24V DC

Low-voltage Motor Range Databook



Sonesse® ULTRA 50 and Sonesse® 30

Sonesse® ULTRA 50 DC RTS | Sonesse® ULTRA 50 DC RS485 | Sonesse® 30 RTS | Sonesse® 30 RS485 | Sonesse® 30 DCT



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 160 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 comminted 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 efficent 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 has been developed to provide a platform for those who want to enhance their expertise of motorization and control solutions. Visit www.somfysystems.com/expert-program to learn more and sign up for training.

TABLE OF CONTENTS

INTRODUCTION	
Low Voltage Motor Range	3
MOTOR SPECIFICATIONS	
Sonesse® ULTRA 50 DC RTS	5 6 7
CONTROL ACCESSORIES	
Radio Technology Somfy® (RTS)	
LOW VOLTAGE POWER AND WIRING ACCESSORIES	
Transformers and Limit Setting Tools Low-voltage Power Accessories - Cables and Pigtails	15 16 17 18 19 20
MECHANICAL ACCESSORIES, LIGHT GAP SPECIFICATIONS & BRACKET PROJECTIONS	
Sonesse® ULTRA 50 Hardware Systems (ZMC)	
Somfy Decorator Type	
RollEase®	
Louvolite	
RollEase® and ZMC® Fascia & Cassette Solutions	
Sonesse® ULTRA 50 DC Mechanical Accessories	
Sonesse® 30 Mechanical Accessories	37

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

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

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

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

Conveniently Quiet and Powerful

This document presents the accessories and specifications related to the Somfy Low-voltage motor 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 visit **www.somfysystems.com**.

The low-voltage motor range is putting window coverings in motion with quiet precision. The motors are engineered with superior noise reduction technology from a distance of 3 feet.

The motors feature speed regulation for precise alignment of adjacent shades and are low-voltage which simplifies installation and are barely heard. The 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.

Somfy's low-voltage motors are designed to automate a broad range of window covering applications which include:

Roller/Solar Shades



Sheer Horizontal/ Layered Shades



Roman/Woven Shades



Pleated Cellular Shades



Horizontal Blinds





As with all Somfy® products, the Sonesse® low-voltage motor range is backed by a 5 year warranty.

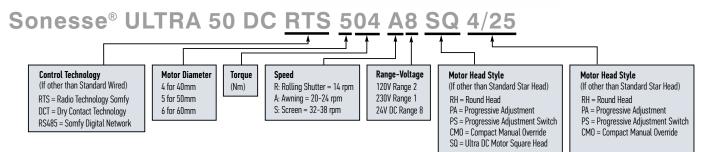


WCMA Award winner, for most innovative overall design

Somfy's Low-voltage Motor Range



MOTOR IDENTIFICATION KEY



SOMFY TECHNOLOGIES



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



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



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.

SOMFY DESIGNED FOR SILENCE Quietness Scale

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.



WHY CHOOSE SOMFY'S SONESSE® LOW VOLTAGE 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 38dBA

Wide Range of Solutions:

- Interior and exterior applications
- Line voltage (AC) or Low voltage (DC) power options
- Residential and commercial markets
- · Radio, digital or wired integrated network options

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
 - Multiple intermediate positions
 - · Collision detection

Simplified Fabrication and Installation:

- Utilizes existing fabrication methods on the market today
- Compatible with leading industry hardware solutions

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 160 million motors

Simple Electrical Connection:

- Available with UL approved pigtail quick connects or screw in flying leads for low-voltage (DC) power and data.
- Plug-in option eliminates the need for an electrician

All Somfy Motors are UL Listed and CSA Recognized

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

E60495, E60888, E63714



Sonesse® ULTRA 50 DC RTS

Square Head Motor

504A8 1134023









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

32°F to 140°F (0°C to 60°C)

Range (interior use only)

Insulation Class Class 3

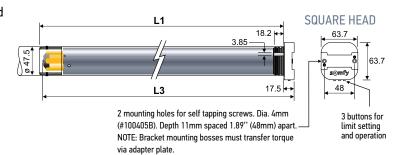
Wiring In accordance with NEC and local

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.

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.

Torque
4 Nm

* Minimum Torque
0.4 Nm

Nominal Voltage
24V DC

Rated Current
1.5A

Speed
Adjustable: 10-25 rpm (default: 25)

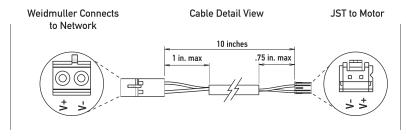
Thermal Protection
5 minutes

**Sound Level
≤ 38 dBA



- 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. This drive stop screw must be tightened with a torque ranging between 1.5 Nm and 1.8 Nm.
- Somfy Soft Clip Drive Wheel Adaptors (brown in color) are not recommended.

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



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® ULTRA 50 DC RS485

Square Head Motor

504A8 1134022







Dimensions



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 32°F to 14

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.

2 mounting holes for self tapping screws. Dia. 4mm (#100405B). Depth 11mm spaced 1.89" (48mm) apart. NOTE: Bracket mounting bosses must transfer torque via adapter plate.

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.

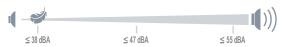
** Sound Level: According to standards ISO 3741 NF 31022 in dBA

ref 1pW at nominal torque without end product.

Fabrication Recommendations:

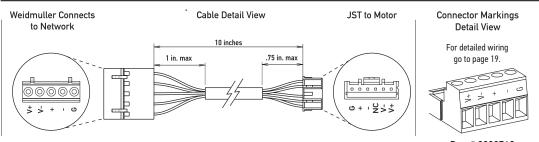
- Operational noise level is reduced when the motor, tube, and mechanical accessories are properly adapted to motorized applications.
- Free play must be minimized between the accessories and the end product tube to ensure quiet performance of the motor.
- Due to the variances of standard aluminum extrusion 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.

Torque4 Nm* Minimum Torque0.4 NmNominal Voltage24V DCRated Current1.5ASpeedAdjustable: 10-25 rpm (default: 25)Thermal Protection5 minutes**Sound Level≤ 38 dBA



- 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. This drive stop screw must be tightened with a torque ranging between 1.5 Nm and 1.8 Nm.
- Somfy Soft Clip Drive Wheel Adaptors (brown in color) are not recommended.

Pigtail: Data and Power (Included with every motor. Also available separately, power and data pigtail (#9020004) or 5 position motor connector (#9020743) only.



Part # 9020743

Maximum Power Cable Length (to guarantee characteristics)

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

Sonesse® 30 RTS

Sonesse 30 RTS

#1001524









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

Technical Features

Voltage Supply 24V DC

Index Protection Rating

(interior use only)

Electronic (RTS) **Limit Switch Type**

IP 30

Limit Switch Capacity 35 Turns

32°F to 140°F (0°C to 60°C) **Temperature Working Range**

Insulation Class

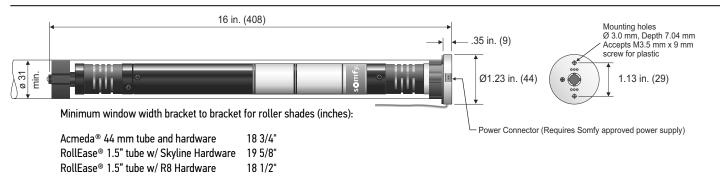
Class III

Antenna Must not come in contact

> with metal. May need to be repositioned for optimal range.

NOTE: Sonesse 30 DC RTS Cable Data and Power Pigtail #9020260 is included with motor.

Dimensions



Specifications

Voltage	24V DC
Motor power connection	2 pin JST, 2 mm pitch
Nominal load starting current	1.8A for max. 300 ms
Nominal load current	.8A
Maximum current during programming	3.2A for 300 ms
Torque	2 Nm
Speed	Adjustable: 6-28 rpm (default: 28)
Thermal protection	2.5 minutes
Minimum inside diameter of tube	1.22 in. (31 mm)
Sound Level*	44 dBA
RF control range (may vary)	65 ft.

*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) > 31 mm must be respected.
- A motor crown adaptor 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.

Type of power cable

24V DC POWER CABLE

2-Conductor 7.5' Length 24 AWG Conductors



Maximum Power Cable Length (to guarantee characteristics)

LENGTH
240 ft.
150 ft.
100 ft.

Sonesse 30 RS485

#1000658







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

Technical Features

Voltage Supply 24V 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 III

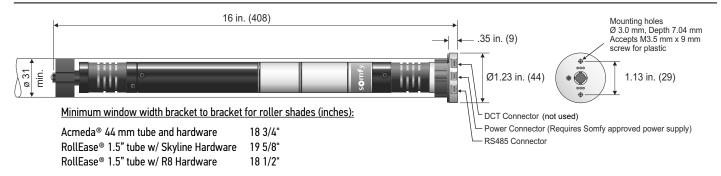
Optional Pigtail:

Sonesse 30 DC RS485 Cable Data and Power Pigtail #9020261 for Power Panel installations is not included with motor.

RS485 Limit Setting Tool and address reader #9017142 is required for

setting limits. (sold separately)

Dimensions



Specifications

Voltage	24V DC
Motor power connector	2 pin JST, 2 mm pitch
Motor RS485 connector	3 pin JST, 2.54 mm pitch
Motor DCT connector (not used)	4 pin JST, 2 mm pitch
Nominal load starting current	1.8A for max. 300 ms
Nominal load current	.8A
Maximum current during programming	3.2A for 300 ms.
Torque	2 Nm
Speed	Adjustable: 6-28 rpm (default: 28)
Thermal protection	2.5 minutes
Minimum inside diameter of tube	1.22 in. (31 mm)
Sound Level*	44 dBA

*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.
- Limit setting to be set with Limit Setting Tool #9017142
- Free play must be minimized between the accessories and the end product tube to ensure quiet performance of the motor.
- Interior Tube Diameter (ID) > 31 mm must be respected.
- A motor crown adaptor 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.

Type of power and data cables (included)

24V DC POWER CABLE #9014794

2-Conductor
7.5' Length
24 AWG Conductors
stripe - positive
white - negative

RS485 COMMUNICATION CABLE #9019190

3-Conductor 7.5' Length 24 AWG Conductors

red = SDN RS485 (+) black = SDN RS485 (-) green = Bus power GND Maximum Power Cable Length (to guarantee characteristics)

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

Optional Pigtail: Sonesse 30 DC RS485 Cable Data and Power Pigtail #9020261 (not included with motor)

Sonesse 30 DCT

#1000668









Offers control via contact closure switching (dry contact)

Technical Features

Voltage Supply 24V DC

Index Protection Rating

(interior use only)

Limit Switch Type Dry Contact

IP 30

35 Turns

Limit Switch Capacity

Temperature Working Range

32°F to 140°F (0°C to 60°C)

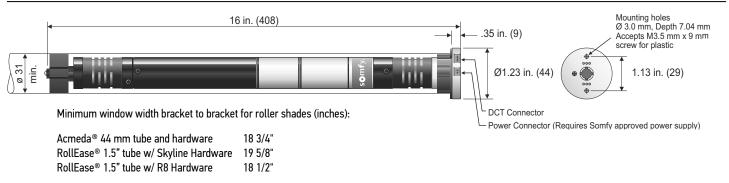
Insulation Class

Class III

NOTE: Power/Control motor cables are included with motor. Limit Setting Tool #9014599 is required for setting limits.

(sold separately)

Dimensions



Specifications

Voltage	24V DC
Motor power connection	2 pin JST, 2 mm pitch
Motor DCT connector	4 pin JST, 2 mm pitch
Nominal load starting current	1.8A for max. 300 ms
Nominal load current	.8A
Maximum current during programming	3.2A for 300 ms
Torque	2 Nm
Speed	Adjustable 6-28 rpm (default 28)
Thermal protection	2.5 minutes
Minimum inside diameter of tube	1.22 in. (31mm)
Sound Level*	< 44 dBA

*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
- Interior Tube Diameter (ID) > 31 mm must be respected.
- A motor crown adaptor 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.

Type of power cable (included with motor)

24V DC POWER CABLE #9014794

2-Conductor 7.5' Length 24 AWG Conductors stripe - positive white - negative

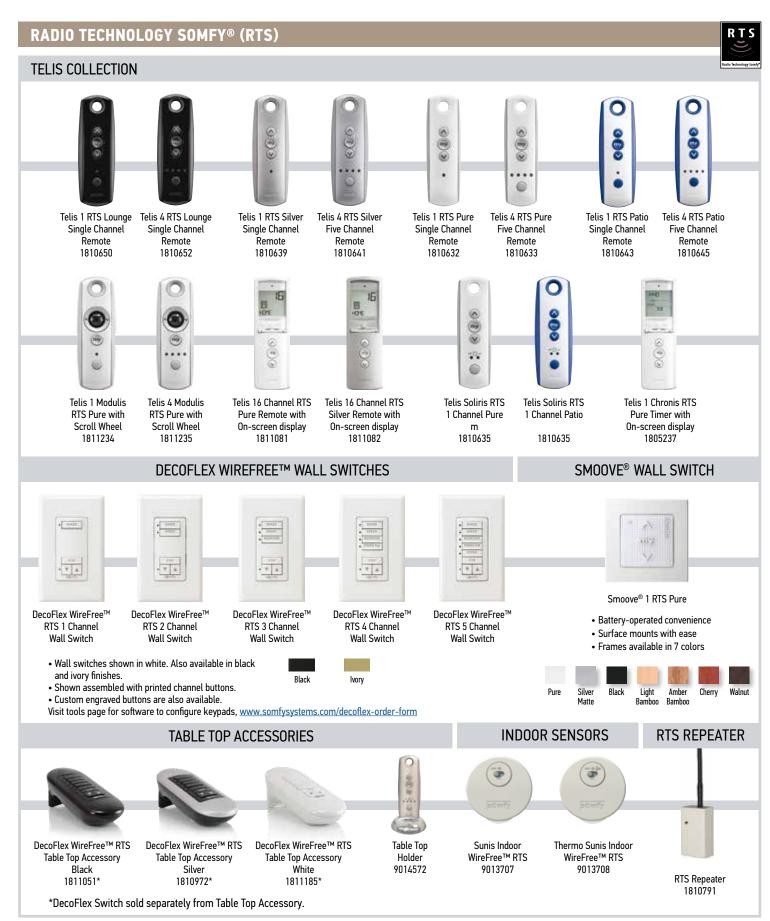
DCT COMMUNICATION CABLE #9014793

4-Conductor 7.5' Length 24 AWG Conductors



white/blue = up blue = stop white/orange = down orange = ground

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



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

INTEGRATION ACCESSORIES

ZRTSI II

myLink™ WiFi TO RTS INTERFACE

16 CHANNEL INTERFACE











Z-Wave® to RTS Interface II

The Somfy Z-Wave® to Radio Technology Somfy Interface (ZRTSI) translates Z-wave® commands from third party systems into motor control commands for Somfy's range of Radio Technology Somfy® (RTS) motors.

1811265

RTS Smart Phone and Tablet Interface

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

www.somfysystems.com/mylink 1811403 Universal RTS Interface 16-Channel

The URTSI allows third party automation systems to control Radio Technology Somfy® (RTS) motorized solutions.

1810872

DRY CONTACT INTERFACE



RTS Dry Contact Interface Single Channel

The RTS Dry-Contact Interface can be used to communicate between home automation or other third party systems and Somfy's RTS products.

1810493

ZDMI



Z-Wave® to Digital Motor Interface

Integrate Z-Wave® wireless control of window coverings powered by Somfy SDN motors and benefit from the versatility of Z-Wave® wireless mesh technology and the quiet intelligence of the Sonesse® SDN motor.

1870171

ZBDMI



ZigBee® to Digital Motor Interface

The ZigBee® to Digital Motor Interface allows integration of Somfy-powered motorized window coverings and projection screens into ZigBee® home automation systems.

1870220

SOMFY CONNECT™ LTI

SOMFY CONNECT™

UNIVERSAL AUTOMATION INTERFACE (UAI) PLUS



The Somfy Connect™ Universal Automation Interface (UAI) Plus allows for commissioning and integrating Somfy Digital Network™ (SDN) over IP.

1870272

SOMFY CONNECT™

BMS INTERFACE



Provides communication between building management systems and SDN motorized shading systems.

1870249



Integrates Somfy RTS and Somfy Digital Network™ (SDN) motorized applications with RadioRA® 2, HomeWorks® QS, GRAFIF Eye® QS, and Quantum® control systems.

1870210

Learn more about Somfy Digital Network™ (SDN) RS485 controls and accessories at www.somfysystems.com/sdn

SOMFY DIGITAL NETWORK™ (SDN) RS485



POWER PANEL



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.

1870259

DATA PANEL



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.

1870260

BUS & SENSOR STATION POWER SUPPLY



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 bus line devices (excluding motors).

1822440

DATA HUB



The Data Hub is a Somfy Digital Network™ (SDN) bus distribution component which adds 5 device ports to an SDN Bus line.

1870262

EXTENDER



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.

1870261

SDN MINI DATA HUB

SDN ROOM CONTROLLER HUB

RTS RECEIVER FOR SDN AND ANIMEO® IP



The SDN Mini Data Hub is a Somfy Digital Network™ (SDN) bus distribution component which adds 3 Device Ports to an SDN Bus line.



The SDN Room Controller Hub is a Somfy Digital Network™ (SDN) component which features 4 Motor Ports and 1 Device Port as an SDN Room controller. This product is powered by the RS485 motors using grey Somfy communication cables.

1870277 1870278

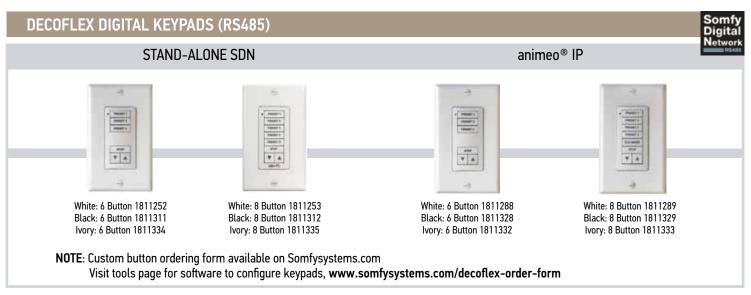


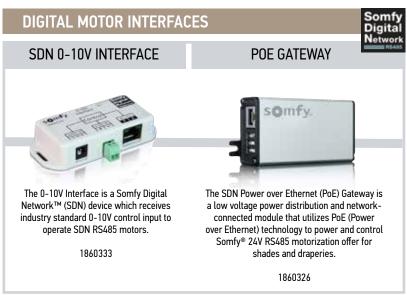
The RTS Receiver for SDN connects directly to the SDN bus and is fully compatible with all RTS transmitters. Control up to 5 groups of motors on the network using an RTS transmitter. The Receiver obtains its power directly from the bus — no external power required.

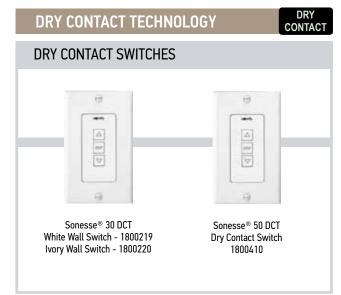
RTS Receiver for SDN: 1822294

The RTS Receiver for animeo® IP provides communication between building management systems and SDN motorized shading systems.

RTS Receiver for animeo® IP: 1822447







Please visit www.somfysystems.com/controls for additional controls 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

LOW VOLTAGE POWER ACCESSORIES - CABLES AND PIGTAILS

SONESSE® 30 OPTIONAL POWER/CONTROL MOTOR CABLES

Sonesse® 30 Dry Contact Closure (DCT) Cable (7.5' length)



9014793

Sonesse® 30 RS485 Adaptor Cable (Old JST to New JST)



9019192

Sonesse® 30 24V DC 2 Conductor Power Cable (7.5' length)



9014794

Sonesse® 30 RS485 New JST to RJ45 Communication Cable

Sonesse® 30 RS485 Control Cable (7.5' length)*

Sonesse® 30 RS485 Communication Cable (7.5' length)**



9019191



*Used for any Sonesse 30 RS485 motor manufactured before June 4, 2014

9015842

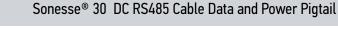


**Used for any Sonesse 30 RS485 motor manufactured after June 4, 2014

9019190

SONESSE® PIGTAILS

Sonesse® 30 DC RTS Cable Power Pigtail





9020261



9020260

Sonesse® Ultra 50 DC RTS Cable Power Pigtail

Sonesse® Ultra 50 DC RS485 Cable Data and Power Pigtail



9020005



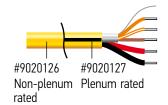
9020004

LOW VOLTAGE POWER ACCESSORIES - CABLES AND PIGTAILS

SDN LOW-VOLTAGE MOTOR POWER AND DATA CABLE

Overview:

The SDN Low-voltage Motor Power and Data Cable is the power and communication backbone that connects low-voltage Somfy Digital Network™ (SDN) RS485 motors including the Sonesse® ULTRA 50 DC RS485 motor and Sonesse® 30 RS485 Motor to Somfy's Power Panel for SDN. Within a single jacket, this cable includes (1) 14 AWG power pair, (1) 22 AWG stranded, twisted and shielded data triad and (1) 24 AWG drain wire for the most reliable data communication on the market. With this cable, motor wiring runs can reach up to 240 ft. This cable is offered in plenum rated and non-plenum rated versions.



Purchase cable from Liberty AV Solutions



Technical Specifications

Electrical Specifications:	9020126	9020127
22 AWG Data Triad		
Conductor DCR:	16.6 Ώ/1,000 ft.	15.7 Ώ/1,000 ft.
Capacitance:	12.5 pF/ft.	12 pF/ft.
Impedance:	100 Ώ	107 Ώ
14 AWG Power Pair		
Conductor DCR:	2.7 Ώ/1,000 ft.	4.05 Ώ/1,000 ft.
Max voltage:	300V	
Max current:	8A@77°F	
Cable diameter:	0.284 in. (7.21 mm)	0.277 in. (7.04 mm)
Cable jacket:	Yellow	Yellow w/ black stripe
Cable jacket material:	Polyvinyl Chloride(PVC)	Plenum Rated Polyvinyl Chloride(PVC)
Operating temperature:	-4°F to 167°F (-20°C to 75°C)	32°F to 167°F (0°C to 75°C)
Weight:	0.056 lb./ft. or 56 lbs./1,000 ft. roll	0.059 lb./ft. or 59 lbs./1,000 ft. roll

Cable type:

Twisted wire - non-shielded:

2 x 14 AWG 41-strand annealed bare copper conductors Twisted and shielded:

3 x 22 AWG 7-strand annealed bare copper conductors

1 x 24 AWG:7 strand, tinned copper (drain)

Shield type: 100% aluminum/poly shield foil

Cable length per spool: 1000 ft.

Ripcord: Nylon

Regulatory Certification(s):
 NEC rated CL3R or CL3P
 EU RoHS-2 2011/65/EU Compliant
 UL13 compliant in accordance to NEC article 725

Features:

- Accommodate longer wiring distances with installation lengths up to 240 ft.
- Installation flexibility with in plenum and non-plenum rated options
- Minimize ground noise produced by motors, switches or other electrical equipment
- Prevent signal corruption, damage to components connected to the bus, ground loops
- Protect against electrical line surges
- Compliant with the EIS/TIA-485 Standard

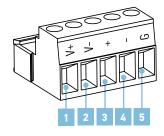


- UL certified
- The only cable that meets the SDN 2.0 quality promise

Related Products:

Sonesse® 50 ULTRA DC RS485 Motor #1134022
 Data and power pigtail (Sonesse® 50 ULTRA DC) #9020004
 Sonesse® 30 RS485 Motor #1000658
 Data and power pigtail (Sonesse® 30) #9020261
 Power Panel for SDN #1870259

Connections and Indicators:



	ELEMENT	FUNCTION
1	Voltage/Power - positive	24V DC Power positive input
2	Voltage/Power - negative	24V DC Power negative input
3	SDN RS485 - positive	Data communication - positive
4	SDN RS485 - negative	Data communication - negative
5	SDN RS485 - ground	Data communication - ground

Cable Pinouts

Somfy SDN Low-voltage Motor Cable

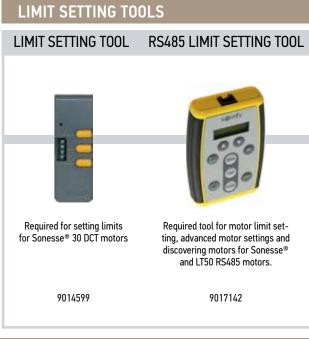
Data and Power Cable 24V DC / SDN Control 5 conductor cable



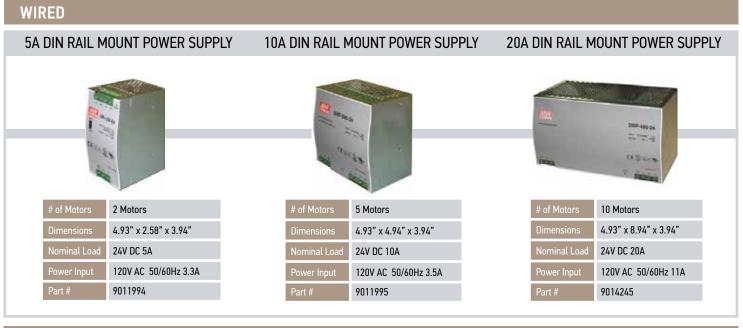
Silver = Drain
Orange = SDN RS485 (-)
Orange/white = SDN RS485 (+)
Brown = SDN RS485 ground
Red = power (+)
Black = power (-)

LOW VOLTAGE POWER ACCESSORIES - TRANSFORMERS AND TOOLS

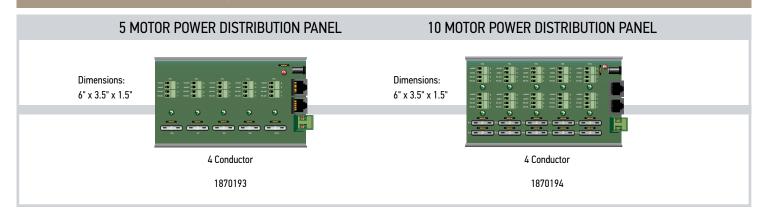








POWER DISTRIBUTION PANELS



POWER/CONTROL DISTRIBUTION ENCLOSURE OPTIONS

Not to be used with SDN installations

5 MOTOR - #1870196



Kit includes:

- 1 5 Motor/Control Distribution Panel
- 1 24V DC 10 Amp Power Supply
- 1 12 in. x 12 in. x 6.25 in. Enclosure



10 MOTOR - #1870192



Kit includes:

- 1 10 Motor/Control Distribution Panel
- 1 24V DC 20 Amp Power Supply
- 1 18 in. x 18 in. x 6.25 in. Enclosure



15 MOTOR - #1870197



Kit includes:

- 1 5 Motor/Control Distribution Panel
- 1 10 Motor/Control Distribution Panel
- 1 24V DC 10 Amp Power Supply
- 1 24V DC 20 Amp Power Supply
- 1 18 in. x 18 in. x 6.25 in. Enclosure



20 MOTOR - #1870198

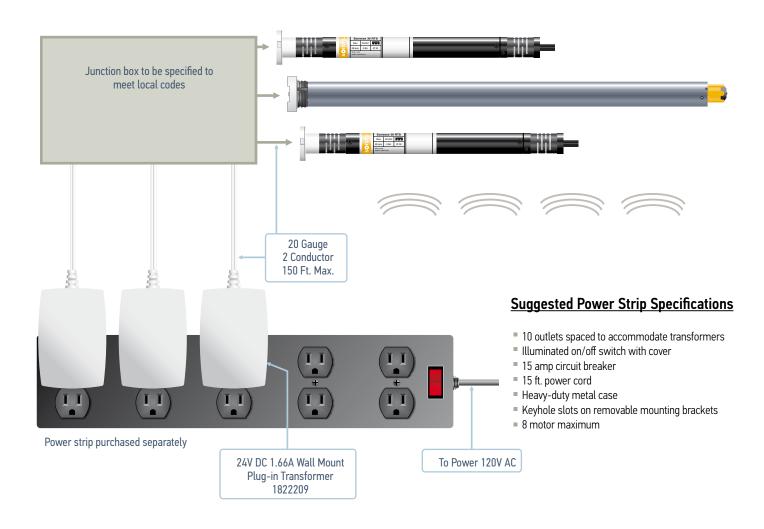


Kit includes:

- 2 10 Motor/Control Distribution Panel
- 2 24V DC 20 Amp Power Supply
- 1 18 in. x 18 in. x 6.25 in. Enclosure

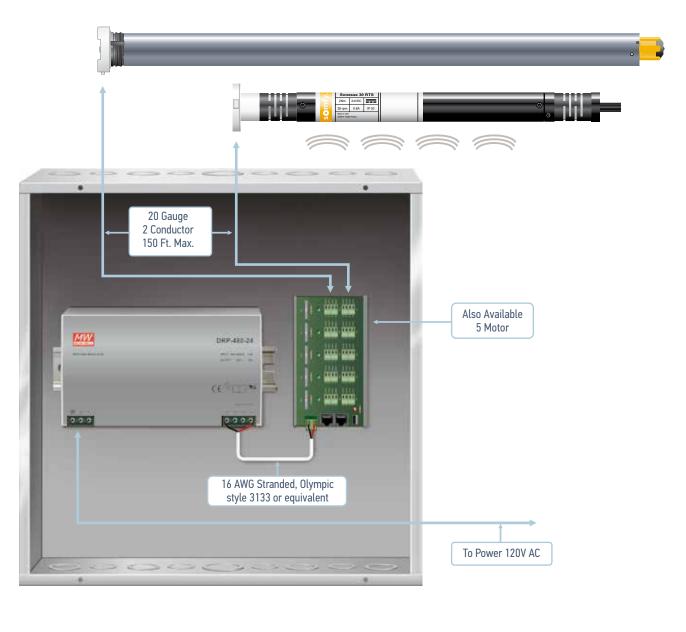


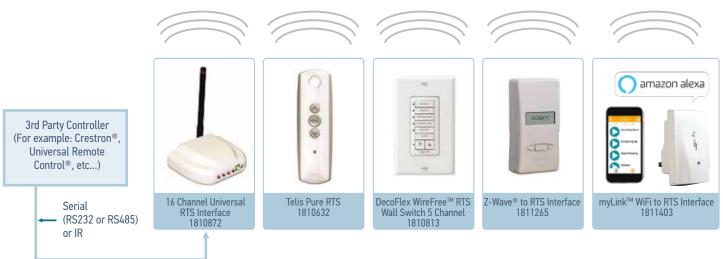
LOW VOLTAGE RTS CONTROL & PLUG-IN STYLE POWER



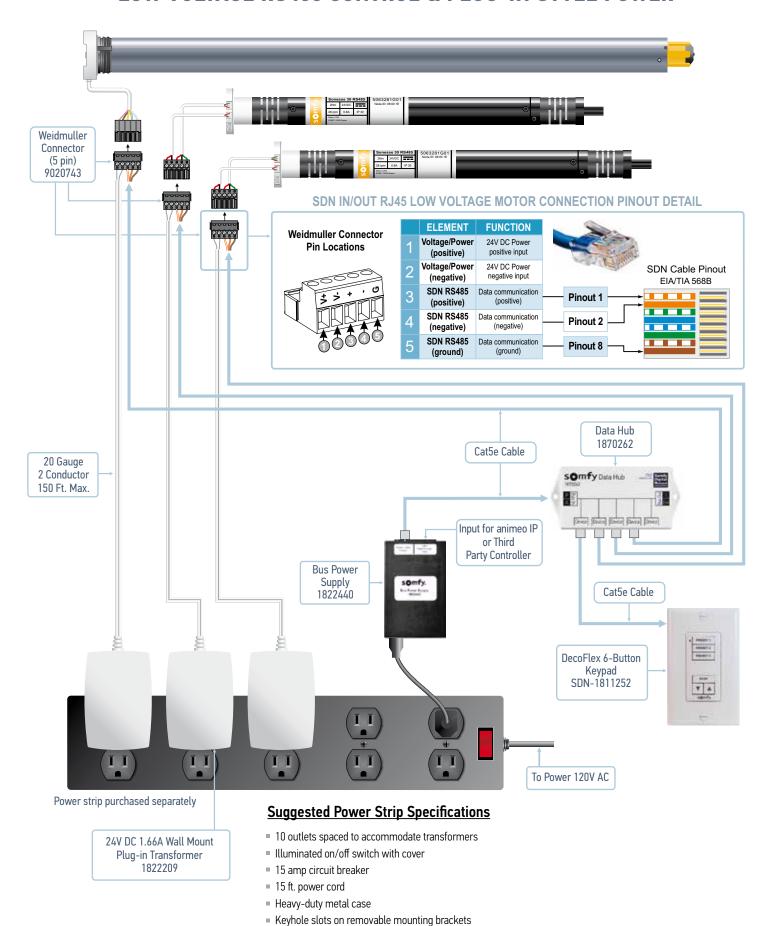


LOW VOLTAGE RTS CONTROL & POWER DISTRIBUTION



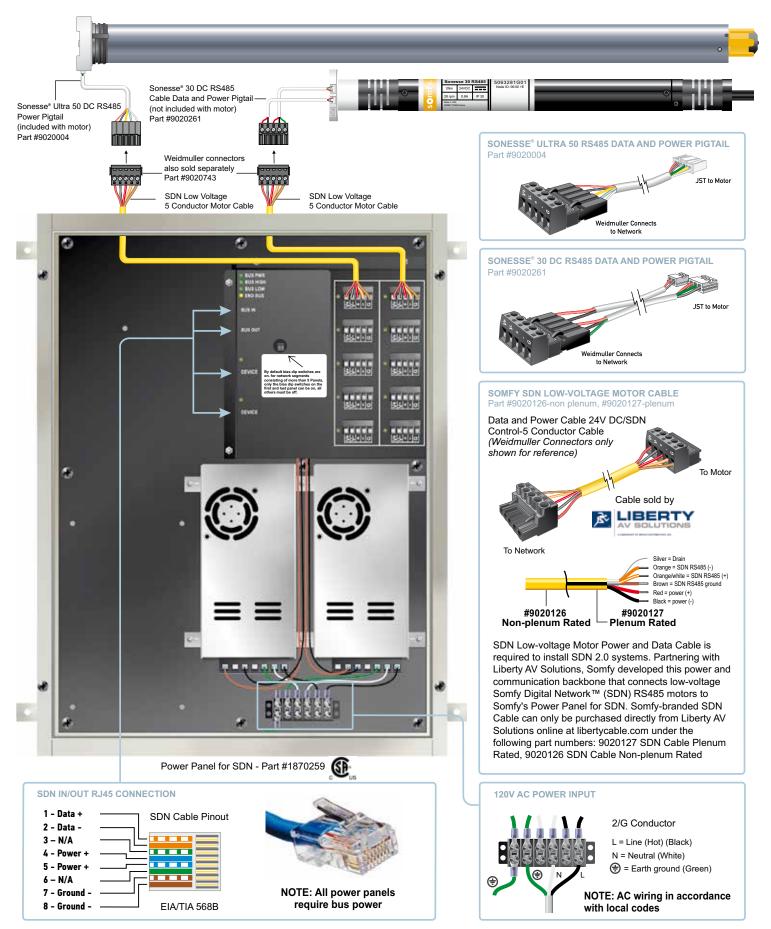


LOW VOLTAGE RS485 CONTROL & PLUG-IN STYLE POWER



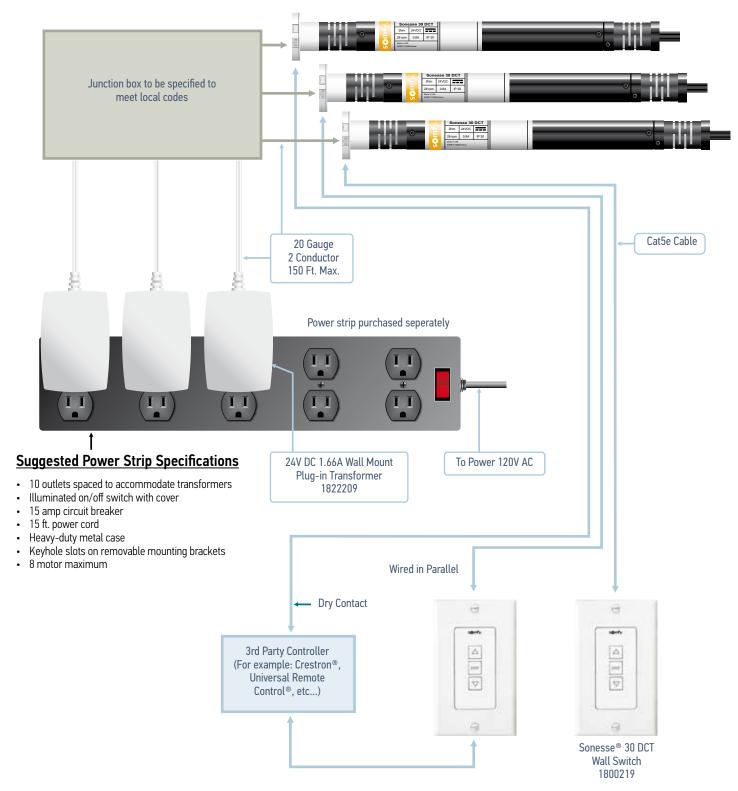
■ 8 motor maximum

LOW VOLTAGE RS485 CONTROL & POWER DISTRIBUTION



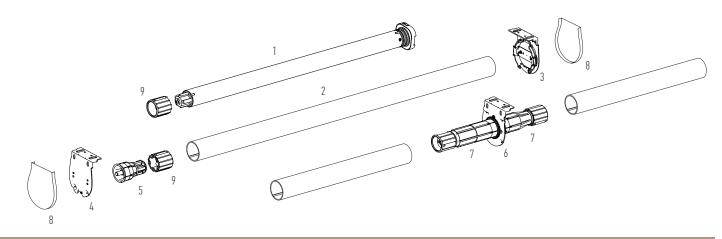
LOW VOLTAGE DRY CONTACT & PLUG-IN STYLE POWER

APPLICATION EXAMPLE

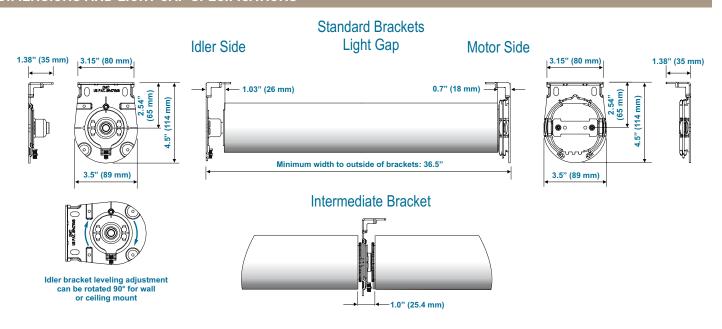


SONESSE® ULTRA 50 DC HARDWARE SYSTEMS - ZMC

STANDARD BRACKET COMPONENTS



DIMENSIONS AND LIGHT GAP SPECIFICATIONS

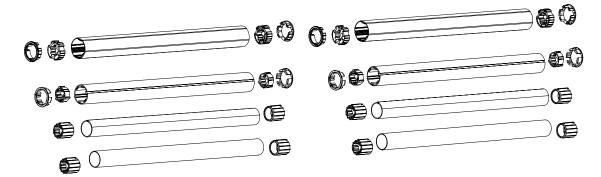


PRODUCT CHART

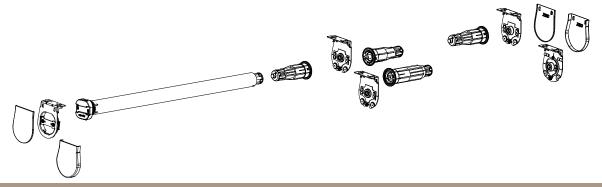
IMAGE	DESCRIPTION	CATALOG NUMBER
1	SONESSE® ULTRA 50 DC MOTOR (RTS) #1134023, RS485 #1134022	
2	ZMC 2" GROOVED MOTOR TUBE (PER FOOT)	9020965
3	SONESSE® ULTRA 50 DC MOTOR BRACKET WITH SPRING RING	9020957
4	SONESSE® ULTRA 50 DC IDLER BRACKET (10 MM BALL) (ADJUSTABLE WALL OR CEILING MOUNT)	9020958
5	SONESSE® ULTRA 50 DC UNIVERSAL SHORT IDLER END (10 MM)	9020959
6	SONESSE® ULTRA 50 DC INTERMEDIATE BRACKET (10 MM) (ADJUSTABLE WALL OR CEILING MOUNT)	9020961
7	SONESSE® ULTRA 50 DC INTERMEDIATE AND INDEXABLE COUPLER (10 MM SHAFT)	9020962
8	SONESSE® ULTRA 50 DC MOTOR AND IDLER BRACKET COVER	9020963
9	ZMC 2" GROOVED TUBE DRIVE WHEEL FOR SONESSE® ULTRA 50 MOTORS	9020964

SONESSE® ULTRA 50 DC HARDWARE SYSTEMS - ZMC

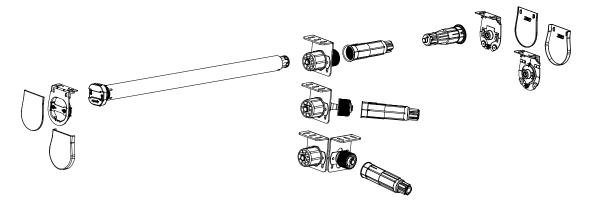
STANDARD AND ROLLER TUBE ACCESSORIES



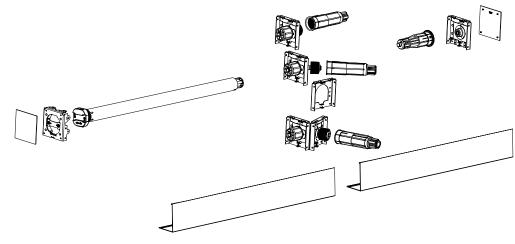
MOTOR BRACKETS AND ACCESSORIES FOR SONESSE ULTRA 50 DC MOTORS



MOTOR U-JOINT INDEXABLE BRACKET FOR SONESSE ULTRA 50 DC MOTORS

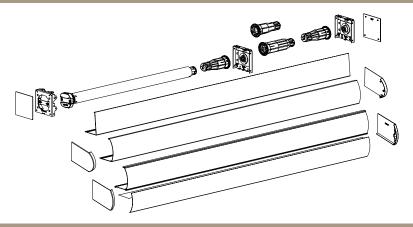


4" ADJUSTABLE U-JOINT INDEXABLE FASCIA BRACKET FOR SONESSE ULTRA 50 DC MOTORS

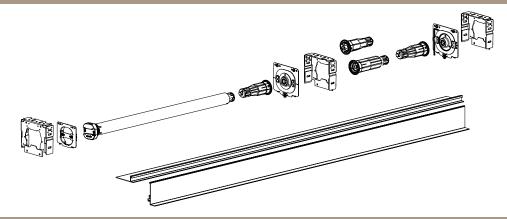


SONESSE® ULTRA 50 DC HARDWARE SYSTEMS - ZMC

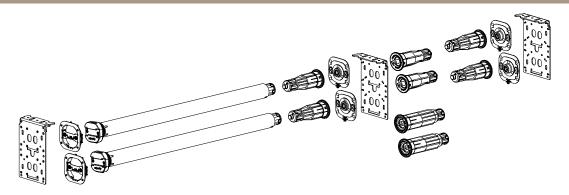
4" FASCIA BRACKETS FOR SONESSE ULTRA 50 DC MOTORS



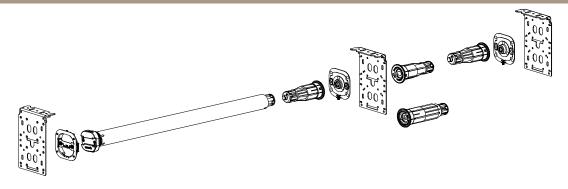
5.5" FASCIA SYSTEM FOR SONESSE ULTRA 50 DC MOTORS



7.5" OPEN ROLL DUO BRACKET FOR SONESSE ULTRA 50 DC MOTORS

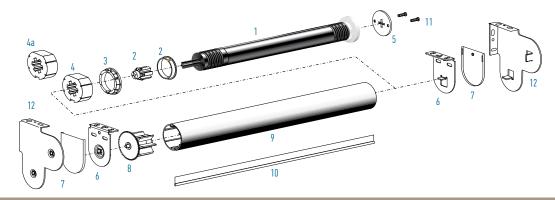


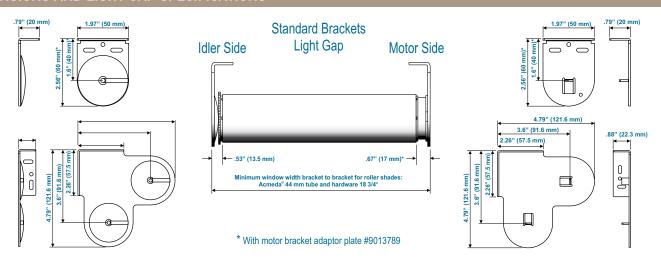
7.5" OPEN ROLL SINGLE BLIND BRACKET FOR SONESSE ULTRA 50 DC MOTORS



SONESSE® 30 HARDWARE SYSTEMS - Acmeda®

STANDARD BRACKET COMPONENTS

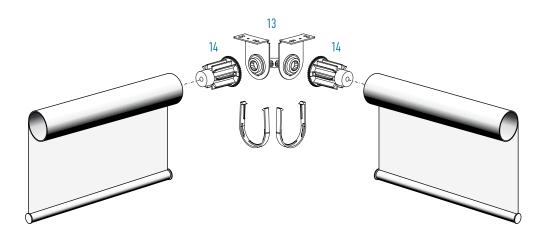


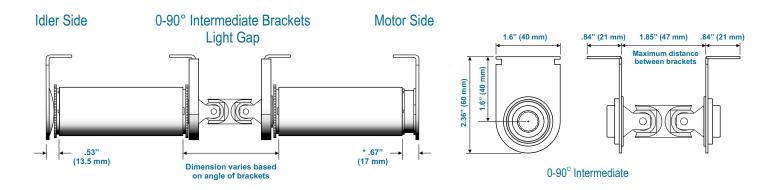


PRODUCT CHART		
IMAGE	DESCRIPTION	CATALOG NUMBER
1	SONESSE® 30 MOTOR (RTS) #1001524, RS485 #1000658, DTC #1000668	
2	SONESSE® 30 TO LS40 ADAPTOR KIT (Required part for conversion)	9013776
3	CROWN ADAPTOR 44 MM TUBE (ACMEDA TYPE)	9013791
4	DRIVE WHEEL 44 MM (ACMEDA TYPE)	9013790
4A	SILENT DRIVE WHEEL 44 MM (ACMEDA TYPE)	9015259
5	MOTOR BRACKET ADAPTOR PLATE (ACMEDA TYPE)	9013789
6	MOTOR & IDLER BRACKET KIT 40P (ACMEDA TYPE)	9013778
7	PLASTIC BRACKET COVER 40P KIT (ACMEDA TYPE)	9013780
8	IDLER END PLUG 44 MM TUBE (ACMEDA TYPE)	9013774
9	44 MM ALUMINUM TUBE (16 FT. MAX LENGTH)	1780688
10	TUBE SPLINE 44 MM TUBE (ACMEDA TYPE)	1780687
11	M 3.5 x 9 MM SCREWS	9014066
12	MOTOR BRACKET COMBO SET 122 MM x 122 MM	9013782

SONESSE® 30 HARDWARE SYSTEMS - Acmeda®

INTERMEDIATE BRACKET COMPONENTS



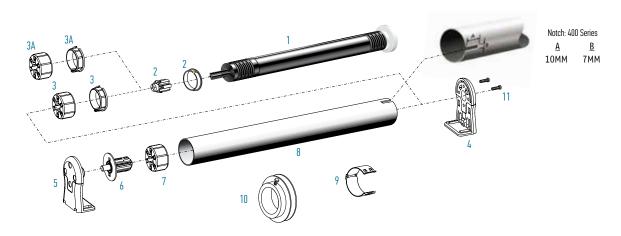


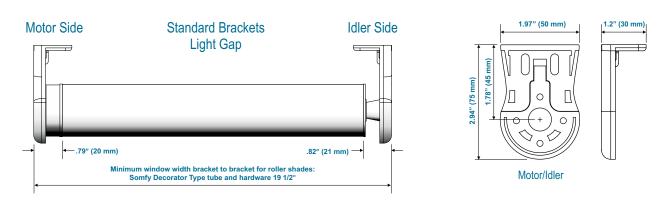
^{*} With motor bracket adaptor plate #9013789

PRODUC	T CHART	
IMAGE	DESCRIPTION	CATALOG NUMBER
13	INTERMEDIATE BRACKET & COVER KIT 40P, 0-90 DEGREES (ACMEDA TYPE)	9013787
14	INTERMEDIATE MALE IDLER END PLUG (ACMEDA TYPE)	9013786

SONESSE® 30 HARDWARE SYSTEMS - Somfy® Decorator Type

STANDARD BRACKET COMPONENTS

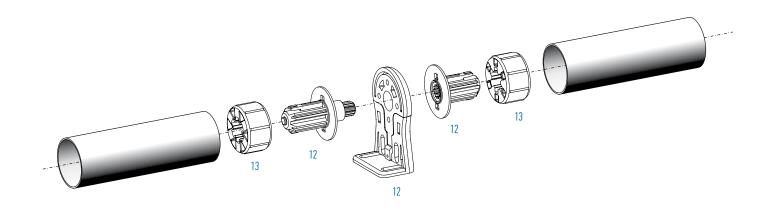


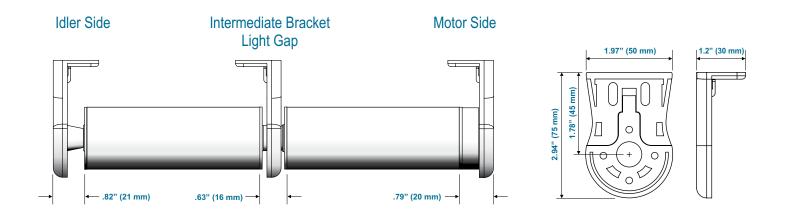


PRODUCT CHART		
IMAGE	DESCRIPTION	CATALOG NUMBER
1	SONESSE® 30 MOTOR (RTS) #1001524, RS485 #1000658, DTC #1000668	
2	SONESSE® 30 TO LS40 ADAPTOR KIT (Required part for conversion)	9013776
3	CROWN AND DRIVE (SOMFY 40 MM x 1.5 MM ROUND TUBE)	9012224
3A	CROWN AND RUBBERIZED DRIVE (SOMFY 40 MM x 1.5 MM ROUND TUBE)	9016654
4	MOTOR BRACKET (DECORATOR TYPE)	9500683
5	IDLER END BRACKET (DECORATOR TYPE)	9500685
6	IDLER END PLUG (DECORATOR TYPE)	9500688
7	40 MM ROUND DRIVE (FOR USE WITH IDLER END PLUG)	9147544
8	SOMFY 40 MM ROUND TUBE (20 FT. MAX LENGTH)	1781153
9	CORD CLIPS FOR ROMAN SHADE APPLICATIONS	9012200
10	CORD TAKE-UP REEL (40 MM TUBE)	1781152
11	M3.5 x 9 MM SCREWS (Must be ordered separately when used with Sonesse $^{\tiny{\$}}$ 30 motor range.	9014066

SONESSE® 30 HARDWARE SYSTEMS - Somfy® Decorator Type

INTERMEDIATE BRACKET COMPONENTS

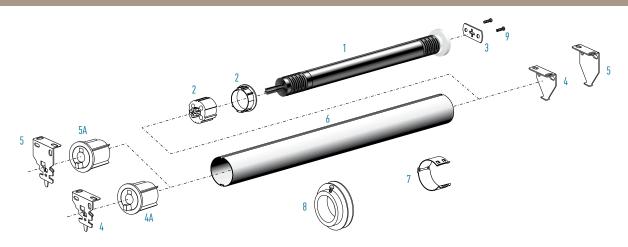




PRODUC	T CHART	
IMAGE	DESCRIPTION	CATALOG NUMBER
12	INTERMEDIATE BRACKET KIT (DECORATOR TYPE)	9500687
13	40 MM ROUND DRIVE (FOR USE WITH INTERMEDIATE BRACKET)	9147544

SONESSE® 30 HARDWARE SYSTEMS - Rollease® Standard & ZMC® XR-Series

STANDARD BRACKET COMPONENTS

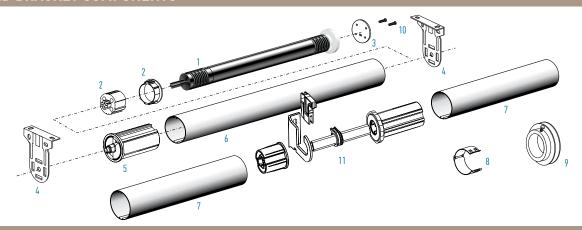


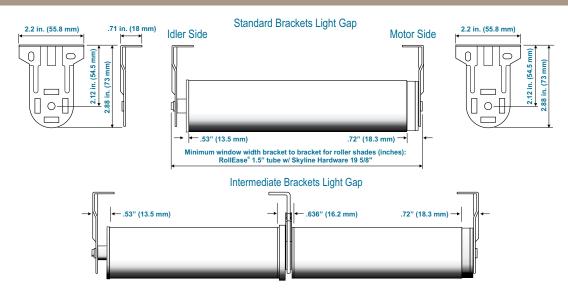


PRODUCT CHART		
IMAGE	DESCRIPTION	CATALOG NUMBER
1	SONESSE® 30 MOTOR (RTS) #1001524, RS485 #1000658, DTC #1000668	
2	CROWN AND DRIVE FOR ROLLEASE® 1.5" TUBE	9013775
3	MOTOR ADAPTOR PLATE FOR ROLLEASE® R8 BRACKET WITH SCREWS	9014073
4	ROLLEASE® 1.5" BRACKET KIT R8 SERIES FOR SOMFY 40 MM ROUND TUBE	9012311
5	ROLLEASE® 1.5" PROJECTION BRACKET KIT R8 SERIES & ZMC® 1.5" PROJECTION XR- SERIES BRACKETS	CONTACT SOMFY/ZMC
6	ROLLEASE® 2" BRACKET KIT R8 SERIES FOR SOMFY® 2" ROUND TUBE	9012313
7	ROLLEASE® 1.5" TUBE	9017913
8	ZMC® 1.5" Z-TUBE	CONTACT ZMC
9	CORD CLIPES (FOR ROLLEASE® 1.5" TUBE & ZMC® 1.5" Z-TUBE)	9012200
10	TAKE-UP REEL (FOR ROLLEASE® 1.5" TUBE & ZMC® 1.5" Z-TUBE)	1780786
11	M3.5 x 9 MM SCREWS	9014066
12	MOTOR PLATE 9012258 (ROLLEASE® MOTOR BRACKET ACCES. R8 SERIES)	9012258

SONESSE® 30 HARDWARE SYSTEMS - Rollease® Skyline™ and ZMC® XL-Series

STANDARD BRACKET COMPONENTS

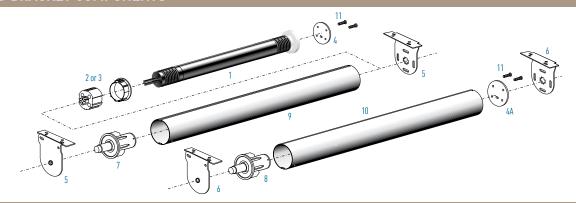


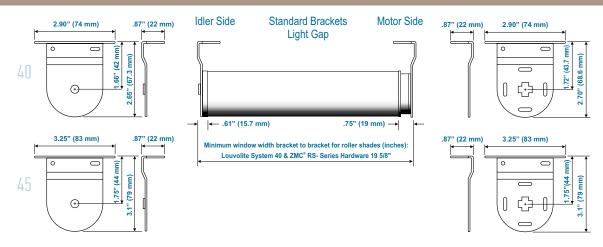


PRODUCT CHART		
IMAGE	DESCRIPTION	CATALOG NUMBER
1	SONESSE® 30 MOTOR (RTS) #1001524, RS485 #1000658, DTC #1000668	
2	CROWN AND DRIVE (FOR ROLLEASE® 1.5" TUBE & ZMC® 1.5" Z-TUBE)	9013775
3	MOTOR ADAPTOR PLATE FOR ROLLEASE® SKYLINE™ BRACKETS W/SCREWS & ZMC® XL SERIES BRACKET	9016378
4	SKYLINE SERIES BRACKETS 1.5" PROJECTION (ROLLEASE®) (2 REQUIRED)	9017910
5	SKYLINE SERIES HEAVY DUTY IDLER END PLUG (FOR ROLLEASE® 1.5" TUBE)	9017912
6	ROLLEASE® 1.5" TUBE	9017913
7	ZMC® 1.5" Z-TUBE	CONTACT ZMC
8	CORD CLIPS (FOR ROLLEASE® 1.5" TUBE & ZMC® 1.5" Z-TUBE)	9012200
9	TAKE-UP REEL (FOR ROLLEASE® 1.5" TUBE & ZMC® 1.5" Z-TUBE)	1780786
10	M3.5 x 9 MM SCREWS	9014066
11	ROLLEASE® SKYLINE SERIES INTERMEDIATE LINK SYSTEM	9016367

SONESSE® 30 HARDWARE SYSTEMS - Louvolite® System 40 & ZMC® RS-Series

STANDARD BRACKET COMPONENTS



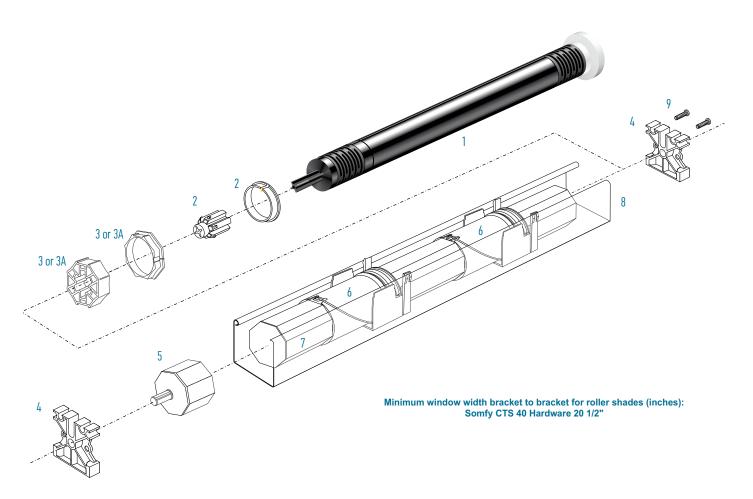


PRODUCT CHART		
IMAGE	DESCRIPTION	CATALOG NUMBER
1	SONESSE® 30 MOTOR (RTS) #1001524, RS485 #1000658, DTC #1000668	
2	CROWN AND DRIVE (LOUVOLITE® 40 MM TUBE) WITH SCREWS	9013775
2, 4, 11	CROWN, DRIVE, MOTOR MOUNT PLATE AND 3.5 x 9 MM SCREWS (FOR LOUVOLITE® SYSTEM 40 AND ZMC® 1.5" RS-SERIES)	9014045
3, 4A, 11	CROWN, DRIVE, MOTOR MOUNT PLATE AND 3.5 x 9 MM SCREWS (FOR LOUVOLITE® SYSTEM 45 AND ZMC® 1.5" RS-SERIES)	9014333
4	MOTOR BRACKET ADAPTOR PLATE WITH SCREWS (LOUVOLITE® SYSTEM 40)	9014072
4A	MOTOR BRACKET ADAPTOR PLATE WITH SCREWS (LOUVOLITE® SYSTEM 45)	9016013
5	MOTOR & IDLER BRACKET KIT (FOR LOUVOLITE® STYLE SYSTEM 40 & ZMC® RS-SERIES)	9013715
6	*MOTOR & IDLER BRACKET KIT (LOUVOLITE® SYSTEM 45)	9015554
7	COLLAPSIBLE END PLUG (FOR LOUVOLITE® STYLE SYSTEM 40 & ZMC® RS- SERIES)	9013716
8	COLLAPSIBLE END PLUG (LOUVOLITE® SYSTEM 45)	9015555
9	LOUVOLITE® STYLE 40 MM TUBE & ZMC® 1.5" RS-TUBE	CONTACT SOMFY/ZMC®
10	LOUVOLITE® 45 MM TUBE	CONTACT LOUVOLITE®
11	SCREWS M3.5 x 9 MM	9014066

^{*}KIT TO BE USED WITH MOTOR BRACKET ADAPTOR PLATE (LOUVOLITE® SYSTEM 40), CATALOG #9014072

SONESSE® 30 HARDWARE SYSTEMS - Somfy® CTS 40

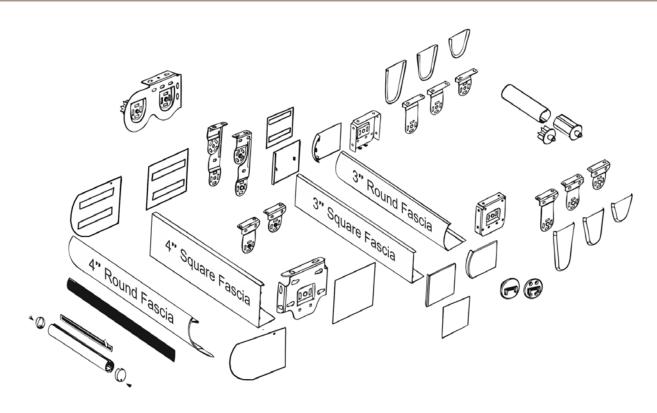
CORD TAKE-UP SYSTEM (CTS)



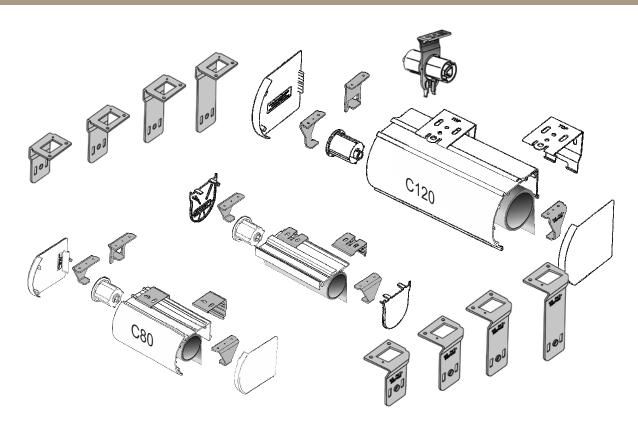
PRODUCT CHART		
IMAGE	DESCRIPTION	CATALOG NUMBER
1	SONESSE® 30 MOTOR (RTS) #1001524, RS485 #1000658, DTC #1000668	
2	SONESSE® 30 TO LS40 ADAPTOR WITH SCREWS	9013776
3	CROWN AND DRIVE KIT 40 MM OCTAGONAL TUBE (LOUVOLITE® SYSTEM 40)	9012225
3A	RUBBERIZED CROWN AND DRIVE KIT 40 MM OCTAGONAL TUBE	9016655
4	MOTOR/IDLER BRACKET (FOR 57 MM x 51 MM HEADRAIL) (LOUVOLITE® SYSTEM 45)	9500736
5	IDLER END PLUG FOR 40 MM OCTAGONAL TUBE	9012274
6	CTS 40 (FOR 57 MM x 41 MM HEADRAIL)	1781118
7	SOMFY 40 MM OCTAGONAL TUBE (20 FT. MAX LENGTH)	1781154
8	57 MM x 51 MM (2" x 2 1/4") GUTTER RAIL OR SIMILAR	CONTACT MANUFACTURER
9	M 3.5 x 9 MM SCREWS	9014066

SONESSE® 30 HARDWARE SYSTEMS BRACKET, FASCIA AND CASSETTE SOLUTIONS - Rollease®

SKYLINE™ BRACKET AND FASCIA ACCESSORIES

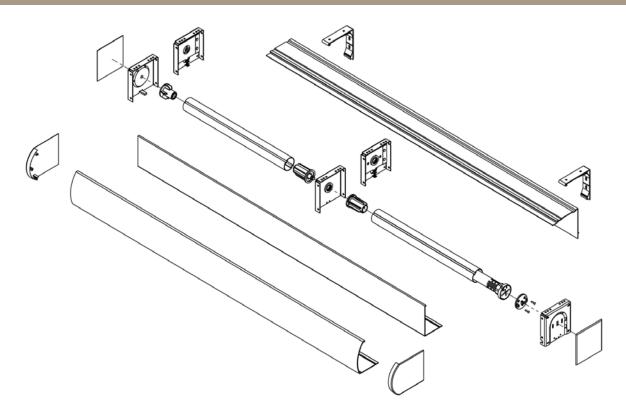


C80/C120 CASSETTE ACCESSORIES

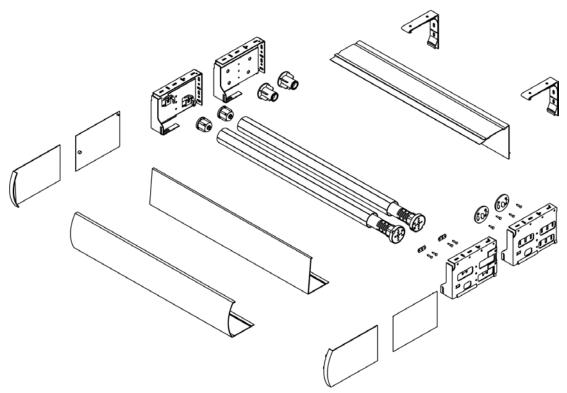


BRACKET, FASCIA AND CASSETTE SOLUTIONS - ZMC®

INTERMEDIATE BRACKET SOLUTIONS



DUO SHADE FASCIA COMPONENTS



Contact ZMC® for items and part numbers: www.zmc.ca

SONESSE® ULTRA 50 DC MECHANICAL ACCESSORIES

CROWNS & DRIVES

Tube Profile (not to scale) Set 2'' Groove Tube Ultra Drive *recommended with Ultra Quiet Part # 9020964



500 SERIES END CAPS

Sonesse® 50 Pin End Cap with 10mm 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.)

Sonesse Ultra 50 Universal Pin End Cap - 10 mm Part #9019716 Sonesse Ultra 50 Universal Pin End Cap - 12 mm Part #9019717

Sonesse® Ultra 50 Universal End Cap with 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.)

Sonesse 50 Pin End Cap 10 mm - Quiet Accessory for 2" Tube **Part #9016628** Sonesse 50 Pin End Cap 12 mm - Quiet Accessory for 2" Tube **Part #9018228**

ZMC® Short Idler End - 10mm



- 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 with 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 #9020959

Ultra Indexable Coupler with 10 mm Shaft



- Ability to couple multiple shades
- Torque transferred via the drive end which is identical to drive end of Somfy motor
- Adaptable to any tube that has Somfy motor drive wheel
- Retractable function for easy installation
- Simple and effective way of leveling the bottom bar

Part #9020962

SONESSE® ULTRA 50 DC 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

LT50 Stop Wheel



- Screws into the motor output shaft to prevent drive from coming off shaft
- Black composite stop

Part #9910004

Spacer for Somfy 10 mm Ultra Universal Pin End



Part #9020960

- Somfy 10 mm Ultra Universal Pin End Note: Spacer only used with ZMC® Idler brackets with bearings (see below)



Sonesse 50 Pin End Cap with 10 mm Collapsible Shaft

Sonesse Ultra 50 Universal End Cap with Collapsible Shaft

500 SERIES BRACKETS

Sonesse® Ultra 50 DC Motor Bracket with Spring Ring



Part #9020957

LT50 Universal Motor and Idler Bracket Cover



Part #9020963

Sonesse® Ultra 50 DC Idler Bracket (10 mm ball)



Part #9020958

Sonesse® Ultra 50 DC Intermediate Bracket (10 mm)



Part #9020961

SONESSE® 30 MECHANICAL ACCESSORIES



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 160 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 SYSTEMS INC SOMFY NORTH AMERICAN HEADQUARTERS

121 Herrod Blvd. Dayton, NJ 08810 T: (800) 22-SOMFY (76639) NJ: (609) 395-1300 F: (609) 395-1776

www.somfysystems.com

FLORIDA

6100 Broken Sound Pkwy. N.W. Suite 14 Boca Raton, FL 33487 T: (800) 22–SOMFY (76639) F: (561) 995–7502

CALIFORNIA

15301 Barranca Parkway Irvine, CA 92618-2201 T: (800) 22-SOMFY (76639) F: (949) 727-3775

SOMFY ULC SOMFY Canada Division

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

SOMFY

50 avenue du Nouveau Monde BP 152 - 74307 Cluses Cedex France T +33 (0)4 50 96 70 00 F +33 (0)4 50 96 71 89

www.somfy.com

A BRAND OF SOMFY GROUP

© Copyright Somfy Systems, Inc. 4/2018 Images: © SAS/Childeric

