	71 × 71 × 44 mm
Degree of protection:	IP 20
Protection class:	II
Operating voltage:	230 V AC
Operating temperature:	0° C to + 45° C
Output voltage:	230 V AC
Output current:	3.15 A

Smoove UNO IB+ Pure	Ref. 1 811 203
Smoove UNO IB+ Silver	Ref. 1 811 204
Smoove UNO IB+ Black	Ref. 1 811 205

For flush-mounted installation.

Smoove Origin IB

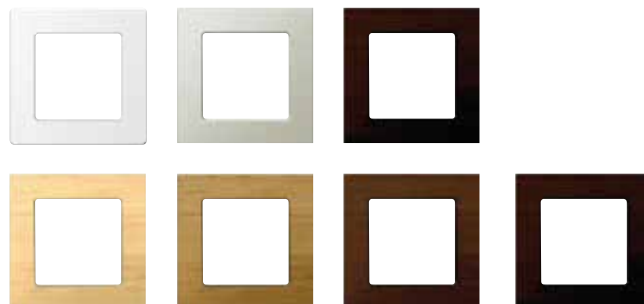
Dimensions (w × h × d):	50 × 50 × 27 mm
Degree of protection:	IP 20
Protection class:	III
Max. input switching capacity	14V DC / 50 mA

Smoove Origin IB	Ref. 1 811 272
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For flush-mounted installation.

Accessories

Smoove UNO IB+ frames

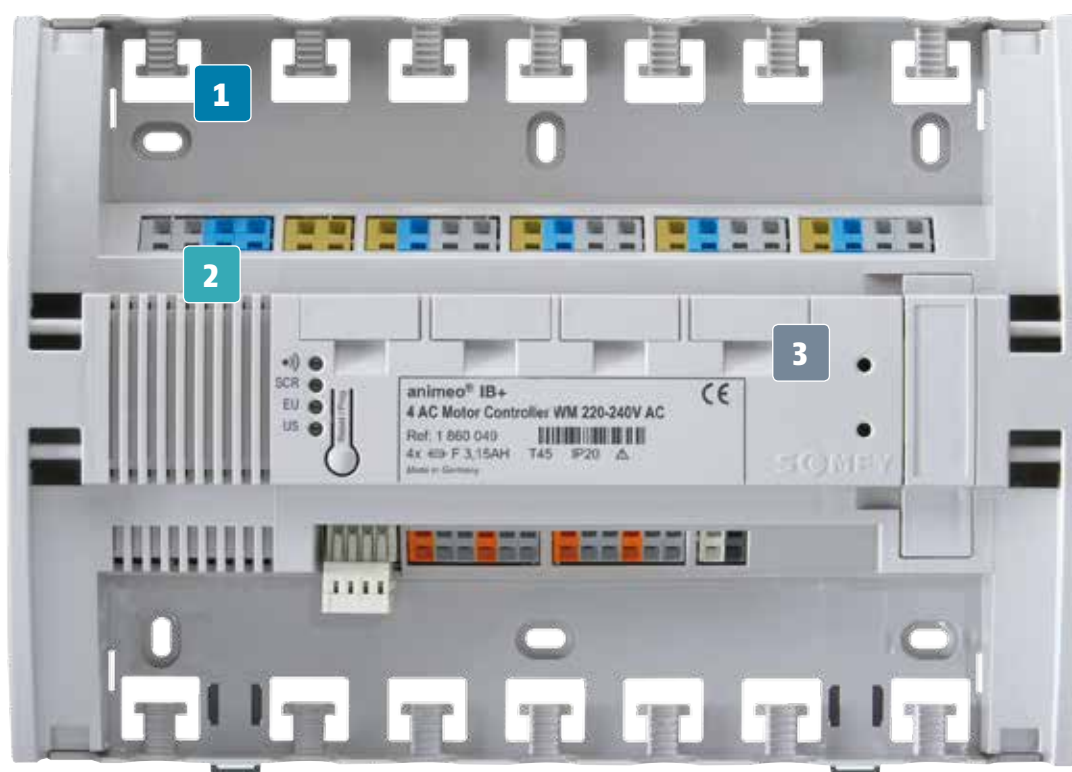


Smoove frames

Pure	Ref. 9 015 022
Silver	Ref. 9 015 024
Black	Ref. 9 015 023
Light Bamboo	Ref. 9 015 027
Amber Bamboo	Ref. 9 015 026
Cherry	Ref. 9 015 236
Walnut	Ref. 9 015 237

animeo IB+

Motor Controller for wall-mounted or DIN-rail installation



1

Quick assembly

- Integrated tension relief, usable with cable ties

2

Quick connectivity

- Spring-clip connectors
- Dual connectors (in-out), to connect to the mains circuit for example

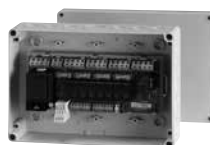
3

Quick maintenance

- Fuse holder per motor output accessible from the outside

Motor Controller

4 AC Motor Controller



For roller shutters, interior blinds, screens, exterior venetian blinds and windows. For the individual control of 4 x 230 VAC motors via local push buttons, or in groups with IB+ Controlling Technology.

Product benefits

- Upgradable for local controlling per radio or infrared.
- Local setting of an intermediate position and of user ergonomics.

Further features

- VDE certified.
- Further functionality: window contact and presence detector can be connected through the Motor Controller Extension Box.
- Easily accessible safety fuses per output.

Dimensions (w × h × d):	255 × 180 × 61 mm
Degree of protection:	IP 20

Protection class:	II
Operating voltage:	230 V AC
Operating temperature:	0° C to + 45° C
Output voltage:	230 V AC
Output current:	max. 3.15 A per output

4 AC Motor Controller WM	Ref. 1 860 049
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For wall-mounted installation.

Dimensions (w × h × d):	210 × 90 × 61 mm
Degree of protection:	IP 20

4 AC Motor Controller DRM	Ref. 1 860 081
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4 AC Motor Controller DRM (pack 6)	Ref. 1 860 082
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For DIN-rail installation.

Dimensions (w × h × d):	255 × 180 × 61 mm
Degree of protection:	IP 20

4 AC Motor Controller Wieland	Ref. 1 860 103
--------------------------------------	----------------

Wieland Plug system compatible.

Dimensions (w × h × d):	254 × 180 × 90 mm
Degree of protection:	IP 54

Housing IP 54	Ref. 9 012 740
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For the integration of a Motor Controller DRM in a IP 54 housing. For wall mounted installation.

Dimensions (w × h × d):	255 × 180 × 61 mm
Degree of protection:	IP 20

Protection class:	II
Operating voltage:	230 V AC
Operating temperature:	0° C to + 45° C
Output voltage:	230 V AC
Output current:	max. 3,15 A per output

4 AC Motor Controller RTS WM	Ref. 1 860 109
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For wall-mounted installation.

2 AC Motor Controller

NEW



For the individual controlling of 2 x 230V AC motor via local push buttons, or in groups with IB+ Controlling Technology.

Product benefits

- Compact construction form suitable for e. g. installation in under-window or wall-mounted wiring channels.
- Local setting of an intermediate position and of user ergonomics.

Further features

- Easy accessible fuses.

2 AC Motor Controller

For roller shutters, screens, exterior venetian blinds and windows.

Dimensions (w × h × d):	90 × 180 × 45 mm
Degree of protection:	IP 20

Protection class:	II
Operating voltage:	230 V AC
Operating temperature:	0° C to + 45° C
Output voltage:	230 V AC
Output current:	3.15 A

2 AC Motor Controller WM	Ref. 1 860 209
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2 AC Motor Controller Panel	Ref. 1 860 210
------------------------------------	----------------

For wall-mounted installation.

PCB version for DIN-rail installation. Additional DIN-rail adapter needed (Ref. 5 008 049).

Motor Controller

1 AC Motor Controller



1 AC Motor Controller Output Converter

Provides 1 x potential free output for the individual control via local push buttons, or in groups with animeo IB+ Controlling technology.

Product benefits

- Compact construction form suitable for e.g. installation in under-window or wall-mounted wiring channels.
- Local setting of an intermediate position and of user ergonomics.

Further features

- Easily accessible fuses.

1 AC Motor Controller

For roller shutters, screens, exterior venetian blinds, exterior venetian blinds with 3 end limits and windows. For the individual control of 1 x 230 VAC motor via local push buttons, or in groups with IB+ Controlling Technology.

Protection class:	II
Operating voltage:	230 V AC
Operating temperature:	0° C to + 45° C
Output voltage:	230 V AC
Output current:	3.15 A

Dimensions (w × h × d):	90 × 180 × 45 mm
Degree of protection:	IP 20

1 AC Motor Controller WM	Ref. 1 860 121
1 AC Motor Controller WM 3 end limit	Ref. 1 860 123
1 AC Motor Controller WM Output Converter	Ref. 1 860 125

For wall-mounted installation.

Dimensions (w × h × d):	65 × 105 × 20 mm
Degree of protection:	according to installation type

1 AC Motor Controller Panel	Ref. 1 860 122
1 AC Motor Controller Panel Kit	Ref. 1 860 163
1 AC Motor Controller Panel 3 end limits	Ref. 1 860 124
1 AC Motor Controller Panel Output Converter	Ref. 1 860 126

Platine version for DIN-rail installation. Additional DIN-rail adapter needed.

4 DC Motor Controller



Product benefits

- Upgradable for local controlling per radio or infrared.
- Local setting of an intermediate position and of user ergonomics.
- Configurable slats and turning speed for optimum user ergonomics.

Further features

- Output protected through current detection.
- Further functionality: window contact and presence detector can be connected through the Motor Controller Extension Box.

For interior blinds, interior venetian blinds and windows. For the individual control of 4 x 24 VDC motors via local push buttons, or in groups with IB+ Controlling Technology. External 24 VDC power supply required (see accessories).

Dimensions (w × h × d):	255 × 180 × 61 mm
Degree of protection:	IP 20
Protection class:	III
Operating voltage:	24 V DC
Operating temperature:	0° C to + 45° C
Output voltage:	24 V DC
Output current:	up to max. 2.1 A per output

4 DC Motor Controller	Ref. 1 860 085
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For wall-mounted installation.

Motor Controller

4 DC-E Motor Controller



For interior blinds, interior venetian blinds and windows.

For the individual controlling of 4 x 24 VDC/DC-E motors from the "Somfy Concept 25" series via local push buttons, or in groups with IB+ Controlling Technology.

Product benefits

- Easy installation: integrated 230 VAC power supply.
- In combination with the DC encoder motor and the CTS wind-up system, it allows a particularly precise setting of the slats and an exact positioning of the venetian blinds.
- Configurable up and down speed (in combination with an animeo IB+ Building Controller).
- Upgradable for local control by radio or infrared.
- Local setting of an intermediate position and of user ergonomics.
- Configurable slats and rotation speed for optimum user ergonomics.

Further features

- Output protected through current identification.
- Further functionality: window contact and motion detector can be connected through the Motor Controller Extension Box.

Dimensions (w × h × d):	255 × 180 × 61 mm
Degree of protection:	IP 20
Protection class:	II
Operating voltage:	230 V AC
Operating temperature:	0° C to + 45° C
Output voltage:	24 V DC
Output current:	max. 0.5 A continuous current per output

4 DC / DC-E Motor Controller WM	Ref. 1 860 087
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For wall-mounted installation.

4 DC / DC-E Motor Controller DRM	Ref. 1 860 200
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For DIN-rail installation.

Accessories

RTS Radio module



Receiver for upgrading from 4 AC, 4 DC or 4 DC/DC-E Motor Controller devices. Direct plug-in to Motor Controller.

Dimensions (w × h × d):	52 × 92 × 27 mm
Degree of protection:	IP 20
Protection class:	II
Operating temperature:	0° C to + 45° C
Supply voltage:	5 V DC, from animeo IB+ Motor Controller
Radio frequency:	433 MHz
Radio range:	20 m through 2 walls

RTS Radio module	Ref. 1 860 105
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Accessories

Power Supply DC



For the power supply to the DC Motor Controller.

In the application of "Somfy Concept 25" motors, up to 2 Motor Controllers 4 DC can be supplied with one power supply (= 8 motors). Switchable also in parallel:
 $2 \times 4.5 \text{ A} = 9 \text{ A}$.

Dimensions (w × h × d):	130 × 180 × 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 min. on, 3 min. off)

Power Supply DC

Ref. 1 860 093

For wall-mounted and DIN-rail installation.

Switch zone splitter



For creating sub-groups within an IB+ zone.

Dimensions (w × h × d):	80 × 80 × 52 mm
Degree of protection:	IP 65
Protection class:	III

switch zone splitter

Ref. 1 810 392

For wall-mounted installation.

DIN-rail adapter



For installation on 35 mm DIN-rail for mounting circuit board versions CD 1 × 1 P6, CD 2 × 1 P6, CD 1 × 4 P6, animeo 1 AC Motor Controller.

Dimensions (w × h × d):	70 × 105 × 23 mm
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DIN-rail adapter

Ref. 9 008 049

For 35 mm DIN-rail, colour; black.

IB / IB+ Repeater



Circuit board for signal amplification of IB/IB+ controlling technology signal with longer cable connection (from 1000 m).

Dimensions (w × h × d):	165 × 160 × 60 mm
Degree of protection:	IP 54
Protection class:	II
Operating voltage:	230 V AC
Operating temperature:	0° C to + 45° C

IB / IB+ Repeater

Ref. 9 011 809

For wall-mounted installation.

animeo IB+

Accessories

WT Setting Tool



Programming tool to program different start-up time delays into the animeo IB+ Motor Controller for the use of WT motors.

Product benefits

- Programming of start-up time delays directly into the animeo IB+ Motor Controller.
- Selection of start-up time delays of the following Somfy WT (electronic) motors: Oximo WT, Orea WT, J4WT controlled by Telis Mod/Var remote control.

WT Setting Tool

Ref. 1 811 242

RTS Programming Tool



Programming tool for assigning the channels of the remote control to the animeo RTS card (Ref. 1 860 105).

RTS Programming Tool

Ref. 1 810 879

USB IB+ Interface



USB IB+ Interface for direct connection of the computer to the Building Controller.

USB IB+ Interface

Ref. 1 860 146

IB+ Wiring Test Tool



To ensure that the system is properly wired.

animeo IB+ Wiring Test Tool

Ref. 1 810 793

Philips, the world's leading lighting solutions company and Somfy, the world's leading electric motor and solar shading automation company, have joined forces to offer integrated lighting management solutions for maximum user comfort and minimum energy consumption.



Light Management Pack: details of the components NEW

For the local integration of artificial lighting and blind control.



For the individual control of 4 x 230 VAC motors through Somfy RTS technology using the animeo RTS radio module.

The pack contains:

- 4 AC Motor Controller WM-0 (Ref. 1 860 231)
- RTS Radio module (Ref. 1 860 105)
- Occuswitch DALI (Ref. 9 018 305)
- OSD Somfy Interface (Ref. 9 018 301)
- Telis 4 RTS Pure (Ref. 1 810 631)

Product benefits

- Ideal for renovation projects or to install in one or more rooms, or even a whole floor, based on real-time occupancy and interaction with the user thanks to the interface developed between the two systems.
- Local user override through Somfy radio technology RTS.
- Simple integration of Philips Occuswitch and the Somfy Philips interface.

Further features

- Smooth dimming of artificial light through Philips Occuswitch.

Dimensions (w × h × d):	255 × 180 × 61 mm
Degree of protection:	IP 20
Protection class:	II
Operating voltage:	230 V AC
Operating temperature:	0° C to + 45° C
Output voltage:	230 V AC
Output current:	3,15 A per output
Light Management Pack	Ref. 1 824 417

For wall-mounted installation.

For more information on this range of solutions please refer to the Light Balance brochures and functional descriptions.

More information : www.light-balancing.com

animeo IB+

Motor Controller

4 AC Motor Controller for occupancy sensor integration

NEW



For roller shutters, interior blinds, screens, exterior venetian blinds. For the individual controlling of 4 x 230 VAC motors through Somfy RTS technology using the animeo RTS radio module (Ref. 1 860 105).

Product benefits

- Simple integration of OccuSwitch DALI (Ref. 9 018 305) and the OSD Somfy Interface (Ref. 9 018 301).
- Automatic switching between manual and automatic priority depending on presence and absence based on room level
- Local user override through Somfy radio technology RTS.

Further features

- Smooth dimming of artificial light through Philips OccuSwitch.

Dimensions (w × h × d):	255 × 180 × 61 mm
Degree of protection:	IP 20
Protection class:	II
Operating voltage:	230 V AC
Operating temperature:	0° C to + 45° C
Output voltage:	230 V AC
Output current:	3.15 A per output

4 AC Motor Controller WM-0	Ref. 1 860 231
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For wall-mounted socket installation.

Accessories

OccuSwitch DALI – LRM 2080

NEW



The OccuSwitch DALI 2080 is a combined sensor and controller which dims and switches the lights in a room or area on occupancy and available daylight, with options for local override. The device is designed for an area of 20... 25 m².

Product benefits

- A combined sensor, easy to install in false ceilings with:
 - a light sensor for daylight depending on regulation
 - a movement detector for occupancy control
 - an infrared receiver.
- Feedback of active status on the device.

Further features

- Area of detection can be extended by coupling in parallel the LRM 2080.

Dimensions (w × h × d):	255 × 180 × 61 mm
Degree of protection:	IP 20
Protection class:	I
Operating temperature:	+ 5° C to + 50° C

animeo IB+ DALI interface	Ref. 9 018 305
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OSD Somfy Interface – LCU 2080

NEW



The LCU 2080/00 OSD Somfy interface unit is an interface between the Philips OccuSwitch DALI lighting control system and the Motor

Controller IB+. It enables the OccuSwitch LRM 2080 to share occupancy information.

Product benefits

- The connection is polarity free, so either connection method is correct.

Dimensions (w × h × d):	120 × 70 × 30 mm
Degree of protection:	IP 20
Operating voltage:	max. 24 V DC SELV
Operating temperature:	+ 5° C to + 50° C
Max. current:	2 mA





animeo IB+ DALI interface	Ref. 9 018 301
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Project example

Building owner desired and specified functionalities

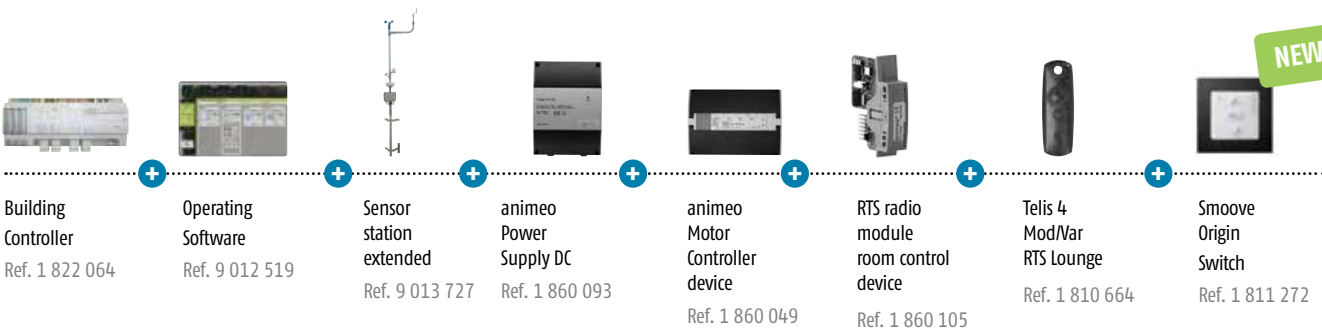
- Up to 8 separate façade zones are to be controlled
- For the user interface an ergonomic PC software is desired
- Exterior venetian blinds except for the gross floor which will be equipped with roller shutters (security)
- Local control through Somfy RTS technology switches

Legend

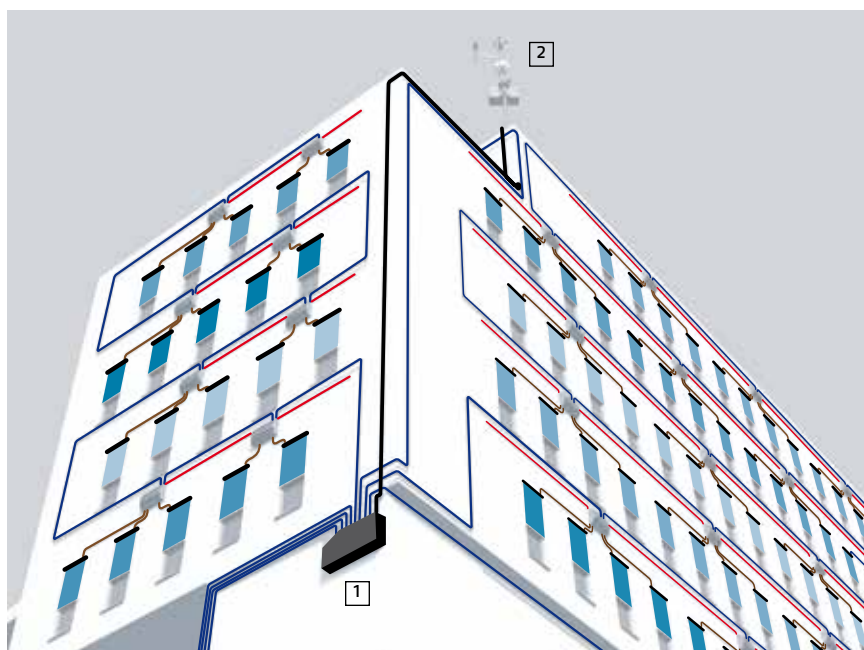
	Links to sensors
	Bus line IB+
	Power supply
	Motor cable



Products installed



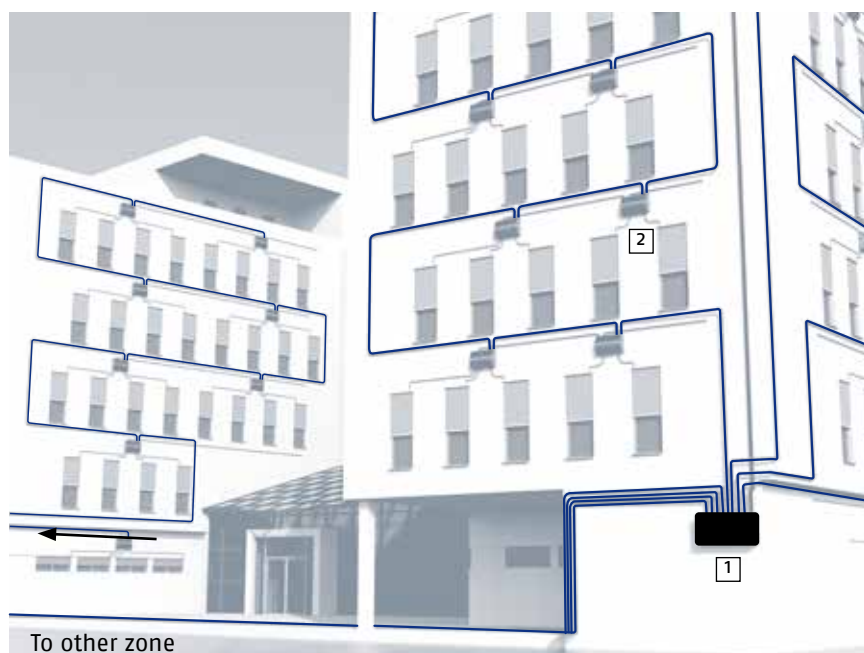
Installation details



The animeo IB+ Building Controller enable to automate up to 8 zones.

The Sensor Station is directly linked to the Building Controller and each zone is separately managed depending on the weather and other parameters to be defined.

1. animeo IB+ Building Controller
2. Sensor station



Each Motor Controller of a same zone is connected to the same IB+ network via the animeo IB+ Building Controller.

1. animeo IB+ Building Controller
2. animeo IB+ Motor Controller

Case study

Santos Place Brisbane, Australia



"Santos Place, formally known as Northbridge, has targeted the highest possible 6 star rating under the Green Building Council of Australia rating scheme."



RYAN COYNE
Project Administrator
Hutchinson Builders

Initial Brief

Find a solution to create a highly efficient and automated façade design to be awarded the highest 6 star green star rating.

The key driver was the IEQ5 daylight glare control requisite to implement a "fully automated, centrally controlled, motorised solar control and glare control solution with local switching".

Reasons to use animeo IB+

- Solution used by Hutchinson Builders for their head office and the solution proved to be very easy to install and use.
- Being an "off-the-shelf" and highly cost-effective solution to meet the green star energy conservation requirements of the architect.
- Excellent support from the planning stage right through to installation and commissioning, Somfy, Hutchinson Builders and KWA Blinds worked closely to make sure everything went smoothly.

Technical information
• animeo IB+ system
• 2 Building Controller animeo IB+
• 5 sun sensors
• 340 Motor Controller 4 AC
• 1200 internal roller blinds



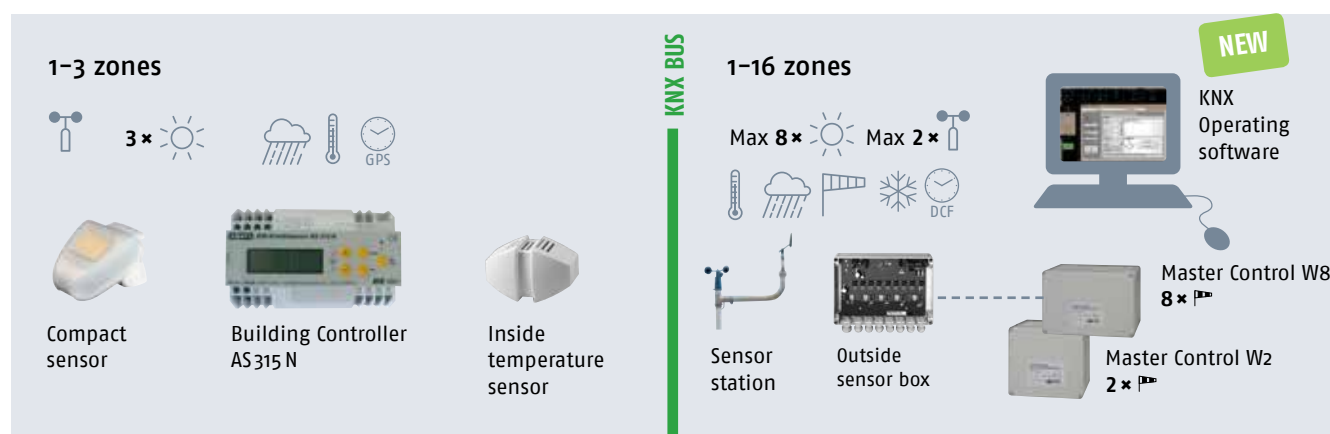
- System topology
- Benefits
- Products
- Project example
- Case study



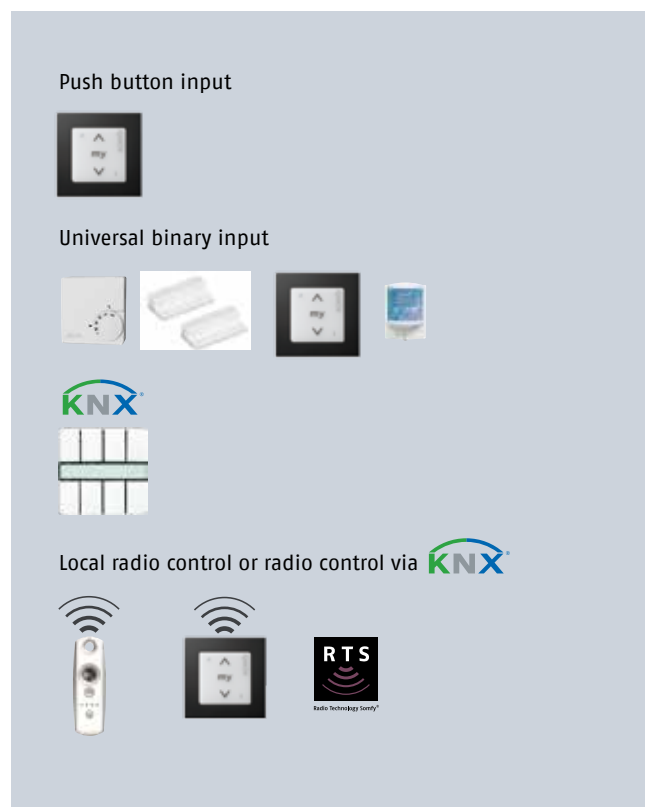
Adaptable façade management system compatible with KNX standards.
No zone limitation.

System topology

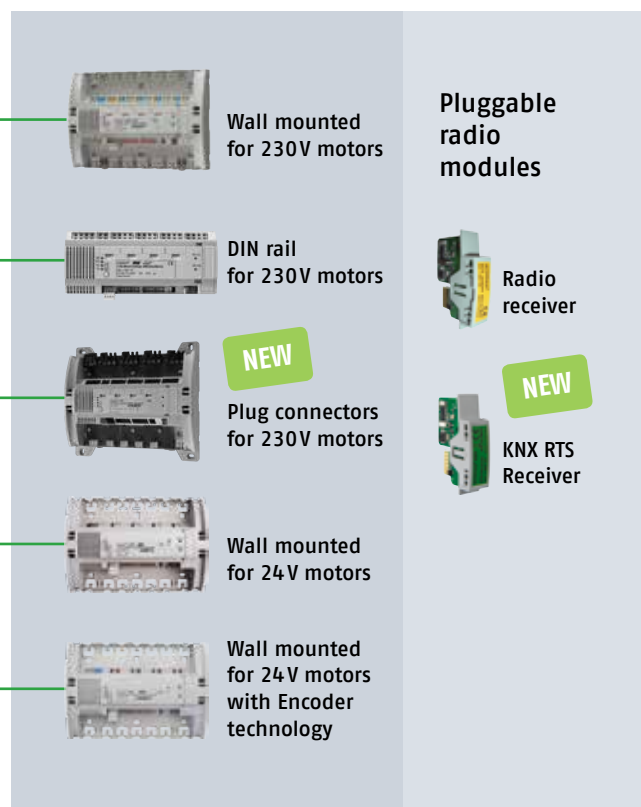
Central KNX control



Local control options



Motor Controllers



All benefits at a glance

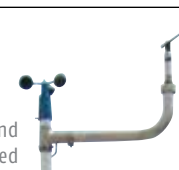
Intuitive animeo KNX Operating Software

Simplified programming of all functions, such as wind direction and sun-tracking.

Wind direction measurement

The blinds move up into the security position only when the façade is affected by wind speed, depending on wind direction. All other areas of the façade remain shaded. In the event of a storm, the blinds on all façades move up.

Wind direction and
wind speed



Zone based daylight/shadow management

Available
Q1 2014

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 when users are absent.
- Diminished slat-turn angles and reduced cooling requirements in summer.
- Intelligent wind protection controlled using only the wind affected façades. In all other façade zones, the blinds remain in the sun protection position and thus reduce the load for cooling.



Functions integrated with other systems

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

High levels of user comfort

All blinds can be operated locally. The user is able to override the automatic function.

More functions

- Individual sun protection control per façade and thus, improved working conditions in every room.
- Sensors can be used in multiple ways.
- All types of blinds and façade elements can be controlled. 19 different blind and façade elements are available.
- Manual override of automatic orders possible at a room level.



Wall mounted
Motor Controller



Din rail
Motor Controller

Compatible with all installation environments

Building Controller

KNX Master Control W2 / W8



Ref. 1 860 187



Ref. 1 860 193



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 passed on to the KNX bus.

Dimensions (w × h × d):	180 × 182 × 110 mm
Degree of protection:	IP 20
Protection class:	III
Operating voltage:	24 V AC
Operating temperature:	0° C to + 55° C

KNX Master Control W2	Ref. 1 860 187
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For wall-mounted installation. For 2 wind speed sensors

Dimensions (w × h × d):	180 × 254 × 110 mm
Degree of protection:	IP 20
Protection class:	III
Operating voltage:	24 V AC
Operating temperature:	0° C to + 55° C

KNX Master Control W8	Ref. 1 860 193
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For wall-mounted installation. For 8 wind speed sensors

Product benefits

- 1 – 16 façade zones incl. Operating Software – parameter setting without ETS.
- 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 8 x 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 can be overridden.
- Monitoring of all weather data for energy optimisation.
- All real values can be sent to the KNX bus and viewed at the same time via the Windows graphical user interface on the PC.
- The status of the façades can be called up from memory and the set values, by using a password, can be changed in the menu by the user without prior ETS knowledge.

Further 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 individual wind speed sensors on the façade can be avoided.
- For each of the 16 façades, individual response and delay times can be configured for all available functions.
- Slat tracking for each zone depending on the sun's elevation and azimuth can be configured in the user software.
- The entire configuration of the sun protection control centre is done over a user-friendly Windows interface.
- Individual façades can be controlled over the operating user interface.
- Direct adjustment 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.

Building Controller

KNX Building Controller AS 315 N



Product benefits

- More precise sensor measurements.
- Easy wiring as all sensors are integrated in the device.
- Monitored communication between Building Controller and Compact Sensor.
- Façade automation system for 3 façades.
- Controls sun protection and window systems ranging from a detached family house to a large building.
- Provides optimum light and climate inside the building.
- The connected Compact Sensor communicates the following information to the KNX Building Controller AS 315 N: brightness from east, south and west, dusk, wind speed, rain, outside temperature, time and date via integrated GPS.

Compact Sensor

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

- Wiring benefits: only one cable (2 x 2 x 0.8 mm) needs to be laid from the AS 315 N to the Compact Sensor.
- An optional Inside Temperature Sensor (e. g. for a conservatory) can be connected.
- The KNX Building Controller AS 315 N evaluates and processes all weather signals so that the sun protection and window system can be controlled from a user and energy standpoint.
- The most important functions can be set over the ETS as well as directly over the display on the AS 315 N.

Further features

- Integrated sensors.
- 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.
- GPS Receiver for time synchronisation.
- Bracket for wall or post mounting.

Dimensions (w × h × d):	140 × 90 × 64 mm
Degree of protection:	IP 20
Protection class:	II
Operating voltage:	230 V AC
Operating temperature:	-5° C to + 45° C

KNX Building Controller AS 315 N

Ref. 1 860 068

For DIN-rail installation.

Dimensions (w × h × d):	96 × 77 × 118 mm
Degree of protection:	IP 44
Protection class:	III
Operating voltage:	230 V AC
Operating temperature:	-25° C to + 50° C

Compact Sensor

Ref. 9 015 079

For DIN-rail installation.

Kit AS 315 N + Compact Sensor

Ref. 1 860 069

Delivery including 1 × KNX Building Controller AS 315 N + 1 × Compact Sensor

Sensor accessories

Inside Temperature Sensor



For interior temperature control and air ventilation. Ideal for winter gardens. To connect to the AS315 N.

Dimensions (w × h × d):	84 × 50 × 32 mm
Degree of protection:	IP 20
Protection class:	II

Inside Temperature Sensor

Ref. 9 001 461

For wall-mounted installation.

Motor Controller

KNX 4 AC Motor Controller



For roller shutters,
interior blinds, screens,
exterior venetian blinds
and windows.

For the control of
4 x 230 V AC motors.

Product benefits

- Cost savings through use of 8 freely-definable binary inputs.
- Upgradable for local operation by radio or infrared.
- 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.
- Extensibility: extendable at any time with the animeo RTS radio module. Without any additional wiring investment, 4 motors can be controlled individually or in a group by radio using the Somfy RTS Technology.

- New: through the animeo KNX RTS Radio Receiver (Ref. 1 860 191) signals can be linked to the KNX bus.

Further 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.
- The device can be used "out of the box", without requiring programming with the ETS software.
- Mixed systems: in contrast to Motor Controllers based on the Somfy Controlling Technology, with KNX different motor types can be connected to one Motor Controller 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 back to automatic again.

Dimensions (w × h × d):	255 × 180 × 61 mm
Degree of protection:	IP 20
Protection class:	II
Operating voltage:	230 V AC
Operating temperature:	0° C to + 45° C
Output voltage:	230 V AC
Max current consumption:	max. 3.15 A per output

KNX 4 AC Motor Controller	Ref. 1 860 114
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For wall-mounted installation.

Dimensions (w × h × d):	90 × 210 × 61 mm
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KNX 4 AC Motor Controller DRM	Ref. 1 860 116
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For DIN-rail installation.

KNX 4 DC Motor Controller



For interior blinds,
interior venetian blinds
and windows.

For the control of
4 x 24 V DC motors.

External 24 V DC
power supply required
(see accessories).

Product benefits

- Cost savings through use of 8 freely-definable binary inputs.
- Clear, self-explanatory ETS index cards.
- Configurable slat tilting speed for optimum user ergonomics.

Further features

- Output protected through current detection.

Dimensions (w × h × d):	255 × 180 × 61 mm
Degree of protection:	IP 20
Protection class:	III
Operating voltage:	240 V DC
Operating temperature:	0° C to + 45° C
Output voltage:	24 V DC
Max current consumption:	max. 2,1 A per output

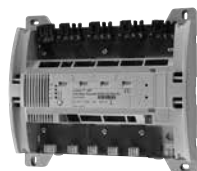
KNX 4 DC Motor Controller WM-P8	Ref. 1 860 128
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For wall-mounted installation.

Motor Controller with specific connectors

KNX 4 AC Motor Controller WM-P2

NEW



Product benefits

- For Wago Winsta® plug connectors.
- Clear, self-explanatory ETS index cards.

Further features

- Easily accessible safety fuse per output.

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

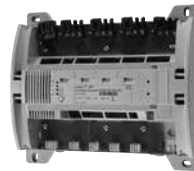
Dimensions (w × h × d):	255 × 180 × 63 mm
Degree of protection:	IP 20
Protection class:	II
Operating voltage:	230 V AC
Operating temperature:	0° C to + 45° C
Output voltage:	230 V AC
Max current consumption:	max. 3.15 A per output

KNX 4 AC Motor Controller WM-P2	Ref. 1 860 197
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For wall-mounted installation.

KNX 4 AC Motor Controller WM-P

NEW



Product benefits

- For Wieland plug connectors.
- Cost savings through use of 8 freely-definable binary inputs.
- Upgradable for local operation by radio or infrared.
- Clear, self-explanatory ETS index cards.

Further features

- Easily accessible safety fuse per output.

For roller shutters, interior blinds, screens, exterior venetian blinds and windows.
For the control of 4 x 230 V AC motors.

Dimensions (w × h × d):	255 × 180 × 63 mm
Degree of protection:	IP 20
Protection class:	II
Operating voltage:	230 V AC
Operating temperature:	0° C to + 45° C
Output voltage:	230 V AC
Max current consumption:	max. 3.15 A per output

KNX 4 AC Motor Controller WM-P	Ref. 1 860 219
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For wall-mounted installation.

Motor Controller

Available
Q2 2014

KNX 4 DC / DC-E Motor Controller



For interior blinds and interior venetian blinds.
For the control of 4 x 24 V DC or DC-E Somfy Encoder motors from the "Somfy Concept 25" series.

Product benefits

- 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.
- Exact positioning of the venetian blind.
- Upgradable for local operation by radio.
- Local setting of intermediate position and user ergonomics.
- Clear, self-explanatory ETS index cards.

Further features

- Output protected through current detection.

Dimensions (w × h × d):	255 × 180 × 61 mm
Degree of protection:	IP 20
Protection class:	III
Operating voltage:	230 V DC
Operating temperature:	0° C to + 45° C
Output voltage:	24 V DC
Max current consumption:	max. 0.5 A per output

KNX 4 DC / DC-E Motor Controller WM	Ref. 1 860 127
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For wall-mounted installation.

KNX 4 DC / DC-E Motor Controller DRM	Ref. 1 860 192
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For DIN-rail installation.

KNX/RS485 Motor Controller excellent screen control

Available
Q4 2013

KNX RS485 Motor Controller



KNX RS485 Motor Controller which connects with the KNX bus to control a group of 1 to 6 similar Somfy RS485 motors.

Further technical features are explained in full in the operating instructions.

Product benefits

- To control Somfy tubular motors in screens and roller shutters.
- The interface enables bi-directional data exchange between the KNX bus and the Somfy tubular motor.
- The exact position of the motor during a move is sent to the KNX bus.
- The top and bottom positions of the motor are sent when the positions are reached.
- A conventional double push button and window contact can be connected directly to the interface. Both inputs can be used as universal binary inputs.

Further features

- Using a byte telegram, the motor can be moved to any desired position (0 – 100 %).
- The current position of the motor (0 – 100 %) can be viewed on an external display / BMCS System.
- The motor, based on parameter settings and if a window or door contact is open, is moved to one of four blocking positions and disabled for further move commands.
- Following a safety telegram, the motor moves to one of various configurable safety positions and is blocked for further move commands.

Important for site managers

- Precise façade design through positioning of the blinds with help of the increment encoder technology of the RS485 motor.

Dimensions (w × h × d):	85 × 45 × 26 mm
Degree of protection:	IP 20
Protection class:	II
Operating voltage:	24 V DC
Operating temperature:	0° C to + 40° C
Nominal current consumption KNX bus:	< 10 mA DC

KNX RS485 Motor Controller WM	Ref. 1 860 236
For wall-mounted installation.	

KNX RS485 Motor Controller PCB	Ref. 1 860 238
For DIN-rail installation. Additional DIN-rail adapter needed (Ref. 9 008 049).	

DIN-rail adapter



For installation on 35 mm DIN-rail for mounting of circuit board versions for animeo 1 AC Motor Controller and animeo KNX RS485 Motor Controller.

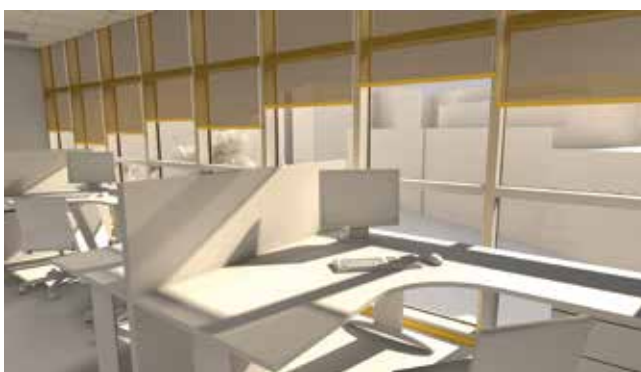
Dimensions (w × h × d):	70 × 105 × 23 mm
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DIN-rail adapter	Ref. 9 008 049
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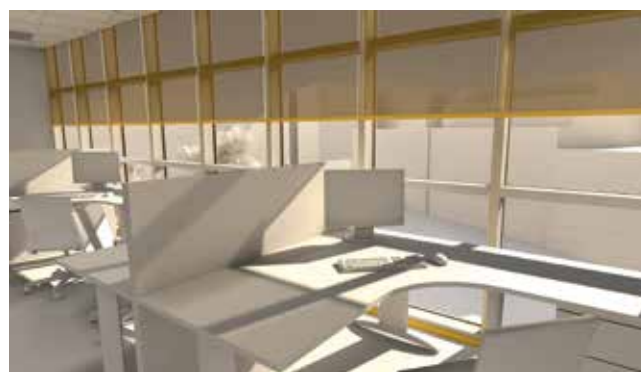
For 35 mm DIN-rail, colour; black.

KNX/RS485 Motor Controller excellent screen control

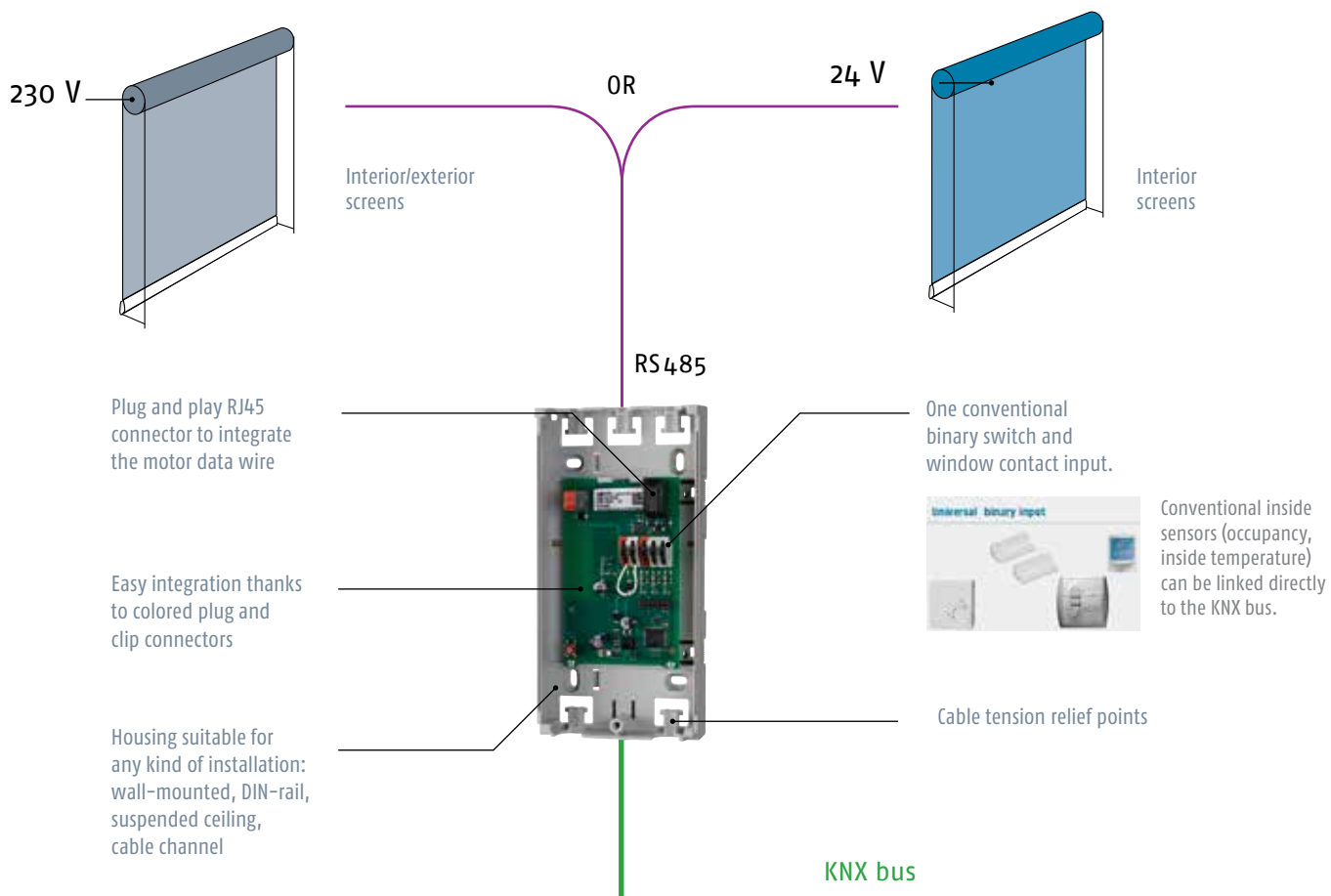
- Perfect alignment
- Numerous intermediate positions
- Precise motor position feedback
- Precise façade design



With standard motor



With the digital RS485 motor



Accessories

RTS Radio module



Radio for retrofitting KNX 4 AC, 4 DC or 4 DC/DC-E Motor Controllers. Directly pluggable into the Motor Controller.

Dimensions (w × h × d):	52 × 92 × 27 mm
Degree of protection:	IP 20
Protection class:	II
Supply voltage:	5 V DC, from animeo IB+ Motor Controller
Operating temperature:	0° C to + 45° C
Radio frequency:	433 MHz
Radio range:	20 m through 2 walls

KNX RTS Receiver	Ref. 1 860 105
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KNX RTS Receiver

NEW


Radio receiver for forwarding the Somfy RTS radio signals to the KNX bus.

Product benefits

- Economic radio operation for KNX.
- No additional bus subscriber (physical address).

- Pluggable into existing animeo KNX Motor Controller.
- 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.

Dimensions (w × h × d):	52 × 92 × 27 mm
Degree of protection:	IP 20
Protection class:	II
Supply voltage:	5 V DC, from animeo IB+ Motor Controller
Operating temperature:	0° C to + 45° C
Radio frequency:	433 MHz
Radio range:	20 m through 2 walls

KNX RTS Receiver	Ref. 1 860 191
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Sensors and accessories

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 benefits

- Convenient lightning protection – only two cables (power supply 24 V AC/DC and data cable) need to 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.

Dimensions (w × h × d):	235 × 207 × 90 mm
Degree of protection:	IP 65
Protection class:	III
Operating voltage:	24 V AC / DC
Operating temperature:	–30° C to + 70° C

Outside Sensor Box	Ref. 9 001 606
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For wall-mounted installation.

Compact Sensor

NEW with KNX Master Control



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

Product benefits

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

Further features

- Integrated sensors:
- 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.
 - GPS receiver for time synchronisation.
 - Bracket for wall or post mounting.

Dimensions (w × h × d):	96 × 77 × 118 mm
Degree of protection:	IP 65
Protection class:	III
Operating voltage:	24 V DC ± 10 %
Operating temperature:	– 25° C to + 50° C

animeo Compact Sensor	Ref. 9 015 047
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Power Supply DRM 24 V 1.5 A

NEW



To supply the Outside Sensor Box (without heated sensors) or the animeo KNX Compact Sensor.

Dimensions (w × h × d):	78 × 93 × 56 mm
Degree of protection:	IP 20
Protection class:	II
Operating voltage:	230 V AC
Output voltage:	24 V DC
Output current:	1.5 A

Power Supply DRM 24 V DC 1.5 A	Ref. 9 017 611
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Sensors and accessories

animeo Power Supply DC



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

Dimensions (w × h × d):	130 × 180 × 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 min. on, 3 min. off)

animeo Power Supply DC

Ref. 1 860 093

For wall-mounted and DIN-rail installation.

Sensor Station extended without sensors



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

Dimensions / mast height:	3 200 mm
Sensor Station extended without sensors	Ref. 9 014 302

Wind Sensor



Measurement of wind speed.

Dimensions:	Height 200 mm, ø 240 mm max. ø-mast: 48 mm
Degree of protection:	IP 65
Wiring recommendations:	2 × 0.8 mm ²

Wind Sensor

Ref. 9 001 608

Rain Sensor Ondeis 24 V DC

NEW



Power supply through the Outside Sensor Box.

Dimensions (w × h × d):	115 × 100 × 85 mm
Degree of protection:	IP 44
Wiring recommendations:	3 × 1.5 mm ²

Rain Sensor Ondeis

Ref. 9 016 344

Heated Wind Sensor



Power supply via Outside Sensor Box. Measurement of wind speed.

Dimensions:	Height 190 mm, ø 240 mm max. ø-mast: 48 mm
Degree of protection:	IP 54
Wiring recommendations:	5 × 1.5 mm ²

Heated Wind Sensor

Ref. 9 140 180

Sensors and accessories

Wind Direction Sensor



With high-quality bearing.

Dimensions:	Height 303 mm, Arrow length 515 mm, max. Ø-mast: 48 mm
Degree of protection:	IP 54
Wiring recommendations:	5 × 1.5 mm ²
Wind Direction Sensor	Ref. 9 013 807

Outside Temperature Sensor



With solar radiation sensor protective housing.

Dimensions:	Height 150 mm, Ø 115 mm
Degree of protection:	IP 65
Wiring recommendations:	2 × 0.8 mm ²
Outside Temperature Sensor	Ref. 9 001 611

Sun Sensor



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

Dimensions (w × h × d):	34 × 88 × 47 mm
Degree of protection:	IP 43
Protection class:	III
Wiring recommendations:	2 × 0.8 mm ²
Angle position:	150°

Sun Sensor without mounting bracket	Ref. 9 050 100
Mounting bracket for Sun Sensor	Ref. 9 127 888
Complete pack	Ref. 9 154 043

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.

Dimensions / mast height:	3200 mm
Sensor Station	Ref. 9 013 726

Sensors and accessories

Sensor Station without sensors

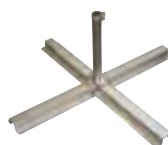


Sensor Station without sensors and Outside Sensor Box.

Dimensions / mast height:	3 200 mm
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Sensor Station without Sensor	Ref. 9 014 301
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Roof mounting



For the roof-mounting of the Sensor Station. Stainless steel.

Roof mounting	Ref. 9 014 300
Strain connection for roof mounting only	Ref. 9 014 303

Sensor Station extended



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.

Dimensions / mast height:	3200 mm
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Sensor Station extended	Ref. 9 013 727
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Lightning protection



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

Electronic lightning protection power supply	Ref. 9 001 629
Electronic lightning protection RS 485	Ref. 9 001 630

Local controls

Light Balancing Switch

NEW



A wall-mounted KNX switch designed to control the natural and artificial light level in the room. Fits ideally with the Somfy animeo KNX range and Philips KNX range. Available in two versions: white and black. Both with glass-finish front.

Product benefits

- Four buttons with dedicated application marking.
- One switch allows the control of four functions: 1. Solar shading control (up, down, stop, tilt), 2. Lighting control on/off, 3. Lighting dimming, 4. Scenes. – Reaction times of individual buttons can be programmed individually.

Further features

- Flexible pre-mounting of frame to provide accurate positioning of the switch.
- Standard KNX connection of the bus coupling unit through KNX terminal.
- Easy, clip-on installation of front cover.

Light Balancing

PHILIPS | **somfy**

Dimensions (w × h × d):	86 × 86 × 35 mm
Degree of protection	IP 20
Protection class:	II
Operating voltage:	21...30 V DC
Operating temperature:	- 5° C to + 55° C
KNX current consumption:	< 25 mA
KNX standby current:	< 5 mA

Light Balancing switch-w	Ref. 1 860 232
Light Balancing switch-b	Ref. 1 860 233

System accessories

KNX Power Supply 320 mA

NEW



Product benefits

- Wide range input 100 to 240 V AC / 50-60 Hz.
- Integrated KNX choke.
- Integrated KNX reset function for choked output.
- Short-circuit protection.
- Status LEDs for power, overload and reset.

KNX Power Supply with integrated choke. Usable worldwide due to wide range input 100 – 240 V AC. LED indicator for power, overload and reset. Push button for automatic reset on the KNX line. Additional auxiliary voltage output with 30 V DC. Nominal current on the short-circuit protected outputs is 320 mA.

Dimensions (w × h × d):	71 × 91 × 62 mm (4 SU)
Degree of protection:	IP 20
Protection class:	III
Operating temperature:	- 5° C to + 50° C
Supply voltage:	100 – 240 V AC / 50 – 60 Hz
Output voltage:	30 V DC (28 – 31 V DC according to KNX specification)
Output voltage not choked:	30 V DC
Nominal current:	320 mA

KNX Power Supply 320 mA	Ref. 9 018 244
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For DIN-rail installation.

System accessories

KNX Power Supply 640 mA

NEW



KNX Power Supply with integrated choke. Usable worldwide due to wide range input 100 – 240 V AC. LED indicator for power, overload and reset. Push button for automatic reset on the KNX line.

Additional auxiliary voltage output with 30 V DC. Nominal current on the short-circuit protected outputs is 640 mA.

Product benefits

- Wide range input 100 to 240 V AC / 50–60 Hz.
- Integrated KNX choke.
- Integrated KNX reset function for choked output.
- Short-circuit protection.
- Status LEDs for power, overload and reset.

Dimensions (w × h × d):	107 × 91 × 62 mm (6 SU)
Degree of protection:	IP 20
Protection class:	III
Operating temperature:	– 5° C to + 50° C
Supply voltage:	100 – 240 V AC / 50 – 60 Hz
Output voltage:	30 V DC (28 – 31 V DC according to KNX specification)
Output voltage not choked:	30 V DC
Nominal current:	640 mA

KNX Power Supply 320 mA

Ref. 9 018 245

For DIN-rail installation.

KNX USB Interface

NEW



This interface is to establish a bidirectional connection between a PC and the KNX installation bus. The USB connector has a galvanic separation from the KNX bus. Both ETS (Engineering Tool Software) versions ETS3 or later and some Visualisation tools support this interface.

Dimensions (w × h × d):	18 × 90 × 56 mm (1 SU)
Degree of protection:	IP 20
Protection class:	III
Operating temperature:	– 5° C to + 45° C
Supply voltage:	Power for communication via USB is supplied by the connected PC / laptop, correct operation is signalled by the corresponding LED. Power consumption: < 200 mW Power for communication via KNX is supplied by KNX bus.
Power consumption:	< 100 mW

KNX USB Interface

Ref. 9 018 243

System accessories

KNX USB Interface Stick

NEW



This interface is for establishing a bi-directional connection between a PC and the KNX installation bus.

The USB connector has a galvanic separation from the KNX bus. Both ETS (Engineering Tool Software) versions ETS3 or later and some visualisation tools support this interface.

Dimensions (w × h × d):	21 × 90 × 12 mm (1 SU)
Degree of protection:	IP 20
Protection class:	III
Operating temperature:	- 5° C to + 45° C
Supply voltage:	Power for communication via USB is supplied by the connected PC / laptop, correct operation is signalled by the corresponding LED. Power consumption: < 200 mW Power for communication via KNX is supplied by KNX bus.
Power consumption:	< 100 mW

KNX USB Interface stick	Ref. 9 018 349
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KNX IP Interface

NEW



The KNXnet/IP-Interface is used to connect a PC to the KNX network. The connection is made through LAN (IP). The IP address can be obtained by a DHCP server or by manual configuration (ETS) respectively.

Dimensions (w × h × d):	36 × 90 × 56 mm (2 SU)
Degree of protection:	IP 20
Protection class:	III
Operating temperature:	- 5° C to + 45° C
Supply voltage:	External supply 12 - 24 V AC / 12 - 30 V DC Alternative: power - over Ethernet
Power consumption:	< 800 mW

KNX IP Interface	Ref. 9 018 246
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KNX IP Interface 740 wireless



Wireless KNX IP interface.

Dimensions (w × h × d):	125 × 67 × 31 mm
Degree of protection:	IP 20
Protection class:	III
Operating temperature:	- 5° C to + 45° C
Supply voltage:	Via enclosed wall power supply (primary: 230 V ~ / 50 Hz, secondary: 9V)
Power consumption:	< 2.5 W (secondary, at 9 V)

KNX IP Interface wireless	Ref. 9 018 247
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KNX IP Router

NEW



The KNXnet/IP router enables telegrams to be forwarded between different lines through a LAN (IP) as a fast backbone. In addition, this device is suited to connect a PC to the KNX network e.g. for ETS programming. The IP address can be obtained by a DHCP server or by manual configuration (ETS) respectively.

Dimensions (w × h × d):	36 × 90 × 56 mm (2 SU)
Degree of protection:	IP 20
Protection class:	III
Operating temperature:	- 5° C to + 45° C
Supply voltage:	External supply 12 - 24 V Alternative: Power - over - Ethernet
Power consumption:	< 800 mW

KNX IP Router	Ref. 9 018 248
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System accessories

KNX IP Line Master

The KNX Line Master combines the essential functions of a KNX bus line: power supply with choke, IP router and IP Interface.

In addition to the bus voltage the power supply offers an auxiliary voltage of 24 V. The IP router in the Line Master enables telegrams to be forwarded between different lines through a LAN (IP) as a fast backbone. Using the embedded IP interface, the KNX line can be connected directly for PC (e.g. by ETS).

Dimensions (w × h × d):	122 × 90 × 56 mm
Degree of protection:	IP 20
Protection class:	III
Operating temperature:	- 5° C to + 45° C
Supply voltage:	Mains voltage 230 V AC / 50 Hz
Power consumption:	< 4 W (idle) < 28 W (full load)

KNX IP Line Master	Ref. 9 018 249
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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.

Dimensions (w × h × d):	72 × 90 × 56 mm (2 SU) (2 SUs; 1 SU = 18 mm)
Degree of protection:	IP 20
Protection class:	III

KNX Line / backbone coupler	Ref. 9 706 007
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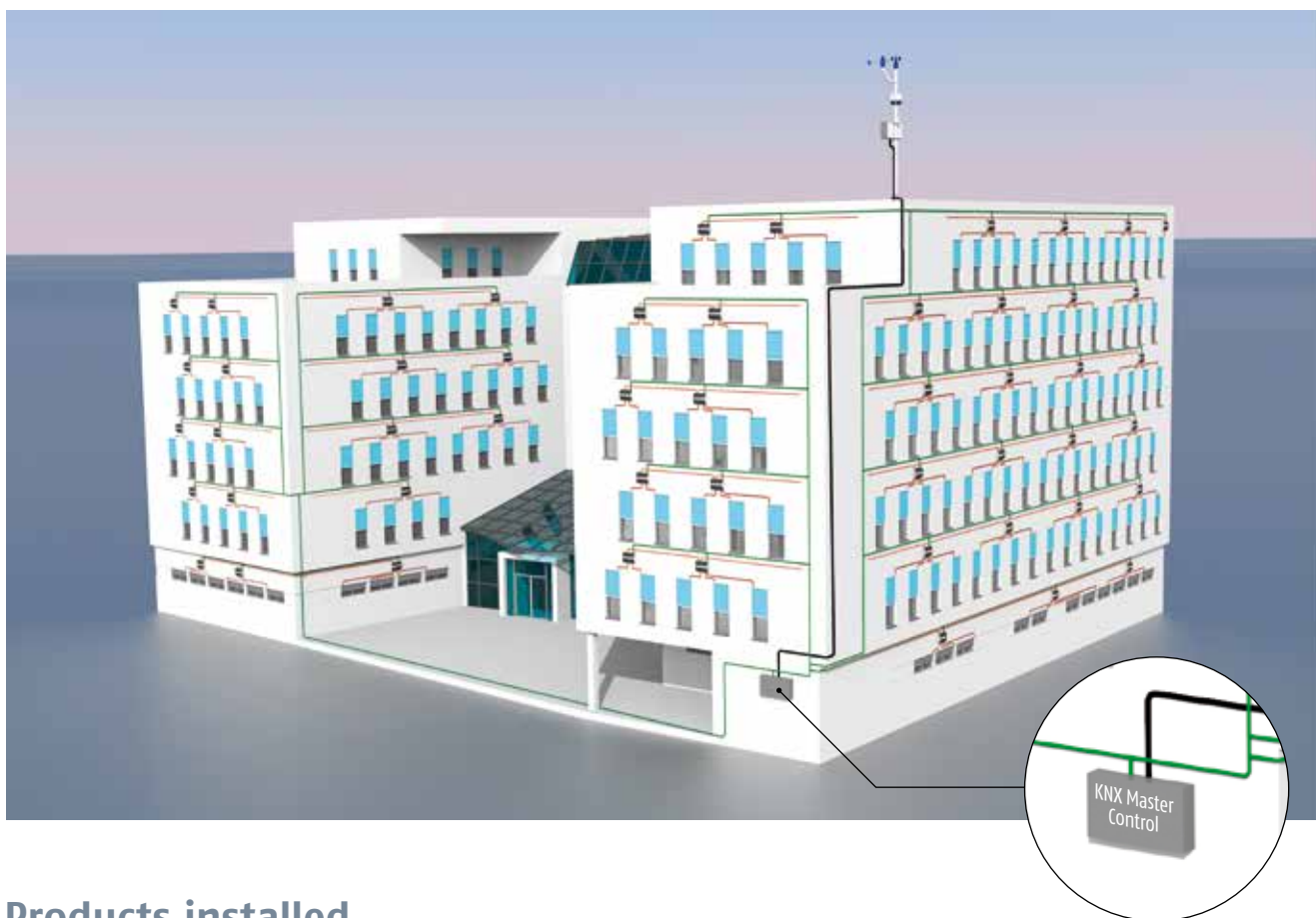
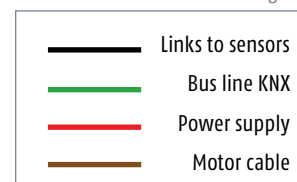
For DIN-rail mounting.

Project example

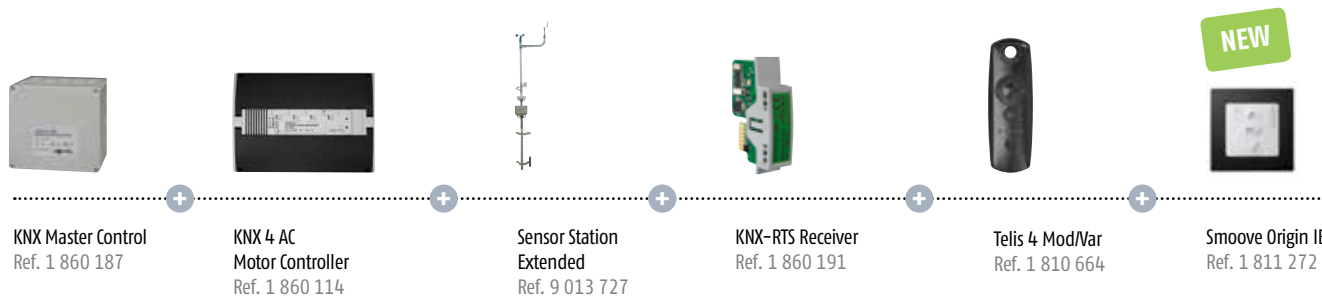
Building owner desired and specified functionalities

- Unrestricted number of zones to control exterior venetian blinds
- Interaction with lighting and HVAC system
- Zone based shadow management
- Controlling of blinds and light through Somfy RTS technology

Legend



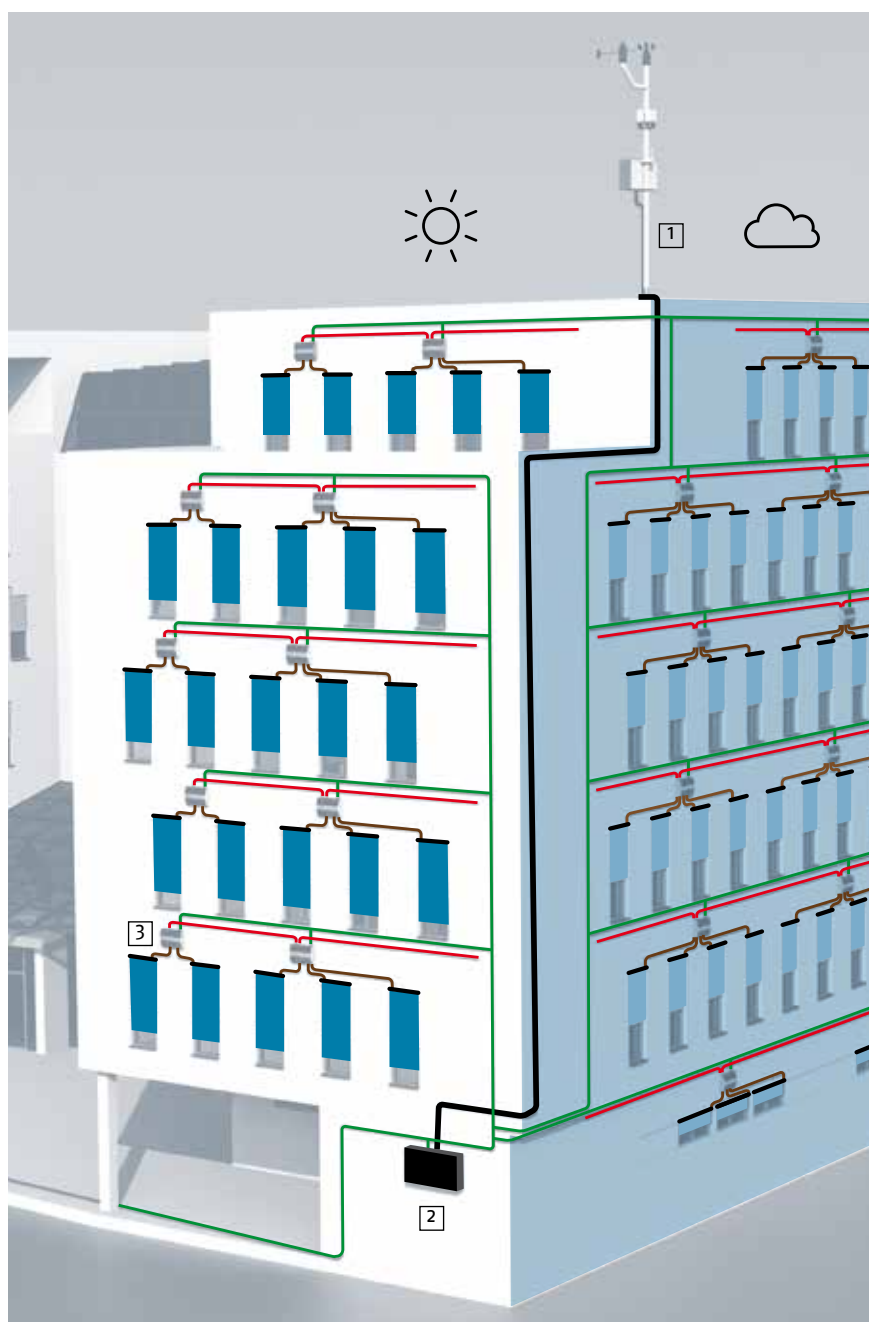
Products installed



Automatic functions

- Wind safety, as well as wind direction dependent
- Sun automatic with sun tracking including zone based shadow management to provide a maximum of user comfort and energy saving
- Integration to a BMCS via an OPC link.
- Movement detectors are used to switch between the energy saving mode and comfort functions. The movement detectors are integrated into the bus system using the universal binary inputs of the Motor Controller.

Installation details



All the Motor Controllers are connected to the same KNX network via the animeo KNX Building Controller.

One KNX Building Controller enable to create up to 16 zones, it's possible to create more zones by adding more Building Controllers.

The Sensor Station is directly linked to the KNX Building Controller and each zone is separately managed depending on the weather and other parameters to be defined.

1. Sensor station
2. animeo KNX Master Control
3. animeo KNX Motor Controller

Case study

Business Park Town, Vienna – Austria



"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 which 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

Electrical Planning Enterprise Erin GmbH

Initial Brief

A projected cost saving of up to 40 % had been targeted for this area of downtown Vienna with its 21 buildings totalling around 80,000 m²: one of the top office complexes in the heart of Vienna – and an example of sustainable building methods.

To propose a tailor-made offer for the operator with intelligent controlling for cooling and heating rooms naturally.

Reasons to use animeo KNX

- During test phases, a movement strategy that ensures the effectiveness of solar shadings was analysed in order to keep the best sun protection with the minimum moves. Reducing movements of the interior solar protection contributes to blinds' mechanical longevity and reduces noise and so disturbs users less.
- With animeo KNX, any desired motor group can be formed and defined over the KNX wire to the building as individually and efficiently as possible. This way, costly KNX operating points are not needed.

Technical information

- 520 animeo KNX Motor Controller 4 DC
- 2000 J101 motors for interior venetian blinds (24 V)
- 260 animeo Power Supply DC 4.5 A
- Integration of conventional local push buttons over binary inputs on the animeo KNX Motor Controller 4 DC



animeo LON

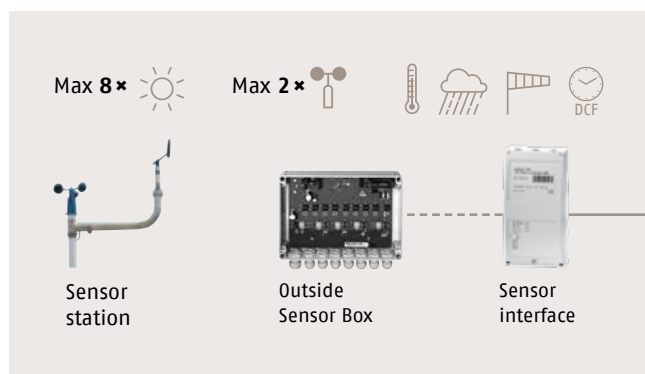
- System topology
- Benefits
- Products
- Project example
- Case study



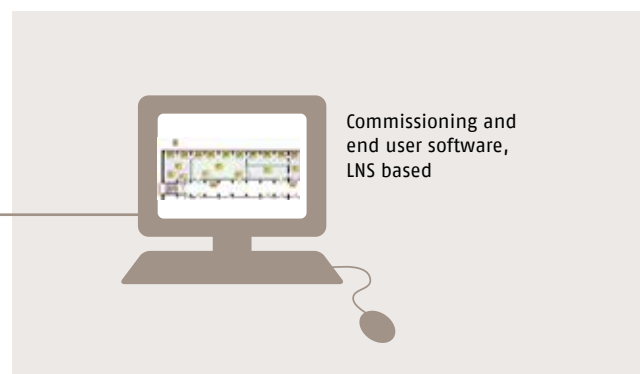
Interactive façade management system compatible with LON standards. No zone limitation.

System topology

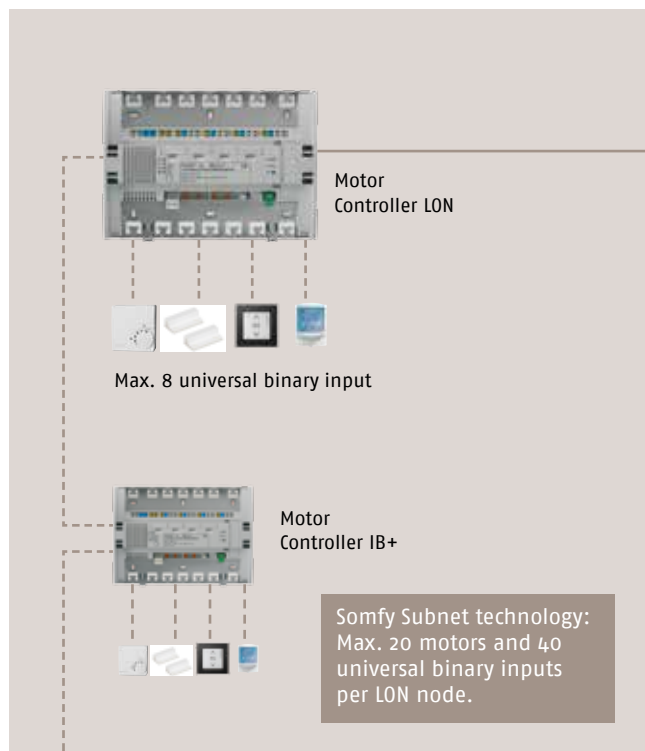
LON Sensor Interface



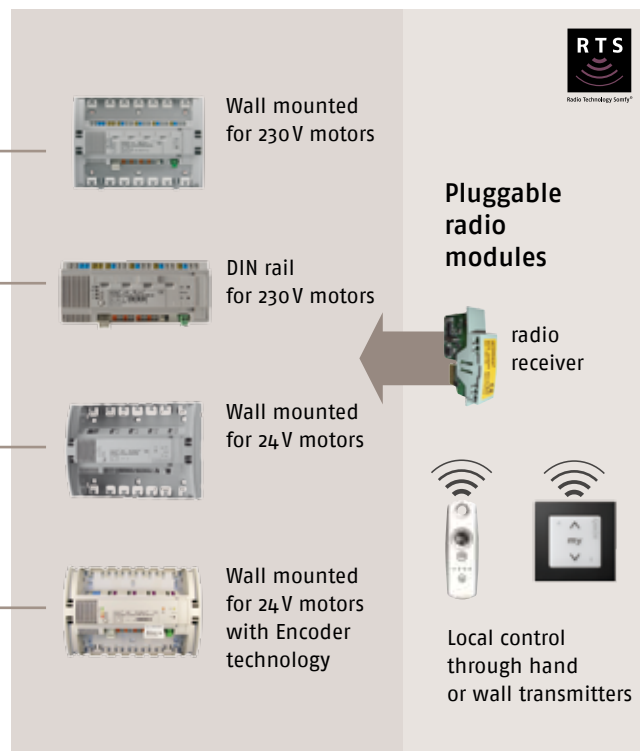
animeo LON Design Suite



Application example



Motor Controllers



animeo LON

Benefits of the solution

User friendly graphical interface

- More time-saving by using the animeo LON Design Suite software which enables faster configuration of functions.
- The animeo LON solution can be programmed and integrated off-site: no need to involve a dedicated team on site.



Somfy Subnet technology

- Cost-effective solution with the use of Somfy Subnet technology.
- Max. 20 motors and 40 universal binary inputs per LON node.

Window based shadow management

NEW

This solution impacts the movement of the sun protection based on the shadow projected on the window.

Thus, each solar protection is individually controlled to ensure optimum comfort for the user and less artificial lighting.



Meeting today's LONMark standards

- 4 integrated LONMark #6111 "sunblind controller" – objects with a variety of functions such as sun, sun tracking, wind, wind direction, rain, frost and temperature for maximum flexibility – in one unique product. Each output acts as an independent controller. The priorities for these functions are freely configurable.

More advantages

- Some advanced pre-programmed functions like sun tracking
- Cost savings: up to 8 local push button binary inputs can be used additionally as universal LON inputs so that e.g. window contacts, temperature sensors or presence detectors can be connected.
- Using an input signal, a LON output signal can be generated; types: setting, switch, scene or occupancy.

The central logic, Building Controller, is embedded in the Motor Controller.



Motor Controller

LON 4 AC Motor Controller WM + DRM



Product benefits

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

Further features

- Easy accessible safety fuse by output.

Further technical features are explained in full in the operating instructions.

For roller shutters, interior blinds, screens, exterior venetian blinds and windows. For the control of 4 x 230 V AC motors.

Dimensions (w × h × d):	255 × 180 × 61 mm
Degree of protection:	IP 20
Protection class:	II
Operating temperature:	0° C to + 45° C
Operating voltage:	230 V AC
Output voltage:	230 V AC
Max. current consumption (motor):	max. 3.15 A per output

LON 4 AC Motor Controller WM	Ref. 1 860 115
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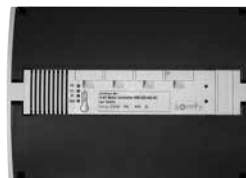
For wall-mounted installation.

Dimensions (w × h × d):	210 × 90 × 61 mm
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LON 4 AC Motor Controller DRM	Ref. 1 860 119
--------------------------------------	----------------

For DIN-rail installation.

LON 4 DC Motor Controller WM



Product benefits

- Cost savings through use of 8 freely-definable binary inputs.
- Upgradable for local operation by radio.
- Configurable slats turning speed for optimum user ergonomics.

Further features

- Outputs protected through current detection.

Further technical features are explained in full in the operating instructions.

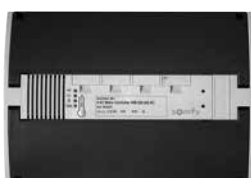
For interior blinds, interior venetian blinds and windows. For the control of 4 x 24 V DC motors. External 24 V DC power supply (see accessories).

Dimensions (w × h × d):	255 × 180 × 61 mm
Degree of protection:	IP 20
Protection class:	III
Operating temperature:	0° C to + 45° C
Operating voltage:	24 V DC
Output voltage:	24 V DC
Max. current consumption (motor):	max. 2.1 A per output

LON 4 DC Motor Controller WM	Ref. 1 860 130
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For wall-mounted installation.

LON 4 DC / DC-E Motor Controller WM



Product benefits

- 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.
- Exact positioning of the venetian blind.
- Upgradable for local operation by radio.
- Local setting of intermediate position and user ergonomics.
- Configurable slats-turning speed for optimum user ergonomics.

For interior blinds, interior venetian blinds. For the control of 4 x 24 VDC or DC-E Somfy Encoder Motors from the "Somfy Concept 25" series.

Further features

- Outputs protected through current identification.

Dimensions (w × h × d):	255 × 180 × 63 mm
Degree of protection:	IP 20
Protection class:	II
Operating temperature:	0° C to + 40° C
Operating voltage:	230 V AC
Output voltage:	24 V DC
Max. current consumption (motor):	max. 0.5 A per output

LON 4 DC / DC-E Motor Controller WM	Ref. 1 860 129
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For wall-mounted installation.

LON 4 DC / DC-E Motor Controller	Ref. 1 860 199
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For DIN-rail installation.

Accessories

Power Supply DC



For the power supply of the DC Motor Controller. In the application of "Somfy Concept 25" motors, up to 2 Motor Controllers 4 DC can be supplied with one power supply (= 8 motors). Switchable also in parallel:
 $2 \times 4.5 \text{ A} = 9 \text{ A}$.

Dimensions (w × h × d):	130 × 180 × 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 min. on, 3 min. off)

Power Supply DC

Ref. 1 860 093

For wall-mounted and DIN-rail installation.

RTS Radio module



Receiver for upgrading from 4 AC, 4 DC or 4 DC/DC-E Motor Controller devices. Direct plug-in to Motor Controller or LON radio adapter box.

Dimensions (w × h × d):	52 × 92 × 27 mm
Degree of protection:	IP 20
Protection class:	II
Operating temperature:	0° C to + 45° C
Supply voltage:	5 V DC, from animeo IB+ Motor Controller
Radio frequency:	433 MHz
Radio range:	20 m through 2 walls

RTS Radio module

Ref. 1 860 105

LON Radio adapter box



The standard animeo radio card (Ref. 1 860 105) is plugged into the slot inside the animeo LON radio adapter box. Through a wire (length 50 cm) and a pluggable card at one end, the connection to the animeo LON Motor Controller is established, simply by plugging the card into the Motor Controller.

The animeo LON radio adapter box is designed to connect the standard animeo radio card (Ref. 1 860 105) with the animeo LON Motor Controller.

Dimensions (w × h × d):	110 × 110 × 40 mm
animeo LON Radio adapter box	Ref. 9 015 809

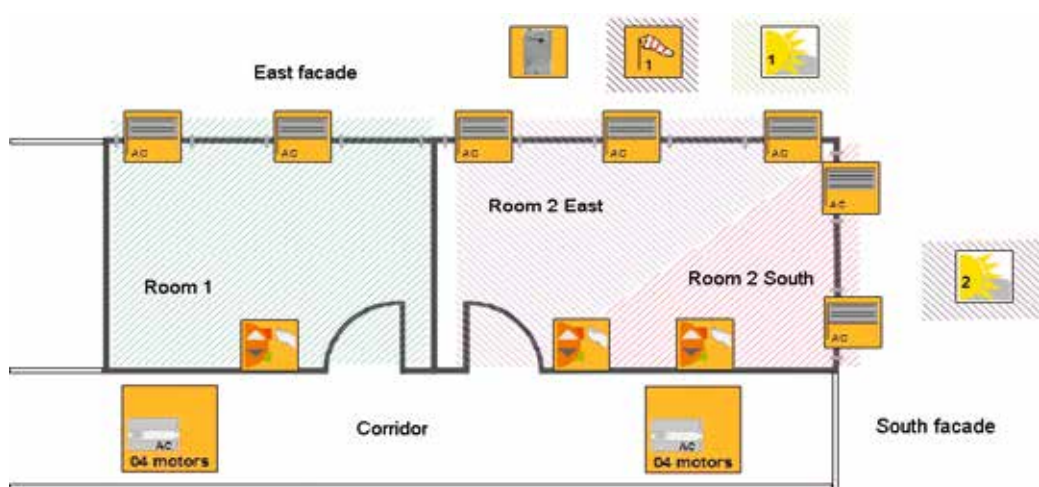
animeo LON Design Suite

The graphical interface for LON commissioning

With the new animeo LON Design Suite software, configurations involving the solar protection of buildings can be integrated into a LON network faster and in a more time-saving manner.

The software is based on the NLFacilities commissioning tool and offers users a pool of around ten functional models that include up to 80 % of all possible sun protection functions.

Upon request, Somfy can also create project-related models for specific structural requirements.



Time-saving copy function

One significant benefit of the animeo LON Design Suite is the comprehensive copying function. The programming of the shading can smoothly be transferred from one room or floor to another. This results in significant time savings when dealing with large numbers of objects and rooms.

Another advantage is minimising the margin of error during the integration process since you do not have to deal with cryptically transcribed variables and parameters, only with functions. Any subsequent changes of the programmed solar protection settings can be carried out without significant effort. The change only needs to be entered once into the project template and can then be transferred to the entire building via a mouse click.

The new Somfy software includes ten standard models which represent all common solar protection functions and accordingly take into account approximately 80 % of all usual building requirements. For example, this includes rooms with or without local control key and/or motion detector, group operations with or without lock function (e.g. for window cleaners) and weather sensor functions with optional tracking the position of the sun.

The remaining 20 % usually include project-related special cases for which individual shading solutions are required.

Changes possible by operator without extensive knowledge

However, the animeo LON Design Suite not only facilitates the commissioning of solar protection functions but also supports the building operator in executing modifications. For example, if local operations must be assigned to different shutters during the course of a change in room utilisation you can carry out this reconfiguration yourself with the help of the easy-to-use runtime version even without extensive LON knowledge.

animeo LON Design Suite



LON Design Suite for commissioning and visualisation

A graphical network management tool for commissioning and visualisation. Based on LNS® it drastically reduces integration time in cases where the same, or a similar application has to be installed repeatedly (for example, room automation for office buildings).

Delivered with 64 nodes.

Product benefits

- Supports LNS® TE (Turbo Edition).
- Separates the conceptual design from the setup process.
- Significantly reduces setup times thanks to multi-use templates.
- Somfy templates can be re-used in different projects.
- Simplified maintenance due to zone concept.
- Quick modification in line with new requirements.
- Import function for plan views of floors.
- Contains a function for monitoring objects.
- Versions without a network management function are available for operating personnel.

LON Design Suite for commissioning and visualisation

Ref. 1 860 178

LON Design Suite for visualisation (max. 100 nodes)

Runtime version for the facility management with zoning for networks with up to 100 nodes.

LON Design Suite for visualisation (max. 100 nodes)

Ref. 1 860 180

LON Design Suite for visualisation (unlimited LON nodes)

Runtime version for the facility management with zoning for networks with an unlimited number of nodes.

LON Design Suite for visualisation (unlimited nodes)

Ref. 1 860 181

LON credits for animeo LON Design Suite

LON credits for animeo LON Design Suite. License fee for the commissioning of a LON device with the animeo LON Design Suite Software.

LON credits for animeo LON Design Suite

Ref. 1 860 179

animeo LON

System accessories

LON Touch Display



A flexible graphical user interface with a wide range of functions. Any data point can be displayed on or controlled by the high-resolution touch display (5.7", 320 × 240 pixels, 256 colors/VGA palette), surrounded by a brushed aluminium frame with an anodised finish.

Product benefits

- Fully compliant with CEA-709, CEA-852 and EN14908.
- Supports TP/FT-10 or CEA-852 Ethernet (IP-852) channels.
- Simple, graphical programming with LNS® plug-in or stand-alone LVIS configuration tool.
- Support of dynamically created network variables or static network variables.
- Supports user defined NVs (UNVTs) as well as configuration properties (SCPTs, UCPTs).
- Up to 1000 input or output network variables can be processed.
- Up to 512 destination addresses can be used.
- Supports trending, scheduling and alarming locally.
- Provides Remote Network Interface functionality (RNI) with 2 MNI devices.
- Easy installation, DHCP
- 2 ports: 1 x TP/FT-101 x Ethernet Port (IP-852) (user selectable).

Operating voltage:	24 V DC / V AC
Dimensions (w × h × d):	210 × 165 × 60 mm

LON Touch Display	Ref. 1 860 169
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LON Logic module incl. scheduler



LON Logic module including scheduler.

Product benefits

- Automation Server (CEA-709)
- IEC 61131-3 programming languages (FBD, ST, LD/KOP, SFC, C)
- Fully compliant with CEA-709, CEA-852 and EN14908
- Fully featured Remote Network Interface function with 2 MNI devices

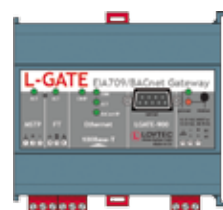
- Supports up to 1000 CEA-709 network variables.
- Supports up to 1000 address table entries.
- Support of dynamically created network variables or static network variables.
- Support of user defined NVs (UNVTs) and configuration properties (SCPTs, UCPTs).
- Maps SNVTs to IEC61131-3 variables
- Conversion between different SNVT types.
- M-Bus Master (EN 13757-3).
- Modbus Master.
- 2 Ports: 1 x TP/FT-10, 1 x Ethernet Port (IP-852) (user selectable).

Operating voltage:	12 – 35 V DC / 12 – 24 V AC 50 / 60 Hz max. 200 mA@24 V
Dimensions (w × h × d):	105 × 86 × 60 mm

LON Logic module incl. scheduler	Ref. 1 860 170
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For DIN-rail installation.

LON BACnet Gateway



Gateway for transmitting telegrams between LON and BACnet networks.

Product features

- Supports mapping of dynamic network variables to BACnet server objects.
- Supports alarming, scheduling, calendar and trending in BACnet and LON networks.
- Configurable via LNS plug-in.
- 3 ports: 1 x TP/FT-10, 1 x BACnet MS/TP 1 x Ethernet (IP-852, BACnet/IP)

Operating voltage:	12 – 35 V DC / 12 – 24 V AC 50 / 60 Hz max. 200 mA@24 V
Dimensions (w × h × d):	105 × 86 × 60 mm

LON BACnet Gateway	Ref. 1 860 171
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For DIN-rail installation.

System accessories

LON to LON Gateway

Gateway for transmitting telegrams between 3 LON/IP and 2 TP/FT-10 segments.

Product features:

- Provides data interchange across domain boundary and different LNS databases.
- Functionality by mapping input to output NV's (e. g. to overcome alias limitations).
- Configurable via LNS plug-in.
- Port 1: 100 Base-T (LON/IP).
- Port 2-3: 2 x TP/FT-10 (LON).

Operating voltage:	12 – 35 V DC / 12 – 24 V AC 50 / 60 Hz max. 200 mA@24 V
Dimensions (w × h × d):	105 × 86 × 60 mm

LON to LON Gateway	Ref. 1 860 172
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For DIN-rail installation.

LON OPC Server



Certified OPC server.
Compliant with OPC 2.0 and 3.0.

Product features:

- Direct interface to SNVT / UNVT master list and catalogue file.
- Automatic formatting of SNVT / UNVT.
- Heartbeat: configuration of an automatic update rate for network variables.
- Bases on LNS® TE (LNS® server not included).
- Limitation to 32000 OPC data points
- Runs under Windows NT® / 2000 / XP®.
- License protection: USB or parallel port dongle.

animeo LON OPC Server	Ref. 1 860 182
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LON Repeater

LON Repeater between 2 LON TP/FT or TP/LP LON network segments.

Operating voltage:	12-35 V DC / 12 – 24 V AC 50 / 60 Hz max. 200 mA@24 V
Dimensions (w × h × d):	105 × 86 × 60 mm
LON Repeater	Ref. 1 860 190

8 Port UTP 10 / 100 Mbit/s 100Base-FX SNMP managed switch

Product features:

- Number of 10 / 100 Mbps RJ45-Ports: 8 (auto-sensing).
- Number of 100 Mbps fiber optic SC-Ports: 1 (multi and single mode with MT-RJ options).
- 128 VLANs, switch-type: layer 2.
- WEB browser based management.
- SNMP MIB II network management.
- LED display for power, port speed / link activity and FDX / COL.

Operating voltage:	100 – 240 V AC 50 / 60 Hz
Dimensions (w × h × d):	440 × 255 × 44 mm

8 Port UTP 10 / 100 Mbit/s 100Base-FX SNMP managed switch	Ref. 1 860 189
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animeo LON

System accessories

LON / IP Router


Product benefits:

- Simplifies the topology.
- Accelerates data transmission.

Product features:

- Preferably used as LON / IP backbone router.
- Built-in web server for easy configuration.
- Integrated EIA-852 configuration server.
- Protocol analysis via LPA-IP tool.
- For one TP / FT-10 channel

Operating voltage:	12 – 35 V DC / 12 – 24 V AC 50 / 60 Hz max. 200 mA@24 V
Dimensions (w × h × d):	105 × 86 × 60 mm

LON / IP 1 × 100 Base-T (Ethernet) 1 × TP / FT-10 port	Ref. 1 860 174
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For DIN-rail installation.


Product features:

- For two TP / FT-10 channel

Operating voltage:	12 – 35 V DC / 12 – 24 V AC 50 / 60 Hz max. 200 mA@24 V
Dimensions (w × h × d):	105 × 86 × 60 mm

LON / IP 1 × 100 Base-T (Ethernet) 2 × TP / FT-10 port	Ref. 1 860 175
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For DIN-rail installation.


Product features:

- For four TP / FT-10 channel

Operating voltage:	12 – 35 V DC / 12 – 24 V AC 50 / 60 Hz max. 200 mA@24 V
Dimensions (w × h × d):	160 × 86 × 60 mm

LON / IP 1 × 100 Base-T (Ethernet) 4 × TP / FT-10 port	Ref. 1 860 176
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For DIN-rail installation.

LON USB Interface


Product features:

- Compatible with LNS applications in high performance LNS / VNI access mode.
- Simultaneous operation of LNS applications and LPA or LSD tools.
- Software driver for Windows XP / Vista / etc.

**USB Interface
connecting LON
networks via
TP/FT-10 or
TP/XF-1250 segments.**

Network:	TP / FT-10 (78 kbps) TP / XF-1250 (1.25 Mbps)
Power Supply:	via PCI-Bus (250 mA)
Dimensions (w × h × d):	135 × 96 × 20 mm

LON – USB interface	Ref. 1 860 173
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LON Terminator


Product features:

- For 2 TP/FT-10 segments in free or line topology.

**Bus terminator for
TP/FT-10 segments.**

Dimensions (w × h × d):	85 × 17 × 60 mm
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LON Terminator	Ref. 1 860 177
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Sensors and accessories

LON Sensor Interface



Sensor interface to connect one Outside Sensor Box for transmitting sensor values to the LON Bus.

Further features:

Three universal inputs to connect additional sensors. For each of the universal inputs one of the following applications can be selected: 0-10 V, 4-20 mA or NTC.

Dimensions (w × h × d):	78 × 93 × 56 mm
Degree of protection:	IP 20
Protection class:	II
Operating voltage:	230 V AC
Output voltage:	24 V DC
Output current:	1.5 A

LON Sensor interface	Ref. 1 860 161
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Outside Sensor Box



The Outside Sensor Box is the interface between external sensors and LON Sensor Interface. All measurement values are evaluated here and sent to the LON Sensor Interface. It requires an external 24 V AC/DC power supply.

Product benefits

- Convenient lightning protection – only two cables (power supply 24 V AC/DC and data cable) need to 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.

Dimensions (w × h × d):	235 × 207 × 90 mm
Degree of protection:	IP 65
Protection class:	III
Operating voltage:	24 V AC / DC
Operating temperature:	- 30° C to + 70° C

Outside Sensor Box	Ref. 9 001 606
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For wall-mounted installation.

Power Supply DRM 24 V 1.5 A

NEW



To supply the Outside Sensor Box (without heated sensors) or the animeo compact sensors.

Dimensions (w × h × d):	78 × 93 × 56 mm
Degree of protection:	IP 20
Protection class:	II
Operating voltage:	230 V AC
Output voltage:	24 V DC
Output current:	1.5 A

Power Supply DRM 24 V DC 1.5 A	Ref. 9 017 611
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animeo Power Supply DC



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

Dimensions (w × h × d):	130 × 180 × 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 min. on, 3 min. off)

animeo Power Supply DC	Ref. 1 860 093
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For wall-mounted and DIN-rail installation.

Wind Sensor



Measurement of wind speed.

Dimensions:	Height 200 mm, ø 240 mm max. ø-mast: 48 mm
Degree of protection:	IP 65
Wiring recommendations:	2 × 0.8 mm²

Wind Sensor	Ref. 9 001 608
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Sensors and accessories

Heated Wind Sensor



Power supply via Outside Sensor Box. Measurement of wind speed.

Dimensions:	Height 190 mm, \varnothing 240 mm max. \varnothing -mast: 48 mm
Degree of protection:	IP 54
Wiring recommendations:	5 × 1.5 mm ²
Heated Wind Sensor	Ref. 9 140 180

Wind Direction Sensor



With high-quality bearing.

Dimensions:	Height 303 mm, Arrow length 515mm, max. \varnothing -mast: 48 mm
Degree of protection:	IP 54
Wiring recommendations:	5 × 1.5 mm ²
Wind Direction Sensor	Ref. 9 013 807

Outside Temperature Sensor



With solar radiation protective housing.

Dimensions:	Height 150 mm, \varnothing 115 mm
Degree of protection:	IP 65
Wiring recommendations:	2 × 0.8 mm ²
Outside Temperature Sensor	Ref. 9 001 611

Rain Sensor Ondeis 24 V DC

NEW


Power supply through the Outside Sensor Box.

Dimensions:	115 × 100 × 85 mm
Degree of protection:	IP 44
Wiring recommendations:	3 × 1.5 mm ²
Rain Sensor Ondeis	Ref. 9 016 344

Sun Sensor



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

Dimensions (w × h × d):	34 × 88 × 47 mm
Degree of protection:	IP 43
Protection class:	III
Wiring recommendations:	2 × 0.8 mm ²
Angle position:	150°
Sun Sensor without mounting bracket	Ref. 9 050 100
Mounting bracket for Sun Sensor	Ref. 9 127 888
Complete pack	Ref. 9 154 043

Sensors and accessories

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.

Dimensions / mast height:	3200 mm
Sensor Station	Ref. 9 013 726
Sensor Station without sensors	Ref. 9 014 301

Sensor Station extended



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.

Dimensions / mast height:	3200 mm
Sensor Station extended	Ref. 9 013 727

Sensor Station without sensors



Sensor Station without sensors and Outside Sensor Box.

Dimensions / mast height:	3200 mm
Sensor Station without sensors	Ref. 9 014 301

Sensor Station extended without sensors



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

Dimensions / mast height:	3200 mm
Sensor Station extended without sensors	Ref. 9 014 302

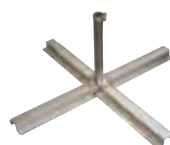
Lightning protection



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

Electronic lightning protection power supply	Ref. 9 001 629
Electronic lightning protection RS 485	Ref. 9 001 630

Roof mounting



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





Roof mounting	Ref. 9 014 300
Strain connection for roof mounting only	Ref. 9 014 303

Project example

Building owner desired and specified functionalities

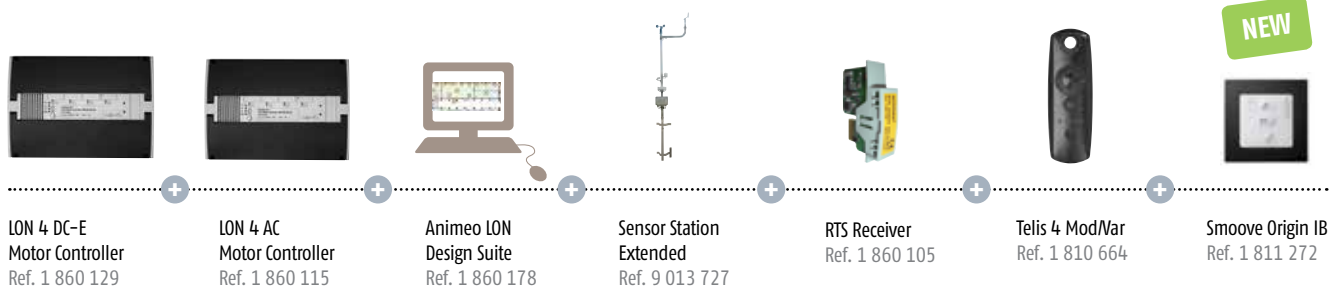
- Unrestricted number of zones to control interior venetian blinds and window openers
- Graphical user interface for maintenance interaction with lighting and HVAC system
- Window based shadow management
- Controlling of blinds and light through Somfy RTS and wired local control

Legend

	LON bus line
	IB+ bus line
	Power supply
	Motor cable



Products installed



Automatic functions

- Wind safety, as well as wind direction dependent to monitor the window openers
- Sun automatic with sun tracking including window based shadow management to provide a maximum of user comfort and energy saving
- Integration to a BMCS system via an OPC link.
- Movement detectors are used to switch between the energy saving mode and comfort functions. The movement detectors are integrated into the bus system using the universal binary inputs of the Motor Controller.

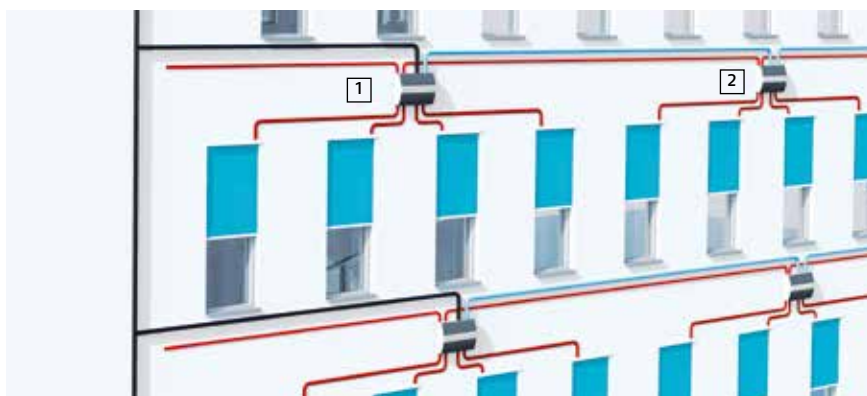
Installation details



The LON network enable to create any topology network for all LON product installed (Motor Controllers / Sensor Station).

No zone or size limitation as a window can be a zone.

1. Building Management System
2. Motor Controller LON
3. Motor Controller IB+



The particularity of Somfy solution is the possibility to use a subnet in order to optimise the total cost of the solution.

The Sensor Station is directly linked to the LON network without the need of a Building Controller.

1. Motor Controller LON
2. Motor Controller IB+

Case study

Norpac Headquarters, Villeneuve d'Asq – France

"A model calculation of the sun path and shadows helped to create an automation program specific to our building, zone by zone. This option limits the cooling requirements and couples to other techniques such as passive cooling of groundwater to ensure summer comfort. This management of solar protection is both highly innovative and efficient."



FRANÇOIS YVES LELONG

Directeur Technique
Fluides de Norpac

Initial Brief

Choice of building materials in order to reduce the environmental footprint of the building and improve the health quality of indoor air.

Reasons to use animeo LON

- The shadow management solution is used to enhance occupants' visual and thermal comfort by managing solar heat gain.
- animeo LON proved to be the best solution for reducing energy consumption. After one year of operation, the energy consumption was divided by four compared to the former Norpac headquarters.

According to a RT study conducted by Alto Ingénierie, the energy consumption of the Norpac building is estimated at 43 kWhpe/sqm/year, that is to say 55% less than standard regulatory value (98 kWh PE per sq.m per year).

Technical information

- BBC Label
- Shadow management solution with LON Motor Controllers
- Somfy Sensor Station with LON interface
- Integrator: S3EB
- Electrician: Eiffage Energy

notes

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notes

[illegible]

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SOMFY FOR COMMERCIAL BUILDINGS

