

# 400 Series Databook





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

screens and projection screens. Somfy motorization systems are easily integrated with security, HVAC and lighting systems, providing total home or building automation.

1000 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 Technical Support\_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.





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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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

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

# 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 <a href="https://www.somfysystems.com">www.somfysystems.com</a> 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.





**Sheer Horizontal Shades** 



**Roman/Woven Shades** 



**Horizontal Blinds** 



**Awnings** 



**Rolling Shutters** 



**Exterior Solar Screens** 



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



Offers control via standard AC switching.



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

# **Sonesse**® **40** – Designed to set the new acoustic standard.

# 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**



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.



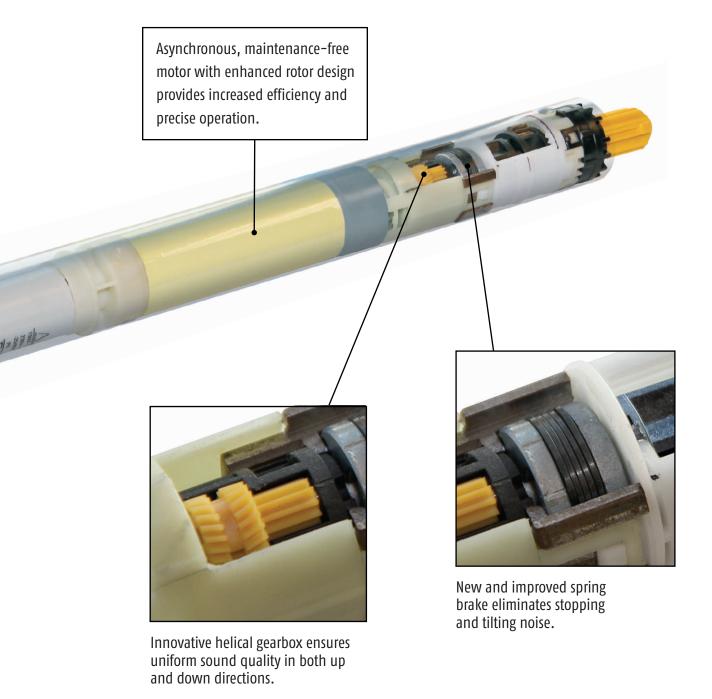












**404S2** 1001553 **406A2** 1001556 **409R2** 1001557









# **Technical features**

**Voltage Supply** 120V AC

IP 44

**Index protection rating** (interior use only)

Limit switch type

Progressive Adjustment (PA)

Limit Switch Capacity

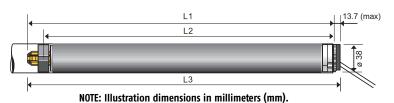
Temperature working Range

40 Turns

32°F to 140°F (0°C to 60°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.

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**

	40452	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:

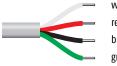
According to standards ISO 3741 NF 31022 in dBA ref 1pW at nominal torque without end product.

#### **Fabrication recommendations:**

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

# Type of power cable





white = neutral red = direction 1 black = direction 2

green = ground

**404S2** 1001636 406A2 1001637 409R2 1001638









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

### Technical features

120V AC **Voltage Supply** 

IP 44

**Limit Switch Capacity** 

(limited to 3 minutes of rotation without stop)

Index protection rating

**Temperature working Range** 

32°F to 140°F (0°C to 60°C)

(interior use only) Limit switch type

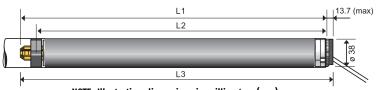
Electronic (RTS)

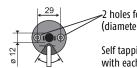
**Insulation class** 

Class 1 for 120 V AC

250 Turns

## **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	ı)
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Dimensions	40452	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**

	40452	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
·			

# Type of power cable





#### \* 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.

404S21020005404R21021003409R21023029412R21024020







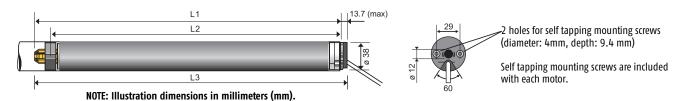
# **Technical features**

**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**



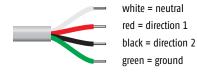
Dimensions	404S2	404R2	409R2	412R2
l1	17.0 in. (442 mm)			
L2	16.57 in. (421 mm)			
L3	18.03 in. (458 mm)			
Cable Length		6.5 ft. (2 m)		

# Specifications

	40452	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





40452 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** 

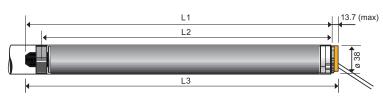
Limit switch type Electronic (RTS) **Limit Switch Capacity** 250 Turns

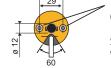
(limited to 3 minutes of rotation without stop)

14°F to 104°F (-10°C to 40°C) **Temperature working Range** 

**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	404\$2	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**

	404\$2	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



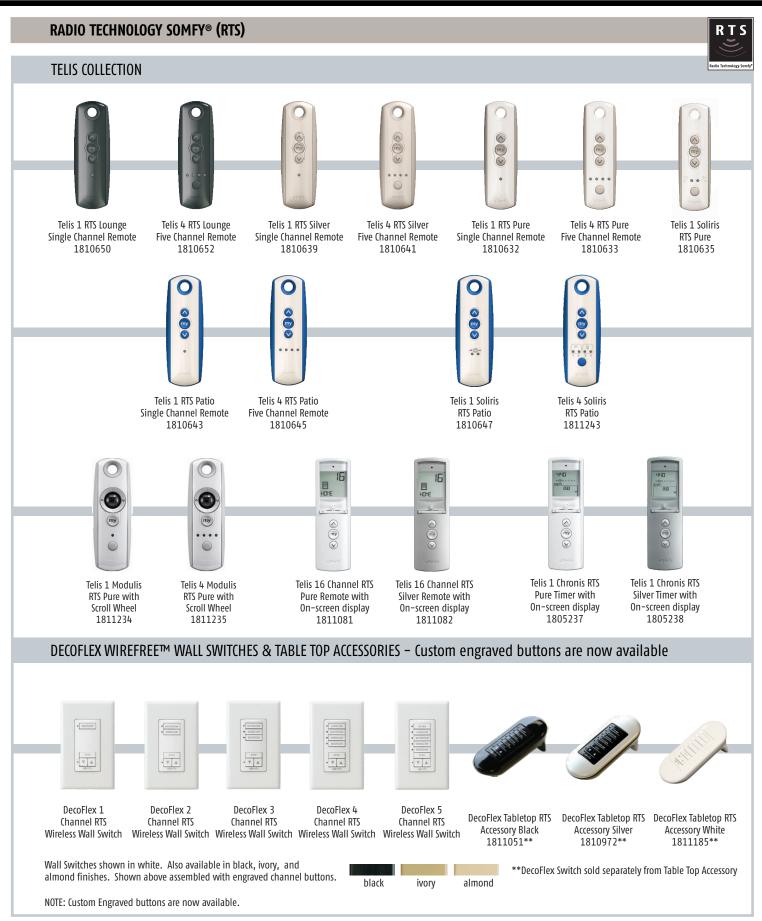


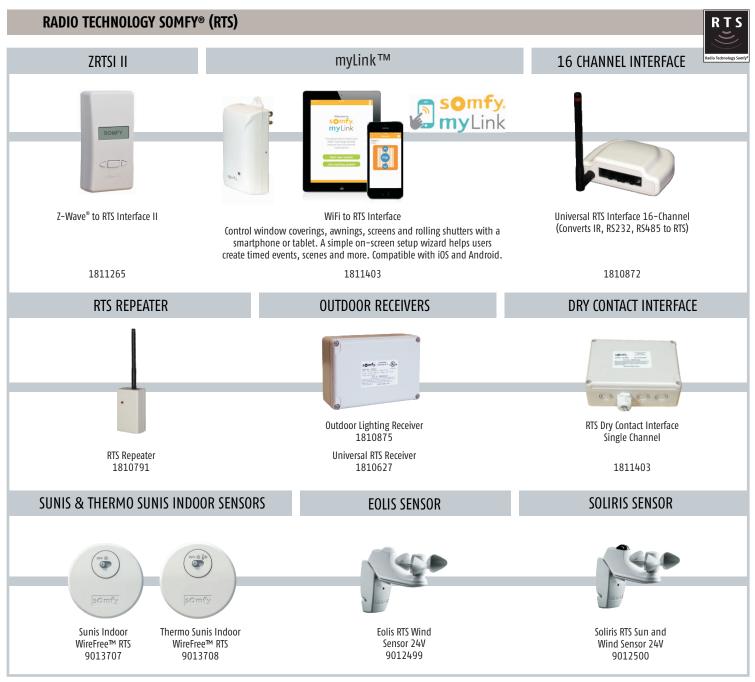
white = neutral black = live

green = ground

# **CONTROL ACCESSORIES**

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





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 Maintained Toggle Switch Momentary Toggle Switch Momentary Toggle Switch (White) (White) (Ivory) (Ivory) 1800381 1800380 1800383 1800382 Standard Metal Toggle Switchplate Standard Metal Toggle Switchplate Plastic Toggle Switchplate Plastic Toggle Switchplate (Ivory) (White) (Ivory) 9011954 9011953 9011963 9011962 **DECORATOR PADDLE SWITCHES & SWITCHPLATES** Maintained Paddle Switch Maintained Paddle Switch Momentary Paddle Switch Momentary Paddle Switch (White) (Ivory) (White) (Ivory) 1800374 1800373 1800378 1800377 Single Gang Paddle Switchplate Single Gang Paddle Switchplate Maintained Double Pole, Maintained Double Pole, Double Throw Paddle Switch Double Throw Paddle Switch (White) (Ivory) (White) 9011967 9011966 (Ivory) 1800375 1800376 SPECIALTY SWITCH 5 position Momentary/Maintained Rocker Switch Switchplate included (White) 1800388

# **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)



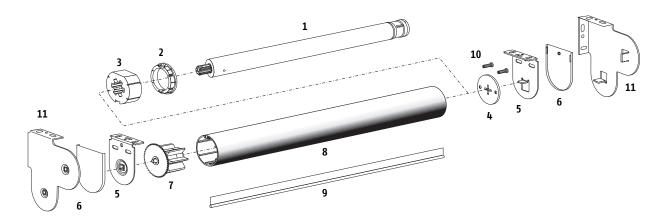
IGC II Gang Electric Box 3.5" Deep 9013166



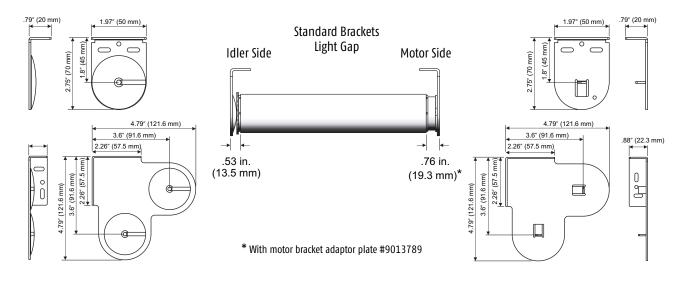
IGC RTS Radio Receiver 1810481

# **400 SERIES MECHANICAL ACCESSORIES** Acmeda® System

#### STANDARD BRACKET COMPONENTS



### **DIMENSIONS AND LIGHT GAP SPECIFICATIONS**

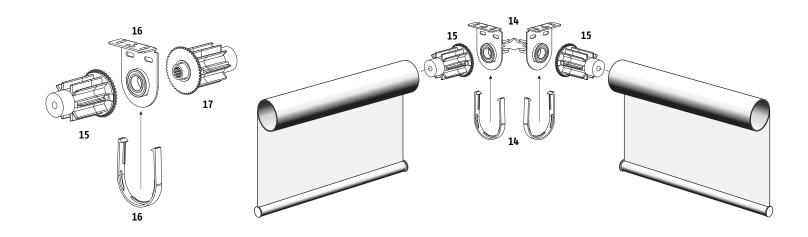


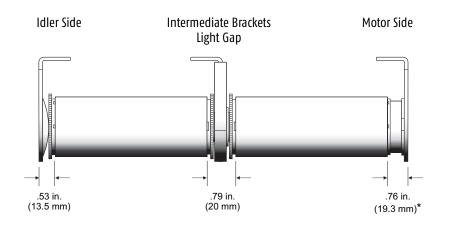
PRODUCT CHART		
IMAGE	DESCRIPTION	CATALOG NUMBER
1	MOTOR (SONESSE® 40 SHOWN)	REFER TO INDIVIDUAL 400 SERIES SPEC SHEET
2	CROWN ADAPTOR 44 MM TUBE (ACMEDA® TYPE)	9013791
3	DRIVE WHEEL 44 MM (ACMEDA® TYPE)	9013790
4	MOTOR BRACKET ADAPTOR PLATE (ACMEDA® TYPE)	9013789
5	MOTOR & IDLER BRACKET KIT 40P (ACMEDA® TYPE)	9013778
6	PLASTIC BRACKET COVER 40P KIT (ACMEDA® TYPE)	9013780
7	IDLER END PLUG 44 MM TUBE (ACMEDA® TYPE)	9013774
8	44 M ALUMINUM TUBE (16 FT. MAX LENGTH)	1780688
9	TUBE SPLINE 44 MM TUBE (ACMEDA® TYPE)	1780687
10	M4 x 12 MM SCREWS	100405B
11	MOTOR BRACKET COMBO SET 122 MM x 122 MM	9013782

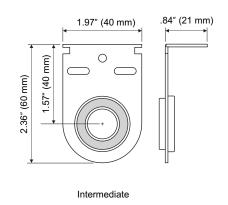
Please Note: For maximum torque limitations please refer to manufacturer's specifications.

# **400 SERIES MECHANICAL ACCESSORIES A**cmeda® System

### INTERMEDIATE BRACKET COMPONENTS





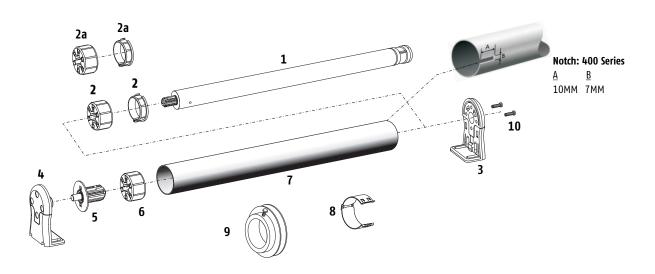


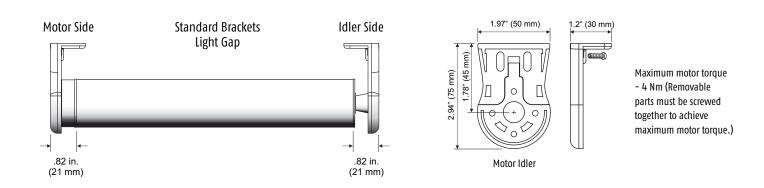
PRODUCT CH	ART	
IMAGE	DESCRIPTION	CATALOG NUMBER
14	INTERMEDIATE BRACKET & COVER KIT 40P, 0-90 DEGREES (ACMEDA® TYPE)	9013787
15	INTERMEDIATE MALE IDLER END PLUG (ACMEDA® TYPE)	9013786
16	INTERMEDIATE BRACKET & COVER KIT 40P (ACMEDA® TYPE)	9013783
17	INTERMEDIATE FEMALE IDLER END PLUG (ACMEDA® TYPE)	9013785

<sup>\*</sup> With motor bracket adaptor plate #9013789

# **400 SERIES MECHANICAL ACCESSORIES**Somfy Decorator Type

### STANDARD BRACKET COMPONENTS



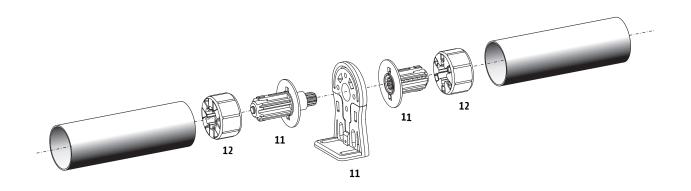


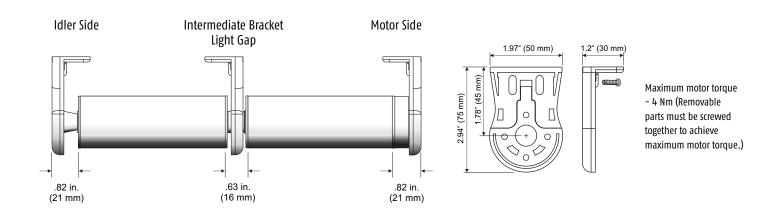
PRODUCT CHART		
IMAGE	DESCRIPTION	CATALOG NUMBER
1	MOTOR (SONESSE® 40 SHOWN)	REFER TO INDIVIDUAL 400 SERIES SPEC SHEET
2	CROWN AND DRIVE (SOMFY 40 MM x 1.5 MM ROUND TUBE)	9012224
2a	CROWN AND RUBBERIZED DRIVE (SOMFY 40 MM x 1.5 MM ROUND TUBE)	9016654
3	MOTOR BRACKET (DECORATOR TYPE)*	9500683
4	IDLER END BRACKET (DECORATOR TYPE)*	9500685
5	IDLER END PLUG (8 MM DIA. PIN-DECORATOR TYPE)	9500688
6	40 MM ROUND DRIVE ONLY (FOR USE WITH IDLER END PLUG)	9147544
7	SOMFY 40 MM ROUND TUBE (20 FT. MAX LENGTH)	1781153
8	CORD CLIPS FOR ROMAN SHADE APPLICATIONS	9012200
9	CORD TAKE-UP REEL (40 MM TUBE)	1781152
10	M4 x 12 MM SCREWS	100405B

<sup>\*</sup>Maximum motor torque - 4 Nm. (Removable parts must be screwed together to achieve maximum motor torque.)

# **400 SERIES MECHANICAL ACCESSORIES** Somfy Decorator Type

#### INTERMEDIATE BRACKET COMPONENTS



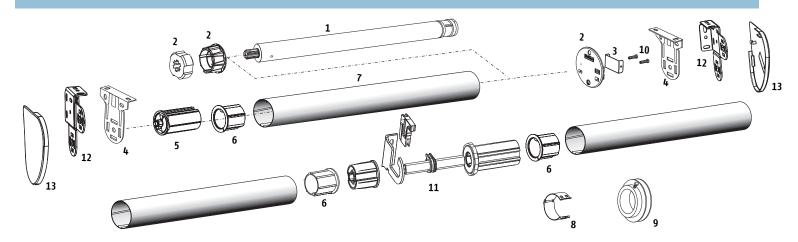


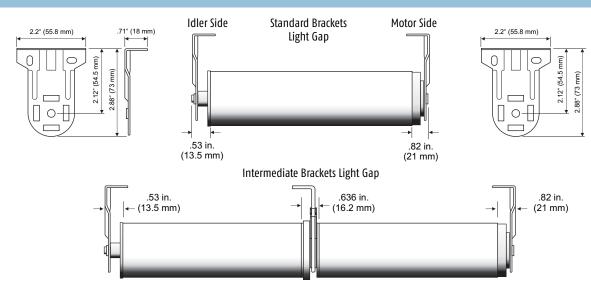
PRODUCT CHART				
IMAGE	DESCRIPTION	CATALOG NUMBER		
11	INTERMEDIATE BRACKET KIT (DECORATOR TYPE)*	9500687		
12	40 MM ROUND DRIVE ONLY (FOR USE WITH INT. BRACKET)	9147544		

<sup>\*</sup>Maximum motor torque - 4Nm (Removable parts must be screwed together to achieve maximum motor torque.)

# **400 SERIES MECHANICAL ACCESSORIES**RollEase® Skyline

### STANDARD BRACKET COMPONENTS

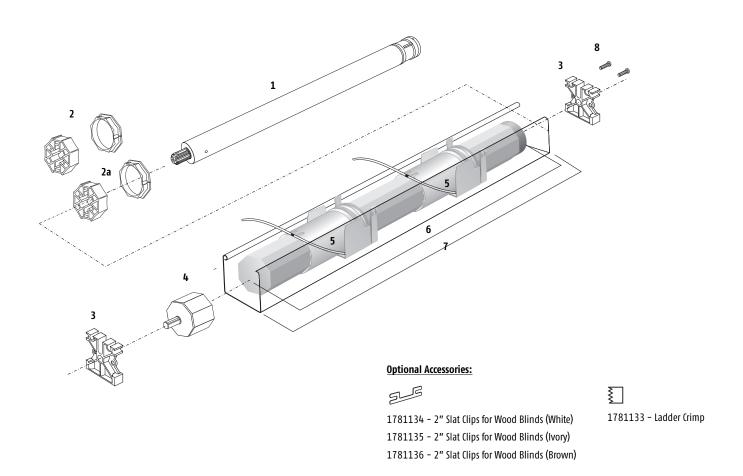




PRODUCT CHART				
IMAGE	DESCRIPTION	CATALOG NUMBER		
1	MOTOR (SONESSE® 40 SHOWN)	REFER TO INDIVIDUAL 400 SERIES SPEC SHEET		
2	CROWN AND DRIVE WITH SKYLINE MOTOR MOUNT PLATE FOR ROLLEASE® 2" TUBE	9016352		
3	MOTOR MOUNT CLIP	9017255		
4	ROLLEASE® SKYLINE SERIES BRACKETS 2"	9016325		
5	ROLLEASE® SKYLINE SERIES IDLER END PLUG	5059165		
6	IDLER ADAPTOR COLLAR 2" PROFILE TUBE	9016366		
7	ROLLEASE® 2" TUBE	1781798		
8	CORD CLIPS FOR ROMAN SHADE APPLICATIONS 2" TUBE	9138028		
9	TAKE-UP REEL - ROLLEASE 2" TUBE	1781151		
10	M4 x 12 MM SCREWS	100405B		
11	ROLLEASE® SKYLINE SERIES INTERMEDIATE LINK SYSTEM	9016367		
12	ROLLEASE® DOUBLE BRACKET	9016616		
13	ROLLEASE® DOUBLE BRACKET COVERS	9017267		

# **400 SERIES MECHANICAL ACCESSORIES** Somfy CTS 40

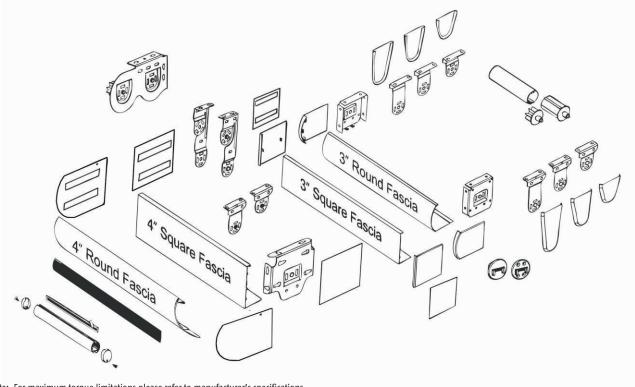
# CORD TAKE-UP SYSTEM (CTS)



PRODUCT CHART				
IMAGE	DESCRIPTION	CATALOG NUMBER		
1	MOTOR (SONESSE® 40 SHOWN)	REFER TO INDIVIDUAL 400 SERIES SPEC SHEET		
2	CROWN AND DRIVE KIT (40 MM OCTAGONAL TUBE)	9012225		
2a	CROWN AND RUBBERIZED DRIVE KIT (40 MM OCTAGONAL TUBE)	9016655		
3	MOTOR / IDLER BRACKET (FOR 57 MM x 51 MM HEADRAIL)	9500736		
4	IDLER END PLUG FOR 40 MM OCTAGONAL TUBE	9012274		
5	CTS 40 (FOR 57 MM x 41 MM HEADRAIL)	1781118		
6	SOMFY 40 MM OCTAGONAL TUBE (20 FT. MAX LENGTH)	1781154		
7	57 MM x 51 MM (2" x 2 1/4") GUTTER RAIL OR SIMILAR	CONTACT MANUFACTURER		
8	M4 x 12 MM SCREWS	100405B		

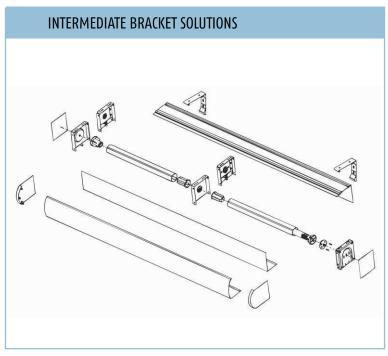
# **BRACKET, FASCIA, AND CASSETTE SOLUTIONS**RollEase®

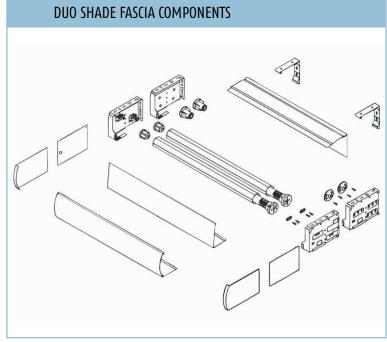
### SKYLINE™ BRACKET AND FASCIA ACCESSORIES



Please Note: For maximum torque limitations please refer to manufacturer's specifications

# **BRACKET, FASCIA, AND CASSETTE SOLUTIONS > ZMC®**





Please Note: For maximum torque limitations please refer to manufacturer's specifications

#### **400 SERIES**

### 400 SERIES to 500 SERIES Adaptor Kit

### 400 Series "LO" Bracket w/ a Square Stud

### 400 Series Drive Stop w/ Screw



-Allows the use of 500 Series crowns and drives with 400 Series motors -Black composite -Maximum motor torque - 13 Nm Part # 9013763



-Motor mounting screws included -10 mm square stud -Zinc plated steel -Maximum motor torque 13 Nm Part # 9147334



-Prevents drive disengagement from 400 series motor shaft -1 screw included Part # 9147894\*

#### **400 SERIES MOTOR BRACKET**



-Compatible with RollEase Bracket -Stainless steel -Maximum motor torque - 4 Nm Part # 9012258

#### 400 SERIES to 500 SERIES MOUNTING CONVERSION BRACKET



-Black composite -Allows 400 Series motors to be used w/ 500 Series Star Head motor brackets -Maximum motor torque - 9 Nm -2 screws included Part # 9500659

#### **CROWNS AND DRIVES**





400 Series Crown for 40 x 0.8 mm Octagonal Tube Part # 9147327



400 Series Drive for 40 x 0.8 mm Octagonal Tube Part # 9147545

400 Series 40 mm Octagonal Set Part # 9012225





NEW 400 Series Crown and Rubberized Drive for 40 mm Octagonal Tube Part # 9016655\*





for 40 x 1.5 mm Round Tube Part # 9147330



**400** Series Drive for 40 x 1.5 mm Round Tube Part # 9147544

400 Series 40 mm Round Set Part # 9012224





NEW 400 Series Crown and Rubberized Drive for 40 mm x 1.5 mm Round Tube Part # 9016654\*







400 Series Crown for 40 x 1.0 mm Round Tube Part # 9132143



400 Series Drive for 40 x 1.0 mm **Round Tube** Part # 9132142

<sup>\*</sup>Due to material composition it is recommended to apply a silicon-based lubricant to drive adaptor surface prior to motorized roller tube assembly. 400 Series drive stop with screw (part #9147894) should also be used to prevent drive disengagement during installation or removal.

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