SOMFY FOR COMMERCIAL BUILDINGS

Somfy Specification Solutions

Motors and Controls for Interior and Exterior Shading Solutions

somfy®

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Solutions for Buildings

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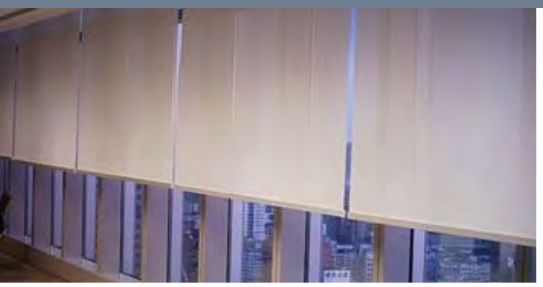
SDN 2.0 Bus Distribution Devices

Who is Somfy?



Somfy Systems

is the global leader in the manufacturing of strong, intelligent, quiet motors and control systems for both interior and exterior window coverings. Since 1969, Somfy engineers have designed products for both the commercial and residential markets and recently celebrated the production and sales, throughout the world, of more than 150 million motors.

Somfy's Commercial Building Solutions

offer a wide range of intelligent motors and controls that optimize the utilization of natural light in your commercial workspace. Our systems are calibrated to maximize occupant comfort while enhancing visual environments, minimizing solar glare and heat gain, and providing UV protection.

Somfy's natural light automation systems are scalable in design, offered in low voltage, line voltage or wirefree options, and are perfect for projects of any size or budget.

Somfy operates worldwide via a network of 76 subsidiaries, 60 offices & agencies across 59 countries. With 8 production sites, Somfy has an efficient and responsive industrial assembly tool. Our high quality standards allow us to cater to 220 million users' and 30,000 commercial clients' needs worldwide.

Power of Somfy

Commitment to
Quality

Dedicated to
Service & Support

Continuous
Product Innovation

Somfy is the leading global manufacturer of strong, intelligent and quiet motors with electronic and app controls for interior and exterior window coverings.

150 million motors produced and sold since 1969

Production capacity of 70,000 motors a day

270 million users worldwide

4 distribution centers across North America

100% LEED Accredited Sales Force

Motors backed by a 5 year warranty

40+ years of experience

More than 600 standard approvals in the world

Ease of product installation and adjustment

400+ engineers developing innovation

Over 450 active patents

Life Cycle Testing for endurance and reliability

64,000 sq.ft. state-of-the-art product testing facility

100% products tested

Acoustic Tests for Sound Level and Quality

Mechanical & Electrical Safety Tests (UL, CE, TUV)

Radio Technology Somfy® (RTS) Receiver Power & Sensitivity

Embedded Software Validation Testing

Heat and Fire Resistance Testing

Water and Oxidation Resistance

Climate (Temperature & Humidity)

Packaging

Somfy Support

Working with you from specification to commissioning

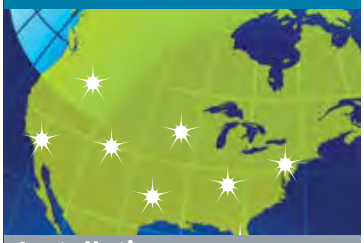
Thousands of shade manufacturers around the world choose Somfy motors to bring their natural light control products to life. Somfy's nationwide Commercial Specification Team will work with you to find the right manufacturer and support your project every step of the way.

Specification for projects of all sizes and price points

Planning

Somfy's Commercial Specification team will remain on hand throughout the planning and specification process ensuring a tailor-made solution for your project.

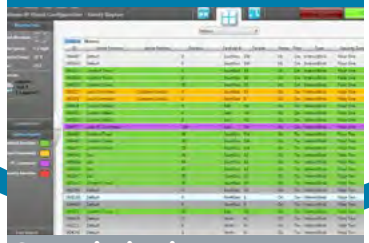
Experienced professional installation services



Installation

Somfy's nationwide network of trained professional installers will work hard to respect your project timeline and meet all local and federal building requirements.

Simplified and trouble-free system programming



Commissioning

- Intuitive animeo® IP software allows the facility manager total control over all system functions.
- Sample pattern projects can be established through Somfy support to simplify programming.
- Somfy on-site support is available.

Continuing Somfy Support

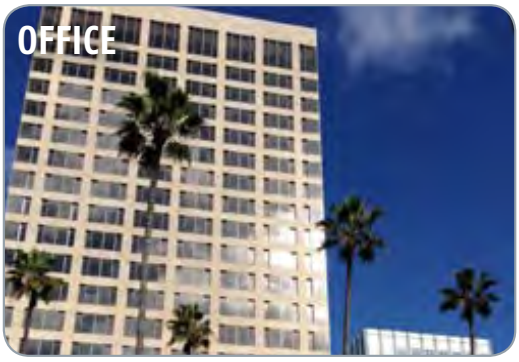
5 Warranty year somfy

Operation

All Somfy system components are backed by a 5 year non-prorated warranty and a 10+ year life expectancy.

For additional information about Somfy products or services visit **Somfysystems.com/commercial** or email **commercial_solutions_na@somfy.com** for project support.

Project References



PIMCO Corporate Office Tower

650 Newport Center Drive, Newport Beach, CA

Application:	New Construction
Sector:	Office
Structural Type:	20 Story, 398,846 sq.ft.
Developer:	Irvine Company
Architect:	Gensler
Shade Manufacturer:	Skyco Shading Systems
Dealer:	Philips Drapery
Motors & Qty:	220 Somfy Sonesse® 50/ Sonesse® 30
Completed:	March 2014

Shangri-La Tower

188 University Ave, Toronto, ON M5H 0A3, Canada

Application:	New Construction
Sector:	Hospitality
Structural Type:	65-story, 873,270 sq.ft. · 220 bedrooms & 353 apartments
Developer:	Westbank Projects
Architect:	James K.M. Cheng Architects
Shade Manufacturer:	Solarfective
Motors & Qty:	680 Glydea® drapery motors, 150 Sonesse® 50 ILT2 motors
Completed:	2012

John E. Jaqua Academic Center

1585 E 13th Ave, Eugene, OR 97403

Application:	New Construction
Sector:	Education
Structural Type:	3-story, 40,000 sq.ft.
Developer:	University of Oregon
Architect:	ZGF Architects LLP
Contractor:	Hoffman Construction Company
Shade Manufacturer:	Draper Inc.
Motors & Qty:	138 Somfy Sonesse® 50 ILT2
Controls:	Somfy Digital Network RS485
Completed:	January 2010

Cooks Children's Medical Center

801 7th Ave, Fort Worth, TX 76104

Application:	New Construction
Sector:	Healthcare
Structural Type:	6 floors, 314,000 sq.ft.
Developer:	Cooks Children's
Architect:	HKS – Dallas, TX
Contractor:	Linbeck Construction – Fort Worth, TX
Shade Manufacturer:	SWFcontract
Dealer:	Quiltcraft
Motors & Qty:	220 Somfy Sonesse® 50 ILT2
Controls:	Somfy - animeo® IP
Completed:	June 2014

Vertical Market Segments

There are many reasons for which commercial buildings are built or renovated. Buildings are needed for education, for work, for healing, and for relaxation. Somfy offers a wide array of solutions for any type of building, delivering benefits that are universally desirable for any functionality.

- Increased thermal and visual comfort aids the learning rate of students, creates a productive atmosphere for workers, provides comfort to customers, and fosters the well-being of patients. Everyone wants to benefit from as much natural light as possible, while at the same time avoiding heat gain and glare.
- Optimized energy performance provides substantial energy savings and meets new environmental regulations by consuming less energy and natural resources. Saving money and protecting the environment are positives for any building owner and occupant.
- Natural ventilation control provides fresh air which is conducive to good health, and reduces the demand on HVAC resulting in energy savings.
- Rapid return on investment as a result of energy savings and reduced maintenance and operational costs.

> "Natural light, proper ventilation, appropriate temperature and humidity ranges, or even localized controls lead to healthier environments." *(Miller et al. 2009)*

Somfy Solutions For Your Projects

Somfy has developed intelligent solutions for the operation of building openings and sun protection devices. These systems improve comfort for occupants while also reducing energy costs.

In this way, Somfy contributes to the development of bioclimatic façades for all types of buildings, regardless of function or architecture.

Offices

- Increase energy savings by utilizing natural light management to reduce artificial lighting in the workplace.
- Integrate shading solutions with building management systems to control heat gain and reduce peak loads on cooling systems.

Hospitality

- Save energy by managing the amount of heat gain or loss in occupied or unoccupied spaces.
- With automated and remote-controlled solutions, everyone can take advantage of the benefits of motorized shading solutions.

Healthcare

- Consider controlling solar shading solutions in patient rooms using integrated bedside controls.
- Centralized shading control systems offered by Somfy allow adjustments of shade positions from the main nursing stations or control desk.

Education

- Integrate with building security systems to automatically open or close shading solutions during evacuation or lock out modes.
- Actively participate in Child Safety Month by excluding strings and chains from manual windows in spaces occupied by young children.

Vertical Market Segments – Offices

Office Solutions:

- Air quality, like temperature and light levels, is an essential component for comfort. It is monitored in order to provide the best possible working conditions for occupants while also promoting their good health.
- Somfy's centralized automation solutions are easy to integrate, operate and help maximize energy savings. The ease of operating automated shades reduces the effort required to adjust manual shades which improves comfort and decreases building's operating costs.
- Somfy offers Dynamic Insulation™ solutions so you no longer have to choose between comfort and energy savings by prioritizing the use of natural light and the way it's controlled during normal occupancy periods.

Consider Somfy for energy simulation modeling services for your next project, to identify opportunities to improve your building's efficiency.

Ways to contribute to LEED certifications:

1. **Optimize Energy Performance:** Achieve increasing energy performance ratings beyond standard design requirements by reducing environmental and economic impacts associated with excessive energy use.
2. **Controllability of Systems-Lighting:** To provide a high level of lighting system control by individual occupants or groups in multi-occupant spaces and promote their productivity, comfort, and well-being.

Contact a Somfy Commercial Representative to fully understand how we can help you gain LEED points for your building.

National Public Radio Headquarters

Location:	Washington, DC
Completed:	May 2014
Type:	Office/Government
Applications:	Motorized roller shades
Motors:	150 Sonesse® 50 ILT
Controls:	DecoFlex Digital Keypads for SDN

Gold LEED Certification

Vertical Market Segments – Hospitality

Hospitality Solutions:

- Somfy motors and controls improve occupant conditions such as consistent operating temperatures in hotel rooms, reception areas, and meeting rooms. Maintaining constant temperatures by managing natural light and heating or cooling loads is a key factor in improved occupant comfort.
- The sensors and automatic devices used in Somfy solutions reduce energy consumption by prioritizing the use of natural light, reducing solar gains in the summer and adapting building openings to actual occupancy periods (tourist season, seminar times, etc.).
- With automated and remote controlled solutions, everyone can take advantage of the benefits of technology. Occupants have complete freedom over their space and simple control options are able to adapt the hotel's structure to their desires.

Consider Somfy for energy simulation modeling services for your next project, to identify opportunities to improve your building's efficiency.

Ways to contribute to LEED certifications:

1. **Innovation & Design:**
   Somfy can contribute by educating the project team members about green building design and construction, the LEED requirements and application process early in the design phase.
2. **Daylight & Views–Daylight: Views for 75% of the space:**
   To provide building occupants with a connection between indoor spaces and the outdoors through the introduction of daylight and views into the regularly occupied areas of the building.

Contact a Somfy Commercial Representative to fully understand how we can help you gain LEED points for your building.

MGM City Center's VDARA Towers

Location:	Las Vegas, NV
Completed:	November 2009
Type:	Hospitality
Applications:	Motorized Roman shades
Motors:	9000 Sonesse® 50 RTS
Controls:	Customized DecoFlex WireFree™ RTS wall switches

Gold LEED Certification

Vertical Market Segments – Healthcare

Healthcare Solutions:

- By using Somfy control systems, patients can manage their own sun protection devices without moving from their bed and without disturbing anyone else in order to control natural light, protect their privacy and stay in control of their comfort at all times by overriding the automatic systems.

This is an example of the customized bedside controls used in healthcare applications which have shade control built into the remote.

- Somfy solutions communicate with weather sensors, timers and switches to centralize main controls for a building. This centralized control enables nursing staff to adjust shades for patients from a main computer which increases nursing station efficiency and improves the quality of patient care.

Consider Somfy for energy simulation modeling services for your next project, to identify opportunities to improve your building's efficiency.

Ways to contribute to LEED certifications:

1. **Thermal Comfort-Design:** To provide a comfortable thermal environment that promotes occupant productivity, comfort and well-being.

2. **Controllability of Systems-Thermal Comfort:**
   To provide a high level of thermal comfort system control by individual occupants or groups in multi-occupant spaces (e.g., cafeteria or waiting rooms) and promote productivity, comfort and well-being.

Contact a Somfy Commercial Representative to fully understand how we can help you gain LEED points for your building.

MedImpact Healthcare Headquarters

Location:	San Diego, CA
Completed:	September 2010
Type:	Healthcare
Applications:	Automated roller shades
Motors:	120 Sonesse® 50 ILT motors
Controls:	Somfy Digital Network (SDN)

Gold LEED Certification

Vertical Market Segments – Education

Education Solutions:

- Somfy motorization and control systems enable integration with building security systems to automatically open or close shades during evacuation or lock out modes. The operation of automated shades during emergency modes increases the security and safety of the occupants.
- If a school is designed to meet local requirements by eliminating strings from window shading fixtures, the school will be able to actively participate in Child Safety Month by excluding strings and chains from manual windows in spaces occupied by young children.
- The sensors and automatic devices used in Somfy solutions reduce energy consumption by prioritizing the use of natural light, reducing solar gains in the summer and adapting building openings to actual occupancy periods.

Consider Somfy for energy simulation modeling services for your next project, to identify opportunities to improve your building's efficiency.

Ways to contribute to LEED certifications:

1. **Daylight & Views-Daylight: Views for 90% of the space:** To provide building occupants a connection to the outdoors through the introduction of daylight and views into the regularly occupied areas of the building.
2. **Controllability of Systems-Lighting:** To provide a high level of lighting system control by individual occupants or groups in multi-occupant spaces (ex. Classrooms and conference areas) and promote their productivity, comfort and well-being.

Contact a Somfy Commercial Representative to fully understand how we can help you gain LEED points for your building.

John E. Jaqua Academic Center

Location:	Eugene, Oregon
Completed:	January 2010
Type:	Education
Applications:	Motorized roller shades
Motors:	138 Somfy Sonesse® 50 ILT2
Controls:	Somfy Digital Network (SDN)

Gold LEED Certification

System Architecture

Somfy products installed in a typical building equipped with motorized shading solutions.

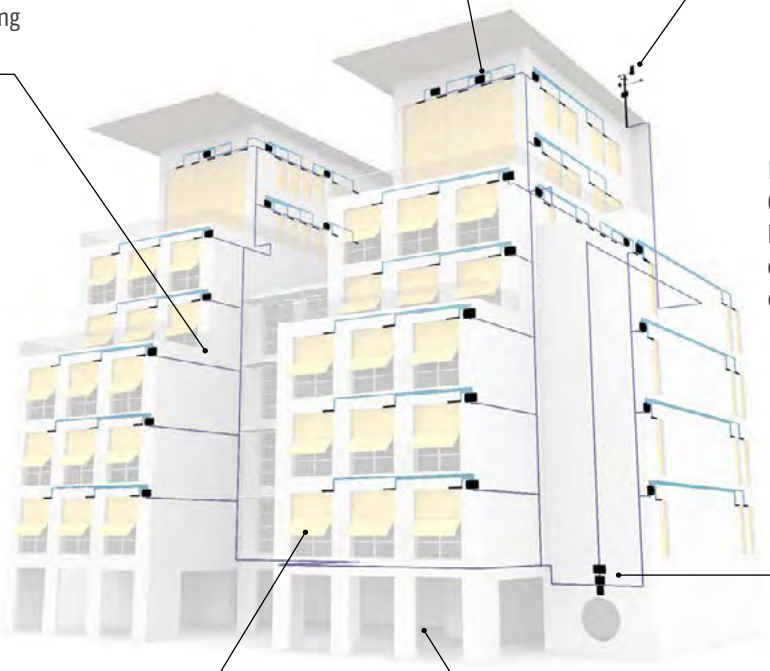
Motorized window treatments

Sensor station

Sends commands to the building controllers.

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

Somfy now offers innovative SDN 2.0 Bus Distribution Devices to improve power and data distribution along any SDN bus line.



Building controllers

Compatible with proprietary bus (Somfy Digital Network) or open protocols (KNX) to control buildings of any size.

Local controls

animeo® IP Virtual Keypads

DecoFlex Digital Keypad

Programming and configuration interfaces

Solutions Overview

System Solutions for Buildings

Somfy solutions manage all types of buildings when using these innovative products (motors, façade management systems and local controls).

Somfy has a solution for any project and is compatible with all solar shading and opening devices.

Interior Roller Shades

Interior Venetian Blinds

Skylights

Draperies

Window Openers

External Vertical Screens

Awnings

Somfy Solutions Include

1. animeo® range of intelligent building controls

Façade management systems enable the control of all or part of window treatments via a PC or a dedicated control system. Motors and automation communicate with each other via a proprietary Somfy bus (Somfy Digital Network and animeo IP) or international standards (KNX or LON).

Somfy Digital Network RS485

2. Motors

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

Somfy tubular motor

Somfy drapery motor

3. Local Controls

Depending on the number of window treatments and configuration of the room, there will always be a Somfy user interface available to meet the requirements.

The various technologies (radio, wired, digital) offer a number of advantages that are adapted to any type of building.

Telis 1 RTS Pure

animeo® IP Virtual Keypads

Digital DecoFlex™ Keypad

4. SDN 2.0 Bus Distribution Devices

All Somfy Digital Network Systems are now supported by new products which strengthen network signals and improve reliability. SDN 2.0 products are backed by a SDN 2.0 Certified Quality Promise which means these products have been designed to meet the highest standards for Somfy Digital Network system components and validated by Somfy engineers. Systems designed using SDN 2.0 certified products are easier to install, more reliable, and improve overall system performance.

QUALITY SDN CERTIFIED 2.0 PROMISE

Choose Your Application

Somfy solutions offer a wide range of applications, power sources, motors and control options. Use these sections as a guide to understanding Somfy motor and control products and contact us to discuss additional design details.

Interior Applications

Roller Shades

Horizontal Blinds

Roman Shades

Cellular or Pleated Shades

Draperies

Skylights

Exterior Applications

Exterior Roller Shades

Awnings

Window Motorization

Bottom Hinged Windows

Top Hinged Windows

Roof Windows

Domes

Sun Shades

Louvres

Choose Your Power Source

Type of Power Source	Line Voltage (AC)	Low Voltage (DC)
Size	Large applications	Small or large applications
Power connection	Using a single circuit allows 'daisy chain' power design	Design in a centralized locations and distribute power and data over low voltage wiring
Motor speed	Offered in multiple speed variations	Regulated and adjustable speed available for proper alignment
Quiet operation	Operates with a uniform, low decibel rating in low or high torque applications operated in either direction.	Consistent quiet operation when operating within the torque limit of the motor
Maintenance required	No maintenance is required for the lifetime of the motor	

Choose Your Motor – Interior

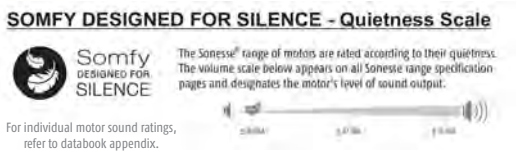
Interior Roller Shades and Blinds

A wide range of quiet motors and intelligent controls are available and selection is determined based on project requirements and building functionality. Somfy solutions offer a large range of motor and control options for all types of end products.

- Somfy line voltage (AC) motors fit the most common interior and exterior window treatment applications.

Sonesse® 50

Sonesse® 40

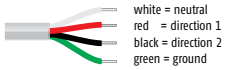


Wired Technology

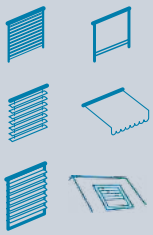
The cost-effective standard solution. Typically used for interior or exterior applications requiring a higher torque range.

Type of Power Cable

Wired
120V AC / 60Hz
4 conductor cable



Electrical connection	white = neutral red = direction 1 black = direction 2 green = ground
Torque	4-100 Nm
Diameter	40-60 mm
Voltage	120 V AC
Current consumption	0.5-3.8 A
Installation comments	Line voltage can not be powered in parallel. Follow local codes and regulations.
Applications	Roller shutters Screens Venetian blinds Awnings Large slats Fabric Tension Systems (Skylights)



Somfy Digital Network Technology

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

Type of Power Cable

120V AC / 60Hz
3 conductor cable

NOTE: Need to include extra data cable: RJ9 or RJ45 (sold separately)

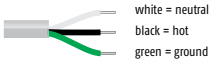
Electrical connection	white = neutral black = hot green = ground+ extra cable with RS485
Torque	6-35 Nm
Diameter	50 mm
Voltage	120 V AC
Current consumption	0.5-2.1 A
Installation comments	Follow the guidelines to properly design and install a Somfy Digital Network system. Most SDN devices should not be installed further than 30 feet from the main bus line.
Applications	For roller shutters and screens in situations where exact positioning and consistent high precision is required. Applicable for blinds greater than 10 feet in height.

Radio Technology Somfy® RTS

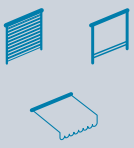
RTS motors are controlled by radio frequency transmitters without the need for wired controls. The RTS motor only receives one way communication from the radio transmitter. Mainly used in the residential and small scale building areas.

Type of Power Cable

RTS
120V AC / 60Hz
3 conductor cable



Electrical connection	white = neutral black = hot green = ground
Torque	6-100 Nm
Diameter	40-60 mm
Voltage	120 V AC
Current consumption	0.5-3.8 A
Installation comments	Max. recommended radio distance: 60 ft with up to 2 cement walls.
Applications	Roller shutters Screens Awnings

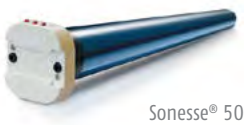


For more detailed information concerning line voltage motorized shades and blinds, see the 400 or 500 Series Databook appendix.

Choose Your Motor – Interior

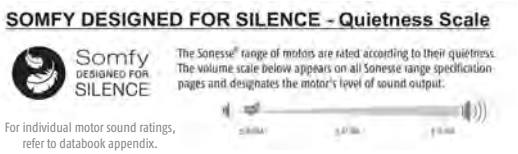
Interior Roller Shades and Blinds

- Low Voltage (DC) motors are designed for the most common interior window treatment applications.



Sonesse® 50

Sonesse® 30



Radio Technology Somfy® RTS

- RTS motors are controlled by radio frequency transmitters without the need for wired controls. The RTS motor receives one way communication from the radio transmitter. Mainly used in the residential and small scale building areas.

Type of Power Cable

Electrical connection	stripe = positive white = negative
Torque	2 Nm
Diameter	30 mm
Voltage	24 V DC
Current consumption	0.8–1.8 A
Installation comments	Maximum power lengths will vary when using different gauge wiring (18 gauge wire over 100 ft, 16 gauge wire over 150 ft from the power source). Maximum recommended distance between the motor and controller is 65 feet.
Applications	Interior shades and blinds

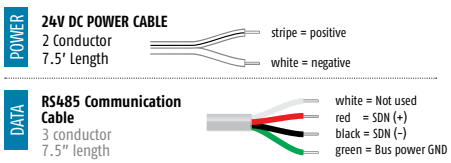
Somfy Digital Network Technology

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

Type of Power Cable

Sonesse® 50 — Motors are delivered with single power and data distribution cable

Sonesse® 30



Electrical connection	stripe = positive white = negative extra cable with RS485
Torque	2–4 Nm
Diameter	30 or 50 mm
Voltage	24 V DC
Current consumption	0.9–2.0 A
Installation comments	Maximum power lengths will vary when using different gauge wiring. Most SDN devices should not be installed further than 30 feet from the main bus line.
Applications	For situations where exact precise shade alignment is required. Applicable for small to large shades and blinds.

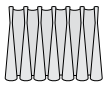
For more detailed information concerning low voltage motorized shades and blinds, see the Sonesse® 30 Databook appendix.

Choose Your Motor – Interior

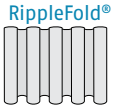
Draperies – Glydea®

Glydea is designed to easily adapt to various control technologies including dry contact, Radio Technology Somfy® (RTS), RS485, Z-Wave® and ZigBee®. Glydea® is available for all drapery types including pinch pleat, Ripplefold® and Accordia®.

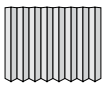
Pinch Pleat



RippleFold®



Accordia®



	Glydea® 35e	Glydea® 60e
Power supply	110 V AC 50/60 HZ	
Amperage	0.5 A	1A
Average linear speed	4.9"/s-7.86"/s 12.5 cm/s to 20 cm/s	
Power consumption	60 W	120 W
Power cable type	3-wire cable with molded NEMA plug 4-wire cable (wired version only)	
Control connector type	RJ12	
DCT control circuit voltage	3.3 VDC	
Motor sound level	<44 dB(A)	
Certifications	c TUV us, CCC, CE	
Track maximum length	32 ft (9.7 m)	36 ft (10.9 m)
Maximum number of junctions	2	
Minimum bending radius	11.8 in. (30 cm)	
Minimum curving radius	118 in. (300 cm)	
Side opening max weight	77 lbs / 30 ft 35 kg / 9.7 m	132 lbs / 36 ft 60 kg / 10.9 m
Center opening max weight	77 lbs / 30 ft 35 kg / 9.7 m	132 lbs / 36 ft 60 kg / 10.9 m
Tandem alternative	154 lbs / 70 kg 64 ft / 19.4m	264 lbs / 120 kg 72 ft / 21.8 m

Adaptable control modules available:

RTS Control Module

ZigBee® Control Module

RS485 Control Module

Z-Wave® Control Module

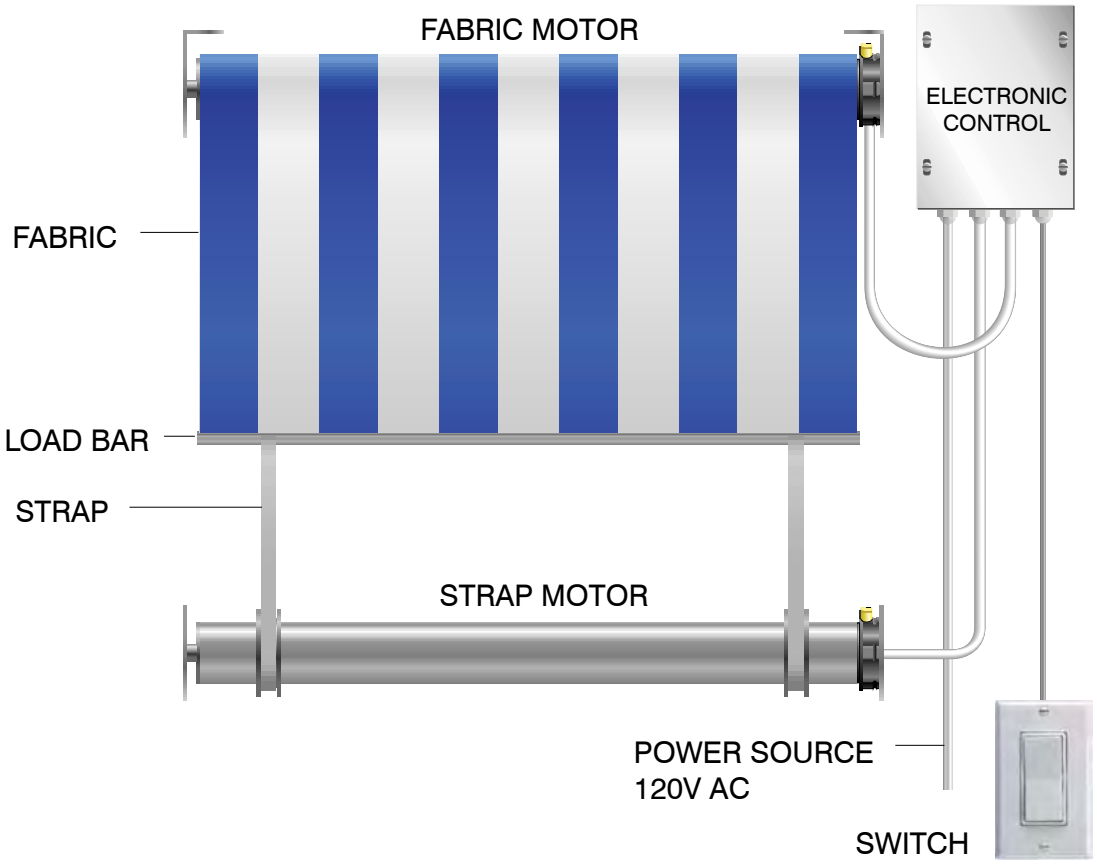
Dry contact and wired versions are available, see the Glydea Databook for more information.

For more detailed information concerning Glydea® motorized draperies, see the Glydea® Databook appendix.

Choose Your Motor – Interior

Skylight Shades – Fabric Tension System (FTS)

The FTS is a specialized system designed for the solar protection market where horizontal or inclined type shading is required. This system is designed to meet the needs of motorizing skylights or horizontal shades which are normally installed in hard-to-reach places.



System Requirements:

- The system consists of two specific motors, an electronic control unit and a switch. One motor is inserted into the fabric roll-up tube and is referred to as the fabric motor. The other is inserted into the strap take-up tube and is called the strap motor. While not every application will have a load bar and straps (shown above), these references will simplify installation.

- The electronic control unit operates each motor independently and maintains a desirable dynamic (moving) tension as well as final tension in the system, eliminating fabric sag while the fabric is both moving and standing. Adjustment to both dynamic and final tension can be made through the electronic control.

For more detailed information concerning skylight shade systems, contact a Somfy Representative.

Choose Your Motor – Interior

Window Automation – Mingardi® Window Actuators

Mingardi is a worldwide leader in providing actuators and control interfaces for remote window operation. Smoke and heat evacuation is an important function comprised of specialized windows that are fitted with extremely reliable opening devices and the appropriate controls.

Chain Actuators are used for automated window opening control. These motorized actuators are compact in size and offer full range of strokes, thrust forces and chain resistance required for most motorized window application.

MODEL	MICRO S	Micro L	Micro XL
Description	Micro S 200 mm	Micro L 280 mm	Micro XL 420 mm
Voltage	24V DC	24V DC	24V DC
Thrust tensile	200 N	350 N	400 N
Stroke	200 mm	280 mm	420 mm
Power consumption	30 W	25 W	50 W
Speed minimum	10 mm/s	16 mm/s	17 mm/s

For more detailed information concerning Mingardi Actuators, see the Mingardi Databook appendix.

Choose Your Motor – Exterior

Exterior Roller Shades

There are three types of exterior roller shades:

1. Exterior shades

Installed on the exterior of building facades to manage natural light entrance and minimize solar heat gain by blocking radiant heat outside the window.

2. Enclosed exterior shades

Provide optimum protection for the shade by retracting into a concealed, weather-tight enclosure.

3. Wind-resistant shades

Shades designed to remain tight during windy weather conditions. A mechanical protection against wind is often integrated using a lock at the bottom of each lateral guide rail guarantees a perfect alignment of the load bars.

The choice of fabric is important since it influences the way in which heat is transmitted, reflected and absorbed. It is usually a perforated fabric made from woven - fiberglass or polyester coated and held by 2 lateral rails or cables. Somfy motors adapt to any type of blind and fit the requirements for speed to guarantee the occupants' visual comfort. They are designed to fit exterior shades up to 194 sq.ft.

500 Series – LT50 RS485

The RS485 motor controls and monitors networked shades and blinds to ensure users comfort and energy savings. Other control technologies available: wired (line voltage), Radio Technology Somfy or Digital bus for compatibility with third party control systems and more advanced features.

400 Series – Altus 40 RTS

Versatile radio motor allowing users to control any type of roller shade or blind. Several levels of power and sizes are available according to each application: Altus 40, 50, 60. Available in various speeds and a special fast-paced motors line for exterior roller shades.

Radio Technology Somfy® (RTS) offers a high-performance, convenient and reliable solution, eliminating the need for wiring between the motor and controls. With the radio receiver integrated within the motor, RTS is the ideal choice because installation is quick and easy.

For more detailed information concerning line voltage motorized exterior shades, see the 400 or 500 Series Databook appendixes.

Choose Your Motor – Exterior

Awnings

Sunea® RTS CMO (Compact Manual Override)

Somfy offers the most advanced and innovative motor for cassette, semi-cassette and standard awnings. Achieve instant sun protection and extended control of outdoor spaces using this solution, while also incorporating all of the benefits of motorization with one motor.

Manual Override: Maintain control of the awning even with the loss of power. This dependable function enables the user to have peace of mind and operate the awning with a crank handle should power be lost. Additionally, Somfy's advanced technology ensures that all settings and programmed controls remain in the motor's memory.

Specifications

MODEL	525A2 CMO	535A2 CMO	550R2 CMO
Torque	25 Nm	35 Nm	50 Nm
Nominal Voltage	120V AC	120V AC	120V AC
Rated Current	1.6 A	2.1 A	2.1 A
Speed	20 rpm	20 rpm	14 rpm
Thermal Protection	4 minutes	4 minutes	4 minutes
Radio Frequency	433.42 MHz	433.42 MHz	433.42 MHz

Technology options available

Radio Technology Somfy® (RTS) offers a high-performance, convenient and reliable solution, eliminating the need for wiring between the motor and controls. With the radio receiver integrated within the motor, RTS is the ideal choice because installation is quick and easy.

Wired Technology offers a cost effective solution to motorize solar shading devices. Wired awning applications are usually operated through momentary wall switches.

NOTE: For more detailed information concerning the Sunea® motor see the 500 Series Databook.

Choose Your Control

Control Solutions for Buildings

The motor technology that you choose depends largely on the features you are specifying. The motors and control units must be compatible to work together correctly.

Wired Technology

Wired motors

Wired technology for Somfy motors is the most basic control option offered. The standard wired technology is a common control technology which is commonly know in the design industry. The simple function of this technology also provides minimal innovative control options.

■ Benefits

- Wired technology is a simple system technology to understand due to the basic nature and functionality.
- The control interfaces used with wired motors are limited to basic types with the same functionality of switching polarity to send commands.

Radio Technology Somfy®

Radio motors

Radio Technology Somfy® (RTS) is Somfy's radio control platform which enables users to adjust motorized interior window coverings and motorized exterior products from virtually anywhere inside or outside.

Radio Technology Somfy®

■ Benefits

- Security: alternating, tamper resistant code with 16 million combinations
- Reliability: its narrow bandwidth means that RTS usually is not affected by other systems (Depending on other system strength).
- Upgradeability: you can add/change user controls and automatic systems over time
- Controllability: could be controlled using remotes, switches, sensors, timers and an app based myLink™ interface.

Somfy Digital Network

Digital motors

The SDN system is a standard half duplex, bi-directional RS485 network. Bi-directional communication enables sending and receiving signals to each motor on the network. This allows the system to view the position and status of any motor on the network in real time. Since the SDN network runs over standard network architecture, it is possible to establish a remote connection to the system from anywhere internet access is available. This defines a new level of commissioning and support services that can be offered for today's energy efficient Intelligent Building.

All Somfy Digital Network systems are able to be designed using the new line of SDN 2.0 Bus Distribution Devices.

SDN 2.0 products are backed by a SDN 2.0 Certified Quality Promise which means these products have been designed to meet the highest standards for Somfy Digital Network system components and validated by Somfy engineers. Systems designed using SDN 2.0 certified products are easier to install, more reliable, and improve overall system performance.

To learn more about individual SDN 2.0 devices, visit the SDN 2.0 Bus Distribution Devices section in the appendix.

■ Benefits

- Interfaces with a range of centralized building management and home automation systems.

Choose Your Control

International 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

Wired Technology
Standard wired control offers the most basic form of control communication using power signal switching.

Good

Wireless technologies

Radio Technology Somfy® (RTS)
With over 10 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.

Better

io homecontrol®
Highly secure wireless technology included in a wide range of home and building equipment, making it fully compatible, reliable and secure.

EnOcean®
Energy harvesting self-powered wireless technology. The advantages are that EnOcean wireless technology is fully open and interoperable.

International

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.

Best

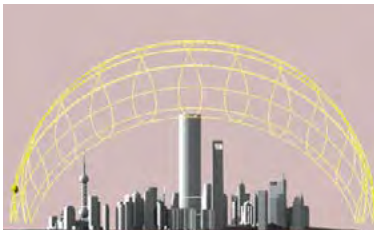
KNX
World standard for home and building control which fits for use in any application domain.

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

International

animeo® Range of Solutions

animeo®: a range of Somfy controls for commercial buildings



Sun path

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

Throughout the day, the elevation of the sun is constantly changing as well as the occupants activities. The animeo range of intelligent controls automatically adjust the blinds and shades accordingly.

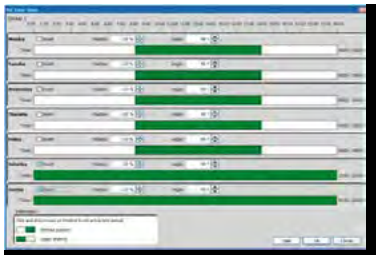
The main elements to be taken into account are:

1. Real time sensor monitoring

Weather conditions impacting a building at different times of the day.

Each building is unique, in terms of its size, geographical location, environment or architecture. The weather conditions and sensor data have an impact on the buildings energy needs. Design consideration 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 etc.) with different occupancy periods: a school will be closed during some weeks, a hospital will always be occupied.

Automated solar management provides flexibility to adjust blinds or shades during peak occupancy periods.

3. The definition of zones

It is essential to design the building performance and function based on the occupants' needs.

A zone can be:

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

animeo® Range of Solutions

animeo®: control for all automated window covering and opening devices

Somfy Systems range overview

Building size	Closed protocol			International / Open protocol
	SDN	IP	IB+	KNX
Large		animeo® IP	animeo® IB+ 1 to 4 zones or 1 to 16 zones	animeo® KNX
Medium	Stand-Alone Somfy Digital Network			
Small				

	SDN	IP	IB+	KNX
Number of motors	Unlimited*	Unlimited*	> 6400	> 6400
Number of zones	Unlimited*	Unlimited*	> 16	> 16

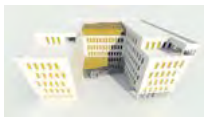
Improve digital network performance using the new line of SDN 2.0 Bus Distribution Devices!

* Contact a Somfy Representative to understand system design abilities.

animeo® Range of Solutions

Functions achieved by animeo range of solutions

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

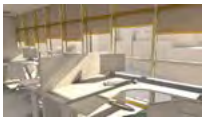
Functions for visual comfort and reduced artificial lighting		How does it work?
Basic sun function	The shades automatically close in direct glare, and open when the sun is not present. The function applies to a building, façade, zone or floor level.	Through programmable weekly timers or commands sent through sun sensor.
Solar depth entrance management	Utilize the amount of natural light entrance in a space for lighting and glare reduction. Occupants' visual comfort is improved, since they can enjoy a view through as much of the window as possible.	Algorithm embedded in Somfy animeo software: function enabled, depending on the building geographical location.
Managing building sensors	 Basic sensor levels 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 for artificial lighting is reduced.	Building design and planning should include surrounding buildings that could cast a shadow onto the building façades. This could be adjusted in real time using sensor functions.
At night	All shades and blinds close to minimize external light pollution.	Using a programmable timer.

Functions for increased building energy performance		How does it work?
Avoid overheating	Blinds automatically adjust when sun is detected to minimize the solar heat gain. The function applies at a building, façade, zone or floor level.	Commands from the sun sensors linked to indoor and outdoor temperature sensors.
Gain heat	Blinds open automatically when the weather is sunny and when the inside temperature is lower than the outside temperature. Natural energy is used to heat the building.	
Dynamic Insulation®	Blinds close automatically to minimize heat loss and reduce heating costs.	

animeo® Range of Solutions

Maintenance functions: Protection of solar shading or people (building safety)		**How does it work?**
Window cleaner safety	All shades open and occupants' local commands are disabled to ensure cleaner's safety. The function applies at a zone or building level.	Central command, sent from the Building Controller.
Links to fire alarm	All shades open 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 shades 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 shades, exterior shades or window openers work together, the level of priorities can be programmed.	With the Building Controller.

Maintenance functions: Advanced functions / links to BMS		**How does it work?**
Status of motor position or type of system activation	Motor feedback during movement and/or at end-limits up/down, intermediate position. Some systems provide the ability to view the type of system activation (Occupant, sensor or alarm control).	Displayed on computer, using BMS Interface and animeo IP Visual Configuration Software.
Remote access	Remote access to shades for the facility manager.	Via the remote web based access.

Functions to enhance the façade's appearance or indoor space		**How does it work?**
Blind alignment	 Encoder motors with exact motor positions.	With RS485 encoder motors with exact motor positions displayed on computer.
Communication on façades	Showing messages or words on the façade.	Via the facility manager.

Functions to enhance user comfort		**How does it work?**
Manual override	Occupants can always control their own shades, using a keypad or remote control.	Supported by the Somfy line of user interfaces.
Occupancy detection	Light Balancing PHILIPS | somfy Somfy Philips Light Balancing solution to optimize the use of artificial lighting.	See Light Balancing section.

animeo® IP

Automated Total Solar Management

animeo® IP is a total solar management system utilizing Somfy-powered intelligent motorized window coverings as well as digital keypads and weather sensors. The system's controllers, sensors and keypads can be added to both new and existing Somfy Digital Network installations for comprehensive solar management as either a stand-alone solution or integrated into third party control systems.

An intuitive user interface allows for simplified commissioning, building management and technical support, featuring drag-and-drop programming, motor auto discovery, and at-a-glance real-time system status updates.

What animeo® IP can do for your project

animeo® IP is a hardware and software solution that combines configuration and control software in one comprehensive package. By managing a full range of intelligent motors from a single source, animeo IP presents a stronger, more customizable solution that meets today's requirements for LEED certification while increasing occupant comfort.

animeo® IP performs in installations across all vertical market segments including Offices, Hospitality, Education and Healthcare.

animeo® IP Benefits

	Building Owner	Architect	Facility Manager	Occupant/Tenant	Engineer
Energy Efficiency	• Reduce heat gain • Save on HVAC capital costs	• Reduce heat gain and cooling loss • Wider selection of glazing options	• Reduce lighting and HVAC demand during occupied and unoccupied times	• Reduce the power consumption from artificial light	• Increase the ability to achieve successful building perfomance
Visual & Thermal Comfort	• Improve building façade appearance • Reduce glare in work environment	• Solar Depth Entrance Management offers options for positioning workspaces	• Enter the distance between windows and work areas in animeo IP to manage solar depth entrance management	• Manage natural daylight • Minimize glare	• Assist during the design process to create a productive and comfortable working environment
Scalability & Flexibility	• Easily add to existing SDN installations	• One system fits buildings of all sizes	• System functionality and operation remains simple for a single office or an entire building	• System easily adapts to the specific needs and requirements of the workspace	• The system could support the functionality of multiple building types
Simplicity	• Reduces the complexity of automated solar shading solutions	• Simple to design, install and commission	• Easy to adjust functionality of motors or controls from Graphical User Interface • Control entire building from one computer	• Override automatic control via in-wall keypads, virtual computer keypads and mobile devices	• System is simple to understand, design and build
LEED Certification	• Compliant with Title 24 • Opportunity to gain LEED credits	• The Somfy Specification Team is LEED accredited and provide support during the design phase	• Somfy supports LEED based design and commissioning for the system installed in your building	• LEED buildings show a higher occupant satisfaction in areas like perceived productivity, indoor air quality and thermal comfort.*	• Earn more LEED points during the design phase of a project

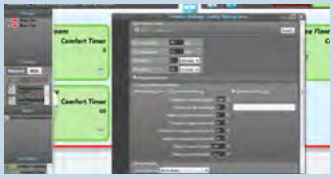
* US Green Building Council, "The Business Case for Being Green." July 2012

animeo® IP

animeo® IP System Features

Sun sensor monitoring

Automates natural light management based on the sun's position in the sky and façade direction to minimize glare and maximize the opportunity for daylighting.



Solar entrance depth management

During active sun tracking periods, animeo IP's Solar Entrance Depth Management feature will adjust and maintain the solar shade height to limit the distance that sunlight enters the space. This protects furnishings, maximizes daylight availability and minimizes glare on work surfaces and computer screens.

Control versatility

Programmable wall-mounted keypads, wireless controls and virtual keypads provide occupants control over nearby window coverings. animeo IP can override manual occupant commands during specific time periods (ex: east façade from 8 AM - 12 PM) to keep the building running as efficiently as possible, providing just the right balance of manual and automated control.

Facility Manager View

Somfy Digital Keypad

Virtual Keypad

Compatibility

animeo IP is compatible with existing SDN installations, at any point in system design, as well as wind, sun and weather sensors, in-wall keypads and wireless sensors, and third party building management systems.

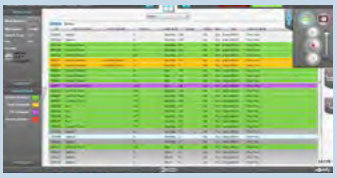
Somfy Digital Network RS485

Sonesse® 30 RS485

Sonesse® 50 RS485

Facility management

Somfy Digital Network (SDN) technology provides bi-directional status reporting of window covering positions. With this information, animeo IP exports system status snapshots in convenient graph or table form. Quickly see how and why shades were adjusted with simple color codes for timed events, occupant actions or building overrides. Facility managers can also receive systems alerts via email.



Streamlined commissioning process

Auto-discovery of motors and switches expedites installation while drag-and-drop configuration simplifies commissioning.

Real and astronomic timed events

With animeo IP's timed events feature, schedules can be created to keep buildings energy efficient based on certain times of day. Creating timed events around periods of high occupancy (between 8:00AM and 6:00PM, Monday through Friday) and low occupancy (weekends, holidays) ensures the building is running as efficiently as possible.

Sensors

A variety of Somfy weather sensors are compatible with animeo IP, including rain, wind, sun and temperature sensors. Sensor configuration and setup is easy using animeo IP's intuitive user interface.

Compact Sensor

animeo® IP

Intuitive Graphic User Interfaces

A standout feature of animeo IP is its graphic user interface. There are four main system views: Façade, Group, List and Floorplan. The Floorplan view offers facility managers a dynamic snapshot of system status and indicators in an easy-to-understand floor plan format as well as convenient access to controls and critical system information.

- Weather forecast information
- Real-time information from weather sensors
- System errors and notifications
- Color-coded motor statuses
- Hover over motors or keypads to view detailed information
- Easily access other floors
- Switch between multiple views
- Right click to emulate user commands
- Master keypad for facility manager controls
- Scale and zoom

Floor Plan View

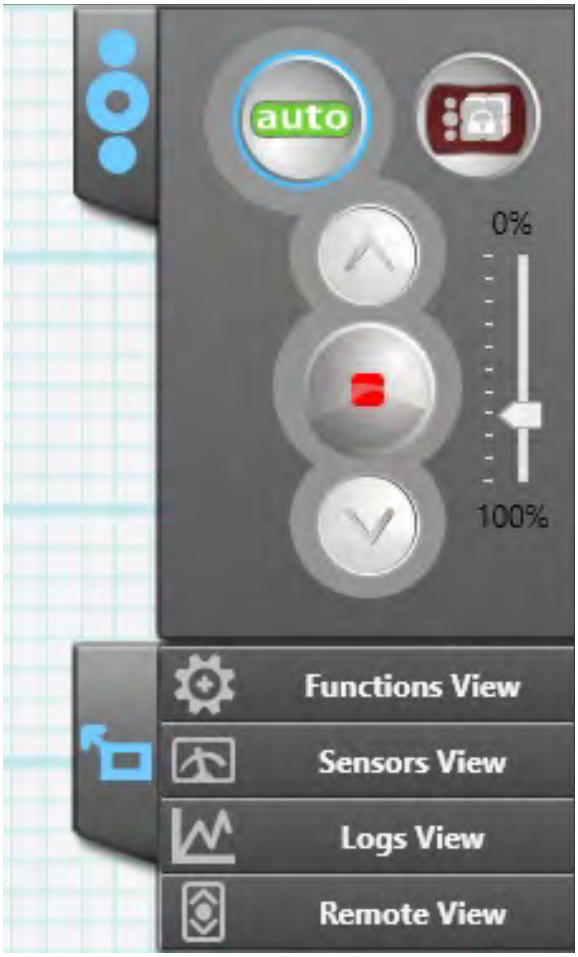
animeo® IP

Virtual Keypads

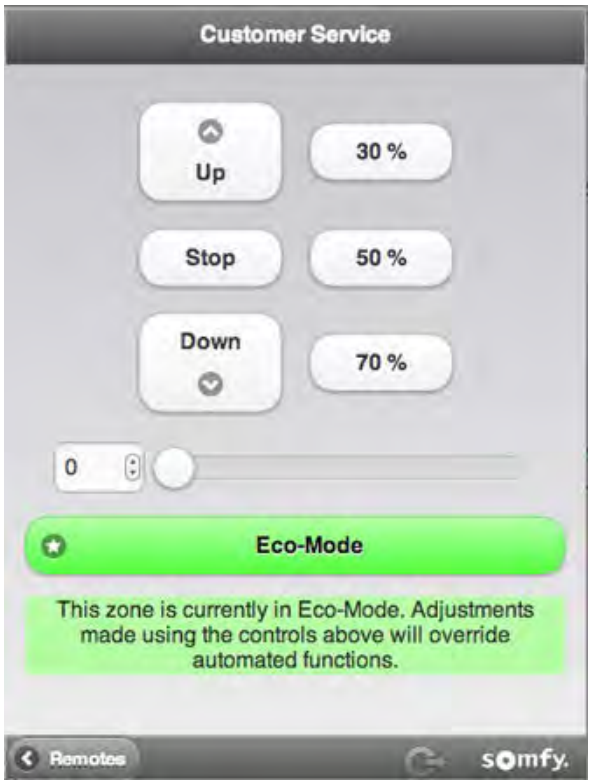
Both facility managers and occupants have access to virtual keypads from their PCs, laptops, tablets or smart phones connected to the site's LAN for convenient local control.

- Access system presets:
  Openness levels and Energy Savings Mode
- Up, Down and Stop commands
- Slider for customized settings

Facility Manager View



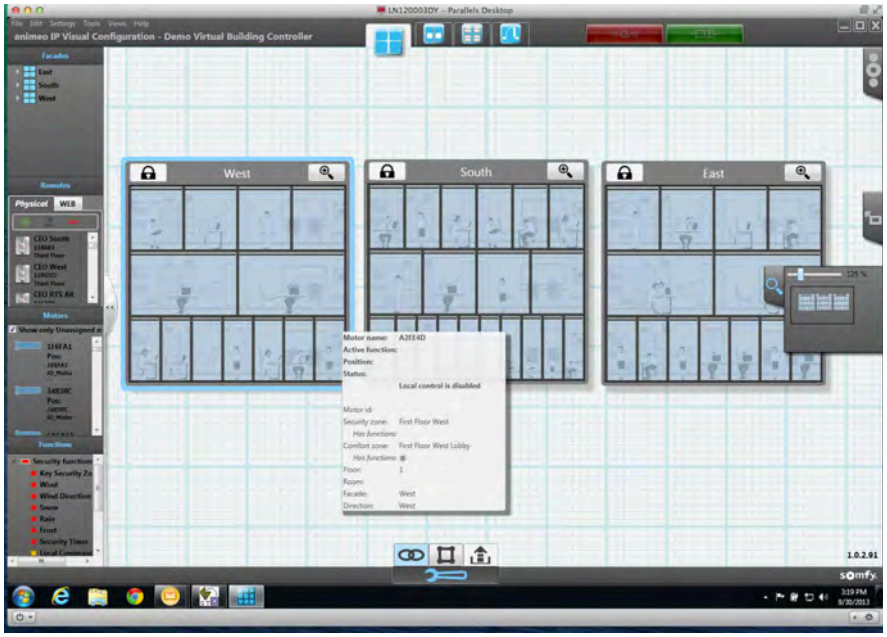
Occupant View



animeo® IP

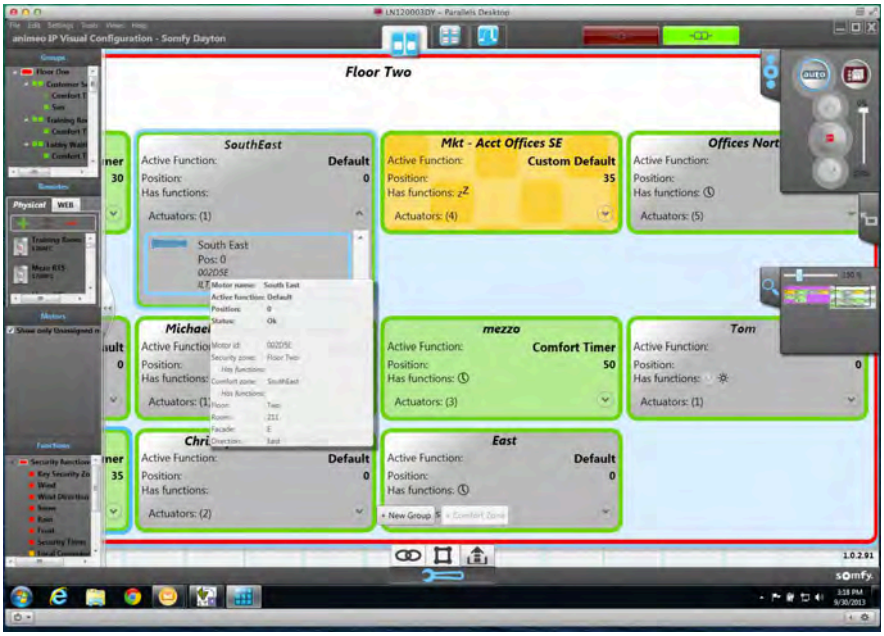
Configuration Views

Façade View



Graphical representation of building exterior

Group View

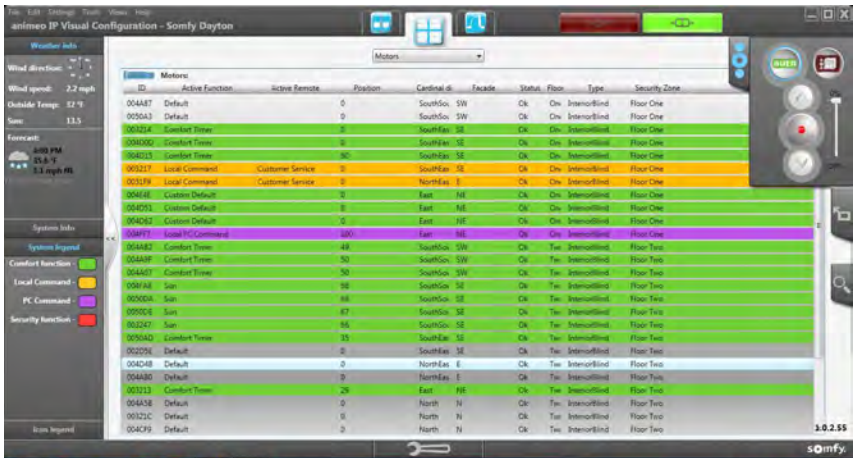


Conceptualized view of groups that make up the system

animeo® IP

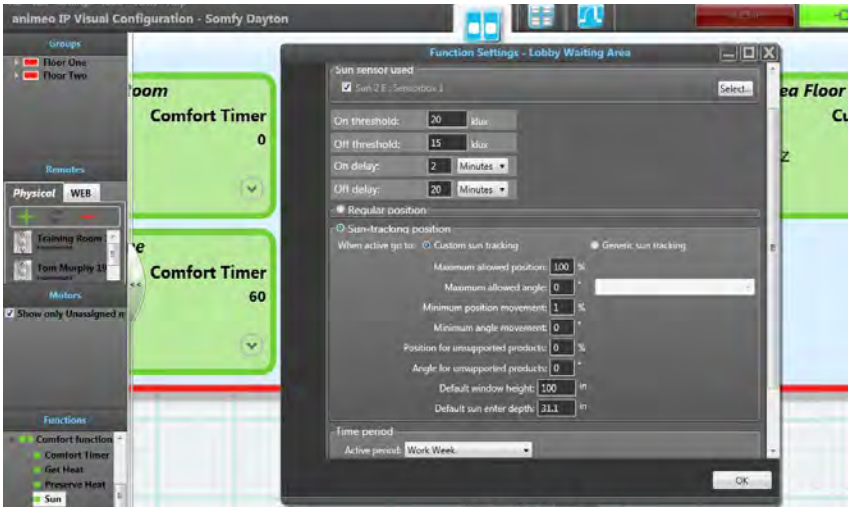
Configuration Views

List View



Able to sort database by system status.

Sun Sensor Monitoring



Input from sun sensors effectively automate solar shading. animeo IP can log historical light and temperature values to improve efficient energy management and glare reduction.

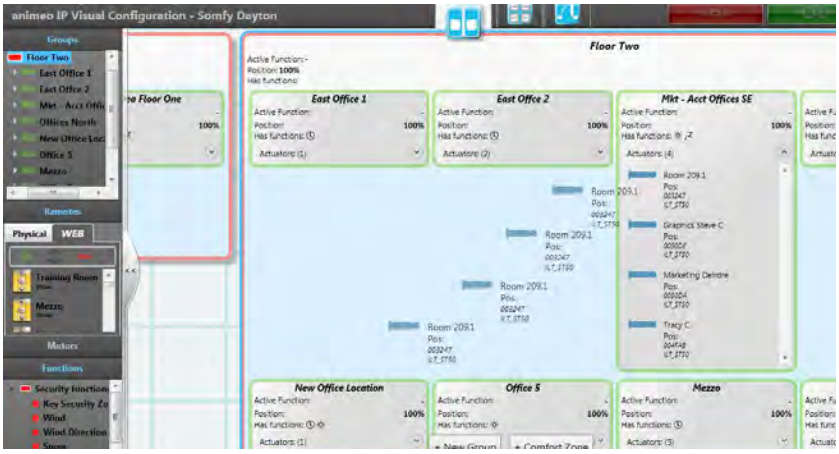
animeo® IP

Configuration Views

Timer Configuration

Schedules based on animeo IP's real-time and astronomic clocks are easy to configure. Proper configuration is guaranteed with a simplified interface and color coded confirmation.

Drag-and-Drop Configuration



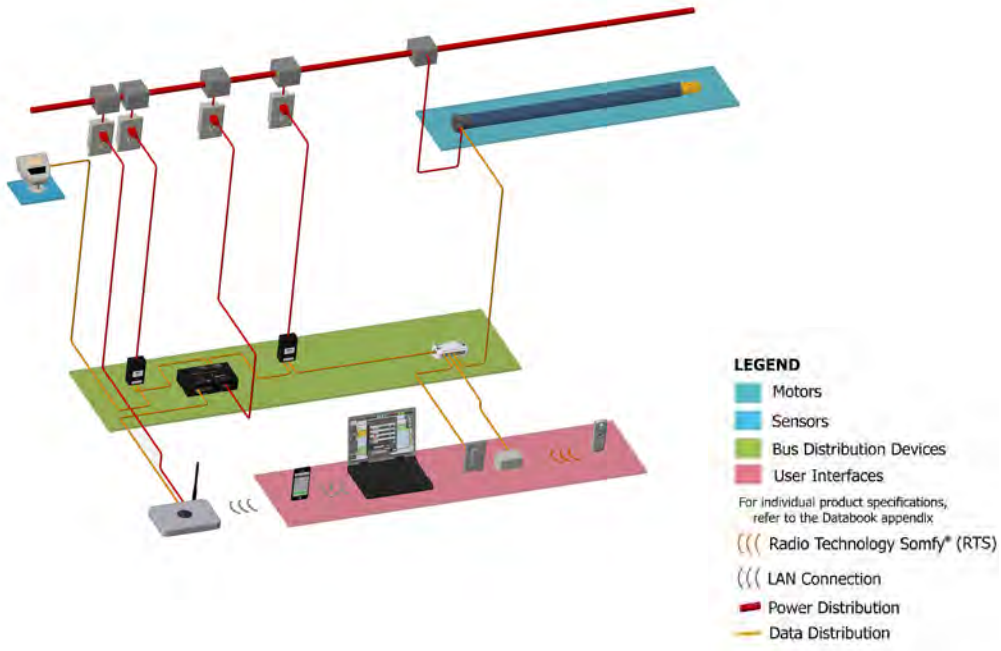
Easily make adjustments to the system at any time with intuitive drag-and-drop organization of motors and sensors.

Drag and drop motors from one zone to another.

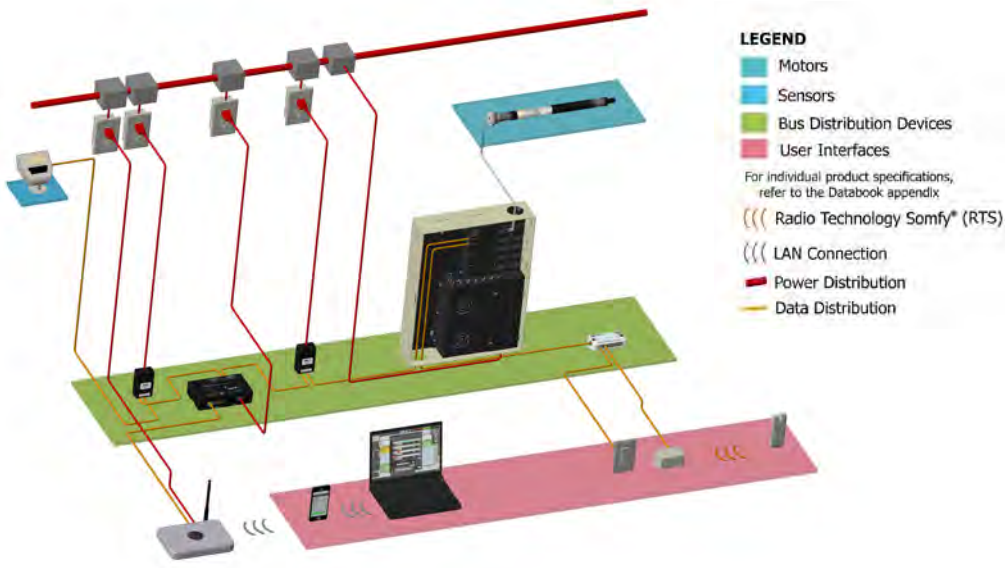
System Wiring Diagrams

SDN System animeo® IP

Line voltage motors controlled by animeo® IP



Low voltage motors controlled by animeo® IP

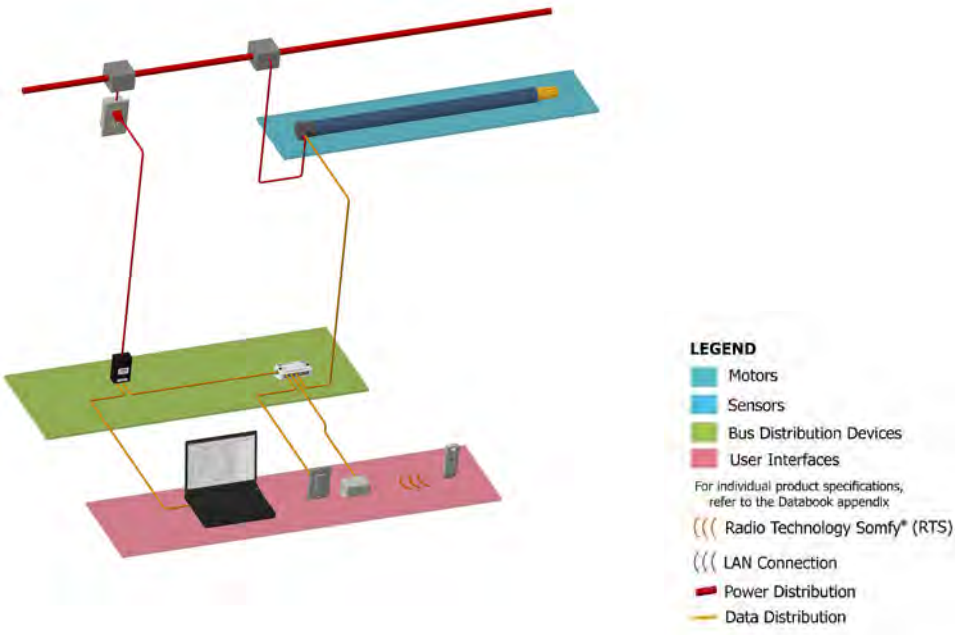


NOTE: For more detailed information concerning specific connection details, see the motor databooks and animeo® IP brochure in the appendix.

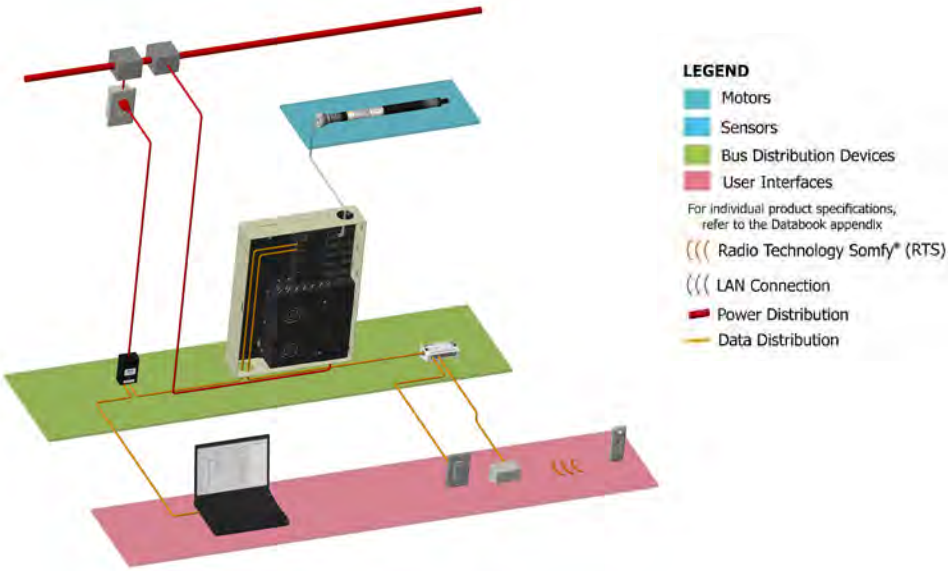
System Wiring Diagrams

SDN System Stand-alone

Line voltage motors controlled by stand-alone SDN



Low voltage motors controlled by stand-alone SDN



NOTE: For more detailed information concerning specific connection details, see the motor databooks and animeo® IP brochure in the appendix.

Integration

Third Party Systems

Automation Control Systems

System Integration:

Through RS485, RS232, Dry Contact automation systems can be programmed to directly interact with Somfy products.

Building Management Systems (BMS)

BMS Interface

Utilizing the Somfy BACnet gateway, Stand-alone SDN and animeo IP systems are able to send and receive data points on a BACnet system

Somfy Connect LTI

SDN systems can directly interact with Lutron lighting or shading systems via a Somfy Connect Translator, enabling Lutron® keypad control of Somfy motors.

- Centralized logic center and communication bridge
- Hardware realtime clock for scheduled events
- Support for RadioRA® 2, HomeWorks® QS, Quantum®, and GRAFIK Eye® QS systems

Somfy-Philips Light Balancing

Integration

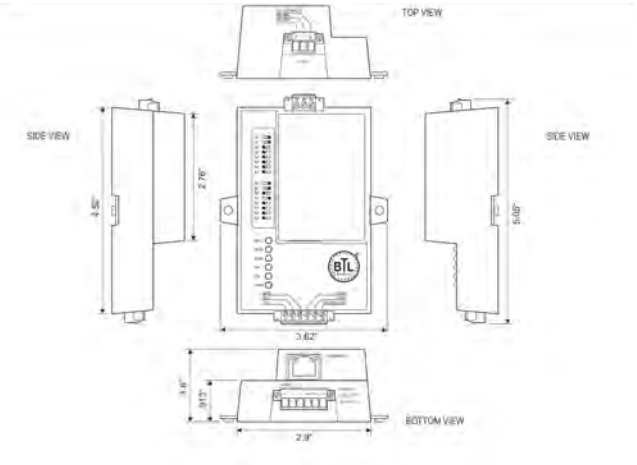
Somfy Connect BMS Interface

Overview

The Somfy Connect BMS Interface provides communication between Building Management Systems and Somfy motorized shading systems, stand-alone SDN or SDN with animeo® IP shade systems. This interface communicates through a direct connection to the building automation IP network or uses a BACnet translator box to send and receive signals. The BMS Interface provides third party communication to stand-alone SDN systems and animeo IP. When utilizing the interface Somfy motorized system devices provide feedback and can be controlled by the BACnet network.

Features Summary

- System control
  - Stand-alone SDN – control individual or motor groups.
    - Position (%) – feedback on motors only
    - Position (absolute) – feedback on motors only
    - Intermediate position
    - Up, Stop, and down control
  - animeo IP – control individual or motor groups, sensors, and virtual keypads.
    - Position (%) – feedback on motors only
    - Up, Stop, and down control/commands
    - Priority control
    - Sensor data – provides single direction information to BMS system
- Supports up to 1500 data points.
- Integration capabilities: Modbus, BACnet MS/TP, BACnet IP
- Sensor data – provides single direction information to the BACnet network.
- Programmable through user friendly interface.
- Auto device discovery for animeo IP.



Technical Specifications

- 1500 data points maximum
- Input: 9-30 VDC or 12-24 VAC
- Power Consumption: 250 mA
- Material: ABS plastic
- Dimensions: (L x W x H) 4.5 x 3.2 x 1.6 in.
- Operating Temperature Range: (°F)= -40° to 167°F
- Relative Humidity: 5-90% RH, non-condensing
- Shipping Weight: 1 Lb.
- Approvals:
  - BACnet Testing Labs (BTL) B-ASC Ver. 12
  - TUV approved to UL 916 EN 60950-1, EN 50491-3 and
  - CSA C22-2 standards
  - RoHS Compliant
  - DNP3 Conformance Tested
  - CE & FCC Approved
  - BTL Marked Certified

What's in the Box

- (1) 24V DC 1.66A Wall Mount Power Supply (Cat. No. 1822209)
- BACnet device quick guide (in-depth instructions online)

	Connections	FUNCTION
1	Field	BACnet MS/TP and Modbus connection Screw terminal
2	Ethernet Port	Local area network configuration connection between BACnet IP and animeo IP using an RJ45 connection port
3	Host	Stand alone SDN or URTSI connection Screw terminal
4	Power	9-30V DC or 12-24V AC, Screw terminal

NOTE: For more detailed information concerning BMS Interface, see the animeo IP Databook appendix.

Integration

Somfy Connect LTI

Overview

The Somfy Connect LTI expands the capabilities of Somfy systems providing a centralized logic center and communication bridge. The Somfy Connect allows Somfy Digital Network (SDN) and Radio Technology Somfy® (RTS) systems to interact with third party systems allowing the shading system to become part of a truly integrated part of commercial and residential automation systems. The Somfy Connect is equipped with a real-time hardware clock for scheduling shading events. The internal clock keeps time without the need for accessing an external time server and through power loss, ensuring continuous reliable operation. The Connect has Lutron®'s Integration protocol built in allowing Lutron®'s handheld and in-wall controls from RadioRA® 2, HomeWorks® QS, GRAFIK Eye® QS, and Quantum® systems to operate Somfy motorized applications.

Features Summary

- Centralized logic center and communication bridge
- Hardware realtime clock for scheduled events
  - Astronomic events
  - Repeatable schedules
- Support for RadioRA® 2, HomeWorks® QS, Quantum®, and GRAFIK Eye® QS systems
  - Able to interpret:
    - 198 programmable timed events
    - Button press
    - Button release
    - Button Hold
    - Toggle
    - Group Raise/Lower
- 300 Programmable (Lutron® home control) communication maps

Technical Specifications

- Input: 9-24V DC
- Power Consumption: 100ma
- Material: ABS
- Dimensions: 6" x 3.5" x 1.5"
- Operating Temperature Range: ambient
- Shipping Weight: 1 Lb.

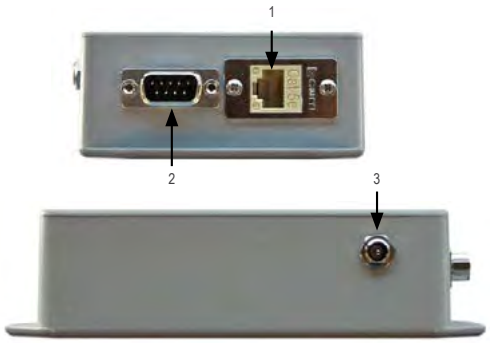
Optional Accessories

- USB to RS485 Adapter
- URTSI
- Power Supply Bus & Sensor

What's in the Box

- Somfy Connect LTI
- DB9 cable (6'; male to female; straight through)

Connections and Indicators



	ELEMENT	FUNCTION
1	SDN Bus	RS-485 - Connect to SDN system or URTSI
2	Integration Port	RS232 - Connect to Lutron Integration port
3	Power	3.5mm Barrel connector (female)

Integration

Somfy Philips Light Balancing

Enjoy Increased Comfort and Energy Savings

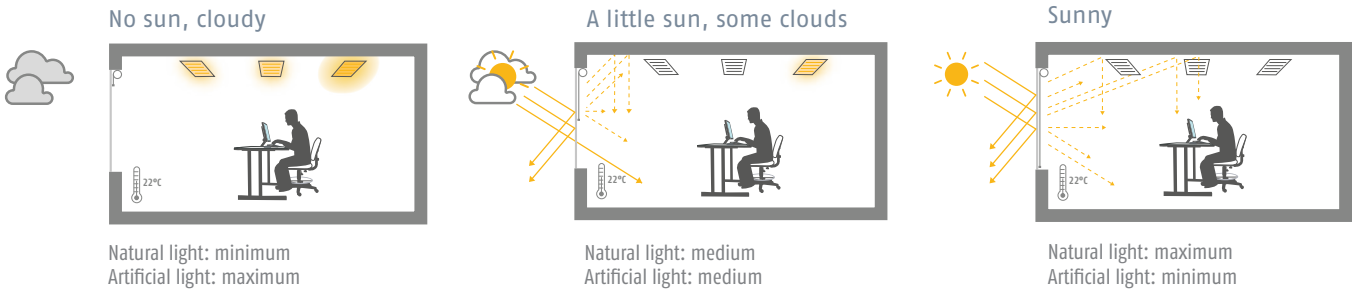
Solutions from Somfy and Philips control the balance between natural and artificial light in buildings, and combine optimal visual comfort with energy savings.

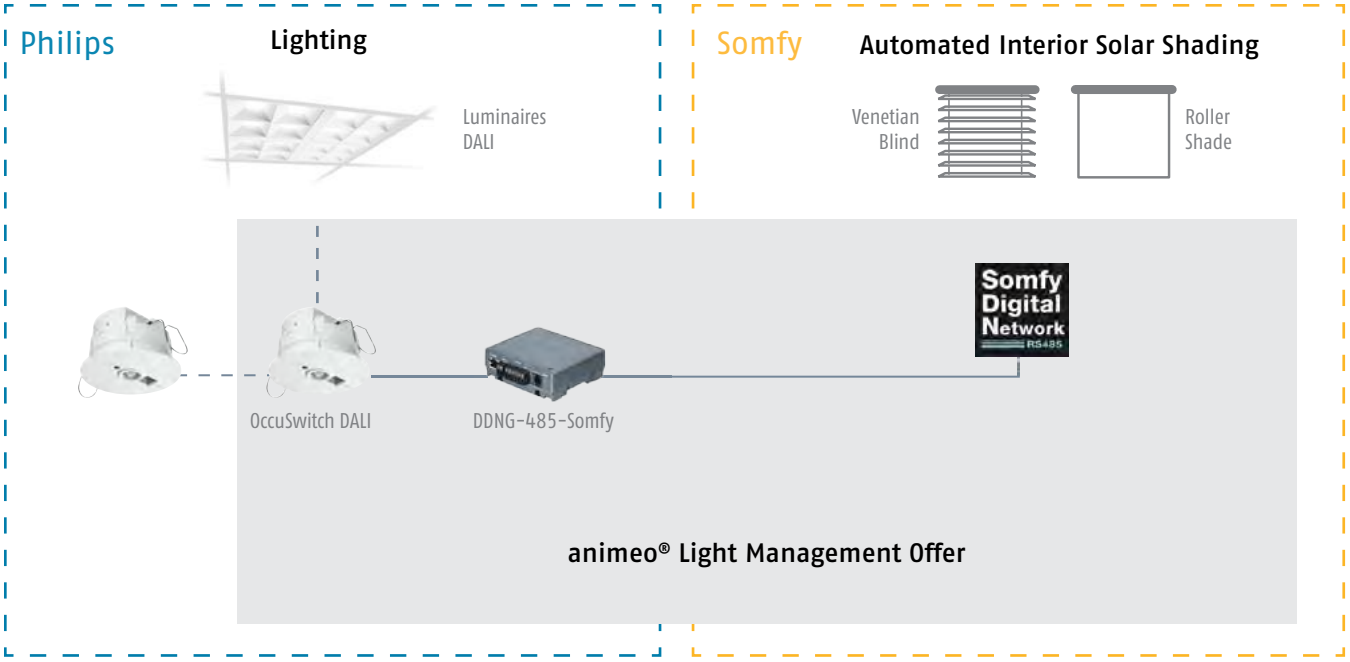
Light Balancing
PHILIPS | somfy

Light Balancing

The symbiosis between natural and artificial light management

As global market leaders in their respective fields, both Somfy and Philips seek to deliver user benefits through the efficient control of light. Their systems work naturally together: when the outside light is blocked to provide thermal comfort and glare control, the artificial light will automatically compensate the light levels and vice versa. This results in maximum comfort at the lowest possible energy consumption.





Somfy Support

Access CSI Specifications

Consider using Somfy specifications during the design phase of your future projects. Thousands of shade manufacturers around the world choose Somfy solutions to optimize natural light management in buildings.

Somfy's nationwide Commercial Specification Team will work with you to find the right manufacturer and support your project every step of the way.

Our CSI Specifications follow the common CSI 3-Part MasterFormat 1995 and 2012, in DOC, RTF, WP, and text format and may be found on Somfysystems.com/csispecs or ARCAT.com

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Contact Somfy for Project Support

Contact your local Somfy LEED certified experts to learn more about Somfy specification solutions.

Ty Saville
Architectural/Engineering Market Specifications Manager
North America Business Area
Ty.Saville@Somfy.com
T: NJ 609-395-1300 Ext. 2640

Justin Fransila
LEED Green Associate
Architectural Specification Manager
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SECTION 12496

MOTORS AND CONTROLS FOR WINDOW COVERINGS

Logo
Display hidden notes to specifier by using “Tools”/”Options”/“View”/”Hidden Text”.

** NOTE TO SPECIFIER ** Somfy Systems, Inc.; motors for interior and exterior window coverings.
.
This section is based on the products of Somfy Systems, Inc., which is located at:

121 Herrod Blvd.
Dayton, NJ 08810
Toll Free: 800-64-SOMFY
Phone: 609-395-1300
Fax: 609-395-1776
Email: commercial_solutions_na@somfy.com
Web Site: www.somfypro.com/commercial-building-solutions

Somfy Systems is the global leader in the manufacturing of strong, intelligent, quiet motors and control systems for both interior and exterior window coverings. Since 1969, Somfy engineers have designed products for both the commercial and residential markets and recently celebrated the production and sales, throughout the world, of 100 million motors.

Somfy’s Commercial Building Solutions offer a wide range of intelligent motors and controls that optimize the utilization of natural light in the commercial workspace while focusing on sustainable growth and contributing to LEED points. Our systems are calibrated to maximize occupant comfort while enhancing the visual environment, minimizing solar glare and heat gain, and providing UV protection. Somfy’s broad range of intelligent motors and natural light control automation systems are scalable in design, offered in line voltage, low voltage or wirefree options, and are perfect for projects of any size or budget.

PART 1 GENERAL

1.1 SECTION INCLUDES

** NOTE TO SPECIFIER ** Delete applications not required.

A. Motors, controls and automatic devices for the following applications:
   1. Interior solar shades.
   2. Interior draperies.
   3. Interior blinds.
   4. Interior window coverings.
   5. Projection screens.
   6. Exterior solar screens.
   7. Retractable awnings.
   8. Retractable insect screens.
   9. Rolling shutters.
   10. Motorized window operators.

1.2 RELATED SECTIONS

** NOTE TO SPECIFIER ** Delete any sections below not relevant to this project; add others as required.

A. Section 10536 - Awnings.

D. Section 11132 - Projection Screens.

E. Section 12490 - Window Treatment.

F. Division 26 - Electrical.

G. Division 27 - Communications.

1.3 REFERENCES

** NOTE TO SPECIFIER ** Delete references from the list below that are not actually required by the text of the edited section.

A. Underwriters Laboratories (UL).

B. Canadian Standards Association (CSA).

C. Technischer Überwachungs-Verein/Technical Inspection Association (TÜV).

D. European CE Marking System (CE).

E. United States Green Building Council (USGBC): Leadership in Energy and Environmental Design (LEED) Rating System.

F. The International Organization for Standardization (ISO): ISO 9001 - Quality Management Standards.

1.4 SUBMITTALS

A. Product Data: Include system performance criteria, controls, characteristics, limitations and trouble-shooting protocol. Include transportation, storage, handling and installation requirements.

B. Shop Drawings: Include sections, details, materials, operating components, dimensions, gauges, finishes and relationship to operating components and adjacent construction. Include typical system single-line control wiring diagrams and typical sequence of operation.

** NOTE TO SPECIFIER ** Delete if not required.

C. LEED Submittals: Documentation of Somfy's solar automation solutions contribution to LEED credits.

** NOTE TO SPECIFIER ** To minimize light trespass from the building and site, reduce sky-glow to increase night sky access, improve nighttime visibility through glare reduction and reduce development impact from lighting on nocturnal environments. Somfy contributes towards 1 point with automated solutions for shading devices, eliminating light pollution by blocking artificial light to the outside during evening hours.

1. Sustainable Sites: Credit 8. Light pollution reduction.

** NOTE TO SPECIFIER ** To provide design teams and projects the opportunity to achieve exceptional performance above the requirements set by the LEED Green Building Rating System and/or innovative performance in Green Building categories not specifically addressed by the LEED Green Building Rating System. Somfy contributes towards 1 point by educating the project team members about green building design and construction, the LEED requirements, and application process early in the design phase.

2. Innovation and Design: Credit 1.1.

** NOTE TO SPECIFIER ** To achieve increasing levels of energy performance beyond the prerequisite standard to reduce environmental and economic impacts associated with excessive energy use. Somfy contributes towards up to 11 points by helping to optimize the energy savings of the artificial lighting systems and HVAC.

3. Energy and Atmosphere: Credit 1.

** NOTE TO SPECIFIER ** To provide additional outdoor air ventilation to improve indoor air quality (IAQ) and promote occupant comfort, well-being, and productivity. Somfy contributes towards 1 point by allowing natural ventilation (operable windows) during a cool day and/or by night cooling.

4. Indoor Environmental Quality: Credit 2, Increase ventilation.

** NOTE TO SPECIFIER ** To provide a high level of lighting system control by individual occupants or groups of multi-occupant spaces (e.g., classrooms and conference areas) and promote their productivity, comfort, and well-being. Somfy contributes towards 1 point through the management of scenes between the lighting and solar protection systems.

5. Indoor Environmental Quality: Credit 6.1, Controllability of systems - lighting.

** NOTE TO SPECIFIER ** To provide a high level of thermal comfort system control by individual occupants or groups in multi-occupant spaces (e.g. classrooms or conference areas) and promote their productivity, comfort, and well-being. Somfy contributes towards 1 point by the dynamic insulation solution interacting with the heating and cooling systems.

6. Indoor Environmental Quality: Credit 6.2, Controllability of systems - thermal comfort.

** NOTE TO SPECIFIER ** To provide comfortable thermal environment that promotes occupant productivity and well-being. Somfy contributes towards 1 point by helping to create the design of the building envelope for thermal comfort.

7. Indoor Environmental Quality: Credit 7.1, Thermal Comfort - design.

** NOTE TO SPECIFIER ** To provide building occupants with a connection between indoor spaces and the outdoors through the introduction of daylight and views into the regularly occupied areas of the building. Somfy contributes towards 1 point by maximizing the use natural light while controlling glare and solar gain.

8. Indoor Environmental Quality: Credit 8.1 Daylight and Views - Daylight; views for 75 percent of the space.

** NOTE TO SPECIFIER ** To provide building occupants a connection to the outdoors through the introduction of daylight and views into the regularly occupied areas of the building. Somfy contributes towards 1 point by maximizing natural light while controlling glare and solar gain by providing a view to the outside through motorized shading devices.

9. Indoor Environmental Quality: Credit 8.2, Daylight and Views – Daylight; views for 90 percent of the space.

1.5 QUALITY ASSURANCE

A. Manufacturer's Qualifications:
   1. Minimum of 10 years experience manufacturing tubular motors and natural light control systems.
   2. Motor manufacturer must be ISO 9001 certified.
   3. Minimum 100 million motors manufactured.

B. Quality Control for Motors:
   1. Motors shall have a life expectancy of 10 years or more.
   2. Motors shall be tested and approved by the major global safety testing laboratories UL, CUL, TUV, ETL, CE, VDE.
   3. Motor manufacturer shall test 100 percent of motors for defects in wiring and operation before leaving factory
   4. Motors must undergo an extensive quality assurance process including testing in:
      a. Assembled motor test design specifications when installed in various end products.

b. Product installation testing.
c. Product safety tests.
d. Product performance tests.
e. Life cycle testing for endurance and reliability.
f. Embedded software tests.
g. Heat and fire resistance tests.
h. Water and oxidation resistance tests.
i. Climate tests (temperature and humidity).
j. Acoustic tests (sound level and quality).
k. Radio frequency tests (transmission and reception).
l. Electromechanical capability (CEM).

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver, store and handle materials and products in strict compliance with manufacturer's instructions and recommendations and industry standards.

B. Store materials in manufacturer's original sealed, labeled packaging until ready for installation and in accordance with manufacturer's instructions. Protect from damage.

1.7 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer’s absolute limits.

1.8 WARRANTY

A. Manufacturers Standard Warranty Statement for Motors and Controls: Minimum 5 year, 100 percent motor replacement non-depreciating warranty.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: Somfy Systems, Inc.; 121 Herrod Blvd.; Dayton, NJ 08810. Toll Free: 800-64-SOMFY. Phone: 609-395-1300. Fax: 609-395-1776. Email: commercial_solutions_na@somfy.com. Web Site: www.somfysystems.com

** NOTE TO SPECIFIER ** Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

B. Substitutions: Not permitted.

C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 SYSTEM DESCRIPTION

A. Provide systems based on the Somfy Digital Network RS485 (SDN) by Somfy Systems Inc. The SDN system architecture shall consist entirely of a digital network of serial interconnected intelligent devices to include SDN RS485 motors with both line and low voltage power options rated for interior and exterior applications, wired and wireless intelligent keypads, intelligent drapery track motors, sun sensors and timers. SDN is the

fundamental building block of Somfy's intelligent solar automation control, regardless of project size, from a single space to an entire building. SDN also supports an advanced layer of natural light control, Somfy animeo® IP Solar Automation Control, described herein.

1. SDN shall exchange digital messages on a twisted pair bus line using the differential signaling method defined by the RS-485 standard.
2. SDN Differential signaling, low data speed communication and high impedance devices shall result in a single bus segment that can be up to 4000 feet long with 255 devices and free wiring topology with no termination resistors. Minimize noise and interference by using capacitance controlled, unshielded twisted pair cable.
3. System shall allow for unlimited; large networks can be built using RS485 or IP, and then operated as stand-alone system or integrated into building management system.

B. Somfy's animeo IP Automated Total Solar Management system provides a layer of advanced control built on the SDN serial backbone. Animeo IP provides advanced solar automation features such as sun tracking, solar entrance depth management, auto discovery of components, time/calendar event scheduling, comfort timers, facility manager graphical user interface for global system status updates and control, self-contained weather station, virtual keypads, remote management for configuration and control and BMS system integration.

2.3 INTELLIGENT MOTORS

** NOTE TO SPECIFIER ** Select AC Line Voltage Motor or DC Motor or both. Line voltage intelligent motors provide simplified installation and wiring, and stronger torque motors with greater lifting capacity. Delete one of the following two paragraphs.

A. AC Line Voltage Motors: AC Line Voltage Sonesse® Intelligent Motor by Somfy Systems. Provide tubular, asynchronous motor, built in reversible capacitor, brushless 110V AC (60 Hz) single-phase motor, thermally protected, permanently lubricated gearbox, maintenance free, providing a range of torque lifting capacity from a minimum of 6 Nm to a maximum of 35Nm. Motors must have embedded microprocessor-based controller and onboard serial communications port.

B. DC Low Voltage Motors: DC Low Voltage Sonesse Intelligent Motor by Somfy Systems. Provide tubular, thermally protected, permanently lubricated gearbox, maintenance free, minimum of 2Nm torque lifting capacity, must fit in a minimum tube diameter of 31mm. Motors must have embedded microprocessor-based controller and onboard serial communications port.

C. Motor Characteristics:
1. Motor lifting capacity shall be a minimum of 2Nm torque or greater for low voltage motors and a minimum of 4 Nm torque or greater for line voltage motors without the need for any external mechanical components (springs).
2. Intelligent motors shall be available in both AC line voltage and DC low voltage power options, with wired and wireless communication options.
3. Intelligent motors shall be rated for both interior and exterior applications.
4. Each motor shall come equipped with a customizable length of power and communication wire featuring an optional disconnect plug.
5. Each motor shall be compatible with industry standard hardware. Motor must be adaptable to varying tube diameters with snap-on adapters. Motors shall be field-interchangeable (can come out of the tube and replaced in opposite end of tube) to easily adapt to wire locations.
6. Digital encoder delivering precise alignment of +/- 2mm accuracy.
   a. Systems using a "time function" for positioning are not acceptable.
7. Operating sound level from 3 feet away rated at 38 dBA or better.

8. Each motor shall have the ability to set 16 unique stopping points that are electronically set and locked into non-volatile memory.
9. Each motor shall be capable of being positioned at fully-up, fully-down or any position between 0-100 percent in 0.5 percent increments.
10. Each motor shall be UL, CUL recognized, and meet CSA standards.
11. Each motor's electrical components shall be tested to withstand a 15 kV electrostatic discharge without damage or loss of memory.
12. Motors shall have factory-assigned individual unique addresses and can be individually configurable over the network without needing to physically access motor.
13. Motor shall have an onboard communication port for bi-directional communication allowing for status updates, configuration and operation from a PC with the applicable system software.
14. Each motor shall accept 16-user configurable group addresses that are electronically stored and locked into non-volatile memory.

D. Glydea® Drapery Track 60e Motor and Components:
1. Geared Motor: A DC motor with precision planetary gear reduction and integrated the lyre release system. Rated at 1 Amp at 110 VAC to provide a nominal torque of 1Nm (1.1 maximal Watt consumption). Operates a curtain up to 132 lbs on a two-way 36 foot straight track with an adjustable linear speed from 4.9 inches/second to 7.86 inches/second. For exact weight capacity on different track configurations and lengths, refer to manufacturer's width/weight capacity chart.
2. Manual Override: Motor must be capable of moving manually when power is lost simply by pulling on the drape. Once power is restored, motion must automatically re-engage without any manual adjustment and assume normal automated operation.
3. Achieved through the lyre release system which automatically disconnects the electrical geared motor from the track to allow manual operation of the drapery. The drapery can be operated manually in both directions when the motor unit is not running or when power is interrupted.
4. Limit Switching: Motor has an electronic encoder that is used to set the end stops and intermediate position during installation. The end stops and the intermediate position do not need to be readjusted during the motor's lifetime or after manual operation.
5. Motor Control: Logic circuit with programmable microprocessor. Motor has overload current sensing, maximum run timer and speed management. Soft start and stop and speed adjustment from 4.9 inches/second to 7.86 inches/second.
6. Integration: Motors can integrate with systems such as audio visual, lighting or building automation system. The motor comes standard with one RJ12 connector to allow connection to two or three dry contact control device or Somfy Infrared Sensor.
7. Motor must be able to communicate directly with wireless protocols including but not limited to ZigBee®, Z-Wave®, infiNET™, Radio Technology Somfy® RTS).
8. Motor must be directly compatible with hardwired SDN RS485 protocol.

2.4 SYSTEM COMPONENTS

A. The Somfy Digital Network RS485 system shall be able to operate with or without a system-wide master controller.
1. Systems with or without a system-wide master controller must utilize a communication infrastructure comprised of:
    a. Wired Technology:
        1) A network of intelligent devices (including but limited to motors, keypads, sensors) with individual unique addresses.
        2) Digital messages on a twisted-pair bus line, utilizing unshielded Category 5 wire or higher.
        3) Differential signaling method defined by the RS485 standard.

4) Network reliability is enhanced by low baud rate and high impedance devices allowing free wiring topology without the need for termination resistors.
5) Utilization of unshielded wire allowing flexibility in wire choices and reduced cost.
6) Bus connected control devices such as keypads, sensors, adaptors, repeaters and receivers powered directly from the bus line utilizing a 24V DC Class 2 power supply.
7) Wire terminated with low cost, field-installable, RJ-45 connectors terminated in the EIA T-568B standard.

b. Wireless Technology: Multiple addresses, no interference.
1) A network of intelligent devices (including but limited to motors, keypads, sensors) with individual unique addresses.
2) Operating in the 433.42 MHz FCC unlicensed ISM (Industrial, Scientific, and Medical) frequency band to enhance reliable wireless communication.
3) Adapt wired to wireless devices and wireless to wired devices on the same network, allowing flexibility during design and installation.
4) Devices must be able to communicate to industry wireless standards (including but not limited to ZigBee®, Z-Wave®, infiNET™, Radio Technology Somfy® RTS).

** NOTE TO SPECIFIER ** Below, select stand-alone or system-wide master controller system . Stand-alone systems are applicable for smaller, less feature-rich applications. System wide master controller systems (animeo® IP) are to be used on larger jobs requiring advanced features.

2. A stand-alone scalable shading system, without a system-wide master controller, comprised of intelligent motors and controls utilizing Somfy Digital Network RS485 shall have the ability to:
a. Network Characteristics:
1) Manage the intelligent motors and controls on a RS485 network.
2) Manage unique addresses for each intelligent motor.
3) Allow the operation of both AC line voltage motors and DC low voltage intelligent motors on a single common intelligent network without requiring gateway devices.
4) Allow for upper and lower motor limits to be pre-set by window covering manufacturer and adjustable on site via handheld device or P, without the need to access the roller assembly or external, mechanical limit wheels or buttons.
5) Allow for intelligent keypads, schedules, motor grouping and virtual switches to be configurable and managed from any point in the system's wiring network via the Somfy software suite.
6) Be comprised of multiple bus segments, with each segment up to 4000 feet long with up to 255 devices.
7) Expand system capacity from one bus segment to multiple through the use of SDN system repeaters.
8) Allow for each motor to be a member of up to 16 groups with a total system capacity of up to 65000 groups.
9) Allow for each motor to automatically align itself to a referenced shade position upon receiving a command from the network.
10) Operate without the need of a dedicated PC.

b. Automated Direction of System Components:
1) Provide automatic sun-based control.
(a) Utilize input levels from sun sensors to automatically adjust window coverings to pre-configured positions.
2) Perform time-based scheduled events.

c. Integration of System with other Building Systems:
    1) Communicate to Building Management Systems.
    2) Communicate to third party automation systems through RS485 and RS232 serial protocols as well as dry contact closure, with the ability to:
        (a) Enact an event within the automation system.
        (b) Have the automation system directly control a single motor.
        (c) Have the automation system simultaneously control a pre-programmed group of motors.

3. A scalable shading system, with a system-wide master controller (animeo® IP), comprised of intelligent motors and controls utilizing Somfy Digital Network RS485 shall have the ability to:
    a. Network Characteristics:
        1) Manage the intelligent motors and controls on a RS485 network.
        2) Manage unique addresses for each intelligent motor.
        3) Allow the operation of both AC Line Voltage Motors and DC Low Voltage SDN motors on a single common intelligent shade network without requiring gateway devices.
        4) Allow for upper and lower limits to be pre-set by shade manufacturer and adjustable on site via handheld device or PC, without the need to access the roller assembly or external mechanical limit wheels or buttons.
        5) Allow for intelligent keypads, schedules, motor grouping and virtual switches to be configurable and managed from its own internal IP network, from the building's internal network, or remotely over the internet.
        6) Provide an isolated RS485 communication bus input for sensor information to ensure motor and keypad data integrity
        7) Include integrated IP networking infrastructure hardware to allow for stand-alone operation, separated from building IP network.
        8) Be comprised of multiple bus segments, with each segment up to 4000 feet long with up to 255 devices.
        9) Expand system capacity from one bus segment to multiple through the use of SDN system repeaters, or animeo® IP Sub Controllers.
        10) Allow for each motor to automatically align itself to a referenced shade position upon receiving a command from the network.
    b. Automated direction of system components
        1) Provide two methods of automated sun based control.
            (a) Methods:
                (1) Sun Control: Threshold-based control of solar shading. Move solar shading systems to a pre-determined location upon passing beyond a programmable light level threshold. The system is to be able to enact multiple configurations based on time of day.
                (2) Solar Entrance Depth Management: Automatic management of light entrance into the building space. Move solar shading system based on the following user-defined parameters, including but not limited to the following:
                    (i) Building location, precise longitude/latitude.
                    (ii) Window's cardinal direction.
                    (iii) Time of year.
                    (iv) Time of day.
                    (v) Size of window.
                    (vi) Allowable distance of sunlight entrance into the space.

(vii) Portion of window that should be un-shaded at all times.
(viii) Shade position if light level drops below programmed threshold.
(ix) Sun position based on astronomic time clock with programmable offset.

(b) Method 1 or Method 2 of automated sun-based control shall provide for on and off delays to account for momentary changes of cloud cover.

(c) Method 1 or Method 2 of automated sun based control shall provide for override timers to turn sun control on and off at a programmable time.

2) Perform astronomic and real-time scheduled events.

(a) Keeps precise time using a self-calibrating real-time clock (RTC) with battery backup.

(b) Provide the ability to cascade multiple events for the same motor or group.

c. Integration of system with other building systems.

1) Communicate to Building Management Systems through HTTP commands via IP.

2) Communicate to third party automation systems through HTTP commands via IP and dry relay closure, with the ability to:

(a) Enact an event within the automation system.

(b) Have the automation system directly control a single motor.

(c) Have the automation system simultaneously control a pre-programmed group of motors.

3) Provide a master input from alarm system to position shades in a predetermined position.

d. Allow for firmware and configuration upgrades.

1) Both from within the building and remotely over the internet

(a) Allow for an interface to the building LAN for remote connectivity for software upgrades and remote troubleshooting.

(b) Building and Sub Controller to have fail-safe firmware backup to ensure ongoing operation after low level failure.

e. Provide a graphical user interface (GUI) for motor commissioning and system configuration.

1) Allow for the auto discovery of motors, intelligent keypads and weather sensors present on the SDN Network.

2) Allow visual identification and assignment of motor location to specific window location within a building.

3) Have a graphical user interface allowing for “drag and drop” programming of the system based on Microsoft Windows 7 programming conventions.

4) Provide setting of parameters in US or Metric units of measurement.

f. Provide a graphical user interface (GUI) for system building management operation and maintenance.

1) Multilevel administrator system account access allowing building management control without the ability to adjust system configuration

2) Provide status and real-time values for all weather sensors.

3) Provide visual status of motor position and status in both graphical and tabular formats.

4) Provide real-time status for system’s current mode of control: auto, timer, manual, or system override.

5) Provide an optional floor plan view of motor placement and status, with the ability to import standard AutoCAD files.
6) Provide the ability to lock shades at specific position for maintenance.
7) Provide a lock-out timer to disable local control overrides during periods where energy saving performance is a priority.

g. Provide graphical user interface (GUI) for user operation.
1) Allow for account-based end user password access that provides each individual user a customized virtual keypad for pre-assigned shades and zones.
2) Allow user access from most popular web browsers on a PC, Mac, smartphone, or tablet.

2.5 FABRICATION

A. Verify dimensions of existing Work before commencing fabrication and report discrepancies to Architect.

B. Fabricate Work in accordance with Contract Drawings and reviewed shop drawings. Fabricate, fit and assemble Work in shop where possible. Where shop fabrication is not possible, make trial assembly in shop.

PART 3 EXECUTION

3.1 EXAMINATION AND PREPARATION

A. Prepare substrates using the methods recommended by the manufacturer for achieving best result for the substrates under project conditions.

B. Do not proceed with installation until substrates have been prepared using the methods recommended by the manufacturer and deviations from manufacturer's recommended tolerances are corrected. Commencement of installation constitutes acceptance of conditions.

C. If preparation is the responsibility of another installer, notify Architect in writing of deviations from manufacturer's recommended installation tolerances and conditions.

3.2 INSTALLATION

A. Install systems in accordance with approved submittals and manufacturer's written instructions. Install in proper relationship to adjacent construction.

B. Test for operation as recommended by manufacturer. Repair or replace units until satisfactory results are obtained.

3.3 CLEANING AND PROTECTION

A. Clean installed products in accordance with manufacturer's recommendations. Touch-up, repair or replace damaged products before Substantial Completion.

B. Protect installed products until completion of project.

END OF SECTION

SECTION 12 22 16
MASTER SPECIFICATION FOR SOMFY SYSTEMS
SOMFY GLYDEA® 60e MOTORIZED DRAPERY TRACK

PART 1 – GENERAL

1.1 SUMMARY

A. The Glydea motors are a product of years of industry experience and expertise. The reliable motor solution offers a superior user experience as well as a wide array of features. Glydea is available for pinch pleat, RippleFold® and Accordia® style draperies. It has been designed to easily adapt to various control technologies via plug-and-play modules including; dry contact, Radio Technology Somfy® (RTS), Z-Wave®, ZigBee® and RS-485. Glydea has a touch-motion feature allowing a user to easily adjust the drapery position. In addition, there is a manual override capability which can be used when power is lost. The simple power and communication cabling will keep installation costs to a minimum.

B. Motorized drapery track system.

C. Drapery control, local, group and master.

D. Building shade management system.

1.2 RELATED SECTIONS

A. Division 01 – General Requirements

B. Division 09 – Gypsum Board Assemblies

C. Division 09 – Acoustical Ceilings

D. Division 12 – Window Treatments

E. Division 26 – Electrical

F. Division 27 – Communications

1.3 SYSTEM DESCRIPTION

A. Motorized drapery track system: quiet operation, timing belt for precise control, touch motion, manual override and adjustable speeds.

B. Track: [Single drapery track.] [Single tandem drapery track.]

C. Track Type: [One way.] [Center opening.] [Asymmetrical.] [One way with a bend.] [Center opening with bend.] [One way with two bends.] [Center opening with two bends.] [One way with continuous curve.] [Center opening with continuous curve.]

D. Motor Mount: [Left side] [Right side] and [top mount.] [bottom mount.]

E. Track Mount: [Wall mounted.] [Ceiling mounted.]

F. Drapery Style: [Pinch pleat.] [RippleFold.] [Accordia.]

G. Local Controls: [Hand-held remote.] [DecoFlex Wire-free™ wall switch.] [Wired DecoFlex wall switch].

1.4 SUBMITTALS

A. Product Data:

1. Submit cut sheets to the Architect for the Glydea® motor and for each component required for the complete installation. The Contractor shall notate any deviations from the bid proposal.

2. Identify the system performance criteria, controls, limitations and trouble-shooting protocol on the cut sheets.

3. Identify storage, handling and installation requirements.

4. Submit cut sheets for the components required for integration with Building Automation Systems, audiovisual systems, lighting control systems or other control systems as specified.

B. Shop Drawings:

1. Submit elevations and sections of the motorized drapery track system indicating the finishes, materials and dimensions to adjacent construction components.

2. Submit a description of the drapery track system that includes the opening direction, motor location and mount.

3. Submit complete wiring diagrams of the motorized drapery track system.

4. Submit control diagram of the motorized drapery track system indicating groups, switches and sequence of operation.

C. Close-Out Documentation:

1. Submit all close-out documentation to the Architect and the Owner to incorporate into the project Operations and Maintenance manuals.

2. Identify the location of each motorized drapery track per the Architects space numbers. Include the name plate information, model year, number of units and serial number.

3. Include a functional description of the motorized drapery track system detailing operation and control.

4. Identity safety precautions.

5. Provide the Owner with the contact information for a supplier that carries spare parts for the components of the motorized drapery track system.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications:

1. Minimum of 20 years of experience manufacturing motors for shade systems.

2. Lloyds Registered ISO 9001 certified.

3. Test 100% of motors prior to leaving factory.

B. Installer Qualifications:

1. Trained and certified by the manufacturer.

2. Experience installing and commissioning motorized drapery track systems.

C. Motor Qualifications:

1. Have a minimum life expectancy of 5 years.

2. Tested and approved by TUVUS, TUVGS, CE.

D. Mock-Up:

1. Construct a mock-up of the one typical motorized drapery track system in a location designated by the Architect.

2. Review the mock-up with the Architect and acceptance and approval prior to proceeding with the scope of work.

1.6 DELIVERY, STORAGE AND HANDLING

A. The installer shall deliver the motorized drapery track system in a package that indicates the manufacturer, product type and room and window designation as indicated on the architectural finish schedule.

1.7 PROJECT CONDITIONS

A. The motorized drapery track system shall not be installed until the adjacent work is complete.

1.8 WARRANTY

A. The motors shall have a minimum five year warranty with 100% motor replacement.

PART 2 – PRODUCTS

2.1 MANUFACTURER

A. The manufacturer of the Glydea® motorized drapery track system:

1. Somfy Systems, Inc.

121 Herrod Boulevard

Dayton, NJ 08810

800-22-SOMFY

2.2 GLYDEA DRAPERY TRACK SYSTEM

A. Tracks:

1. Headrail: manufactured from 6063-T5 AL (coated) extruded aluminum of 30.5 mm (1.2”) in width, 25.1 mm (1-1/32”) in height, curvable to a minimum radius of 300 mm (11.8”). Curves shall be factory made according to template or specification.

2. Drive Belt: synchronous, pre-lubed, toothed belt that circulates internally within the headrail to ensure smooth travel for all track types.

3. Drive and Return Assembly: Manufactured from injection molded plastic, equipped with a bush bearing and allows for multiple curtain hook attachments.

4. Carriers: Wheel mounted type with rotating eyelet and able to accommodate a pinch pleat or ripple-fold heading.

5. Brackets: Manufactured from steel [one touch type for easy mount] [a swivel type for a maximum of 2 mm light gap].

B. Glydea® Drapery Track 60e Motor and Components:

1. Geared Motor: A DC motor with precision planetary gear reduction integrating the lyre release system. Rated at 1 Amp at 110 VAC, to provide a nominal torque of 1Nm. Operates a curtain up to 132 lbs on a two way 36 foot straight track with an adjustable linear speed from 4.9 inches/second to 7.86 inches/second. For exact weight capacity on different track configurations and lengths refer to manufacturer’s width/weight capacity chart.

2. Manuel Override: Achieved through the lyre release system which automatically disconnects the gearbox from the track to allow manual operation of the drapery. The drapery can be operated manually in both directions when the motor unit is not running or when power is interrupted.

3. Limit Switching: Motor has an electronic encoder that is used to set the end stops and intermediate position during installation. The end stops and the intermediate position do not need to be readjusted during the motor’s lifetime or after manual operation.

4. Motor Control: Logic circuit with programmable microprocessor. Motor has overload current sensing, maximum run timer and speed management. Soft start and stop and speed adjustment from 4.9 inches/second to 7.86 inches/second.

5. Integration: Motors can integrate with systems such as audio visual, lighting or building automation system. The motor comes standard with one RJ12 connector to allow connection to a two or three dry contact control device or Somfy Infrared Sensor. In addition, one of the below control modules can be added to the base of the motor.

   a. [Radio frequency plug-in module (RF) to allow wireless control with Somfy RTS transmitters.]

   b. [Wired RS-485 communication plug-in module.]

   c. [Z-Wave® plug-in module.]

d. [ZigBee® plug-in module.]

6. Operating Mode: Momentary contact directional control for closing, opening, stopping and one programmable intermediate position. Optional “touch motion” feature which allows the user to initiate the drapery to open or close pulling on the fabric in intended direction of travel.

7. Accuracy: Fully opened and fully closed positions will remain within +/- 10 mm from the set positions over 10,000 cycles (one cycle is a full open and close on a 10 meter track length).

8. Noise Level: Motor is rated at 44 dB.

9. Motor Design: Patented design that allows the connectors, cables and control modules to be completely concealed. The motor is also concealed by the fabric.

C. Controls and Grouping:

1. [Local control] and/or [group control] via [dry contact switches], [smart switches], [Single or multiple channel Infrared transmitters], [Chronis RTS Timer] or [Sun Sensor].

2. Automated control via [lighting control system], [audio visual system] or [building management system].

D. Wall Mount Controls

1. Dry Contact Switch

a. Three button switch, up, down and stop.

2. DecoFlex Wirefree™ Wall Switch

a. [One channel RTS with two programmable buttons and a raise and lower button.]

b. [Two channel RTS with three programmable buttons and a raise and lower button.]

c. [Three channel RTS with three programmable buttons and a raise and lower button.]

d. [Four channel RTS with four programmable buttons and a raise and lower button.]

e. [Five channel RTS with five programmable buttons and a raise and lower button.]

E. Remote Controls

1. [One channel RTS three button remote with up, stop and down.]

2. [Five channel RTS four button remote with up, stop, down and channel selector for individual or group control.]

3. [Sixteen channel RTS with digital display.]

PART 3 – EXECUTION

3.1 EXAMINATION

A. Prior to installation the installer shall verify the condition and dimensions of the area the intelligent motors are to be installed. The installer shall notify the Architect if the conditions are inadequate.

3.2 PREPARATION

A. The installer shall prepare and clean the area of work the intelligent motors are to be installed.

3.3 INSTALLATION

A. The installer shall install the motorized drapery track system per the manufacturer’s instructions and in accordance with the reviewed shop drawings.

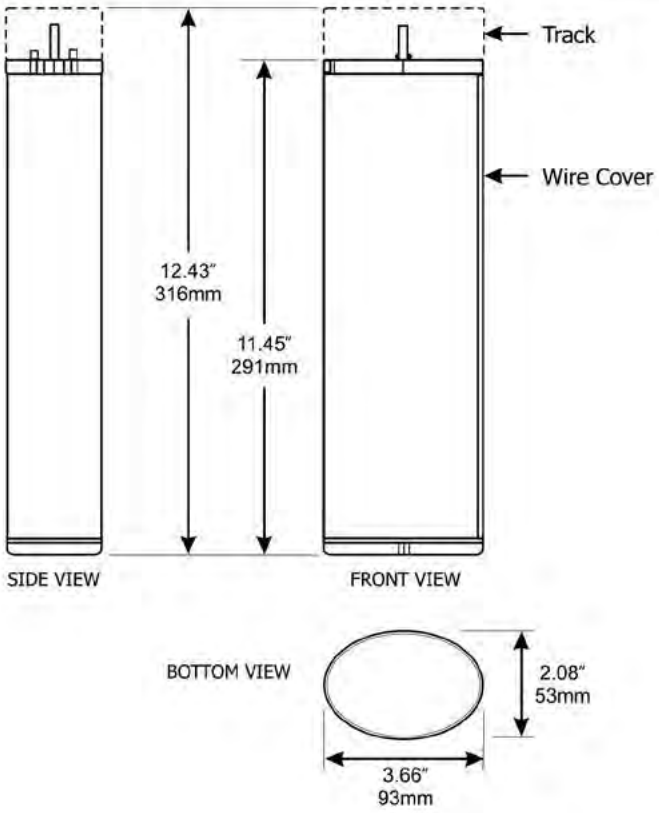
3.4 PROTECTION

A. The installer shall protect the motorized drapery track system from the construction environment until the completion of the project. The installer shall be responsible to replace any broken or damaged parts prior to turn over of the space.

Motorized track main characteristics

	Glydea® 60e
Power supply	110V AC 50/60 HZ
Amperage	1A
Average linear speed	4.9"/s to 7.86"/s
Power consumption	120 W
Power cable type	3-wire cable with molded NEMA plug 4-wire cable (wired version only)
Control connector type	RJ12
DCT control circuit voltage	3.3 VDC
Motor sound level	<44 dB(A)
Certifications	c TUV us, CE
Track maximum length	36 ft (10.9 m)
Maximum number of splices	2
Minimum bending radius	11.8 in. (30 cm)
Minimum curving radius	118 in. (300 cm)
Side opening max weight	132 lbs. 60 kg.
Center opening max weight	132 lbs. 60 kg.
Tandem alternative (see page 21)	264 lbs / 120 kg 72 ft /21.8 m

Motor dimensions



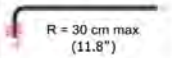
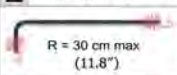
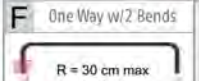
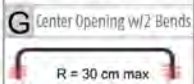
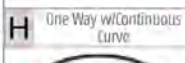
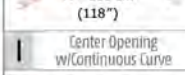
Features overview

	Glydea® 60e
Motor unit main features	
Soft start	✓
Manual operation	✓
Automatic limits on end stop	✓
Soft stop	✓
Intermediate position	✓
Touch motion with 2 sensitivity settings	✓
Adjustable limits	✓
Speed control & adjustment	✓
Control options	
3 normally open dry contacts	✓
2 normally open dry contacts	✓
2 normally open dry contact sequencing mode	✓
Dry contact individual and group & master control	✓
Radio Technology Somfy® RTS	✓
Infrared	✓
RS485 digital technology	✓
Z-Wave®	✓
ZigBee®	✓
Tandem alternative	✓
Sun control	✓
Timer control	✓
Installation and setting features	
Setting with buttons on motor unit	✓
Setting with external 3 normally open dry contact switch	✓
LED indicators	✓
Motor unit direction change	✓
Factory reset	✓
Inverse (top mount) mounting	✓
Tracks / Drapery Types	
Side opening	✓
Center opening	✓
Asymmetric	✓
Multiple	✓
Pinch pleat	✓
Ripplefold® with overlap arm	✓
Ripplefold® with butt arm	✓
Accordia®	✓

SOMFY GLYDEA 60e MOTORIZED DRAPERY TRACK

122216-7

SELECTION CHARTS

Track Type	Glydea® 35e			Glydea® 60e		
	UP TO 10 FT.	UP TO 20 FT.	UP TO 32 FT.	UP TO 10 FT.	UP TO 32 FT.	UP TO 36 FT.
A One Way	77 Lbs.			132 Lbs.		
B Center Opening	77 Lbs.			132 Lbs.		
C Asymetrical	77 Lbs.			132 Lbs.		
D One Way w/Bend 	77 Lbs.	55 Lbs.	44 Lbs.	100 Lbs.	100 Lbs.	77 Lbs.
E Center Opening w/Bend 	77 Lbs.	55 Lbs.	44 Lbs.	100 Lbs.	100 Lbs.	77 Lbs.
F One Way w/2 Bends 	33 Lbs.	22 Lbs.	-	77 Lbs.	55 Lbs.	-
G Center Opening w/2 Bends 	33 Lbs.	22 Lbs.	-	77 Lbs.	55 Lbs.	-
H One Way w/Continuous Curve 	77 Lbs.	33 Lbs.	-	77 Lbs.	55 Lbs.	-
I Center Opening w/Continuous Curve 	66 Lbs.	22 Lbs.	-	66 Lbs.	44 Lbs.	-

END OF SECTION

1 General

1.1 **SECTION INCLUDES**

A. Design, labor, products, equipment and services necessary for window vent operators work in accordance with the contract documents.

1.2 **RELATED SECTIONS**

A. Glazing systems: Division 08.

B. Electrical wiring: Division 26.

1.3 **SYSTEM DESCRIPTION**

A. Window vent operating system for this project is based on the Mingardi® linear actuator with the animeo® DC4 window motor control unit by Somfy Systems, Inc.

1.4 **DESIGN REQUIREMENTS**

A. Design window vent operating system to interface with building automation system via momentary master dry contacts.

1.5 **SUBMITTALS**

A. Product data:
1. Submit copies of manufacturer's product data in accordance with Section 01 33 00 indicating:
   a. System performance criteria, controls, characteristics, limitations, and trouble-shooting protocol.
   b. Product transportation, storage, handling and installation requirements.

B. Shop drawings:
1. Submit shop drawings in accordance with Section 01 33 00 indicating:
   a. Elevations, sections, details, materials, operating components, dimensions, gauges, finishes and relationship to operating components and adjacent construction.
   b. Complete electrical wiring diagrams including electrical schematics and sequence of operation.
   c. Complete engineering design data confirming that products meet design criteria specified.

C. Closeout submittals:
1. Submit following for incorporation into Operations and Maintenance Manuals in accordance with Section 01 78 00:
   a. Identification: Manufacturing name, type, year, serial number, number of units, capacity, and identification of related systems.
   b. Functional description detailing operation and control of components.
   c. Operating instructions and precautions.

d. Safety precautions.
e. Component parts availability including names and addresses of spare part suppliers.

1.6 **QUALITY ASSURANCE**

****SPEC. NOTE: Optional

A. Mock-up:
1. Construct one mock-up of complete window vent operating system in location acceptable to Consultant.
2. Arrange for Consultant's review and acceptance of mock-up prior to proceeding with work.
3. Mock-up may remain as part of work if accepted by Consultant. Remove and dispose of mock-ups which do not form part of work.
4. Upon acceptance, mock-up shall serve as a minimum standard of quality for the balance of the work of this Section.

1.7 **EXTENDED WARRANTY**

A. Submit a warranty for window vent operating system in accordance with the Conditions of the Contract

2 Products

2.1 **WINDOW VENT OPERATING SYSTEM COMPONENTS**

A. Window control unit: Unit to provide actuator control and power distribution. Capable of interfacing with building automation system via separate momentary dry contract inputs for open and close positions. Provide dry contact inputs for each output to allow optional control of wall mounted local switch and to allow optional control down to a single window. Actuator power to be provided by either 5 or 10 amp UL approved switching type power supply to step voltage from 115V AC to 24 V DC.

B. Electric Drive Unit:
1. Mingardi® Micro L linear electric actuator with movement by a flat link chain contained inside a pre-finished housing. Housing colour to be selected from manufacturer' standard colours of anodised silver or black
2. Actuator to have an opening stroke of 280mm or 380mm with a travel speed of 16 mm per second at maximum thrust load.
3. Operating voltage to be 24V DC with a maximum current of 1.0 A at full tensile load of 350 N.
4. Actuator to have operating time duty cycle of 50% and tested/rated for a life cycle of 10,000 cycles.
5. Actuator to have internal limit switch system that provides automatic stopping at open and closed positions at minimum and maximum opening stroke and operates independently of master control system
6. Actuator to be provided with manufacturers mounting hardware for project out windows

2.2 **FABRICATION**

A. Verify dimensions of existing work before commencing fabrications and report discrepancies to Consultant.

B. Fabricate work in accordance with contract drawings and reviewed shop drawings. Fabricate, fit and assemble work in shop where possible. Where shop fabrication is not possible, make trial assembly in shop.

3 Execution

3.1 **EXAMINATION**

A. Verify condition and dimensions of previously installed work upon which this Section depends. Report defects to Consultant. Commencement of work means acceptance of existing conditions.

3.2 **INSTALLATION/APPLICATION**

A. Install window vent operating system in accordance with reviewed shop drawings and manufacturer's written instructions.

END OF SECTION

1 General

1.1 **SECTION INCLUDES**

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1.2 **RELATED SECTIONS**

A. Glazing systems: Division 08.

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1.4 **DESIGN REQUIREMENTS**

A. Design window vent operating system to interface with building automation system via momentary master dry contacts.

1.5 **SUBMITTALS**

A. Product data:
1. Submit copies of manufacturer's product data in accordance with Section 01 33 00 indicating:
   a. System performance criteria, controls, characteristics, limitations, and trouble-shooting protocol.
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   a. Elevations, sections, details, materials, operating components, dimensions, gauges, finishes and relationship to operating components and adjacent construction.
   b. Complete electrical wiring diagrams including electrical schematics and sequence of operation.
   c. Complete engineering design data confirming that products meet design criteria specified.

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d. Safety precautions.
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A. Mock-up:
1. Construct one mock-up of complete window vent operating system in location acceptable to Consultant.
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2.1 **WINDOW VENT OPERATING SYSTEM COMPONENTS**

A. Window control unit: Unit to provide actuator control and power distribution. Capable of interfacing with building automation system via separate momentary dry contract inputs for open and close positions. Provide dry contact inputs for each output to allow optional control of wall mounted local switch and to allow optional control down to a single window. Actuator power to be provided by either 5 or 10 amp UL approved switching type power supply to step voltage from 115V AC to 24 V DC.

B. Electric Drive Unit:
1. Mingardi® Micro S linear electric actuator with movement by a flat link chain contained inside a pre-finished housing. Housing color to be selected from manufacturer' standard colors of anodised silver or black
2. Actuator to have an opening stroke of 250mm mm with a travel speed of 16 mm per second at maximum thrust load.
3. Operating voltage to be 24V DC with a maximum current of 1.0 A at full tensile load of 200 N.
4. Actuator to have operating time duty cycle of 50% and tested/rated for a life cycle of 10,000 cycles.
5. Actuator to have internal limit switch system that provides automatic stopping at open and closed positions and operates independently of master control system
6. Actuator to be provided with manufacturers mounting hardware for project out windows

2.2 **FABRICATION**

A. Verify dimensions of existing work before commencing fabrications and report discrepancies to Consultant.

B. Fabricate work in accordance with contract drawings and reviewed shop drawings. Fabricate, fit and assemble work in shop where possible. Where shop fabrication is not possible, make trial assembly in shop.

3 Execution

3.1 **EXAMINATION**

A. Verify condition and dimensions of previously installed work upon which this Section depends. Report defects to Consultant. Commencement of work means acceptance of existing conditions.

3.2 **INSTALLATION/APPLICATION**

A. Install window vent operating system in accordance with reviewed shop drawings and manufacturer's written instructions.

END OF SECTION

Sonesse® 30 Databook

somfy®

Somfy is the leading global manufacturer of strong, quiet motors with electronic and app controls for interior and exterior window coverings. Over 270 million users worldwide enjoy the more than 150 million motors produced by Somfy. During the past 40+ years, Somfy engineers have designed products for both the commercial and residential markets to motorize window coverings such as interior shades, wood blinds, draperies, awnings, rolling shutters, exterior solar screens and projection screens. Somfy motorization systems are easily integrated with security, HVAC and lighting systems providing total home or building automation.

100 MILLION motors

WHY SOMFY?

Somfy has a committed Customer Support team comprised of Somfy motor and control specialists available for assistance:

Somfy Corporate Headquarters
800–22–SOMFY (76639)

General Customer Service
877–210–5327
CustomerService_us@somfy.com

Standard Purchase Order
Ordering_us@somfy.com

Rush Purchase Order
ExpeditedShippingOrders_us@somfy.com

Accounting Inquiries
AccountsReceivable@somfy.com

Technical Support
877 – 233 – 0019
TechnicalSupport_us@somfy.com

Warranty Claim Requests
us_Return@somfy.com

- Somfy has a production capacity of more than 70,000 motors per day.
- Somfy motors have over 600 standards approvals worldwide.
- Somfy has certified over 100 patents since the year 2000.
- Every Somfy motor goes through an extensive quality assurance process including testing in extreme environmental conditions, for electrostatic discharge, mechanical shock, and high life cycle.
- Somfy has a network of 15,000 trained professional installers throughout the world.

Somfy operates in 60 countries, with 78 subsidiaries, and 52 agencies spread across 5 continents. With 8 production centers, Somfy is an efficient and reactive industry leader. Thanks to its strict quality standards, Somfy is able to satisfy the needs of over 270 million users worldwide.

5 Year Warranty

EXPERT somfy

Somfy understands that training and support are critical to success. Somfy's Expert Program has been developed to provide a platform for those who want to enhance their expertise of motorization and control solutions. Contact Somfy directly or visit www.somfysystems.com to learn more and sign up for training.

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Crestron® is a registered trademark of Crestron Electronics, Inc.

Universal Remote Control, Inc.® is a registered trademark of Universal Remote Control, Inc.

Z-Wave® is a registered trademark of Zensys, Inc. and its subsidiaries.

ZigBee® is a registered trademark of ZigBee® Alliance.

Conveniently Quiet

This document presents the accessories and specifications related to the Somfy Sonesse® 30 range. It provides the technical information needed to order, fabricate, and sell the award-winning quiet motors. For additional information regarding any of the products in this document including motors, power sources, controls, interfaces etc., please reference **www.somfypro.com**, where detailed instructions are available for download.

The award winning Sonesse® 30 range is putting window coverings in motion with quiet precision. The motors are engineered with superior noise reduction technology and are barely heard from a distance of 3 feet.

The compact, low-profile Sonesse®30 motors are designed for tubes as small as 1.5" in diameter and are easily concealed within headrails, cassette systems or smaller pocket sizes. The motors feature speed regulation for precise alignment of adjacent shades and are low-voltage which simplifies installation. The Sonesse® 30 motors are available with a variety of control options and easily integrate with home automation systems. They also feature the ability to adjust to precise intermediate positions for increased control flexibility.

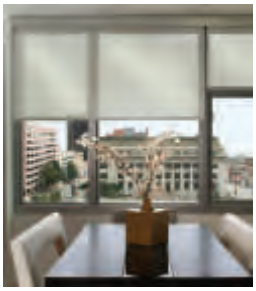
Radio Technology Somfy® (RTS) allows wireless radio control of motorized window coverings via the RTS family of controls.

A new generation of intelligent motors that are controlled and monitored via Somfy Digital Network solutions and animeo® IP total solar management system.

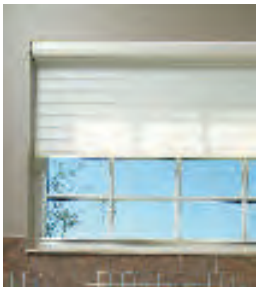
Offers control via contact closure switching (dry contact).

Sonesse® 30 motors are designed to automate a broad range of window covering applications which include:

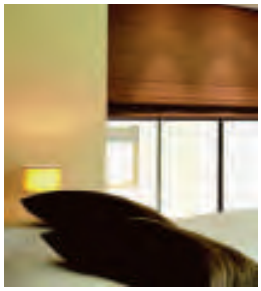
Solar/Roller Shades



Sheer Horizontal Shades



Roman/Woven Shades



Pleated/Cellular Shades

Horizontal Blinds

As with all Somfy® products, the Sonesse® 30 motors are backed by a 5 year warranty.

WCMA Award Winner, for Most Innovative Overall Design.

Sonesse® 30 RTS

Part #1001524

5 year Warranty

Radio Technology Somfy® (RTS) allows for wireless radio control of motorized window coverings via the RTS family of controls.

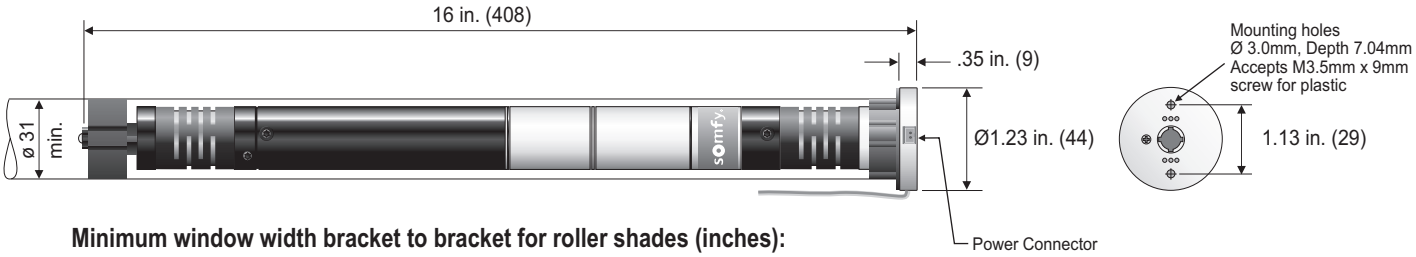
Technical features

Voltage Supply	DC
Index Protection Rating	IP 30
Limit Switch Type	Electronic
Limit Switch Capacity	35 Turns

Temperature Working Range	32°F to 140°F (0°C to 60°C)
Insulation Class	Class III
Antenna	Must not come in contact with metal. May need to be repositioned for optimal range

NOTE: Power cable is included with motor.

Dimensions - in. (mm)



Minimum window width bracket to bracket for roller shades (inches):

Acmeda 44mm tube and hardware	18 5/8"
RollEase® 1.5" tube w/ Skyline Hardware	19 5/8"
RollEase® 1.5" tube w/ R8 Hardware	18 1/2"

Performances

	SONESSE®30 RTS
Voltage*	24VDC
Motor Power Connection	2pin JST, 2mm pitch
Nominal load starting current *	1.8A for max. 300ms
Nominal load current *	.8A
Maximum current during programming *	3.2A for 300ms.
Torque	17.7 in. lbs. (2Nm)
Speed	6-28 rpm (programmable)
Thermal protection	2.5 minutes
Minimum inside diameter of tube	1.22 in. (31mm)
****Sound level**	≤ 44 dBA
RF control range (may vary)	65 ft.

* Regulated power supply required

****Sound Level:**

Sound level measured at 3 feet from end product at maximum torque.

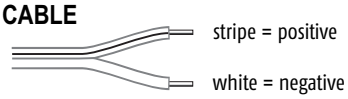
Fabrication Recommendations:

- Operational noise level is reduced when motor, tube, and mechanical accessories are properly adapted to motorized applications.
- Free play must be minimized between the accessories and the end product tube to ensure quiet performance of the motor.
- Interior Tube Diameter (ID) > 31mm must be respected.
- A motor crown adapter between motor and end product tube is required to ensure concentric operation of motor.
- ST30 Series Drive Stop and Screw (included with crown and drive), are recommended to prevent noise and drive wheel separation from motor shaft.

Included Cable

24V DC POWER CABLE

2 Conductor
7.5' Length



Sonesse® 30 RS485

Sonesse® 30 RS485

Part #1000658

5 Warranty year somfy.

Somfy Digital Network (SDN), is Somfy's proprietary digital communication backbone compatible with industry standard RS485

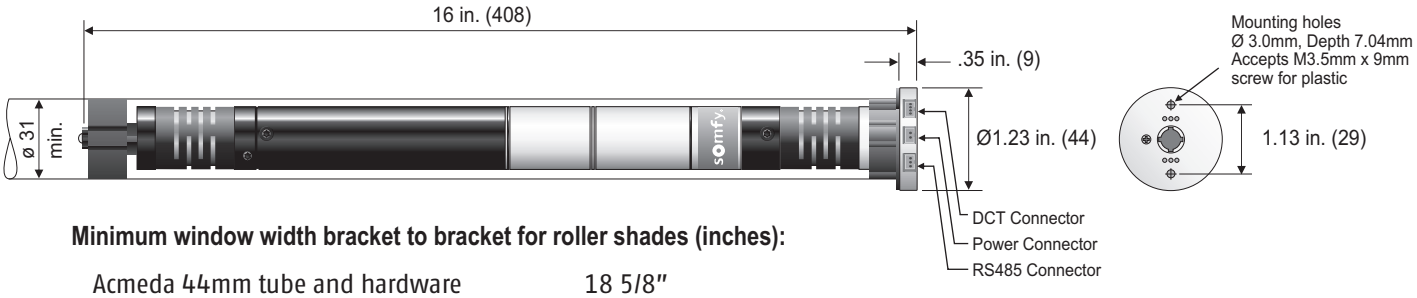
Technical features

Voltage Supply	DC
Index Protection Rating	IP 30
Limit Switch Type	Digital
Limit Switch Capacity	35 Turns

Temperature Working Range	32°F to 140°F (0°C to 60°C)
Insulation Class	Class III

NOTE: Power/Control motor cables are included with motor. Does not include Limit Setting Tool # 9014599 or Dry Contact Closure (DCT) Cable # 9014793 required for setting limits.

Dimensions – in. (mm)



Minimum window width bracket to bracket for roller shades (inches):

Acmeda 44mm tube and hardware	18 5/8"
RollEase® 1.5" tube w/ Skyline Hardware	19 5/8"
RollEase® 1.5" tube w/ R8 Hardware	18 1/2"

Performances

	SONESSE® 30 RS485
Voltage*	24VDC
Motor power connector	2 pin JST, 2mm pitch
Motor RS485 connector	3 pin JST, 2mm pitch
Motor DCT connector	4 pin JST, 2mm pitch
Nominal load starting current *	1.8A for max. 300ms
Nominal load current *	.8A
Maximum current during programming *	3.2A for 300ms.
Torque	17.7 in. lbs. (2Nm)
Speed	6-28 rpm (programmable)
Thermal protection	2.5 minutes
Minimum inside diameter of tube	1.22 in. (31mm)
****Sound level**	44 dBA

* Regulated power supply required

****Sound Level:**

Sound level measured at 3 feet from end product at maximum torque.

Fabrication Recommendations:

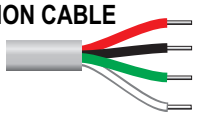
- Operational noise level is reduced when motor, tube, and mechanical accessories are properly adapted to motorized applications.
- Free play must be minimized between the accessories and the end product tube to ensure quiet performance of the motor.
- Interior Tube Diameter (ID) > 31mm must be respected.
- A motor crown adapter between motor and end product tube is required to ensure concentric operation of motor.
- ST30 Series Drive Stop and Screw (included with crown and drive), are recommended to prevent noise and drive wheel separation from motor shaft.

Included Cables

24V DC POWER CABLE
2 Conductor
7.5' Length

stripe = positive
white = negative

RS485 COMMUNICATION CABLE
3 Conductor
7.5' Length



red = RS485 A
black = RS485 B
green = Bus power GND
white = N/A cut off

DRY CONTACT

Offers control via contact closure switching (dry contact)

Sonesse® 30 DCT

Part #1000668

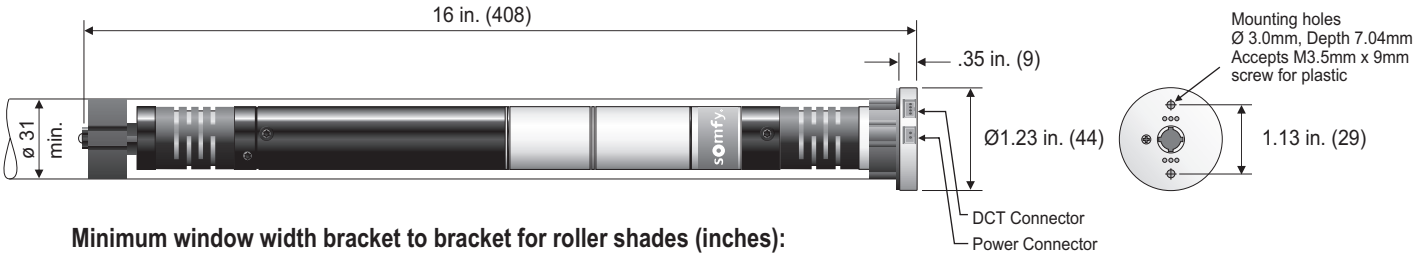
5 Warranty year somfy.

Technical features

Voltage Supply	DC
Index Protection Rating	IP 30
Limit Switch Type	Dry Contact
Limit Switch Capacity	35 Turns
Temperature Working Range	32°F to 140°F (0°C to 60°C)
Insulation Class	Class III

NOTE: Power/Control motor cables are included with motor. Does not include Limit Setting Tool # 9014599 required for setting limits.

Dimensions – in. (mm)



Minimum window width bracket to bracket for roller shades (inches):

Acmeda 44mm tube and hardware	18 5/8"
RollEase® 1.5" tube w/ Skyline Hardware	19 5/8"
RollEase® 1.5" tube w/ R8 Hardware	18 1/2"

Performances

	SONESSE® 30 DCT
Voltage*	24VDC
Motor power connector	2 pin JST, 2mm pitch
Motor DCT connector	4 pin JST, 2mm pitch
Nominal load starting current *	1.8A for max. 300ms
Nominal load current *	.8A
Maximum current during programming *	3.2A for 300ms.
Torque	17.7 in. lbs. (2Nm)
Speed	6-28 rpm (programmable)
Thermal protection	2.5 minutes
Minimum inside diameter of tube	1.22 in. (31mm)
****Sound level**	<44 dBA

* Regulated power supply required

****Sound Level:**

Sound level measured at 3 feet from end product at maximum torque.

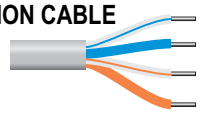
Fabrication Recommendations:

- Operational noise level is reduced when motor, tube, and mechanical accessories are properly adapted to motorized applications.
- Free play must be minimized between the accessories and the end product tube to ensure quiet performance of the motor.
- Interior Tube Diameter (ID) > 31mm must be respected.
- A motor crown adapter between motor and end product tube is required to ensure concentric operation of motor.
- ST30 Series Drive Stop and Screw (included with crown and drive), are recommended to prevent noise and drive wheel separation from motor shaft.

Included Cables

24V DC POWER CABLE
2 Conductor
7.5' Length

DCT COMMUNICATION CABLE
4 Conductor
7.5' Length



RADIO TECHNOLOGY SOMFY® (RTS)

TELIS RTS HAND-HELD REMOTE COLLECTION

Telis 1 RTS Pure Single Channel Remote 1810632

Telis 4 RTS Pure Five Channel Remote 1810633

Telis 1 RTS Silver Single Channel Remote 1810639

Telis 4 RTS Silver Five Channel Remote 1810641

Telis 1 RTS Lounge Single Channel Remote 1810650

Telis 4 RTS Lounge Five Channel Remote 1810652

Telis 1 RTS Patio Single Channel Remote 1810643

Telis 4 RTS Patio Five Channel Remote 1810645

Telis 1 Modulis RTS Pure with Scroll Wheel 1811234

Telis 4 Modulis RTS Pure with Scroll Wheel 1811235

Telis 16 Channel RTS Pure Remote with On-screen display 1811081

Telis 16 Channel RTS Silver Remote with On-screen display 1811082

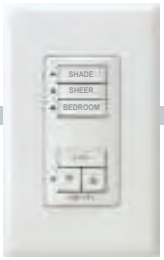
Telis 1 Chronis Pure WireFree™ Timer 1805237

Telis 1 Chronis Silver WireFree™ Timer 1805238

DECOFLEX WIREFREE™ RTS WALL SWITCHES

DecoFlex 1 Channel RTS WireFree™ Wall Switch

DecoFlex 2 Channel RTS WireFree™ Wall Switch



DecoFlex 3 Channel RTS WireFree™ Wall Switch

DecoFlex 4 Channel RTS WireFree™ Wall Switch

DecoFlex 5 Channel RTS WireFree™ Wall Switch

- Wall Switches shown in white. Also available in black, ivory, and almond finishes.
- Shown assembled with printed channel buttons.
- Custom engraved buttons are also available.

BLACK | IVORY | ALMOND (1 & 5 channel only)

TABLE TOP ACCESSORIES

DecoFlex WireFree™ RTS Table Top Accessory Black 1811051*

DecoFlex WireFree™ RTS Table Top Accessory Silver 1810972*

DecoFlex WireFree™ RTS Table Top Accessory White 1811185*

*DecoFlex Switch sold separately from Table Top Accessory.

INDOOR RTS SENSORS

Sunis Indoor WireFree™ RTS 9013707

Thermo Sunis Indoor WireFree™ RTS 9013708

RTS REPEATER

RTS Repeater (extends RTS range) 1810791

RTS MOTOR INTERFACES

ZRTSI

Z-Wave® to RTS Interface
1811265

16 CHANNEL RTS INTERFACE

Universal RTS Interface 16-Channel
(Converts IR, RS232, RS485 to RTS)
1810872

myLink™

WiFi to RTS Interface
Control window coverings, awnings, screens and rolling shutters with a smartphone or tablet. A simple on-screen setup wizard helps users create timed events, scenes and more. Compatible with iOS and Android.

1811403

DRY CONTACT

RTS Dry Contact Interface
Single Channel
1810493

RS485 DECOFLEX DIGITAL KEYPAD

Stand-alone SDN

White: 6 Button 1811252
Black: 6 Button 1811311
Ivory: 6 Button 1811334
Almond: 6 Button 1811314

White: 8 Button 1811253
Black: 8 Button 1811312
Ivory: 8 Button 1811335
Almond: 8 Button 1811313

animeo® IP

White: 6 Button 1811288
Black: 6 Button 1811328
Ivory: 6 Button 1811332
Almond: 6 Button 1811330

White: 8 Button 1811289
Black: 8 Button 1811329
Ivory: 8 Button 1811333
Almond: 8 Button 1811331

DIGITAL MOTOR INTERFACE

ZDMI

Z-Wave® to Digital
Motor Interface
1870171

ZBDMI

ZigBee® to Digital
Motor Interface
1870220

animeo® IP

animeo® IP is a total solar management system utilizing Somfy®-powered intelligent motorized window coverings as well as digital keypads and weather sensors. The system's controllers, sensors and keypads can be added to both new and existing Somfy Digital Network installations for comprehensive solar management as either a stand-alone solution or integrated into third party control systems.

animeo® IP Building Controller
1822314

An intuitive user interface allows for simplified commissioning, building management and technical support, featuring drag-and-drop programming, motor auto discovery and at-a-glance system status update.

Visit **www.somfypro.com/animeo** to learn more

WIRED TECHNOLOGY

DRY CONTACT SWITCHES

Sonesse® 30 DCT
White Wall Switch - 1800219
Ivory Wall Switch - 1800220

LIMIT SETTING TOOL

Required for setting limits for Sonesse® 30 DCT and Sonesse® 30 RS485 motors.
9014599

NOTE: For additional information regarding ZigBee® or Z-Wave® controls, contact Somfy Systems, Inc.

Plug-In

Plug-In Wall Type			
# of Motors	Dimensions	Nominal Load	Part #
1 Motor	3.5" x 2.3" x 1.3"	24V DC 1.25A	1822209

With 5 ft. cable – 18 AWG

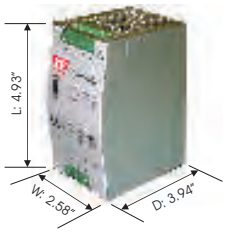
Plug-In Floor Type			
# of Motors	Dimensions	Nominal Load	Part #
1 Motor	4" x 2.5" x 1.3"	24V DC 2.5A	1822116

With 6 ft. AC cable
With 6 ft. cable – 18 AWG

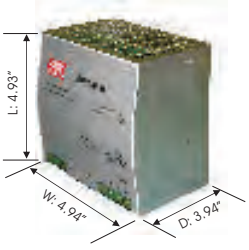
Plug-In Table/Shelf Type			
# of Motors	Dimensions	Nominal Load	Part #
2 Motors	2" x 7.1" x 8.5"	24V DC 5A	1822118
5 Motors	2.7" x 7.1" x 8.5"	24V DC 10A	1822119
7 Motors	2.7" x 7.1" x 8.5"	24V DC 15A	1822122
10 Motors	2.7" x 7.1" x 8.5"	24V DC 20A	1822123

Wired

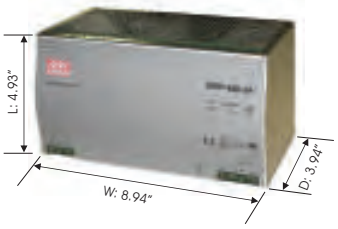
Din Rail Mount			
# of Motors	Dimensions	Nominal Load	Part #
2 Motors	4.93" x 2.58" x 3.94"	24V DC 5A	9011994



Din Rail Mount			
# of Motors	Dimensions	Nominal Load	Part #
5 Motors	4.93" x 4.94" x 3.94"	24V DC 10A	9011995

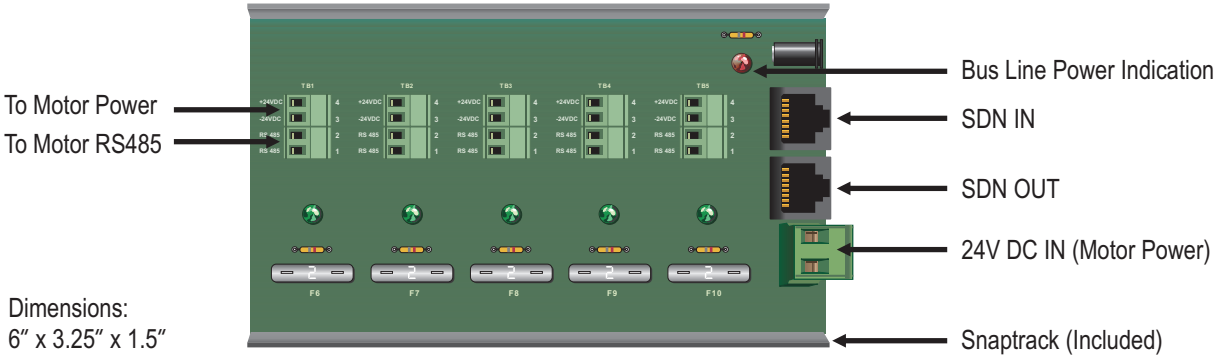


Din Rail Mount			
# of Motors	Dimensions	Nominal Load	Part #
10 Motors	4.93" x 8.94" x 3.94"	24V DC 20A	9014245



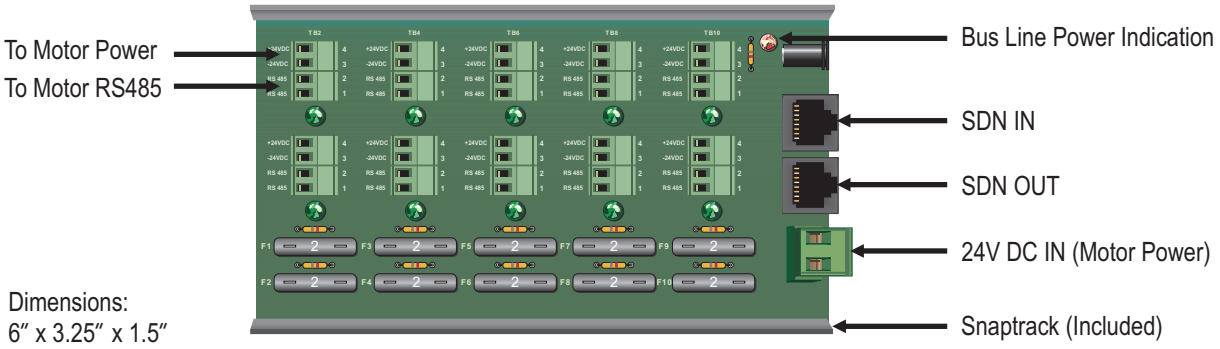
5 Motor Power/Control Distribution Panel

4 Conductor, #1870193

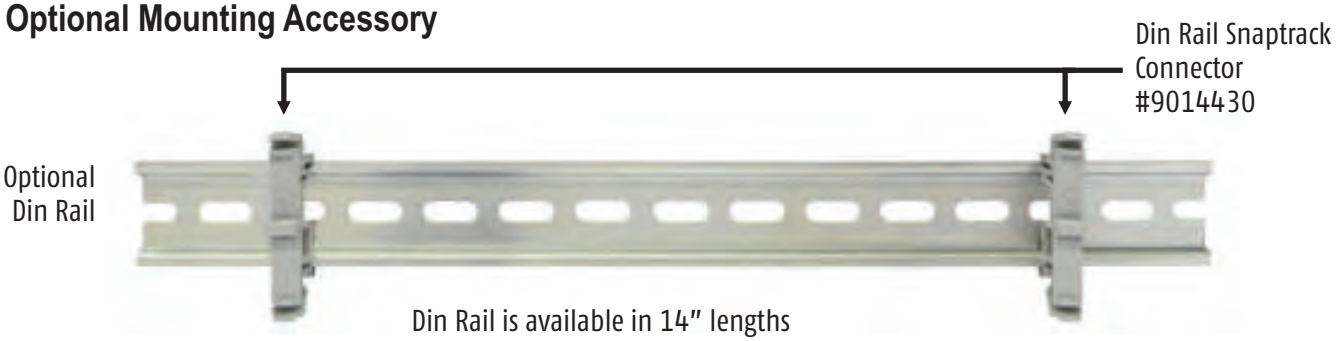


10 Motor Power/Control Distribution Panel

4 Conductor, #1870194



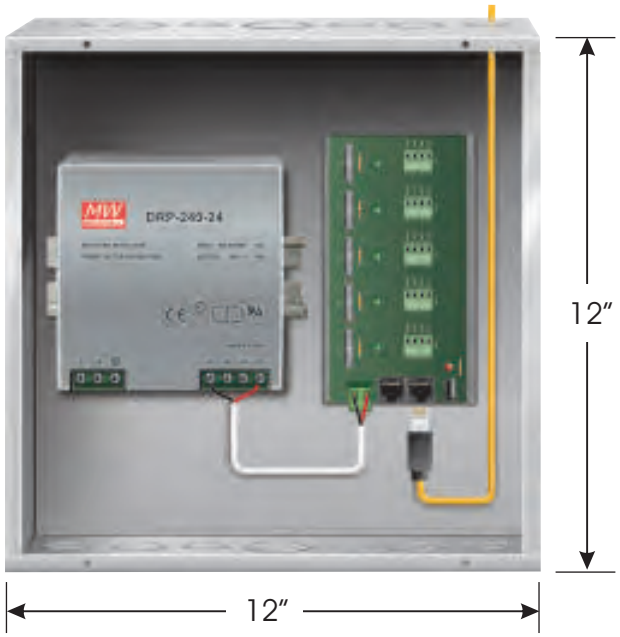
Optional Mounting Accessory



Sonesse® 30 Power/Control Motor Cables (optional)	
Sonesse® 30 Dry Contact Closure (DCT) Cable (7.5' length)	# 9014793
Sonesse® 30 RS485 Control Cable (7.5' length)	# 9015842
Sonesse® 30 24V DC 2 Conductor Power Cable (7.5' length)	# 9014794

Power/Control Distribution Enclosure Options

5 MOTOR - #1870196



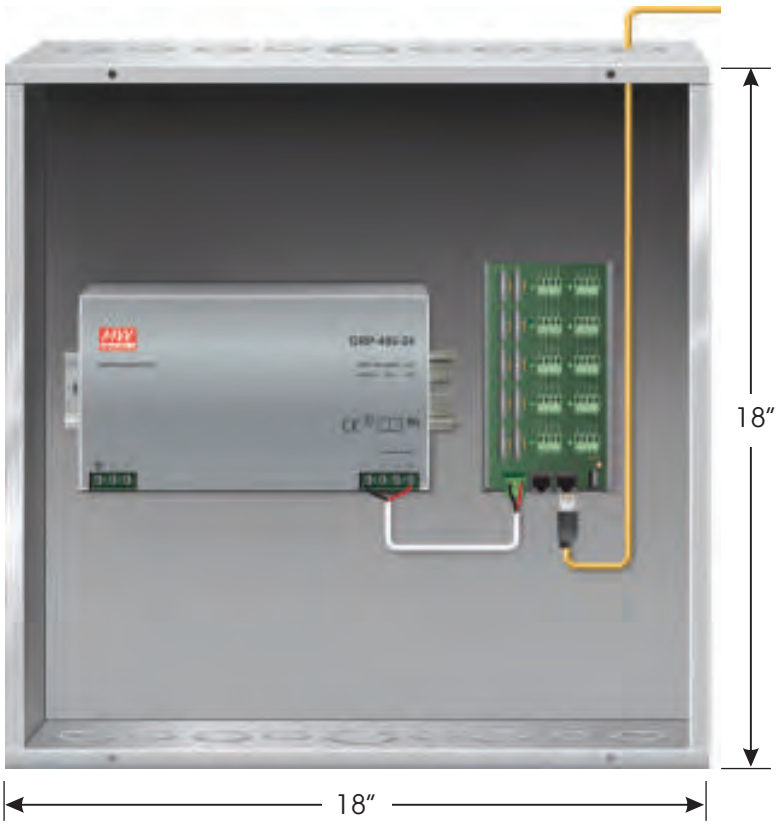
Kit Includes:

1 - 5 Motor Power/Control Distribution Panel - #1870193

1 - 24V DC 10 Amp Power Supply #9011995

1 - 12″ x 12″ x 6.25″ Enclosure

10 MOTOR - #1870192



Kit Includes:

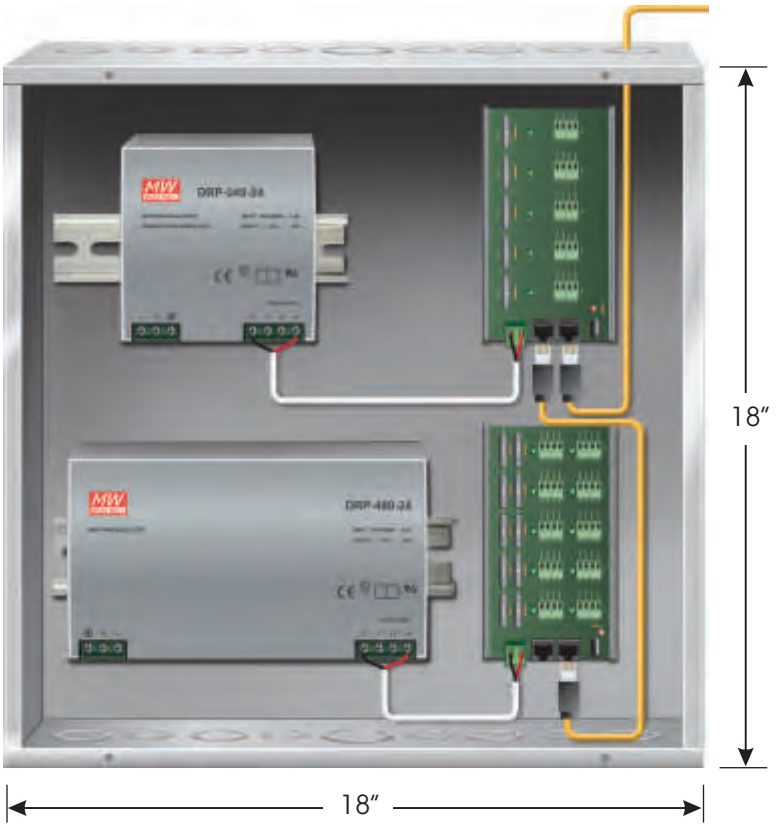
1 - 10 Motor Power/Control Distribution Panel - #1870194

1 - 24V DC 20 Amp Power Supply #9014245

1 - 18″ x 18″ x 6.25″ Enclosure

NOTE: For detailed connections please reference pp. 14 -15

15 MOTOR - #1870197



Kit Includes:

1 - 5 Motor Power/Control Distribution Panel - #1870193

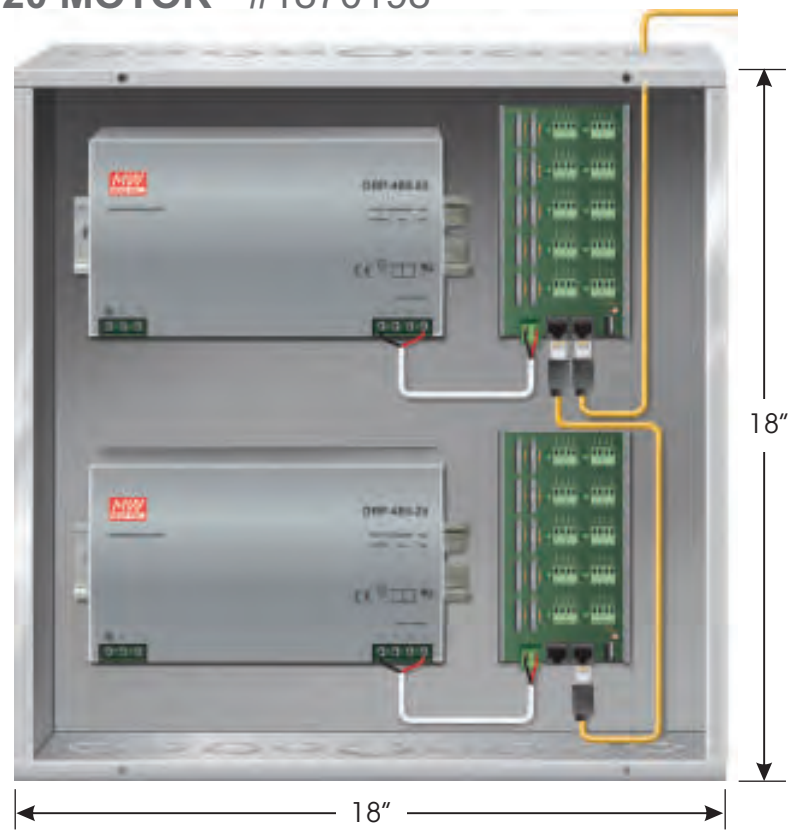
1 - 10 Motor Power/Control Distribution Panel - #1870194

1 - 24V DC 10 Amp Power Supply #9011995

1 - 24V DC 20 Amp Power Supply #9014245

1 - 18″ x 18″ x 6.25″ Enclosure

20 MOTOR - #1870198



Kit Includes:

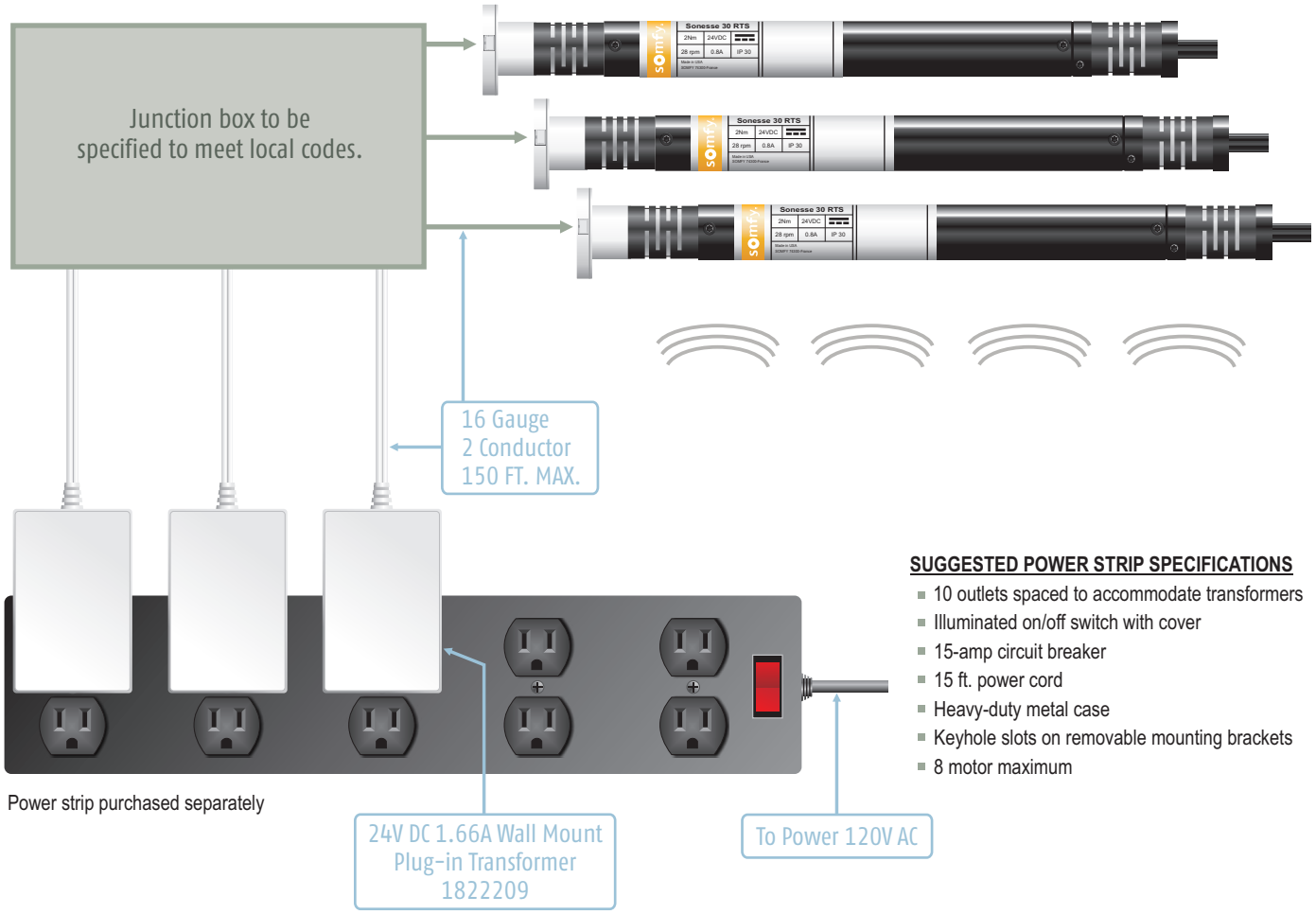
2 - 10 Motor Power/Control Distribution Panel - #1870194

2 - 24V DC 20 Amp Power Supply #9014245

1 - 18″ x 18″ x 6.25″ Enclosure

NOTE: For detailed connections please reference pp. 14 -15

APPLICATION EXAMPLE

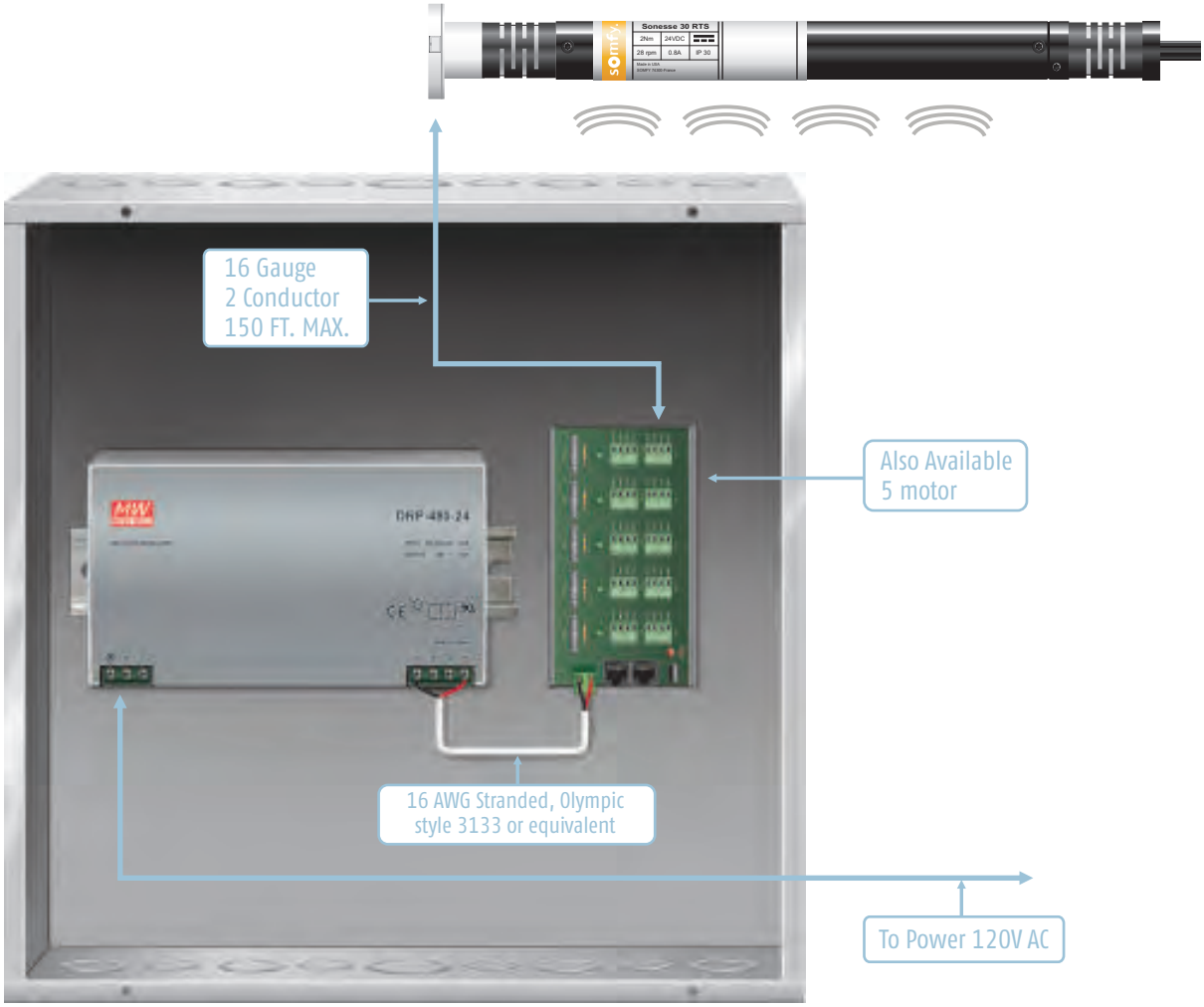


SUGGESTED POWER STRIP SPECIFICATIONS

- 10 outlets spaced to accommodate transformers
- Illuminated on/off switch with cover
- 15-amp circuit breaker
- 15 ft. power cord
- Heavy-duty metal case
- Keyhole slots on removable mounting brackets
- 8 motor maximum

For additional RTS controls see page 6

APPLICATION EXAMPLE



3RD Party Controller
(For example: Crestron®,
Universal Remote
Control, etc...)

Serial
(RS232 or RS485)
or IR

16 CHANNEL UNIVERSAL RTS INTERFACE
1810872

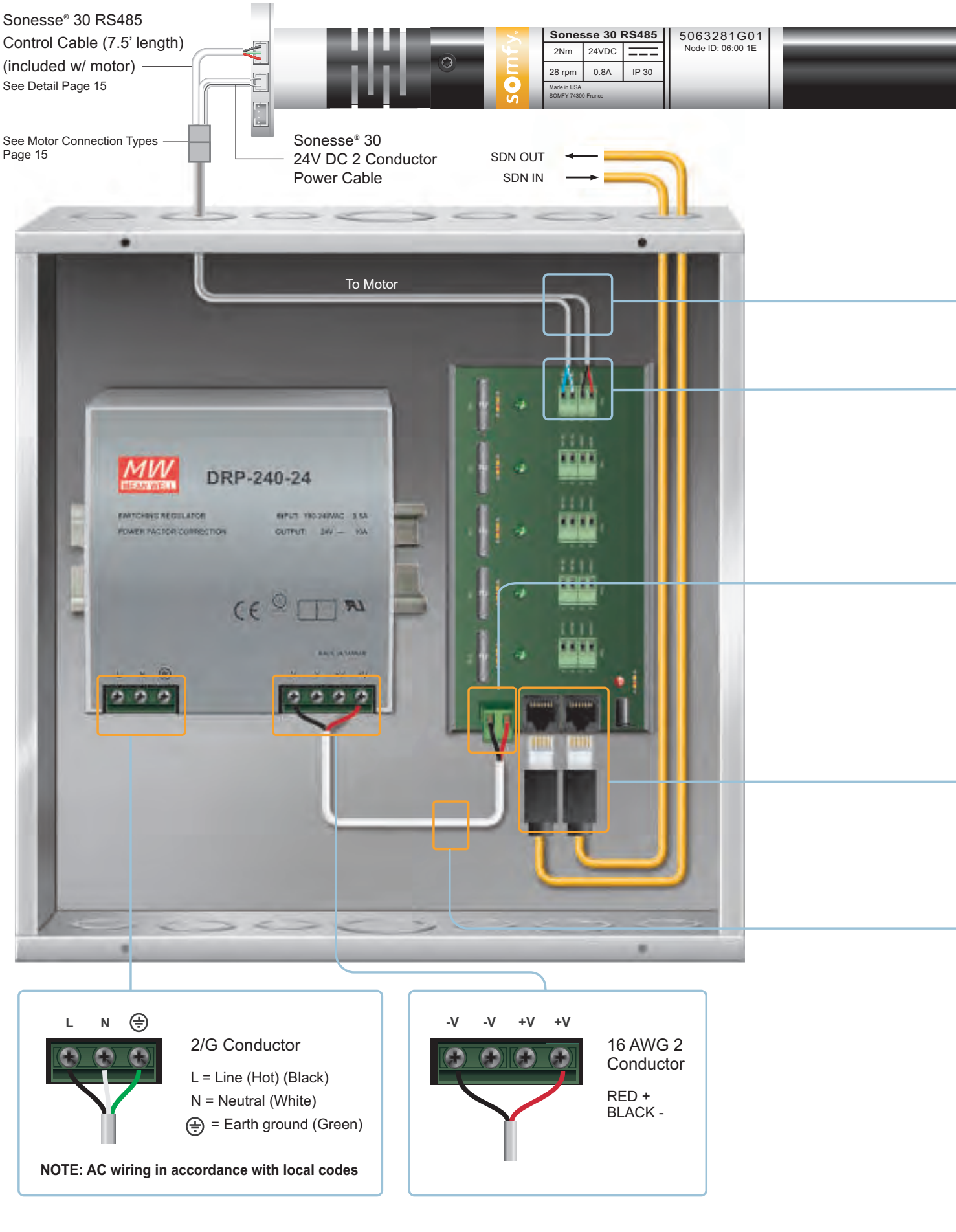
TELIS PURE RTS
1810632

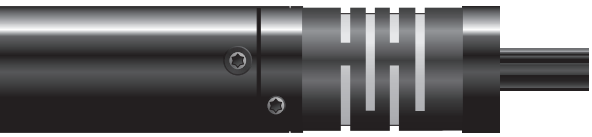
DECOFLEX WIREFREE™ RTS WALL SWITCH 5 CHANNEL
1810813

Z-WAVE® TO RTS INTERFACE
1811265

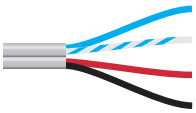
For additional RTS controls see page 6

Sonesse® 30 RS485 Control & Power Distribution





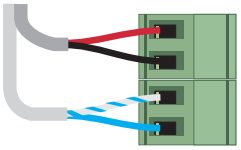
SUGGESTED BUILDING WIRE



16 AWG 2 Conductor
24/2 pr

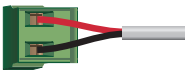
Coleman Model 97295
or equivalent

POWER/CONTROL DIST. BOARD CONNECTION



+ 24V DC
- 24V DC
Data- (RS485 B)
Data + (RS485 A)

BOARD POWER CONNECTION



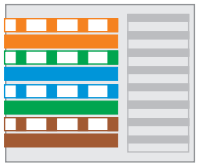
16 AWG Stranded,
Olympic style 3133
or equivalent

RED +
BLACK -

SDN IN/OUT CONNECTION

1 - Data +
2 - Data -
3 – N/A
4 - Power +
5 - Power +
6 – N/A
7 - Ground -
8 - Ground -

SDN Cable Pinout



EIA/TIA 568B

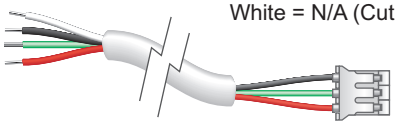
SUGGESTED BOARD POWER WIRE

16 AWG Stranded,
Olympic style 3133
or equivalent

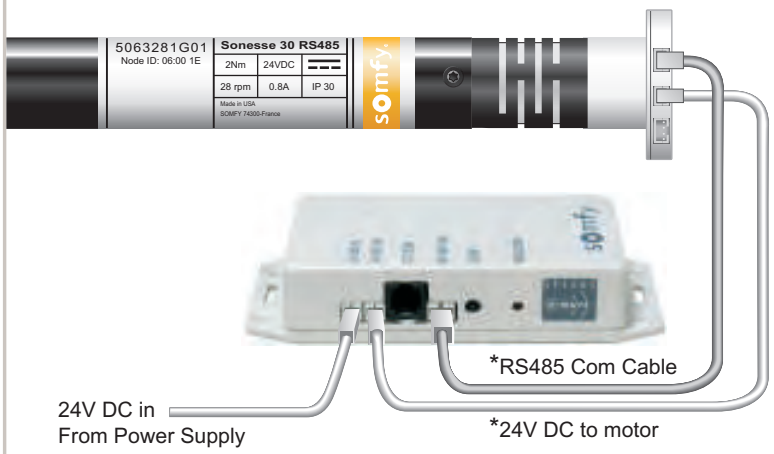
SONESSE 30 RS485 CONTROL CABLE

Sonesse® 30
RS485 Control Cable
(included with motor)

Red = A
Black = B
Green = Ground
(Connected to power -)
White = N/A (Cut off)



Connection to Z-Wave® or ZigBee® Digital Motor Interface

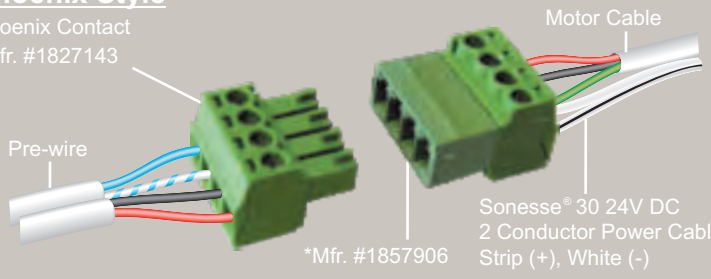


*** Included with Z-Wave® to Digital Motor Interface and the ZigBee® Digital Motor Interface.**

Motor Connection Types

Phoenix Style

Phoenix Contact
*Mfr. #1827143

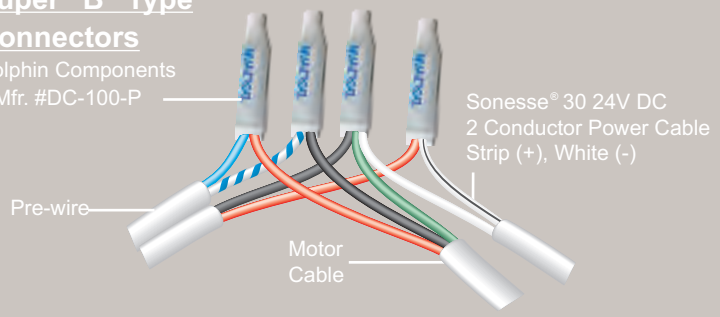


Power/Control Distribution Board Connector

Data + (RS485 A)	4	Red
Data - (RS485 B)	3	Black
*- 24V DC	2	Green
		Power White
+ 24V DC	1	Power Stripe

Super "B" Type Connectors

Dolphin Components
**Mfr. #DC-100-P



***As part of the specification on the Sonesse 30 RS485 motor, when a separate wire is not present for RS485 ground, connect the ground to the - 24V DC wire.**

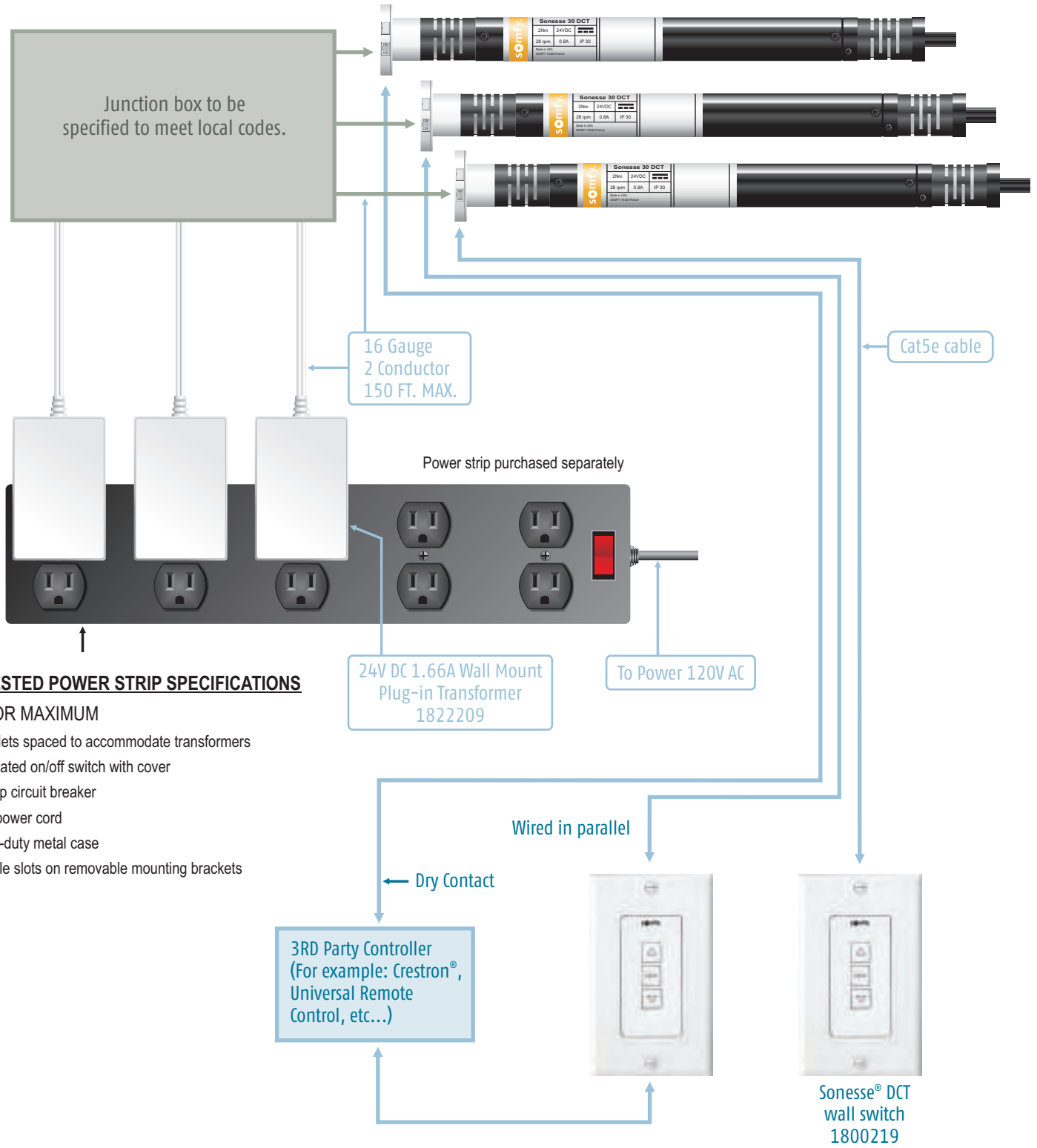
****All part numbers listed are for reference only. These are not Somfy part numbers**

Sonesse® 30 DCT Dry Contact & Plug-In Style Power

DRY CONTACT

NOTE: A maximum of 8 motors can be wired to 1 switch or Dry Contact input.

APPLICATION EXAMPLE



SUGGESTED POWER STRIP SPECIFICATIONS

8 MOTOR MAXIMUM

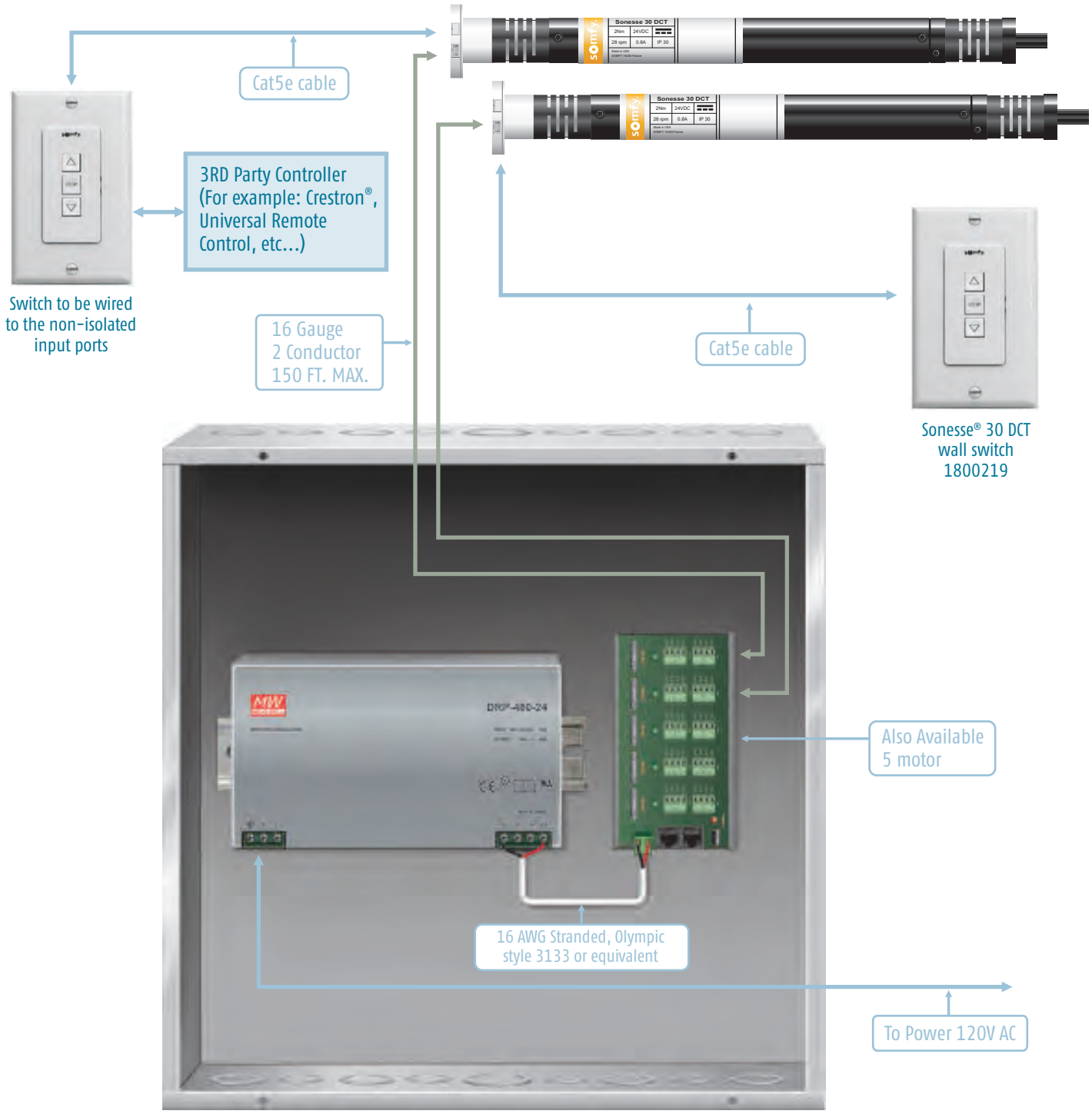
- 10 outlets spaced to accommodate transformers
- Illuminated on/off switch with cover
- 15-amp circuit breaker
- 15 ft. power cord
- Heavy-duty metal case
- Keyhole slots on removable mounting brackets

Sonesse® 30 DCT Dry Contact & Power Distribution

DRY CONTACT

NOTE: A maximum of 8 motors can be wired to 1 switch or Dry Contact input.

APPLICATION EXAMPLE



10 Motor Power Panel #1870192

SOMFY SYSTEMS INC
SOMFY NORTH AMERICAN HEADQUARTERS
121 Herrod Blvd.
Dayton, NJ 08810
P: (800) 22-SOMFY (76639)
NJ: (609) 395-1300
F: (609) 395-1776

FLORIDA
6100 Broken Sound Pkwy. N.W.
Suite 14
Boca Raton, FL 33487
P: (800) 22-SOMFY (76639)
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Irvine, CA 92618-2201
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F: (949) 727-3775

SOMFY ULC
SOMFY Canada Division
5178 Everest Drive
Mississauga, Ontario L4W2R4
P: 1-800-66-SOMFY (76639)
CN: (905) 564-6446
F: (905) 238-1491

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400 Series Databook

Sonesse® 40

somfy®

Somfy is the leading global manufacturer of strong, quiet motors with electronic and app controls for interior and exterior window coverings. Over 270 million users worldwide enjoy the more than 150 million motors produced by Somfy. During the past 40+ years, Somfy engineers have designed products for both the commercial and residential markets to motorize window coverings such as interior shades, wood blinds, draperies, awnings, rolling shutters, exterior solar screens and projection screens. Somfy motorization systems are easily integrated with security, HVAC and lighting systems providing total home or building automation.

100 MILLION motors

WHY SOMFY?

Somfy has a committed Customer Support team comprised of Somfy motor and control specialists available for assistance:

Somfy Corporate Headquarters
800–22–SOMFY (76639)

General Customer Service
877–210–5327
CustomerService_us@somfy.com

Standard Purchase Order
Ordering_us@somfy.com

Rush Purchase Order
ExpeditedShippingOrders_us@somfy.com

Accounting Inquiries
AccountsReceivable@somfy.com

Technical Support
877 – 233 – 0019
TechnicalSupport_us@somfy.com

Warranty Claim Requests
us_Return@somfy.com

- Somfy has a production capacity of more than 70,000 motors per day.
- Somfy motors have over 600 standards approvals worldwide.
- Somfy has certified over 100 patents since the year 2000.
- Every Somfy motor goes through an extensive quality assurance process including testing in extreme environmental conditions, for electrostatic discharge, mechanical shock, and high life cycle.
- Somfy has a network of 15,000 trained professional installers throughout the world.

Somfy operates in 60 countries, with 78 subsidiaries, and 52 agencies spread across 5 continents. With 8 production centers, Somfy is an efficient and reactive industry leader. Thanks to its strict quality standards, Somfy is able to satisfy the needs of over 270 million users worldwide.

5 Warranty year somfy

EXPERT somfy

Somfy understands that training and support are critical to success. Somfy's Expert Program has been developed to provide a platform for those who want to enhance their expertise of motorization and control solutions. Contact Somfy directly or visit www.somfysystems.com to learn more and sign up for training.

TABLE OF CONTENTS

INTRODUCTION

Somfy's 40mm Motor Range 2

MOTOR SPECIFICATIONS

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LS 40 WT 8
ALTUS® 40 RTS 9

CONTROL ACCESSORIES

Radio Technology Somfy® (RTS) 10-11
Somfy Digital Network - animeo® IP 11
Wired Controls 12-13

Acmeda® is a registered trademark of Acmeda International Group Incorporated.
RollEase® is a registered trademark of RollEase Inc. - Stamford, CT.

Somfy's 40mm Motor Range

This document is a presentation of accessories and specifications related to the Sonesse® 40 (RTS & Wired), Altus® 40 RTS and LS 40 Wired motors. It provides the technical information needed to order, fabricate, and sell the complete range of Somfy's 40 mm motors. For additional information regarding any of the products in this document including motors, power sources, controls, interfaces, etc., please reference www.somfysystems.com where detailed instructions are available for download.

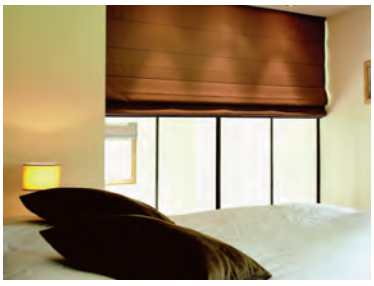
Conveniently Quiet – Sonesse® 40 (RTS & Wired)
The Sonesse® 40 Range with patent pending technology features a newly designed brake, rotor and gearbox to further reduce motor operating sound. Available in both RTS and wired versions, the Sonesse 40 can be used in a variety of interior window covering applications.

Power, Simplicity, and Convenience – Altus® 40 (RTS)
The Altus® 40 RTS features an integrated radio receiver within the motor which eliminates any wiring between the motor and controls. Available in two torques 4Nm and 9Nm, the Altus 40 RTS is ideal for exterior product applications.

Proven Strength and Reliability – LS 40 (Wired)
The LS 40 motor is Somfy's original 40 mm solution. This robust and durable motor is available in a wide variety of torques and speeds and is a dependable source for exterior applications.

Solar/Roller Shades

Sheer Horizontal Shades



Roman/Woven Shades

Horizontal Blinds

Awnings

Rolling Shutters

Exterior Solar Screens

RTS 10 MILLION SYSTEMS INSTALLED WORLDWIDE
Radio Technology Somfy®

Radio Technology Somfy® (RTS) allows wireless radio control of motorized window coverings via the RTS family of controls.

WIRED TECHNOLOGY

Offers control via standard AC switching.

5 Warranty year somfy.

As with all Somfy products, motors are backed by a 5 year warranty.

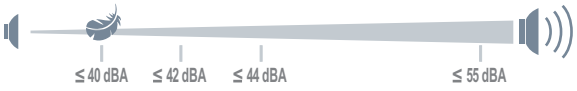
The most compact, adaptable and quiet 40 mm AC motor dedicated to interior window coverings.

The Sonesse® 40 range features 4 patents pending that reduce motor operating sound. The brake, rotor, and gearbox are all specially designed to absorb sources of noise. Available in both RTS and Wired, the Sonesse 40 can be used to motorize a variety of applications. The Sonesse 40 is compatible with Somfy's full range of controls and accessories including the Telis Modulis RTS, a hand-held remote with a scroll wheel exclusively designed for the precise control of blind slats.

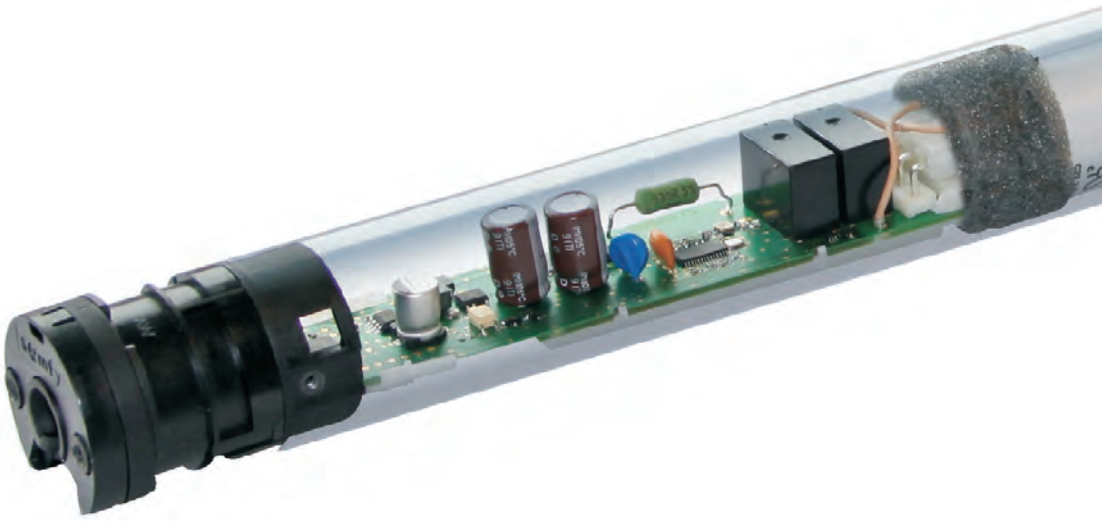
SOMFY DESIGNED FOR SILENCE – Quietness Scale

Somfy DESIGNED FOR SILENCE

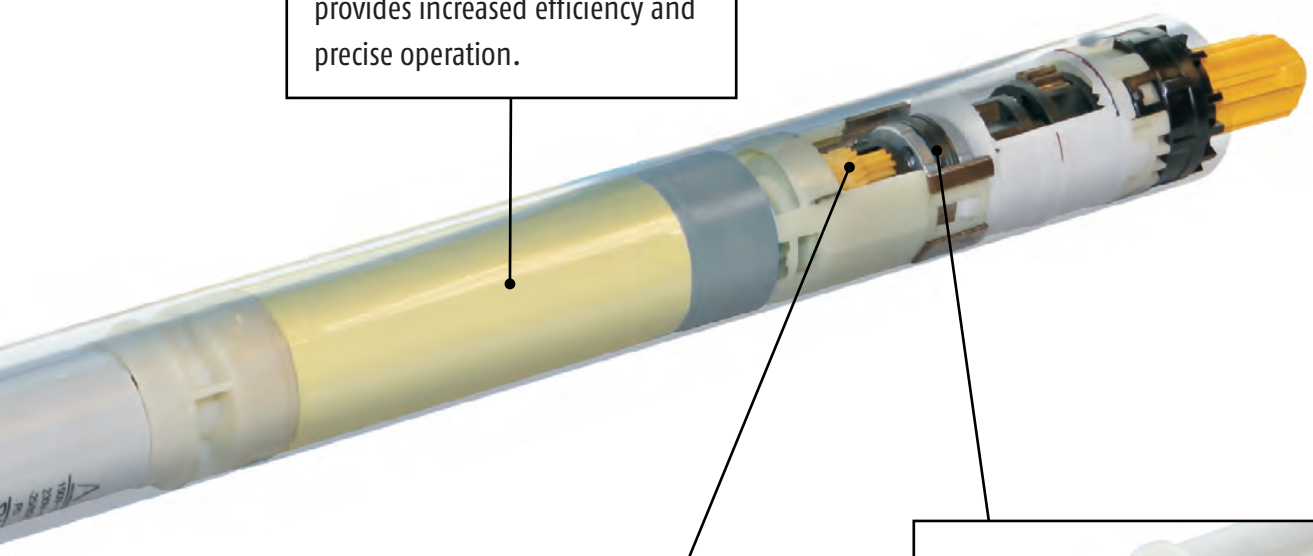
The Sonesse® range of motors are rated according to their quietness. The volume scale below appears on all Sonesse range specification pages and designates the motor's level of sound output.

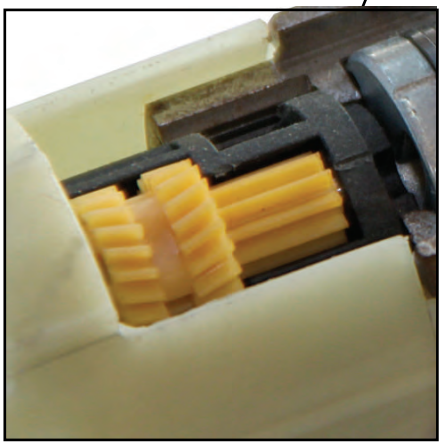


Telis Modulis RTS
Hand-held Remote

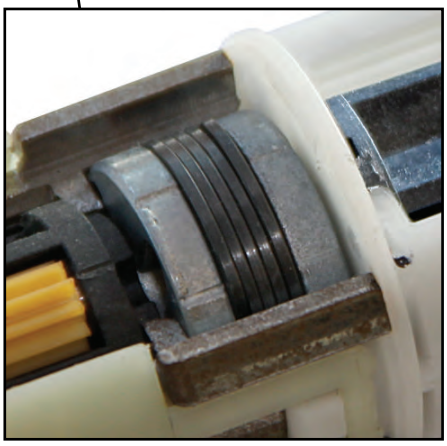


Asynchronous, maintenance-free motor with enhanced rotor design provides increased efficiency and precise operation.





Innovative helical gearbox ensures uniform sound quality in both up and down directions.



New and improved spring brake eliminates stopping and tilting noise.

Sonesse® 40 WT

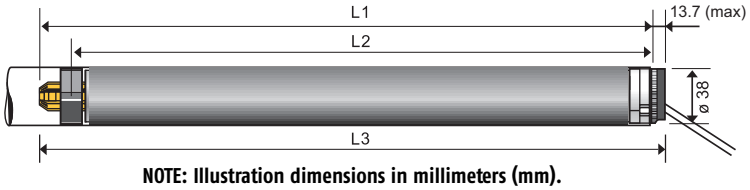
404S2	1001553
406A2	1001556
409R2	1001557

Offers control via AC power switching.

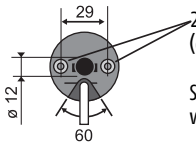
Technical features

Voltage Supply	120V AC
Index protection rating (interior use only)	IP 44
Limit switch type	Progressive Adjustment (PA)
Limit Switch Capacity	40 Turns
Temperature working Range	32°F to 140°F (0°C to 60°C)
Insulation class	Class 1 for 120 V AC

Dimensions



NOTE: Illustration dimensions in millimeters (mm).



2 holes for self tapping mounting screws (diameter: 4mm, depth: 9.4 mm)

Self tapping mounting screws are included with each motor.

Dimensions	404S2	406A2	409R2
L1	18.19 in. (462 mm)	19.45 in. (494 mm)	19.45 in. (494 mm)
L2	17.36 in. (441 mm)	18.62 in. (473 mm)	18.62 in. (473 mm)
L3	18.82 in. (478 mm)	20.08 in. (510 mm)	20.08 in. (510 mm)
Cable Length	6.5 ft. (2 m)		

Specifications

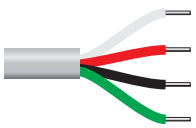
	404S2	406A2	409R2
Torque	4 Nm	6 Nm	9 Nm
Nominal Voltage	120 V / 60 Hz		
Rated Current	.95 A	1.2 A	.98 A
Speed	36 rpm	24 rpm	14 rpm
Thermal Protection	4 minutes		
Sound Level*	42 dBA	44 dBA	40 dBA

*** Sound level:**
According to standards ISO 3741
NF 31022 in dBA ref 1pW at nominal torque without end product.

Fabrication recommendations:
Operational noise level is reduced when motor, tube, and mechanical accessories are properly adapted to motorized applications.

Type of power cable

Wired
120V AC / 60 Hz
4 conductor cable



white = neutral
red = direction 1
black = direction 2
green = ground

Sonesse® 40 RTS

404S2 1001636
406A2 1001637
409R2 1001638

Somfy DESIGNED FOR SILENCE

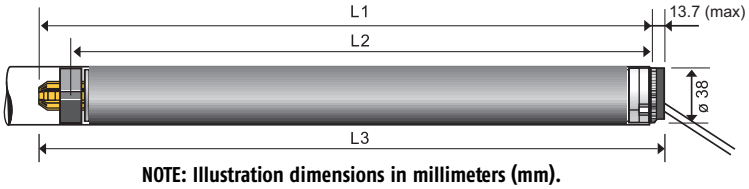
RTS Radio Technology Somfy®

Radio Technology Somfy® (RTS) allows for wireless radio control of motorized window coverings via the RTS family of controls.

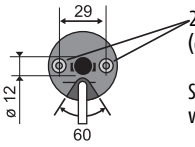
Technical features

Voltage Supply	120V AC	**Limit Switch Capacity**	250 Turns (limited to 3 minutes of rotation without stop)
Index protection rating (interior use only)	IP 44	**Temperature working Range**	32°F to 140°F (0°C to 60°C)
Limit switch type	Electronic (RTS)	**Insulation class**	Class 1 for 120 V AC

Dimensions



NOTE: Illustration dimensions in millimeters (mm).



2 holes for self tapping mounting screws (diameter: 4mm, depth: 9.4 mm)

Self tapping mounting screws are included with each motor.

Dimensions	404S2	406A2	409R2
L1	19.84 in. (504 mm)	21.06 in. (535 mm)	21.06 in. (535 mm)
L2	18.90 in. (480 mm)	20.12 in. (511 mm)	20.12 in. (511 mm)
L3	20.35 in. (517 mm)	21.57 in. (548 mm)	21.57 in. (548 mm)
Cable Length	11.5 ft. (3.5 m)		

Specifications

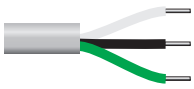
	404S2	406A2	409R2
Torque	4 Nm	6 Nm	9 Nm
Nominal Voltage	120 V / 60 Hz		
Rated Current	.95 A	1.2 A	.98 A
Speed	36 rpm	24 rpm	14 rpm
Thermal Protection	4 minutes		
Radio Frequency	433.42 MHz		
Sound Level*	42 dBA	44 dBA	40 dBA

*** Sound level:**
According to standards ISO 3741
NF 31022 in dBA ref 1pW at nominal torque without end product.

Fabrication recommendations:
Operational noise level is reduced when motor, tube, and mechanical accessories are properly adapted to motorized applications.

Type of power cable

RTS
120V AC / 60 Hz
3 conductor cable



white = neutral
black = live
green = ground

LS 40 WT

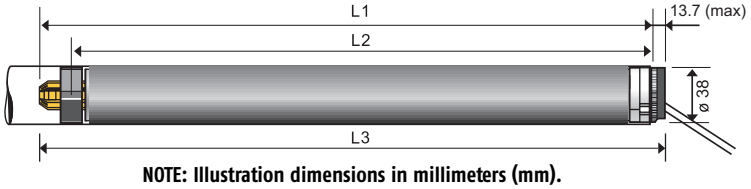
404S2 1020005
404R2 1021003
409R2 1023029
412R2 1024020

Offers control via AC power switching.

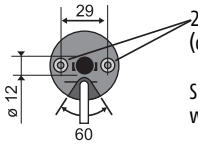
Technical features

Voltage Supply	120V AC	**Limit Switch Capacity**	40 Turns
Index protection rating	IP 44	**Temperature working Range**	14°F to 104°F (-10°C to 40°C)
Limit switch type	Progressive Adjustment (PA)	**Insulation class**	Class 1 for 120 V AC

Dimensions



NOTE: Illustration dimensions in millimeters (mm).



2 holes for self tapping mounting screws (diameter: 4mm, depth: 9.4 mm)

Self tapping mounting screws are included with each motor.

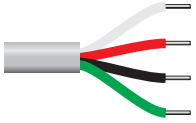
Dimensions	404S2	404R2	409R2	412R2
L1	17.0 in. (442 mm)	17.0 in. (442 mm)	17.0 in. (442 mm)	17.0 in. (442 mm)
L2	16.57 in. (421 mm)	16.57 in. (421 mm)	16.57 in. (421 mm)	16.57 in. (421 mm)
L3	18.03 in. (458 mm)	18.03 in. (458 mm)	18.03 in. (458 mm)	18.03 in. (458 mm)
Cable Length	6.5 ft. (2 m)			

Specifications

	404S2	404R2	409R2	412R2
Torque	4 Nm	4 Nm	9 Nm	12 Nm
Nominal Voltage	120 V / 60 Hz			
Rated Current	.95 A	.85 A	1.2 A	1.2 A
Speed	36 rpm	16 rpm	16 rpm	8 rpm
Thermal Protection	5 minutes			
Sound Level	59 dBA			

Type of power cable

Wired
120V AC / 60 Hz
4 conductor cable



white = neutral
red = direction 1
black = direction 2
green = ground

Altus® 40 RTS

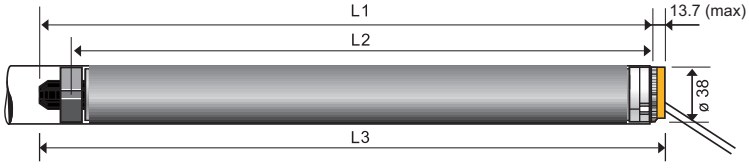
404S2 1020105
409R2 1001643

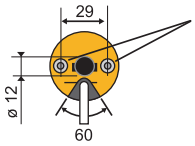
Radio Technology Somfy® (RTS) allows for wireless radio control of motorized window coverings via the RTS family of controls.

Technical features

Voltage Supply	120V AC
Index protection rating	IP 44
Limit switch type	Electronic (RTS)
Limit Switch Capacity	250 Turns (limited to 3 minutes of rotation without stop)
Temperature working Range	14°F to 104°F (-10°C to 40°C)
Insulation class	Class 1 for 120 V AC

Dimensions





2 holes for self tapping mounting screws (diameter: 4mm, depth: 9.4 mm)

Self tapping mounting screws are included with each motor.

NOTE: Illustration dimensions in millimeters (mm).

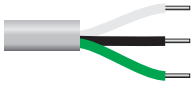
Dimensions	404S2	409R2
L1	19.57 in. (497 mm)	19.57 in. (497 mm)
L2	18.62 in. (473 mm)	18.62 in. (473 mm)
L3	20.08 in. (510 mm)	20.08 in. (510 mm)
Cable Length	23 ft. (7 m)	

Specifications

	404S2	409R2
Torque	4 Nm	9 Nm
Nominal Voltage	120 V / 60 Hz	
Rated Current	.95 A	1.15 A
Speed	36 rpm	16 rpm
Thermal Protection	5 minutes	
Radio Frequency	433.42 MHz	
Sound Level	59 dBA	

Type of power cable

RTS
120V AC / 60 Hz
3 conductor cable



white = neutral
black = live
green = ground

CONTROL ACCESSORIES

Learn more about controls and accessories and download RTS brochure at www.somfysystems.com/controls.

RADIO TECHNOLOGY SOMFY® (RTS)

TELIS COLLECTION

Telis 1 RTS Lounge
Single Channel Remote
1810650

Telis 4 RTS Lounge
Five Channel Remote
1810652

Telis 1 RTS Silver
Single Channel Remote
1810639

Telis 4 RTS Silver
Five Channel Remote
1810641

Telis 1 RTS Pure
Single Channel Remote
1810632

Telis 4 RTS Pure
Five Channel Remote
1810633

Telis 1 Soliris
RTS Pure
1810635

Telis 1 RTS Patio
Single Channel Remote
1810643

Telis 4 RTS Patio
Five Channel Remote
1810645

Telis 1 Soliris
RTS Patio
1810647

Telis 4 Soliris
RTS Patio
1811243

Telis 1 Modulis
RTS Pure with
Scroll Wheel
1811234

Telis 4 Modulis
RTS Pure with
Scroll Wheel
1811235

Telis 16 Channel RTS
Pure Remote with
On-screen display
1811081

Telis 16 Channel RTS
Silver Remote with
On-screen display
1811082

Telis 1 Chronis RTS
Pure Timer with
On-screen display
1805237

Telis 1 Chronis RTS
Silver Timer with
On-screen display
1805238

DECOFLEX WIREFREE™ WALL SWITCHES & TABLE TOP ACCESSORIES – Custom engraved buttons are now available

DecoFlex 1
Channel RTS
Wireless Wall Switch

DecoFlex 2
Channel RTS
Wireless Wall Switch

DecoFlex 3
Channel RTS
Wireless Wall Switch

DecoFlex 4
Channel RTS
Wireless Wall Switch

DecoFlex 5
Channel RTS
Wireless Wall Switch

DecoFlex Tabletop RTS
Accessory Black
1811051**

DecoFlex Tabletop RTS
Accessory Silver
1810972**

DecoFlex Tabletop RTS
Accessory White
1811185**

Wall Switches shown in white. Also available in black, ivory, and almond finishes. Shown above assembled with engraved channel buttons.

black ivory almond

**DecoFlex Switch sold separately from Table Top Accessory

NOTE: Custom Engraved buttons are now available.

RADIO TECHNOLOGY SOMFY® (RTS)

ZRTSI II

Z-Wave® to RTS Interface II

1811265

myLink™

WiFi to RTS Interface
Control window coverings, awnings, screens and rolling shutters with a smartphone or tablet. A simple on-screen setup wizard helps users create timed events, scenes and more. Compatible with iOS and Android.

1811403

16 CHANNEL INTERFACE

Universal RTS Interface 16-Channel
(Converts IR, RS232, RS485 to RTS)

1810872

RTS REPEATER

RTS Repeater
1810791

OUTDOOR RECEIVERS

Outdoor Lighting Receiver
1810875

Universal RTS Receiver
1810627

DRY CONTACT INTERFACE

RTS Dry Contact Interface
Single Channel

1811403

SUNIS & THERMO SUNIS INDOOR SENSORS

Sunis Indoor
WireFree™ RTS
9013707

Thermo Sunis Indoor
WireFree™ RTS
9013708

EOLIS SENSOR

Eolis RTS Wind
Sensor 24V
9012499

SOLIRIS SENSOR

Soliris RTS Sun and
Wind Sensor 24V
9012500

Please visit **www.somfysystems.com/controls** for additional control information.

animeo® IP

animeo IP is a total solar management system utilizing Somfy-powered intelligent motorized window coverings as well as digital keypads and weather sensors. The system's controllers, sensors and keypads can be added to both new and existing Somfy Digital Network installations for comprehensive solar management as either a stand-alone solution or integrated into third party control systems.
An intuitive user interface allows for simplified commissioning, building management and technical support, featuring drag-and-drop programming, motor auto discovery and at-a-glance system status update.

Please visit **www.somfysystems.com/animeo** to learn more.

animeo® IP Building Controller
1822314

WIRED AC CONTROLS & SWITCHES

DECORATOR TOGGLE SWITCHES (single pole, double throw) & SWITCHPLATES

Maintained Toggle Switch
(White)
1800381

Maintained Toggle Switch
(Ivory)
1800380

Momentary Toggle Switch
(White)
1800383

Momentary Toggle Switch
(Ivory)
1800382

Standard Metal Toggle Switchplate
(White)
9011954

Standard Metal Toggle Switchplate
(Ivory)
9011953

Plastic Toggle Switchplate
(White)
9011963

Plastic Toggle Switchplate
(Ivory)
9011962

DECORATOR PADDLE SWITCHES & SWITCHPLATES

Maintained Paddle Switch
(White)
1800374

Maintained Paddle Switch
(Ivory)
1800373

Momentary Paddle Switch
(White)
1800378

Momentary Paddle Switch
(Ivory)
1800377

Maintained Double Pole,
Double Throw Paddle Switch
(White)
1800375

Maintained Double Pole,
Double Throw Paddle Switch
(Ivory)
1800376

Single Gang Paddle Switchplate
(White)
9011967

Single Gang Paddle Switchplate
(Ivory)
9011966

SPECIALTY SWITCH

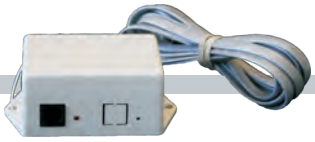
5 position Momentary/Maintained Rocker Switch
Switchplate included
(White)
1800388

CONTROL ACCESSORIES

WIRED AC CONTROLS & SWITCHES

GROUP CONTROL SYSTEM II (GCS II)

Group Control System II (GCS II)
1810476



GCS II RTS Radio Receiver
1810854

STANDARD INDIVIDUAL GROUP CONTROL (IGC) (110V AC)

IGC II
(Single Motor)
1810522

IGC 3N1
(3 Motors)
1810523

INDIVIDUAL GROUP CONTROL II (IGC II) (110V AC)

IGC II (Single Motor)
1810535

IGC II 3N1 (3 Motors)
1810536

IGC AND IGC II OPTIONS (110V AC)

IGC II Gang Electric Box
3.5" Deep
9013166

IGC RTS Radio Receiver
1810481

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F: (905) 238-1491

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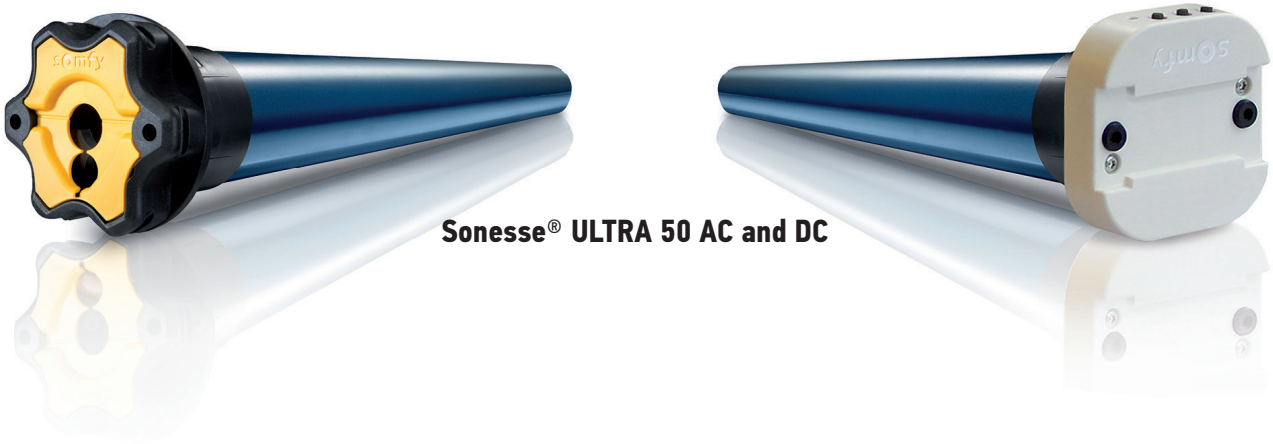
500 Series

Databook



Sonesse® ULTRA 50 AC and DC

somfy® Building happiness

Why Somfy?

Somfy is the leading global manufacturer of strong, quiet, motors with electronic and app controls for interior and exterior window coverings. Over 270 million users worldwide enjoy the more than 150 million motors produced since 1980. For more than four decades, Somfy engineers have designed products for both the commercial and residential markets to motorize window coverings such as interior shades, wood blinds, draperies, awnings, rolling shutters, exterior solar screens and projection screens. Somfy motorization systems are easily integrated with security, HVAC and lighting systems, providing total home or building automation.

Somfy has a committed customer support team comprised of Somfy motor and control specialists available for assistance:

Somfy Corporate Headquarters
800-22-SOMFY (76639)

General Customer Service
877-210-5327
CustomerService_us@somfy.com

Standard Purchase Order
Ordering_us@somfy.com

Rush Purchase Order
ExpeditedShippingOrders_us@somfy.com

Accounting Inquiries
AccountsReceivable@somfy.com

Technical Support
877-233-0019
TechnicalSupport_us@somfy.com

Warranty Claim Requests
us_Return@somfy.com

- Somfy has a production capacity of more than 70,000 motors per day.
- Somfy motors have over 600 standards approvals worldwide.
- Somfy has certified over 100 patents since the year 2000.
- Every Somfy motor goes through an extensive quality assurance process including testing in extreme environmental conditions, for electrostatic discharge, mechanical shock, and high life cycle.
- Somfy has a network of 15,000 trained professional installers throughout the world.

Somfy operates in 60 countries, with 76 subsidiaries, and 60 agencies spread across 5 continents. With 8 production centers, Somfy is an efficient and reactive industry leader. Thanks to its strict quality standards, Somfy is able to satisfy the needs of over 270 million users worldwide.

Somfy understands that training and support are critical to success. Somfy's Expert Program provides a platform for those who want to enhance their expertise of Somfy motorization and control solutions. Contact Somfy directly or visit **somfysystems.com/expert-program** to learn more.

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Acmeda® is a registered trademark of Acmeda International Group Incorporated
RollEase® is a registered trademark of RollEase® Inc. - Stamford, CT.
ZMC® is a registered trademark of ZMC® Window Coverings
Z-Wave® is a registered trademark of Zensys, Inc. and its subsidiares
ZigBee® is a registered trademark of ZigBee Alliance
iPad® and iPhone® are registered trademarks of Apple, Inc.

Somfy's 500 Series Motor Range

MOTOR IDENTIFICATION KEY

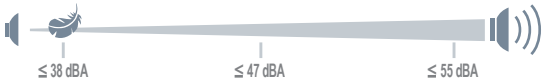
Sonesse® RTS 510 S 2 RH

Control Technology (If other than Standard Wired)	Motor Diameter	Torque (Nm)	Speed	Range-Voltage	Motor Head Style (If other than Standard Star Head)
RTS = Radio Technology Somfy® DCT = Dry Contact RS485 = Somfy Digital Network™	4 for 40mm 5 for 50mm 6 for 60mm		R: Rolling Shutter = 14 rpm A: Awning = 20-24 rpm S: Screen = 32-38 rpm	120V AC Range 2 230V Range 1	RH = Round Head PA = Progressive Adjustment PS = Progressive Adjustment Switch CMO = Compact Manual Override

SOMFY DESIGNED FOR SILENCE - Quietness Scale

Somfy DESIGNED FOR SILENCE

The Sonesse® range of motors are rated according to their quietness. The volume scale below appears on all Sonesse range specification pages and designates the motor's level of sound output.



SOMFY TECHNOLOGIES

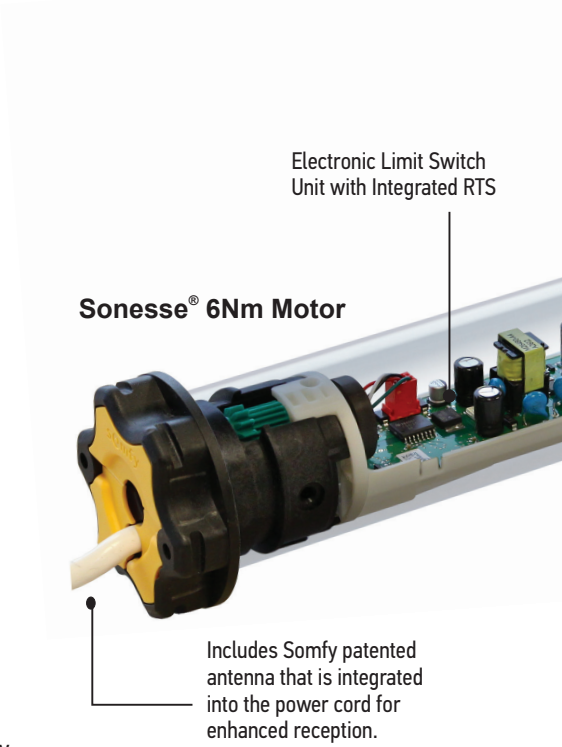
Radio Technology Somfy
Radio Technology Somfy® (RTS) allows wireless radio control of motorized applications via the RTS family of controls.

Wired Technology
Offers control via standard AC switching.

Dry Contact
Is a dry contact input for a basic low voltage control.

IR-Infrared
By simply plugging an IR sensor to the control input, DCT can be immediately controlled by any Somfy IR remote without any configuration operation.

RS485
RS485 is another control method that uses a two-wired bus. Due to the open source nature of the RS485 protocol, many building management systems and home automation systems use this protocol to communicate to devices. Systems that use the RS485 connection can be programmed to Somfy RS485 motors or controllers to operate the installation.



As with all Somfy motors and controls, our motors are backed by a 5 year warranty.

WHY CHOOSE SOMFY'S SONESSE® RANGE?

Quiet and Strong:

- Stronger torque for larger applications including multi-banded/ coupled window coverings
- *Uniform quiet operation in both the up and down directions under 40dBA

Wide Range of Solutions:

- Interior and exterior applications
- Residential and commercial markets
- RTS, wired and RS485 integrated network options

Simplified Fabrication and Installation:

- Utilizes existing fabrication methods on the market today
- Compatible with leading industry hardware solutions
- Can be installed in 6 different orientations
- Advanced design enables simple "Snap-On" connection for roller tube adaptors

Streamlined Programming:

- RTS limits set via radio transmitter
- Wired simple push-button limit setting
- Improved RS485 commissioning process:
  - Motor auto discovery
  - Motor position feedback
  - Compatible with Somfy's animeo® IP system
  - Backward compatibility provides seamless integration with existing Somfy Digital Network projects
  - Multiple intermediate positions
  - Collision detection

Superior Quality:

- Motors undergo rigorous endurance, acoustic, radio, mechanical, electrical and safety tests in our 65,000 sq. ft. quality control and testing facility
- More than 600 approved standards worldwide
- Manufactured and sold over 150 million motors

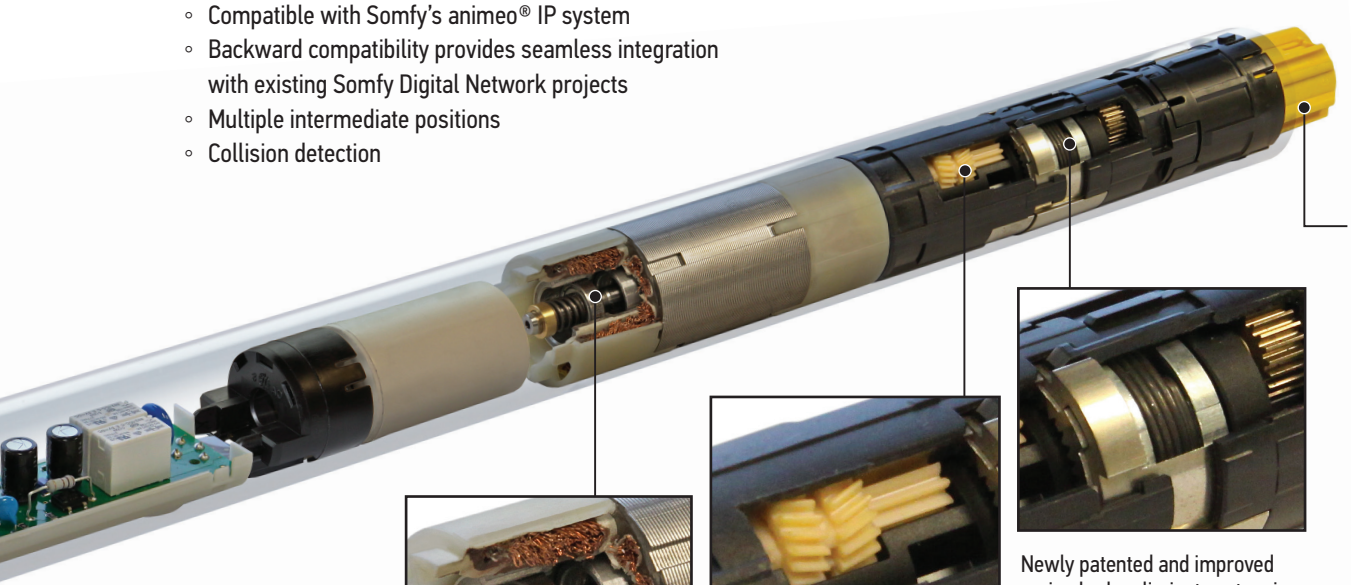
Simple Electrical Connection:

- Available with UL approved 5 -15P NEMA plug-in motor cable
- Plug-in option eliminates the need for an electrician
- Motor cable length can be customized to meet your installation requirements.

All Somfy Motors are UL and CSA Recognized

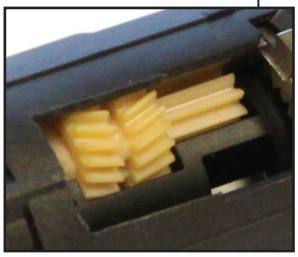
- All SOMFY motors are UL Recognized and can be found under the following file numbers:

E60495, E60888, E63714

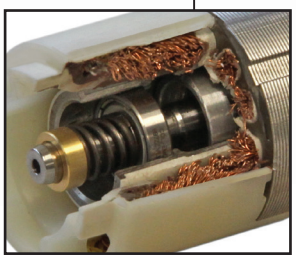


Compatible with all Somfy Snap-on drive wheels.

Newly patented and improved spring brake eliminates stopping and tilting noise.



Innovative and patented helical gearbox ensures uniform sound quality in both up and down directions.



A newly patented, asynchronous, high quality, maintenance-free motor that provides perfect rotary part alignment supported by roller bearings.

- According to standards ISO 3741 NF 31022 in dBA ref 1pW at nominal torque without end product.

Sonesse® ULTRA 50 RA

Star Head and Round Head Motors (rapid limit adjustment)

506A2 1002558
506A2RH 1002560

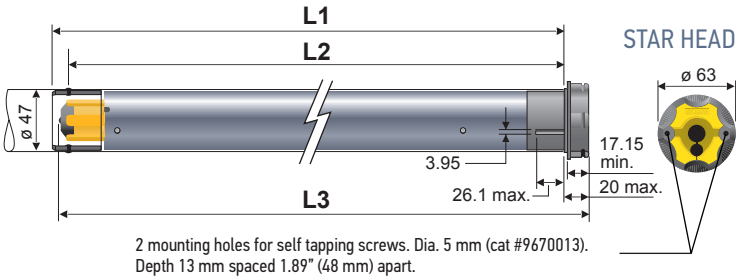
Somfy DESIGNED FOR SILENCE

Offers control via power switching

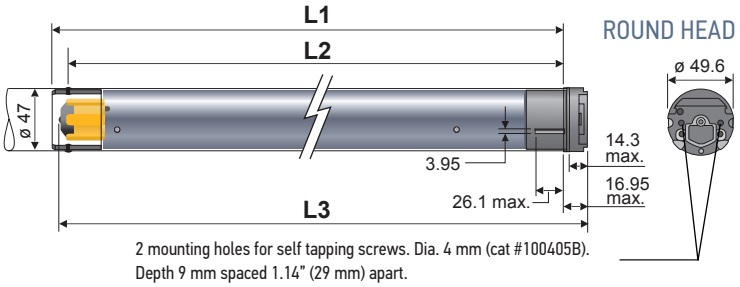
Technical Features

Voltage Supply	120V AC, 60Hz
Index Protection Rating	506 - IP 31 (interior use)
Limit Switch Type	Rapid Adjustment RA
Limit Switch Capacity	46 Turns
Temperature Working Range	506: 32°F to 140°F (0°C to 60°C) Interior use
Insulation Class	Class 1 for 120V AC
Wiring	Do not parallel wire.

Dimensions



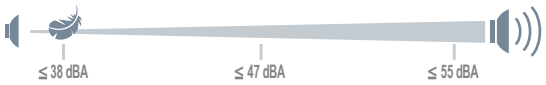
2 mounting holes for self tapping screws. Dia. 5 mm (cat #9670013).
Depth 13 mm spaced 1.89" (48 mm) apart.



2 mounting holes for self tapping screws. Dia. 4 mm (cat #100405B).
Depth 9 mm spaced 1.14" (29 mm) apart.

Specifications

Torque	6 Nm
*** Minimum Torque**	0.4 Nm
Nominal Voltage	120V / 60Hz
Rated Current	.95A
Speed	24 rpm
Thermal Protection	4 minutes
****Sound Level**	≤ 38 dBA



Dimensions

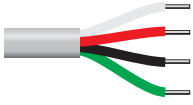
L1	30.8 in. (783 mm)
L2	30.3 in. (769 mm)
L3	SH 31.4 in. (798 mm) RH 31.3 in. (795 mm)
SJTW Power Cable Length	9.8 ft. (3 m)

*** Minimum Torque:** Minimum application weight to ensure smooth operation.
**** Sound Level:** According to standards ISO 3741 NF 31022 in dBA ref 1pW at nominal torque without end product.
Fabrication Recommendations:

- Operational noise level is reduced when motor, tube, and mechanical accessories are properly adapted to motorized applications.
- Free play must be minimized between the accessories and the end product tube to ensure quiet performance of the motor. Due to the variances of standard aluminum extrusion tolerances, it is recommended to screw the drive wheel & pin end to immobilize them and ensure quiet performance throughout the life of the product.
- Interior Tube Diameter (ID) > 47 mm must be respected.
- A motor crown adaptor between motor and end product tube is required to ensure concentric operation of motor.
- 500 Series Drive Stop and Screw (9910004) is recommended to prevent noise and drive wheel separation from motor shaft.
- Somfy Soft Clip Drive Wheel Adaptors (brown in color) are not recommended.

Type of power cable

Wired
120V AC / 60Hz
4 conductor cable



white = neutral
red = direction 1
black = direction 2
green = ground

Sonesse® 50 RA

Star Head and Round Head Motors (rapid limit adjustment)

506S2	1001814	**506S2RH**	1001812
510S2	1001813	**510S2RH**	1001810

Somfy DESIGNED FOR SILENCE

cULus

5 year Warranty

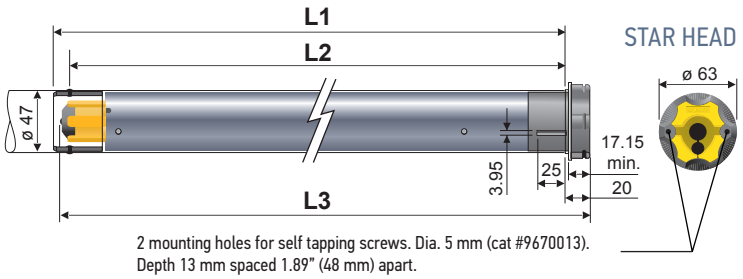
WIRED TECHNOLOGY

Offers control via power switching

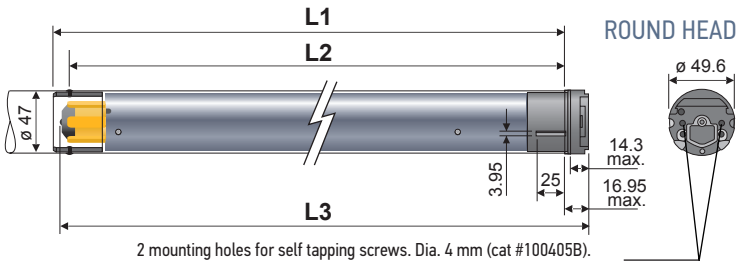
Technical Features

Voltage Supply	120V AC, 60Hz
Index Protection Rating	506 - IP 31 (interior use) 506/510 - IP 44 (interior & exterior use)
Limit Switch Type	Rapid Adjustment RA
Limit Switch Capacity	46 Turns
Temperature Working Range	506/510: -4°F to 158°F (-20°C to 70°C) Interior and exterior use
Insulation Class	Class 1 for 120V AC
Wiring	Do not parallel wire.

Dimensions



2 mounting holes for self tapping screws. Dia. 5 mm (cat #9670013).
Depth 13 mm spaced 1.89" (48 mm) apart.



2 mounting holes for self tapping screws. Dia. 4 mm (cat #100405B).
Depth 9 mm spaced 1.14" (29 mm) apart.

Dimensions	506	510
L1	23.7 in. (603 mm)	23.7 in. (603 mm)
L2	23.2 in. (590 mm)	23.2 in. (590 mm)
L3	SH 24.3 in. (616 mm) RH 24.1 in. (613 mm)	SH 24.3 in. (616 mm) RH 24.1 in. (613 mm)
Cable Length	6.5 ft. (2 m)	6.5 ft. (2 m)

Specifications

	506	510
Torque	6 Nm	10 Nm
Nominal Voltage	120V / 60Hz	120V / 60Hz
Rated Current	1.2A	1.67A
Speed	32 rpm	32 rpm
Thermal Protection	4 minutes	4 minutes
***Sound Level**	≤ 45 dBA	≤ 47 dBA

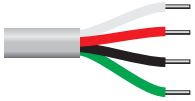
*** Sound Level:**
According to standards ISO 3741 NF 31022 in dBA ref 1pW at nominal torque without end product.

Fabrication Recommendations:

- Operational noise level is reduced when motor, tube, and mechanical accessories are properly adapted to motorized applications.
- Free play must be minimized between the accessories and the end product tube to ensure quiet performance of the motor.
- Interior Tube Diameter (ID) > 47 mm must be respected.
- A motor crown adaptor between motor and end product tube is required to ensure concentric operation of motor.
- 500 Series Drive Stop and Screw (9910004) is recommended to prevent noise and drive wheel separation from motor shaft.
- Somfy Soft Clip Drive Wheel Adaptors (brown in color) are not recommended.

Type of power cable

Wired
120V AC / 60Hz
4 conductor cable



white = neutral
red = direction 1
black = direction 2
green = ground

Sonesse® 50 PA & PS

(Progressive Limit Adjustment)

506S2PA 1001801 **506S2PS** 1001800
510S2PA 1002323 **510S2PS** 1002324

Somfy DESIGNED FOR SILENCE

cULus

5 Year Warranty

WIRED TECHNOLOGY

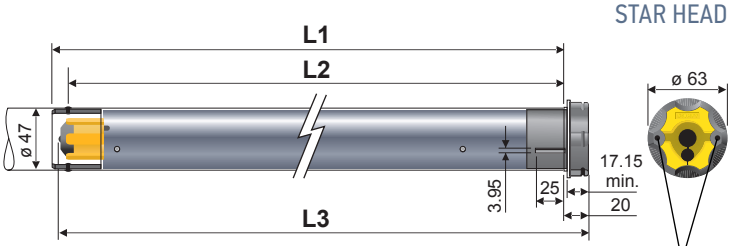
Offers control via power switching

Technical Features

Voltage Supply	120V AC, 60Hz
Index Protection Rating	506/510: IP44 (exterior use)
Limit Switch Type	Progressive Adjustment PA
Limit Switch Capacity	29 Turns
Temperature Working Range	506/510: -4°F to 140°F (-20°C to 60°C) exterior use
Insulation Class	Class 1 for 120V AC
Wiring	Do not parallel wire.

Dimensions

STAR HEAD



2 mounting holes for self tapping screws. Dia. 5 mm (cat #9670013).
Depth 13 mm spaced 1.89" (48 mm) apart.

Dimensions	506S2PA	506S2PS**	510S2PA	510S2PS**
L1	23.74 in. (603 mm)	23.74 in. (603 mm)	23.74 in. (603 mm)	23.74 in. (603 mm)
L2	23.23 in. (590 mm)	23.23 in. (590 mm)	23.23 in. (590 mm)	23.23 in. (590 mm)
L3	24.25 in. (616 mm)	24.25 in. (616 mm)	24.25 in. (616 mm)	24.25 in. (616 mm)
Cable Length	5 in. (.12 m)	5 in. (.12 m)	5 in. (.12 m)	5 in. (.12 m)

Specifications

	506S2PA	506S2PS**	510S2PA	510S2PS**
Torque	6 Nm	6 Nm	10 Nm	10 Nm
Nominal Voltage	120V / 60Hz	120V / 60Hz	120V / 60Hz	120V / 60Hz
Rated Current	1.2A	1.2A	1.67A	1.67A
Speed	32 rpm	32 rpm	32 rpm	32 rpm
Thermal Protection	4 minutes	4 minutes	4 minutes	4 minutes
*Sound Level	≤ 45 dBA	≤ 45 dBA	≤ 47.2 dBA	≤ 47.2 dBA

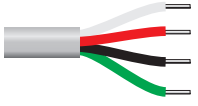
*** Sound Level:** According to standards ISO 3741 NF 31022 in dBA ref 1pW at nominal torque without end product.

Fabrication Recommendations:

- Operational noise level is reduced when motor, tube, and mechanical accessories are properly adapted to motorized applications.
- Free play must be minimized between the accessories and the end product tube to ensure quiet performance of the motor.
- Interior Tube Diameter (ID) > 47 mm must be respected.
- A motor crown adaptor between motor and end product tube is required to ensure concentric operation of the motor.
- 500 Series Drive Stop and Screw (9910004) is recommended to prevent noise and drive wheel separation from the motor shaft.
- Somfy Soft Clip Drive Wheel Adaptors (brown in color) are not recommended.

Type of power cable PA

Wired
120V AC / 60Hz
4 conductor cable

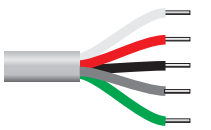


white = neutral
red = direction 1
black = direction 2
green = ground

Type of power cable PS

****Progressive Limit Adjustment with external power switching capability when limit is reached.

Wired
120V AC / 60Hz
5 conductor cable



white = neutral
red = direction 1
black = direction 2
grey = power switching
green = ground

Sonesse® ULTRA 50 RTS

Star Head and Round Head Motors

506A2 1002562
506A2RH 1002564

Somfy DESIGNED FOR SILENCE

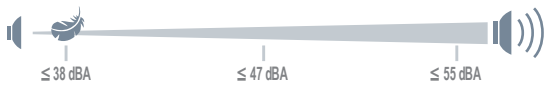
Radio Technology Somfy (RTS) allows for wireless radio control of motorized window coverings via the RTS family of controls.

Technical Features

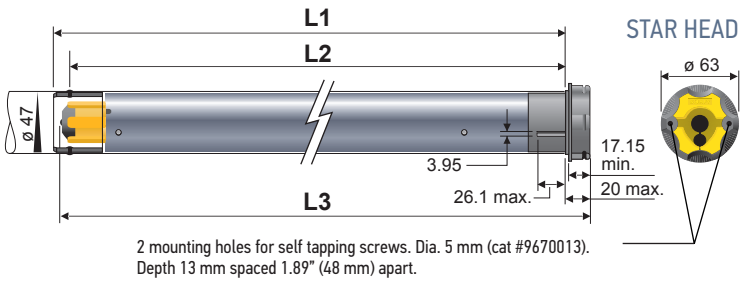
Voltage Supply	120V AC, 60Hz
Index Protection Rating	IP 31 (interior use)
Limit Switch Type	Electronic RTS
Limit Switch Capacity	250 Turns
Temperature Working Range	32°F to 140°F (0°C to 60°C) (Interior use only)
Insulation Class	Class 1 for 120V AC
Antenna	Integrated into power cord. Power cord must be at least 12 inches and must not come in contact with metal.
Wiring	Parallel wiring allowed in accordance with NEC and local electrical codes.

Specifications

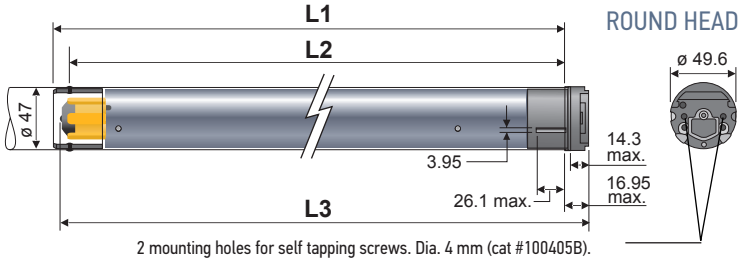
Torque	6 Nm
*** Minimum Torque**	0.4 Nm
Nominal Voltage	120V / 60Hz
Rated Current	.95A
Speed	24 rpm
Thermal Protection	4 minutes
Radio Frequency	433.42 MHz
****Sound Level**	≤ 38 dBA



Dimensions



2 mounting holes for self tapping screws. Dia. 5 mm (cat #9670013). Depth 13 mm spaced 1.89" (48 mm) apart.



2 mounting holes for self tapping screws. Dia. 4 mm (cat #100405B). Depth 9 mm spaced 1.14" (29 mm) apart.

Dimensions

L1	31.8 in. (808 mm)
L2	31.3 in. (795 mm)
L3	SH 32.4 in. (823 mm) RH 32.3 in. (820 mm)
SJTW Power Cable Length	9.8 ft. (3 m)

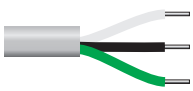
Optional cables with NEMA plugs available in 3 ft, 6 ft, 10 ft, 12 ft, 18 ft, 24 ft.

*** Minimum Torque:** Minimum application weight to ensure smooth operation.
**** Sound Level:** According to standards ISO 3741 NF 31022 in dBA ref 1pW at nominal torque without end product.
Fabrication Recommendations:

- Operational noise level is reduced when motor, tube, and mechanical accessories are properly adapted to motorized applications.
- Free play must be minimized between the accessories and the end product tube to ensure quiet performance of the motor. Due to the variances of standard aluminum extrusion tolerances, it is recommended to screw the drive wheel & pin end to immobilize them and ensure quiet performance throughout the life of the product.
- Interior Tube Diameter (ID) > 47 mm must be respected.
- A motor crown adaptor between motor and end product tube is required to ensure concentric operation of motor.
- 500 Series Drive Stop and Screw (9910004) is recommended to prevent noise and drive wheel separation from motor shaft.
- Somfy Soft Clip Drive Wheel Adaptors (brown in color) are not recommended.

Type of power cable

RTS
120V AC / 60Hz
3 conductor cable



white = neutral
black = hot
green = ground

Sonesse® ULTRA 50 DC RTS

New Square Head

504A8 1134023

Somfy DESIGNED FOR SILENCE

UL LISTED

5 year Warranty somfy

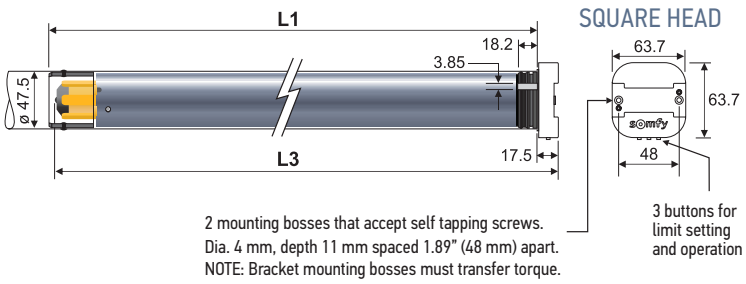
RTS Radio Technology Somfy

Radio Technology Somfy (RTS) allows for wireless radio control of motorized window coverings via the RTS family of controls.

Technical Features

NEW Sleep Mode	New feature that allows for advanced programming and grouping.
Voltage Supply	24V DC
Index Protection Rating	IP 20 (interior)
Limit Switch Type	Electronic
Limit Switch Capacity	38 Turns
Temperature Working Range	32°F to 140°F (0°C to 60°C) (interior use only)
Insulation Class	Class 3
Wiring	In accordance with NEC and local electrical codes.
Power Supply	Use only Somfy's power supplies to maintain UL listing requirements and guarantee motor's performance.

Dimensions



Dimensions

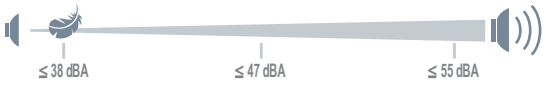
L1	30.7 in. (780 mm)
L3	31.5 in. (800 mm)
Data & Power Cable Length	10 in. (250 mm)

Specifications

*** Minimum Torque:** Minimum application weight to ensure smooth operation.

**** Sound Level:** According to standards ISO 3741 NF 31022 in dBA ref 1pW at nominal torque without end product.

Torque	4 Nm
*** Minimum Torque**	0.4 Nm
Nominal Voltage	24V DC
Rated Current	1.5A
Speed	10-25 Adjustable
Thermal Protection	5 minutes
****Sound Level**	≤ 38 dBA

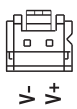


Fabrication Recommendations:

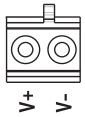
- Operational noise level is reduced when the motor, tube, and mechanical accessories are properly adapted to motorized applications.
- Free play must be minimized between the accessories and the end product tube to ensure quiet performance of the motor.
- Due to the variances of standard aluminum extrusion tolerances, it is recommended to screw the drive wheel & pin end to immobilize them and ensure quiet performance throughout the life of the product.
- Interior Tube Diameter (ID) > 47 mm must be respected.
- A motor crown adaptor between motor and end product tube is required to ensure concentric operation of the motor.
- 500 Series Drive Stop and Screw (9910004) is recommended to prevent noise and drive wheel separation from the motor shaft.
- Somfy Soft Clip Drive Wheel Adaptors (brown in color) are not recommended.

Pigtail: Data and Power (Included with every motor. Also available separately, part # 9020005).

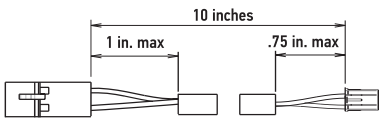
JST to Motor



Weidmuller Connects to Network

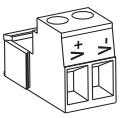


Cable Detail View



Connector Markings Detail View

Font: Ariel
Height: 2.3 mm
Color: Black



Maximum Power Cable Length (to guarantee characteristics)

GAUGE	LENGTH
14 AWG	240 ft.
16 AWG	150 ft.
18 AWG	100 ft.

Sonesse® 50 RTS

Star Head and Round Head Motors

506S2	1001809	**506S2RH**	1001806
510S2	1001807	**510S2RH**	1001805

Somfy DESIGNED FOR SILENCE

cULus

5 year Warranty somfy

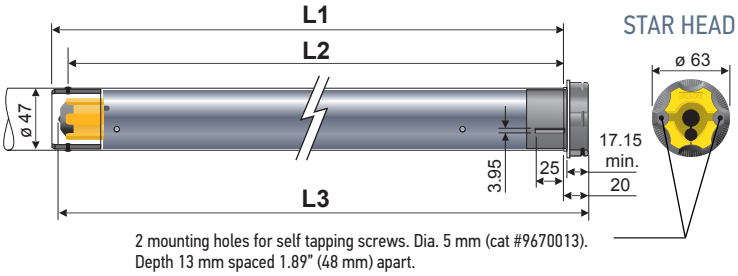
RTS Radio Technology Somfy®

Radio Technology Somfy (RTS) allows for wireless radio control of motorized window coverings via the RTS family of controls.

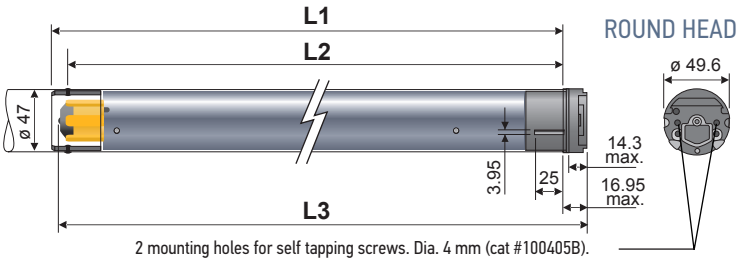
Technical Features

Voltage Supply	120V AC, 60Hz
Index Protection Rating	506 - IP 31 (interior use) 506/510 - IP 44 (interior & exterior use)
Limit Switch Type	Electronic RTS
Limit Switch Capacity	250 Turns
Temperature Working Range	506/510: -4°F to 158°F (-20°C to 70°C) interior and exterior use
Insulation Class	Class 1 for 120V AC
Antenna	Integrated into power cord. Power cord must be at least 12 inches and must not come in contact with metal.
Wiring	Parallel wiring allowed in accordance with NEC and local electrical codes.

Dimensions



2 mounting holes for self tapping screws. Dia. 5 mm (cat #9670013).
Depth 13 mm spaced 1.89" (48 mm) apart.



2 mounting holes for self tapping screws. Dia. 4 mm (cat #100405B).
Depth 9 mm spaced 1.14" (29 mm) apart.

Specifications

	506	510
Torque	6 Nm	10 Nm
Nominal Voltage	120V / 60Hz	120V / 60Hz
Rated Current	1.2A	1.67A
Speed	32 rpm	32 rpm
Thermal Protection	4 minutes	4 minutes
Radio Frequency	433.42 MHz	433.42 MHz
***Sound Level**	≤ 45 dBA	≤ 47 dBA

Dimensions	506	510
L1	25.7 in. (653 mm)	25.7 in. (653 mm)
L2	25.2 in. (640 mm)	25.2 in. (640 mm)
L3	SH 26.2 in. (666 mm) RH 26.1 in. (663 mm)	SH 26.2 in. (666 mm) RH 26.1 in. (663 mm)
Cable Length	6.5 ft. (2 m)	6.5 ft. (2 m)

Optional cables with NEMA plugs available in 3 ft, 6 ft, 10 ft, 12 ft, 18 ft, 24 ft.

*** Sound Level:**

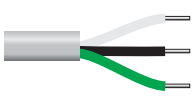
According to standards ISO 3741 NF 31022 in dBA ref 1pW at nominal torque without end product.

Fabrication Recommendations:

- Operational noise level is reduced when motor, tube, and mechanical accessories are properly adapted to motorized applications.
- Free play must be minimized between the accessories and the end product tube to ensure quiet performance of the motor.
- Interior Tube Diameter (ID) > 47 mm must be respected.
- A motor crown adaptor between motor and end product tube is required to ensure concentric operation of motor.
- 500 Series Drive Stop and Screw (9910004) is recommended to prevent noise and drive wheel separation from motor shaft.
- Somfy Soft Clip Drive Wheel Adaptors (brown in color) are not recommended.

Type of power cable

RTS
120V AC / 60Hz
3 conductor cable



white = neutral
black = hot
green = ground

Sonesse® 50 DCT

Star Head Motors

506S2 1001804
510S2 1001803

Somfy DESIGNED FOR SILENCE

cULus

5 Year Warranty

IR DRY CONTACT

Motors that can be controlled via contact closure (dry contact) or infrared.

Technical Features

Voltage Supply	120V AC, 60Hz
Index Protection Rating	IP 44
Limit Switch Type	Electronic
Limit Switch Capacity	300 Turns
Temperature Working Range	-4°F to 140°F (-20°C to 60°C)
Insulation Class	Class 1 for 120V AC
Wiring	Parallel wiring allowed in accordance with NEC and local electrical codes.

Specifications

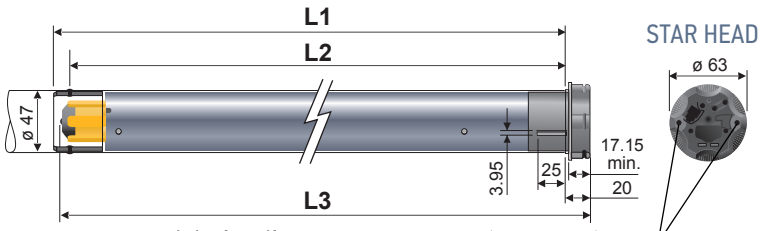
Torque	6 Nm	10 Nm
Nominal Voltage	120V / 60Hz	120V / 60Hz
Rated Current	1.2A	1.66A
Speed	32 rpm	32 rpm
Thermal Protection	4 minutes	4 minutes
***Sound Level**	≤ 45 dBA	≤ 47.2 dBA

*** Sound Level:** According to standards ISO 3741 NF 31022 in dBA ref 1pW at nominal torque without end product.

Fabrication Recommendations:

- Operational noise level is reduced when motor, tube, and accessories are properly adapted to motorized applications.
- Free play must be minimized between the accessories and the end product tube to ensure quiet performance of the motor.
- Interior Tube Diameter (ID) > 47 mm must be respected.
- A motor crown adaptor between motor and end product tube is required to ensure concentric operation of the motor.
- 500 Series Drive Stop and Screw (9910004) is recommended to prevent noise and drive wheel separation from the motor shaft.
- Somfy Soft Clip Drive Wheel Adaptors (brown in color) are not recommended.

Dimensions

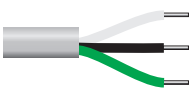


2 mounting holes for self tapping screws. Dia. 5 mm (cat #9670013). Depth 13 mm spaced 1.89" (48 mm) apart.

Dimensions	506	510
L1	25.71 in. (653 mm)	26.49 in. (673 mm)
L2	25.19 in. (640 mm)	25.98 in. (660 mm)
L3	26.22 in. (666 mm)	27.01 in. (686 mm)
Power Cable Length	1.4 ft. (.44 m)	1.4 ft. (.44 m)
Data Cable Length	1 ft. (.3 m) 4 wire	1 ft. (.3 m) 4 wire

Type of power cable

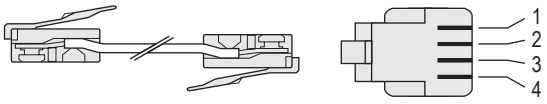
DCT
120V AC / 60Hz
3 conductor cable



white = neutral
black = hot
green = ground

Data Cable

RJ9 Pin Outs



PIN COLOR	4 RED	3 BLUE	2 WHITE	1 YELLOW
Dry Contact	UP	GND	-	DOWN
IR Contact	IR	GND	+5V	-

Optional Data Cables:

DCT white data cable - 1 ft. (.3 m) Part #9209060
DCT white data cable - 5 ft. (1.5 m) Part #9209061
DCT white data cable - 25 ft. (7.5 m) Part #9012343
DCT white data cable - 50 ft. (15 m) Part #9012344

Sonesse® ULTRA 50 RS485

Star Head Motor

506A2 1002566

Somfy DESIGNED FOR SILENCE

Somfy Digital Network RS485

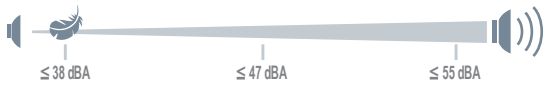
A new generation of intelligent motors that are controlled and monitored via Somfy Digital Network solutions and animeo® IP total solar management system.

Technical Features

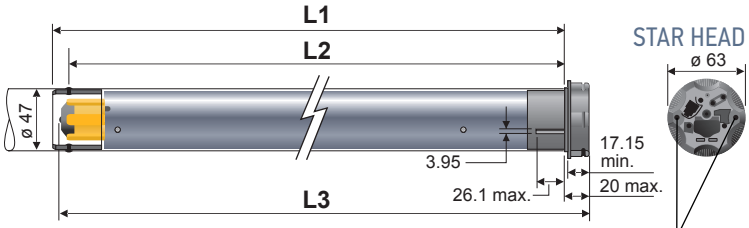
Voltage Supply	120V AC, 60Hz
Index Protection Rating	IP 31 (interior)
Limit Switch Type	Electronic
Limit Switch Capacity	300 Turns
Temperature Working Range	32°F to 140°F (0°C to 60°C) (interior use only)
Insulation Class	Class 1 for 120V AC
Wiring	Parallel wiring allowed in accordance with NEC and local electrical codes.

Specifications

Torque	6 Nm
*** Minimum Torque**	0.4 Nm
Nominal Voltage	120V / 60Hz
Rated Current	.95A
Speed	24 rpm
Thermal Protection	4 minutes
****Sound Level**	≤ 38 dBA



Dimensions



2 mounting holes for self tapping screws. Dia. 5 mm (cat #9670013). Depth 13 mm spaced 1.89" (48 mm) apart.

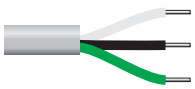
Dimensions

L1	33.0 in. (838 mm)
L2	32.5 in. (825 mm)
L3	33.6 in. (853 mm)
SJTW Power Cable Length	9.8 ft. (3 m)
Data Cable (must be ordered separately)	Customizable and available in various lengths

Optional cables with NEMA plugs available in 3 ft, 6 ft, 10 ft, 12 ft, 18 ft, 24 ft.

Type of power cable

120V AC / 60Hz
3 conductor cable



white = neutral
black = hot
green = ground

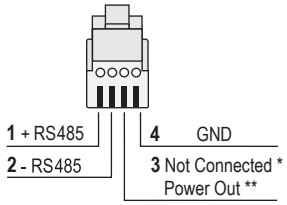
*** Minimum Torque:** Minimum application weight to ensure smooth operation.
**** Sound Level:** According to standards ISO 3741 NF 31022 in dBA ref 1pW at nominal torque without end product.

Fabrication Recommendations:

- Operational noise level is reduced when motor, tube, and mechanical accessories are properly adapted to motorized applications.
- Free play must be minimized between the accessories and the end product tube to ensure quiet performance of the motor. Due to the variances of standard aluminum extrusion tolerances, it is recommended to screw the drive wheel & pin end to immobilize them and ensure quiet performance throughout the life of the product.
- Interior Tube Diameter (ID) > 47 mm must be respected.
- A motor crown adaptor between motor and end product tube is required to ensure concentric operation of motor.
- 500 Series Drive Stop and Screw (9910004) is recommended to prevent noise and drive wheel separation from motor shaft.
- Somfy Soft Clip Drive Wheel Adaptors (brown in color) are not recommended.

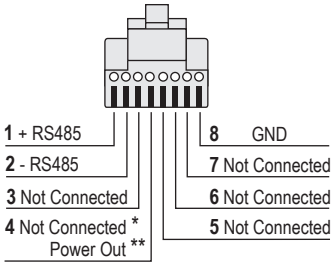
Data Cable: RJ9/RJ45 (sold separately)

RJ9 connects to motor



* Data cable (black) for animeo IP networks
** Data cable (grey) for powering external modules

RJ45 connects to network



4 Cond. 26AWG modular cable with RJ9 on one end and RJ45 other end - (RTS, Z-Wave®, ZigBee modules)

GREY WITH POWER OUT

2.5 ft. long	#9018545
8 ft. long	#9018546
12 ft. long	#9018547
24 ft. long	#9018548

4 Cond. 26AWG modular cable with RJ9 on one end and RJ45 other end - (SDN - animeo IP)

BLACK WITHOUT POWER OUT

2.5 ft. long	#9018541
8 ft. long	#9018542
12 ft. long	#9018543
24 ft. long	#9018544

Visit **somfysystems.com/sdn-2-0** for complete information on SDN 2.0 Bus Distribution Products.

Sonesse® ULTRA 50 DC RS485

New Square Head

504A8 1134022

Somfy DESIGNED FOR SILENCE

UL LISTED

5 year Warranty

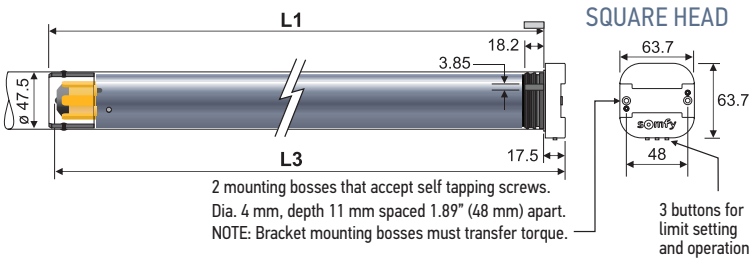
Somfy Digital Network RS485

A new generation of intelligent motors that are controlled and monitored via Somfy Digital Network solutions and animeo® IP total solar management system.

Technical Features

Voltage Supply	24V DC
Index Protection Rating	IP 20 (interior use)
Limit Switch Type	Electronic
Limit Switch Capacity	38 Turns
Temperature Working Range	32°F to 140°F (0°C to 60°C) (interior use only)
Insulation Class	Class 3
Wiring	In accordance with NEC and local electrical codes.
Power Supply	Use only Somfy's power supplies to maintain UL listing requirements and guarantee motor's performance.

Dimensions



Dimensions

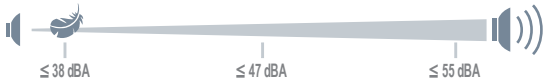
L1	30.7 in. (780 mm)
L3	31.5 in. (800 mm)
Data & Power Cable Length	10 in. (250 mm)

Specifications

*** Minimum Torque:** Minimum application weight to ensure smooth operation.

**** Sound Level:** According to standards ISO 3741 NF 31022 in dBA ref 1pW at nominal torque without end product.

Torque	4 Nm
*** Minimum Torque**	0.4 Nm
Nominal Voltage	24V DC
Rated Current	1.5A
Speed	10-25 Adjustable
Thermal Protection	5 minutes
****Sound Level**	≤ 38 dBA

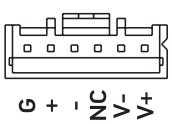


Fabrication Recommendations:

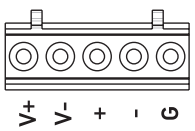
- Operational noise level is reduced when the motor, tube, and mechanical accessories are properly adapted to motorized applications.
- Free play must be minimized between the accessories and the end product tube to ensure quiet performance of the motor.
- Due to the variances of standard aluminum extrusion tolerances, it is recommended to screw the drive wheel & pin end to immobilize them and ensure quiet performance throughout the life of the product.
- Interior Tube Diameter (ID) > 47 mm must be respected.
- A motor crown adaptor between motor and end product tube is required to ensure concentric operation of the motor.
- 500 Series Drive Stop and Screw (9910004) is recommended to prevent noise and drive wheel separation from the motor shaft.
- Somfy Soft Clip Drive Wheel Adaptors (brown in color) are not recommended.

Pigtail: Data and Power (Included with every motor. Also available separately, part # 9020004).

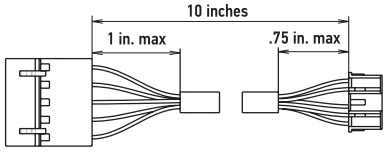
JST to Motor



Weidmuller Connects to Network

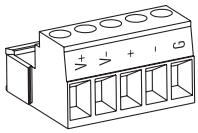


Cable Detail View



Connector Markings Detail View

Font: Ariel
Height: 2.3 mm
Color: Black



Maximum Power Cable Length (to guarantee characteristics)

GAUGE	LENGTH
14 AWG	240 ft.
16 AWG	150 ft.
18 AWG	100 ft.

Visit **somfysystems.com/sdn-2-0** for complete information on SDN 2.0 Bus Distribution Products.

Sonesse® 50 RS485

Star Head Motor

506S2 1002286
510S2 1002287

Somfy DESIGNED FOR SILENCE

cULus

5 Warranty year Somfy

Somfy Digital Network RS485

A new generation of intelligent motors that are controlled and monitored via Somfy Digital Network solutions and animeo® IP total solar management system.

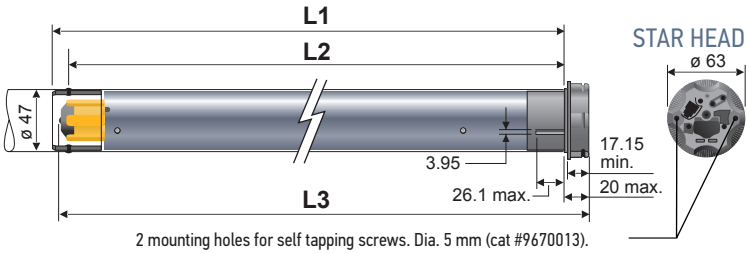
Technical Features

Voltage Supply	120V AC, 60Hz
Index Protection Rating	IP 44 (interior & exterior use)
Limit Switch Type	Electronic
Limit Switch Capacity	300 Turns
Temperature Working Range	-4°F to 158°F (-20°C to 70°C) (interior and exterior use)
Insulation Class	Class 1 for 120V AC
Wiring	Parallel wiring allowed in accordance with NEC and local electrical codes.

Specifications

	506	510
Torque	6 Nm	10 Nm
Nominal Voltage	120V / 60Hz	120V / 60Hz
Rated Current	1.2A	1.66A
Speed	32 rpm	32 rpm
Thermal Protection	4 minutes	4 minutes
***Sound Level**	≤ 45 dBA	≤ 47 dBA

Dimensions



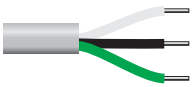
2 mounting holes for self tapping screws. Dia. 5 mm (cat #9670013). Depth 13 mm spaced 1.89" (48 mm) apart.

Dimensions	506	510
L1	25.7 in. (653 mm)	26.5 in .(673 mm)
L2	25.2 in. (640 mm)	26.0 in. (660 mm)
L3	26.2 in. (666 mm)	27.0 in. (686 mm)
SJTW Power Cable Length	9.8 ft. (3 m)	9.8 ft. (3 m)
Data Cable (must be ordered separately)	Customizable and available in various lengths	Customizable and available in various lengths

Optional cables with NEMA plugs available in 3 ft, 6 ft, 10 ft, 12 ft, 18 ft, 24 ft.

Type of power cable

120V AC / 60Hz
3 conductor cable



white = neutral
black = hot
green = ground

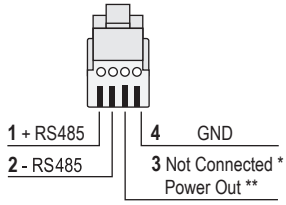
**** Sound Level:** According to standards ISO 3741 NF 31022 in dBA ref 1pW at nominal torque without end product.

Fabrication Recommendations:

- Operational noise level is reduced when motor, tube, and mechanical accessories are properly adapted to motorized applications.
- Free play must be minimized between the accessories and the end product tube to ensure quiet performance of the motor.
- Interior Tube Diameter (ID) > 47 mm must be respected.
- A motor crown adaptor between motor and end product tube is required to ensure concentric operation of motor.
- 500 Series Drive Stop and Screw (9910004) is recommended to prevent noise and drive wheel separation from motor shaft.
- Somfy Soft Clip Drive Wheel Adaptors (brown in color) are not recommended.

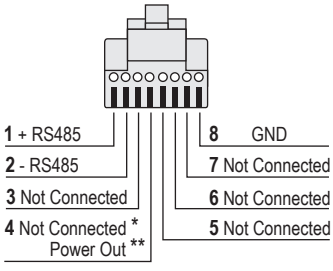
Data Cable: RJ9/RJ45 (sold separately)

RJ9 connects to motor



* Data cable (black) for animeo IP networks
** Data cable (grey) for powering external modules

RJ45 connects to network



4 Cond. 26AWG modular cable with RJ9 on one end and RJ45 other end - (RTS, Z-Wave®, ZigBee modules)

GREY WITH POWER OUT

2.5 ft. long	#9018545
8 ft. long	#9018546
12 ft. long	#9018547
24 ft. long	#9018548

4 Cond. 26AWG modular cable with RJ9 on one end and RJ45 other end - (SDN - animeo IP)

BLACK WITHOUT POWER OUT

2.5 ft. long	#9018541
8 ft. long	#9018542
12 ft. long	#9018543
24 ft. long	#9018544

Visit **somfysystems.com/sdn-2-0** for complete information on SDN 2.0 Bus Distribution Products.

LT50 RA

Star Head and Round Head Motors (rapid limit adjustment)

506S2	1032023	**525A2**	1043024	**506S2RH**	1032016
510S2	1037036	**530R2**	1045026	**510S2RH**	1037026
515A2	1039024	**535A2**	1047013	**515S2RH**	1039019
515S2	1039027	**540R2**	1049042	**520R2RH**	1041028
520R2	1041026	**550R2**	1051019	**525A2RH**	1043025

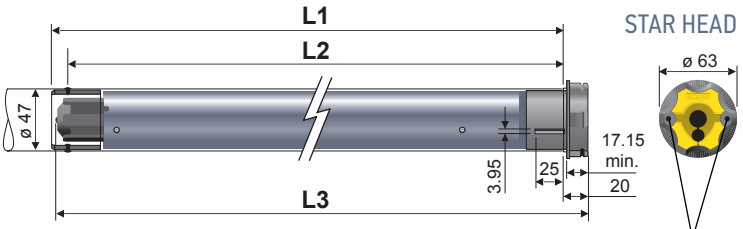
Offers control via power switching

Technical Features

Voltage Supply	120V AC, 60Hz
Index Protection Rating	IP 44
Limit Switch Type	Rapid Adjustment RA
Limit Switch Capacity	46 Turns
Temperature Working Range	14°F to 140°F (-10°C to 60°C)
Insulation Class	Class 1 for 120V AC
Wiring	Do not parallel wire.

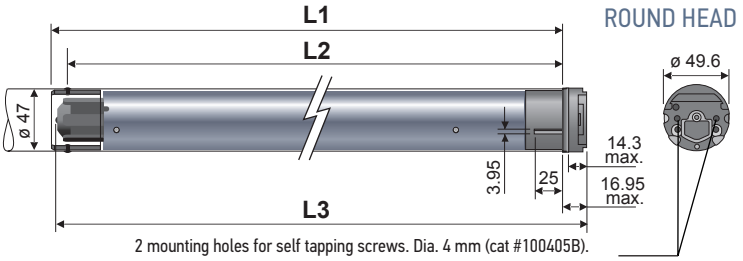
Dimensions

STAR HEAD



2 mounting holes for self tapping screws. Dia. 5 mm (cat #9670013).
Depth 13 mm spaced 1.89" (48 mm) apart.

ROUND HEAD



2 mounting holes for self tapping screws. Dia. 4 mm (cat #100405B).
Depth 9 mm spaced 1.14" (29 mm) apart.

Dimensions	506S2	510S2	515A2	515S2	520	525	530	535	540	550
L1	20.67 in. (525 mm)	21.85 in. (555 mm)	20.67 in. (525 mm)	23.82 in. (605 mm)	20.67 in. (525 mm)	21.85 in. (555 mm)	21.85 in. (555 mm)	23.82 in. (605 mm)	23.82 in. (605 mm)	23.82 in. (605 mm)
L2	20.10 in. (510 mm)	21.26 in. (540 mm)	20.10 in. (510 mm)	23.23 in. (590 mm)	20.10 in. (510 mm)	21.26 in. (540 mm)	21.26 in. (540 mm)	23.23 in. (590 mm)	23.23 in. (590 mm)	23.23 in. (590 mm)
L3 (Star Head only)	20.98 in. (533 mm)	22.17 in. (563 mm)	20.98 in. (533 mm)	24.13 in. (613 mm)	20.98 in. (533 mm)	22.17 in. (563 mm)	22.17 in. (563 mm)	24.13 in. (613 mm)	24.13 in. (613 mm)	24.13 in. (613 mm)
L3 (Round Head only)	20.87 in. (530 mm)	22.05 in. (560 mm)		24.02 in. (610 mm)	20.98 in. (533 mm)	22.17 in. (563 mm)				
Cable Length	6.5 ft. (2 m)									

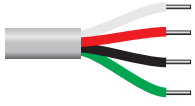
Optional cables available in 6 ft, 10 ft, 12 ft, 24 ft.

Specifications

	506S2	510S2	515A2	515S2	520	525	530	535	540	550
Torque	6 Nm	10 Nm	15 Nm	15 Nm	20 Nm	25 Nm	30 Nm	35 Nm	40 Nm	50 Nm
Nominal Voltage	120V / 60Hz									
Rated Current	.95A	1.3A	1.1A	1.8A	1.1A	1.6A	1.5A	2.1A	1.8A	2.1A
Speed	38 rpm	38 rpm	20 rpm	38 rpm	14 rpm	20 rpm	14 rpm	20 rpm	14 rpm	14 rpm
Thermal Protection	5 minutes									
Sound Level (RH only)	55 dBA	56 dBA	NA	56 dBA	NA	NA	NA	NA	NA	NA

Type of power cable

Wired 120V AC / 60 Hz 4 conductor cable



white = neutral
red = direction 1
black = direction 2
green = ground

LT50 RA CMO

(Rapid Limit Adjustment - Compact Manual Override)

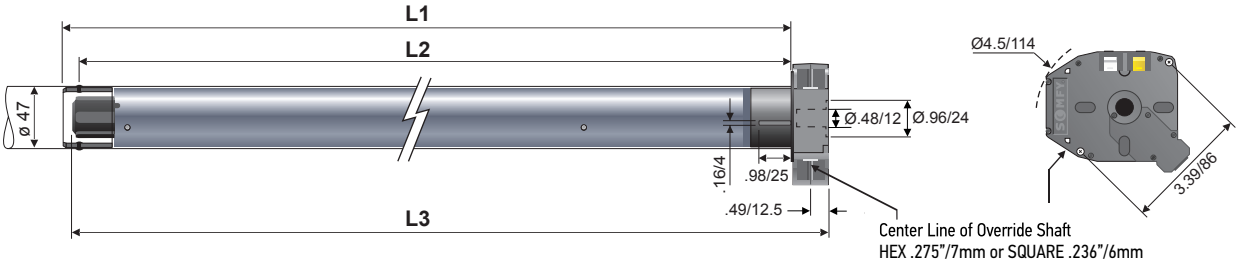
525A2 CMO	1043010	**540R2 CMO**	1049026
530R2 CMO	1045017	**550R2 CMO**	1051014
535A2 CMO	1047006		

Offers control via power switching

Technical Features

Voltage Supply	120V AC, 60Hz	**Temperature Working Range**	14°F to 104°F (-10°C to 40°C)
Index Protection Rating	IP 44	**Insulation Class**	Class 1 for 120V AC
Limit Switch Type	Rapid Adjustment (RA) (includes manual override)	**Wiring**	Do not parallel wire.
Limit Switch Capacity	34 Turns		

Dimensions



Dimensions	525A2 CMO	530R2 CMO	535A2 CMO	540R2 CMO	550R2 CMO
L1	23.39 in. (594 mm)	23.39 in. (594 mm)	26.14 in. (664 mm)	26.14 in. (664 mm)	26.14 in. (664 mm)
L2	22.80 in. (579 mm)	22.80 in. (579 mm)	25.55 in. (649 mm)	25.55 in. (649 mm)	25.55 in. (649 mm)
L3	23.90 in. (607 mm)	23.90 in. (607 mm)	26.65 in. (677 mm)	26.65 in. (677 mm)	26.65 in. (677 mm)
Cable Length	6 ft. (1.8 m)				

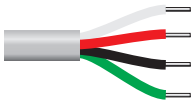
Optional cables available in 6 ft, 12 ft, 24 ft.

Specifications

	525A2 CMO	530R2 CMO	535A2 CMO	540R2 CMO	550R2 CMO
Torque	25 Nm	30 Nm	35 Nm	40 Nm	50 Nm
Nominal Voltage	120V / 60Hz				
Rated Current	1.6A	1.5A	2.1A	1.8A	2.1A
Speed	20 rpm	14 rpm	20 rpm	14 rpm	14 rpm
Thermal Protection	5 minutes				

Type of power cable

Wired
120V AC / 60Hz
4 conductor cable



white = neutral
red = direction 1
black = direction 2
green = ground

LT50 PA

(Progressive Limit Adjustment)

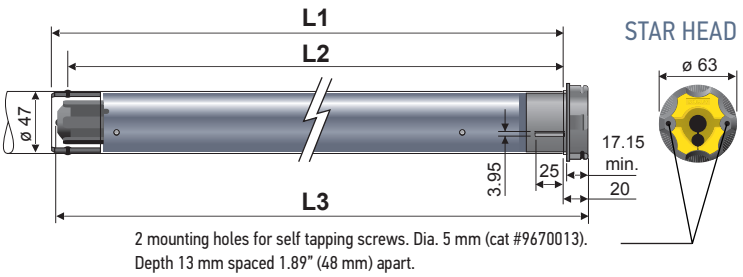
510R2PA 1037395
535A2PA 1047298

Offers control via power switching

Technical Features

Voltage Supply	120V AC, 60Hz
Index Protection Rating	IP 44
Limit Switch Type	Progressive Adjustment PA
Limit Switch Capacity	29 Turns
Temperature Working Range	14°F to 104°F (-10°C to 40°C)
Insulation Class	Class 1 for 120V AC
Wiring	Do not parallel wire.

Dimensions



2 mounting holes for self tapping screws. Dia. 5 mm (cat #9670013).
Depth 13 mm spaced 1.89" (48 mm) apart.

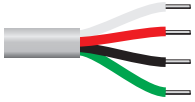
Dimensions	510R2PA	535A2PA
L1	19.88 in. (505 mm)	23.82 in. (605 mm)
L2	19.29 in. (490 mm)	23.23 in. (590 mm)
L3	20.19 in. (513 mm)	24.13 in. (613 mm)
Cable Length	5 in. (.12 m)	3.28 ft. (1 m)

Specifications

	510R2PA	535A2PA
Torque	10 Nm	35 Nm
Nominal Voltage	120V / 60Hz	
Rated Current	.7A	2.1A
Speed	14 rpm	20 rpm
Thermal Protection	5 minutes	
Sound Level	NA	NA

Type of power cable PA

Wired
120V AC / 60Hz
4 conductor cable



white = neutral
red = direction 1
black = direction 2
green = ground

LT50 Altus® RTS

Star Head and Round Head Motors

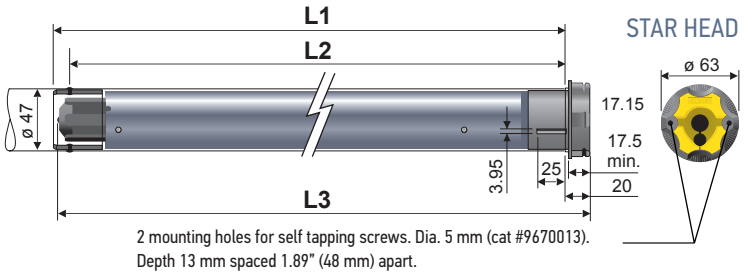
506S2	1032500	**535A2**	1037509
510S2	1037501	**540R2**	1037510
525A2	1043287	**550R2**	1037511
530R2	1037507		

Radio Technology Somfy (RTS) allows for wireless radio control of motorized window coverings via the RTS family of controls.

Technical Features

Voltage Supply	120V AC, 60Hz
Index Protection Rating	IP 44
Limit Switch Type	Electronic RTS
Limit Switch Capacity	250 Turns
Temperature Working Range	14°F to 104°F (-10°C to 40°C)
Insulation Class	Class 1 for 120V AC
Wiring	Integrated into power cord. Must be at least 12 inches and must not come in contact with metal.

Dimensions



2 mounting holes for self tapping screws. Dia. 5 mm (cat #9670013). Depth 13 mm spaced 1.89" (48 mm) apart.

Dimensions	506	510	525	530	535	540	550
L1	23.82 in. (605 mm)	25.79 in. (655 mm)	25.79 in. (655 mm)	25.79 in. (655 mm)	26.57 in. (605 mm)	26.57 in. (605 mm)	26.57 in. (605 mm)
L2	23.23 in. (590 mm)	25.20 in. (640 mm)	25.20 in. (640 mm)	25.20 in. (640 mm)	25.98 in. (660 mm)	25.98 in. (660 mm)	25.98 in. (660 mm)
L3	SH 24.13 in. (613 mm) RH 24.02 in. (610 mm)	SH 26.10 in. (663 mm) RH 25.98 in. (660 mm)	26.10 in. (663 mm)	26.10 in. (663 mm)	26.89 in. (683 mm)	26.89 in. (683 mm)	26.89 in. (683 mm)
Cable Length	6.5 ft. (2 m)	6.5 ft. (2 m)	12.3 ft. (3.75 m)	6.5 ft. (2 m)	12.3 ft. (3.75 m)	6.5 ft. (2 m)	6.5 ft. (2 m)

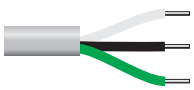
Optional cables with NEMA plugs available in 3 ft, 6 ft, 10 ft, 12 ft, 18 ft, 24 ft.

Specifications

	506	510	525	530	535	540	550
Torque	6 Nm	10 Nm	25 Nm	30 Nm	35 Nm	40 Nm	50 Nm
Nominal Voltage	120V/60Hz						
Rated Current	1.1A	1.3A	1.6A	1.5A	2.1A	1.8A	2.1A
Speed	38 rpm	38 rpm	20 rpm	14 rpm	20 rpm	14 rpm	14 rpm
Thermal Protection	5 minutes						
Radio Frequency	433.42 MHz						

Type of power cable

RTS 120V AC / 60 Hz
3 conductor cable



white = neutral
black = hot
green = ground

LT50 RTS CMO

(Compact Manual Override)

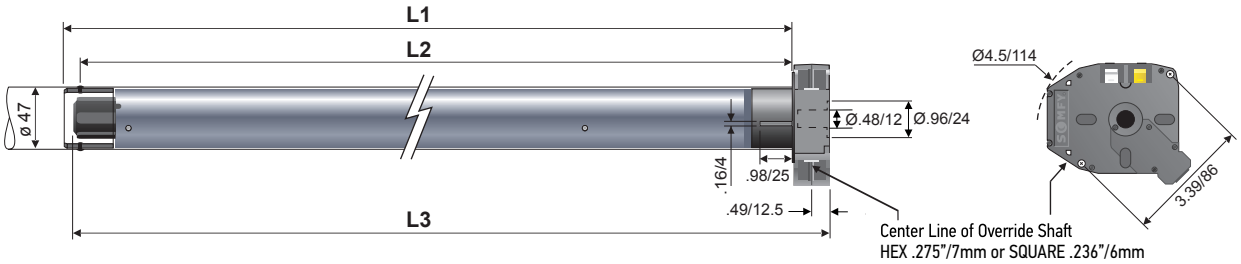
525A2 CMO	1043020	**540R2 CMO**	1049013
530R2 CMO	1045014	**550R2 CMO**	1051012
535A2 CMO	1047010		

Radio Technology Somfy (RTS) allows for wireless radio control of motorized window coverings via the RTS family of controls.

Technical Features

Voltage Supply	120V AC, 60Hz	**Temperature Working Range**	14°F to 104°F (-10°C to 40°C)
Index Protection Rating	IP 44	**Insulation Class**	Class 1 for 120V AC
Limit Switch Type	Rapid Adjustment RA and Electronic Receiver Integrated in motor tube	**Antenna**	Integrated into power cord. Must be at least 12 inches and must not come in contact with metal.
Limit Switch Capacity	34 Turns	**Wiring**	Parallel wiring allowed in accordance with NEC and local electrical codes.

Dimensions



Dimensions	525A2 CMO	530R2 CMO	535A2 CMO	540R2 CMO	550R2 CMO
L1	30.47 in. (774 mm)	30.47 in. (774 mm)	30.47 in. (774 mm)	30.47 in. (774 mm)	30.47 in. (774 mm)
L2	29.88 in. (759 mm)	29.88 in. (759 mm)	29.88 in. (759 mm)	29.88 in. (759 mm)	29.88 in. (759 mm)
L3	30.98 in. (787 mm)	30.98 in. (787 mm)	30.98 in. (787 mm)	30.98 in. (787 mm)	30.98 in. (787 mm)
Cable Length	12 ft. (3.6 m)	6 ft. (1.8 m)	12 ft. (3.6 m)	6 ft. (1.8 m)	6 ft. (1.8 m)

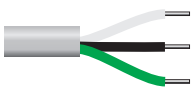
Optional cables with NEMA plugs available in 6 ft, 12 ft, 18 ft, 24 ft.

Specifications

	525A2 CMO	530R2 CMO	535A2 CMO	540R2 CMO	550R2 CMO
Torque	25 Nm	30 Nm	35 Nm	40 Nm	50 Nm
Nominal Voltage	120v / 60Hz				
Rated Current	1.6A	1.5A	2.1A	1.8A	2.1A
Speed	20 rpm	14 rpm	20 rpm	14 rpm	14 rpm
Thermal Protection	5 minutes				
Radio Frequency	433.42 MHz				

Type of power cable

RTS
120V AC / 60Hz
3 conductor cable



white = neutral
black = hot
green = ground

LT50 Orea® RTS

Specifically designed for use in cassette awnings only

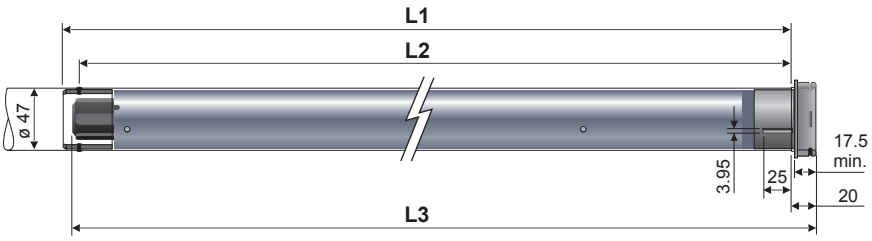
535A2 1037522
550R2 1037523

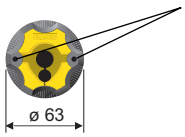
Radio Technology Somfy (RTS) allows for wireless radio control of motorized window coverings via the RTS family of controls.

Technical Features

Voltage Supply	120V AC, 60Hz
Index Protection Rating	IP 44
Limit Switch Type	Electronic RTS
Limit Switch Capacity	250 Turns
Temperature Working Range	14°F to 104°F (-10°C to 40°C)
Insulation Class	Class 1 for 120V AC
Antenna	Integrated into power cord. Must be at least 12 inches and must not come in contact with metal.
Wiring	Parallel wiring allowed in accordance with NEC and local electrical codes.

Dimensions





2 mounting holes for self tapping screws.
Dia. 5 mm (cat #9670013)
Depth 13 mm
Spaced 1.89" (48 mm) apart

Dimensions	535	550
L1	26.57 in. (675 mm)	26.57 in. (675 mm)
L2	25.98 in. (660 mm)	25.98 in. (660 mm)
L3	26.89 in. (683 mm)	26.89 in. (683 mm)
Cable Length	13.1 ft. (4 m)	

Optional cables with NEMA plugs available in 3 ft, 6 ft, 10 ft, 12 ft, 18 ft, 24 ft.

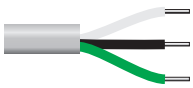
Specifications

	535	550
Torque	35 Nm	50 Nm
Nominal Voltage	120V / 60HZ	
Rated Current	2.1A	
Speed	20 rpm	14 rpm
Thermal Protection	5 minutes	
Radio Frequency	433.42 MHz	433.42 MHz

Please Note:
Orea® RTS motor is specifically designed for cassette awnings only. Automatic limit setting in the UP direction.

Type of power cable

RTS
120V AC / 60Hz
3 conductor cable



white = neutral
black = hot
green = ground

Oximo™ 50 RTS

Star Head

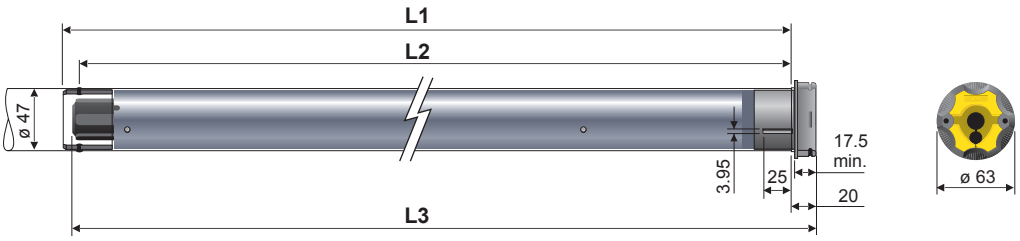
525A2 1033035

Radio Technology Somfy (RTS) allows for wireless radio control of motorized window coverings via the RTS family of controls.

Technical Features

Voltage Supply	120V AC, 60Hz
Index Protection Rating	IP 44
Limit Switch Type	Electronic RTS
Limit Switch Capacity	200 Turns
Temperature Working Range	14°F to 104°F (-10°C to 40°C)
Insulation Class	Class 1 for 120V AC
Antenna	Integrated into power cord. Must be at least 12 inches and must not come in contact with metal.
Wiring	Parallel wiring allowed in accordance with NEC and local electrical codes.

Dimensions



Dimensions

L1	25.79 in. (655 mm)
L2	25.20 in. (640 mm)
L3	26.10 in. (663 mm)
Cable Length	6.5 ft. (2 m)

Optional cables with NEMA plugs available in 3 ft, 6 ft, 10 ft, 12 ft, 18 ft, 24 ft.

Specifications

Torque	25 Nm
Nominal Voltage	120V / 60HZ
Rated Current	1.6A
Speed	20 rpm
Thermal Protection	4 minutes
Radio Frequency	433.42 MHz

Type of power cable

RTS
120V AC / 60Hz
3 conductor cable

white = neutral
black = hot
green = ground

Sunea® RTS CMO (Compact Manual Override)

Specifically designed for use in cassette and standard retractable awnings only

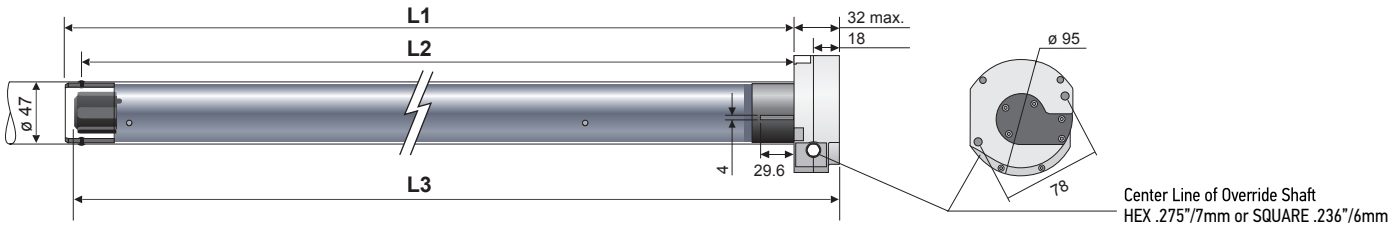
525A2 CMO	1114230
535A2 CMO	1116266
550R2 CMO	1118167

Radio Technology Somfy (RTS) allows for wireless radio control of motorized window coverings via the RTS family of controls.

Technical Features

Voltage Supply	120V AC, 60Hz
Index Protection Rating	IP 44
Limit Switch Type	Electronic RTS
Limit Switch Capacity	250 Turns
Temperature Working Range	14°F to 104°F (-10°C to 40°C)
Insulation Class	Class 1 for 120V AC
Antenna	Integrated into power cord. Must be at least 12 inches and must not come in contact with metal.
Wiring	Parallel wiring allowed in accordance with NEC and local electrical codes.

Dimensions



Dimensions	525A2 CMO	535A2 CMO	550R2 CMO
L1	27.40 in. (696 mm)	27.40 in. (696 mm)	27.40 in. (696 mm)
L2	26.93 in. (684 mm)	26.93 in. (684 mm)	26.93 in. (684 mm)
L3	28.35 in. (720 mm)	28.35 in. (720 mm)	28.35 in. (720 mm)

Optional fast connector cables with NEMA plugs available in 11 ft, 17 ft, 23 ft.

Specifications

	525A2 CMO	535A2 CMO	550R2 CMO
Torque	25 Nm	35 Nm	50 Nm
Nominal Voltage	120V / 60HZ		
Rated Current	1.6A	2.1A	2.1A
Speed	20 rpm	20 rpm	14 rpm
Thermal Protection	4 minutes		
Radio Frequency	433.42 MHz		

Type of power cable - SJTW +18 in.

Fast Connector - Male
(Do not cut fast connector cable)

LT50 DCT

Star Head and Round Head Motors

506S2 1100019
515S2 1100026
535A2 1030075

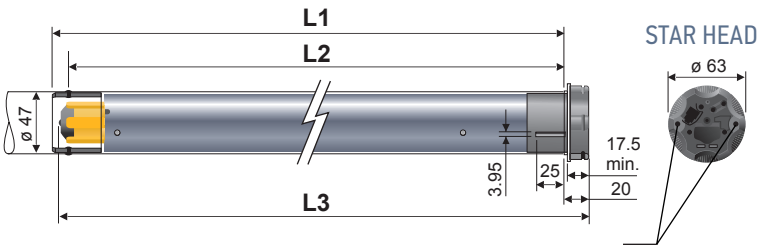
DRY CONTACT

Motors that can be controlled via contact closure (dry contact) or infrared.

Technical Features

Voltage Supply	120V AC, 60Hz
Index Protection Rating	IP 44
Limit Switch Type	Electronic
Limit Switch Capacity	300 Turns
Temperature Working Range	-4°F to 158°F (-20°C to 70°C)
Insulation Class	Class 1 for 120V AC

Dimensions



2 mounting holes for self tapping screws. Dia. 5 mm (cat #9670013).
Depth 13 mm spaced 1.89" (48 mm) apar

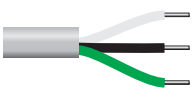
Specifications

	506	515	535
Torque	6 Nm	15 Nm	35 Nm
Nominal Voltage	120V / 60Hz		
Rated Current	.95A	1.8A	2.1A
Speed	38 rpm	38 rpm	20 rpm
Thermal Protection	5 minutes		
Sound Level	55 dBA	56 dBA	58 dBA

Dimensions	506	515	535
L1	23.82 in. (605 mm)	26.57 in. (675 mm)	26.57 in. (675 mm)
L2	23.23 in. (590 mm)	25.98 in. (660 mm)	25.98 in. (660 mm)
L3 Star Head	24.13 in. (613 mm)	26.89 in. (683 mm)	26.89 in. (683 mm)
L3 Round Head	24.02 in. (610 mm)	26.77 in. (680 mm)	26.77 in. (680 mm)
Power Cable Length	6.5 ft. (2 m)		
Data Cable Length (included)	1 ft. (.3 m) / 4 wires / RJ9 phone connectors	5 ft. (1.5 m) / 4 wires / RJ9 phone connectors	

Type of power cable

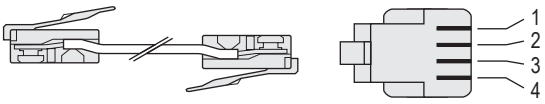
DCT:
120V AC / 60Hz 3 threads by wire



white = neutral
black = hot
green = ground

Data Cable

RJ9 Pin Outs



PIN COLOR	4 RED	3 BLUE	2 WHITE	1 YELLOW
Dry Contact	OPEN	GND	-	CLOSE
IR Contact	IR	GND	+5V	-

Optional Data Cables:

DCT white data cable - 1 ft. (.3 m)	#9209060
DCT white data cable - 5 ft. (1.5 m)	#9209061
DCT white data cable - 25 ft. (7.5 m)	#9012343
DCT white data cable - 50 ft. (15 m)	#9012344

LT50 RS485

Star Head Motor

515S2 1002427
535A2 1002288

A new generation of intelligent motors that are controlled and monitored via Somfy Digital Network solutions and animeo® IP total solar management system.

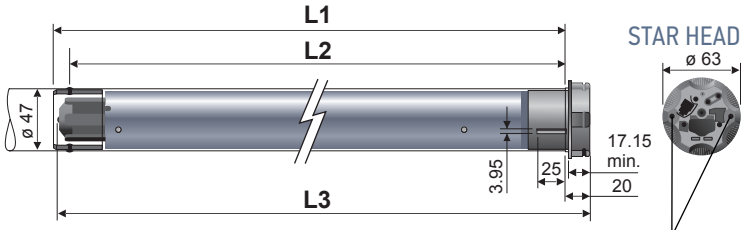
Technical Features

Voltage Supply	120V AC, 60Hz
Index Protection Rating	IP 44 (interior & exterior use)
Limit Switch Type	Electronic
Limit Switch Capacity	300 Turns
Temperature Working Range	-4°F to 140°F (-20°C to 60°C) (interior and exterior use)
Insulation Class	Class 1 for 120V AC
Wiring	Parallel wiring allowed in accordance with NEC and local electrical codes.

Specifications

	515	535
Torque	15 Nm	35 Nm
Nominal Voltage	120V / 60Hz	120V / 60Hz
Rated Current	1.8A	2.1A
Speed	38 rpm	20 rpm
Thermal Protection	4 minutes	4 minutes
***Sound Level**	≤ 55 dBA	≤ 55 dBA

Dimensions



2 mounting holes for self tapping screws. Dia. 5 mm (cat #9670013). Depth 13 mm spaced 1.89" (48 mm) apart.

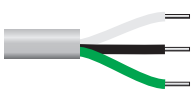
Dimensions

L1	26.57 in. (675 mm)
L2	25.98 in. (660 mm)
L3	26.89 in. (683 mm)
SJTW Power Cable Length	9.8 ft. (3 m)
Data Cable (must be ordered separately)	Customizable and available in various lengths

Optional cables with NEMA plugs available in 3 ft, 6 ft, 10 ft, 12 ft, 18 ft, 24 ft.

Type of power cable

120V AC / 60Hz
3 conductor cable



white = neutral
black = hot
green = ground

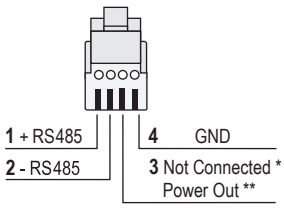
*** Sound Level:**
According to standards ISO 3741 NF 31022 in dBA ref 1pW at nominal torque without end product.

Fabrication Recommendations:

- Operational noise level is reduced when motor, tube, and mechanical accessories are properly adapted to motorized applications.
- Free play must be minimized between the accessories and the end product tube.
- Interior Tube Diameter (ID) > 47 mm must be respected.
- A motor crown adaptor between motor and end product tube is required to ensure concentric operation of motor.
- 500 Series Drive Stop and Screw (9910004) is recommended to prevent noise and drive wheel separation from motor shaft.
- Somfy Soft Clip Drive Wheel Adaptors (brown in color) are not recommended.

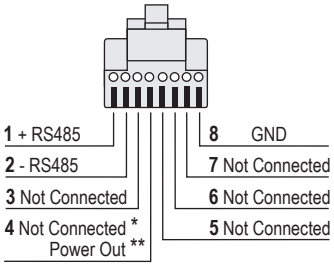
Data Cable: RJ9/RJ45 (sold separately)

RJ9 connects to motor



* Data cable (black) for animeo IP networks
** Data cable (grey) for powering external modules

RJ45 connects to network



4 Cond. 26AWG modular cable with RJ9 on one end and RJ45 other end - (RTS, Z-Wave®, ZigBee modules)

GREY WITH POWER OUT

2.5 ft long	#9018545
8 ft long	#9018546
12 ft long	#9018547
24 ft long	#9018548

4 Cond. 26AWG modular cable with RJ9 on one end and RJ45 other end - (SDN - animeo IP)

BLACK WITHOUT POWER OUT

2.5 ft long	#9018541
8 ft long	#9018542
12 ft long	#9018543
24 ft long	#9018544

Visit **somfysystems.com/sdn-2-0** for complete information on SDN 2.0 Bus Distribution Products.

CONTROL ACCESSORIES

Learn more about controls and accessories and download RTS brochure at www.somfysystems.com/controls

RADIO TECHNOLOGY SOMFY® (RTS)

TELIS COLLECTION

Telis 1 RTS Lounge Single Channel Remote 1810650

Telis 4 RTS Lounge Five Channel Remote 1810652

Telis 1 RTS Silver Single Channel Remote 1810639

Telis 4 RTS Silver Five Channel Remote 1810641

Telis 1 RTS Pure Single Channel Remote 1810632

Telis 4 RTS Pure Five Channel Remote 1810633

Telis 1 Soliris RTS Patio 1810647

Telis 4 Soliris RTS Patio 1810243

Telis 1 Soliris RTS Pure 1810635

Telis 1 RTS Patio Single Channel Remote 1810643

Telis 4 RTS patio Five Channel Remote 1810645

Telis 1 Modulis RTS Pure with Scroll Wheel 1811234

Telis 4 Modulis RTS Pure with Scroll Wheel 1811235

Telis 16 Channel RTS Pure Remote with On-screen display 1811081

Telis 16 Channel RTS Silver Remote with On-screen display 1811082

Telis 1 Chronis RTS Pure Timer with On-screen display 1805237

Telis 1 Chronis RTS Silver Timer with On-screen display 1805238

DECOFLEX WIREFREE™ WALL SWITCHES

DecoFlex 1 Channel RTS WireFree™ Wall Switch

DecoFlex 2 Channel RTS WireFree™ Wall Switch

DecoFlex 3 Channel RTS WireFree™ Wall Switch

DecoFlex 4 Channel RTS WireFree™ Wall Switch

DecoFlex 5 Channel RTS WireFree™ Wall Switch

- Wall Switches shown in white. Also available in black and ivory finishes.
- Shown assembled with printed channel buttons.
- Custom engraved buttons are also available.

Black

Ivory

SMOOVE® WALL SWITCH

Smoove 1 RTS Pure

- Battery-operated convenience
- Surface mounts with ease
- Frames available in 7 colors

Pure, Silver Matte, Black, Light Bamboo, Amber Bamboo, Cherry, Walnut

TABLE TOP ACCESSORIES

DecoFlex WireFree™ RTS Table Top Accessory Black 1811051*

DecoFlex WireFree™ RTS Table Top Accessory Silver 1810972*

DecoFlex WireFree™ RTS Table Top Accessory White 1811185*

*DecoFlex Switch sold separately from Table Top Accessory.

CONTROL ACCESSORIES

RADIO TECHNOLOGY SOMFY® (RTS)

ZRTSI

Z-Wave® to RTS Interface 2

1811265

myLink™

WiFi to RTS Interface

Control window coverings, awnings, screens and rolling shutters with a smartphone or tablet. A simple on-screen set up wizard helps users create timed events, scenes and more. Compatible with iOS and Android.

1811403

16 CHANNEL INTERFACE

Universal RTS Interface 16-Channel (Converts IR, RS232, RS485 to RTS)
.

1810872

RTS REPEATER

RTS Repeater

1810791

DIMMABLE LED RTS LIGHT KIT

Dimmable LED RTS Light Kit

Warm White
1811401

Cool White
1811506

Dimming LED RTS Receiver
1811486

OUTDOOR RECEIVERS

Outdoor Lighting Receiver
1810875

Universal RTS Receiver
1810627

DRY CONTACT INTERFACE

RTS Dry Contact Interface
Single Channel

1810493

SUNIS & THERMOSUNIS INDOOR SENSORS

Sunis Indoor WireFree™ RTS

9013707

ThermoSunis Indoor WireFree™ RTS

9013708

EOLIS 3D SENSOR

Eolis 3D WireFree™ RTS Wind Sensor

1816081

EOLIS SENSOR

Eolis RTS Wind Sensor 24V

9012499

SOLIRIS SENSOR

Soliris RTS Sun and Wind Sensor 24V

9012500

ONDEIS RAIN & SUN SENSOR

Ondeis WireFree™ RTS Rain and Sun Sensor

9019617

CONTROL ACCESSORIES

DIGITAL MOTOR INTERFACES

ZDMI

Z-Wave® to Digital Motor Interface
1870171

ZBDMI

ZigBee® to Digital Motor Interface
1870220

animeo® IP

animeo IP is a total solar management system utilizing Somfy-powered intelligent motorized window coverings as well as digital keypads and weather sensors. The system's controllers, sensors and keypads can be added to both new and existing Somfy Digital Network installations for comprehensive solar management as either a stand-alone solution or integrated into third party control systems.
An intuitive user interface allows for simplified commissioning, building management and technical support, featuring drag-and-drop programming, motor auto discovery and at-a glance system status update.

animeo® IP Building Controller
1822314

Visit **www.somfysystems.com/animeo** to learn more

WIRED AC CONTROLS & SWITCHES

GROUP CONTROL SYSTEM II (GCS II)

Group Control System II (GCS II)
1810476

GCS II RTS Radio Receiver
1810854

INDIVIDUAL GROUP CONTROL (IGC) 4N1 MOTOR CONTROLLER

IGC 4N1 Motor Controller
1811416

IGC 4N1 RTS Radio Receiver
1811492

DecoFlex Dry Contact Keypad
1811402

CONTROL ACCESSORIES

WIRED AC CONTROLS & SWITCHES

DECORATOR TOGGLE SWITCHES (single pole, double throw) & SWITCHPLATES

Maintained Toggle Switch
(White)
1800381

Maintained Toggle Switch
(Ivory)
1800380

Momentary Toggle Switch
(White)
1800383

Momentary Toggle Switch
(Ivory)
1800382

Standard Metal Toggle Switchplate
(White)
9011954

Standard Metal Toggle Switchplate
(Ivory)
9011953

Plastic Toggle Switchplate
(White)
9011963

Plastic Toggle Switchplate
(Ivory)
9011962

DECORATOR PADDLE SWITCHES & SWITCHPLATES

Maintained Paddle Switch
(White)
1800374

Maintained Paddle Switch
(Ivory)
1800373

Momentary Paddle Switch
(White)
1800378

Momentary Paddle Switch
(Ivory)
1800377

Maintained Double Pole,
Double Throw Paddle Switch
(White)
1800375

Maintained Double Pole,
Double Throw Paddle Switch
(Ivory)
1800376

Single Gang Paddle Switchplate
(White)
9011967

Single Gang Paddle Switchplate
(Ivory)
9011966

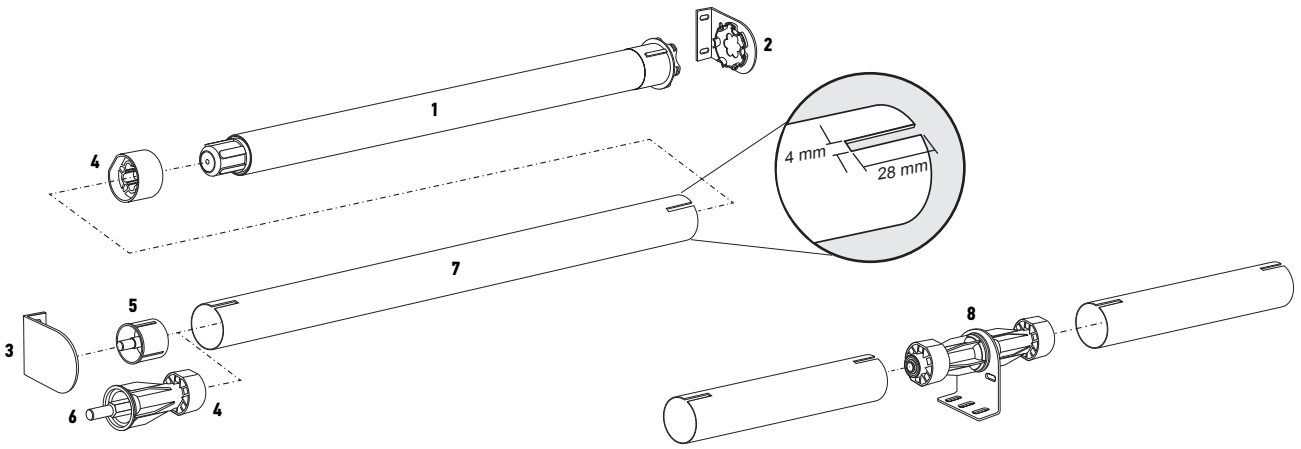
SPECIALTY SWITCH

5 position Momentary/Maintained Rocker Switch
Switchplate included
(White)
1800388

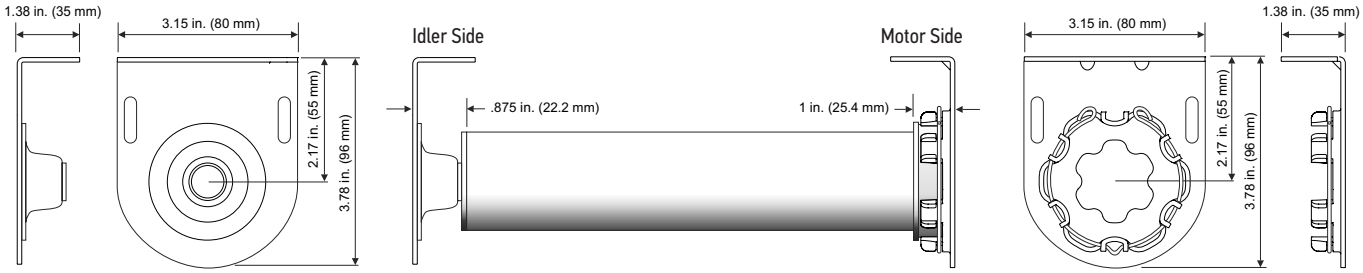
500 SERIES HARDWARE SYSTEMS

SOMFY 2'' SYSTEM

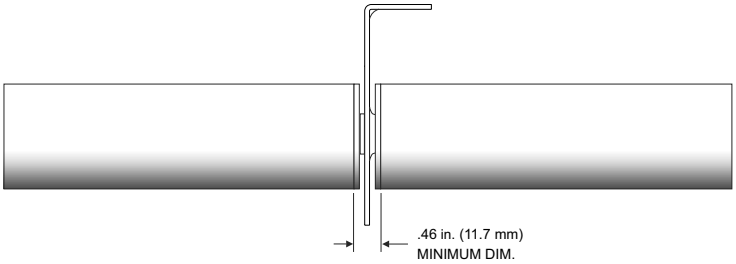
STANDARD BRACKET COMPONENTS



DIMENSIONS AND LIGHT GAP SPECIFICATIONS



INTERMEDIATE BRACKET



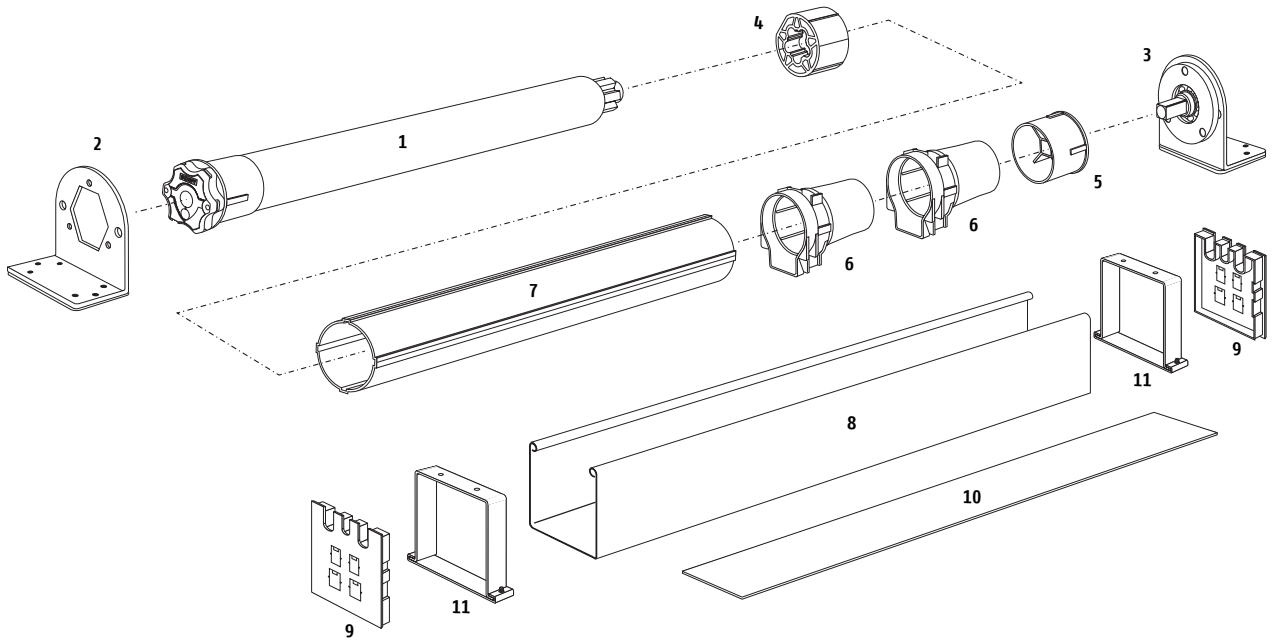
PRODUCT CHART

IMAGE	DESCRIPTION	CATALOG NUMBER
1	Motor - LT50 shown	Refer to individual 500 Series Spec Sheet
2	LT50 Universal Motor Bracket	9410651
3	LT50 Idler Bracket with 10 mm Hole Nylon Bearing	9410635
4	2" Round LT50 - Hard Clip	9206088
5	2" Collapsible End Cap (silent) - 10 mm Shaft (requires notch in tube)	9013592
6	2" Universal End Cap - Collapsible 10 mm Shaft (requires notch in tube)	9420800
7	2" Aluminum Tube	1781148
8	LT50 2" Universal Intermediate Bracket Kit (requires notch in tube)	9410648

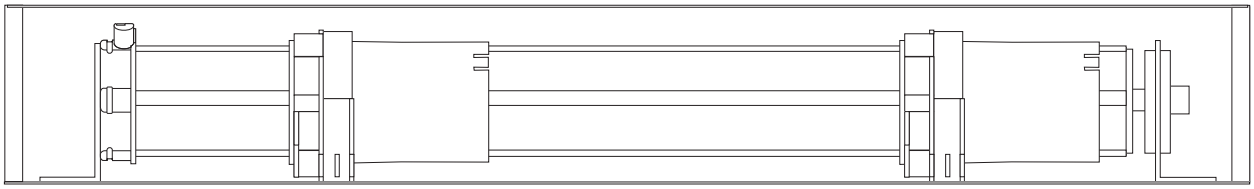
500 SERIES HARDWARE SYSTEMS

SOMFY CTS50 SYSTEM

STANDARD BRACKET COMPONENTS



COMPLETE ASSEMBLY



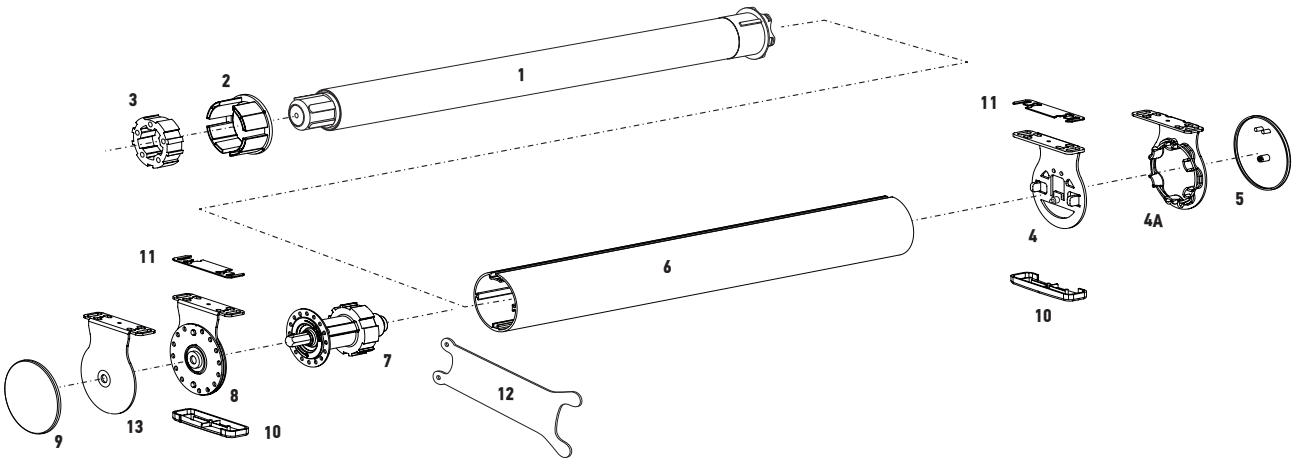
PRODUCT CHART

IMAGE	DESCRIPTION	CATALOG NUMBER
1	Motor - LT50 shown	Refer to individual 500 Series Spec Sheet
2	CTS50 Motor Mount Bracket	1781110
3	CTS50 Motor Idler Bracket	1781112
4	2" LT Drive for CTS50 Tube	9704080
5	CTS50 Idler End Cap	1781113
6	CTS50 Kit (cone, cradle bearing, tilting rod, end cover)	1781129
7	CTS50 Aluminum Tube	1781150
8	CTS50 Aluminum Headrail	1781106
9	Headrail End Caps	1781105
10	Headrail Cover	1781107
11	Headrail Mounting Bracket	1781111

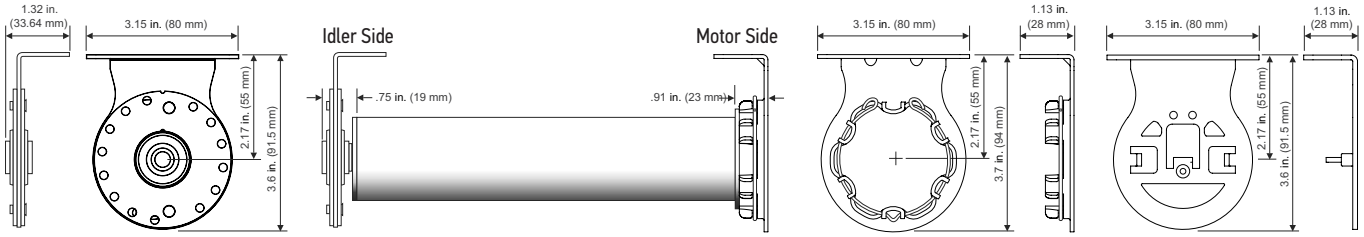
500 SERIES HARDWARE SYSTEMS

ACMEDA®

STANDARD BRACKET COMPONENTS



DIMENSIONS AND LIGHT GAP SPECIFICATIONS



PRODUCT CHART

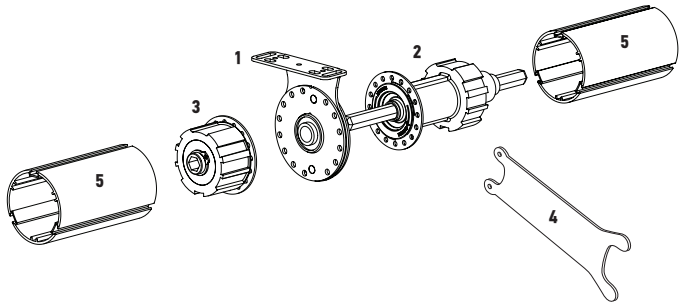
IMAGE	DESCRIPTION	CATALOG NUMBER
1	Motor (Sonesse® 50 RTS)	Refer to individual 500 Series Spec Sheet
2	ST50 Crown 56 mm Tube	9014125
3	ST50 Drive Wheel 56 mm Tube	9014126
4	ST50 Round Head Motor Bracket 55P	9014109
4A	ST50 Star Head Motor Bracket 55P	9014135
5	ST50 Motor Bracket Cover	9014111
6	56 OD Aluminum Sonesse 50 Tube (ft) - White Powder Coat	1780744
6	56 OD Aluminum Sonesse 50 Tube (ft) - Mill Finish	1780743
7	ST50 Auto Plug End 56 mm Tube	9014097
8	ST50 Adjustable Idler Bracket - Ceiling Mount 55P	9014110
8	ST50 Adjustable Idler End Bracket - Wall Mount 55P	9014238
9	ST50 Idler Bracket Cover	9014112
10	ST50 Screw Plate Cover	9014113
11	ST50 Mounting Shim	9014124
12	ST50 Bracket Leveling Adjuster Tool	1780742
13	Non-Adjustable Idler Bracket 55P	9014683

500 SERIES HARDWARE SYSTEMS

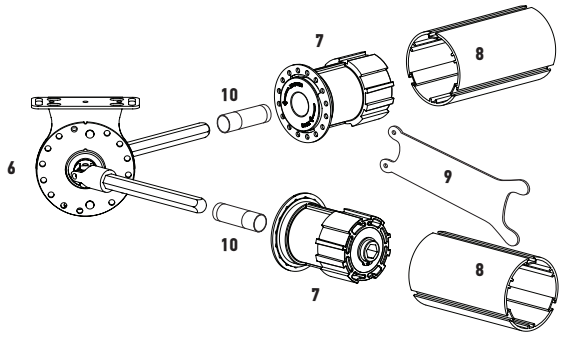
ACMEDA®

INTERMEDIATE BRACKET COMPONENTS (STANDARD & 0-90°)

INTERMEDIATE STANDARD

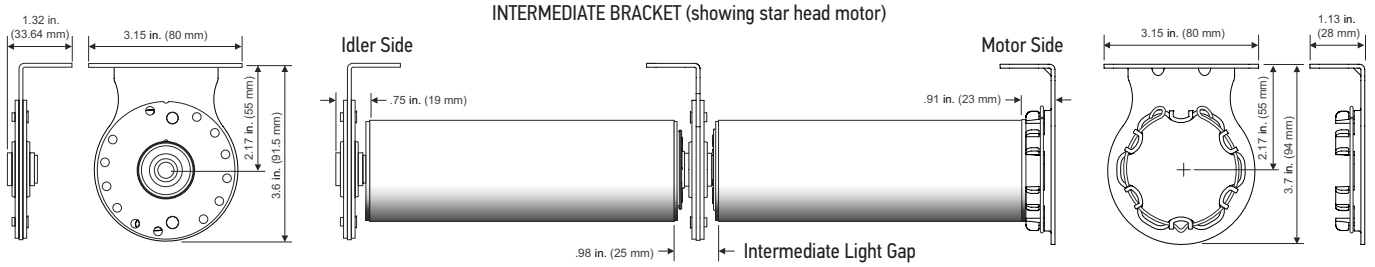


INTERMEDIATE 0°- 90



DIMENSIONS AND LIGHT GAP SPECIFICATIONS (INTERMEDIATE)

INTERMEDIATE BRACKET (showing star head motor)



PRODUCT CHART - STANDARD

IMAGE	DESCRIPTION	CATALOG NUMBER
1	ST50 Intermediate Bracket Ceiling Mount 55P	9014120
1	ST50 Intermediate Bracket Wall Mount 55P	9014240
2	ST50 Intermediate Drive 56 mm Tube	9014114
3	ST50 Intermediate Receiver 56 mm Tube	9014121
4	ST50 Bracket Leveling Adjuster Tool	1780742
5	56mm OD Aluminum Sonesse 50 Tube (ft) - White Powder Coat	1780744
5	56mm OD Aluminum Sonesse 50 Tube (ft) - Mill Finish	1780743

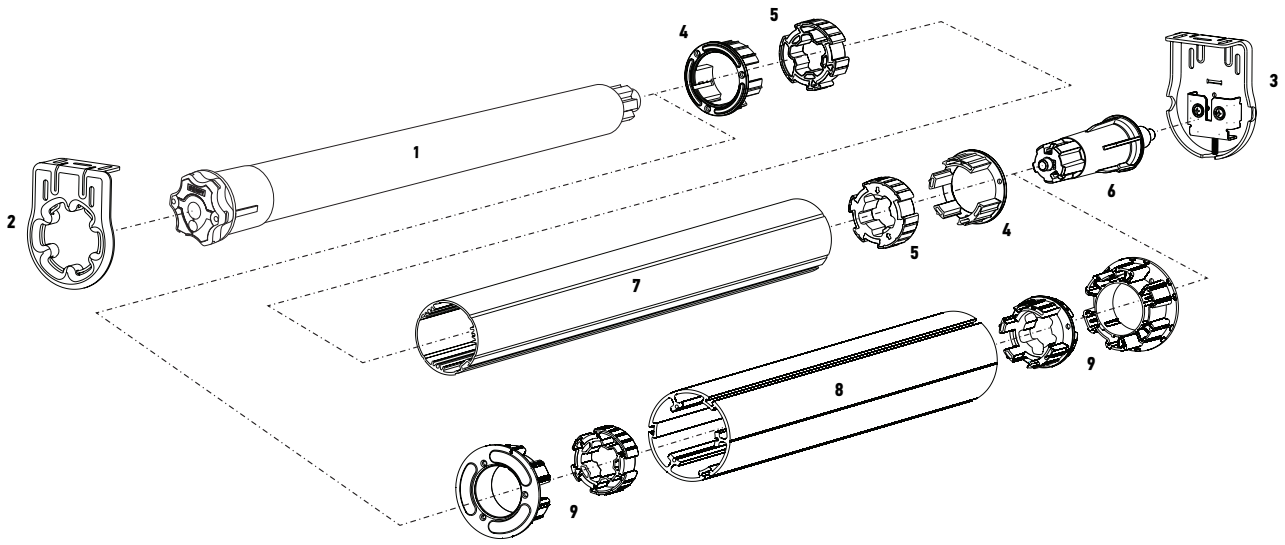
PRODUCT CHART - 0° to 90°

IMAGE	DESCRIPTION	CATALOG NUMBER
6	50 Intermediate Bracket Ceiling Mount 55P / 90°	9014122
6	ST50 Intermediate Bracket Wall Mount 55P / 90°	9014239
7	ST50 Intermediate Receiver 56 mm Tube 90° (spacer included)	9014123
8	56mm OD Aluminum Sonesse 50 Tube (ft) - White Powder Coat	1780744
8	56mm OD Aluminum Sonesse 50 Tube (ft) - Mill Finish	1780743
9	ST50 Bracket Leveling Adjuster Tool	1780742
10	Spacer (included with 9014123)	NA

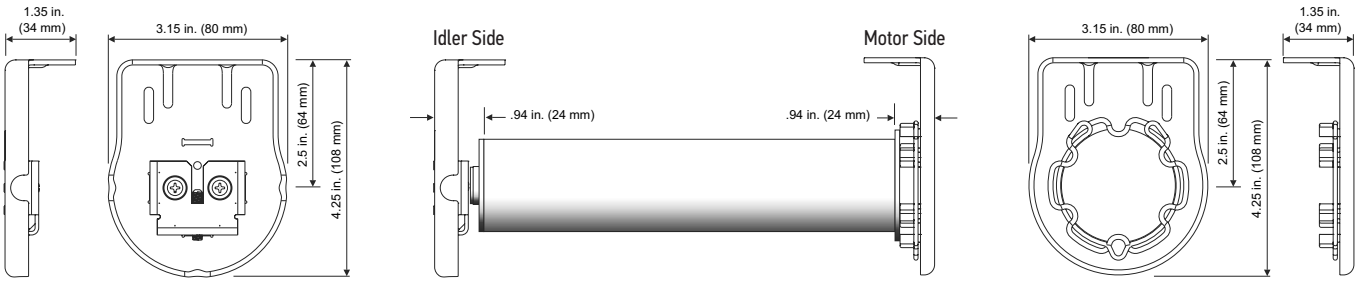
500 SERIES HARDWARE SYSTEMS

ROLLEASE® SILENT PIN SYSTEM

STANDARD BRACKET COMPONENTS



DIMENSIONS AND LIGHT GAP SPECIFICATIONS



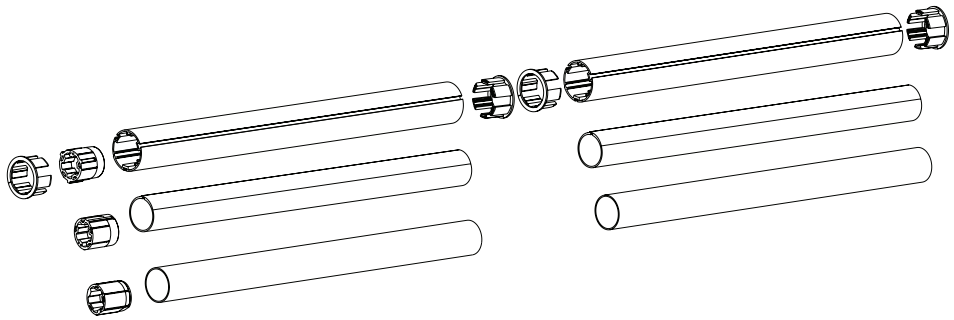
PRODUCT CHART

IMAGE	DESCRIPTION	CATALOG NUMBER
1	Motor - LT50 shown	Refer to individual 500 Series Spec Sheet
2	RollEase® “Silent Pin” Motor Bracket White	9016858
3	RollEase® “Silent Pin” Idler Bracket Wall and Ceiling Mount - White	9016859
4	RollEase® “Silent Pin” Crown only for RollEase 2.5” (63 mm) Tube	9016856
4 & 5	RollEase® “Silent Pin” Crown and Drive Adaptor for RollEase 2.5” (63 mm) Tube	9015234
6	RollEase® “Silent Pin” Idler End Pin	9016857
7	2.5” O.D. Aluminum Tube	1781343
8	3.25” O.D. Aluminum Tube	1782096
9	RollEase® “Silent Pin” Crown and Drive Adaptor for RollEase 3.25” (83 mm) Tube	9016855

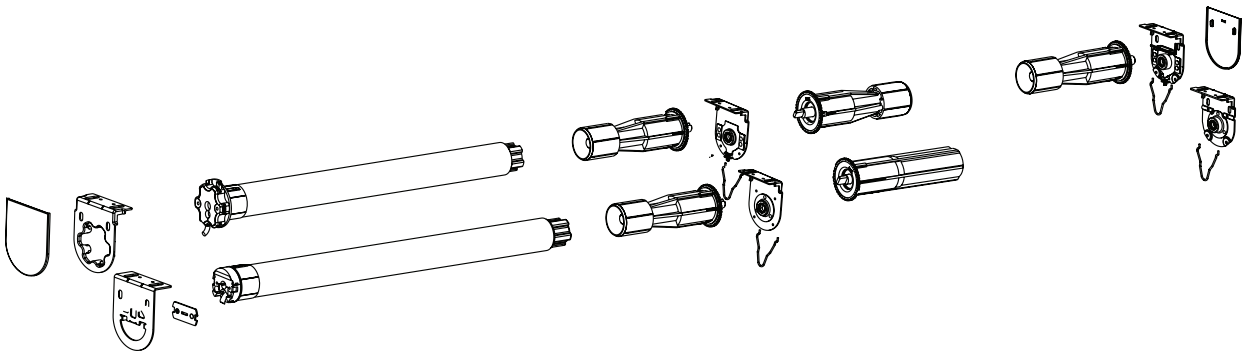
500 SERIES HARDWARE SYSTEMS

ZMC®

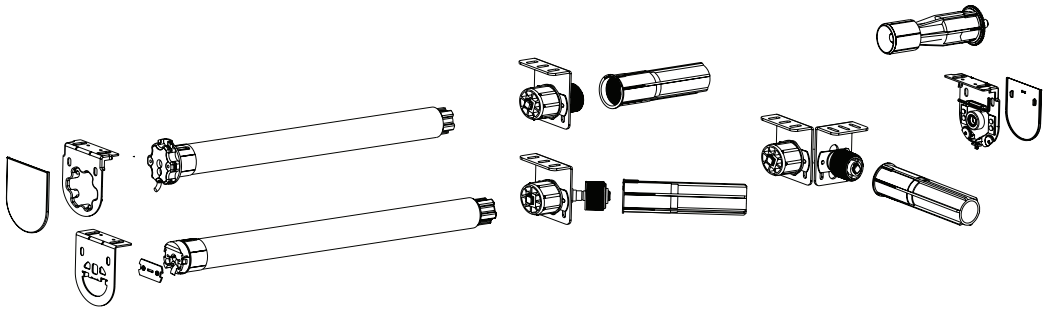
STANDARD ROLLER TUBE AND ACCCESSORIES



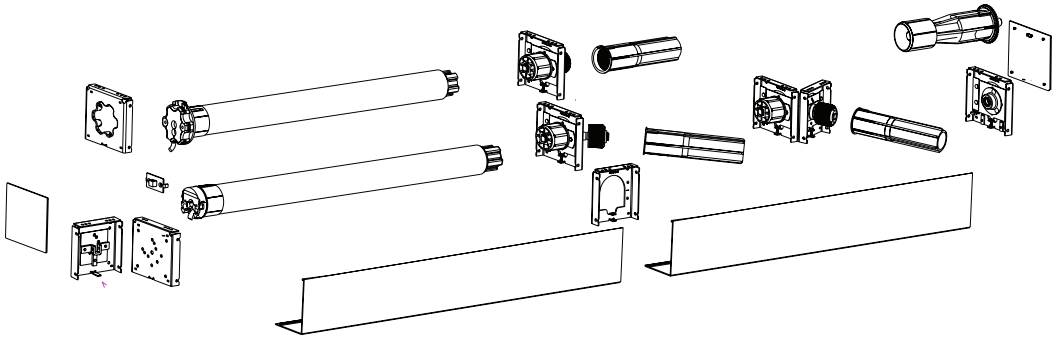
MOTOR BRACKETS AND ACCESSORIES FOR SOMFY 500 SERIES MOTORS



MOTOR U-JOINT INDEXABLE BRACKET FOR SOMFY 500 SERIES MOTORS



4" ADJUSTABLE U-JOINT INDEXABLE FASCIA BRACKET FOR SOMFY 500 SERIES MOTORS

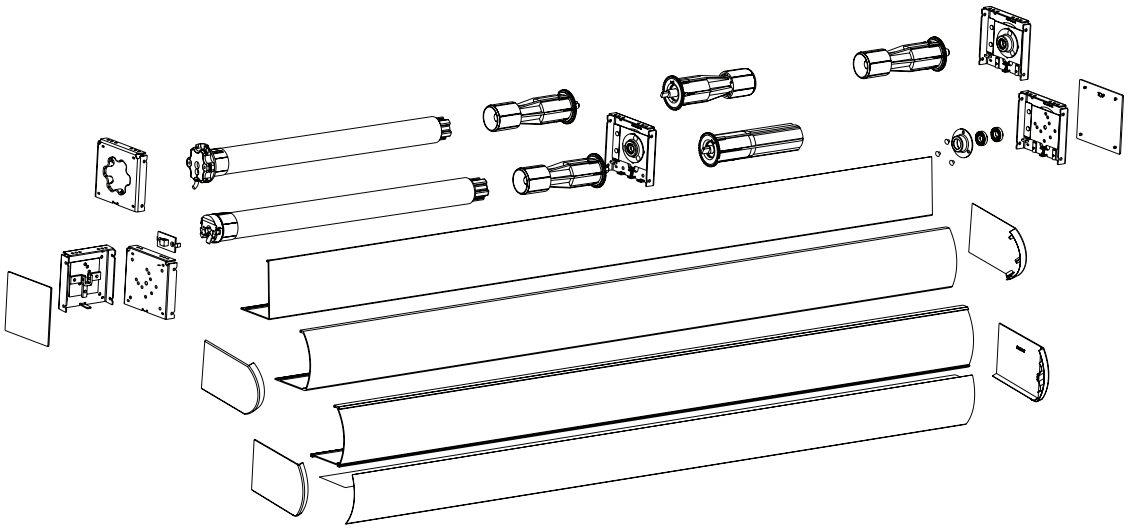


Contact ZMC for Items and Part Numbers: www.zmc.ca

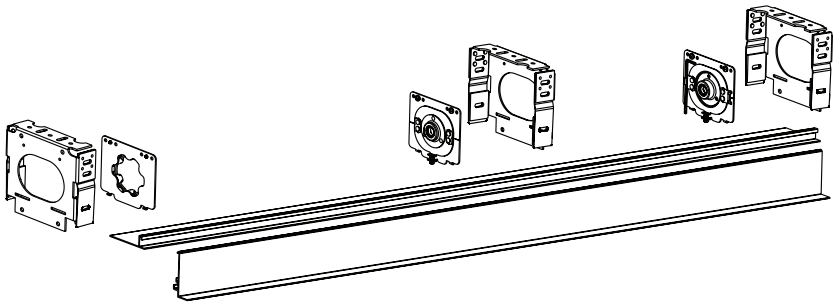
500 SERIES HARDWARE SYSTEMS

ZMC®

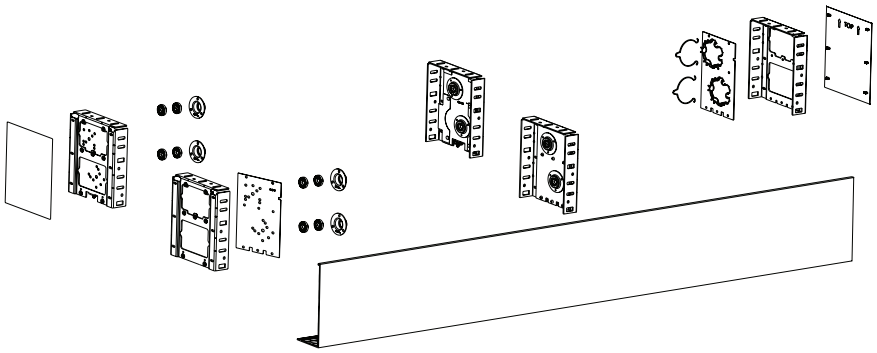
4” FASCIA BRACKETS FOR SOMFY 500 SERIES MOTORS



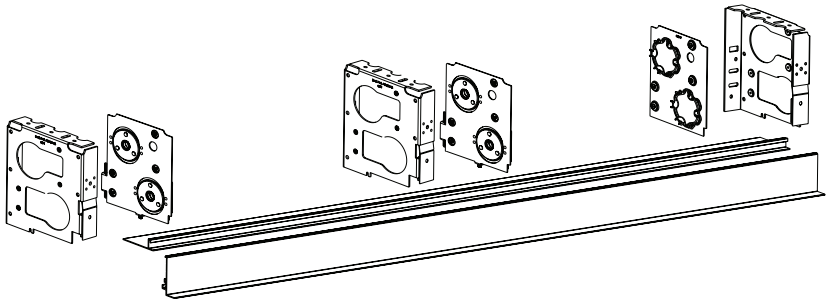
5.5” SMART HEAD BOX SYSTEM FOR SOMFY 500 SERIES MOTORS



7” FASCIA SYSTEM FOR SOMFY 500 SERIES MOTORS



7” SMART HEAD BOX SYSTEM FOR SOMFY 500 SERIES MOTORS

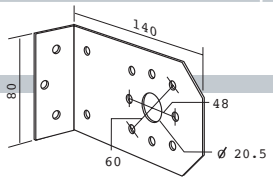


Contact ZMC for Items and Part Numbers: www.zmc.ca

500 SERIES MECHANICAL ACCESSORIES

500 SERIES MOTOR BRACKETS

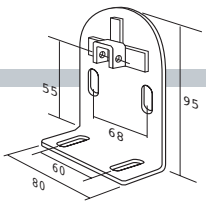
LT50 Motor Angle Bracket



- Zinc plated steel
- .807 in. diameter through hole
- Maximum motor torque - 40 Nm
- Compatible with # 1781098 idler end bearing support
- Maximum system load - See note below*

Part # 9012250

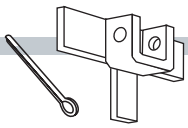
Universal LT50 Motor Bracket (LS Style) for 10 mm Square Stud



- Zinc plated steel
- Maximum motor torque - 25 Nm
- Horizontally and vertically adjustable
- Maximum system load - 126 Lbs. (57 Kg.)

Part # 9410665

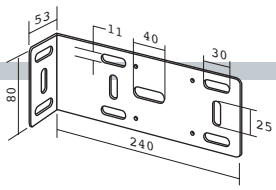
"U" Shape LS Style Motor Bracket for 10 mm Square Stud



- Maximum motor torque - 25 Nm
- Zinc plated steel
- Maximum system load - See note below*
- Cotter Pin included

Part # 9510658

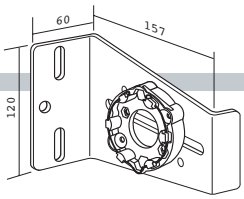
Heavy Duty Angle Plate



- For ceiling and wall installation in combination with # 9012263
- Black oxide finish
- Compatible with brackets # 9012263, 9701310 and 9132065
- Maximum motor torque - 100 Nm
- Maximum system load - See note below*

Part # 9701091

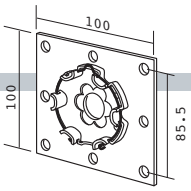
Motor Bracket LT60 FTS



- Zinc plated steel, gauge 3 (0.24 in.)
- For use with LT FTS 60
- Maximum motor torque - 100 Nm
- Includes universal bracket with spring ring
- Maximum system load - 441 Lbs. (200 kg.)
- Must use locking spring ring # 9910002 to obtain full torque and load capability.
- Compatible with idler bracket # 9430603 and intermediate bracket # 9420763

Part # 9430601

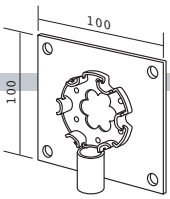
Motor Bracket With Spring Ring (100 mm x 100 mm)



- Four mounting holes provided with a through hole in the center of the bracket
- Zinc plated steel
- Lateral space requirement for installation: 28 mm
- Maximum motor torque - 85 Nm
- Maximum system load - See note below*

Part # 9763508

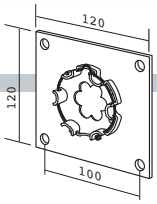
LT50/60 Motor Bracket with 1/2"Conduit Connector



- Four mounting holes provided
- Lateral space requirement: 28 mm
- Zinc plated steel
- Must be used with either spring ring # 9206033, or locking spring ring # 9910002 (not included)
- Maximum motor torque - 85 Nm or 100 Nm when locking spring ring # 9910002 is used.

Part # 9012262

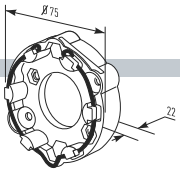
Motor Bracket With Spring Ring (120 mm x 120 mm)



- Four mounting holes provided
- Zinc plated steel
- Lateral space requirement for installation: 28 mm
- Maximum motor torque - 85 Nm
- Maximum system load - See note below*

Part # 9763503

Universal Bracket with Spring Ring



Spring ring needs to be replaced with locking spring ring #9910002 to obtain maximum torque and load capability.

Note: Screws must engage bracket's thread on its full length with recommended tightening torque of 105 in. lbs. for Grade 8 bolts.

Universal Bracket with Spring Ring - Zamak Aluminum Alloy Material

- 2 holes for M6 hex screw on 48 mm diameter
- 2 holes on M8 hex screw on 60 mm diameter
- 2 countersunk holes for M8 screw on 60 mm diameter
- No threaded holes
- Used for bolts to protrude through back of bracket
- Lateral space requirement for installation: 27 mm
- Maximum motor torque - 85 Nm or 100 Nm when used with locking spring ring # 9910002, and M8 bolts
- Maximum system load - 441 Lbs. (200 kg.) when used with locking spring ring # 9910002

Part # 9420631

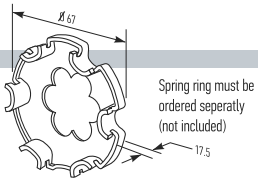
Same as above: Threaded to accept Inch Series threaded screws 1/4 - 20, 5/16 - 18

Part # 9910021

Same as above: Threaded to accept M6 and M8 bolts

Part # 9910001

Weld-on Bracket Without Spring Ring



- Steel bracket without surface treatment
- For welding to mounting plates of all kinds. Lateral space requirement for installation: 23 mm + thickness of mounting plate
- Must be used with spring ring # 9206033 or locking spring ring # 9910002 (not included)
- Maximum motor torque - 85 Nm or 100 Nm depending on spring ring and quality of weld
- Maximum system load - 441 Lbs. (200 kg.) when used with locking spring ring # 9910002

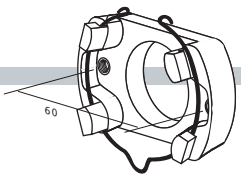
Part # 9206029

*** Note: Maximum system load will vary depending on application. SOMFY recommends testing of component in actual application to determine its suitability.**

500 SERIES MECHANICAL ACCESSORIES

500 SERIES MOTOR BRACKETS

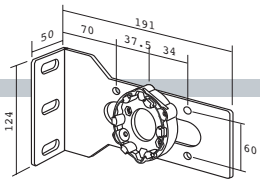
LT50 Compact Bracket



- Two mounting holes with molded in M5 nuts 60 mm apart
- Maximum motor torque 35Nm when used with Locking Spring Ring
- Black nylon material

Part # 9708461

Heavy Duty Angle Plate with Universal Motor Bracket



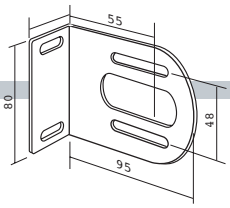
- With two M8 screws and nuts included
- Angle plate (zinc plated steel)
- Three adjustment positions possible
- Maximum motor torque - 85 Nm or 100 Nm when used with locking spring ring # 9910002
- Maximum system load - 287 Lbs. (130 Kg.) or 441 Lbs. (200 Kg.) with locking spring ring # 9910002

Part # 9420602

Heavy Duty Angle Plate - Part # 9420604

- Same as above but without the universal motor bracket

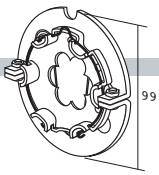
LT50 Angle Plate with Elongated Holes Allowing Adjustment



- Zinc plated steel
- Compatible with idler end bearing support # 1781098 and intermediate bearing support # 9146011
- Maximum motor torque - 50 Nm
- Maximum load - 152 Lbs. (69 Kg.)

Part # 9410639

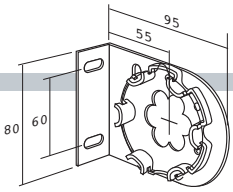
LT50/60 Radial Motor Bracket



- Maximum motor torque 80 Nm
- Zinc plated steel
- Allows for easy removal of LT motor without removing entire bracket. It disassembles in 2 pieces with one part remaining attached to structure
- Maximum system load - See note below*

Part # 9420620

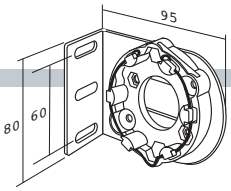
LT50 Universal Motor Bracket



- Maximum motor torque - 50 Nm
- Zinc plated steel
- Maximum system load - 254 Lbs. (115 Kg.)
- Compatible with idler bracket # 9410635, # 9410633 and intermediate bracket # 9410648

Part # 9410651

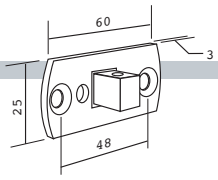
LT50 Adjustable Universal Motor Bracket



- Zinc plated steel
- Without molded nuts
- Maximum motor torque - 50 Nm
- Maximum system load - 254 Lbs. (115 Kg.)

Part # 9002550

Retrofit Brackets



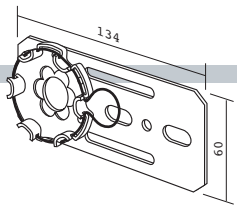
- Zinc plated steel - yellow
- LO LT motor bracket with a 10 mm stud. Vertical pin hole
- Mounting screws # 9670013 not included
- Maximum motor torque - 25 Nm for new LT applications
  - 35 Nm for replacing LS motor with LT motor
- Maximum system load - 154 Lbs. (70 Kg.)

Part # 9206020

Same as above, except pin hole is horizontal

Part # 9206021

Adjustable Motor Bracket with Spring Ring



- Zinc plated steel
- Horizontally and Vertically adjustable
- Lateral space requirement for installation: 27 mm
- Maximum motor torque 50 Nm
- Maximum system load - See note below*

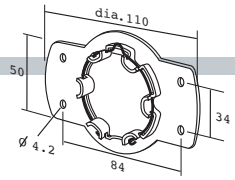
Part # 9703948

*** Note: Maximum system load will vary depending on application. SOMFY recommends testing of component in actual application to determine its suitability.**

500 SERIES MECHANICAL ACCESSORIES

500 SERIES MOTOR BRACKETS

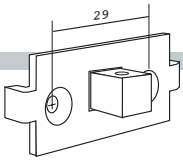
LT50 HA Motor Bracket*



- Allows flush mounting of the motor head against the mounting surface
- Zinc plated steel
- Maximum motor torque - 50 Nm

Part # 9410715

LT RH Motor Bracket



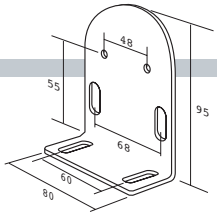
- Pin hole is vertical
- Zinc plated steel
- 10 mm square stud
- Maximum motor torque - 25 Nm
- Mounting Screws # 100405B included
- Maximum system load - 154 Lbs. (70 Kg.)

Part # 9910016

Same as above except pin hole is horizontal

Part # 9910017

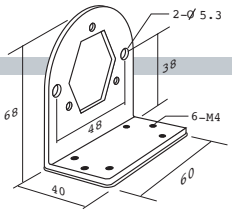
LT50 Angle Bracket*



- For ceiling and wall installation
- Zinc plated steel
- Horizontally and vertically adjustable
- Maximum motor torque - 50 Nm

Part # 9410637

CTS50 Motor Mounting Bracket* (Cord Take-Up System)

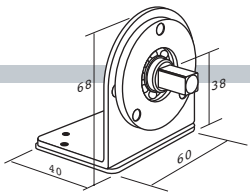


- Zinc plated steel
- Attaches directly to LT50 motor head (48 mm on center)
- Adaptable for Nichibei headrail (70 x 70)
- Maximum motor torque - 10 Nm

Part # 1781110

500 SERIES IDLER BRACKETS

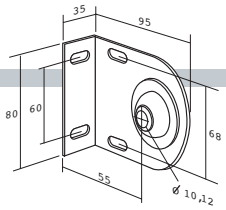
CTS50 Motor Idler Bracket* (Cord Take-Up System)



- Zinc plated
- 10 mm square shaft with ball bearings
- Adaptable for Nichibei headrail (70 x 70)
- Maximum motor torque - 10 Nm

Part # 1781112

LT Idler End Bracket (inside diameter 10 mm)



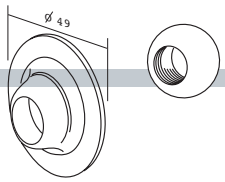
- Zinc plated steel
- 10 mm ID Nylon ball bearing
- Compatible with motor brackets # 9410665 and # 9410651
- Maximum motor torque - 50 Nm
- Maximum system load 287 Lbs. (130 Kg.)

Part # 9410635

Same but with a 12 mm ID Nylon Ball Bearing

Part # 9410633

Idler Bracket 10 mm Ball Bearing and Holder Kit



Part # 9012657

Ball Bearing with 10 mm ID **Part # 9410803**

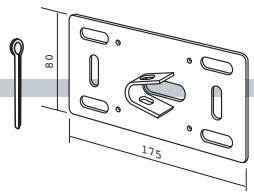
Ball Bearing with 12 mm ID **Part # 9028665**

Ball Bearing Holder

- Used with # 9410803 or # 9028665 ball bearings
- Zinc plated steel
- Maximum motor torque - 50 Nm
- Maximum system load - up to 287 Lbs. (130 Kg.)

Part # 1781030

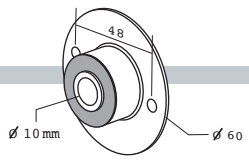
Heavy Duty Idler Bracket*



- Used with end cap having stationary 16 mm diameter shaft
- Cotter pin holding end cap's shaft included
- Zinc plated steel
- Maximum motor torque - 100 Nm

Part # 9132065

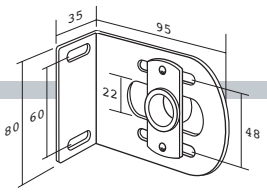
LT50 Round Anti-Vibration Idler Bracket*



- Zinc plated steel with a 10 mm round insert surrounded by rubber
- Can be mounted on # 9410637
- Maximum motor torque - 20 Nm
- Can reduce sound levels by 2-4 dB

Part # 9701310

LT50 Idler Bracket with 14 mm ID Bearing*



- Zinc plated steel
- Adjustable bearing location
- Maximum motor torque - 50 Nm

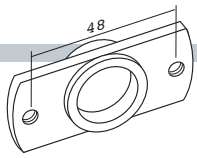
Part # 9002540

*** Note: Maximum system load will vary depending on application. SOMFY recommends testing of component in actual application to determine its suitability.**

500 SERIES MECHANICAL ACCESSORIES

500 SERIES IDLER BRACKETS

Idler End Bearing Support for 14 mm Diameter Shaft*



- Two threaded mounting holes for M5 screws
- Sintered Brass in a zinc plated steel plate
- Mounting hardware included
- Compatible with shaft # 1781011 and brackets # 9012250 and # 9146001
- Maximum motor torque 50 Nm

Part # 1781098

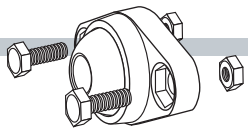
Same as above but hardware not included

Part # 9146007

With 16 mm Dia. Shaft (no hardware)

Part # 9146011

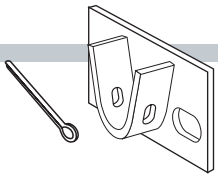
Idler End 12 mm Nylon Ball Bearing with Holder



- Cast aluminum
- Compatible with bracket # 9420604
- Maximum motor torque:
  - FTS range - 25 Nm
  - LT range - 100 Nm
- Maximum system load - 287 Lbs. (130 Kg.)

Part # 9430610

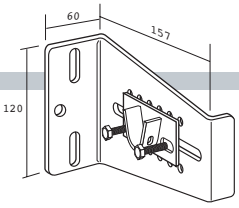
Idler End Cap Holder and Cotter Pin



- Zinc plated steel
- Compatible with bracket # 9420604
- Used with end cap having stationary 16 mm diameter shaft
- Maximum motor torque when properly installed with cotter pin:
  - FTS range - 55 Nm
  - LT range - 100 Nm
- Maximum system load - 441 Lbs. (200 Kg.)
- Open end of the "U" must face up
- Cotter pin 6.3mm x 80 mm (zinc plated) # 132444A

Part # 9540786

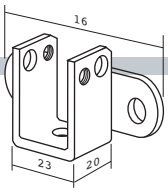
Heavy Duty Idler Bracket with Idler End Cap Holder



- Two screws and cotter pin included
- Zinc plated steel, gauge 3(0.2391 in.)
- Used with end cap having stationary 16 mm diameter shaft
- Maximum motor torque when properly installed with cotter pin:
  - FTS range - 55 Nm
  - LT range - 100 Nm
- Maximum system load - 441 Lbs. (200 Kg.)

Part # 9430603

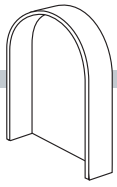
"U" Shaped Idler Bracket



- Zinc plated steel
- Idler bearing securing screw included
- Maximum motor torque - 40 Nm
- Maximum system load - 254 Lbs. (115 Kg.)

Part # 9127808

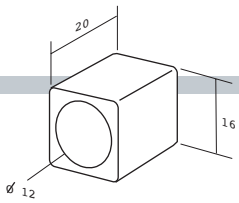
White Dress Cover for Idler Brackets



9410635, # 9410633 and motor brackets # 9410665 and # 9410651
- White composite

Part # 9002519

Idler Bearing (for Ø 12mm Shaft)



- Nylon material
- Maximum motor torque - 40 Nm
- Compatible with # 9127808
- Maximum system load - 254 Lbs. (115 Kg.)

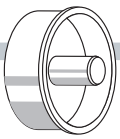
Part # 1781015

*** Note: Maximum system load will vary depending on application. SOMFY recommends testing of component in actual application to determine its suitability.**

500 SERIES MECHANICAL ACCESSORIES

500 SERIES END CAPS

Die Cast End Cap*



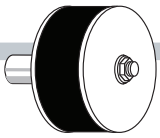
- For tube diameter 2 " (5 0 mm)
- Shaft Diameter 0 .3 9" (1 0 mm)
- Maximum motor torque - 50 Nm

Part # 9128101

Same as Above but with 1 2 mm Shaft

Part # 9132087

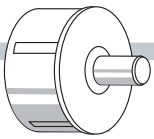
2" Anti-Vibration End Cap



- For tube diameter 2" (50 x 1.5 mm, 50 x 1.6 mm)
- Shaft Diameter 0.39" (10 mm)
- Zinc plated steel parts with molded rubber

Part # 9701380

Molded Composite End Cap*



- For tube diameter 2.5" (63 mm)
- Shaft Diameter 0.59" (15 mm)
- Maximum motor torque - 40 Nm

Part # 9701116

- For tube diameter 2.0" (50 mm)
- Shaft diameter 0.40" (10 mm)
- Maximum motor torque - 50 Nm

Part # 9700958

2" Tube Idler End Cap without Shaft

NOTE: Set screw must use Lock-tight to prevent screw from vibrating free.

- Cast aluminum with set screw

Part # 9129631

2.5" Tube Idler End Cap without Shaft

- Cast aluminum with set screw

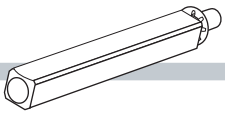
Part # 9129632

2.75" Tube Idler End Cap without Shaft

- Cast aluminum with set screw

Part # 9129633

13 mm Square Drive Shaft with 12 mm Diameter Shaft



- Zinc plated steel shaft

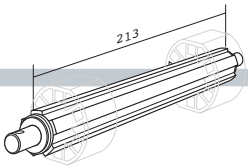
Part # 1781009

13 mm Square Drive Shaft with 14 mm Diameter Shaft

- Zinc plated steel shaft

Part # 1781011

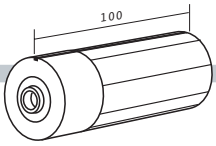
Heavy Duty End Cap with 16 mm Diameter Shaft



- Adaptable to any tube profile using matching LT drives
- To be used with Idler bracket accepting stationary shaft # 9430643
- Extruded aluminum shaft w/heavy duty ball bearings
- Maximum motor torque:
  - FTS range - 55 Nm
  - LT range - 100 Nm
- Maximum system load - 441 Lbs. (200 Kg.)

Part # 9420674

Roller Tube End Cap with 12 mm Hole*



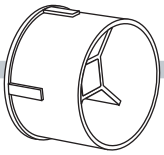
- For tube 50 x 1.5 mm
- Black composite with ball bearing

Part # 9701288

Roller Tube End Cap with 10 mm Hole*

Part # 60903170

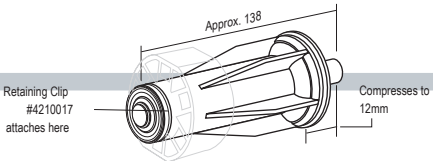
Idler End Cap for CTS 50 Tube



- Maximum system load - See note below
- Used with # 1781112

Part # 1781113

Universal End Cap with 10 mm Collapsible Shaft



- Directly compatible with 2" tube and requires notched 2" tube and 2" drive held in place with retaining clip included
- End cap is adaptable to all tubes w/LT50/60 crown and drive sets
- Black nylon
- Maximum motor torque:
  - With awning - 50 Nm
  - With FTS - 25 Nm
- Maximum system load - 88 Lbs. (40 Kg.)

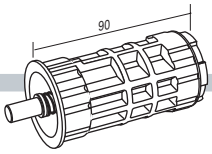
Part # 9420800

Same as above but with 9.15 mm shaft & shorter pin
Part # 9420814*

Same as above but with 12 mm shaft - Part # 9420801

Same as above but with 14 mm Shaft - Part # 9420802

Sonesse 50 Pin End Cap with 10 mm Collapsible Shaft



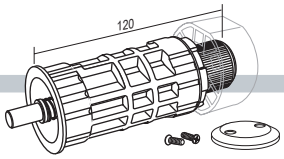
- Ultra Quiet rubber over-molded end cap compatible with 2" tube (requires notched 2" tube)
- Black nylon housing with yellow rubber over-mold
- 2 roller bearings for smooth, quiet operation
- Maximum motor torque: 50 Nm
- Maximum system load - 88 Lbs. (40 Kg.)

Part # 9016628

Same as above but with 12 mm Shaft

Part # 9018228

Sonesse ULTRA 50 Universal End Cap with 10 mm Collapsible Shaft



- Universal Ultra Quiet rubber over-molded end cap is adaptable to all tubes by mounting LT50/60 crown and drive sets (drive stop & screws included)
- Black nylon housing with rubber over-mold
- 2 roller bearings for smooth, quiet operation
- Maximum motor torque: 50 Nm
- Maximum system load - 88 Lbs. (40 Kg.)

Part # 9019716

Same as above but with 12 mm Shaft

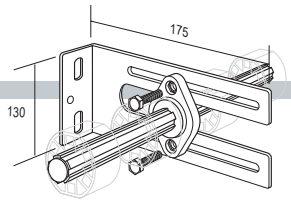
Part # 9019717

*** Note: Maximum system load will vary depending on application. SOMFY recommends testing of component in actual application to determine its suitability.**

500 SERIES MECHANICAL ACCESSORIES

500 SERIES INTERMEDIATE BRACKETS

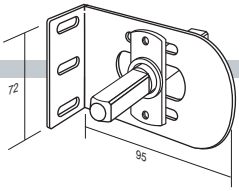
Heavy Duty LT Intermediate Support Bracket*



- Will adapt to any tube profile using tube matching LT drives
- The 4 drives are not included and must be specified separately
- Maximum motor torque:
  FTS range - 55 Nm, LT range - 100 Nm
- Heavy gauge 3 (0.24 in.), zinc plated steel
- Extruded aluminum shaft with heavy duty roller bearing

Part # 9420673

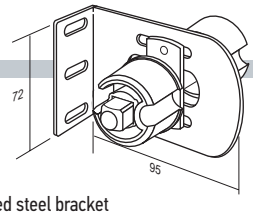
LT50 Intermediate Bracket with 16 mm ID Bearing



- Zinc plated steel
- 16 mm bearing plate # 9146011 also sold separately
- Square shaft # 1781018 also sold separately
- Maximum motor torque:
  FTS range - 25 Nm, LT50 range - 50 Nm
- Maximum system load - 152 Lbs. (69 Kg.)

Part # 9002541

LT50 Adjustable Intermediate Support Bracket for a 2'' Tube



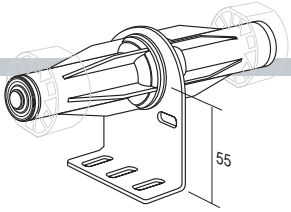
- Zinc plated steel bracket
- Cast aluminum drives, with set screw - set screw must use lock tight to prevent screw from vibrating free
- Maximum motor torque:
  FTS range - 25 Nm, LT50 range - 50 Nm
- Maximum system load - 152 Lbs. (69 Kg.)

Part # 9012203

LT50 Adjustable Intermediate Support Bracket for a 2.5" Tube

Part # 9012204

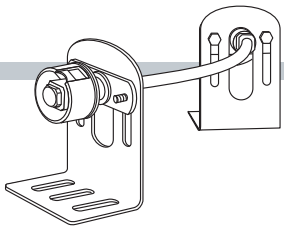
LT Intermediate Bracket for 2'' Tube Only



- Zinc plated steel bracket
- Composite end caps
- Maximum motor torque - 15 Nm
- Requires notched 2" tube for transfer of torque
- Recommended tube used included with 2" LT drives
- Maximum system load - 152 Lbs. (69 Kg.)
- Compatible with LT brackets # 9410665, # 9410651, # 9410635, and # 9410633

Part # 9410648

LT50 Flexible Intermediate Bracket Kit for 2'' Tube



- Maximum angle up to 30°
- Maximum effective motor torque - 7 Nm
- Zinc plated steel bracket
- Cast aluminum drives and flexible coiled steel shaft
- Maximum system load - 60 Lbs. (28 Kg.)

Part # 9012318

Same as above except for maximum angle up to 45°

Part # 9012319

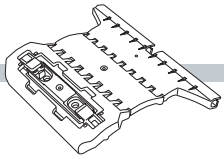
*** Note: Maximum system load will vary depending on application. SOMFY recommends testing of component in actual application to determine its suitability.**

RIGID LINKS - Recommended to be used in conjunction with Oximo motor.

Number and location of Rigid Links:

- Minimum of 2 rigid links per rolling shutter.
- Do not exceed 33 lbs (15 kg) hanging load per rigid link.

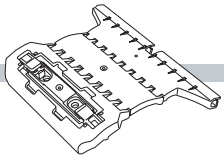
Rigid Link - 1 Link



- Maximum torque stopping load: 14 Nm
- Slat Size: .32 in. (9 mm)

Part # 9019327

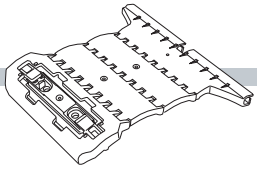
Rigid Link - 1 Link



- Maximum torque stopping load: 14 Nm
- Slat Size: .55 in. (14 mm)

Part # 9019328

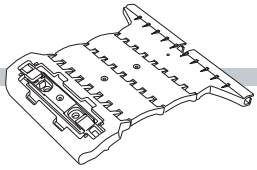
Rigid Link - 2 Links



- Maximum torque stopping load: 10 Nm
- Slat Size: .32 in. (9 mm)

Part # 9019329

Rigid Link - 2 Links



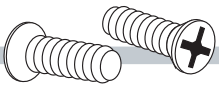
- Maximum torque stopping load: 10 Nm
- Slat Size: .55 in. (14 mm)

Part # 9019330

500 SERIES MECHANICAL ACCESSORIES

500 SERIES MISCELLANEOUS

LT50 Motor Mounting Screws-Flat Head, Self Tapping Tri lobe 5 mm Dia. (13 mm Deep)



Part # 9670013

LT50 RH Motor Mounting Screws- Flat Head, Self Tapping Tri lobe 4 mm Dia. (9 mm Deep)

Part # 100405B

Spring Ring with Loop

- Used with brackets and motors rated up to 80 Nm maximum
- Allows for easy hand removal from the bracket
- Spring type stainless steel

Part # 9685025

Spring Ring

- Used with brackets and motors rated up to 80 Nm maximum
- Stainless steel spring type

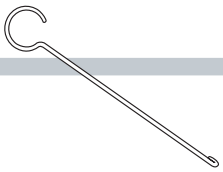
Part # 9206033

Locking Spring Ring

- Must be used with all brackets in combination with the 6100R2 motor or installations where flexing of the tube is abnormally high
- Used with brackets and motors rated up to 100 Nm
- Spring type stainless steel
- Locking screw must be secured to prevent motor from disengaging from the universal bracket

Part # 9910002

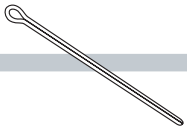
Pull-off Tool for Spring Ring



- Black finished steel

Part # 9206015

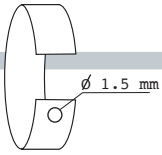
Cotter Pin



- 3.5 mm x 45 mm

Part # 43500020

Fabric Fastening Clip



- for 2" (50 mm) O.D. Tube
- Made out of spring steel

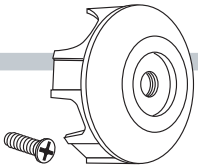
Part # 9138028

Fabric Fastener

- for 2.5" (63 mm) O.D. Tube

Part # 9012201

LT50 Stop Wheel



- Screws into the motor output shaft to prevent drive from coming off shaft
- Black composite stop

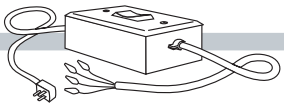
Part # 9910004

LT60 Stop Wheel

- Same as above but with a screw adaptable to the LT60 operators

Part # 9012194

Tester Cable - 4 Wire



- Allows easy setting of the LT motor limit switches before connecting the motor to the controlling device

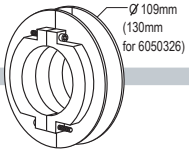
Part # 9012116

FTS Tester Cable - 5 Wire

- Same as above, but for the FTS (Fabric Tension System)

Part # 9012117

50 x 1.5 mm Tube Cord Take-up Reel



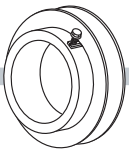
- Material - Cast aluminum alloy
- Shipped unassembled in 4 pieces
- Adjustable tape width

Part # 9146035

63 x 1.5 mm Tube Cord Take-up Reel

Part # 9146071

2" Tube Take-up Reel



- Outside dia. 89 mm
- Material ABS
- Maximum tape width - 9 mm

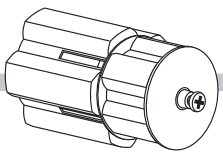
Part # 1781151

40mm tube take-up reel

- Outside dia. 66 mm

Part # 1781152

Anti-Blocking System (ABS)



ABS Wheel - Left Rotation - Maximum motor torque - 30 Nm
ABS Wheel - Right Rotation - Maximum motor torque - 30 Nm
The input of the ABS wheel fits the LT50 motor shaft. The output shaft will accept any of the LT50 drive wheels. Drive retaining washer is included. In the up direction, 30 Nm can be lifted. If an obstacle is detected in the down direction then the motor will spin freely and not damage the product. A momentary switch or Somfy controls having 3 min. time out are required.

Left Rotation Part # 9705415 Right Rotation Part # 9705414

Same as above but with greater torque threshold which is required to activate the ABS

- CMO ABS left rotation - maximum motor torque - 30 Nm
- CMO ABS right rotation - maximum motor torque - 30 Nm

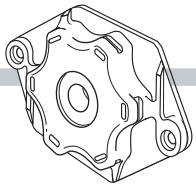
Left Rotation Part # 9706003 Right Rotation Part # 9706004

*** Note: Maximum system load will vary depending on application. SOMFY recommends testing of component in actual application to determine its suitability.**

500 SERIES MECHANICAL ACCESSORIES

CMO MECHANICAL ACCESSORIES

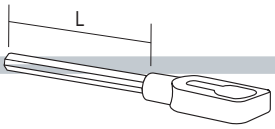
CMO Motor Bracket



- Converts a CMO motor head to be compatible with standard LT brackets
- Allows the motor to be rotated in 60° increments
- Delivered with two motor mounting screws
- Black composite
- Maximum motor torque - 80 Nm
- Maximum system load- See note below*

Part # 9910051

CMO Awning Eye with 2.36'' (60 mm) Long 7 mm Hex Shaft



Part # 9685114

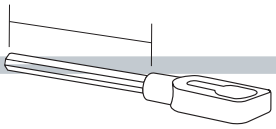
CMO Awning Eye with 6.5" (165 mm) Long 7 mm Hex Shaft

Part # 9685136

CMO Awning Eye with 4" (100 mm) Long 7 mm Hex Shaft

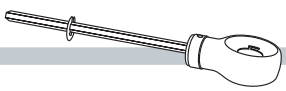
Part # 9685148

Sunea Awning Eye with 2.36'' (60 mm) Long 7 mm Hex Shaft



Part # 9016332

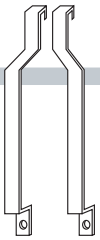
LT CMO Awning Eye Compatible with Geiger Crank Handles



- Length of the shaft is (100 mm) 4"
- Stainless steel pin for eyepiece mounting to 7 mm Hex shaft
- Stainless steel stop washer & socket head screw (also sold separately)
- Zinc plated steel shaft

Part # 9707287

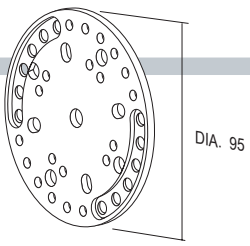
CMO Motor Limit Setting Tool



- Allows setting the travel limits of the motor when the limit switch buttons are hard to access
- Zinc plated steel

Part # 9910019

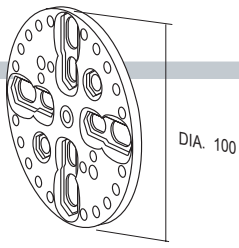
Sunea RTS CMO Universal Bracket



- U.S. thread 1/4 - 20, 5/16 - 18 threads
- Delivered without motor mounting screws
- Zamak aluminum alloy material
- Maximum motor torque - 50 Nm
- Maximum system load - See note below*

Part # 9015802

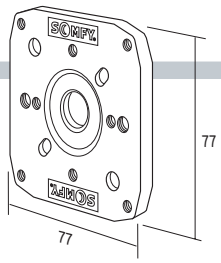
CMO Round Awning Motor Bracket



- U.S. thread 1/4 - 20, 5/16 - 18 threads
- Delivered without motor mounting screws
- Black finished aluminum alloy
- Maximum motor torque - 100 Nm (must be used with 5/16 - 18 bolts at maximum torque)
- Maximum system load - See note below*

Part # 9420648

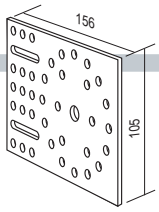
CMO ME Square Awning Motor Bracket



- U.S. thread 1/ 4 - 20 , 5 /16 - 18 threads
- Delivered with two motor mounting screws (3/16" Socket Head)
- Black finished aluminum alloy
- Maximum motor torque - 100 Nm (must be used with 5 /16 - 18 bolts at max. torque)
- Maximum system load - See note below*

Part # 9910041

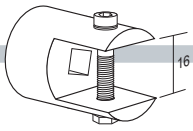
Standard LT and LT CMO Motor Mounting Plate



- Allows for different orientation of the LT CMO motor head in 15 increments
- Zinc plated steel
- Maximum motor torque - 100 Nm
- Maximum system load - See note below*

Part # 9012293

LT50 Differential Torque Tube Connectors



- For square link bars (16 x 1 mm)
- Zinc plated steel

Part # 9012778

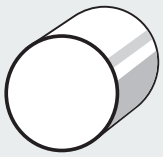
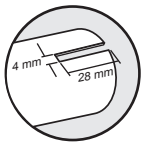
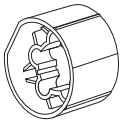
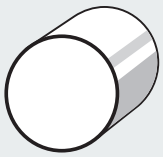
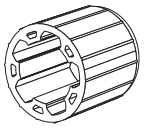
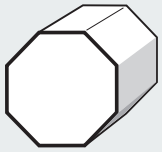
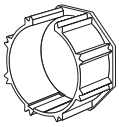
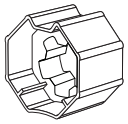
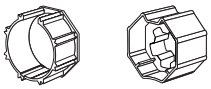
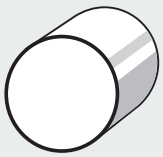
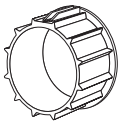
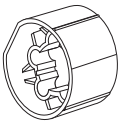
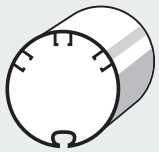
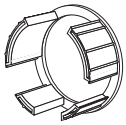
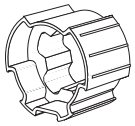
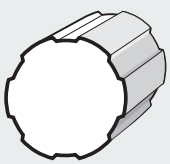
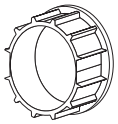
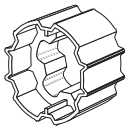
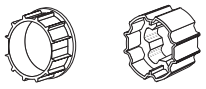
- For round link bars (Dia. 16 x 1 mm)

Part # 9910045

*** Note: Maximum system load will vary depending on application. SOMFY recommends testing of component in actual application to determine its suitability.**

500 SERIES MECHANICAL ACCESSORIES

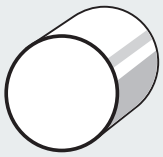
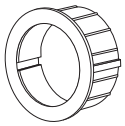
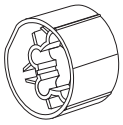
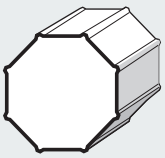
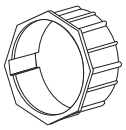
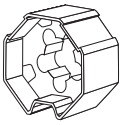
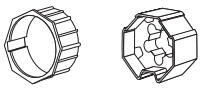
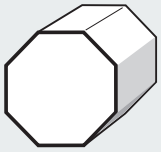
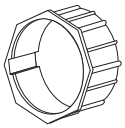
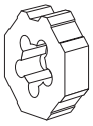
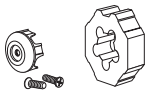
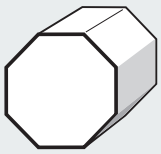
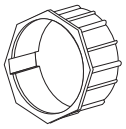
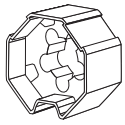
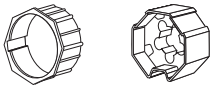
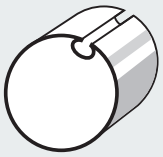
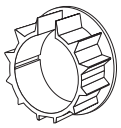
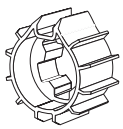
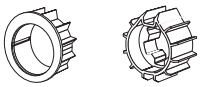
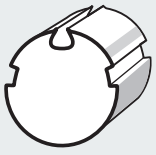
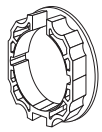
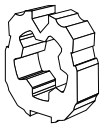
CROWNS AND DRIVES

TUBE PROFILE	CROWN	DRIVE	SET
 ø 2 in. / 50 mm	No adaptor crown is required but 2 in. tube must be notched according to the dimensions shown below 	 2.0" Round LT50 Drive (50 mm x 1.5 mm) - Soft clip **Part # 9206089** 2.0" Round LT50 Drive (50 mm x 1.5 mm) - Hard clip **Part # 9206088**	
 ø 2 in. / 50 mm	No adaptor crown is required but 2 in. tube must be notched according to the dimensions shown below 	 Sonesse 50 Drive Wheel (50 mm x 1.5 mm) - Soft clip **Part # 9018455** Sonesse 50 Drive Wheel (50 mm x 1.5 mm) - Hard clip **Part # 9016630**	
 ø 60 mm Octagonal IMBAC	 60 mm Octagonal LT50 Crown **Part # 9707025**	 60 mm Octagonal LT Drive **Part # 9751001**	 60 mm Octagonal LT50 Set **Part # 9012233**
 ø 2.5 in. / 63 mm	 2.5" Round LT50 Crown **Part # 9707026**	 2.5" Round LT Drive (63 mm x 1.5 mm) - Soft clip **Part # 9206041** 2.5" Round LT Drive (63 mm x 1.5 mm) - Hard clip **Part # 9206019**	 2.5" Round LT50 Set "Hard Clip" **Part # 9012231**
 ø 65 mm MADOPRON Sun Master	 SM 65 LT50 Crown - 3 Grooves **Part # 9707030**	 SM 65 LT Drive **Part # 9751002**	
 ø 65 mm IMBAC	 I65 LT50 Crown **Part # 9707024**	 I65 LT50 Drive **Part # 9751004**	 I65 LT50 Set **Part # 9012240**

*** Note: Maximum system load will vary depending on application. SOMFY recommends testing of component in actual application to determine its suitability.**

500 SERIES MECHANICAL ACCESSORIES

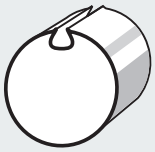
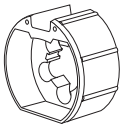
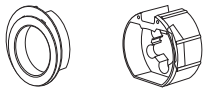
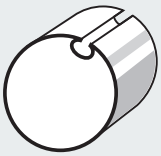
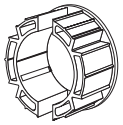
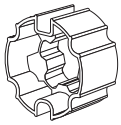
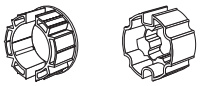
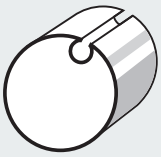
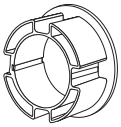
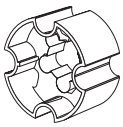
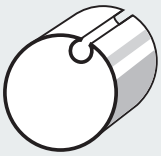
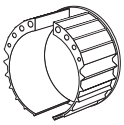
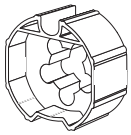
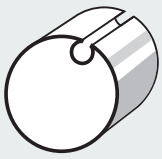
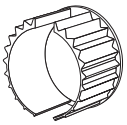
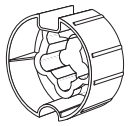
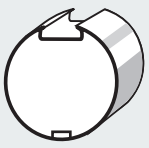
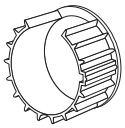
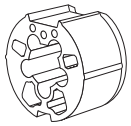
CROWNS AND DRIVES

TUBE PROFILE	CROWN	DRIVE	SET
 ø 2.75 in. / 70 mm	 2.75" Round LT50 Crown **Part # 9707031** 2.75" Round LT60 Crown **Part # 9420342**	 2.75" Round LT Drive (70 mm x 1.5 mm) - Soft clip **Part # 9206026** 2.75" Round LT Drive (70 mm x 1.5 mm) - Hard clip **Part # 9206028**	 2.75" Round LT50 Set **Part # 9012232** 2.75" Round LT60 Set **Part # 9012246**
 ø 70 mm Octagonal IMBAC	 70 mm Octagonal LT60 Crown **Part # 9705340**	 70 mm Octagonal LT Drive **Part # 9761002**	 70 mm Octagonal LT60 Set **Part # 9012247**
 ø 70 mm Octagonal IMBAC	 70 mm Octagonal LT60 Crown **Part # 9705340**	 70 mm Octagonal Aluminum LT50/60 Drive **Part # 9011878**	 70 mm Octagonal Aluminum LT50/60 Drive Wheel Kit (crown not included) **Part # 9012227**
 ø 70 mm Octagonal IMBAC	 70 mm Octagonal LT50 Crown (includes 2.5" LT50 Step-up Adaptor #9707026) **Part # 9012328**	 70 mm Octagonal LT Drive **Part # 9761002**	 70 mm Octagonal LT50 Set **Part # 9012234**
 ø 70 mm DOHNER	 DS 70 LT50 Crown (3 mm offset) **Part # 9707034**	 DS 70 LT Drive (0.8 -1 mm wall thickness) (3 mm offset) **Part # 9751005**	 DS 70 LT50 Set (3 mm offset) **Part # 9012237**
 ø 71 mm AMA	 AMA/P71 LT50 Crown **Part # 9997118**	 AMA/P71 LT50 Drive **Part # 9751015**	

*** Note: Maximum system load will vary depending on application. SOMFY recommends testing of component in actual application to determine its suitability.**

500 SERIES MECHANICAL ACCESSORIES

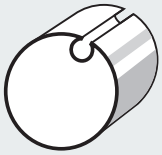
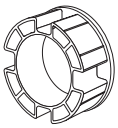
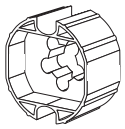
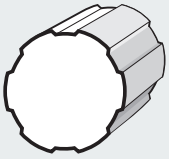
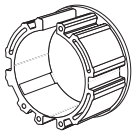
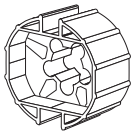
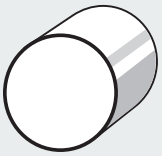
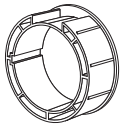
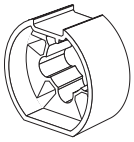
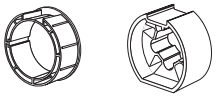
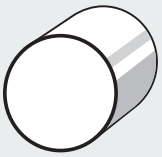
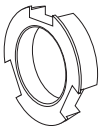
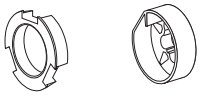
CROWNS AND DRIVES

TUBE PROFILE	CROWN	DRIVE	SET
 ø 72 mm PERMA	 P72 LT60 Crown (4 mm offset) **Part # 9277167** P72 LT50 Set (4 mm offset) **Part # 9012329**	 P72 LT Drive (4 mm offset) **Part # 9761011**	 P72 LT50 Crown Set (4 mm offset) **Part # 9012235**
 ø 74 mm DOHNER	 DS 74 LT50 Crown **Part # 9707037**	 DS 74 LT50 Drive **Part # 9751009**	 DS 74 LT50 Set **Part # 9012238**
 ø 78 mm IMBAC	 DS 78 LT50 Crown **Part # 9707027** DS 78 LT60 Crown **Part # 9705341**	 DS 78 LT50/60 Drive **Part # 9761001**	 DS 78 LT50 Set **Part # 9012239**
 ø 78 mm MITSAVILA	 DS 78/R LT50 Crown (4.4 mm offset) **Part # 9707640* + Part # 9707026*** * Both parts required for LT50 compatibility DS 78/R LT60 Crown (4.4 mm offset) **Part # 9707640**	 DS 78/R LT Drive (44 mm offset) **Part # 9761005**	
 ø 78 mm IMBAC	 DS 78/D LT50 Crown (2.5 mm offset) * Both parts required for LT50 compatibility **Part # 9707639* + Part # 9707026*** DS 78/D LT60 Crown (2.5 mm offset) **Part # 9707639**	 DS 78/D LT Drive (2.5 mm offset) **Part # 9761004**	
 ø 78 mm MHZ	 LT60 Crown (78 mm) **Part # 9762012**	 LT60 Drive (78 mm) **Part # 9761012**	

*** Note: Maximum system load will vary depending on application. SOMFY recommends testing of component in actual application to determine its suitability.**

500 SERIES MECHANICAL ACCESSORIES

CROWNS AND DRIVES

TUBE PROFILE	CROWN	DRIVE	SET
 ø 85 mm DOHNER	 DS 85 LT50 Crown **Part # 9707035** DS 85 LT60 Crown **Part # 9705776**	 DS 85 LT Drive **Part # 9761003**	
 ø 85 mm IMBAC	 I85 LT60 Crown **Part # 9690085**	 I85 LT Drive **Part # 9420300**	 I85 LT60 Set **Part # 9012222**
 ø 3.5" / 89 mm	 3.5" Round LT50 Crown (81 mm x 1 mm) **Part # 9012656** 3.5" Round LT60 Crown (89 mm x 2 mm) **Part # 9520312**	 3.5" Round LT Drive (89 mm x 2 mm) **Part # 9420303**	 3.5" Round LT50 Set **Part # 9012236** 3.5" Round LT60 Set **Part # 9012248**
 ø 4" / 102 mm	 4.0" Round LT60 Crown **Part # 9420370**	 4.0" Round LT Drive (102 mm x 2 mm) **Part # 9420304** 4.0" Round LT Drive (101.6 mm x 3.6 mm) **Part # 9420309**	 4.0" Round LT60 Set **Part # 9012221**

*** Note: Maximum system load will vary depending on application. SOMFY recommends testing of component in actual application to determine its suitability.**

500 SERIES MECHANICAL ACCESSORIES

500 SERIES STANDARD AND CMO PRODUCT KITS

U.S. 3/4" SS Hardware Kit	U.S. 1" SS Hardware Kit	U.S. 1.25" SS Hardware Kit
1/4 - 20 x 3/4 hex head SS 18-8 bolt 1/4 flat washer SS 18-8 1/4 split lock washer 18-8 Qty. in package - 2 each **Part # 9012297**	1/4 - 20 x 1 hex head SS 18-8 bolt 1/4 flat washer SS 18-8 1/4 split lock washer 18-8 Qty. in package - 2 each **Part # 9012298**	1/4 - 20 x 1.25 hex head SS 18-8 bolt 1/4 flat washer SS 18-8 1/4 split lock washer 18-8 Qty. in package - 2 each **Part # 9012299**
Metric 20 mm SS Hardware Kit	**Metric 25 mm SS Hardware Kit**	**Metric 30 mm SS Hardware Kit**
M6 x 20 mm hex head cap screw SS Lock washer split M6 SS A2 M6 flat washer SS A2 Qty. in package - 2 each **Part # 9012300**	M6 x 25 mm hex head cap screw SS Lock washer split M6 SS A2 M6 flat washer SS A2 Qty. in package - 2 each **Part # 9012301**	M6 x 30 mm hex head cap screw SS Lock washer split M6 SS A2 M6 flat washer SS A2 Qty. in package - 2 each **Part # 9012302**

CMO Round Awning Override Kit	CMO ME Square Awning Override Kit
1/4 - 20 x 1.25 hex head SS 18-8 bolt 1/4 - 20 x 7/8 socket head cap screw Nut hex 1/4 - 20 18-8 SS 1/4 flat washer SS 18-8 1/4 split lock washer 18-8 CMO awning bracket with US thread CMO awning override short shaft Plastic bag 5 x 6 x .04 Qty. in package - 2 each **Part # 9012348**	1/4 - 20 x 3/4 hex head SS 18-8 bolt 1/4 - 20 x 1.25 hex head SS 18-8 bolt Nut hex 1/4 - 20 18-8 SS 1/4 flat washer SS 18-8 1/4 split lock washer 18-8 CMO awning bracket with ME US thread CMO awning override short shaft Plastic bag 5 x 6 x .04 Qty. in package - 2 each **Part # 9012349**
CMO Awning Kit without Awning Eye	**CMO ME Awning Kit without Awning Eye**
1/4 - 20 x 1.25 hex head SS 18-8 bolt 1/4 - 20 x 7/8 socket head cap screw Nut hex 1/4 - 20 18-8 SS 1/4 flat washer SS 18-8 1/4 split lock washer 18-8 CMO awning bracket with US thread Plastic bag 5 x 6 x .04 Qty. in package - 2 each **Part # 9012362**	1/4 - 20 x 3/4 hex head SS 18-8 bolt 1/4 - 20 x 1.25 hex head SS 18-8 bolt Nut hex 1/4 - 20 18-8 SS 1/4 flat washer SS 18-8 1/4 split lock washer 18-8 CMO ME awning bracket with US thread Plastic bag 5 x 6 x .04 Qty. in package - 2 each **Part # 9012363**

*** Note: Maximum system load will vary depending on application. SOMFY recommends testing of component in actual application to determine its suitability.**

DECOFLEX RTS, SDN & DRY CONTACT

Button Engraving Order Form

Customer Name: _____ Customer #: _____

SHIPPING

Shipping Information

Ship to: Default Shipping Address ☐ **Drop Ship** ☐

Name: _____

Address: _____

City: _____ State: ___ Zip: _____

Phone: _____

Project Information

Project Name: _____

Installer Name/Company: _____

P/O #: _____ Order #: _____

Area: _____

Room: _____

STYLE

Button Color

WHITE ☐ #9018259 IVORY ☐ #9018260 BLACK ☐ #9018261

Switch Type

RTS ☐ Somfy Digital Network (SDN) RS485 ☐ Dry Contact ☐

Available in White only

ENGRAVING OPTIONS

	Buttons (A-F) 9 Characters Maximum (including paces)	QTY.
A		
B		
C		
D		
E		
F*		
G		
H		

(F): Command Button by default is labeled STOP on the DecoFlex RTS and Dry Contact Switches only.

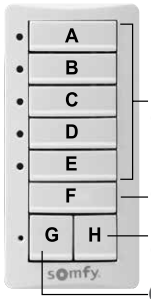
NOTE: **G** and **H** buttons by default are labeled as follows:

(**G** = down▽ icon) WHITE - #9018263 IVORY - #9018264 BLACK - #9018265

(**H** = up△ icon): WHITE - #9018267 IVORY - #9018268 BLACK - #9018269

If you prefer they can be substituted with an associated command NAME (UP, DOWN, LOWER, etc.) up to 5 characters.

DecoFlex RTS



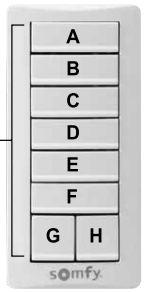
(A-E) Designated channel buttons

(F) Stop/"MY" command only

(H) "UP" command

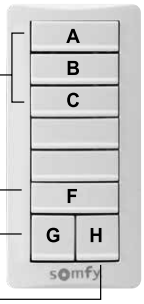
(G) "DOWN" command

DecoFlex SDN



(A-H) Programmable function buttons

DecoFlex Dry Contact



(A-C) Programmable intermediate position buttons

(F) Stop/"MY" command only

(G) "DOWN" command

(H) "UP" command

Engraving Options – Default option will be used if nothing is selected.

Character Types: (choose one)

☐ ALL LETTERS CAPITALIZED (Default) ☐ First Letters Capitalized ☐ As written in above section

Payment terms of your account will apply.
All engraved switches are custom made and are non-cancellable.
Please send form to: Fax # 609-495-8117 or e-mail to: Ordering_us@somfy.com

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SOMFY Canada Division
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CN: (905) 564-6446
Fax: (905) 238-1491

SOMFY® is the leading global manufacturer of strong, quiet motors with electronic and app controls for interior and exterior window coverings. Over 270 million users worldwide enjoy the more than 150 million motors produced by Somfy. During the past 40+ years, Somfy engineers have designed products for both the commercial and residential markets to motorize window coverings such as interior shades, wood blinds, draperies, awnings, rolling shutters, exterior solar screens and projection screens. Somfy motorization systems are easily integrated with security, HVAC and lighting systems providing total home or building automation.

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Glydea® Databook

somfy®

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Glydea® Motor Range

This document presents the technical information and related accessories for Somfy's Glydea® motor range designed specifically for draperies. It provides detailed information to facilitate the specification of this motor solution and presents information regarding options for specialty applications including bent and curved tracks. Information for Somfy's entire product range including motors, power sources, control interfaces etc. can be accessed at www.somfysystems.com.

Innovative
The Glydea® motor range is a product of years of industry experience and expertise. This reliable motor solution offers a superior user experience as well as a wide array of features and exemplifies Somfy's continued commitment to quality.

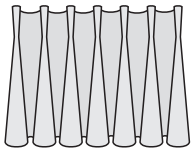
Competitive
Designed for residential, commercial and hospitality markets, the Glydea® range provides a convenient solution for glare reduction and privacy while also reducing energy costs and protecting interiors from damaging UV rays.

Adaptable
Glydea® is available for all drapery types including pinch pleat, Ripplefold® and Accordia®. Additionally, it has been designed to easily adapt to various control technologies including infrared, dry contact, Radio Technology Somfy® (RTS), RS485, Z-Wave® and ZigBee®.

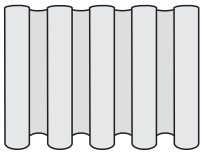
Z-Wave® is a registered trademark of Zensys, Inc. and its subsidiaries. ZigBee® is a registered trademark of ZigBee® Alliance. Ripplefold® and Accordia® are registered trademarks of Kirsch.

Somfy's Glydea® motors are compatible with the three types of draperies below.

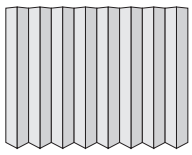
Pinch Pleat



Ripplefold®



Accordia®



Plug-in control modules offer simple compatibility with various technologies:

RTS Radio Technology Somfy®

Z-WAVE

ZigBee™

Somfy Digital Network RS485

Glydea®, the difference is in the details

The sophistication of Glydea™ is reflected in the simple form and sleek lines of the motor and the track.

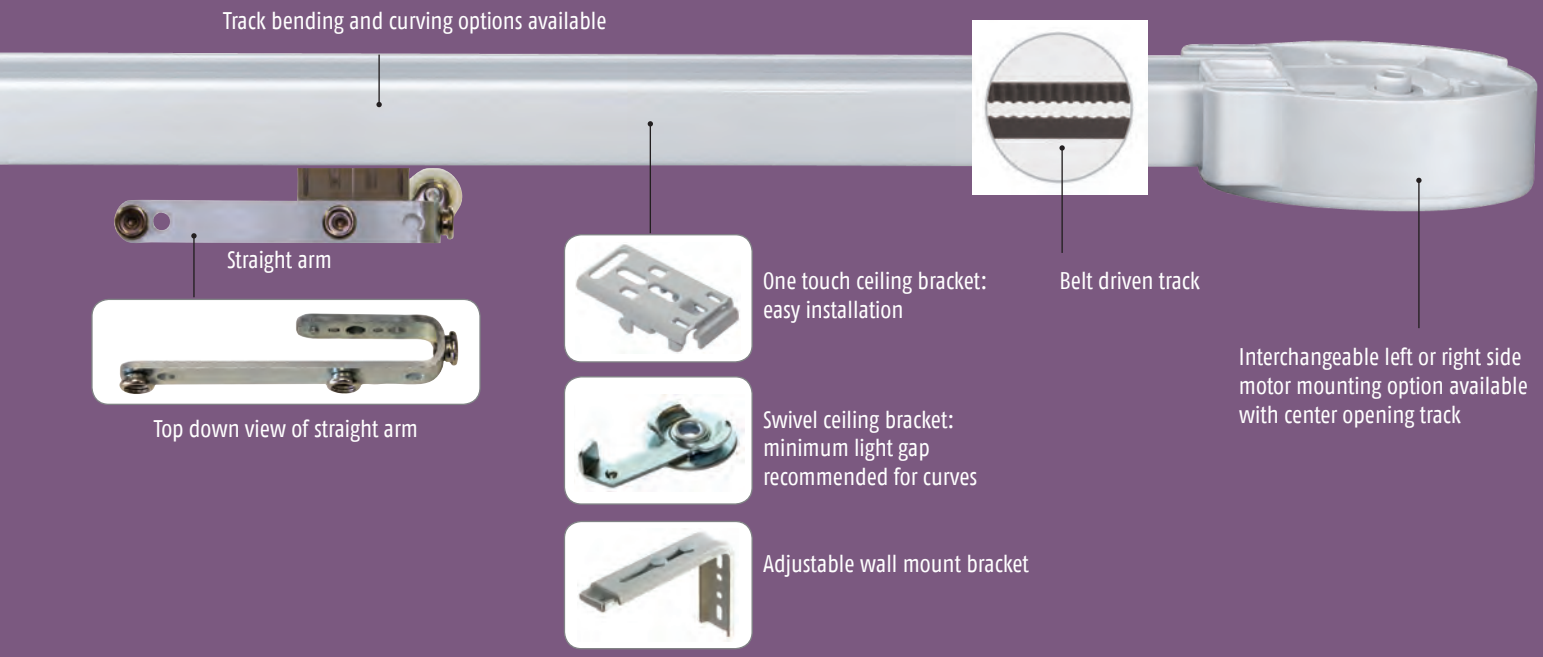
Adaptable Control Modules

RTS Control Module

RS485 Control Module

ZigBee® Control Module

Z-Wave® Control Module



Aesthetic

- Clean premium design with brushed aluminum finish.
- Adjustable limit setting provides alignment of drapery fabric.
- Patented control module cover design conceals unsightly cables and protects the connectors and control modules inside the motor.
- Advanced track design and swivel ceiling brackets minimize the light gap.
- Soft start and soft stop.
- Improved arm design provides even overlap and even stack back.

Easy Installation

- Spring loaded one-touch hardware (wall and ceiling mount).
- On center opening tracks, motor can be installed to the right or to the left side of the track.
- Automatic or adjustable limit setting
- Inverse (top mount) option allows the motor to be installed above the track.

Flexibility

- Patented flexible master carrier reduces friction and is adaptable to various drapery types.
- Various control modules allow Glydea® to easily integrate with third party control protocols.
- Drapery track is available with custom curves and bends.
- Exclusive cable cover allows you to reverse cable direction for easier access to power.
- Adjustable speed available.

Quiet

- Motor design and advanced high performance belt drive system provide quiet operstion (<44dBA).

Efficient

- **Touch Motion** allows the user to activate the motorized drapery simply by pulling on the fabric. Two sensitivity settings available.
- **Manual Override** disengages the motor when drapery is adjusted manually. This is ideal for power outages and also protects the fabric from damage.
- **My Function** allows user to set a preferred drapery openness position for easy access.

Somfy DESIGNED FOR SILENCE

Glydea®, Somfy quality

5 years international warranty.
International certifications.

Technical Specifications Glydea® 35e

Motor part numbers

Glydea® 35e DCT motor **Part# 1002465**
(with 10′ cable and molded NEMA plug)

Glydea® 35e RTS motor **Part# 1001615**
(with 10′ cable and molded NEMA plug)

Glydea® 35e RS485 motor **Part# 1002109**
(with 10′ cable and molded NEMA plug)

Glydea® 35e Wired motor **Part# 1002464**
(5′ long without plug)

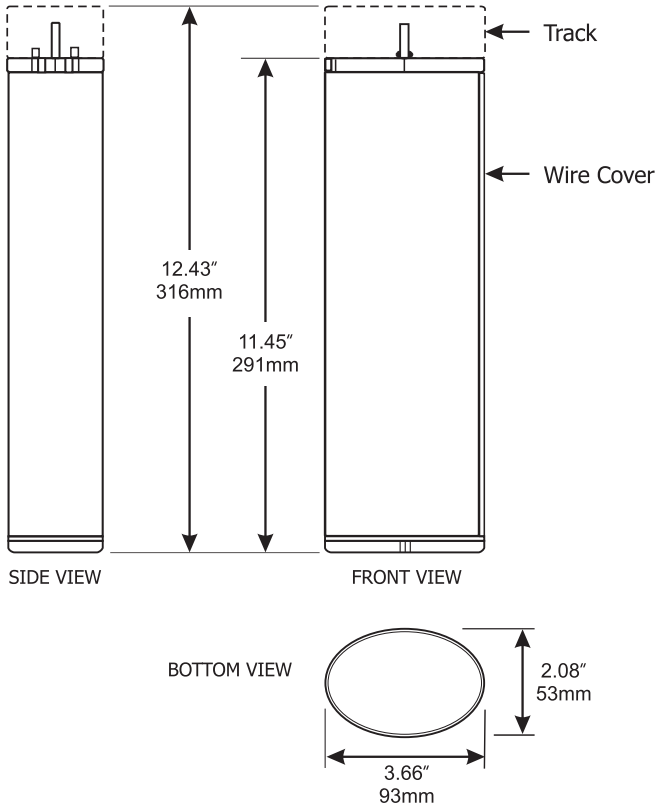
Features overview

Glydea® 35e
Motor unit main features
Soft start
Manual operation
Automatic limits on end stop
Soft stop
Intermediate position
Touch motion with 2 sensitivity settings
Adjustable limits
Speed control & adjustment
Control options
3 normally open dry contacts
2 normally open dry contacts
2 normally open dry contact sequencing mode
Dry contact individual, group & master control
Radio Technology Somfy® RTS
Infrared
RS485 digital technology
Z-Wave®
ZigBee®
Tandem alternative
Sun control
Timer control
Installation and setting features
Setting with buttons on motor unit
Setting with normally open dry contact switch
LED indicators
Motor unit direction change
Factory reset
Inverse (top mount) mounting
Tracks / Drapery Types
Side opening
Center opening
Asymmetric
Multiple
Pinch pleat
Rippleffold® with overlap arm
Rippleffold® with butt arm
Accordia®

Motorized track main characteristics

	Glydea® 35e
Power supply	110V AC 50/60 HZ
Amperage	0.5 A
Average linear speed	4.9″/s - 7.86″/s
Power consumption	60 W
Power cable type	3-wire cable with molded NEMA plug 4-wire cable (wired version only)
Control connector type	RJ12
DCT control circuit voltage	3.3 VDC
Motor sound level	< 44 dB(A)
Certifications	c TUV us, CE
Track maximum length	32 ft (9.7 m)
Maximum number of splices	2
Minimum bending radius	11.8 in. (30 cm)
Minimum curving radius	118 in. (300 cm)
Side opening max weight	77 lbs 35 kg
Center opening max weight	77 lbs 35 kg
Tandem alternative (see page 21)	154 lbs / 70 kgs 64 ft / 19.4 m

Motor dimensions



Technical Specifications Glydea® 60e

Motor part numbers

Glydea® 60e DCT motor **Part# 1002545**
(with 10′ cable and molded NEMA plug)

Glydea® 60e RTS motor **Part# 1001617**
(with 10′ cable and molded NEMA plug)

Glydea® 60e RS485 motor **Part# 1002108**
(with 10′ cable and molded NEMA plug)

Glydea® 60e Wired motor **Part# 1001537**
(5′ long without plug)

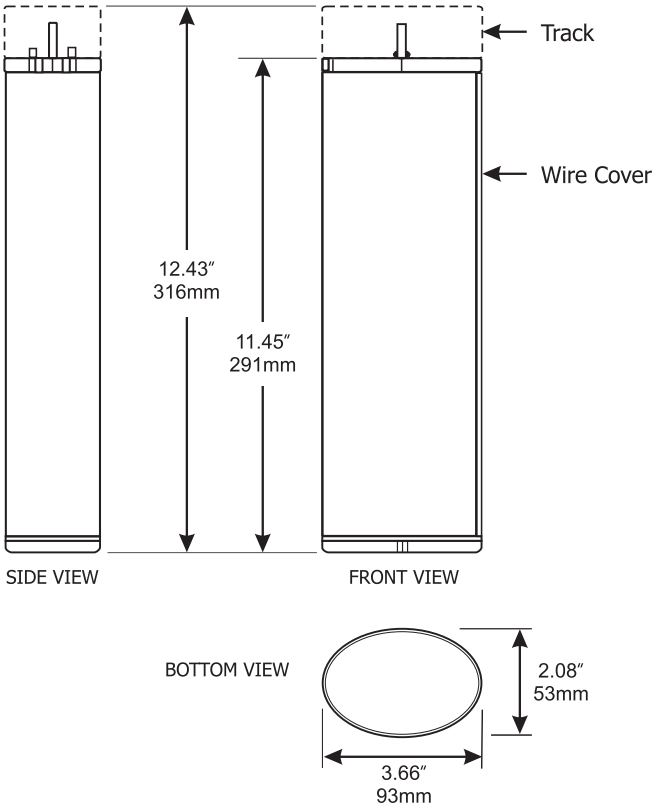
Features overview

Glydea® 60e
Motor unit main features
Soft start
Manual operation
Automatic limits on end stop
Soft stop
Intermediate position
Touch motion with 2 sensitivity settings
Adjustable limits
Speed control & adjustment
Control options
3 normally open dry contacts
2 normally open dry contacts
2 normally open dry contact sequencing mode
Dry contact individual, group & master control
Radio Technology Somfy® RTS
Infrared
RS485 digital technology
Z-Wave®
ZigBee®
Tandem alternative
Sun control
Timer control
Installation and setting features
Setting with buttons on motor unit
Setting with normally open dry contact switch
LED indicators
Motor unit direction change
Factory reset
Inverse (top mount) mounting
Tracks / Drapery Types
Side opening
Center opening
Asymmetric
Multiple
Pinch pleat
Ripplefold® with overlap arm
Ripplefold® with butt arm
Accordia®

Motorized track main characteristics

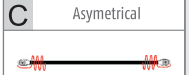
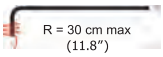
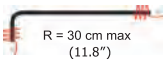
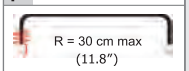
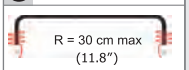
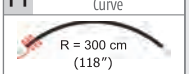
	Glydea® 60e
Power supply	110V AC 50/60 HZ
Amperage	1A
Average linear speed	4.9″/s to 7.86″/s
Power consumption	120 W
Power cable type	3-wire cable with molded NEMA plug 4-wire cable (wired version only)
Control connector type	RJ12
DCT control circuit voltage	3.3 VDC
Motor sound level	<44 dB(A)
Certifications	c TUV us, CE
Track maximum length	36 ft (10.9 m)
Maximum number of splices	2
Minimum bending radius	11.8 in. (30 cm)
Minimum curving radius	118 in. (300 cm)
Side opening max weight	132 lbs. 60 kg.
Center opening max weight	132 lbs. 60 kg.
Tandem alternative (see page 21)	264 lbs / 120 kg 72 ft /21.8 m

Motor dimensions

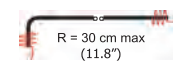
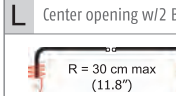
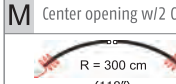


Technical Specifications

SELECTION CHARTS

Track Type	Glydea® 35e			Glydea® 60e		
	UP TO 10 FT.	UP TO 20 FT.	UP TO 32 FT.	UP TO 10 FT.	UP TO 32 FT.	UP TO 36 FT.
A One Way	77 Lbs.			132 Lbs.		
B Center Opening	77 Lbs.			132 Lbs.		
C Asymetrical 	77 Lbs.			132 Lbs.		
D One Way w/Bend 	77 Lbs.	55 Lbs.	44 Lbs.	100 Lbs.	100 Lbs.	77 Lbs.
E Center Opening w/Bend 	77 Lbs.	55 Lbs.	44 Lbs.	100 Lbs.	100 Lbs.	77 Lbs.
F One Way w/2 Bends 	33 Lbs.	22 Lbs.	-	77 Lbs.	55 Lbs.	-
G Center Opening w/2 Bends 	33 Lbs.	22 Lbs.	-	77 Lbs.	55 Lbs.	-
H One Way w/Continuous Curve 	77 Lbs.	33 Lbs.	-	77 Lbs.	55 Lbs.	-
I Center Opening w/Continuous Curve	66 Lbs.	22 Lbs.	-	66 Lbs.	44 Lbs.	-

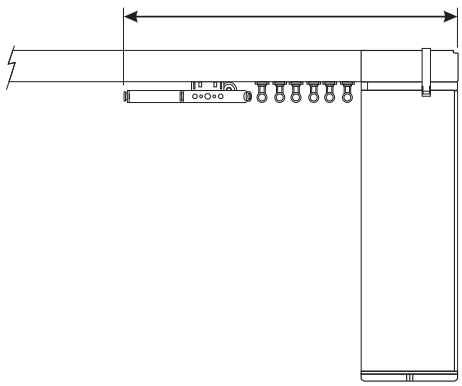
Dual Motor Tandem Alternative
(2 one way tracks)

Track Type		Glydea® 60e		
2 One Way Butted Tracks		UP TO 10 FT.	UP TO 32 FT.	UP TO 36 FT.
J Center opening w/2 Straight	(1) Straight	132 Lbs.		
	(1) Straight	132 Lbs.		
K Center opening w/1 Bend 	(1) 90° Bend	100 Lbs.		77 Lbs.
	(1) Straight	132 Lbs.		
L Center opening w/2 Bends 	(1) 90° Bend	100 Lbs.		77 Lbs.
	(1) 90° Bend	100 Lbs.		77 Lbs.
M Center opening w/2 Curves 	(1) Curve	77 Lbs.	55 Lbs.	-
	(1) Curve	77 Lbs.	55 Lbs.	-

*STACKING CHART – FOR REFERENCE ONLY

TRACK SIZES	RIPPLEFOLD® - inches carrier count - ( )					
	ONE WAY 80%	ONE WAY 100%	ONE WAY 120%	CENTER OPENING 80%	CENTER OPENING 100%	CENTER OPENING 120%
	Butt Arm	Butt Arm	Butt Arm	Butt Arm	Butt Arm	Butt Arm
Up to 4 ft.	19.5 (20)	21.5 (24)	23.5 (28)	12.25 (20)	13.25 (24)	14.25 (28)
5 ft.	22 (25)	24.5 (30)	27 (35)	12.5 (26)	14.75 (30)	16.25 (36)
6 ft.	24.5 (30)	27.5 (36)	30.5 (42)	12.75 (30)	16.25 (36)	17.75 (42)
7 ft.	27 (35)	30.5 (42)	34 (49)	13 (36)	17.75 (42)	19.75 (50)
8 ft.	29.5 (40)	33.5 (48)	37.5 (56)	13.25 (40)	19.25 (48)	21.25 (56)
9 ft.	32 (45)	36.5 (54)	41 (63)	13.5 (46)	20.75 (54)	23.25 (64)
10 ft.	34.5 (50)	39.5 (60)	44.5 (70)	13.75 (50)	22.25 (60)	24.75 (70)
11 ft.	37 (55)	42.5 (66)	48 (77)	14 (56)	23.75 (66)	26.75 (78)
12 ft.	39.5 (60)	45.5 (72)	51.5 (84)	14.25 (60)	25.25 (72)	28.25 (84)
13 ft.	42 (65)	48.5 (78)	55 (91)	14.5 (66)	26.75 (78)	30.25 (92)
14 ft.	44.5 (70)	51.5 (84)	58.5 (98)	14.75 (70)	28.25 (84)	31.75 (98)
15 ft.	47 (75)	54.5 (90)	62 (105)	15 (76)	29.75 (90)	33.75 (106)
16 ft.	49.5 (80)	57.5 (96)	65.5 (112)	15.25 (80)	31.25 (96)	35.25 (112)
17 ft.	52 (85)	60.5 (102)	69 (119)	15.5 (86)	32.75 (102)	37.25 (120)
18 ft.	54.5 (90)	63.5 (108)	72.5 (126)	15.75 (90)	34.25 (108)	38.75 (126)
19 ft.	57 (95)	66.5 (114)	76 (133)	16 (96)	35.75 (114)	40.75 (134)
20 ft.	59.5 (100)	69.5 (120)	79.5 (140)	16.25 (100)	37.25 (120)	42.25 (140)
21 ft.	62 (105)	72.5 (126)	83 (147)	16.5 (106)	38.75 (126)	44.25 (148)
22 ft.	64.5 (110)	75.5 (132)	86.5 (154)	16.75 (110)	40.25 (132)	45.75 (154)
23 ft.	67 (115)	78.5 (138)	90 (161)	17 (116)	41.75 (138)	47.75 (162)
24 ft.	69.5 (120)	81.5 (144)	93.5 (168)	17.25 (120)	43.25 (144)	49.25 (168)
25 ft.	72 (125)	84.5 (150)	97 (175)	17.5 (126)	44.75 (150)	51.25 (176)
26 ft.	74.5 (130)	87.5 (156)	100.5 (182)	17.75 (130)	46.25 (156)	52.75 (182)
27 ft.	77 (135)	90.5 (162)	104 (189)	18 (136)	47.75 (162)	54.75 (190)
28 ft.	79.5 (140)	93.5 (168)	107.5 (196)	16.25 (140)	49.25 (168)	56.25 (196)
29 ft.	82 (145)	96.5 (174)	111 (203)	18.5 (146)	50.75 (174)	58.25 (204)
30 ft.	84.5 (150)	99.5 (180)	114.5 (210)	18.75 (150)	52.25 (180)	59.75 (210)
31 ft.	87 (155)	102.5 (186)	118 (217)	19 (156)	53.75 (186)	61.75 (218)
32 ft.	89.5 (160)	105.5 (192)	121.5 (224)	19.25 (160)	55.25 (192)	63.25 (224)
33 ft.	92 (165)	108.5 (198)	125 (231)	19.5 (166)	56.75 (198)	65.25 (232)
34 ft.	94.5 (170)	111.5 (204)	128.5 (238)	19.75 (170)	58.25 (204)	66.75 (238)
35 ft.	97 (175)	114.5 (210)	132 (245)	20 (176)	59.75 (210)	68.75 (246)
36 ft.	99.5 (180)	117.5 (216)	135.5 (252)	20.25 (180)	61.25 (216)	70.25 (252)

* Measurements do not consider drapery fabric and are calculated from end of pulley to front of master arm (shown here).

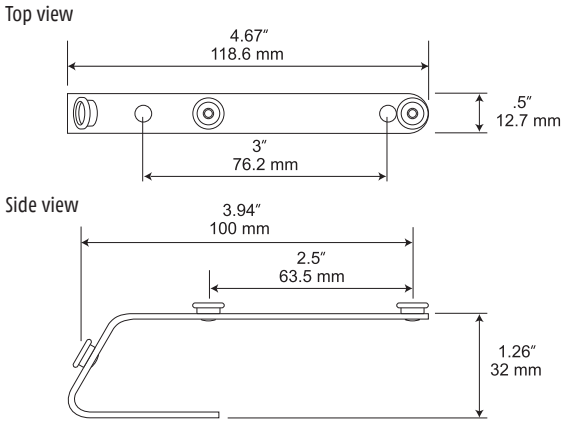


TRACK SIZES	RIPPLEFOLD® - inches carrier count - ( )									PINCH PLEAT - inches carrier count - ( )		
	ONE WAY 80%	ONE WAY 100%	ONE WAY 120%	CENTER OPENING 80%		CENTER OPENING 100%		CENTER OPENING 120%		ONE WAY	CENTER OPENING	
	Overlap Arm	Overlap Arm	Overlap Arm	Overlap Arm	Straight Arm	Overlap Arm	Straight Arm	Overlap Arm	Straight Arm	Overlap Arm	Overlap Arm	Straight Arm
Up to 4 ft.	19.25 (20)	21.25 (24)	23.25 (28)	14 (10)	13.75 (10)	15 (12)	14.75 (12)	16.25 (14)	16 (14)	15.25 (12)	11.75 (6)	11.5 (6)
5 ft.	21.75 (25)	24.25 (30)	26.75 (35)	15.5 (13)	15.25 (13)	16.5 (15)	16.25 (15)	18.25 (18)	18 (18)	16.75 (15)	12.75 (8)	12.5 (8)
6 ft.	24.25 (30)	27.25 (36)	30.25 (42)	16.5 (15)	16.25 (15)	18 (18)	17.75 (18)	19.75 (21)	19.5 (21)	18.25 (18)	13.25 (9)	13 (9)
7 ft.	26.75 (35)	30.25 (42)	33.75 (49)	18 (18)	17.75 (18)	19.5 (21)	19.25 (21)	21.75 (25)	21.5 (25)	19.75 (21)	14.25 (11)	14 (11)
8 ft.	29.25 (40)	33.25 (48)	37.25 (56)	19 (20)	18.75 (20)	21 (24)	20.75 (24)	23.25 (28)	23 (28)	21.25 (24)	14.75 (12)	14.5 (12)
9 ft.	31.75 (45)	36.25 (54)	40.75 (63)	20.5 (23)	20.25 (23)	22.5 (26)	22.25 (26)	25.25 (32)	25 (32)	22.75 (27)	15.75 (14)	15.5 (14)
10 ft.	34.25 (50)	39.25 (60)	44.25 (70)	21.5 (25)	21.25 (25)	24 (30)	23.75 (30)	26.75 (35)	26.5 (35)	24.25 (30)	16.25 (15)	16 (15)
11 ft.	36.75 (55)	42.25 (66)	47.75 (77)	23 (28)	22.75 (28)	25.5 (33)	25.25 (33)	28.75 (39)	28.5 (39)	25.75 (33)	17.25 (17)	17 (17)
12 ft.	39.25 (60)	45.25 (72)	51.25 (84)	24 (30)	23.75 (30)	27 (36)	26.75 (36)	30.25 (42)	30 (42)	27.25 (36)	17.75 (18)	17.5 (18)
13 ft.	41.75 (65)	48.25 (78)	54.75 (91)	25.5 (33)	25.25 (33)	28.5 (39)	28.25 (39)	32.25 (46)	32 (46)	28.75 (39)	18.75 (20)	18.5 (20)
14 ft.	44.25 (70)	51.25 (84)	58.25 (98)	26.5 (35)	26.25 (35)	30 (42)	29.75 (42)	33.75 (49)	33.5 (49)	30.25 (42)	19.25 (21)	19 (21)
15 ft.	46.75 (75)	54.25 (90)	61.75 (105)	28 (38)	27.75 (38)	31.5 (45)	31.25 (45)	35.75 (53)	35.5 (53)	31.75 (45)	20.25 (23)	20 (23)
16 ft.	49.25 (80)	57.25 (96)	65.25 (112)	29 (40)	28.75 (40)	33 (48)	32.75 (48)	37.25 (56)	37 (56)	33.25 (48)	20.75 (24)	20.5 (24)
17 ft.	51.75 (85)	60.25 (102)	68.75 (119)	30.5 (43)	30.25 (43)	34.5 (51)	34.25 (51)	39.25 (60)	39 (60)	34.75 (51)	21.75 (26)	21.5 (26)
18 ft.	54.25 (90)	63.25 (108)	72.25 (126)	31.5 (45)	31.25 (45)	36 (54)	35.75 (54)	40.75 (63)	40.5 (63)	36.25 (54)	22.25 (27)	22 (27)
19 ft.	56.75 (95)	66.25 (114)	75.75 (133)	33 (48)	32.75 (48)	37.5 (57)	37.25 (57)	42.75 (67)	42.5 (67)	37.75 (57)	23.25 (29)	23 (29)
20 ft.	59.25 (100)	69.25 (120)	79.24 (140)	34 (50)	33.75 (50)	39 (60)	38.75 (60)	44.25 (70)	44 (70)	39.25 (60)	23.75 (30)	23.5 (30)
21 ft.	61.75 (105)	72.25 (126)	82.75 (147)	35.5 (53)	35.25 (53)	40.5 (63)	40.25 (63)	46.25 (74)	46 (74)	40.75 (63)	24.75 (32)	24.5 (32)
22 ft.	64.25 (110)	75.25 (132)	86.25 (154)	36.5 (55)	36.25 (55)	42 (66)	41.75 (66)	47.75 (77)	47.5 (77)	42.25 (66)	25.25 (33)	25 (33)
23 ft.	66.75 (115)	78.25 (138)	89.75 (161)	38 (58)	37.75 (58)	43.5 (69)	43.25 (69)	49.75 (81)	49.5 (81)	43.75 (69)	26.25 (35)	26 (35)
24 ft.	69.25 (120)	81.25 (144)	93.25 (168)	39 (60)	38.75 (60)	45 (72)	44.75 (72)	51.25 (84)	52 (84)	45.25 (72)	26.75 (36)	26.5 (36)
25 ft.	71.75 (125)	84.25 (150)	96.75 (175)	40.5 (63)	40.25 (63)	46.5 (75)	46.25 (75)	53.25 (88)	53 (88)	46.75 (75)	27.75 (38)	27.5 (38)
26 ft.	74.25 (130)	87.25 (156)	100.25 (182)	41.5 (65)	41.25 (65)	48 (78)	47.75 (78)	54.75 (91)	54.5 (91)	48.25 (78)	28.25 (39)	28 (39)
27 ft.	76.75 (135)	90.25 (162)	103.75 (189)	43 (68)	42.75 (68)	49.5 (81)	49.25 (81)	56.75 (95)	56.5 (95)	49.75 (81)	29.25 (41)	29 (41)
28 ft.	79.25 (140)	93.25 (168)	107.25 (196)	44 (70)	43.75 (70)	51 (84)	50.75 (84)	58.25 (98)	58 (98)	51.25 (84)	29.75 (42)	29.5 (42)
29 ft.	81.75 (145)	96.25 (174)	110.75 (203)	45.5 (73)	45.25 (73)	52.5 (87)	52.25 (87)	60.25 (102)	60 (102)	52.75 (87)	30.75 (44)	30.5 (44)
30 ft.	84.25 (150)	99.25 (180)	114.25 (210)	46.5 (75)	46.25 (75)	54 (90)	53.75 (90)	61.75 (105)	61.5 (105)	54.25 (90)	31.25 (45)	31 (45)
31 ft.	86.75 (155)	102.3 (186)	117.75 (217)	48 (78)	47.75 (78)	55.5 (93)	55.25 (93)	63.75 (108)	63.5 (108)	55.75 (93)	32.25 (47)	32 (47)
32 ft.	89.25 (160)	105.3 (192)	121.25 (224)	49 (80)	48.75 (80)	57 (96)	56.75 (96)	65.25 (112)	65 (112)	57.25 (96)	32.75 (48)	32.5 (48)
33 ft.	91.75 (165)	108.3 (198)	124.75 (231)	50.5 (83)	50.25 (83)	58.5 (99)	58.25 (99)	67.25 (116)	67 (116)	58.75 (99)	33.75 (50)	33.5 (50)
34 ft.	94.25 (170)	111.3 (204)	128.25 (238)	51.5 (85)	51.25 (85)	60 (102)	59.75 (102)	68.75 (118)	68.5 (118)	60.25 (102)	34.25 (51)	34 (51)
35 ft.	96.75 (175)	114.3 (210)	131.75 (245)	53 (86)	52.75 (86)	61.5 (105)	61.25 (105)	70.75 (123)	70.5 (123)	61.75 (105)	35.25 (53)	35 (53)
36 ft.	99.25 (180)	117.3 (216)	135.25 (252)	54 (90)	53.75 (90)	63 (108)	62.75 (108)	72.25 (126)	72 (126)	63.25 (108)	35.75 (54)	35.5 (54)

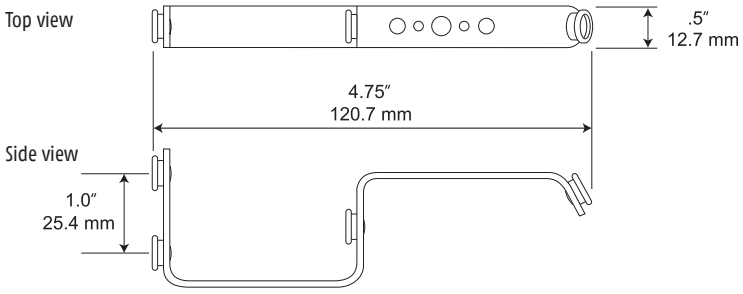
Product Specifications

CARRIER ARM DIMENSIONS

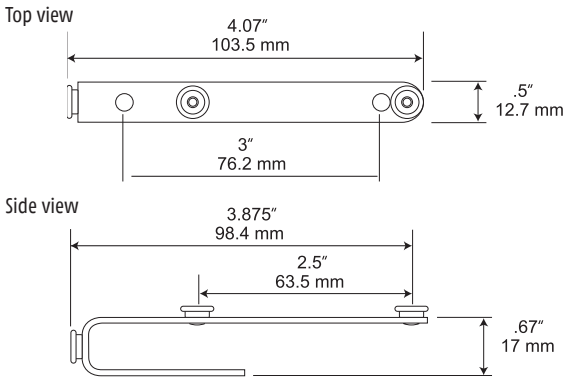
Overlap Arm – #1782320



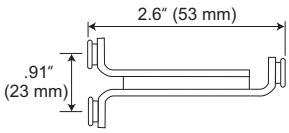
One Way Butt Arm – #1782319



Straight Arm – #1782321

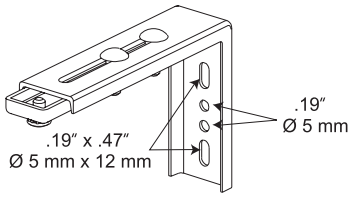


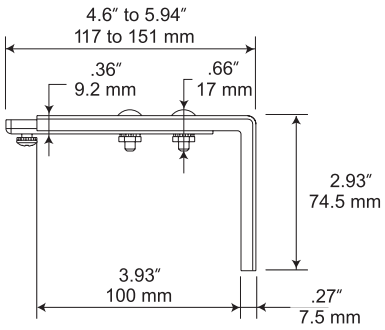
Butt Master Arm Center Opening – #1780953



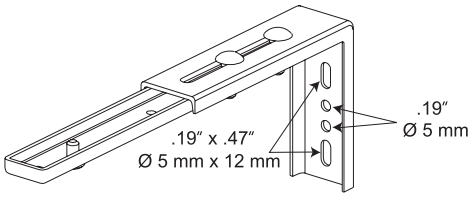
WALL BRACKET DIMENSIONS

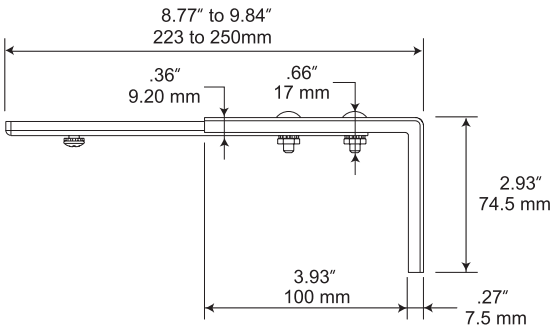
Adjustable Wall Mount Bracket – #1780909



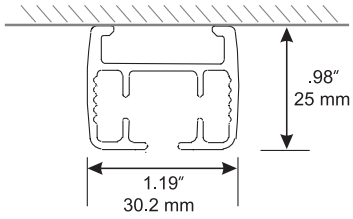


Double Adjustable Wall Mount Bracket – #1780910



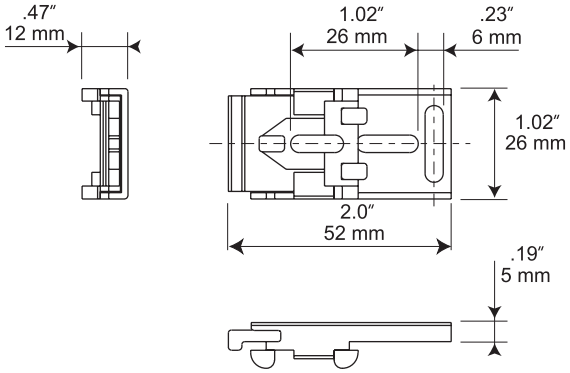


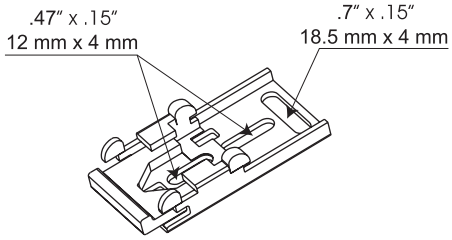
TRACK PROFILE



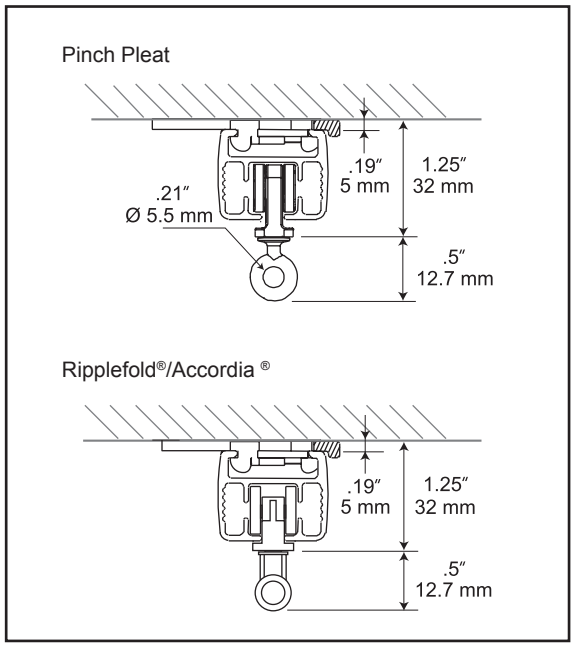
CEILING BRACKET DIMENSIONS

One Touch Ceiling Bracket – #1780907

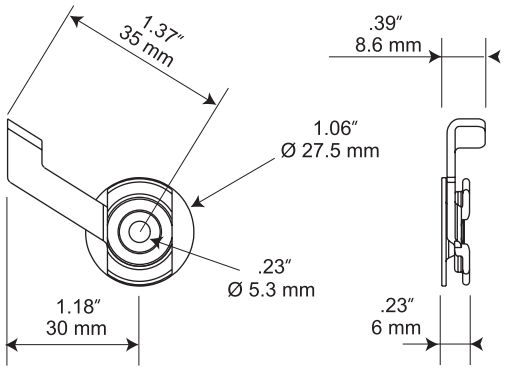


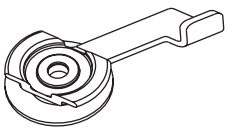


Carriers

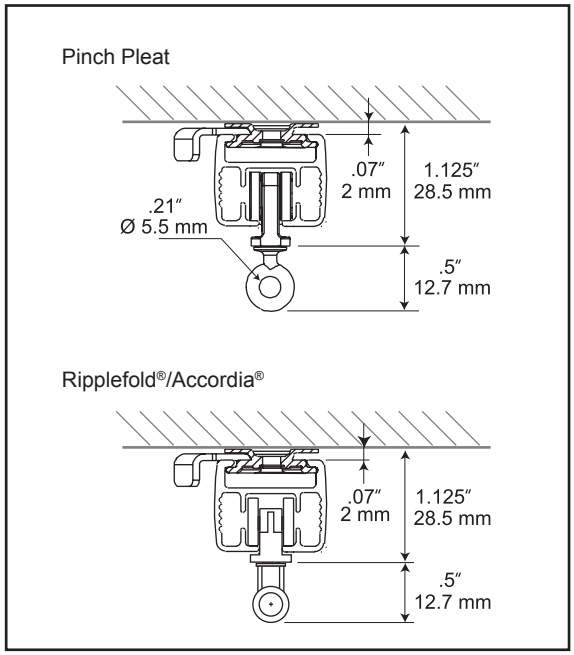


Swivel Ceiling Bracket – #1780906
(recommended for curved tracks)





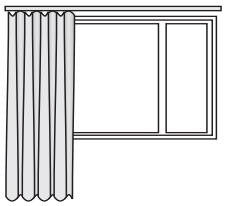
Carriers



Track Configurations

RIPPLEFOLD®

One Way Stacked



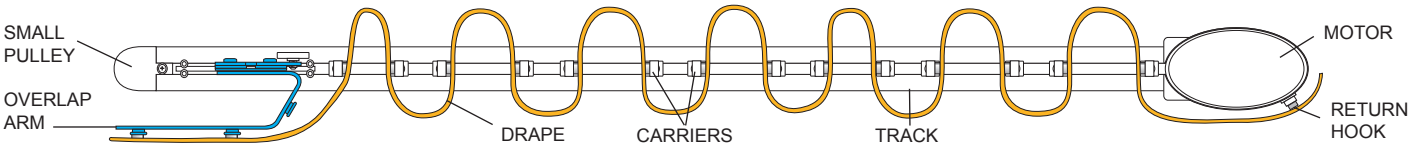
REQUIRED ARMS (1)

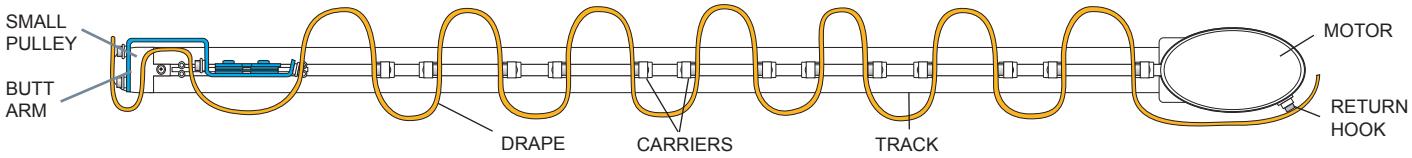
One Way Overlap Arm Kit
#1782320

REQUIRED ARMS (1)

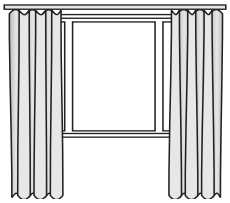
One Way Butt Arm Kit
#1782319

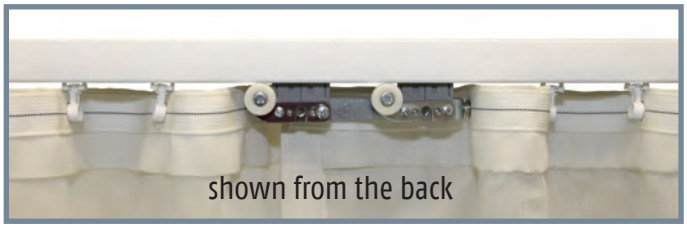
Bottom up view of track and drape assembly





Center Opening

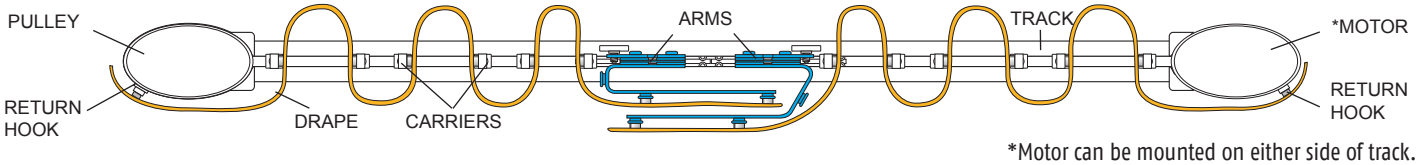




REQUIRED ARMS (1 each)

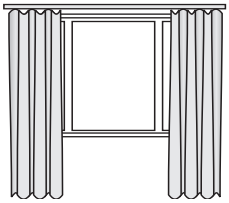
Straight Arm Kit - #1782321
&
Overlap Arm Kit - #1782320

Bottom up view of track and drape assembly



*Motor can be mounted on either side of track.

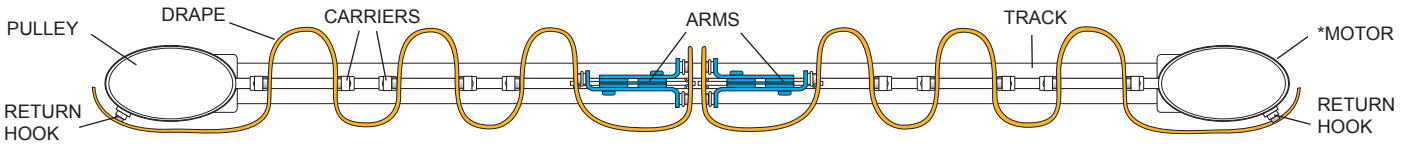
Center Opening with Butt Master Arms



REQUIRED ARMS (2)

Butt Master Arms - #1780953

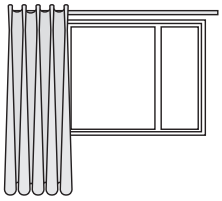
Bottom up view of track and drape assembly



*Motor can be mounted on either side of track.

PINCH PLEAT

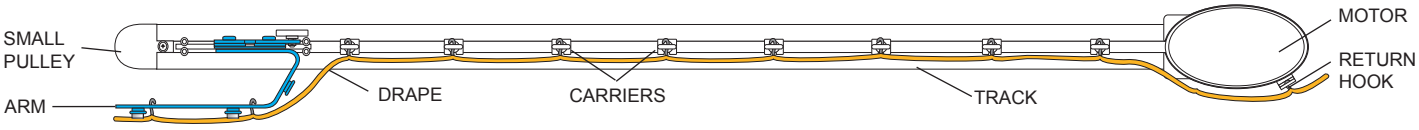
One Way Stacked



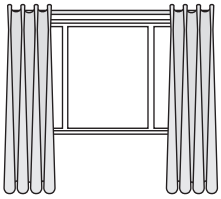
REQUIRED ARMS (1)

One Way Overlap Arm Kit - #1782320

Bottom up view of track and drape assembly

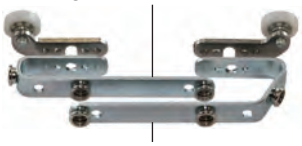


Center Opening



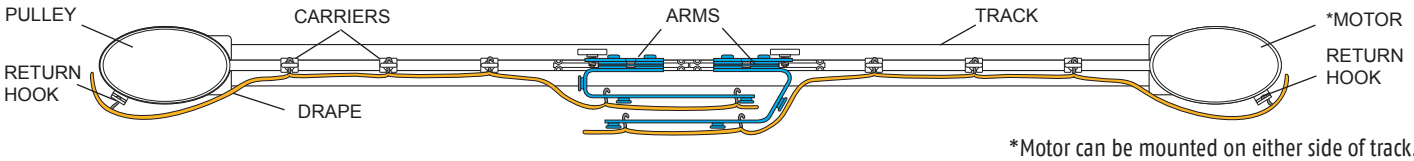
REQUIRED ARMS (1 each)

Straight Arm Kit - #1782321



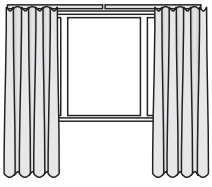
Overlap Arm Kit - #1782320

Bottom up view of track and drape assembly



*Motor can be mounted on either side of track.

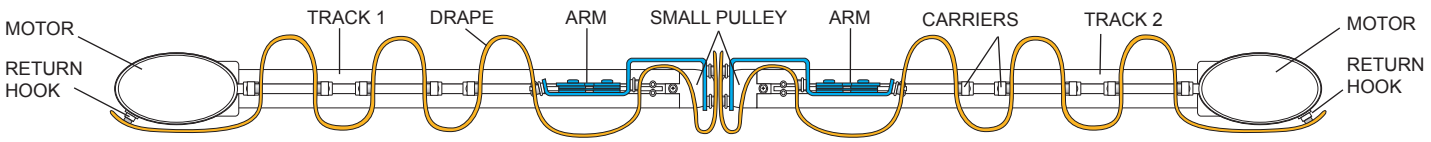
Two One Way Butted Tracks (tandem alternative)



REQUIRED ARMS (2)

#1782319

Bottom up view of track and drape assembly



Glydea® Controls and Accessories

RADIO TECHNOLOGY SOMFY® (RTS)

TELIS HAND-HELD REMOTE COLLECTION

Telis 1 RTS Pure
Single Channel Remote
1810632

Telis 4 RTS Pure
Five Channel Remote
1810633

Telis 1 RTS Silver
Single Channel Remote
1810639

Telis 4 RTS Silver
Five Channel Remote
1810641

Telis 1 RTS Lounge
Single Channel Remote
1810650

Telis 4 RTS Lounge
Five Channel Remote
1810652

Telis 1 RTS Patio
Single Channel Remote
1810643

Telis 4 RTS Patio
Five Channel Remote
1810645

Telis 16 Channel RTS Pure
Remotes w/ On-screen display
1811081

Telis 16 Channel RTS Silver
Remotes w/ On-screen display
1811082

SOMFY CONNECT

Integrates Somfy RTS and Somfy Digital Network™ (SDN) motorized applications with RadioRA® 2, HomeWorks® QS, GRAFIF Eye® QS, and Quantum® control systems.

16 CHANNEL INTERFACE

Universal RTS Interface 16-Channel
(Converts IR, RS232, RS485 to RTS)
1810872

RTS REPEATER

RTS Repeater
1810791

ZRTSI II

Z-Wave® to RTS®
Interface 2
1811265

TELIS 1 CHRONIS RTS

Telis 1 Chronis RTS
Pure Timer
1805237

Telis 1 Chronis RTS
Silver Timer
1805238

INDOOR SENSORS

Sunis Indoor
WireFree™ RTS
9013707

Thermo Sunis Indoor
WireFree™ RTS
9013708

RADIO TECHNOLOGY SOMFY® (RTS)

DECOFLEX WIREFREE™ WALL SWITCHES – Custom engraved buttons are now available (see order form page 26).

DecoFlex 1 Channel RTS
WireFree™ Wall Switch

DecoFlex 2 Channel RTS
WireFree™ Wall Switch

DecoFlex 3 Channel RTS
WireFree™ Wall Switch

DecoFlex 4 Channel RTS
WireFree™ Wall Switch

DecoFlex 5 Channel RTS
WireFree™ Wall Switch

Wall Switches shown in white. Also available in black, ivory, and almond finishes. Shown above assembled with printed channel buttons.

DECOFLEX WIREFREE™ RTS TABLE TOP ACCESSORIES

DecoFlex WireFree™ RTS
Table Top Accessory Black
1811051*

DecoFlex WireFree™ RTS
Table Top Accessory Silver
1810972*

DecoFlex WireFree™ RTS
Table Top Accessory White
1811185*

*DecoFlex Switch sold separately from Table Top Accessory.

myLink™

WiFi to RTS Interface
1811264

Control draperies while home or away using your tablet or smartphone. A simple on-screen setup wizard helps users create timed events, scenes and more. Compatible with iOS and Android

WIRED TECHNOLOGY

DRY CONTACT SWITCH

White
1800219

Ivory
1800220

DECORATOR PADDLE SWITCH

For use with Glydea 60e wired motors only (1001537)

Maintained White
1800374

Double Pole, Double Throw
1800375

Maintained Ivory
1800373

Double Pole, Double Throw
1800376

Glydea® Wiring Examples

GLYDEA® RTS RADIO CONTROL

Individual control with Telis RTS remote, DecoFlex WireFree™ RTS wall switch and the myLink WiFi to RTS interface
(Glydea® DCT motor + RTS receiver)

Group and individual control with 4 channel Telis RTS, DecoFlex WireFree™ RTS wall switch and the myLink WiFi to RTS interface.
(Glydea® DCT motors + RTS receivers)

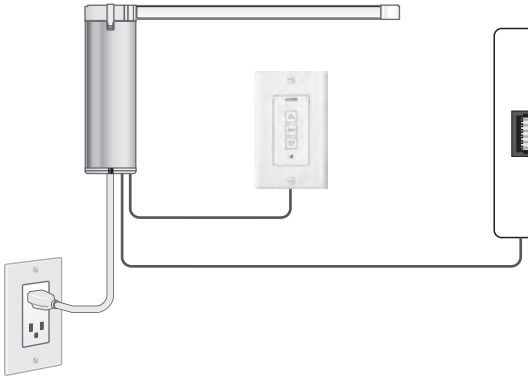
GLYDEA® DCT CONTROL

The Dry Contact Control can be done through devices with 2 normally open contacts (open, close) or 3 normally open contacts (open, stop, close). For devices using 2 contacts, the stop command is achieved by closing the open and close contacts. For 3 devices, the stop can also be achieved with a specific stop button. Individual, group and master DCT controls can be achieved using a DCT Splitter and a Diode boxes as shown below.

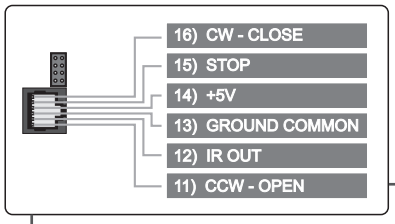
NUMBER OF GLYDEA® DCT AND LENGTH OF CONTROL LIMITATIONS

WIRE CROSS-SECTION	MAXIMUM LENGTH OF CABLE	MAXIMUM NUMBER OF MOTORS
Cat5 or Equal	100 m (328')	10
0.75 mm^2	200 m (656')	20

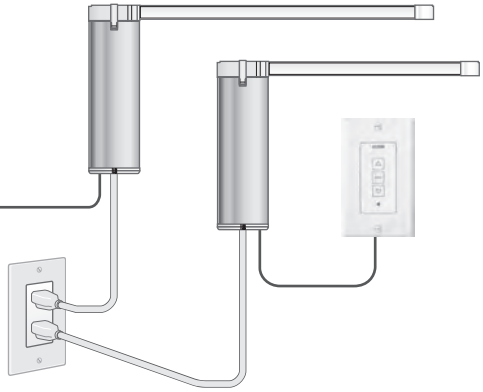
Individual control



RJ12 SOCKET PIN OUT

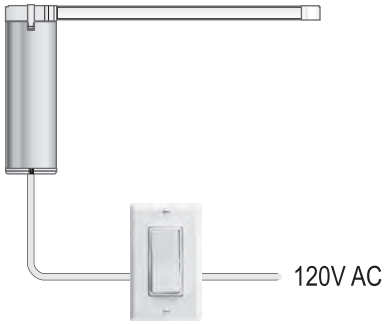


Group control

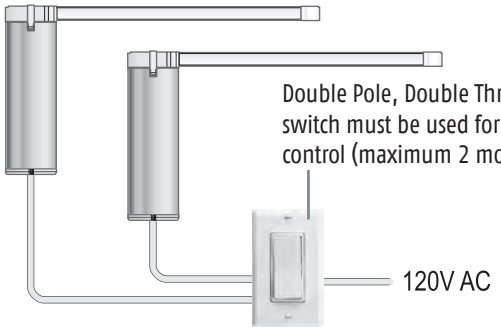


GLYDEA® WIRED CONTROL

Individual control



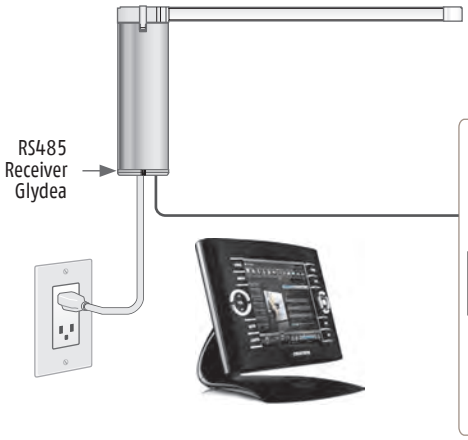
Group control



NOTE: Examples are for illustrative purposes. Additional components may be needed depending on your installation.

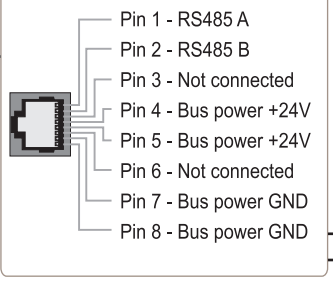
GLYDEA® RS485 CONTROL

Individual control

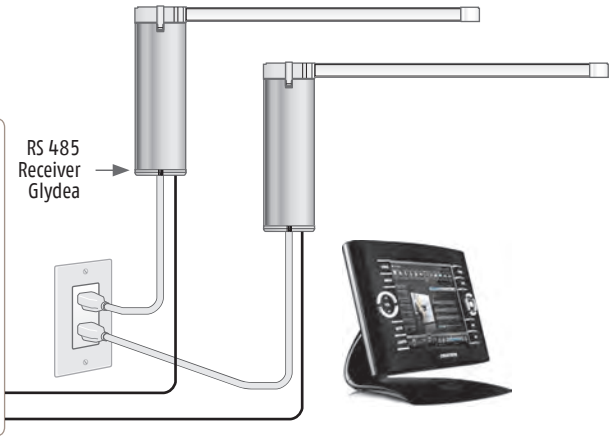


See diagram on previous page
for RJ12 Socket Pin Out

SDN Pin Out (RS485)

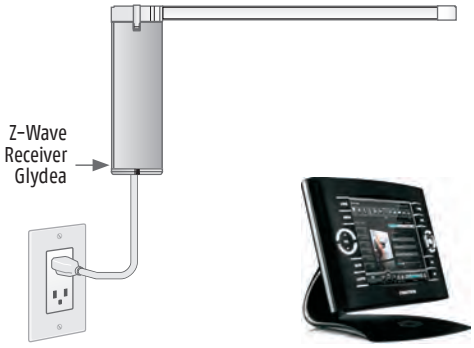


Group and individual control

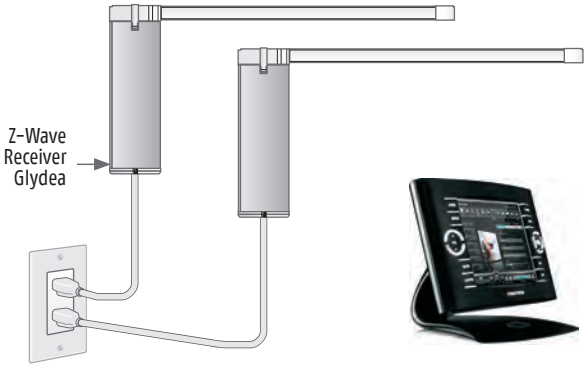


GLYDEA® Z-WAVE® CONTROL

Individual control

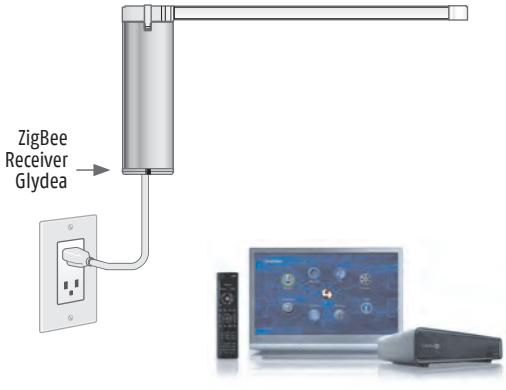


Group and individual control

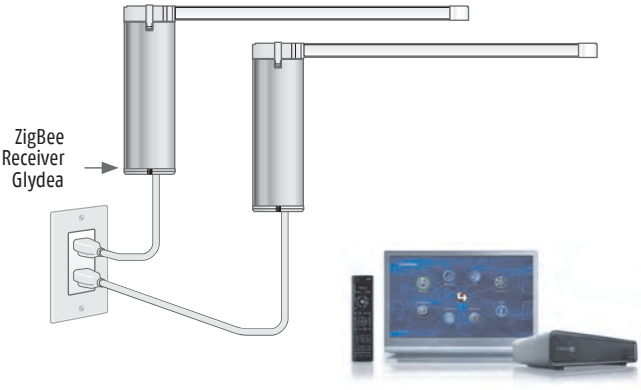


GLYDEA® ZIGBEE® CONTROL

Individual control



Group and individual control



NOTE: Examples are for illustrative purposes. Additional components may be needed depending on your installation.

Glydea® Parts List

MOTORS AND CONTROL MODULES

Glydea® 35e

Qty. per box 8

DCT with 10' Plug	1002465
RTS with 10' Plug	1001615
RS485 with 10' Plug	1002109
Wired without Plug	1002464

Glydea® 60e

Qty. per box 8

DCT with 10' Plug	1002545
RTS with 10' Plug	1001617
RS485 with 10' Plug	1002108
Wired without Plug	1001537

Control Modules

Z-Wave®
1870228

ZigBee®
1870221

Radio Technology Somfy® RTS
1870172

RS485
1811129

COMMON TRACK COMPONENTS

Small Drive Pulley

Qty. per box: 10
1782318

Drive Pulley

Qty. per box: 10
1780945

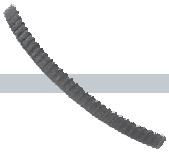
Heavy Duty Master Carrier

Qty. per box: 10
1781344

Pulley Cover

Qty. per box: 10
1780898

High Performance 10mm Belt

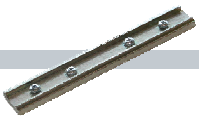


196' roll
1782084

Track

96' per carton
(6 pcs. x 16')
1780899 (per ft.)

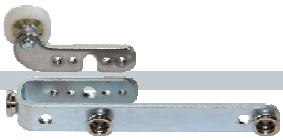
Straight Rail Joint



Qty. per box: 10
1782316

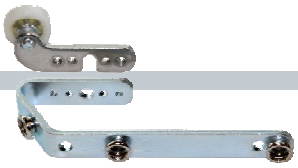
PINCH PLEAT TRACK COMPONENTS

Straight Arm



Qty. per box: 10
1782321
For use with center opening draperies.

Overlap Arm



Qty. per box: 10
1782320
For use with one way and center opening draperies.

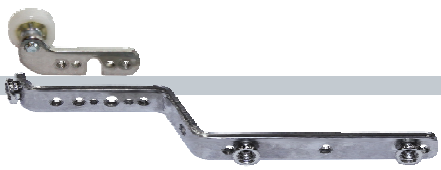
Pinch Pleat Return Hook

Qty. per box: 20
1780895

Carrier

Qty. per box: 500
1780892

One Way Overlap Arm



Qty. per box: 10
1780947
For use with one way opening draperies with pulley #1780945.

Straight Arm

Qty. per box: 10
1780947
For use with tandem alternative draperies (to be used together)

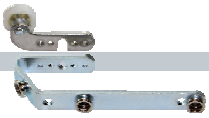
RIPPLEFOLD® & ACCORDIA® TRACK COMPONENTS

Straight Arm

Qty. per box: 10
1782321

For use with center opening draperies.

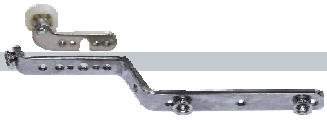
Overlap Arm



Qty. per box: 10
1782320

For use with one way and center opening draperies

One Way Overlap Arm



Qty. per box: 10
1780947

For use with tandem alternative straight arm
#

Ripplefold® Butt Master Arms

Qty. per box: 10
1780953

For use with center opening draperies only.

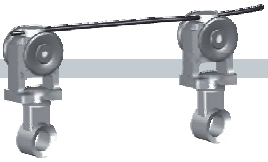
One Way Ripplefold® Butt Arm

Qty. per box: 10
1782319

For use with Ripplefold one way opening and double track tandem alternative

Ripplefold® and Accordia® Type Carriers

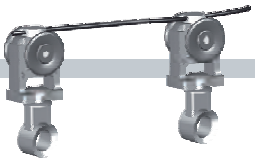
80% Fullness



Carrier Spacing:
2 3/8"

Qty. per roll: 500
1780903

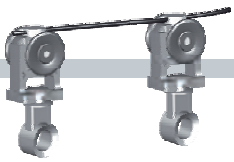
100% Fullness



Carrier Spacing:
2 1/8"

Qty. per roll: 500
1780902

120% Fullness



Carrier Spacing:
1 7/8"

Qty. per roll: 500
1780901

Ripple Snap Tape

100 yd. roll:
1782301

Per yd.
1782542

Ripple Return Snap

Qty. per box: 20
1780905

Recommended for use with Somfy Ripple Snap Tape (ordered separately), but also adaptable to Kirsch and Graber snap tape.

Accordia® type carrier consists of Pinch Pleat carrier and Ripplefold® pendant.

BRACKETS

One Touch Ceiling Bracket

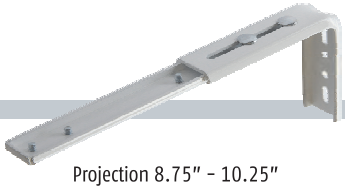
Qty. per box: 100
1780907

Adjustable Wall Mount Bracket

Projection 4.5" - 6"

Qty. per box: 50
1780909

Double Adjustable Wall Mount Bracket



Projection 8.75" - 10.25"

Qty. per box: 50
1780910

Swivel Ceiling Bracket

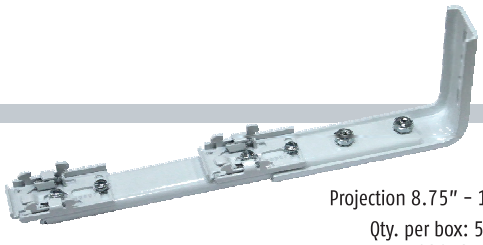
Qty. per box: 100
1780906

Adjustable Wall/Ceiling Mount Bracket Kit

Projection 4.5" - 6"

Qty. per box: 50
1782054

Double Adjustable Wall/Ceiling Mount Bracket Kit



Projection 8.75" - 10.25"

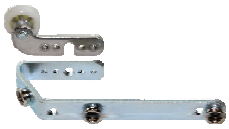
Qty. per box: 50
1782053

Glydea® Fabricated Track Options*

AVAILABLE CARRIER ARMS – Carrier arms are included with fabricated motorized drapery tracks per the opening type.

ONE WAY OPENING

Overlap Arm: For use with one way opening Pinch Pleat, one way Ripplefold® and Accordia® draperies.
Qty 1 per drapery track.



One Way Overlap Arm Kit
#1782320

CENTER OPENING

Overlap Arm: For use with center opening Pinch Pleat, Ripplefold® and Accordia® draperies.
Qty 1 Overlap Arm per drapery track and 1 Straight Arm per drapery track..

Overlap Arm Kit
#1782320
&
Straight Arm Kit
#1782321

CENTER OPENING BUTT MASTER

Butt Master Arm: For use with Ripplefold® and Accordia® center opening draperies only.
Qty 2 per drapery track required.

or (optional)

Butt Master Arms
#1780953

ONE WAY OPENING OR TWO MOTOR TANDEM ALTERNATIVE

One Way Butt Arm: For use with Ripplefold® one way draperies and 2 motor tandem alternative.
Qty 1 per drapery track required.

One Way Butt Arm
#1782319

TWO MOTOR TANDEM ALTERNATIVE

Overlap Arm:
Straight Arm: For use with Pinch Pleat and 2 motor tandem alternative.
Qty 1 per drapery track required.

Straight Arm
#

***Fabricated tracks are available upon request. For information, please contact Somfy sales.**

AVAILABLE CARRIERS - Carriers are included with fabricated motorized drapery tracks.

PINCH PLEAT DRAPERIES

Pinch Pleat Carriers: Somfy includes a quantity of 3 carriers per foot. Additional carriers can be ordered if necessary.

Carrier
#1780892

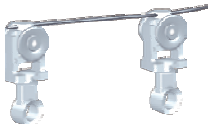
Pinch Pleat Return Hook:
Qty 2 for One Way Draw (included)
Qty 4 for Center Opening (included)

Return Hook
#1780895

RIPPLEFOLD®/ ACCORDIA® DRAPERIES

****Somfy Ripplefold®/Accordia® Type Carriers:** The quantity of carriers needed depends on the desired fullness, reference the chart below to determine the needed quantity and standard spacing. Each carrier comes complete with pendant. See page 8-9 for Somfy's carrier count.

Item #	Fullness	**Carrier Spacing
1780903	80%	2 3/8" / 5 per ft. (included)
1780902	100%	2 1/8" / 6 per ft. (included)
1780901	120%	1 7/8" / 7 per ft. (included)



Carrier and
Pendant

****NOTE: Quantity per ft. is included with each fabricated track. Fullness must be specified when order is placed.**

Recommended for use with Somfy Ripple Snap Tape (ordered separately), but also adaptable to Kirsch and Graber snap tape.

Ripple Snap Tape:

(100 yd. roll) #1782301
(per yd.) #1782542

Return Snap:
Qty 2 for One Way draw (included)
Qty 4 for Center Opening (included)

Return Snap
#1780905

Custom Track Options

Tandem Alternative

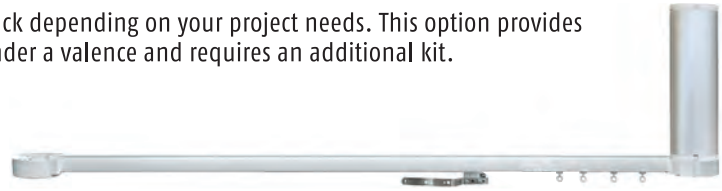
Tandem alternative RTS motorized systems utilize two Glydea® motors and are used for draperies that exceed the maximum single motor capacity. Tandem systems are also available with dry contact control technologies and require additional accessories.

Please contact Somfy for specification details.

Top Mount

Glydea® motors can be installed above the drapery track depending on your project needs. This option provides the ability to conceal the motor in a drop ceiling or under a valence and requires an additional kit.

Top Mount Kit
1780908



Glystro® Conversion Kit

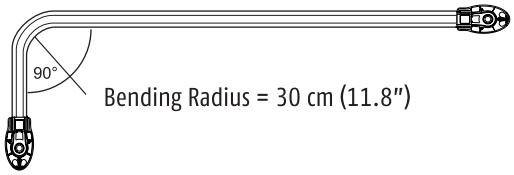
The Glystro® conversion kit is designed to allow adaptation to Somfy's current Glydea® drapery motor to previous Glystro® drapery tracks and associated hardware.

1782106

Bends

Tracks with bends are ideal for bay and corner windows. Track bends are available at a fixed radius of 11.8". For more information on how to measure for a bend, please see page 22.

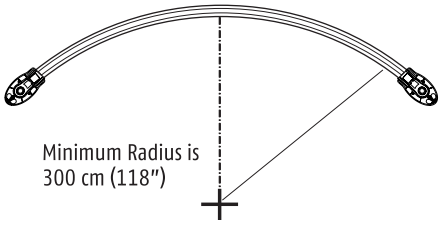
Bent Drapery Track Measurement Form required for all orders.



Curves

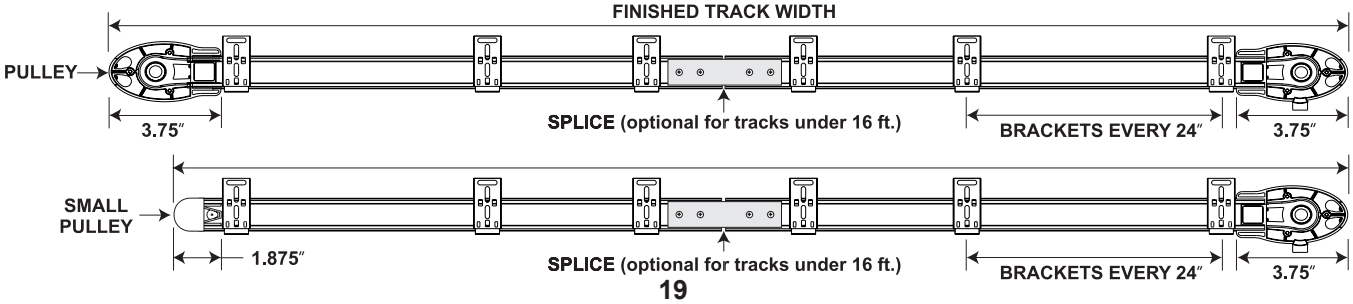
Custom curves are ideal for bow windows and other special applications. For additional information on how to measure for a curve, and how to make a template, please see Directions for Creating a Template for Drapery Curves page 23.

Templates are required for accuracy for all orders.



BRACKET MOUNTING RECOMMENDATIONS (top view of track)

Somfy recommends 1 bracket by each pulley and 1 bracket every 24". Additionally, 1 bracket should be placed on each side of a splice if used.



Bent Drapery Track Measurement Form

The bent track measurement form represents wall measurements, therefore the R dimension (Return) **MUST BE** specified for accurate track fabrication.

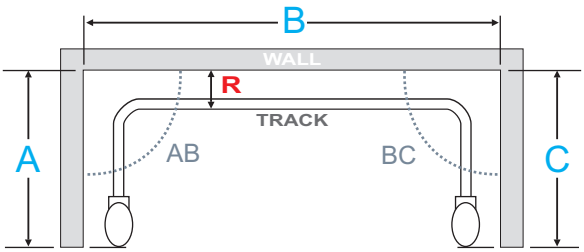
If R dimension IS NOT specified, drapery track will be fabricated according to dimensions (A, B, C, D, etc.) provided. Return dimensions will not be considered, and measurements will be calculated from center of each bend.

The following dimensions are shown from the top view of the track and show various wall designs.

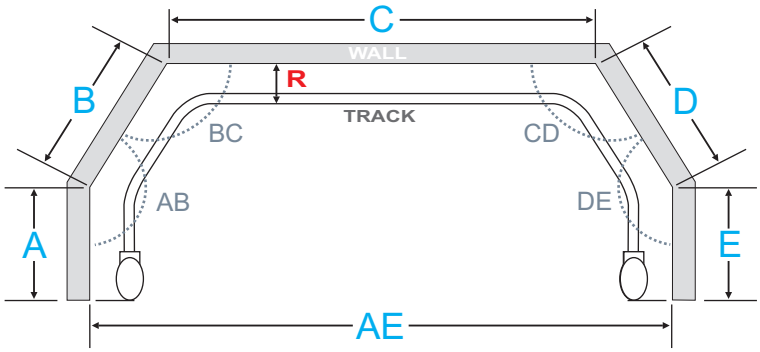
1. Choose the design that best fits your room setup.
2. Provide all of the proper wall measurements and degrees of all angles.
3. Provide the Return measurement "R" (distance from wall to front of draper track as shown) and submit to Somfy.
4. Please attach filled out measurement form.

NOTE: When fabricating drapery, please add an additional 1.5 inches of drapery fabric to the anticipated return size.

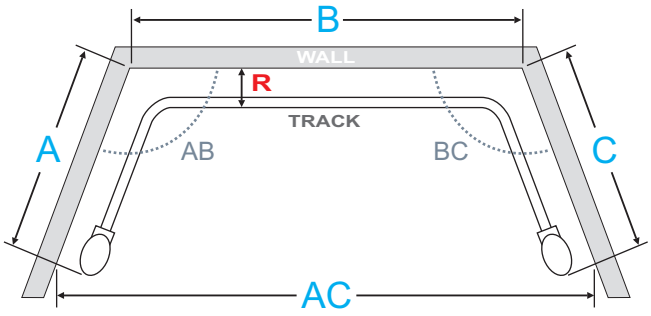
STYLE 1 MEASUREMENT



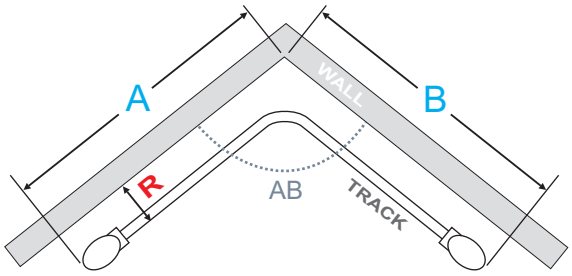
STYLE 2 MEASUREMENT



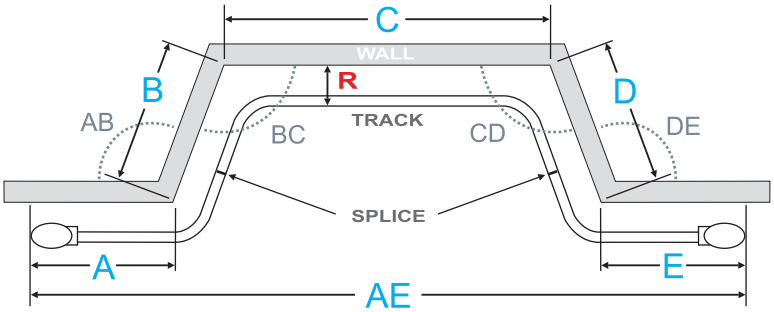
STYLE 3 MEASUREMENT



STYLE 4 MEASUREMENT



STYLE 5 MEASUREMENT *



*** Splices are required for this style.**

TRACK 1		TRACK 2	
"R" Dimension _____		"R" Dimension _____	
Style _____	Degree of Bend	Style _____	Degree of Bend
A _____	AB _____	A _____	AB _____
B _____	BC _____	B _____	BC _____
C _____	CD _____	C _____	CD _____
D _____	DE _____	D _____	DE _____
E _____		E _____	
AC _____		AC _____	
AE _____		AE _____	

Directions for Creating a Template for Drapery Curves

What you need: • Large piece of construction paper • Tape measure • Marker • Tape

1. Start with a large piece of construction paper that exceeds the depth and length of the curve.
2. Place the paper on the floor or ceiling depending on the orientation of the curve.
3. Secure the paper with the tape.
4. Clearly define the stacking side, motor placement, pocket depth and center line of track with the marker.
5. Mark the radius of the curve
6. Please provide as much detail as possible and all templates **must** include the following:
   - Indicate "room side"
   - Note how the template was created
     - -Template created on the floor facing up (See Figure 1)(Preferred method)
     - -Template created on the ceiling facing down (See Figure 2)
   - Purchase order number
   - Customer name
   - Company name and account number
7. Note the distance from the wall or the window to the center of the track.
   NOTE: Be sure to clear all possible obstructions such as handles, sills etc.
8. Identify the following measurement points:
   - Placement of motor
   - Exact stopping point of track on template
   - Total measurement of curve (See Figure 4-"C")

Please call Somfy for specialty curving applications. Depending on your particular application, your project may require special attention.

Figure 1: Template on the Floor Facing Up

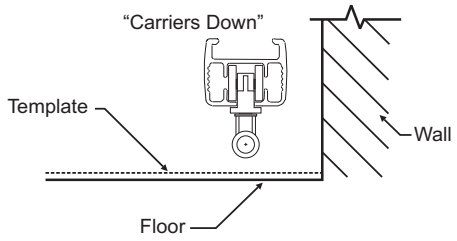


Figure 2: Template on the Ceiling Facing Down

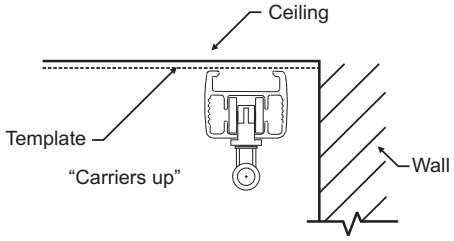


Figure 3: Critical Dimensions of a Curved Track

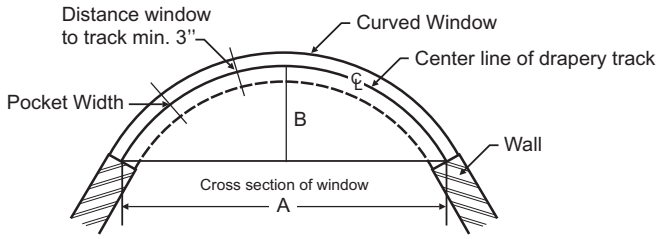
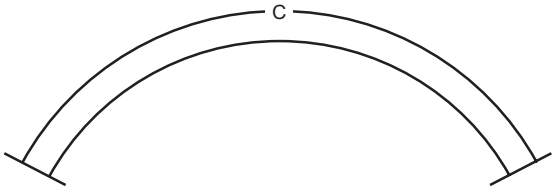


Figure 4: Total Measurement of Curve



Template Submission Instructions

Attach a copy of the purchase order to the template.
Roll up template and place in a mailing tube. **DO NOT FOLD TEMPLATE**
Mail to: Somfy Systems, Inc.
121 Herrod Blvd.
Dayton, NJ 08810
Attn: Drapery Department

NOTE: When mailing, be sure to:
- Get a tracking number
- Include your return address
- Include your purchase order number on the label

Acceptable materials for making templates:

• Kraft Paper • Butcher Paper • Construction Paper

Somfy will not accept templates made from the following materials:

• Newspaper • Plastic • Wax Paper • Fabric • Tissue Paper
• Roofing Paper • Existing Arch Shades • Wrapping Paper

NOTE: If the material used to make a template stretches, tears easily, will not lay flat or will mark the fabric – IT WILL NOT BE USED.

www.somfysystems.com

SOMFY SYSTEMS INC
SOMFY NORTH AMERICAN HEADQUARTERS
121 Herrod Blvd.
Dayton, NJ 08810
P: (800) 22-SOMFY (76639)
NJ: (609) 395-1300
F: (609) 395-1776

FLORIDA
6100 Broken Sound Pkwy. N. W.
Suite 14
Boca Raton, FL 3487
P: (800) 22-SOMFY (76639)
F: (561) 995-7502

CALIFORNIA
15291 Barranca Parkway
Irvine, CA 92618-2201
P: (800) 22-SOMFY (76639)
F: (949) 727-3775

SOMFY ULC
SOMFY Canada Division
5178 Everest Drive
Mississauga, Ontario L4W2R4
P: (800) 66-SOMFY (76639)
CN: (905) 564-6446
F: (905) 238-1491

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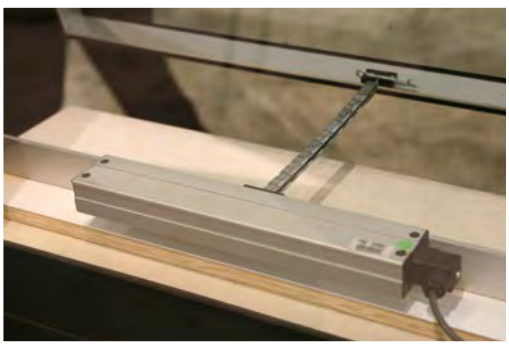
MiNGARDi®

THE REFERENCE FOR WINDOW AUTOMATION

Window Automation



AUTOMATION FOR WINDOWS, SKYLIGHTS AND LOUVERS

Introduction

- Natural Ventilation 1
- Applications 2

Somfy Motor Solutions

- Top Opening Windows 3
- Bottom Opening Windows 3
- Skylights & Domes 4
- Louvers & Sun Shades 5
- Somfy Window Motors 6

Technical Information

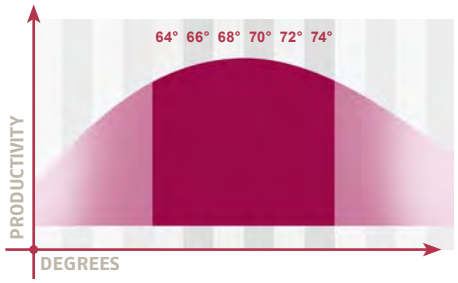
- Mingardi Micro S 7
- Mingardi Micro L 8
- Mingardi Micro XL 9
- Mingardi Euro 1+ 10

Somfy Control Solutions 11

Safety Recommendations & Technical Support 12

NATURAL VENTILATION
an essential requirement

Clean healthy air – along with good heat and light – is very important for the well being and health of people in a building. Automatic control of ventilation openings can contribute significantly to maintaining a healthy and comfortable indoor climate.



* Relative air humidity between 30% and 70% is comfortable and a minimum of 1060–1410 cubic feet of fresh air must be supplied per person. Source: Arbo and environment – Indoor climate
– Climate standard NEN–150 7730

Natural ventilation satisfies the main objectives of biocimatic designs by reducing the demand for air conditioning and increasing occupant comfort. The entrance of cold air or evacuation of hot air in a space limits the energy consumption of air conditioning systems during optimal weather conditions.

Window automation systems using timer settings, temperature readings and weather conditions enables a building's overnight cooling when occupants are not present. Automated window systems ensures that windows are opened and closed to reach the maximum performance level expected from the building.

ADVANTAGES OF MOTORIZED WINDOWS

Apart from supplementing the exchange of clean air and the creation of thermal comfort, there are other clear advantages allied to natural ventilation from motorized windows:

- reduced reliance on air conditioning units
- lower energy use
- lower operational costs
- creation of a healthy indoor climate as a condition for physical and mental well being
- positive influence on corporate identity
- improve a building's performance and value

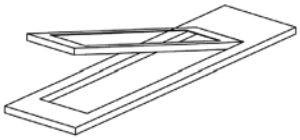
APPLICATIONS

Mingardi offers window automation solutions for every window type. To choose the appropriate motor for your project, consider the following details.

1. Is the window opened from the top or bottom?
2. What is the opening distance for the window? This is required to determine the length of the chain or piston.

TOP
OPENING WINDOW

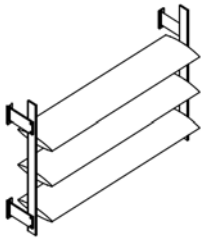
BOTTOM
OPENING WINDOW



SKYLIGHTS

DOME WINDOWS

LOUVERS



SUN SHADES

SOLUTIONS FOR TOP AND BOTTOM OPENING WINDOWS

chain linkage motors

Window properties

choose your motor

height of the window	500mm - 1000mm		500mm -1000mm		2000mm - 2500mm		
width of the window	< 1500mm		< 1500mm		< 1500mm		
desired opening (mm)	200	250	280	380	420	600	835
power required (N)	200	200	350	350	400	400	400
power source (DC)	24V DC	24V DC	24V DC	24V DC	24V DC	24V DC	24V DC
motor type	**Micro S**		**Micro L**		**Micro XL**		

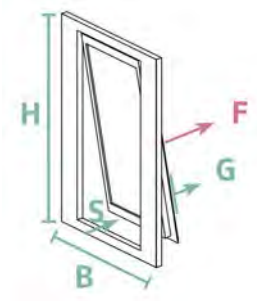
rod linkage motors

Window properties

choose your motor

height of the window	500mm-1000mm	1000mm - 2000mm		2000mm - 2500mm	
width of the window	< 1500mm	< 1500mm		< 1500mm	
desired opening (mm)	0-70	0-200	0-300	0-300	0-500
power required (N)	1000	450	450 1000	450 1000	450
power source (DC)	24V DC	24V DC	24V DC 24V DC	24V DC 24V DC	24V DC
motor type	**Euro 1+** 70 mm	**Euro 1+** 200 mm	**Euro 1+** 300 mm	**Euro 1+** 500 mm	

* Calculation of the power required is based on the most common systems on the market For an exact calculation use the following formula.



F = needed force in Kg
S = desired stroke in mm
H = height of the window in mm
G = weight of the window in Kg

$$F = \frac{S}{H} \times \frac{G}{2}$$

- The width (B) of the window must not exceed 1500mm.
- The height of the window must be at least twice the size of the desired opening, this in connection with the maximum sag of the chain.

Skylights

Window properties → choose your motor

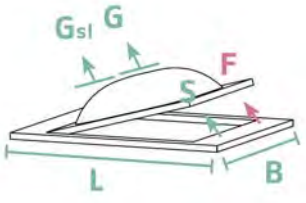
height of the window	500mm - 1000mm		1000mm - 2000mm		Skylights are available in many types. The manner of rotation can vary as well. A Velux type skylight in a horizontal roof that can be tilted to 30° has a distributed weight of 50% at the hinges and 50% at the motor. In skylights that swivel in the middle, the weight is nil and the power needed is determined only by the friction of the window.
width of the window	< 1500mm		< 1500mm		
desired opening (mm)	200	250	250	420	
torque required (N)	200	200	200	400	
power source (DC)	24V DC	24V DC	24V DC	24V DC	
motor type	**Micro S**		**Micro L**		

Domes

Dome properties → choose your motor

width of the dome	< 1500mm			
desired opening (mm) (adjustable)	0-70	0-300		0-500
power required (N)	1000	450	1000	450
power source (DC)	24V DC	24V DC	24V DC	24V DC
motor type	**Euro 1+** 70 mm	**Euro 1+** 200 mm	**Euro 1+** 300 mm	**Euro 1+** 500 mm

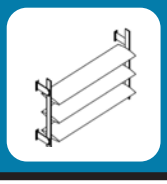
* Calculation of the power required is based on the most common systems on the market For an exact calculation use the following formula.



F = needed force in Kg
S = desired stroke in mm
H = height of the window in mm
G = weight of the window in Kg
Gst = snow load per m2

$$F = \frac{G + G_{st}}{2}$$

- The width (B) of the window must not exceed 1500mm.
- The height of the window must be at least twice the size of the desired opening, this in connection with the maximum sag of the chain.



Louver properties

choose your motor

Sun shade properties

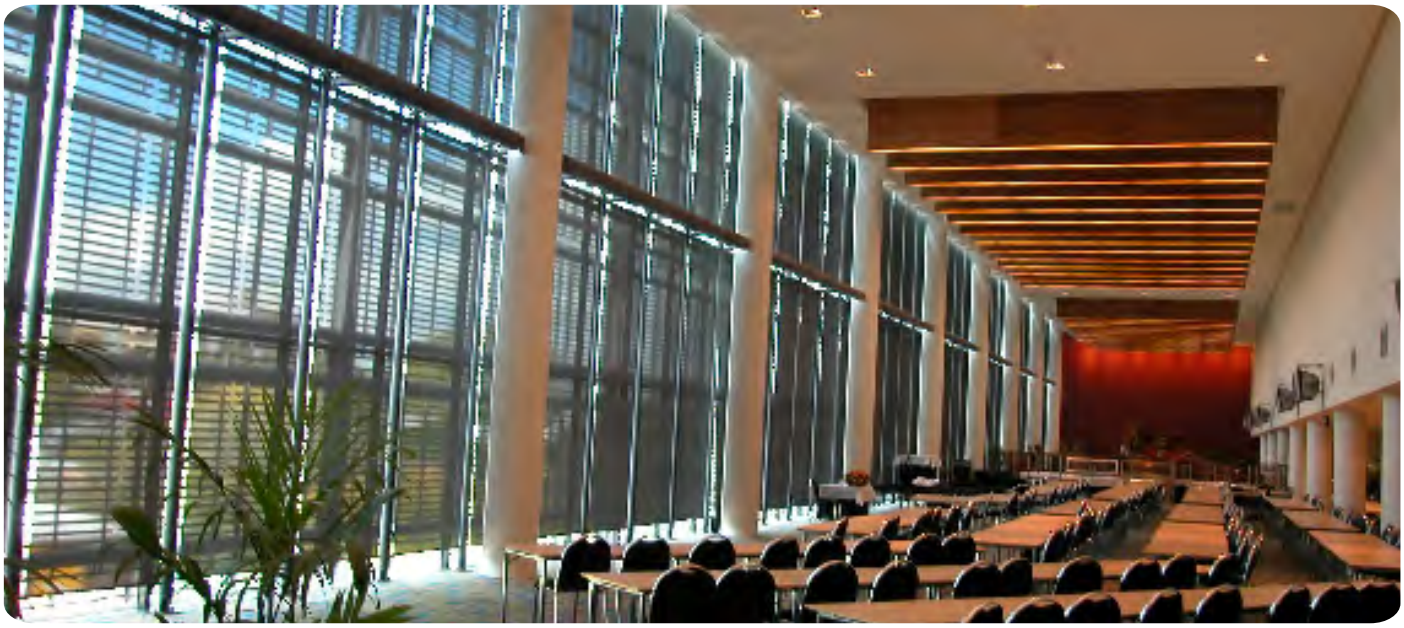
LOUVERS

Louver windows are made from a set of small transparent or opaque louvers made of glass or plastic. Theoretically the louvers are in balance and therefore do not require power to turn them. As a result the 450 N motor is often sufficient to handle the friction in the system. Be sure to understand the desired extension distance for every design. The most common type is 200 mm but there are other possibilities. The motor is normally attached to the back of the system and is hidden in the width of the profile.

desired opening (mm) (adjustable)	0-200	0-300		0-500
torque required (N)	1000	450	1000	450
power source (DC)	24V DC	24V DC	24V DC	24V DC
motor type	**Euro 1+** 70 mm	**Euro 1+** 200 mm	**Euro 1+** 300 mm	**Euro 1+** 500 mm

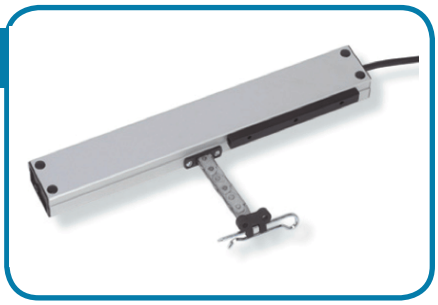
SUN SHADES

Sun Shades in slats or strips consist of a set of strips (usually between 100 and 400 mm wide) which are mounted in a horizontal or vertical configuration. It is almost impossible to calculate the power required in advance because it depends on the friction of the strips and the power transfer. The power of the motor must also be estimated higher if you expect that the strips will not continue to rotate perfectly around their axis over a longer period of time. Because of the nature of the application the motor may need to be fully exposed to the weather. When exposed to the weather Somfy recommends covering the motor to ensure protection.



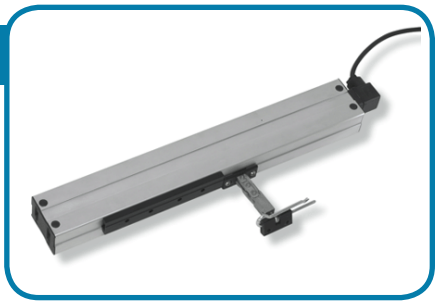
SOMFY WINDOW MOTORS
Somfy's range of window openers includes:

Mingardi Micro S



- Maintenance-free chain motor
- Strong duplex chain
- Easy integration because of small sizes
- Voltage: 24V DC

Mingardi Micro L

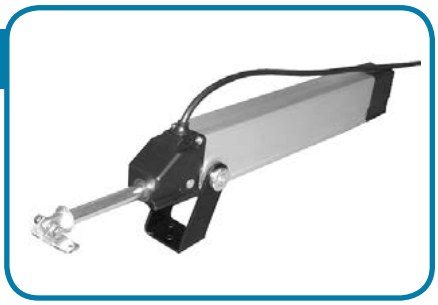


- Maintenance-free chain motor
- Strong duplex chain
- Common integration because of medium sizes
- Voltage: 24V DC

Mingardi Micro XL

- Maintenance-free chain motor
- Strong duplex chain
- Large opening angle because of opening up to 835 mm
- Voltage: 24V DC

Mingardi Euro 1+



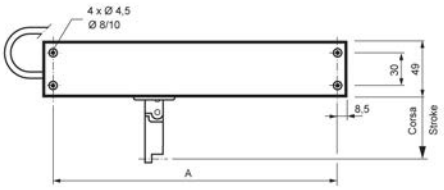
- Maintenance-free linear motor
- Variable opening
- High degree of protection IP55
- Voltage: 24V DC

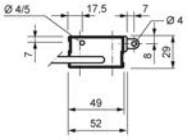
TECHNICAL INFORMATION
Mingardi Micro S – 24V DC

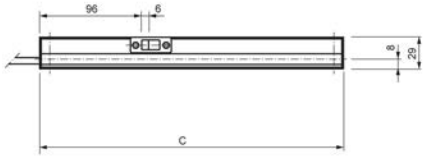
DESCRIPTION
MINGARDI linear electric actuator with reinforced double-sprocket chain inside the actuator body.

- Maintenance-free chain motor
- Strong duplex chain
- Easy integration because of small sizes
- Voltage: 24V DC

Dimensions







Opening (mm)	A (mm)	C (mm)
200	224	261,4
250	269	286,4

Specifications

Model type	Micro S 200 mm	Micro S 250 mm
Power supply voltage	24V DC	24V DC
Opening distance	200 mm	250 mm
Push and pull force	200 N	200 N
Current strength	0.80 A	0.80 A
Speed	10 mm/s	10 mm/s
Operating temperature range	14^0 F to 104^0 F	14^0 F to 104^0 F
Maximal run time	4 min.	4 min.
End switch open/close type	hall diode / absorption	hall diode / absorption
Protection class	IP 20	IP 20
Color available	anodised silver	anodised silver

NOTE:

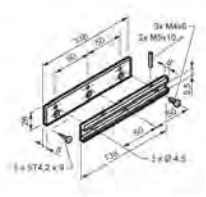
230V power options are available for international use. Please contact a Somfy Representative in regards to international projects.

Points for consideration

- Minimum window height: 500 mm
- Maximum window width: 1500 mm
- Power to be delivered may not exceed: 200 N

Attachment materials

Attachment materials for top opening windows and skylights are available when placing orders.

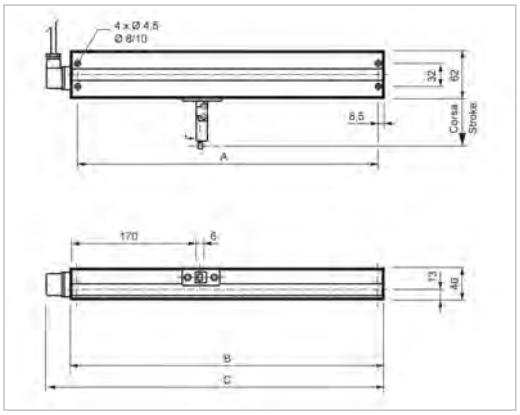


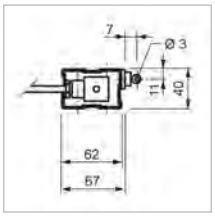
TECHNICAL INFORMATION
Mingardi Micro L - 24V DC

DESCRIPTION
MINGARDI linear electric actuator with reinforced double-sprocket chain inside the actuator body.

- Maintenance-free chain motor
- Strong duplex chain
- Easy integration because of small sizes
- Voltage: 24V DC

Dimensions





Opening (mm)	A (mm)	B (mm)	C (mm)
420	458	478	514
600	553	573	609
835	667	687	723

Specifications

Model type	Micro L 280 mm	Micro L 380 mm
Power supply voltage	24V DC	24V DC
Opening distance	280 mm	380 mm
Push and pull force	350 N	350 N
Current strength	2.3 A	2.3 A
Speed	22 mm/s	22 mm/s
Operating temperature range	14^0 F to 104^0 F	14^0 F to 104^0 F
Maximal run time	4.5 min.	4.5 min.
End switch open/close type	reed	reed
Protection class	IP 22	IP 22
Color available	anodised silver	anodised silver

NOTE:

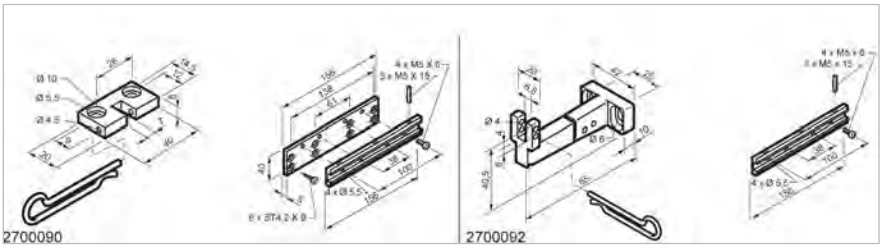
230V power options are available for international use. Please contact a Somfy Representative in regards to international projects.

Points for consideration

- Minimum window height: 1100 mm
- Maximum window width: 1500 mm
- Power to be delivered may not exceed: 400 N

Attachment materials

Attachment materials for top opening windows and skylights are available when placing orders

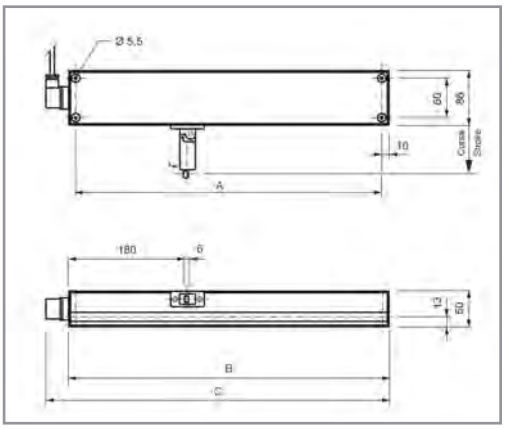


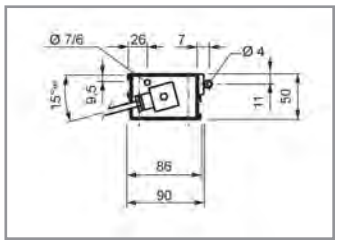
TECHNICAL INFORMATION
Mingardi Micro XL – 24V DC

DESCRIPTION
MINGARDI linear electric actuator with reinforced double-sprocket chain inside the actuator body.

- Maintenance-free chain motor
- Strong duplex chain
- Large opening angle up to 835 mm
- Voltage: 24V DC

Dimensions





Opening (mm)	A (mm)	B (mm)	C (mm)
420	458	478	514
600	553	573	609
835	667	687	723

Specifications

Model Type	Micro XL 420 mm	Micro XL 600 mm	Micro XL 835 mm
Power supply voltage	24V DC	24V DC	24V DC
Opening distance	420 mm	600 mm	835 mm
Push and pull force	400 N	400 N	200 N
Current strength	2.3 A	2.3 A	2.3 A
Speed	22 mm/s	22 mm/s	22 mm/s
Operating temperature range	14⁰ F to 104⁰ F	14⁰ F to 104⁰ F	14⁰ F to 104⁰ F
Maximal run time	4.5 min.	4.5 min.	4.5 min.
End switch open/close type	reed	reed	reed
Protection class	IP 22	IP 22	IP 22
Color available	anodised silver	anodised silver	anodised silver

NOTE:

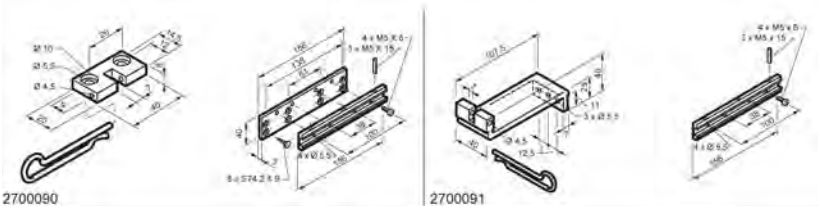
230V power options are available for international use. Please contact a Somfy Representative in regards to international projects.

Points for consideration

- Minimum window height: 1100 mm
- Maximum window width: 1500 mm
- Power to be delivered may not exceed: 400 N

Attachment materials

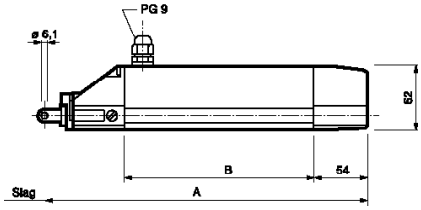
Attachment materials for top opening windows and skylights are available when placing orders.

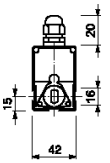


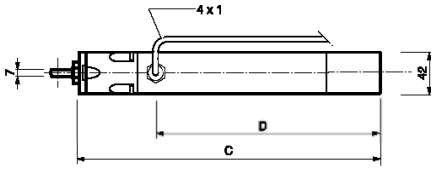
TECHNICAL INFORMATION
Mingardi Euro 1+ - 24V DC

DESCRIPTION
MINGARDI linear electric actuators with movement by a stiff rod that is highly resistant to maximum loads. Rod actuators are commonly used for: top hinged windows, domes, sunshades, louver windows.

Dimensions







Opening (mm)	A (mm)	B (mm)	C (mm)	D (mm)
200	330	200	308	234
300	430	300	408	334
500	630	500	608	535

Specifications

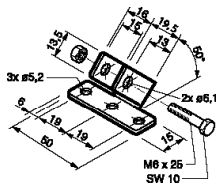
Model Type	**Euro 1+ 200 mm**	**Euro 1+ 300 mm**	**Euro 1+ 500 mm**	**Euro 1+ 70 mm**
Power supply voltage	24V DC	24V DC	24V DC	24V DC
Opening distance	0-200 mm	0-300 mm	0-500 mm	0-70 mm
Push and pull force	450 N	450 N	450 N	1000 N
Current strength	0.75 A	0.75 A	0.75 A	0.75 A
Speed	10 mm/s	10 mm/s	10 mm/s	3 mm/s
Operating temperature range	14^0 F to 104^0 F	14^0 F to 104^0 F	14^0 F to 104^0 F	14^0 F to 104^0 F
Maximal run time	4 min.	4 min.	4 min.	4 min.
End switch open/close type	Micro switch	Micro switch	Micro switch	Micro switch
Protection class	IP 55	IP 55	IP 55	IP 55
Color available	anodised silver	anodised silver	anodised silver	anodised silver

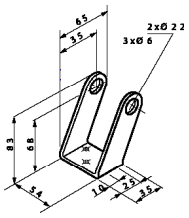
Points for consideration

- Minimum window height: 300 mm
- Maximum window width: 1500 mm
- Power to be delivered may not exceed: 450 N - 1000 N

Attachment materials

Attachment materials are available when placing orders.





Controlling the thermal exchanges in a building will improve the thermal and visual comfort for building occupants as well as optimize the energy efficiency of the building.

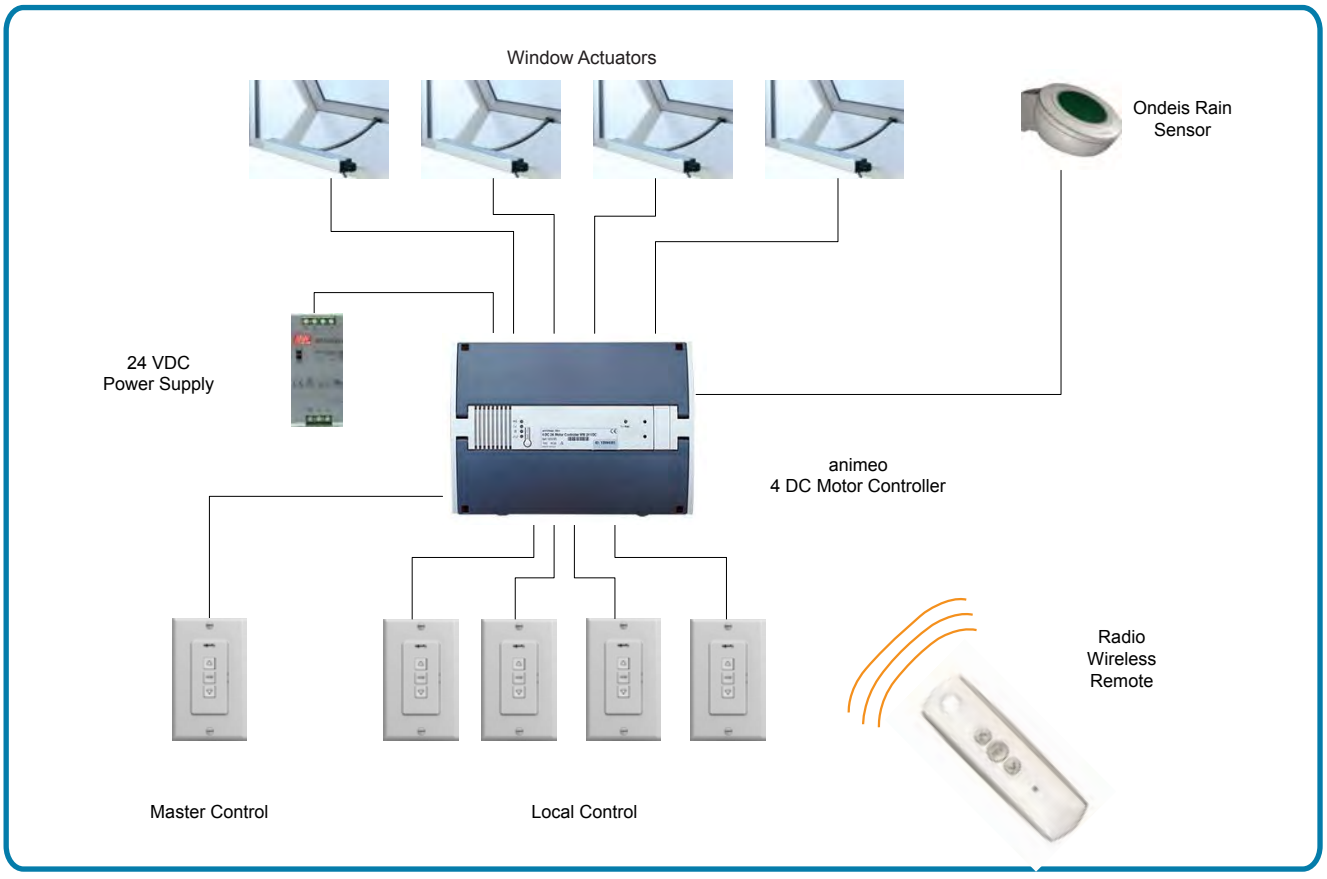
Animeo is the name of the Somfy solution for façade management and environmental control. The Animeo Façade Management System offers the ability to centrally monitor and control all motorized applications (eg windows, blinds, awnings, louvers) on all building facades via a combination of timers, sun tracking devices & weather sensors.

Animeo Façade Management System can control up to 6400 motorized applications and is easily integrated with other building automation systems. Control over any individual application remains possible with the Somfy individual switches.

As both natural ventilation and solar protection are critical aspects in the performance of a building, maximizing these functionalities via Somfy's centrally monitored Animeo Façade Management System will improve the thermal and visual comfort for building occupants as well as reducing costs incurred by air conditioning, heating and lighting.

Effective façade management reduces reliance on artificial lighting, heating and cooling sources – improving productivity, reducing energy consumption and lowering operational costs.

EXAMPLE OF APPLICATION



SAFETY RECOMMENDATIONS

Somfy recommends the following safety checks before installing & operating the window opener:

- Make sure that the strength of the motor selected is in agreement with the dimensions and the weight of your application.
- Check that the motor attachment materials are firmly fixed to both the motor and the window or louver application.
- Make sure that the motor is correctly aligned with the attachment bracket that is placed on the window. (an alignment that is not correctly fitted will have a detrimental effect on the operational life of both the motor and the window)
- If the window opener is exposed to the weather, Somfy recommend covering the motor to ensure protection.

SOMFY TECHNICAL SUPPORT

Somfy Customer Service Phone 800-22-SOMFY

Somfy offers a comprehensive technical support program to assist with the design, planning, installation and programming of our window openers & automation systems.

Somfy will assist with:

- Advice and recommendations on motor and control selection
- Installation and on site support
- Phone support for programming
- Provision of wiring diagrams

Somfy products are synonymous with innovation, quality, safety and durability.
All Somfy motors, controllers and sensors carry a 5 year warranty.

MINGARDI®
THE REFERENCE FOR WINDOW AUTOMATION

NOTES:

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F: (905) 238-1491

www.somfysystems.com

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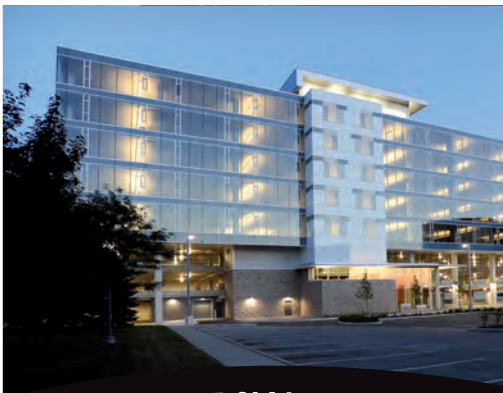


SOMFY FOR COMMERCIAL BUILDINGS

animeo® IP

Automated Total Solar Management

somfy®

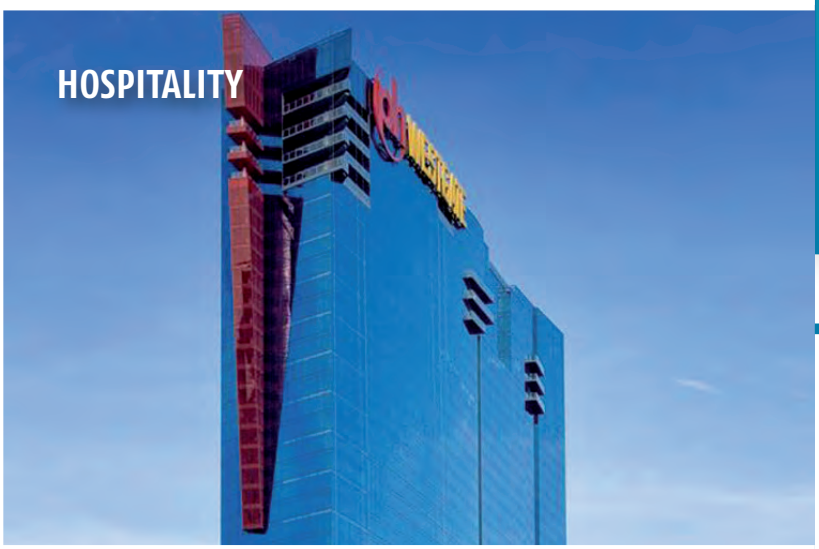
Introduction

100 MILLION motors

HOTEL HOSPITALITY | H HEALTHCARE | OFFICES | SCHOOL EDUCATION

Somfy is the leading global manufacturer of strong, quiet motors with electronic and app controls for interior and exterior window coverings. Over 270 million users worldwide enjoy the more than 150 million motors produced by Somfy. During the past 40+ years, Somfy engineers have designed products for both the commercial and residential markets to motorize window coverings such as interior shades, wood blinds, draperies, awnings, rolling shutters, exterior solar screens and projection screens. Somfy motorization systems are easily integrated with security, HVAC and lighting systems providing total home or building automation.

Somfy's Commercial Building Solutions offer a wide range of intelligent motors and controls that optimize the utilization of natural light in your commercial workspace. Our systems are calibrated to maximize occupant comfort while enhancing the visual environment, minimizing solar glare and heat gain, and providing UV protection. Somfy's natural light control and automation systems are scalable in design, offered in low voltage, line voltage or wireless options, and are perfect for projects of any size or budget. Somfy's Commercial Specification team is LEED accredited and will support all aspects of any project, from specification through commissioning.



Working with you from specification to maintenance

Thousands of shade manufacturers around the world choose Somfy motors to bring their natural light control products to life. Somfy's nationwide Commercial Specification Team will work with you to find the right manufacturer and support your project every step of the way.

Specifying for projects of all sizes and price points

Experienced professional installation services

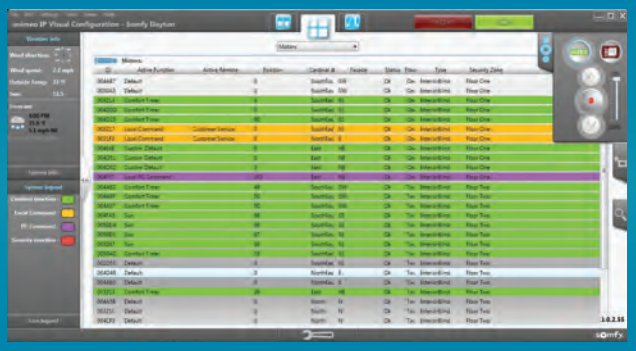
Planning

Somfy's Commercial Specification team will remain on hand throughout the planning and specification process ensuring a tailor-made solution for your project.

Installation

Somfy's nationwide network of trained professional installers will work hard to respect your project timeline and meet all local and federal building requirements.

Simplified and trouble-free system programming



Continuing Somfy Support

5 Warranty year somfy

Commissioning

- Intuitive animeo IP software allows the facility manager total control over all system functions.
- Sample pattern projects can be established through Somfy support to simplify programming.
- Somfy on-site support is available.

Operation

All Somfy system components are backed by a 5 year non-prorated warranty and a 10+ year life expectancy.

Introducing animeo® IP

animeo® IP is a total solar management system utilizing Somfy-powered intelligent motorized window coverings as well as digital keypads and weather sensors. The system's controllers, sensors and keypads can be added to both new and existing Somfy Digital Network installations for comprehensive solar management as either a stand-alone solution or integrated into third party control systems.

An intuitive user interface allows for simplified commissioning, building management and technical support, featuring drag-and-drop programming, motor auto discovery, and at-a-glance real-time system status updates.

Benefits of animeo® IP

Energy Efficiency | Comfort | Scalability & Flexibility | Compatibility | LEED Certification

Natural Light Management

Automatically managing motorized window coverings reduces dependency on artificial light, allowing more natural light for increased visual comfort of occupants as well as energy savings.

The 1/3/10 rule

The difference in brightness between what the eye sees (30° angle) and a visual task (e.g. a sheet of paper) must be no more than a ratio of 1:3. The ratio is 1:10 for the difference between total perceived light (90° angle) and surfaces located within the field of vision (e.g. a window).

Dynamic Insulation™

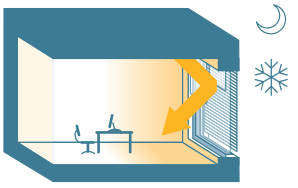
Automated motorized window coverings are raised and lowered according to changes in outdoor weather conditions and indoor comfort needs based on commands from sensors, pre-programmed settings, or local occupant controls.

And with animeo IP's sun tracking function, the process is automated to ensure the reality of energy savings.

Summer strategy

Lower window coverings during the hottest part of the day to reduce heat gain.

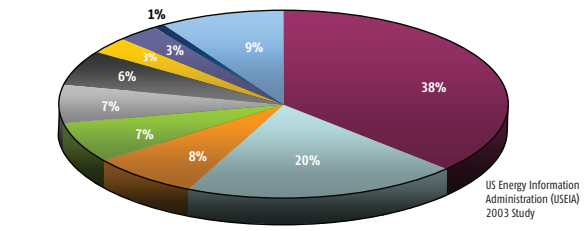
Winter strategy



Lowered window coverings prevent heat loss through windows during nighttime hours.

Energy savings

With 62% of energy use in commercial buildings attributed to lighting and HVAC systems (USEIA 2003), decision makers are pushing to increase energy efficiency with the automation of critical systems.



US Energy Information Administration (USEIA) 2003 Study

- Space Heating - 2,203 trillion Btu (38%)
- Lighting - 1,143 trillion Btu (20%)
- Water Heating - 449 trillion Btu (8%)
- Cooling - 431 trillion Btu (7%)
- Ventilation - 384 trillion Btu (7%)
- Refrigeration - 354 trillion Btu (6%)
- Cooking - 167 trillion Btu (3%)
- Personal Computers - 148 trillion Btu (3%)
- Office Equipment - 64 trillion Btu (1%)
- Other - 478 trillion Btu (9%)

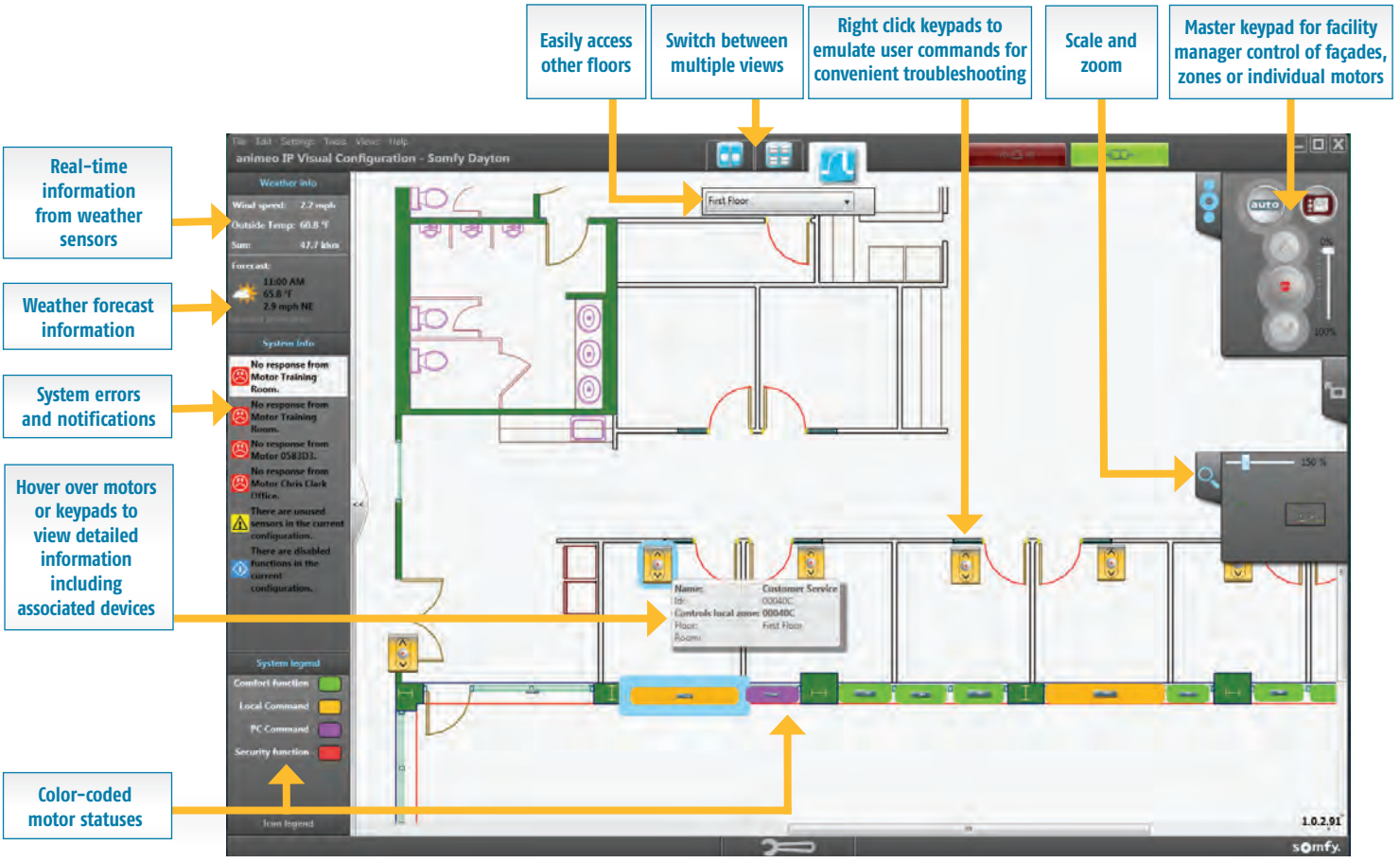
Meeting LEED requirements

Somfy is one of your key partners for LEED certification. Somfy solutions, including building control with animeo® IP, provide the opportunity to obtain LEED points on your next project.

Intuitive Graphic User Interface

A standout feature of animeo IP is its graphic user interface. There are four main system views: Façade, Group, List and Floorplan. The Floorplan view offers facility managers a dynamic snapshot of system status and indicators in an easy-to-understand floorplan format as well as convenient access to controls and critical system information.

Floor Plan View



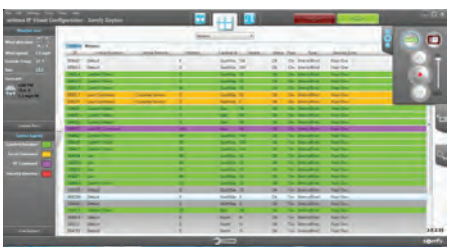
Façade View

Graphical representation of building exterior

Group View

Conceptualized view of groups that make up the system

List View



Sortable database of system states

The following examples demonstrate other key features of the user interface that also simplify commissioning, operation and troubleshooting.

Timer Configuration

Schedules based on animeo IP's real-time and astronomic clocks are easy to configure. Proper configuration is guaranteed with a simplified interface and color coded confirmation.

Choose from preset time periods to create customized timers

Green means there are no conflicts, red means actions are overlapping

Virtual Keypads

Both facility managers and occupants have access to virtual keypads from their PCs, laptops, tablets or smartphones connected to the site's LAN for convenient local control.

Facility Manager View

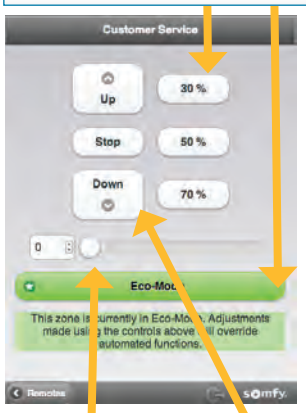
Access system presets like Openness levels and Energy Savings Mode

Up, Down and Stop commands

Slider for customized settings

Occupant View

Access system presets like Openness levels and Energy Savings Mode

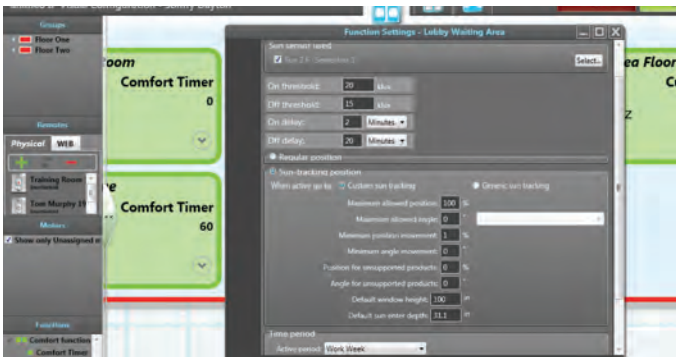


Slider for customized settings

Up, Down and Stop commands

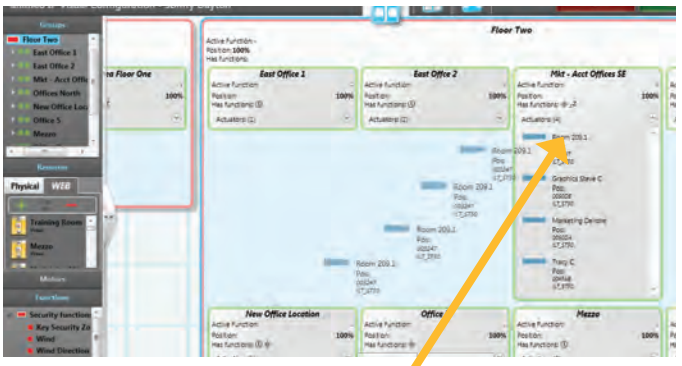
Sun Tracking

animeo IP uses input from sun sensors to effectively automate solar shading. By compiling data from sun sensors, animeo IP can log historical light and temperature values to aid in the creation of more efficient energy management and glare reduction settings.



Drag-and-Drop Configuration

Easily make adjustments to the system at any time with intuitive drag-and-drop organization of motors and sensors.



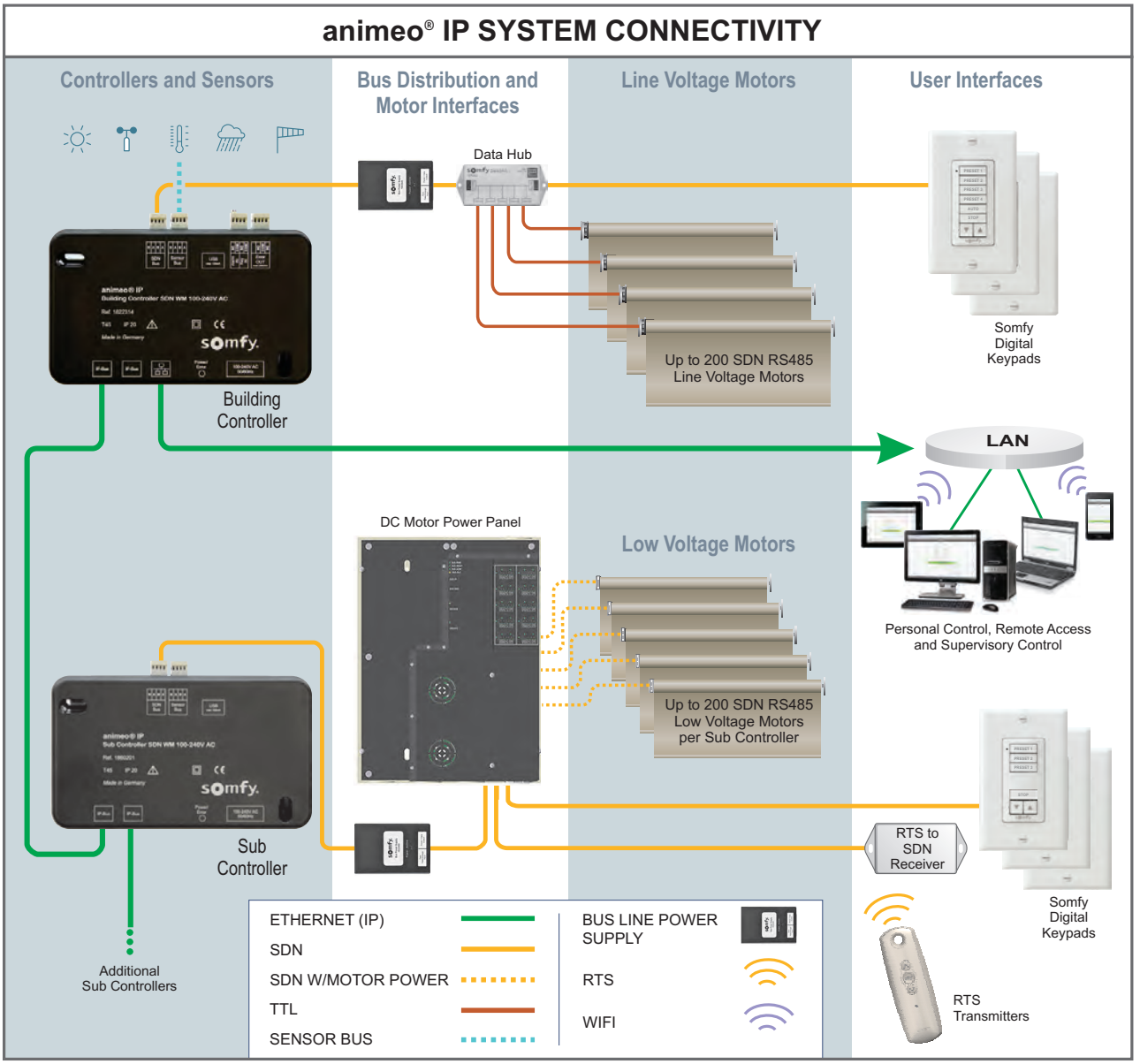
Drag and drop motors from one zone to another

Flexible and Scalable

animeo® IP maximizes the performance of Somfy Digital Network solutions by adding a main Building Controller and client software incorporating an intuitive graphic user interface. Sub Controllers increase system capacity to meet project requirements. The animeo IP range also includes solar, wind and temperature sensors which optimize natural elements for increased occupant comfort and energy efficiency.

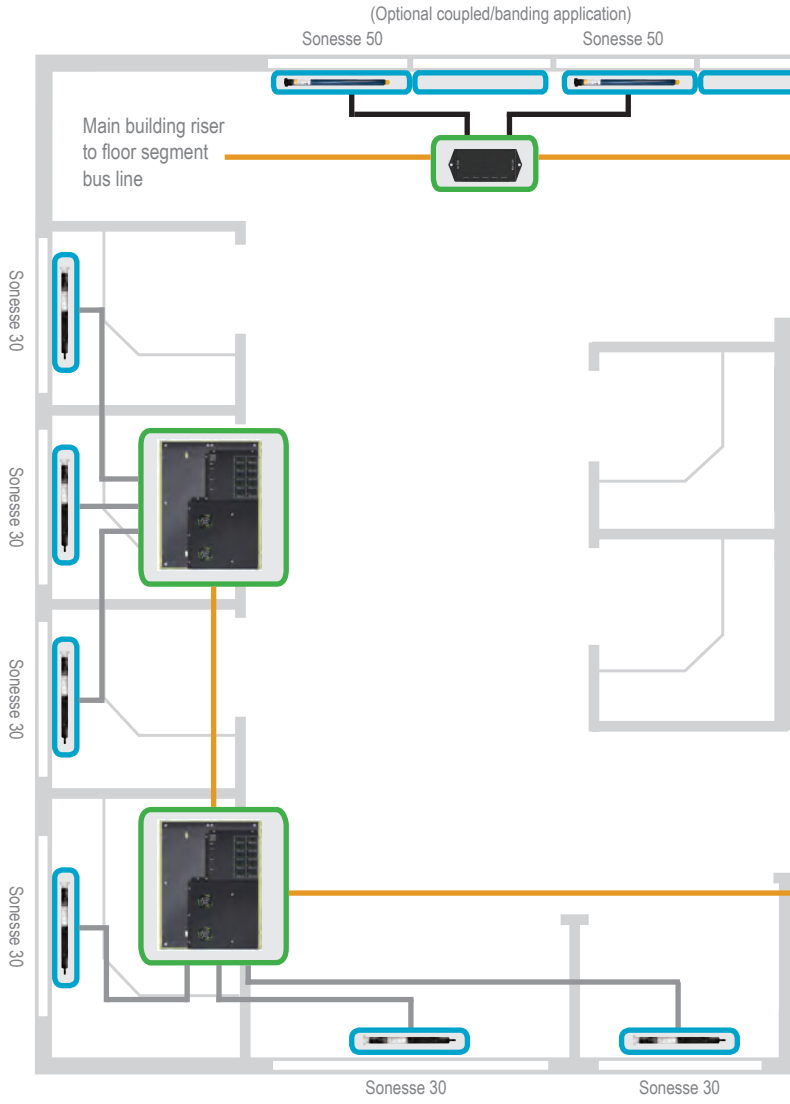
SYSTEM CONFIGURATION	SOMFY DIGITAL NETWORK	SOMFY DIGITAL NETWORK WITH animeo IP
Supports Somfy AC and DC Intelligent Motors	✓	✓
Sun Tracking		✓
Solar Entrance Depth Management		✓
Virtual Keypads		✓
Wired and Wireless Controls	✓	✓
Remote Access		✓
Time Scheduled Events	✓	✓
Compact Weather Sensor		✓
Sensor Weather Station		✓
Graphical Systematical Status and Position Updates		✓
Configuration with Auto-Discovery		✓
Integrate with BMS systems	✓	✓
Scalability	✓	✓

The schematic below represents the building-block approach of animeo® IP system and serial wiring topology. The system's scalability means that using these same components, animeo® IP can effectively manage a single conference room, individual floor or an entire building.



Somfy Digital Network RS485

Line and Low Voltage



Power Panel

- Low voltage transformer (24V DC)
- Provides data signal over a 16 AWG 2 conductor 24/2 cable
- Control box for communication
- Provides motor power over a Coleman Model 97295 or equivalent cable

Powered by standard outlet or junction box

Sonesse 30 RS485

Low voltage motor (24V DC)

- Quiet operation
- Wide range of control options
- Fully programmable
- Powered off the bus line

RTS to SDN Receiver

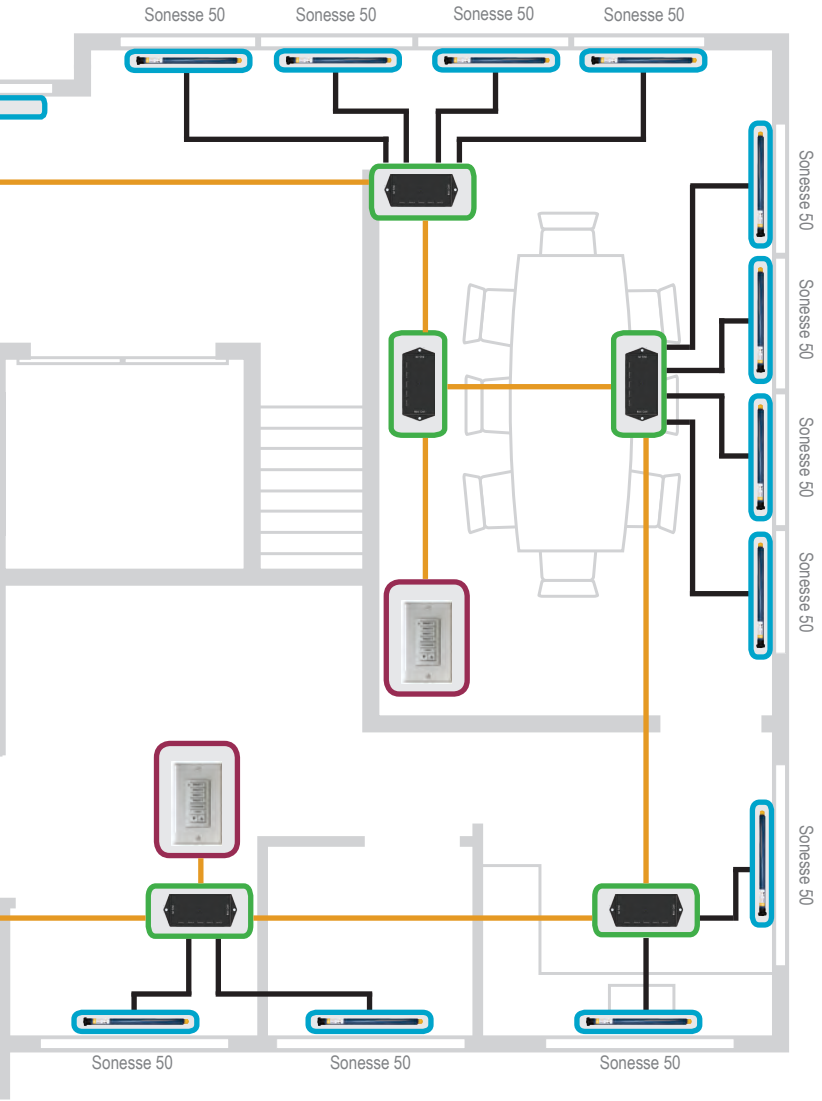
RTS Transmitter

Digital Keypad

Virtual Keypad

- Fully programmable
- Individual motor and group motor functionality
- Up to 5 preset positions and full up, stop, down functionality

Somfy's line and low voltage solutions featuring the intelligent Sonesse® 50 and Sonesse® 30 motor lines offer ultra-quiet operation along with greater strength and quality than other motor options offered by the industry competitors. Somfy's line and low voltage motors and controls are a stand alone solution, or can communicate with building network using animeo® IP, providing the most flexible complete network solution available.



SDN 2.0 products are backed by a SDN 2.0 Certified Quality Promise which means these products have been designed to meet the highest standards for Somfy Digital Network system components and validated by Somfy engineers. Systems designed using SDN 2.0 certified products are easier to install, more reliable, and improve overall system performance.

animeo IP

- Provides connection from the Somfy digital network to the building network
- Can be placed anywhere in the building

Powered by standard outlet or junction box

Sonesse 50 Ultra RS485

Line voltage motor (120V AC)

- Ultra-quiet operation
- Ultra powerful operation
- Wide range of control options
- Fully programmable

Powered by standard outlet or junction box

5 Port Data Hub and Data Hub Plus

- Allows digital communication off of the bus line to controls.
- Increase motor connections along the bus line.

Power Panel

Data Panel

Coleman model 97295 or equivalent for Sonesse 30 motor wiring

4 Conduit 26AWG modular cable with RJ9 and an RJ45 connector for Sonesse 50 motor wiring

BUS LINE

MOTOR

BUS DISTRIBUTION

USER INTERFACE

animeo® IP Product Line

CONTROLLERS

animeo® IP Building Controller #1822314

The **animeo IP Building Controller** features a sophisticated graphical user interface and built-in software applications for managing scheduled events, sun tracking, and virtual web-based keypads. An animeo IP Building Controller is required for every animeo IP installation. For larger animeo IP systems (over 200 nodes), animeo IP Sub Controllers must be used.

animeo® IP Sub Controller #1860201

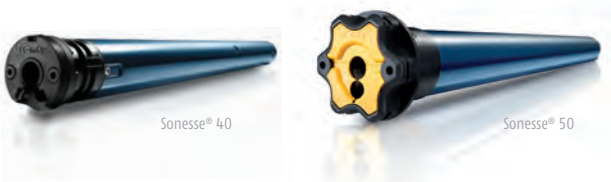
The **animeo IP Sub Controller** expands the system's capacity beyond the initial 200 motors supported by the animeo IP Building Controller. Each additional Sub Controller supports 200 motors.

MOTORS

Low Voltage Intelligent Motors

Somfy's low voltage intelligent motors are available in both quiet and ultra-quiet Sonesse versions. Both require 24V DC power. Torque ranges from 2Nm-4Nm.

Line Voltage Intelligent Motors



Somfy's line voltage intelligent motors are available in both quiet and ultra-quiet Sonesse versions. Both require 110V AC power. Torque ranges from 4Nm-35Nm.

SENSORS

Sensor Station #9013726

The **Sensor Station** consists of an aluminum mast with pre-mounted and pre-wired outside sensor box, 4 sun sensors, wind sensor and an outside temperature sensor, and can be equipped with additional sensors.

Compact Sensor #9015047

The **Compact Sensor** consists of 3 sun sensors which can be oriented to East, South and West, as well as a wind sensor, outside temperature sensor and rain sensor.

USER INTERFACES

DecoFlex Keypads

DecoFlex Keypads provide an in-wall user interface for animeo® IP. The Keypad offers users a familiar way to adjust their environment for personal comfort without affecting the overall efficiency of the building. Available in both wired and wireless options.

Radio Technology Somfy® to Somfy Digital Network Receiver #1822294

The **Radio Technology Somfy to Somfy Digital Network Receiver** connects directly to the SDN bus and is fully compatible with all RTS transmitters. Control up to 5 groups of motors on the network using an RTS transmitter. The Receiver obtains its power directly from the bus – no external power required.

BUS POWER & DISTRIBUTION

Bus and Sensor Station Power Supply #1822440

The **Somfy Bus and Sensor Station Power Supply** provides 24V DC power to the SDN bus. Each Power Supply can provide power to up to 100 busline devices (excluding motors).

24V DC Power/Data Distribution Panels

Power/Control Distribution Panels supply power and communication to low voltage RS485 motors. Each motor output is individually fuse protected. Available in 10 motor configurations.

animeo IP Building Controller

Part #1822314

Overview:

The animeo® IP Building Controller is an integrated hardware and software control point for Somfy Digital Network (SDN) installations. The Building Controller provides dynamic solar management using Somfy powered motorized window coverings and climate information provided by a real-time weather station. The Building Controller features an intuitive graphical user interface to simplify programming, commissioning, operation and system status. For larger installations, the Building Controller's capacity can be expanded with the addition of the animeo IP Sub Controller (#1860201).

The Building Controller features an integrated router for IP connectivity, which allows for a stable network connection between the Building Controller and Sub Controller(s); connecting to the building network allows for remote servicing and occupant-facing virtual keypads.

The Building Controller is suitable as a stand-alone control solution for both new and existing SDN installations as well as part of third party BMS systems.

animeo IP System Overview:

animeo® IP is a total solar management system utilizing Somfy-powered intelligent motorized window coverings as well as digital keypads and weather sensors. The system's controllers, sensors and keypads can be added to both new and existing Somfy Digital Network installations for comprehensive solar management as either a stand-alone solution or integrated into third party control systems.

An intuitive user interface allows for simplified commissioning, building management and technical support, featuring drag-and-drop zone creation, motor auto discovery and at-a-glance system status updates.

Every animeo IP installation includes an animeo IP Building Controller that supports up to 200 motors. The animeo IP is a scalable system and network capacity is expanded by adding one Sub Controller for each additional group of 200 motors. For systems exceeding 1000 motors the Building Controller is configured to only manage network traffic and not have any direct motor connections.

The animeo IP Controller resides on a standard Somfy Digital Network (SDN) bus. Proper SDN system design must be respected for optimal animeo IP performance.

Features Summary:

- Sun tracking for dynamic facade control
- Sensor threshold based motor control
- Accurate time & astronomic motor control
- Network-based motor control with user account access
- Facility manager access to global system status & control
- Integration with third party control systems and BMS Systems
- System auto discovery of motors, sensors, keypads
- IP connectivity for Sub Controller connections, virtual keypads,remote access and programming
- Windows 7-based drag-and-drop setup, configuration & operation

Technical Specifications:

- Input: Universal power supply 100V AC – 120V AC
- Power Consumption: 1.25 Amps (Max)
- Material: ABS
- Dimensions: 6 7/8" W x 4" H x 1 ¾" D
- ARM-based processor
- Internal OS: Linux Client OS: Windows 7 or higher
- Dual SDN Bus (dedicated Motor & Sensor buses)
- Dedicated IP Bus with integrated router
- Integrated upgradeable 1GB flash storage
- Self-Calibrating, Hardware real-time clock with battery backup
- Dry Contact input & output for third party integration
- Shipping Weight: 1 lb.

Compliance Specifications:

- UL Listed
- CE Approved
- IEC Appliance Protection Class II
- SEQR Type 1 Action
- NEMA Index Protection Rating: IP20
- NI Pollution Degree 2
- Operating Temperature Range: Ambient Temperature
- Operating Relative Humidity: 85%

Optional Accessories:

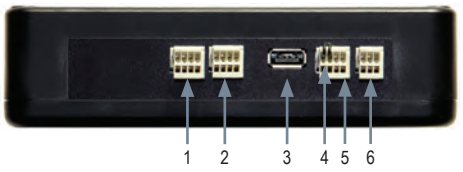
animeo IP Sub Controller	#1860201
Bus & Sensor Station Power Supply	#1822440
animeo IP DecoFlex 6-Button White *	#1811288
animeo IP DecoFlex 8-Button White *	#1811289
RTS Receiver for animeo IP	#1810816
Sensor Station Mast	#9013726
Compact Sensor Station	#9015047

What's in the Box:

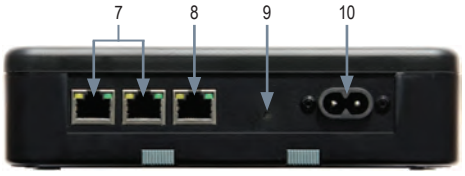
- animeo IP Building Controller
- Power Cable
- Instructions (when applicable)

Connections and Indicators:

TOP SIDE

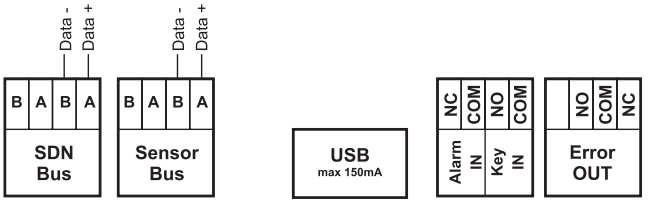


BOTTOM SIDE



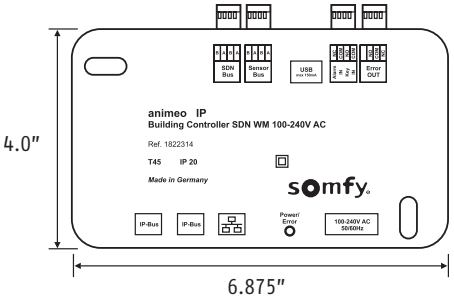
	ELEMENT	FUNCTION
1	SDN Bus	SDN Bus for motor & keypad connection
2	Sensor Bus	SDN Bus for environmental sensor connection
3	Service	USB Connection for service
4	Alarm Input	NC input allowing for system override from 3rd party controller
5	Key In	NO input allowing for system override from 3rd part controller
6	Error Out	Digital Output for notification of system failure 24V DC @ 1A (NC or NO)
7	Animeo IP Network	10/100 Internal Network for connecting to Sub Controllers
8	External Network	10/100 Network Connection for Virtual Keypads and Remote Access
9	Status Indicator	Solid Green = initial system boot up Rapid Green/Red Flash = configuration commit Green Flash* = system normal Red Flash = system has experienced an error (not failed) *Speed of flash indicates system load
10	Power Input	100V AC – 240V AC switching power supply

Cable Pinouts:

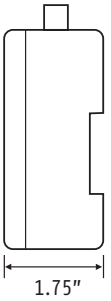


Dimensions:

FRONT VIEW

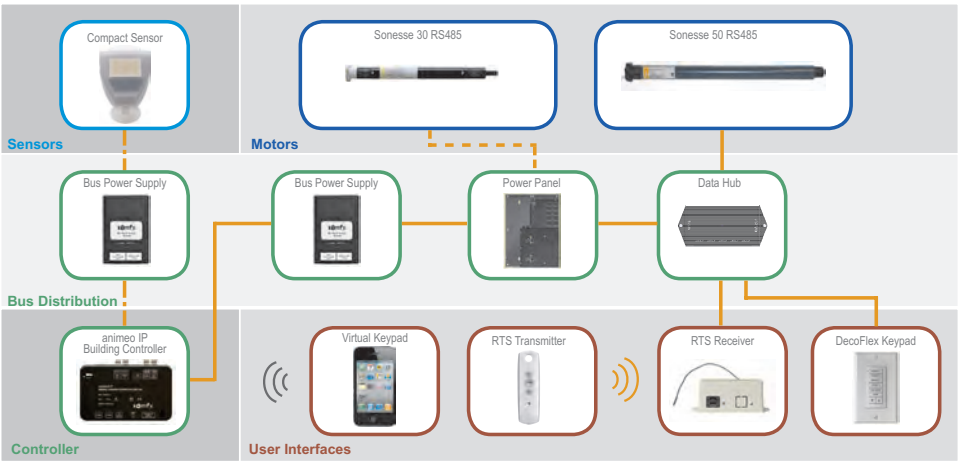


SIDE VIEW

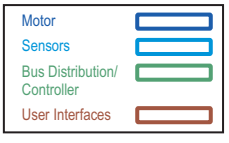


Wiring Best Practices:

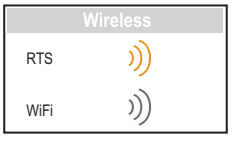
- **Alarm Input/Key IN/Error OUT:** Use two conductor 20-24 AWG cable.
- **ALL Connections below:** Category 5 or higher cable with a 568B pinout configuration.
- **SDN Bus:** The Building Controller should be placed within 30' of the SDN bus line.
- **Sensor Bus:** The sensor bus should not exceed 4,000' in total wire length.
- **External IP Network:** The external IP network cable should not exceed 330'
- **animeo IP Network:** The animeo IP network should not exceed 330'

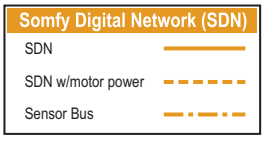


Component Types



Wiring Connection Types





animeo IP Sub Controller

Part #1860201

Overview:

The animeo IP Sub Controller expands the animeo IP Building Controller (#1822314) base system capacity of 200 intelligent motors. Each Sub Controller allows an additional 200 AC or DC powered intelligent motors as well as sensors and keypads. The Sub Controller utilizes the Building Controller's integrated router to interface over an IP backbone to provide a stable connection between the Building Controller and Sub Controller components of the shade system's network infrastructure.

animeo IP System Overview:

animeo® IP is a total solar management system utilizing Somfy-powered intelligent motorized window coverings as well as digital keypadsand weather sensors. The system's controllers, sensors and keypads can be added to both new and existing Somfy Digital Network installations for comprehensive solar management as either a stand-alone solution or integrated into third party control systems.

An intuitive user interface allows for simplified commissioning, building management and technical support, featuring drag-and-drop zone creation, motor auto discovery and at-a-glance system status updates.

Every animeo IP installation includes an animeo IP Building Controller that supports up to 200 motors. The animeo IP is a scalable system and network capacity is expanded by adding one Sub Controller for each additional group of 200 motors. For systems exceeding 1000 motors the Building Controller is configured to only manage network traffic and not have any direct motor connections.

The animeo IP Controller resides on a standard Somfy Digital Network (SDN) bus. Proper SDN system design must be respected for optimal animeo IP performance.

Features Summary:

- Expands system motor capacity
- Additional connection point for sensors
- Integrated IP switch for simplified connectivity of additional Sub Controllers (pass through)
- Sun tracking for dynamic facade control
- Sensor threshold based motor control
- Accurate time & astronomic motor control
- System auto discovery of motors, sensors, keypads

Technical Specifications:

- Input: Universal power supply 100V AC – 120V AC
- Power Consumption: 1.25 Amps (Max)
- Material: ABS
- Dimensions: 6 7/8" W x 4" H x 1 ¾" D
- ARM-based processor
- Internal OS: Linux
- Dual SDN Bus (dedicated Motor & Sensor buses)
- Dedicated IP Bus with integrated router
- Integrated upgradeable 512 MB flash storage
- Shipping Weight: 1 lb.

Compliance Specifications:

- UL Listed
- CE Approved
- IEC Appliance Protection Class II
- SEQR Type 1 Action
- NEMA Index Protection Rating: IP20
- NI Pollution Degree 2
- Operating Temperature Range: Ambient Temperature
- Operating Relative Humidity: 85%

Optional Accessories:

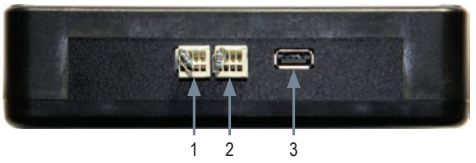
animeo IP Building Controller	#1822314
Bus & Sensor Station Power Supply	#1822440
animeo IP DecoFlex 6-Button White *	#1811288
animeo IP DecoFlex 8-Button White *	#1811289
RTS Receiver for animeo IP	#1810816
Sensor Station Mast	#9013726
Compact Sensor Station	#9015047

What's in the Box:

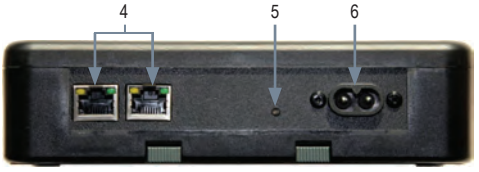
- animeo IP Sub Controller
- Power Cable
- Instructions (when applicable)

Connections and Indicators:

TOP SIDE



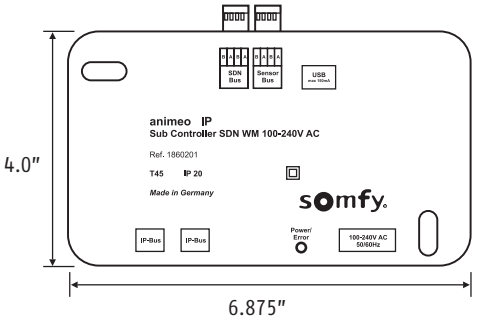
BOTTOM SIDE



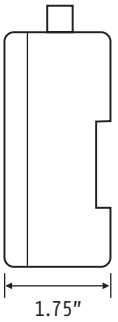
	ELEMENT	FUNCTION
1	SDN Bus	SDN Bus for motor & keypad connection
2	Sensor Bus	SDN Bus for environmental sensor connection
3	Service	USB Connection for service
4	Animeo IP Network	10/100 Internal Network for connecting to Sub Controllers
5	Status Indicator	Solid Green = initial system boot up Rapid Green/Red Flash = configuration commit Green Flash* = system normal Red Flash = system has experienced an error (not failed) *Speed of flash indicates system load
6	Power Input	100V AC – 240V AC switching power supply

Dimensions:

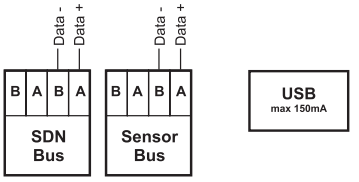
FRONT VIEW



SIDE VIEW

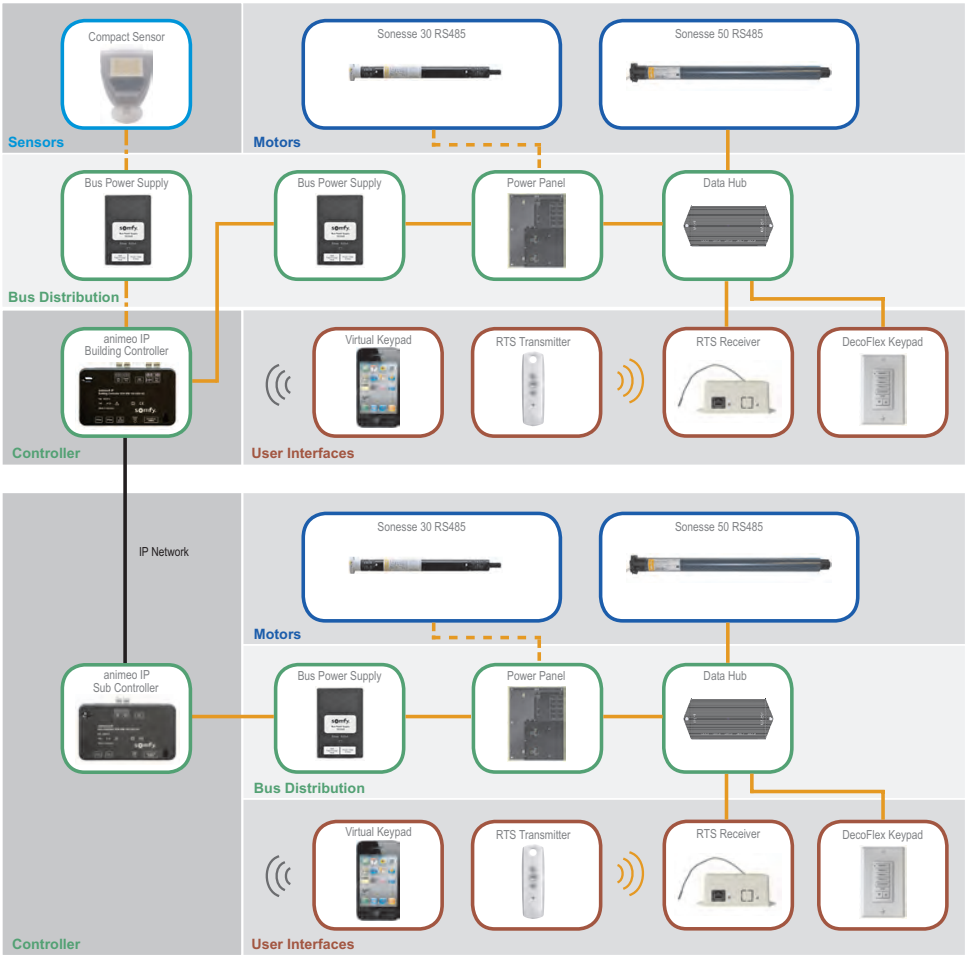


Cable Pinouts:

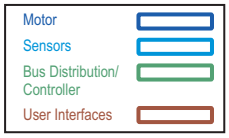


Wiring Best Practices:

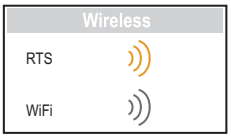
- **ALL Connections below:** Category 5 or higher cable with a 568B pinout configuration.
- **SDN Bus:** The Building Controller should be placed within 30' of the SDN bus line.
- **Sensor Bus:** The sensor bus should not exceed 4,000' in total wire length.
- **animeo IP Network:** The animeo IP network should not exceed 330'

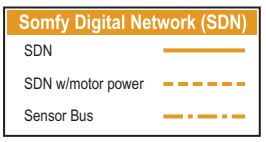


Component Types



Wiring Connection Types





DecoFlex Digital Keypad
Somfy Digital Network

Part #1811252, 1811253

Overview:

The Somfy Digital Keypad for Somfy Digital Network (SDN) is an intelligent control device providing a hard-wired in-wall user interface for stand-alone SDN shading systems. Keypads provide users a familiar way to adjust their environment for personal comfort. Each keypad communicates directly with intelligent motors in the system without the need for a centralized system controller, distributing intelligence across the network, ensuring reliable operation.

Every DecoFlex Digital Keypad uses a priority based command structure which allows multiple keypads to have different levels of authority. For example, a system can be programmed to prioritize life-safety and facility manager control over local user control.

Available in both 6 button and 8 button configurations, the DecoFlex Digital Keypad comes with default engraved buttons (shown at right). Custom engraved buttons are available. Each keypad also includes 8 dry contact inputs on the reverse, regardless of the number of buttons on the front. All contacts, even those not associated to a specific front button, are programmed to output SDN commands for the control of intelligent motors on the network.

Features Summary:

- Directly control intelligent motors either individually, by group, facade or an entire building.
- Each button can be programmed with different commands for Press, Release and Hold
- Set intermediate position at current shade position via button press
- Keypad configurations can be exported and backed up
- Dry contact inputs
- Custom engraved buttons available
- Standard Decora size
- Includes wall plate and dry contact terminal blocks

Technical Specifications:

- Input: 24V DC
- Power consumption: 10mA supplied by SDN Bus
- Material: Face plates and Buttons: Lexan 945U
- Back housing: Fire retardent grade of ABS-FR 15 Na100
- Mounting: Single gang
- Dimensions: 1 7/16" x 1 1/2" x 4 1/16" (without wall plate)
- Face plate dimensions: Standard Decora
- Operating temperature range: Ambient temperature
- Shipping weight: Actual weight: 0.25 - 0.3 lbs.
- LED: Red - Rear (power) (flashes when powered)
  Front (status) (flashes when transmitting)

What's in the Box:

- (1) Keypad
- (1) Face plate with screws
- (2) 1" screws

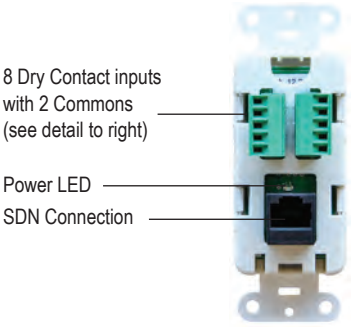
Optional Colors:

- White: 6 Button #1811252
- *Black: 6 Button #1811311
- *Almond: 6 Button #1811314
- *Ivory: 6 button #1811334

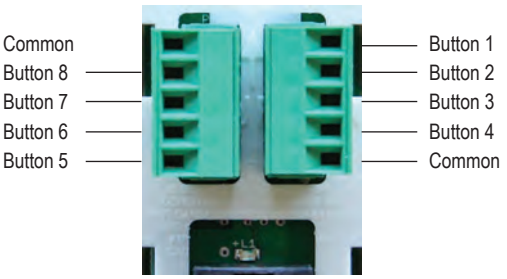
- White: 8 Button #1811253
- *Black: 8 Button #1811312
- *Almond: 8 Button #1811313
- *Ivory: 8 button #1811335

NOTE: Special lead times may apply

Connections and Indicators:

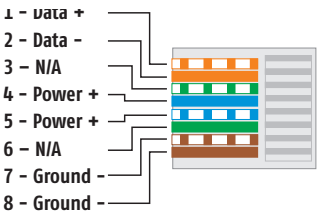


Detail of Inputs



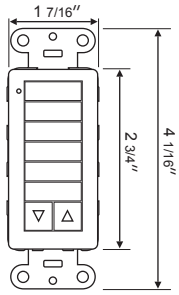
Cable Pinout:

SDN Cable Pinout

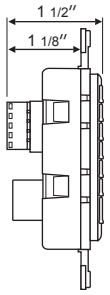


Dimensions:

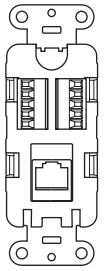
FRONT VIEW



SIDE VIEW



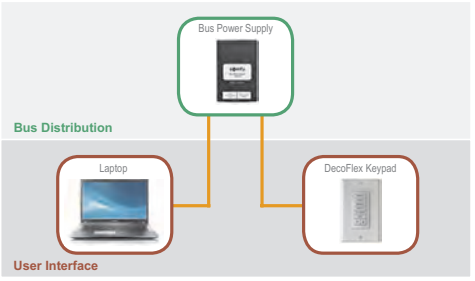
BACK VIEW



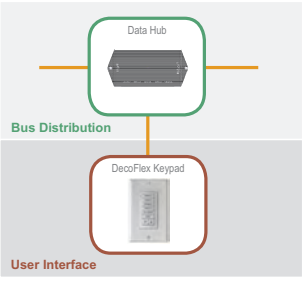
Wiring Best Practice:

The DecoFlex Digital Keypad has a single SDN connection which is utilized for both communication and power. Connecting the Keypad to the SDN bus is easy using any SDN Data hub as any free port can support a keypad. It is recommended that wires connecting the Keypad to the SDN bus are no more than 30 feet.

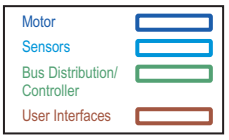
For Configuration



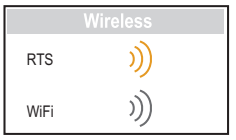
For Normal Operation

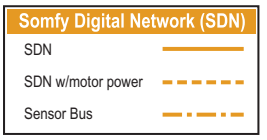


Component Types



Wiring Connection Types





Keypad Configuration:

The DecoFlex Digital Keypad for SDN has 8 fully programmable buttons which can be configured to control any motor or group through the Somfy Swicth Configuration Software. Once a keypad is fully configured, all of the settings can be exported to a file for backup.

Configuration Features:

- All buttons can be configured with different commands for Press, Release, and Hold which means each button can perform up to 3 motor functions
- Any button can be configured to control any individual motor or motor group
- Keypads are addressable, useful for later configuration over the SDN bus
- 255 Keypad command priority levels

Displayed button configuration will raise the shade on Press, and on Release, the shade will stop at it's current position.

Available Commands:

- Go to upper/lower limit
- Go to specific intermediate position
- Go to absolute position
- Go to a percentage
- Lock motor at a priority level
- Cycle through specific commands on one button
- Momentary jog up or down by millisecond or number of pulses
- Lock the motor at a limit, intermediate position or current position
- Set intermediate position at current shade position
- Unlock
- Stop

Dry Contact Integration:

Every keypad has 8 dry contact inputs, providing a simple method of integration with third party automation systems. Each input corresponds to a front button on the keypad; when a dry contact is closed the button is "pushed", sending the same SDN command as if the user were physically pushing a button. Connecting to a keypad is easy using the included 5 pin termination blocks. Each connection requires 2 conductors (supporting up to 14 AWG) from the third party system. One attaches to the corresponding button input and the other attaches to the common pin on the corresponding termination block.

DecoFlex Digital Keypad
animeo® IP

Part #1811288, 1811289

Overview:

The DecoFlex Digital Keypad for animeo® IP is an intelligent control device that provides a hardwired, in-wall user interface for a single zone within the animeo IP total solar management system. The Keypad provides the user a familiar way to adjust their environment for personal comfort without affecting the overall efficiency of the building. However, using advanced logic, animeo IP's energy efficient "Eco-Mode" settings can override user-initiated Keypad actions after a configurable time interval. During critical times of day, Keypads can be overridden entirely by animeo IP automated functions, ensuring the most efficient building operation.

The Keypad can be located anywhere on the Somfy Digital Network, communicating and receiving power with a single SDN connection. Commissioning Keypads is simplified using the animeo IP keypad discovery wizard featuring automatic location and address discovery with a single button press. Once discovered, the Keypad is programmed using intuitive click-and-drag actions for control over entire facades, groups or single motors.

White: 6 Button 1811288
Black: 6 Button 1811328
Ivory: 6 Button 1811332
Almond: 6 Button 1811330

White: 8 Button 1811289
Black: 8 Button 1811329
Ivory: 8 Button 1811333
Almond: 8 Button 1811331

Available in both 6 button and 8 button configurations, the DecoFlex Digital Keypad for animeo IP also includes 8 dry contact inputs on the reverse side of the keypad, regardless of the number of buttons on the front. Each of these inputs is mapped to a corresponding front button. All contacts, even those not associated to a specific front button, are programmed to output animeo IP commands for the control of motors on the network.

Features Summary:

- Provides user interface for animeo IP system to control motors individually, by group, facade, or an entire building
- Auto-discoverable address and location
- Configurable button functionality presets
- Interchangeable buttons to match selected preset
- Single or multi-gang compatible
- Standard Decora® size
- Includes wall plate and dry contact terminal blocks

Technical Specifications:

- Input: 24V DC
- Power consumption: 10mA supplied by SDN Bus
- Material: Face plates and Buttons: Lexan 945U
- Back housing: Fire retardent grade of ABS-FR 15 Na100
- Mounting: Single gang
- Dimensions: 1 7/16" x 1 1/2" x 4 1/16" (without wall plate)
- Face plate dimensions: Standard Decora
- Operating temperature range: Ambient temperature
- Shipping weight: Actual weight: 0.25 - 0.3 lbs.
- LED: Red - Rear (power) (flashes when powered)
  Front (status) (flashes when transmitting)

What's in the Box:

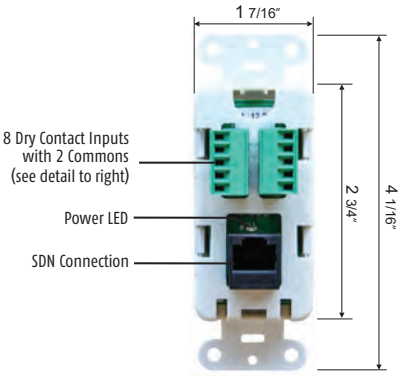
- (1) Keypad
- (1) Face plate with screws
- (2) 1" screws

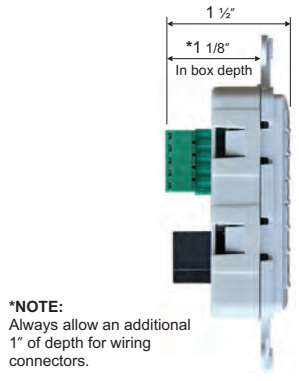
Optional Colors:

- White: 6 Button #1811288
- *Black: 6 Button #1811328
- *Ivory: 6 button #1811332
- *Almond: 6 Button #1811330
- White: 8 Button #1811289
- *Black: 8 Button #1811329
- *Ivory: 8 button #1811333
- *Almond: 8 Button #1811331

NOTE: Special lead times may apply

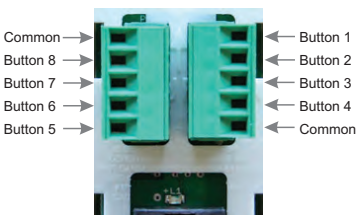
Connections and Indicators:





*NOTE:
Always allow an additional 1" of depth for wiring connectors.

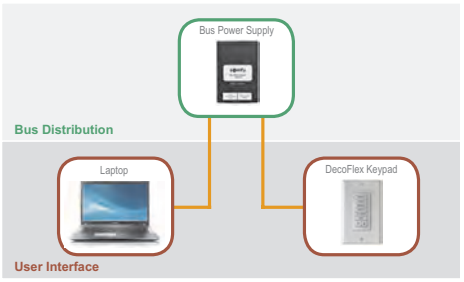
Detail of Inputs



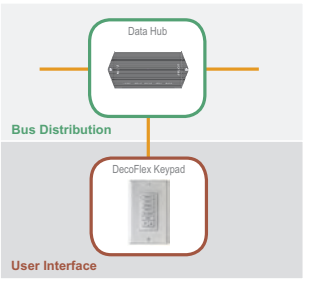
Wiring Best Practice:

The DecoFlex Digital Keypad for animeo IP has a single SDN connection which is utilized for both communication and power. Connecting the Keypad to the SDN bus is easy using any SDN Data block as any free port can support a Keypad. It is recommended that wires connecting the Keypad to the SDN bus are no more than 30 feet.

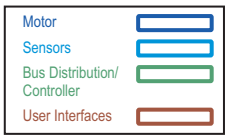
For Configuration



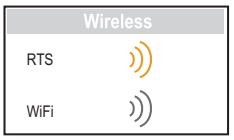
For Normal Operation

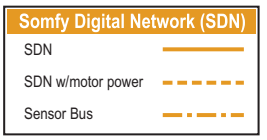


Component Types

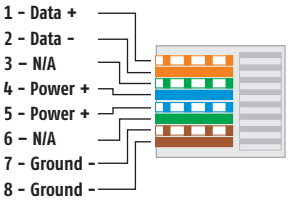


Wiring Connection Types





SDN Cable Pinout



Button Profiles:

Both six and eight button Keypads can be configured with one of three profiles: “Preset Priority”, “Eco Priority” or “No Eco”. Each Keypad comes with a default profile – “No Eco” for six button Keypads and “Preset Priority” for eight button keypads – and additional engraved buttons are included for reconfiguration into “Eco Priority” and “No Eco” profiles as well.

6 BUTTON KEYPAD CONFIGURATION OPTIONS

	No Eco (default)	Eco Priority	Preset Priority
Button 1	Move to 25%	Toggle Eco-Mode	Move to 25%
Button 2	Move to 50%	Move to 40%	Move to 50%
Button 3	Move to 75%	Move to 60%	Move to 75%
Button 4	*Dry Contact Integration	*Dry Contact Integration	*Dry Contact Integration
Button 5	*Dry Contact Integration	*Dry Contact Integration	*Dry Contact Integration
Button 6	Stop	Stop	Toggle Eco-Mode
Button 7	Move to Down Limit	Move to Down Limit	Move to Down Limit
Button 8	Move to Up Limit	Move to Up Limit	Move to Up Limit

8 BUTTON KEYPAD CONFIGURATION OPTIONS

	Preset Priority (default)	Eco Priority	No Eco
Button 1	Move to 20%	Toggle Eco-Mode	Open
Button 2	Move to 40%	Move to 20%	Move to 20%
Button 3	Move to 60%	Move to 40%	Move to 40%
Button 4	Move to 80%	Move to 60%	Move to 60%
Button 5	Toggle Eco-Mode	Move to 80%	Move to 80%
Button 6	Stop	Stop	Close
Button 7	Move to Down Limit	Move to Down Limit	Move to Down Limit
Button 8	Move to Up Limit	Move to Up Limit	Move to Up Limit

*** For more information, see below**

Dry Contact Integration:

Every Keypad has eight dry contact inputs, providing a simple method of integration with third party automation systems. Each input corresponds to a front button on the Keypad; when a dry contact is closed the button is "pushed", sending the same SDN command as if a user were physically pushing a button. Connecting to the Keypad is easy using the included 5 pin termination blocks. Each connection requires two conductors (supporting up to 14 AWG) from the third party system. One attaches to the corresponding button input and the other attaches to the common pin on the corresponding termination block.

NOTE: On six button Keypads, buttons 4 and 5 are available for dry contact integration. All six button Keypads allow third party integration with only one dry contact (Button 4 goes to the upper limit if held and the lower limit if released; button 5 goes to the lower limit if held and the upper limit if released).

RTS to SDN Receiver for animeo IP

Part #1822447

Overview:

The RTS Receiver for animeo IP allows for Somfy RTS interfaces to control groups, facades or single motors in an animeo IP system. Though use of a Telis or RTS Decoflex the Receiver provides a user a familiar way to adjust their environment for personal comfort while not disturbing the the overall efficiently of the building. Using advanced logic the user actions can revert back to the automatic Eco-Mode of operation after a configurable time interval. also, during critical times of day, the keypads can be overridden by automated functions ensuring the most efficient building operation. The RTS Receiver works with Somfys range of indoor RTS receivers pairing with up to five RTS channels. Any combination of Telis or decoFlex transmitters to be used with a single receiver.

The Somfy RTS Receiver can be located anywhere on the Somfy Digital Network, communicating and powered over a single wire. Pairing with a RTS transmitter is easy with a simple series of presses of the programming button. Transmitters are then configured into the animeo IP system with the keypad discovery wizard; automatic location and address discovery with the push of a single button. Once discovered, the RTS Transmitter is programmed with simple click and drag actions, giving discrete control over entire facades, groups or single motors.

Features Summary:

- Control motors individually, by group, facade, or an entire building
- Communicate/powered over single SDN connection
- Auto-discoverable address
- Auto-discoverable location
- Works with DecoFlex and Telis Transmitters
- Up to 5 paired transmitters

Technical Specifications:

- Input: 24V DC (SDN bus power)
- Power Consumption: 10 mA
- Material: ABS
- Listings: UL Listed
- Dimensions: 3" L x 2" W x 1.5" H
- Maximum Range: 65 feet radius (under optimal conditions)
- Operating Temperature Range: Ambient temperature
- Frequency: 433.42 MHz
- Shipping Weight: 1 lb.

Optional Accessories:

Bus & Sensor Station Power Supply	#1822440
USB to RS485 Converter	#9015260
RS232 to RS485 Converter	#1810496
Telis 4 RTS Pure Transmitter*	#1810633
DecoFlex Wirefree™ 5 Channel White**	#1810813
animeo IP Building Controller	#1822314

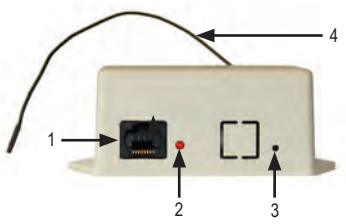
What's in the Box:

- RTS to SDN Receiver

*Telis 4 Pure is an example optional transmitter. You can choose any Telis remote control

** DecoFlex Wirefree 5 Channel is an example optional transmitter. You can choose any of the DecoFlex Switches

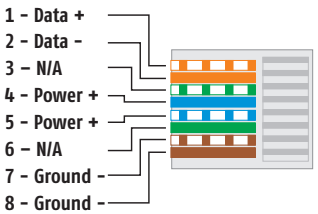
Connections and Indicators:



	ELEMENT	FUNCTION
1	**SDN Input**	RJ45 port for SDN input
2	**LED**	LED Indicator
3	**Master Reset**	Factory Reset
4	**RTS Antenna**	RTS Antenna
5	**Mounting Bracket**	Mounting Bracket

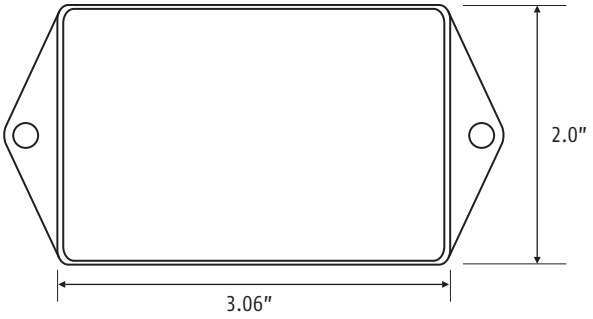
Cable Pinouts:

SDN Input

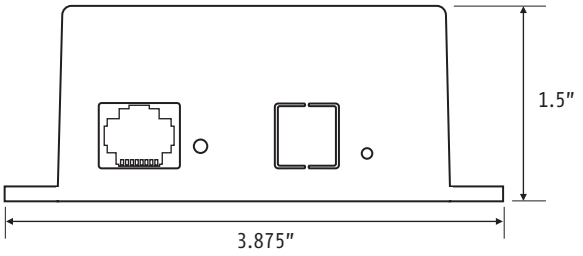


Dimensions:

FRONT VIEW

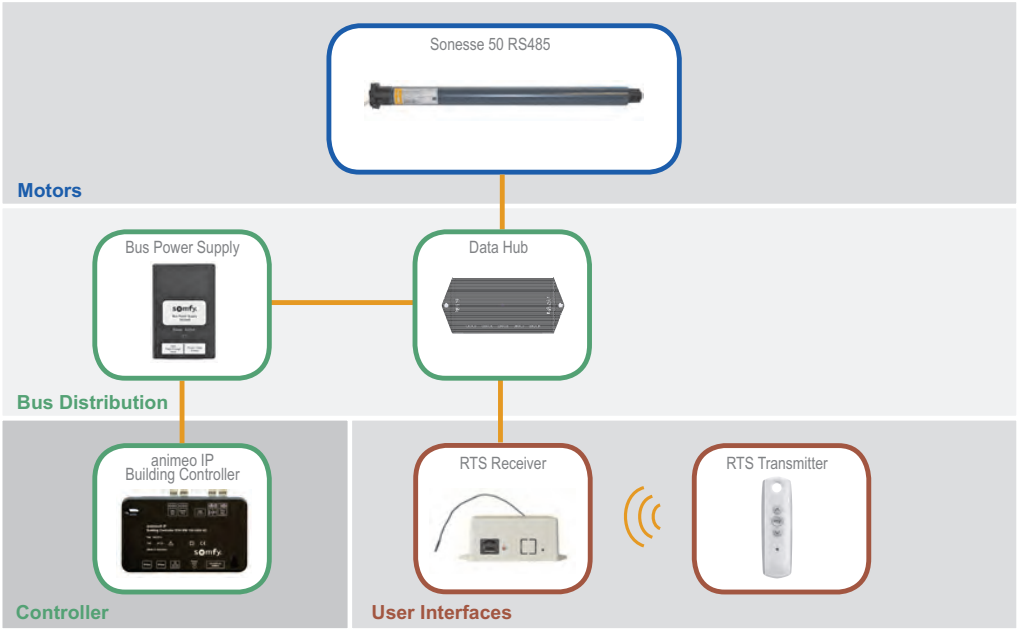


SIDE VIEW

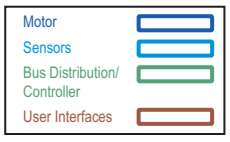


Wiring Best Practices:

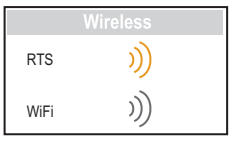
The RTS Receiver has a single SDN connection which is utilized for communication and power. Connecting the Receiver to the SDN bus is easy using a SDN Data Block; any free port can support a Receiver. It is recommended that wires connecting the keypad to the SDN bus line are no more than 30 feet. The SDN bus should be powered by a bus and sensor station power supply as illustrated below.

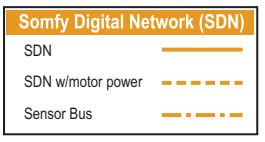


Component Types



Wiring Connection Types





Compact Sensor Station

Part #9015047

Overview:

The Compact Sensor Station provides real time weather information to an animeo IP system. A single Compact Sensor Station unlocks powerful environmental automation for an entire animeo IP system. Containing six independent sensors, the Compact Sensor Station monitors wind speed, rain, temperature, and three directions of sun intensity. Any of these sensors can be used in the animeo IP Visual Configuration software to configure Security and Comfort Functions automatically adjusting window coverings ensuring energy efficient building operation.
The Compact Sensor Station connects directly to the Sensor Bus on an animeo IP Building Controller or Sub Controller. Powered though the SDN Bus Power Supply (Part# 1822440, sold separately), the compact sensor connects with only a single wire which provides communication and power. Configuring the Compact Sensor Station is done through animeo IP's New Configuration Wizard. The wizard automatically finds the station, without having to specify where it in the system it is located. Once discovered the sensor is simply named and it is amiable for use anywhere in the animeo IP configuration.

Features Summary:

- Six independent Sensors
  - Wind Speed
  - Heated Rain
  - Temperature
  - Sun intensity (3)
- Auto-discoverable
- Pole or wall mountable
- Weather tight RJ45 connector

Technical Specifications:

- Input: 24V DC (SDN Bus Power)
- Power Consumption: 150mA
- Material: TBD
- Dimensions: 4.64" L x 3.77" W x 3.03" H
- IP Rating: 44
- Operating Temperature Range: -22° F to 122° F
- IEC Application Protection: Class II
- CE
- Shipping Weight: 1 lb.

Sensor Specifications:

- Sun Sensor
  - Resolution: 1k lux
  - Range: 1k lux to 65k lux
- Rain
  - Heating: 1.2 W when raining or Temperature is below 50F
  - Range: Toggle, Rain/ no Rain
- Temperature
  - Resolution: 1.8F
  - Range: -22F to 122F
- Wind
  - Range 1.1 mph to 44.9 mph

What's in the Box:

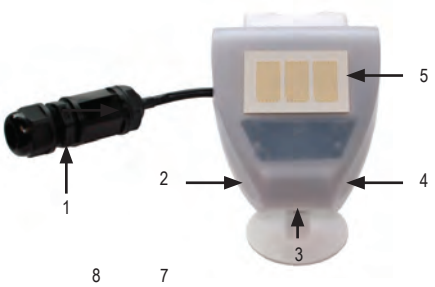
- Compact Sensor Station
- Instructions with insert
- Mounting Bracket

Optional Accessories:

Bus & Sensor Station Power Supply	#1822440
animeo IP Building Controller	#1822314
Roof Mounting	#9014300

Connections and Indicators:

FRONT SIDE

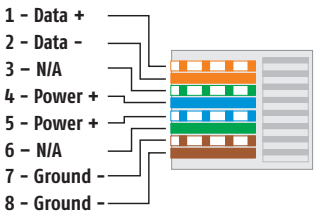


BACK SIDE

	ELEMENT	FUNCTION
1	**Sensor Bus Connection**	RJ45 connection for data + power (SDN Bus w/ power)
2	**Sun Sensor**	Western Sun Sensor (sensor mounting Southern Exposure)
3	**Sun Sensor**	Southern Sun Sensor (sensor mounting Southern Exposure)
4	**Sun Sensor**	Eastern Sun Sensor (sensor mounting Southern Exposure)
5	**Rain Sensor**	Heated Rain Sensor
6	**Wind Sensor**	Wind Sensor
7	**Temperature Sensor**	Temperature Sensor
8	**Mounting Bracket**	Wall or Pole mount bracket

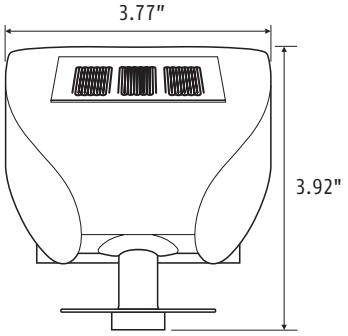
Cable Pinouts:

Sensor Bus Connection (SDN Pinout)

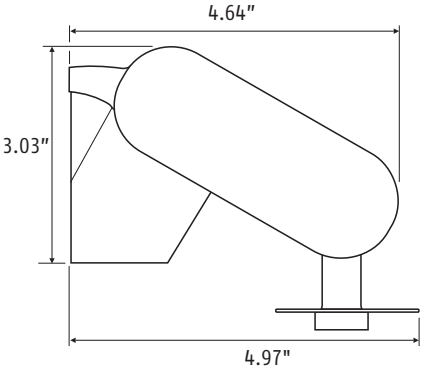


Dimensions:

FRONT VIEW

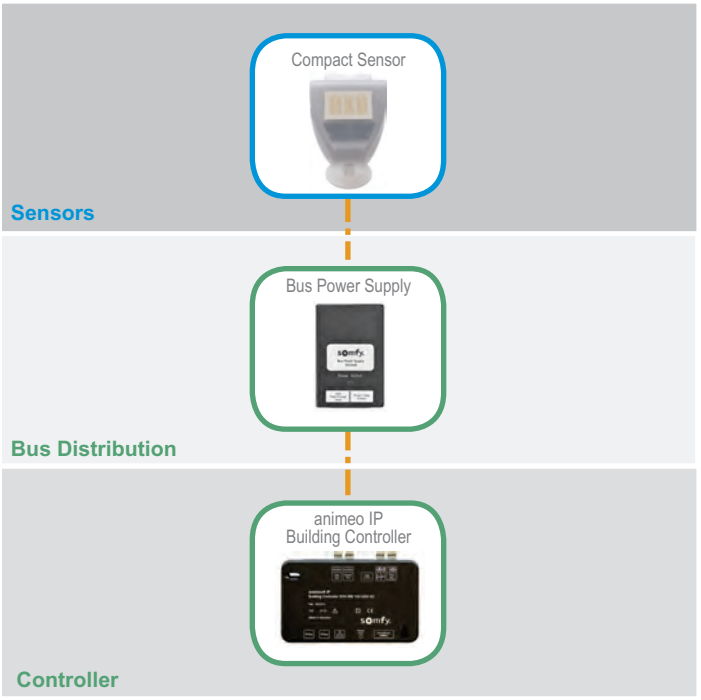


SIDE VIEW

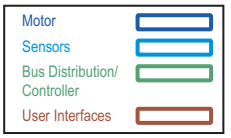


Wiring Best Practices:

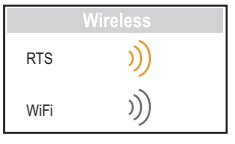
The Compact Sensor Station has a single SDN connection which is utilized for communication and power. The sensor connects through the Sensor Bus of any Building controller or Sub Controller in the animeo IP network, it is powered though the SDN bus Power Supply (Part# 1822440, Sold Separately). To connect, use the individual conductors of a cat 5 cable, connect Orange to A and White orange to B on the terminal bock of the Building Controller or Sub Controller SDN Sensor bus. then using an RJ-45 connect to the Data passthrough port on the SDN Bus Power Supply, then the Power/Data Output of the Bus Power supply to the Female RJ-45 on the Compact Sensor. It is recommended that wires connecting the Sensor to a building controller or Sub controller does not total more then 150 ft.

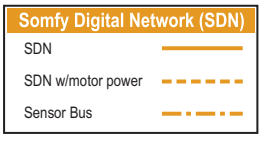


Component Types



Wiring Connection Types





Bus Power Supply
Somfy Digital Network

Part #1822440

Overview:

The Bus Power Supply for Somfy Digital Network (SDN) provides 24V DC power for up to 100 controls and distribution devices on the SDN bus. A separate Bus Power Supply can be used for 1 Compact Sensor or 1 Sensor Station. The Bus Power Supply cannot be used to power motors. The Bus Power Supply is fault-tolerant, ensuring reliable operation should installation or wiring errors occur. Also provided is a SDN data pass-through input for in-line connection anywhere on the bus without splitters or hubs. For bus segments with more than 100 devices, multiple Bus Power Supplies can be joined through the pass-through connection providing power segmentation without additional wiring considerations.

Features Summary:

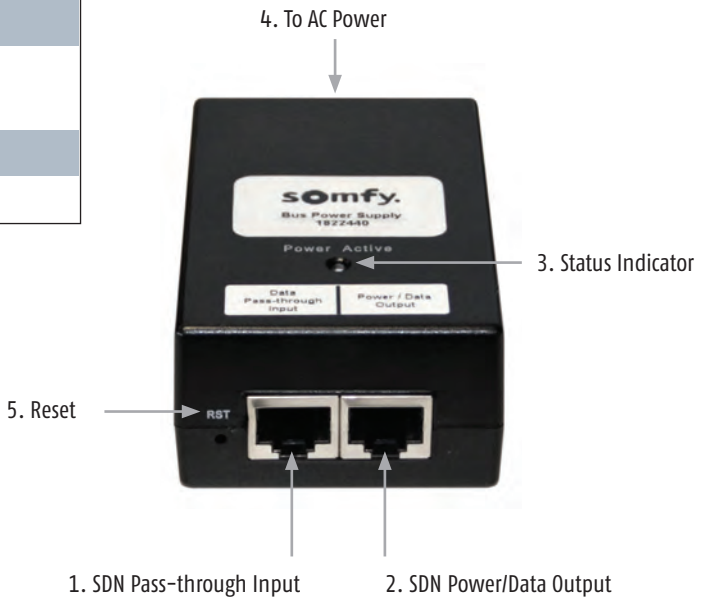
- Powers up to 100 controls and distribution devices or 1 Compact Sensor or 1 Sensor Station
- Fault-tolerant
- Pass-through SDN connection
- Provides a power isolation point for large installations
- Standard SDN RJ-45 Connection
- Current overload indicator

Technical Specifications:

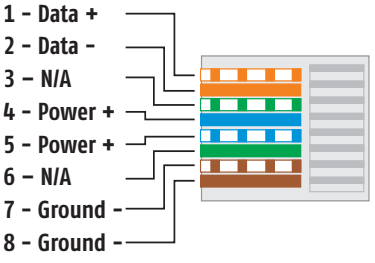
- Output: 24V DC 1.0A
- Input: 100-240V AC 0.55A
- IEC-320 C6 AC input (cord included - 26in.)
- Operating Temperature: 14˚F to 140˚F
- Size: 3.5"L x 2.12"W x 1.3"D
- Weight: 4oz
- UL Listed
- CE Approved

Connections and Indicators:

	ELEMENT	FUNCTION
1	**SDN Data Pass-through Input**	SDN input connection for pass-through operation
2	**SDN Power/Data Output**	SDN output with pass-through data and power
3	**Status Indicator**	Blue = Powered normal operation Purple = Operating at excess of 80% capacity
4	**Power Input**	100-240V AC
5	**RST**	Reset (pin-button)

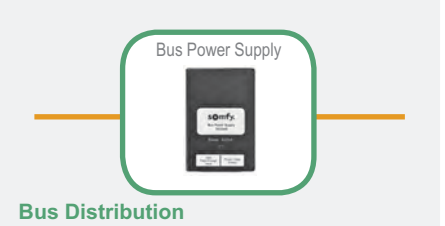


SDN Cable Pinout

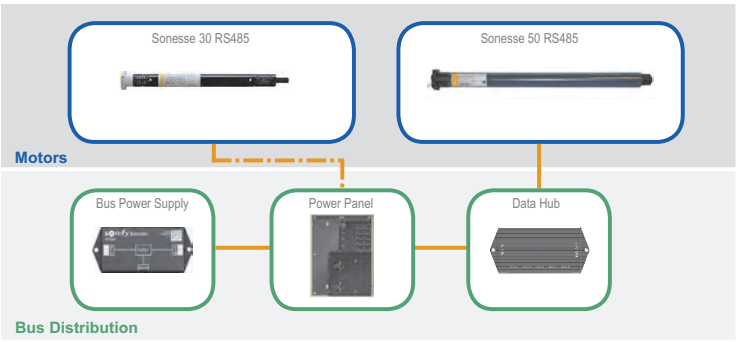


Wiring Best Practice:

1. **Powering a bus with data pass-through:** Utilizing the Bus Power Supply's SDN pass-through input, an active SDN bus can be plugged into the Bus Power Supply. The incoming data will be joined with the power output from the Bus Power Supply and routed to the output port. This scenario can be used in riser-based systems where the input is likely coming from a repeater. In larger systems with over 100 controls or distribution devices, an additional Bus Power Supply can be added in the middle of a wire run.

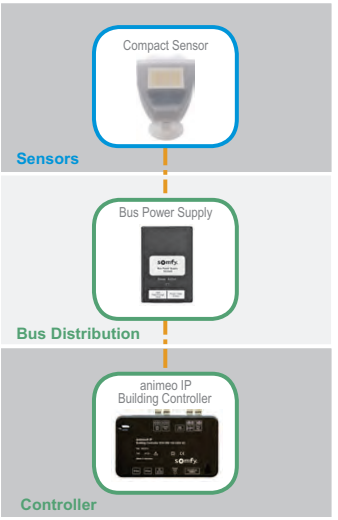


2. **Powering a bus without data pass-through:** Directly connecting the output of the Bus Power Supply to a SDN Data Hub (#9017623) will create a power-only connection. Use this configuration in systems where bus distribution is centralized in one location.

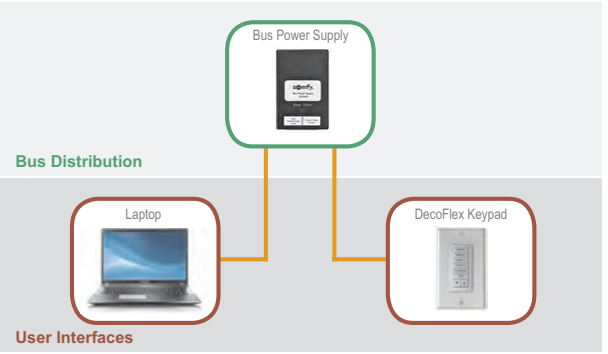


3. **Powering animeo IP® sensors:** The Bus Power Supply can be used to power the animeo IP Compact Sensor or Sensor Station. Connection is made from the Building Controller or Sub Controller sensor bus output to the Bus Power Supply's pass-through input. Then connect Compact Sensor or Sensor Station's outdoor sensor box to Bus Power Supply SDN Power /Data output

   NOTE: When powering an animeo IP sensor, one Bus Power Supply is required per Compact Sensor or Sensor Station.



4. **Powering devices during configuration:** The Bus Power Supply can be used for temporary power while configuring SDN components such as Keypads and RTS Receivers. Simply connect a USB to RS485 adapter (#9015260) to the SDN data pass-through input and the device to be programmed to the SDN Power/Data output.



Wire Legend:

Standard category 5E data cable

All data connections to power supply are standard RJ-45

Somfy Connect BMS Interface

Part #1870249

Overview:

The Somfy Connect™ BMS Interface provides communication between building management systems using BACnet® technologies and Somfy Digital Network™ (SDN) motorized shading systems with or without animeo® IP, Somfy's Total Solar Management System. The BMS interface communicates over IP or the building's wired BMS network to send and receive signals between the building management system and animeo IP or stand-alone SDN systems. When installed, the BMS Interface provides control of individual motors and groups of motors, and when installed in animeo IP systems, control of virtual keypads and feedback from sensors. The Somfy Connect BMS Interface is easily programmable through a web-friendly interface and has integration capabilities for Modbus RTU, Modbus IP, BACnet MS/TP, and BACnet IP.

Features Summary:

- System control
  - Stand alone SDN – control individual or motor groups.
    - Position (%) – feedback on motors only
    - Position (absolute) – feedback on motors only
    - Intermediate position
    - Up, Stop, and down control
  - animeo IP – control individual or motor groups, sensors, and virtual keypads.
    - Position (%) – feedback on motors only
    - Up, Stop, and down control/commands
    - Priority control
    - Sensor data – provides single direction information to BMS system
- Supports up to 1500 data points.
- Integration capabilities: Modbus, BACnet MS/TP, BACnet IP
- Sensor data – provides single direction information to the BACnet network.
- Programmable through user friendly interface.
- Auto device discovery for animeo IP.

Technical Specifications:

- 1500 data points maximum
- Input: 9-30 VDC or 12-24 VAC
- Power Consumption: 250 mA
- Material: ABS plastic
- Dimensions: (L x W x H) 4.5 x 3.2 x 1.6 in.
- Operating Temperature Range: F= -40° to 167°
- Relative Humidity: 5-90% RH, non-condensing
- Shipping Weight: 1 Lb.
- Approvals:
  - BACnet Testing Labs (BTL) B-ASC Ver. 12
  - TUV approved to UL 916 EN 60950-1, EN 50491-3 and CSA C22-2 standards
  - RoHS Compliant
  - DNP3 Conformance Tested
  - CE & FCC Approved
  - BTL Marked Certified

What's in the Box:

- (1) 24V DC 1.66A Wall Mount Power Supply (Cat. No. 1822209)
- BACnet device quick guide (in-depth instructions online)

Optional Accessories:

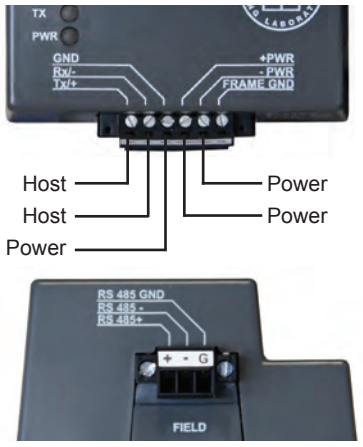
- Bus Power Supply (Cat. No. 1822440)
- Data Hub

Connections and Indicators:

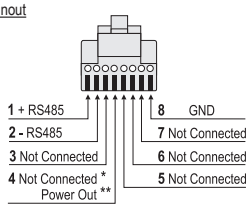
	CONNECTIONS	FUNCTION
1	**Field**	BACnet MS/TP and Modbus connection Screw terminal
2	**Ethernet Port**	Local area network configuration connection between BACnet IP and animeo IP using an RJ45 connection port
3	**Host**	Stand alone SDN or URTSI connection Screw terminal
4	**Power**	9-30V DC or 12-24V AC Screw terminal

TAG	LED INDICATORS
SPL	Not used
RUN	Once powered, wait 20 seconds and the green LED will begin to flash to indicate normal operation.
ERR	A solid red light indicates a system error on the interface.
RX	Stand alone SDN communication status
TX	Stand alone SDN communication status
PWR	Solid green at all times
RTC	Unused

Cable Pinouts:



RJ45 Pinout



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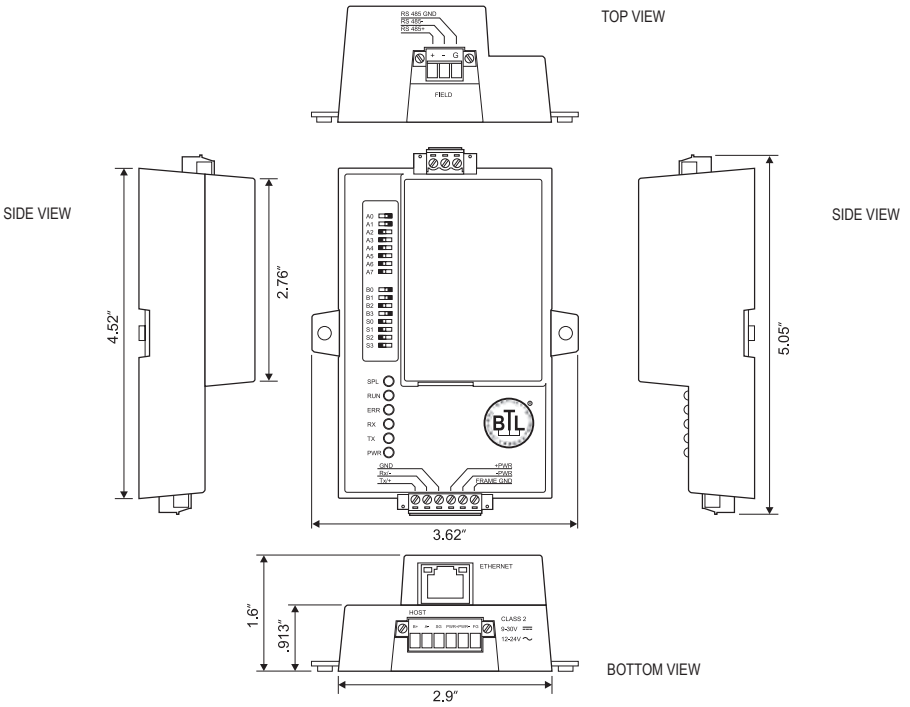
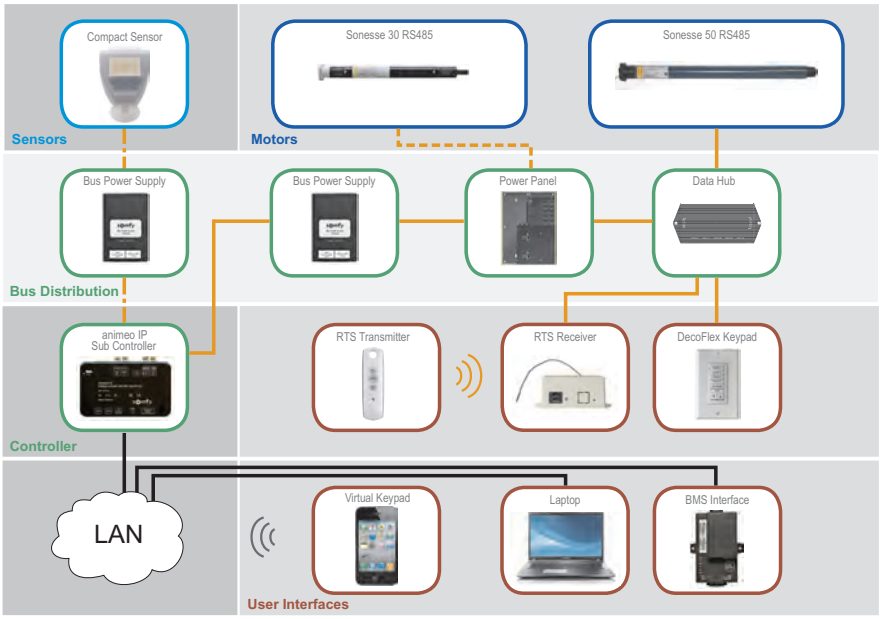
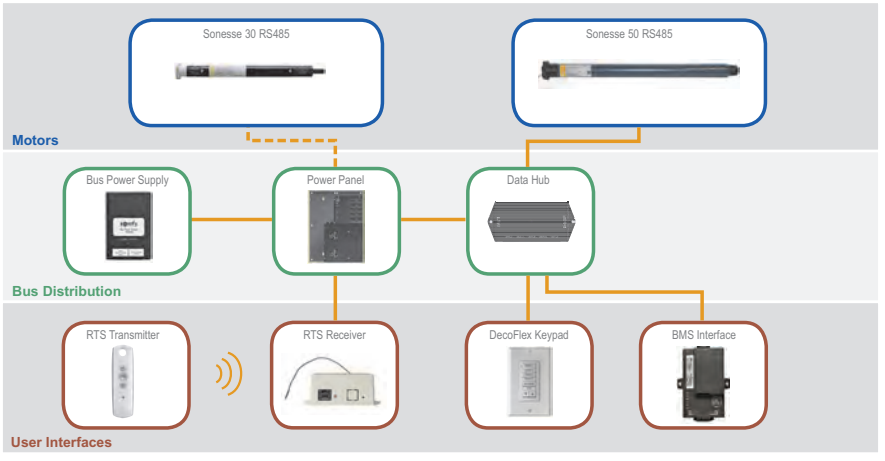


Wiring Best Practices:

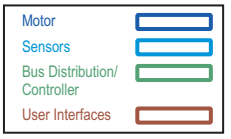
animeo IP



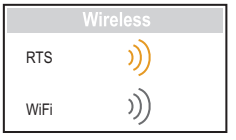
Standalone SDN

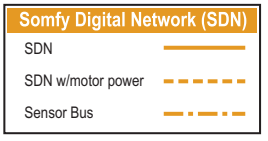


Component Types



Wiring Connection Types





Somfy Connect™ LTI

Part #1870210

Overview:

The Somfy Connect™ LTI expands the capabilities of Somfy systems providing a centralized logic center and communication bridge. Connect allows Somfy Digital Network (SDN) and Radio Technology Somfy (RTS) systems to interact with third party systems allowing the shading system to become part of a truly integrated part of commercial and residential automation systems. The Somfy Connect LTI is equipped with a real-time hardware clock for scheduling shading events. The internal clock keeps time without the need for accessing an external time server and though power loss, ensuring continuous reliable operation. The Connect has Lutron®'s Integration protocol built in allowing Lutron®'s handheld and in-wall controls from RadioRA® 2, HomeWorks® QS, Grafik Eye® QS, and Quantum® systems to operate Somfy motorized applications.

Features Summary:

- Centralized logic center and communication bridge
- Hardware realtime clock for scheduled events
  - Astronomic events
  - Repeatable schedules
- Support for RadioRA® 2, HomeWorks® QS, Quantum®, and GRAFIK Eye® QS systems
  - Able to interpret:
    - Button press
    - Button release
    - Button Hold
    - Toggle
    - Group Raise/Lower
- 300 Programmable Lutron Home Control and communication maps
- 198 programmable timed events

Technical Specifications:

- Input: 9-24v DC
- Power Consumption: 100ma
- Material: ABS
- Dimensions: 6" x 3.5" x 1.5"
- Operating Temperature Range: ambient
- Shipping Weight: 1 Lb.

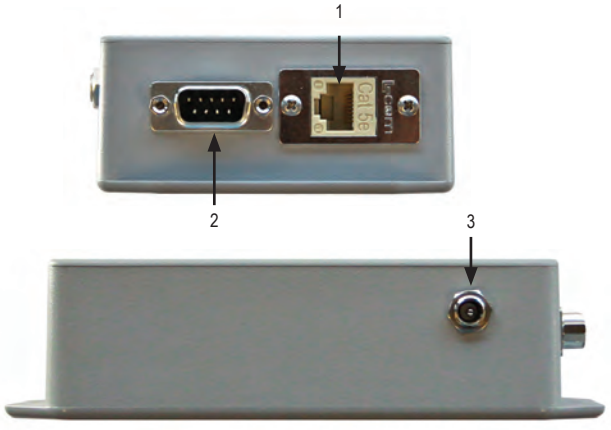
Optional Accessories:

USB to RS485 Adapter	9015260
URTSI	1810872
Power Supply Bus & Sensor	1822440

What's in the Box:

- Somfy Connect
- DB9 cable (6'; male to female; straight through) RX

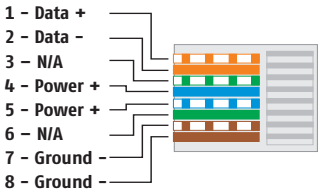
Connections and Indicators:



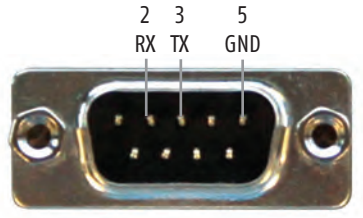
	ELEMENT	FUNCTION
1	**SDN BUS**	RS-485 - Connect to SDN system or URTSI
2	**Integration Port**	RS232 - Connect to Lutron Intergration port
3	**Power**	3.5mm Barrel connector (female)

Cable Pinouts:

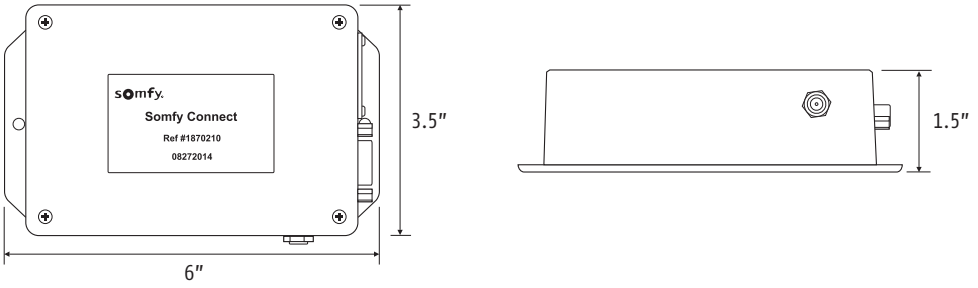
RJ 45 Pinout



DB9 pinout



Dimensions:

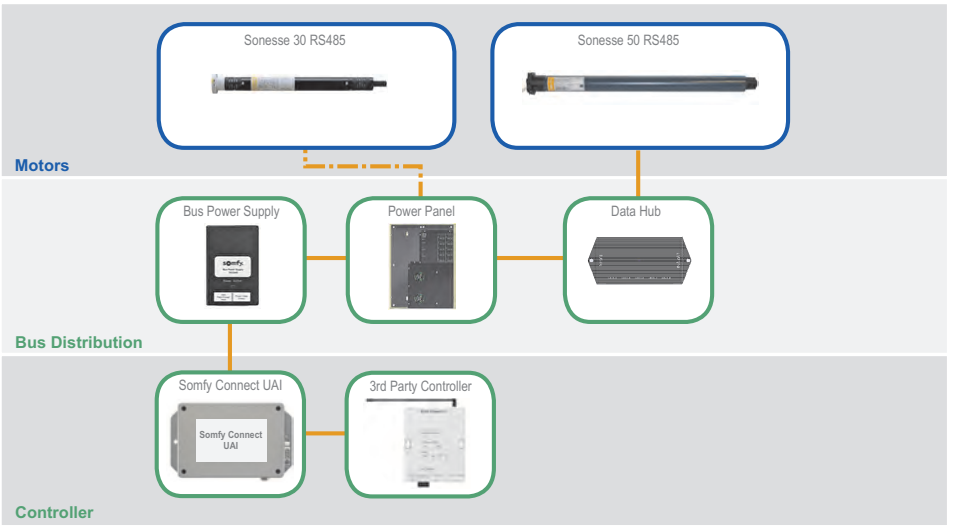


Wiring Best Practices:

SDN

The Somfy Connect LTI joins a SDN network though a single connection which provides communication and power. Wiring from a SDN Data Hub to the Connect should not be more then 30Ft.

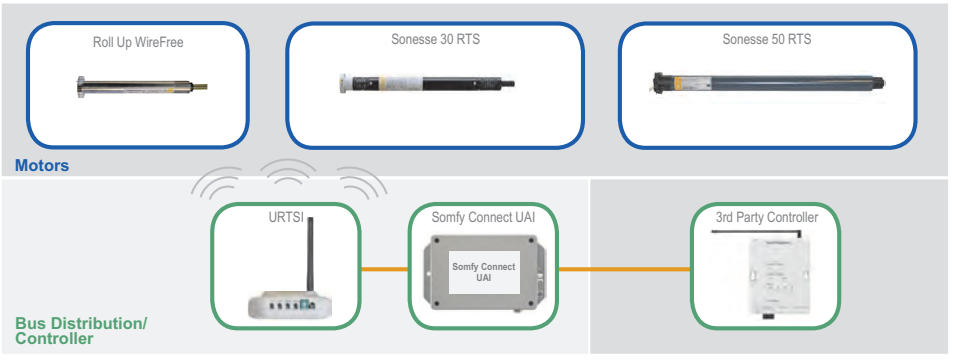
Somfy Connect SDN with Lutron RadioRa®



RTS

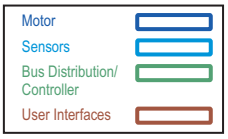
The Somfy Connect LTI RTS utilizes a URTSI to transmit RTS commands. Connect to the URTSI using a single wire connecting the SDN port of the connect and the RS-485 port of the URSTI. Additional range and channels can be added by introducing more URTSI into the system and interconnecting them though the RS485 output.

Somfy Connect RTS (URTSI) with Lutron RadioRa®

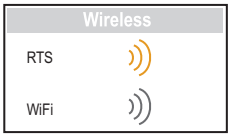


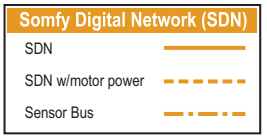
The DB9 RS232 connection to connect to Luton's Integration port, this connection must be under 50ft in length.

Component Types



Wiring Connection Types





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Data Hub

Item #: 1870262

OVERVIEW:

The **Data Hub** is a Somfy Digital Network™ (SDN) bus distribution component which adds 5 device ports to an SDN Bus line. The device ports support wire stubs with a maximum length of 30 ft. A wire stub is an extension of the bus segment which connects the bus line to the user interfaces, motors or integration devices. The wire stubs consist of any devices which split away from the main bus distribution line in a system. A connected device can include a keypad, Radio Technology Somfy (RTS) receiver, motor or Somfy Connect™ product.

SOMFY DIGITAL NETWORK SYSTEM OVERVIEW:

Somfy Digital Network (SDN) is Somfy's intelligent wired shading network. An SDN system is comprised of bus distribution devices that create a network for user interfaces, motorized applications and sensors to be connected. SDN is scalable, and suitable for both small and large projects, and the same components are used whether an SDN system remains standalone, integrated into third party automation systems, or with Somfy's animeo® IP automated total solar management system.

TECHNICAL SPECIFICATIONS:

- Input: SDN Bus Power
- SDN Power Units: Consumes 1 Power Unit
- Material: ABS
- Operating Temperature Range: Ambient temperature
- Dimensions: 4" L x 2.13" W x .90" H
- Maximum Wiring Distance: 30 ft. per device port
- Shipping Weight: 1 lb.
- Indoor use only

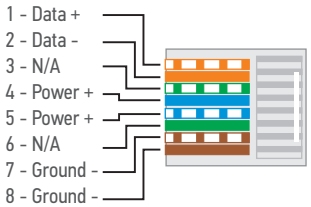
FEATURES SUMMARY:

- Adds 5 device ports to the SDN bus line
- Wiring stub length up to 30 ft.
- Powered by the SDN Bus Line
- Includes bus segment status LEDs for:
  - Power
  - Communication
  - End of line notification
- Protects system components from miswire
- Automatic segment termination

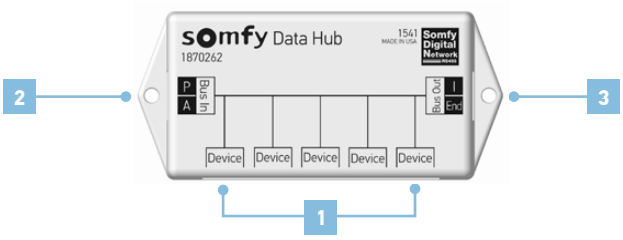
WHAT'S IN THE BOX:

- Data Hub
- Instructions

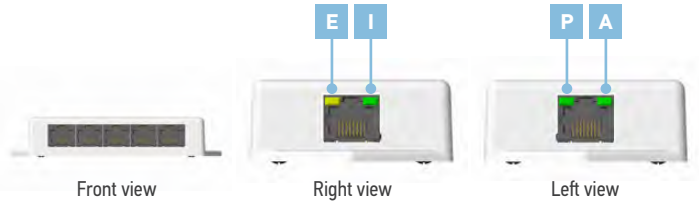
CABLE PINOUTS:



CONNECTIONS AND INDICATORS:



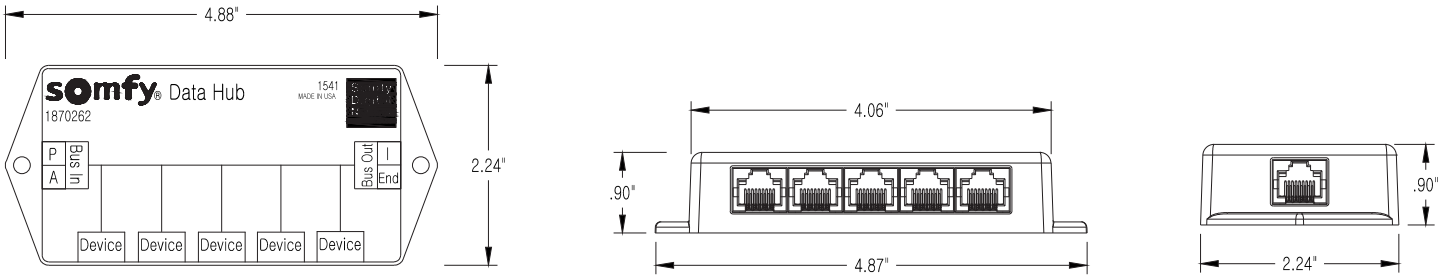
	ELEMENT	FUNCTION
1	**Device Port**	5 device ports to the SDN system (each port has 30 ft. wire length limitation)
2	**SDN Bus Input**	Input for bus signals
3	**SDN Bus Output**	Output for bus signals



LED Indicators

LABEL	ELEMENT	COLOR	FUNCTION ON	FUNCTION OFF
P	**Bus Power**	**Green**	Power	No Power
A	**A (activity)**	**Green**	Data	No Data
I	**I (idle)**	**Green**	No Data	Data
E	**End (end of line)**	**Yellow**	End of bus	Not End of bus

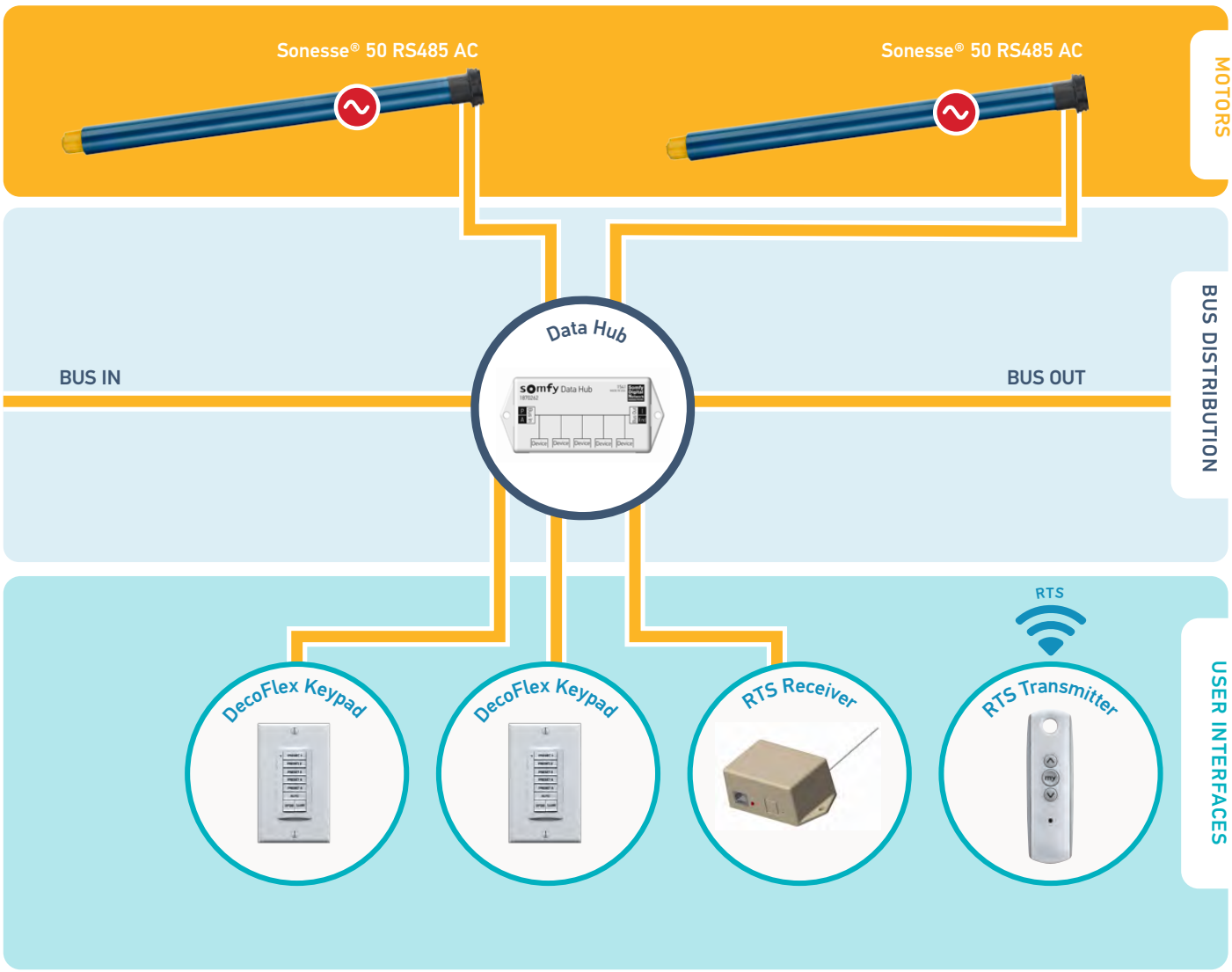
DIMENSIONS:



BEST WIRING PRACTICES

The diagram shown below is meant for illustrative purposes to show the connections from product to product. This device could be used in other configurations than shown below.

- Adds 5 device ports to a system
- Wiring stubs cannot exceed 30 ft.



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Data Hub Plus

Item #: 1870263

OVERVIEW:

The **Data Hub Plus** is a Somfy Digital Network™ (SDN) bus distribution component which adds 5 isolated device ports to an SDN Bus line. The isolated device ports support longer wire stubs beyond the 30 ft. of the standard Data Hub. A wire stub is an extension of the bus segment which connects the bus line to the user interfaces, motors or integration devices. The wire stubs consist of any devices which split away from the main bus distribution line in a system. A connected device can include a keypad, Radio Technology Somfy® (RTS) receiver, motor or Somfy Connect™ product.

SOMFY DIGITAL NETWORK SYSTEM OVERVIEW:

Somfy Digital Network (SDN) is Somfy's intelligent wired shading network. An SDN system is comprised of bus distribution devices that create a network for user interfaces, motorized applications and sensors to be connected. SDN is scalable, and suitable for both small and large projects, and the same components are used whether an SDN system remains standalone, integrated into third party automation systems, or with Somfy's animeo® IP automated total solar management system.

TECHNICAL SPECIFICATIONS:

- Input: SDN Bus Power
- Power Consumption: 5 Power Units
- Material: ABS plastic
- Dimensions: 4" L x 2.13" W x .90" H
- Maximum Wiring Distance: 800 ft. per device port
- Operating Temperature Range: Ambient temperature
- Shipping Weight: 1 lb.
- Indoor use only

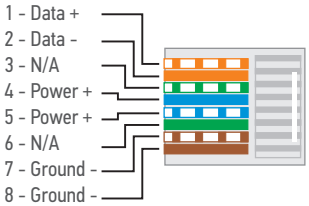
FEATURES SUMMARY:

- Allows installation of motors and user interfaces beyond 30 ft. from bus segment
- Built-in Somfy Digital Network bus isolation to create new bus segment
- Powered by the SDN Bus
- Includes bus segment status LEDs for;
  - Power
  - Communication
  - End of line notification
- Protects system components from miswire
- Automatic segment termination

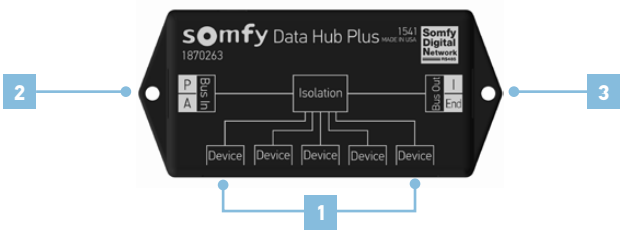
WHAT'S IN THE BOX:

- Data Hub Plus
- Instructions

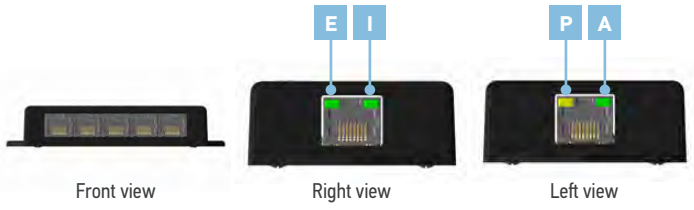
CABLE PINOUTS:



CONNECTIONS AND INDICATORS:



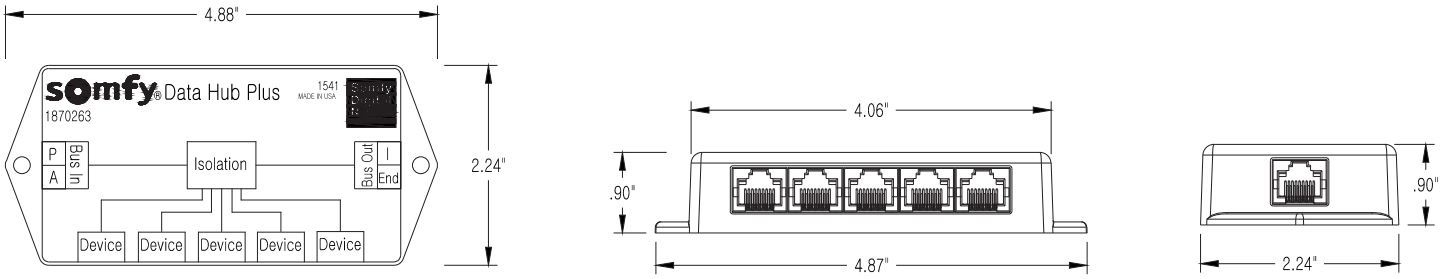
	ELEMENT	FUNCTION
1	**Isolated Device Port**	5 devices beyond 30ft from main bus line
2	**SDN Bus Input**	Input for bus signals
3	**SDN Bus Output**	Output for bus signals



Front view | Right view | Left view

LED Indicators				
LABEL	**ELEMENT**	**COLOR**	**FUNCTION ON**	**FUNCTION OFF**
P	**Bus Power**	**Green**	Power	No Power
A	**A (activity)**	**Green**	No Data	Data
I	**I (idle)**	**Green**	Data	No Data
E	**End (end of line)**	**Yellow**	End of bus	Not End of bus

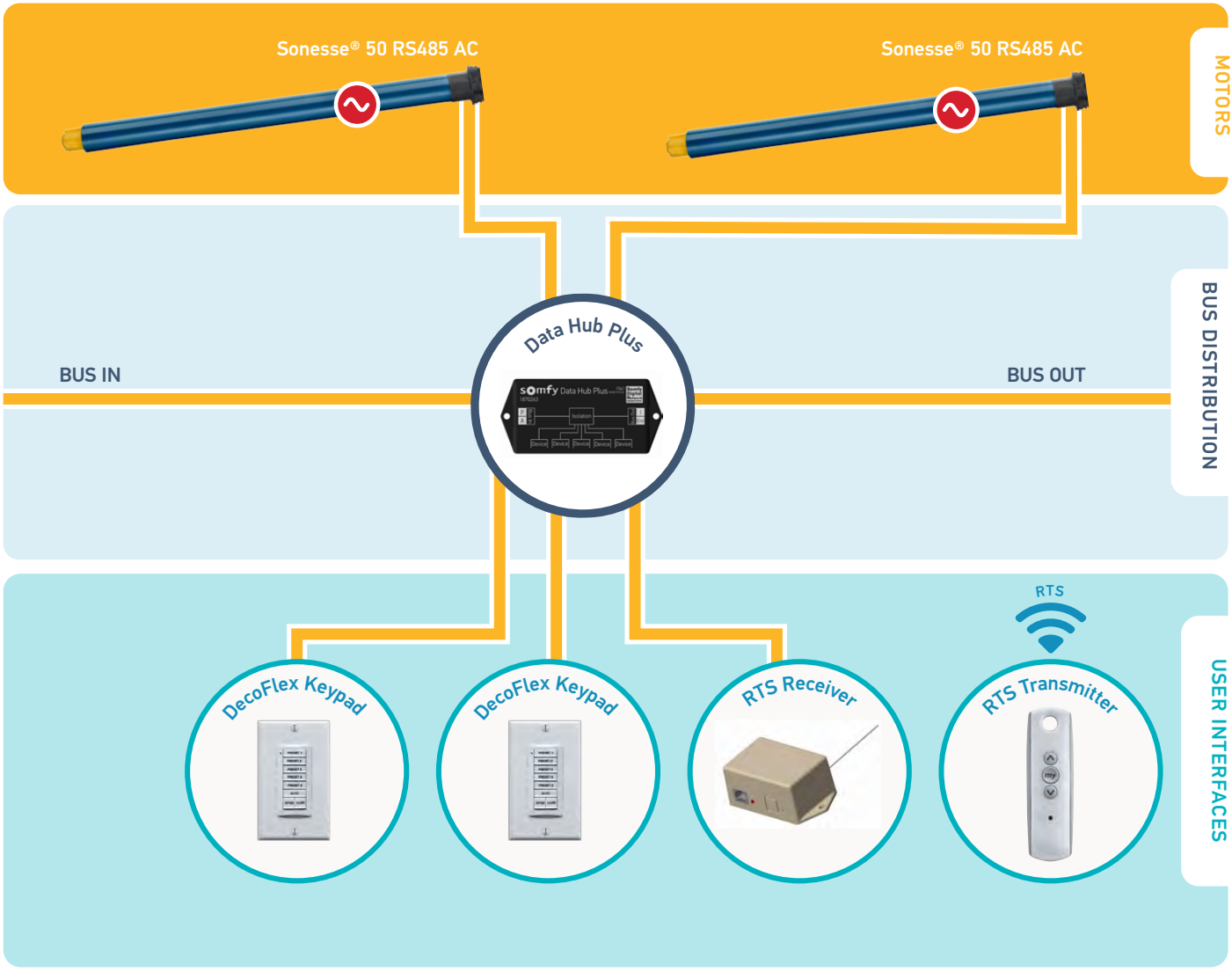
DIMENSIONS:



BEST WIRING PRACTICES

The diagram shown below is meant for illustrative purposes to show the connections from product to product. This device can be used in other configurations than shown below.

- Adds 5 isolated device ports to a system
- Wiring stubs can extend beyond 30 ft.



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Extender

Item #: 1870261

OVERVIEW:

The **Extender** is a Somfy Digital Network™ (SDN) bus distribution component that is used to refresh a segment's capacity or to create a new bus segment in the middle of an existing bus segment. The Extender's additional isolated bus segment supports 255 devices and 4000 ft. of bus wiring per segment, and supplies 100 power units. Additional isolated bus segments enable bus line extension for hard-to-reach places over an extended distance.

SOMFY DIGITAL NETWORK SYSTEM OVERVIEW:

Somfy Digital Network (SDN) is Somfy's intelligent wired shading network. An SDN system is comprised of bus distribution devices that create a network for user interfaces, motorized applications and sensors to be connected. SDN is scalable, and suitable for both small and large projects, and the same components are used whether an SDN system remains standalone, integrated into third party automation systems, or with Somfy's animeo® IP automated total solar management system.

TECHNICAL SPECIFICATIONS:

- Input: 24V DC 1.25A (Included Power Supply)
- Output: 100 SDN Bus Power Units
- Material: ABS plastic
- Dimensions: 4" L x 2.13" W x 0.90" H
- Maximum Wiring Distance: 4000 ft. new bus segment length
- Operating Temperature Range: Ambient temperature
- Shipping Weight: 1 lb.
- Indoor rated

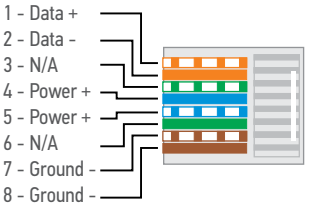
FEATURES SUMMARY:

- Create one isolated SDN bus segment
- Bus output to continue original bus segment
- Provides 100 power units to the new bus segment
- Includes bus segment status LEDs for;
  - Power
  - Communication
  - End of line notification
- Protects system components from miswire
- Automatic segment termination

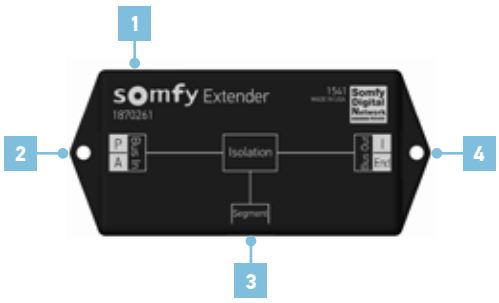
WHAT'S IN THE BOX:

- Extender
- Power Supply (Part #1870096)
- Instructions

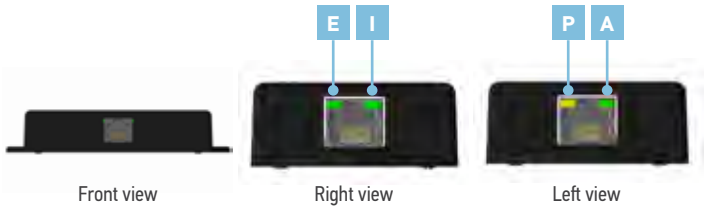
CABLE PINOUTS:



CONNECTIONS AND INDICATORS:



	ELEMENT	FUNCTION
1	**24V DC Power Input**	Provides power to segment
2	**SDN Bus Input**	Input for bus signals
3	**SDN Bus Output**	Output for bus signals
4	**Segment Output**	Start of a new bus segment

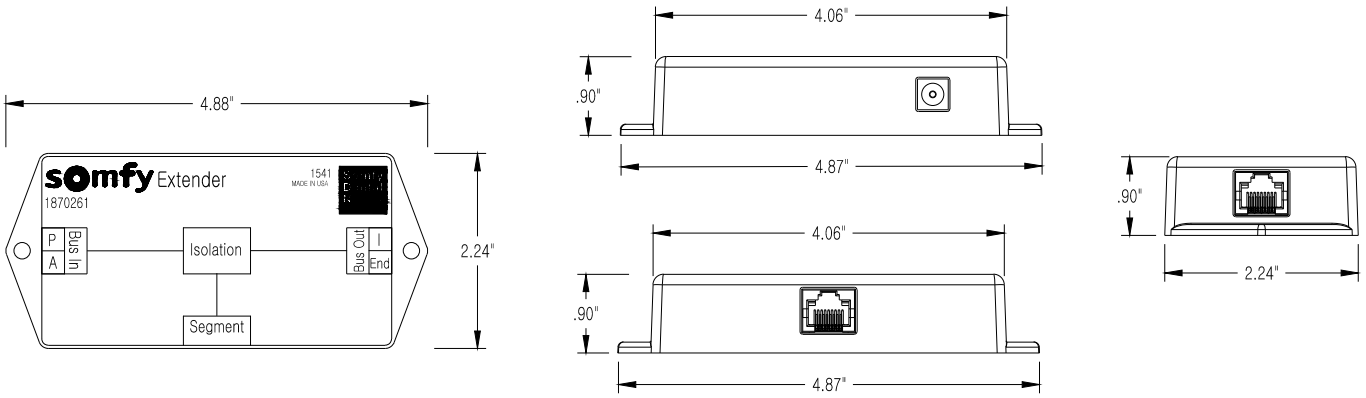


Front view | Right view | Left view

LED Indicators

LABEL	ELEMENT	COLOR	FUNCTION ON	FUNCTION OFF
P	**Bus Power**	Green	Power	No Power
A	**A (activity)**	Green	No Data	Data
I	**I (idle)**	Green	Data	No Data
E	**End (end of line)**	Yellow	End of bus	Not End of bus

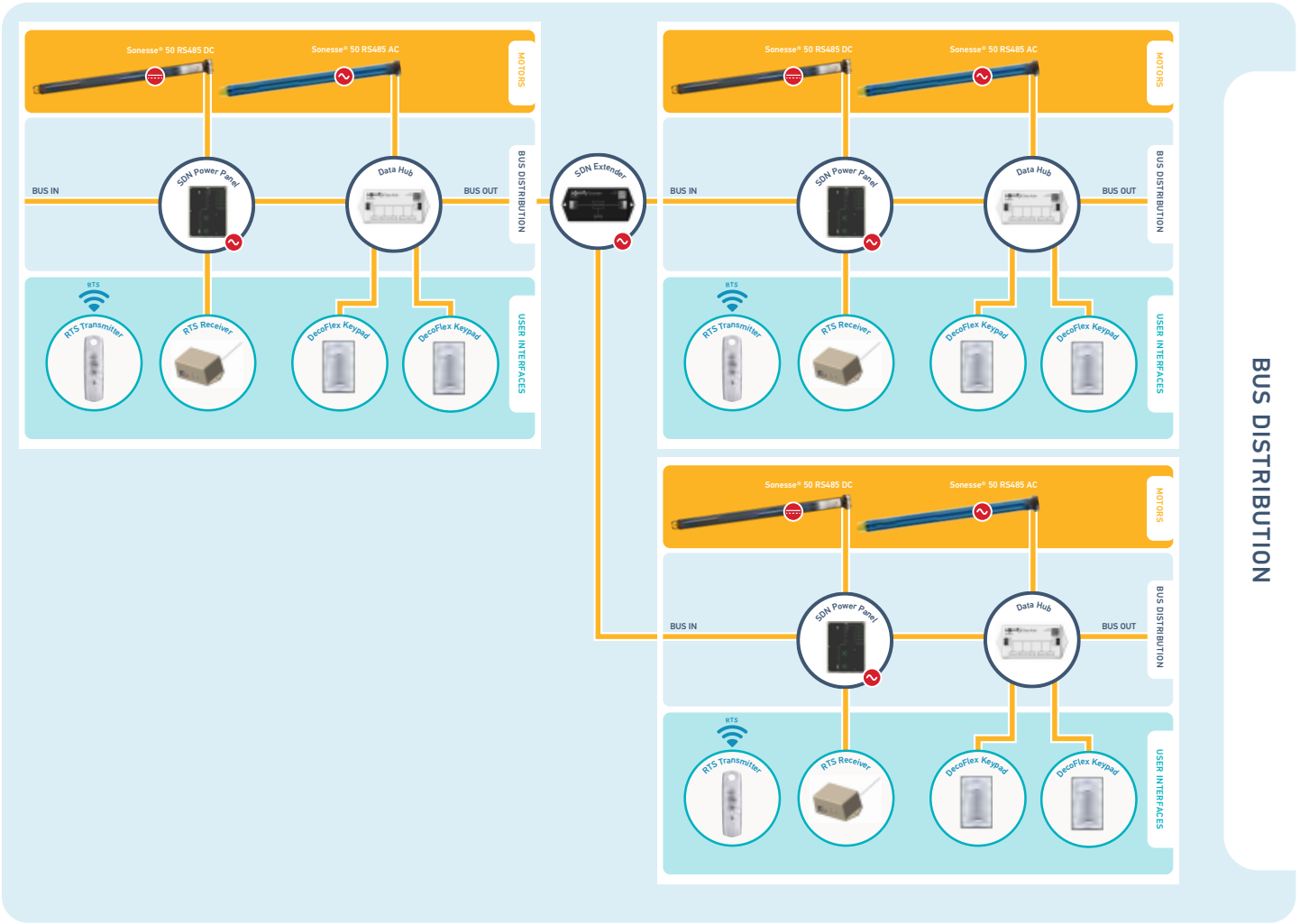
DIMENSIONS:



BEST WIRING PRACTICES

The diagram shown below is meant for illustrative purposes to show the connections from product to product. This device could be used in other configurations than shown below.

- Create a new bus segment in the middle of a run or split a bus
- Adds:
  - 4000 ft. of wiring
  - 255 devices
  - 100 power units



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Power Panel for SDN

Item #: 1870259

OVERVIEW:

The **Power Panel for SDN** is a SDN bus distribution component used to add 10 isolated motor ports and two isolated device ports to an SDN bus segment. The isolated motor ports support up to 240 feet of power and data wiring to individual low voltage intelligent motors. The in-wall or on-wall mountable enclosure offers separated line and low voltage areas for ease of installation. This product could be used in small SDN systems with two control devices and 10 individual motors as a stand alone solution.

SOMFY DIGITAL NETWORK SYSTEM OVERVIEW:

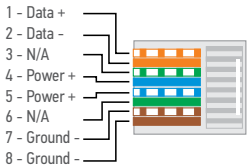
Somfy Digital Network (SDN) is Somfy's intelligent wired shading network. An SDN system is comprised of bus distribution devices that create a network for user interfaces, motorized applications and sensors to be connected. SDN is scalable, and suitable for both small and large projects, and the same components are used whether an SDN system remains standalone, integrated into third party automation systems, or with Somfy's animeo® IP automated total solar management system.

FEATURES SUMMARY:

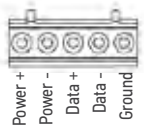
- 10 isolated low voltage motor ports
- 2 isolated device ports
- Includes bus segment status LEDs for;
  - Power
  - Communication
  - End of line notification
- Protects system components from miswire
- Automatic segment termination
- Can mount on-wall on in-wall (between studs)
- Separated line and low voltage areas
- Front cover includes a keyed lock

CABLE PINOUTS:

SDN INPUT



MOTOR INPUT



WHAT'S IN THE BOX:

- Power Panel
- Instructions

TECHNICAL SPECIFICATIONS:

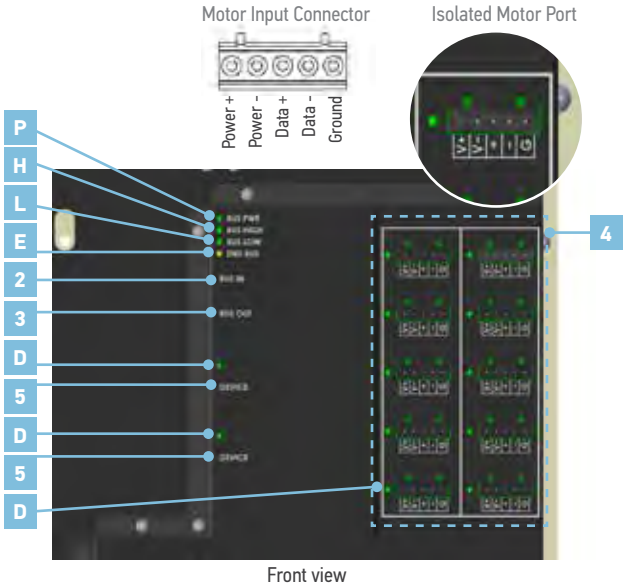
- Input: 120V AC, 7.2A
- Motor Output: 24V DC 2A per motor output
- SDN Power Units: Consumes 0 units on bus, supplies 10 units per device port
- Material: Steel Enclosure
- Dimensions: 18.9" L 14.4" W x 3.5" H (Inner)
- Dimensions: 21.3" L 16.4" W x 3.8" H (Inner with door)
- Maximum Wiring Distance
  - To motors:
    - Up to 240ft with 14AWG wire per motor port
    - Up to 150ft with 16AWG wire per motor port
    - Up to 100ft with 18AWG wire per motor port
  - To devices:
    - Up to 800ft per device port
- Operating Temperature Range: Ambient temperature
- Shipping Weight: 24 lbs.
- Indoor use only

CONNECTIONS AND INDICATORS:

	ELEMENT	FUNCTION
1	**Power Input**	Flying leads with push-in conduit connection located on the bottom right corner of the panel. Supports solid 12 & 14 AWG wiring.
2	**SDN Bus Input**	Input for Bus signals
3	**SDN Bus Output**	Output for Bus signals
4	**Isolated Motor Port**	10 low voltage motors to SDN network
5	**Device Port**	2 SDN devices to the SDN network (max. 800 ft. each)

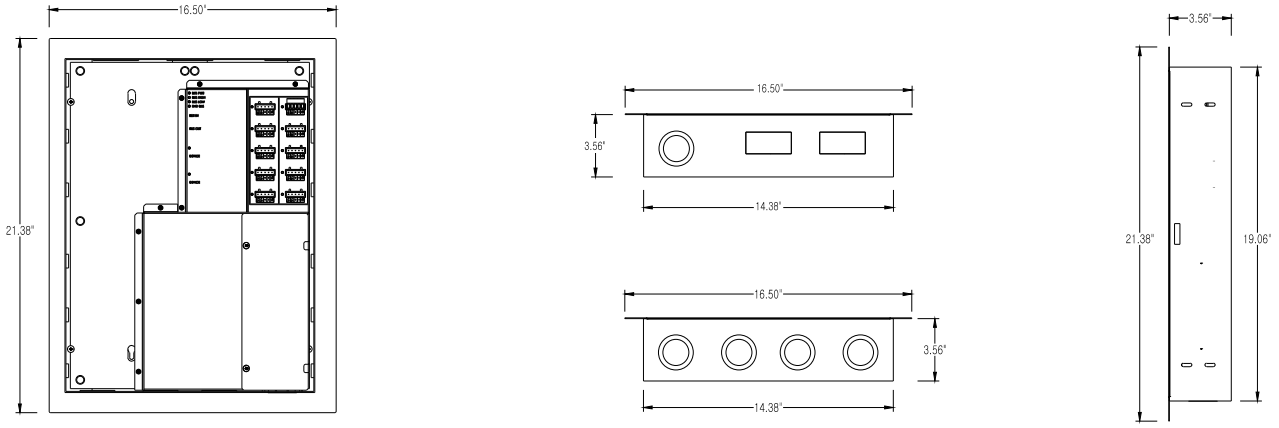
LED Indicators

LABEL	ELEMENT	COLOR	FUNCTION ON	FUNCTION OFF
P	**Bus Power**	**Green**	Power	No Power
L	**Bus Low (Bus Data)**	**Green**	No Data	Data
H	**Bus High**	**Green**	Data	No Data
E	**End of Bus**	**Yellow**	End of bus	Not End of bus
D	**Device LED**	**Green**	Device port powered	Device port not powered



Front view

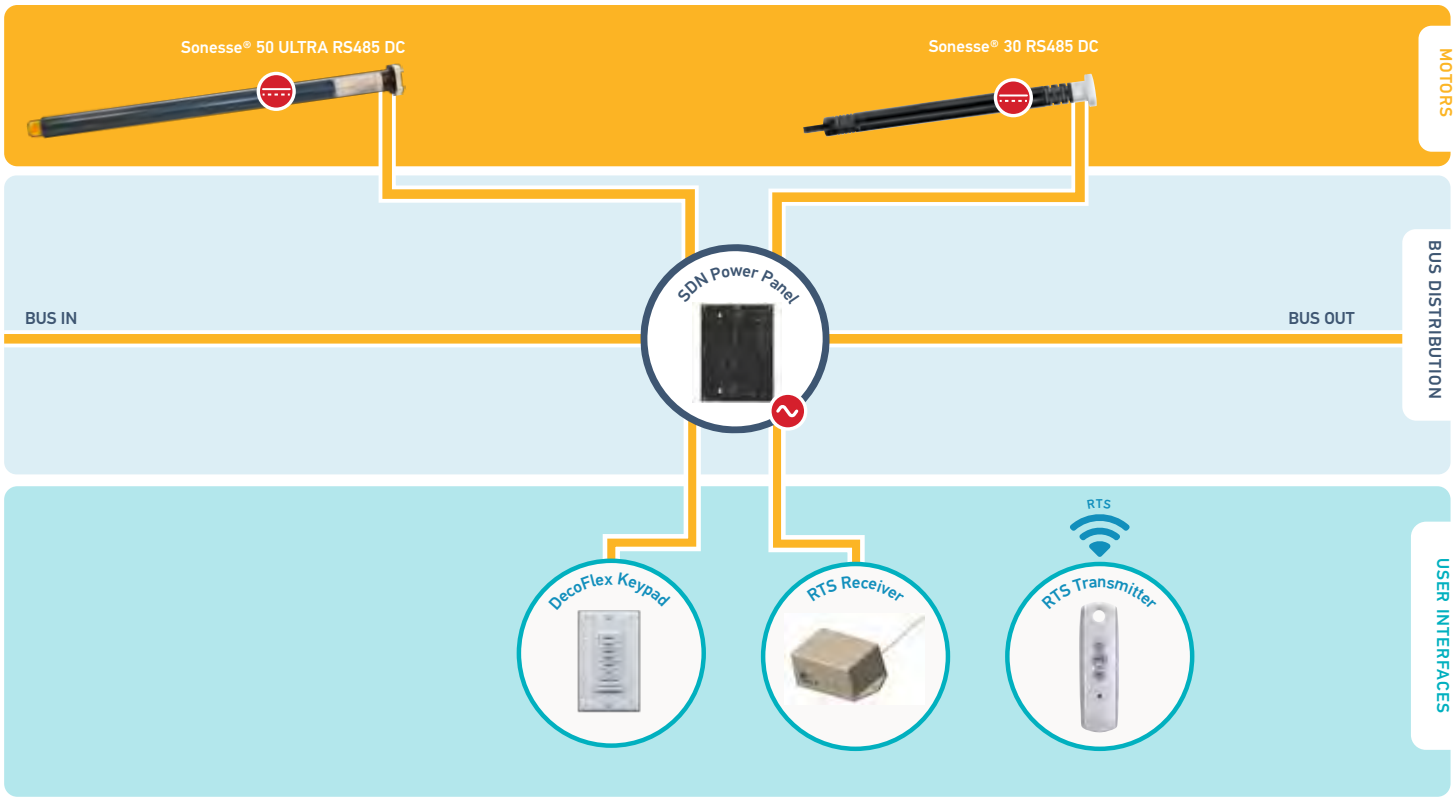
DIMENSIONS:



BEST WIRING PRACTICES

The diagram shown below is meant for illustrative purposes to show the connections from product to product. This device could be used in other configurations than shown below.

- Adds 10 isolated motor ports and 2 isolated device ports to a system.
- Motor wiring distance up to 240 ft. using 14 AWG wire.
- Maximum 800 ft. per isolated device port.



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Data Panel

Item #: 1870260

OVERVIEW:

The **Data Panel** is a bus distribution component used to start or grow a Somfy Digital Network™ (SDN) system. This device adds 4 isolated bus segments to an SDN system. Each isolated bus segment output supports 255 devices, 4000 ft. of bus wiring per segment and supplies 100 power units. The in-wall or on-wall mountable enclosure offers separated line and low voltage areas for ease of installation. A built-in SDN DecoFlex Keypad provides a dedicated local control point for motors on the 4 bus segments and the included din rail is a convenient way to mount an animeo® IP Building Controller or Sub Controller for animeo IP systems.

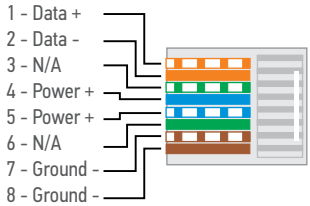
SOMFY DIGITAL NETWORK SYSTEM OVERVIEW:

Somfy Digital Network (SDN) is Somfy's intelligent wired shading network. An SDN system is comprised of bus distribution devices that create a network for user interfaces, motorized applications and sensors to be connected. SDN is scalable, and suitable for both small and large projects, and the same components are used whether an SDN system remains standalone, integrated into third party automation systems, or with Somfy's animeo® IP automated total solar management system.

FEATURES SUMMARY:

- Adds 4 isolated bus segments to a SDN system
- Includes bus segment status LEDs
- Protects system components from miswiring
- Automatic Riser termination
- Can mount on-wall or in-wall (between studs)
- Din rail mount for animeo® IP Building Controllers
  - Front cover includes a keyed lock
- Separated line and low voltage areas
- SDN Decoflex Digital Keypad for convenient local control

CABLE PINOUTS:



TECHNICAL SPECIFICATIONS:

- Input: 120V AC, 3.35A
- Output: 100 SDN Bus Power units per segment
- Material: Steel
- Dimensions: 18.9" L 14.4" W x 3.5" H (Inner)
- Dimensions: 21.3" L 16.4" W x 3.8" H (Inner with door)
- Maximum Wiring Distance: Each segment supports 4000 ft. total bus length for all connected devices
- Operating Temperature Range: Ambient temperature
- Shipping Weight: 18 lbs.
- Indoor rated
- UL Pending

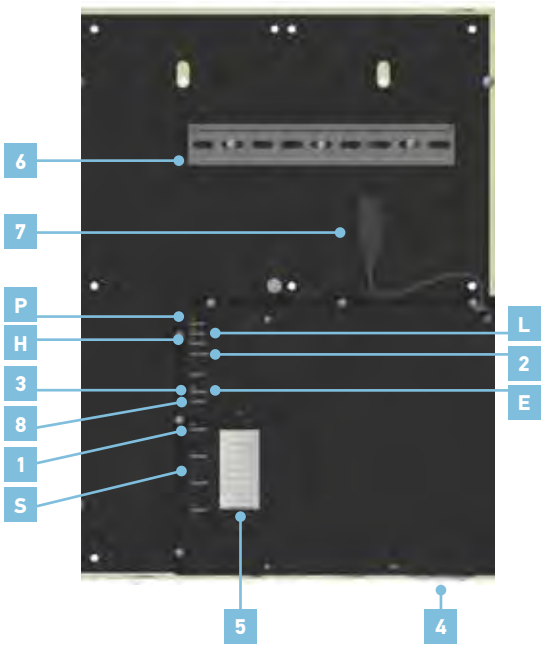
WHAT'S IN THE BOX:

- Data Panel
- Instructions

CONNECTIONS AND INDICATORS:

	ELEMENT	FUNCTION
1	**4 Isolated Bus Segments**	Each segment supports 4000 ft. total wiring stub length, 255 devices and 100 power units
2	**SDN Riser Input**	Input from previous Data Panel
3	**SDN Riser Output**	Output to next Data Panel
4	**Power Input**	Flying leads with push-in connectors (Supports solid 12 & 14 AWG wiring)
5	**DecoFlex Digital Keypad**	Service keypad to test group or zone operation
6	**Empty DIN Rail**	Building Controller Mount
7	**Connection for Building Controller**	(Optional use)
8	**Control Port**	Input for Controller

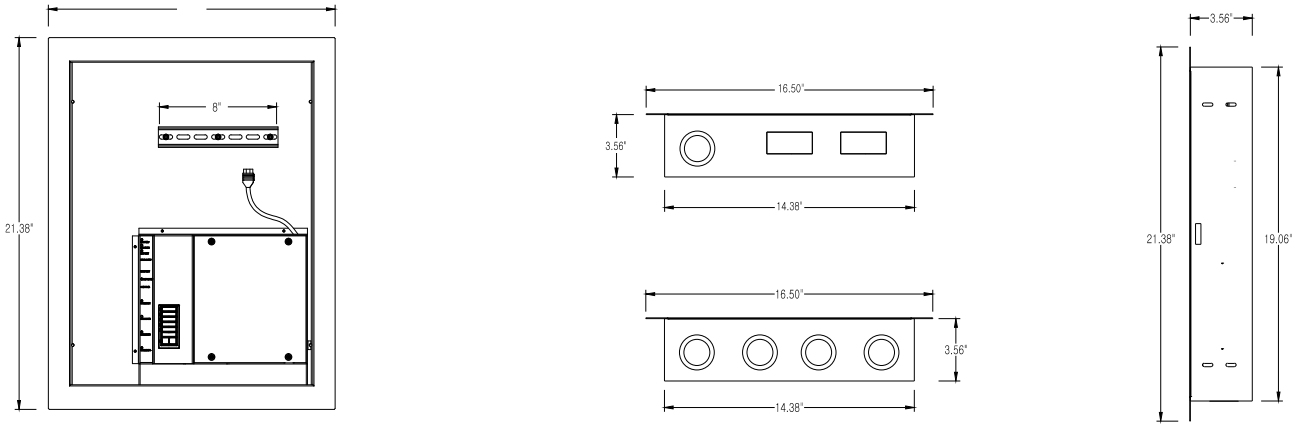
Front view



LED Indicators

LABEL	ELEMENT	COLOR	FUNCTION ON	FUNCTION OFF
P	**Bus Power**	**Green**	Power	No Power
L	**Bus Low**	**Green**	No Data	Data
H	**Bus High**	**Green**	Data	No Data
E	**End Riser**	**Yellow**	End of Riser	Not End of Riser
S	**Segment 1-4**	**Green**	Bus Segment Power On	Bus Segment Power Off

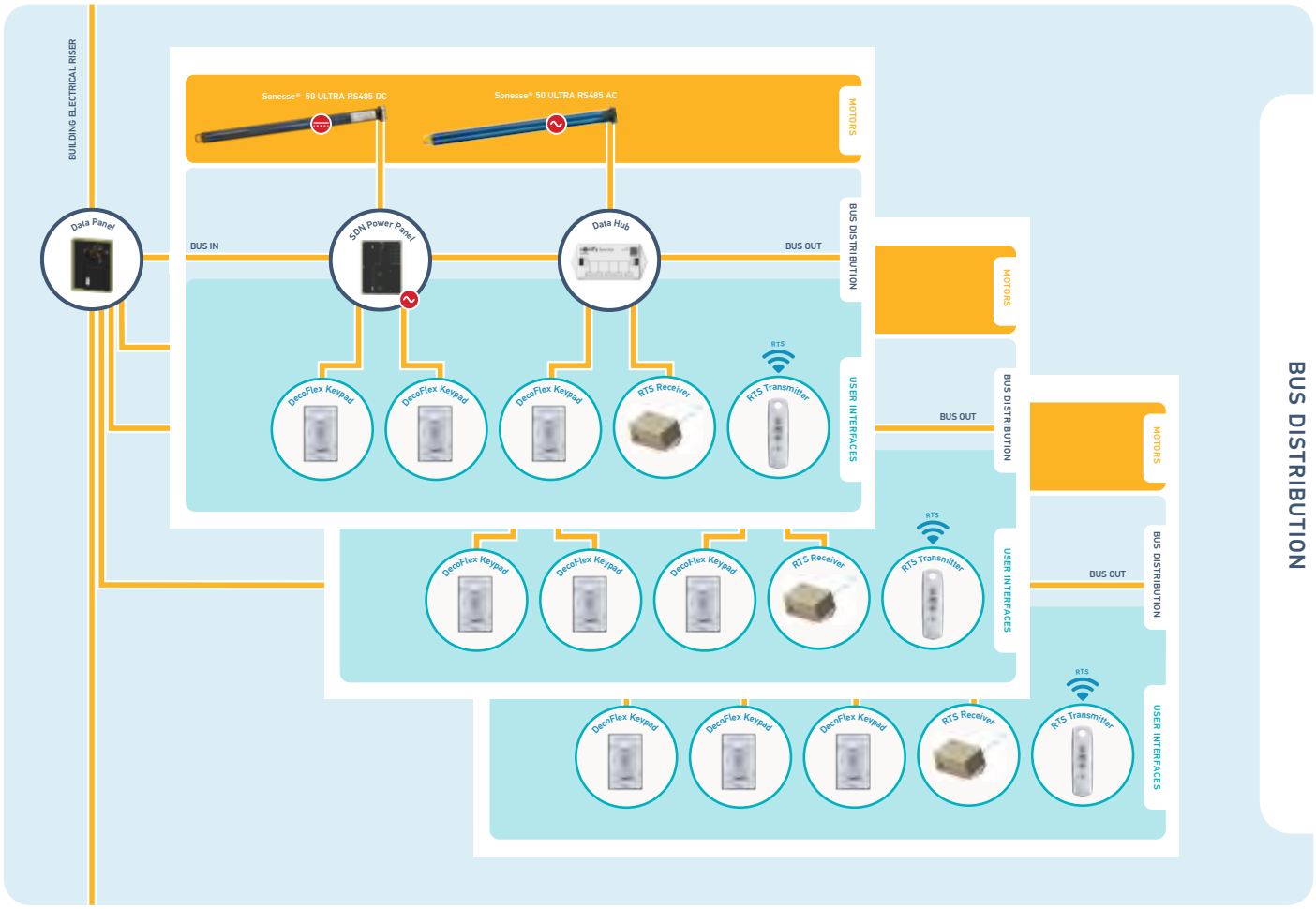
DIMENSIONS:



BEST WIRING PRACTICES

The diagram shown below is meant for illustrative purposes to show the connections from product to product. This device could be used in other configurations than shown below.

- Start or add 4 bus segments to system
- Each segment supports:
  - 4000 ft. of wiring
  - 255 devices
  - 100 power units



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